



AMERICAN ACADEMY of ACTUARIES

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May 19, 2016

Kevin Fry  
Chair, Investment Risk-Based Capital (E) Working Group  
National Association of Insurance Commissioners  
Via e-mail to: [JGarber@naic.org](mailto:JGarber@naic.org)

Re: *Investment Risk-Based Capital: A Way Forward*

Dear Commissioner Fry:

On behalf of the American Academy of Actuaries' <sup>1</sup> Casualty, Health, Life, and Risk Management and Financial Reporting groups overseeing risk-based capital issues, we would like to offer the following comments on the "Way Forward" document that was recently exposed by the National Association of Insurance Commissioners' (NAIC) Investment Risk-Based Capital (E) Working Group (IRBC).

The Academy is supportive of many of the concepts contained in the Way Forward document. We appreciate the catalyzing potential provided by this document to move toward implementation.

We see the RBC-only implementation as an efficient and practical means for updating the investment risk factors without the need to implement throughout the entire Annual Statement or modify any state investment laws.

We support expansion of the number of bond factors from six to twenty. Further, we support the implementation of updated factors for corporate bonds, common stock, and investment real estate for year-end 2017 RBC. We also support updating other factors based on the use of factors identical to those used for bonds, including certain assets reported in Schedule DB (derivatives), Schedule BA (other long-term invested assets), and AVR (asset valuation reserve).

We suggest deferring any action on modifying the RBC calculation for non-modeled structured securities via changes to the determination of filing exempt securities, until a more comprehensive review of the process for determining RBC for all structured securities is taken up by the IRBC. For year-end 2017 RBC implementation, we suggest reviewing the process for mapping the breakpoint

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<sup>1</sup> The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

prices and whether the breakpoints should be mapped to a set of “new six”, or to the set of twenty RBC designations.

We support the use of the life factors in the P&C and health RBC formulas with adjustments for differences in tax assumptions and accounting, as is the case in the current RBC formulas. Further, we support removing the offset in the health/P&C bond factors for expected credit losses. Recall that the life bond factors include an offset for the expected credit losses contained in statutory life reserves, but this offset would not be appropriate for health/P&C as health/P&C reserves do not contain provision for expected credit losses. Finally, we note that further consideration of the ten-year time horizon for the health/P&C factors may be warranted in light of the differences in liability characteristics of many health/P&C products.

We also suggest further consideration of the proposed Way Forward document regarding the following items:

- Adjustments to common stock charges for P&C/health RBC
- Beta methodology
- Real estate
- Other investment types
- Any necessary changes to AVR and interest maintenance reserve (IMR), which we believe should be made in conjunction with the associated bond factor changes.

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Thank you for this opportunity to provide our views on the IRBC’s Way Forward exposure. If you have any questions or would like to discuss this letter in more detail, please contact Nikhail Nigam, the Academy’s policy analyst for risk management and financial reporting, at 202.785.7851 or [nigam@actuary.org](mailto:nigam@actuary.org).

Sincerely,

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CC: Nancy Bennett, Co-Chairperson, C1 Work Group, American Academy of Actuaries  
Jerry Holman, Co-Chairperson, C1 Work Group, American Academy of Actuaries

**Investment Risk-Based Capital A Way Forward  
As of March 18, 2016**

**The Investment Risk-Based Capital (E) Working Group is charged with the following:**

*Evaluate relevant historical data and apply defined statistical safety levels over appropriate time horizons in developing recommendations for revisions to the current asset risk structure and factors in each of the RBC formulas and delivering those recommendations to the Capital Adequacy (E) Task Force.*

**In addressing this charge, it is worth noting that the primary original purposes of the project include the following:**

- *Update the investment RBC factors since they were originally developed, including most notably the bond factors.*
- *Consider if there should be more consistency between the factors used by the different statement types, given the covariance formula already appropriately weights asset risk higher for life, than for P/C and health.*
- *Consider the extent to which the current six bond factors should be broken into additional detail, consistent with the approach being considered/taken on NAIC designations determined by SVO staff.*

**Comments:**

- We suggest that the question of consistency be explored in greater detail and depth. Does it mean the same numerical value for the RBC factor for a given quality asset, at the first step in the formula? Or the same RBC charge at the end of the process, after adjustments and covariance calculations? Is it more important to have consistency within the different formulas for life, property & casualty and health, or between them for the same category of risk? How important is it to reflect the different business models, in particular the long-term investment requirements of many life insurance products versus the short term runoff of most P&C and health liabilities? Does consistency mean the same Statistical Safety Level for each category of asset, or each category of risk? Does consistency across RBC formulae create unintended inaccuracies within a given RBC formula? Clarification of these issues will facilitate work on updating the RBC factors for P&C and health.
- The covariance formula does not weight the risk factors. The covariance adjustment reflects the degree of independence between the various risk categories. The covariance is a statistical adjustment reflecting the correlation of risk among independent, normally distributed random variables. Compared to the health or P&C risk categories, the investment risk is a larger risk for life insurers, relative to the other risks assumed by life insurers, but there is no risk weighting in the RBC covariance adjustment.
- Depending on how consistency is defined, different factors may be needed to achieve consistency in the measurement of investment risk across all three RBC formulas.

**In considering changes to address these original purposes of the project, the work product should also consider some of the key principles of the formula(s):**

- *The RBC formulas are intended to benchmark specified levels of regulatory actions for weakly capitalized insurers.*
- *The P/C and health factors for some assets may be higher than the life factors (e.g., low-income housing and certain other types of BA assets), where the life industry was willing to create a more complex and onerous requirement in order for a lesser charge to be considered.*
- *The factors differ between statement types because of the differing treatment for taxes. Other differences between statement types are not considered material for purposes of varying the factors.*

**Comments:**

- Currently, the base factors for corporate bonds are identical for investment grade bonds between the three RBC formulas with the exception of the tax adjustment in the life formula. For below-investment-grade bonds, the factors for P&C/health are different from those in the life formula, reflecting the different accounting treatment (current market value vs. amortized cost).
- The offset for statutory reserve requirements in the life bond factors is material and continues to be reflected in the recommended C1 factors<sup>2</sup>. The statutory reserve requirements for P&C and health insurers do not reflect expected credit losses, as is the case for life insurance reserves. We do not believe it is appropriate to reduce the P&C and health RBC factors for a statutory reserve offset.
- Recognizing that the ten year time horizon was selected by regulators to correspond to the length of the credit cycle, we note that an insurer's exposure to credit risk within the cycle depends upon the duration of the assets it carries, which tends to follow the duration of the liabilities it predominantly writes. This may warrant further consideration for purposes of applying the factors to different types of insurance.

<sup>2</sup> In developing the life factors, the mean of the loss distribution is deducted in order to reflect the provision for expected losses in statutory reserves

**In order to meet the original purpose of the project, including specifically that in general, the default position should be that the risk associated with owning an asset is the same across the different statement types. Therefore, the asset factors for the different statement types should be the same or largely the same for as many of the asset types as possible. Differences between statement types should be supported by analysis of underlying data, if practical, via testing of differences in underlying assumptions, and/or where the differences are supported by a rationale for application of regulatory judgment.**

**This document is intended to put forth “A way forward path” that regulators can collectively agree upon as something that accomplishes as many of these objectives as possible, but with appropriate regulatory judgment.**

**PROCESS FOR MODIFYING THIS DOCUMENT:** This high-level document has been

developed by the chair of the Investment Risk-Based Capital (E) Working Group and will be updated based upon discussions/input from members of this Working Group. The Working Group will aim to reach consensus on as much of this document as possible and will present it to the Capital Adequacy (E) Task Force once completed. Prior to reaching a consensus, the Working Group would request the Task Force consider approving a recommendation that any work being done by any drafting groups be reported into the Working Group, although some of that input may not be necessary since this document attempts to use some of the overarching views of those groups, while also recognizing the goal of as much consistency between the statement types as possible. It is important to note that this document is intended to be high level, with the intent of reaching agreement on these high-level items before any detail work is done to implement the items agreed to by the Task Force.

### **Principles for Updating Bond Factors**

- For RBC purposes, the NAIC designations will be expanded from six to 20. These designations will become part of a new required electronic-only column of the annual statement and will be based upon each asset's bond rating/SVO designation. For statutory accounting and state law purposes, the six-designation system will continue to apply.
- The factors for the 20 RBC designations will be based upon the analysis performed by the AAA relating to corporate bonds. This is consistent with how the factors were developed in the current RBC framework.

#### **Comments:**

- We support an expanded number of bond factors. We support the concept of implementing a structure that accommodates the maximum number of rating classes, but recommend using identical factors for some of the rating classes, consistent with the fourteen unique factors recommended by the C1 Work Group (C1WG) in August, 2015. In addition, the C1WG's recommended bond factors contained in the August, 2015 report were base factors obtained directly from its model. We anticipate some rounding of these base factors, following final approval of a set of factors.
- The increased granularity is most important for life RBC, and will have little effect on health and P&C RBC. The NAIC may wish to evaluate the cost/benefit ratio of expanding beyond the current six classes/factors for those formulae.
- The current RBC formula contains portfolio adjustments for the ten largest issuers in an insurer's asset portfolio and for the size of the bond portfolio. The Academy's C1WG has started analysis of the portfolio adjustments that would be appropriate in light of the assumptions and methodology used to develop the base factors. It would not be appropriate to assume that the current adjustments will produce the same results if applied to the updated factors. The question of whether to retain the current adjustments or develop different adjustments requires further analysis and discussion.

- These changes will not affect the RBC methodology for residential mortgage-backed securities (RMBS)/commercial mortgage-backed securities (CMBS) securities that are modeled by the NAIC.
- Non-modeled 43R securities will no longer be subject to modified filing exempt (FE)

treatment.

**Comments:**

- These last two points address the RBC for structured securities (i.e., RMBS and CMBS). When the IRBC started this project, the focus was placed on reviewing the RBC factors for corporate bonds, with the understanding that the methodology for establishing the RBC for structured securities would be comprehensively reviewed.
- In the short run, we suggest a review of the process followed to map the breakpoint carrying prices for the modeled securities. Will the breakpoint carrying prices for the modeled securities be mapped to a new set of twenty factors or to a compressed set of “new six” factors, consistent with the current process?
- We do not understand the rationale for changing the FE treatment for non-modeled securities. Our understanding is that the process outlined in the SSAP 43R flowchart for non-modeled securities is a simplified approach for capturing the difference between book adjusted carrying value and fair value. We question eliminating this adjustment for non-modeled securities, while retaining a similar adjustment for modeled securities. We believe this adjustment would be part of the modeling process and should be retained for both modeled and non-modeled securities or eliminated for both.

- Consideration will be given to keeping the six-designation RBC system with updated factors for non-life statement types.
- The goal is to have the updated bond factors in place by year-end 2017.
- The Working Group is willing to consider proposals for the use of different factors for certain asset classes such as municipals and sovereign debt, with the understanding that the earliest implementation would be year-end 2018.

**Comments:**

- The cost/benefit evaluation should include consideration of the IRBC’s stated principle that “the risk associated with owning an asset is the same across the different statement types.” It should also take into account that the same factor before covariance results in a substantially lower charge after covariance.
- As we have stated in the past, the Academy strongly supports the use of one set of factors for all fixed income securities: corporates, municipals, privates/144a, sovereign debt, certain derivatives in Schedule DB, certain securities in Schedule BA, and any other asset classes that use the corporate bond factors.
- Our recommendation reflects the practices followed by the major Credit Rating Providers (CRPs) in their use of a global ratings process. In addition, our recommendation is consistent with the current RBC formula, the regulators’ reliance on ratings from CRPs in the financial statements, along with the absence of credible default data.

**Principles for Updating Common Stock Factor**

- The RBC factor for common stock should be the same for all statement types after adjusting for the tax treatment built into the different models.

- The current P/C and health factor of 15% was developed using an expected policyholder deficit standard, while the current life formula of 30% was developed using a ruin probability standard. If the life factor is tax adjusted to properly compare to the P/C and health, it would be 19.5%.
- The Working Group proposes that the life factor remain unchanged, while the P/C and health factors are increased to 19.5%. These same factors will be used for Schedule BA investments, with the exception of the special categories within the BA framework that have unique charges.
- With regard to the Beta methodology, the Working Group could consider various options including eliminating the use of Beta in the life formula, adding the use of Beta to the P/C and health formulas, or continuing to use the Beta methodology for only the life formula.
- The goal is to have the updated common stock factor in place by year-end 2017.

**Comments:**

- No changes are being proposed for the base factor for unaffiliated common stock for life. We support continuation of the base 30% factor for life RBC. The suggested P/C and health factor of 19.5% appears to have been developed by tax-adjusting the base 30% factor for life. Further work is needed to validate that this is an appropriate after-tax charge for P/C and health RBC.
- Further discussion is needed on the Beta methodology. However, we believe that the Beta adjustment in the life RBC formula better reflects risk in the RBC calculation for a stock portfolio. Since that element of the life RBC formula is in place, we see no reason to remove a refinement that improves the measurement of risk. We also point out that changing the calculation of RBC for common stock could affect the AVR calculation, perhaps in an unintended fashion.
- We note that the NAIC's P&C RBC (E) Working Group explicitly recommended no Beta in the P/C RBC formula on February 22, 2016, after extensive research and deliberation. The Working Group's report is included for reference.

**Other Principles**

- Although real estate is not listed, this document suggests consideration be given to adopting the previously developed proposal on that asset type, but only if the time spent on that asset type does not stall the implementation of the above changes for bonds and stocks into year-end 2017.

**Comments:**

- The C1WG has reviewed the investment real estate proposal developed by the American Council of Life Insurers (ACLI) and submitted by the ACLI to NAIC for exposure. We support the priority placed on corporate bonds and common stock, but will review and provide comments on an updated investment real estate proposal when available.

- No other discussions on other investment types shall occur until the final changes for bonds

and common stock are adopted and ready for use.

**Comments:**

- RBC charges for credit default swaps and other types of derivatives were updated in the last couple of years. Currently, the RBC factors for certain Schedule DB Derivatives are identical to the factors for corporate bonds. We suggest reviewing these factors and updating for consistency between Schedule D and Schedule DB.
- Similarly, there are asset types in Schedule BA with RBC charges in the life formula set equal to the charges for corporate bonds in Schedule D. We suggest reviewing these factors and updating for consistency between Schedule D and Schedule BA.
- Finally, we suggest a complete review of the RBC formulas to use the updated bond factors for any other asset type using the bond factors and update for consistency (e.g., surplus notes, etc.)

- Updates to asset valuation reserve (AVR) factors will be implemented after year-end 2017.

**Comments:**

- Updates to AVR can and should happen at the same time as bond factor changes. The C1WG recommended AVR Basic Contribution Factors in August, 2015 along with C1 Bond factors. Note that the Basic Contribution Factors are defined to be equal to the mean of the loss distribution and are derived from the model used to develop the C1 bond factors. Consideration should be given to modifying the AVR calculation to reflect the twenty RBC designations. If the regulators do not see the value in expanding the AVR calculation to reflect the twenty RBC designations, then the C1WG can provide the NAIC with an updated set of six basic contribution factors for AVR implementation, if desired. We recognize that if state laws need to be changed in order to change AVR, then we can understand retaining the six-designation scheme for ease of implementation.
- We also question how this Way Forward document anticipates changing the IMR, if at all. The current IMR calculation includes realized gains and losses that are based on a change of one NAIC designation. Will IMR continue to be calculated according to the six-designation scheme, or will IMR be based on the 20 RBC designations? Similar to AVR, if state laws need to be changed in order to change IMR, then we can understand retaining the six-designation scheme with an updated set of factors for ease of implementation. We suggest clarifying the intentions for changing IMR.