

July 19, 2017

Mr. Kevin Fry
Chair, Investment Risk- Based Capital (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Re: Updated Recommendation of Corporate Bond Risk-Based Capital (RBC) Factors

AQS Asset Management respectfully submits the following comments on the American Academy of Actuaries' C1 Work Group (C1WG) report titled, "Updated Recommendation of Corporate Bond Risk-Based Capital (RBC) Factors".

Overview

The C1WG Academy's objectives as written in the report Model Construction and Development of RBC factors for Fixed Income Securities for the NAIC's Life Risk-Based Capital Formula dated August 3, 2015, (page 8, paragraph 2):

1. "to eliminate large jumps in the C1 factors" and;
2. "to better align the C1 factors with investment risks." And;
3. "Further, the more granular set of categories will better track changes in portfolios distributions by not relying on average assumptions."

As a result of this exercise, two components of the C1-o calculation have seen significant change:

1. The number of rating categories has increased from 6 (NAIC 1 – NAIC 6) to 14 and now to 20.
2. The portfolio adjustment formula has been revised to include a larger multiplier for companies with fewer issuers.

We take exception to the assumptions:

1. "To the extent that investment risks are reflected in the NRSRO rating, then that risk is captured in the C1 capital requirement." (August 3, 2015; page 5, paragraph 2)
2. "In other words, the risk of loss for an A-rated municipal is equivalent to the risk of loss for an A-rated corporate and the risk of loss for an A-rated private placement". (October 17, 2016, page 5)

AQS asserts that the shortcomings of the NRSROs individually and collectively and NRSRO – NAIC mapping rubric in particular, inhibit the presumed accuracy of the proposed "NAIC 20". We do not take issue with the analysis; instead, we take issue with the assumptions on which the analysis is based and point to the AAA's own statements as evidence of the shortcomings of these results.

Mapping NRSRO ratings to SVO classes

As presented in the August 3, 2015 report (page 5, paragraph 2), "To the extent that investment risks are reflected in the NRSRO rating, then that risk is captured in the C1 capital requirement."

Portfolio managers already understand that specific issues trade rich or cheap to ratings. This is due to ratings lag.

Currently, NAIC ratings rely on the "second lowest" method for issues with multiple ratings, lower of two or if only one, a single rating. NRSROs are not always timely and typically do not update ratings at the same time. Some ratings may be updated or withdrawn years apart. The SVO mapping rubric, reliant on ratings at a given point in time, does not discriminate between current and stale ratings. It seems that any accuracy gained by 20 factors is significantly reduced without some effort to validate NRSRO ratings.

Will this methodology be changed? It would seem that this represents a greater weakness in the accuracy of risk capital calculations than the granularity obtained by 20 factors.

Private Placements - Is there enough data?

Private placements, 20% of insurance assets, are reviewed at filing. NRSROs seldom rate such issues. Can the SVO assert that the process in place is equivalent to multiple NRSROs? Does this process

include periodic review equal or better than that of NRSRO – rated issues? Is the data reviewed consistently equivalent to the public filing requirements of publicly traded issues? Are these ratings stale? Is the SVO in a position to assert equivalent or greater expertise than NRSROs? If not, the opacity of these issues calls into question equivalence to public issues. This model also suggests that default rates of private placement issues is equivalent to same-rated public issues. Is there any evidence to support or refute this?

Liquidity of private placements is less than that of public issues.

Bankruptcies are not identical

The C1WG model assumes that the risk of loss is identical for ratings across asset classes for all bonds of the same rating (pg. 5). Recent history in both the largest Corporate (Lehman Brothers - 2008) and largest Municipal (Detroit - 2013) defaults on record find this assumption does not hold in practice.

Senior unsecured Lehman, rated A2 on 9/12/08 (Friday) indicated they would file for bankruptcy on 9/15/08 (Monday) and was rated B3 (*-). This issue ultimately recovered approximately 42% of par.

Detroit Sewer was rated B1 (*-) just prior to bankruptcy and recovered fully 100% of par.

Utility of experience vs “random” events

A-rated base factors increased between the '02 and '15 AAA studies.

From the response dated October 17, 2016, the impact of financial defaults during the crisis is addressed as “a random shortcoming in the rating process that could occur again with any other sector. In that light, all prior experience is appropriate to form the historical experience assumption.” (page 13)

On page 5, the C1WG writes that “In other words, the risk of loss for an A-rated municipal is equivalent to the risk of loss for an A-rated corporate and the risk of loss for an A-rated private placement”.

These statements seem to be contradicted by the actual experience of Detroit sewer and Lehman. If the idea of equivalent risk stated above does not hold in practice, how does increased granularity reconcile these contradictions?

Unintended consequences in revamping issuer portfolio adjustment formula

In the letter “Updated Recommendation of Corporate Bond Risk-Based Capital (RBC) Factors” dated June 8, 2017, page 2, Section B, Portfolio Adjustment Formula, the AAA addresses an increase in size factor to “reflect differences between an individual insurer’s bond portfolios and the representative portfolio used in developing the base factors”.

The new scalars or multipliers are particularly punitive for insurers with fewer issuers than the representative portfolio as shown

<u>Portfolio Adjustment Factors</u>					
Appendix B					
Current PA Formula			Recommended PA Formula (June, 2017)		
	Issuers	Factor		Issuers	Factor
Up to	50	2.50	Up to	20	6.75
Next	50	1.30	Next	130	1.70
Next	300	1.00	Next	250	1.05
Over	400	0.90	Next	500	1.00
			Over	900	0.95

The multiplier adjusts required capital for diversification. More issuers suggests greater diversification and results in a lower multiplier. However, this “issuer count” is poorly defined. There is no specification for the size of an “issuer” leaving the recommended formula open to manipulation in direct contradiction to the stated goal of these proposed revisions.

Consider the Category Size 1 portfolio (June 8, 2017, Appendix D). With 120 issuers, the size factor is 2.541 under the proposed methodology vs 1.75 under the old. The addition of 300 issuers via small

(\$1,000) bond positions (an increase in assets of 0.36% in a portfolio of \$84 million) reduces the size factor under the new formula to 1.52.

Consider the Category Size 2 portfolio (assets: \$715.5 million; 293 issuers). Adding the same 300 - \$1,000 par issuers (an increase in assets of 0.04%), the proposed multiplier is reduced from 1.727 to 1.368.

While diversification is a key tenet of portfolio management, the unintended consequence of this onerous increase in the multiplier incentivizes pseudo-diversification.

Impact of CUSIP method on the Portfolio Adjustment Formula?

The proposed size factor was determined using non-CUSIP level data (Appendix D). The RBC workbook instructions for issuer count allows the first 6 digits of a CUSIP to be used for determination. It is an objective method by which issuer count can be determined. Why was this ignored? This necessarily skews the resultant multiplier.

Conclusions

1. The ratings of the NRSROs, however stale, continue to determine the NAIC classifications.
2. The assignment rubric used, "second lowest", is still without statistical relevance.
3. While the NRSROs claim to rate on a "global" basis, it is naïve to assume that all sectors have similar default and recovery prospects. Secondary capital markets demonstrate this.
4. Default rates and recovery rates were taken from single NRSROs while 8 NRSROs are recognized to establish NAIC mapping. Logic suggests this data to be thin at best.
5. The financial crisis is dismissed as "a random shortcoming in the rating process that could occur again with any other sector."

In short, the proposed solution, albeit more complex, does not appear to address the underlying problem with the current asset risk metric. An NAIC 20 with its attendant cost and effort addresses "large jumps in the C1 factors" but continues to rely on NRSRO ratings that may not be current.

Just after the financial crisis an innovative methodology to incorporate RMBS market valuations into SVO ratings was developed. While the solution does not directly translate here, it does suggest that a more timely and market-based solution might be possible.



Steven Clayburn

Senior Actuary, Health Insurance & Reinsurance
 steveclayburn@acli.com

July 24, 2017

Mr. Kevin Fry
 Chair
 NAIC Investment Risk-Based Capital Working Group

RE: Updated Recommendation of Corporate Bond (RBC) Factors

Dear Mr. Fry:

The American Council of Life Insurers¹ (ACLI) appreciates the opportunity to comment on the June 8, 2017 report from the American Academy of Actuaries (Academy) containing their updated recommendation of corporate bond RBC factors. We recognize the efforts of the Investment RBC Working Group to fulfill its charge of updating RBC C-1 bond factors. ACLI remains supportive of the Working Group's charge and is committed to working collaboratively with regulators and other stakeholders on revised factors. We appreciate the additional work the Academy has done to update the proposed RBC bond factors. That said, we believe that further progress to address areas of concern is dependent upon direct engagement and transparent discussions among key stakeholders. As a next step, we request the formation of a joint working group of regulators, the Academy, and industry representatives to discuss possible targeted adjustments to address the open issues surrounding this proposal.

EXECUTIVE SUMMARY

The following are three main areas that we have identified after reviewing the Academy's report on the proposed changes to the corporate bond factors (and other factors):

- The portfolio adjustment factor (previously called the bond size factor) has changed significantly, resulting in a substantial and negative RBC impact, particularly for small and mid-sized insurance companies. This new approach needs to be more thoroughly discussed and analyzed (e.g., the linkage of this approach to the underlying base factors).
- While the current base factors represent an improvement over the initial recommendation, the slope of the charges still is counterintuitive and provides an incentive to invest in below investment grade securities. We also believe recognition for differences in historical experience between corporate bonds, private placements, municipal bonds and sovereigns justifies consideration of unique base factors for each.
- We continue to believe it is important to have a detailed implementation plan in place before proceeding. The current corporate bond factors are used in other parts of the C-1 calculation. Companies need to know if additional granularity will be added to any of

¹ ACLI is a Washington, D.C.-based trade association with approximately 290 member companies operating in the United States and abroad. ACLI advocates in federal, state, and international forums for public policy that supports the industry marketplace and the 75 million American families that rely on life insurers' products for financial and retirement security. ACLI members offer life insurance, annuities, retirement plans, long-term care and disability income insurance, and reinsurance, representing 94 percent of industry assets, 93 percent of life insurance premiums, and 97 percent of annuity considerations in the United States. Learn more at www.acli.com.

these other area, whether they retain the current 6-class structure with the current factors or retain 6-classes but with new factors.

PORTFOLIO ADJUSTMENT FACTOR

A material and concerning part of the latest proposal is the increase in the portfolio adjustment factor (described as the bond size factor in the current formula). The current bond size factor was initially designed to account for the higher risk presented by an overly concentrated bond portfolio that contains relatively few issuers—this factor would decrease as a portfolio became more diversified and held securities from a larger number of issuers.

While the June 2017 adjustment factor continues to be higher for smaller portfolios and lower for larger portfolios, the weighted average factor for portfolios of all sizes is significantly higher compared to the current factors as illustrated in the table:

Number of issuers	Current bond size factor	Proposed portfolio adjustment factor	Proposed increase over current factor
25	2.50	5.74	130%
100	1.90	2.71	43%
500	1.16	1.44	24%
1000	1.03	1.21	18%
2500	.95	1.06	12%

If improperly calibrated, the portfolio adjustment factor can have an outsized effect on total required capital. This appears to be the case in the Academy’s latest proposal, which itself differs materially from the December 2016 proposal and is vastly more punitive than the bond size factor currently in place. The June 2017 proposal, if implemented, would result in all life insurers receiving an adjustment factor greater than 1.00, suggesting that no insurance company holds a well-diversified credit portfolio.

Under the current framework, to receive a total bond size adjustment factor of 1.00, a portfolio would need to hold the securities of 1,300 issuers. In the Academy’s December 2016 proposal, this figure was approximately 750 issuers. But in this latest proposal, a portfolio would need 5,300 unique issuers to have a factor of 1.00. To put this number in context, in the Moody’s 1920-2012 annual default study (the time period whose data has been used throughout this C-1 factor update process), Moody’s rated only 2,500 investment grade issuers and 2,300 below investment grade issuers, and the Barclays Global Corporate Aggregate index had fewer than 2,000 issuers. An insurer would need to own the entire rated universe and 500 more non-rated issuers to reach this 5,300-issuer threshold. No rational portfolio manager would construct such a credit portfolio. In addition, given that even large insurers cannot meet this threshold, smaller insurance companies will be impacted even more severely.

ACLI surveyed its members on the proposed new base factors and portfolio adjustment factors. The respondents represent over \$2.2 trillion (52%) of total life insurers invested assets as of 12/31/16. Collectively, these companies would be required to hold an additional \$2.4 billion in C-1 capital, an increase of 14%. If the results of companies with over \$100 billion in invested assets are excluded from the calculations, the smaller companies would be required to hold approximately \$1.8 billion more in C-1 capital, an increase of 23%. Of that increase, approximately 92% is due to the weighted portfolio adjustment factor.²

² The survey included the recalculation of non-modeled securities with current and proposed factors. Portfolio adjustment factors were calculated using the number of reported issuers. Data compiled from 12/31/16 Annual Statements.

The new portfolio adjustment factor will have the unintended consequence of incentivizing a higher risk portfolio. Insurers will be rewarded for holding more issuer names for the sake of holding more names, rather than knowing well the names they hold, and having a high conviction in the financial position of those names. Holding such a large number of issuers will also cause a material portion of the portfolio to be in issuers that do not trade with normal frequency, thus increasing the illiquidity and risk of the portfolio. Smaller to mid-size companies will again be disproportionately impacted as the small position sizes will only increase the liquidity challenges.

While the application of the adjustment factor on its surface seems to be similar to the current process, the underlying methodology used to develop the adjustment factor represents a fundamentally and substantially different methodology. The original methodology was a statistical adjustment based solely on the number of issuers held and assuming that the underlying factors were developed at the 96th percentile for a representative company portfolio. The current approach restructures the RBC charges to develop a perceived 96th percentile for each company, as the factors themselves do not represent a 96th percentile safety level as noted by the Academy on page 11 of the June 8 report. Thus, there appears to be a linkage between the base bond factors and the portfolio adjustment factor such that the latter factor appears to be a “top-side” adjustment to scale the total RBC required. As a result, while the base factors have decreased relative to the initial Academy proposal, the total capital requirement after applying the portfolio adjustment factor is essentially the same under both proposals. Appendix A provides more detail on our analysis of the linkage between the base bond factors and the portfolio adjustment factors.

The original objectives of the Working Group were to update the C-1 bond factors based on recent default experience since the last update and to incorporate additional granularity. While an increase in RBC for securities in the lower “AA” and “A” rating grades would be expected given the increased granularity, default experience since the 1990’s would have suggested comparable, if not lower, overall required capital levels.

While there has been considerable amount of discussion over the last two years and additional analysis of the C-1 base factors that has helped to move them in a better direction, this is not the case with the proposed adjustment factors. The proposed adjustment factors were first published in June 2017, less than two months ago. We had a relatively brief conversation with the Academy regarding the portfolio adjustment factor and submitted follow up questions in an effort to better understand the approach and its development. However, given the short window of time to respond to the latest proposal, neither industry nor the Academy have had ample time to fully discuss what, in our opinion, is a significant and material change in both the philosophy and the structure of the C-1 calculation. Because of the impact this has on the overall C-1 results, and because of the potential disproportionate impact it will have on smaller companies, we believe that it is important to appropriately review and analyze such a major change to this calculation of a company’s RBC. We recommend and welcome further discussions to occur regarding this issue. We also suggest that the discussions be done through a joint working group with industry representatives, the Academy, and regulators to more quickly resolve the open issues surrounding this latest proposal. Appendix A includes proposed adjustments to the modeling approach.

BASE BOND FACTORS

We appreciate the additional work the Academy has done to respond to concerns the ACLI expressed regarding the Academy’s August 2015 proposal on corporate bond RBC factors. The increase in the proposed RBC base factors for investment grade securities compared to current factors, coupled with decreases in those for below investment grade securities, would have had profound impacts not only on company RBC ratios, but on the future investment strategies of life insurance companies. While the June 2017 base factors more appropriately represent the balance between investment

grade and below investment grade securities, the slope of the charges still provides some incentives to invest in below investment grade securities.

IMPLEMENTATION

As the NAIC moves forward on the initiative of updating RBC calculations for bonds, companies must make plans to implement the changes. This is particularly important as it relates to system changes that may be needed to capture the required information going into the calculations. Other items that have been identified that need to be addressed include:

- Will federal tax rates remain at 26.25% for non-defaulted assets or changed to the 28% rate referenced in the Academy's August 2015 documentation?
- The current corporate bond factors are used in other areas of the C-1 calculation.
 - For other securities also using the current 6-class structure, will this continue or will added granularity be incorporated?
 - Will the factors for these other securities be changed? If so, how will the factors be determined?
- Clarity on the application of the revised factors to structured securities, i.e., whether/how the breakpoints for modeled and non-modeled structures will be updated to reflect the new factors will be necessary.
- Given the potential RBC impact on companies, will there be a phase-in period? If so, what are the details?
- Will a field test be done to assess the overall impact on various size companies before final implementation occurs?
- Has communication with RBC software vendors been initiated of the future proposed changes?
- Is the structure currently being put in place to support different capital factors for private placements, municipals and sovereigns?
- Can the impacts of the more granular designation structure be accommodated by the NAIC's Securities Valuation Office in time for the proposed implementation date?

Industry shares the interest of the regulators of being able to finalize this as soon as possible, and ACLI is committed to doing everything it can to achieve this objective. At the same time, it is important to understand that based on estimates from the Academy, the proposed changes will represent \$6 billion in new capital requirements for the industry. Therefore, it is important for everyone to have a good understanding of what is creating the need for this additional capital, validation that the model is appropriately addressing the need, and comfort with the resulting company level impacts. Again, we request the opportunity to have transparent, meaningful discussions with the Academy and the Working Group on the technical aspects of the latest proposal.

Sincerely,



Steven M. Clayburn, FSA, MAAA

cc: Julie Garber, CPA, NAIC Sr. Manager, Solvency Regulation

Appendix A Proposed Modeling Adjustments

To analyze the Academy's latest proposal and determine appropriate and effective solutions through modeling adjustments, it helps to understand the overall C-1 framework as having three components:

- A. **Level of capital** for the "representative portfolio" (as constructed by the Academy for use in their model)
- B. Change in required capital due to **credit quality** (i.e., increase/decrease for portfolios holding securities with worse/better credit ratings)
- C. Change in required capital due to **portfolio diversification** (i.e., increase/decrease for portfolios holding fewer/more issuers)

As compared to the current C-1 framework, the Academy's proposal impacts each component as follows:

- A. The level of capital for the representative portfolio has increased from 1.25% to 1.56%, an increase of 26%. Note that this is substantially similar to the Academy's previous proposal, which increased capital requirements by 24%.
 - Historical default experience since the early 1990s has been substantially better than that of the 1980s – therefore, the level of capital should be decreasing or staying level, not increasing.
- B. The ratio of base factors for a typical investment grade and high yield bond (A2 and Ba2, respectively) has increased from 9% to 22%, indicating substantially less differentiation and greater incentive to hold a lower credit quality portfolio.
- C. The ratio of capital required for a typical smaller insurer (Academy insurer size #1: portfolio size less than \$0.5 billion) to the representative portfolio has increased from 118% to 171%, indicating substantially larger penalties for less diversified portfolios

Based on the limited information that has been provided to date, it appears that these impacts are the result of the Academy's modeling process, which involves two runs of the model for two distinct purposes:

Run 1: Calculating the 92nd percentile for each of 19 letter ratings (Aaa to Caa3)

- These results directly affect component B

Run 2: Calculating the 96th percentile for each insurer portfolio (with different inputs for issuers by NAIC rating 1 to 5)

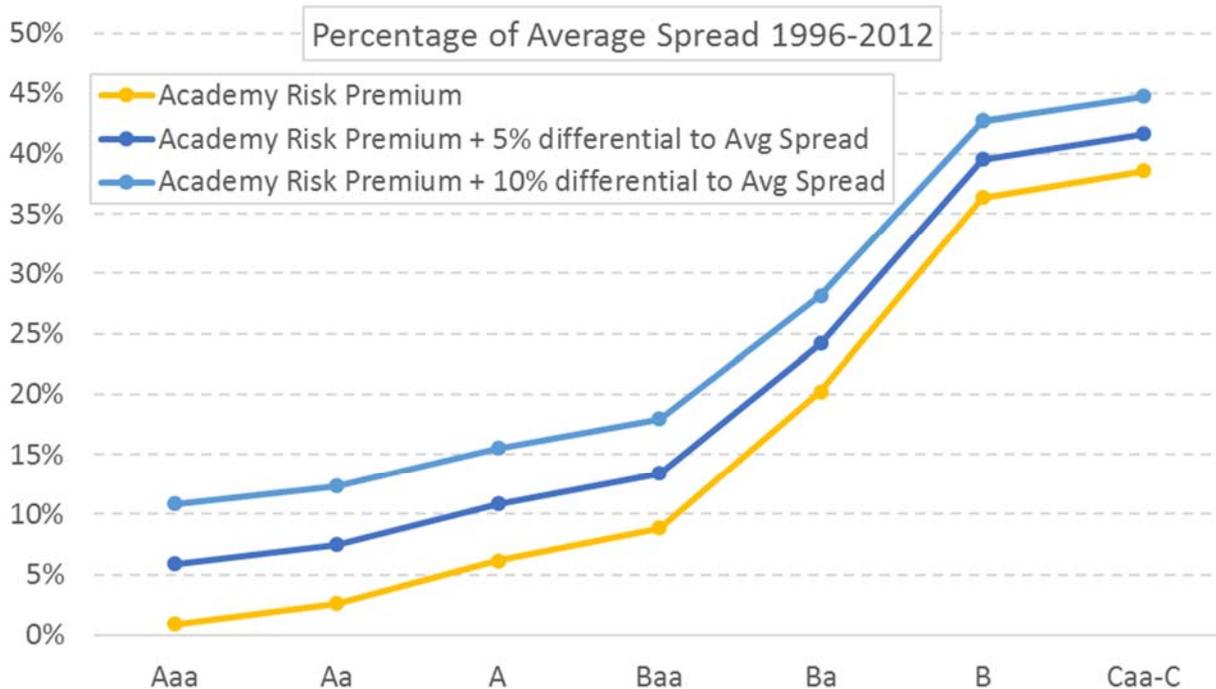
- These results directly affect components A and C

Between the August 2015 and June 2017 proposals, only the first of these two runs was changed – the number of holdings in the model was roughly doubled, increasing diversification and thus lowering risk for the base factors. This change, however, had no impact on the second run, which is by far the more important model result.

Our September 2016 comment letter raised many concerns with this modeling approach and certain key assumptions, but to date these concerns remain unaddressed. However, based on our extensive work of replicating the Academy's model, we propose three intuitive and easily implemented adjustments that would yield more reasonable results:

1. Increase risk premia (spreads) in the model such that corporate bonds earn more than Treasuries

- This is a simple, rational change that reflects the reality that insurance companies invest in corporate bonds because they earn more than Treasuries on average.
- The impact of this change would be a decrease in the level of capital (component A) and an improved, steeper slope (component B):

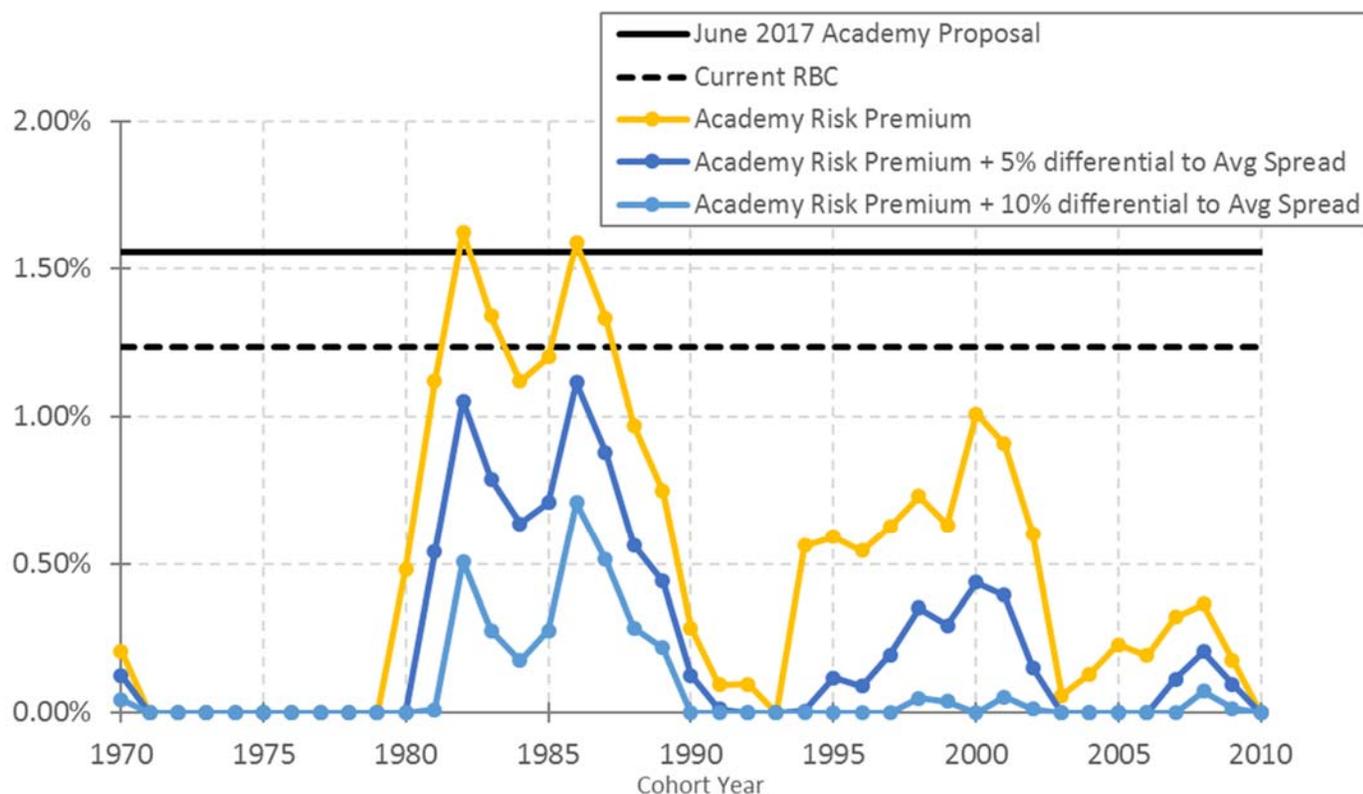


Average spread data from 1996-2012 based on economic research published by the Federal Reserve Bank of St. Louis (<https://research.stlouisfed.org/>)

- In addition, the model's assumed risk premium is inconsistent with the conservative nature of the statutory reserve framework. The result of this inconsistency is that the portion of default costs between expected levels and CTE 70 is effectively covered in both reserves and the proposed C-1 charges. In VM-20, the use of the CTE 70 default costs is explicit. Similar explicit guidance is currently proposed for VM-21 and AG 43. For other reserves, the coverage of this level of default costs is not explicit, but rather is embedded in the conservatism of the valuation rates. This coverage is further addressed in the development of the appointed actuary's Statement of Actuarial Opinion, which requires that reserves be adequate under moderately adverse conditions.

As seen in the following figure, the higher level of required capital implied by the latest proposal is a result of this overly conservative risk premium. Incorporating a small fraction of average credit spread, however, validates the appropriateness of total required capital levels currently in place (note also that the chart demonstrates the relative severity of default experience in the 1980's compared to more recent experience, as noted above).

Historical Portfolio Capital Required (using Actual Experience by Year)



2. When running the model for each portfolio (run 2), use letter rating inputs for issuers rather than NAIC rating inputs wherever this data is available
 - As a percent of NAIC 1 rated holdings, smaller insurers tend to hold more Aaa and Aa assets than larger insurers. By presumably using a constant proportion across the industry, the Academy is short-changing smaller insurers – this means the portfolio adjustment should be less punitive for smaller insurers (improving component C)
 - In a recent call, the Academy stated that this data is available for 75% of assets
3. For run 1, calculate the 96th percentile with the full representative portfolio of assets
 - This will change the optics of the portfolio adjustment, such that the representative portfolio gets a multiplier of roughly 1
 - It will also marginally increase differentiation of charges by letter rating

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July 24, 2017

Kevin Fry, Chair
Investment Risk-Based Capital (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
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Via electronic mail to Julie Garber.

Dear Mr. Fry:

We are writing in regard to the June 8, 2017, report from the American Academy of Actuaries to your Working Group, “Updated Recommendation of Corporate Bond Risk-Based Capital (RBC) Factors.” UnitedHealth Group is one of the nation’s largest managed care and healthcare services companies, which administers and provides healthcare benefits serving individuals in all fifty states and the District of Columbia. We thank you for the opportunity to comment on the Academy’s report.

In particular, we wish to comment on Appendix C of the report, which offers C-1 factors for corporate bonds that are deemed appropriate for the Health and Property/Casualty RBC formulas. In the Health RBC formula, those bond default-risk factors are categorized as H-1. As we noted during your Working Group’s June 13 conference call, we believe that the proposed factors should be adjusted to reflect the fact that the bond portfolios of health insurers typically have a much shorter average term to maturity than the bond portfolios of life insurers.

Intuitively, it makes sense that, at least for investment-grade bonds, the risk of default should increase as the bond’s remaining term to maturity increases. If the bond currently has an investment-grade rating, then presumably the issuer’s financial condition is reasonably good, and default is not imminent. Although default in the near-term is possible, because of a misvaluation by the rating agencies, it is more likely that default will occur after some period of deterioration in the issuer’s financial condition. The more time that remains until the bond matures, the more time there is for such deterioration to occur.

The Academy has acknowledged that there is probably such a relationship between term to maturity and default risk. However, they have also stated that because of the way that their default model was constructed, significant effort would be required to adjust the model to reflect the shorter maturity of the typical health-company portfolio. Given the relatively small impact that investment risk has on the RBC requirement of most health insurers, that degree of effort does not seem warranted. Preferably, the factors could be adjusted using existing data regarding the relationship between default risk and term to maturity.

As it happens, the NAIC has already performed such an analysis, for the purposes of its Principle-Based Reserving (PBR) initiative. In the NAIC's *Valuation Manual*, in standard VM-20, Appendix 2 includes tables related to bond default risk. Among these, the most relevant to the present issue may be Table D, which displays cumulative default rates at CTE 70, varying both by credit rating and weighted average life (WAL) of the bond. The credit ratings are at essentially the same granularity as the categories that you intend to apply to RBC H-1, and the WAL categories range from one year to ten years in one-year increments.

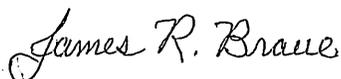
For each credit rating, it should be possible to adjust the proposed H-1 factor for the maturity difference, by multiplying the proposed factor by the ratio of two Table D factors: the numerator would be the Table D factor applicable to the WAL of the typical health insurer bond portfolio; the denominator would be the Table D factor applicable to the WAL of the typical life insurer bond portfolio. Such an adjustment would probably still be conservative, since the target confidence level for the proposed H-1 factors probably exceeds CTE 70; if the Table D factors were based on that higher confidence level, there presumably would be even a greater difference by maturity, at least for the higher credit ratings.

Of course, Table D in the *Valuation Manual* was not developed for this purpose. However, there is no obvious reason why it could not be used as the basis for an approximate adjustment of the kind described above. You may wish to consult with the Life Actuarial Task Force to determine whether there is some compelling reason not to use Table D in this fashion.

Please note that this does not address the additional adjustment that is needed to reflect the different reporting treatment for bonds designated NAIC 3 through 5: viz., that they are reported at amortized cost in the Life Annual Statement, but at the lower of cost and market in the Health Annual Statement. The Academy made no recommendation in this regard, and we anticipate that your Working Group will be discussing this topic before finalizing any new H-1 factors for Health RBC.

If you have any questions regarding our comments above, we would be happy to discuss the matter with you further.

Sincerely,



James R. Braue
Director, Actuarial Services
UnitedHealth Group

cc: Julie Garber, NAIC
Randi Reichel, UnitedHealth Group



July 24, 2017

Mr. Kevin Fry
Illinois Department of Insurance
Chair, NAIC Investment Risk Based Capital (E) Working Group

Via email to: Julie Garber, NAIC

Re: Comments on the Report from the American Academy of Actuaries Regarding Corporate Bond Factors

Dear Mr. Fry:

The Stable Value Investment Association (SVIA) appreciates the opportunity to provide comments on the American Academy of Actuaries (AAA) June 2017 updated recommendation of corporate bond risk-based capital (RBC) factors. The NAIC's Investment Risk Based Capital Working Group's charge to revise the C-1 RBC factors for bonds is of importance to the stable value community. Corporate bonds represent a significant allocation of investment management portfolios supporting stable value funds.

The SVIA is a non-profit organization dedicated to educating retirement plan sponsors and the public about the importance of saving for retirement and the contribution stable value can make toward a financially secure retirement. SVIA represents all segments of the stable value investment community including public and private plan sponsors, insurance companies, banks, and investment managers and consultants. SVIA's members collectively manage over \$821 billion in stable value assets as of December 31, 2016, covering more than 165,000 defined contribution plans, which make stable value available to millions of participants.

Stable value funds, which are used primarily in defined contribution plans, are designed to preserve principal, while providing consistent, conservative investment returns, as well as provide benefit-responsive liquidity to plan participants. As such, stable value funds play an important role in the investment option line-up for those plans that include them (approximately half of all defined contribution plans) as an available choice for plan participants looking for a relatively low-risk investment that provides protection of principal and steady income that, over time, has exceeded returns from money market investments. This is particularly important for the millions of stable value investors that are in or nearing retirement, and desire maximizing income while preserving capital.

July 24, 2017
Mr. Kevin Fry

To help achieve a performance objective of preserving principal, providing liquidity and producing steady and positive returns, a stable value fund is generally comprised of a conservative and diversified portfolio of high-credit quality, fixed income securities. Underlying assets of a typical stable value fund are invested across major sectors of the fixed income market, including mortgage-backed securities, asset-backed securities, commercial mortgage-backed securities, cash, U.S. treasuries, and corporate bonds. Although not all stable value portfolios are managed the same, investment grade corporate bonds do consistently represent a material allocation within the underlying assets of a typical stable value portfolio.

SVIA's recent Stable Value Investment and Policy Survey that covers over \$821 billion in stable value assets under management as of 12/31/16, reported these assets generated a 2.49% crediting rate, had a duration of 4.47 years and average credit quality using Barclays Index Rating methodology of AA-. The survey also reported the following underlying fund asset allocation: 3.8% in cash or equivalents; 14.6% in treasuries; 3.5% in agencies; 1.2% in traditional GICs; 7.5% in asset-backed securities; 13.6% in mortgage-backed securities; 4.8% in commercial-backed securities; 34.8% in publicly traded corporate bonds; 4.3% in private placements; 5.2% in commercial mortgages and 6.6% in other investments.¹

As such, the potential impact of American Academy of Actuaries' proposal on the products our members offer is of concern to the stable value community. If adopted under its current form, base C-1 RBC factors for investment grade corporate bonds would increase. This would have an impact on an important asset class for stable value portfolios which are attracted to fixed income investments that are high credit quality, offer attractive yields, support diversification and provide liquidity. Each of these important characteristics is found in investment-grade corporate bonds.

These changes could motivate issuers to change their portfolios by holding more capital and charging higher fees, that would ultimately reduce returns for plan participants. Given the proposed base C-1 RBC factors suggest a change in relationship between investment and non-investment grade risk, there is a potential that adopting these changes could incentivize companies to invest in riskier assets. Finally, these changes would impact retirement savers seeking steady, consistent returns, and investing in a relatively low-risk asset class.

We strongly urge members of the NAIC Investment Risk-Based Capital Working Group to engage key stakeholders, including the American Academy of Actuaries and industry representatives, to analyze the proposal, including details of the AAA's model, to understand the impact proposed changes in C-1 RBC factors for corporate bonds would have on stable value products and retirement plan participants who invest in our products. We believe it is important that regulators take time to

¹ SVIA's Stable Value Fund Investment and Policy Survey (2016).

July 24, 2017
Mr. Kevin Fry

understand the implications of the proposal and resolve open questions with the AAA's model before considering it for adoption. This is particularly appropriate given the new and dramatic changes reflected in the latest proposal, such as the portfolio adjustment factor.

Finally, we have reviewed written comments submitted by the American Council of Life Insurers and are supportive of their statements.

Thank you for your consideration of our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Gina Mitchell". The signature is fluid and cursive, with a large initial "G" and "M".

Gina Mitchell,
President, Stable Value Investment Association



July 24, 2017

Via E-mail to: jgarber@NAIC.org

Mr. Kevin Fry
 Chair, Investment Risk-Based Capital (E) Working Group
 National Association of Insurance Commissioners
 1100 Walnut Street, Suite 1500
 Kansas City, MO 64106-2197

Re: Comments on American Academy of Actuaries' June 8, 2017 Updated Recommendation of Corporate Bond Risk-Based Capital (RBC) Factors

Dear Mr. Fry:

On behalf of the National Structured Settlements Trade Association (“NSSTA”) I am writing to offer our association’s comments on the above-referenced Recommendation (the “2017 RBC Bond Factor Recommendation”) and its potential implications for life insurers that issue single-premium immediate annuities to fund structured settlements (“structured settlement annuities” or “SSAs”).

NSSTA is a non-profit association dedicated to promoting the use of structured settlements to resolve physical injury claims. Its members include life insurers that issue SSAs; property and casualty insurers that use structured settlements to resolve claims against their insureds; insurance brokers that specialize in arranging structured settlements; and lawyers, life care planners and other professionals engaged in negotiating and implementing structured settlements.

NSSTA commends the diligence of the American Academy of Actuaries (the “AAA”) in preparing the 2017 RBC Bond Factor Recommendation. Its updated base C1 bond factors represent an improvement on the factors recommended by AAA in August 2015; but we remain concerned that the updated factors still would lead to problematic increases in capital costs for life insurers that issue SSAs.

Because of the exceptionally long duration of structured settlement liabilities, SSA issuers commonly have extensive holdings of long-term, investment grade bonds. While such holdings would not be affected as dramatically by the updated bond factors as they would have been by the factors that were suggested in August 2015, the updated factors still would impose

Mr. Kevin Fry

July 24, 2017

Page 2

substantially increased capital costs on SSA issuers. Insofar as they are passed through to SSA purchasers (primarily property & casualty insurers), those increased capital costs would make structured settlements less appealing as a means of settling physical injury claims. Insofar as the costs are not passed through to SSA purchasers, they would discourage life insurers from continuing to issue SSAs or from joining (or rejoining) the market if they do not currently issue them.

In recent years the number of life insurers issuing SSAs has fallen sharply. Of the more than 700 stock or mutual life insurers in business in the United States, only nine now are writing SSAs. (In 2017 those companies issued approximately 25,000 new SSAs, for which they received premiums totaling approximately \$5.8 billion.) NSSTA hopes to see additional life insurers join, or rejoin, the market; but they cannot be expected to do so if they would face substantially increased capital costs for holdings of long-term, investment grade corporate bonds. Worse yet, the increased capital costs resulting from use of the base C1 bond factors might prompt existing SSA issuers to quit the market, leaving parties to structured settlements with fewer choices than they have today.

By facilitating settlements and offering injury victims assured, continuing, tax-free payments tailored to their needs and the needs of their families, structured settlements serve important public policies that have been endorsed by Congress and by State legislatures throughout the country. Those policies will be ill-served if use of updated base C1 bond factors leads to disproportionately increased capital costs for SSA issuers and/or higher premiums charged to SSA purchasers.

NSSTA thus recommends that before making any recommendation to the Capital Adequacy (E) Task Force concerning the 2017 RBC Bond Factor Recommendation, the Investment Risk-Based Capital (E) Working Group consider, and ask AAA, in consultation with other industry stakeholders, to assess (i) how the updated base C1 bond factors would affect SSAs, and (ii) how adverse effects on SSAs could be avoided or minimized.

* * * *

NSSTA welcomes this opportunity to comment on the 2017 RBC Bond Factor Recommendation. If we can answer questions about the above comments or provide background about structured settlements or SSAs, please feel free to direct inquiries to the undersigned or to

Mr. Kevin Fry
July 24, 2017
Page 3

NSSTA's counsel, Craig Ulman of Hogan Lovells, who can be reached at (202) 637-5669 or by e-mail at craig.ulman@hoganlovells.com.

Very truly yours,

A handwritten signature in black ink that reads "W.H. Eric Vaughn". The signature is written in a cursive style with a large, stylized "V" at the end.

Eric Vaughn
Executive Director
National Structured Settlements Trade Association



Julie Garber
 National Association of Insurance Commissioners
 1100 Walnut Street
 Suite 1500
 Kansas City, MO 64106-2197
 Via e-mail: jgarber@naic.org

Comment Submission on the American Academy of Actuaries Recommendation of Corporate Bond Risk-Based Capital (RBC) Factors

Dear Ms. Garber,

The North American CRO Council (“CRO Council” or “Council”) appreciates the opportunity to comment on the proposed updates to the credit risk (“C1”) component of Risk Based Capital (“RBC”). The CRO Council is a professional association of Chief Risk Officers (“CROs”) from leading insurers based in the United States, Canada, and Bermuda. Member CROs currently represent 31 of the largest Life, and Property and Casualty insurers in North America. As a body formed to promote sound practices in risk management, the CRO Council appreciates the opportunity to submit its comments and concerns regarding the proposed revisions.

The Council understands and supports state regulators’ desire for a continuing dialogue between insurers and their regulators regarding insurers’ key risks and their risk management programs. Although the Council believes that good progress has been made on the base bond factors in the June 2017 proposal from the American Academy of Actuaries (“Academy”), we are concerned that significant modeling issues have not been addressed. Most notably:

- The model is not a true portfolio model, distorting both the magnitude of capital requirements as well as the trade-off from investment grade to below investment grade
- The model double-counts risks already covered by reserves
- The model assumes that a credit portfolio only earns enough spread to cover expected losses
- The model treats all debt as if it were senior unsecured public corporate exposure

These issues have been highlighted through industry letters and discussions since the publication of base factor methodology in August 2015. In the June 2017 proposal, the impact of these issues is most visible in the portfolio adjustment.

An update to the portfolio adjustment framework was not part of the initial August 2015 proposal and methodology document. Instead, it was published over a year later in December 2016, and the industry did not have the opportunity to discuss the methodology underlying this adjustment in detail as the Academy was developing the new June 2017 proposal. The proposed portfolio adjustment framework is material and deserves proper documentation and review.

Our initial concern with the June 2017 portfolio adjustment framework is that it does not match intuition and it seems to be a drastic departure from the current framework. The current framework is built on a



representative portfolio of 1,300 issuers that receives a bond size adjustment (new terminology is 'portfolio adjustment') of 1.00. The June 2017 proposal is built on a representative portfolio of 988 issuers that receives a portfolio adjustment of 1.22. The following table summarizes portfolio adjustment factors for a sample of portfolio sizes:

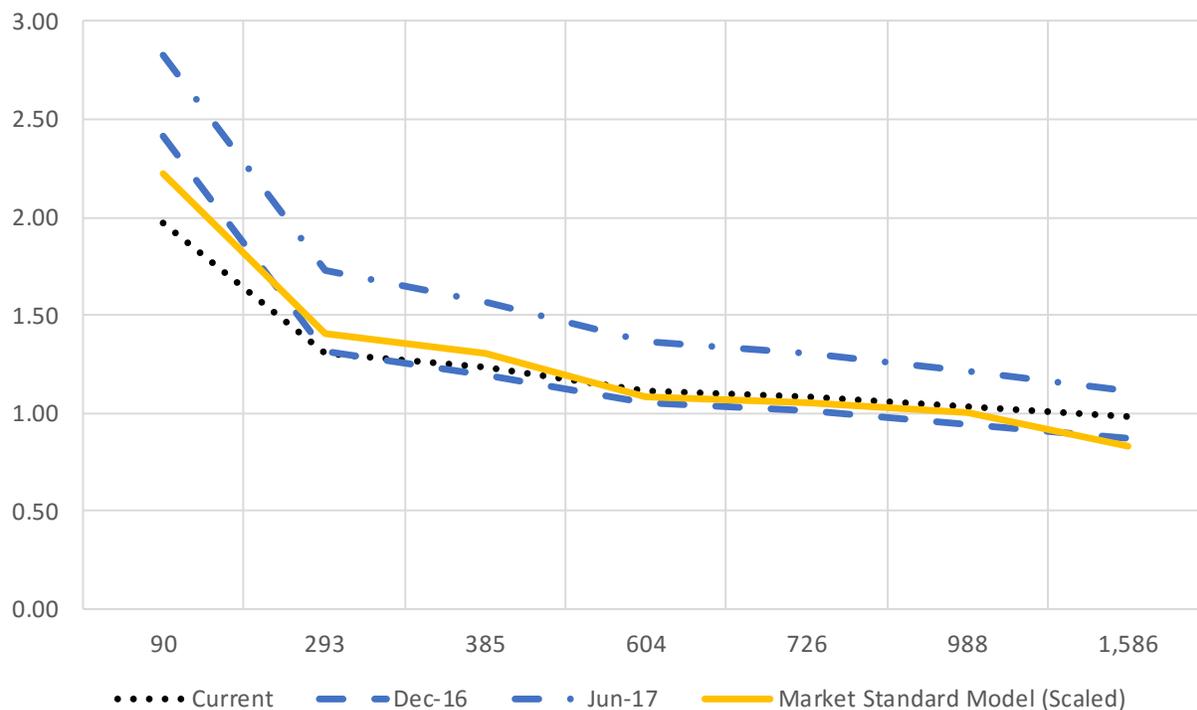
# ISSUERS	CURRENT	DEC-16	JUN-17
250	1.36	1.40	1.84
500	1.16	1.10	1.44
750	1.07	1.00	1.29
1,000	1.03	0.94	1.21
1,250	1.00	0.90	1.16
1,500	0.99	0.88	1.13
1,750	0.97	0.86	1.10
2,000	0.97	0.84	1.08
2,250	0.96	0.83	1.07
2,500	0.95	0.83	1.06
5,300	0.92	0.79	1.00

The June 2017 proposal requires 5,300 issuers to receive an adjustment factor of 1.00. The December 2016 portfolio adjustment only required 750 issuers to receive an adjustment factor of 1.00. Changes of this nature would constitute fundamental shifts in how diversification impacts bond portfolios. To our knowledge, no such shift has been observed or even suggested by market participants over the past 25 years. Furthermore, the largest life insurers hold about half the number of proposed issuers. The Council asserts that the portfolio adjustments do not pass a simple reasonability test.

For an improved benchmark of diversification benefit, we ran the Academy's 7 portfolios through a market standard credit portfolio model. We modeled 96th percentile losses using the Academy's stated portfolios and default expectations.¹ The resulting losses were then scaled to a base portfolio of 988 issuers to provide a pure portfolio adjustment centered around the Academy's representative portfolio. The resulting portfolio adjustment line (solid yellow line below) tracks closely to both the current and December 2016 portfolio adjustments:

¹ **Model Assumptions:**

- 96th Percentile
- Probability of Defaults and Loss Given Defaults: Academy assumptions
- Industries: No industry treatment to match Academy model
- Coupon Rate: 0.96%, CDX IG Basket 10yr
- Tenor: 10yr



This shows that while the shape of the proposed curves may be generally reasonable, attempting to adjust percentile in this calculation materially distorts the results and represents a departure from the original model. Since no material portfolio modeling changes have occurred in the June 2017 proposal, the June 2017 reduction of base factors necessarily means that the portfolio adjustment must increase to an unintuitive level.

Beyond the unintuitive nature of the results, there are a few practical reasons that the CRO Council believes the new proposal to be untenable. If the proposed model accurately represents reality, the entire industry will require a large increase in required capital. The current proposal for portfolio adjustment would yield three detrimental effects to the health of the industry:

- 1) Such an adjustment factor would severely impact small companies by requiring additional capital above and beyond what is actually necessary based on historical default and the size of their balance sheets.
- 2) The number of bonds required would create an incentive to raise issuance counts in an artificial manner. This could result in portfolios which are not representative of what is actually contained in the balance sheet of insurers, and could result in operational risk greater than the risk lowered by the higher bond count.
- 3) The diversification parameter would also create an incentive for insurers to add issuers beyond their regular investable universe. This has the potential to increase risk as insurers are forced into investing in less safe or less well understood bonds.

In closing, the CRO Council wishes to reiterate its support for the ongoing attempt to refine RBC C1 factors. However, due to the implication of substantially higher default rates, the creation of capital inefficiencies



of smaller insurers, incentivizing artificially raised issuance counts, and incentivizing investment outside of the regular investable universe, the CRO Council recommends that the current proposal from The Academy be revisited, specifically with regards to the magnitude of the portfolio adjustment factors or the number of securities required to achieve these factors. We believe this would best be accomplished through creation of a working group that includes technical representatives from the NAIC, the Academy, and industry.

Thank you again for the opportunity to respond to your efforts and we would welcome the opportunity to meet to discuss and answer any questions you may have.

Sincerely,

A handwritten signature in black ink that reads "Mark A. Verheyen".

Mark Verheyen, Chair
North American CRO Council

A handwritten signature in blue ink that reads "Michael Slipowitz".

Michael Slipowitz, Chair
CRO Council – State Regulatory Working Group

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Farm Bureau Financial Services:
 Farm Bureau Life Insurance Company
 Farm Bureau Property & Casualty Insurance Company



FBL Financial Group, Inc.

July 21, 2017

Kevin Fry
 Chair, Investment Risk-Based Capital Working Group
 National Association of Insurance Commissioners

Re: American Academy of Actuaries Proposal: RBC Portfolio Adjustment

Dear Kevin:

The American Academy of Actuaries (AAA) recently released updated C-1 factors with an accompanying new factor set and scale for the portfolio adjustment. We recognize all the hard work the AAA has put in to developing the new methodology and very much appreciate the opportunity for further discussion of the most recent draft.

Further, we fully support the expanded number of classes and the new base C-1 factors. However, we have concerns with the new portfolio adjustment. Per the AAA memo:

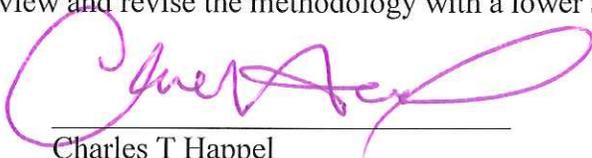
The capital requirements for bond risk in the Life RBC formula are calculated in two steps. The first step involves the calculation of the base factors times each individual security. The second step involves an adjustment to the result from the first step to reflect differences between an individual insurer's bond portfolio and the representative portfolio used in developing the base factors. Primarily, the portfolio adjustment reflects risk differences due to the diversification benefits observed at an individual company's portfolio level.

Some observations:

- The base C-1 factors were generated using a model portfolio of **824** NAIC 1 and NAIC 2 securities at a **92%** confidence level. The portfolio adjustment is intended to increase the confidence level to **96%**.
- The average issuer count for the largest category of insurance company in the study was around **1,600**.
- The portfolio adjustment would require an insurer to hold about **5,300** unique issuers to not receive a C-1 upcharge. In context, the Bloomberg Barclays US Corporate Bond Index contains about **5,400** bonds and far fewer unique issuers.
 - o Many insurers cannot efficiently manage the number of issuers indicated by the diversification level recommended by the AAA.
 - o In holding that many securities, insurers could experience lower liquidity in their portfolios: the size of each holding would be reduced to a level that would impact an insurer's ability to sell the position.
 - o Examples:

Number of issuers	Current Portfolio Adjustment	Proposed Portfolio Adjustment
250 (+/- average count of AAA's life companies)	136.0%	184.4%
1300 (current portfolio adjustment break-even)	100.0%	115.3%
1583 (average count of AAA's largest category)	98.1%	111.5%
5275 (proposed portfolio adjustment break-even)	92.5%	100.0%

We understand that the AAA is using the portfolio adjustment to increase the C-1 charge confidence level to 96% from the base of 92%. However, the proposed methodology would require that an insurer hold over six times the size of the model portfolio and over three times the average size of the largest category held by insurance companies. We would request that the NAIC C-1 group and the AAA work with the ACLI to review and revise the methodology with a lower scale/adjustment for the portfolio factors.



Charles T Happel
Chief Investment Officer

FBL Financial Group
Farm Bureau Life Insurance Company



July 24, 2017

2017 Officers:

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Catholic Financial Life

Kevin A. Marti
Vice Chair of the Board
Gleaner Life Insurance Society

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Patrick Dees
Immediate Past Board Chair
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Douglas Baker
Teachers Life Insurance Society

Darcy G. Callas
Modern Woodmen of America

Eivind Heiberg
Sons of Norway

Paul Johnston
Thrivent Financial

Timothy L. Kuzma
Polish Falcons of America

Cynthia Maleski
First Catholic Slovak Ladies
Association of America

Timothy Porter
Foresters Financial

Buddy Preuss
Hermann Sons Life

Thomas P. Smith
Knights of Columbus

Joseph J. Annotti
President and CEO

2017 Executive Summit
April 3-5, 2017
W Chicago – City Center
Chicago, IL

2017 Spring Symposium
May 23-25, 2017
Loews Chicago O'Hare
Chicago, IL

2017 Annual Meeting
Sept. 6-8, 2017
Sheraton Wild Horse Pass
Phoenix, AZ

Kevin Frey, Chair, NAIC Investment RBC Working Group

Attn: Julie Garber – jgarber@naic.org

RE: Corporate Bond RBC Factors – Academy Recommendations

Dear Mr. Fry:

The American Fraternal Alliance (Alliance) appreciates the opportunity to provide comments regarding [the June 8, 2017 report presented by the American Academy of Actuaries](#) (Academy) and its Updated Recommendation of Corporate Bond Risk-Based Capital (RBC) Factors.

The Alliance has concerns regarding the negative impact from the Modifications to the Base Factors and changes to the Portfolio Adjustment Formula as proposed by the Academy in its [June 8, 2017 report](#). Based on data that we have collected from a sample of our members the Alliance is concerned that small to mid-sized fraternal benefit societies RBC Levels would be significantly impacted by the Academy's proposed changes. For instance, solely because of these changes small to mid-sized fraternal benefit societies, which are currently viable and financially healthy insurers, could be pushed below the Company Action Level RBC and be unnecessarily subjected to further regulatory scrutiny.

We appreciate the deliberate fashion in which NAIC is trying to address this matter and welcome the opportunity to work with NAIC and other industry representatives on this matter as it is expected to have significant negative consequences on small to mid-sized insurers.

Sincerely,

President and CEO



COLUMBIAN FINANCIAL GROUP

Tammy-Anne Campbell, FSA, FCIA, MAAA
 Vice President & Corporate Actuary
 Phone: (607) 724-2472 x 7259
 Email: tammy-anne.campbell@cflife.com

July 24, 2017

Ms. Julie Garber
 Senior Manager – Solvency Regulation
 NAIC
 110 Walnut Street
 Suite 1500
 Kansas City, MO 64106

RE: Exposure of Academy's Revised Bond Factor Report & Recommendation

Dear Mr. Garber,

Below are my comments regarding the exposed Academy's Revised Bond Factor Report.

First of all, I appreciate the work of the Academy and would like to extend my thanks to all those involved.

My concern lies with the proposed changes to the portfolio adjustment factor. While the changes to the C1 Factors themselves seem to be well reasoned and appropriate, the proposal relating to the portfolio adjustment factor does not seem rational or reasonable. I do understand that the Academy went with a simpler approach at the direction of the IRBC, but I do not believe that this approach appropriately reflects the inherent risk of a portfolio.

Let us look at a simple example:

	Company A	Company B
Bond Portfolio Size	100M	1000M
# Bond Issuers	100	1000
Avg Size per Issuer	1M	1M
Old Portfolio Adjustment Factor	1.9	1.03
New Portfolio Adjustment Factor	2.71	1.2135

Is Company A's portfolio really 123% more risky than Company B? Is there sufficient information to judge? The portfolio adjustment factor does not take into account the dispersion of the portfolio, average size or the quality of the underlying portfolio.

If we believe that the C1 factors are appropriate, I would suggest that the portfolio adjustment factor is no longer required. If we are appropriately measuring the risk associated with each asset category, then the concentration factor would capture the risk of too high a proportion with any specific issuer, and not just bonds. The concentration factor could be expanded to include the Top 20, say, if there is significant concern in this area. This would be an approach that would produce more equitable results between small and large companies.

I expect a larger company to have more bond issuers. I do not believe that smaller companies should be penalized for "right sizing" their portfolios.

My concern, if this approach moves ahead, is that smaller companies will be diverting their investment resources to maximize the number of issuers rather than achieving their other strategic investment targets. I do not see how this redeployment of valuable resources helps the industry or improves the financial strength of any company. A metric that can so easily be manipulated is not a reliable one.

RBC is important to small companies for many reasons, not the least of which is the small company exemption under PBR. If this proposal moves forward, I would request an implementation date of December 31, 2018 at the earliest to give small companies time to analyze and assess the impact of these changes.

Thank you for the opportunity to voice my concerns.

Sincerely,



Tammy-Anne Campbell, FSA, FCIA, MAAA
Vice President and Corporate Actuary



Ralph S. Blanchard, III
FCAS, MAAA
 Vice President & Actuary
 Accounting Policy - Finance
 The Travelers Companies, Inc.
 One Tower Square
 Hartford, CT 06183
 (860) 277-9975
 (860) 954-3708 (fax)
rblancha@travelers.com

July 24, 2017
 Kevin Fry, Chair
 NAIC's Investment Risk-Based Capital Working Group
 ATTN: Julie L. Garber

RE: Comments on the exposed report from the American Academy of Actuaries regarding bond factors in all of the RBC formulas

The Travelers Companies, Inc. (Travelers) appreciates the opportunity to comment on the exposed report from the American Academy of Actuaries regarding bond factors in all of the RBC formulas. Travelers is a leading provider of property and casualty (P&C) insurance products and services to a wide variety of businesses and organizations as well as individuals. Our products are distributed primarily through independent insurance agents and brokers throughout the United States and in selected international markets.

Our comment letter deals exclusively with the Bond risk factors suggested for P&C and Health RBC, as shown on the exposed document's Appendix C under the label "Alt 6/17".

Overall, we believe that the suggested factors for P&C and Health do not appear to be correct. They seem unreasonably high, so much so that it seems likely that some error or erroneous assumption likely occurred in their derivation.

Specific reasons to question the suggested factors for P&C insurers include:

- The underlying analysis used a 10-year holding period for a hypothetical portfolio of bonds, despite the fact that bond durations for property/casualty insurers are typically far shorter. This is a major error in analysis, as the default probabilities are significantly higher for 10 year holding periods than they are for 5 year holding periods, and 5 year holding periods are far more typical of the P&C industry. As evidence of this we show the following average cumulative default rates by rating from the Moody's Annual Default Study for corporate bonds (using data from 1983-2016, as found on page 37 of the study)"

	<u>5 yr</u>	<u>6 yr¹</u>	<u>10 yr</u>
Aaa	0.067%	0.100%	0.139%
Aa	0.313%	0.408%	0.650%
A	0.836%	1.111%	2.003%
Baa	1.632%	2.049%	3.226%
Ba	8.735%	10.444%	14.798%
B	22.011%	25.702%	34.223%

¹ We are aware that the American Academy of Actuaries is stating that 6 year holding periods is the average for the P&C industry. We believe that 5 year holding periods may be more typical (and consistent with our own stated bond duration of under 5 years), but have included a 6 year column in this table to reflect the Academy's findings.

Based on the above, it seems likely that factors reflecting a 10 year holding period are as much as twice as high for investment grade bonds than a more correct holding period would have produced.

- The suggested factors were stated to be based on a 92% confidence level. With the portfolio adjustment factor, the Academy's report states that the factors would represent a 96th percentile over a 10 year period. Ignoring for now that the P&C industry does not typically hold bonds for such a long average period, the major risks for P&C RBC are calibrated to only a 87.5th percentile. Combining risk factors for a major risk at an 87.5th percentile with risk factors for a minor risk at beyond the 96th percentile (as they reflect a holding period materially longer than is typical for P&C insurers) would result in a significant inconsistency within the P&C RBC formula.
- One stated reason to review the P&C RBC Bond risk factors at this time was to be consistent in the various RBC formula responses to bond risk. The theory is that the risk of holding an asset is independent of who holds it, accordingly, the risk charges should be consistent from one formula to the next. Yet this desire for consistent treatment is extremely inconsistent with regard to the proposed treatment of tax offsets. The Life RBC formula assumes that a troubled company would be able to fully utilize all tax credits resulting from bond defaults, while the P&C RBC formula assumes that a troubled company would not be able to utilize any tax credits for the same defaults. We have seen no evidence to support such inconsistent treatment. Absent such evidence, we would expect the proposal to be consistent between Life and P&C RBC with regard to tax offsets for bond defaults.

In summary, we believe that the suggested factors for P&C RBC Bond risk are flawed. We also note that the relative immateriality of Bond risk for P&C argues for a simplified solution to this problem. One such solution would be to use the same factors for P&C bond risk as for Life bond risk, i.e., have the P&C bond risk factors be equal to the life factors on an after-tax basis. This would be roughly consistent with adjusting the suggested factors for the use of a more realistic bond duration (5 years rather than 10, resulting in a 50% reduction in the factors), and the use of factors on an after-tax basis. Some adjustment would still be necessary for non-investment grade bonds to reflect the use of market value for such bonds held by P&C insurers vs. the amortized cost basis used by Life insurers.

APPENDIX – Current vs. suggested bond factors

Current P&C	Rating	<u>Suggested factors</u>		
		pre-tax PC	pre-tax Life	
0.30%	AAA	0.26%	0.22%	not adjusted for diff. valuation bases
	AA+	0.43%	0.32%	
	AA	0.64%	0.44%	
	AA-	0.92%	0.56%	
	A+	1.27%	0.68%	
	A	1.64%	0.82%	
	A-	2.07%	0.98%	
1.00%	BBB+	2.56%	1.13%	
	BBB	3.12%	1.32%	
	BBB-	3.88%	1.57%	
2.00%	BB+	8.66%	2.88%	
	BB	11.44%	3.74%	
	BB-	15.39%	4.89%	
4.50%	B+	20.10%	5.07%	
	B	28.18%	6.89%	
	B-	39.47%	9.45%	
10.00%	CCC+	54.63%	13.87%	
	CCC	69.19%	19.02%	
	CCC-	72.49%	29.06%	



AMERICAN ACADEMY of ACTUARIES

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July 24, 2017

Via email to: jgarber@naic.org

Kevin Fry
Chair, Investment Risk-Based Capital (E) Working Group
National Association of Insurance Commissioners

c/o Julie Garber, Senior Manager—Solvency Regulation
 1100 Walnut Street, Suite 1500
 Kansas City, MO 64106-2197

Re: C1 Work Group Updated Recommendation of Corporate Bond Risk-Based
 Capital Factors

Dear Mr. Fry:

The American Academy of Actuaries¹ (“Academy”) Property and Casualty Risk-Based Capital Committee and Health Solvency Subcommittee is pleased to provide this response letter to the NAIC Investment Risk-Based Capital (E) Working Group (“IRBCWG”). This letter is in reference to the IRBCWG’s exposure of the American Academy of Actuaries C1 Work Group’s (“C1WG”) “Updated Recommendation of Corporate Bond Risk-Based Capital (“RBC”) Factors” letter dated June 8, 2017.

IRBCWG Objectives—Basis for These Comments

It is our understanding that the IRBCWG is considering implementing new life RBC fixed-income asset risk factors based on the work done by the C1WG and presented in the June 8, 2017, report titled “Updated Recommendation of Corporate Bond Risk-Based Capital Factors.”

We understand that the IRBCWG is also considering implementing new property and casualty (“P&C”) and health fixed-income asset risk factors based on output from the C1WG’s corporate bond model, with certain adjustments. This letter sets forth some of the implications of, and issues related to, that change in the P&C and health fixed-income asset risk factors.

¹ The American Academy of Actuaries is a 19,000-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.

As explained below, it appears that the potential impact of the proposed factors could be greater on P/C and health companies than previously assumed, and further research on potential adjustments is required.

Current (2016) P&C Fixed-Income Asset Risk Factors

The P&C and health factors have been unchanged since the first adoption of RBC for P&C and health insurers. We understand that in 2001 the life factors were revised for tax considerations, but P&C and health factors were not updated at that time.

To understand this history, we obtained the 2000 RBC instructions for P&C and life. Table 1 shows the 2000 P&C, health, and life RBC fixed-income asset risk factors. Note that P&C and health utilized the same factors.

Table 1
2000 Life and P&C RBC Factors

1	2	3
NAIC Designation	Life	P&C / Health
1	0.3%	0.3%
2	1.0%	1.0%
3	4.0%	2.0%
4	9.0%	4.5%
5	20.0%	10.0%
6	30.0%	30.0%

The factors in Table 1, columns 2 and 3, are consistent with the common understanding that the P&C and health factors selected in the original P&C and health RBC formulas were the same as the life factors with an adjustment (equal to 50 percent) for the fact that P&C and health statutory carrying value for NAIC classes 3-5 (“below-investment-grade bonds”) is market value and the life statutory carrying value for bonds is amortized cost.

We note that there are multiple simplifications inherent in the current approach, as it does not consider certain differences between the life and P&C/health statutory reporting and business practices, including:

- There is no provision for credit risk contained in statutory policy reserves for P&C and health insurers. Removing the risk premium offset would **increase** the factors.

- P&C and health insurers typically have shorter duration assets. A number of speakers at IRBCWG meetings have expressed the view that an appropriate adjustment would *decrease* the factors.²

In addition, we have found minimal discussion of the basis for the 50 percent adjustment for below-investment-grade bonds.

Table 2 shows the impact on P&C asset risk factors using the updated life factors and *retaining* the simplifications inherent in the current P&C asset risk factors. In other words, this analysis uses the new factors proposed for life companies and applies a 50 percent adjustment for below-investment-grade bonds. We have labeled this Scenario 1 and prepared results both including and excluding the tax effect.

The approximate impact on P&C insurers is displayed in the table below.³

Table 2

Impact Analysis of Scenario 1

Impact Metric	Scenario 1	
	Pre-Tax	Post-Tax
Average % change in authorized control level (ACL)	0.1%	0.0%
% of companies with 15%+ change in ACL	12.9%	6.3%
% of companies with 50%+ change in ACL	5.1%	0.0%
# of companies with change in RBC action level	0	0

This analysis shows that updating the factors using the new life factors, using the same approach that was done in the past on a post-tax basis, has minimal impact to the ACL for P&C insurers. Additional data and information on this impact analysis is shown in Appendix 1. We are pulling together the information for health companies and expect to show similar results.

C1WG Work

The C1WG report dated June 8, 2017, shows factors recommended for life insurers. The C1WG report also contains factors referred to as “Alternative Base Factors for Health and P&C” that equal the life factors increased to remove the federal income tax offset and to remove the credit risk contained in statutory life reserves. These are shown in column 3 of Table 3, below.

² The Academy’s Property and Casualty Risk-Based Capital Committee and Health Solvency Subcommittee have not yet researched that issue.

³ The impact presented in this section is approximated, as discussed in Appendix 1.

Table 3
2000 Life and P&C/Health RBC Factors

1	2	3
NAIC Designation	Current P&C/Health	Alternative Base Factors ⁴
1	0.3%	1.03%
2	1.0%	3.19%
3	2.0%	11.83%
4	4.5%	29.25%
5	10.0%	65.44%
6	30.0%	30.00%

In its letter, the C1WG points out that the factors do not include any adjustment for the reporting differences for below-investment-grade securities. However, it is our understanding that the C1WG would expect that an appropriate adjustment, possibly the current 50 percent adjustment, would be made.

Comparing columns 2 and 3 of Table 3, we observe these alternative base factors are higher than we anticipated given that the process was intended to largely provide more granularity and given that the change in the life factors is much smaller.

The adjustment to remove the credit risk contained in statutory life reserves was not part of the original P&C and health RBC calibration. It appears that introducing this adjustment, as part of the granularity increase, creates the more significant change in factors that we have observed.

It is important to highlight that the C1WG is not recommending the alternative base factors to be used for P&C and health, but rather provided these factors as a potential starting point:

“The C1WG is not recommending these factors for the P&C and Health RBC formulas, but have provided these alternative factors as a potential starting point for consideration by regulators to create a more consistent set of updated charges across all RBC formulas.”⁵

This Committee’s Review of C1WG Work

We appreciate the C1WG’s work and for providing the base factors as a starting point. These base factors highlight that removing the simplifications from the current approach may lead to significantly different factors for P&C and health insurers.

⁴ From Appendix C of C1WG report dated June 8, 2017. Granular designations summarized by assuming equal weights in assets within each of the old 1-6 designations.

⁵ C1WG report dated June 8, 2017, page 4.

As part of our research, we have reviewed these factors and the potential impact to P&C insurers.⁶ The approximate impact on P&C insurers is displayed in the table below.⁷

Table 4

Impact Analysis of Scenario 2

Impact Metric	Scenario 2	
	Pre-Tax	Post-Tax
Average % change in ACL	0.7%	0.4%
% of companies with 15%+ change in ACL	18.7%	15.8%
% of companies with 50%+ change in ACL	14.1%	11.3%
# of companies with change in RBC action level	2	1

This analysis shows that updating the factors under this scenario has a significant impact (greater than 50 percent increase) on the resulting ACL for many insurers (more than 10 percent of all companies). Additional data and information on this impact analysis is shown in Appendix 1.

While these factors provide a starting point, further research is required to address other differences between life and P&C/health statutory reporting and business practices. We are prepared to research the following topics further:

1. **Maturity**—Our research has shown that the average time to maturity for P&C insurer bond portfolios is about six years, compared to an average of about 10 years for life insurer bond portfolios.⁸ The average maturity for health is expected to be consistent with or lower than P&C average maturity. We can research the appropriateness of the representative portfolio and the time horizon assumptions to determine the appropriate adjustments needed to account for this difference.
2. **Adjustment for Below-Investment-Grade Bonds**—Below-investment-grade securities are reported at the lower of amortized cost and fair value for P&C and health companies, while these securities are reported at amortized cost for life companies⁹. We have found little discussion of the basis for the 50 percent adjustment for below-investment-grade bonds in the current approach. We can research the appropriate adjustment for this difference further.
3. **Tax**—As shown in Table 1, the original factors for P&C, health, and life were identical, except for the adjustment for below-investment-grade bonds. Thus, life,

⁶ This scenario uses the Life factors, and applies an adjustment for below-investment-grade bonds equal to the current adjustment of 50 percent.

⁷ The impact presented in this section is approximated, as discussed in Appendix 1.

⁸ Based on a review of average maturities as reported in Schedule D, Part 1A. Industry information compiled using “SNL Financial—Life Industry” and “P&C Combined Industry.”

⁹ SSAP No. 26.

P&C, and health factors both considered taxes in the same way. In 2001, the life RBC formula was amended to show factors on a pre-tax basis, and then apply a tax adjustment later in the life RBC formula. This was not done for the P&C and health RBC formulas. We can research why the RBC view of the tax situation on default risk might be different for P&C and health companies than for life companies, and provide our analysis.

Concluding Observations

The Academy's Property & Casualty Risk-Based Capital Committee and the Health Solvency Subcommittee observe the following:

1. The alternative base factors provide a good starting point to account for the credit risk contained in statutory life reserves. Additional research needs to be performed to ensure appropriate adjustments are applied to account for other differences the life and P&C/health statutory reporting and business practices. We are prepared to research these areas further.
2. As this research will be time-consuming, the IRBCWG could consider adopting the factors presented as Scenario 1 in this letter, on a post-tax basis. As discussed, the current approach is simplified and does not address many of the differences between the life, P&C, and health statutory reporting and business practices. However, adopting the factors presented as Scenario 1 in this letter would maintain consistency with the current approach and not be overly disruptive to P&C and health insurers. These factors could then be replaced with recommended factors after the further research referenced in this letter is completed.

We welcome feedback and/or questions from IRBCWG members, regulators, and interested parties. If you have any questions about our comments, please contact Marc Rosenberg, the Academy's casualty senior policy analyst, at rosenberg@actuary.org or 202-785-7865.

Sincerely,

Lauren Cavanaugh, MAAA, FCAS
 Chairperson, Property and Casualty Risk-Based Capital Committee
 American Academy of Actuaries

Tim Deno, MAAA, FSA
 Chairperson, Health Solvency Subcommittee
 American Academy of Actuaries

Appendix 1

In order to approximate the impact for P&C insurers under the scenarios presented in this letter, we submitted a request to Sak-man Luk of the New York Department of Financial Services to update the current bond factors present in the formula. The factors for the scenarios discussed in this letter are shown in Table 5 below.

Table 5

1	2	3	4	5	6
Bond Rating	Current P&C Factors	Scenario 1		Scenario 2	
		Pre-Tax	Post-Tax	Pre-Tax	Post-Tax
Aaa	0.30%	0.22%	0.16%	0.26%	0.19%
Aa1	0.30%	0.32%	0.23%	0.43%	0.31%
Aa2	0.30%	0.44%	0.32%	0.64%	0.46%
Aa3	0.30%	0.56%	0.40%	0.92%	0.66%
A1	0.30%	0.68%	0.49%	1.27%	0.91%
A2	0.30%	0.82%	0.59%	1.64%	1.18%
A3	0.30%	0.98%	0.70%	2.07%	1.49%
Baa1	1.00%	1.13%	0.82%	2.56%	1.84%
Baa2	1.00%	1.32%	0.95%	3.12%	2.25%
Baa3	1.00%	1.57%	1.13%	3.88%	2.79%
Ba1	2.00%	1.44%	1.04%	4.33%	3.12%
Ba2	2.00%	1.87%	1.35%	5.72%	4.12%
Ba3	2.00%	2.44%	1.76%	7.70%	5.54%
B1	4.50%	2.54%	1.83%	10.05%	7.24%
B2	4.50%	3.44%	2.48%	14.09%	10.14%
B3	4.50%	4.73%	3.40%	19.74%	14.21%
Caa1	10.00%	6.93%	4.99%	27.31%	19.67%
Caa2	10.00%	9.51%	6.85%	34.60%	24.91%
Caa3	10.00%	14.53%	10.46%	36.25%	26.10%

As we do not have data for each of the proposed 20 bond classes, the factors were compressed by assuming equal weights in assets within each of the old 1-6 designations, as shown in Table 6.

Table 6

1	2	3	4	5	6
Current NAIC Category	Current P&C Factors	Scenario 1		Scenario 2	
		Pre-Tax	Post-Tax	Pre-Tax	Post-Tax
1	0.3%	0.6%	0.4%	1.0%	0.7%
2	1.0%	1.3%	1.0%	3.2%	2.3%
3	2.0%	1.9%	1.4%	5.9%	4.3%
4	4.5%	3.6%	2.6%	14.6%	10.5%
5	10.0%	10.3%	7.4%	32.7%	23.6%
6	30.0%	30.0%	30.0%	30.0%	30.0%

The results are based on changing the factors for unaffiliated bonds and hybrid securities, and incorporating the impact to the asset concentration charge.

Luk provided the following analyses for each scenario:

- Distribution of all P&C companies by change in R1 charges;
- Distribution of all P&C companies by change in 2016 ACL RBC;
- The average change to the R1 charge for P&C companies;
- The average change in RBC at the ACL for P&C companies; and
- Comparisons of 2016 P&C current RBC action level and RBC action level under different scenarios.

His report is provided on the two pages that follow.

Distribution of Companies by Change in R1 Charges

	Scenario 1: Pre-Tax	Scenario 1: Post-Tax	Scenario 2: Pre-Tax	Scenario 2: Post-Tax
Less Than -50%	0	0	0	0
-50% to -25%	0	11	0	0
-25% to -15%	0	21	0	0
-15% to -5%	3	98	0	0
-5% to 5%	263	546	246	248
5% to 15%	76	526	9	22
15% to 25%	148	647	15	15
25% to 50%	581	641	24	52
Over 50%	1,420	1	2,197	2,154
Total	2,491	2,491	2,491	2,491

Distribution of Companies by Change in 2016 ACL RBC

	Scenario 1: Pre-Tax	Scenario 1: Post-Tax	Scenario 2: Pre-Tax	Scenario 2: Post-Tax
Less Than -50%	0	0	0	0
-50% to -25%	0	3	0	0
-25% to -15%	0	3	0	0
-15% to -5%	3	8	0	0
-5% to 5%	2,076	2,186	1,846	1,975
5% to 15%	90	135	180	122
15% to 25%	53	107	53	35
25% to 50%	143	49	62	77
Over 50%	126	0	350	282
Total	2,491	2,491	2,491	2,491

Comparisons of 2016 R1 and ACL RBC Charges between different Scenarios

	Current	Scenario 1: Pre-tax	Scenario 1: Post-Tax	Scenario 2: Pre-Tax	Scenario 2: Post-Tax
R1	8,762,240,847	11,355,332,651	9,002,541,055	21,813,845,568	16,552,865,592
% Change in R1		29.6%	2.7%	149.0%	88.9%
ACL RBC	129,627,474,377	129,744,882,427	129,630,894,452	130,541,911,065	130,082,173,312
% Change in ACL RBC		0.1%	0.0%	0.7%	0.4%

Notes:

2016 RBC results under which the corresponding bond factors applicable to both unaffiliated bonds and hybrid securities and hybrid securities RBC re-classified to R1

Scenario 1: Pre-Tax bond factors - Class 1: 0.57%; Class 2: 1.34%; Class 3: 1.92%; Class 4: 3.57%; Class 5: 10.32% and Class 6: 30%

Scenario 1: Post-Tax bond factors - Class 1: 0.41%; Class 2: 0.96%; Class 3: 1.38%; Class 4: 2.57%; Class 5: 7.43% and Class 6: 30%

Scenario 2: Pre-Tax bond factors - Class 1: 1.03%; Class 2: 3.19%; Class 3: 5.92%; Class 4: 14.62%; Class 5: 32.72% and Class 6: 30%

Scenario 2: Post-Tax bond factors - Class 1: 0.74%; Class 2: 2.29%; Class 3: 4.26%; Class 4: 10.53%; Class 5: 23.56% and Class 6: 30%

Comparisons of 2016 P&C Current RBC Action Level and RBC Action Level under Different Scenarios

	Current RBC Action Level					Total
	MCL	ACL	RAL	CAL	No Action	
MCL	17					17
ACL		8				8
RAL			12			12
CAL				21		21
Trend Test					29	29
No Action					2,404	2,404
Total	17	8	12	21	29	2,491

Scenario 1: Pre-Tax bond factors - Class 1: 0.57%; Class 2: 1.34%; Class 3: 1.92%; Class 4: 3.57%; Class 5: 10.32% and Class 6: 30%

	Current RBC Action Level					Total
	MCL	ACL	RAL	CAL	No Action	
MCL	17					17
ACL		8				8
RAL			12			12
CAL				21		21
Trend Test					29	29
No Action					2,404	2,404
Total	17	8	12	21	29	2,491

Scenario 1: Post-Tax bond factors - Class 1: 0.41%; Class 2: 0.96%; Class 3: 1.38%; Class 4: 2.57%; Class 5: 7.43% and Class 6: 30%

	Current RBC Action Level					Total
	MCL	ACL	RAL	CAL	No Action	
MCL	17					17
ACL		8				8
RAL			12			12
CAL				21		21
Trend Test					1	1
No Action					2,403	2,403
Total	17	8	12	21	29	2,491

Scenario 2: Pre-Tax bond factors - Class 1: 1.03%; Class 2: 3.19%; Class 3: 5.92%; Class 4: 14.62%; Class 5: 32.72% and Class 6: 30%

	Current RBC Action Level					Total
	MCL	ACL	RAL	CAL	No Action	
MCL	17					17
ACL		8				8
RAL			12			12
CAL				21		21
Trend Test					1	1
No Action					2,403	2,403
Total	17	8	12	21	29	2,491

Scenario 2: Post-Tax bond factors - Class 1: 0.74%; Class 2: 2.29%; Class 3: 4.26%; Class 4: 10.53%; Class 5: 23.56% and Class 6: 30%

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July 24, 2017

Mr. Kevin Fry, Chair
Investment Risk-Based Capital Working Group
National Association of Insurance Commissioners
2301 McGee Street, Suite 800
Kansas City, Missouri 64108-2662

Re: Comments on AAA Letter: *Updated Recommendation for Corporate Bond Risk-Based Capital (RBC) Factors* dated June 8, 2017

Dear Mr. Fry,

America's Health Insurance Plans (AHIP) appreciates the opportunity to provide these comments on the exposure of the referenced [American Academy of Actuaries' Letter](#) ("the Letter"). AHIP has followed the development of processes to review the appropriateness of risk factors for various asset types since 2009.

As various projects have been completed by the Academy of Actuaries Life Practice Council, we have noted that the models used contain assumptions that are intended to be appropriate when looking at asset risks matched to life and annuity liabilities. We have commented on multiple occasions that such modeling should be modified to reflect asset risks matched to health liabilities (of shorter duration and generally less complexity than the life liabilities). This would allow for fair adjustments to the asset factors for the Health RBC formula.

In review of the Letter, we have noted that some of the revisions to the assumptions in the Alternate Base Factors would work to reduce the factors while others would increase the factors relative to those proposed for the Life RBC formula. The Letter on page 8 applied adjustments expected to move in ways that increased the factors but incorporated nothing to offset those adverse effects. As would be expected, the resulting factors (in the column Alt 6/17) are unreasonable. We would oppose any consideration of them as the basis for revising the bond factors to be used in the Health RBC formula.

It was our understanding that the Academy's Health Practice Council, possibly in coordination with the Academy's Casualty Practice Council, was prepared to work to make the necessary modifications to the new Life Corporate Bond model. AHIP and BCBSA members were also prepared to support the Academy's work with volunteer time. It seems the Working Group is moving ahead without waiting for the results of those efforts. Consequently, we have attempted to provide some measure of the potential adjustment necessary to reflect a portfolio of shorter duration bonds.

The AAA Life Practice Council model looks at a 10-year period during which no bonds mature. The default rates are based on the initial bond classification and vary depending on the years from original classification. A Health bond portfolio would be more likely to have *shorter* duration bonds to match the health liabilities. This means that the bonds would potentially mature several times during the 10-year



July 24, 2017

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period. Replacing them with new bonds of the same rating classification would start the durational default rates all over again. We have use an assumption of average 3-year bonds to revise Table A1: Smoothed (Across Ratings) Spot Rates – 4th Degree, based on 2012 Moody’s Study in the [AAA Report of August 3, 2015](#). We compared the cumulative impact of durational default rates from that table through 6 years, 8 years and 10 years with no replacement, and replacement after 3 years. The results show that for most highly rated bonds, the cost of default is much less when replacement is assumed:

Rating	Ratio of Cumulative Default Rates ¹		
	<u>6 Years</u>	<u>8 Years</u>	<u>10 Years</u>
Aaa	7.61%	7.55%	6.11%
Aa1	15.65%	14.72%	13.92%
Aa2	27.31%	25.18%	25.68%
Aa3	41.33%	37.28%	38.13%
A1	55.49%	48.52%	48.24%
A2	67.57%	58.05%	56.47%
A3	76.19%	65.12%	62.27%
Baa1	81.07%	69.68%	65.71%
Baa2	82.78%	72.19%	67.32%
Baa3	82.42%	73.35%	67.84%

We strongly recommend proceeding with the development of a revised bond model that reflects replacement of bonds upon maturity based on the shorter average duration of bonds in the average health company portfolio.

We would be happy to address any questions the Working Group has with these comments. For more information, contact Bill Weller at (301) 695-2697.

Sincerely,

William C. Weller
Actuarial Consultant to AHIP

Colleen M. (Candy) Gallaher
Senior Vice President, AHIP- State Policy

c/c: Julie Garber, NAIC

¹ Cumulative default rate assuming replacement after 3 years compared to cumulative default rates assuming no replacement over 10 years.

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July 24, 2017

Mr. Kevin Fry
Chair, Investment Risk-Based Capital Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Attn: Julie Garber, NAIC
Via E-mail: JGarber@naic.org

Re: Bond Factors: All RBC Formulas

Dear Mr. Fry:

The National Association of Mutual Insurance Companies (NAMIC) appreciates the opportunity to comment on the proposed factors for fixed-income investments to apply to the RBC filing for year-end 2018.

NAMIC is the largest property/casualty insurance trade association in the United States, with more than 1,400 member companies representing 39 percent of the total U.S. market. NAMIC supports regional and local mutual insurance companies on main streets across the country and many of the country's largest national and international insurers. NAMIC member companies serve more than 170 million policyholders and write more than \$230 billion in annual premiums. Our members account for 54 percent of homeowners, 43 percent of automobile, and 32 percent of the business insurance markets in the United States. Through NAMIC advocacy programs we promote public policy solutions that benefit NAMIC member companies and the policyholders they serve and foster greater understanding and recognition of the unique alignment of interests between management and policyholders of mutual companies.

The life, health, and property/casualty risk-based capital formulas have historically used the six RBC factor categories for bonds. This working group decided that more granularity was needed for the bond charges in the life formula; therefore, the decision to expand the number of categories from six to twenty for all three formulas was made to maintain consistency among the RBC formulas. NAMIC supports the decision to expand the number of categories, because implementing a two-structured approach would be difficult to manage for multi-line writers, many of which are NAMIC members. In addition, having a consistent structure allows for the recognition of the differences between the make-up of a property/casualty fixed income portfolio versus a life portfolio through the selection of different factors for those lines of businesses.

NAMIC's choice to support the working group decision on a more granular approach to investment risk was based in part on achieving a more risk-sensitive approach to RBC. As has

been noted in previous meetings of the working group, there are many open questions around the appropriateness of having differing factors in the RBC formula for the same asset. NAMIC holds the position that P/C insurers invest in asset classes based on the liabilities on their balance sheet, and we support the historical recognition that accounts for the differences between the different lines of businesses, including asset/liability duration, accounting, and taxing differences.

P/C insurers, like life insurers, try to match cash flows as best they can based on the duration of their liabilities. By the nature of the products offered, P/C insurers hold shorter-duration bonds versus the longer duration fixed income bonds that life insurers typically hold. Consequently, P/C insurers have shorter investment cycles; therefore, reinvestment risk is lower. As well, the risk that corporations call their bonds is increased in a longer investment cycle. This is because in a longer duration cycle there is a greater chance of operating in a declining interest rate environment, a time when call risk increases.

The different accounting treatment for fixed-income bonds between life insurers and P/C insurers is another reason why NAMIC supports a difference in factors. P/C insurers are required to report all NAIC 3-5 rated designations at the lower of fair value or amortized cost. Accordingly, the factors are applied to this cost-basis. In contrast, life insurers record NAIC 3-5 rated designations at amortized cost with the factors applied to this cost-basis. In effect, fixed-income bonds rated NAIC 3-5 are recorded at a lower value for P/C insurers than they are for life insurers. Having the same factors applied for these assets, even though they may be the same asset, does not seem appropriate, nor would it be risk-sensitive.

In addition to the differences in carrying value, life insurers maintain an Asset Valuation Reserve (AVR) and an Interest Maintenance Reserve (IMR). These concepts don't exist for P/C insurers and would need to be accounted for in determining factors to apply to the P/C formula. The presence of these concepts highlights a difference in how taxes are treated between the two formulas. As well, there are differences between how policy reserves are accounted for in the Academy model that should be included in future discussions.

As it applies to the timing of the proposed changes, NAMIC has concern that the current timeline of the project, calling for a mid-2018 adoption of the factor changes and a 31 December 2018 target implementation date, is not enough time for companies to implement. The proposed timeline is concerning for a couple of reasons. Investment accounting system providers will not have adequate time to test and implement the proposed changes to meet the year-end 2018 deadline. Software providers can't test the new factors until the Capital Adequacy Task Force adopts the factors and that may not be until mid-2018. This gives vendors very little time to code and test their products.

Additionally, these changes also impact internal systems. The new rating categories have to be mapped into internal accounting systems and those can't be updated until the vendor release is received. These delays further impact capital forecasting processes. Should these changes be adopted by the working group, we would ask you to consider the timing of the vendor releases so the industry has enough time to properly update and test.

In summary, NAMIC supports a more granular approach to investment risk. While it is widely understood that investment risk in the P/C formula is not as material as it is for the life formula, individual P/C companies may be impacted significantly. We understand why the working group chose to work on the C1 factors in the life formula first and we support the process used to develop those factors. As the working group turns its attention to the P/C formula, we urge them to use a similar process. Although it may be faster and more efficient to develop a way to account

for the key differences between the lines of business, we maintain that more granular approach would achieve the goal of consistency while recognizing these key differences.

Thank you for your consideration of these comments. If there are any questions please feel free to contact me at 317-876-4206.

Respectfully submitted,

A handwritten signature in cursive script that reads "Jonathan Rodgers".

Jonathan Rodgers
Financial Regulation Manager
National Association of Mutual Insurance Companies

