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September 20, 2019

Mr. Philip Barlow  
Chair, Life Risk-Based Capital (E) Working Group  
National Association of Insurance Commissioners (NAIC)

Dear Philip,

The Life Capital Adequacy Committee (LCAC) of the American Academy of Actuaries' (Academy)<sup>1</sup> Life Practice Council is pleased to submit comments on the "Risk-Based Capital (RBC) Requirements for Long-Horizon Equity Investments" exposure. The exposure proposes a reduction in the RBC C-1 (asset risk) equity charge for a portion of equities that support long-duration payout contracts.

The LCAC does not support the reduction in the RBC C-1 equity charge for a portion of equities that back long-duration payout contracts for the following reasons:

1. Any consideration of product specific investment choices is reflected in C-3, not C-1. The C-1 component covers the risk of asset performance (e.g., default, change in equity value) as reported in statutory surplus.
2. The C-1 common stock equity charge is already reduced through the RBC covariance adjustment. For example, 2018 overall industry data shows about a 50% reduction.
3. The proposal only measures loss at the end of a stated period. RBC is designed to cover the capital requirement throughout a stated period consistent with a Greatest Present Value of Accumulated Deficiency (GPVAD) approach.
4. The proposed approach for determining total adjusted capital (TAC) in RBC (i.e., amortization of equity gains and losses) is inconsistent with how actual statutory capital is reported. As a result, the RBC amount calculated for the purposes of identifying weakly capitalized companies would not reflect the actual statutory solvency risk.
5. The potential statutory capital loss from equity risk would be based on asset performance only and would not be offset by the long-duration payout liabilities.

With those general comments in mind, the LCAC has drafted the following responses to the questions that were raised at the Life Risk-Based Capital Working Group meeting on Aug. 3:

1. *Is time diversification something that should be reflected in RBC and if so, is it appropriately considered in the C-1 Risk category?*

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<sup>1</sup> The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

Our comments reflect two possible aspects of “time diversification”:

One aspect is that time diversification occurs when different risks emerge more fully at different points in time, so the total amount needed to satisfy a risk measure at any one time is less than the sum of each separate risk measure across all time points in a projection. We believe this aspect of time diversification should be reflected in RBC. Under the current RBC framework:

- This phenomenon is directly considered in RBC covariance adjustments.
- This phenomenon is not directly considered in C-1 RBC because the risks are evaluated over different time horizons that are consistent with the typical cycle of each risk.
- This phenomenon is partially considered in C-3 testing, but only within each scenario, rather than across scenarios, because the GPVAD methodology takes results from potentially many different time horizons.

Another aspect is that time diversification occurs when the holding period for a stock increases and that results in a lower probability of losing money relative to the initial investment. However, equity investments like common stocks are held at market value, so any change in market value of a stock is immediately reflected in its statement value, and hence, immediately reflected in statutory capital. An entire stock portfolio, regardless of when it is acquired, is subject to the same mark-to-market risk. The RBC requirement is based on the GPVAD over the specified period, so RBC is determined to be sufficient both at the end of a specified period and at interim points as well. We believe this aspect of time diversification should not be reflected in RBC because it does not reduce mark-to-market risk.

2. *Is there an unrecognized solvency risk with payout annuities and structured settlements in this ongoing low interest rate environment and will a shift to equity investments to back those products alleviate that risk?*

There is not an unrecognized solvency risk with payout annuities and structured settlement options in the ongoing low-interest-rate environment. This risk is appropriately captured in RBC C-3 and asset adequacy testing. A shift to equities, while potentially leading to a higher expected return, would also increase mark-to-market risk (i.e., the risk of statutory losses from declines in market value of the common stocks) and would not decrease solvency risk.

3. *Should there be a complementary change to the accounting for the equities or is the proposal to modify the total adjusted capital (TAC) to smooth equity gains and losses sufficient?*

RBC is calibrated to identify potentially weakly capitalized companies. In order for the RBC ratio to operate as intended, the calculation needs to be on the same accounting basis as the reported statutory capital. Otherwise, the calculated capital amount will not be accurate for the statutory solvency risk. Therefore, if smoothing of TAC is done in the RBC calculation, the same change would need to be made to the accounting of statutory capital. This statutory change, if made, must also be reviewed for other impacts as well.

4. *The proposal assumes a diversified portfolio. How do we require an initial diversified portfolio backing the reserves and how do we allow reasonable trades in that portfolio while preventing inappropriate activity?*

To the extent that an individual insurer’s stock portfolio is more or less diversified than the diversification in the S&P 500 portfolio assumed in the proposal, a more sophisticated approach for measuring the relative diversification risk would need to be developed. For example, the

current LRBC formula adjusts the equity charge through a beta adjustment that measures the volatility of an individual stock relative to the S&P 500 index; the bond charges are adjusted based on the number of bond holdings in an insurer's bond portfolio; and both bonds and stocks have a concentration factor requirement.

5. *How might the use of reinsurance impact this proposal?*

RBC should reflect the net risks that a company retains or assumes.

6. *How do we ensure that this proposal is strictly limited to payout annuities and structured settlements?*

An approach to accurately measure, monitor, and report which equity investments are allocated to payout annuities and structured settlements would need to be developed. It should be noted that other products like long-term care have similar characteristics as to payout annuities (i.e., longer liabilities with no immediate cash needs). Any adoption of a change to RBC should establish the rationale for the change as well as for excluding or including other product types.

7. *Are there implications in this proposal for PBR or Asset Adequacy Analysis and if so, how should those be coordinated?*

The proposal only addresses the calculation of RBC. The requirements for PBR and asset adequacy analysis would be unchanged. Any change in investment strategy that a company would choose as a result of this proposal would need to be reflected in its PBR and asset adequacy testing.

8. *Retirement security is a big issue and a proposal that has the potential to put more money into the hands of retired people will help, but should that be a criterion that we consider in developing RBC?*

The focus and purpose of RBC has always been a tool for regulators to identify weakly capitalized companies. Introducing other objectives would dilute that objective and introduce judgment and subjectivity in determining the capital requirement for risks.

9. *Should this proposal be forward looking only? Given that there is no opportunity to adjust the payments for existing payout annuities and structured settlements is there a reason to allow it for existing contracts?*

The issues that we have identified in the proposal are applicable to both new and existing contracts. In addition, RBC has not been designed to establish separate capital requirements by year of issue.

10. *Does the proposal work for environments other than the current low-interest environment?*

This proposal would introduce similar risks in different interest rate environments. The tradeoff of investing in equities is the prospect of higher expected returns but also greater risk of market value loss on a statutory basis. The capital requirements should appropriately reflect the higher level of risk. RBC factors and requirements are designed to measure risks accurately over most economic environments.

In addition to the questions that the Life Risk-Based Capital Working Group posed, we identified the following questions regarding this proposal that you may want to consider:

1. How does the analysis differ if periods other than seven years are used?
2. Would smoothed results also be used for insolvency impacts as to when state guaranty fund systems would be used?
3. Are equity dividends included, or just price movements?
4. How do the risk/return characteristics of this option compare with a variable payout annuity that has an allocation to variable and fixed funds?
5. How would federal income taxes be impacted?
6. Would the RBC covariance adjustment be appropriate in light of the proposed change?

If you have any questions on our comments, please contact Ian Trepanier, life policy analyst at the Academy ([trepanier@actuary.org](mailto:trepanier@actuary.org)).

Sincerely,

Chris G. Trost, MAAA, FSA  
Chairperson, Life Capital Adequacy Committee  
American Academy of Actuaries