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September 29, 2015

Elaine Wieche
Chair, Investment Risk Based Capital Working Group
National Association of Insurance Commissioners

Via email: mwong@naic.org

Dear Elaine:

On behalf of the American Academy of Actuaries[1] C1 Work Group (C1WG), we appreciate the opportunity to provide comments on the ACLI'S August 7, 2015, proposal, *"Life Insurer C-1 Asset Risk-Based Capital Requirement – Real Estate"* exposed by the NAIC Investment Risk-Based Capital Working Group.

In general, the C1WG supports a lower capital charge for equity real estate. The proposed methodology is a significant improvement over the current approach, where the C1 factor is based on the relative correlation of equity real estate to common stock. We support the overall structure of the proposal that includes a reduced base factor, treatment of encumbrances, and a market value adjustment applied to the base factor. However, at this time, we cannot support the specifics of the August 7, 2015, proposal for the following reasons:

1. **Data Questions:**
   In our review of the data provided, we could not determine whether the data (and therefore, the recommended 8.5 percent base factor) adequately captures the extreme fluctuations in the real estate market. We are concerned that the modeled losses do not adequately reflect the tail loss of the distribution. We acknowledge that the historical data on the equity real estate market is not as rich as other asset classes, but would like to verify that the data captures the extremes and is consistent with the purpose of RBC. For example, we note that there are two time frames in 25 years with volatility over 8.5 percent; we question whether the proposed factor satisfies the target 95th percentile confidence level for RBC. Examination of this data would facilitate a better understanding of the determination of the base factor and associated confidence levels.

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[1] The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists 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.

The proposal includes a simulation of life company portfolio performance under statutory accounting as additional justification for the 8.5 percent base factor. As stated on page 6 of the proposal, "statutory accounting can lessen the severity of recognized losses during market downturns." This simulation is interesting, but loses its significance when the base factor is adjusted for the current market value.

Consequently, we would like to examine quarterly data and the standard deviation of the total return for the historical quarterly data and the data used in developing the base factors. Such data can provide the assurance that the base factor is set to capture the tail of the real estate loss distribution.

2. **Income Offset:**
   The methodology for developing the base factor reflects an offset to real estate losses for the investment income received. Using income to offset the losses is inconsistent with the development of the C1 factors for corporate bonds, but consistent with the C1 factors for common stock. Given that income is much more significant for real estate compared to common stock, we would like to better understand the appropriateness of including income in establishing the capital requirement and the materiality of that assumption. Further, there is no basic contribution to the Asset Valuation Reserve (AVR) for real estate, but there is an AVR basic contribution for bonds and common stock (note: there is a reserve objective for real estate).

   We question whether it is appropriate to reduce the capital requirements for real estate for investment income. We suggest some analysis of the significance of this income offset assumptions. How material is the income offset to the base real estate factor? Could the base real estate factor be recalculated excluding the income offset?

3. **Market Value Adjustment:**
   a. The proposal includes an adjustment to the base factor for the difference between current market value and statutory statement value. This adjustment is based on two-thirds of the difference. Because real estate is more of an equity investment (as opposed to a fixed-income investment), an adjustment for market value is justified from a risk perspective. We support an adjustment, but the rationale for the two-thirds offset has not been explained. Some discussion of the rationale for the two-thirds figure would be useful.
   b. The adjustment to the base factor is subject to a 1.3 percent floor. This floor is tied to the current C1 factor for NAIC 2 bonds. We suggest tying this floor to the adopted factors for corporate bonds. Currently, the recommended factor for Baa bonds is 1.7 percent before tax and covariance.

We have no opinion on the recommendation to maintain the same relationship between the factor for Schedule A real estate with the factor for Schedule BA real estate. We believe further consideration of the risk differences between the properties reported in the two schedules is needed and suggest deferring this decision to the Schedule BA subgroup.

While we understand that real estate is not a material asset class for the industry in aggregate, the asset class can be more material for some individual insurers. We reiterate our general support for revising the current factors, but would like to see additional consideration and explanation of certain aspects of the proposal. In addition, we suggest adding more detail to the documentation to provide a better explanation of the methodology and certain assumptions. The appendix that follows contains several questions and comments we suggest addressing in the final documentation.

Please contact Nancy Bennett (bennett@actuary.org), the Academy's senior life actuary, or Scot Davies (davies@actuary.org; 202-223-8196), the Academy's life policy analyst, if you have any questions.

Sincerely,

Nancy Bennett, MAAA, FSA, CERA
Jerry Holman, MAAA, FSA, CFA
Co-Chairpersons, C1 Work Group
American Academy of Actuaries

Cc: Ed Toy
    John Bruins, ACLI

1. Regarding the Fisher simulation:
    a. How were the adjustments from statutory carrying value to market value determined in the simulations?
    b. The memo states that new properties are added to the simulation at book value set equal to market value. Are all properties considered to be new properties at the start of each scenario (i.e., no existing depreciation in the existing portfolio)?
    c. The description of the construction of the scenario is confusing. Is there one scenario, or is each successive quarterly point in the 36- year period run for 10 years?

2. Regarding the table on page 3, could the data be expanded to include more percentile points (e.g., 97th and 99th percentiles)? Please show the data that supports the comment that increasing the base factor 8 to 8.5 percent equates to increasing the confidence level from the 95th to the 97th percentile.

3. Regarding the NCREIF data that supports the base factor:
    a. Could quarterly data be provided? The data from two specific historical time periods when the real estate markets were especially volatile (early 1990s and 2008-2010) would be instructive.
    b. What is the volatility observed from the NPI study? The correlation of 60 percent was used in determining the current real estate factors. Although the proposed factors are based on the NCREIF index, what has been the historical correlation?
    c. Questions/observations on the data:
        i.   Confirm: is the largest loss 2% per quarter (i.e., 4 x 2%= 8%)?
        ii.   Are the updated estimates of market values on page 5 based on individual properties or index of portfolio results?
        iii. On page 6, the proposal states: "In simple terms, the 17% decline in one year is more on the order of 2.8% probability loss (i.e. one year out of 36) while RBC is not set to the worst loss, but at the 5% (or 95% confidence) level." This particular sentence in the proposal is confusing, especially related to setting of the RBC factor at the 95th percentile confidence level.
        iv.   The methodology is based on the cumulative losses over a two- to three-year period, as described on page 3. Does a cumulative basis allow for the probability of an insolvency in one year? One year of poor performance can contribute to an insurer's insolvency.
        v.   Can you cite the national research that supports the statement that the real estate cycle accounts for about 50 percent of the variation in values?

4. The example of the encumbrance on page 9 could be clearer if some additional steps in the calculation are included. Could more steps in the calculation be added to better explain the calculation?