



# July 2018 RBC Update

### Peter A. Wirtala, CFA | Insurance Strategist

The NAIC Investment Risk-Based Capital Working Group continues to progress on its project to update the factors applied to bonds in the risk-based capital formula.

This will most likely entail increasing the number of bond ratings buckets from 6 to 20, changing the factors associated with these buckets, and also changing the calculation of the portfolio adjustment factor (also known as the bond size factor) to add extra incentive to hold a diversified portfolio. According to the NAIC's newsletter (November, 2017), "The expanded factors are intended to add more transparency to the varying degrees of risk within insurers' fixed-income securities. This will allow the capital charges for these investments to better reflect the capital needed over a 10-year time horizon."

# Timeline

Statutory statements will likely continue to reflect the prior 6 ratings buckets, with the extra granularity only included in new electronic-only reports. The NAIC is targeting year-end 2019 to implement these changes, but is still refining the details and considering feedback in quarterly meetings, and the timeline is not yet finalized.

### **Factors**

In summer 2017 the American Academy of Actuaries (AAA) released an updated set of factors in response to feedback and discussions of prior proposals, many of which highlighted how they would significantly increase required capital for certain bond ratings buckets. The new factors reduce this effect, while maintaining the increased granularity (and reduction in "cliffs" between buckets) that were a large part of the original impetus for this project.

| NRSRO Rating | Current NAIC<br>Rating | Current RBC<br>Factor | Proposed RBC<br>Factor 2015 | Proposed RBC<br>Factor 2017 | Change from 2015 |
|--------------|------------------------|-----------------------|-----------------------------|-----------------------------|------------------|
| AAA          | 1                      | 0.40                  | 0.28                        | 0.22                        | -0.06            |
| AA+          | 1                      | 0.40                  | 0.43                        | 0.32                        | -0.11            |
| AA           | 1                      | 0.40                  | 0.63                        | 0.44                        | -0.19            |
| AA-          | 1                      | 0.40                  | 0.79                        | 0.56                        | -0.23            |
| A+           | 1                      | 0.40                  | 0.96                        | 0.68                        | -0.28            |
| А            | 1                      | 0.40                  | 1.13                        | 0.82                        | -0.31            |
| A-           | 1                      | 0.40                  | 1.30                        | 0.98                        | -0.32            |
| BBB+         | 2                      | 1.30                  | 1.49                        | 1.13                        | -0.36            |
| BBB          | 2                      | 1.30                  | 1.68                        | 1.32                        | -0.36            |
| BBB-         | 2                      | 1.30                  | 2.01                        | 1.57                        | -0.44            |
| BB+          | 3                      | 4.60                  | 3.55                        | 2.88                        | -0.67            |
| BB           | 3                      | 4.60                  | 4.39                        | 3.74                        | -0.65            |
| BB-          | 3                      | 4.60                  | 5.62                        | 4.89                        | -0.73            |
| B+           | 4                      | 10.00                 | 5.99                        | 5.07                        | -0.92            |
| В            | 4                      | 10.00                 | 7.86                        | 6.89                        | -0.97            |
| B-           | 4                      | 10.00                 | 10.31                       | 9.45                        | -0.86            |
| CCC+         | 5                      | 23.00                 | 14.45                       | 13.87                       | -0.58            |
| CCC          | 5                      | 23.00                 | 19.85                       | 19.02                       | -0.83            |
| CCC-         | 5                      | 23.00                 | 29.82                       | 29.06                       | -0.76            |

#### Proposed RBC C1 Factors

### **Projected Impact**

We calculated the impact of this change on a representative Life portfolio with the following quality breakdown:

| Current NAIC Rating | Carrying Value |
|---------------------|----------------|
| 1                   | 71.4%          |
| 2                   | 27.1%          |
| 3                   | 1.2%           |
| 4                   | 0.0%           |
| 5                   | 0.3%           |
| 6                   | 0.0%           |

#### Sample Company Bond Holdings

Disregarding the doubling of RBC for the 10 largest issuers and the portfolio adjustment factor, this portfolio's gross RBC requirement from bond holdings declined by 21.6% under the new factors relative to the previous iteration. That's a nice reduction, but this isn't the only thing being changed. Alterations to the portfolio adjustment factor are also being recommended, which will significantly increase required capital for many insurers.

| lssuers  | Old Factor | lssuers  | New Factor |
|----------|------------|----------|------------|
| First 50 | 2.50       | First 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       |

It's safe to say this change is now the most impactful part of the overall RBC revision, as this table illustrates for our representative insurer:

|                  | Gross Bond<br>RBC | Portfolio Adj<br>Factor | Total Bond RBC |
|------------------|-------------------|-------------------------|----------------|
| Current System   | 1,768,187         | 1.26                    | 2,225,476      |
| Latest Proposal  | 2,065,112         | 1.62                    | 3,346,312      |
| Latest / Current | 116.8%            | 128.7%                  | 150.4%         |

While specifics will vary for each company, in this case the portfolio adjustment factor change increases required capital by almost twice as much as the new, granular factors. This is based on a portfolio with about 350 issuers, which we would consider typical for a medium-sized life insurer. While all of these factors are still subject to debate and revision, the key takeaway from the latest proposal is that increasing a portfolio's issuer count may be more useful than changing the credit rating mix for companies seeking to decrease their bond RBC requirement.

# Bond ETFs

Another possible strategy for mitigating the impact of the portfolio adjustment factor is the use of bond ETF's. These funds, which may contain hundreds or thousands of bonds, are now reported on Schedule D Part 1 with other bond holdings. The NAIC has recently evaluated how to incorporate the large number of issuers held by such ETF's into the portfolio adjustment factor calculation. Several options were discussed, including counting an ETF as a single issuer, and giving an insurer pro-rata credit for the total number of issuers in the ETF based on the size of the ETF position relative to other bond holdings. This topic is still up in the air, but it's possible that holding a portion of bonds via ETF's could help insurers (especially smaller insurers, who normally tend to hold fewer issuers) reduce their portfolio adjustment factor, and thus their total required capital.

### **Asset Valuation Reserve**

Yet another mitigating factor is the effect on the Asset Valuation Reserve for life insurers. Without going into all the technicalities of how AVR is calculated, it's likely that if the RBC bond factors change, the AVR bond factors will as well (they've historically been connected), which would probably lead to higher AVR balances. Since the AVR is included in Total Adjusted Capital for RBC purposes, this will increase RBC ratios. This should alleviate some of the strain from higher bond factors and higher portfolio adjustment factors.

Discussion also continues regarding the scope of these changes. The project has chiefly focused on life insurers, but a consensus has grown that P&C and Health factors should be adjusted as well, both to take advantage of the research the AAA has done, and to maintain consistency across sectors. In point of fact, bonds contribute relatively little to total required capital for non-life insurers (especially once the covariance adjustment is taken into account), so changing their factors will have a relatively negligible effect on most such companies. In the summer 2017 proposal the AAA released a set of hypothetical alternative factors for P&C insurers that are modestly higher than the Life ones (in part due to P&C factors not including a tax adjustment), but it remains to be seen if a consensus exists for maintaining two separate sets of factors.

### **Tax Factors**

There's another RBC factor that's changing too, though not as part of this same project. For Life insurers many RBC factors receive a tax adjustment, and with the change in corporate tax rates in 2018 these adjustments need to change. In particular, the adjustments for bond factors are projected to decline from 0.2625 to 0.1575. The full details of how this shakes out are technical, but in short the new factors imply a smaller deduction to required capital than before, which should lead to slightly lower

overall RBC ratios. A pro forma analysis of a representative Life company indicated a 6% decline in the RBC ratio due solely to the tax change being applied to the bond factors, though in fact this change will be applied to many other parts of the RBC calculation as well.

# Key Takeaways

The RBC revision saga continues. We will continue to track this developing issue and provide updates as needed. The final form is still uncertain, but Life insurers in particular should anticipate some level of decline in their RBC ratios effective year-end 2019. AAM can help estimate the size of this effect on request, using the latest available information.

**Peter A Wirtala, CFA** is an Insurance Strategist at AAM with nine years of investment experience. Pete's responsibilities include conducting analysis of client liabilities and operational projections for development of customized investment solutions and performing dynamic tax analysis using modeling software and financial market data to identify optimal allocation to municipal securities. Previously Pete worked for Epic Systems Corporation. Pete earned a BBA in Finance from the University of Wisconsin.



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