NAIC NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

Date: 4/23/26

Virtual Meeting

RISK-BASED CAPITAL INVESTMENT RISK AND EVALUATION (E) WORKING GROUP
Wednesday, May 6, 2026
3:00 – 5:00 p.m. ET / 2:00 – 4:00 p.m. CT / 1:00 – 3:00 p.m. MT / 12:00 – 2:00 p.m. PT

ROLL CALL

Philip Barlow, Chair	District of Columbia	Tadd Wegner	Nebraska
Thomas Reedy, Vice Chair	California	Jennifer Li	New Hampshire
Wanchin Chou	Connecticut	Bob Kasinow/William B. Carmello	New York
Carolyn Morgan	Florida	Dale Bruggeman/Tom Botsko	Ohio
Matt Cheung	Illinois	Rachel Hemphill	Texas
Roy Eft	Indiana	Doug Stolte	Virginia
Carrie Mears/Kevin Clark	Iowa	Steve Drutz/Katy Bardsley	Washington
Fred Andersen	Minnesota	Amy Malm	Wisconsin
William Leung/Danielle Smith	Missouri		

NAIC Committee Support: Julie Gann/Maggie Chang

AGENDA

1. Hear an Update from the American Academy of Actuaries (Academy) on the Collateralized Loan Obligation (CLO) Risk-Based Capital (RBC) Project: Residual Tranches—*Philip Barlow (DC)* — Attachment 1

2. Receive Comments on the Academy's March 2 Presentation Regarding an Update on CLO C-1 Factors Modeling—*Philip Barlow (DC)* — Attachment 2
   - A. Alternative Credit Council (ACC) and Loan Syndications and Trading Association (LSTA) Joint Letter—*Joe Engelhard* — Attachment3A
   - B. American Consumer Institute—*Leah Locke* — Attachment 3B
   - C. American Council of Life Insurers (ACLI)—*Marc Altschull* — Attachment 3C
   - D. American Investment Council (AIC)—*Daniel McCarty* — Attachment 3D
   - E. Athene—*Mike Consedine* — Attachment 3E
   - F. International Center for Law & Economics (ICLE)—*R.J. Lehmann and Ian Adams* — Attachment 3F
   - G. Iowa Insurance Division—*Carrie Mears and Kevin Clark* — Attachment 3G
   - H. MetLife—*Francisco Paez* — Attachment 3H
   - I. Moody's Ratings (Moody's)—*Natasha Kaden* — Attachment 3I
   - J. Pinpoint Policy Institute—*Eric Ventimiglia* — Attachment 3J
   - K. SPAM Index—*Ilya Podolyako* — Attachment 3K
   - L. Structured Financial Association—*Dallin Merrill* — Attachment 3L
   - M. Taxpayers Protection Alliance (TPA)—*Ross Marchand* — Attachment 3M

N. Virginia Bureau of Insurance—*Dan Bumpus* Attachment 3N
O. Western & Southern Financial Group—*Scott Weston and Kevin Howard* Attachment 3O

3. Receive Comments on and Consider Adoption of Proposal 2025-22-IRE MOD V.2 (CLO RBC Structure)—*Philip Barlow (DC)* Attachment 4A Attachment 4B
   A. ACC and LSTA Joint Letter—*Joe Engelhard/Andrew Berlin*
   B. ACLI—*Tip Tipton* Attachment 5A
   C. Structured Financial Association—*Dallin Merrill* Attachment 5B Attachment 5C

4. Hear an Update from the Academy on the CLO RBC Project: Portfolio Adjustment Factors—*Philip Barlow (DC)* Attachment 6

5. Consider Exposure of Proposal 2026-12-IRE (CLO RBC Factors) —*Philip Barlow (DC)* Attachment 7

6. Discuss Any Other Matters Brought Before the Working Group —*Philip Barlow (DC)*

7. Adjournment

Attachment 1- PENDING

Hear an Update from the American Academy of Actuaries (Academy) on the Collateralized Loan Obligation (CLO) Risk-Based Capital (RBC) Project: Residual Tranches

C-1 Subcommittee Update on CLO C-1 Factors Modeling

March 2, 2026

Stephen Smith, MAAA, FSA, CFA
Chairperson, C-1 Subcommittee

American Academy of Actuaries

About the Academy

Mission:
To serve the public and the U.S. actuarial profession

Community:
Serving over 20K MAAAs & public stakeholders for 60 years

Standards:
Setting qualification, practice, and professionalism standards

Impact:
Delivering over 300 insight-driven publications & resources annually

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Introduction

- The C-1 Subcommittee & the NAIC's Structured Securities Group (SSG) have collaborated to build a working model for CLO C-1.
- *Modeled* C-1 factors are shown based on ratings. The Academy has found ratings to include substantial information on tail risk so that ratings can serve as a comparable attribute when appropriate adjustments are made for horizon and tranche thickness.
- Results are broadly consistent with work done by SSG in the CLO ad hoc group, showing low risk for senior tranches but potential cliff risk for junior tranches.
- Factors are horizon-neutral.

Methodology Summary

- Objective: Define several risk buckets for CLOs according to comparable attributes and then assign a C-1 factor to each bucket.
- CLO collateral credit modeling is largely consistent with C-1 corporate bond modeling.
- Projection of CLO cash flows is largely consistent with SSG modeling in the CLO Ad Hoc group, with the primary exception being the CLO collateral credit modeling.
- Conversion of CLO cash flows into C-1 factors is consistent with C-1 corporate bond methodology where possible, with additional modeling to address the fact that missed payments on CLOs do not necessarily trigger defaults.

Anticipated Project Timeline

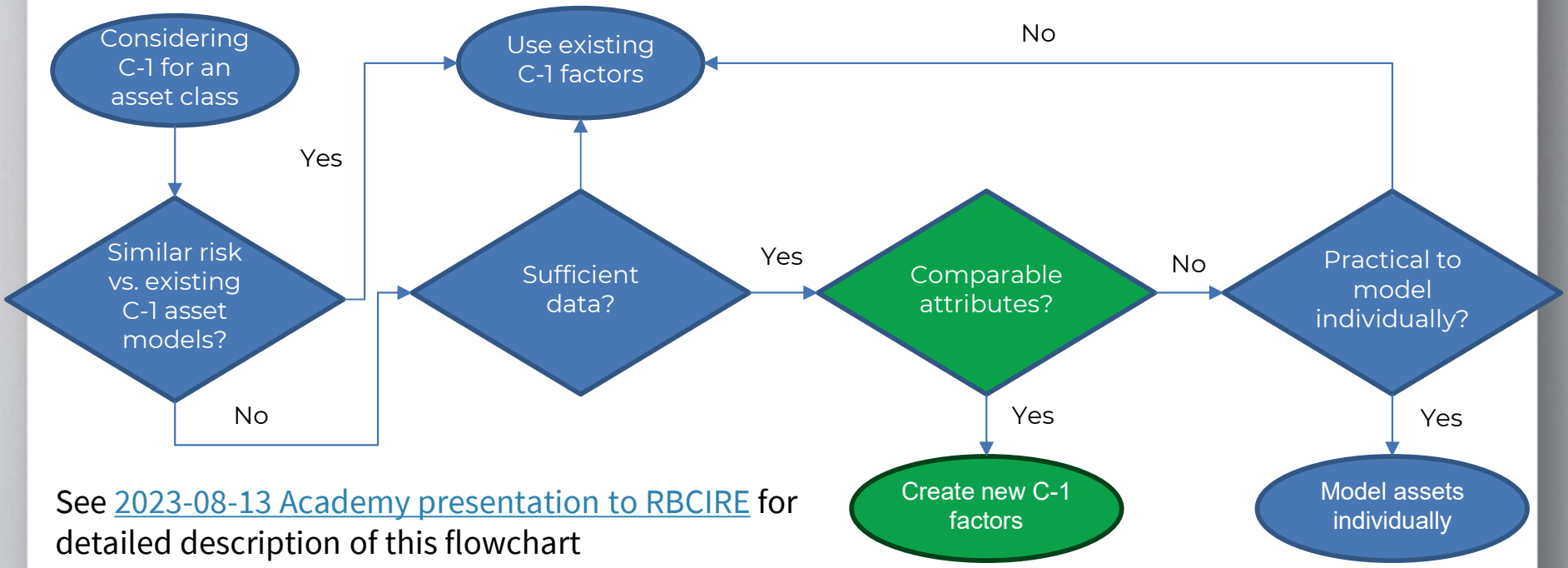
- Sept. 8, 2025—initial presentation of model
- Dec. 15, 2025—status update to regulators
- Early 2026—presentation of residual tranche results, portfolio adjustment factor, model refinements, identification of potential comparable attributes, and resulting factors
- Q1 2026—incorporation of modifications requested by regulators, if any
- Q2 2026—If significant changes are not requested by regulators, expectation is for final factors to be available for exposure by April 30, 2026

WE ARE HERE

Acknowledgments

- ACLI—use of C-1 corporate bond model developed by Moody's for ACLI
- Moody's—access to CLO deal data, collateral data, historical default rate data, and CDOnet
- S&P—historical recovery data and frequent discussions with structured finance analytical professionals
- Bridgeway Analytics—frequent discussions on credit modeling, structured finance, and help in understanding the ACLI & Moody's corporate bond model
- NAIC SSG—modeling advice and running CDOnet
- NAIC Accounting Staff—guidance on CLO statutory accounting and reporting

C-1 Modeling Framework Flowchart



See 2023-08-13 Academy presentation to RBCIRE for detailed description of this flowchart

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Project Status Update as of March 2, 2026

- This presentation includes modeled base factors for CLO debt tranches.
- The Academy will quickly follow-up with modeled portfolio adjustment factors and residual tranche treatment.

Key Definitions

Raw C-1 Factors refer to the factors estimated using a 3-step modeling process (collateral model, cash flow model, and C-1 factor model) for the universe of CLOs in-scope, as described in the American Academy of Actuaries materials presented at the September 3, 2025, and December 12, 2025, NAIC RBC IRE public calls. Raw C-1 Factors are unique to each asset.

Modeled C-1 Factors refer to the factors derived using the comparable attributes modeling approach described in this presentation. Modeled C-1 Factors apply to asset groupings.

Tranche Thickness is defined as the difference between the detachment point and attachment point, both expressed as a % of the CLO balance, for a given tranche.

Reinvestment Horizon is defined as the time during which a CLO can reinvest principal payments made on its collateral into new loans.

Modeled C-1 Factors for CLO Debt Tranches

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Modeled Comparable Attributes

- Modeled tail risk can be largely explained by a combination of three attributes: remaining reinvestment horizon, rating, and tranche thickness.
- C-1 factors for other asset classes are horizon-neutral, therefore the C-1 factor for a given CLO debt tranche should not depend on its remaining reinvestment horizon.
- After adjusting for systematic differences in reinvestment horizons across ratings, CLO debt tranches can be sorted according to two comparable attributes: rating and tranche thickness (with tranche thickness only needed for CLO debt tranches rated Baa3 and lower).
- Tranche thickness can be treated in a simple manner, by dividing each rating into just two categories: tranche thickness greater than 4% and tranche thickness less than 4%.
- Alternative results are also presented that ignore tranche thickness, prioritizing ease of implementation in a rating-only framework

Option 1—Rating Only (After-Tax Factors)

Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1
Aaa	0.03%	**0.03%**
Aa1	0.28%	**0.04%**
Aa2	0.00%	**0.04%**
Aa3	0.00%	**0.04%**
A1	0.40%	**0.14%**
A2	0.11%	**0.14%**
A3	0.12%	**1.45%**
Baa1	1.58%	**1.81%**
Baa2	3.02%	**2.70%**
Baa3	5.94%	**2.73%**

Below Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1
Ba1	20.70%	**12.59%**
Ba2	27.37%	**20.93%**
Ba3	28.92%	**23.28%**
B1	17.34%	**26.04%**
B2	30.81%	**35.20%**
B3	56.39%	**47.32%**
Caa1	57.60%	**48.12%**
Caa2	66.51%	**55.20%**
Caa3	77.33%	**70.82%**

Option 2—Rating & Tranche Thickness (After-Tax Factors)

Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1	
		Thickness > 4%	Thickness ≤ 4%
Aaa	0.03%	**0.03%**	
Aa1	0.28%	**0.04%**	
Aa2	0.00%	**0.04%**	
Aa3	0.00%	**0.04%**	
A1	0.40%	**0.14%**	
A2	0.11%	**0.14%**	
A3	0.12%	**1.45%**	
Baa1	1.58%	**1.81%**	
Baa2	3.02%	**2.70%**	
Baa3	5.94%	**2.73%**	**12.52%**

Below Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1	
		Thickness > 4%	Thickness ≤ 4%
Ba1	20.70%	**12.59%**	**22.39%**
Ba2	27.37%	**20.93%**	**30.72%**
Ba3	28.92%	**23.28%**	**33.08%**
B1	17.34%	**26.04%**	**35.84%**
B2	30.81%	**35.20%**	**44.99%**
B3	56.39%	**47.32%**	**57.12%**
Caa1	57.60%	**48.12%**	**57.92%**
Caa2	66.51%	**55.20%**	**64.99%**
Caa3	77.33%	**70.82%**	**80.61%**

Appendix 1—Methodology for C-1 Factors

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Methodology for Modeled C-1 Factors

1. Ordinary Least Squares (“OLS”) regression C-1 factor model
2. Adjustments for remaining reinvestment horizon
3. Adjustments for tranche thickness
4. Isotonic regression (on CLO debt tranches rated Baa2 and higher)

Methodology for Modeled C-1 Factors
1. OLS Regression Model

The OLS regression model used to produce Modeled C-1 Factors uses the following independent variables:

- Ratings (19 indicator variables, one per rating)
- Reinvestment horizon (1 numerical variable)
- Interaction terms between reinvestment horizon and rating (6 interaction terms)
- Tranche thickness (1 indicator variable)

The adjusted R^2 for a ratings-only regression is 74.2%. Adding reinvestment horizon increases the adjusted R^2 to 76.2%. Adding interaction terms between reinvestment horizon and ratings increases R^2 to 81.6%. Adding the tranche thickness flag increases R^2 to 83.2%.

C-1 factors are produced using an unweighted OLS, rather than weighted by $ balance.

Methodology for Modeled C-1 Factors
2. Adjustment for Remaining Reinvestment Horizon

We observe reinvestment horizon is predictive of raw C-1 factors; when a security has a shorter reinvestment horizon, its raw C-1 factor is on average smaller.

The effect of reinvestment horizon on C-1 varies by rating—C-1 and its slope is ~0 for Aaa/Aa but increases especially at Baa and below IG

Because Caa has materially fewer data points, we bucket Caa with B3 and offset all other ratings (i.e., B2/B1/Ba3 and Ba2/Ba1/Baa3 etc.) for the purpose of interaction terms which results in a minor improvement to R^2 and produces monotonicity for all below-IG ratings.

We observed no correlation between reinvestment horizon and rating (p-value = 0.19). Because non-CLO C-1 factors are horizon-neutral, the modeled C-1 factors are derived by using the average reinvestment horizon across ratings of 2.41 years (balance-weighted average is near-identical at 2.40 years).

Methodology for Modeled C-1 Factors

3. Adj. for tranche thickness and 4. Isotonic Regression (Baa2 / above)

After adjusting for reinvestment horizon, an isotonic regression is applied to produce monotonic C-1 factors across rating.

Rating	Simple Average Raw C-1	Modeled C-1, Reinvestment Adjusted	Modeled C-1, Isotonic Regression Applied
Aaa	0.03%	0.03%	0.03%
Aa1	0.28%	0.27%	0.04%
Aa2	0.00%	0.00%	0.04%
Aa3	0.00%	0.04%	0.04%
A1	0.40%	0.41%	0.14%
A2	0.11%	0.10%	0.14%
A3	0.12%	1.45%	1.45%
Baa1	1.58%	1.81%	1.81%
Baa2	3.02%	2.70%	2.70%

Note that the shift in A3 from 0.12% simple average of raw C-1 to 1.45% with reinvestment adjustment is due to the relatively short horizons present in the A3 tranches in the dataset. Also note that A3 tranches are less common than A2.

Methodology for Modeled C-1 Factors

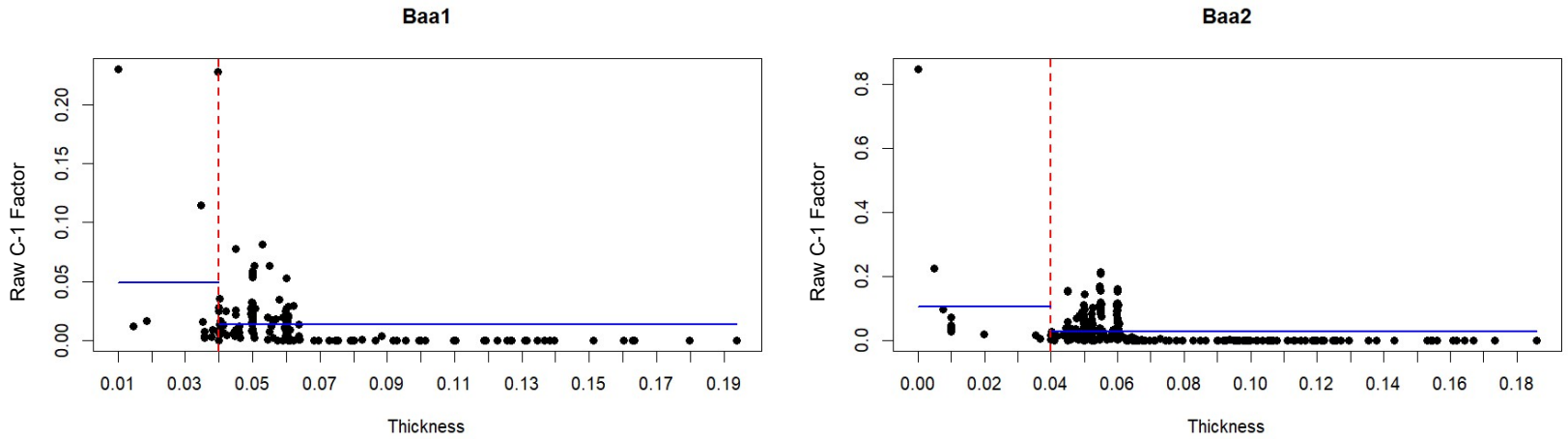
3. Adjustments for tranche thickness (Baa3 / below)

Factors are monotonic after spiking out thickness and accounting for horizon

Rating	Simple Average Raw C-1	Simple Average Raw C-1		Modeled C-1, Reinvestment Adjusted	
		Thickness > 4%	Thickness ≤ 4%	Thickness > 4%	Thickness ≤ 4%
Baa3	5.94%	2.33%	16.27%	2.73%	12.52%
Ba1	20.70%	3.39%	26.09%	12.59%	22.39%
Ba2	27.37%	8.82%	38.13%	20.93%	30.72%
Ba3	28.92%	19.87%	35.61%	23.28%	33.08%
B1	17.34%	13.68%	53.96%	26.04%	35.84%
B2	30.81%	12.68%	65.04%	35.20%	44.99%
B3	56.39%	31.15%	57.35%	47.32%	57.12%
Caa1	57.60%	35.50%	67.07%	48.12%	57.92%
Caa2	66.51%	39.12%	70.16%	55.20%	64.99%
Caa3	77.33%	74.61%	81.47%	70.82%	80.61%

Appendix 2—Modeling Choices

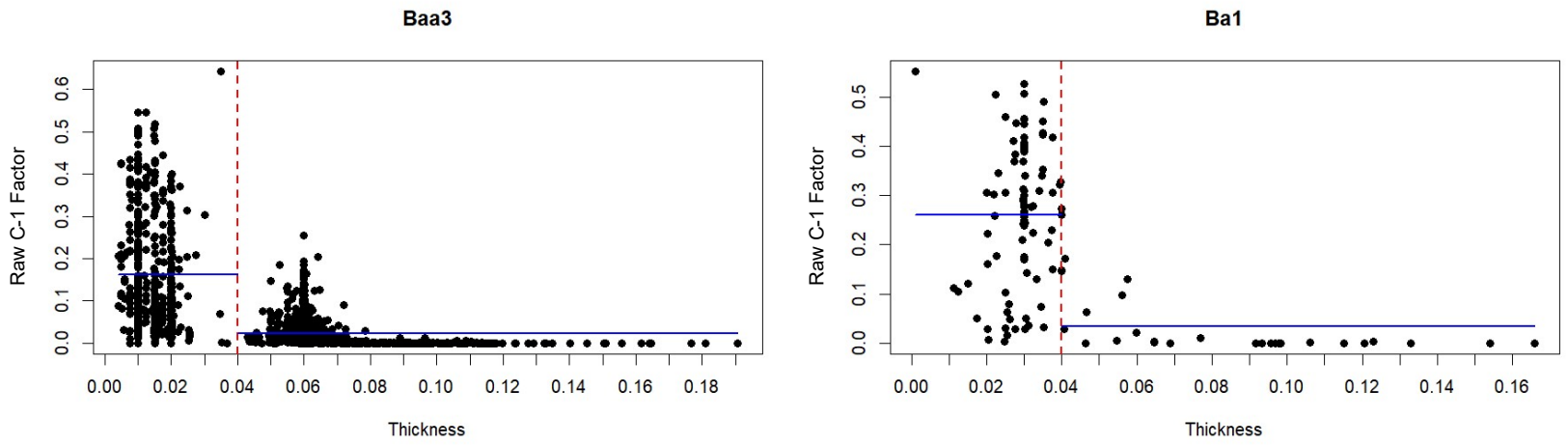
Tranche Thickness 4% Cut-Off
Baa1/Baa2



The scatterplots above show the relationship between tranche thickness and raw C-1 factor within a single rating bucket. Each dot represents one CLO debt tranche. The blue horizontal lines show the average raw C-1 factor across the dataset for CLO debt tranches of the given rating and tranche thickness (less than or equal vs. greater than 4%). The difference between the blue lines shows that tranche thickness provides information on tail risk, as represented by the raw C-1 factor, that is not captured by ratings.

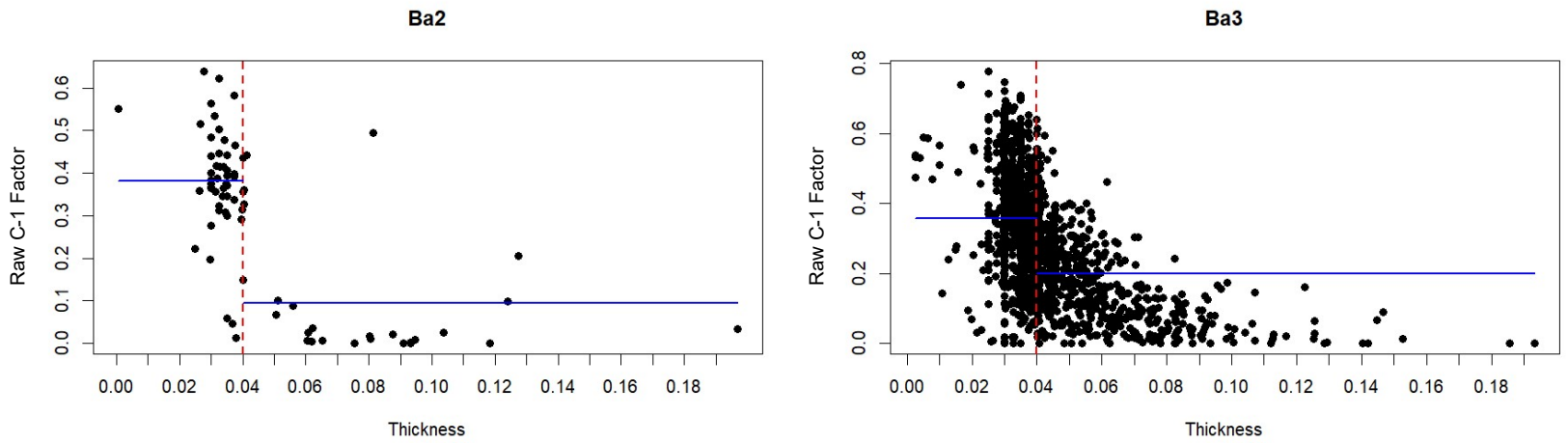
Tranche thickness is not included as a comparable attribute in modeled factors for Baa1 and Baa2 due to low sample size in these ratings, even though the pattern can be observed here.

Tranche Thickness 4% Cut-Off
Baa3/Ba1



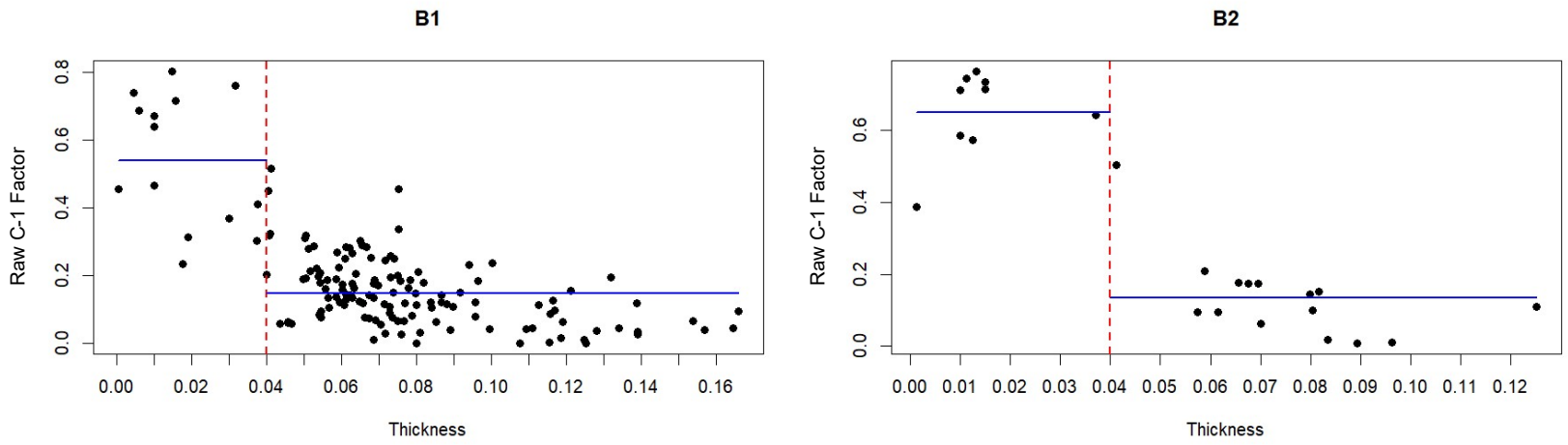
The scatterplots above show the relationship between tranche thickness and raw C-1 factor within a single rating bucket. Each dot represents one CLO debt tranche. The blue horizontal lines show the average raw C-1 factor across the dataset for CLO debt tranches of the given rating and tranche thickness (less than or equal vs. greater than 4%). The difference between the blue lines shows that tranche thickness provides information on tail risk, as represented by the raw C-1 factor, that is not captured by ratings.

Tranche Thickness 4% Cut-Off
Ba2/Ba3



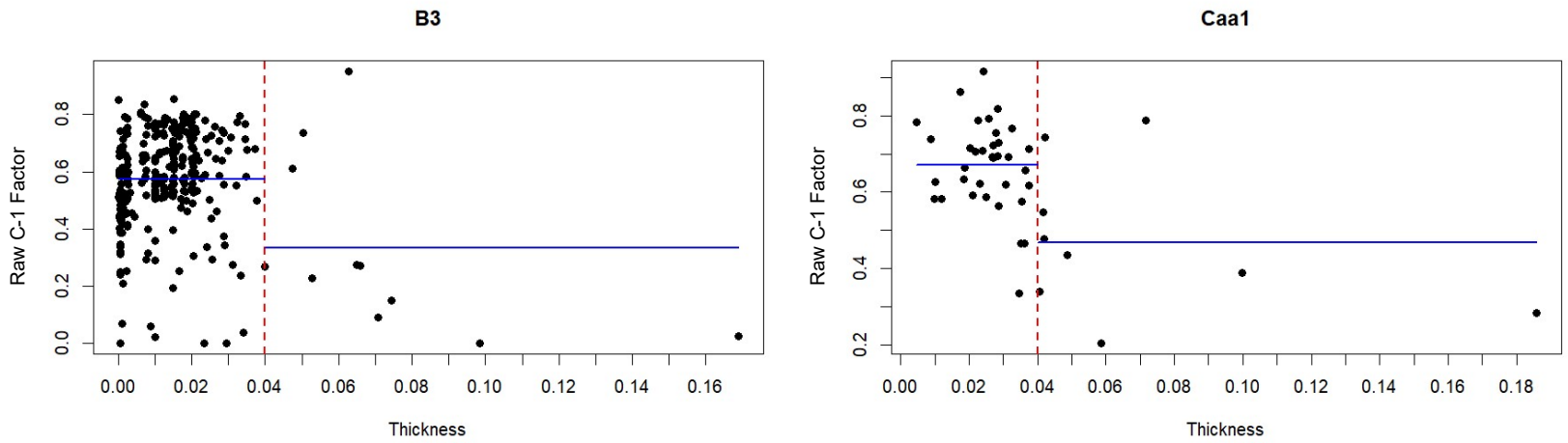
The scatterplots above show the relationship between tranche thickness and raw C-1 factor within a single rating bucket. Each dot represents one CLO debt tranche. The blue horizontal lines show the average raw C-1 factor across the dataset for CLO debt tranches of the given rating and tranche thickness (less than or equal vs. greater than 4%). The difference between the blue lines shows that tranche thickness provides information on tail risk, as represented by the raw C-1 factor, that is not captured by ratings.

Tranche Thickness 4% Cut-Off
B1/B2



The scatterplots above show the relationship between tranche thickness and raw C-1 factor within a single rating bucket. Each dot represents one CLO debt tranche. The blue horizontal lines show the average raw C-1 factor across the dataset for CLO debt tranches of the given rating and tranche thickness (less than or equal vs. greater than 4%). The difference between the blue lines shows that tranche thickness provides information on tail risk, as represented by the raw C-1 factor, that is not captured by ratings.

Tranche Thickness 4% Cut-Off
B3/Caa1



The scatterplots above show the relationship between tranche thickness and raw C-1 factor within a single rating bucket. Each dot represents one CLO debt tranche. The blue horizontal lines show the average raw C-1 factor across the dataset for CLO debt tranches of the given rating and tranche thickness (less than or equal vs. greater than 4%). The difference between the blue lines shows that tranche thickness provides information on tail risk, as represented by the raw C-1 factor, that is not captured by ratings.

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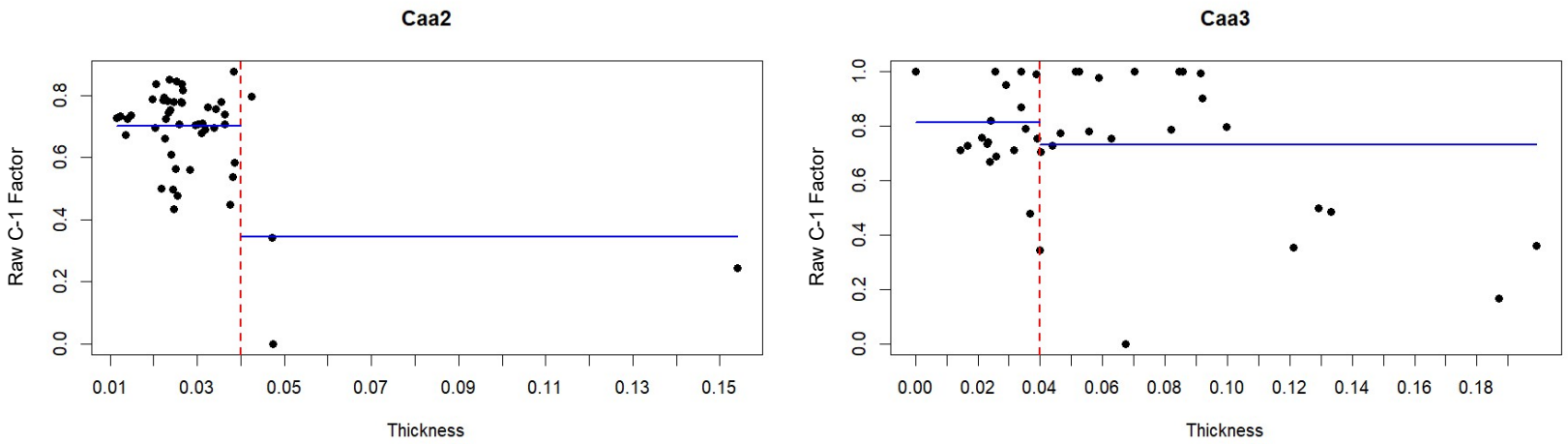
Tranche Thickness 4% Cut-Off
Caa2/Caa3



The scatterplots above show the relationship between tranche thickness and raw C-1 factor within a single rating bucket. Each dot represents one CLO debt tranche. The blue horizontal lines show the average raw C-1 factor across the dataset for CLO debt tranches of the given rating and tranche thickness (less than or equal vs. greater than 4%). The difference between the blue lines shows that tranche thickness provides information on tail risk, as represented by the raw C-1 factor, that is not captured by ratings.

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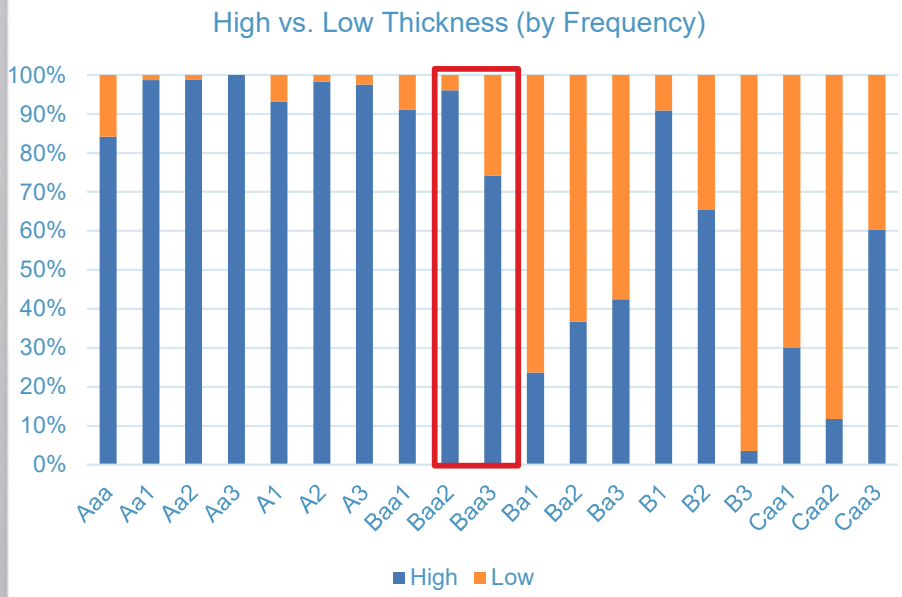
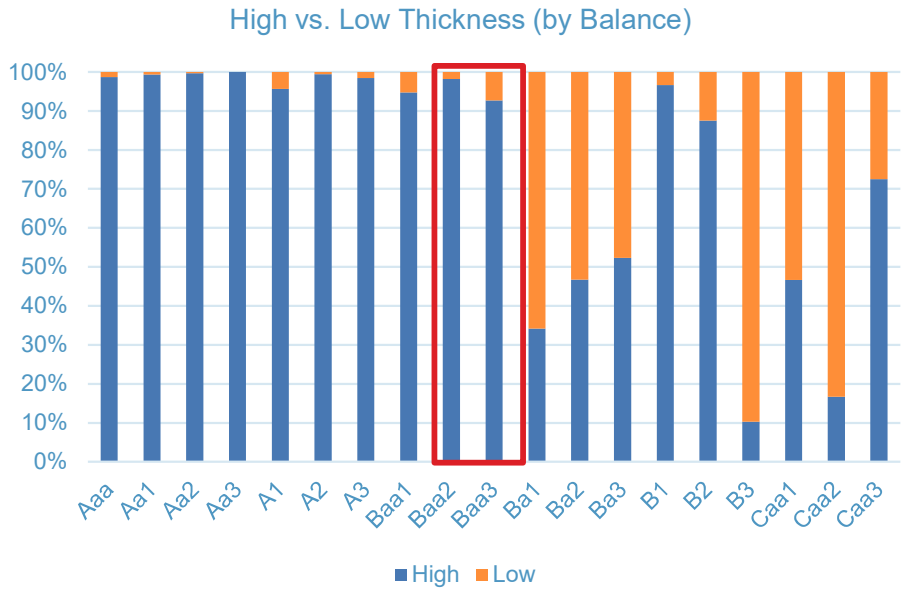
*High vs. low is defined as greater than vs. less than 4%

Distribution by Tranche Thickness

Differences between Baa2 and Baa3 tranche thickness are driven by securities with smaller $ balances. In other words, the intuitive result holds that thin tranches have smaller $ balances than thick tranches for most ratings.





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*High vs. low is defined as greater than vs. less than 4%

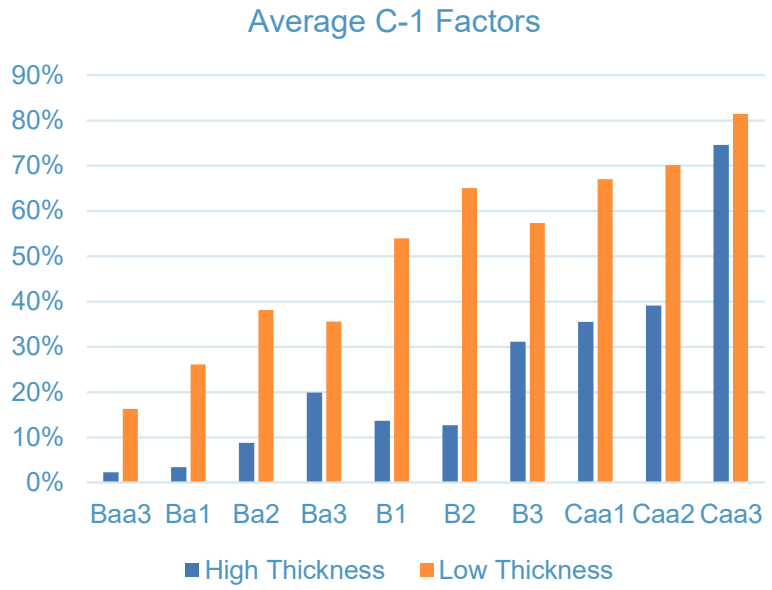
Distribution by Tranche Thickness

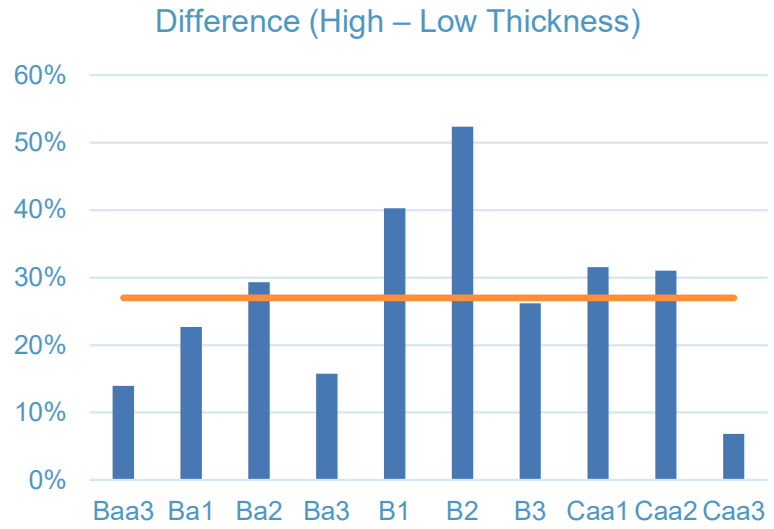
	Counts		Balance		Difference (Balance - Counts)	
	High	Low	High	Low	High	Low
Aaa	84%	16%	99%	1%	15%	-15%
Aa1	99%	1%	99%	1%	1%	-1%
Aa2	99%	1%	100%	0%	1%	-1%
Aa3	100%	0%	100%	0%	0%	0%
A1	93%	7%	96%	4%	3%	-3%
A2	98%	2%	99%	1%	1%	-1%
A3	98%	2%	98%	2%	1%	-1%
Baa1	91%	9%	95%	5%	4%	-4%
Baa2	96%	4%	98%	2%	2%	-2%
Baa3	74%	26%	93%	7%	19%	-19%
Ba1	24%	76%	34%	66%	10%	-10%
Ba2	37%	63%	47%	53%	10%	-10%
Ba3	43%	57%	52%	48%	10%	-10%
B1	91%	9%	97%	3%	6%	-6%
B2	65%	35%	88%	12%	22%	-22%
B3	4%	96%	10%	90%	7%	-7%
Caa1	30%	70%	47%	53%	17%	-17%
Caa2	12%	88%	17%	83%	5%	-5%
Caa3	60%	40%	73%	27%	12%	-12%

*High vs. low is defined as greater than vs. less than 4%

Raw C-1 Factor Averages by Tranche Thickness

Differences between high thickness and low thickness factors do not trend across rating and only have minor improvements to model fit; we use one premium across all ratings to avoid overfitting





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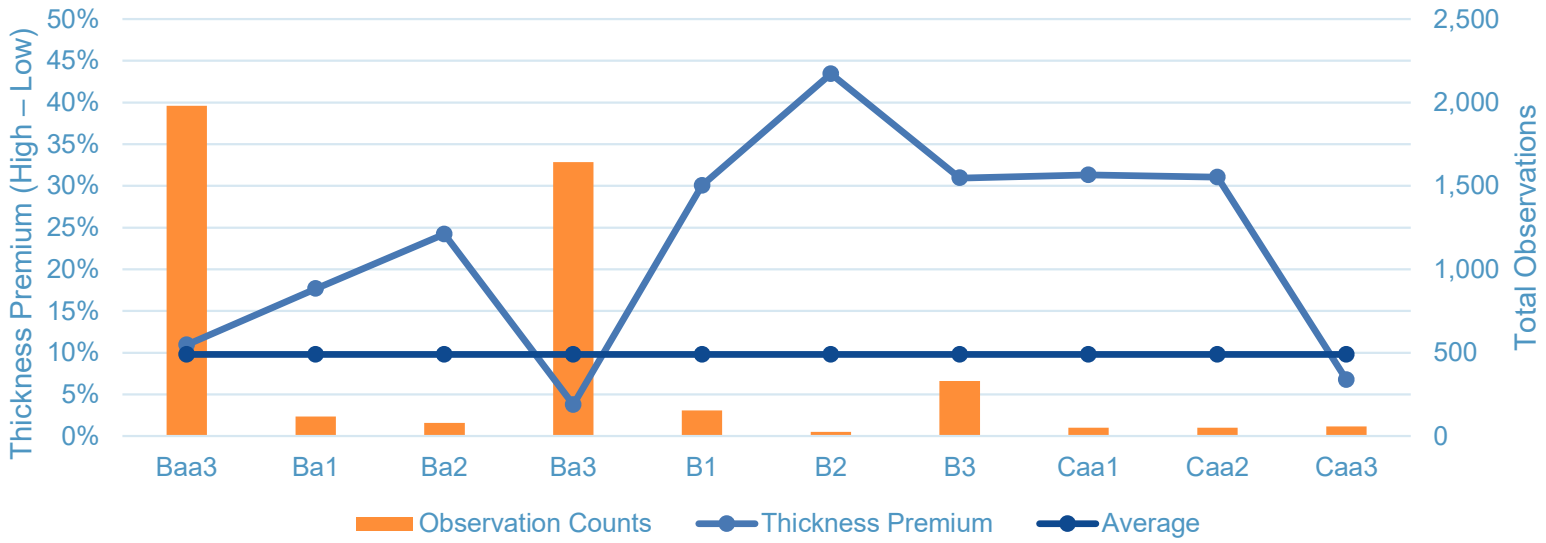
*Applying regression to standardize reinvestment horizon to mean, spiking out 4% thickness for Baa3/below and applying isotonic regression to A2/above

Model* Output Thickness Premiums

After accounting for reinvestment horizon (see next section) and estimating the thickness premium at each rating, we observe noisy results for B1/below and elect to use a single average across all Baa3/below ratings



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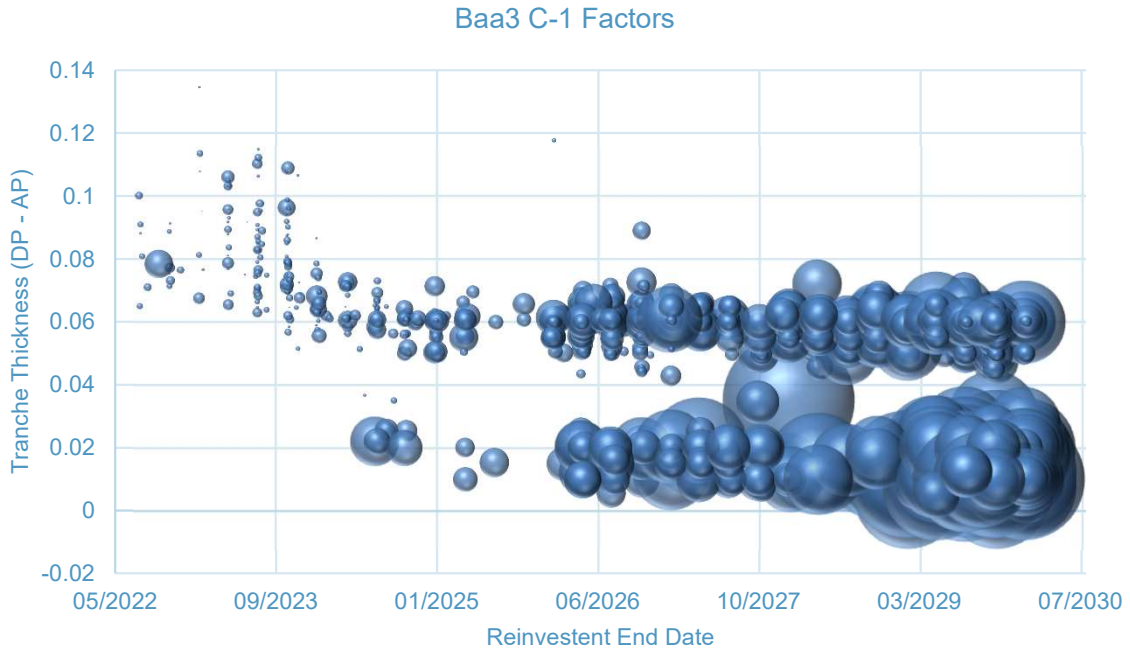
Tranche Thickness and Reinvestment Horizon

- Within Baa3 tranches, two distinct groups are represented here by two horizontal lines of bubbles.
- Each bubble represents one CLO debt tranche, with larger bubbles having higher C-1 factors.
- Bubbles are larger in the bottom row, showing that thin tranches are riskier.
- Bubbles are larger on the right, showing that longer remaining reinvestment horizons have more modeled risk.



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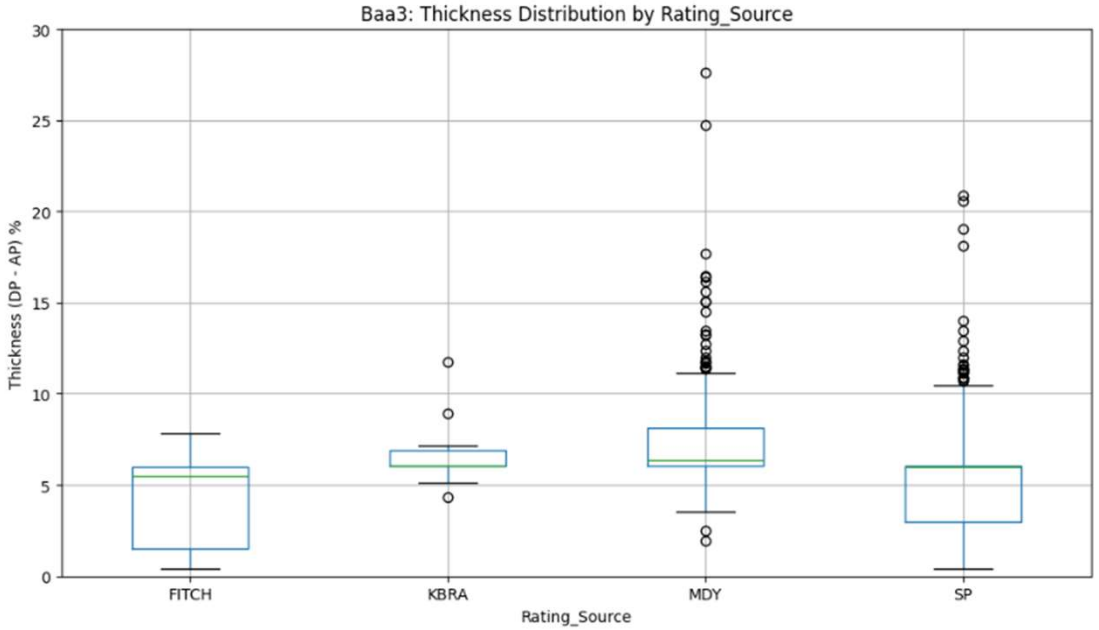
Tranche Thickness by Rating Agency

- Thinner tranches can qualify for an investment-grade rating from S&P or Fitch, which rate to the first dollar of loss (attachment point drives rating, detachment point does not).
- Moody's and KBRA* ratings incorporate severity of loss, as do modeled C-1 factors, and thus higher detachment points tend to be required for an investment-grade rating from Moody's or KBRA*.



*KBRA is drawn from a smaller sample size in the data-set, consisting of only 10 Baa3 CLOs (see following slide for further details on the dataset)

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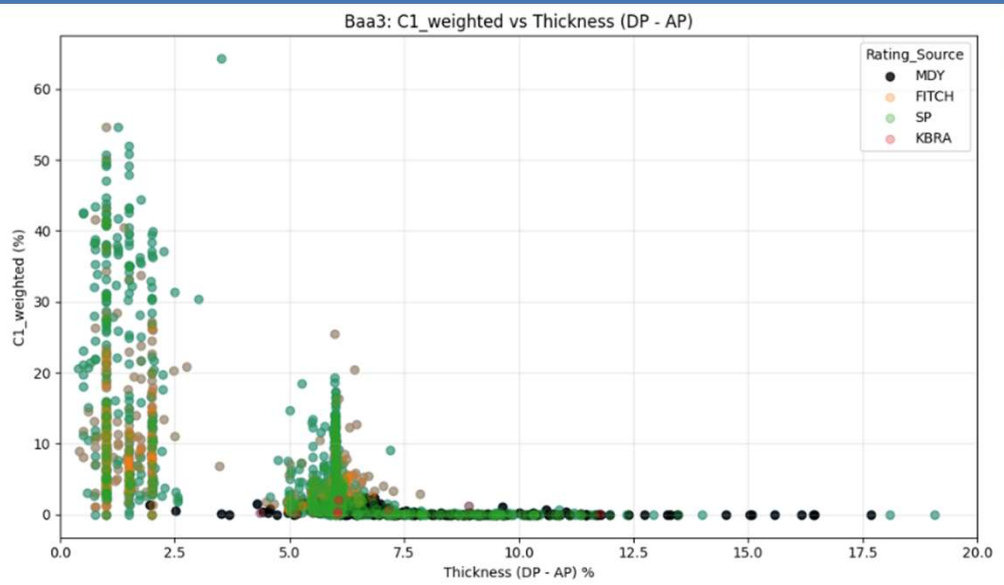
Tranche Thickness by Rating Agency

- Baa3 CLOs are clustered at a 6% thickness (typical Baa3 attaches at 12% and detaches at 18%).
- Moody's ratings (black dots) tend to have higher thickness than S&P ratings (green dots).



Thickness Distribution by Rating_Source (Baa3 only):

index	Rating_Source	count	mean	std	total_balance	avg_C1_weighted	simple_avg_C1	bal_thickness_<4%	bal_thickness_>=4%
0	FITCH	583	3.98	2.29	10371142500	4.5219	6.8773	15.35	84.65
1	KBRA	10	6.76	2.13	347144739	0.8527	0.7481	0	100
2	MDY	354	7.73	5.36	10257986866	0.6521	0.6579	0.76	99.24
3	SP	1033	5.19	2.65	23010314334	3.774	7.2659	6.72	93.28

Reinvestment Horizon

- Adjusting reinvestment horizon to mean fixes non-monotonicity in average C-1 factors, among below investment grade ratings.

	High Thickness		Low Thickness	
Rating	Simple Average	Constant Reinvestment Horizon	Simple Average	Constant Reinvestment Horizon
Aaa	0.03%	0.03%		
Aa1	0.28%	0.27%		
Aa2	0.00%	0.00%		
Aa3	0.00%	0.04%		
A1	0.40%	0.41%		
A2	0.11%	0.10%		
A3	0.12%	1.45%		
Baa1	1.58%	1.81%		
Baa2	3.02%	2.70%		
Baa3	5.94%	2.73%	16.27%	12.52%
Ba1	20.70%	12.59%	26.09%	22.39%
Ba2	27.37%	20.93%	38.13%	30.72%
Ba3	28.92%	23.28%	35.61%	33.08%
B1	17.34%	26.04%	53.96%	35.84%
B2	30.81%	35.20%	65.04%	44.99%
B3	56.39%	47.32%	57.35%	57.12%
Caa1	57.60%	48.12%	67.07%	57.92%
Caa2	66.51%	55.20%	70.16%	64.99%
Caa3	77.33%	70.82%	81.47%	80.61%

*The effect of reinvestment horizon on C-1 is not homogenous across ratings. Due to data limitations (total observations and variance in C-1), not all ratings are credible enough to have their own interaction term; buckets were chosen to optimize adjusted R^2.

Reinvestment Horizon

Ratings with short reinvestment horizons have suppressed average C-1 factors

To estimate this effect, we regress C-1 against reinvestment horizon, with interactions to the following buckets*:

Bucket 1: Aaa

Bucket 2: Aa1, Aa2

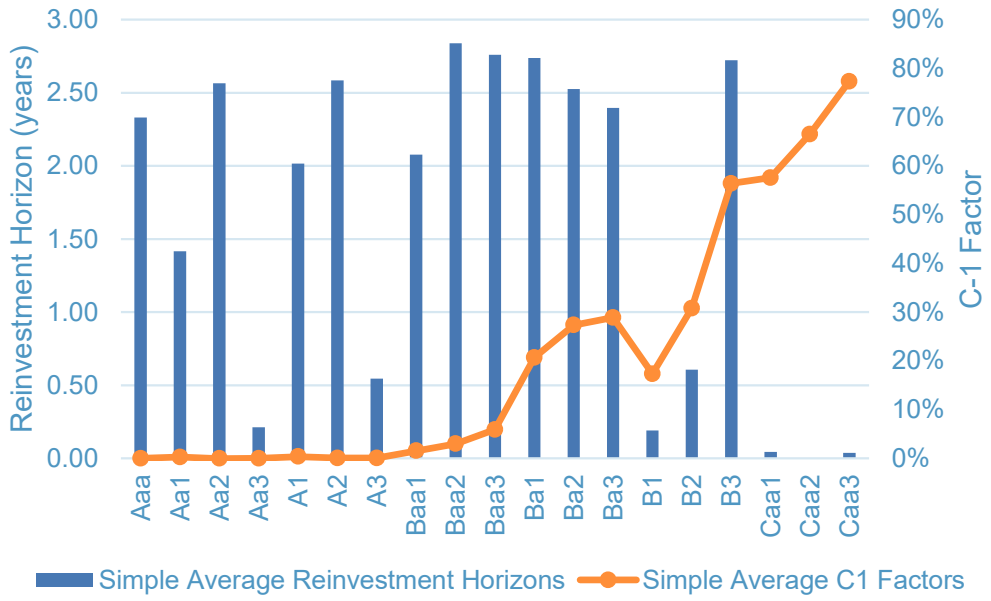
Bucket 3: Aa3, A1, A2

Bucket 4: A3, Baa1, Baa2

Bucket 5: Baa3, Ba1, Ba2

Bucket 6: Ba3, B1, B2

Bucket 7: B3, Caa1, Caa2, Caa3



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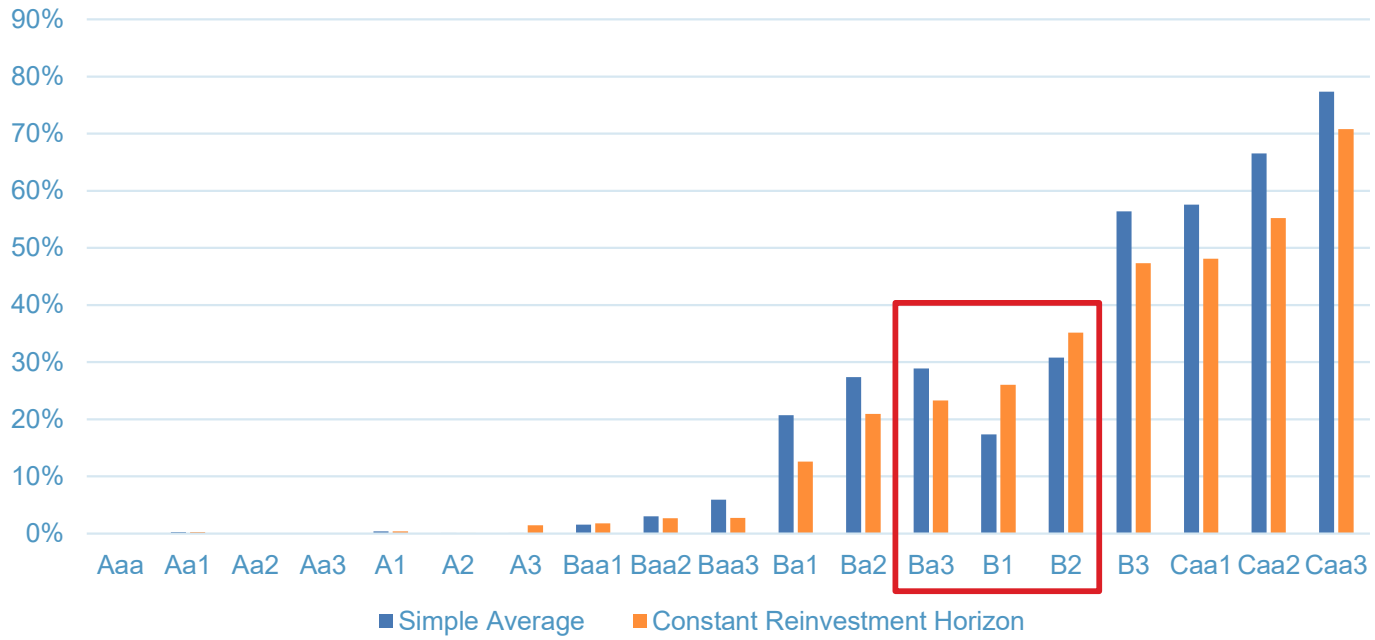
Reinvestment Horizon—High Thickness Factors



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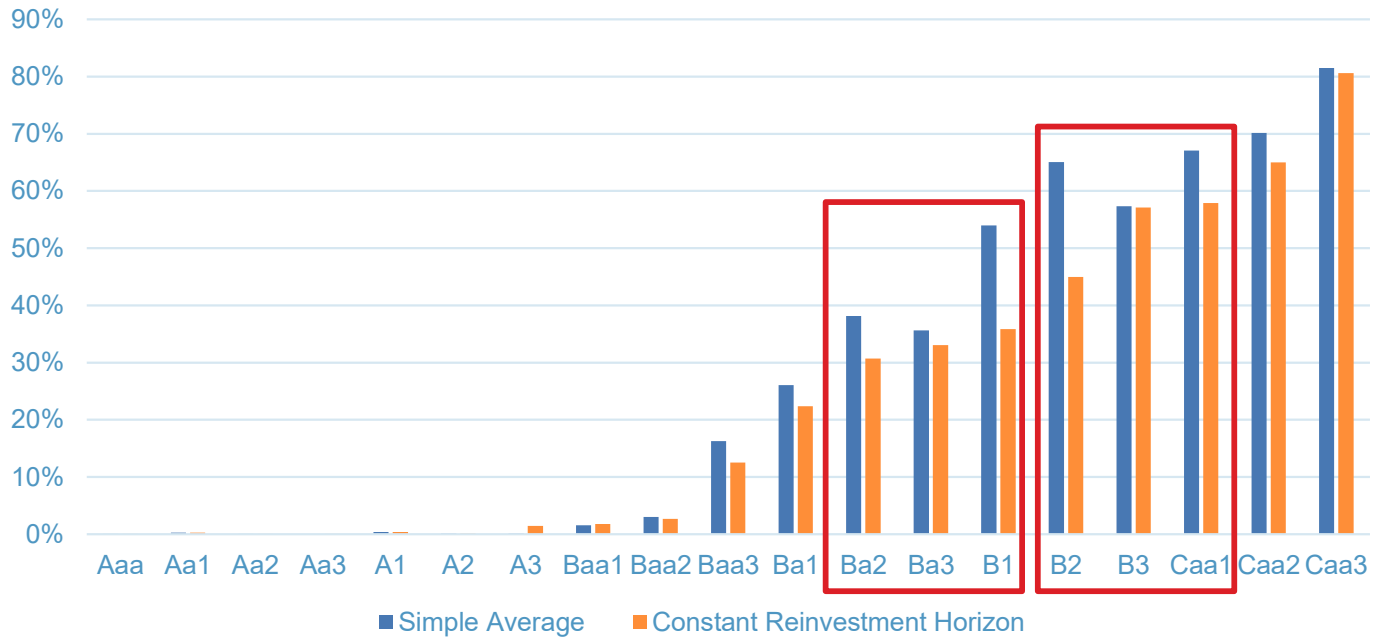
Reinvestment Horizon—Low Thickness Factors



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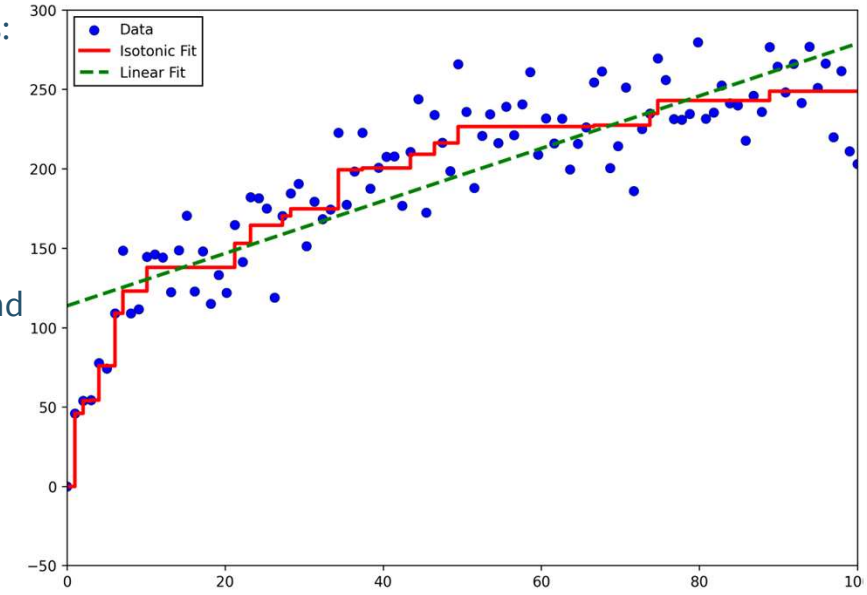
Isotonic Regression

- For $x_1 \leq x_2 \leq \cdots \leq x_n$, the isotonic regression solves:

$$\min_{\hat{y}_1,\ldots,\hat{y}_n} \sum_{i=1}^{n} (y_i - \hat{y}_i)^2 \;\; s.t. \hat{y}_1 \leq \hat{y}_2 \leq \cdots \leq \hat{y}_n$$

- The isotonic regression forces **monotonicity**, i.e., constrains data to be non-decreasing.
- The result is a **stepwise** fit where the steps correspond to weighted averages of the local points.
- The **Pool-Adjacent-Violators (PAV) algorithm** starts with $y_i = \hat{y}_i$ and identifies points where $\hat{y}_i > \hat{y}_{i+1}$.
- When violations occur, the two adjacent steps are averaged together (weighted by number of points) until monotonicity is achieved.

Illustrative Data:



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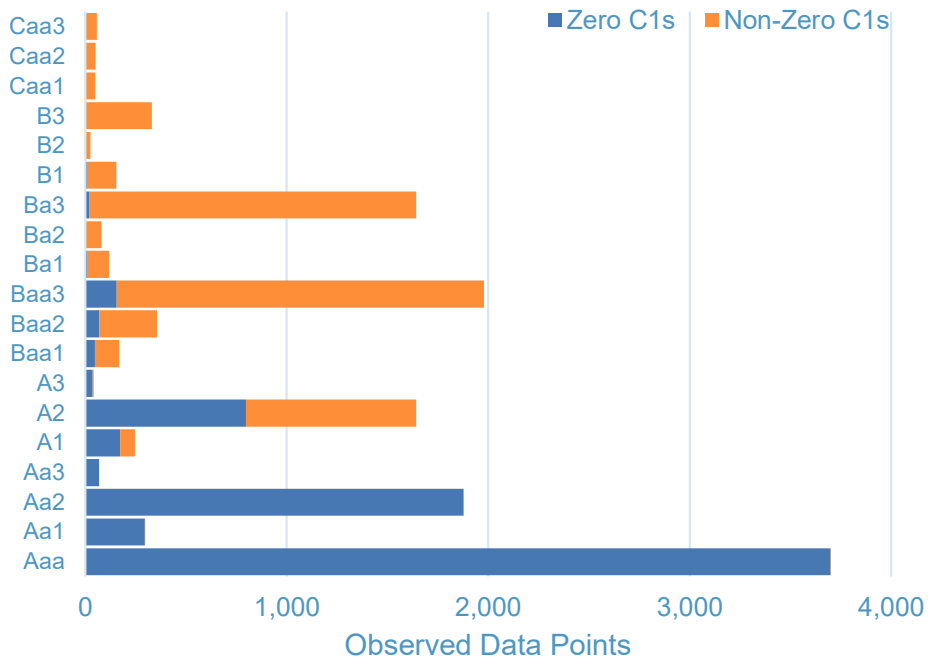
Isotonic Regression—Applied to A3/above CLO C-1 Factors 39

- Average C-1 factors are not monotonic across rating for Aa1 to A2.
- The frequency for non-zero C-1 factors is too low for factors to be credible for Aa1 to A2.
- Isotonic regression smooths the average C-1s.

	Total Observations	Non-Zero C-1 Observations	Average C-1 Factors	Isotonic C-1 Factors
Aaa	3,701	2	0.03%	0.03%
Aa1	297	1	0.27%	0.04%
Aa2	1,879	1	0.00%	0.04%
Aa3	68	0	0.04%	0.04%
A1	246	73	0.41%	0.14%
A2	1,642	844	0.10%	0.14%
A3	41	5	1.45%	1.45%



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Equal-Weighted (Simple) vs. Balance-Weighted Raw C-1

All Tranches

Rating	Counts	Non-Zero C-1 Counts	Simple Average	Weighted Average	Diff
Aaa	3,701	2	0.03%	0.01%	-0.02%
Aa1	297	1	0.28%	0.31%	0.03%
Aa2	1,879	1	0.00%	0.00%	0.00%
Aa3	68	-	0.00%	0.00%	0.00%
A1	246	73	0.40%	0.38%	-0.02%
A2	1,642	844	0.11%	0.10%	-0.01%
A3	41	5	0.12%	0.13%	0.01%
Baa1	168	120	1.58%	1.33%	-0.24%
Baa2	356	286	3.02%	2.56%	-0.46%
Baa3	1,980	1,824	5.94%	3.20%	-2.74%
Ba1	118	107	20.70%	19.21%	-1.50%
Ba2	79	75	27.37%	23.67%	-3.70%
Ba3	1642	1621	28.92%	26.65%	-2.27%
B1	154	146	17.34%	15.46%	-1.89%
B2	26	25	30.81%	18.70%	-12.10%
B3	330	326	56.39%	57.38%	0.99%
Caa1	50	50	57.60%	49.49%	-8.10%
Caa2	51	50	66.51%	65.78%	-0.73%
Caa3	58	57	77.33%	70.71%	-6.62%

- Average C-1 factors tend to be **lower** when weighting by current balance, as opposed to simple average
- This gap is driven by correlation between balance and tranche thickness—it dissipates when accounting for thickness and reinvestment horizon (see next page)
- Because weighted regressions have fewer effective degrees of freedom, we present unweighted results

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*Applying regression to standardize reinvestment horizon to mean, spiking out 4% thickness for Baa3/below and applying isotonic regression to A2/above

Unweighted vs. Weighted Modeled* C-1 Factors

Tranche Thickness > 4%

Rating	Counts	Non-Zero C-1 Counts	Unweighted	Weighted	Diff
Aaa	3,701	2	0.03%	0.01%	-0.02%
Aa1	297	1	0.04%	0.04%	0.00%
Aa2	1,879	1	0.04%	0.04%	0.00%
Aa3	68	-	0.04%	0.04%	0.00%
A1	246	73	0.14%	0.14%	-0.01%
A2	1,642	844	0.14%	0.14%	-0.01%
A3	41	5	1.45%	1.39%	-0.06%
Baa1	168	120	1.81%	1.70%	-0.11%
Baa2	356	286	2.70%	2.44%	-0.26%
Baa3	1,468	1,322	2.73%	2.68%	-0.05%
Ba1	28	17	12.59%	13.09%	0.49%
Ba2	29	25	20.93%	19.23%	-1.70%
Ba3	698	682	23.28%	23.57%	0.29%
B1	140	132	26.04%	25.48%	-0.56%
B2	17	16	35.20%	27.25%	-7.95%
B3	12	11	47.32%	48.53%	1.21%
Caa1	15	15	48.12%	48.53%	0.41%
Caa2	6	5	55.20%	57.99%	2.79%
Caa3	35	34	70.82%	68.02%	-2.80%

Tranche Thickness <= 4%

Rating	Counts	Non-Zero C-1 Counts	Unweighted	Weighted	Diff
Aaa	3,701	2	0.03%	0.01%	-0.02%
Aa1	297	1	0.04%	0.04%	0.00%
Aa2	1,879	1	0.04%	0.04%	0.00%
Aa3	68	-	0.04%	0.04%	0.00%
A1	246	73	0.14%	0.14%	-0.01%
A2	1,642	844	0.14%	0.14%	-0.01%
A3	41	5	1.45%	1.39%	-0.06%
Baa1	168	120	1.81%	1.70%	-0.11%
Baa2	356	286	2.70%	2.44%	-0.26%
Baa3	512	502	12.52%	11.79%	-0.73%
Ba1	90	90	22.39%	22.20%	-0.19%
Ba2	50	50	30.72%	28.34%	-2.38%
Ba3	944	939	33.08%	32.69%	-0.39%
B1	14	14	35.84%	34.59%	-1.24%
B2	9	9	44.99%	36.36%	-8.64%
B3	318	315	57.12%	57.65%	0.53%
Caa1	35	35	57.92%	57.65%	-0.27%
Caa2	45	45	64.99%	67.10%	2.11%
Caa3	23	23	80.61%	77.13%	-3.48%

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Appendix 3—Alternative Models Considered

Tested Regressions—Part 1

Regression Exogenous Variables	Adjusted R^2	Number of Parameters	Notes
All Variables, excluding Rating (no transformations)	42.6%	47	Baseline estimate for non-rating characteristics
Attachment Point Percentile Buckets (50 equal-sized)	66.5%	50	
Thickness (DP – AP) Percentile Buckets (50 equal-sized)	45.3%	50	
Detachment Point Percentile Buckets (50 equal-sized)	76.5%	50	New baseline for non-rating characteristics. Downside: agnostic towards underlying credit quality.
Rating	74.2%	19	Baseline for ratings. Explanatory power comparable to detachment point
Rating + Detachment Point	74.4%	20	Adds little additional explanatory power over rating

Rating modeled as individual indicator variables for each of the 19 ratings

Tested Regressions—Part 2

Regression Exogenous Variables	Adjusted R^2	Number of Parameters	Notes
Rating + Detachment Point Buckets	81.8%	68	Explains an additional 7.6% of variance over ratings only
Rating + Reinvestment Horizon	76.2%	20	Reinvestment horizon explains an additional 2.0% of variance over ratings only; is the most explanatory variable when added to rating (w/o transformation)
Rating + Reinvestment Horizon x Rating (interaction terms with rating)	82.4%	37	Explains an additional 8.2% of variance over ratings only; potential overfitting on thin tranches
Rating + Reinvestment Horizon x Rating Letter (interactions with AAA, AA, A, etc.)	81.6%	26	Loses less than 1% of variance explained Adds credibility to non-standard tranches
Rating + Reinvestment Horizon x Rating Bucket (interactions with B3/below, B2/B1/Ba3, Ba1/Ba2/B3, etc.)	81.6%	26	Comparable R^2 as rating letter; adds credibility to CCC (adds observations and adds variance in horizon)
Rating + Reinvestment Horizon x Rating Bucket + Detachment Point	81.7%	27	Negligible improvement over model without DP

Rating modeled as individual indicator variables for each of the 19 ratings

Tested Regressions—Part 3

Regression Exogenous Variables	Adjusted R^2	Number of Parameters	Notes
Rating + Reinvestment Horizon x Rating Bucket + Detachment Point Buckets	85.6%	75	Detachment point (at the granular level) explains an additional 4.0% of variance
Rating + Reinvestment Horizon x Rating Bucket + Thickness	81.7%	27	Negligible improvement over model without thickness
Rating + Reinvestment Horizon x Rating Bucket + Flag for [Thickness ≤ 4% & Baa3/below Rating]	83.2%	27	Explains additional 1.6% of variance over model without thickness or DP; **chosen model**
Rating + Reinvestment Horizon x Rating Bucket + Flag for [Thickness ≤ 4% & Baa3/below Rating] * Rating	84.3%	36	Explains only 1% additional variance with 9 additional variables; potential overfitting for below-IG
Rating + Reinvestment Horizon x Rating Bucket + Flag for [Thickness ≤ 4% & Baa3/below Rating] + Detachment Point Buckets	85.7%	76	Reference point: granular detachment point data only explains an additional 2.5% of variance over chosen model

Rating modeled as individual indicator variables for each of the 19 ratings

References

- American Academy of Actuaries (2025, Sept 8). *C-1 Subcommittee Update on CLO-C1 Factors Modeling [Slides].* NAIC RBC IRE Public Call.
- American Academy of Actuaries (2025, Dec 15). *C-1 Subcommittee Update on CLO-C1 Factors Modeling [Slides].* NAIC RBC IRE Public Call.
- S&P, "Default, Transition, and Recovery: Recovery Study (U.S.): Quantitative Easing, Low Yields, And Distressed Exchanges Have Boosted Bond Recoveries Since 2010," December 14, 2017.

Questions?

For more information, please contact

Amanda Barry-Moilanen,

the Academy's Policy Project Manager, Life at
barrymoilanen@actuary.org

American Academy of Actuaries

April 16, 2026

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106

Via Email

Re: Comments on the American Academy of Actuaries' March 2, 2026, Presentation – C-1 Subcommittee Update on CLO C-1 Factors Modeling

Dear Members of the Working Group:

LSTA, Inc. ("LSTA")[1] and the Alternative Credit Council ("ACC")[2] appreciate the opportunity to submit comments on the proposed updates to the risk-based capital ("RBC") charges for U.S. broadly syndicated loan ("BSL") collateralized loan obligations ("CLOs") being considered by the Risk-Based Capital Investment Risk and Evaluation ("RBC IRE") Working Group (the "Working Group").

Our comments address four topics: (I) our support for the American Academy of Actuaries C-1 Subcommittee's comparable attributes model (the "Academy Model"), including tranche thickness, relative to the Structured Securities Group ("SSG") model; (II) our recommendation to implement the Academy Model for U.S. BSL CLOs at year-end 2026, while deferring middle-

[1] LSTA, Inc. is a not-for-profit trade association that has been the leading advocate for the U.S. corporate lending market since 1995. LSTA's mission is to promote a fair, orderly, efficient and growing corporate loan market while advancing and balancing the interests of all market participants. Our 600+ member institutions include commercial banks (ranging in size from GSIBs to community banks), investment banks, broker-dealers, asset managers, and institutional lenders, as well as law firms and market service providers. LSTA undertakes a wide variety of activities in pursuit of its mission, including advocacy, thought leadership, data analytics, education, and standardization of documents, practices and operations. LSTA's offerings are designed for the voluntary use by our members and benefit from LSTA's ability to build a consensus of diverse stakeholders. For more information, visit www.lsta.org.

[2] The Alternative Credit Council (ACC) is a global body that represents asset management firms in the private credit and direct lending space. It currently represents 250 members that manage over US$2 trillion of private credit assets. The ACC is an affiliate of AIMA and is governed by its own board, which ultimately reports to the AIMA Council. ACC members provide an important source of funding to the economy. They provide finance to mid-market corporates, SMEs, commercial and residential real estate developments, infrastructure, and the trade and receivables business. The ACC's core objectives are to provide guidance on policy and regulatory matters, support wider advocacy and educational efforts and generate industry research to strengthen the sector's sustainability and wider economic and financial benefits. Alternative credit, private debt or direct lending funds have grown substantially in recent years and are becoming a key segment of the asset management industry. The ACC seeks to explain the value of private credit by highlighting the sector's wider economic and financial stability benefits.

market ("MM") CLO treatment to year-end 2027 pending a separately calibrated model; and (III) our view that S&P's rating methodology and data are fit for purpose to support the MM CLO modeling workstream.

I. The Academy Model Is the Sounder Approach to Updating CLO RBC Charges

We have closely followed and support NAIC's multi-year effort to transition from a ratings-based approach to a model-based approach for CLO RBC charges. We support the Academy Model for two key reasons. First, it appropriately reflects that CLO tranches exhibit materially different risk characteristics from their underlying loans. Through overcollateralization, coverage tests, waterfall structures, and credit enhancement, senior CLO tranches have demonstrated near-zero historical loss rates even through periods of significant collateral defaults. Notably, Moody's Investors Service has reported zero defaults on AAA and AA CLO tranches across all vintages from 1993 through 2023.[3] Enforcing RBC parity with the collateral – the SSG approach – would misrepresent this structural protection and systematically overstate required capital. Second, the comparable-attributes approach is more practical and operationally sound than tranche-by-tranche modeling: by grouping tranches according to rating, thickness, and reinvestment horizon, the Academy Model produces rigorous, empirically grounded C-1 factors and stochastic modeling.

II. A Sequenced Approach: Immediate Implementation for U.S. BSL CLOs, Separate Modeling for MM CLOs

We urge the Working Group to adopt a sequenced implementation structure that distinguishes between BSL CLOs – for which the Academy's model has been calibrated using robust empirical data – and MM CLOs, for which the Academy's model has not yet been calibrated. The Academy confirmed in a public RBC IRE meeting that any MM CLO data was excluded from its analysis in providing the exposed CLO C-1 factors. Specifically, we recommend that the Working Group (i) implement the Academy's BSL CLO C-1 factors for U.S. BSL CLOs effective year-end 2026; (ii) continue to apply current corporate bond C-1 factors to MM CLOs effective year-end 2026, pending a calibrated model for those assets; and (iii) direct the Academy to develop a dedicated C-1 model for MM CLOs, targeting year-end 2027 implementation, with the BSL CLO rating-only factors applied staring year-end 2027 if the modeling workstream is not completed within the proposed timeline.

We recognize the NAIC's interest in finalizing CLO RBC treatment in 2026. However, we do not believe it would be prudent to include MM CLOs in the year-end 2026 implementation. As the following considerations demonstrate, the material differences in collateral and structural characteristics between BSL and MM CLOs, the absence of a calibrated MM CLO model, and the need for proper empirical calibration mean that extending the BSL CLO model to MM CLOs at this stage would risk producing RBC charges that do not accurately reflect the risk of those assets. Applying the BSL CLO factors to MM CLOs without confirming they are appropriate for MM CLOs would also be contrary several of the Risk-Based Capital Model Governance (EX)

[3] Moody's Investors Service, "Impairment and Loss Rates of Structured Finance Securities: 1993–2022," published June 26, 2023. See also S&P Global Ratings, "CLO Spotlight: Thirty Years Strong: U.S. CLO Tranche Defaults From 1994 Through First-Quarter 2024," published June 27, 2024.

Task Force RBC principles set forth below. While ratings may turn out to be the only comparable attribute for MM CLOs, we won't know that until the analysis has been performed.

This sequenced approach is grounded in the following considerations:

Collateral and structural differences. The collateral and structural characteristics of MM CLOs differ materially from those of BSL CLOs. The underlying loans are typically illiquid, lack broadly available market pricing, carry different default and recovery dynamics, and exhibit distinct tranche thickness distributions.

Data foundation. On a dollar basis, S&P rates about two-thirds of the MM CLO market,[4] making it a necessary source for the Academy's modeling workstream.

A credible and achievable timeline. Based on the scope of work required – which mirrors the BSL CLO modeling process – and discussions with the Academy, we understand that a dedicated MM CLO model can realistically be completed within approximately nine months of commencement, supporting the feasibility of year-end 2027 implementation.

Regulatory momentum. Adopting the sequenced approach allows the Working Group to prioritize analytical accuracy for MM CLOs while still implementing RBC treatment for the supermajority of insurer CLO holdings by year-end 2026. Currently, BSL and MM CLOs account for approximately 83% and 17% of insurers' CLO holdings, respectively, meaning the 2026 implementation will capture most of insurer exposures while allowing additional time to develop robust RBC treatment for the MM CLO segment.

Table 1: U.S. BSL CLO – Life Insurer Holdings vs. Market Outstanding (YE25, in $B)

Rating	Insurer Holdings	Market Outstanding	% of Market
AAA	$51.50	$617.00	8.40%
AA	$42.80	$116.00	36.90%
A	$29.40	$62.90	46.80%
BBB	$25.40	$66.60	38.10%
BB and below	$5.10	$40.70	12.50%
Total Debt	**$154.20**	**$903.10**	**17.10%**

Excludes equity tranches. Source: S&P Capital IQ, Kanerai, Intex, Barclays Research.

[4] J.P. Morgan.

Table 2: U.S. MM CLO – Life Insurer Holdings vs. Market Outstanding (YE25, in $B)

Rating	Insurer Holdings	Market Outstanding	% of Market
AAA	$14.20	$105.80	13.40%
AA	$8.00	$15.90	50.30%
A	$7.10	$14.70	48.30%
BBB	$2.80	$8.00	35.00%
BB and below	$0.70	$4.40	15.90%
Total Debt	**$32.70**	**$148.80**	**22.00%**

Excludes equity tranches. Source: S&P Capital IQ, Kanerai, Intex, Barclays Research.

We believe that this sequenced approach would be consistent with the recently approved Principles of RBC requirements, including Principle 4 (equal capital for equal risk), Principle 5 (objectivity), Principle 6 (accuracy), Principle 9 (transparency), and Principle 10 (data-driven and evidence-based).

III. S&P's Rating Methodology and Data Are Well-Suited to Support the MM CLO Model

We address below a concern that has been raised regarding whether S&P's ratings model considers loss given default ("LGD"). S&P's CLO rating methodology incorporates two key aspects from the perspective of (i) the portfolio and (ii) the securitization structure itself.

Regarding the portfolio, S&P utilizes a Monte Carlo simulation to assess portfolio risk, and to determine the default hurdle rate that a given tranche of the securitization transaction must be able to withstand in order to achieve a particular rating. This is known as the Scenario Default Rate ("SDR"), and it incorporates critical aspects of the portfolio such as diversification (both single obligor as well as industry), credit risk of each asset (as determined by the rating assigned to each obligor by S&P), and portfolio tenor (i.e. the maturity of each asset in the portfolio).

In terms of the securitization itself, S&P incorporates cashflow modeling to determine the resiliency and robustness of each tranche. Asset recovery rates are a key input into this analysis. The cashflow model generates break-even default rates ("BDR") for each tranche across various interest rate and default pattern and timing stresses. The BDRs are generated assuming a certain LGD on the portfolio (with stress levels specific to each tranche). The BDR is the maximum default rate a given tranche can withstand before it loses its first dollar of either principal or interest in a timely and/or ultimate manner (depending upon the tranche rating and terms of the securitization). The BDR must exceed the SDR in order for a tranche to achieve a particular rating.

The Academy's comparable-attributes model derives C-1 factors from its own modeled loss outcomes – not from rating agency methodologies – and uses ratings only as a grouping attribute. Any rating agency-driven dispersion in risk within a given rating bucket is a calibration question for the Academy, not a flaw in the use of S&P data. We are therefore confident that the S&P data provides a sound foundation for a rigorous MM CLO model.

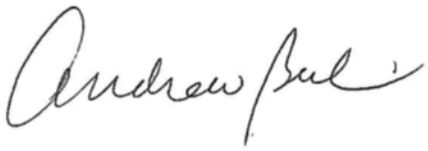
V. Conclusion

LSTA and ACC are committed to working constructively with the Working Group and the Academy to ensure that the final CLO RBC framework is well-calibrated, analytically sound, and equitable across CLO asset classes. To that end, we urge the Working Group to adopt the sequenced implementation structure described in Section II – implementing the Academy's BSL CLO C-1 factors at year-end 2026 while deferring MM CLO treatment pending a data-driven and evidence-based model. We emphasize that S&P's data is fit for purpose to support the MM CLO modeling workstream.

We welcome the opportunity to discuss any of these comments further with Working Group staff and members.

Sincerely,

LSTA, INC.



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American Consumer Institute

PUBLIC COMMENT APRIL, 2026

Philip Barlow
Chair, Risk-Based Capital Investment Risk and
Evaluation (E) Working Group
National Association of Insurance Commissioners

Re: Proposal 2025-22-IRE CLO Modified RBC Structure with Tranche Thickness

Dear Mr. Barlow:

The American Consumer Institute (ACI) appreciates the opportunity to submit comments to the National Association of Insurance Commissioners (NAIC) regarding the rule proposal for changes to Long-Term Bond reporting requirements.[1] While ACI supports consumer protection through risk-based regulatory frameworks, we caution the use of this proposed reporting framework as an impetus for future uniform capital charge increases.

The loss of a loved one can be daunting, but having means to pay for unexpected expenses through life insurance prevents the financial strain many can face at such a time.[2] Life insurance is central to consumer peace of mind by assuaging financial concerns. It is essential for consumers to be able to access and afford life insurance to provide comfort in times of sorrow.

While the proposal is limited to adopting detailed Long-Term bond reporting, it is also a first step to adopting structural changes such as increasing capital requirements. However, not all collateralized loan obligations (CLOs) are the same. From a 2024 report by Oliver Wyman, various asset classes experienced differing net present value (NPV) losses.[3]

Such a proposal could lead to future rules that negate risk-based regulatory standards by adopting a one-size-fits-all regulatory approach. This is not an effective approach to adequately assessing risk or curtailing tail-risk events. ACI believes this current proposal for more granular reporting is the impetus for increases in risk-based capital (RBC) that are not indicative of the level of risk within the categories and are not based on studied data.

[1] The American Consumer Institute (ACI) is a 501(c)(3) nonprofit educational and research institute, https://www.theamericanconsumer.org/.
[2] Yan Fridman, et al., "Life Insurance as a Force for Good: Insights from Industry Experts," *Milliman*, August 15, 2025, https://www.milliman.com/en/insight/life-insurance-force-for-good-industry-experts.
[3] "Residual Tranche Risk Analysis," *Oliver Wyman*, February 26, 2024, 31, https://content.naic.org/sites/default/files/inline-files/Oliver%20Wyman%20Residual%20Tranche%20Report.pdf.

When risk-based capital requirements increase without adequate market support determining the increase, costs increase for the insured. According to a study conducted in 2024, 45 percent of respondents cited cost as the main reason for not purchasing life insurance.[4] Price increases can and will prevent consumers from purchasing life insurance.

Access to life insurance and the solace it provides is essential for consumers. Changes that may impact access to life insurance should be made with due care and caution.

Respectfully submitted,

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[4] Amy Danise, "Life Insurance Statistics, Data and Industry Trends," *Forbes*, April 1, 2026, https://www.forbes.com/advisor/life-insurance/life-insurance-statistics-apr-26/.

April 16, 2026

Mr. Philip Barlow, Chair
Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1000
Kansas City, MO 64106-2197

Re: American Academy of Actuaries' Presentation on March 2, 2026 Titled C-1 Subcommittee Update on CLO C-1 Factors Modeling

Submitted Electronically

Dear Chair Barlow:

The American Council of Life Insurers (ACLI) appreciates the opportunity to comment on the American Academy of Actuaries' ("Academy") March 2, 2026 presentation, *C-1 Subcommittee Update on CLO C-1 Factors Modeling*. We thank the Academy and NAIC staff for their continued work to develop a transparent, analytically grounded approach to calibrating C-1 capital factors for collateralized loan obligations (CLOs).

ACLI strongly supports the Academy's CLO C-1 modeling framework as the appropriate path forward. The comparable attribute approach is an appropriate and scalable framework that can be leveraged to map CLO and other structured security risk into an RBC structure. However, ACLI contends that the Academy's work must be completed by incorporating material model sensitivities identified by the Academy, and other enhancements noted below, which ACLI views as critical in the calibration of capital factors across CLO tranches. The observations and recommendations discussed below are important enhancements to strengthen this sensible framework further, intended to improve the alignment of capital with risk and enhance the transparency and durability of the framework over time as additional data, validation, and regulatory experience are incorporated.

ACLI recommends a phased approach that:

- Aligns statutory reporting with the Academy model in the near term, and
- Requires additional enhancements, validation, and exposure before Academy-derived C-1 factors are adopted for capital purposes.

This approach balances transparency, analytical rigor, and operational readiness.

Recommendations for Year-end 2026

ACLI appreciates the Academy's continued engagement with the Working Group and stakeholders, including the March 2, 2026 update and the related sensitivity testing, which represents substantial progress toward a more transparent, analytically grounded approach to calibrating CLO C-1 factors.

For year-end 2026, ACLI recommends adopting an Academy-aligned reporting structure, while maintaining existing bond C-1 factors for capital purposes. Specifically, ACLI recommends adoption of a blanks structure that reflects the Academy model's tranche rating comparable attribute, and that allows Broadly Syndicated Loan (BSL) CLOs and Middle-Market (MM) CLOs to be reported separately. Under this approach, bond C-1 factors would continue to apply to all CLOs for year-end 2026, including both BSL and MM CLOs.

Limiting year-end 2026 implementation to enhanced disclosure (rather than adopting Academy-derived capital factors immediately) is appropriate at this stage. While the framework is promising and the Academy's work represents meaningful progress, ACLI members believe additional enhancements, documentation, and validation would be beneficial before the results are relied upon for regulatory capital.

Accordingly, a disclosure-only approach for year-end 2026 would:

- Allow time for consideration of sensitivity testing which has shown key assumptions (e.g., recoveries, reinvestment price, prepayments, and correlation related to systemic risk) can materially affect tail losses and the resulting C-1 charge.
- Provide time to assess stability and reduce the risk of unintended volatility or "capital cliff" effects.
- Support consistent implementation and supervisory confidence through added transparency and documentation (model specification, inputs, calibration, governance, and maintenance).

In addition, Academy-aligned reporting would provide valuable information that is not currently available, including:

- Separate identification of BSL and MM CLO exposures and
- Visibility into tranche rating distributions.

This enhanced disclosure supports supervisory monitoring and can inform future calibration and policy decisions, while preserving regulatory continuity and avoiding implementation of an incomplete model during the transition year.

ACLI emphasizes that separate reporting of BSL and MM CLOs is intended to reflect differences in underlying collateral characteristics, asset structures, and data availability. The Academy's current factor analysis is based on BSL CLO data, and separate disclosure will facilitate more robust analysis and validation of MM CLOs over time.

Enhancements Recommended for Year-end 2027 Adoption

ACLI would support the adoption of the C-1 factors produced by the Academy model for year-end 2027, with the commitment from the Working Group to authorize continued enhancements of the Academy model. These enhancements, accompanied by any necessary updates to the blanks structure, would be exposed for public comment and considered for adoption for year-end 2027 reporting.

Specifically, ACLI recommends the following enhancements to be considered as part of the 2027 implementation:

1. Incorporation of Sensitivity Test Results

ACLI supports incorporating insights from the Academy's sensitivity testing as presented on December 15, particularly where results identify assumptions that materially influence modeled tail risk. These results can help inform appropriate calibration choices and strengthen confidence in the selected C-1 factors.

Specifically, ACLI recommends the sensitivity testing be expanded where possible to include the universe of CLOs as well as targeted additional analysis, focused on three assumption areas that the Academy's sensitivities showed to be material:

- Systemic risk correlation (Academy sensitivities #1 and #2)
- Recovery average (Academy sensitivity #5)
- Collateral repurchase price and prepayment (Academy sensitivities #6 and #7)

Systemic Risk (Sensitivities #1 and #2)

The Academy's presentation demonstrates that small changes in correlation assumptions can drive material changes in modeled C-1 factors. The Academy pointed to a set of studies providing academic ballast to the observed behavior that default correlations increase during stress, especially for non-investment grade issuers. In other words, correlations are state-dependent and not static properties of ratings. Accordingly, ACLI contends that not fully conducting this sensitivity analysis risks misaligning the factor with the underlying risks.

Finally, it should be noted that the Academy points out in their presentation that it is important to test their chosen systemic risk correlation assumption because "leveraged loans may carry more systemic risk than bonds."

ACLI recommends:

- Finalizing the systemic risk correlation of tranches under stressed economic and financial market scenarios (e.g., correlation of price movements across issuances by ratings) that may amplify tail outcomes. The literature indicates this much for bonds and the Academy suggests that loans may have more systemic risks.
- Documenting the rationale for the chosen systemic risk correlation given its outsized influence on tranche tails and on "equal capital for equal risk."

Recoveries (Sensitivity #5)

The Academy's presentation demonstrates that lower recovery rate assumptions materially increase modeled C-1 for Baa and below tranches. We understand the baseline uses S&P recovery deciles by seniority (capturing tail shape), while Sensitivity #5 tests higher average loss given default (LGD) rates derived through statistical fitting. ACLI recommends:

- Refreshing recovery assumptions against the most current, seniority-aware empirical sources and ensuring that tail behavior remains realistically represented, particularly for first-lien/senior secured loans predominating CLO collateral.

- Assessing independence of structures (e.g., correlation of recoveries across issuers and with default intensity) that may amplify tail outcomes, as the Academy's correlation-in-severities sensitivity (Sensitivity #4) also shows meaningful impacts for mezzanine tranches.

- Evaluating whether a weighting technique may be appropriate when using historical data to derive recovery assumptions given the consistently lower loan recoveries observed in the last decade as a consequence of the material changes to standard loan structures and terms in the market versus the prior historical norm.

- Documenting the rationale for the chosen recovery distribution (level and shape), given its outsized influence on tranche tails and on "equal capital for equal risk" across otherwise similar CLOs.

- Using loan probability of default (PD) assumptions rather than broader all-issuer defaults across exposure types, as the broader dataset includes issuers and instruments that are not representative of predominantly senior-secured CLO collateral and therefore can overstate default incidence[1].

- Pairing any higher CLO collateral LGD assumption with a corresponding enhancement to loan PD, as expected loss reflects both default frequency and loss severity. A framework that increases severity without also calibrating behavior of the same collateral assumptions can overstate the overall loss profile of CLO collateral and therefore assign a capital charge that exceeds the collateral's actual risk profile.

Collateral Reinvestment Price and Prepayment (Sensitivities #6 and #7)

ACLI appreciates that the baseline assumes no prepayment and par reinvestment, consistent with rating-agency cash-flow setups. However, the Academy's stressed-market sensitivities, introducing below-par reinvestment prices and non-zero prepayments, show material dispersion across CLOs and material reductions in C-1 factors for junior tranches in certain structures. We recommend:

- Joint calibration of price-at-reinvestment and prepayment to historically consistent, stress-period relationships (e.g., linking loan prices and prepayment rates to observed default-rate

[1] Loan default rates (that generally include senior secured borrowing) are expected to be lower than all-issuer default rates (that include unsecured, bond-only issuers) when applying Moody's Default and Recovery Database data.

regimes). This would avoid overstating or understating risk when these drivers move together in real markets.

- Bounding or stratifying assumptions by collateral quality mix and reinvestment horizon (e.g., within the CLO reinvestment period versus after), to reflect realistic manager behavior and market liquidity conditions.

- Explicitly testing stability across a broader deal set (beyond the initial six deals) to confirm that the approach is robust – recognizing the Academy's finding of widely varying results across deals under these sensitivities.

ACLI agrees with the Academy's observation and recognizes these sensitivities move in opposite directions and may not fully offset each other. Treating the assumptions jointly will better align the C-1 factors with underlying risk. Given their interaction, we recommend an integrated sensitivity suite (like the Academy's combined tests #8 and #9 but incorporating the three sensitivities mentioned above) be used to select final calibration points, so that RBC factors reflect the net portfolio-tail effect rather than canceling assumptions in isolation. Additionally, an enhancement to replace the application of all-issuer default rates with loan default rates would produce lower PD assumptions that are expected to offset the higher LGD sensitivity in the bond C-1 framework even before any prepayment or reinvestment enhancements.

2. Enhancement of Grading Between Tranche Ratings (including A3 treatment)

ACLI encourages continued enhancement of grading between adjacent tranche ratings, particularly where model outputs imply discontinuities that may not reflect commensurate differences in economic risk. Reducing cliff effects would help promote smoother transitions, strengthen alignment with the broader C-1 bond framework, and improve interpretability across market environments. In periods of market stress, investment-grade CLO tranches, while generally expected to remain performing, may nonetheless experience meaningful rating migration potentially by multiple letter grades rather than single-notch moves. More gradual capital transitions can help limit the potential for procyclical dynamics by reducing incentives for forced selling at inopportune points in the cycle (as illustrated by subprime RMBS during the financial crisis, where rapid rating migration contributed to the NAIC's subsequent adoption of a break-point methodology).

Consistent with this objective, ACLI recommends calculating the C-1 factor for A3 tranches using an averaging approach (rather than grouping entirely with BBB-rated tranches) to improve stability and representativeness while preserving monotonicity across ratings.

3. Development of Separate Factors for MM CLOs

Although currently a smaller subset of the overall CLO universe, MM CLO issuance has grown rapidly, with new issue volumes reaching record levels in recent years. As exposure increases, the proportion of insurer-held CLOs backed my middle market collateral will rise. Therefore, ACLI recommends development of separate modeled C-1 factors for MM CLOs, based on dedicated analysis of MM collateral performance, structural features, and available data. Separate calibration would improve risk alignment while remaining consistent with the Academy's overall framework. Developing separate modeled C1 factors now proactively addresses the trajectory of insurer-held MM CLOs, adapting to innovation in financial markets while protecting policyholders and preventing future capital distortions or the need for ad hoc adjustments.

Some analyses suggest MM CLOs may carry different risks than BSL CLOs due to less liquid collateral, higher weighted average spreads compensating for credit profiles, greater industry/issuer concentration profile, and limited secondary market pricing transparency. At the same time, MM structures often incorporate compensating features such as stronger credit enhancements and manager alignment through risk retention and origination. A dedicated MM analysis would empirically evaluate those factors, ensuring C-1 factors reflect "equal capital for equal risk" and avoid BSL-centric assumptions that may not capture MM nuances. Extending BSL logic to MM CLOs is a natural and feasible extension of the Academy's work given the data now available from rating agencies and managers.

4. Consideration of Tranche Thickness for BSL and MM CLOs

ACLI supports further consideration of tranche thickness as a comparable attribute for both BSL and MM CLOs, particularly for below-investment-grade tranches, where the Academy's analysis shows it provides incremental information about tail risk.

5. Incorporation of Data from Additional NRSROs

ACLI recommends incorporating data from S&P and Fitch, in addition to Moody's, since Moody's does not rate the full capital structure for a significant portion of recent CLO issuance. Leveraging data from multiple NRSROs would provide a more complete view of tranche structures and improve representativeness.

6. Model Replicability and Validation

The Academy has undertaken comprehensive empirical analysis in support of the effort to develop proposed C-1 factors for CLOs. Additional transparency into the Academy's methodology will allow stakeholders to replicate and validate those results.

ACLI appreciates the extensive work undertaken by the Academy and regulators to develop a robust CLO C-1 modeling framework. A phased approach, with enhanced Academy-aligned disclosure for both BSL and MM CLOs in year-end 2026 and adoption of enhanced capital factors for year-end 2027, best supports transparency, analytical rigor, and regulatory continuity.

ACLI looks forward to continued engagement with the Working Group and the Academy as this important work progresses.

Respectfully submitted,

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AMERICAN INVESTMENT COUNCIL

April 16, 2026

VIA ELECTRONIC SUBMISSION

National Association of Insurance Commissioners ("NAIC")
Risk-Based Capital Investment Risk and
Evaluation (E) Working Group
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Re: American Academy of Actuaries' Presentation titled *C-1 Subcommittee Update on CLO C-1 Factors Modeling (March 2, 2026)*

Dear Members of the Risk-Based Capital Investment Risk and Evaluation (E) Working Group ("Working Group"):

The American Investment Council ("AIC") appreciates the opportunity to comment on the American Academy of Actuaries' ("Academy") recent presentation to the Risk-Based Capital Investment Risk and Evaluation (E) Working Group ("Working Group") titled *"Update on CLO C-1 Factors Modeling"* dated March 2, 2026. We also appreciate the thoughtful and deliberate approach the Academy and the Working Group have taken with respect to broadly syndicated loan ("BSL") collateralized loan obligations ("CLO") in consideration of the Working Group's objective of advancing and ultimately adopting amendments to the risk-based capital ("RBC") framework. More broadly, AIC supports the primacy of state-based insurance regulation, particularly with respect to insurer investment regulation and supervision, and views the continued evolution of the RBC framework and related workstreams as clear evidence that state insurance regulators are well positioned – now and as insurer investments continue to evolve – to effectively regulate and supervise insurer investment activity.

As a general matter, AIC supports the Academy's framework for evaluating C-1 risk across asset classes and appreciates the careful consideration of potential comparable attributes in developing modeled C-1 RBC factors for CLO investments.[1] AIC agrees with the Academy's analysis, based on its study of BSL CLOs, that CLOs exhibit sufficient comparable attributes to support the use of standardized C-1 factors rather than ongoing individual asset-level modeling. This conclusion is well supported by the Academy's

[1] *See* p. 7 of the Academy's presentation to the Working Group dated March 2, 2026, titled *C-1 Subcommittee Update on CLO C-1 Factors Modeling*, ("March 2, 2026 Academy Presentation") available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fcontent.naic.org%2Fsites%2Fdefault%2Ffiles%2Finline-files%2FLife-Presentation-CLOUpdateMarch2026.pptx&wdOrigin=BROWSELINK.

analysis, as well as reports and data that we have submitted in connection with the NAIC's consideration of C-1 risk associated with CLO investments.[2]

As between the two alternative approaches presented by the Academy for establishing RBC factors for BSL CLO investments – namely the "*Rating Only (After-Tax Factors)*" option ("Option 1") and the "*Rating & Tranche Thickness (After-Tax Factors)*" option ("Option 2")[3] – **AIC recommends the adoption of Option 1**, as it represents a more readily implementable framework that achieves the NAIC's broader objective of establishing CLO-specific C-1 factors while avoiding unnecessary complexity. With respect to middle market ("MM") CLO investments, based on the Academy's initial assessment and preliminary observations, AIC believes that Option 1 could also provide a reasonable RBC framework, particularly if the Academy conducts relevant analysis surrounding MM CLOs. However, **AIC recommends that the Working Group defer the application of Option 1 to MM CLOs to year-end 2027**, in light of the fact that the Academy's modeling work to date has been limited to BSL CLOs. This delay would give the Academy an opportunity to both validate that its findings with respect to BSL CLOs also apply to MM CLOs – which may require separate data, analysis, and calibration – and also give stakeholders time to adjust their investment controls and guidelines in consideration of the amended RBC framework for MM CLOs.

To the extent that the Working Group nevertheless determines that Option 2 is its preferred long-term solution, Option 1 should be approved and implemented as an interim measure for BSL and MM CLOs (i.e., for year-end 2026 for BSL CLO investments and year-end 2027 for MM CLO investments) to provide regulators, the Academy, and interested parties additional time to assess whether the suggested four percent (4%) tranche thickness threshold is appropriate and whether other refinements should be considered. Further consideration should also be given to incorporating prepayment behavior, reinvestment dynamics, and discount features into the calibration of certain factors under Option 2, consistent with considerations previously raised by AIC and other stakeholders.[4] Such a measure is particularly appropriate for MM CLO investments, which have not yet been the subject of a comprehensive modeling and validation process that is necessary to understand whether differentiated treatment is warranted.

AIC appreciates the significant effort the Academy and the Working Group have devoted to this workstream and we look forward to working with you on these issues as

[2] *See e.g.*, AIC Letter to the Working Group dated January 29, 2026, regarding the Academy presentation titled *C-1 Subcommittee Update on CLO C-1 Factors Modeling* ("January 29 Letter") and the materials referenced therein, available at: https://www.investmentcouncil.org/aic-comment-to-the-naic-on-the-american-academy-of-actuaries-presentation-titled-c-1-subcommittee-update-on-clo-c-1-factors-modeling/.

[3] Pursuant to Option 1, CLO-specific C-1 RBC factors are determined based on tranche credit ratings, leveraging the information embedded in ratings as a proxy for relative risk. Pursuant to Option 2, tranche thickness is incorporated as an additional structural attribute to further differentiate risk among similarly rated tranches. *See* pp. 12-13 of the March 2, 2026 Academy Presentation.

[4] *See e.g.*, the January 29 Letter (discussing, among other things, prepayment behavior, reinvestment assumptions, and related considerations).

we seek to achieve our mutual goals of strengthening the state-based system of insurance regulation and ensuring that insurers continue to have access to responsible long-term investment options. We also look forward to reviewing proposed RBC charges developed by the Working Group, which should be consistent with the Academy's modeled base factors and its broader conclusion that investment grade CLO tranches exhibit relatively low C-1 risk when compared to comparably rated fixed-income investments. We appreciate the Working Group's engagement with interested parties and welcome the opportunity for continued engagement as this workstream progresses.

Sincerely,

/s/ Shelby Telle
Deputy General Counsel
American Investment Council

ATHENE

April 16, 2026

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Via email: mchang@naic.org

Re: Comments on American Academy of Actuaries (Academy) C-1 Subcommittee Update on CLO C-1 Factors Modeling

Dear Ms. Chang,

Athene Holding Ltd. (Athene) appreciates the opportunity to provide comments on the RBC Investment Risk and Evaluation (E) Working Group's request for input on the Academy C-1 Subcommittee's Update on CLO C-1 Factors Modeling.

Athene supports adopting the Academy's modeled, principles-based framework for all collateralized loan obligations (CLOs), including broadly syndicated loan (BSL) and middle market (MM) CLO tranches, for year-end 2026. It is analytically grounded, scalable, and a clear improvement over the status quo, advancing the RBC objective of equal capital for equal risk while creating a consistent, governable standard that can be refined with targeted enhancements for year-end 2027.

U.S. life and annuity companies are a critical source of guaranteed income and long-duration protection. That role depends on an RBC framework that is stable, analytically sound, and credible as both a minimum capital standard and an early-warning tool, especially amid heightened focus on solvency, supervisory credibility, and cross-jurisdictional capital arbitrage. Consistent with Athene's March 12, 2026 comments to the RBC Model Governance (EX) Task Force, we support the Working Group's efforts to modernize CLO treatment as part of a broader push for C-1 consistency in credit risk measurement, tail calibration, embedded assumptions, and modeling approach.

I. Adopt for YE 2026 Implementation with Refinements for YE 2027

The Academy model is grounded in a robust, data-driven analysis and leverages a modeling framework aligned with the existing corporate bond methodology, ensuring conceptual consistency across asset classes. At the same time, it captures key features unique to CLOs, including portfolio credit risk, structural subordination, and tail loss behavior, without introducing undue complexity or reliance on deal-specific modeling. By producing

standardized, transparent C-1 factors, the Academy model supports the core RBC objective of equal capital for equal risk and avoids the variability and operational burden associated with a deal-by-deal approach.

The Academy has presented regulators with two options for consideration: (1) "Option 1" – simpler approach: RBC factors for CLOs based rating only (after tax factors); or (2) "Option 2" – a more risk-sensitive approach with ratings adjusted to account for tranche thickness for certain CLO tranches (Baa3 and below).

Athene believes either option would be appropriate for BSL CLOs for YE2026, but Option 1 would be easier to implement for year-end and would be more appropriate for MM CLOs as MM CLO tranche thickness data has not been collected. The Academy found ratings to be a comparable attribute, provide more information than any other single data set, and provide a better estimate for risk than all the other factors tested combined (except for tranche thickness and reinvestment horizon/reinvestment period), enabling practical and scalable implementation.

The Working Group can then evaluate and, where supported, incorporate additional refinements for year-end 2027, including tranche thickness (if it does not adopt in 2026) and other key sensitivities.

II. Application to MM CLOs

As noted, Athene supports adoption of Option 1 or Option 2 for BSL CLOs. We recognize the data on MM CLOs has not been collected and that MM CLOs are commercially and structurally distinct from BSL CLOs (e.g., often less levered, present different diversification and portfolio construction dynamics, and frequently used in a more liability-management-oriented context), but we believe ratings are an appropriate comparable attribute across both BSL and MM CLOs. Credit rating providers use substantially similar core analytical building blocks across BSL and MM CLOs, including portfolio credit quality, expected default behavior, recovery assumptions, concentration or diversification effects, governance, and tranche cash-flow resilience.

Even if the calibration of those inputs varies by platform and asset mix, that common analytical base should be deemed sufficient to support capital treatment for year-end 2026 using a ratings-only model. Targeted enhancements to MM CLOs could follow as needed in 2027. Applying a consistent, transparent starting point now then recalibrating where evidence shows refinements are appropriate would be a reasonable path forward and provide factors more aligned to the risk drivers than the current C-1 bond factors.

We understand, however, that some stakeholders have asked for a defined reporting-only transition period for MM CLOs. While we believe implementation in the RBC formula for

year-end 2026 is appropriate for both BSL and MM CLOs, we do not object to a time-limited reporting-only phase for MM CLOs, but only if the Working Group concludes it is necessary to support implementation readiness, data validation, or broader stakeholder confidence. Any such transition should be clearly bounded and accompanied by an explicit commitment and timeline to move from reporting to binding capital factors based on the Academy model for year-end 2027.

III. The Academy approach is consistent with RBC Principles

Adoption of factors in 2026 based on rigorous analysis by the Academy while keeping the door open for further refinements is consistent with the RBC principles adopted by the RBC Model Governance Task Force in 2025. Those principles are designed to serve as a "North Star" for governing updates to the RBC formulas. Pursuant to the principles, RBC changes should be guided by the principle of equal capital for equal risk, be sufficiently precise to assess solvency risk while avoiding unnecessary complexity, and rely on data-driven methodologies. The principles also contemplate the use of interim solutions as part of a sound RBC process.

The Academy model appropriately integrates and balances CLO treatment to the existing corporate bond C-1 framework, while recognizing meaningful differences between CLOs and corporate bonds. The objective of C-1 CLO reform should not be to force perfect symmetry where the economics differ, but to preserve comparability where comparable attributes exist and to make differences explicit where they are risk-justified – or simply put, equal capital for equal risk.

Just as important, the Academy approach is structurally less prone to cliff effects. A framework based on ratings – and, if adopted, tranche thickness – is more reflective of the underlying risk than a framework that can generate abrupt designation changes from asset-level model outputs. That stability matters for comparability, supervisory credibility, industry-wide implementation, and market stability.

The Academy model is also sufficiently transparent to support practical oversight. Athene has independently analyzed and validated the model and believes it can also be reviewed and refined as needed in a disciplined way by regulators and industry participants.

Built on that foundation, the Academy framework offers the most coherent path to durable CLO capital treatment because it is designed to fit within the existing C-1 architecture, preserve risk rank-ordering, and allow refinements without destabilizing designations or creating avoidable volatility.

Against that backdrop, it is worth underscoring why the Academy approach is a stronger policy endpoint than the prior Structured Securities Group (SSG) Intrinsic Price (IP)

workstream. The NAIC and SSG invested meaningful effort over multiple years to develop a transparent, scenario-based tool to assess CLO performance, and that work helped surface key sensitivities and modeling decisions. But the IP approach ultimately depended on scenario calibration choices and loss constructs that proved highly model-sensitive and, at times, difficult to reconcile with core RBC design conventions, including consistency with the bond C-1 construct and stable, comparable capital outcomes across similar credit risk. In practice, those features can produce cliff effects and outlier capital results that risk undermining comparability and supervisory credibility.

By contrast, the Academy model is purpose-built to integrate with C-1, uses a disciplined tail-risk construct, and has produced results that align more naturally with the bond methodology rather than sitting outside it.

IV. Key assumptions for 2027 Refinement

The Academy's CLO model retains certain baseline assumptions in which key loan-specific refinements have not been fully carried through the production results, given time constraints and the fact that several of the baseline sensitivities partially "offset" each other. Notably, the Academy model:

- Uses the baseline assumption of 27% loss given default (LGD) for senior secured and 60% for senior unsecured. While the model cites average LGD levels, it effectively applies extreme recoveries in the tail scenarios, potentially introducing a degree of conservatism that is not fully transparent.

- Assumes no collateral prepayments and no repurchase discounts, even though an actively managed CLO collateral pool turns over through prepayments, refinancings, sales, and amortization. Excluding those refinements risks less accuracy around timing of cash flows, losses, and tranche performance.

- Keeps collateral reinvestment at par. Collateral is often acquired below par under stress scenarios, which in practice can increase credit enhancement and excess spread, thereby providing additional protection against future losses.

- Reinvests only maturities and default recoveries with a 2.5-year reinvestment horizon, which serves as a simplifying proxy but may not fully reflect actual reinvestment behavior in CLOs.

- Retained baseline assumptions around correlations within the collateral pool, including correlation between loans and correlation between defaults and

severities. While this is directionally consistent with the C-1 bond factor framework, results for Baa and below are highly reactive to those assumptions.[1]

Additionally, modeled CLO collateral loss depends on both default frequency and loss severity – which should be calibrated consistently. Accordingly, to the extent the Academy framework adopts more conservative LGD assumptions for senior-secured bank loans that make up CLO collateral, the corresponding probability of default (PD) assumptions should also be calibrated consistently to that same collateral. In particular, the model appears to rely on PD assumptions drawn from a broader set of all corporate issuer defaults rather than from the U.S. BSL market, a market to which U.S. BSL CLOs are limited. Because the BSL population has experienced lower default rates than the broader all-issuer dataset, lower default frequency is expected to offset at least part of any impact from higher severity assumption applied to CLO collateral.

Taken together, these points indicate that the current Academy model, without these refinements to sensitivities, would overstate expected loss for CLO collateral that is not representative of the CLO market. A framework calibrated to the more relevant loan profile would better align default assumptions with the actual risk profile of CLO collateral in delivery of a permanent solution.

We therefore recommend allowing the Academy time to assess and refine these sensitivities over the next year.

V. Conclusion and Offer of Continued Engagement

The Academy model is anchored to C-1 and built around comparable attributes that can be implemented at scale. It uses ratings, and potentially tranche thickness, to map CLO risk into a governable RBC structure. The Academy's model demonstrated significant scalability over the past year as an initial proof of concept to an operational model, expanding the initial sample size of six CLOs in December 2025 to a dataset covering 12,886 CLO positions in March 2026. The Academy's work is directionally sound and operationally credible, particularly when the remaining refinements are understood, primarily relate to calibration and sensitivity testing, and can be completed in the next year. This is a better fit for the NAIC's capital architecture than an alternative methodology based on perpetual cusip-by-cusip designation work or a mapping of scenario-driven intrinsic price results that depend on calibration choices and would be difficult to standardize and consistently interpret for supervisory purposes.

[1] See Slide 9 of the American Academy of Actuaries presentation titled *"C-1 Subcommittee Update on CLO C-1 Factors Modeling,"* dated December 15, 2025 ("December Academy Presentation").

While we believe the refinements discussed above should be addressed in the future, the current model should be adopted now as it provides a meaningful and immediate improvement over the status quo and establishes a credible, flexible foundation for future enhancements.

Athene remains available to support the Working Group, the Academy, and NAIC staff as this process continues.

Respectfully submitted,

Michael Consedine
Executive Vice President
Global Head of Government and Regulatory Affairs
Athene Holding Ltd.

International Center for Law & Economics

April 16, 2026

Philip Barlow
Chair, Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1101 K Street, N.W., Suite 650
Washington, DC 20005

Re: Comments on the American Academy of Actuaries' CLO Risk Factors Study and Proposal 2025-22-IRE MOD

Dear Mr. Barlow and Members of the Working Group,

The International Center for Law & Economics (ICLE) respectfully submits these comments on the American Academy of Actuaries' March 2026 presentation on CLO C-1 factor modeling and Proposal 2025-22-IRE MOD concerning CLO RBC structure with tranche thickness. At the Spring 2026 National Meeting, the RBC Investment Risk and Evaluation Working Group exposed the Academy's CLO presentation for comment through April 16 and re-exposed a modified version of Proposal 2025-22-IRE through April 17. That re-exposure, rather than final adoption of a new factor regime, reflects an appropriately measured posture.[1]

ICLE supports the NAIC's prudential objective. Insurer solvency oversight requires regulators to assess increasingly complex assets, and the NAIC's work in this area is plainly consequential. Our concern is narrower and more institutional: where an accreditation-backed, nationally influential process is considering increasingly granular investment-policy judgments, the better course is to proceed with transparent incrementalism, to favor the simplest administrable rule that fits the evidence, and to avoid hard-coding methodological choices before they are clearly stable and reproducible.[2]

A substantial academic literature helps explain why that kind of restraint is warranted. In *Is U.S. Insurance Regulation Unconstitutional?*, Daniel Schwarcz argues that many NAIC materials function with the practical force of law because state insurance codes commonly require adherence to current NAIC manuals and related materials. He further argues that this occurs through dynamic

[1] Nat'l Ass'n of Ins. Comm'rs, *Risk-Based Capital Investment Risk and Evaluation (E) Working Group Summary*, Spring 2026 Nat'l Meeting (Mar. 23, 2026), https://content.naic.org/sites/default/files/national_meeting/2026-spnm-summary-e-rbcirewg.pdf.

[2] Nat'l Ass'n of Ins. Comm'rs, *Life Risk-Based Capital (E) Working Group*, https://content.naic.org/committees/e/life-risk-based-capital-wg (last visited Apr. 13, 2026).

incorporation by reference, even though the NAIC is a private entity not subject to the ordinary procedural safeguards that govern public rulemaking and administrative review.[3] Whether or not one accepts the article's broadest constitutional conclusion, its institutional point is hard to ignore: when NAIC materials can effectively shape binding state regulatory outcomes, the case for modesty in highly technical policymaking becomes stronger, not weaker.

The NAIC accreditation program underscores that point. Schwarcz describes accreditation as creating powerful incentives for states to remain aligned with NAIC standards, including because a loss of accreditation can expose domestic insurers to costly multi-state examinations and create pressure for redomestication, job loss, and lost tax revenue.[4] At the same time, he also recognizes the real benefits of NAIC-led uniformity and agility and suggests that states could preserve those benefits while adding review safeguards, including through an interstate-compact-style oversight mechanism or by allowing a meaningful period for state review of NAIC materials before they become operative.[5] That is a useful frame here: the answer to institutional concern is not hostility to the NAIC, but procedural discipline and regulatory modesty.

The NAIC's own recent issue brief on SVO discretion points in the same direction.[6] The brief fairly emphasizes that the NAIC cannot unilaterally reject or override a rating and that any discretionary review is intended for limited circumstances with notice rights, appeal rights, and regulator oversight. But the same brief also confirms that regulators, through the NAIC, are developing due-diligence standards for credit rating providers; that the SVO Credit Committee may place a filing-exempt security under review; that a three-notch materiality test is applied; and that, if regulators authorize removal of a CRP rating from filing exemption and no alternate CRP rating is available, the SVO's designation becomes the NAIC designation.[7] Properly understood, the brief does not show arbitrary power. It shows that substantial evaluative authority over complex credit instruments is already concentrated within the NAIC-centered process. That is another reason to avoid layering in additional granularity unless the incremental gain is clearly justified.

Those institutional considerations matter acutely in the CLO project. The Academy's March 2026 presentation describes a working model and the Spring 2026 meeting summary reports progress in developing model documentation. The materials are therefore best understood as an ongoing modeling exercise, not a finished policy justification for materially changing insurer capital treatment. That distinction matters because the present record does not appear to include a formal

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[3] Daniel Schwarcz, *Is U.S. Insurance Regulation Unconstitutional?*, 25 CONN. INS. L.J. 189 (2018), https://scholarship.law.umn.edu/faculty_articles/866.

[4] *Id.* at 201-203.

[5] *Id.* at 259-262.

[6] Nat'l Ass'n of Ins. Comm'rs, *SVO Discretion Issue Brief* (Mar. 2026), https://content.naic.org/sites/default/files/svo-discretion-issue-brief.pdf.

[7] *Id.*

comparative analysis explaining why the more punitive, tranche-thickness-based approach should be preferred over the simpler rating-only framework as a regulatory matter.

The Academy's presentation states that modeled tail risk can largely be explained by remaining reinvestment horizon, rating, and tranche thickness, with tranche thickness needed only for Baa3-and-below CLO debt.[8] But the presentation also offers an alternative rating-only framework that explicitly prioritizes ease of implementation. Under Option 1, the modeled after-tax factor for Baa3 is 2.73%; under Option 2, the modeled factor for Baa3 rises to 12.52% when thickness is 4% or less. The Academy also reports that, after ratings and reinvestment-horizon interactions are added, the tranche-thickness flag increases adjusted R-squared from 81.6% to 83.2%.[9] Elsewhere, however, the presentation notes that thickness differences do not trend across ratings, provide only minor improvements to model fit, and generate noisy results for B1/below, leading the Academy to use a single average premium across all Baa3/below ratings to avoid overfitting.[10] The methodology is valuable and thoughtful, but on this record it does not yet amount to a formal empirical showing that insurers should move from the simpler rating-only framework to substantially higher capital charges for thin tranches.

That conclusion is reinforced by the structure of Proposal 2025-22-IRE MOD itself.[11] The proposal expressly states that it does not contemplate any changes to factors. Instead, it would create a more granular reporting structure that separates CLOs from other long-term bonds and carves out broadly syndicated loan CLO tranches with current thickness of 4% or less for separate reporting, while leaving factors to a separate proposal if changes are later deemed necessary.[12] That is an important distinction. A reporting change can be useful as a data-gathering and transparency exercise. But where the structural proposal is plainly a precursor to later factor choices, the NAIC should resist allowing the reporting architecture to harden prematurely into an implicit endorsement of the more complex and more punitive methodology before a separate, formal justification has been published and tested.

The timing of the current process further supports restraint. The Life RBC Working Group page states that structural RBC changes must be adopted by May 15 of the reporting year and non-structural changes, including factors and instructions, by June 30.[13] With the Academy materials open through April 16 and the modified structural proposal open through April 17, there is limited room for further empirical testing, public scrutiny, state-level review, and refinement before the

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[8] Am. Acad. of Actuaries, *C-1 Subcommittee Update on CLO C-1 Factors Modeling* (Mar. 2, 2026), https://content.naic.org/sites/default/files/call_materials/life-pres-clo-2603.pdf.

[9] *Id.*

[10] *Id.*

[11] Nat'l Ass'n of Ins. Comm'rs, *Proposal 2025-22-IRE: CLO Modified RBC Structure with Tranche Thickness* (2026), https://content.naic.org/sites/default/files/inline-files/ATTN_E%20Proposal%202025-22-IRE%20CLO%20modified%20RBC%20structure%20with%20tranche%20thickness.pdf.

[12] *Id.*

[13] Nat'l Ass'n of Ins. Comm'rs, *supra* note 2.

current-cycle deadlines. Where the institutional stakes are high and the model still presents meaningful implementation choices, the better course is to keep the near-term rule simple.

For that reason, ICLE respectfully urges the NAIC to separate the questions of disclosure, structure, and calibration. In the near term, the NAIC should favor reporting improvements that generate comparable data and improve transparency. If factor changes are pursued later, the NAIC should strongly consider beginning with the Academy's rating-only approach, which the presentation itself identifies as easier to implement, while using any new reporting on thin tranches to gather additional evidence before adopting a thickness-based surcharge. And if tranche thickness is eventually retained, the NAIC should be wary of a hard 4% breakpoint that creates cliff effects and incentives to structure around the rule. A more graduated approach would be preferable, but only after more validation than the current record appears to provide.

In practical terms, ICLE recommends five steps. First, the NAIC should keep Proposal 2025-22-IRE MOD clearly limited to reporting architecture unless and until a separate factor proposal is independently justified on a more mature record. Second, before any increase in CLO factors is proposed, the Academy and the Working Group should publish a formal analysis explaining why the rating-only framework is inadequate and why any tranche-thickness-based surcharge is sufficiently robust, administrable, and empirically justified to warrant adoption. Third, if new CLO factors are pursued, the NAIC should begin from the rating-only framework and require additional validation before adopting tranche-thickness-driven surcharges. Fourth, any eventual use of tranche thickness should avoid abrupt cliff effects around a single 4% threshold. Fifth, given the *de facto* national significance of NAIC materials under accreditation and dynamic incorporation, the NAIC should build in a meaningful review period for state regulators and legislatures before major methodological changes are allowed to function as the nationwide baseline. That final point is not an attack on the NAIC. It is a recognition that the more complex and policy-laden the rule, the stronger the case for accountable review.

The NAIC's solvency mission is legitimate, and the effort to refine insurer treatment of CLOs is serious and worthwhile. But the combination of accreditation-backed influence, dynamic incorporation, and expanding NAIC-centered evaluative discretion means that complexity should be added only when it is plainly necessary and clearly supported. On the present record, the better path is constructive caution: separate reporting from calibration, prefer the simplest workable rule, and leave time for state-level review before contested modeling choices become *de facto* national investment policy.

Respectfully submitted,

R.J. Lehmann, Editor-in-Chief and Senior Fellow

Ian Adams, Executive Director

International Center for Law & Economics

IOWA | Insurance Division

GOVERNOR KIM REYNOLDS
LT. GOVERNOR CHRIS COURNOYER

DOUG OMMEN, INSURANCE COMMISSIONER

April 7, 2026

To: Mr. Philip Barlow, Chair
Risk-Based Capital Investment Risk & Evaluation Working Group

Re: Academy of Actuaries' proposed CLO factors

The Iowa Insurance Division offer the following comments regarding the proposed CLO factors as determined by the Academy of Actuaries:

Use of designation-based RBC factors across CLOs
The Academy presented as its "Option 1" a series of factors for designation categories (excluding NAIC 6 and residual interests at this time), based on its underlying modeling of CLOs for which the collateral consists of broadly syndicated loans (BSLs). Questions have been raised whether applying these factors to the Non-agency – CLOs/CBOs/CDOs subtotal (affiliated & unaffiliated) is appropriate given there are other types of investments in this subtotal that are not BSL CLOs. The remaining securities would be primarily middle market CLOs (MMs) but also other types to lesser degrees.

The Academy concluded that rating agency ratings are an appropriate comparable attribute to apply factor-based capital charges, as they serve as a good predictor of the expected loss as demonstrated by the Academy model. (Further discussion on methodological differences between agencies is below). ***Fundamental to the NAIC use of CRP ratings is the expectation those ratings are consistent and comparable both within rating agencies for similar asset types, and across rating agencies.*** This expectation has been also confirmed by multiple rating agencies. In the specific example of BSL vs MM CLOs, the rating agencies confirmed each use the same methodology to ascertain the appropriate attachment points, with adjustments made for the risk assessment of the underlying collateral. Loans within a BSL pool already have rating agency ratings for which this determination can be based; MM loans often require a credit assessment in lieu of rating. The perceived additional risk associated with MM loans (the uncertainty of the underlying rating, more concentrated exposure, etc) is reflected in different tranche sizing to ultimately assign equivalent ratings. Said another way, a BBB- BSL CLO should have the expectation of similar loss characteristics as a BBB- MM CLO.

It is understood there can be small differences across asset classes, sectors, etc, particularly for the types of stress scenarios that would produce losses for these investments. This would be akin to various sectors of corporate bonds being subjected to different types of stress; however, we still utilize an overall C-1 corporate bond framework.

We would note that any assertion to the contrary would, by extension, be an assertion that the NAIC can no longer rely on CRP ratings as a foundational approach to risk assessment, which would have

immediate impact on our overarching framework, and is not aligned with the public methodologies presented by rating agencies.

Therefore, we unequivocally support the application of ratings-based factors to all securities reported in the Non-agency – CLOs/CBOs/CDOs subtotal.

CRP methodological differences – tranche thickness

It has been long understood that some agencies (S&P and Fitch, specifically) rate to the first dollar of loss, while others represented in the sample (KBRA and Moody's) rate to expected loss or loss severity given a default event. The Academy data clearly demonstrates the impact of those methodologies, whereby thinner tranches rated by S&P and Fitch experience much more severe expected losses than equivalently rated tranches for KBRA and Moody's, particularly for NAIC 2 and below. Given the intent of the Academy model to measure loss severity, ratings alone remain good comparable attributes for the application of factors for assets rated under methodologies that incorporate loss severity. However, ratings alone are not reliable predictors for S&P and Fitch rated CLOs, and alternatives must be considered.

The Academy presented Option 2 to address this issue, by which tranche thickness is introduced as a second comparable attribute for the application of factors. This will require a structure change (exposed as Proposal 2025-22-IRE CLO Modified RBC Structure with Tranche Thickness). It will also require additional underlying work to ascertain the appropriate tranche thickness minimum for each ratings class, and is an area where BSL vs MM may matter.

We would note this is a good example of the purpose of the newly created Credit Rating Provider (E) Working Group ("CRPWG") and the overall CRP due diligence process to ensure *informed* reliance on rating agency ratings. The P&P Manual of the SVO notes that an NAIC designation where appropriate "shall reflect 'tail risk' and/or loss given default…". This Working Group has concluded that tail risk is an appropriate consideration for the application of the capital factors, and therefore the designation utilized in that process should reflect such tail risk. Given the current inability of the Fitch and S&P methodological frameworks to meet this objective, the matter could be referred to this group to consider other actions, such as limiting the use of these methodologies within the designation process, notching designations downward to reflect the additional risk, requiring individual modeling for this subset, or other options that can be discussed by the working group.

We would tend to support the path of utilizing CRPWG for this identified issue, and moving forward with a ratings-only comparable attribute, but look forward to discussing the implications of various paths with this working group.

Potential further work on assumptions used in modeling and ultimate factors

Following adoption of the newly modeled factors for 2026, multiple stakeholders have expressed a preference for continued refinement of the modeling process in future years, inclusive of recovery

expectations, correlation assumptions, prepayment expectations, etc. Others have also noted the desire for continued work on the application to MM CLOs.

We generally support any future efforts to refine the models post-2026 with two caveats. First, we do not support delaying 2026 implementation of the factors for any subset of the CLO population for the reasons describe above. Second, prioritization of further refinement should be considered within the framework laid out by the Risk-Based Capital Model Governance (EX) Task Force, by which future work will continue to be prioritized for applicability and impact. We would note that it has long been the expectation of this Working Group that the CLO project is an anchor project for a review of the totality of asset-backed securities which would generally require an approach that incorporates tail risk. It may well be that addressing non-CLO asset-backed securities should be of higher priority than further refinements of the CLO model, and outcomes of that work may have applicability back to CLOs, or subsets thereof, that should be incorporated where appropriate.

Sincerely,

Carrie Mears
Chief Investment Specialist

Kevin Clark
Chief Accounting & Reinsurance Specialist

MetLife

April 16, 2026

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

Re: American Academy of Actuaries' Presentation on March 2, 2026 Titled "C-1 Subcommittee Update on CLO C-1 Factors Modeling"

Submitted Electronically

Dear Chair Barlow:

MetLife, Inc. appreciates the opportunity to comment on the American Academy of Actuaries' ("Academy") March 2, 2026 presentation, *C1 Subcommittee Update on CLO C1 Factors Modeling*. MetLife supports the ACLI comments on the same topic and this letter provides additional analysis on key points for consideration.

While we view the Academy's analytical approach as promising, we agree with the ACLI position that the model remains materially incomplete on key aspects that may result in significant impacts to RBC. Therefore, the proposed C1 factors generated from that model should not be implemented, even on an interim basis. We agree with the ACLI position that the sensible path at this time would be to give the Academy more time to complete its CLO model while seeking additional disclosures from insurers on CLO holdings as part of a regulatory sensitivity analysis. If NAIC members remain committed to applying new factors on CLOs for the 2026 financial year, we consider the NAIC Structured Securities Group (SSG) model as the best available interim option to advance stated policy goals.

In the following comments we provide our perspectives on the NAIC's RBC modernization initiative and our thoughts on the exposure. An appendix of illustrative charts follows at the end.

Right Path on Modernizing the RBC Framework

To preface our comments with important context, we start with a lookback on the NAIC's approach to modernizing the RBC framework for asset backed securities.

Asset backed securities (ABS) are an important component of a diversified investment portfolio. But as is the case with any asset class, investors must understand and manage their inherent risks. For example, given that the structured nature of ABS magnifies potential losses in subordinated tranches, they have a unique tail loss profile in which some of these tranches can suffer severe or total losses under stress.

Understanding that the tail loss profile of structured assets substantially differs from corporate bonds – something the financial markets understand well (See Appendix, Chart 1) - several years ago the NAIC embarked on an initiative to develop new RBC factors to address that risk, starting with CLOs. Given the relatively short history of CLOs and the lack of a major corporate credit cycle since their inception, the NAIC decided that the best way to understand the unique loss profile of CLOs was through cash flow modeling. The NAIC's SSG developed a cash flow

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model aimed specifically at reducing the capital arbitrage between the underlying loans and the CLO structure. The Academy developed a factor-based cash flow model to establish loss estimates through stochastic scenarios. MetLife has been a strong supporter of these efforts, as under the current bond-based factors, capital charges for subordinated ABS asset types (like CLOs) are not adequately aligned with the underlying risk.

Many investment managers market assets to insurers by quoting “capital-adjusted” returns, that is, the yield available once the regulatory capital requirements are considered. If an insurer sought to maximize capital-adjusted returns in a framework where some assets have inadequate RBC factors, investment risk would be undercapitalized. For many insurers, internal risk management guidelines would inhibit such a portfolio, but nonetheless insurer benchmarking data shows concentration by some life insurers in subordinated CLO holdings (See Appendix, Chart 2). This behavior provides pricing power and may introduce unhealthy competitive incentives.

The NAIC’s new RBC factors for CLOs are intended to better align capital with underlying risk (“Equal Capital for Equal Risk”). NAIC has sought to narrow the “arbitrage gap” that exists between holding a portfolio of below investment grade loans or holding a CLO structure built with those same loans. Directionally, the current work by the Academy is the right approach and shows promise but is not yet complete, as the current Academy proposal does not materially further the goal of minimizing the arbitrage gap (See Appendix, Chart 3), as the tail risks are not yet sufficiently captured. The Academy C-1 working group identified several material sensitivities that require further analysis and in our view, the Academy should have more time to complete the model.

We appreciate the NAIC’s commitment to taking action on CLO RBC factors in 2026, as indicated in the E Committee timeline from November. It is important that action is complete as well as timely. The CLO RBC factor project is the first for asset backed securities, and the currently proposed factors would set an inadequate baseline for the work that will follow. Should the NAIC decide to adopt the current proposal even on an interim basis, there is a significant risk that it becomes a long-term standard and momentum will be lost to complete the work on a promising initiative.

Key financial regulators in the United States and abroad are carefully watching how the NAIC manages the risk emerging from changes in life insurer asset allocations. Regulators in other major markets with insurers investing in U.S. asset backed securities are anticipated to follow the NAIC’s lead and thus NAIC will be setting the de facto global standard on how to measure and set capital requirements for structured assets. Given that securitization structures are often a major source of funding for private credit, scrutiny on this initiative is heightened as private credit markets expand and become more volatile. This further emphasizes the need for a more responsive and well-calibrated approach than the current Academy proposal.

As strong supporters of the state-based regulatory system, we recommend that NAIC provide more time for the Academy C-1 working group to complete the CLO model calibration in the remainder of 2026, to be ready for 2027 financials. In the meantime, the NAIC could require additional disclosures for 2026 to inform regulators and support sensitivity analysis. Alternatively, the SSG CLO model would provide a viable interim solution that furthers the policy goal of meaningfully reducing the regulatory capital arbitrage gap. The NAIC has been signaling changes to CLO RBC factors for many years and market participants have had adequate time to adjust positions accordingly.

MetLife

Comments on Current Exposure

MetLife appreciates the substantial analytical effort undertaken by the Academy and the long hours dedicated towards developing a framework for calibrating C-1 capital factors for CLOs. We believe that the modeling, when completed, can represent an analytically sound method for assessing the underlying risks of CLOs and identify appropriate capital factors that reflect these risks. Towards this end, the Academy's latest presentation exposed for comment lays the path for, but falls short of being, a meaningful step forward. While the framework has promise, we believe the model remains materially incomplete.

MetLife contends that the current version of the Academy's model does not sufficiently capture the risks of the underlying loans and consequently does not meaningfully further the policy goal of minimizing regulatory capital arbitrage (see Chart 3 in the Appendix). In particular, we believe the currently proposed C-1 factors for subordinated CLO tranches significantly underestimate their risks. For that reason, MetLife also concludes that the proposed C-1 capital factors are inappropriate to be applied, even as an interim solution. The Academy should complete the model sensitivities that were identified in their December 2025 presentation — specifically, the systemic risk correlations, recovery rate assumptions, and reinvestment assumptions — for the proposal to have the necessary analytical rigor and for the proposed capital factors to more realistically represent risk.

To advance the effort in the meantime, we recommend a phased approach starting with disclosures, which we believe will provide the NAIC with needed insights into the dispersion of holdings and how CLO risks are pooled. As the NAIC assesses the new data, the Academy will take the time needed to complete and incorporate the model sensitivities highlighted above and discussed further in the following pages. The observations and recommendations discussed below are intended to improve the alignment of capital with risk, enhance transparency for structured assets, and ensure that durability of the RBC regime over time. As the work on CLOs represents the first project in developing new RBC factors for asset backed securities, we think it should meet a high standard to set the overall initiative on the right course.

The following sections discuss the key sensitivities identified by the Academy and mentioned above. All figures show excerpts from the Academy's December 2025 presentation.

Academy Model Sensitivities #1 and #2: Systemic Risk

The Academy's presentation demonstrates that higher correlations across leveraged loans can materially increase modeled C-1 factors across many CLO tranches. (See Figure 1) In practice, this issue is exacerbated because subordinated tranches of CLOs become highly-correlated themselves during periods of stress. This increase in correlation among subordinated tranches of CLOs during stress is due to the fact that the performance of these tranches is reliant on loans to the weakest companies or companies within the weakest industries in the economy and these will tend to overlap across different CLOs.

The Academy notes that the correlation across leveraged loans is higher than the correlation across corporate bonds and therefore may require different assumptions than the current proposal. We agree with this point and contend that the issue is significantly magnified due to the correlation under stress of subordinated tranches of CLOs, which in adverse scenarios significantly reduces the benefits of diversification in a portfolio of these types of tranches.

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Figure 1

Sensitivity—Systemic Risk

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After-Tax C-1 / Tranche Rtg	Baseline Dec '25	1 5% Corr	2 20% Corr
Aaa	0.00%	0.00%	0.00%
Aa2	0.00%	0.00%	0.05%
A2	0.04%	0.01%	1.24%
Baa2	0.89%	0.04%	8.17%
Baa3	2.34%	0.80%	12.58%
Ba3	30.72%	20.18%	52.93%

*Results are preliminary and subject to change. This is only 6 deals—results may change when all CLOs held by life insurers are included. Baa2 tranche is from only one deal and is therefore potentially especially unrepresentative due to its small sample size.

Systemic risk is modeled with pairwise correlation between loans.

Baseline correlation is 10%.

Li and Chen (2018) reference 2%, 35% and 51% in 1-yr, 5-yr and 10-yr correlations for B-rated issuers.

Qi et al (2019) reference 2%, 10% and 9% in 1-yr, 5-yr and 10-yr correlations for B-rated issuers.

C1-SC Update on CLO C-1 Factors Modeling
December 15, 2025

American Academy of Actuaries

The Academy pointed to a set of studies, Li and Chen (2018) and Qi et al (2019), that advance industry's understanding of the nature of correlation spikes in below-investment grade securities during stress events. Briefly, both studies show that default correlations increase during stress, especially for non-investment grade issuers. In other words, correlations are state-dependent (i.e., sensitive to financial and economic conditions) and are not static properties of ratings.

To this point, MetLife disagrees with the Academy's default use of a baseline correlation of 10%, which they suggested is derived from bonds. We contend that this assumption is optimistic and inappropriate for modeling broadly syndicated loan CLOs. The Academy supports our objection in the appendix of their December presentation, where they write:

> "*It is important to test this assumption for loans [rather] than bonds due to **potentially more systemic risk among leveraged loans** (higher leverage, lower credit ratings, more intermediaries, and opacity) versus bonds." (See Figure 2)*

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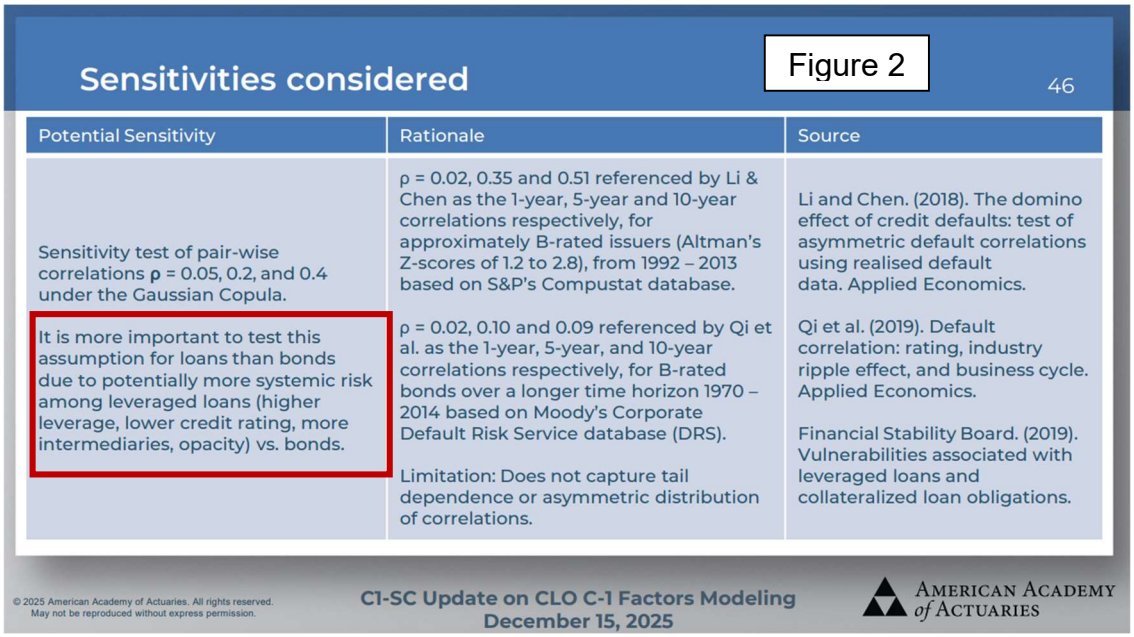
Figure 2



Sensitivities considered

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Potential Sensitivity	Rationale	Source
Sensitivity test of pair-wise correlations ρ = 0.05, 0.2, and 0.4 under the Gaussian Copula.	ρ = 0.02, 0.35 and 0.51 referenced by Li & Chen as the 1-year, 5-year and 10-year correlations respectively, for approximately B-rated issuers (Altman's Z-scores of 1.2 to 2.8), from 1992 – 2013 based on S&P's Compustat database.	Li and Chen. (2018). The domino effect of credit defaults: test of asymmetric default correlations using realised default data. Applied Economics.
It is more important to test this assumption for loans than bonds due to potentially more systemic risk among leveraged loans (higher leverage, lower credit rating, more intermediaries, opacity) vs. bonds.	ρ = 0.02, 0.10 and 0.09 referenced by Qi et al. as the 1-year, 5-year, and 10-year correlations respectively, for B-rated bonds over a longer time horizon 1970 – 2014 based on Moody's Corporate Default Risk Service database (DRS). Limitation: Does not capture tail dependence or asymmetric distribution of correlations.	Qi et al. (2019). Default correlation: rating, industry ripple effect, and business cycle. Applied Economics. Financial Stability Board. (2019). Vulnerabilities associated with leveraged loans and collateralized loan obligations.

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American Academy of Actuaries

Accordingly, MetLife believes that not fully conducting this sensitivity analysis risks misaligning the factor with the underlying risks of the loans. We contend that this warrants the NAIC's attention and a specific mandate from the NAIC to the Academy to adequately address this sensitivity.

We draw your attention to the dispersion of outcomes for Sensitivities #1 and #2 in subordinated tranches as shown in Figure 1 above. To use the subordinated tranche rated Baa3 as an example, you can see that the higher correlation assumption could lead to an RBC factor that is over five times higher than the baseline in the current proposal – 12.58% vs. 2.34%. The asymmetry of results underscores the sensitivity of correlation assumptions and highlights the importance of calibrating to leveraged loans rather than bonds.

Given the magnitude of these differences, MetLife believes the NAIC should explicitly require the Academy to complete and finalize this sensitivity analysis before any C-1 factors generated by the model are adopted. This is all the more important because, as we said at the onset of this section, the correlation among subordinated tranches of CLOs in insurers' portfolios will also likely tend to spike when market conditions are sufficiently stressed.

Academy Model Sensitivities #5: Recoveries

The Academy's presentation demonstrates that lower recovery rate assumptions materially increase modeled C-1 for subordinated tranches. (See Figure 3) Per the Academy's presentation, their baseline loss given default (LGD) is derived from S&P's recovery deciles by seniority.

MetLife is concerned with the optimistic LGD distribution and recovery assumptions in the Academy's baseline. We contend that due to structural shifts in the market, recoveries are now much lower than currently assumed in the Academy's baseline. The Academy supports our objection in their appendix, where they write:

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"S&P LGD distributions are more dated and materially lower than historical averages from JPM and Moody's."

Figure 3

Sensitivities considered

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Potential Sensitivity	Rationale	Source
Test lower recoveries (i.e., higher LGD) averages	S&P LGD distributions are more dated and materially lower than historical averages from JPM and Moody's. Limitations: variation of LGD across sectors/industries, year of default or issuance, correlation with defaults are not accounted for.	Jantzen et al. (2025). J.P. Morgan Default Monitor September 2025.
Discrete economic state model Two states: low defaults, severities, and correlations vs. high defaults, severities, and correlations. Dependence between defaults and recoveries is built-in by their dependence on the economic state.	Would need to have two sets of assumptions of defaults by rating and severities. Normal state: correlation between defaults, between defaults and recoveries of 0.1, 0.3 respectively Stressed state: 0.4, 0.5 respectively.	Bruche and Gonzalez-Aguado. (2008). Recovery Rates, Default Probabilities and the Credit Cycle. CEMFI, Madrid. Moody's Analytics. (2021). Assessment of the Proposed Revisions to the RBC C1 Bond Factors.

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Similar to our concerns noted in the prior section, we note the stark difference in C-1 factor outcomes between the baseline of the current model and when the Academy employs what MetLife considers a more appropriate assumption. As noted in the Academy's slide below (Figure 4), a lower recovery assumption yields C-1 charges for some subordinated tranches that can be orders of magnitude higher than the current baseline. Here, for example the RBC factor when using the more realistic recovery assumption is over eight times the baseline factor in the current proposal (19.62% vs. 2.34%).

Figure 4

Sensitivity—Recovery Average

16

		5
After-Tax C-1 / Tranche Rtg	Baseline Dec '25	Lower Recovery
Aaa	0.00%	0.00%
Aa2	0.00%	0.00%
A2	0.04%	1.77%
Baa2	0.89%	21.73%
Baa3	2.34%	19.62%
Ba3	30.72%	59.09%

*Results are preliminary and subject to change. This is only 6 deals—results may change when all CLOs held by life insurers are included. Baa2 tranche is from only one deal and is therefore potentially especially unrepresentative due to its small sample size.

Baseline assumption S&P average loss given default (LGD): 27% for senior secured, 60% for senior unsecured.

A higher LGD is tested: 36% for senior secured, 54% for senior unsecured (despite being lower for senior unsecured, this is higher overall because most loans in CLOs are senior secured).

However, in both cases simple averages are not the input to the model. Decile data published by S&P was used so that the tail could be captured. The averages for the sensitivity are fitted to the shape of the S&P deciles by least-squares optimization.

C1-SC Update on CLO C-1 Factors Modeling
December 15, 2025

American Academy of Actuaries

MetLife

Given the magnitude of these differences, MetLife believes the NAIC should explicitly require the Academy to complete and finalize this sensitivity analysis before any C-1 factors are adopted. Without addressing the risks implied by the systemic risk and recovery sensitivities in subordinated tranches, we believe that the unhealthy competitive incentives we mentioned before will remain a threat to sound investing in our industry.

Academy Model Sensitivities #6 and #7: Collateral Reinvestment Price and Prepayment

The Academy's baseline assumes no prepayments and no reinvestment at a discount. While conservative, we recognize that this is not fully reflective of historical data. Similar to the above, the Academy's stressed-market sensitivities show material dispersion of C-1 factors across CLO tranches.

Finally, we do not agree with a prevailing view that, when all of the above sensitivities are taken together, the factors may offset each other and, therefore, do not merit further analysis. We contend that the asymmetry of impact on C-1 factors from the implementation of more conservative assumptions, as noted in the December slides, will yield a material change in C-1 factors for certain subordinated tranches of CLOs. We stress that the Academy defines the deficits in their analysis and outlines reasons for the need for further work on these sensitivities. Providing the Academy time to complete the analysis it recommended, but did not have time to complete, will better align the ultimate C-1 factors with the underlying risks.

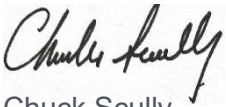
Conclusion

In closing, MetLife supports the Academy's objective of developing an analytically grounded framework for assessing CLO risk under the NAIC's RBC regime. However, based on the Academy's own sensitivity analyses, we believe the current model remains incomplete and that the resulting proposed C-1 factors—particularly for some subordinated tranches—do not yet reflect the real extent of the underlying risks. The wide dispersion in capital outcomes across plausible assumptions for systemic correlation, recovery rates, and reinvestment and prepayment dynamics underscores that these inputs are not ancillary, but foundational to the model's credibility.

Accordingly, MetLife respectfully recommends that the NAIC refrain from implementing the proposed C-1 factors, even on an interim basis, until the Academy has completed and finalized the identified sensitivities. In the interim, a phased approach centered on enhanced disclosures would allow regulators to better understand risk concentration and dispersion across CLO exposures, while giving the Academy the time necessary to finalize a model that appropriately aligns capital with risk. We believe this approach will promote transparency, preserve the durability of the RBC framework, and better serve regulators and insurers over the long term.

MetLife appreciates the opportunity to provide these comments and welcomes continued engagement with the NAIC and the Academy as this important work progresses.

Sincerely,



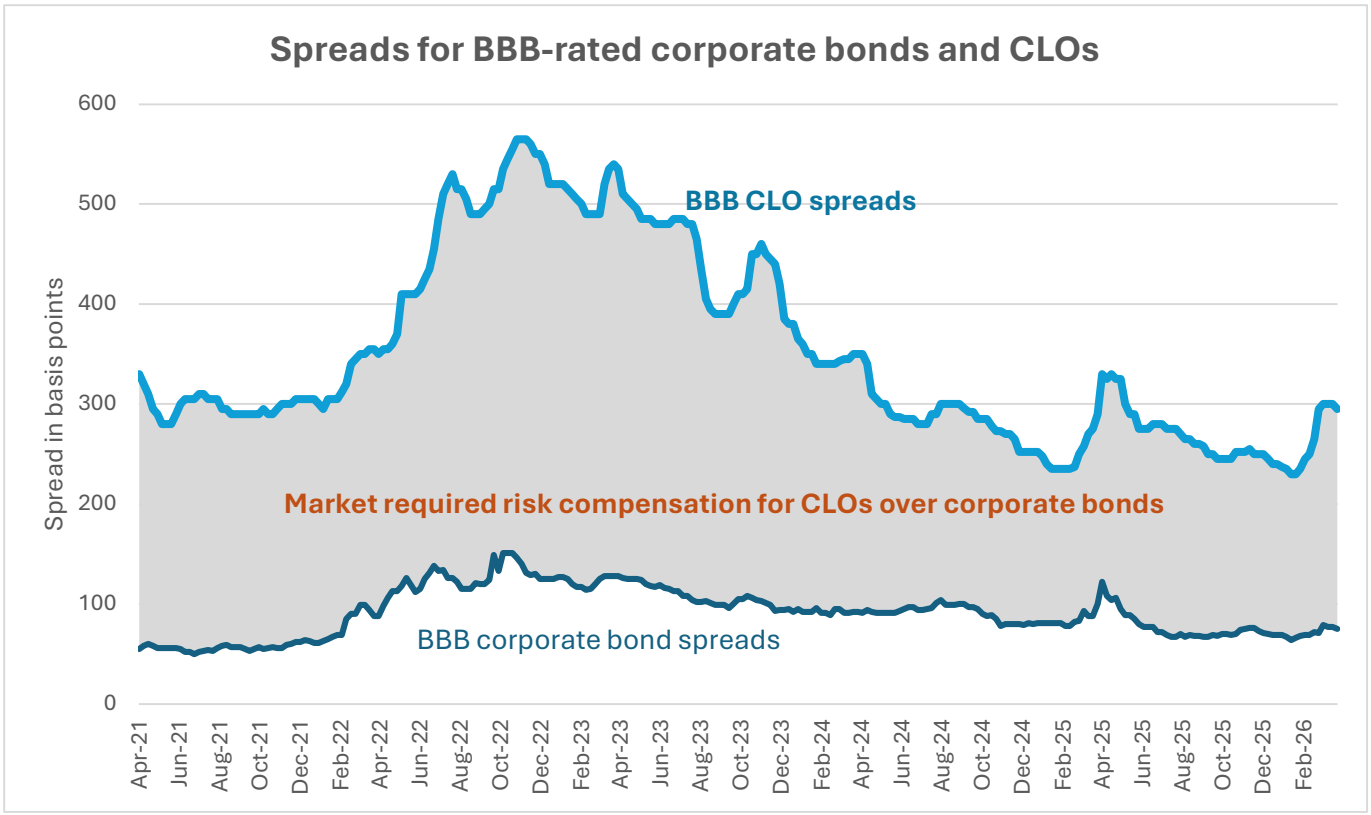
Chuck Scully
Executive Vice President and CIO
MetLife Insurance Investments

MetLife

APPENDIX

Chart 1: Market understands that CLOs have incremental risks to corporate bonds

Despite holding the same credit ratings, BBB CLOs trade at wide spreads over BBB bonds, given investor perceptions of higher risk.



Source: MetLife based on index data as reported by Bloomberg

MetLife

Chart 2: Two CLO strategies in the U.S. Life Insurance Industry Under Current RBC Treatment

Group A: 32 companies; 92% of industry bond investments; 31% of industry CLOs rated BBB+ or lower

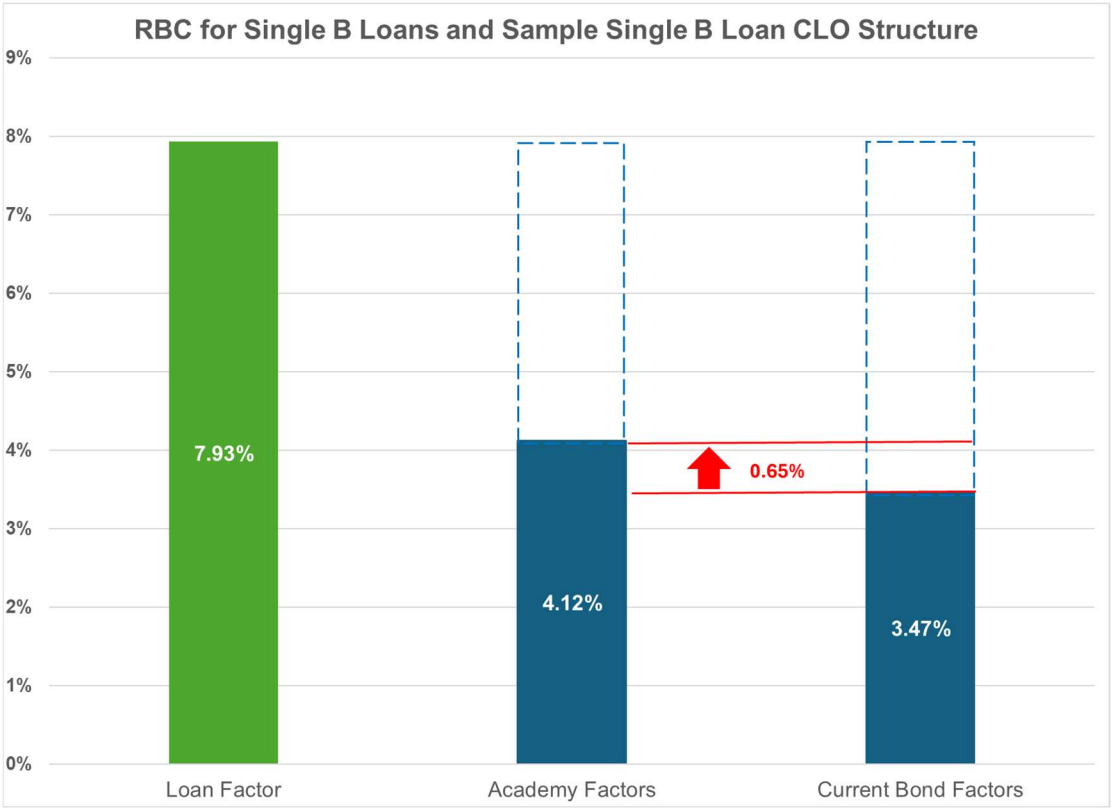
Group B: 6 companies; 8% of industry bond investments; 69% of industry CLOs rated BBB+ or lower

Source: MetLife based on holdings data as reported by Barclays - "NAIC CLO Proposal Skews More Negative to RBC Ratios than Positive", 30 March 2026

MetLife

Chart 3: Closing the Capital Arbitrage Gap

This chart shows the weighted RBC requirement of holding a Single B loan (in green) vs an entire CLO securitization of Single B loans (in blue). The proposed Academy factors reduce the arbitrage gap modestly.



Notes: Estimates derived from after-tax factors provided by the Academy C-1 working group. Residual RBC charge set at 45% (pre-tax). Sample CLO deal is 65% AAA, 10% AA, 7% A, 6% BBB-, 4% BB-, 8% residual

MOODY'S
RATINGS

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250 Greenwich Street
New York, NY 10007
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April 16, 2026

Via Email

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

Re: American Academy of Actuaries CLO RBC Proposal

Dear Mr. Barlow:

Moody's Ratings (Moody's) appreciates the opportunity to comment on the American Academy of Actuaries' (Academy) March 2nd presentation to the Risk-Based Capital Investment Risk and Evaluation (E) Working Group (RBC IRE WG) regarding capital requirements for insurer investments in collateralized loan obligation (CLO) debt tranches (the "Presentation")[1]. The Presentation outlines a proposed Framework (the "Framework") for establishing C-1 factors for CLO investments and describes two conceptual approaches, Option 1 and Option 2. Under Option 1, the Academy would rely solely on rating factors, mapping credit ratings directly to C-1 factors through an Academy-developed table. Option 2 would increase C1 factors further for CLO tranches that are thinner than 4% and rated Baa3 and below.

We commend the Academy for the rigor of its analysis and for highlighting differences in investment risk associated with tranches carrying ratings from different credit rating providers ("CRPs" or "rating providers"). The data presented by the Academy indicates that tranche size is an important additional attribute to consider when mapping expected tail risk losses to credit ratings assigned under probability-of-default (PD) or first-dollar-loss analytical approaches. The same dataset also indicates that tranche size is not likely an important attribute when mapping from losses to ratings assigned under an expected loss (EL) analytical approach. This difference in observation is consistent with differences in analytical approaches in CRPs' rating methodologies, as the PD-oriented approach generally does not incorporate tranche thickness into its analysis and, therefore, does not incorporate loss-given-default (LGD) considerations at the CLO tranche/bond level, whereas an EL-oriented approach incorporates these factors.[2]

These findings reinforce our view that ratings from different providers should not be

[1] The presentation can be found on the RBC IRE WG webpage: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fcontent.naic.org%2Fsites%2Fdefault%2Ffiles%2Finline-files%2FLife-Presentation-CLOUpdateMarch2026.pptx&wdOrigin=BROWSELINK.

[2] Slide 33 of the Academy's Presentation indicates that tail risk losses are higher overall for securities rated Baa3 (or BBB-) by CRPs that employ a PD-oriented analytical approach compared to securities carrying those ratings from CRPs that follow an EL-oriented analytical approach. Moreover, as expected by theoretical considerations, the slide also shows that tail risk losses are correlated with tranche size for securities carrying ratings assigned under a PD-oriented approach but uncorrelated with tranche size for securities carrying ratings assigned under an EL-oriented approach.

assumed to be interchangeable and more research on differences in the meaning of ratings across providers is merited. In the meantime, however, we recommend that the NAIC adopt the proposed Framework on an interim basis, applying the Option 1 mapping when a tranche's rating is based on an EL-oriented approach and applying the Option 2 mapping when a tranche's rating is based on a PD-oriented approach.

We further recommend that the NAIC consider the following points as it refines its approach to risk-based capital (RBC) charges for CLO tranches and other structured finance securities:

1. Whenever considering the relationship among ratings, tranche thickness, and tail losses, the Framework should take into account the rating approach driving individual NAIC designations, recognizing differences between PD-oriented and EL-oriented approaches.
2. When considering tranche thickness as a risk attribute, the Framework should consider the impact of tranche thickness across the full rating scale (Aaa and below), rather than limiting it to Baa3 and below, consistent with the underlying economic logic of the Academy's analysis and the data provided in the Academy's Presentation.
3. When relying on PD-oriented credit ratings, as tranche size decreases, the C-1 factors should be calibrated to increase continuously, rather than jump at any particular threshold value. A continuous calibration is supported by the data provided in the Academy's Presentation and is consistent with the approach taken by U.S. bank regulators.
4. Quantification of the tail risk losses associated with CLO tranches may, more generally, warrant further consideration. The default and LGD correlation assumptions, which are currently set to match those observed for corporate bonds may merit upward adjustment to reflect the vintage and sector concentrations common to CLO collateral.
5. The Academy's dataset quantifies differences in expected credit loss rates by rating category across ratings from different CRPs. This unique and important data should be analyzed by the NAIC and, where possible, made publicly available.
6. To the extent any framework is developed and applied to middle-market or private credit CLOs (MM/PC CLOs), it should explicitly incorporate differences in rating methodologies across CRPs, including: (1) distinctions between PD-oriented and EL-oriented approaches, and (2) differences in overall credit enhancement requirements across CRPs necessary to achieve target rating levels.
7. The NAIC should establish a disclosure mechanism that identifies, for each security, the name of the CRP whose rating was used to determine the RBC charge and encourage public ratings where feasible.

Collectively, the incorporation of these considerations would strengthen the risk sensitivity of the Framework, enhance transparency, reduce incentives for rating shopping and capital arbitrage, and promote greater confidence in the financial soundness of the insurance sector.

1. Recognition of Differences in Rating Approaches and the Incorporation of Tranche Thickness into Capital Treatment

Moody's recommends that the Academy distinguish between PD and EL rating approaches as measures of credit risk in the Framework and apply tranche thickness adjustments only where the rating approach does not incorporate consideration of expected loss severity in the event of default.

A PD-oriented rating approach captures the likelihood that an obligation will fail to meet its contractual payment obligations over a specified horizon, while an EL-based approach incorporates both the likelihood of default and the severity of loss in the event of default.

In the structured finance sector, some rating providers apply a primarily PD-oriented approach to assigning ratings, while others apply an EL-oriented approach.[3] While neither rating approach is inherently "right" or "wrong," the distinction matters for regulatory capital because EL-oriented ratings already reflect the greater loss severity associated with thinner tranches, while PD-oriented ratings generally do not.

Adopting Option 2 in cases where ratings are based on a PD-oriented approach is appropriate because two tranches with the same likelihood of default can have very different tail risks due to differences in thickness. Incorporating tranche thickness as a risk attribute in these cases helps align capital requirements more closely with underlying investment risk and reduces incentives to structure thinner tranches primarily for capital efficiency. This analytical conclusion - that thinner tranches will experience higher losses that thicker tranches carrying the same PD-oriented rating - is supported by the Academy's empirical analysis. However, for tranches assigned the same rating under an EL-oriented approach, both analytical considerations and the Academy's data do not indicate a comparable relationship between tranche thickness and losses.

The Academy's research emphasizes that modeled tail losses are central to effective capital calibration and are conceptually aligned with EL-oriented rating approaches. As a result, applying additional tranche thickness adjustments to tranches carrying EL-based ratings would penalize credit rating approaches that already reflect the very risks the proposed Framework is designed to capture. Applying the Option 2 mapping to tranches rated under an EL-oriented rating approach would result in adjustments that double-count risk elements already incorporated into EL-oriented ratings.

More broadly, the Academy's analysis illustrates that ratings from different rating providers should not be presumed interchangeable for regulatory capital purposes. Differences in rating approaches, beyond differences in PD and EL orientation, can result in variation in expected loss rates at the same nominal rating level. Within any particular asset class, ratings from different providers may be associated, on average, with differing credit loss expectations.[4] As reflected in the Academy's data, recognizing such differences

[3] In the corporate bond context, differences in EL due to security and subordination are reflected in ratings across all rating providers and are translated into different RBC charges through existing rating-to-designation mappings. Bonds issued by the same borrower typically share similar default expectations, but their EL profiles may differ predictably based on seniority and collateralization. Similar logic applies to CLO tranches: tranches that share the same attachment point but differ in detachment point have similar default expectations but materially different expected loss severity.

[4] Slide 33 of the Academy's presentation shows that the proposed Baa3/BBB- C-1 factors closely approximate the model implied average weighted C-1 charges for PD-oriented ratings, while implying C-1 factors that are approximately three to four times higher than the model-implied average weighted C-1 charges assigned EL-oriented ratings. As such the charges appear excessive for tranches assigned EL-oriented ratings.

within the capital framework can help avoid unintended incentives that could otherwise arise from treating ratings from different providers as fully interchangeable.[5]

2. Extending the Logic of Tranche Thickness Beyond a Limited Rating Segment

Moody's agrees with the Academy that tranche thickness is a potentially important determinant of tail risk. We believe, however, that the economic logic underlying the Academy's analysis applies across the full rating scale, not solely to tranches rated Baa3 and below. Limiting tranche thickness adjustments to Baa3-rated tranches and below implicitly assumes that relationship between tranche thickness and loss severity differences disappears at higher rating levels. If left unaddressed, capital charges will not reflect the potentially meaningful differences in risk associated with differences in tranche size rated across the investment-grade portion of the scale with the ratings assigned under a PD-oriented approach.

Moody's analysis[6] of split tranches shows that carving thin slices from high investment-grade tranches concentrates risk more sharply, resulting in thin tranches that are disproportionately risky on a per-dollar basis. As one moves up the capital structure and correlation rises, this effect can become more pronounced, supporting the need to adjust for tranche thickness throughout the scale when mapping losses to PD-oriented ratings.

3. Continuous Treatment of Tranche Thickness

We also encourage the NAIC and the Academy to consider gradually and continuously adjusting capital requirements as tranche size declines, rather than focus on a single tranche thickness threshold.

Because tranche thickness affects loss severity in a gradual and continuous manner rather than at a single breakpoint, the introduction of a discrete threshold capital charge risks misaligning capital charges with economic risk and encouraging structuring around regulatory cutoffs.

U.S. bank capital framework provides a useful reference point in this regard.[7] The Federal Reserve's simplified supervisory formula approach for structured finance exposures calculates capital charges that are a continuous function of tranche attachment and detachment points, explicitly recognizing that incremental changes in tranche thickness correspond to incremental changes in loss severity and tail risk.

4. Adjust Correlation

The Academy's analysis is sensitive to key modeling assumptions regarding both default correlation and LGD, and in our view these assumptions warrant recalibration.

With respect to correlation, the Academy explains its use of a 10% assumption in part by reference to the correlation embedded in the NAIC's corporate bond C-1 factors.[8] However,

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[5] The NAIC's current approach applies a single mapping from ratings to RBC charges regardless of the underlying rating approach. Data presented by the Academy suggests that this uniform treatment has incentivized the structuring of thin Baa3-rated tranches that almost exclusively have been assigned PD-oriented ratings. The limited presence of EL-oriented ratings on these thin tranches suggests that such ratings would have been lower.

[6] See Appendix A.

[7] See https://www.federalreserve.gov/frrs/regulations/section-21743-simplified-supervisory-formula-approach-ssfa-and-the-gross-up-approach.htm.

[8] In its December 15, 2025 presentation, the Academy demonstrated that assumed investment-grade loss rates at the CTE 90 confidence level increase materially under alternative parameters. In particular, slide 15 shows substantially higher CTE 90 loss rates when asset correlation is increased to 20%, and slide 16 shows similarly higher CTE 90 loss rates when higher LGD assumptions are applied. These sensitivities underscore the importance of ensuring that the baseline assumptions used in the

that comparison may understate the degree of systematic risk present in CLO collateral pools. Corporate bond portfolios held by insurers are typically diversified across industries, rating levels, and issuance vintages, and include obligations of financial institutions and utilities alongside nonfinancial corporates. By contrast, CLO collateral consists almost exclusively of speculative-grade, nonfinancial corporate loans, many of which originated over a relatively short period of time, resulting in concentrated vintage exposure. In addition, a meaningful share of these loans is sponsored by a relatively small group of asset management firms, which may further increase correlation through common underwriting practices, financial policies, and exposure to macroeconomic stress. Taken together, these structural features suggest that the correlation assumption appropriate for broadly diversified corporate bond portfolios may not be directly transferable to CLO collateral loans without upward adjustment. An increased correlation assumption would reveal greater risk for all investment-grade rated tranches and indicate that the thickness of those tranches is also a relevant credit consideration.

Absent more conservative assumptions for correlation of defaults and LGD rates, the Framework could understate tail losses for investment grade CLO tranches and produce capital charges that are not robust to severe but plausible stress environments.

5. Transparency and Access to Underlying Data

We look forward to learning more about the NAIC's efforts to assess differences in the meaning and performance of ratings across credit rating providers and the implications for mapping ratings to capital charges. In that context, Moody's strongly supports greater transparency around the data and analysis underlying the Academy's Proposal. The Academy's modeling produced a large and valuable dataset linking CLO tranches, ratings from multiple rating providers, and modeled tail risk loss measures such as CTE 90, which can meaningfully inform assessments of how ratings from different providers map to loss rates and tail risk. We recommend that this dataset be made available to the NAIC staff engaged in evaluating credit rating comparability and, to the extent feasible, be shared publicly, as broader access would enhance independent analysis, support market understanding, and strengthen the design of capital frameworks that better reflect underlying economic risk.

6. Application to Middle-Market/Private Credit CLOs

Moody's is agnostic as to whether the Academy's current framework for broadly syndicated loan (BSL) CLOs is extended to MM/Private Credit CLOs or whether a distinct framework is developed for that segment in the future. What is critical, however, is that any regulatory capital framework applied to MM/Private Credit CLOs explicitly recognize differences in the rating approaches, not only with respect to PD- and EL-orientation but also overall levels of credit enhancement required on average to achieve particular rating levels.

Absent such recognition, a uniform capital framework may unintentionally increase incentives for capital-motivated structuring and rating selection in a segment where transparency is more limited because public information about the underlying collateral is less readily available and portfolios may be less diversified.

Given the lower level of transparency in this portion of the market, the loss content

model are appropriate for the risk characteristics of CLO collateral, especially when the outputs are intended to inform capital or prudential frameworks.

associated with a given rating level may vary more meaningfully across providers in MM/Private Credit CLO market than in the BSL market. The relevant policy question is not whether one rating approach is better than the other, but whether ratings produced under different approaches may reflect credit risk differently and should therefore be mapped differently to RBC requirements.

7. Use of Public Ratings and Disclosure

Moody's encourages the NAIC and regulators to continue promoting transparency in the use of credit ratings for regulatory capital purposes. Where insurers rely on third-party credit ratings to support regulatory filings or capital calculations, the use of public ratings enhances transparency and comparability. Where private ratings are used, regulators may wish to consider encouraging disclosure of the identity of the credit rating provider, where permitted, so that market participants can better understand the methodology used in assigning the rating and how capital outcomes relate to underlying credit assessments.

Without that clarity, regulators may face challenges in monitoring capital outcomes, and market participants may lack the ability to assess whether capital requirements reflect differences in rating approaches.

8. Conclusion

We recognize that some of the suggested considerations discussed above may require additional time and analysis to implement. If these issues cannot be addressed within the current timeline, we recommend that the NAIC adopt the Framework on an interim basis, applying the Option 1 mapping when a tranche's rating is based on an EL-oriented approach and applying the Option 2 mapping when a tranche's rating is based on a PD-oriented approach.

We believe additional research and refinements of the Framework would be beneficial. In particular, further consideration of tranche thickness and other differences in analytical approaches across credit rating providers could mitigate incentives that may favor ratings associated with more favorable capital outcomes. At the same time, we continue to recommend that the NAIC take steps, detailed in our previous letter[9], to strengthen market discipline as a tool to discourage regulatory capital arbitrage and rating shopping.

* * *

We reiterate our appreciation for the NAIC's initiatives and leadership in this area, as well as the Academy's efforts. We look forward to continued engagement with the NAIC on these topics and welcome the opportunity to discuss these issues with you in greater detail.

Sincerely,

/s/ Nick Miller

Nick Miller
Managing Director – Global Regulatory Affairs

[9] See, Letter from Moody's Investors Service to Financial Condition (E) Committee Chair Elizabeth Dwyer, dated October 9, 2023, regarding Proposed Framework for Regulation of Insurer Investments (https://content.naic.org/sites/default/files/inline-files/Framwork%20Comments_0.pdf, p. 93).

Appendix A

The following table shows that the difference in expected loss between two tranches with the same attachment points is, in fact, greater as one moves to higher rated (above Baa-rated) tranches. The resulting impact of thin slice tranching is measured with differences in expected-loss rates, and the impact would be even greater if the differences were measured with tail risk, CTE 90 calculations.

We conducted split-tranche loss analysis to dimension the implications of splitting CLO tranches and the resulting re-allocation of risk into thinner junior sub-tranches. In our analysis, we took a typical 2025 vintage CLO (where Moody's rated only the senior Aaa tranche) and calculated expected losses (ELs) for the original AA, A, and BBB tranches as well as for their post-split sub-tranches. To align with the Academy's proposal to impose higher RBC charges on thin (≤ 4%) tranches, we split a tranche T in such a way as to create senior (Tsr) and junior (Tjr) tranches where Tjr is sized at 3% of the total liabilities. When a CLO tranche is split into thin junior and senior sub-tranches, the thin junior portion absorbs a disproportionately large share of the original tranche's risk. This effect becomes more pronounced the higher the tranche is in the capital stack (i.e., the safer or more senior the original tranche), because carving thin slices out of already safer tranches concentrates what little risk existed into the thin slices, making them relatively much riskier per dollar of notional compared to the original tranches. In this analysis for example, splitting a BBB tranche into two ~3% slices results in the thin junior slice carrying about 84% of that tranche's risk (despite being ~50% of its notional). At A, the thin slice takes ~88% of the risk. Even at AA (where the thin slice is only ~30% of the original notional), it captures ~79% of the risk.

Tranche T	Original T Size ($)	3% Junior Tranche Tjr ($)	Tjr (% of T)	Untranched expected loss (T)	Tranched Senior Expected loss (T_{sr})	Tranched Junior Expected loss (T_{jr})	Ratio: Expected loss (T_{jr}) / Expected loss (T)
AA	40.00	12.18	30.5%	1.3556%	0.4121%	3.5107%	2.5898
A	24.00	12.18	50.8%	9.5160%	2.3530%	16.4673%	1.7305
BBB	24.00	12.18	50.8%	24.7513%	8.0407%	40.9680%	1.6552

Pinpoint POLICY INSTITUTE

April 15, 2026

Mr. Philip Barlow
Chairman
Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners (NAIC)

Dear Mr. Barlow:

I write again to share Pinpoint Policy Institute's concerns regarding the working group's ongoing deliberations on risk-based capital charges for collateralized loan obligations. Pinpoint Policy Institute is a nonpartisan, pro-growth 501(c)(4) nonprofit organization dedicated to promoting free markets, limited government, and the rule of law. We submitted comments to this working group in June 2024 and have continued to follow these deliberations closely. We write today because the current proposal raises the same fundamental concerns we raised then, and in several respects raises new ones that are more troubling still.

The working group is considering a dramatic increase in risk-based capital (RBC) charges on non-investment-grade collateralized loan obligation (CLO) tranches, including middle-market CLOs. The analytical basis offered is a study by the American Academy of Actuaries, a study built exclusively on broadly syndicated loan (BSL) CLO data. The Academy has said so publicly, explicitly stating that it cannot speak to the application of its proposed factors to MM CLOs because it did not analyze them. Applying BSL-derived factors to a different asset, without any supporting data or independent analysis, is not evidence-based regulation. It is an arbitrary exercise of authority dressed up in the language of rigor.

The data points in the opposite direction. Since 2009, no MM CLO in the S&P ratings coverage universe has defaulted. Every single CLO 2.0 default, all 20 of them, has been a BSL CLO. S&P, Moody's, and Fitch have each independently confirmed that MM CLOs outperform BSL CLOs under stress. The Oliver Wyman study, which forms the very foundation of the Academy's work, found that MM CLO residuals consistently perform better than BSL CLOs across all three stress scenarios it modeled. Against this backdrop, the working group is contemplating raising the Baa3 tranche charge from 1.8% to 12.52% and the Ba3 charge from 5.01% to 33.08%. These are not modest recalibrations. They are dramatic increases applied to an asset class with a demonstrated track record of strong performance and no data to justify them.

The consequences are real. Insurers required to hold significantly more capital against CLO investments may raise premiums or reduce investment in these vehicles, with costs ultimately borne by consumers. Middle-market CLOs finance more than 200,000 American companies employing approximately 48 million people and accounting for roughly one-third of

private-sector GDP. As we noted in June 2024, the NAIC has never documented a single performance problem associated with losses or defaults in these assets. That remains true today.

We also note serious concerns about how this deliberation has been conducted. The NAIC is a nonprofit membership association, not a government regulator, that does not file a Form 990 yet effectively drives insurance regulatory outcomes across all 50 states through model law adoption. Key deliberations on this proposal have occurred in closed-door, regulator-only sessions. Chair Barlow's determination that MM CLOs are "not material," despite representing 20% of insurer CLO holdings, was made unilaterally by staff and never put to a commissioner vote. The fact is that the NAIC should not be applying higher capital charges to MM CLOs when the Academy's study never modeled MM CLO's. The data is missing. The public should be allowed to formally comment on the study's lack of MM CLO modeling before we can consider these proposed changes.

The NAIC's own RBC Model Governance principles call for transparency, materiality, and data-driven decision-making. Those principles are not being followed here. We urge commissioners to do their duty and consider carefully the broader economic harm of assigning capital charges that do not align with risk.

Sincerely,

Eric Ventimiglia
Executive Director
Pinpoint Policy Institute

Chang, Maggie

From: Ilya Podolyako <iop@thespamindex.com>
Sent: Wednesday, April 8, 2026 3:21 PM
To: Chang, Maggie
Subject: BSL Risk-Based Capital

Ms. Chang,

I am writing to provide a comment on the AAA proposal.

My firm believes that in order to reflect market knowledge about the condition of potentially distressed portfolios, the risk-based capital requirements in the AAA presentation from March 2, 2026, for a given tranche should increase or decrease in proportion to the ratio of (a) one over (b) the last trade price for the tranche, with the adjustment being one (no adjustment) in the event that the party applying the calculation lacks any trade data for the tranche within the last twelve months.

--
Ilya Podolyako
The SPAM Index

www.thespamindex.com

April 16, 2026

Mr. Philip Barlow, Chair
Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, Missouri 64106

Re: CLO C-1 Factors Modeling

Dear Chair Barlow:

The Structured Finance Association (the "SFA") appreciates the opportunity that the Risk-Based Capital Investment Risk and Evaluation (E) Working Group (the "RBC IRE WG") has provided for comments on the modeled C-1 factors for CLO debt tranches proposed by the American Academy of Actuaries (the "Academy").[1]

The SFA generally supports, for application to the debt tranches of broadly syndicated loan ("BSL") CLOs, the C-1 factors that the Academy has recommended based on its modeling methodology. The Academy's process for analyzing BSL CLO notes and the risk factors associated with them has been thorough and well-documented.

The SFA respectfully requests that for year-end 2026, the C-1 factors that the Academy has recommended be applied only to BSL CLO debt tranches. The reason is that the data analysis and modeling process used by the Academy to generate those C-1 factors were based exclusively on BSL CLO notes and did not include any middle market ("MM") CLO notes.

We encourage the RBC IRE WG to ask the Academy to undertake a separate data-driven modeling process tailored to MM CLO debt tranches, with a goal of developing proposed C-1 factors for MM CLO debt tranches to become effective at year-end 2027.

I. The Academy's Approach, Rather Than Deal-by-Deal Modeling, Is the Appropriate Methodology for CLO Debt Tranches

The SFA is of the firm view that the Academy's "comparable attributes" methodology is more appropriate for assigning RBC factors to CLO debt tranches than the deal-by-deal modeling methodology developed by the NAIC's Structured Securities Group, which is based on an assumption that the aggregate RBC charge for holding all of the securities issued by a CLO issuer should equal the aggregate RBC charge for the underlying loans—an assumption that the Academy has expressly stated that it did not follow.

[1] The SFA is a consensus-driven trade association with over 370 institutional members representing the entire value chain of the securitization market. By facilitating the responsible issuance of and investment in loans and securities, our members help to foster a market that provides trillions of dollars of capital to consumers and businesses in communities across the country. SFA members include issuers, investors (including insurance companies), broker-dealers, rating agencies, data analytics firms, law firms, servicers, trustees and accounting firms.

In their comment letter also being submitted on this date, LSTA, Inc. (the "LSTA") and the Alternative Credit Council (the "ACC"), also support the Academy's methodology. The LSTA and the ACC observe that the set of risk factors associated with CLO debt tranches is materially distinct from the risk factors associated with a CLO's underlying loans. Additionally, the LSTA and the ACC point out that the Academy's methodology is more operationally appropriate. We strongly agree. The Academy's many months of analytical work carried out under the auspices of the RBC IRE WG have produced a far superior methodology for the RBC treatment of CLO notes.

II. The Principle That RBC Changes Should Rely on Data-Driven Methodologies Strongly Suggests That the Academy's Factors Should Be Applied Only to BSL CLO Debt Tranches in This Initial Phase

While the SFA generally supports the Academy's methodology, we respectfully request that for year-end 2026, the methodology be applied only to BSL CLO debt tranches.

In response to the Chair's question at the March 2 meeting of the RBC IRE WG, Stephen Smith of the Academy confirmed that the Academy's modeling process to date has only included BSL CLO notes, and not MM CLO notes. Mr. Smith explained that the Academy will need additional time to do the credit modeling of the MM loans serving as collateral for MM CLO notes. He also stated that the tranche thickness-based factors that the Academy has proposed as the second option for BSL CLO notes should not be used for MM CLOs, since those thickness-based factors are not based on empirical data derived from MM CLOs.[2]

Mr. Smith's remarks regarding the need for further information and time to perform modeling calibrated for MM CLO notes are supported by the LSTA's and ACC's thorough analysis in their comment letter. We agree with the LSTA and ACC that MM CLO notes—which the Academy has not yet modeled—differ significantly from BSL CLO notes in multiple ways that impact the tail risk, including the nature of the underlying collateral and the structural features of the securitization.

One of the "Principles for RBC Requirements" adopted by the Risk-Based Capital Model Governance (EX) Task Force states that the process for "[m]aintaining and updating RBC requirements must adhere to model risk management standards, relying on data-driven methodologies . . . ."[3] Based on that principle, we respectfully submit that a data-driven approach for determining RBC factors for MM CLOs calls for a modeling methodology that uses MM CLO data, rather than BSL CLO data.

At the March 2 meeting of the RBC IRE WG, Mr. Smith advised that the Academy will be able to use information from rating agencies to facilitate its credit modeling calibrated to MM CLO notes.

[2] NAT'L ASS'N OF INS. COMM'RS, *Risk-Based Capital Investment Risk and Evaluation (E) Working Group*, Minutes of the March 2, 2026 Meeting, 2-3 (Attachment A to the Agenda for the March 23, 2026 Meeting), https://content.naic.org/sites/default/files/national_meeting/RBCIREWG%2003-23-26%20SPGNM%20Agenda%26Materials.pdf.

[3] NAT'L ASS'N OF INS. COMM'RS, *Risk-Based Capital Model Governance (EX) Task Force*, Principles for RBC Requirements, https://content.naic.org/sites/default/files/inlinefiles/Dec%202025%20Adopted%20Principles.pdf.

We are encouraged that leading rating agencies have indicated that they are prepared to provide such information.

It appears likely that the Academy will be able to model MM CLO notes in sufficient time to develop RBC factors that can be considered by the RBC IRE WG for implementation at year-end 2027. The SFA stands ready to assist with that process, whether through provision of information from our broad group of structured finance market participants or otherwise.

III. If the NAIC Determines that tranche thickness is an appropriate comparable attribute, the SFA supports its application to BSL CLOs only for year-end 2026.

As stated above, the SFA—aligned here with the LSTA and ACC—respectfully requests that the new RBC factors not be applied to MM CLO notes until the Academy has performed the appropriate modeling of MM CLO notes.

Further, if the NAIC chooses to apply the Academy's Option 2 (which uses tranche thickness as an additional attribute for determining the RBC factor), the SFA supports the application of Option 2 solely to BSL CLOs as currently drafted in the blanks proposal.

As a threshold matter, there are concerns among some in SFA's membership about applying a separate tranche thickness attribute to any CLO debt tranches. It has been noted that tranche thickness is already taken into account in at least one rating agency's methodology, such that application of a stand-alone tranche thickness attribute may represent double-counting.

More generally, we believe there is substantial merit to the view expressed during the discussion at the March 2 meeting of the RBC IRE WG that the application of a separate tranche thickness attribute would be an imprecise approach given all of the variables, including differences in rating methodologies, tranche seniority, tranche sizes, and tranche ratings. We respectfully submit that more study of this aspect is warranted.

Furthermore, as noted above, the Academy made clear that the Option 2 tranche thickness is not appropriate apply to MM CLO notes, given that no analysis of MM CLO data has yet been performed, and that if such an analysis were performed, it may indicate that a different thickness threshold is appropriate for MM CLO notes. The SFA strongly agrees.

The SFA also welcomes the opportunity the RBC IRE WG has provided for comment, by April 17, on the structure proposal that would implement the new RBC factors that the RBC IRE WG decides to adopt for CLO notes. For now, we will express our firm view that if the NAIC determines to adopt Option 2 as a general matter, the RBC IRE WG should retain the structural features of the current blanks reporting form where the tranche thickness attribute applies only to BSL CLO notes rated Baa3 (or the equivalent rating of other rating agencies) or below.

IV. Conclusion

The SFA appreciates the deliberative process that the RBC IRE WG has undertaken with respect to RBC treatment of CLO notes. Importantly, we appreciate the process not only with respect to CLO notes, but as a prototype for an approach to asset-backed securities issued by other types of structured finance vehicles.

We respectfully request that the RBC IRE WG continue to employ an iterative, data-driven approach. Consistent with that principle, we urge the RBC IRE WG to take a phased approach to the application of new RBC factors to CLO notes. We support the application for year-end 2026 of the Academy's proposed new RBC factors to the BSL CLO notes that it has modeled but urge the RBC IRE WG to defer a change to RBC factors for MM CLO notes until the Academy has time to model such notes and develop factors that are calibrated to that asset class.

The SFA would welcome the opportunity to discuss our comments with the RBC IRE WG, the NAIC staff, and/or the Academy. This could include meetings with SFA members active in different roles in the CLO market and in the structured finance universe more broadly. Again, we are focused not only on the NAIC process for determining new RBC factors for CLO notes but also on any future NAIC development of adjustments to RBC treatment of other structured finance investments.

Sincerely,

Dallin Merrill

Head of Policy
Structured Finance Association

TAXPAYERS PROTECTION ALLIANCE

April 16, 2026

Philip Barlow
Chair, Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1101 K Street, N.W., Suite 650
Washington, DC 20005

RE: C-1 Subcommittee Update on CLO C-1 Factors Modeling

Dear Chair Barlow,

On behalf of millions of taxpayers and consumers, the Taxpayers Protection Alliance (TPA) is pleased to provide feedback on the "C-1 Subcommittee Update on CLO C-1 Factors Modeling," which is currently exposed for comment. TPA is concerned that the modeled base factors for collateralized loan obligations (CLOs) reflect a predisposition to assess CLO-related risk based on an arbitrary bias against certain investments. Raising the risk-based capital (RBC) charge on insurers that invest in non-investment-grade tranches of CLOs is particularly concerning because the entity raising the charge—the NAIC—wields government power while not being bound by the transparency requirements imposed on government agencies. TPA urges the NAIC to avoid raising prices on consumers and embrace transparency and the rule of law.

The NAIC is poised to subject insurers to costly requirements pertaining to CLOs with little accompanying evidence to justify these requirements. For example, the American Academy of Actuaries' study did not model middle market CLOs, yet the NAIC is applying more stringent RBC charges to insurers' investments in these assets. Moreover, from 2010 through 2024, S&P Global Ratings rated nearly 19,000 tranches and found an average annual default rate of only 0.04 percent for CLO BB tranches and 0.16 percent for CLO B tranches.

The data to justify these increases is nonexistent, but the negative implications are severe and the NAIC's decisions will carry the force of law. As the R Street Institute noted in 2012, the NAIC "promulgates model laws and regulations that, in many states, are incorporated into statutory law by 'reference'; that is to say, a decision by the NAIC to make changes to an existing model can change public policy in the states automatically. This gives the group the patina of a quasi-regulator, although unlike regulators, the NAIC does not have to comply with open public meetings or freedom of information laws." In addition, while the NAIC is a 501(c)(3) nonprofit organization similar to countless other public policy groups, it is not required to file annual Form 990 disclosure forms.

Because of the resulting secrecy, taxpayers cannot verify basic facts such as the salary of key staff, important meeting details, financial ties, and evidence of regulatory capture by regulated parties—even though taxpayers inevitably pay for financial regulatory enforcement. Even in the case that the NAIC is acting erratically in promulgating CLO restrictions, there is nothing analogous to the Administrative Procedure Act (APA)—which ordinarily protects regulated parties from government abuses—that applies to the NAIC.

Instead of implementing increasingly costly regulations, the NAIC should commit to increased accountability and work with lawmakers to bring the organization under the umbrella of procedural and public information access laws. We thank you for your time and attention to this critical matter.

Sincerely,

Ross Marchand
Executive Director

COMMONWEALTH OF VIRGINIA

SCOTT A. WHITE
COMMISSIONER OF INSURANCE
STATE CORPORATION COMMISSION
BUREAU OF INSURANCE

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April 16, 2026

Philip Barlow
Chair, Risk-Based Capital Investment Risk and Evaluation (E) Working Group
District of Columbia Department of Insurance, Securities & Banking
1050 First Street, NE
Office #801
Washington, DC 20002

Re: Comments on the American Academy of Actuaries' CLO C-1 Factors Modeling Update

Dear Chair Barlow,

The Virginia Bureau of Insurance ("Bureau") appreciates the opportunity to offer its comments on the March 2nd presentation from the American Academy of Actuaries (the "Academy") on its work to model C-1 factors for collateralized loan obligations ("CLOs"). The Bureau's comments are supportive of and largely aligned with the comments from the Iowa Insurance Division, also filed on this exposure, with a few exceptions as explained below.

The Bureau has been and remains supportive of the Academy's work that led to the proposals in the March 2nd presentation. The Risk-Based Capital Investment Risk and Evaluation (E) Working Group ("RBCIREWG") tasked the Academy with modeling CLOs to produce tailored C-1 factors. The membership of RBCIREWG understood at that time the limitations of the data available to the Academy for the modeling effort and accepted that modeling broadly syndicated CLOs would generate a reasonable proxy for C-1 factors applicable to all CLOs, including middle-market CLOs. The Academy's March 2nd proposals support RBCIREWG's expectation, and the Bureau supports applying the proposed C-1 factors to all CLOs.

Upon review and consideration of the Academy's presentation, the Bureau supports adopting the Academy's "Option 2" proposal to use two comparable attributes – credit ratings and tranche thickness – to generate CLO C-1 factors for all CLOs. The use of credit ratings as a comparable attribute is of little surprise as they are a foundational component of C-1 factor risk assessment for many assets. The Bureau finds the Academy's proposal to include tranche thickness for ratings at Baa3 and below to be supported by strong evidence showing the difference in risk of tranches thicker or thinner than four percent. The Bureau also finds that the material difference in C-1 factors between the "thin" versus "thick" tranches appropriately captures the added risk of "thin" tranches and, as such, tranche thickness should be included as a comparable attribute to determine CLO C-1 factors.

The Bureau is also supportive of RBCIREWG's consideration of future work related to the Academy's proposals. However, RBCIREWG does not need to decide now on future work, and it should take its time to consider whether the Academy should pursue further CLO work. The two main projects discussed

have been: (1) potential refinements to the model's underlying assumptions and (2) modeling middle-market CLOs. The Bureau looks forward to continued engagement on these projects.

Lastly, the Bureau notes that the Academy's proposals are consistent with the "Principles for RBC Requirements" adopted by the Risk-Based Capital Model Governance (EX) Task Force last year. Highlighting a few of the principles, the proposals show that the changes to CLO C-1 factors are material, the proposals further "equal capital for equal risk," the proposals are sufficiently precise, and the decision that will be arrived at by RBCIREWG is transparent. Further, RBCIREWG relied on "data-driven methodologies" and the proposals allow regulators to "rely on expert judgment and proxies" consistent with the principles.

Sincerely,
/s/ Dan Bumpus
Deputy Commissioner
Innovative Solutions & Strategies Division

Cc: Doug Stolte – Deputy Commissioner, Financial Regulation Division
Greg Chew – Chief Financial Analyst, Financial Regulation Division

Western & Southern Financial Group
400 Broadway
Cincinnati, OH 45202-3341
Tel: 513-629-1800
westernsouthern.com

April 16, 2026

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

Re: American Academy of Actuaries' Presentation of March 2, 2026
Titled C-1 Subcommittee Update on CLO C-1 Factors Modeling

Dear Chair Barlow:

Western & Southern Financial Group, Inc. (W&S) appreciates the opportunity to comment on the March 2, 2026 presentation by the American Academy of Actuaries (the Academy), *C-1 Subcommittee Update on CLO C-1 Factors Modeling*.

W&S supports adopting the Academy model's capital factors for YE2026. We recognize that several refinements can and should be made to the model for YE2027 reporting to improve its efficacy, but we believe the model is an improvement over the status quo and will help regulators identify areas of risk to be mitigated. Accordingly, subject to a commitment by regulators to address areas where the model can be improved for YE 2027 reporting, W&S supports the adoption of the C-1 factors produced by the Academy model for actual YE 2026 reporting, rather than merely as "enhanced disclosure." Delaying implementation would prolong known inconsistencies in the current framework and limit regulators' ability to accurately assess and compare CLO-related risks across insurers.

Among the refinements that should be made in 2027 to further enhance the model's utility is to adopt appropriate recovery rates. The Academy's model currently uses ~70%, but the market has experienced lower recovery rates in the past 10 years with some as low as 40-50% in weaker cohorts. Less subordinated debt, weaker covenants, the proliferation of LMEs and the shift to asset-light borrowers has fundamentally changed recovery expectations in the BSL market.

We also support taking tranche thickness into account in the model in 2027. The Academy identified tranche thickness as second only to ratings in terms of its significance as a risk common attribute, and it should be incorporated into the model. Extremely thin tranches—particularly those representing 1–2% of the capital structure—exhibit highly binary outcomes, where losses on only a small number of underlying loans can result in full principal impairment. Such structures create concentrated, path-dependent exposures that resemble contingent loss positions rather than true diversified credit investments. These risks are not adequately captured by traditional rating-based approaches, and the model should explicitly incorporate tranche thickness to recognize this risk and discourage the formation of structures that introduce disproportionate tail risk with limited economic justification.

Finally, we support separating Broadly Syndicated Loan (BSL) and Middle Market (MM) CLOs. We estimate that MM CLOs comprise approximately 16% of the universe of CLOs held by the life insurance industry. Given that the generally accepted threshold for materiality is 10%, MM CLOs warrant separate analysis and consideration.

We disagree strongly with any suggestion that CLO C-1 factors should be limited to 45% pretax. Although in general a 45% charge effectively non-admits the asset for RBC purposes, the actual impact depends on legal entity capital levels and covariance nuances. More importantly RBC is not intended to gauge the strength of highly capitalized insurers but rather it is designed to identify weakly capitalized companies that are potentially on a path to insolvency. For residual and deeply subordinated tranches, loss outcomes are driven by extreme but plausible tail scenarios, where full principal loss is highly likely. Under a tail-based measure such as CTE, this implies that capital charges should approach 100% of carrying value. This is also consistent with the structure of securitizations, where these tranches absorb losses first, and supports alignment between the aggregate capital required for CLO tranches and the capital required for the underlying assets. We recognize that, in some cases, this approach may result in certain exposures being effectively non-admitted, but view this as an appropriate outcome warranted by the underlying risk. If this process is truly to be "data driven" then artificial caps should not be imposed on the CLO C-1 factors. Accordingly, capital factors for these tranches should not be capped and should be permitted to reach 100% if supported by the modeled loss distribution.

W&S appreciates the efforts of the Academy and regulators to develop an effective CLO C-1 modeling framework. *The Academy model's capital factors should be adopted for YE2026 reporting, with a commitment to address identified refinements for YE2027.* We believe that maintaining the solvency and reputation of the life insurance industry is a paramount objective and look forward to continued engagement with the RBC IRE Working group and the Academy toward this end.

Respectfully submitted,

Scott D. Weston
Managing Director
Fort Washington Investment Advisors, Inc.

Sincerely,

Kevin L. Howard
Vice President, Deputy General Counsel
and Head of Government Affairs

Capital Adequacy (E) Task Force
RBC Proposal Form

☐ Capital Adequacy (E) Task Force
☐ Catastrophe Risk (E) Subgroup
☐ Variable Annuities Capital. & Reserve (E/A) Subgroup
☐ Health RBC (E) Working Group
☐ P/C RBC (E) Working Group
☐ Economic Scenarios (E/A) Subgroup
☐ Life RBC (E) Working Group
☐ Longevity Risk (A/E) Subgroup
☒ RBC Investment Risk & Evaluation (E) Working Group

DATE:	**11/11/2025**
CONTACT PERSON:	**Maggie Chang**
TELEPHONE:	**816-783-8976**
EMAIL ADDRESS:	**mchang@naic.org**
ON BEHALF OF:	**Risk-Based Capital Investment Risk and Evaluation (E) Working Group**
NAME:	**Philip Barlow, Chair**
TITLE:	**Associate Commissioner of Insurance**
AFFILIATION:	**District of Columbia**
ADDRESS:	**1050 First Street, NE Suite 801**
	Washington, DC 20002

FOR NAIC USE ONLY

Agenda Item # 2025-22-IRE MOD
Year 2026 or later

DISPOSITION

ADOPTED:
☐ TASK FORCE (TF) _____
☐ WORKING GROUP (WG) _____
☐ SUBGROUP (SG) _____

EXPOSED:
☐ TASK FORCE (TF) _____
☒ WORKING GROUP (WG) 12/15/25
☐ SUBGROUP (SG) _____

REJECTED:
☐ TF ☐ WG ☐ SG _____

OTHER:
☐ DEFERRED TO _____
☐ REFERRED TO OTHER NAIC GROUP
☐ (SPECIFY) _____

IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

☐ Health RBC Blanks
☐ Health RBC Instructions
☐ Health RBC Formula
☐ Property/Casualty RBC Blanks
☐ Property/Casualty RBC Instructions
☐ Property/Casualty RBC Formula
☒ Life and Fraternal RBC Blanks
☒ Life and Fraternal RBC Instructions
☒ Life and Fraternal RBC Formula
☐ OTHER _____

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

This proposal incorporates a more granular reporting of Long-Term Bonds into two buckets: i) collateralized loan obligations (CLOs) and ii) all other Long-Term Bonds on the LR002 Bonds page. The expanded presentation of bonds is a result of the work of Risk-Based Capital Investment Risk and Evaluation (E) Working Group under Working Agenda item: Evaluate the appropriate RBC treatment of Asset-Backed Securities (ABS), including Collateralized Loan Obligations (CLO), collateralized fund obligations (CFOs), or other similar securities carrying similar types of tail risk (Complex Assets).

Please note that this proposal does not contemplate any changes to factors. Any changes of factors, if deemed necessary, will be dealt with by a separate proposal. Likewise, residual tranche structural changes, if any, are to be contemplated in separate proposal form.

The accompanying changes proposed to the instructions and blanks of the AVR – Default Component & Equity and Other Invested Asset Component tables are under purview of NAIC Blanks (E) Working Group. As such, the proposed changes to "Annual Statement Source" in LR002 are contingent on the adoption of such Blanks proposal.

Additional Staff Comments:

12/15/25 – exposed by Working Group (mkc)
3/23/26 – modified to incorporate tranche thickness as comparable attributes (mkc). All modifications are highlighted in yellow

** **This section must be completed on all forms.** **Revised 2-2023**

BONDS

LR002

Basis of Factors

The bond factors are based on cash flow modeling using historically adjusted default rates for each bond category. For each of 2,000 trials, annual economic conditions were generated for the 10-year modeling period. Each bond of a 400-bond portfolio was annually tested for default (based on a "roll of the dice") where the default probability varies by designation category and that year's economic environment. When a default takes place, the actual loss considers the expected principal loss by category, the time until the sale actually occurs and the assumed tax consequences.

Actual surplus needs are reduced by incorporating anticipated annual contributions to the asset valuation reserve (AVR) as offsetting cash flow. Required surplus for a given trial is calculated as the amount of initial surplus funds needed so that the accumulation with interest of this initial amount and subsequent cash flows will not become negative at any point throughout the modeling period. The factors chosen for the proposed formula produce a level of surplus at least as much as needed in 92% of the trials by category and a 96% level for the entire bond portfolio.

The factor for NAIC 6 bonds recognizes that the book/adjusted carrying value of these bonds reflects a loss of value upon default by being marked to market.

Specific Instructions for Application of the Formula

Lines (1) through (7)

The book/adjusted carrying value of all bonds, excluding collateralized loan obligations (CLOs), Collateralized Bond Obligations (CBOs), and Collateralized Debt Obligations (CDOs) ~~and related fixed income investments~~ should be reported in Column (1). The bonds are split into seven different risk classifications. For long-term bonds, these classifications are found on Lines A1 through A7 of the Asset Valuation Reserve Default Component~~, Page 30~~ of the annual statement.

The book/adjusted carrying value of all ~~collateralized loan obligations~~CLOs/CBOs/CDOs should be reported in Column 2. The ~~collateralized loan obligations~~ CLOs/CBOs/CDOs are split into six different risk classifications. These classifications are found on Lines A9.1 through A14 of the Asset Valuation Reserve Default Component~~, Page 30~~ of the annual statement.

Line (7.2)

Amounts reported in Column (2) line (3.3), (4.1), (4.2), (4.3), (5.1), (5.2), (5.3), (6.1), (6.2), (6.3) should exclude book/adjusted carrying value of Broadly Syndicated Bank Loans (BSL) CLO tranches (as defined below) with [current] tranche thickness less than or equal to [4%] (as defined below). Such balances should be reported in Column (2) Line (7.2).

BSL are typically syndicated corporate loans distributed to a broad base of institutional investors and rated by credit rating agencies. BSL CLOs are primarily backed by syndicated corporate loans.

[Current] Tranche thickness is defined as the difference between the attachment point (AP) and the detachment point (DP) of a CLO tranche. AP refers to tranche's subordination percentage, and DP is the percentage of total par amount of the underlying portfolio including principal proceeds, that will completely write off the tranche. The current tranche thickness is to be measured using the most recent periodic report available, without being stale, as of the investment reporting date.

Report the Subtotal RBC Requirement in Column (4), Line (7.2) based on the following calculations:

NAIC Designation Categories of the thin tranche CLOs	Book/Adjusted Carrying Value		Factors		RBC Requirement
NAIC Designation Category 2.C	Company Record	X	TBD	=	
NAIC Designation Category 3.A	Company Record	X	TBD	=	

NAIC Designation Category 3.B	Company Record	X	TBD	=	
NAIC Designation Category 3.C	Company Record	X	TBD	=	
NAIC Designation Category 4.A	Company Record	X	TBD	=	
NAIC Designation Category 4.B	Company Record	X	TBD	=	
NAIC Designation Category 4.C	Company Record	X	TBD	=	
NAIC Designation Category 5.A	Company Record	X	TBD	=	
NAIC Designation Category 5.B	Company Record	X	TBD	=	
NAIC Designation Category 5.C	Company Record	X	TBD	=	
			Subtotal		==========

The total of Column (2) Lines (3.3), (4.1), (4.2), (4.3), (5.1), (5.2), (5.3) (6.1), (6.2) and (6.3) should agree to the total of AVR Default Component Column 1 Line A10.3, Line A11.1, Line A11.2, Line A11.3, Line A12.1, Line A12.2, Line A12.3, Line A13.1, Line A13.2, Line A13.3.

Line (8)
The total should equal long-term bonds ~~and other fixed income instruments~~ reported on Page 2, Column 3, Line 1 plus Schedule DL Part 1, Column 6, Line 2009999999 of the annual statement.

Lines (9) through (15)
The book/adjusted carrying value of all short-term and cash equivalent bonds ~~and related fixed income investments~~ should be reported in Column (1). The bonds are split into seven different risk classifications. For short-term bonds, these classifications are found on Lines ~~18~~ C1 through ~~24~~ C7 of the Asset Valuation Reserve Default Component, ~~Page 30~~ of the annual statement. For cash equivalent bonds, these classifications are found in Footnotes to Schedule E, Part 2.

Line (16)
The total should equal short-term bonds reported on Schedule DA, Part 1, Column 6 Line 0509999999 plus Schedule DL Part 1, Column 6, Line 9509999999 plus Schedule E, Part 2, Column 7, Line 0509999999.

Line (22)
Class 1 bonds (highest quality) issued by a U.S. government agency that are not backed by the full faith and credit of the U.S. government should be reported on this line. The loan-backed securities of the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC) would be examples of the securities reported on this line. Line (22) should not be larger than the sum of Lines (2) and (10). Exempt obligations should not be included on this line.

Line (24)
Bonds should be aggregated by issuer (the first six digits of the CUSIP number can be used). Exempt U.S. government bonds and bonds reported on Line (22) are not counted in determining the size factor. The RBC for those bonds will not be included in the base to which the size factor is applied. If this field is left blank, the maximum size factor adjustment of 2.40 will be used.

Line (25)
The size factor reflects the higher risk of a bond portfolio that contains relatively fewer bonds. The overall factor decreases as the portfolio size increases. The size factor is based on the weighted number of issuers. (The calculation shown below will not appear on the RBC filing software but will be calculated automatically.)

Line (25)	Source	(a) Number of Issuers (for bonds,	(b) Weighted Issuers (for bonds, excluding CLOs/CBOs/CDOs)

		excluding CLOs/CBOs/CDOs)				
First 50	Company Records		X	2.40	=	
Next 50	Company Records		X	1.53	=	
Next 100	Company Records		X	0.85	=	
Next 300	Company Records		X	0.85	=	
Over 500	Company Records		X	0.82	=	
(i) Total Number of Issuers from Line (23) Column (1)						
(ii) Total Weighted Issuers (for bonds, excluding CLOs/CBOs/CDOs)						

	Source	(a) Number of Issuers (for CLOs/CBOs/CDOs)				(b) Weighted Issuers (for CLOs/CBOs/CDOs)
First XX*	Company Records		X	TBD	=	
Next XX*	Company Records		X	TBD	=	
Next XXX*	Company Records		X	TBD	=	
Next XXX*	Company Records		X	TBD	=	
Over XXX*	Company Records		X	TBD	=	
(iii) Total Number of Issuers from Line (23) Column (2)						
(iv) Total Weighted Issuers (for CLOs/CBOs/CDOs)						
Size Factor = Total Weighted Issuers (ii)+(iv) Divided by Total Number of Issuers (i)+(iii)						

* Total number of breakpoints, as well as weights assigned to each, is subject to American Academy of Actuaries' recommendation and Working Group's review.

BONDS

Company Name — Cocode: 00000

BONDS

	SVO Bond Designation Category	Annual Statement Source	(1) Non-CLOs/CBOs/CDOs Book / Adjusted Carrying Value		Factor	(2) CLOs/CBOs/CDOs Book / Adjusted Carrying Value		(3) Factor		(4) RBC Requirement
	Long Term Bonds									
(1)	Exempt Obligations	C(1) AVR Default Component Column 1 Line A1 C(1) AVR Default Component Column 1 Line A2.1	$0	X	0.00000	XXX		XXX	=	$0
(2.1)	NAIC Designation Category 1.A	C(2) AVR Default Component Column 1 Line A9.1 C(1) AVR Default Component Column 1 Line A2.2	$0	X	0.00158	$0	X	TBD	=	$0
(2.2)	NAIC Designation Category 1.B	C(2) AVR Default Component Column 1 Line A9.2 C(1) AVR Default Component Column 1 Line A2.3	$0	X	0.00271	$0	X	TBD	=	$0
(2.3)	NAIC Designation Category 1.C	C(2) AVR Default Component Column 1 Line A9.3 C(1) AVR Default Component Column 1 Line A2.4	$0	X	0.00419	$0	X	TBD	=	$0
(2.4)	NAIC Designation Category 1.D	C(2) AVR Default Component Column 1 Line A9.4 C(1) AVR Default Component Column 1 Line A2.5	$0	X	0.00523	$0	X	TBD	=	$0
(2.5)	NAIC Designation Category 1.E	C(2) AVR Default Component Column 1 Line A9.5 C(1) AVR Default Component Column 1 Line A2.6	$0	X	0.00657	$0	X	TBD	=	$0
(2.6)	NAIC Designation Category 1.F	C(2) AVR Default Component Column 1 Line A9.6 C(1) AVR Default Component Column 1 Line A2.7	$0	X	0.00816	$0	X	TBD	=	$0
(2.7)	NAIC Designation Category 1.G	C(2) AVR Default Component Column 1 Line A9.7	$0	X	0.01016	$0	X	TBD	=	$0
(2.8)	Subtotal NAIC 1	Sum of Lines (2.1) through (2.7)	$0			$0				$0
(3.1)	NAIC Designation Category 2.A	C(1) AVR Default Component Column 1 Line A3.1 C(2) AVR Default Component Column 1 Line A10.1 C(1) AVR Default Component Column 1 Line A3.2	$0	X	0.01261	$0	X	TBD	=	$0
(3.2)	NAIC Designation Category 2.B	C(2) AVR Default Component Column 1 Line A10.2	$0	X	0.01523	$0	X	TBD	=	$0
(3.3)	NAIC Designation Category 2.C	C(1) AVR Default Component Column 1 Line A3.3 C(2) AVR Default Component Column 1 Line A10.3, in part	$0	X	0.02168	$0 ‡	X	TBD	=	$0
(3.4)	Subtotal NAIC 2	Sum of Lines (3.1) through (3.3)	$0			$0				$0
(4.1)	NAIC Designation Category 3.A	C(1) AVR Default Component Column 1 Line A4.1 C(2) AVR Default Component Column 1 Line A11.1, in part C(1) AVR Default Component Column 1 Line A4.2	$0	X	0.03151	$0 ‡	X	TBD	=	$0
(4.2)	NAIC Designation Category 3.B	C(2) AVR Default Component Column 1 Line A11.2, in part C(1) AVR Default Component Column 1 Line A4.3	$0	X	0.04537	$0 ‡	X	TBD	=	$0
(4.3)	NAIC Designation Category 3.C	C(2) AVR Default Component Column 1 Line A11.3, in part	$0	X	0.06017	$0 ‡	X	TBD	=	$0
(4.4)	Subtotal NAIC 3	Sum of Lines (4.1) through (4.3)	$0			$0				$0
(5.1)	NAIC Designation Category 4.A	C(1) AVR Default Component Column 1 Line A5.1 C(2) AVR Default Component Column 1 Line A12.1, in part C(1) AVR Default Component Column 1 Line A5.2	$0	X	0.07386	$0 ‡	X	TBD	=	$0
(5.2)	NAIC Designation Category 4.B	C(2) AVR Default Component Column 1 Line A12.2, in part C(1) AVR Default Component Column 1 Line A5.3	$0	X	0.09535	$0 ‡	X	TBD	=	$0
(5.3)	NAIC Designation Category 4.C	C(2) AVR Default Component Column 1 Line A12.3, in part	$0	X	0.12428	$0 ‡	X	TBD	=	$0
(5.4)	Subtotal NAIC 4	Sum of Lines (5.1) through (5.3)	$0			$0				$0
(6.1)	NAIC Designation Category 5.A	C(1) AVR Default Component Column 1 Line A6.1 C(2) AVR Default Component Column 1 Line A13.1, in part C(1) AVR Default Component Column 1 Line A6.2	$0	X	0.16942	$0 ‡	X	TBD	=	$0
(6.2)	NAIC Designation Category 5.B	C(2) AVR Default Component Column 1 Line A13.2, in part C(1) AVR Default Component Column 1 Line A6.3	$0	X	0.23798	$0 ‡	X	TBD	=	$0
(6.3)	NAIC Designation Category 5.C	C(2) AVR Default Component Column 1 Line A13.3, in part	$0	X	0.30000	$0 ‡	X	TBD	=	$0
(6.4)	Subtotal NAIC 5	Sum of Lines (6.1) through (6.3)	$0			$0				$0
(7.1)	NAIC 6	C(1) AVR Default Component Column 1 Line A7 C(2) AVR Default Component Column 1 Line A14	$0	X	0.30000	$0	X	TBD	=	$0
(7.2)	CLO in NAIC Designation Category 2.C or below, with thin tranches (See Instruction)	C(2) AVR Default Component Column 1 Line A10.3, in part + Line A11.1, in part + Line A11.2, in part + Line A11.3, in part + Line A12.1, in part + Line A12.2, in part + Line A12.3, in part + Line A13.1, in part + Line A13.2, in part + Line A13.3, in part	XXX		XXX		X	Composite Factor '§	=	
(8)	Total Long-Term Bonds	Sum of Lines (1) + (2.8) + (3.4) + (4.4) + (5.4) + (6.4) + (7.1) + (7.2) (Column (1) + Column (2) should equal Page 2 Column 3 Line 1 + Schedule DL Part 1 Column 6 Line 2009999999)	$0			$0				$0
	Short Term and Cash Equivalent Bonds									
(9)	Exempt Obligations	AVR Default Component Column 1 Line C1 + Schedule E, Part 2, Column 7, Line 0019999999	$0	X	0.000	XXX		XXX	=	$0
(10.1)	NAIC Designation Category 1.A	AVR Default Component Column 1 Line C2.1 + Schedule E, Part 2, Footnote L000001A, Amount 1 - Schedule E, Part 2, Column 7, Line 0019999999	$0	X	0.00158	XXX		XXX	=	$0
(10.2)	NAIC Designation Category 1.B	AVR Default Component Column 1 Line C2.2 + Schedule E, Part 2, Footnote L000001A, Amount 2	$0	X	0.00271	XXX		XXX	=	$0
(10.3)	NAIC Designation Category 1.C	AVR Default Component Column 1 Line C2.3 + Schedule E, Part 2, Footnote L000001A, Amount 3	$0	X	0.00419	XXX		XXX	=	$0
(10.4)	NAIC Designation Category 1.D	AVR Default Component Column 1 Line C2.4 + Schedule E, Part 2, Footnote L000001A, Amount 4	$0	X	0.00523	XXX		XXX	=	$0
(10.5)	NAIC Designation Category 1.E	AVR Default Component Column 1 Line C2.5 + Schedule E, Part 2, Footnote L000001A, Amount 5	$0	X	0.00657	XXX		XXX	=	$0
(10.6)	NAIC Designation Category 1.F	AVR Default Component Column 1 Line C2.6 + Schedule E, Part 2, Footnote L000001A, Amount 6	$0	X	0.00816	XXX		XXX	=	$0
(10.7)	NAIC Designation Category 1.G	AVR Default Component Column 1 Line C2.7 + Schedule E, Part 2, Footnote L000001A, Amount 7	$0	X	0.01016	XXX		XXX	=	$0
(10.8)	Subtotal NAIC 1	Sum of Lines (10.1) through (10.7)	$0							$0

=ROUND(MAX(0,D10)*F10 + MAX(0,G10)*I10,0)

		AVR Default Component Column 1 Line C3.1 +						
(11.1)	NAIC Designation Category 2.A	Schedule E, Part 2, Footnote L000001B, Amount 1	$0	X	0.01261	XXX	XXX =	$0
		AVR Default Component Column 1 Line C3.2 +						
(11.2)	NAIC Designation Category 2.B	Schedule E, Part 2, Footnote L000001B, Amount 2	$0	X	0.01523	XXX	XXX =	$0
		AVR Default Component Column 1 Line C3.3 +						
(11.3)	NAIC Designation Category 2.C	Schedule E, Part 2, Footnote L000001B, Amount 3	$0	X	0.02168	XXX	XXX =	$0
(11.4)	Subtotal NAIC 2	Sum of Lines (11.1) through (11.3)	$0					$0
		AVR Default Component Column 1 Line C4.1 +						
(12.1)	NAIC Designation Category 3.A	Schedule E, Part 2, Footnote L000001C, Amount 1	$0	X	0.03151	XXX	XXX =	$0
		AVR Default Component Column 1 Line C4.2 +						
(12.2)	NAIC Designation Category 3.B	Schedule E, Part 2, Footnote L000001C, Amount 2	$0	X	0.04537	XXX	XXX =	$0
		AVR Default Component Column 1 Line C4.3 +						
(12.3)	NAIC Designation Category 3.C	Schedule E, Part 2, Footnote L000001C, Amount 3	$0	X	0.06017	XXX	XXX =	$0
(12.4)	Subtotal NAIC 3	Sum of Lines (12.1) through (12.3)	$0					$0
		AVR Default Component Column 1 Line C5.1 +						
(13.1)	NAIC Designation Category 4.A	Schedule E, Part 2, Footnote L000001D, Amount 1	$0	X	0.07386	XXX	XXX =	$0
		AVR Default Component Column 1 Line C5.2 +						
(13.2)	NAIC Designation Category 4.B	Schedule E, Part 2, Footnote L000001D, Amount 2	$0	X	0.09535	XXX	XXX =	$0
		AVR Default Component Column 1 Line C5.3 +						
(13.3)	NAIC Designation Category 4.C	Schedule E, Part 2, Footnote L000001D, Amount 3	$0	X	0.12428	XXX	XXX =	$0
(13.4)	Subtotal NAIC 4	Sum of Lines (13.1) through (13.3)	$0					$0
		AVR Default Component Column 1 Line C6.1 +						
(14.1)	NAIC Designation Category 5.A	Schedule E, Part 2, Footnote L000001E, Amount 1	$0	X	0.16942	XXX	XXX =	$0
		AVR Default Component Column 1 Line C6.2 +						
(14.2)	NAIC Designation Category 5.B	Schedule E, Part 2, Footnote L000001E, Amount 2	$0	X	0.23798	XXX	XXX =	$0
		AVR Default Component Column 1 Line C6.3 +						
(14.3)	NAIC Designation Category 5.C	Schedule E, Part 2, Footnote L000001E, Amount 3	$0	X	0.30000	XXX	XXX =	$0
(14.4)	Subtotal NAIC 5	Sum of Lines (14.1) through (14.3)	$0					$0
		AVR Default Component Column 1 Line C7						
(15)	NAIC 6	Schedule E, Part 2, Footnote L000001F, Amount 1	$0	X	0.300	XXX	XXX =	$0
(16)	Total Short-Term and Cash Equivalent Bonds (Column (1) should equal Schedule DA Part 1 Column 6 Line 0509999999 + Schedule DL Part 1 Column 6 Line 9509999999 +	Sum of Lines (9) + (10.8) + (11.4) + (12.4) + (13.4) + (14.4) + (15) Schedule E Part 2 Column 7 Line 0509999999)	$0					$0
(17)	Total Long-Term and Short-Term Bonds (pre-MODCO/Funds Withheld)	Line (8) + (16)	$0		$0			$0
(18)	Credit for Hedging	LR014 Hedged Asset Bond Schedule Column (13) Line (0399999)						$0
(19)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	LR045 Modco or Funds Withheld Reinsurance Ceded - Bonds C-1o Column (4) Line (9999999)						$0
(20)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	LR046 Modco or Funds Withheld Reinsurance Assumed - Bonds C-1o Column (4) Line (9999999)						$0
(21)	Total Long-Term and Short-Term Bonds (including MODCO/FundsWithheld and Credit for Hedging adjustments.)	Lines (17) - (18) - (19) + (20)	$0		$0			$0
(22)	Non-exempt U.S. Government Agency Bonds	Schedule D Part 1 Section 1 and Section 2, Schedule DA Part 1 and Schedule E Part 2, in part†	$0	X	0.00158		=	$0
(23)	Bonds Subject to Size Factor	Line (21) - Line (1) - Line (9) - Line (22)	$0		$0			$0
(24)	Number of Issuers	Company Records	$0		$0			
(25)	Size Factor for Bonds							2.4 Formula subjects to change once breakpoints & weights are finalized
(26)	Bonds Subject to Size Factor after the Size Factor is Applied	Line (23) x Line (25)						$0
(27)	Total Bonds	Line (22) + Line (26)						$0

† Only investments in-U.S. Government agency bonds previously reported in Lines (2.8) and (10.8), net of those included on Line (19), plus the portion of Line (20) attributable to ceding companies' Lines (2.8) and (10.8) should be included on Line (22). No other bonds should be included on this line. Exempt U.S. Government bonds shown on Lines (1) and (9) should not be included on Line (22). Refer to the bond section of the risk-based capital instructions for more clarification.

‡ **Exclude BSL CLO tranches with current tranche thickness less than or equal to 4% . Refer to Instruction for details.**

§ **Column (3) is calculated as Column (4) divided by Column (2).**

Denotes items that must be manually entered on the filing software.

CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL

Company Name

Cocode: 00000

CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL

		Source	(1) RBC Amount		Tax Factor		(2) RBC Tax Effect	
	ASSET RISKS							
	Bonds							
(001)	Long-term Bonds – NAIC 1	LR002 Bonds Column (4) Line (2.8) + LR018 Off-Balance Sheet Collateral Column (3) Line (2.8)	$0	X	0.1680	=	$0	
(002)	Long-term Bonds – NAIC 2	LR002 Bonds Column (4) Line (3.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (3.4)	$0	X	0.1680	=	$0	
(003)	Long-term Bonds – NAIC 3	LR002 Bonds Column (4) Line (4.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (4.4)	$0	X	0.1680	=	$0	
(004)	Long-term Bonds – NAIC 4	LR002 Bonds Column (4) Line (5.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (5.4)	$0	X	0.1680	=	$0	
(005)	Long-term Bonds – NAIC 5 & Others	LR002 Bonds Column (4) Line (6.4) & (7.2) + LR018 Off-Balance Sheet Collateral Column (3) Line (6.4)	$0	X	0.1680	=	$0	
(006)	Long-term Bonds – NAIC 6	LR002 Bonds Column (4) Line (7.1) + LR018 Off-Balance Sheet Collateral Column (3) Line (7)	$0	X	0.2100	=	$0	
(007)	Short-term Bonds – NAIC 1	LR002 Bonds Column (4) Line (10.8)	$0	X	0.1680	=	$0	
(008)	Short-term Bonds – NAIC 2	LR002 Bonds Column (4) Line (11.4)	$0	X	0.1680	=	$0	
(009)	Short-term Bonds – NAIC 3	LR002 Bonds Column (4) Line (12.4)	$0	X	0.1680	=	$0	
(010)	Short-term Bonds – NAIC 4	LR002 Bonds Column (4) Line (13.4)	$0	X	0.1680	=	$0	
(011)	Short-term Bonds – NAIC 5	LR002 Bonds Column (4) Line (14.4)	$0	X	0.1680	=	$0	
(012)	Short-term Bonds – NAIC 6	LR002 Bonds Column (4) Line (15)	$0	X	0.2100	=	$0	
(013)	Credit for Hedging - NAIC 1 Through 5 Bonds	LR014 Hedged Asset Bond Schedule Column (13) Line (0199999)	$0	X	0.1680	=	$0	†
(014)	Credit for Hedging - NAIC 6 Bonds	LR014 Hedged Asset Bond Schedule Column (13) Line (0299999)	$0	X	0.2100	=	$0	†
(015)	Bond Reduction - Reinsurance	LR002 Bonds Column (4) Line (19)	$0	X	0.2100	=	$0	†
(016)	Bond Increase - Reinsurance	LR002 Bonds Column (4) Line (20)	$0	X	0.2100	=	$0	
(017)	Non-Exempt NAIC 1 U.S. Government Agency	LR002 Bonds Column (4) Line (22)	$0	X	0.1680	=	$0	
(018)	Bonds Size Factor	LR002 Bonds Column (4) Line (26) - LR002 Bonds Column (4) Line (21)	$0	X	0.1680	=	$0	
	Mortgages							
	In Good Standing	Detail Eliminated to Conserve Space						
(019)	Residential Mortgages - Insured		$0	X	0.1575	=	$0	
(020)	Residential Mortgages - Other	LR004 Mortgages Column (6) Line (2)	$0	X	0.1575	=	$0	
(021)	Commercial Mortgages - Insured	LR004 Mortgages Column (6) Line (3)	$0	X	0.1575	=	$0	

Company Name | Cocode: 00000

CALCULATION OF AUTHORIZED CONTROL LEVEL RISK-BASED CAPITAL

		Source	(1) RBC Requirement
	Insurance Affiliates and Misc. Other Amounts (C-0)		
(1)	Directly Owned Health Insurance Companies or Health Entities	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (1)	$0
(2)	Directly Owned Property and Casualty Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (2)	$0
(3)	Directly Owned Life Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (3)	$0
(4)	Indirectly Owned Health Insurance Companies or Health Entities	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (4)	$0
(5)	Indirectly Owned Property and Casualty Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (5)	$0
(6)	Indirectly Owned Life Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (6)	$0
(7)	Affiliated Alien Insurers - Directly Owned	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Lines (9) + (10) + (11)	$0
(8)	Affiliated Alien Insurers - Indirectly Owned	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Lines (12) + (13) + (14)	$0
(9)	Off-Balance Sheet and Other Items	LR017 Off-Balance Sheet and Other Items Column (5) Line (34)	$0
(10)	Total (C-0) - Pre-Tax	Sum of Lines (1) through (9)	$0
(11)	(C-0) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (122)	$0
(12)	Net (C-0) - Post-Tax	Line (10) - Line (11)	$0
	Asset Risk – Unaffiliated Common Stock and Affiliated Non-Insurance Stock (C-1cs)		
(13)	Schedule D Unaffiliated Common Stock	LR005 Unaffiliated Common Stock Column (5) Line (21) + LR018 Off-Balance Sheet Collateral Column (3) Line (16)	$0
	Schedule BA Unaffiliated Common Stock/ Equity Interests and Affiliated Non-Insurance Stock (C1-cs), excluding		
(14)	Residual Tranches or Interests	LR008 Other Long-Term Assets Column (5) line (49) - (45)	$0
(15)	Total Residual Tranches or Interests	LR008 Other Long-Term Assets Column (5) line (45)	$0
(16)	Common Stock Concentration Factor	LR011 Common Stock Concentration Factor Column (6) Line (6)	$0
(17)	Holding Company in Excess of Indirect Subs	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (7)	$0
(18)	Affiliated Non-Insurers	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Lines (19) + (20) + (21)	$0
(19)	Total (C-1cs) - Pre-Tax	Sum of Lines (13) through (18)	$0
(20)	(C-1cs) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (134)	$0
(21)	Net (C-1cs) - Post-Tax	Line (19) - Line (20)	$0
	Asset Risk - All Other (C-1o)		
(22)	Bonds after Size Factor	LR002 Bonds Column (4) Line (27) + LR018 Off-Balance Sheet Collateral Column (3) Line (8)	$0
(23)	Mortgages (including past due and unpaid taxes)	LR004 Mortgages Column (6) Line (31)	$0
(24)	Unaffiliated Preferred Stock	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (10) + LR018 Off-Balance Sheet Collateral Column (3) Line (15)	$0
(25)	Investment Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (8)	$0
(26)	Investment in Upstream Affiliate (Parent)	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (15)	$0
(27)	Directly Owned Health Insurance Companies or Health Entities Not Subject to RBC	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (16)	$0
(28)	Directly Owned Property and Casualty Insurance Companies Not Subject to RBC	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (17)	$0
(29)	Directly Owned Life Insurance Companies Not Subject to RBC	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (18)	$0
(30)	Publicly Traded Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (22)	$0
(31)	Separate Accounts with Guarantees	LR006 Separate Accounts Column (3) Line (7)	$0
(32)	Synthetic GIC's (C-1o)	LR006 Separate Accounts Column (3) Line (8)	$0
(33)	Surplus in Non-Guaranteed Separate Accounts	LR006 Separate Accounts Column (3) Line (13)	$0
(34)	Real Estate (gross of encumbrances)	LR007 Real Estate Column (3) Line (13)	$0
(35)	Schedule BA Real Estate (gross of encumbrances)	LR007 Real Estate Column (3) Line (25)	$0
(36)	Other Long-Term Assets	LR008 Other Long-Term Assets Column (5) Line (57) + LR018 Off-Balance Sheet Collateral Column (3) Line (17) + Line (18)	$0

Capital Adequacy (E) Task Force
RBC Proposal Form

☐ Capital Adequacy (E) Task Force
☐ Catastrophe Risk (E) Subgroup
☐ Variable Annuities Capital. & Reserve (E/A) Subgroup
☐ Health RBC (E) Working Group
☐ P/C RBC (E) Working Group
☐ Economic Scenarios (E/A) Subgroup
☐ Life RBC (E) Working Group
☐ Longevity Risk (A/E) Subgroup
☒ RBC Investment Risk & Evaluation (E) Working Group

DATE: 11/11/2025

CONTACT PERSON: Maggie Chang
TELEPHONE: 816-783-8976
EMAIL ADDRESS: mchang@naic.org
ON BEHALF OF: Risk-Based Capital Investment Risk and Evaluation (E) Working Group
NAME: Philip Barlow, Chair
TITLE: Associate Commissioner of Insurance
AFFILIATION: District of Columbia
ADDRESS: 1050 First Street, NE Suite 801
Washington, DC 20002

FOR NAIC USE ONLY

Agenda Item # 2025-22-IRE MOD V.2
Year 2026 or later

DISPOSITION

ADOPTED:
☐ TASK FORCE (TF)
☐ WORKING GROUP (WG)
☐ SUBGROUP (SG)

EXPOSED:
☐ TASK FORCE (TF)
☒ WORKING GROUP (WG) 12/15/25 3/23/26
☐ SUBGROUP (SG)

REJECTED:
☐ TF ☐ WG ☐ SG

OTHER:
☐ DEFERRED TO
☐ REFERRED TO OTHER NAIC GROUP
☐ (SPECIFY)

IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

☐ Health RBC Blanks
☐ Health RBC Instructions
☐ Health RBC Formula
☐ Property/Casualty RBC Blanks
☐ Property/Casualty RBC Instructions
☐ Property/Casualty RBC Formula
☒ Life and Fraternal RBC Blanks
☒ Life and Fraternal RBC Instructions
☒ Life and Fraternal RBC Formula
☐ OTHER _____

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

This proposal incorporates a more granular reporting of Long-Term Bonds into two buckets: i) collateralized loan obligations (CLOs) and ii) all other Long-Term Bonds on the LR002 Bonds page. The expanded presentation of bonds is a result of the work of Risk-Based Capital Investment Risk and Evaluation (E) Working Group under Working Agenda item: Evaluate the appropriate RBC treatment of Asset-Backed Securities (ABS), including Collateralized Loan Obligations (CLO), collateralized fund obligations (CFOs), or other similar securities carrying similar types of tail risk (Complex Assets).

Please note that this proposal does not contemplate any changes to factors. Any changes of factors, if deemed necessary, will be dealt with by a separate proposal. Likewise, residual tranche structural changes, if any, are to be contemplated in separate proposal form.

The accompanying changes proposed to the instructions and blanks of the AVR – Default Component & Equity and Other Invested Asset Component tables are under purview of NAIC Blanks (E) Working Group. As such, the proposed changes to "Annual Statement Source" in LR002 are contingent on the adoption of such Blanks proposal.

Additional Staff Comments:

12/15/25 – exposed by Working Group (mkc)
3/23/26 [MOD V.1] – modified to incorporate tranche thickness as comparable attributes (mkc).
5/1/26 [MOD V.2]–modified to streamline LR002 page such that line (3.3), (4.1)-(4.3), (5.1)-(5.3) and (6.1)-(6.3) no longer use "in part"/ "company record" methodology. **Noted this structure was initially exposed on 12/15/2025.** This modified version continues to include line (7.2) to capture all CLOs designated NAIC 2.C. or below AND have tranche thickness below 4%. **Note that this structure was initially exposed on 3/23/26.** The only modification in this version is to reflect a flat thin tranche surcharge, if advocated by the Working Group. Since this is a structural proposal, the amount of flat surcharge is not within the scope of the proposal. **Ultimately, after making the aforementioned modification, there will be no change in substance as compared to MOD V.1.** All modifications from V.1 are highlighted in Aqua within the RBC Blanks. (mkc)

** **This section must be completed on all forms.** **Revised 2-2023**

BONDS

LR002

Basis of Factors

The bond factors are based on cash flow modeling using historically adjusted default rates for each bond category. For each of 2,000 trials, annual economic conditions were generated for the 10-year modeling period. Each bond of a 400-bond portfolio was annually tested for default (based on a "roll of the dice") where the default probability varies by designation category and that year's economic environment. When a default takes place, the actual loss considers the expected principal loss by category, the time until the sale actually occurs and the assumed tax consequences.

Actual surplus needs are reduced by incorporating anticipated annual contributions to the asset valuation reserve (AVR) as offsetting cash flow. Required surplus for a given trial is calculated as the amount of initial surplus funds needed so that the accumulation with interest of this initial amount and subsequent cash flows will not become negative at any point throughout the modeling period. The factors chosen for the proposed formula produce a level of surplus at least as much as needed in 92% of the trials by category and a 96% level for the entire bond portfolio.

The factor for NAIC 6 bonds recognizes that the book/adjusted carrying value of these bonds reflects a loss of value upon default by being marked to market.

Specific Instructions for Application of the Formula

Lines (1) through (7)

The book/adjusted carrying value of all bonds, excluding collateralized loan obligations (CLOs), Collateralized Bond Obligations (CBOs), and Collateralized Debt Obligations (CDOs) ~~and related fixed-income investments~~ should be reported in Column (1). The bonds are split into seven different risk classifications. For long-term bonds, these classifications are found on Lines A1 through A7 of the Asset Valuation Reserve Default Component~~, Page 30~~ of the annual statement.

The book/adjusted carrying value of all ~~collateralized loan obligations~~CLOs/CBOs/CDOs should be reported in Column (2). The ~~collateralized loan obligations~~ CLOs/CBOs/CDOs are split into six different risk classifications. These classifications are found on Lines A9.1 through A14 of the Asset Valuation Reserve Default Component~~, Page 30~~ of the annual statement.

Line (7.2)

Amounts reported in Column (2) line (7.2) ~~(3.3), (4.1), (4.2), (4.3), (5.1), (5.2), (5.3), (6.1), (6.2), (6.3)~~ should ~~exclude~~ include book/adjusted carrying value of Broadly Syndicated Bank Loans (BSL) CLO tranches (as defined below) with [current] tranche thickness less than or equal to [4%] (as defined below). ~~Such balances should be reported in Column (2) Line (7.2).~~

BSL are typically syndicated corporate loans distributed to a broad base of institutional investors and rated by credit rating agencies. BSL CLOs are primarily backed by syndicated corporate loans.

[Current] Tranche thickness is defined as the difference between the attachment point (AP) and the detachment point (DP) of a CLO tranche. AP refers to tranche's subordination percentage, and DP is the percentage of total par amount of the underlying portfolio including principal proceeds, that will completely write off the tranche. The current tranche thickness is to be measured using the most recent periodic report available, without being stale, as of the investment reporting date.

~~Report the Subtotal RBC Requirement in Column (4), Line (7.2) based on the following calculations:~~

~~NAIC Designation Categories of the thin tranche CLOs~~	~~Book/Adjusted Carrying Value~~		~~Factors~~		~~RBC Requirement~~
~~NAIC Designation Category 2.C~~	~~Company Record~~	~~X~~	~~TBD~~	~~=~~	
~~NAIC Designation Category 3.A~~	~~Company Record~~	~~X~~	~~TBD~~	~~=~~	

NAIC Designation Category 3.B	Company Record	X	TBD	=	
NAIC Designation Category 3.C	Company Record	X	TBD	=	
NAIC Designation Category 4.A	Company Record	X	TBD	=	
NAIC Designation Category 4.B	Company Record	X	TBD	=	
NAIC Designation Category 4.C	Company Record	X	TBD	=	
NAIC Designation Category 5.A	Company Record	X	TBD	=	
NAIC Designation Category 5.B	Company Record	X	TBD	=	
NAIC Designation Category 5.C	Company Record	X	TBD	=	
			Subtotal		

The total of Column (2) Lines (3.3), (4.1), (4.2), (4.3), (5.1), (5.2), (5.3) (6.1), (6.2) and (6.3) should agree to the total of AVR Default Component Column 1 Line A10.3, Line A11.1, Line A11.2, Line A11.3, Line A12.1, Line A12.2, Line A12.3, Line A13.1, Line A13.2, Line A13.3.

Line (8)
The total should equal long-term bonds and other fixed income instruments reported on Page 2, Column 3, Line 1 plus Schedule DL Part 1, Column 6, Line 2009999999 of the annual statement.

Lines (9) through (15)
The book/adjusted carrying value of all short-term and cash equivalent bonds and related fixed-income investments should be reported in Column (1). The bonds are split into seven different risk classifications. For short-term bonds, these classifications are found on Lines 18 C1 through 24 C7 of the Asset Valuation Reserve Default Component, Page 30 of the annual statement. For cash equivalent bonds, these classifications are found in Footnotes to Schedule E, Part 2.

Line (16)
The total should equal short-term bonds reported on Schedule DA, Part 1, Column 6 Line 0509999999 plus Schedule DL Part 1, Column 6, Line 9509999999 plus Schedule E, Part 2, Column 7, Line 0509999999.

Line (22)
Class 1 bonds (highest quality) issued by a U.S. government agency that are not backed by the full faith and credit of the U.S. government should be reported on this line. The loan-backed securities of the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC) would be examples of the securities reported on this line. Line (22) should not be larger than the sum of Lines (2) and (10). Exempt obligations should not be included on this line.

Line (24)
Bonds should be aggregated by issuer (the first six digits of the CUSIP number can be used). Exempt U.S. government bonds and bonds reported on Line (22) are not counted in determining the size factor. The RBC for those bonds will not be included in the base to which the size factor is applied. If this field is left blank, the maximum size factor adjustment of 2.40 will be used.

Line (25)
The size factor reflects the higher risk of a bond portfolio that contains relatively fewer bonds. The overall factor decreases as the portfolio size increases. The size factor is based on the weighted number of issuers. (The calculation shown below will not appear on the RBC filing software but will be calculated automatically.)

Line (25)	Source	(a) Number of Issuers (for bonds,	(b) Weighted Issuers (for bonds, excluding CLOs/CBOs/CDOs)

		excluding CLOs/CBOs/ CDOs)				
First 50	Company Records		X	2.40	=	
Next 50	Company Records		X	1.53	=	
Next 100	Company Records		X	0.85	=	
Next 300	Company Records		X	0.85	=	
Over 500	Company Records		X	0.82	=	
(i) Total Number of Issuers from Line (23) Column (1)						
(ii) Total Weighted Issuers (for bonds, excluding CLOs/CBOs/CDOs)						

	Source	(a) Number of Issuers (for CLOs/CBOs/ CDOs)				(b) Weighted Issuers (for CLOs/CBOs/CDOs)
First XX*	Company Records		X	TBD	=	
Next XX*	Company Records		X	TBD	=	
Next XXX*	Company Records		X	TBD	=	
Next XXX*	Company Records		X	TBD	=	
Over XXX*	Company Records		X	TBD	=	
(iii) Total Number of Issuers from Line (23) Column (2)						
(iv) Total Weighted Issuers (for CLOs/CBOs/CDOs)						
Size Factor = Total Weighted Issuers (ii)+(iv) Divided by Total Number of Issuers (i)+(iii)						

* Total number of breakpoints, as well as weights assigned to each, is subject to American Academy of Actuaries' recommendation and Working Group's review.

BONDS

Company Name

Cocode: 00000

BONDS

	SVO Bond Designation Category	Annual Statement Source	(1) Non-CLOs /CBOs/CDOs Book / Adjusted Carrying Value	Factor	(2) CLOs/CBOs/CDOs Book / Adjusted Carrying Value	Factor	(3) RBC Requirement
	Long Term Bonds						
(1)	Exempt Obligations	C(1) AVR Default Component Column 1 Line A1	$0	0.00000	XXX	XXX	$0
(2.1)	NAIC Designation Category 1.A	C(1) AVR Default Component Column 1 Line A2.1 C(2) AVR Default Component Column 1 Line A9.1	$0	0.00158	$0	TBD	$0
(2.2)	NAIC Designation Category 1.B	C(1) AVR Default Component Column 1 Line A2.2 C(2) AVR Default Component Column 1 Line A9.2	$0	0.00271	$0	TBD	$0
(2.3)	NAIC Designation Category 1.C	C(1) AVR Default Component Column 1 Line A2.3 C(2) AVR Default Component Column 1 Line A9.3	$0	0.00419	$0	TBD	$0
(2.4)	NAIC Designation Category 1.D	C(1) AVR Default Component Column 1 Line A2.4 C(2) AVR Default Component Column 1 Line A9.4	$0	0.00523	$0	TBD	$0
(2.5)	NAIC Designation Category 1.E	C(1) AVR Default Component Column 1 Line A2.5 C(2) AVR Default Component Column 1 Line A9.5	$0	0.00657	$0	TBD	$0
(2.6)	NAIC Designation Category 1.F	C(1) AVR Default Component Column 1 Line A2.6 C(2) AVR Default Component Column 1 Line A9.6	$0	0.00816	$0	TBD	$0
(2.7)	NAIC Designation Category 1.G	C(1) AVR Default Component Column 1 Line A2.7 C(2) AVR Default Component Column 1 Line A9.7	$0	0.01016	$0	TBD	$0
(2.8)	Subtotal NAIC 1	Sum of Lines (2.1) through (2.7)	$0		$0		$0
(3.1)	NAIC Designation Category 2.A	C(1) AVR Default Component Column 1 Line A3.1 C(2) AVR Default Component Column 1 Line A10.1	$0	0.01261	$0	TBD	$0
(3.2)	NAIC Designation Category 2.B	C(1) AVR Default Component Column 1 Line A3.2 C(2) AVR Default Component Column 1 Line A10.2	$0	0.01523	$0	TBD	$0
(3.3)	NAIC Designation Category 2.C	C(1) AVR Default Component Column 1 Line A3.3 C(2) AVR Default Component Column 1 Line A10.3	$0	0.02168	$0	TBD	$0
(3.4)	Subtotal NAIC 2	Sum of Lines (3.1) through (3.3)	$0		$0		$0
(4.1)	NAIC Designation Category 3.A	C(1) AVR Default Component Column 1 Line A4.1 C(2) AVR Default Component Column 1 Line A11.1	$0	0.03151	$0	TBD	$0
(4.2)	NAIC Designation Category 3.B	C(1) AVR Default Component Column 1 Line A4.2 C(2) AVR Default Component Column 1 Line A11.2	$0	0.04537	$0	TBD	$0
(4.3)	NAIC Designation Category 3.C	C(1) AVR Default Component Column 1 Line A4.3 C(2) AVR Default Component Column 1 Line A11.3	$0	0.06017	$0	TBD	$0
(4.4)	Subtotal NAIC 3	Sum of Lines (4.1) through (4.3)	$0		$0		$0
(5.1)	NAIC Designation Category 4.A	C(1) AVR Default Component Column 1 Line A5.1 C(2) AVR Default Component Column 1 Line A12.1	$0	0.07386	$0	TBD	$0
(5.2)	NAIC Designation Category 4.B	C(1) AVR Default Component Column 1 Line A5.2 C(2) AVR Default Component Column 1 Line A12.2	$0	0.09535	$0	TBD	$0
(5.3)	NAIC Designation Category 4.C	C(1) AVR Default Component Column 1 Line A5.3 C(2) AVR Default Component Column 1 Line A12.3	$0	0.12428	$0	TBD	$0
(5.4)	Subtotal NAIC 4	Sum of Lines (5.1) through (5.3)	$0		$0		$0
(6.1)	NAIC Designation Category 5.A	C(1) AVR Default Component Column 1 Line A6.1 C(2) AVR Default Component Column 1 Line A13.1	$0	0.16942	$0	TBD	$0
(6.2)	NAIC Designation Category 5.B	C(1) AVR Default Component Column 1 Line A6.2 C(2) AVR Default Component Column 1 Line A13.2	$0	0.23798	$0	TBD	$0
(6.3)	NAIC Designation Category 5.C	C(1) AVR Default Component Column 1 Line A6.3 C(2) AVR Default Component Column 1 Line A13.3	$0	0.30000	$0	TBD	$0
(6.4)	Subtotal NAIC 5	Sum of Lines (6.1) through (6.3)	$0		$0		$0
(7.1)	NAIC 6	C(1) AVR Default Component Column 1 Line A7 C(2) AVR Default Component Column 1 Line A14	$0	0.30000	$0	TBD	$0
(7.2)	CLO in NAIC Designation Category 2.C or below, with thin tranches (See Instruction)	C(2) AVR Default Component Column 1 Line A10.3, in part + Line A11.1, in part + Line A11.2, in part + Line A11.3, in part + Line A12.1, in part + Line A12.2, in part + Line A12.3, in part + Line A13.1, in part + Line A13.2, in part + Line A13.3, in part	XXX	XXX		TBD	
(8)	Total Long-Term Bonds	Sum of Lines (1) + (2.8) + (3.4) + (4.4) + (5.4) + (6.4) + (7.1) + (7.2)	$0		$0		$0
	(Column (1) + Column (2) should equal Page 2 Column 3 Line 1 + Schedule DL Part 1 Column 6 Line 2009999999)						
	Short Term and Cash Equivalent Bonds						
(9)	Exempt Obligations	AVR Default Component Column 1 Line C1 + Schedule E, Part 2, Column 7, Line 0019999999	$0	0.000	XXX	XXX	$0
(10.1)	NAIC Designation Category 1.A	AVR Default Component Column 1 Line C2.1 + Schedule E, Part 2, Footnote L000001A, Amount 1 - Schedule E, Part 2, Column 7, Line 0019999999	$0	0.00158	XXX	XXX	$0
(10.2)	NAIC Designation Category 1.B	AVR Default Component Column 1 Line C2.2 + Schedule E, Part 2, Footnote L000001A, Amount 2	$0	0.00271	XXX	XXX	$0
(10.3)	NAIC Designation Category 1.C	AVR Default Component Column 1 Line C2.3 + Schedule E, Part 2, Footnote L000001A, Amount 3	$0	0.00419	XXX	XXX	$0
(10.4)	NAIC Designation Category 1.D	AVR Default Component Column 1 Line C2.4 + Schedule E, Part 2, Footnote L000001A, Amount 4	$0	0.00523	XXX	XXX	$0
(10.5)	NAIC Designation Category 1.E	AVR Default Component Column 1 Line C2.5 + Schedule E, Part 2, Footnote L000001A, Amount 5	$0	0.00657	XXX	XXX	$0
(10.6)	NAIC Designation Category 1.F	AVR Default Component Column 1 Line C2.6 + Schedule E, Part 2, Footnote L000001A, Amount 6	$0	0.00816	XXX	XXX	$0
(10.7)	NAIC Designation Category 1.G	AVR Default Component Column 1 Line C2.7 + Schedule E, Part 2, Footnote L000001A, Amount 7	$0	0.01016	XXX	XXX	$0

=ROUND(MAX(0,D10)*F10 + MAX(0,G10)*110,0)

(10.8)	Subtotal NAIC 1	Sum of Lines (10.1) through (10.7)	$0						$0
		AVR Default Component Column 1 Line **C3**.1 +							
(11.1)	NAIC Designation Category 2.A	Schedule E, Part 2, Footnote L000001B, Amount 1	$0	X	0.01261	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C3**.2 +							
(11.2)	NAIC Designation Category 2.B	Schedule E, Part 2, Footnote L000001B, Amount 2	$0	X	0.01523	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C3**.3 +							
(11.3)	NAIC Designation Category 2.C	Schedule E, Part 2, Footnote L000001B, Amount 3	$0	X	0.02168	XXX	XXX	=	$0
(11.4)	Subtotal NAIC 2	Sum of Lines (11.1) through (11.3)	$0						$0
		AVR Default Component Column 1 Line **C4**.1 +							
(12.1)	NAIC Designation Category 3.A	Schedule E, Part 2, Footnote L000001C, Amount 1	$0	X	0.03151	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C4**.2 +							
(12.2)	NAIC Designation Category 3.B	Schedule E, Part 2, Footnote L000001C, Amount 2	$0	X	0.04537	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C4**.3 +							
(12.3)	NAIC Designation Category 3.C	Schedule E, Part 2, Footnote L000001C, Amount 3	$0	X	0.06017	XXX	XXX	=	$0
(12.4)	Subtotal NAIC 3	Sum of Lines (12.1) through (12.3)	$0						$0
		AVR Default Component Column 1 Line **C5**.1 +							
(13.1)	NAIC Designation Category 4.A	Schedule E, Part 2, Footnote L000001D, Amount 1	$0	X	0.07386	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C5**.2 +							
(13.2)	NAIC Designation Category 4.B	Schedule E, Part 2, Footnote L000001D, Amount 2	$0	X	0.09535	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C5**.3 +							
(13.3)	NAIC Designation Category 4.C	Schedule E, Part 2, Footnote L000001D, Amount 3	$0	X	0.12428	XXX	XXX	=	$0
(13.4)	Subtotal NAIC 4	Sum of Lines (13.1) through (13.3)	$0						$0
		AVR Default Component Column 1 Line **C6**.1 +							
(14.1)	NAIC Designation Category 5.A	Schedule E, Part 2, Footnote L000001E, Amount 1	$0	X	0.16942	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C6**.2 +							
(14.2)	NAIC Designation Category 5.B	Schedule E, Part 2, Footnote L000001E, Amount 2	$0	X	0.23798	XXX	XXX	=	$0
		AVR Default Component Column 1 Line **C6**.3 +							
(14.3)	NAIC Designation Category 5.C	Schedule E, Part 2, Footnote L000001E, Amount 3	$0	X	0.30000	XXX	XXX	=	$0
(14.4)	Subtotal NAIC 5	Sum of Lines (14.1) through (14.3)	$0						$0
		AVR Default Component Column 1 Line **C7**							
(15)	NAIC 6	Schedule E, Part 2, Footnote L000001F, Amount 1	$0	X	0.300	XXX	XXX	=	$0
(16)	Total Short-Term and Cash Equivalent Bonds	Sum of Lines (9) + (10.8) + (11.4) + (12.4) + (13.4) + (14.4) + (15)	$0						$0
	(Column (1) should equal Schedule DA Part 1 Column 6 Line 0509999999 + Schedule DL Part 1 Column 6 Line 9509999999 + Schedule E Part 2 Column 7 Line 0509999999)								
(17)	Total Long-Term and Short-Term Bonds (pre-MODCO/Funds Withheld)	Line (8) + (16)	$0			$0			$0
(18)	Credit for Hedging	LR014 Hedged Asset Bond Schedule Column (13) Line (0399999)							$0
(19)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	LR045 Modco or Funds Withheld Reinsurance Ceded - Bonds C-1o Column (4) Line (9999999)							$0
(20)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	LR046 Modco or Funds Withheld Reinsurance Assumed - Bonds C-1o Column (4) Line (9999999)							$0
(21)	Total Long-Term and Short-Term Bonds (including MODCO/FundsWithheld and Credit for Hedging adjustments.)	Lines (17) - (18) - (19) + (20)	$0			$0			$0
(22)	Non-exempt U.S. Government Agency Bonds	Schedule D Part 1 Section 1 and Section 2, Schedule DA Part 1 and Schedule E Part 2, in part†	$0	X	0.00158			=	$0
(23)	Bonds Subject to Size Factor	Line (21) - Line (1) - Line (9) - Line (22)	$0			$0			$0
(24)	Number of Issuers	Company Records	$0			$0			
(25)	Size Factor for Bonds								2.4 **Formula subjects to change once breakpoints & weights are finalized**
(26)	Bonds Subject to Size Factor after the Size Factor is Applied	Line (23) x Line (25)							$0
(27)	Total Bonds	Line (22) + Line (26)							$0

† Only investments in-U.S. Government agency bonds previously reported in Lines (2.8) and (10.8), net of those included on Line (19), plus the portion of Line (20) attributable to ceding companies' Lines (2.8) and (10.8) should be included on Line (22). No other bonds should be included on this line. Exempt U.S. Government bonds shown on Lines (1) and (9) should not be included on Line (22). Refer to the bond section of the risk-based capital instructions for more clarification.

Denotes items that must be manually entered on the filing software.

CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL

Company Name

Cocode: 00000

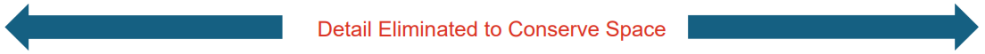
CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL

		Source	(1) RBC Amount		Tax Factor		(2) RBC Tax Effect	
	ASSET RISKS							
	Bonds							
(001)	Long-term Bonds – NAIC 1	LR002 Bonds Column (4) Line (2.8) + LR018 Off-Balance Sheet Collateral Column (3) Line (2.8)	$0	X	0.1680	=	$0	
(002)	Long-term Bonds – NAIC 2	LR002 Bonds Column (4) Line (3.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (3.4)	$0	X	0.1680	=	$0	
(003)	Long-term Bonds – NAIC 3	LR002 Bonds Column (4) Line (4.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (4.4)	$0	X	0.1680	=	$0	
(004)	Long-term Bonds – NAIC 4	LR002 Bonds Column (4) Line (5.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (5.4)	$0	X	0.1680	=	$0	
(005)	Long-term Bonds – NAIC 5 **& Others**	LR002 Bonds Column (4) Line (6.4) & (7.2) + LR018 Off-Balance Sheet Collateral Column (3) Line (6.4)	$0	X	0.1680	=	$0	
(006)	Long-term Bonds – NAIC 6	LR002 Bonds Column (4) Line (7.1) + LR018 Off-Balance Sheet Collateral Column (3) Line (7)	$0	X	0.2100	=	$0	
(007)	Short-term Bonds – NAIC 1	LR002 Bonds Column (4) Line (10.8)	$0	X	0.1680	=	$0	
(008)	Short-term Bonds – NAIC 2	LR002 Bonds Column (4) Line (11.4)	$0	X	0.1680	=	$0	
(009)	Short-term Bonds – NAIC 3	LR002 Bonds Column (4) Line (12.4)	$0	X	0.1680	=	$0	
(010)	Short-term Bonds – NAIC 4	LR002 Bonds Column (4) Line (13.4)	$0	X	0.1680	=	$0	
(011)	Short-term Bonds – NAIC 5	LR002 Bonds Column (4) Line (14.4)	$0	X	0.1680	=	$0	
(012)	Short-term Bonds – NAIC 6	LR002 Bonds Column (4) Line (15)	$0	X	0.2100	=	$0	
(013)	Credit for Hedging - NAIC 1 Through 5 Bonds	LR014 Hedged Asset Bond Schedule Column (13) Line (0199999)	$0	X	0.1680	=	$0	†
(014)	Credit for Hedging - NAIC 6 Bonds	LR014 Hedged Asset Bond Schedule Column (13) Line (0299999)	$0	X	0.2100	=	$0	†
(015)	Bond Reduction - Reinsurance	LR002 Bonds Column (4) Line (19)	$0	X	0.2100	=	$0	†
(016)	Bond Increase - Reinsurance	LR002 Bonds Column (4) Line (20)	$0	X	0.2100	=	$0	
(017)	Non-Exempt NAIC 1 U.S. Government Agency	LR002 Bonds Column (4) Line (22)	$0	X	0.1680	=	$0	
(018)	Bonds Size Factor	LR002 Bonds Column (4) Line (26) - LR002 Bonds Column (4) Line (21)	$0	X	0.1680	=	$0	
	Mortgages							
	In Good Standing	Detail Eliminated to Conserve Space						
(019)	Residential Mortgages - Insured		$0	X	0.1575	=	$0	
(020)	Residential Mortgages - Other	LR004 Mortgages Column (6) Line (2)	$0	X	0.1575	=	$0	
(021)	Commercial Mortgages - Insured	LR004 Mortgages Column (6) Line (3)	$0	X	0.1575	=	$0	

Company Name | Cocode: 00000

CALCULATION OF AUTHORIZED CONTROL LEVEL RISK-BASED CAPITAL

		Source	(1) RBC Requirement
	Insurance Affiliates and Misc. Other Amounts (C-0)		
(1)	Directly Owned Health Insurance Companies or Health Entities	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (1)	$0
(2)	Directly Owned Property and Casualty Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (2)	$0
(3)	Directly Owned Life Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (3)	$0
(4)	Indirectly Owned Health Insurance Companies or Health Entities	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (4)	$0
(5)	Indirectly Owned Property and Casualty Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (5)	$0
(6)	Indirectly Owned Life Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (6)	$0
(7)	Affiliated Alien Insurers - Directly Owned	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Lines (9) + (10) + (11)	$0
(8)	Affiliated Alien Insurers - Indirectly Owned	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Lines (12) + (13) + (14)	$0
(9)	Off-Balance Sheet and Other Items	LR017 Off-Balance Sheet and Other Items Column (5) Line (34)	$0
(10)	Total (C-0) - Pre-Tax	Sum of Lines (1) through (9)	$0
(11)	(C-0) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (122)	$0
(12)	Net (C-0) - Post-Tax	Line (10) - Line (11)	$0
	Asset Risk – Unaffiliated Common Stock and Affiliated Non-Insurance Stock (C-1cs)		
(13)	Schedule D Unaffiliated Common Stock	LR005 Unaffiliated Common Stock Column (5) Line (21) + LR018 Off-Balance Sheet Collateral Column (3) Line (16)	$0
	Schedule BA Unaffiliated Common Stock/ Equity Interests and Affiliated Non-Insurance Stock (C1-cs), excluding		
(14)	Residual Tranches or Interests	LR008 Other Long-Term Assets Column (5) line (49) - (45)	$0
(15)	Total Residual Tranches or Interests	LR008 Other Long-Term Assets Column (5) line (45)	$0
(16)	Common Stock Concentration Factor	LR011 Common Stock Concentration Factor Column (6) Line (6)	$0
(17)	Holding Company in Excess of Indirect Subs	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (7)	$0
(18)	Affiliated Non-Insurers	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Lines (19) + (20) + (21)	$0
(19)	Total (C-1cs) - Pre-Tax	Sum of Lines (13) through (18)	$0
(20)	(C-1cs) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (134)	$0
(21)	Net (C-1cs) - Post-Tax	Line (19) - Line (20)	$0
	Asset Risk - All Other (C-1o)		
(22)	Bonds after Size Factor	LR002 Bonds Column (4) Line (27) + LR018 Off-Balance Sheet Collateral Column (3) Line (8)	$0
(23)	Mortgages (including past due and unpaid taxes)	LR004 Mortgages Column (6) Line (31)	$0
(24)	Unaffiliated Preferred Stock	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (10) + LR018 Off-Balance Sheet Collateral Column (3) Line (15)	$0
(25)	Investment Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (8)	$0
(26)	Investment in Upstream Affiliate (Parent)	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (15)	$0
(27)	Directly Owned Health Insurance Companies or Health Entities Not Subject to RBC	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (16)	$0
(28)	Directly Owned Property and Casualty Insurance Companies Not Subject to RBC	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (17)	$0
(29)	Directly Owned Life Insurance Companies Not Subject to RBC	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (18)	$0
(30)	Publicly Traded Insurance Affiliates	LR042 Summary for Affiliated/Subsidiary Stocks Column (4) Line (22)	$0
(31)	Separate Accounts with Guarantees	LR006 Separate Accounts Column (3) Line (7)	$0
(32)	Synthetic GIC's (C-1o)	LR006 Separate Accounts Column (3) Line (8)	$0
(33)	Surplus in Non-Guaranteed Separate Accounts		$0
(34)	Real Estate (gross of encumbrances)		$0
(35)	Schedule BA Real Estate (gross of encumbrances)		$0
(36)	Other Long-Term Assets		$0



April 17, 2026

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, Missouri 64106

Re: Comment Letter on Proposal 2025-22-IRE

Dear Members of the Working Group:

LSTA, Inc. ("LSTA")[1] and the Alternative Credit Council ("ACC")[2]appreciate the opportunity to submit comments on Proposal 2025-22-IRE (the "Proposal"), which would create a separate reporting column for collateralized loan obligations ("CLOs"), collateralized bond obligations ("CBOs"), and collateralized debt obligations ("CDOs") on the LR002 Bonds page of the Life and Fraternal RBC filing. The Proposal also introduces, as modified on March 23, 2026, a distinct treatment for broadly syndicated loan ("BSL") CLO tranches with thin tranche thickness (≤4%).

We are generally supportive of the Working Group's objective of enhancing the granularity of CLO reporting within the RBC framework. However, we urge the Working Group to adopt a critical clarification that will significantly improve the precision of the Proposal: the separate CLO reporting column and associated thin-tranche treatment under proposed Line (7.2) should

[1] LSTA, Inc. is a not-for-profit trade association that has been the leading advocate for the U.S. corporate lending market since 1995. LSTA's mission is to promote a fair, orderly, efficient and growing corporate loan market while advancing and balancing the interests of all market participants. Our 600+ member institutions include commercial banks (ranging in size from GSIBs to community banks), investment banks, broker-dealers, asset managers, and institutional lenders, as well as law firms and market service providers. LSTA undertakes a wide variety of activities in pursuit of its mission, including advocacy, thought leadership, data analytics, education, and standardization of documents, practices and operations. LSTA's offerings are designed for the voluntary use by our members and benefit from LSTA's ability to build a consensus of diverse stakeholders. For more information, visit www.lsta.org.

[2] The Alternative Credit Council (ACC) is a global body that represents asset management firms in the private credit and direct lending space. It currently represents 250 members that manage over US$2 trillion of private credit assets. The ACC is an affiliate of AIMA and is governed by its own board, which ultimately reports to the AIMA Council. ACC members provide an important source of funding to the economy. They provide finance to mid-market corporates, SMEs, commercial and residential real estate developments, infrastructure, and the trade and receivables business. The ACC's core objectives are to provide guidance on policy and regulatory matters, support wider advocacy and educational efforts and generate industry research to strengthen the sector's sustainability and wider economic and financial benefits. Alternative credit, private debt or direct lending funds have grown substantially in recent years and are becoming a key segment of the asset management industry. The ACC seeks to explain the value of private credit by highlighting the sector's wider economic and financial stability benefits.

apply exclusively to broadly syndicated loan ("BSL") CLOs. Middle market ("MM") CLOs – which securitize pools of directly originated, senior secured loans to middle market companies – should remain subject to the existing corporate bond C-1 RBC factors, pending the Academy's development of separately calibrated C-1 factors for MM CLOs. Due to the fundamentally different risk profiles, structural characteristics, and underlying collateral pools of BSL CLOs and MM CLOs, C-1 factors calibrated for BSL CLO data are inappropriate for MM CLOs.

I. Background and Scope of the Proposal

The Proposal, as modified, would bifurcate Long-Term Bond reporting on LR002 into: (i) a Column (1) for all bonds excluding CLOs/CBOs/CDOs, subject to existing NAIC designation-based factors; and (ii) a Column (2) for CLOs/CBOs/CDOs, with factors designated as "TBD." The modified Proposal further singles out BSL CLO tranches with current tranche thickness at or below 4% for separate treatment under Line (7.2), with higher RBC factors to be determined.

As currently drafted, the Proposal does not distinguish between BSL CLOs and MM CLOs other than for tranche thickness purposes. We are concerned about the treatment of all CLO types within a single column and imposing capital requirements on MM CLOs that are calibrated to the risk characteristics of BSL CLOs, which differ materially in their structure, collateral quality, and obligor concentration. Absent a separate column for MM CLOs, applying the new BSL CLO factors would be updating the charges for MM CLOs prior to any data-driven analysis, which would violate several of the recently approved Principles of RBC requirements, including Principle 4 (equal capital for equal risk), Principle 5 (objectivity), Principle 6 (accuracy), Principle 9 (transparency), and Principle 10 (data-driven and evidence-based).

II. MM CLOs Are Distinct from BSL CLOs

The Working Group's focus on tail risk associated with complex assets is well-founded. However, the tail risk characteristics of CLOs vary substantially depending on the nature of the underlying collateral. BSL CLOs and MM CLOs are distinct instruments and should not be treated as fungible for RBC purposes. Key distinctions include:

- **Underlying Collateral.** BSL CLOs are backed by broadly syndicated loans made to large, rated corporate borrowers and typically have public ratings. These loans have active secondary market pricing and relatively high liquidity. MM CLOs are collateralized by privately originated, bilateral or club loans, typically to smaller borrowers. With a single or small group of creditors and often a relationship with a private equity sponsor, adjustments to loan terms are possible. Key lenders directly negotiate the loan without the intermediation of a bank and develop a bespoke loan contract that forms the basis of a long-term relationship with the borrower, allowing for greater management control during the life of the loan. These distinctions are material to overall performance, recovery rates, and portfolio volatility.
- **Tranche Thickness and Structural Protections.** MM CLOs are structured with thicker tranches and greater subordination levels compared to BSL CLO tranches. These protections reflect market solutions to the distinct risk characteristics of MM collateral. MM CLO collateral comprises loans to borrowers across three segments: $10-30M EBITDA (lower middle market), $20-100M EBITDA (core middle market), and greater

than $100M EBITDA (upper middle market). With substantially fewer borrowers than BSL CLOs, MM CLOs experience higher concentration (diversity scores of 47). MM CLO collateral also features substantially tighter covenant protection, with approximately 12% covenant-lite loans on average versus approximately 90% in BSL CLOs. BSL CLO collateral, by contrast, focuses on larger borrowers with greater than $100M EBITDA. The pool includes a larger number of borrowers, enabling greater diversification (diversity scores of 86) and lower concentrations of collateral with greater credit risk exposure (approximately 27% B-rated or below).[3]

- **Market Comparables and Factor Calibration.** This Proposal is appropriately calibrated to BSL CLOs using Academy models developed with robust empirical data. Given the differences in MM CLOs noted above, a similar analysis is needed to properly calibrate C-1 factors that reflect their distinct collateral and structural characteristics. LSTA and ACC are concurrently requesting that the Academy develop a dedicated MM CLO model for independent calibration and year-end 2027 implementation. Pending completion of that modeling workstream, MM CLOs should continue to receive corporate bond C-1 factors.
- **Insurance Company Investment Objectives.** Life insurance companies invest in MM CLOs as part of diversified credit strategies designed to enhance portfolio yield while maintaining credit quality. Subjecting these instruments to BSL CLO-specific RBC treatment would contradict the RBC framework's core objective of the equal capital for equal risk principle.

III. Proposed Clarification: Limit the Separate CLO Column to BSL CLOs

We respectfully request that the Working Group adopt the following clarification to the Proposal:

- **Column (2) of LR002 (CLO/CBO/CDO Column).** The book/adjusted carrying value reported in Column (2) should be limited to BSL CLOs, CBOs, and CDOs. MM CLOs should continue to be reported in Column (1) and remain subject to the existing corporate bond C-1 RBC factors applicable to their NAIC designation category.
- **Definitional Clarity in Instructions.** The LR002 instructions should be amended to include a clear definition of BSL CLO for purposes of the separate column, consistent with the definition of BSL and BSL CLO set forth in the Proposal's description of Line (7.2).

IV. Additional Comments

Beyond our primary recommendation, we request the following clarifications:

- **Size Factor Treatment for CLOs.** The Proposal modifies the Line (25) size factor calculation to include separate breakpoints and weighting factors for CLOs/CBOs/CDOs. We note that the CLO-specific breakpoints are designated as "XX" and "XXX" pending the Academy's recommendation. We request that the Working Group clarify that MM

[3] Bank of America Securities.

CLOs, if they are to be retained in Column (1) as we recommend, will continue to be treated as part of the non-CLO bond portfolio for size factor purposes.

- **Coordination with Blanks Proposal.** The Proposal notes that the proposed changes to "Annual Statement Source" in LR002 are contingent on the adoption of a related NAIC Blanks (E) Working Group proposal affecting the AVR Default Component and related schedules. We encourage the Working Group to ensure that the CLO-scope clarification we are requesting is carried through consistently to any related Blanks proposal, so that the AVR reporting treatment for MM CLOs likewise remains consistent with their continued inclusion in Column (1).

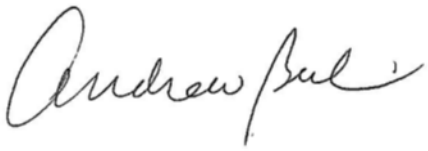
V. Conclusion

LSTA and ACC support the Working Group's efforts to enhance CLO-related RBC reporting granularity and precision. Extending the separate CLO column and thin-tranche treatment to MM CLOs would be inconsistent with principles underlying the RBC framework and impose unjustified capital burdens on instruments that do not share the structural characteristics motivating the Proposal and where the work has not been done. We respectfully urge the Working Group to clarify that the separate CLO reporting column and thin-tranche treatment apply exclusively to BSL CLOs, and that MM CLOs remain subject to existing corporate bond C-1 RBC factors.

We would welcome the opportunity to discuss these comments further with the Working Group staff and members.

Sincerely,

LSTA, INC.



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ALTERNATIVE INVESTMENT MANAGEMENT ASSOCIATION

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Asset Management Policy, Americas
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Washington, DC 20005
jengelhard@aima.org

April 17, 2026

Mr. Philip Barlow, Chair
Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1000
Kansas City, MO 64106-2197

Re: 2025-22-IRE CLO Modified RBC Structure with Tranche Thickness

Submitted Electronically

Dear Chair Barlow:

The American Council of Life Insurers (ACLI) appreciates the opportunity to comment on the modified exposed item from the Risk-Based Capital Investment Risk and Evaluation (E) Working Group (RBCIREWG) on more granular reporting of Collateralized Loan Obligations (CLO) on the LR002 – Bonds page of the Life and Fraternal RBC Blank and related Instructions. The modification includes incorporating tranche thickness as comparable attributes.

ACLI submitted a comment letter on April 16th regarding the American Academy of Actuaries' March 2nd presentation on CLO C-1 factors. Our recommendation for year-end 2026 is to adopt an Academy-aligned reporting structure, while maintaining existing bond C-1 factors for capital purposes.

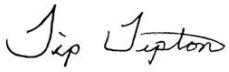
In alignment with ACLI's recommendation, ACLI intends to suggest the Blanks (E) Working Group (BWG) exposure 2025-27BWG will provide updated disclosure information to show CLOs by NAIC Designation Category as reported in Schedule D–Part 1–Section 2 – *Asset-Backed Securities* by CLO type (e.g., Broadly Syndicated Loans (BSL), Middle Market Loans (MML), Other). The bifurcated CLO data will be used to create enhancements to the risk-based capital formula for CLOs in future years.

ACLI is recommending that all proposed changes associated with the bifurcation of CLOs and tranche thickness within 2025-22-IRE be withdrawn except for the changes to support modifications to the Annual Statement Source column on page LR002 – Bonds to reflect the renumbering of the Line Numbers column in the Asset Valuation Reserve pages.

We welcome the opportunity to discuss our comments further and to support RBCIREWG's continued work in this area.

American Council of Life Insurers | 300 New Jersey Avenue, NW, 10th Floor | Washington, DC 20001

Sincerely,



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cc: Thomas Reedy, Vice Chair – RBCIREWG
Maggie Change, NAIC

STRUCTURED FINANCE ASSOCIATION

April 17, 2026

Mr. Philip Barlow, Chair
Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, Missouri 64106

Re: 2025-22-IRE MOD Proposal

Dear Chair Barlow:

The Structured Finance Association (the "SFA") appreciates the opportunity that the Risk-Based Capital Investment Risk and Evaluation (E) Working Group (the "RBC IRE WG") has provided for comments on 2025-22-IRE MOD, the structural change proposal to incorporate a more granular reporting of Long-Term Bonds on the LR002 Bonds page of the Life and Fraternal RBC Blanks and Instructions by creating separate buckets for (i) collateralized loan obligations ("CLOs") and (ii) all other Long-Term Bonds.[1]

I. For Year-End 2026, Distinct Reporting for CLO Debt Should Be Limited to Broadly Syndicated Loan ("BSL") CLO Notes

In our April 16 comment letter on the modeled C-1 factors for CLO debt tranches proposed by the American Academy of Actuaries (the "Academy"), the SFA requested that for year-end 2026, the C-1 factors that the Academy has recommended be applied only to BSL CLO debt tranches. The reason is that the data analysis and modeling process used by the Academy to generate those C-1 factors were based exclusively on BSL CLO notes and did not include any middle market ("MM") CLO notes.

Consistent with that request, the SFA recommends that the separate CLO bucket that is proposed to be created by 2025-22-IRE MOD should be limited to BSL CLOs, and that all other types of CLOs should remain in the "all other Long-Term Bonds" bucket. We note that the LSTA, Inc. ("LSTA") and the Alternative Credit Council (the "ACC") are also making the same request in their comment letter on this proposal.

[1] The SFA is a consensus-driven trade association with over 370 institutional members representing the entire value chain of the securitization market. By facilitating the responsible issuance of and investment in loans and securities, our members help to foster a market that provides trillions of dollars of capital to consumers and businesses in communities across the country. SFA members include issuers, investors (including insurance companies), broker-dealers, rating agencies, data analytics firms, law firms, servicers, trustees and accounting firms.

To implement this approach, we recommend that all references in the proposed LR002 blanks and instructions to CLOs (or to CLOs/CBOs/CDOs) be revised to instead reference just BSL CLOs.[2]

II. For Year-End 2026, Consider Removing Reporting Tied to a Separate Tranche Thickness Attribute

The Academy has presented the RBC IRE WG with two options for the determination of C-1 RBC factors for CLO debt tranches. Option 1 would determine the RBC factor solely by reference to the tranche's rating, whereas Option 2 would first look to the tranche's rating and would then apply a higher RBC factor to tranches rated Baa3 (or the applicable equivalent) or below in cases where the tranche thickness is 4 percent or less.

In our April 16 comment letter, we expressed concerns about Option 2 and suggested that the RBC IRE WG consider choosing Option 1 for year end 2026. If the RBC IRE WG decides to implement Option 1 prior to finalizing the structural change proposal, then it can delete the provisions in the LR002 blank and instructions that would use Line (7.2) to break out tranches rated Baa3 (or the applicable equivalent) or below in cases where the tranche thickness is 4 percent or less. Alternatively, if the RBC IRE WG decides to implement Option 1 after finalizing the structural change proposal, then it can simply insert the same factors for Line (7.2) as are used in Lines (3.3), (4.1), (4.2), (4.3), (5.1), (5.2), (5.3), (6.1), (6.2) and (6.3).

Conclusion

The SFA appreciates the deliberative process that the RBC IRE WG has undertaken with respect to RBC treatment of CLO notes. Importantly, we appreciate the process not only with respect to CLO notes, but as a prototype for an approach to asset-backed securities issued by other types of structured finance vehicles.

As we stated in our April 16 comment letter, the SFA respectfully requests that the RBC IRE WG continue to employ an iterative, data-driven approach. Consistent with that principle, we urge the RBC IRE WG to take a phased approach to the application of new RBC factors to CLO notes. We support the application for year-end 2026 of the Academy's proposed new RBC factors to the BSL CLO notes that it has modeled but urge the RBC IRE WG to defer a change to RBC factors for MM CLO notes until the Academy has time to model such notes and develop factors that are calibrated to that asset class.

Accordingly, we request that all revisions to the LR002 page in respect of CLO notes be limited to BSL CLO notes. In addition, to the extent that the NAIC decides to apply a separate tranche thickness attribute to CLO notes rated Baa3 (or the applicable equivalent) or below, we

[2] So far as we can determine, CBOs (collateralized bond obligations) and CDOs (collateralized debt obligations) were not included in the Academy's modeling process, and therefore it does not seem appropriate to us to make them subject to the factors that the Academy developed for BSL CLOs.

agree with the fact that the proposed LR002 revisions for Line (7.2) would apply that attribute only to BSL CLO notes rated Baa3 (or the applicable equivalent) or below.

The SFA would welcome the opportunity to discuss our comments with the RBC IRE WG, the NAIC staff, and/or the Academy. This could include meetings with SFA members active in different roles in the CLO market and in the structured finance universe more broadly. Again, we are focused not only on the NAIC process for determining new RBC factors for CLO notes but also on any future NAIC development of adjustments to RBC treatment of other structured finance investments.

Sincerely,

Dallin Merrill

Head of Policy
Structured Finance Association

Attachment 6 - PENDING

Hear an Update from the American Academy of Actuaries (Academy) on the Collateralized Loan Obligation (CLO) Risk-Based Capital (RBC) Project: Portfolio Adjustment Factors

Capital Adequacy (E) Task Force

RBC Proposal Form

☐ Capital Adequacy (E) Task Force
☐ Catastrophe Risk (E) Subgroup
☐ Variable Annuities Capital. & Reserve (E/A) Subgroup
☐ Health RBC (E) Working Group
☐ P/C RBC (E) Working Group
☐ Economic Scenarios (E/A) Subgroup
☐ Life RBC (E) Working Group
☐ Longevity Risk (A/E) Subgroup
☒ RBC Investment Risk & Evaluation (E) Working Group

DATE:	**5/1/2026**
CONTACT PERSON:	**Maggie Chang**
TELEPHONE:	**816-783-8976**
EMAIL ADDRESS:	**mchang@naic.org**
ON BEHALF OF:	**Risk-Based Capital Investment Risk and Evaluation (E) Working Group**
NAME:	**Philip Barlow, Chair**
TITLE:	**Associate Commissioner of Insurance**
AFFILIATION:	**District of Columbia**
ADDRESS:	**1050 First Street, NE Suite 801**
	Washington, DC 20002

FOR NAIC USE ONLY

Agenda Item # 2026-12-IRE
Year 2026

DISPOSITION

ADOPTED:
☐ TASK FORCE (TF) _____
☐ WORKING GROUP (WG) _____
☐ SUBGROUP (SG) _____

EXPOSED:
☐ TASK FORCE (TF) _____
☐ WORKING GROUP (WG) _____
☐ SUBGROUP (SG) _____

REJECTED:
☐ TF ☐ WG ☐ SG _____

OTHER:
☐ DEFERRED TO _____
☐ REFERRED TO OTHER NAIC GROUP
☐ (SPECIFY) _____

IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

☐ Health RBC Blanks
☐ Health RBC Instructions
☐ Health RBC Formula
☐ Property/Casualty RBC Blanks
☐ Property/Casualty RBC Instructions
☐ Property/Casualty RBC Formula
☒ Life and Fraternal RBC Blanks
☒ Life and Fraternal RBC Instructions
☒ Life and Fraternal RBC Formula
☐ OTHER _____

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

This proposal incorporates CLOs' Modeled C-1 factors presented by the American Academy of Actuaries on March 2, 2026. Note that the factors are adjusted for tax as the Modeled C-1 factors presented are on an after-tax basis.
The Academy did not propose C-1 factor for NAIC 6 CLOs due to limited sample for modelling. Based on Working Group's discussion, NAIC staff has taken an arithmetic mean of 1 and NAIC 5.C. factor, arriving at 92.56% pre-tax factor for NAIC 6.

Additional Staff Comments:

5/1/2026 – building on Proposal 2025-22-IRE (CLO RBC Structure) MOD V.3, NAIC staff has identified further refinements in LR002 in order to effectuate Portfolio Adjustment Factor (PAF) methodology proposed by the Academy. All proposed edits highlighted in green within the RBC Blanks. (mkc)

Note that this proposal comes with two options – Option 1 and Option 2 to reflect Academy's recommendation as excerpt below. For Option 2, it was noted that the prevalent surcharge on thin tranches was 9.79% post tax, as such, to streamline the structure, NAIC staff proposed a flat surcharge of 11.77% (i.e. 9.79%/0.832)

Option 1—Rating Only (After-Tax Factors)

12

Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1
Aaa	0.03%	**0.03%**
Aa1	0.28%	**0.04%**
Aa2	0.00%	**0.04%**
Aa3	0.00%	**0.04%**
A1	0.40%	**0.14%**
A2	0.11%	**0.14%**
A3	0.12%	**1.45%**
Baa1	1.58%	**1.81%**
Baa2	3.02%	**2.70%**
Baa3	5.94%	**2.73%**

Below Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1
Ba1	20.70%	**12.59%**
Ba2	27.37%	**20.93%**
Ba3	28.92%	**23.28%**
B1	17.34%	**26.04%**
B2	30.81%	**35.20%**
B3	56.39%	**47.32%**
Caa1	57.60%	**48.12%**
Caa2	66.51%	**55.20%**
Caa3	77.33%	**70.82%**

American Academy of Actuaries

Option 2—Rating & Tranche Thickness (After-Tax Factors)

13

Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1	
		Thickness > 4%	Thickness ≤ 4%
Aaa	0.03%	**0.03%**	
Aa1	0.28%	**0.04%**	
Aa2	0.00%	**0.04%**	
Aa3	0.00%	**0.04%**	
A1	0.40%	**0.14%**	
A2	0.11%	**0.14%**	
A3	0.12%	**1.45%**	
Baa1	1.58%	**1.81%**	
Baa2	3.02%	**2.70%**	
Baa3	5.94%	**2.73%**	**12.52%**

Below Investment Grade

Rating	Simple Average Raw C-1	Modeled C-1	
		Thickness > 4%	Thickness ≤ 4%
Ba1	20.70%	**12.59%**	**22.39%**
Ba2	27.37%	**20.93%**	**30.72%**
Ba3	28.92%	**23.28%**	**33.08%**
B1	17.34%	**26.04%**	**35.84%**
B2	30.81%	**35.20%**	**44.99%**
B3	56.39%	**47.32%**	**57.12%**
Caa1	57.60%	**48.12%**	**57.92%**
Caa2	66.51%	**55.20%**	**64.99%**
Caa3	77.33%	**70.82%**	**80.61%**

American Academy of Actuaries

** **This section must be completed on all forms.** **Revised 2-2023**

BONDS

LR002

Basis of Factors

The bond factors are based on cash flow modeling using historically adjusted default rates for each bond category. For each of 2,000 trials, annual economic conditions were generated for the 10-year modeling period. Each bond of a 400-bond portfolio was annually tested for default (based on a "roll of the dice") where the default probability varies by designation category and that year's economic environment. When a default takes place, the actual loss considers the expected principal loss by category, the time until the sale actually occurs and the assumed tax consequences.

Actual surplus needs are reduced by incorporating anticipated annual contributions to the asset valuation reserve (AVR) as offsetting cash flow. Required surplus for a given trial is calculated as the amount of initial surplus funds needed so that the accumulation with interest of this initial amount and subsequent cash flows will not become negative at any point throughout the modeling period. The factors chosen for the proposed formula produce a level of surplus at least as much as needed in 92% of the trials by category and a 96% level for the entire bond portfolio.

The factor for NAIC 6 bonds recognizes that the book/adjusted carrying value of these bonds reflects a loss of value upon default by being marked to market.

Specific Instructions for Application of the Formula

Lines (1) through (7)

The book/adjusted carrying value of all bonds, excluding collateralized loan obligations (CLOs), Collateralized Bond Obligations (CBOs), and Collateralized Debt Obligations (CDOs) ~~and related fixed-income investments~~ should be reported in Column (1). The bonds are split into seven different risk classifications. For long-term bonds, these classifications are found on Lines A1 through A7 of the Asset Valuation Reserve Default Component~~, Page 30~~ of the annual statement.

The book/adjusted carrying value of all ~~collateralized loan obligations~~CLOs/CBOs/CDOs should be reported in Column 2. The ~~collateralized loan obligations~~ CLOs/CBOs/CDOs are split into six different risk classifications. These classifications are found on Lines A9.1 through A14 of the Asset Valuation Reserve Default Component~~, Page 30~~ of the annual statement.

Line (7.2)

Amounts reported in Column (2) line (7.2) should include book/adjusted carrying value of Broadly Syndicated Bank Loans (BSL) CLO tranches (as defined below) with [current] tranche thickness less than or equal to [4%] (as defined below).

BSL are typically syndicated corporate loans distributed to a broad base of institutional investors and rated by credit rating agencies. BSL CLOs are primarily backed by syndicated corporate loans.

[Current] Tranche thickness is defined as the difference between the attachment point (AP) and the detachment point (DP) of a CLO tranche. AP refers to tranche's subordination percentage, and DP is the percentage of total par amount of the underlying portfolio including principal proceeds, that will completely write off the tranche. The current tranche thickness is to be measured using the most recent periodic report available, without being stale, as of the investment reporting date.

[Drafting Note – Depending on whether Option 1 or Option 2 is being adopted]
Option 1 – Column (3) defaults to zero.
Option 2 - It was noted that the prevalent surcharge on thin tranches was 9.79% post-tax, as such, to streamline the structure, NAIC staff proposed a flat surcharge of 11.77% (i.e. 9.79%/0.832) and is hard-coded in Column (3).

Line (8)

The total should equal long-term bonds ~~and other fixed income instruments~~ reported on Page 2, Column 3, Line 1

plus Schedule DL Part 1, Column 6, Line 2009999999 of the annual statement.

Lines (9) through (15)
The book/adjusted carrying value of all short-term and cash equivalent bonds ~~and related fixed-income investments~~ should be reported in Column (1). The bonds are split into seven different risk classifications. For short-term bonds, these classifications are found on Lines ~~18~~ C1 through ~~24~~ C7 of the Asset Valuation Reserve Default Component, ~~Page 30~~ of the annual statement. For cash equivalent bonds, these classifications are found in Footnotes to Schedule E, Part 2.

Line (16)
The total should equal short-term bonds reported on Schedule DA, Part 1, Column 6 Line 0509999999 plus Schedule DL Part 1, Column 6, Line 9509999999 plus Schedule E, Part 2, Column 7, Line 0509999999.

Line (22)
Class 1 bonds (highest quality) issued by a U.S. government agency that are not backed by the full faith and credit of the U.S. government should be reported on this line. The loan-backed securities of the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC) would be examples of the securities reported on this line. Line (22) should not be larger than the sum of Lines (2) and (10). Exempt obligations should not be included on this line.

~~Line (23)~~
Column (1) and Column (2) require Company to bifurcate Line (21) Column (4) "Total RBC Requirement" into Non-CLO RBC Requirement (Column 1) and CLO RBC Requirement (Column 2) components. For Non-CLO (Column (1)), the amount needs to be further reduced by Column (4) Line(1), Column (4) Line(9) and Column (4) Line (22). The sum of Column (1) and Column (2) should agree to Column (4).

Line (24)
Bonds should be aggregated by issuer (the first six digits of the CUSIP number can be used). Exempt U.S. government bonds and bonds reported on Line (22) are not counted in determining the size factor. The RBC for those bonds will not be included in the base to which the size factor is applied. If this field is left blank, the maximum size factor adjustment of 2.40 will be used.

Line (25)
The size factor reflects the higher risk of a bond portfolio that contains relatively fewer bonds. The overall factor decreases as the portfolio size increases. The size factor is based on the weighted number of issuers. (The calculation shown below will not appear on the RBC filing software but will be calculated automatically.)

Line (25)	Source	(a) Number of Issuers (for bonds, excluding CLOs/CBOs/CDOs)				(b) Weighted Issuers (for bonds, excluding CLOs/CBOs/CDOs)
First 50	Company Records		X	2.40	=	
Next 50	Company Records		X	1.53	=	
Next 100	Company Records		X	0.85	=	
Next 300	Company Records		X	0.85	=	
Over 500	Company Records		X	0.82	=	
(i) Total Number of Issuers from Line (24) Column (1)						
(ii) Total Weighted Issuers (for bonds, excluding						

CLOs/CBOs/CDOs)
Size Factor = Total Weighted Issuers (ii) Divided by Total Number of Issuers (i) _____

	Source	(a) Number of Issuers (for CLOs/CBOs/ CDOs)				(b) Weighted Issuers (for CLOs/CBOs/CDOs)
First XX*	Company Records	_____	X	TBD	=	_____
Next XX*	Company Records	_____	X	TBD	=	_____
Next XXX*	Company Records	_____	X	TBD	=	_____
Next XXX*	Company Records	_____	X	TBD	=	_____
Over XXX*	Company Records	_____	X	TBD	=	_____
(iii) Total Number of Issuers from Line (24) Column (2)		_____				
(iv) Total Weighted Issuers (for CLOs/CBOs/CDOs)						_____
Size Factor = Total Weighted Issuers ~~(ii)+~~(iv) Divided by Total Number of Issuers ~~(i)+~~(iii)						_____

* Total number of breakpoints, as well as weights assigned to each, is subject to American Academy of Actuaries' recommendation and Working Group's review.

Company Name

BONDS

Cocode: 00000

BONDS

OPTION 1

	SVO Bond Designation Category	Annual Statement Source	(1) Non-CLOs/CBOs/CDOs Book / Adjusted Carrying Value		Factor		(2) CLOs/CBOs/CDOs Book / Adjusted Carrying Value		(3) Factor		(4) Total RBC Requirement
	Long Term Bonds										
(1)	Exempt Obligations	C(1) AVR Default Component Column 1 Line A1	$0	X	0.00000		XXX		XXX	=	$0
(2.1)	NAIC Designation Category 1.A	C(1) AVR Default Component Column 1 Line A2.1 C(2) AVR Default Component Column 1 Line A9.1	$0	X	0.00158		$0	X	0.00036	=	$0
(2.2)	NAIC Designation Category 1.B	C(1) AVR Default Component Column 1 Line A2.2 C(2) AVR Default Component Column 1 Line A9.2	$0	X	0.00271		$0	X	0.00048	=	$0
(2.3)	NAIC Designation Category 1.C	C(1) AVR Default Component Column 1 Line A2.3 C(2) AVR Default Component Column 1 Line A9.3	$0	X	0.00419		$0	X	0.00048	=	$0
(2.4)	NAIC Designation Category 1.D	C(1) AVR Default Component Column 1 Line A2.4 C(2) AVR Default Component Column 1 Line A9.4	$0	X	0.00523		$0	X	0.00048	=	$0
(2.5)	NAIC Designation Category 1.E	C(1) AVR Default Component Column 1 Line A2.5 C(2) AVR Default Component Column 1 Line A9.5	$0	X	0.00657		$0	X	0.00168	=	$0
(2.6)	NAIC Designation Category 1.F	C(1) AVR Default Component Column 1 Line A2.6 C(2) AVR Default Component Column 1 Line A9.6	$0	X	0.00816		$0	X	0.00168	=	$0
(2.7)	NAIC Designation Category 1.G	C(1) AVR Default Component Column 1 Line A2.7 C(2) AVR Default Component Column 1 Line A9.7	$0	X	0.01016		$0	X	0.01743	=	$0
(2.8)	Subtotal NAIC 1	Sum of Lines (2.1) through (2.7)	$0				$0				$0
(3.1)	NAIC Designation Category 2.A	C(1) AVR Default Component Column 1 Line A3.1 C(2) AVR Default Component Column 1 Line A10.1	$0	X	0.01261		$0	X	0.02175	=	$0
(3.2)	NAIC Designation Category 2.B	C(1) AVR Default Component Column 1 Line A3.2 C(2) AVR Default Component Column 1 Line A10.2	$0	X	0.01523		$0	X	0.03245	=	$0
(3.3)	NAIC Designation Category 2.C	C(1) AVR Default Component Column 1 Line A3.3 C(2) AVR Default Component Column 1 Line A10.3	$0	X	0.02168		$0	X	0.03281	=	$0
(3.4)	Subtotal NAIC 2	Sum of Lines (3.1) through (3.3)	$0				$0				$0
(4.1)	NAIC Designation Category 3.A	C(1) AVR Default Component Column 1 Line A4.1 C(2) AVR Default Component Column 1 Line A11.1	$0	X	0.03151		$0	X	0.15132	=	$0
(4.2)	NAIC Designation Category 3.B	C(1) AVR Default Component Column 1 Line A4.2 C(2) AVR Default Component Column 1 Line A11.2	$0	X	0.04537		$0	X	0.25156	=	$0
(4.3)	NAIC Designation Category 3.C	C(1) AVR Default Component Column 1 Line A4.3 C(2) AVR Default Component Column 1 Line A11.3	$0	X	0.06017		$0	X	0.27981	=	$0
(4.4)	Subtotal NAIC 3	Sum of Lines (4.1) through (4.3)	$0				$0				$0
(5.1)	NAIC Designation Category 4.A	C(1) AVR Default Component Column 1 Line A5.1 C(2) AVR Default Component Column 1 Line A12.1	$0	X	0.07386		$0	X	0.31298	=	$0
(5.2)	NAIC Designation Category 4.B	C(1) AVR Default Component Column 1 Line A5.2 C(2) AVR Default Component Column 1 Line A12.2	$0	X	0.09535		$0	X	0.42308	=	$0
(5.3)	NAIC Designation Category 4.C	C(1) AVR Default Component Column 1 Line A5.3 C(2) AVR Default Component Column 1 Line A12.3	$0	X	0.12428		$0	X	0.56875	=	$0
(5.4)	Subtotal NAIC 4	Sum of Lines (5.1) through (5.3)	$0				$0				$0
(6.1)	NAIC Designation Category 5.A	C(1) AVR Default Component Column 1 Line A6.1 C(2) AVR Default Component Column 1 Line A13.1	$0	X	0.16942		$0	X	0.57837	=	$0
(6.2)	NAIC Designation Category 5.B	C(1) AVR Default Component Column 1 Line A6.2 C(2) AVR Default Component Column 1 Line A13.2	$0	X	0.23798		$0	X	0.66346	=	$0
(6.3)	NAIC Designation Category 5.C	C(1) AVR Default Component Column 1 Line A6.3 C(2) AVR Default Component Column 1 Line A13.3	$0	X	0.30000		$0	X	0.85120	=	$0
(6.4)	Subtotal NAIC 5	Sum of Lines (6.1) through (6.3)	$0				$0				$0
(7.1)	NAIC 6	C(1) AVR Default Component Column 1 Line A7 C(2) AVR Default Component Column 1 Line A14	$0	X	0.30000		$0	X	0.92560	=	$0
(7.2)	CLO in NAIC Designation Category 2.C or below, with thin tranches (See Instruction)	C(2) AVR Default Component Column 1 Line A10.3, in part + Line A11.1, in part + Line A11.2, in part + Line A11.3, in part + Line A12.1, in part + Line A12.2, in part + Line A12.3, in part + Line A13.1, in part + Line A13.2, in part + Line A13.3, in part	XXX		XXX		$0	X	0.00000	=	$0
(8)	Total Long-Term Bonds	Sum of Lines (1) + (2.8) + (3.4) + (4.4) + (5.4) + (6.4) + (7.1) + (7.2)	$0				$0				$0
	(Column (1) + Column (2) should equal Page 2 Column 3 Line 1 + Schedule DL Part 1 Column 6 Line 2009999999)										
	Short Term and Cash Equivalent Bonds										
(9)	Exempt Obligations	AVR Default Component Column 1 Line C1 + Schedule E, Part 2, Column 7, Line 0019999999	$0	X	0.000		XXX		XXX	=	$0
(10.1)	NAIC Designation Category 1.A	AVR Default Component Column 1 Line C2.1 + Schedule E, Part 2, Footnote L000001A, Amount 1 - Schedule E, Part 2, Column 7, Line 0019999999	$0	X	0.00158		XXX		XXX	=	$0
(10.2)	NAIC Designation Category 1.B	AVR Default Component Column 1 Line C2.2 + Schedule E, Part 2, Footnote L000001A, Amount 2	$0	X	0.00271		XXX		XXX	=	$0
(10.3)	NAIC Designation Category 1.C	AVR Default Component Column 1 Line C2.3 + Schedule E, Part 2, Footnote L000001A, Amount 3	$0	X	0.00419		XXX		XXX	=	$0
(10.4)	NAIC Designation Category 1.D	AVR Default Component Column 1 Line C2.4 + Schedule E, Part 2, Footnote L000001A, Amount 4	$0	X	0.00523		XXX		XXX	=	$0
(10.5)	NAIC Designation Category 1.E	AVR Default Component Column 1 Line C2.5 + Schedule E, Part 2, Footnote L000001A, Amount 5	$0	X	0.00657		XXX		XXX	=	$0
(10.6)	NAIC Designation Category 1.F	AVR Default Component Column 1 Line C2.6 + Schedule E, Part 2, Footnote L000001A, Amount 6	$0	X	0.00816		XXX		XXX	=	$0
(10.7)	NAIC Designation Category 1.G	AVR Default Component Column 1 Line C2.7 + Schedule E, Part 2, Footnote L000001A, Amount 7	$0	X	0.01016		XXX		XXX	=	$0
(10.8)	Subtotal NAIC 1	Sum of Lines (10.1) through (10.7)	$0								$0

=ROUND(MAX(0,D10)*F10 + MAX(0,G10)*J10,0)

		AVR Default Component Column 1 Line C3.1 +					
(11.1)	NAIC Designation Category 2.A	Schedule E, Part 2, Footnote L000001B, Amount 1	$0	X 0.01261	XXX	XXX =	$0
		AVR Default Component Column 1 Line C3.2 +					
(11.2)	NAIC Designation Category 2.B	Schedule E, Part 2, Footnote L000001B, Amount 2	$0	X 0.01523	XXX	XXX =	$0
		AVR Default Component Column 1 Line C3.3 +					
(11.3)	NAIC Designation Category 2.C	Schedule E, Part 2, Footnote L000001B, Amount 3	$0	X 0.02168	XXX	XXX =	$0
(11.4)	Subtotal NAIC 2	Sum of Lines (11.1) through (11.3)	$0				$0
		AVR Default Component Column 1 Line C4.1 +					
(12.1)	NAIC Designation Category 3.A	Schedule E, Part 2, Footnote L000001C, Amount 1	$0	X 0.03151	XXX	XXX =	$0
		AVR Default Component Column 1 Line C4.2 +					
(12.2)	NAIC Designation Category 3.B	Schedule E, Part 2, Footnote L000001C, Amount 2	$0	X 0.04537	XXX	XXX =	$0
		AVR Default Component Column 1 Line C4.3 +					
(12.3)	NAIC Designation Category 3.C	Schedule E, Part 2, Footnote L000001C, Amount 3	$0	X 0.06017	XXX	XXX =	$0
(12.4)	Subtotal NAIC 3	Sum of Lines (12.1) through (12.3)	$0				$0
		AVR Default Component Column 1 Line C5.1 +					
(13.1)	NAIC Designation Category 4.A	Schedule E, Part 2, Footnote L000001D, Amount 1	$0	X 0.07386	XXX	XXX =	$0
		AVR Default Component Column 1 Line C5.2 +					
(13.2)	NAIC Designation Category 4.B	Schedule E, Part 2, Footnote L000001D, Amount 2	$0	X 0.09535	XXX	XXX =	$0
		AVR Default Component Column 1 Line C5.3 +					
(13.3)	NAIC Designation Category 4.C	Schedule E, Part 2, Footnote L000001D, Amount 3	$0	X 0.12428	XXX	XXX =	$0
(13.4)	Subtotal NAIC 4	Sum of Lines (13.1) through (13.3)	$0				$0
		AVR Default Component Column 1 Line C6.1 +					
(14.1)	NAIC Designation Category 5.A	Schedule E, Part 2, Footnote L000001E, Amount 1	$0	X 0.16942	XXX	XXX =	$0
		AVR Default Component Column 1 Line C6.2 +					
(14.2)	NAIC Designation Category 5.B	Schedule E, Part 2, Footnote L000001E, Amount 2	$0	X 0.23798	XXX	XXX =	$0
		AVR Default Component Column 1 Line C6.3 +					
(14.3)	NAIC Designation Category 5.C	Schedule E, Part 2, Footnote L000001E, Amount 3	$0	X 0.30000	XXX	XXX =	$0
(14.4)	Subtotal NAIC 5	Sum of Lines (14.1) through (14.3)	$0				$0
		AVR Default Component Column 1 Line C7					
(15)	NAIC 6	Schedule E, Part 2, Footnote L000001F, Amount 1	$0	X 0.30000	XXX	XXX =	$0
(16)	Total Short-Term and Cash Equivalent Bonds (Column (1) should equal Schedule DA Part 1 Column 6 Line 0509999999 + Schedule DL Part 1 Column 6 Line 9509999999 + Schedule E Part 2 Column 7 Line 0509999999)	Sum of Lines (9) + (10.8) + (11.4) + (12.4) + (13.4) + (14.4) + (15)	$0		$0		$0
(17)	Total Long-Term and Short-Term Bonds (pre-MODCO/Funds Withheld)	Line (8) + (16)	$0		$0		$0
(18)	Credit for Hedging	LR014 Hedged Asset Bond Schedule Column (13) Line (0399999)					$0
(19)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	LR045 Modco or Funds Withheld Reinsurance Ceded - Bonds C-1o Column (4) Line (9999999)					$0
(20)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	LR046 Modco or Funds Withheld Reinsurance Assumed - Bonds C-1o Column (4) Line (9999999)					$0
(21)	Total Long-Term and Short-Term Bonds (including MODCO/FundsWithheld and Credit for Hedging adjustments.)	Lines (17) - (18) - (19) + (20)	$0		$0		$0
(22)	Non-exempt U.S. Government Agency Bonds	Schedule D Part 1 Section 1 and Section 2, Schedule DA Part 1 and Schedule E Part 2, in part†	$0	X 0.00158		=	$0
			Non-CLO RBC Requirement		CLO RBC Requirement		
(23)	RBC Requirements Subject to Size Factor	Company Records (See Instruction)	$0		$0		$0
(24)	Number of Issuers	Company Records	0		0		
(25)	Size Factor for Bonds		2.4		1.0		
(26)	Bonds Subject to Size Factor after the Size Factor is Applied	Column (1) Line (23) x Column (1) Line (25) + Column (2) Line (23) X Column (2) Line (25)					$0
(27)	Total Bonds	Line (22) + Line (26)					$0

Column (1)
=ROUND(IF(D85>0,(MIN(D85,50)*2.4+MIN(MAX(0,D85-50),50)*1.53+MIN(MAX(0,D85-100),100)*0.85+MIN(MAX(0,D85-200),300)*0.85+MAX(0,(D85-500))*0.82)/D85,2.4),3)

=ROUND(D84*D86+G84*G86,0)

Column (2) = Default to "1", subject to changes as per the Academy's recommendation & Working Group discretion

† Only investments in-U.S. Government agency bonds previously reported in Lines (2.8) and (10.8), net of those included on Line (19), plus the portion of Line (20) attributable to ceding companies' Lines (2.8) and (10.8) should be included on Line (22). No other bonds should be included on this line. Exempt U.S. Government bonds shown on Lines (1) and (9) should not be included on Line (22). Refer to the bond section of the risk-based capital instructions for more clarification.

Denotes items that must be manually entered on the filing software.

Company Name

BONDS

Cocode: 00000

BONDS

OPTION 2

	SVO Bond Designation Category	Annual Statement Source	(1) Non-CLOs/CBOs/CDOs Book / Adjusted Carrying Value		Factor		(2) CLOs/CBOs/CDOs Book / Adjusted Carrying Value		(3) Factor		(4) Total RBC Requirement
	Long Term Bonds										
(1)	Exempt Obligations	C(1) AVR Default Component Column 1 Line A1	$0	X	0.00000		XXX		XXX	=	$0
(2.1)	NAIC Designation Category 1.A	C(1) AVR Default Component Column 1 Line A2.1 C(2) AVR Default Component Column 1 Line A9.1	$0	X	0.00158		$0	X	0.00036	=	$0
(2.2)	NAIC Designation Category 1.B	C(1) AVR Default Component Column 1 Line A2.2 C(2) AVR Default Component Column 1 Line A9.2	$0	X	0.00271		$0	X	0.00048	=	$0
(2.3)	NAIC Designation Category 1.C	C(1) AVR Default Component Column 1 Line A2.3 C(2) AVR Default Component Column 1 Line A9.3	$0	X	0.00419		$0	X	0.00048	=	$0
(2.4)	NAIC Designation Category 1.D	C(1) AVR Default Component Column 1 Line A2.4 C(2) AVR Default Component Column 1 Line A9.4	$0	X	0.00523		$0	X	0.00048	=	$0
(2.5)	NAIC Designation Category 1.E	C(1) AVR Default Component Column 1 Line A2.5 C(2) AVR Default Component Column 1 Line A9.5	$0	X	0.00657		$0	X	0.00168	=	$0
(2.6)	NAIC Designation Category 1.F	C(1) AVR Default Component Column 1 Line A2.6 C(2) AVR Default Component Column 1 Line A9.6	$0	X	0.00816		$0	X	0.00168	=	$0
(2.7)	NAIC Designation Category 1.G	C(1) AVR Default Component Column 1 Line A2.7 C(2) AVR Default Component Column 1 Line A9.7	$0	X	0.01016		$0	X	0.01743	=	$0
(2.8)	Subtotal NAIC 1	Sum of Lines (2.1) through (2.7)	$0				$0				$0
(3.1)	NAIC Designation Category 2.A	C(1) AVR Default Component Column 1 Line A3.1 C(2) AVR Default Component Column 1 Line A10.1	$0	X	0.01261		$0	X	0.02175	=	$0
(3.2)	NAIC Designation Category 2.B	C(1) AVR Default Component Column 1 Line A3.2 C(2) AVR Default Component Column 1 Line A10.2	$0	X	0.01523		$0	X	0.03245	=	$0
(3.3)	NAIC Designation Category 2.C	C(1) AVR Default Component Column 1 Line A3.3 C(2) AVR Default Component Column 1 Line A10.3	$0	X	0.02168		$0	X	0.03281	=	$0
(3.4)	Subtotal NAIC 2	Sum of Lines (3.1) through (3.3)	$0				$0				$0
(4.1)	NAIC Designation Category 3.A	C(1) AVR Default Component Column 1 Line A4.1 C(2) AVR Default Component Column 1 Line A11.1	$0	X	0.03151		$0	X	0.15132	=	$0
(4.2)	NAIC Designation Category 3.B	C(1) AVR Default Component Column 1 Line A4.2 C(2) AVR Default Component Column 1 Line A11.2	$0	X	0.04537		$0	X	0.25156	=	$0
(4.3)	NAIC Designation Category 3.C	C(1) AVR Default Component Column 1 Line A4.3 C(2) AVR Default Component Column 1 Line A11.3	$0	X	0.06017		$0	X	0.27981	=	$0
(4.4)	Subtotal NAIC 3	Sum of Lines (4.1) through (4.3)	$0				$0				$0
(5.1)	NAIC Designation Category 4.A	C(1) AVR Default Component Column 1 Line A5.1 C(2) AVR Default Component Column 1 Line A12.1	$0	X	0.07386		$0	X	0.31298	=	$0
(5.2)	NAIC Designation Category 4.B	C(1) AVR Default Component Column 1 Line A5.2 C(2) AVR Default Component Column 1 Line A12.2	$0	X	0.09535		$0	X	0.42308	=	$0
(5.3)	NAIC Designation Category 4.C	C(1) AVR Default Component Column 1 Line A5.3 C(2) AVR Default Component Column 1 Line A12.3	$0	X	0.12428		$0	X	0.56875	=	$0
(5.4)	Subtotal NAIC 4	Sum of Lines (5.1) through (5.3)	$0				$0				$0
(6.1)	NAIC Designation Category 5.A	C(1) AVR Default Component Column 1 Line A6.1 C(2) AVR Default Component Column 1 Line A13.1	$0	X	0.16942		$0	X	0.57837	=	$0
(6.2)	NAIC Designation Category 5.B	C(1) AVR Default Component Column 1 Line A6.2 C(2) AVR Default Component Column 1 Line A13.2	$0	X	0.23798		$0	X	0.66346	=	$0
(6.3)	NAIC Designation Category 5.C	C(1) AVR Default Component Column 1 Line A6.3 C(2) AVR Default Component Column 1 Line A13.3	$0	X	0.30000		$0	X	0.85120	=	$0
(6.4)	Subtotal NAIC 5	Sum of Lines (6.1) through (6.3)	$0				$0				$0
(7.1)	NAIC 6	C(1) AVR Default Component Column 1 Line A7 C(2) AVR Default Component Column 1 Line A14	$0	X	0.30000		$0	X	0.92560	=	$0
(7.2)	CLO in NAIC Designation Category 2.C or below, with thin tranches (See Instruction)	C(2) AVR Default Component Column 1 Line A10.3, in part + Line A11.1, in part + Line A11.2, in part + Line A11.3, in part + Line A12.1, in part + Line A12.2, in part + Line A12.3, in part + Line A13.1, in part + Line A13.2, in part + Line A13.3, in part	XXX		XXX		$0	X	0.11767	=	$0
(8)	Total Long-Term Bonds	Sum of Lines (1) + (2.8) + (3.4) + (4.4) + (5.4) + (6.4) + (7.1) + (7.2)	$0				$0				$0
	(Column (1) + Column (2) should equal Page 2 Column 3 Line 1 + Schedule DL Part 1 Column 6 Line 2009999999)										
	Short Term and Cash Equivalent Bonds										
(9)	Exempt Obligations	AVR Default Component Column 1 Line C1 + Schedule E, Part 2, Column 7, Line 0019999999	$0	X	0.000		XXX		XXX	=	$0
(10.1)	NAIC Designation Category 1.A	AVR Default Component Column 1 Line C2.1 + Schedule E, Part 2, Footnote L000001A, Amount 1 - Schedule E, Part 2, Column 7, Line 0019999999	$0	X	0.00158		XXX		XXX	=	$0
(10.2)	NAIC Designation Category 1.B	AVR Default Component Column 1 Line C2.2 + Schedule E, Part 2, Footnote L000001A, Amount 2	$0	X	0.00271		XXX		XXX	=	$0
(10.3)	NAIC Designation Category 1.C	AVR Default Component Column 1 Line C2.3 + Schedule E, Part 2, Footnote L000001A, Amount 3	$0	X	0.00419		XXX		XXX	=	$0
(10.4)	NAIC Designation Category 1.D	AVR Default Component Column 1 Line C2.4 + Schedule E, Part 2, Footnote L000001A, Amount 4	$0	X	0.00523		XXX		XXX	=	$0
(10.5)	NAIC Designation Category 1.E	AVR Default Component Column 1 Line C2.5 + Schedule E, Part 2, Footnote L000001A, Amount 5	$0	X	0.00657		XXX		XXX	=	$0
(10.6)	NAIC Designation Category 1.F	AVR Default Component Column 1 Line C2.6 + Schedule E, Part 2, Footnote L000001A, Amount 6	$0	X	0.00816		XXX		XXX	=	$0
(10.7)	NAIC Designation Category 1.G	AVR Default Component Column 1 Line C2.7 + Schedule E, Part 2, Footnote L000001A, Amount 7	$0	X	0.01016		XXX		XXX	=	$0
(10.8)	Subtotal NAIC 1	Sum of Lines (10.1) through (10.7)	$0								$0

=ROUND(MAX(0,D10)*F10 + MAX(0,G10)*J10,0)

		AVR Default Component Column 1 Line C3.1 +					
(11.1)	NAIC Designation Category 2.A	Schedule E, Part 2, Footnote L000001B, Amount 1	$0	X 0.01261	XXX	XXX =	$0
		AVR Default Component Column 1 Line C3.2 +					
(11.2)	NAIC Designation Category 2.B	Schedule E, Part 2, Footnote L000001B, Amount 2	$0	X 0.01523	XXX	XXX =	$0
		AVR Default Component Column 1 Line C3.3 +					
(11.3)	NAIC Designation Category 2.C	Schedule E, Part 2, Footnote L000001B, Amount 3	$0	X 0.02168	XXX	XXX =	$0
(11.4)	Subtotal NAIC 2	Sum of Lines (11.1) through (11.3)	$0				$0
		AVR Default Component Column 1 Line C4.1 +					
(12.1)	NAIC Designation Category 3.A	Schedule E, Part 2, Footnote L000001C, Amount 1	$0	X 0.03151	XXX	XXX =	$0
		AVR Default Component Column 1 Line C4.2 +					
(12.2)	NAIC Designation Category 3.B	Schedule E, Part 2, Footnote L000001C, Amount 2	$0	X 0.04537	XXX	XXX =	$0
		AVR Default Component Column 1 Line C4.3 +					
(12.3)	NAIC Designation Category 3.C	Schedule E, Part 2, Footnote L000001C, Amount 3	$0	X 0.06017	XXX	XXX =	$0
(12.4)	Subtotal NAIC 3	Sum of Lines (12.1) through (12.3)	$0				$0
		AVR Default Component Column 1 Line C5.1 +					
(13.1)	NAIC Designation Category 4.A	Schedule E, Part 2, Footnote L000001D, Amount 1	$0	X 0.07386	XXX	XXX =	$0
		AVR Default Component Column 1 Line C5.2 +					
(13.2)	NAIC Designation Category 4.B	Schedule E, Part 2, Footnote L000001D, Amount 2	$0	X 0.09535	XXX	XXX =	$0
		AVR Default Component Column 1 Line C5.3 +					
(13.3)	NAIC Designation Category 4.C	Schedule E, Part 2, Footnote L000001D, Amount 3	$0	X 0.12428	XXX	XXX =	$0
(13.4)	Subtotal NAIC 4	Sum of Lines (13.1) through (13.3)	$0				$0
		AVR Default Component Column 1 Line C6.1 +					
(14.1)	NAIC Designation Category 5.A	Schedule E, Part 2, Footnote L000001E, Amount 1	$0	X 0.16942	XXX	XXX =	$0
		AVR Default Component Column 1 Line C6.2 +					
(14.2)	NAIC Designation Category 5.B	Schedule E, Part 2, Footnote L000001E, Amount 2	$0	X 0.23798	XXX	XXX =	$0
		AVR Default Component Column 1 Line C6.3 +					
(14.3)	NAIC Designation Category 5.C	Schedule E, Part 2, Footnote L000001E, Amount 3	$0	X 0.30000	XXX	XXX =	$0
(14.4)	Subtotal NAIC 5	Sum of Lines (14.1) through (14.3)	$0				$0
		AVR Default Component Column 1 Line C7					
(15)	NAIC 6	Schedule E, Part 2, Footnote L000001F, Amount 1	$0	X 0.30000	XXX	XXX =	$0
(16)	Total Short-Term and Cash Equivalent Bonds (Column (1) should equal Schedule DA Part 1 Column 6 Line 0509999999 + Schedule DL Part 1 Column 6 Line 9509999999 + Schedule E Part 2 Column 7 Line 0509999999)	Sum of Lines (9) + (10.8) + (11.4) + (12.4) + (13.4) + (14.4) + (15)	$0		$0		$0
(17)	Total Long-Term and Short-Term Bonds (pre-MODCO/Funds Withheld)	Line (8) + (16)	$0		$0		$0
(18)	Credit for Hedging	LR014 Hedged Asset Bond Schedule Column (13) Line (0399999)					$0
(19)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	LR045 Modco or Funds Withheld Reinsurance Ceded - Bonds C-1o Column (4) Line (9999999)					$0
(20)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	LR046 Modco or Funds Withheld Reinsurance Assumed - Bonds C-1o Column (4) Line (9999999)					$0
(21)	Total Long-Term and Short-Term Bonds (including MODCO/FundsWithheld and Credit for Hedging adjustments.)	Lines (17) - (18) - (19) + (20)	$0		$0		$0
(22)	Non-exempt U.S. Government Agency Bonds	Schedule D Part 1 Section 1 and Section 2, Schedule DA Part 1 and Schedule E Part 2, in part†	$0	X 0.00158		=	$0
			Non-CLO RBC Requirement		CLO RBC Requirement		
(23)	RBC Requirements Subject to Size Factor	Company Records (See Instruction)	$0		$0		$0
(24)	Number of Issuers	Company Records	0		0		
(25)	Size Factor for Bonds		2.4		1.0		
(26)	Bonds Subject to Size Factor after the Size Factor is Applied	Column (1) Line (23) x Column (1) Line (25) + Column (2) Line (23) X Column (2) Line (25)					$0
(27)	Total Bonds	Line (22) + Line (26)					$0

Column (1)
=ROUND(IF(D85>0,(MIN(D85,50)*2.4+MIN(MAX(0,D85-50),50)*1.53+MIN(MAX(0,D85-100),100)*0.85+MIN(MAX(0,D85-200),300)*0.85+MAX(0,(D85-500))*0.82)/D85,2.4),3)

=ROUND(D84*D86+G84*G86,0)

Column (2) = Default to "1", subject to changes as per the Academy's recommendation & Working Group discretion

† Only investments in-U.S. Government agency bonds previously reported in Lines (2.8) and (10.8), net of those included on Line (19), plus the portion of Line (20) attributable to ceding companies' Lines (2.8) and (10.8) should be included on Line (22). No other bonds should be included on this line. Exempt U.S. Government bonds shown on Lines (1) and (9) should not be included on Line (22). Refer to the bond section of the risk-based capital instructions for more clarification.

Denotes items that must be manually entered on the filing software.