Draft date: 8/2/23

2023 Summer National Meeting
Seattle, Washington

RISK-BASED CAPITAL INVESTMENT RISK AND EVALUATION (E) WORKING GROUP
Sunday, 8/13/2023
2:00 - 3:00 p.m.
Regency Ballroom B - Level 7 - Hyatt Regency Seattle

ROLL CALL

RISK-BASED CAPITAL INVESTMENT RISK AND EVALUATION (E) WORKING GROUP

Philip Barlow, Chair	District of Columbia	William Leung/Debbie Doggett	Missouri
Thomas Reedy	California	Lindsay Crawford	Nebraska
Wanchin Chou	Connecticut	Jennifer Li	New Hampshire
Ray Spudeck/Carolyn Morgan	Florida	Bob Kasinow/Bill Carmello	New York
Vincent Tsang	Illinois	Dale Bruggeman/Tom Botsko	Ohio
Roy Eft	Indiana	Rachel Hemphill	Texas
Carrie Mears/Kevin Clark	Iowa	Doug Stolte	Virginia
Fred Andersen	Minnesota	Steve Drutz/Tim Hays	Washington
		Amy Malm	Wisconsin

NAIC Support Staff: Dave Fleming/Julie Gann

AGENDA

1. Consider Adoption of its June 14; May 17: April 20; and Spring National Meeting Minutes—*Philip Barlow (DC)* — Attachments A-D

2. Receive Updates from the Valuation of Securities (E) Task Force and the Statutory Accounting Principles (E) Working Group—*Philip Barlow (DC)*

3. Hear a Presentation from the American Academy of Actuaries (Academy) —*Philip Barlow (DC)* — Attachment E

4. Discuss Next Steps—*Philip Barlow (DC)*

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

6. Adjournment

Draft: 8/2/23

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
Virtual Meeting
June 14, 2023

Risk-Based Capital Investment Risk and Evaluation (E) Working Group met June 14, 2023. The following Working Group members participated: Philip Barlow, Chair (DC); Thomas Reedy (CA); Wanchin Chou (CT); Ray Spudeck (FL); Vincent Tsang (IL); Roy Eft (IN); Carrie Mears and Kevin Clark (IA); Fred Andersen (MN); Debbie Doggett (MO); Lindsay Crawford (NE); Bob Kasinow and Bill Carmello (NY); Dale Bruggeman and Tom Botsko (Ohio); Rachel Hemphill and Jamie Walker (TX); Doug Stolte (VA); Steve Drutz and Tim Hays (WA) and Amy Malm (WI).

1. Discussed Comment Letters Received on Residual Factor and Sensitivity Test Factor

Clark presented the comment letter submitted by Iowa and Connecticut (Attachment 1). He said there have been comments that there is more information supporting a 45% charge than a 30% charge. He said presumably the support being referred to is the example of a broadly syndicated collateralized loan obligation (BSL CLO) which shows a 2/3 reduction in capital pre- and post- securitization. While it may be true that this serves as a data point supporting an increase in the charge for BSL CLOs, he said there is no evidence supporting this singular example being representative of all asset-backed security (ABS) residuals. Based on the information we have, he said we believe that the population of ABS that are not BSL CLOs makes up a significant portion of the residual tranche population. We do not believe they constitute outliers or merely 10% of the population. He said they do not believe that there is sufficient analysis to support an increase in RBC charge at this time. They still believe that such an increase lacks sufficient supporting analysis. Therefore, unless the alternative proposal, which is to delay the implementation, includes a process or mechanism to consider further information that may be available prior to implementing an increase, they continue to not support an automatic increase.

Walker presented the comment letter submitted by Texas (Attachment 2). She said she looked for a solution that would address the direction of the Financial Condition (E) Committee regarding an interim charge, something that acknowledges that the factor established for traditional equity investments did not anticipate residual tranche investments, which have a different risk profile, allows time for companies to address any investment changes needed in their asset mix and provides for the most efficient use of regulatory tools. She said changing the charge for year-end 2023 would be too disruptive to companies and may even result in companies divesting assets at suppressed prices because of the timing. She said they are trying to avoid that outcome in the deterioration of company surplus. However, leaving the charge at 30% until a final solution for all tranches are developed would not address the concerns raised by segments of the industry and some regulators. Therefore, she said a compromise is to align the residual tranche base charge with the current charge of 30% for 2023 and propose a 15% sensitivity rate for 2023 to get more information and understanding about the potential concentration on these types of investments for companies. Additionally, she proposed that the 2024 base charge be raised to 45% to get more certainty for future years. She said it would allow time for all parties to adjust and plan as if that charge will be in place. She said any action taken today needs to be qualified such that if the Working Group receives or develops information that indicates that a 45% charge is not appropriate for the segment of structured securities residual tranche investments, the Working Group commit to act on that information and set the appropriate charge as soon as practical.

Jeff Johnson (Global Atlantic Financial Group) presented their comment letter (Attachment 3). He said Global Atlantic supports the proposal made by Iowa and Connecticut for reasons presented in their comment letter on May 12. They stand by the principles described in their letter on May 12, which are fundamental to developing charges and reflect equal capital for equal risk. He said their June 9 comment letter is focused on explaining why the proposed 45% percent factor should not apply to all residual tranches and two examples are included to illustrate this point.

John Golden (Athene) presented Athene's comment letter. He said their main concern is regarding the need for an overarching consistent reliable system, ensuring fairness across all asset classes. They recommend that the Working Group and the NAIC take a holistic approach, take a step back and review this workstream in the context of the broader NAIC framework for consistency. He said they are supportive of any further efforts to study any asset class including residuals in this context.

2. Adopted Residual Tranche Base Factor and Sensitivity Test Factor

Andersen said, while Minnesota prefers a 45% charge for the residual tranche being implemented for year-end 2023, he said the Texas alternative could be considered a strong and practical approach. He made a motion to adopt the Texas proposal, which contains the 30% charge and an additional 15% sensitivity test for year-end 2023, which is to be replaced by the 45% charge applied beginning with year 2024 with a consideration of positive or negative adjustments based on the additional information as mentioned by Walker and her oral and written comments. This motion was seconded by Walker.

Clark suggested NAIC staff summarize the sensitivity data when it becomes available, which could be provided to the Financial Analysis (E) Working Group on an informational basis for their possible use. Bruggeman said he is pleased with the Texas commentary and Ohio would support the motion as it stands now. Stolte expressed concern that they are out of step with other financial service regulators regarding the capital charge for this asset class.

A roll call vote was taken, and the motion passed unanimously.

Having no further business, the Risk-Based Capital Investment Risk and Evaluation (E) Working Group adjourned.

Draft: 7/25/23

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
Virtual Meeting
May 17, 2023

Risk-Based Capital Investment Risk and Evaluation (E) Working Group met May 17, 2023. The following Working Group members participated: Philip Barlow, Chair (DC); Thomas Reedy (CA); Wanchin Chou (CT); Ray Spudeck (FL); Vincent Tsang (IL); Roy Eft (IN); Carrie Mears and Kevin Clark (IA); Fred Andersen (MN); William Leung and Debbie Doggett (MO); Lindsay Crawford (NE); Bill Carmello (NY); Dale Bruggeman and Tom Botsko (OH); Rachel Hemphill (TX); Greg Chew and David Smith (VA); Steve Drutz and Tim Hays (WA) and Amy Malm (WI).

1. Discussed 2022 Data Reported for Residual Tranches

Julie Gann (NAIC) presented a NAIC staff review of the information reported for residuals by life companies on Schedule BA for year-end 2022 (Attachment 1). This review included the size of residuals held, residuals involving related parties, residuals as a percentage of surplus and invested assets and also the impact of a 45% risk-based capital (RBC) factor.

Barlow said when a new type of asset is added to an insurer's portfolio, they decide where they think it goes in the annual statement and based on that reporting and rating, if it has one, it gets an RBC factor. At some point regulators recognize the new asset and may move it someplace else in the annual statement which will generate a new RBC charge. None of that involves any analysis of the appropriate RBC charge. While it is true that neither 30% nor 45% factors for residuals has had a full RBC review, there is a difference in the factor that was generated solely by where the asset landed in the annual statement and the review that has been done of residual tranches which has included: 1) understanding how the structured assets and residual tranches work; 2) seeing how structuring assets could cause a loss of 2/3 of the RBC charge without a change to the underlying risk; 3) the capital charge that bank regulators use, which is effectively 100% and; 4) the data just presented that shows among other things the growth of residual tranches and that no insurers would fall into an action level as a result. Barlow said that the analysis has led him to conclude that the 30% charge is not sufficient. He also said the Working Group does not have the option of deferring this decision because a factor has to be adopted for the new bucket of residual tranches created.

2. Discussed Comment Letters on Residual Factor and Sensitivity Test

The Working Group discussed the comment letters received on the residual tranche factor and the sensitivity test (Attachments 2-11).

Tsang said if it takes a long time to come up with a more thorough analysis for CLO residual tranches, an interim solution is needed. Barlow said what is being addressed are residual tranches generally rather than CLO residual tranches. Carmello said New York supports 45% and asked whether there is another NAIC group which looks at whether a given asset should be admitted because he questions whether this is appropriate for an insurance company.

Eft said he agreed that something needs to be done to address the disparity in the factor currently charged and 45% that is being proposed. However, he supports the sensitivity factor as an interim solution rather than changing the RBC factor for these residual tranches because there are so many variations in the residual tranches.

Andersen said there is some variation within an asset class, which happens to all asset classes. He said data shows holdings of these assets have increased by a multiple of ten over the past three years. His concern is that the sensitivity test alone is not going to change the trajectory at all. He said having liabilities supported by an under-capital-charged asset class does not seem to be the way to go.

Barlow said there is an exposure for 45% and a call for the middle of June will be scheduled to get additional feedback before a final decision is to be made on a factor to be set. He said any new comments will be taken through June 9.

Having no further business, the Risk-Based Capital Investment Risk and Evaluation (E) Working Group adjourned.

Draft: 8/1/23

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
Virtual Meeting
April 20, 2023

Risk-Based Capital Investment Risk and Evaluation (E) Working Group met April 20, 2023. The following Working Group members participated: Philip Barlow, Chair (DC); Thomas Reedy (CA); Wanchin Chou (CT); Ray Spudeck (FL); Roy Eft (IN); Kevin Clark (IA); Fred Andersen (MN); Debbie Doggett (MO); Lindsay Crawford (NE); Bob Kasinow and Bill Carmello (NY); Dale Bruggeman and Tom Botsko (OH); Rachel Hemphill (TX); Steve Drutz and Tim Hays (WA) and Amy Malm (WI).

1. Discussed Comment Letters

Connie Jasper Woodroof (CJW Associates) said her only comment was that the proposal was strictly for the life risk-based capital (RBC) formula, but property and health companies could also have residual tranches and those would only be subject to 20% charge for the RBC. She said this may need to be addressed in the other formulas. Barlow said they were not intending to ignore the Health and P&C formulas, but the issue is most pronounced for life companies and the current proposal is only for the life formula. He believes the initial referral received from the Financial Condition (E) Committee indicated a focus on life first.

Christopher Halldorson (Prudential) said there is currently no theoretical foundation for the current capital treatment of residual tranches and the 30% capital charge was developed based on S&P 500 experience between 1960 and 1991. He said there were not any residual CLO tranches included in that analysis and some analysis. He said there is some analysis since that indicates 30% seems quite low given the volatility of the underlying collateral of these types of transactions.

Kim Welsh (Athene) said they were not opposed to the proposal to employ one factor instead of three, but they continue to have concerns about the interim solution. She said they believe everything should be viewed through the principle of equal capital for equal risk and structured products needed to be reviewed holistically with respect to the risk in other asset classes.

Hemphill said she appreciated the comments from and dialogue with all the interested parties on both sides, which really helped her understand the issues. She understands there is a lot of sensitivity on this topic, and it is important to have an inclusive and transparent delivery process so that decisions that best represent the relevant facts will be made.

2. Adopted the Residual Tranche Structure Change

Barlow said the proposal is revised from the recommendation from the Valuation of Securities (E) Task Force, which included three buckets for residuals and there is only one bucket for the interim proposal. He said this is for all residual tranches that are reported in the annual statement and not limited to CLOs or any other particular type of structure.

Chou made a motion, seconded by Botsko, to adopt the residual tranche structure change. The motion passed unanimously.

3. Adopted the Sensitivity Test

Steve Clayburn (American Council of Life Insurers—ACLI) said the proposal adds a line to incorporate the residual tranches into the sensitivity test. Barlow said the Working Group was not able to expose this structural change for the sensitivity test by the normal timeline but asked for and did not get any comments from vendors on their ability to handle this.

Clark made a motion, seconded by Crawford, to adopt the sensitivity test structure change. The motion passed.

4. Exposed a Residual Tranche Factor for Comment

Andersen made a motion, seconded by Stolte, to expose a 45% interim RBC charge for the residual tranches. The motion passed unanimously.

Having no further business, the Risk-Based Capital Investment Risk and Evaluation (E) Working Group adjourned.

Draft: 4/4/2023

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
Virtual Meeting
March 23, 2023

Risk-Based Capital Investment Risk and Evaluation (E) Working Group of the Capital Adequacy (E) Task Force met March 23, 2023. The following Working Group members participated: Philip Barlow, Chair (DC); Thomas Reedy (CA); Wanchin Chou (CT); Virginia Christy (FL); Vincent Tsang (IL); Roy Eft (IN); Carrie Mears and Kevin Clark (IA); Debbie Doggett (MO); Lindsay Crawford (NE); Bob Kasinow (NY); Dale Bruggeman and Tom Botsko (OH); Rachel Hemphill (TX); Steve Drutz (WA); and Amy Malm (WI). Also participating was: Doug Stolte (VA).

1. Adopted its Feb. 27, 2023; and Fall National Meeting Minutes

The Working Group met Feb. 27, 2023, and took the following action: 1) discussed comments received on the American Academy of Actuaries' (Academy's) presentation on collateralized loan obligations (CLOs); 2) discussed comments received on the referral from the Valuation of Securities E) Task Force; and 3) discussed potential structure change to address residual tranches.

Eft made a motion, seconded by Chou, to adopt the Working Group's Feb. 27, 2023 (Attachment), and Dec. 14, 2022, minutes (*see NAIC Proceedings – Fall 2022, Capital Adequacy (E) Task Force, Attachment*). The motion passed unanimously.

2. Received Updates from the Valuation of Securities (E) Task Force and the Statutory Accounting Principles (E) Working Group

Mears said a newly created ad hoc group of the Valuation of Securities (E) Task Force is looking for participation from a variety of stakeholders with technical expertise in this area to dig into some of the more granular areas of the modeling process. Ultimately, the group would have participation from the American Academy of Actuaries (Academy). She said the other item on the agenda of the Task Force is to review the structured equity or rated feeder fund type structures and have a proposal to ensure transparency into those types of structures.

Bruggeman said the Statutory Accounting Principles (E) Working Group is moving forward with the principle-based bond definition in their its reporting, which includes the new Schedule D1.1 and D1.2 and new reporting categories with the planned effective date of Jan. 1, 2025. He said the Working Group exposed limited revisions to bond classification and accounting in addition to detailed accounting and reporting guidance for debt securities that do not qualify as bonds. The Working Group also exposed proposed reporting changes to capture new Schedule BA reporting lines for non-bond debt securities. The bond reporting changes to Schedule D1 and other related schedules were exposed by the Blanks (E) Working Group. A referral is expected to the Capital Adequacy (E) Task Force and the risk-based capital (RBC) groups to assess whether the blanks reporting changes will necessitate RBC revisions. Bruggeman said the Working Group discussed negative interest maintenance reserve (IMR) amounts and directed NAIC staff to move forward with referrals and drafting language for possible exposure. He said one of the referrals will be to the Capital Adequacy (E) Task Force, requesting that it consider removing admitted negative IMR as a direct reduction to total adjusted capital in the RBC formula along with consideration of sensitivity testing. He said there are a number of other considerations, including a referral to the Life Actuarial (A) Task Force. He said the Working Group also adopted clarifying language on invested assets issued by an affiliated entity or that include the obligations of an affiliated entity.

3. Continued Discussion of CLOs

Stephen Smith (Academy), chair of the Academy's C1 Work Group, said the Academy is focused on a couple of main priorities that it is trying to understand better. He said one ongoing project is that the Academy is trying to come up with a hypothetical model specification document to model CLOs for RBC purposes or provide a blueprint to check any other proposed model against. He said the Academy is also doing more work on the concept of RBC arbitrage. He said the Academy has observed that regulators, interested parties, and the industry have differing definitions of RBC arbitrage. He said the Academy is working on a document that will more clearly lay out the different definitions, along with some views on definitions that would be useful in terms of driving RBC. Mears asked Smith about the time frame. Smith said the Academy is trying to get the RBC arbitrage document out as quickly as possible, perhaps in a couple of months, and model specifications will be on a longer time frame.

4. Discussed Residual Tranche Structural Change

Barlow said his understanding of the charge received from the Financial Condition (E) Committee is to look at residual tranches for all structured assets, not just CLOs, and that this is intended to be an interim solution. As work continues on CLOs, as Smith just discussed, Barlow said he hopes to get a structure and a methodology that can be applied to other types of assets as well as CLOs. While CLOs may no longer be included in this interim solution, it could be that it stays in place for some categories of assets that do not have enough volume to warrant developing a methodology specifically for them.

Clark said a key point in taking an interim step would be the magnitude of the population and whether it is a pressing enough issue that an interim step is needed. Until regulators hold a meeting to look at the data, he said he is not sure a decision can be made. Barlow said he believes the guidance received for the Working Group's charge is to develop an interim proposal. Although the 2022 year-end data might inform the necessity of an interim proposal, he said he does not believe the Working Group should be deciding if an interim proposal is needed. However, if that is the will of the Working Group after reviewing the 2022 year-end data in the upcoming April meeting, it can be taken back to the Financial Condition (E) Committee. Clark said he is fine with the structural change to accommodate the timeline, as it keeps the Working Group's options open as to whether a change in factors is needed at this time.

Stolte said Virginia is supportive of the interim solution on residuals. He expressed concern about being out of step with other financial service regulators in the U.S. and internationally. Bruggeman said he supports looking at the data and waiting for a decision on a charge but expressed concern about waiting for all the data to be available because of the number of different structures and the materiality to individual companies.
Clark said he shared these concerns but said there is currently some ambiguity in the accounting guidance regarding what constitutes a residual tranche, and there will be some continued inconsistency in reporting until the definition is further refined. Therefore, the Working Group may not be looking at the full population, and that may inform the RBC decision. He expressed concern about implementing an interim step that does not have the usual level of analysis unless there is a material concern. Barlow said these are the issues the Working Group is to address and why there is representation from the other groups—so there is coordination from start to finish. He said his goal is to make RBC a non-factor when companies make investment decisions.

Hemphill said she does not think it is appropriate to just think of materiality from an overall industry perspective since the concern is from a solvency perspective. She said the Working Group needs to be willing to make incremental changes and improvements, and it is appropriate to consider making the change even if there is a concern that the average materiality across companies may not be high.

5. Discussed Next Steps

In line with many of the comments received, Barlow said it seems that the Working Group is supportive of having one category and one factor for the interim proposal on residual tranches. He said there were also several comments supporting sensitivity tests. He said he does not believe this would be a substitute for what the Working Group was asked to do but had suggested that if a proposal for sensitivity tests was received, the Working Group could consider that as an additional item. He said the American Council of Life Insurers (ACLI) has submitted a proposed sensitivity test.

Steve Clayburn (ACLI) said the ACLI believes there should be some quantitative analysis before a final factor is determined and thinks the sensitivity testing could be an additional tool for the state insurance regulators. Barlow said the structural change was exposed by the end of January, but the sensitivity test change was not exposed. He said that work will be done to get it ready for exposure and that this would include a request for input from RBC vendors as to the possibility of having this included for yearend 2023. He said there will be a regulator-only meeting in April to look at the 2022 year-end data on residual tranches and then an open meeting to continue discussions on the interim proposal.

Having no further business, the Risk-Based Capital Investment Risk and Evaluation (E) Working Group adjourned.

SharePoint/NAIC Support Staff Hub/Committees/E CMTE/CADTF/2023-1-Spring/RBCIREWG/RBC Investment Risk 03-23-23 Minutes.docx

Principles for Structured Securities RBC

Presentation to NAIC's RBCIRE

August 13, 2023

Steve Smith, MAAA, FSA, CFA

Academy C-1 Subcommittee, Chairperson

Executive Summary—
C-1 Asset Modeling

- The American Academy of Actuaries proposes a flowchart to determine whether (a) an asset class needs to be modeled and (b) whether securities within an asset class need to be modeled individually to determine C-1 factors.

- Preference is given toward simpler solutions—if an existing factor can be used, it should be used. Individual security modeling for C-1 determination is a last resort.

Executive Summary—
Principles-Based Approach for Structured Securities

- If the result of the flowchart is that an asset class requires modeling, the Academy would support a principles-based approach to the derivation of C-1 factors
- A principles-based approach to RBC for structured securities will allow regulators flexibility in adapting to new structures as they emerge in the marketplace
- This presentation proposes several candidate-principles
    - The Academy supports each of these candidate-principles, but we believe reasonable and informed people may disagree and are seeking guidance from regulators
    - We request that regulators identify which candidate-principles accurately reflect their views—these can then be incorporated into a principles-based approach to structured securities RBC

Discussion Topics

I. C-1 Modeling Flowchart

II. Structured Securities C-1 Principles

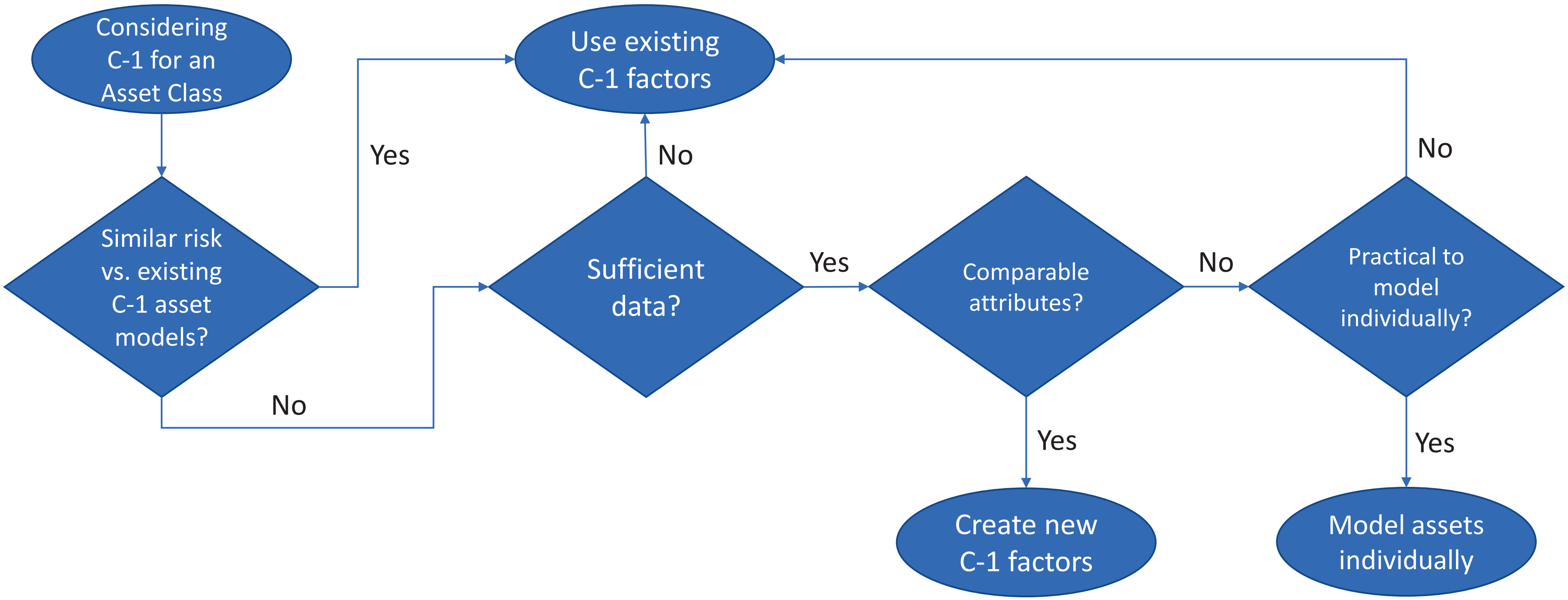
III. Appendices
   a) Appendix A—RBC Arbitrage
   b) Appendix B—Definitions of Terms

C-1 Modeling Flowchart

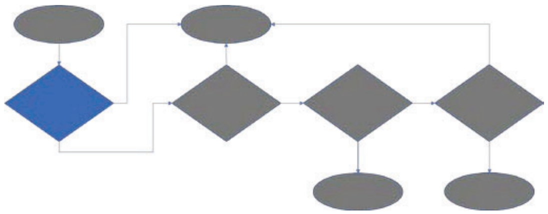
Threshold Questions

- For an asset class to be considered using this flowchart, it should first be verified as having all of the following attributes:
  1. Materiality or likely materiality in the future across the industry. Allocations from a small handful of companies would not justify changes to the RBC formula.
  2. The risk that would be modeled needs to be incorporated in C-1. For example, illiquidity alone would not be a sufficient justification because C-1 does not measure illiquidity risk.
  3. The expected benefits of a more precise calculation should outweigh the expected costs of building and using a new model. Costs include both time and energy spent to build the model as well as the negative effect of added complexity within the RBC formula.
- The burden to verify these attributes falls on the party asking for a more exact determination of RBC

C-1 Modeling Flowchart

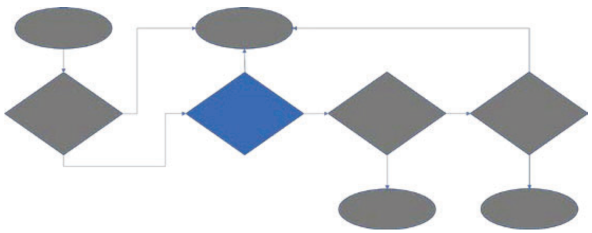


Decision: similar risk vs. existing C-1 asset models



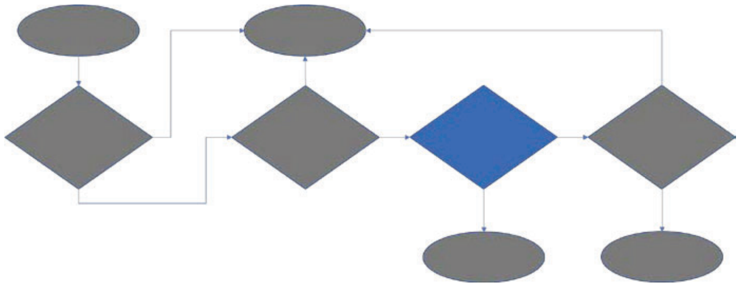
- Answer "yes" if the relative risk differences between risk categories (usually ratings or designations for fixed income) is similar to that of an existing set of C-1 factors.
- For example, municipal bonds and bank loans would each likely have an answer of "yes," because relative increase in risk as ratings decrease is similar to that of corporate bonds.
- CLOs and some other structured securities would likely have an answer of "no," because tail risk increases more quickly as the rating decreases compared to corporate bonds.

Decision: sufficient data



- Answer "yes" if data exist to enable risk modeling, and in particular tail risk modeling.
- For example, CLOs would likely have an answer of "yes," because their bank loan collateral has ample historical loss data and the waterfall structure is well documented.
- Some esoteric ABS, especially residual tranches, may have an answer of "no" if insufficient data are available.

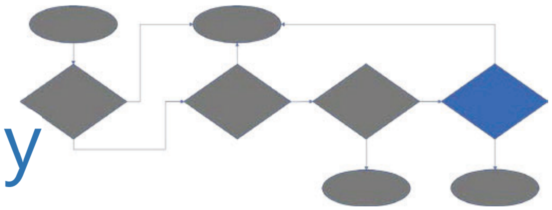
Decision: comparable attributes



- Answer “yes” if most individual assets within this asset class have an easily identifiable attribute that can be used to sort the assets into risk buckets.
- For example, CLOs would likely have an answer of “yes,” because most CLOs are rated by CRPs and those ratings can reasonably sort each individual CLO security into a risk bucket.
- Asset classes that are typically not rated by CRPs may have an answer of “no” here, but don’t automatically. For example, commercial mortgage loans are also a likely “yes” because DSCR and LTV substitute for CRP ratings as comparable attributes.

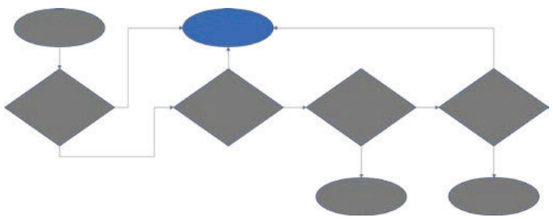
Initialism guide: CLO = collateralized loan obligation. CRP = credit rating provider. DSCR = debt service coverage ratio. LTV = loan-to-value

Decision: practical to model individually



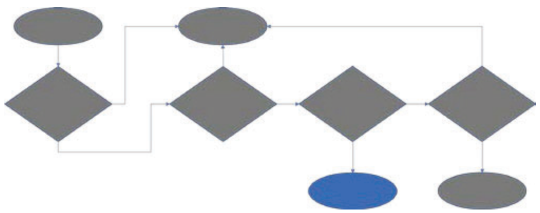
- Answer "yes" if individual assets within the asset class have several attributes that differentiate individual assets and can be used for risk modeling or if existing modeling software can be used.
- For example, CLOs would likely have an answer of "yes." because off-the-shelf software exists that can model individual CLOs (however, CLOs may never have arrived at this decision point if they were deemed to have comparable attributes).
- If modeling cannot reasonably be done in a timely and cost-effective manner for RBC filing, then the answer here must be "no."
- Some esoteric ABS may have an answer of "no" if the relevant risk is so specific to each deal that a common modeling framework does not apply across a reasonably large share of securities.

Outcome: use existing C-1 factors



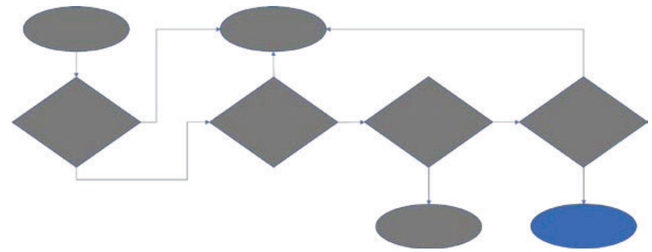
- This outcome can either mean to use existing C-1 factors directly, without adjustment, or it can mean to make slight adjustments to existing C-1 factors.
- For example, municipal bonds and bank loans currently use corporate bond C-1 factors without adjustment.
- Schedule BA real estate currently uses Schedule A real estate C-1 factors but with an upward adjustment resulting in a proportionately higher C-1 factor for BA real estate.

Outcome: create new C-1 factors



- This outcome means that a new set of C-1 factors should be developed for this asset class.
- For example, CLOs may retain the 20 possible designations that they are currently mapped into. But instead of those 20 designations corresponding to the 20 corporate bond C-1 factors, CLOs may instead have their own set of 20 C-1 factors.
- Instead of just a slight adjustment to existing C-1 factors, this outcome requires fundamental modeling work to derive new factors.

Outcome: model asset individually



- This outcome means that each asset within this asset class needs to be modeled individually in order to generate a C-1 factor.
- In practice, this is currently how non-agency RMBS and CMBS are treated. The modeling work is done by the Structured Securities Group to determine the NAIC designation, after which point corporate bond factors are used. This is functionally similar to modeling each RMBS and CMBS security individually to determine its C-1 factor.
- Because of the significant operational complexity involved, this outcome is a last resort.

Structured Securities C-1 Principles

Glossary of Terms

- **ABS**: bonds falling within the emerging definition of ABS in SSAP 26, most recently exposed November 16, 2022
- **Vertical Slice**: an investment in all tranches of an ABS in equal proportion to the total outstanding
- **RBC-transformative ABS[1]**: ABS where a vertical slice draws a lower aggregate C-1 requirement, considering only base factors (before portfolio adjustment and covariance adjustment), than its underlying collateral would draw if held directly by a life insurer
- **RBC Arbitrage (narrower)**: Holding a vertical slice of an RBC-transformative ABS
- **RBC Arbitrage (broad)**: Holding any part of an RBC-transformative ABS

1. Conversely, one could then define RBC-neutral ABS as ABS where a vertical slice draws aggregate C1 equal to that which would be drawn by its underlying collateral

Candidate-Principle #1.
The RBC Formula Is a Blunt Filtering Tool

- **The purpose of RBC is to help regulators identify weakly capitalized insurers, therefore small inaccuracies in RBC formulaic requirements will seldom justify a change to the RBC formula**
    - A structure that is close to RBC-neutral may not require a change in C-1 requirements.
    - Small allocations to RBC-transformative ABS may not require a change in C-1 requirements.
    - Small allocations to RBC-transformative ABS at the industry level will not avoid regulatory scrutiny.

Candidate-Principle #2.
RBC Is Based on Statutory Accounting

- **<u>RBC measures the impact of risk on statutory surplus. Changes in accounting treatment will affect C-1 requirements</u>**
    - All else equal, assets that are marked to market ("MTM") may have higher C-1 requirements because C-1 on MTM assets incorporates price fluctuations in addition to credit losses.

Candidate-Principle #3.
C-1 Established for Underlying Collateral

- **RBC arbitrage can only be measured for ABS where the underlying collateral has an established asset-class-specific C-1 requirement**
  - ABS collateral may include unrated debt securities that would be either NAIC-6 or non-admitted if held directly by insurers—NAIC-6 assets draw a 30% pre-tax C-1 factor regardless of risk.
  - This unrated collateral, often non-corporate, typically does not have an established asset-class-specific framework for assigning C-1 (e.g., auto loans or credit card receivables).
  - ABS including such collateral is very often RBC-transformative because it converts NAIC-6 or non-admitted assets into rated paper.
  - Because the underlying collateral does not have an established asset-class-specific C-1 requirement, forcing C-1 on the ABS to be RBC-neutral would likely result in a C-1 requirement that is more conservative than C-1 for comparable risk in other asset classes.

Candidate-Principle #4. Intentions Don't Matter For C-1 Requirements

- **The motivation behind creating an ABS structure should have no bearing on its C-1 requirements.** Even a structure designed with the explicit intent of reducing C-1 requirements should be treated like any other ABS. C-1 requirements represent a quantitative assessment of risk.
    - For many structures, it may be impractical or even impossible to objectively determine the intention of the design.
    - Even structures not designed to reduce C-1 may nevertheless lead to insufficient C-1 requirements.

Candidate-Principle #5.
C-1 Requirements Reflect Likely Future Trading Activity

- **C-1 requirements on ABS should treat the collateral as a dynamic pool of assets, incorporating future trading activity that is likely to occur based on historical data or mandated by the structure's legal documents.**
  - If C-1 requirements on ABS acknowledge the evolving nature of the collateral pool, the total C-1 of the structure may not equal the C-1 of a snapshot of the collateral pool at any one point in time.
  - Specific to CLOs, management of the collateral is a known factor impacting risk that can be modeled with reference to historical data.
  - While the Academy supports this candidate-principle, we acknowledge that the current C-1 framework generally does not incorporate likely future changes to a portfolio, except indirectly in cases where Credit Rating Providers have assigned a rating that incorporates assumptions about portfolio management.
  - The RBCIRE WG have expressed concerns with incorporating active management in C-1 requirements for CLOs.
  - This candidate-principle does not imply incorporating credit selection on the part of the ABS manager. In other words, this candidate-principle is separate from the concept of active management as commonly understood.

Candidate-Principle #6.
C-1 Requirement for Each Tranche Is Independent

- **RBC is based on the holdings of an insurer; assets not owned by an insurer should not impact its RBC**
  - This principle would imply RBC arbitrage depends on which tranche is held, even if an insurer holds a tranche issued by an RBC-transformative ABS.
  - This principle would imply that RBC arbitrage exists only in the tranches whose C-1 requirement is inadequate relative to the measured risk.
  - This principle would avoid tainting an entire structure with the label of RBC arbitrage in cases where C-1 is already sufficient for the particular tranche held by an insurer.
  - One practical drawback to this principle is it requires measuring risk at each tranche. The broad definition is simpler; showing that a structure is RBC-transformative is sufficient to identify RBC arbitrage per the broad definition. However, a C-1 requirement is still needed for each tranche held by an insurer, so the apparent simplicity under the broad definition is illusory.

Candidate-Principle #7.
Different Risk Measures

- Each C-1 factor is based on the asset class's risk profile. However, the risk profile for at least some ABS is quite different from the risk profile for bonds. Therefore, **C-1 requirements for ABS** should be calibrated to **different risk measures** where appropriate.
  - In our December 2022 report to RBCIRE WG, the Academy recommended adopting a different risk measure for CLOs—Conditional Tail Expectation ("CTE")—because CTE may better capture tail risk inherent in CLOs.
  - While different risk *measures* are appropriate, each asset's C-1 factor aims for a similar *magnitude*. For example, because most bonds use a 96th percentile, a CTE-96 for CLOs would be overly conservative. CTE-90 would be more consistent with the 96th percentile.
  - It is impossible to simultaneously reject this candidate-principle and require that all ABS structures are RBC-neutral, because in this case the collateral and the ABS would have C-1 requirements set to different statistical safety levels.

Summary of Candidate-Principles

1. The purpose of RBC is to help regulators identify weakly capitalized insurers, therefore small inaccuracies in RBC requirements may not justify a change to the RBC formula.
2. RBC measures the impact of risk on statutory surplus. Changes in accounting treatment will affect C-1 requirements.
3. RBC arbitrage can only be measured for ABS where the underlying collateral has an established asset-class-specific C-1 requirement.
4. The motivation behind creating an ABS structure should have no bearing on its C-1 requirements.
5. C-1 requirements on ABS should treat the collateral as a dynamic pool of assets, incorporating future trading activity that is likely to occur based on historical data or mandated by the structure's legal documents.
6. RBC is based on the holdings of an insurer; assets not owned by an insurer should not impact its RBC.
7. C-1 requirements for ABS should be calibrated to different risk measures where appropriate.

Key Questions for Regulators

- Which candidate-principles do regulators support?
- Are there additional principles not outlined herein that also ought to be incorporated into RBC for ABS?

Appendix A—RBC Arbitrage

Impact of Principles on Definition of RBC Arbitrage

- By discussing broader principles, this presentation seeks to spark conversation on the definition of Risk-Based Capital (RBC) arbitrage in Asset Backed Securities (ABS) and clarify the implications of conflicting RBC arbitrage definitions.
- The NAIC's Investment Analysis Office (IAO) has proposed a constraint in the model used to determine designations, and therefore RBC requirements, for CLOs. This constraint would eliminate RBC arbitrage, as defined by the IAO, that the IAO believes is present in CLOs.
- Competing definitions among interested parties and regulators have been used in some formal and informal discussions, so far without a forum for being discussed directly.
- This presentation attributes differences in RBC arbitrage definitions to underlying principles of RBC. The C1WG is requesting guidance from regulators on which principles should be followed. Once the principles have been identified, RBC arbitrage can be more clearly defined and more effectively mitigated. These principles will also guide a broader effort around improving the C-1 framework for all ABS.

Asset Classes With Greatest Potential for RBC Arbitrage

	Tranched	Pass-Through
Established asset-class-specific C-1	CLO Non-Agency RMBS/CMO CMBS CFO	Agency RMBS
No established asset-class-specific C-1	Consumer Finance Asset-based Lending Credit feeder fund	

- Quantifying RBC arbitrage is most direct when the underlying collateral has an explicit C-1 factor
- Tranched structures are more likely to produce RBC arbitrage than pass-through structures because tranching transforms risk
- RBC arbitrage discussions should focus on tranched structures with established asset-class-specific C-1

Definitions of RBC Arbitrage

- IAO has expressed its view that holding **any tranche** of a securitization whose vertical slice carries a different aggregate C-1 requirement compared to the underlying collateral constitutes RBC arbitrage—we term this the **broad**[1] definition of RBC arbitrage
- An alternative, **narrower**[1] definition of RBC arbitrage includes only instances where an insurer holds a **vertical slice**[1]
- Many other possible definitions lie somewhere in between

1. Please see Appendix B—Definitions of Terms for precise definitions of technical terms.

IAO Usage of the Term "RBC Arbitrage"

- A letter from IAO to VOSTF dated May 25, 2022, introduces the concept of RBC arbitrage within the context of CLOs: "The aggregate RBC factor for owning all of the CLO tranches should be the same as that required for owning all of the underlying loan collateral. If it is less, it means there is RBC arbitrage."
- SVO's Structured Equity & Funds Proposal dated November 28, 2022, also uses the term "RBC arbitrage" with effectively the same meaning but expanding the scope from CLOs to include certain feeder fund structures.

Academy Usage of "RBC Arbitrage"

- In our presentation to RBCIREWG dated December 14, 2022, the Academy disagreed with the concept that the existence of RBC arbitrage, as defined by IAO, necessarily implied an incorrect C-1 requirement
- The Academy believes dialogue among all parties will be improved if we first collectively agree on a definition of RBC arbitrage before discussing its implications for C-1 requirements

Related Regulatory Concerns

- IAO has also pointed out the possibility of RBC-transformative ABS being used to reclassify investments to technically comply with investment limits set forth in state insurance law, for example converting equity to debt for statutory purposes
- RBC-transformative ABS may also be used to reclassify investment returns or losses from an accounting perspective
- While we acknowledge these related potential issues, this presentation focuses only on C-1 implications of RBC-transformative ABS

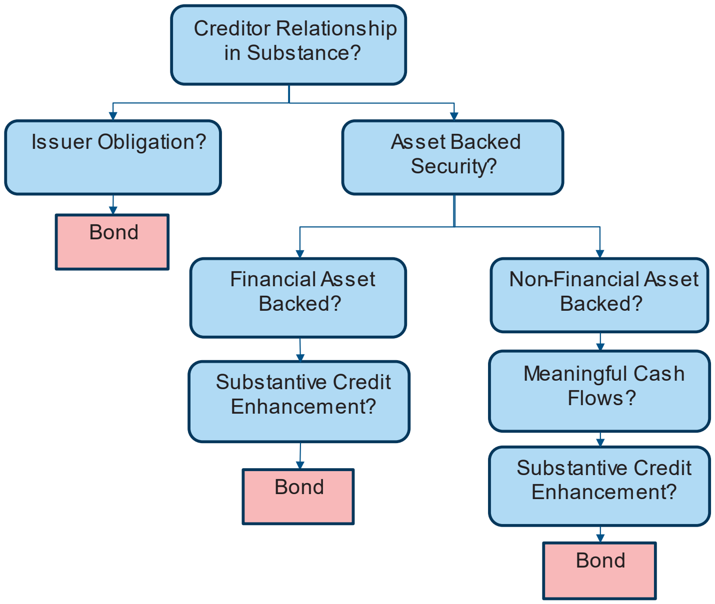
Appendix B—Definitions of Terms

ABS Definition

- RBC arbitrage discussions typically involve structured securities, for example CLOs and rated note feeder fund structures.
- Within this presentation, we refer to all such structured securities as **ABS**, and we intend for the definition of ABS to align with the emerging definition of ABS in **SSAP 26**, most recently exposed November 16, 2022. Under this definition, ABS has a primary purpose of raising debt capital backed by collateral that provides the cash flows to service the debt.

ABS Definition, Continued

Bond Principles Flowchart



- Exposed principles-based definition of ABS is illustrated here
- Image taken from "Assets: Regulatory Updates in Life Insurance" April 4, 2023, webinar by the American Academy of Actuaries

Vertical Slice Definition

A vertical slice is an investment in all tranches of an ABS in equal proportion to the total outstanding. A vertical slice is economically equivalent to a direct investment in the underlying collateral at any one point in time.

RBC-Transformative ABS Definition

An RBC-transformative ABS is any ABS where a vertical slice draws a lower aggregate C-1 requirement than its underlying collateral would draw if held directly by a life insurer.

Narrowly Defined RBC Arbitrage

- **Holding a vertical slice of an RBC-transformative ABS** constitutes RBC arbitrage under the narrow definition.
- In this case, it is unambiguously true that absent the structure of the ABS a life insurer would be required to hold a higher level of C-1 capital.
- Even under the narrow definition of RBC arbitrage, C-1 requirements for the collateral may be inappropriately high rather than the ABS C-1 requirements being inappropriately low. Also, C-1 for the ABS and its collateral may be calibrated precisely to the prescribed risk measures despite the ABS being RBC-transformative. Regardless, in such cases holding a vertical slice of an RBC-transformative ABS would still constitute RBC arbitrage.

Broadly Defined RBC Arbitrage

- **Holding any part of an RBC-transformative ABS** constitutes RBC arbitrage under the broad definition
- For example, any CLO holdings would constitute RBC arbitrage under this definition, because CLOs are an RBC-transformative ABS (as discussed in the Academy's December 2022 presentation to RBCIREWG)
- IAO letters written to VOSTF during 2022 employ the broad definition of RBC arbitrage

QUESTIONS

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