

Draft date: 11/15/23

*2023 Fall National Meeting
Orlando, Florida*

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

Saturday, December 2, 2023

8:00 – 9:00 a.m.

Hilton Orlando Bonnet Creek—Floridian Ballroom G-I—Level 1

ROLL CALL

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 Oct. 17 and Summer National Meeting Minutes—*Philip Barlow (DC)* Attachment A
Attachment B
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 C
4. Discuss Next Steps—*Philip Barlow (DC)* Attachment D
5. Discuss Any Other Matters Brought Before the Working Group —*Philip Barlow (DC)*
6. Adjournment

Draft: 11/14/23

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

The Risk-Based Capital Investment Risk and Evaluation (E) Working Group of the Capital Adequacy (E) Task Force met Oct. 17, 2023. The following Working Group members participated: Philip Barlow, Chair (DC); Ted Chang (CA); Wanchin Chou (CT); Ray Spudeck (FL); Carrie Mears and Kevin Clark (IA); Vincent Tsang (IL); Roy Eft (IN); David Nelson (MN); Debbie Doggett (MO); Lindsay Crawford (NE); Jennifer Li (NH); Bob Kasinow and Bill Carmello (NY); Dale Bruggeman and Tom Botsko (OH); Rachel Hemphill (TX); Doug Stolte (VA); Steve Drutz (WA); and Amy Malm (WI).

1. Discussed the American Academy of Actuaries' (Academy) Principles for Structured Securities Risk-Based Capital

Barlow said he believes these principles are important for the Academy to be able to work on the request for developing a proposal to address collateralized loan obligations (CLOs) with the hope that the methodology developed can be more broadly applied to other asset backed structures. Steve Smith (Academy) presented these principles at the Summer National Meeting and Barlow said the goal is for the Working Group to provide feedback and have some agreement on the principles the Academy will use by the Fall National Meeting. Barlow said Working Group members were asked for comments in advance of this meeting and suggested addressing the principles one at a time.

With respect to principle 1, page 17 of the presentation (Attachment 1), Barlow said that aspects of RBC that can change more quickly need to be recognized and addressed in a more flexible way, which requires more granularity and specificity. Smith said the level of precision across the RBC formula should not necessarily be uniform and more precision should be in areas that are more easily arbitrated by companies. Barlow agreed. Carmello said regulators should be concerned if any company has an understated RBC or overstated surplus and are looking at the significance at the company level, not at the industry level. Hemphill said she agrees with Carmello. She would also like to consider a prospective view in terms of current allocations and trends. Clark said he agrees with this principle. He said material exposure that a company has is clearly a regulatory concern but said it is a question of whether it is best addressed by RBC or other regulatory tools. He asked whether there are any principles that can address when an issue is material to enough companies that a change in RBC is necessitated. Barlow said the number of companies which experience the same issue could escalate very rapidly. Stolte said he agrees with Barlow and Hemphill in that what does not seem material today may become the new trend and material in the future. Smith said small allocations at the industry level will not avoid regulatory scrutiny. He asked regulators for guidance on the extent of materiality which leads to a change in the RBC formula.

With respect to principle 2, Barlow asked whether the C-1 factor will become higher when assets are marked to market in a down market. Smith said the Academy is not suggesting a dynamic C-1 factor, but assets will be marked to market, which likely leads to a higher charge. Tsang said the market price already reflects the market's perception about the credibility of these assets. He said it will be a double hit to an investor when a depressed bond has a higher C-1 charge so he questions having a higher C-1 charge on assets that are marked to market because he believes the market price has already provided an additional buffer. Smith said the risk of the statutory surplus is what RBC accounts for, which gives regulators comfort that statutory surplus will remain positive. Changes in the market value of assets from one period to the next will impact the statutory surplus. If an asset is held at the book value, there is no need to worry about the marked to market fluctuations. Tsang said he was looking at the default risk of the assets. Carmello said the market is still very volatile at that point and this is why the market value is required. Tsang said he asked whether another layer, which is the C-1 charge, is needed for

an already depressed asset value. Smith said the market price roughly reflects expected value whereas capital is a tail risk. He said C-1 is meant to measure a reduction in statutory surplus, which is equivalent to default or impairment. He asked whether regulators want to make a change to focus on the long-term default or continue to have it calibrated to statutory surplus explicitly. Tsang asked Smith whether marked to market assets refer to securities such as stocks or assets that are in the other-than-temporary impairment category and have to be marked to market. Smith said they refer to stocks or more specifically asset backed securities' (ABS) residual tranches. Tsang asked Smith to clarify what marked to market assets mean in this context. Smith said the Academy will work on a clarification.

With respect to principle 3, Clark asked about its implication and the expected impact. Smith said C-1 should be an accurate measure of the risk of what an actual asset is. Clark said he is concerned about the implication when RBC is only addressed where a measurable capital arbitrage is observed. He asked whether this principle can be rephrased as the capital requirements should align with the risk of the investment. Smith agreed with Clark's comment. Tsang asked whether the ABS would be spoiled when the collateral is not rated. Smith said this is another implication. He said it would not because whether being rated or not is less important than what the risk is. Tsang asked what would happen to the ABS if the collateral does not have a specific C-1 requirement. Smith said the capital added up on the vertical slice will not necessarily be equal to that on the collateral because the capital on the collateral is not calibrated to the risk while the capital on the ABS is. Tsang said it implies that there is no arbitrage when the collateral is unrated and said a clarification would be helpful. Hemphill said she agrees and would like to see this principle rephrased. Smith said the Academy would work on updates based on this feedback.

For principle 4, Clark agreed with this principle, but is not sure whether it necessarily needs to be a principle. Hemphill said she had a similar reaction and would like a clarification of what exactly the concern is to make this principle necessarily needed. Carmello said this principle is not needed and suggested getting rid of it. Smith said the Academy did not consider the connection between principle 4 and materiality. It was considered in terms of calculating the C-1 requirement. Barlow asked Smith to explain how this principle could help. Smith said this principle may not be necessary, especially if principle 3 is rephrased. It was intended to further reinforce the idea that C-1 on a given security is based on the risk of that security. The underlying motivation was that C-1 capital has to align with risk. Clark said the revised principles would cover what was intended by this principle.

For principle 5, Clark said he agrees with this principle, but need to be cognizant of what is being captured in the attribute that is used to assign the capital charges. Barlow asked Smith to acknowledge the avoidance of double counting. Smith said it is worth independently thinking through how C-1 should be calculated and then looking to Credit Rating Provider (CRP) ratings to understand how they are calculated and then looking for differences and analyzing those differences. Chou asked Smith to explain how collateral should be treated if the historical data is quite limited or this collateral is relatively new. Smith said if dynamism and the collateral pool are to be considered, there needs to be some kind of reasonable basis for that. Any claims of dynamism that might be credit enhancing need to be justified. Eric Kolchinsky (NAIC) said the question for regulators is marginal trading. Charles Therriault (NAIC) said one concern they generally have is that there's no uniformity across CRP ratings.

Barlow said principle 6 sounds straightforward. He asked Smith about its implications. Smith said this principle boils down to the goal to align capital with risk. This principle is trying to avoid a strict enforcement of having a vertical slice of total capital equal the underlying capital at the expense of getting correct capital at each tranche. Barlow said the Working Group would benefit from looking at some revisions of these principles. Hemphill agrees on the rephrasing.

Barlow said the right risk measure, which depends upon the asset structure, should be used for principle 7. Smith said they will get back to the Working Group with some revisions as quickly as they can.

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/2023-3-Fall/RBC Investment Risk 10-17-23 Minutes.docx

Draft Pending Adoption

Attachment **XX**
 Capital Adequacy (E) Task Force
 8/14/23

Draft: 8/22/23

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
 Virtual Meeting
 August 13, 2023

The Risk-Based Capital Investment Risk and Evaluation (E) Working Group of the Capital Adequacy (E) Task Force met Aug. 13, 2023. The following Working Group members participated: Philip Barlow, Chair (DC); Thomas Reedy (CA); Qing He (CT); Carolyn Morgan (FL); Carrie Mears and Kevin Clark (IA); Vincent Tsang (IL); Roy Eft (IN); Fred Andersen (MN); Debbie Doggett (MO); Lindsay Crawford (NE); Bob Kasinow (NY); Dale Bruggeman and Tom Botsko (OH); Jamie Walker (TX); David Smith and Greg Chew (VA); Steve Drutz (WA); and Amy Malm (WI). Also participating was: Mike Yanacheak (IA).

1. Adopted its June 14, May 17, April 20, and Spring National Meeting Minutes

Botsko made a motion, seconded by Drutz, to adopt the Working Group's June 14 (Attachment **A**), May 17 (Attachment **B**), April 20 (Attachment **C**), and March 23 (see *NAIC Proceedings – Spring 2023, Capital Adequacy (E) Task Force, Attachment Five*) minutes. The motion passed unanimously.

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

Mears said the Valuation of Securities (E) Task Force was going to review progress on the work of a definition of a designation, and she talked about how the concept of how a designation works within the insurance regulatory process. In addition, it was going to discuss a proposal for the Securities Valuation Office (SVO) to have some discretion of individual ratings that come from credit rating providers (CRPs) and the ability to challenge those via a due process that has been laid out. The Task Force will also discuss the comment letters received and the next steps from there.

Bruggeman said the Statutory Accounting Principles (E) Working Group adopted the principle-based bond definition that would become effective Jan. 1, 2025. It also updated *Statement of Statutory Accounting Principles (SSAP) No. 26R—Bonds*, *SSAP No. 43R—Loan-Backed and Structured Securities*, and some of the references in other SSAPs for issuing credit obligations and asset-backed securities (ABS). The project included updating Schedule D1 for those that meet the bond definition, which was almost completed by the Blanks (E) Working Group. Along with exposing the project issue paper, the Statutory Accounting Principles (E) Working Group also exposed an update to *SSAP No. 21R—Other Admitted Assets* for debt-related securities that do not meet the definition. The exposure also included a concept for distributions of the two or four residual tranches that would go to the principal value first rather than income until the principal value reaches zero, and distributions will be recorded as income afterward. The Statutory Accounting Principles (E) Working Group is going to sponsor the Blanks (E) Working Group's proposal to revise Schedule BA for ABS and debt-related securities that do not meet the definition. The Statutory Accounting Principles (E) Working Group plans to have separate reporting lines based on why it did not meet the definition under three categories. Part of the Schedule D1 break-up setup will make it easier for the RBC schedules to pull collateralized loan obligation (CLO) information directly from blanks.

Draft Pending Adoption

Attachment XX
Capital Adequacy (E) Task Force
8/14/23

3. Heard a Presentation from the Academy

Steve Smith (American Academy of Actuaries—Academy) presented principles for structured securities risk-based capital (RBC) (Attachment D). There are two main sections of the presentation. The first section, which is on asset modeling, covers how granular C-1 should be in terms of asset classes. Smith walked through the C-1 modeling flow chart. Mears asked how state insurance regulators should assess the information available in the designation if the rating itself is informative enough. Smith said it is interconnected with the second section of the presentation. It depends on what C-1 is specifically measuring. Barlow said he is not clear on whether ratings for corporate bonds mean the same thing for CLOs. Smith said the Academy does not believe a given rating in terms of the tail risk on a corporate bond means the same thing for a CLO. Yanacheak asked whether it is right to say a risk measure of the same percentile could have different meanings between two completely different asset types. Smith said he agrees with him on this.

For the second section of the presentation, Smith talked about seven candidate principles that would govern structured securities for RBC. He explained what these candidate principles are and how they work. Barlow made a comment on the first principle. He said it is worthwhile for the Working Group to consider how easy it is to adjust the RBC when considering the extent of precision with a particular component. Mears asked a question on the fifth principle. She asked whether there is a need to have a separate set of factors for CLOs compared to other ABS due to the active management incorporated into the CLO rating. Smith said it depends on the situation. In a filing-exempt (FE) world, no additional work would be needed for CLOs to satisfy this candidate principle. However, an awareness of this principle should be kept in modeling assets for CLOs individually. Clark asked a question on the last candidate principle. He asked whether the Academy asked state insurance regulators to provide feedback on whether the conditional tail expectation (CTE) would be a better measure or an endorsement of the CTE (90) versus 96th percentile. Smith said that feedback is requested regarding whether the Working Group supports using different risk measures for different assets.

The Academy asked the Working Group to provide its feedback on these principles, based on which the Academy would work to produce a general framework around the principles.

4. Discussed its Next Steps

Barlow said the next step for the Working Group would be to have a follow-up call to get questions and comments from the state insurance regulators and interested parties on the principles presented.

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

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Updated Principles for Structured Securities RBC

Presentation to NAIC's RBCIRE
December 2, 2023

Steve Smith, MAAA, FSA, CFA
Chairperson, Academy C-1 Subcommittee

Executive Summary: C-1 Asset Modeling

The American Academy of Actuaries proposes a flowchart to determine whether

- An asset class needs to be modeled, and
- Securities within an asset class need to be modeled individually to determine C-1 factors.

Simpler solutions are preferred—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, we would support a principles-based approach to the derivation of C-1 factors

- A principles-based approach to RBC for structured securities (referred to as “ABS” throughout this presentation) allows flexibility when adapting to new structures as they emerge in the marketplace

This presentation proposes several candidate-principles, all of which the Academy supports. However, reasonable and informed people may disagree.

REQUEST: Regulators identify which candidate-principles accurately reflect their views, in order to incorporate them into a structured securities RBC principles-based approach.

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

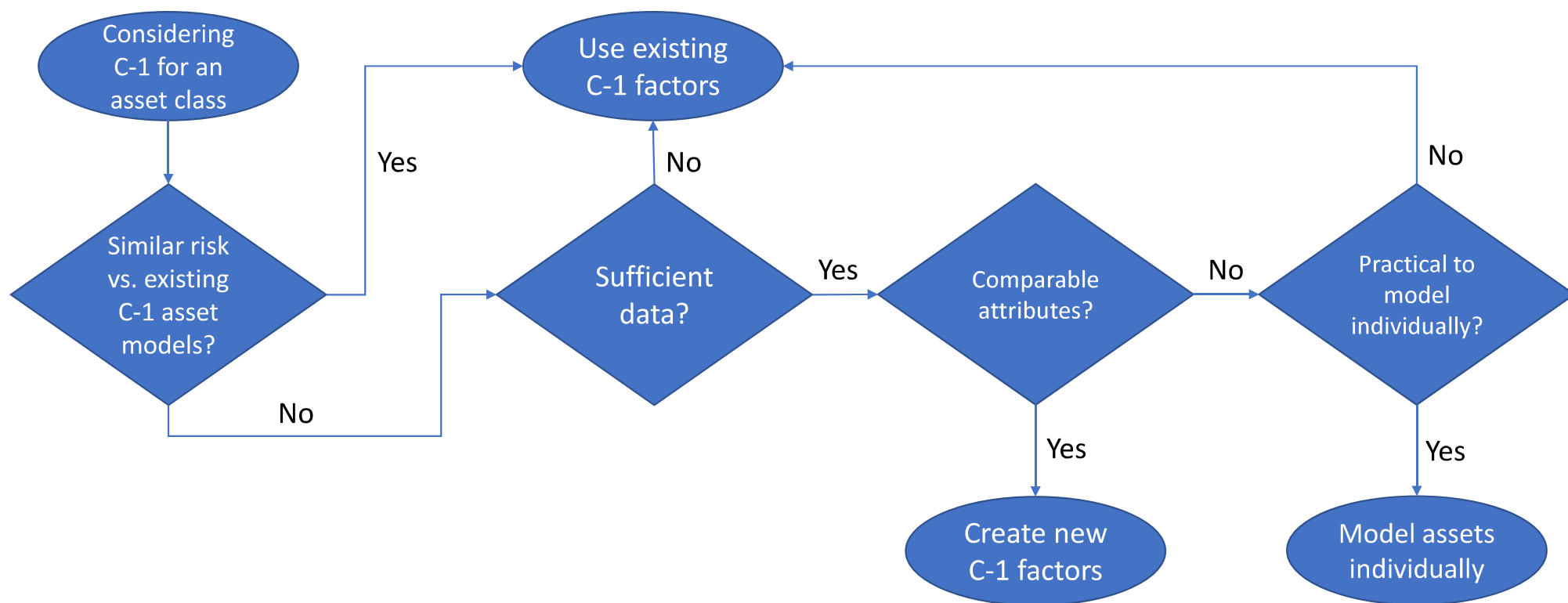
Threshold Questions

For an asset class to be considered using this flowchart, it should first be verified as having all of the following attributes:

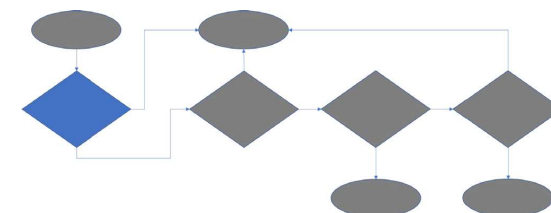
1. Materiality or likely materiality in the future across the industry. Allocations from a small handful of companies would not justify changes to the RBC formula.
2. The risk that would be modeled needs to be incorporated in C-1. For example, illiquidity alone would not be a sufficient justification 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



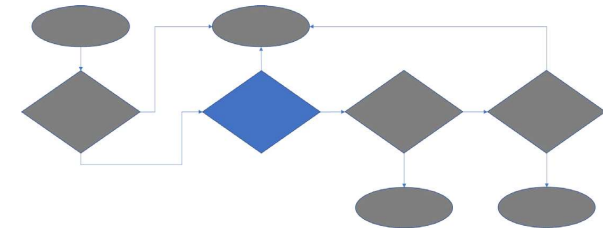
Answer “yes” if the relative risk differences between risk categories (usually ratings or designations for fixed income) is similar to that of an existing set of C-1 factors.

- 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.

CLO = collateralized loan obligation.

Decision—sufficient data

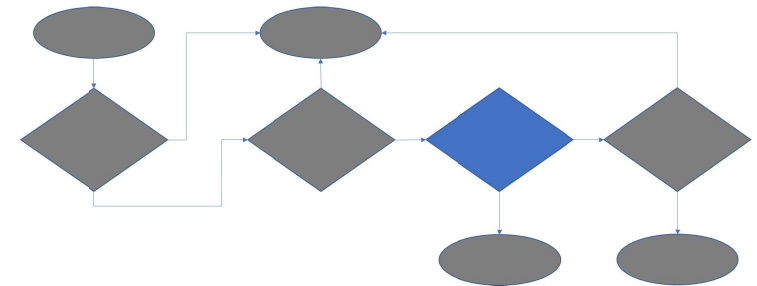


Answer “yes” if data exist to enable risk modeling, and in particular tail risk modeling.

- 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



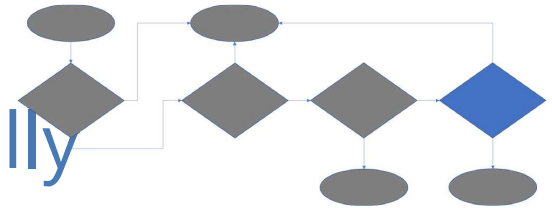
Answer “yes” if most individual assets within this asset class have an easily identifiable attribute that can be used to sort the assets into risk buckets.

- 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.

CRP = credit rating provider. DSCR = debt service coverage ratio. LTV = loan-to-value.

Decision—practical to model individually



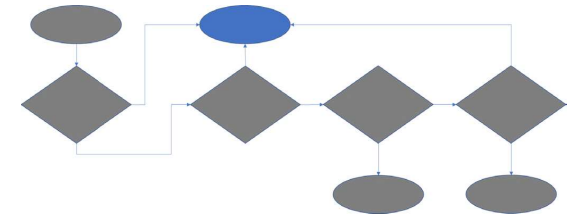
Answer “yes” if individual assets within the asset class have several attributes that differentiate individual assets and can be used for risk modeling or if existing modeling software can be used.

- 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

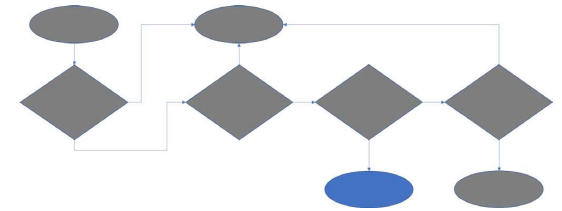


This outcome can either mean to use existing C-1 factors directly, without adjustment, or it can mean to make slight adjustments to existing C-1 factors.

- 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

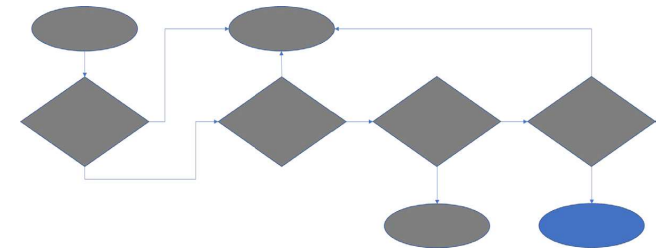


This outcome means that a new set of C-1 factors should be developed for this asset class.

- 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 potentially weakly capitalized insurers, therefore changes that have a small impact on RBC ratios may not justify a change to the RBC formula

The frequency of changes to the RBC formula is practically limited by NAIC processes and stakeholders' available time, therefore it is important to prioritize the most material potential changes to the RBC formula.

Small allocations to RBC-transformative ABS by a limited number of insurers may not require a change in C-1 requirements across the entire industry.

Candidate-Principle #2. Emerging Risks Require Regulatory Scrutiny

Emerging investment risks create concerns for regulators, and existing regulatory tools can be considered alongside RBC for addressing these newer risks—but RBC needs to be considered when there are material solvency issues.

RBC should address solvency issues, but not every risk will create a material solvency concern.

Modifications to RBC may be necessary, but complementary regulatory tools should also be considered (e.g., ORSA, AAT/AG53, disclosures, examinations, etc.).

RBC-transformative ABS that are held by a small but growing number of insurers or with increased allocation may justify changes to the RBC formula.

More responsive refinements to RBC may be justified in areas where an insurer can more easily adjust its business model to optimize around the RBC formula.

- Refinements that are made should generally be principal-driven and agnostic to specific market conditions.
- Temporary relief may be warranted on occasion, even though it has the effect of contributing anti-cyclicality into RBC.

Candidate-Principle #3. RBC Is Based on Statutory Accounting

C-1 requirements reflect the impact of risk on statutory surplus. **Changes in accounting treatment will affect RBC.**

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.

In practice, this means that C-1 for residual tranches would consider price fluctuations, whereas C-1 for unimpaired rated debt tranches only considers credit losses.

Impaired rated debt tranches are part of a broader issue that applies beyond just structured securities and are therefore outside the scope of this candidate-principle.

Candidate-Principle #4. C-1 Aligns With Risk

C-1 requirements for a given tranche should align with that tranche's risk, to the extent practical.

If an ABS has unrated collateral, the unrated status has no bearing on how to determine the ABS' appropriate C-1 requirement

The existence of unrated collateral does not automatically imply that an ABS should have a higher C-1 requirement.

The existence of unrated collateral also does not automatically imply that an ABS should not have a higher C-1 requirement.

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 activities that are reasonable and vary appropriately by economic scenario.

C-1 requirements should not be reduced by any amount due to an assumption of credit alpha.

This candidate-principle refers to the trading activity that is subject to 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.

If designations are based on CRP ratings, then explicit recognition of trading activity may not be required to the extent CRP ratings account for this.

Candidate-Principle #6. Appropriate Risk Measures

Each C-1 factor is based on the asset class’s risk profile. However, the risk profile for ABS differs 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* may be appropriate, each asset’s C-1 factor aims for a similar *magnitude or level of risk*.

This candidate-principle implies that not all ABS structures are necessarily RBC-neutral, because 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 potentially weakly capitalized insurers, therefore changes that have a small impact on RBC ratios may not justify a change to the RBC formula.
2. Emerging risks require regulatory scrutiny.
3. C-1 requirements reflect the impact of risk on statutory surplus. Changes in accounting treatment will affect RBC.
4. C-1 requirements on a given tranche align with that tranche's risk.
5. C-1 requirements on ABS should treat the collateral as a dynamic pool of assets.
6. 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 currently outlined that should 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 Academy 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

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

- 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 RBCIRE WG](#) 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

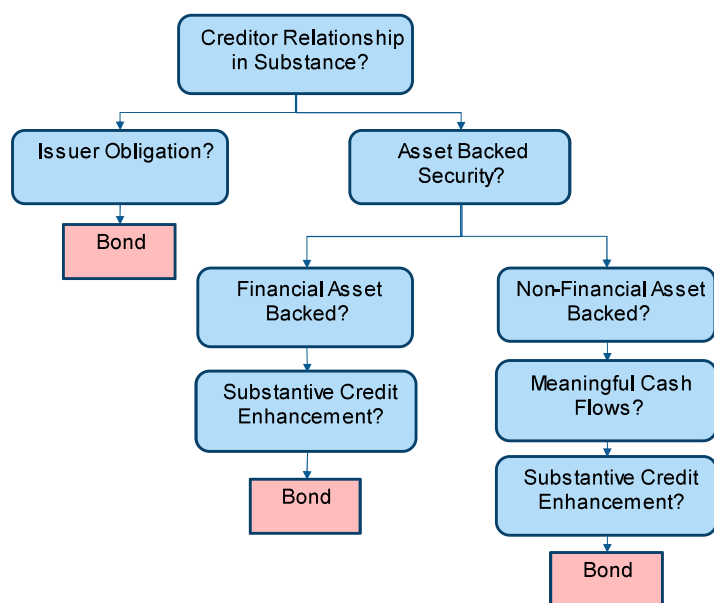
Appendix B: Definitions of Terms

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 RBCIRE WG](#)).

IAO letters written to VOSTF during 2022 employ the broad definition of RBC arbitrage.

QUESTIONS

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Priority 1 – High Priority
Priority 2 – Medium Priority
Priority 3 – Low Priority

**CAPITAL ADEQUACY (E) TASK FORCE
WORKING AGENDA ITEMS FOR CALENDAR YEAR 2024**

2024 #	Owner	2024 Priority	Expected Completion Date	Working Agenda Item	Source	Comments	Date Added to Agenda
Carryover Items Currently being Addressed – RBC IR & E							
IR1	RBC IRE	2	2023 or later	Supplementary Investment Risks Interrogatories (SIRI)	Referred from CADTF Referral from Blackrock and IL DOI	The Task Force received the referral on Oct. 27. This referral will be tabled until the bond factors have been adopted and the TF will conduct a holistic review all investment referrals.	1/12/2022 11/19/2020
IR2	RBC IRE	2	2023 or later	NAIC Designation for Schedule D, Part 2 Section 2 - Common Stocks Equity investments that have an underlying bond characteristic should have a lower RBC charge. Similar to existing guidance for SVO-identified ETFs reported on Schedule D-1, are treated as bonds.	Referred from CADTF Referral from SAPWG 8/13/2018	10/8/19 - Exposed for a 30-day Comment period ending 11/8/2019 3-22-20 - Tabled discussion pending adoption of the bond structure and factors.	1/12/2022 10/11/2018
IR3	RBC IRE	2	2023 or later	Structured Notes - defined as an investment that is structured to resemble a debt instrument, where the contractual amount of the instrument to be paid at maturity is at risk for other than the failure of the borrower to pay the contractual amount due. Structured notes reflect derivative instruments (i.e., put option or forward contract) that are wrapped by a debt structure.	Referred from CADTF Referral from SAPWG April 16, 2019	10/8/19 - Exposed for a 30-day Comment period ending 11/8/2019 3-22-20 - Tabled discussion pending adoption of the bond structure and factors.	1/12/2022 8/4/2019
IR4	RBC IRE	2	2023 or later	Comprehensive Fund Review for investments reported on Schedule D Pt 2 Sn2	Referred from CADTF Referral from VOSTF 9/21/2018	Discussed during Spring Mtg. NAIC staff to do analysis. 10/8/19 - Exposed for a 30-day comment period ending 11/8/19 3-22-20 - Tabled discussion pending adoption of the bond structure and factors.	1/12/2022 11/16/2018
New Items – RBC IR & E							
IR5			2023 or later	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).	Request from E Committee, SAPWG, VOSTF	Per the request of E Committee comments were solicited asking if these types of assets should be considered a part of the RBC framework.	1/12/2022
IR6			2023 or later	Evaluate the appropriate RBC treatment of Residual Tranches.	Request from E Committee, SAPWG, VOSTF	Per the request of E Committee comments were solicited asking if these types of assets should	1/12/2022

						be considered a part of the RBC framework.	
IR7			2025 or later	Phase 2 Bond analysis - evaluate and develop an approach to map other ABS to current bond factors following the established principles from Phase I where the collateral has an assigned RBC. This project will likely require an outside consultant and the timeline could exceed 2-3 years.	Request from E Committee	Per the request of E Committee comments were solicited requesting the need for outside review.	1/12/2022
IR8	RBC IRE		2023 or later	Address the tail risk concerns not captured by reserves for privately structured securities.	Referral from the Macroprudential (E) Working Group		8/11/2022