

Date: 2/7/2022

Valuation of Securities (E) Task Force

Tuesday, February 21, 2023

2:00 p.m. - 3:00 p.m. ET / 1:00 p.m. - 2:00 p.m. CT / 12:00 p.m. - 1:00 p.m. MT / 11:00 a.m. - 12:00 p.m. PT

ROLL CALL

Member	Representative	State
Doug Ommen, Chair	Carrie Mears	Iowa
Eric Dunning, Vice Chair	Lindsay Crawford	Nebraska
Mark Fowler	Sheila Travis	Alabama
Lori K. Wing-Heier	Jeffrey Bethel	Alaska
Ricardo Lara	Laura Clements	California
Andrew N. Mais	Ken Cotrone	Connecticut
Michael Yaworsky	Carolyn Morgan	Florida
Dean L. Cameron	Eric Fletcher	Idaho
Dana Popish Severinghaus	Vincent Tsang	Illinois
Vicki Schmidt	Tish Becker	Kansas
James J. Donelon	Stewart Guerin	Louisiana
Kathleen A. Birrane	Matt Kozak	Maryland
Gary D. Anderson	John Turchi	Massachusetts
Grace Arnold	Fred Andersen	Minnesota
Chlora Lindley-Myers	Debbie Doggett	Missouri
Marlene Caride	John Sirovetz	New Jersey
Adrienne A. Harris	James Everett	New York
Jon Godfread	Matt Fischer	North Dakota
Glen Mulready	Diane Carter	Oklahoma
Michael Humphreys	Diana Sherman	Pennsylvania
Carter Lawrence	Trey Hancock	Tennessee
Cassie Brown	Amy Garcia	Texas
Jon Pike	Jake Garn	Utah
Scott A. White	Doug Stolte	Virginia
Mike Kreidler	Tim Hays	Washington
Nathan Houdek	Amy Malm	Wisconsin

NAIC Support Staff: Charles Therriault/Marc Perlman

AGENDA

Discuss Comments and Consider for Adoption:

1. Proposed P&P Manual Amendment to Update References to 5GI (Doc. ID: 2022.016-01) Attachment A, A-1
—Carrie Mears (IA), Charles A. Therriault (NAIC), and Marc Perlman (NAIC)
2. Proposed P&P Manual Amendment to Add Instructions for the Financial Modeling of CLOs Attachment B, B-1
(Doc. ID: 2022.004-12, 2022.004-13)
—Carrie Mears (IA), Eric Kolchinsky (NAIC), Charles A. Therriault (NAIC), and Marc Perlman (NAIC)

Discuss Comments Received:

3. Proposed CLO Modeling Methodology (Excluding Scenarios and Probabilities)
(Doc. ID: 2022.017-01, 2022.017-02, 2022.01-03, 2022.017-04, 2022.017-05, 2022.017-06, 2022.017-07, 2022.017-08)
—Carrie Mears (IA), Eric Kolchinsky (NAIC), Charles A. Therriault (NAIC), and Marc Perlman (NAIC)
4. Any other matters

Attachment C
Attachment C-1 – C - 7



MEMORANDUM

TO: Carrie Mears, Chair, Valuation of Securities (E) Task Force
Members of the Valuation of Securities (E) Task Force

FROM: Charles A. Therriault, Director, NAIC Securities Valuation Office (SVO)
Marc Perlman, Managing Investment Counsel, NAIC Securities Valuation Office (SVO)

CC: Eric Kolchinsky, Director, NAIC Structured Securities Group (SSG) and Capital Markets Bureau

RE: Non-substantive technical amendment to the Purposes and Procedures Manual clarifying the corresponding NAIC Designation Category for NAIC 5GI

DATE: November 15, 2022

Summary – At the 2021 Fall National Meeting the Task Force adopted a non-substantive technical amendment to the PL Securities section in Part Three of the *Purposes and Procedures Manual of the NAIC Investment Analysis Office (Purposes and Procedures Manual)* which clarified that an NAIC 5GI Designation is the equivalent of an NAIC 5.B Designation Category. The SVO has identified other places in the *Purposes and Procedures Manual* where the 5GI.B Designation Category is not currently specified and proposes a non-substantive technical amendment to make the changes shown below in **red** (additions **underlined** and deletions with **~~strikethrough~~**).

PART TWO
OPERATIONAL AND ADMINISTRATIVE INSTRUCTIONS
APPLICABLE TO THE SVO

COMPILATION AND PUBLICATION OF THE SVO LIST OF INVESTMENT SECURITIES

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RMBS/CMBS Modeled Securities Process

7. RMBS and CMBS that are deemed to be subject to financial modeling are retained in the RMBS/CMBS Modeled Process. RMBS and CMBS that are deemed ineligible for financial modeling but that have been assigned credit ratings by NAIC CRPs migrate to the Filing Exempt Securities Process. RMBS and CMBS that are deemed ineligible for financial modeling and that have also not been assigned credit ratings by NAIC CRPs may be reported by the insurer in the **5GI NAIC General Interrogatory** with an NAIC 5GI and an NAIC Designation Category of 5.B GI.

PART THREE
SVO PROCEDURES AND METHODOLOGY FOR PRODUCTION
OF NAIC DESIGNATIONS

PRODUCTION OF NAIC DESIGNATIONS

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NAIC DESIGNATIONS RELATED TO SPECIAL REPORTING INSTRUCTION

27. An insurance company that self-assigns a 5.B GI must attest that securities receiving this designation meet all required qualifications by completing the appropriate general interrogatory in the statutory financial statements. If documentation necessary for the SVO to perform a full credit analysis for a security does not exist or if an NAIC CRP credit rating for an FE or PL security is not available, but the issuer is not current on contractual interest and principal payments, and/or if the insurer does not have an actual expectation of ultimate payment of all contracted interest and principal, the insurance company is required to self-assign this security an NAIC 6*.
28. NAIC 6* is assigned by an insurer to an obligation in lieu of reporting the obligation with appropriate documentation in instances in which appropriate documentation does not exist, but the requirements for an insurance company to assign a 5.B GI are not met.
29. Securities with NAIC 5.B GI Designations Categories are deemed to possess the credit characteristics of securities assigned an NAIC 5.B Designation Category. A security assigned an NAIC 5.B GI Designation Category incurs the regulatory treatment associated with an NAIC 5.B Designation Category.
30. Securities an insurance company previously assigned as NAIC 5.B GI are permitted to subsequently receive this NAIC 6* Designation Category if the requirements for an NAIC 5.B GI Designation Category continue to be met.
31. Securities with NAIC 6* Designations are deemed to possess the credit characteristics of securities assigned an NAIC 6 Designation. Therefore, a security assigned an NAIC 6* Designation incurs the regulatory treatment associated with an NAIC 6 Designation.
32. Securities that are residual tranches or interests, as defined in *SSAP 43R – Loan Backed and Structured Securities*, shall be reported on Schedule BA - Other Long-Term Invested Assets, without an NAIC Designation and are ineligible to be assigned an NAIC 5.B GI Designation Category or NAIC 6* Designation.

NOTE REGARDING RESIDUAL TRanches OR INTERESTS: For 2021 year-end reporting only, residual tranches or interests previously reported on Schedule D-1: Long-Term Bonds shall be permitted to be reported on Schedule D-1 with an NAIC 6* Designation, however an NAIC 5GI is not permitted.

NOTE: The GI after the quality indicator 5.B refers to General Interrogatory and distinguishes NAIC 5.B GI from an NAIC 5.B Designation Category. The asterisk (*) after the quality indicator 6 distinguishes the NAIC 6* Designation from an NAIC 6 Designation.

REGULATORY TRANSACTIONS

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Status of Regulatory Transactions

290. A Regulatory Transaction is not eligible for:
- Assignment of an NAIC Designation by the SVO;
 - The filing exemption process for publicly rated securities;
 - The private letter rating component of the filing exemption or for use of the PLGI designation symbol;
 - Self-assignment by an insurer of the administrative symbol Z under the 120-rule;
 - Self-reporting by an insurer on the general interrogatory for securities eligible for filing exemption but for which no NAIC CRP credit rating is available (i.e., 5.B GI) and
 - Inclusion in the SVO List of Investment Securities or any other NAIC electronic system or processes maintained for operations for the VOS/TF



Mike Monahan
Senior Director, Accounting Policy
202-624-2324 t
mikemonahan@acli.com

February 13, 2023

Ms. Carrie Mears, Chair
Valuation of Securities Task Force
National Association of Insurance Commissioners
110 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

**Re: Non-substantive technical amendment to the Purposes and Procedures Manual
Clarifying the Corresponding NAIC Designation Category for NAIC 5GI**

Dear Ms. Mears,

The undersigned (ACLI, PPIA, and NASVA) appreciate the opportunity to comment on the exposure referred to above that was released for comment by the Valuation of Securities Task Force (VOSTF) on December 14th, 2022.

The undersigned are supportive of the referred to proposed amendment.

We stand ready to work collaboratively with the Task Force and SVO on this and other matters in the future.

Sincerely,

A handwritten signature in black ink that reads 'Mike Monahan'.

Mike Monahan
Senior Director, Accounting Policy

Tracey Lindsey

Tracey Lindsey
NASVA

A handwritten signature in black ink that reads 'John Petchler'.

John Petchler
on behalf of PPIA
Board of Director



TO: Carrie Mears, Chair, Valuation of Securities (E) Task Force
Members of the Valuation of Securities (E) Task Force

FROM: Eric Kolchinsky, Director, NAIC Structured Securities Group (SSG) and Capital Markets Bureau
Charles A. Therriault, Director, NAIC Securities Valuation Office (SVO)
Marc Perlman, Managing Investment Counsel, NAIC Securities Valuation Office (SVO)

RE: Amendment to the Purposes and Procedures Manual of the NAIC Investment Analysis Office
(the "P&P Manual") to Include Collateralized Loan Obligations (CLO) as a Financially Model
Security in Part Four

DATE: September 16, 2022 (**Updated: December 20, 2022**)

Summary – A collateralized loan obligation (CLO) is type of structured security backed by a pool of debt, typically corporate loans with low credit ratings. An insurer that purchases every tranche of a CLO holds the exact same investment risk as if it had directly purchased the entire pool of loans backing the CLO. The aggregate risk-based capital (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 risk-based capital (RBC) arbitrage. As noted in the Investment Analysis Office's (IAO) memo of May 25, 2022, "Risk Assessment of Structured Securities – CLOs", it is currently possible to materially (and artificially) reduce C1 capital requirements just by securitizing a pool of assets.

Recommendation – The Investment Analysis Office recommends the Task Force assign the Structured Securities Group (SSG) the responsibility of financially modeling CLO investments. SSG can model CLO investments and evaluate all tranche level losses across all debt and equity tranches under a series of calibrated and weighted collateral stress scenarios to assign NAIC Designations that create equivalency between securitization and direct holdings, thereby eliminating RBC arbitrage.

The Task Force sent a referral to the Capital Adequacy (E) Task Force (CATF) and its Risk-Based Capital Investment Risk and Evaluation (E) Working Group (RBCIREWG) requesting those groups consider adding two new RBC factors. These recommended new RBC factors would account for the tail risk in any structured finance tranche. Staff also recommends adding NAIC Designation Categories (e.g. 6.A, 6.B and 6.C) with possible interim RBC factors of 30%, 75% and 100%, respectively, until those groups can further study structured securities. Staff request approval to draft a Blanks proposal for the new NAIC Designation Categories.

Proposed Amendment - The proposed text changes to P&P Manual are shown below with additions in red underline, deletions in ~~red strikethrough~~ as it would appear in the 2022 P&P Manual format. Changes made on December 20, 2022 are highlighted in **yellow**.



PART ONE

**POLICIES OF THE NAIC VALUATION OF SECURITIES (E) TASK
FORCE**



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<p style="text-align: center;">POLICIES APPLICABLE TO FILING EXEMPT (FE) SECURITIES AND PRIVATE LETTER (PL) RATING SECURITIES</p>
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Filing Exemption

82. Bonds, within the scope of SSAP No. 26R and SSAP No. 43R (excluding **CLO** RMBS and CMBS subject to financial modeling) and Preferred Stock within scope of SSAP No. 32, that have been assigned an Eligible NAIC CRP Rating, are exempt from filing with the SVO (FE securities) with the exception of Bonds and or Preferred Stock explicitly excluded in this Manual.

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PART TWO
OPERATIONAL AND ADMINISTRATIVE INSTRUCTIONS
APPLICABLE TO THE SVO



COMPILATION AND PUBLICATION OF THE SVO LIST OF INVESTMENT SECURITIES

Directive

3. On a quarterly basis, the SVO shall:
 - Compile a list of Investment Securities from each of the data files defined as VOS Process, Filing Exempt Securities Process, **CLO/RMBS/CMBS Modeled Securities Process**, U.S. Treasury Process and the Exempt U.S. Government Securities Process (each an SVO Sub-List bearing the name of the corresponding Process).

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CLO/RMBS/CMBS Modeled Securities Process

6. **Collateralized Loan Obligations (CLO)**, Residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS) are Investment Securities, reported by an insurance company to the NAIC and subsequently added by NAIC staff to the **CLO/RMBS/CMBS Modeled Securities Process**, where on an annual basis and for purposes of the annual surveillance they are evaluated for eligibility to be financially modeled.
7. **CLO/RMBS** and CMBS that are deemed to be subject to financial modeling are retained in the **CLO/RMBS/CMBS Modeled Process**. **CLO**, RMBS and CMBS that are deemed ineligible for financial modeling but that have been assigned credit ratings by NAIC CRPs migrate to the Filing Exempt Securities Process. **CLO**, RMBS and CMBS that are deemed ineligible for financial modeling and that have also not been assigned credit ratings by NAIC CRPs may be reported by the insurer in the **5GI General Interrogatory**.
8. Insurance companies shall not file Regulatory Transactions as eligible for the **CLO/RMBS/CMBS Modeled Securities Process**, and the NAIC staff shall not add a Regulatory Transaction to the **CLO/RMBS/CMBS Modeled Securities Process**.

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NAIC POLICY ON THE USE OF CREDIT RATINGS OF NRSROs

NOTE: See “Coordination Between the Statutory Accounting Principles Working Group and the Valuation of Securities Task Force, “Use of Credit Ratings of NRSROs in NAIC Processes” and “Policies Applicable to the Filing Exemption (FE) Process” in Part One; “Definition – Credit Ratings Eligible for Translation to NAIC Designations in this “NAIC Policy on the Use of Credit Ratings of NRSROs”; “Procedure Applicable to Filing Exempt (FE) Securities and Private Letter (PL) Rating Securities” in Part Three; and “Filing Exemption Status of **CLO**, RMBS and CMBS” in Part Four, which excludes **CLO**, RMBS and CMBS from the use of NRSRO credit ratings for NAIC regulatory processes.



PART THREE
SVO PROCEDURES AND METHODOLOGY FOR PRODUCTION
OF NAIC DESIGNATIONS



PROCEDURE APPLICABLE TO FILING EXEMPT (FE) SECURITIES AND PRIVATE LETTER (PL) RATING SECURITIES

NOTE: See “Use of Credit Ratings of NRSROs in NAIC Processes” and “Coordination Between the Statutory Accounting Principles Working Group and the Valuation of Securities Task Force” (especially “NAIC Designations Do Not Communicate Statutory Accounting or Reporting” and “Policies Applicable to the Filing Exemption (FE) Process”) in Part One; “NAIC Policy on the Use of Credit Ratings of NRSROs” (especially “Definition – Credit Ratings Eligible for Translation to NAIC Designations”) in Part Two (the definition excludes the use of NAIC CRP credit ratings assigned to a security type where the NAIC has determined that the security type is not eligible to be reported on Schedule D or the it is not appropriate for NRSRO credit ratings to be used to determine the regulatory treatment of the security or asset, as specified in this Manual); and “Filing Exemption Status of **CLO**, RMBS and CMBS” in Part Four (excluding **CLO**, RMBS and CMBS from the use of credit ratings for NAIC regulatory processes).

FE SECURITIES

Filing Exemption

3. Bonds, within the scope of SSAP No. 26R and SSAP No. 43R (excluding **CLO**, RMBS and CMBS subject to financial modeling) and Preferred Stock within scope of SSAP No. 32, that have been assigned an Eligible NAIC CRP Rating, as described in this Manual, are exempt from filing with the SVO (FE securities) with the exception of Bonds and/or Preferred Stock explicitly excluded below.



PART FOUR
THE NAIC STRUCTURED SECURITIES GROUP



DEFINITIONS

1. The following terms used in this Part Four have the meaning ascribed to them below.
 - **ABS** stands for asset-backed securities and means structured securities backed by consumer obligations originated in the United States.
 - **CLO** stands for collateralized loan obligation and means structured securities backed by a pool of debt, typically corporate loans with low credit ratings. The loans are managed by a collateral manager which bundles the initial loans (for example, generally 150 or more) together and then actively manages the portfolio -- buying and selling loans. To fund the purchase of new debt, the CLO manager sells various tranches of the CLO to outside investors, such as which could include insurers. Each tranche differs based on the order priority in which the investors will be paid when the underlying loan payments are made. As a result, they also differ with respect to the risk associated with the investment since investors who are in lower tranches paid last have a higher risk of default from the underlying loans. To compensate for the risk, the interest coupon payments on the subordinate tranches are higher. Investors who are in higher tranches paid out first have lower overall risk, but they receive smaller interest coupon payments, as a result.
 - **CMBS** stands for commercial mortgage-backed securities and means structured securities backed by commercial real estate mortgage loans originated in the United States. The definition of CMBS may refer to securitizations backed by commercial mortgages, respectively, originated outside of the United States if and to the extent that the vendor selected by the NAIC to conduct the financial modeling: (a) has the necessary information about the commercial mortgage and commercial mortgage loans originated outside of the United States to fully model the resulting securities; and (b) can adapt the modeling process to account for any structural peculiarities associated with the jurisdiction in which the mortgage was originated.
 - **Initial Information** means the documentation required to be filed with an Initial Filing of an CLO, RMBS or a CMBS CUSIP, pursuant to the section below and pertaining to Loan Information, Reps and Warranty Information and Structure and Formation Information for the transaction, where:



- *Loan Information* For RMBS and CMBS, means a review of the loan files by a third party to assess the sufficiency of legal title and other related issues. For middle market loans in CLOs, means a review consistent with the guidance in Part Three of this manual for General Corporate and Municipal Methodology for Independent Credit Quality Assessment. This requirement will generally not apply to broadly syndicated bank loans.
- *Reps and Warranty Information* means the actual representation and warranties in effect for the securitization given by the mortgage originator(s) to the Trust pertaining to loan origination processes and standards, compliance with applicable law, loan documentation and the process governing put backs of defective mortgages back to the originator(s). Rep and Warranty information will generally not be applicable or required in the case of CLOs.
- *Structure and Formation Information* means the waterfall, as described in the definition of Ongoing Information, information and documentation in the form of legal opinions and documentation governing the formation of the securitization and its entities relative to issues such as bankruptcy remoteness, true sale characterization, the legal standards and procedures governing the securitization and other similar issues. In each case, as applicable to the relevant asset class in question.
- **Intrinsic Price** is an output of financial modeling, defined as ‘1 – weighted average of discounted principal loss’ expressed as a percentage, reflecting the credit risk of the security.
- **Legacy Security**, for the purposes of this section shall mean any RMBS and any CMBS that closed prior to January 1, 2013.
- **Official Price Grids** means and refers to those generated by the SSG and provided to an insurance company or insurance companies that own the security for regulatory reporting purposes.



- **Ongoing Information** differs based on the asset class of the security being reviewed. In general, Ongoing Information can consist of: (a) tranche level data; such as principal balance, factors, principal and interest due and paid, interest shortfalls, allocated realized losses, appraisal reductions and other similar information typically provided by the trustee in periodic reports for the specific tranche; (b) trust level data, such as aggregate interest and principal and other payments received, balances and payments to non-tranche accounts, aggregate pool performance data and other similar information; (c) loan level performance information (where such information is not otherwise available - for example, broadly syndicated loans - it will generally not require such information); and (d) a computerized model of rules that govern the order and priority of the distribution of cash from the collateral pool (i.e., the “waterfall”) to the holders of the certificates/securities—provided in the format and modeling package used by the NAIC financial modeling vendor.
- **Original Source**, with respect to a specific set of data, means the Trustee, Servicer or similar entity that is contractually obligated under the agreement governing the RMBS or CMBS to generate and maintain the relevant data and information in accordance with standards specified in applicable agreements or an authorized re-distributor of the same.
- **NAIC Designation Intrinsic Price Mapping** is the mapping of the Intrinsic Price to a single NAIC Designation and Designation Category employing the midpoints between each adjoining AVR RBC charges (pre-tax). The midpoints are directly used as the minimum Intrinsic Prices (weighted average loss points) for corresponding NAIC Designations and Designation Categories.
- **Price Grids** means and refers to CUSIP-specific price matrices containing six price breakpoints; i.e., each price corresponding to a specific NAIC Designation category. Each breakpoint on a Price Grid is the price point that tips the NAIC Designation for the RMBS CUSIP into the next NAIC Designation (credit quality/credit risk) category. The plural is used because two Price Grids are generated for any CUSIP. This reflects the difference in RBC for those insurance companies that maintain an asset valuation reserve and for those insurance companies that do not.



- **Re-REMIC** is a securitization backed by: (a) otherwise eligible RMBS from one or two transactions; or (b) otherwise eligible CMBS from one or two transactions at closing. Re-REMICs cannot acquire any Underlying Securities after closing.
- **RMBS** stands for residential mortgage-backed securities and means structured securities backed by non-agency residential mortgages originated in the United States, where the collateral consists of loans pertaining to non-multi-family homes. That includes prime, subprime and Alt-A mortgages, as well as home-equity loans, home-equity lines of credit and Re-REMICs of the above. Excluded from this definition is agency RMBS, where the mortgages are guaranteed by federal and federally sponsored agencies such as the Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA) or Federal Home Loan Mortgage Corporation (FHLMC) and loans against manufactured or mobile homes or collateralized debt obligations backed by RMBS. The exclusion covers bonds issued and guaranteed by, or only guaranteed by, the respective agency. Also not included are loans guaranteed by the U.S. Department of Veteran Affairs or the U.S. Department of Agriculture's Rural Development Housing and Community Facilities Programs. The definition of RMBS may refer to securitizations backed by residential mortgages, respectively, originated outside of the United States if and to the extent that the vendor selected by the NAIC to conduct the financial modeling: (a) has the necessary information about the residential mortgage and residential mortgage loans originated outside of the United States to fully model the resulting securities; and (b) can adapt the modeling process to account for any structural peculiarities associated with the jurisdiction in which the mortgage was originated.
- **Underlying Security** means the RMBS or CMBS backing a Re-REMIC. A Re-REMIC cannot be an Underlying Security.

NOTE: The definitions of **CLO**, RMBS and CMBS reflect limitations associated with the financial modeling process, NAIC credit rating provider (CRP) internal naming conventions and SSG processes, as more fully discussed below and may, therefore, be subject to a narrower or a broader reading in any reporting period. Please call the SSG with any concerns or questions about the scope of the definitions for a given reporting period. Also note:



- It is possible that the scope of the CLO, RMBS and CMBS definitions may be broadened because the financial modeling vendors indicate other collateral or waterfall structures can be modeled.
- NAIC CRPs may adopt different internal conventions with respect to what market or asset segments are within their rated populations of CLO, RMBS, CMBS or ABS. This could affect the application of the adopted NAIC methodology or require the NAIC to select which naming process it wishes to adopt.
- It is possible that the SSG will acquire analytical assessment capabilities that permit the assessment of existing, additional or different structured securities that cannot now be modeled or that are not currently rated.



ADMINISTRATIVE AND OPERATIONAL MATTERS

Certain Administrative Symbols

2. The following administrative symbols are used in the Valuation of Securities (VOS) Products to identify RMBS and CMBS that the NAIC vendor has confirmed will be subject to the financial modeling methodology and application of Price Grids described in this Part.
 - **FMR** – Indicates that the specific CUSIP identifies a Legacy Security RMBS that is subject to the financial modeling methodology and the application of Price Grids to determine a NAIC Designation and Designation Category.
 - **FMC** – Indicates that the specific CUSIP identifies a Legacy Security CMBS that is subject to the financial modeling methodology and the application of Price Grids to determine a NAIC Designation and Designation Category
 - Non-Legacy RMBS and CMBS subject to the financial modeling methodology would be assigned an NAIC Designation and Designation Category by the SSG without an administrative symbol.
 - **CLO** subject to the financial modeling methodology would be assigned an NAIC Designation and Designation Category by the SSG without an administrative symbol.

NOTE: The administrative symbols **FMR** and **FMC** are related to symbols that insurers are required to use in the financial statement reporting process. Under applicable financial statement reporting rules, an insurer uses the symbol **FM** as a suffix to identify Legacy Security modeled RMBS and CMBS CUSIPs. The symbol **FM** is inserted by the insurer in the financial statement as a suffix following the NAIC Designation Category for Legacy Security RMBS and CMBS; (e.g., **2.B FM**), and for **CLO** and Non-Legacy RMBS and CMBS it would be left blank (e.g. **3.C**).

The use of these administrative symbols in the VOS Product means the insurer should not use the filing exempt process for the security so identified.



Quarterly Reporting of RMBS and CMBS

3. To determine the NAIC Designation to be used for quarterly financial statement reporting for a **CLO**, RMBS or CMBS purchased subsequent to the annual surveillance described in this Part, the insurer uses the prior year-end modeling data for that CUSIP (which can be obtained from the NAIC) and follows the instructions in contained under the heading “Use of Net Present Value and Carrying Value for Financially Modelled Legacy Security RMBS and CMBS” or “Use of Intrinsic Price for Financially Modelled non-Legacy Security RMBS and CMBS" below, subject to, and in accordance with, *SSAP No. 43R—Loan-Backed and Structured Securities*.



FILING EXEMPTIONS

Limited Filing Exemption for RMBS and CMBS

4. **CLO, RMBS and CMBS that Can be Financially Modeled** – CLO, RMBS and CMBS that can be financially modeled are exempt from filing with the SVO. NAIC Designations for CLO, RMBS and CMBS that can be financially modeled are determined by application of the methodology discussed in this Part, not by the use of credit ratings of CRPs.
5. **CLO, RMBS and CMBS securities that Cannot be Financially Modeled**
 - **But Are Rated by a CRP** – CLO, RMBS and CMBS that cannot be financially modeled but that are rated by a CRP are exempt from filing with the SSG. The NAIC Designations for these CLO, RMBS and CMBS are determined by application of the filing exemption procedures discussed in this Manual.
 - **But Are Not Rated by a CRP** – CLO, RMBS and CMBS that cannot be financially modeled and that are not rated by a CRP are not filing exempt and must be filed with the SSG or follow the procedures, as discussed below in this Part.

Filing Exemption for ABS

6. ABS rated by a CRP are exempt from filing with the SSG.

Review of Decisions of the SSG

7. Analytical decisions made through the application of financial modeling are not subject to the appeal process. In the absence of an appeal, the SSG shall provide whatever clarification as to the results of financial modeling is possible to any insurer who requests it and owns the security, provided that it is not unduly burdensome for the SSG to do so. Any decision made by the SSG that results in the assignment of an NAIC Designation and does not involve financial modeling methodology, whether developed by the SSG on its own or in collaboration with the SVO, is subject to the appeal process.



REQUIRED DATA AND DOCUMENTS FOR TRANSACTIONS SUBMITTED TO THE SSG

8. The policy statement set forth in this section shall be applicable generally to any transaction filed with the SSG for an analytical assessment, including, but not limited to, a Price Grid or for assignment of an NAIC Designation. Any filing with the SSG is deemed to be incomplete unless the insurer has provided the information, documentation, and data in quantity and quality sufficient to permit the SSG to conduct an analysis of the creditworthiness of the issuer and the terms of the security to determine the requested analytical value. It is the obligation of the reporting insurance company to provide the SSG with all necessary information. It is the responsibility of the SSG to determine whether the information provided is sufficient and reliable for its purposes and to communicate informational deficiencies to the reporting insurance company.

Documentation Standards

9. In order for an insurer-owned CLO, RMBS or CMBS to be eligible for the year-end modeling process, conducted pursuant to this section below, the analysis must be based on information, documentation and data of the utmost integrity. A Legacy Security must meet the Ongoing Information requirements. A CLO, RMBS, CMBS or Re-REMIC that is not a Legacy Security must meet the Initial Information and Ongoing Information requirements. For the purposes of determining a Re-REMIC's status as a Legacy Security, the closing date of the Re-REMIC (not the Underlying Security) shall be used. The SSG may, in its sole discretion, determine that the Initial Information and/or Ongoing Information is not sufficient and/or not reliable to permit the CLO, RMBS or CMBS CUSIP to be eligible for financial modeling. If the SSG determines that the Initial Information and/or Ongoing Information is not sufficient and/or not reliable to permit the CLO, RMBS or CMBS CUSIP to be eligible for financial modeling, it will communicate this decision to the insurer and invite a dialogue to ascertain whether alternative information is available that would be deemed sufficient and/or reliable by the SSG.

Initial Information Requirements

10. A CLO, RMBS or CMBS meets the Initial Information Requirements if the security meets one of the following three conditions:



- **RTAS** – The RMBS or CMBS was assigned a preliminary price grid or designation as described in this Part;
- **Initial Sufficiency Filing** – The **CLO**, RMBS or CMBS was reviewed by SSG through an Initial Sufficiency Filing; or
- **Safe Harbor** – The **CLO**, RMBS or CMBS meets the Safe Harbor requirements.

Initial Sufficiency Information Filing

11. An insurance company may file Initial Sufficiency Information with the SSG for the purpose of obtaining a determination that a **CLO**, RMBS or CMBS CUSIP is eligible for financial modeling under the annual surveillance process discussed below. Initial Sufficiency Information is only filed once for any given **CLO**, RMBS or CMBS. Reporting insurance companies are solely responsible for providing the SSG with Initial Information. A determination by the SSG that a given **CLO**, RMBS or CMBS CUSIP is eligible for financial modeling after an Initial Sufficiency Filing assessment is subject to the further and continuing obligation that the SSG obtain or the insurer provide the SSG with updated Ongoing Information close to the date of the annual surveillance.
12. **Required Documents for Initial Sufficiency Filing** – An insurer that owns a **CLO**, RMBS or a CMBS for which Initial Information is not publicly available shall provide the SSG with the following documentation.
13. **CLO** – Unless otherwise specified by the SSG in a Modeling Alert, as further described below, an Initial Filing for a CLO consists of submission of Initial Information and Ongoing Information in the form of the following documentation, as may be appropriate:
 - **Pooling and Servicing Agreement Indenture** or similar
 - Prospectus, Offering Memorandum or similar; Accountant’s comfort letter, if obtained in connection with such transaction.
 - If applicable, ISDA Schedules and Confirmations or similar
 - Legal opinions given in connection with the transaction
 - Any other documents referenced by the above



- ~~Third-Party Due diligence scope document and raw results. If less than 100% due diligence, detailed description of the loan selection process.~~
- ~~If applicable, loan purchase agreements or similar.~~
- ~~Loan Tape~~
- All available eligible CRP ratings for underlying loan portfolio.
- For each unrated underlying loans, the Prospectus, Offering Memorandum or similar; 3-years of audited financial statements for the issuing entity.

14. **RMBS** – Unless otherwise specified by the SSG in a Modeling Alert, as further described below, an Initial Filing for an RMBS consists of submission of Initial Information and Ongoing Information in the form of the following documentation:

- Pooling and Servicing Agreement or similar
- Prospectus, Offering Memorandum or similar; Accountant’s comfort letter
- If applicable, ISDA Schedules and Confirmations or similar
- Legal opinions given in connection with the transaction
- Any other documents referenced by the above
- Third-Party Due diligence scope document and raw results. If less than 100% due diligence, detailed description of the loan selection process
- If applicable, loan purchase agreements or similar. Loan Tape

15. **CMBS** – Unless otherwise specified by the SSG in a Modeling Alert, as further described below, an Initial Filing for a CMBS consists of submission of Initial Information and Ongoing Information in the form of the following documentation:

- Pooling and Servicing Agreement or similar
- Prospectus, Offering Memorandum or similar; Accountant’s comfort letter
- If applicable, ISDA Schedules and Confirmations or similar
- Legal opinion given in connection with the transaction
- Any other documents referenced in the above
- Asset Summaries



- Loan Tape
- Loan documents, including reliable information about the terms of the transaction; including, but not limited to, financial covenants, events of default, legal remedies and other information about financial, contractual or legal aspects of the transaction in form and substance consistent with industry best practices for CMBS issuance.
- In certain cases, additional documents below will enable the SSG to verify and validate initial underwriting information of the property securing the CMBS. These documents may be required in form and substance consistent with best practices for typical CMBS issuance.
- Historical operating statements and borrower's budget
- Underwriter's analysis of stabilized cash flow with footnotes of assumptions used
- Property type specific, rent roll information
- Appraisals and other data from recognized industry market sources
- Independent engineering report (Property Condition Assessment)
- Environmental Site Assessment (ESA) – Phase I/Phase II
- Documentation related to seismic, flood and windstorm risks
- Franchise agreements and ground leases, if applicable
- Management agreements

SSG Modeling Alerts

16. The SSG shall at all times have discretion to determine that differences in the structure, governing law, waterfall structure or any other aspect of a securitization or a class of securitization requires that insurance companies provide Initial Information and/or Ongoing Information additional to or different from that identified in this Part. The SSG shall communicate such additional or different documentation requirements to insurers by publishing a Modeling Alert on the NAIC website and scheduling a meeting of the VOS/TF to ensure public dissemination of the decision.



Safe Harbor

17. Safe Harbor options serve as proxies for the Initial Sufficiency filing. The options reflect publicly available information that a third party has analyzed the Initial Information. Because the structured securities market is quite dynamic, the list of Safe Harbor options may change frequently, with notice and opportunity for comment, as described in this section. A **CLO**, RMBS or CMBS meets the Initial Information requirement if:
- At least two Section 17(g)-7 reports issued by different CRPs are publicly available; or
 - A security that is publicly registered under the federal Securities Act of 1933.

Ongoing Information Requirements

18. A **CLO**, RMBS or CMBS meets the Ongoing Information Requirements if Ongoing Information is available to the SSG and the relevant third-party vendor from an Original Source. The SSG, in its sole discretion and in consultation with the relevant third-party vendor, may determine that the Ongoing Information is not sufficient or reliable to permit a given **CLO**, RMBS or CMBS CUSIP to be financially modeled. However, in making such a determination, the SSG shall take into account reasonable market practices and standards.

Special Rules for Certain Re-REMICs

19. Re-REMICs are generally simple restructurings of RMBS or CMBS. An Initial Sufficiency Filing for a Re-REMIC (a) which is not a Legacy Security itself but (b) where each Underlying Security is a Legacy Security shall not require submission of information regarding the Underlying Securities. In most cases, a prospectus for the Re-REMIC will be sufficient. If the SSG determines that additional information about the Re-REMIC structure or formation is required, it will communicate this decision to the insurer and invite a dialogue to ascertain whether additional information is available that would be deemed sufficient by the SSG.



ANALYTICAL ASSIGNMENTS

ANNUAL SURVEILLANCE OF **CLO**, RMBS AND CMBS – MODELED AND NON-MODELED SECURITIES

Scope

20. This section explains the financial modeling methodology applicable to all **CLO**, RMBS and CMBS (defined above) securitizations, the book/adjusted carrying value methodology applicable to a modeled Legacy Security, the NAIC Designation Intrinsic Price Mapping applicable to a modeled non-Legacy Security, and non-modeled securities subject to *SSAP No. 43R—Loan-Backed and Structured Securities*. Please refer to SSAP No. 43R for a description of securities subject to its provisions. The VOS/TF does not formulate policy or administrative procedures for statutory accounting guidance. Reporting insurance companies are responsible for determining whether a security is subject to SSAP No. 43R and applying the appropriate guidance.

Important Limitation on the Definitions of RMBS and CMBS

21. The definitions of **CLO**, RMBS and CMBS above are intended solely to permit the SSG to communicate with financial modeling vendors, insurance company investors who own **CLO**, RMBS and CMBS subject to financial modeling and/or the book/adjusted carrying value methodology and their investment advisors to facilitate the performance by the SSG of the financial modeling methodology described below. The definitions contained in this section are not intended for use and should not be used as accounting or statutory statement reporting instructions or guidance.

NOTE: Please refer to *SSAP No. 43R—Loan-Backed and Structured Securities* for applicable accounting guidance and reporting instructions.

ANALYTICAL PROCEDURES APPLICABLE TO **CLO**, RMBS AND CMBS SECURITIZATIONS SUBJECT TO FINANCIAL MODELING METHODOLOGY

Filing Exemption Status of RMBS and CMBS

22. **CLO**, RMBS and CMBS are not eligible for filing exemption because credit ratings of CRPs are no longer used to set risk-based capital (RBC) for **CLO**, RMBS or CMBS. However, **CLO**, RMBS and CMBS are not submitted to the SSG.



Use of Financial Modeling for Year-End Reporting for **CLO**, RMBS and CMBS

23. Beginning with year-end 2009 for RMBS, and 2010 for CMBS, probability weighted net present values will be produced under NAIC staff supervision by an NAIC-selected vendor using its financial model with defined analytical inputs selected by the SSG. The vendor will provide the SSG with a Intrinsic Price and/or a range of net present values for each RMBS or CMBS corresponding to each NAIC Designation category. The NAIC Designation for a specific Legacy Security RMBS or CMBS is determined by the insurance company, based on book/adjusted carrying value ranges, and the NAIC Designation for a specific non-Legacy Security RMBS or CMBS is determined by the NAIC Designation Intrinsic Price Mapping by SSG.
24. Beginning with year-end **2024** ~~2023~~ for CLOs, probability weighted net present values will be produced under NAIC staff supervision by SSG using its financial model by SSG with defined analytical inputs selected by the SSG. SSG will model CLO investments and evaluate all tranche level losses across all debt and equity tranches under a series of calibrated and weighted collateral stress scenarios to assign NAIC Designations Categories for a specific CLO tranche ~~is will be as~~ determined by the NAIC. ~~Designation Intrinsic Price Mapping by SSG.~~

NOTE: Please refer to *SSAP No. 43R—Loan-Backed and Structured Securities* for guidance on all accounting and related reporting issues.

NOTE: Effective as of January 1, 2024, SSG will financially model CLOs.

Analytical Procedures for **CLO**, RMBS and CMBS

25. The SSG shall develop and implement all necessary processes to coordinate the engagement by the NAIC of a vendor who will perform loan-level analysis of insurer-owned CLO, RMBS and CMBS using the vendor's proprietary models.

CLO, RMBS AND CMBS SUBJECT TO FINANCIAL MODELING

Setting Microeconomic Assumptions and Stress Scenarios

26. Not later than September of each year, the SSG shall begin working with the vendor to identify the assumptions, stress scenarios and probabilities (hereafter model criteria) the SSG intends to use at year-end to run the vendor's financial model.



The Financial Modeling Process

27. Information about the financial modeling process can be found at www.naic.org/structured_securities/index_structured_securities.htm.

Use of Net Present Value and Carrying Value for Financially Modeled Legacy Security RMBS and CMBS

28. For each modeled Legacy Security RMBS and CMBS, the financial model determines the net present value at which the expected loss equals the midpoint between the RBC charges for each NAIC Designation; i.e., each price point, if exceeded, changes the NAIC Designation. Net present value is the net present value of principal losses, discounted using the security’s coupon rate (adjusted in case of original issue discount securities to book yield at original issue and in case of floating rate securities, discounted using LIBOR curve + Origination spread). Because of the difference in RBC charge, the deliverable is five values for each RMBS and CMBS security for companies required to maintain an asset valuation reserve (AVR) and five values for companies not required to maintain an AVR. This is illustrated in the chart below.

RBC charge / NAIC designation (pre-tax)

P&C	RBC	Midpoint
1	0.3%	0.65%
2	1.0%	1.50%
3	2.0%	3.25%
4	4.5%	7.25%
5	10.0%	20.00%
6	30.0%	
Life	RBC	Midpoint
1	0.4%	0.85%
2	1.3%	2.95%
3	4.6%	7.30%
4	10.0%	16.50%
5	23.0%	26.50%
6	30.0%	



29. The NAIC Designation and NAIC Designation Category for a given modeled Legacy Security RMBS or CMBS CUSIP owned by a given insurance company depends on the insurer’s book/adjusted carrying value of each RMBS or CMBS, whether that carrying value, in accordance with *SSAP No. 43R—Loan-Backed and Structured Securities*, paragraphs 25 through 26a, is the amortized cost or fair value, and where the book/adjusted carrying value matches the price ranges provided in the model output for each NAIC Designation and the mapped NAIC Designation Category, reflected in the table below, to be used for reporting an NAIC Designation Category until new prices ranges are developed to reflect the full range of new Risk Based Capital factors adopted for each NAIC Designation Category; except that a modeled Legacy Security RMBS or CMBS tranche that has no expected loss under any of the selected modeling scenarios would be assigned an **NAIC 1 Designation** and **NAIC 1.A Designation Category** regardless of the insurer’s book/adjusted carrying value.

NOTE: Please refer to the detailed instructions provided in SSAP No. 43R.

<u>NAIC Designation Determined by Modeled Price Ranges</u>	<u>Mapped NAIC Designation Category</u>
1	1.D
2	2.B
3	3.B
4	4.B
5	5.B
6	6

Use of Intrinsic Price for Financially Modeled **CLO and non-Legacy Security RMBS and CMBS**

30. The NAIC Designation and NAIC Designation Category for a given modeled **CLO and** non-Legacy Security RMBS or CMBS CUSIP owned by a given insurance is assigned by SSG and **does not** depend on the insurer’s book/adjusted carrying value of each **CLO**, RMBS or CMBS. The NAIC Designation and Designation Category assigned will be determined by applying the Intrinsic Price to the NAIC Designation Intrinsic Price Mapping, as defined in this Part.



Securities Not Modeled by the SSG and Not Rated by an NAIC CRP or Designated by the SVO

31. Securities subject to *SSAP No. 43R—Loan-Backed and Structured Securities* that cannot be modeled by the SSG and are not rated by an NAIC CRP or designated by the SVO are either: (a) assigned the NAIC administrative symbol **ND** (not designated), requiring subsequent filing with the SVO; or (b) assigned the NAIC Designation for Special Reporting Instruction [i.e., an **NAIC 5GI**, NAIC Designation Category **NAIC 5.B GI** or **NAIC 6*** (six-star)].



MORTGAGE REFERENCED SECURITIES

Definition

32. A Mortgage Referenced Security has the following characteristics: A Mortgage Referenced Security's coupon and/or principal payments are linked, in whole or in part, to prices of, or payment streams from, real estate, index or indices related to real estate, or assets deriving their value from instruments related to real estate, including, but not limited to, mortgage loans.

Not Filing Exempt

33. A Mortgage Referenced Security is not eligible for filing exemption but is subject to the filing requirement.

NAIC Risk Assessment

34. In determining the NAIC Designation of a Mortgage Referenced Security, the SSG may use the financial modeling methodology discussed in this Part, adjusted (if and as necessary) to the specific reporting and accounting requirements applicable to Mortgage Referenced Securities.

Quarterly Reporting for Mortgage Reference Securities

35. To determine the NAIC Designation to be used for quarterly financial statement reporting for a Mortgage Reference Security purchased subsequent to the annual surveillance described in this Part, the insurer uses the prior year-end modeling data for that CUSIP (which can be obtained from the NAIC) until the annual surveillance data is published for the current year. For a Mortgage Reference Security that is not in the prior year-end modeling data for that CUSIP, the insurer may follow the instructions in Part Two of this manual for the assignment of the SVO Administrative Symbol "Z" provided the insurer owned security meets the criteria for a security that is in transition in reporting or filing status.

NOTE: Please refer to SSAP No. 26R and SSAP No. 43R for the definition of and guidance on Structured Notes and Mortgage Referenced Securities. Please also refer to Part Three of this Manual for guidance about the filing exempt status of Structured Notes.



GROUND LEASE FINANCING TRANSACTIONS

Definition

36. Ground Lease Financing (GLF) transactions are defined and explained in “Ground Lease Financing Transactions” in Part Three of this Manual.

SSG Role and Process

37. On occasion, the SVO may refer a GLF transaction to the SVO for financial modeling of the GLF space leases or business operation, as applicable, in accordance with the process set forth in “Ground Lease Financing Transactions” in Part Three of this Manual. Following an SVO referral the SSG and SVO will maintain open communication related to requests for additional data, analytical questions and analytical conclusions. Any GLF transaction NAIC Designation will be assigned by the SVO.



THE RTAS – EMERGING INVESTMENT VEHICLE

Purpose

38. Price grids and/or NAIC Designation and Designation Categories are generated for the exclusive use of insurance companies and the NAIC regulatory community. Insurance companies use official Prices Grids and/or NAIC Designations and Designation Categories by following the instructions in *SSAP No. 43R—Loan-Backed and Structured Securities* to derive a final NAIC Designation for the **CLO**, RMBS or CMBS, which they use to derive the RBC applicable for the **CLO**, RMBS or CMBS.

NOTE: Please refer to SSAP No. 43R for a full explanation of the applicable procedure.

Extension of Authority

39. The Regulatory Treatment Assessment Service – Emerging Investment Vehicle procedure is extended to the SSG, and the SSG is authorized to determine probable regulatory treatment for **CLO**, RMBS and CMBS pursuant to this Part or for other securities, where, in the opinion of the SSG, financial modeling methodology would yield the necessary analytical insight to determine probable regulatory treatment or otherwise enable the SSG to make recommendations to the VOS/TF as to regulatory treatment for a security.

Interpretation

40. To facilitate this purpose, wherever in the Regulatory Treatment Assessment Service – Emerging Investment Vehicle procedure reference is made to the SVO, it shall be read to also refer to and apply to the SSG, adjusting for differences in the operational or methodological context. The Regulatory Treatment Assessment Service – Emerging Investment Vehicle procedure shall also be read as authority for collaboration between SVO and SSG staff functions so as to encompass RTAS assignments that require the use of SVO financial, corporate, municipal, legal, and structural analysis and related methodologies, as well as of financial modeling methodologies.



Translation of Preliminary into Official Price Grids and/or NAIC Designations and Designation Categories

41. Price Grids and/or Designations and Designation Categories (“PGD”) generated by the SSG pursuant to an RTAS are preliminary within the meaning of that term as used in the Regulatory Treatment Assessment Service – Emerging Investment Vehicle procedure and accordingly cannot be used for official NAIC regulatory purposes. Preliminary NAIC Designations are translated into official NAIC Designations by the SVO when an insurance company purchases and files the security and the SVO conducts an official assessment. However, this Manual does not require the filing of **CLO**, RMBS and CMBS subject to financial modeling methodology with the SSG. It is, therefore, necessary to specify a procedure for the translation of preliminary Price Grids and/or Designations and Designation Categories (“Preliminary PGD”) into official PGD that can be used for NAIC regulatory purposes. Preliminary PGDs generated by the SSG become an official PGD within the meaning of this section when an insurance company has purchased the security for which the PGD was generated and reported that security for quarterly reporting purposes using the SSG generated PGD. A PGD for a security reported by an insurance company for quarterly reporting is effective until the SSG conducts the next annual surveillance pursuant to this Part at which the time the PGD generated by the SSG at year-end shall be the official PGDs for that security.

<https://naiconline.sharepoint.com/teams/SVOVOSTaskForce/Shared Documents/Meetings/2022/2022-12 - Fall National Meeting/02-CLOs Part Four/2022-004.12b - PP Amend to Add CLO to Part Four v2.docx>



Steve Clayburn, FSA, MAAA
Senior Actuary, Health Insurance & Reinsurance
steveclayburn@acli.com

January 9, 2023

Ms. Carrie Mears, Chair
Valuation of Securities (E) Task Force
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Via email: ctherriault@naic.org and dgenaorosado@naic.org

Re: Re-Exposure Amendment to Part Four of the Purposes and Procedures Manual (“P&P Manual”) of the NAIC Investment Analysis Office to Include Collateralized Loan Obligations (“CLO”)

Dear Ms. Mears:

ACLI appreciates the opportunity to provide comments on the Valuation of Securities Task Force’s (VoSTF) re-exposure to update Part Four of the P&P Manual to include CLOs. We have the following ask for clarification with the newly written paragraph 24.

In the “Use of the Financial Modeling for Year-End Reporting for CLO, RMBS, and CMBS”, new paragraph 24, the following is the rewrite from the previous exposure:

24. Beginning with year-end 2024 2023 for CLOs, probability weighted net present values will be produced under NAIC staff supervision by SSG using its financial model by SSG with defined analytical inputs selected by the SSG. SSG will model CLO investments and evaluate all tranche level losses across all debt and equity tranches under a series of calibrated and weighted collateral stress scenarios to assign NAIC Designations Categories for a specific CLO tranche is will be as determined by the NAIC. Designation Intrinsic Price Mapping by SSG.

NOTE: Please refer to SSAP No. 43R—Loan-Backed and Structured Securities for guidance on all accounting and related reporting issues.

NOTE: Effective as of January 1, 2024, SSG will financially model CLOs.

Currently the paragraph starts by stating “beginning with year-end 2024 for CLOs”; however, the second note states “effective as of January 1, 2024, SSG will financially model CLOs”. This has raised the questions as what is the intent of the note and how will this work? In addition, can one explain how to understand the “year-end 2024” reference? If the SSG will provide designations for all CLOs starting January 1, 2024 (although not necessarily done for RMBS/CMBS), how are

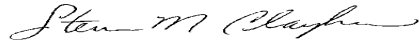
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The American Council of Life Insurers (ACLI) is the leading trade association driving public policy and advocacy on behalf of the life insurance industry. 90 million American families rely on the life insurance industry for financial protection and retirement security. ACLI’s member companies are dedicated to protecting consumers’ financial wellbeing through life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, and dental, vision and other supplemental benefits. ACLI’s 280 member companies represent 94 percent of industry assets in the United States.

insurers expected to provide ratings/designations for CLO tranches for 2024 quarterly financial statements? If SSG cannot provide credit designations for all CLOs beginning Q1 2024, this raises the question which rating categories are eligible for insurers to complete their 2024 quarterly financial statements.

Thank you for the opportunity to continue to participate and comment on this issue. We look forward to future discussions and continued collaboration with the NAIC on this important initiative.

Sincerely,



Steve Clayburn

cc: Mike Monahan, ACLI
Paul Graham, ACLI

SSG

TO: Carrie Mears, Chair, Valuation of Securities (E) Task Force
Members of the Valuation of Securities (E) Task Force

FROM: Eric Kolchinsky, Director, NAIC Structured Securities Group (SSG) and Capital Markets Bureau
Charles A. Therriault, Director, NAIC Securities Valuation Office (SVO)

RE: Proposed Methodology for Modelling CLOs

DATE: December 12, 2022

Summary – A collateralized loan obligation (CLO) is type of structured security backed by a pool of debt, typically corporate loans with low credit ratings. During the Summer National Meeting the Valuation of Securities (E) Task Force (VOS) exposed a proposal to have SSG model CLOs.

Methodology Recommendation – Pending the decision of VOS regarding the financial modeling of CLOs as well as the Risk-Based Capital Investment Risk and Evaluation (E) Working Group (RBCIREWG) decision with respect to the addition of higher capital charges, SSG has been asked to expose the methodology which would be used to model CLOs.

The methodology presented in Annex A hereto, is based on SSG’s annual CLO stress tests. Critically, it excludes the Scenarios to be used in the process. SSG believes that the discussion of the Scenarios is expected to be more in depth and require more time once the methodology is agreed upon.

The assumptions presented here cover the mechanics of the modeling process and cash flow. A consensus on these assumptions will allow a more cogent discussion of the Scenarios and their impact.

Questions Posed to Interested Parties:

1. Are there any other Assumptions (other than Default / Recovery Rate) that will allow market participants to completely replicate the work of NAIC for broadly syndicated loan CLOs?
2. Are these Assumptions reasonable? Please consider that the Default and Recovery Rate Assumptions will come later and that there will be ample opportunity to comment on how these perform on actual CLOs replicated by market participants.
3. Any other issues that you wish to bring to our attention.

For any alternative assumptions or assumptions deemed unreasonable, please provide the following:

- a) An actionable alternative which can be replicated by the NAIC and market participants.
- b) A quantitative justification for such an alternative based on all available historical date (not just the 2011-2019 economic expansion, for example).



- c) References to whether such alternative is used by rating agencies in their public published methodologies and whether it contemplates a trade-off (for example between the timing of recovery and the amount recovered). Specific citations to publications will be greatly appreciated.



ANNEX A

NAIC Collateralized Loan Obligation (CLO) Stress Tests Methodology

Scope

- We will model all tranches of broadly syndicated loan CLOs held by U.S. insurance companies.
- At this stage we will exclude:
 - Commercial real estate (CRE) CLOs – The risk is commercial real estate, and different assumptions are required.
 - Re-securitizations, asset-backed securities (ABS), collateralized debt obligations (CDOs) and trust preferred securities (TruPS) CDOs – They are out of scope.
 - Middle market CLOs – They are temporarily excluded, as the asset class requires specialized assumptions. We hope to return to these assets shortly.
- Another limitation is the availability of the specific CLO via our third-party software vendor.

Givens

- These will be determined via the “Scenario” portion of the process following the setting of the methodology.
- Assume that the inputs are periodic “partial” default rates for each loan based on the current rating.
- In addition, assume each loan has a recovery rate, based on its seniority, for that period.

Assigning Ratings to Underlying Assets

- Historical default rates are reported at the **issuer** level, while the debt instrument typically has an **issue** rating, which may be different. The issuer rating is used to calibrate the default rate, while the issue rating influences the recovery rate.
- We propose the following logic:
 - If an asset has an **Issuer** rating available within our third party software (generally those reported by Moody, Standard & Poor’s (S&P) or Fitch), that rating will be used to set the applicable default rating.
 - Otherwise, if an asset has an **Issue** rating available within our third party software (generally those reported by Moody, S&P or Fitch) that rating will be adjusted to set the applicable default rating as follows:
 - Asset is reported as Senior Secured Loan or Senior Unsecured Bond: default rating = **Issue** rating + 1 notch (i.e. higher default probability)
 - Otherwise: default rating = **Issue** rating
 - This is different from our stress tests
 - If the Securities Valuation Office has assigned an NAIC Designation Category to the Issue, that NAIC Designation Category will be used, unadjusted.



- Once a default rating has been established, the loan will be assumed to “partially default” until its maturity.

Recovery Rate

- Principal is recovered 6 months (2 periods) after default

Cash Flow Assumptions

- **Interest Rates / Proceeds**
 - Forward Secured Overnight Financing Rate (SOFR) curve as of evaluation date
 - Interest Proceeds for each period are based on the weighted average current portfolio spread plus the applicable base rate times the non-defaulting principal.
- **Maturities and prepayments**
 - Non-defaulting portions of each loan mature based on the legal maturity
 - No prepayments assumed
- **Reinvestment**
 - No post-reinvestment period reinvestment
 - Reinvestment collateral is purchased at par
 - Reinvestment occurs before payment date – i.e., there are no principal proceeds in the waterfall that can be used to pay interest or satisfy overcollateralization (O/C) tests
 - Reinvestment is assumed to have a rating equal to the transaction’s weighted average rating factor (WARF). If the WARF is not reported, then it is assumed to be 4.C (B3) and is defaulted as stated above.
 - Reinvested collateral is tracked per reinvestment bucket (e.g., all reinvested collateral in one time period is tracked separately from collateral reinvested in another time period).
- **Event timing**
 - Periodic payment on identified collateral – as per loan terms
 - Periodic payment on reinvested collateral – quarterly
 - Collateral defaults on its interest payment date (prior to paying interest or principal)



AMERICAN ACADEMY *of* ACTUARIES

Objective. Independent. Effective.™

February 14, 2023

Carrie Mears
Chair, Valuation of Securities (E) Task Force
National Association of Insurance Commissioners (NAIC)

Cc: Philip Barlow, Tom Botsko

Re: Proposed Methodology for Modeling Collateralized Loan Obligations (CLOs)

Dear Ms. Mears,

Thank you for the opportunity to comment on proposed methodology for modeling CLOs. The American Academy of Actuaries¹ C1 Work Group (work group) appreciates the open dialogue granted by the Securities Valuation Office (SVO) and Structured Securities Group (SSG) staff as we have studied the topic of Risk-Based Capital (RBC) for CLOs. The work group aims to support the Risk-Based Capital Investment Risk and Evaluation Working Group (RBCIRE) in its objective to determine appropriate C1 factors for CLOs.

Interested parties are requested to comment on a model methodology document, but the work group suggests that a discussion on the SSG model be deferred until RBCIRE provides guidance on CLO RBC methodology objectives. The work group is looking to RBCIRE to provide direction on objectives, in response to a recent [letter](#) sent to RBCIRE.

The work group delivered a [presentation](#) to RBCIRE at the 2022 Fall National Meeting, which included its view on objectives for a CLO RBC methodology. The work group proposed a type of risk measure to use for CLO capital requirements and indicated that total C1 for the CLO tranches should not necessarily add up to total C1 for the underlying bank loans. The risk transformation within CLOs extends the consideration of risk beyond credit risk into other types of market risk. Therefore, implementing the concept of RBC arbitrage requires a more thorough and holistic analysis. Should you have any questions or comments in response to this letter, please contact Amanda Barry-Moilanen, life policy analyst (barrymoilanen@actuary.org).

Stephen Smith
Chairperson, C1 Work Group
American Academy of Actuaries

¹ The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.



February 17, 2023

Dear Mr. Therriault, Ms. Mears & members of the Valuation of Securities Task Force (“VOSTF”):

We appreciate the opportunity to provide a response to the questions that were posed in the memorandum, dated December 12, 2022 regarding the Proposed Methodology for Modelling CLOs. We support the mission of promoting transparency and enhancing risk assessment for statutory solvency purposes. We would like to share the following thoughts with respect to the NAIC’s CLO Stress Test Methodology¹ and offer the following suggestions to improve upon the analysis. We understand that you are not currently looking for feedback on default and recovery rate assumptions, but because these assumptions are so fundamental to the overall methodology our thoughts and suggestions also touch on these topics.

Data from the 1970’s and 1980’s is not representative of the current market.

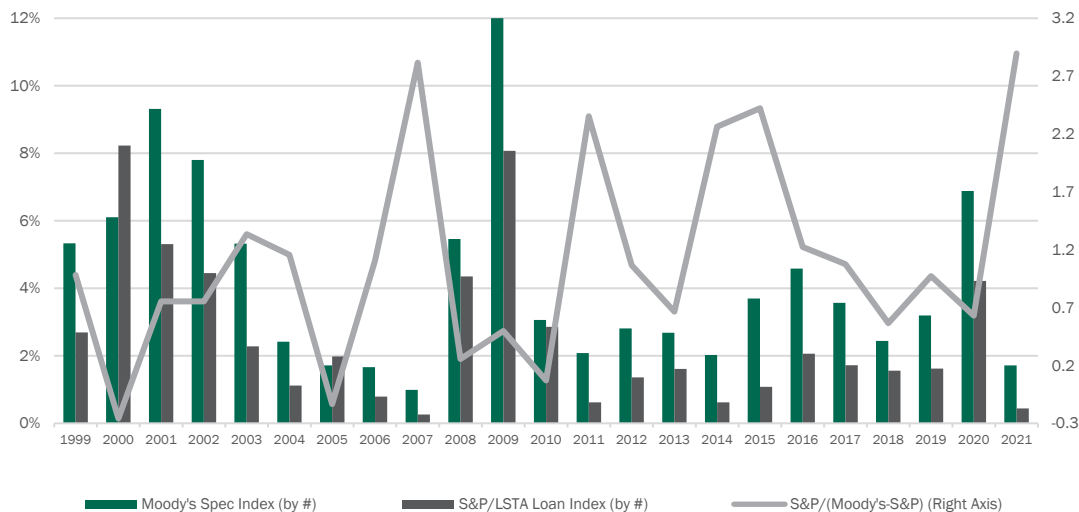
The NAIC’s methodology derives its loan default and loss assumptions based on Moody’s 10-year cohort corporate default data, which goes back to 1970. Given the significant changes that took place in the leveraged loan market in recent decades, the default and loss experiences before 2000 do not reflect today’s market dynamics for the reasons described below.

- The earliest vintage of CLOs, often referred to as “CLO 1.0”, was issued in the mid- to late-1990s, and less than 1%² of “CLO 1.0” vintage remains outstanding. The market evolved to “CLO 2.0” in 2010 and to “CLO 3.0” in the mid-2010s. These newer vintages have better structural protections, such as greater subordination and tighter portfolio constraints. Given that less than 1% of currently outstanding CLOs are from the “CLO 1.0” era (and even fewer reside on insurance balance sheets), appropriate assumptions for CLO 2.0 and 3.0 (i.e., those issued on or after 2010) should be the focus.
- Regarding which data to use, high yield (“HY”), leveraged loan, and CLO markets were in their infancy in the 1970s and 1980s, and were still nascent in the 1990s. The leverage loan market had few issuers prior to 2000 but grew quickly, from \$100 billion in 2000, to \$500 billion in 2010 and \$1.4 trillion in August 2022, with increasingly established leverage loan issuers who might have otherwise raised capital by selling bonds.³ Over the last two decades, the deepening and broadening of the leverage loan market has allowed CLO portfolio managers to create more diversified portfolios and enhance their ability to manage the portfolios dynamically to reduce losses and build par. Given the significant changing landscapes of the leverage loan and CLO markets over time, we believe pre-2000 data are not relevant for inclusion in the data set for testing.
- The NAIC uses Moody’s default data, which is comprised of the historical experience of HY, leveraged loan, and other issuers. However, leverage loan data is more directly applicable for CLOs since the underlying collateral of CLOs is primarily leverage loans. The Morningstar LSTA US Leveraged Loan Index, previously known as the S&P/LSTA Loan Index, exhibited consistently lower default rates than Moody’s default data, (i.e., the Moody’s Spec Index in the graph below). The differential in default rates is as much as 3x for certain years, as shown below.

¹ [NAIC Collateralized Loan Obligation \(CLO\) Stress Tests Methodology.](#)

² [Seeing Beyond the Complexity: An Introduction to Collateralized Loan Obligations, PineBridge Investments.](#)

³ LCD, S&P Global Market Intelligence.



Source: Moody's, Morningstar LSTA US Leveraged Loan Index (or S&P/LSTA loan index).

Using outlier historical experiences in a base case can skew results.

The purpose of a base case is often to reflect the average experience. The hyper-inflationary periods of the 1970s and 1980s, with nearly 20% interest rates are not an average scenario, and a repeat of such high inflation seems unlikely under today's monetary, fiscal, and regulatory frameworks. A more reasonable base case default rate for NAIC's Scenarios A and B would be derived from post-2000 data (e.g., a 27% 10-year cumulative default rate for single-B rated assets based on Moody's corporate default study or a default rate based on the post-2000 Morningstar LSTA US Leveraged Loan Index data).⁴ For Scenario C, it would be more appropriate to apply a stress factor to the base case. For example, increasing a base case 27% default rate by a factor of 25% would lead to a 34% default rate.

The stepdown to a 40% leverage loan recovery rate in Scenarios B and C overstates the risk.⁵

While the 64% base case leverage loan recovery rate used in Scenario A is consistent with historical data, the 40% rate assumed in Scenarios B and C is not justified.⁶ Since the average historical HY bond recovery rate is around 40%, the stepdown is analogous to the NAIC assuming CLOs are comprised of 100% senior unsecured bonds. This is of course unrealistic since CLOs are primarily backed by senior secured loans. It would be more appropriate to apply a stress factor to the base case. For example, lowering the base case 64% recovery rate by a factor of 25% would lead to a stepdown rate of 48%.

The transparency of CLOs allows for a "sum of the parts equaling the whole" concept to be applied which may disadvantage CLOs compared to other securitized products that don't have the same transparency.

CLOs offer greater transparency as compared to other securitized products because, unlike most other securitized products, there is a great deal of information available about the underlying collateral in CLOs (e.g., credit profile, loan pricing). This availability of information and the increased transparency that it

⁴ Moody's corporate default study. Morningstar LSTA US Leveraged Loan Index (or S&P/LSTA loan index).

⁵ See [CLO Stressed Analysis Year-End 2021 \(naic.org\)](#)

⁶ [Collateralized Loan Obligation – Stress Testing U.S. Insurers' Year-End 2021 Exposure.](#)



provides should not be used as a tool to penalize CLOs simply because more analysis and testing is possible as compared to other securitized products.

We would also like to reiterate the position that we took in our letter to the NAIC VOSTF dated July 2022, where we indicated that increasing risk-based capital charges on CLO investments understates some key strengths of CLOs. We would like to highlight CLOs' favorable through-the-cycle credit performance relative to other asset classes, in part thanks to CLOs' structural protection, manager value generation, and investor diligence, collectively.

Sincerely yours,

PineBridge Insurance Solutions and Strategies, CLO team, Leveraged Finance team



Steve Clayburn, FSA, MAAA
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steveclayburn@acli.com

February 17, 2023

Ms. Carrie Mears
Chair, Valuation of Securities Task Force
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Via email: ctherriault@naic.org and dgenaorosado@naic.org

Re: CLO Modeling Methodology

Dear Ms. Mears:

ACLI appreciates the opportunity to provide comments on the Valuation of Securities (E) Task Force's (VoSTF) exposure of the proposed methodology for modeling credit designations of broadly syndicated loan Collateralized Loan Obligations ("CLOs"). The ACLI supports the efforts to assess the potential need for determining capital charges associated with CLO investments that better reflect the actual risk of the various tranches. We appreciate the opportunity to comment and discuss the methodology and assumptions being proposed for use in the modeling and are requesting clarification in areas that might need more information.

Executive Summary

Methodologies and assumptions used for modeling credit designations for CLOs should be aligned with methodologies in the associated RBC bond factors. As such, the ultimate methodology used by the SSG should be compared with that used in the development of RBC bond factors. If modeling methodologies are not aligned with RBC methodologies, resulting RBC amounts held for CLOs could either be excessively conservative or inadequate.

Our comments below are focused on areas where we believe the SVO's proposed methodology could be extended to reflect industry best practices and eliminate potential excess conservatism through simplifying assumptions. Care should be taken to ensure that the ultimate assumptions used do not reduce prudence before the expected RBC threshold (e.g., 96th percentile or 90 CTE).

American Council of Life Insurers | 101 Constitution Ave, NW, Suite 700 | Washington, DC 20001-2133

The American Council of Life Insurers (ACLI) is the leading trade association driving public policy and advocacy on behalf of the life insurance industry. 90 million American families rely on the life insurance industry for financial protection and retirement security. ACLI's member companies are dedicated to protecting consumers' financial wellbeing through life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, and dental, vision and other supplemental benefits. ACLI's 280 member companies represent 94 percent of industry assets in the United States.

Maturities and Prepayments

The exposed methodology assumes that “Non-defaulting portions of each loan mature based on the legal maturity.” While commercially available models may have limitations with projecting every possible cash flow scenario, we recommend that, where practical and reasonable, modeling assumptions should capture loan features such as amortization and callability.

ACLI proposes replacing “no prepayments assumed” with prepayment assumptions that vary by scenario and through time within the scenario. Assumed prepayment rates should align with the severity of the stress present at a given period within a scenario. Prepayments combined with reinvestment price assumptions can have a meaningful impact on cashflows. Prepayment rates have historically attained a minimal level of 20% outside of periods of stress and have risen above 40% in various favorable periods. The average prepayment rate outside of major stress scenarios has been slightly above 30%. The only significant period of stress for which data on CLO collateral prepayments is available - the Global Financial Crisis in 2008-2009 (“GFC”) - exhibited a drop to below 10% as the default rate peaked above 10%.

However, it is reasonable to project that prepayment rates could decline further below 10% in more severe credit stress scenarios. ACLI suggests that the SSG utilize reasonable judgement in choosing a prepayment rate for higher stress periods within scenarios (worse than 92nd-percentile), as there is limited historical data to support calibration. A prepayment vector reflecting stress then gradual renormalization would be more realistic than a constant rate. The modeling should reflect adverse selection by assuming prepayments in very severe stress scenarios both (a) decline and (b) are offset by increases in default rates for non-prepaying loans.

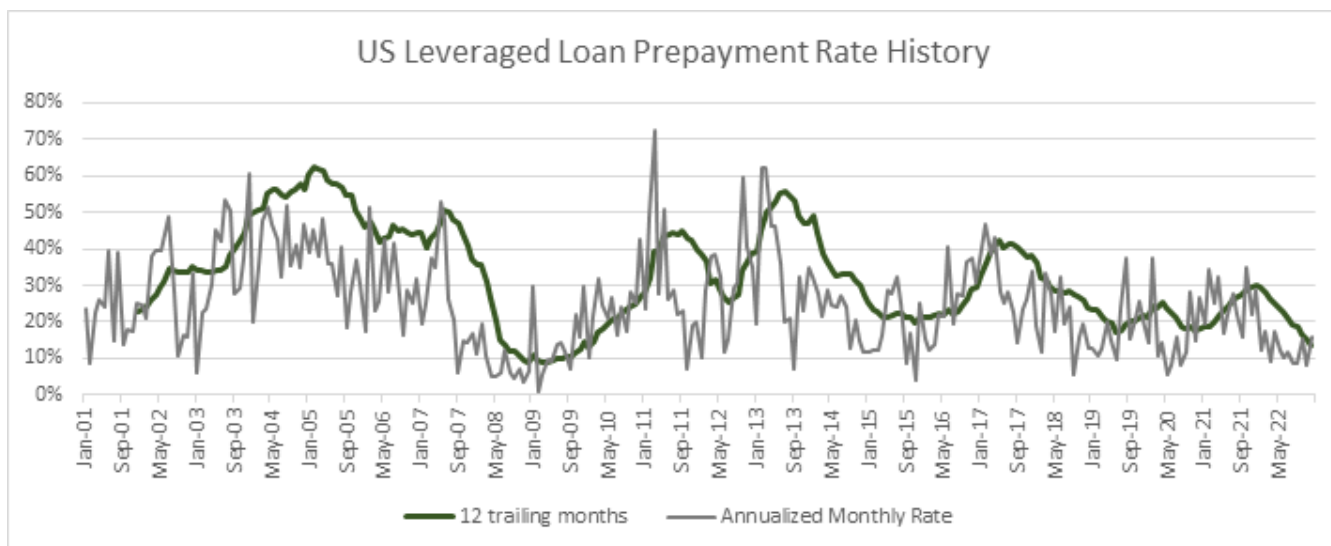
Following is a proposed set of prepayment rate assumptions derived from historical data that varies by scenario and periods within each scenario:

Periods within economic cycles	Prepayment Assumption (possible variance)	Rationale
■ Below 85th-percentile	■ 20%-30%	■ The low end of the historical range outside of cyclical stresses, recognizing the available historical data is from a favorable period of low rates.
■ 85th- to 92nd-percentile	■ 10%	■ Same as the GFC
■ Worse than 92nd-percentile	■ < 8.7%*	■ Judgement – a lower prepayment rate than seen in historical data.

Finally, NAIC should consider that proceeds from prepayments can be reinvested in additional collateral, even if the contractual reinvestment deadline has passed.

*This prepayment rate aligns with the historical experience for the lowest 12-month trailing average. Monthly and annualized data (the last 12-month average) should both be considered in the development of a reasonable range within the economic cycle. Judgement is required to match a prepayment assumption with the severity of the economic cycle.

Historical LCD Leveraged Loan LTM Prepayment Rates 2001-2022^[1]



Reinvestment

ACLI proposes replacing “reinvestment collateral is purchased at par” with pricing levels that vary by scenario and term. Reinvestments of maturities, amortization, and prepayments at prices below par have a meaningful impact on projected cashflows. ACLI recommends use of aggregate monthly historical data (LTM Bid Price) back to 2001 from Leveraged Commentary & Data (LCD) to derive reasonable assumptions for reinvestment prices. Secondary loan prices will likely vary by scenario, i.e., default rate, as investor sentiment drives prices.

Sentiment is negative through credit cycles, but it is often also volatile outside of cycles. We suggest the use of prices from historically stressed years to represent cyclical price levels, and prices from years outside of stress cycles (and excluding stress-related recovery periods) for non-stress scenarios. Judgement should be used for prices in severe stress scenarios, i.e., worse than cyclical stresses, by developing guardrails for losses for reinvestments. In addition, the prepayment assumption should be relatively low in these scenarios.

Scenarios	Price Vector Assumption	Rationale
■ Scenarios below 85th-percentile (less than cyclical)	■ 99 to par	■ Derived from averaging prices in years 2014-2019 (outside of stresses and related recovery periods)
■ 85th- to 92nd-percentile (cyclical shocks)	■ 92	■ Review historical stress years, e.g., 2008, 2009, 2010, 2020
■ Worse than 92nd-percentile	■ < 87	■ Judgement – limited data, and simplest to guardrail to specify losses amounts on reinvestments in tail scenarios

^[1] Source: S&P LCD Leveraged Loan Prepayment Rates based on monthly data from 2001-October 2022. * LTM Rate = sum of all the repayments in the last twelve months divided by the total amount outstanding twelve months ago.

Assigning Ratings to Underlying Assets

ACLI proposes replacing the fallback assumption that uses the SVO-assigned NAIC designation category with more transparent assumption logic that all parties can instantly use (as NAIC designations are not available to all parties). We suggest using the fallback logic used for reinvestment assumptions, i.e., assign the weighted average rating factor (WARF), or if not reported, assume it to be 4.C (B3, B-).

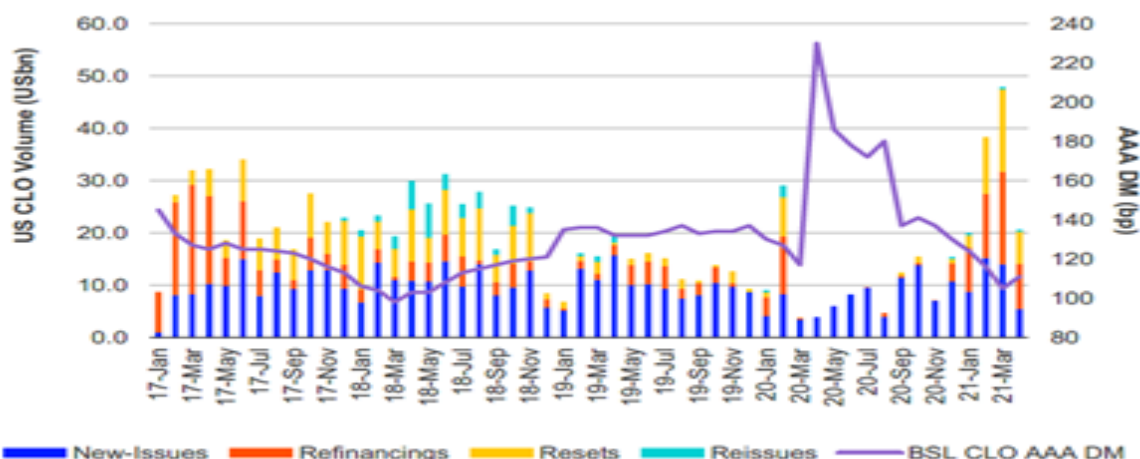
Expected Frequency of CLO Designation Modeling

ACLI would appreciate confirmation of how often CLO structures will be modeled, since the pool of loans will change over time. The manager can also reinvest and will do so based on market conditions at the time of reinvestment. Modeling more frequently than annually should be considered.

Callability of CLO Bonds

CLO transactions typically include call provisions that are frequently exercised when market conditions make it economically advantageous to refinance or reset bonds due to a more favorable spread environment. The chart below shows how pervasive the exercise of call provisions is under favorable market conditions as denoted by refinance, reset and reissue activity:

Exhibit 7 – Monthly US CLO Issuance (New Issue/Refi/Reset/Reissue) vs. AAA Discount Margin (January 2017 – April 2021)



Source: Refinitiv LPC (May 2021).

ACLI recommends considering whether modeling call features will be impactful to the loss projections under the proposed modeling framework, and if so to evaluate ways of incorporating this feature in the modeling exercise. We understand that projected losses under the proposed framework will come from scenarios of adverse macro conditions, and that those scenarios are not conducive to the economic exercise of call provisions. This, however, will be a function of the specific characteristics of the scenario modeled (i.e., whether the deteriorating market conditions begin immediately in the scenario vs. if they are back-ended). Evaluating these factors will help determine whether including the exercise of call provisions in the modeling will have any practical value or not.

“Too Early” Comments on Default and Recovery Rates

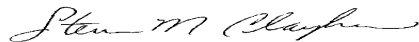
We recognize NAIC’s statement that “the Default and Recovery Rate Assumptions will come later” but offer a few early comments on these assumptions:

1. While we recognize that recovery assumptions will be scenario-dependent, we caution against the use of extreme assumptions such as a constant low recovery rate for the entire life of a CLO.
2. Since the underlying loans for CLOs are generally secured by other assets, the recovery assumption for CLO tranches should be based on secured loans rather than unsecured debt. At the same time, we acknowledge that the pervasive use of ‘covenant-lite’ provisions, ‘loan-only’ structures, ‘EBITDA add-backs’ and other more recent aggressive loan underwriting practices may merit lower than historical recovery rate assumptions – especially in adverse macro scenarios.

Summary

Again, ACLI appreciates the opportunity to comment and hopes this feedback helps to continue developing appropriate assumptions in the modeling. We note that as we move forward with future conversations on probabilities and scenarios, some of these assumptions may need to be revisited to help with the various decisions. We look forward to discussing our comments on the upcoming call of the VoSTF.

Sincerely,



Steve Clayburn

cc: Mike Monahan, ACLI
Paul Graham, ACLI
Mariana Gomez-Vock, ACLI

February 17, 2023

Ms. Carrie Mears, Chair
Valuation of Securities (E) Task Force
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Via email: ctherriault@naic.org and dgenaorosado@naic.org

RE: Proposed Methodology for Modelling CLOs

Dear Ms. Mears,

The undersigned life insurance companies (“the companies”) appreciate the opportunity to provide comments on the “Proposed Methodology for Modeling CLOs” exposed by the Valuation of Securities (E) Task Force (“VoSTF”) on December 12, 2022 (“the Proposal”). The companies strongly support the NAIC initiative to generate credit designations for collateralized loan obligations (CLOs) across the CLO structure that can be mapped to risk-based capital (RBC) charges, with the goals of minimizing RBC differences between holding all tranches of a CLO and holding the underlying loans, as well as calibrating RBC charges to account for the tail risk of CLOs.

Executive Summary

Modeling CLO investments and calibrating tranche losses to NAIC designations is essential for developing updated RBC treatment of CLOs that is commensurate with the tail risk in each CLO tranche. We agree with the ACLI’s July 15, 2022 comments related to the “IOA Issue Paper on the Risk Assessment of Structured Securities – CLOs” that any modeling and subsequent capital charge processes must be “(i) transparent, (ii) consistent across asset classes at the level of stress being examined, (iii) appropriately calibrated for the tail risks faced by each asset class, and (iv) designed to minimize any potential capital arbitrage incentives.”

Accordingly, the companies fully endorse efforts by the VoSTF and Structured Securities Group (SSG) of the Securities Valuation Office (SVO) to specify CLO modeling assumptions and settings as outlined in the Proposal.

The companies, however, strongly recommend that the SSG undertake the effort to detail in a single exposure (a “Modeling Framework”) all the variables and assumptions that it intends to use in its modeling of CLOs as the next step in the process. We view this exercise of enhanced transparency as critical for the industry to fully evaluate the mechanics of the modeling process and provide congruent and holistic feedback. For instance, it is challenging to provide detailed feedback on appropriate loan prepayment assumptions without understanding the specific macro scenarios that will be used, or whether CLO call provisions should be modeled without knowing the shape and timing of adverse macro scenario projections. For this reason, we encourage the

development of a Modeling Framework as a next step in the process and offer any assistance the SSG may deem helpful to support the expedient development of such framework.

As it relates to the current Proposal, the companies agree with the modeling methodology and most of the assumptions presented in the Proposal and largely support the ACLI's recommendations in relation to maturities and prepayments, reinvestment, and assigning ratings to underlying assets. However, there are a few areas that are not addressed in the ACLI letter that regulators should consider:

- **Limitations of Historical Data:** There is limited data history available on CLOs, and as such it may be appropriate to implement more simplified assumptions in cases where more granular, complex assumptions only provide marginal improvements to the cashflow projections.
- **Maturities and Prepayments:** Monthly and annualized prepayment rate data may miss nuances needed to capture realistic prepayment rates within high stress scenarios. We would suggest assumption of a multi-month average prepayment rate of 5% or less for high stress scenarios.
- **Limitations of Active Management and Diversification:** Financial obligations are often rotated in and out of the CLO vehicles to best align with an entity's underlying investment goals and targeted ratings. However, this strategy is of limited value during periods of economic stress, as CLO managers cannot "actively manage" or "diversify" their way out of severe economic stresses.

In addition to the companies' specific comments on the Proposal, **our letter underscores the materiality of CLO holdings of U.S. life insurers**, both at an individual and aggregate company level. The correlation of CLOs to other credit vehicles, the growth of the CLO market, the size of CLOs' holdings, the concentration of CLO holdings in a subset of insurers, as well as the risk profile of CLOs all support the priority that the NAIC is placing on this workstream. By their nature, significant credit events are very difficult to anticipate and we encourage the NAIC to act with appropriate urgency to implement the methodology.

Finally, the companies agree with application of the SVO's "no-arbitrage" principle from the IAO Issue Paper dated May 25, 2022, which states that capital should be **consistent across asset classes** for equivalent risks. We are also confident that **the NAIC has the in-house capabilities to model CLOs** and adhere to this principle. It is important that all inputs/assumptions and model settings be clearly specified and readily available to all parties, to enable them to replicate the calculations for deriving CLO capital charges and achieve the same results.

Limitations of historical data on CLOs

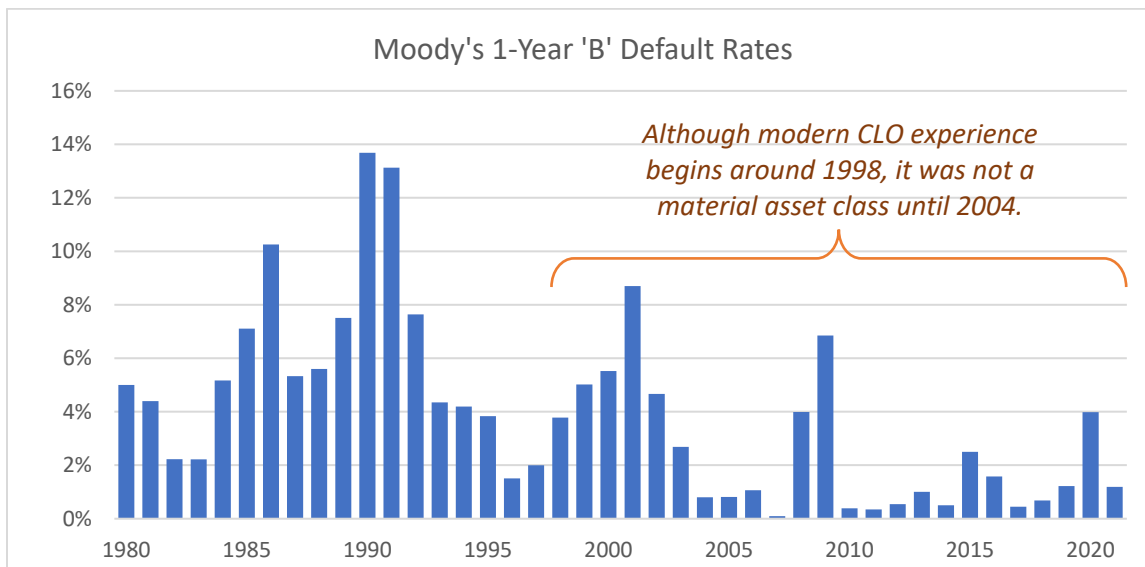
Credit downturns are infrequent and unpredictable events, vary in size and scope, and are heavily influenced by the market and political environment. The current iteration of CLOs became a material asset class fewer than twenty years ago. The past twenty years have been primarily dominated by falling interest rates and significant government support for the credit market. As

such, the current iteration of CLOs has not encountered a corporate credit event equivalent to the stress used to calibrate C1 bond factors.¹

The CLO market was in its infancy during the dot-com crash in the late 1990s, when high yield corporate defaults reached significant levels. The CLO market was only about a third of its current size leading into the 2008 Great Financial Crisis (“GFC”). Additionally, the leveraged loan market has evolved materially over the past twenty years, leading to lower average recoveries on defaulted debt.

It is not surprising that certain debt tranches of CLOs have had lower default experience than similarly rated corporate bonds over this period. The first-loss protection layer shielding these tranches is designed to protect investors in benign credit environments. RBC was developed to protect against tail events where first-loss protection could be depleted and investors are left with highly levered exposure to high yield loans.

In contrast to the CLO experience, current C1 Bond Factors were calibrated using almost forty years of corporate default experience. This experience includes the previously referenced dot-com crash as well as the significant credit stress experienced between 1989 and 1992. To preserve capital consistency across asset classes, these credit events should also be considered when calibrating stress scenarios for CLO collateral.



Accordingly, any solution should look to historical experience, but also account for its limitations. Where there is limited experiential data (e.g., with respect to liquidity / trading in tail scenarios), we support the use of simple assumptions that achieve the objective of reducing RBC arbitrage by setting appropriate capital levels throughout the CLO structure, while not being overly speculative.

¹ RBC C1 Bond Factors were calibrated to a 96th percentile credit event, using almost forty years of corporate bond default experience.

Maturities and Prepayments

We support ACLI's recommendations to replace "no prepayments assumed" with prepayment assumptions that vary by scenario and allow for reasonable regulator judgement when choosing a prepayment rate for the high stress scenarios (worse than 92nd percentile) in the Proposal. We would like to provide some additional thoughts for regulators to consider as they evaluate ACLI's suggestion to utilize monthly and annualized prepayment data as part of the maturity and prepayment modeling.

Prepayments are disproportionately made by companies in stronger financial positions at considerably less risk of default. We agree with the ACLI that this adverse selection characteristic of prepayments should be reflected in the model by assuming prepayments both (a) decline dramatically in very severe stress scenarios and (b) require offsetting increases in default rates for the non-prepaying loans. The net effect of these conditions on the core cumulative losses incurred by a CLO during a high stress scenario may be to fully offset the impact of the prepayments modeled.

The companies feel that hedging too close to either single-month or annualized prepayment data assumptions may miss nuances in prepayment rates that are necessary for properly capturing prepayment performance in high stress scenarios. A single-month annualization rate may be too volatile. For example, the lowest one-month annualized prepayment rate occurred in February 2009 (0.9%) and was a short month followed immediately by a month with the highest recorded rate when compared to the preceding 18 months. Further, the annual annualized rate (e.g., 8.7%, the lowest 12-month trailing average suggested by ACLI) may be too smooth and not capture adequate short-term volatilities that are necessary to capture risks within the high stress scenarios.

Accordingly, we believe a short-term, multi-month averaged prepayment assumption rate is appropriate, particularly for high stress scenarios, as the multi-month average should lessen inappropriate volatility factors while capturing short-term stress data. We would point to the lowest 3-month annualized rate of less than 5% during the GFC (September-November 2008) as appropriate for high stress scenario assumptions.

Limitations of Active Management & Diversification

Most, if not all, CLO managers utilize "active management" strategies to manage their collateral holdings. Financial obligations are often rotated in and out of the CLO vehicles to best align with the underlying investment goals and targeted ratings. However, CLO managers cannot "actively manage" or "diversify" their way out of severe economic stresses. CLO managers are typically sophisticated institutional investors who will all have similar information and research available to them, making it difficult to outperform other investment managers in the market in a stressed environment.

Moreover, the mezzanine tranches of CLOs are where much of their inherent investment (and particularly tail) risk resides. Once it becomes evident that defaults are imminent, very few other

investors will want to purchase these same loans and, if they do, it will likely be at significant losses to the sellers, resulting in financial losses to the CLO either way.

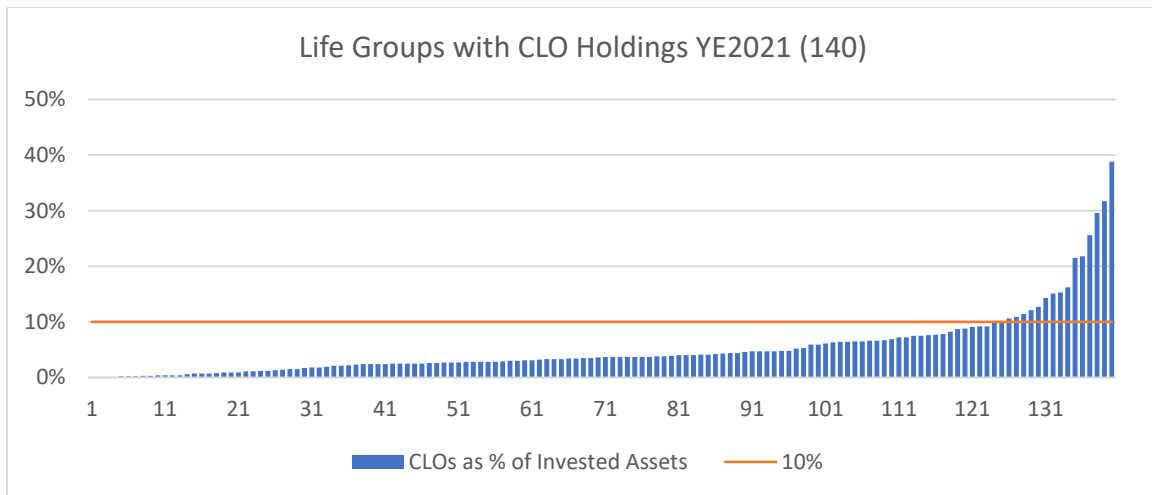
Collateral diversification is already captured in the historical default experience used by the SVO to analyze these transactions and any additional assumed benefits from diversification are inappropriate. Current C1 Bond Factors were created assuming the diversification benefit of about 800 issuers that were mostly investment grade. The typical public Broadly Syndicated Loan CLO has about 200 highly levered issuers and should not receive a higher diversification benefit.² The underlying loans are often highly levered and interconnected, despite being from different companies and industries, which will lead to knock on effects resulting in additional defaults during times of severe economic stress.

Materiality of CLOs

The companies believe that CLOs pose a material and reputational risk to the insurance industry and at individual companies. This is a quickly growing asset class – and insurer investments in CLOs tend to be highly concentrated both in terms of the companies making such investments and in terms of the credit quality where such investments are made. Taken together, we believe that these facts support the NAIC moving quickly to right-size the capital RBC charges for CLOs to ensure they are consistent with underlying risk.

- **CLOs are a growing percentage of aggregate life insurer assets.** CLOs currently represent about 3-4% of General Account investments. Over the past decade, US Life Insurer CLO investments have grown at about 20% per year while General Accounts have grown at less than 5% per year. It is imperative that work begin now so that regulators have better transparency on these investments *before* concentrations grow much larger.
- **CLOs are currently material to several individual life insurers.** A sole focus on aggregate General Account investments ignores that several individual life insurers have invested significant percentages of their General Account assets into CLOs.
 - In their Fall 2022 presentation, the American Academy of Actuaries C1 Working Group indicated that at least four life insurers had more than 10% of their General Accounts invested in CLOs. This analysis focused on the top 30 investors based on dollars invested, which excluded many smaller insurers who invest in CLOs.
 - A wider analysis of all life insurer 2021 statutory filings shows that 16 life groups have allocated at least 10% of their General Accounts to CLOs.

² When discussing the ‘no arbitrage’ principle, the SVO compared Bond C1 factors on collateral versus CLO tranches. It is important to understand that that analysis *already* includes the credit diversification embedded in the bond factors. If anything, the diversification benefit from highly levered, high yield CLO collateral should be less.



- **US Insurers are a material capital source for CLOs.** U.S. insurers represent about 20% of the capital invested in CLOs and hold close to 50% of the mezzanine tranches of CLOs.³

Regulatory Arbitrage

The companies agree with the SVO and SSG’s findings in the IAO Issue Paper dated May 25, 2022 that the single capital framework significantly understates the capital necessary to meet the risks of the mezzanine and subordinate tranches. The total capital requirements for all tranches of the structured security are often materially less than the equivalent underlying collateral if it was to be considered on its own merits, as per the example provided in the IAO Issue Paper. This is true even after accounting for overcollateralization in the CLO.

We agree with the paper’s recommendations that consistent capital treatment must be the basis for the “no arbitrage” principle. Capital required for holding all tranches of a structured security should be *consistent* with the capital required on the underlying collateral. *Consistent* does not mean that the required capital for holding the collateral should be exactly the same as the required capital for holding all tranches. Features such as overcollateralization and excess spread can justify some difference. However, *any difference must be clear and transparent to regulators*. Therefore, it is necessary that regulators have access to evaluations of tranche-level stress losses across all debt and equity tranches under a series of calibrated and weighted collateral stress scenarios.

Moreover, it is imperative that regulators understand sensitivities and underlying risks surrounding CLOs and other structured credit products and take a tailored, activities-based approach to closing these regulatory gaps and ensuring proper solvency regulation. To that end, the companies encourage regulators to remain focused on how we capture the tail risk in the core methodology as the SSG and VoSTF establish the modeling parameters. The companies support the use of a tail risk metric such as conditional tail expectation (CTE) to appropriately capture

³ [The Federal Reserve - Who Owns U.S. CLO Securities? An Update by Tranche \(federalreserve.gov\)](https://www.federalreserve.gov/monetarypolicy/whowhoseclosesecurities.htm). Supported by additional analysis of 2021 statutory investments.

the cliff risks, or “fat-tailed distributions” associated with CLOs. As an example, C3 phase 2 for variable annuity reserves uses $(1/4) \times \text{CTE-98}$.

SVO & NAIC Modeling Capabilities

The companies agree with the SVO that the NAIC has the in-house capabilities to appropriately model CLOs. The SVO has demonstrated both capabilities and knowledge through their annual stress test analysis where they analyze CLO securities across several scenarios. The SVO’s use of a well-vetted third party model makes its work transparent and repeatable, even for firms using different CLO models.

It is important to note that this exercise would not seek to replicate the role of rating agencies in markets.⁴ Instead, this surveillance-focused task would apply credit stresses to securities to ensure consistent RBC treatment with other asset classes and to provide regulators with critical transparency.

It is also vital that all inputs/assumptions and model settings be clearly specified and readily available to all parties, to enable them to replicate the calculations for deriving CLO capital charges and achieve the same results.

The companies strongly support of the SVO’s CLO modeling initiative, which will aid NAIC efforts to quickly enhance the RBC factors to better capture tail risk in structured credit products. We believe these are effective and reasonable risk management efforts that will provide regulators with important and transparent information about the companies they regulate and meaningfully eliminate RBC arbitrage in the regulatory system.

Please let us know if the companies can provide any additional information or assistance as NAIC and regulators work through this project. We look forward to continuing to collaborate with regulators as they refine the RBC charges for all structured products and pursue other initiatives to improve insurer financial solvency.

Respectfully submitted,

Equitable
MetLife
New York Life
Northwestern Mutual
Pacific Life
Prudential Financial, Inc.
Western & Southern

⁴ Rating agency ratings play an important role in credit markets, but they are not appropriate for all purposes. In particular, ratings are not designed to provide equivalency across asset classes at the precise stress level chosen for RBC.

February 17, 2023

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Via email: Charles Therriault ctherriault@naic.org, Denise Genao-Rosado
dgenaorosado@naic.org, and Eric Kolchinsky ekolchinsky@naic.org

Re: CLO Exposure Methodology Draft (2022-17.01) - Proposed Methodology for Modeling CLOs

Dear Ms. Mears and Ms. Crawford:

We appreciate the opportunity to respond to the Valuation of Securities Task Force's (VoSTF) exposure of the "Proposed Methodology for Modeling CLOs."

Preliminary Observations:

- We appreciate the role of the NAIC in supporting insurance commissioners' review of insurer investments, including CLOs. That said, fundamental questions should be addressed before moving forward with this work stream. We believe any review must be data-driven, non-discriminatory, and result in asset capital charges that align with risk across all asset classes (a concept we describe as 'equal capital for equal risk'). There is no shortage of data and studies that track the performance of CLOs that demonstrate that CLO bond tranches rated B3/B- and above (rated CLOs) have performed well across all economic cycles and have less credit risk than equivalently rated corporate bonds. This was true for rated CLO performance before 2008 and given structural changes implemented following the Global Financial Crisis, the asset class has continued to perform well. Numerous studies by market participants, including research by Blackrock and Athene, and recent studies by the American Academy of Actuaries and

Professor Robert Jarrow confirm that rated CLOs are safer credit risk than comparably rated corporate bonds. Any fair bottom-up analysis of CLO data should result in a reduction of rated CLO capital charges below that of corporate bonds. However, if the goal is to increase capital in the insurance industry, then the data suggests capital charges on corporate bonds should be increased relative to CLOs. We recognize that neither option may be popular and that both may go against conventional wisdom, but to do otherwise would contradict the facts.

- It takes significant expertise and resources to appropriately model the credit risk in structured credit instruments like CLOs. The Structured Securities Group (‘SSG’) would have to model every new deal *and* dynamically model all 19,000 outstanding CLO tranches as macroeconomic conditions evolve, structures change, and deals age. The ratings agency industry has built substantial infrastructure, yet still struggles with 6-8 week ratings backlogs. The NAIC should evaluate whether the SSG has sufficient infrastructure with fewer than 50 credit analysts, and whether any perceived benefits justify the cost to ramp up the required resources.
- It has not been clearly articulated why CLOs should no longer be filing exempt but instead should be subject to SSG financial modeling. Any perceived concerns with Credit Rating Provider (CRP) ratings for CLOs should be explicitly identified and addressed before changing long-standing and cost-efficient practices.
- Lastly, we offer specific technical comments about the exposed modeling assumptions.

‘Equal Capital for Equal Risk’

To protect the integrity of the RBC system and insurer solvency, without inappropriately steering insurers away from high-quality investments, the overriding principle that should be applied to capital changes should be ‘equal capital for equal risk.’ Given the intersection between modeling, NAIC designations, and RBC charges, we are concerned with inconsistent application of methodology and process across different asset classes.

The Purposes and Procedures Manual of the NAIC Investment Analysis Office states that one aim of the SVO should be to “promote uniformity in the production of NAIC Designations.”¹ In order to achieve this end, all asset classes should be modeled and evaluated using equivalent assumptions and methodologies. We are concerned that the CLO methodology and process offered for comment are inconsistent with those used across other asset classes.

Consistency across asset classes incentivizes the appropriate allocation of capital and prevents encouraging insurers to hold inappropriate concentration in particular asset classes or risks. Europe’s Solvency II framework has demonstrated how non-economic, politically motivated

¹ See page 26, Paragraph 80 of “[2022 Purposes & Procedures Manual of the NAIC Investment Analysis Office](#).”

policy can drive irrational concentration of risks and poor outcomes. Under Solvency II, *every* sovereign bond and loan in the European Union is assigned a 0% Solvency Capital Requirement (SCR) spread capital charge regardless of credit quality.² The result is that the European life insurance industry has a concentrated ~10% exposure to higher yielding Greek, Italian, Spanish, and Portuguese sovereign debt, a concentration that presumably wasn't the intended outcome of the policy.³

Structured credit investments, including rated CLOs, have provided the U.S. life insurance industry an efficient and safe way to diversify the credit risk supporting policyholder obligations. We are concerned that the proposal creates inconsistency between the models for CLOs and those for corporate bonds, potentially resulting in increasingly concentrated corporate bond exposures. For illustration, consider two examples of inconsistency between the proposed methodology for CLOs and the existing methodology for corporate bonds.

First, the proposal takes as a given that Nationally Recognized Statistical Rating Organization (NRSRO) ratings are a good predictor of default probability for the underlying corporate loans in a CLO, but a bad predictor for CLOs themselves. This is the premise behind the section "Assigning Ratings to Underlying Assets." The methodology seems to imply that NRSRO ratings are a good predictor of credit risk in some asset classes (i.e., bank loans or corporate bonds) and a bad predictor in others (i.e., CLO tranches). The proposal goes further, suggesting that the issue rating for a particular corporate senior secured loan should be notched to a higher default probability *only if* it is held within a CLO. Under that premise, if applying the 'equal capital for equal risk' framework, it might then be necessary to notch the rating to a higher default if the insurance company held the loan directly.

Second, the proposed methodology implicitly applies a capital charge for duration that doesn't exist for corporate bonds. The proposed methodology for structured products allocates capital using expected discounted lifetime loss. This is more punitive for longer-dated investments. No such concept applies in the methodology used for corporate bonds. In recent reports Amnon Levy, CEO, of Bridgeway Analytics stated:

"... the proposed intrinsic price approach, currently used for CMBS and RMBS, which departs from the CI framework in its treatment of the likes of maturity, and reserving and

² Natixis "[Solvency II Capital Requirements for Debt Instruments](#)" May 2, 2016, page 12.

³ Solvency II EUR denominated reference portfolio allocation to Greece, Italy, Spain, Ireland and Portugal sovereign debt as a % of Total Assets as of November 30 available https://www.eiopa.europa.eu/tools-and-data/risk-free-interest-rate-term-structures_en

*offsets, further questioning the framework's ability to rank risk of CLO tranches against other credit assets that receive CI charges."*⁴

*"Intrinsic-price-based designations benchmark poorly to market spreads when compared to agency ratings."*⁵

If the proposed methodology was applied equally to corporate bonds, it could result in a substantial increase in capital charges for long maturity corporate investments. For example, Levy estimates that, using illustrative assumptions, the proposed methodology would imply that a 10 year 'A' rated corporate bond should have the same capital charge as a 2 year 'BB' high-yield corporate bond.⁶

We recognize that striving for 'equal capital for equal risk' across asset classes takes time, analysis, and resources. We encourage the NAIC to engage the industry, rating agencies, and third-party consultants to help. If additional details were shared on the assumptions, the industry would be able to help the NAIC model the impact of the same set of assumptions on other asset classes, including corporate bonds and mortgages.

Significant Expertise and Resources are Needed to Model and Rate Structured Credit Assets Like CLOs

Insurers need appropriate expertise, stable funding, and capital to capture the illiquidity and complexity premia offered by structured credit like CLOs. As noted by AM Best in December 2022, "CLOs can offer compelling relative value, but insurers or their asset managers must have the appropriate mix of credit research, structuring, and legal expertise to effectively capitalize on this asset class."⁷ The appropriate framework to model and rate structured credit instruments like CLOs also require significant resources and analytical computation capabilities. As noted by the Academy of Actuaries in their December 2022 presentation to VoSTF.

"CLOs (and other structured securities) are complex. CLOs contain risks that differ from risks contained in other assets. Accurately capturing the risks posed to an insurer's surplus

⁴ Amnon Levy, CEO, Bridgeway Analytics: "[The Evolving Regulatory Landscape That Governs Insurers' Investments](#)", January 18, 2023, page 11.

⁵ Amnon Levy, CEO, Bridgeway Analytics: "[Benchmarking the Treatment of CLOs](#)", February 14, 2023, page 1.

⁶ Amnon Levy, CEO, Bridgeway Analytics, "[NAIC Regulatory Treatment Update – CLOs](#)", November 17, 2022, pages 5-6.

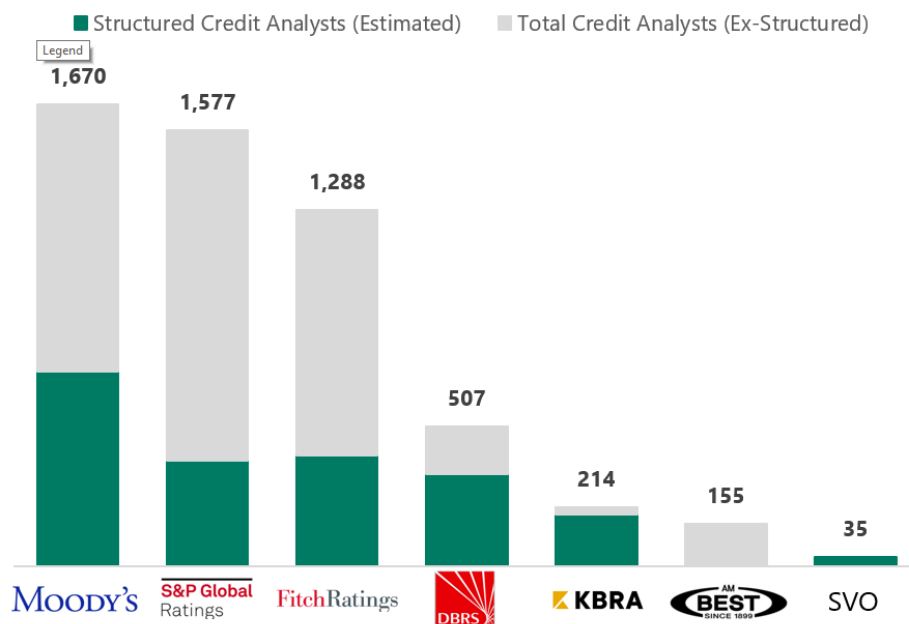
⁷ A.M. Best Special Report "[Insurers' Structured Securities Holdings Continue to Rise](#)" (Andersen, Hopper) – December 19, 2022

requires complex models. Regulators need to balance the need for measurement of complex risks with the cost of measuring those risks.”⁸

There is significant expertise and institutional infrastructure required to properly model CLOs and other complex structured securities. The CRPs have made substantial investments in that infrastructure. Rating agencies also have substantial resources and credit analysts beyond structured securities, allowing them to reallocate to rate certain sectors as demand requires. The SSG does not currently have that infrastructure in place, and we question whether the cost to build it is justified, particularly in light of the fact that any concerns with existing CRP ratings have not been clearly articulated and discussed. Insurers will still need NRSRO ratings and after new issuance would additionally have to obtain SVO/SSG review.

The NAIC should evaluate whether it has sufficient resources to take on the role of determining designations and whether any perceived benefits justify the cost to ramp up the required resources. The NAIC currently has far fewer credit analysts and modeling staff than the CRPs. See Exhibit below.

Exhibit: Estimated Structured Credit Analysts by CRP⁹



⁸ American Academy of Actuaries, “[CI Work Group \(CIWG\) Presentation to the Risk-Based Capital Investment Risk and Evaluation Working Group \(RBCIRE WG\) on Collateralized Loan Obligations \(CLOs\)—Status Update](#)”, December 14, 2022.

⁹ Source: SEC Office of Credit Ratings (OCR) Staff Report on Nationally Recognized Statistical Rating Organizations (NRSROs), February 2023. Data as of December 31, 2021, as reported in [Form NRSROs](#) and [OCR Staff Report, February 2023](#). Structured credit analysts estimated by multiplying total credit analysts by ABS credit ratings as a % of all outstanding ratings for each NRSRO. Note: SVO estimate assumes all SVO/SSG credit analysts have expertise in structured products.

Given the complexity of this modeling, the NAIC may also want to consider enlisting third-party modeling expertise and resources.

Rated CLOs Are Safer Credit Risk than Equivalently Rated Corporate Bonds

If consistent assumptions and methodologies are applied across asset classes, the facts demonstrate that rated CLOs are safer credit risk than equivalently rated corporate debt. Structured credit like CLOs benefit from (i) diversification, (ii) credit enhancement, and (iii) structural protections that divert cash flows to senior tranches during periods of market stress. For detailed analysis on this subject, see the [Understanding Structured Credit](#) whitepaper published by Athene.¹⁰

History and expert modeling show safer credit risk for rated CLOs than equivalently rated corporate bonds. For example, consider the conclusions of Professor Robert Jarrow’s recent paper entitled, “A Bottom-Up, Reduced Form Credit Risk Model Approach for the Determination of Collateralized Loan Obligation Capital”:

“This paper uses a bottom-up, reduced form credit risk model with hazard rate estimated default probabilities to compute various CLO tranches loss probabilities and VaR capital factors, and compares these estimates to equally rated corporate debt default probabilities and NAIC’s capital factors, respectively. It is shown, via various tests, that the CLO tranches loss probabilities are, on average, lower than comparably rated corporate debt... Finally, the NAIC capital factors are biased relative to the bottom-up, reduced form credit risk model’s VaR capital factors, and typically larger.”¹¹

By all objective measures, rated CLOs have performed well over time. At the VoSTF Summer 2022 meeting NAIC staff recognized that “the historical performance of CLOs has been excellent weathering three economic downturns - dotcom bubble, Global Financial Crisis and COVID.”¹² All performance data, pre- and post-Global Financial Crisis, shows rated CLOs have experienced fewer impairments than equivalently rated corporate bonds.¹³ For example, from 2011 to 2020, BBB CLOs have had no impairments vs. 8bps annual average impairments for BBB corporate bonds. The exhibit below shows that rated CLO tranches performed better than comparably rated corporate bonds.

¹⁰ Athene, “[Understanding Structured Credit: Perspectives for Insurance Capital Requirement](#)”, December 2, 2022

¹¹ Professor Robert Jarrow and Donald R. van Deventer, “[A Bottom-up, Reduced Form Credit Risk Model Approach for the Determination of Collateralized Loan Obligation Capital](#)” - Kamakura Corporation, January 2023, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4352677 (warren.sherman@sas.com).

¹² Staff Discussion of Responses to CLO Proposal – NAIC, “[2022-004.02 CLO Response SMN 2022 vF](#)”, page 4, August 11, 2022.

¹³ Athene, “[Understanding Structured Credit: Perspectives for Insurance Capital Requirement](#)”, December 2, 2022 page 16.

Exhibit: Historical Credit Impairments Pre / Post Global Financial Crisis by Asset Class¹⁴

Rating	Corporates	CLO	Other ABS	RMBS	CMBS
Pre-Crisis (2001-2010)					
AAA	0.00%	0.00%	0.00%	0.04%	0.03%
AA	0.05%	0.00%	0.03%	0.29%	0.08%
A	0.11%	0.02%	0.08%	0.76%	0.08%
BBB	0.32%	0.22%	0.63%	1.82%	0.45%
BB	0.85%	0.31%	2.57%	3.17%	1.46%
B	3.00%	1.60%	9.75%	5.09%	3.78%
Post-Crisis (2011-2020)					
AAA	0.00%	0.00%	0.00%	0.02%	0.00%
AA	0.02%	0.00%	0.00%	0.19%	0.05%
A	0.02%	0.00%	0.00%	0.13%	0.05%
BBB	0.08%	0.00%	0.00%	0.36%	0.15%
BB	0.21%	0.13%	0.10%	0.51%	1.58%
B	1.28%	0.66%	0.77%	0.82%	7.15%

S&P Global Ratings’ analysis of CLO ratings from the mid-1990s through 2022 found only 15 investment grade tranche defaults for pre-Global Financial Crisis deals, and none for post-Global Financial Crisis deals.¹⁵ Rated CLOs issued since the Global Financial Crisis have substantially strengthened structural protections and have performed exceptionally well with zero investment grade defaults.

CLOs have required structural protections that require they be actively managed within the constraints of the CLO structure and indenture covenants that generally improve the risk profile. Standalone bank loan managers are not subject to these requirements. CLO managers are asset managers with teams of portfolio managers, traders, credit analysts, risk managers, and operations personnel. A CLO manager may purchase new assets with proceeds received from the prepayment or scheduled amortization of loans in the existing portfolio, which are subject to strict eligibility criteria and collateral quality tests. This active management helps to maintain or improve the credit quality and risk profile of the portfolio. Collateral quality tests restrict the manager from buying loans with too long a maturity or with too low an average rating. The tests require the portfolio to maintain a certain level of diversity and accrue a minimum rate of interest to ensure there is sufficient interest income available to pay interest on the CLO’s liabilities.

¹⁴ Athene, “[Understanding Structured Credit: Perspectives for Insurance Capital Requirement](#)”, December 2, 2022 page 16. Represents the average annual default rate of U.S. products for all categories, except CLOs. CLOs represent the average of US CLO trailing 12-month impairment rate. However, 2001-2010 CLO B impairments were based the average of Moody’s trailing 12-month impairments rates from Feb 2010-Dec 2010 as 12-month impairment data was not available prior to Feb 2010. 2001 - 2010 includes a discounted buyback of a pre-Global Financial Crisis CLO tranche (current CLO documents prohibit such activity); the related CLO transaction performed as expected and repaid all of its debt at par with no underlying impairment. Source: Moody’s Annual Default Study (February 2022). S&P Annual Global Structured Finance Default and Rating Transition Study (May 2021). Moody’s Impairment and loss rates of Global CLOs (June 2021).

¹⁵ S&P Global Ratings, CLO Spotlight, “U.S. CLO Defaults” (March 17, 2022) page 3.

Successful active management by a professional manager can improve credit enhancement levels by “building par” via trading gains or reinvestment of available proceeds into loans issued at a discount. CLO managers optimize loan portfolios by reinvesting and positioning their loan exposures to increase returns in benign economic environments and protect against downside risk during weaker cycles. While CLOs hold two-thirds of the bank loan market, historically they have held less than 20% of all corporate loans that defaulted at the time of default.¹⁶ This demonstrates that CLO managers broadly avoid ultimate defaults by selling assets prior to the time of their default.

As the American Academy of Actuaries noted in their recent presentation, “[g]reat care should be exercised in using existing C-1 [corporate bond] factors for CLOs due to a lack of equivalence between the risk models for corporate bonds, equities, and structured securities.”¹⁷ We agree with the NAIC that the capital charges for CLOs needs to be calibrated, and we think that if the analysis is performed on a bottom-up basis with consistent assumptions across asset charges, it will be determined that capital charges for rated CLOs should be *lower* than those for equivalently rated corporate debt.

We are concerned about unintended consequences resulting from these proposed changes. They could cause policyholders to be exposed to more concentrated and lower quality credit portfolios, without the benefit of the diversification from rated CLOs and other structured products. If insurers are forced to allocate away from investment grade CLOs, it is probable that a significant portion of that reallocation will find its way into riskier bonds and loans. We are also concerned that the proposed changes would have a negative impact on the broader loan financing markets that support economic growth. More broadly, inappropriately steering insurers away from high-quality investments that can back guaranteed life and annuity products can cause broader policy problems. The experience in Europe following the adoption of Solvency II provides an important negative precedent.¹⁸ In the United States, the importance of the life insurance and annuity products to individual families is even greater than in Europe, and, thus, the consequences of these changes may be even more severe.

¹⁶ Analysis of Bank of America Merrill Lynch data for US BSL CLO Default Rates vs. Leveraged Loan Universe 2014-July 2022.

¹⁷ American Academy of Actuaries, “[C1 Work Group \(C1WG\) Presentation to the Risk-Based Capital Investment Risk and Evaluation Working Group \(RBCIRE WG\) on Collateralized Loan Obligations \(CLOs\)—Status Update](#)”, December 14, 2022.

¹⁸ A 2018 Europe-wide survey of insurers indicated that Solvency II deterred long-term business. See <https://www.reinsurancene.ws/solvency-ii-beneficial-but-detering-long-term-business-survey-shows/>. In its 2019 annual survey on long-term guarantees, required by Solvency II, the European Insurance and Pension Authority noted that approximately half of the jurisdictions [in the EU] observed a reduction in the availability of traditional life insurance products with long-term guarantees, and a reduction in the size and duration of guarantees. While it is difficult to reduce this trend to a single cause, many observers draw a direct link between Solvency II’s treatment of investments associated with market risk to the reduction in availability of long-term guaranteed products. EIOPA report available at <https://www.eiopa.europa.eu/sites/default/files/publications/reports/eiopa-ltg-report2019.pdf>.

Comments on the Proposed NAIC CLO Stress Tests Methodology (Excluding Scenarios)

The proposed methodology is insufficiently transparent. VoSTF’s exposure included only select aspects of the modeling approach. We are concerned about the piecemeal approach taken with respect to the limited exposure of the proposed methodology without scenarios and plans or the full scope of the proposed changes. Without a comprehensive understanding of methodology and assumptions, it is difficult for the industry to comment on appropriateness and in a comprehensive manner. It also creates uncertainty, making it difficult for the industry to properly manage risks, design new products, develop business plans, and raise capital.

The proposed methodology presents a single stress run (akin to how a credit portfolio manager or risk manager would stress their portfolio holdings). We do not have a specific objection to modifying capital charges via this approach. However, the assumptions must be reasonable in the context of market function and consistently applied across all other asset classes. We have four key technical points of feedback in that context.

1. Inconsistent Use of Ratings to Assign Ratings to Underlying Assets

It is unclear why the SSG penalizes senior secured loan or senior unsecured bond ratings by notching them down only when held within a CLO.

2. Recovery Rates Do Not Reflect Underlying Assets

Recovery is much better on senior secured loans and senior first lien loans have much better performance than corporate bonds.

Exhibit: Average Corporate Debt Recovery Rates Measured by Trading Prices^{*19}

Priority Position	Issuer-weighted recoveries			Volume-weighted recoveries		
	2021	2020	1983-2021	2021	2020	1983-2021
1st Lien Bank Loan	68.8%	59.8%	65.5%	76.4%	61.0%	63.3%
Sr. Unsecured Bond	51.0%	34.6%	38.0%	48.6%	26.8%	34.8%

* We use market prices (bids) to proxy recoveries in this exhibit.

Source: Moody's Investors Service

3. Prepayments

Assuming no prepayments for the life of the CLO is unrealistic and contrary to all data. Long-term prepayment rates have been 30% per year over the last 21 years. Even during historical stress,

¹⁹ Source: Moody’s Investor Service “[Annual default study: After a sharp decline in 2021, defaults will rise modestly this year](#)“, Exhibit 6 Average corporate debt recovery rates measured by trading prices, February 8, 2022.

prepayment rates were only below an annualized 10% for a month or two, recovering very quickly such that over any one-year period they averaged ~10%. For example, at the trough of the Global Financial Crisis (March 2009) monthly prepayment rates across all U.S. bank loans fell to 0.07% per month, but the lowest average over a twelve-month period was ~8.7%. During 2Q2020, at the trough of the Covid volatility, prepayments dropped to 0.47% per month but the lowest average over a twelve-month period was ~18.2%. See historical prepayment rates below.

Exhibit: Historical LCD Leveraged Loan LTM* Prepayment Rates 2001-2022²⁰



The NAIC should calibrate its prepayment assumptions using this historical data. Market convention uses 20% prepay (close to the long-term average). For example, Citi Research noted that the “NAIC assumes no loan prepayment, whereas we assume 5% annual loan prepayment in the first two years, then 10% for next 4 years before normalizing back to 20%.”²¹ As the SSG plans to use scenarios in their methodology for determining designations, it makes sense to align prepayment assumptions with each scenario’s characteristics, such as 20% for long-term average, 10% for Global Financial Crisis-level stresses, and perhaps 5% for scenarios reflecting worse than historical experience. Prepayment vectors, like the Citi Research example, reflecting a stress period followed by gradual renormalization are an industry convention.

If the SSG chooses to use an unrealistically low prepayment rate for a significant period of time, it must assign an appropriate probability weight to this scenario occurring. Leveraged loans prepay for many reasons, including plain vanilla refinancings, an acquisition, a carve-out or asset sale, or

²⁰ Source: S&P LCD Leveraged Loan Prepayment Rates based on monthly data from 2001-October 2022. * LTM Rate = sum of all the repayments in the last twelve months divided by the total amount outstanding twelve months ago.

²¹ Citi Research “US Insurers’ CLO Investments May Face a Spike in Capital Charge”, July 7, 2022, page 8.

a reorganization. Even in a challenged market like the current one, the loan market continues to observe amend and extend (A&E) activity as well as healthy bond-for-loan take-outs.

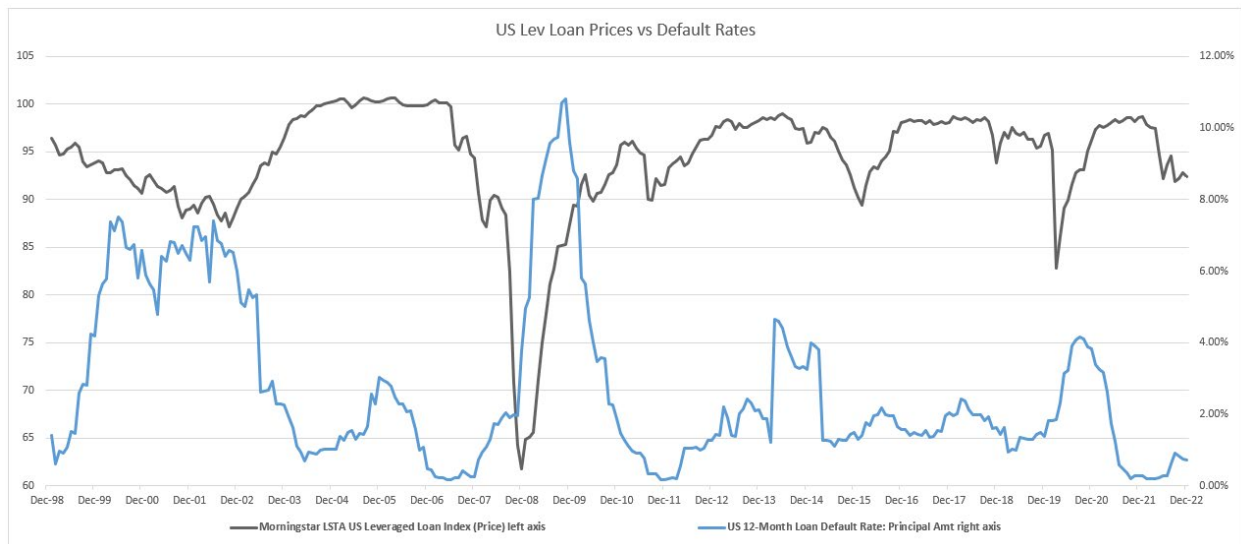
4. Reinvestment

NAIC SSG proposed reinvestment assumptions of “No post-reinvestment period reinvestment” and “Reinvestment collateral is purchased at par.”

Assuming the collateral markets are always priced at par is unrealistic and inconsistent with stress. Assuming the entire market only trades at par means, by definition, that any loan held by a CLO can also be sold at par. Therefore, there will never be realized losses because a CLO manager has perfect ability to sell at par at any time in this hypothetical state of the world. Of course, this is not reality either.

Even in stable, normal markets, CLO managers are often able to invest at small discounts to par. Fixed income instruments are valued at par when their coupon matches the market’s required yield for that instrument’s risk and maturity profile. As markets ebb and flow, required yields can change which causes prices to move around. As technicals in the market change, prices will change.

Exhibit: LSTA Leveraged Loan Prices vs. S&P LCD 12-month Defaults Rates 1998-2022²²



When dislocations emerge and stress enters the market, it is not logical to assume that all loans trade at par. A CLO has certain constraints related to credit quality and maturity profile of loans subject to reinvestment, but when all loans trade down in prices, CLO managers have ample supply

²² Source: Default Rate – S&P LCD, Barclays Research. Loan price – Morningstar, Bloomberg, December 2022.

in the secondary market from which to select. In fact, during periods of volatility, it is typical that CLO managers upgrade the quality of their portfolios by buying loans with better credit quality at discounted prices. When market volatility emerges, it is true that prepayments will slow so not as much free cash will be available to reinvest. But any free cash will be reinvested into loans at discounts.

If the SSG wishes to move to a stress run approach for assigning ratings to CLO tranches, it must design a stress scenario that is plausible. As market stress emerges and defaults pick up, prices of existing loans – with coupons that are lower than the market yield – must fall below par. Any stress run must assume prices of reinvested assets are inversely correlated with market default rates. Scenarios could use 97 for reinvestment prices averaged over normal times, 86 price for Global Financial Crisis and 2010 stress, and a judgment call of 80 price for a hypothetical worst-case stress.

5. Other Considerations:

Applied Inconsistently Even within the CLO Asset Class

Even within the CLO asset class, the proposal seems to treat equal risks inconsistently. In fact, it carves out the types of CLOs for which data happens not to be available from the “third-party software vendor” used by the SSG. This could create odd incentives, including for less sophisticated insurers to invest in private CLOs originated by less transparent issuers that may not be modeled in the software.

Interest Rates / Proceeds

The SSG should consider using a range of interest rate shock scenarios as a single forward curve is only applicable for the moment in which it is used. If only a single forward curve is used, then there would be no stress added to a portfolio that is composed of 100% fixed rate assets and 100% floating rate liabilities, as the fixed swap rate as of a certain moment is, by definition, equal to the present value of each point on the forward curve of the same reference as of that moment. While some CLO equity investors would be happy to remove any rate shocks from a regulatory methodology, that was likely not the goal of the SSG but calls into question the sophistication of the proposed modeling methodology.

Maturities – Impacted by Call Provisions

The proposed methodology ignores call provisions in CLOs, which can change the effective maturity and significantly impact valuation.

Loan Collateral Management to Pass CLO Average Quality Test

If a CLO breaches its average quality test because loans have been downgraded, a CLO manager has to purchase higher quality loans to pass the test. The SSG's proposed methodology needs to incorporate the impact of such safeguards built into the CLO structure that may require higher quality purchases to remain in compliance.

The SSG's proposed methodology assumes that reinvested collateral will have ratings equal to the transaction's weighted average rating factor (WARF). In reality, the WARF is typically in-between the precise rating factor levels for each rating category. For example, the rating factor for a loan rated B2 is 2720, and that for a loan rated B3 is 3490; however, the portfolio WARF is typically never exactly 2720 or 3490, it would usually be somewhere in-between. If the WARF was 3300, for example, and the CLO was breaching its credit quality tests, then the CLO manager would have to maintain or improve the credit quality of the portfolio with each purchase. As such, the CLO manager would be prohibited from buying a loan rated B3, as that would worsen the portfolio credit quality; the CLO manager could only buy a loan rated B2 or better in that situation.

No Differentiation in Stress Parameters Based on Rating Category

NRSRO methodologies apply collateral stresses for every target CLO tranche rating, and the magnitude of the stresses increases for higher target ratings. By contrast, the SSG's proposed methodology simplistically applies the same level of collateral stress to all tranches of the CLO, regardless of seniority.

Model Testing

As a general rule, the NAIC model should be backtested against historical experience and an impact analysis should be performed.

Conclusion

We agree with the NAIC that the capital charges for rated CLOs need to be calibrated, and we think that if the analysis is performed on a bottom-up basis with consistent assumptions across asset charges, it will be determined that capital charges for rated CLOs should be *lower* than those for equivalently rated corporate debt.

Modeling structured credit like CLOs requires significant resources. Based on historical performance, structural protections in CLOs, and the quality of CRP ratings, we disagree with the conclusion that the SSG needs to model this asset class using a methodology inconsistent with C1 Bond factors in order to eliminate reliance on NRSROs. Regulators may want to evaluate whether

the technical capability required to model CLOs is best held in-house at the SSG or with third-party experts like CRPs or expert consultants.

Given appropriate time, analysis, expertise, and resources, there is a framework that can be designed to assign designations and asset charges to ensure 'equal capital for equal risk' is applied across asset classes.

Thank you for the opportunity to continue to participate and comment on this issue. We look forward to future discussions with the NAIC on this important initiative.

Sincerely,

Athene
Everlake Life Insurance Company
F&G Annuities and Life
Global Atlantic Financial Group
Security Benefit Life Insurance Company

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Appendix:

Historical leveraged loan prepayment rates from S&P LCD show zero is overly conservative.

Exhibit: S&P LCD Historical Leveraged Loan Prepayment Rates 2001-2022^{23*}

Leveraged Loan Prepayment Rates per S&P LCD since 2001			
2001+	LTM Rate	3M Rate	Monthly Rate
Min	8.69%	1.27%	0.07%
25%	21.88%	4.46%	1.33%
Median	30.19%	6.98%	2.21%
75%	42.83%	9.91%	3.27%
Max	62.59%	20.81%	10.21%
Post Global Financial Crisis (2010+)			
Min	13.01%	2.42%	0.33%
25%	21.55%	4.51%	1.33%
Median	26.89%	6.64%	2.09%
75%	36.90%	8.29%	2.81%
Max	55.84%	20.81%	10.21%
2014+			
LTM Rate	3M Rate	Monthly Rate	
Min	16.71%	2.42%	0.33%
25%	21.36%	4.24%	1.14%
Median	24.13%	6.14%	1.91%
75%	30.07%	7.55%	2.66%
Max	49.20%	13.74%	5.08%
Global Fin'l Crisis (June '08 to Dec '09)			
LTM Rate	3M Rate	Monthly Rate	
Min	8.69%	1.27%	0.07%
25%	9.43%	1.76%	0.53%
Median	10.44%	2.81%	0.78%
75%	12.10%	3.51%	1.25%
Max	15.23%	6.30%	2.93%
COVID (March - Sept 2020)			
LTM Rate	3M Rate	Monthly Rate	
Min	18.15%	2.42%	0.47%
25%	20.01%	2.65%	0.71%
Median	22.07%	2.85%	0.96%
75%	23.83%	4.63%	1.15%
Max	25.26%	6.05%	1.44%

²³ S&P LCD historical monthly US Leveraged Loan prepayment rates 2001-2022. *LTM Rate = sum of all the repayments in the last twelve months divided by the total amount outstanding twelve months ago.

Historical data from Moody’s shows leveraged loan recovery is better than corporate bonds.

Exhibit: Leveraged Loan 1st Lien and Corporate Bond Recovery Rate Data^{24*}

Year	Loan	Bond					All Bonds
	1st Lien	1st Lien	Sr. Unsec.	Sr. Sub.	Sub.	Jr. Sub.	
1983	n.a.	40.0%	52.7%	43.5%	41.1%	n.a.	44.5%
1984	n.a.	n.a.	49.4%	67.9%	44.3%	n.a.	45.5%
1985	n.a.	83.6%	60.2%	29.6%	39.7%	48.5%	43.6%
1986	n.a.	59.2%	49.5%	46.8%	41.4%	n.a.	47.2%
1987	n.a.	71.0%	63.8%	46.5%	46.9%	n.a.	51.3%
1988	n.a.	55.4%	45.2%	31.4%	33.8%	36.5%	38.5%
1989	n.a.	46.5%	43.6%	35.7%	26.8%	16.9%	32.5%
1990	72.0%	33.8%	38.2%	25.5%	19.5%	10.7%	25.8%
1991	67.9%	50.2%	36.6%	41.8%	24.4%	7.8%	35.5%
1992	60.6%	62.1%	49.2%	49.4%	38.0%	13.5%	45.9%
1993	53.4%	n.a.	37.1%	51.9%	44.1%	n.a.	43.1%
1994	67.6%	69.3%	53.7%	29.6%	38.0%	40.0%	45.6%
1995	75.4%	62.0%	47.6%	34.3%	41.5%	n.a.	43.3%
1996	85.5%	47.6%	62.8%	43.8%	22.6%	n.a.	41.5%
1997	81.3%	72.0%	56.1%	44.7%	33.1%	30.6%	47.6%
1998	59.9%	46.8%	39.5%	45.0%	18.2%	62.0%	38.3%
1999	73.6%	39.1%	38.0%	26.9%	35.6%	n.a.	34.3%
2000	68.8%	40.2%	24.2%	20.8%	31.9%	15.5%	25.3%
2001	64.9%	33.6%	21.4%	19.8%	15.9%	47.0%	21.8%
2002	58.4%	50.8%	29.7%	21.4%	23.4%	n.a.	30.0%
2003	73.4%	63.0%	41.9%	37.8%	12.3%	n.a.	40.8%
2004	87.7%	73.3%	52.1%	42.3%	94.0%	n.a.	58.5%
2005	83.8%	69.2%	54.9%	32.8%	51.3%	n.a.	56.5%
2006	83.6%	74.6%	55.0%	41.4%	56.1%	n.a.	55.0%
2007	68.6%	86.1%	53.7%	56.2%	n.a.	n.a.	57.4%
2008	61.7%	52.5%	33.5%	23.3%	29.5%	n.a.	34.1%
2009	53.6%	37.3%	36.7%	23.1%	45.3%	8.5%	33.9%
2010	70.9%	57.6%	48.2%	37.5%	33.7%	n.a.	51.1%
2011	69.9%	70.5%	43.6%	42.8%	31.9%	n.a.	46.7%
2012	66.4%	57.6%	43.3%	29.9%	40.3%	n.a.	44.5%
2013	76.2%	68.8%	45.1%	20.7%	26.4%	n.a.	46.2%
2014	78.4%	73.6%	47.0%	39.1%	38.8%	n.a.	48.5%
2015	63.7%	54.8%	37.6%	36.6%	58.5%	14.0%	41.1%
2016	66.2%	47.9%	32.2%	36.7%	24.5%	0.6%	36.7%
2017	69.6%	65.4%	54.3%	38.0%	42.6%	17.5%	56.1%
2018	69.4%	58.8%	47.2%	45.6%	n.a.	n.a.	51.4%
2019	57.9%	60.3%	32.3%	64.7%	40.0%	n.a.	41.3%
2020	59.8%	52.5%	34.6%	14.1%	n.a.	n.a.	38.4%
2021	68.8%	58.2%	51.0%	17.0%	n.a.	n.a.	53.6%
* Measured by trading prices.							
Min	53.4%	33.6%	21.4%	14.1%	12.3%	0.6%	21.8%
25%	62.2%	47.7%	37.1%	26.9%	26.4%	10.7%	36.7%
Median	68.8%	58.2%	45.2%	37.5%	38.0%	16.9%	43.6%
75%	75.0%	69.2%	52.7%	44.7%	42.6%	40.0%	48.5%
Max	87.7%	86.1%	63.8%	67.9%	94.0%	62.0%	58.5%
Min Year	1993	2001	2001	2020	2003	2016	2001
Max Year	2004	2007	1987	1984	2004	1998	2004

²⁴ Moody’s Investor Service “[Annual default study: After a sharp decline in 2021, defaults will rise modestly this year](#)”, Exhibit 27. Annual defaulted corporate bond and loan recoveries, February 8, 2022.



February 17, 2023

VIA ELECTRONIC SUBMISSION

Ms. Carrie Mears, Chair
Ms. Lindsay Crawford, Vice Chair
Valuation of Securities Task Force
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Re: Comments regarding the Proposed Methodology for Modeling CLOs

Dear Ms. Mears and Ms. Crawford,

The American Investment Council (“AIC”)¹ appreciates the opportunity to comment on the National Association of Insurance Commissioners (“NAIC”) Valuation of Securities Task Force (“VOSTF”) exposure regarding the *Proposed Methodology for Modelling CLOs* (the “Proposed Methodology”) that was received by VOSTF on December 12, 2022. As the advocacy, communications, and research organization for the world’s leading private equity and private credit firms, which have substantial experience assisting insurers with their investment needs, we believe we are well positioned to share an important perspective with the NAIC.

As noted in our July 15, 2022 letter (“July 15 Letter”) to VOSTF regarding the NAIC Investment Analysis Office (“IAO”) *Issue Paper on the Risk Assessment of Structured Securities – CLOs*, we support VOSTF’s mission of providing regulatory leadership and expertise to establish and maintain all aspects of the NAIC credit assessment process for insurer-owned securities. We also appreciate the need for the NAIC to analyze the risks associated with the various tranches of collateralized loan obligations (“CLOs”) to determine appropriate capital charges in support of insurer solvency and policyholder protection.

¹ The American Investment Council, based in Washington, D.C., is an advocacy, communications, and research organization established to advance access to capital, job creation, retirement security, innovation, and economic growth by promoting responsible long-term investment. In this effort, the AIC develops, analyzes, and distributes information about private equity and private credit industries and their contributions to the US and global economy. Established in 2007 and formerly known as the Private Equity Growth Capital Council, the AIC’s members include the world’s leading private equity and private credit firms which have experience with the investment needs of insurance companies. As such, our members are committed to growing and strengthening the companies in which, or on whose behalf, they invest, to helping secure the retirement of millions of pension holders and to helping ensure the protection of insurance policyholders by investing insurance company general accounts in appropriate, risk-adjusted investment strategies. For further information about the AIC and its members, please visit our website at <http://www.investmentcouncil.org>.

Notwithstanding the above, we continue to be concerned about the pace and cadence of the CLO workstream, and question whether subjecting CLOs to an NAIC Structured Securities Group (“SSG”) financial modeling process is fit for purpose.

I. The NAIC has Not Demonstrated an Issue Exists with NRSRO CLO Ratings or CLO Performance

Fundamental questions remain unanswered regarding whether it is necessary or appropriate to subject CLOs to a financial modeling process. We recognize that the intention of the IAO’s CLO modeling proposal is that insurers would no longer be able to utilize the ratings issued by Nationally Recognized Statistical Rating Organizations (“NRSRO”) for purposes of the relevant regulatory capital charges. However, it remains unclear to us why VOSTF is questioning why the current practice of looking to NRSRO ratings is no longer appropriate for CLOs.

As you know, all NRSRO methodologies are published for public comment and scrutinized by public markets, and NRSROs use the same methodologies for private ratings as for public ratings. Further, following the Great Financial Crisis, NRSROs are subject to rigorous oversight and annual examination by the U.S. Securities and Exchange Commission (“SEC”). While we understand VOSTF is examining potential refinements to the use of NRSRO ratings, a broad examination of the use of NRSRO ratings should not translate into precipitously removing reliance on NRSRO ratings for a single asset. There has been very little CLO market volatility or systemic concern, or demonstrated problem with NRSRO CLO ratings, which would justify the NAIC generating its own proprietary internal modeling for CLOs. Removing reliance on NRSRO ratings for a single asset in the absence of a documented problem sends inappropriate market signals with respect to CLOs and CLO ratings.

VOSTF has also cited a need for transparency as a reason to move CLOs to non-filing exempt status and model the asset. The NAIC already has, however, access to the data required to analyze the content of NRSRO CLO ratings, because full rating reports for all insurers’ filing exempt investments are now required to be provided. These reports include detailed explanations of how NRSRO CLO ratings were derived and typically include links to the public methodologies underpinning the ratings. To our knowledge, the IAO and VOSTF have neither processed the data available from these reports, nor identified substantive or quantitative problems with NRSRO CLO methodologies, ratings quality, or NAIC-required ratings reports. To the contrary, CLOs perform as well or better than equivalently rated corporate debt instruments. To the extent that VOSTF has identified specific concerns with NRSRO CLO methodologies, interested parties would benefit from the ability to understand and publicly comment on such concerns, as well as understand if or how the SSG will address any stated concerns in developing its own model.

II. Punitive Treatment of CLOs and ABS Have Significant Unintended Consequences

Rushing to implement a fundamental change to the CLO regulatory framework without first identifying a problem with reliance on NRSRO ratings and without proper vetting could inappropriately depress insurers' RBC and deprive insurers of a vital capital markets tool. In addition, punitive treatment of CLOs and other asset-backed securities can inappropriately hinder insurers from providing important life insurance and annuity products. The experience in Europe following the adoption of Solvency II provides important data regarding the consequences when regulators steer insurers away from high-quality investments that can back guaranteed life and annuity products.² The consequences would be even greater in the United States, where the life insurance and annuity industry provide significant financial protection to American families and retirees.

III. The NAIC has Not Adequately Considered Foundational Issues Underpinning This Work

It is also notable that the fundamental issues of (a) whether the SSG is properly equipped to undertake such an endeavor and (b) whether other structured securities would be subject to similar modeling, have not been part of VOSTF's public process. Neither interested parties nor the NAIC's own members outside VOSTF have had the opportunity to weigh in on the fundamental considerations that serve as the basis for the Proposed Methodology. Proceeding with the Proposed Methodology without addressing these foundational issues could be viewed as an overhaul of the CLO RBC framework without members' prior approval.

IV. Modeling Should Not be Undertaken as an Indirect Means to Alter RBC Treatment of Insurer Investments

The SSG's proposal appears to also be rooted in a desire to eliminate perceived capital arbitrage in CLOs³. We disagree with this premise⁴ and note that (a) data does not support this claim of arbitrage, especially considering significant revisions adopted to the Annual Statement reporting blank to distinguish CLOs from other types of investments, and (b) even if arbitrage existed, the proposal utilizes an unnecessarily broad and sweeping methodology to achieve the proposed intention. Further, we understand that capital charge changes are to be undertaken by

² A 2018 Europe-wide survey of insurers indicated that Solvency II deterred long-term business. See Reinsurance News, *Solvency II beneficial but deterring [sic] long-term business, survey shows*, July 5, 2018, available at: <https://www.reinsurancene.ws/solvency-ii-beneficial-but-detering-long-term-business-survey-shows/>. In its 2019 annual *Report on long-term guarantees measures and measures on equity risk*, required by Solvency II, the European Insurance and Pension Authority ("EIOPA") noted that approximately half of the jurisdictions in the European Union observed a reduction in the availability of traditional life insurance products with long-term guarantees, and a reduction in the size and duration of guarantees. While it is difficult to reduce this trend to a single cause, many observers draw a direct link between Solvency II's treatment of investments associated with market risk to the reduction in availability of long-term guaranteed products. The 2019 EIOPA Annual Report is available at: <https://www.eiopa.europa.eu/sites/default/files/publications/reports/eiopa-ltg-report2019.pdf>.

³ See the May 15, 2022 memo from the SSG and SVO to VOSTF titled *Risk Assessment of Structured Securities – CLOs*, available at: <https://content.naic.org/sites/default/files/inline-files/2022-004.01%20-%20Risk%20Assessment%20of%20Structured%20Securities%20-%20CLOs%20v3.pdf>.

⁴ See e.g., our July 15 Letter.

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the Risk Based Capital Investment Risk and Evaluation (E) Working Group (“RBCIREWG”) and the Capital Adequacy Task Force (“CATF”), as discussed further below. This is a better vehicle for addressing changes to capital charges rather than having VOSTF or the IAO accomplish this indirectly through changes to non-exempt status and modeling.

To that end, we urge VOSTF to consider a comprehensive data-driven and collaborative approach to assessing insurer CLO investments, and reconsider its proposed modeling efforts unless and until the RBCIREWG and CATF determine it is necessary, especially given (a) the RBC methodology for evaluating CLOs has not been assessed by other NAIC working groups, and (b) VOSTF has not identified or quantified specific problems with CLO performance or NRSRO CLO ratings.⁵ The RBCIREWG is working towards an applicable RBC analysis for CLOs, but its work is not complete. Based on the recent American Academy of Actuaries (“Academy”) presentation on CLOs to the RBCIREWG, insurer CLO exposure is small and does not currently present a solvency risk to the industry. Accordingly, the RBCIREWG work can continue at the pace determined appropriate by that working group. Of note, the NAIC Capital Markets Bureau’s *Special Report on CLOs*⁶, issued last month, comes to the same conclusion regarding aggregate risk.

The Academy report also included the following conclusions:

- Corporate bonds, bank loans and CLOs have unique structures and risk profiles;
- Active management of CLOs changes the risk profile as compared to other modeled securities;
- It is inappropriate to use existing bond factors that force capital charge equivalence between CLOs and corporate bonds;
- The proposed interim RBC charges are not based on a quantitative analysis and the Academy has “zero confidence” that they are accurate.

While we reserve the right to comment on any final Academy publication, we agree in principle with many of the Academy’s central concerns. Indeed, our July 15 Letter expressed many of the same concerns in the context of the broader CLO RBC framework, while also providing evidence that:

- The RMBS/CMBS approach is not a suitable model for CLOs;
- CLOs have performed very well for decades (not just the 2011-2019 economic expansion); and

⁵ We note in particular that VOSTF is charged with “coordinating with other NAIC working groups and task forces...to formulate recommendations...to ensure expertise relative to investments, or the purpose and objective of guidance in the P&P Manual, is reflective of the guidance of such other groups and the expertise of such other NAIC regulatory groups....”

⁶ See NAIC Capital Markets, Special Report, *Collateralized Loan Obligation Stress Testing U.S. Insurers’ Year End 2021 Exposure*, January 5, 2023, available at: <https://content.naic.org/sites/default/files/capital-markets-special-reports-clo-stressed-analysis-ye2021.pdf>.

- The 2020 CLO Stress Test, which we understand is the basis for the Proposed Methodology, may not be fit for purpose.

We believe there is a reasonable basis to address the issues that are foundational to the entire CLO workstream first, including the RBCIREWG developing the more fundamental concepts underlying the CLO RBC framework, before determining a modeling methodology that supplants established NRSRO ratings. At a minimum, we think there is value in a more collaborative and transparent process involving VOSTF, the RBCIREWG, and interested parties that does not result in VOSTF indirectly changing the capital framework for CLOs before the RBCIREWG has completed its analysis and capital charge work.

V. CLO Modeling Methodology

The Proposed Methodology appears to suggest that the IAO will build a cash flow testing model with key assumptions to be exposed for comment at a later date. While we understand that VOSTF's next step will be the exposure of a modeling proposal that will include probabilities and scenarios, it is difficult to provide meaningful feedback without having the benefit of other critical information. For example, no information is provided regarding the most important features of the model (e.g., what default rates are assumed by rating, what recovery rates are assumed by loan seniority, and interest rate stresses). Similarly, the Proposed Methodology includes no discussion of correlation/diversification – a key feature of any CLO model – which the SSG seemingly intends to ignore without any identified rationale. The SSG also fails to describe how the model will be calibrated to real-world historical CLO investment performance data, which is critically important to ensure the CLO model produces high-quality results. The below comments are therefore limited to the portions of the methodology where limited details have been provided.

- *Scope*
 - The Proposed Methodology references limitations with respect to specific CLOs “*via our third party software vendor*”. Does the SSG anticipate disclosing its third party software provider, material contractual obligations and restrictions, and limitations with respect to the SSG's ability to assess CLOs as a result of the limitations of that provider?
- *Givens*
 - Assumption that the inputs are periodic “partial” default rates for each loan based on the current rating
 - The methodology assumes that default rates for each loan should be based solely on a loan's current rating. This raises the following question: why use NRSRO ratings for the underlying asset default probabilities, but not the CLO ratings? Has the SSG considered other indicators of default rate? We would be happy to discuss other factors that should be considered based on historical data.

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- Assumption that each loan has a recovery rate, based on its seniority, for that period
 - It is crucial to consider the current price of a loan when attempting to ascertain its expected recovery. While seniority, specifically first or second lien, is often a helpful factor in modeling expected recovery, the large variation in documentation/covenants and industry (credit cycle dependent) can lead to large variations in ultimate recovery.
- *Assigning Ratings to Underlying Assets*
 - The methodology appears to rely on public ratings for underlying loans, but not for CLOs themselves. It seems illogical to conclude that NRSRO ratings can be relied on with respect to underlying collateral, but not for the CLO rating, unless the SSG has identified a perceived flaw in NRSROs' CLO methodologies. If a flaw has been identified, those flaws should be explained by the SSG and exposed for public comment so that interested parties – including the NRSROs – have the opportunity to comment.
 - The Proposed Methodology states: “*if the Securities Valuation Office [“SVO”] has assigned an NAIC Designation Category to the Issue, that NAIC Designation Category will be used, unadjusted.*” Is this intended to be a catch-all clause that would apply even where an Issue Rating is available from an NRSRO? Is the answer the same if the NRSRO rating is not available within the NAIC’s third party software?
 - The references to “Issuer Rating” and “Issue Rating” in the Proposed Methodology seem to be derived from Moody’s existing CLO methodology, versus other rating agencies’ CLO methodologies. Is it expected that the Moody’s methodology and loan ratings be given priority in the model over other NRSRO’s ratings and methodology? If so, on what basis? How will the model treat underlying loans with different ratings from different rating agencies?
 - If current NRSRO ratings are to be used in the model, does the SSG expect to assess and potentially update its analysis periodically to reflect downgrades or portfolio rotation?
 - NRSROs have access to CLO portfolio managers, and their assessment of CLO managers is taken into account in the ratings process. Does the SSG expect to take a similar approach that will include an assessment of CLO portfolio managers in addition to quantitative modeling factors?
 - As we have indicated previously, active management of CLO investments are among the key reasons that CLO equity demonstrates higher returns after experiencing a financial crisis than after a bull market, and one of the key differentiators between a CLO and its underlying assets. Does the SSG expect to account for active management in its modeling?

- *Recovery Rate*
 - The NAIC Capital Markets Bureau and SSG *CLO Stress Test Methodology*⁷, published in November 2022, provides the following:

“Our Stress Thesis envisions that underlying leveraged loans will perform like unsecured assets during the next downturn. Furthermore, we assumed that the other assets in the CLO would perform similarly to their next worst category.”

Does the SSG expect to quantitatively justify its stress thesis?

- *Cash Flow Assumptions*
 - Interest Rates / Proceeds
 - The Proposed Methodology states that *“interest proceeds for each period are based on the weighted average current portfolio spread plus the applicable base rate times the non-defaulting principal.”* This appears to be inconsistent with the statement in the *Event Timing* section, which states that *“periodic payments on identified collateral [are] as per loan terms.”* Interest proceeds should be modeled at the collateral level, not by using a weighted average of the current portfolio, and such modeling should include differences between 1 and 3 month paying collateral, the applicable base rates, and actual payment dates per loan terms.
 - Maturities and Prepayments
 - The model assumes loans repay at maturity. However, many loans have amortization and are not full bullet maturities. The effect is more significant if the model assumes no prepayments (as is the case here).
 - The model assumes no prepayments, which does not accurately reflect how the loan market operates and fails to reflect an important driver of CLO outcomes. Such an assumption would grossly distort outputs as it does not reflect the reality of how CLOs actually function. To the contrary, prepayments and reinvestments are among the key reasons that CLO equity demonstrates higher returns after experiencing a financial crisis than after a bull market, and have occurred in every economic environment since the inception of the leveraged loan index. We believe a prepayments assumption should be included in line with historical experience.

⁷ See NAIC Capital Markets Analysis *NAIC Collateralized Loan Obligation (CLO) Stress Tests Methodology*, November 2022, available at: <https://content.naic.org/sites/default/files/capital-markets-clo-stress-tests-methodology.pdf>.

○ Reinvestment

- The model assumes no post-reinvestment period reinvestment, which does not accurately reflect how CLOs operate in reality. Most CLO documents permit limited reinvestment post-reinvestment period.
- The model assumes that reinvestments are at par which, specifically during times of credit stress, is a very conservative assumption. During higher default and downgrade environments, and periods of preceding or subsequent volatility, higher quality collateral is accessible at prices below par, and even new issue collateral can often be sourced with material original issue discounts. We urge VOSTF to reconsider this position.
- The model assumes that “*reinvestment occurs before payment date – i.e., there are no principal proceeds in the waterfall that can be used to pay interest or satisfy overcollateralization (“O/C”) tests.*” While principal proceeds are generally reinvested expeditiously, the application of proceeds on a given payment or determination date can vary, often leading to differing results for O/C tests. These differences can lead to varied de-levering of more senior tranches of debt.
- The model states that “*reinvestment is assumed to have a rating equal to the transaction’s weighted average rating factor (“WARF”). If the WARF is not reported, then it is assumed to be 4.C (B3) and is defaulted as stated above.*” This, too, is not reflective of realized manager activity: Reinvestments predominantly occur into higher quality collateral. Additionally, anchoring reinvestment assumptions to a given transaction’s WARF may not be universally applicable, since not all deals report WARF. Finally, the SSG should consider the treatment of cash, which is not discussed in the Proposed Methodology.
- To provide more fulsome substantive feedback, it is also important to understand the assumed reinvestment spread, recoveries, tenor, and coupon applied to reinvestments, and whether the tenor will be limited to factor in a CLO’s weighted average life, or WAL, test.

○ Event Timing

- The model states that “*periodic payment on reinvested collateral [will be paid] quarterly*” Depending on the underlying collateral characteristics, the SSG should also consider reinvestment into collateral that pays monthly.
- It is important to understand whether the SSG CLO methodology will feature a probability of a loss, or expected loss (as is the case with NRSRO CLO methodologies), or refer to other framework assumptions regarding the bottom-performing percentile over a specific time horizon. Relatedly, CLO equity does not involve a promise to pay as does debt, so

to evaluate the SSG's CLO model, one will need to understand the basis of evaluation of CLO equity performance.

- *Additional Procedural Comments and Questions*
 - Does the SSG or VOSTF expect to publish for public exposure a fulsome explanation of the proposed methodologies? We note that NRSROs are required by federal law to publish comprehensive explanations of proposed methodologies for public comment, which ultimately leads to better methodologies and outcomes for the capital markets, insurers and all interested parties. Accordingly, we encourage VOSTF (or other committee of jurisdiction) to expose the full methodology details for public exposure.
 - Does the SSG or VOSTF expect to conduct an impact analysis to understand the aggregate effect of CLO modeling and what the cost will be to insurers, both on an individual review basis and in the aggregate? Notably, the market will still require insurer-purchased CLOs to have NRSRO ratings, so any fees paid to the NAIC as a result of a SSG financial modeling process will increase costs of these investments.
 - Do state insurance regulators (including VOSTF members) expect to address the conflict of interest created by the SSG recommending that CLOs (and seemingly other investment classes) should no longer receive filing exempt status and, instead, that they should be subjected to a financial modeling process that is developed and conducted by the SSG?
 - How does the SSG intend to ensure that the CLO methodology will be reasonable and consistent in comparison to capital charges for other asset classes?

VI. Conclusion

We welcome the opportunity to serve as a resource to VOSTF – or any broader NAIC collaborative group or forum – as state insurance regulators consider a CLO regulatory framework, and would be pleased to present or otherwise provide insight into our members' perspective on these issues. In particular, we welcome the opportunity to support VOSTF and the SSG by providing real world market data in support of the foregoing positions (including with respect to historical CLO vs. corporate credit performance, data regarding default and recovery rates, inter-period interest, prepayments, reinvestments, and active management).

To the extent the technical work continues as planned, we expect to provide additional comments regarding the CLO modeling scenarios and probabilities (including default and recovery rates) once those items are exposed for public comment, with an eye towards ensuring that any changes align regulatory treatment with actual risk and preserve the ability of insurers to offer life and annuity products with long-term guarantees. We share your desire to protect insurer solvency and policyholders, while avoiding Solvency II-like treatment of high-quality investments that are well-suited to match insurer liabilities.

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Thank you for the opportunity to comment. We look forward to continuing to work with you on these important issues.

Sincerely,

/s/ Rebekah Goshorn Jurata
General Counsel
American Investment Council

cc: Mr. Charles Therriault
Director, Securities Valuation Office
National Association of Insurance Commissioners (via email)

Ms. Denise Genao-Rosado Senior Administrative Assistant
National Association of Insurance Commissioners (via email)



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February 17, 2023

Carrie Mears
Chair, Valuation of Securities (E) Task Force
National Association of Insurance Commissioners

Re: Proposed Methodology for Modeling CLOs

Dear Ms. Mears,

SFA appreciates the opportunity to provide feedback to the Valuation of Securities (VOS) (E) Task Force (VOS TF) on the exposure draft for the Proposed Methodology for Modeling CLOs (“Proposed Methodology”). In gathering feedback to respond to the Proposed Methodology, SFA engaged with various market participants, including insurance companies, asset managers, CLO managers, rating agencies, law firms, and others. While all SFA members who participate in the CLO market were invited to participate in building a membership consensus, we will highlight the views of only our insurance company members that are the economic stakeholders that would most directly be impacted by the Proposed Methodology and the move away from the filing exemption towards internal modeling by the NAIC Structured Securities Group (SSG).

Additionally, per SFA’s governance, we seek to arrive at consensus on policy positions. However, in instances where there is not consensus, we will instead inform policymakers of the differing views from market participants. Our response will focus first on feedback and market participant views on the proposed removal of the filing exemption to permit staff’s discretion over the assignment of NAIC designations including through internal modeling by the SSG. We will then share specific feedback on the assumptions provided in the Proposed Methodology.

1. Views on Proposed Removal of Filing Exemption & Internal Modeling of CLOs and Role of Rating Agencies in Determining Risk Based Capital

As a threshold matter, we note that the exposure of the Proposed Methodology takes place within parallel processes involving various groups working simultaneously and in coordination with each other. As part of that process, SFA shared our views with VOS TF on July 15, 2022, and we appreciate that views were noted in the NAIC Annual Summer meeting on August 11, 2022. We also appreciate the degree to which matters SFA raised—including procedural questions, the need for transparency, and providing ample opportunity for market participants to share their views—have been incorporated into the NAIC’s process.



Against that backdrop, and as the NAIC process has advanced through various committees and task forces, our membership is split on its views around the proposed removal of the filing exemption for CLOs and the proposed move towards internal modeling of CLOs. While some members see the proposed change as a reasonable continuation of the work started with RMBS and CMBS in the aftermath of the Great Financial Crisis to better capture the unique risks embedded in structured securities, others have expressed concern about the appropriateness and timing of the change as it relates to CLOs, and point to reservations expressed by the American Academy of Actuaries on December 14, 2022 as evidence.

Given this strong split in member views, SFA surveyed our members seeking a deeper understanding of their positions surrounding the removal of the filing exemption and the move towards internal modeling. What follows next is a summary of the survey responses, including insights into the rationale behind those views.

a. Views on Timing of NAIC Actions Relative to Removal of Filing Exemption and Move Towards Internal Modeling of CLOs

There was consensus among our membership in terms of the important actions that the NAIC should undertake in relation to any move towards internal modeling for CLOs. Such actions include:

- Making SVO modeling methodology and all related assumptions available concurrently for review;
- Detailing the process and frequency of NAIC's modeling designations for CLOs and the required NAIC resources;
- Coordinating with other ongoing efforts, particularly the RBCIRE WG in their evaluation of capital requirements; and
- Examining proposed changes to CLOs, and comparing them to other structured securities, fixed income assets, and equity investments.

While there was consensus about the actions that NAIC should undertake, there was a divide among our members in terms of the timing of such actions relative to a move towards internal modeling for CLOs. Approximately 40% of the insurance companies who responded believe that such actions should be undertaken pursuant to an enumerated goal of having the NAIC move towards internal modeling for CLOs. In other words, these insurance companies believe that these actions should be undertaken with a view to inform *how* the NAIC moves towards internal modeling for CLOs.

On the other hand, 60% of the insurance companies we surveyed believe that such actions are necessary preconditions that must be met prior to the NAIC implementing any procedural changes. In this view, the rationale necessary to justify removing the filing exemption and moving towards internal modeling must first be established by completing these steps including seeking public comment. In other words, these insurance companies believe that these actions should be undertaken with a view to inform *whether* the NAIC moves towards internal modeling



for CLOs. Either way, SFA members agree that if the filing exemption is removed and NAIC adopts a modeling approach, then all assets in the CLO should be modeled and the NAIC designation should be determined using a similarly rigorous methodology and assumptions put out for public comment.

b. Views on Role of Rating Agencies in Determining CLO Risk Based Capital Requirements

Next, SFA surveyed our members for their views on the role of utilizing credit ratings as a basis for risk-based capital calculations for CLOs. Approximately 40% of our insurance company members believe that ratings from nationally recognized statistical rating organizations (NRSROs) should not serve as the basis for regulatory risk-based capital calculations for CLOs. Reasons given for this belief include the idea that credit ratings—while an indispensable part of the market—serve a fundamentally different purpose than risk-based capital calculations. Additionally, these members referred to the questions raised by the NAIC in December 2022 about the appropriateness of using ratings as the basis for determining risk-based capital requirements¹.

On the other hand, approximately 60% of our insurance company members believe that NRSRO ratings can serve as the basis for risk-based capital calculations. These members note the degree to which CLO ratings have matched historical performance as well as the expertise of NRSROs in performing both qualitative and quantitative analysis of the bespoke structuring features of CLOs.

SFA also surveyed our members on their views of whether NAIC should move towards internal modeling of CLOs, or if NAIC should instead maintain the current filing exemption and modify the risk-based capital factors as needed to arrive at appropriate levels of capital reserves. Approximately 40% of our insurance company members believe that removing the filing exemption and moving towards internal modeling is the appropriate path forward, as they believe doing so would better capture the expected losses of CLO investments consistent with RBC purposes. Other reasons for this view include the belief that internal modeling by NAIC will allow the NAIC to better address their goals in determining risk-based capital, as well as their view that NAIC staff are well-positioned with staff and resources to undertake this role.

Approximately 60% of insurance companies believe under the current circumstances, the best path forward is to maintain the filing exemption and instead modify the risk-based capital factors as needed to eliminate any material RBC arbitrage to arrive at the appropriate risk-based capital levels². Reasons for this view include the belief that NAIC has not yet adequately justified a

¹ <https://content.naic.org/cipr-topics/structured-securities-project>

² To clarify, some members in this group believe that modifying the RBC factors is not the best way to accomplish the goal to avoid RBC arbitrage. Insurance companies with this view believe that instances of material RBC arbitrage are in the small minority as compared to insurance company investments in broadly syndicated loan CLOs as a



rationale for removing the filing exemption³. These members also have concerns about NAIC staffing and expertise to model CLOs, particularly given the extensive variation of structural features that exist across individual CLOs.

Finally, we surveyed our members about the role of NRSROs in the market more broadly, regardless of the approach taken by the NAIC towards the filing exemption and internal modeling of CLOs. Members strongly felt that credit ratings should and will continue to play a vital role in the CLO market, and that the NAIC should make clear that any move with regards to modeling does not necessarily negatively reflect on any particular rating agency methodologies or ratings. One insurance company who believes that the NAIC should remove the filing exemption and move towards internal modeling suggested that the NAIC should perhaps require CLOs to have a rating from a rating agency given the essential role that credit ratings play in the CLO market.

As noted above, SFA strives for consensus where possible, and seeks to provide context where there are differences of views among market participants. While we were unable to reach consensus on all these questions, we hope that the survey responses above provide the NAIC and policymakers with additional color on market participants' views. Additionally, we strongly encourage the NAIC to take appropriate steps where there are areas of consensus—such as in emphasizing the vital role of credit rating agencies in the CLO market.

2. Assumptions for Proposed Methodology of Modeling of CLOs

We note at the outset that our current feedback is necessarily incomplete, as we cannot assess the NAIC's proposed methodology without full transparency of all the assumptions and scenarios that will inform the models. The interplay of the various assumptions and scenarios will ultimately drive end results, and our responses reflect that reality. Furthermore, our members noted that there were vital assumptions missing including those related to interest rate movements and default curves. Therefore, while we have made best efforts to provide views on the assumptions, we will need revisit and potentially amend our responses as additional information is published and exposure drafts are released in the future.

A. Reinvestment Price

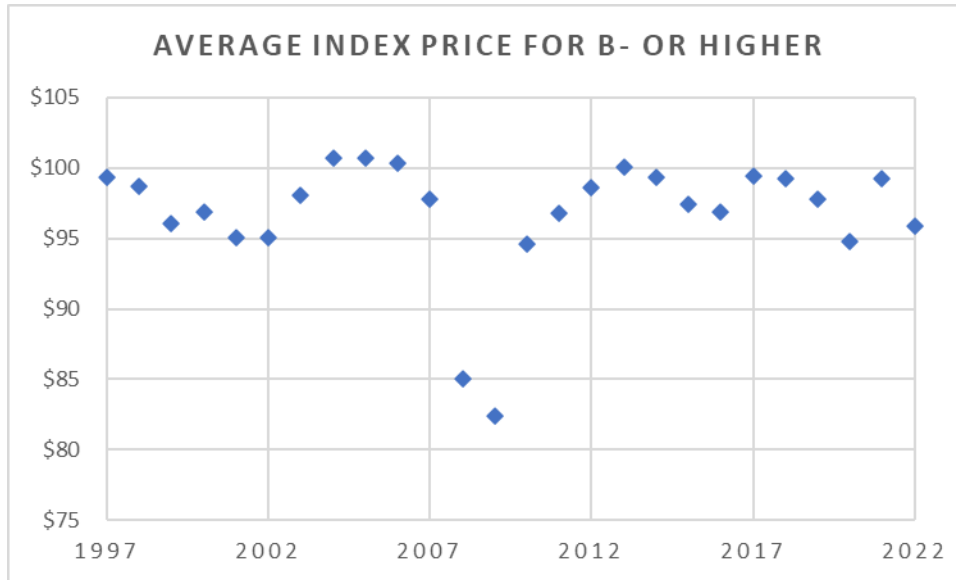
The NAIC's proposed methodology for modeling CLOs currently assumes that "reinvestment collateral is purchased at par", which we believe fails to capture an important element of the economics of CLOs. Leveraged loans are commonly traded at discounts even in the primary

whole. Instead it would be more feasible for the RBC IRE WG to identify which insurance companies engage in material RBC arbitrage and take action in those unique situations. Moreover, they do not believe the risks posed by CLO investment justify this level of departure from current operating procedures.

³ While there is a preference for adjusting RBC factors compared to internal modeling by NAIC, these insurance company members do not support the proposed NAIC Category 6 interim capital levels of 30%, 75% or 100% as they believe those proposed interim levels are not based upon sufficient analysis.



market and can become deeply discounted in adverse market conditions. The chart below uses LCD index data to plot the average annual price for loans rated B- or better going back to 1997:



These prices reflect only secondary price data, but if we look at primary pricing dynamics we see an average discount price of \$99.3 over the last 10 years. Based on this data we would recommend that the NAIC follows a simplified scenario-based approach for reinvestment price similar to the below:

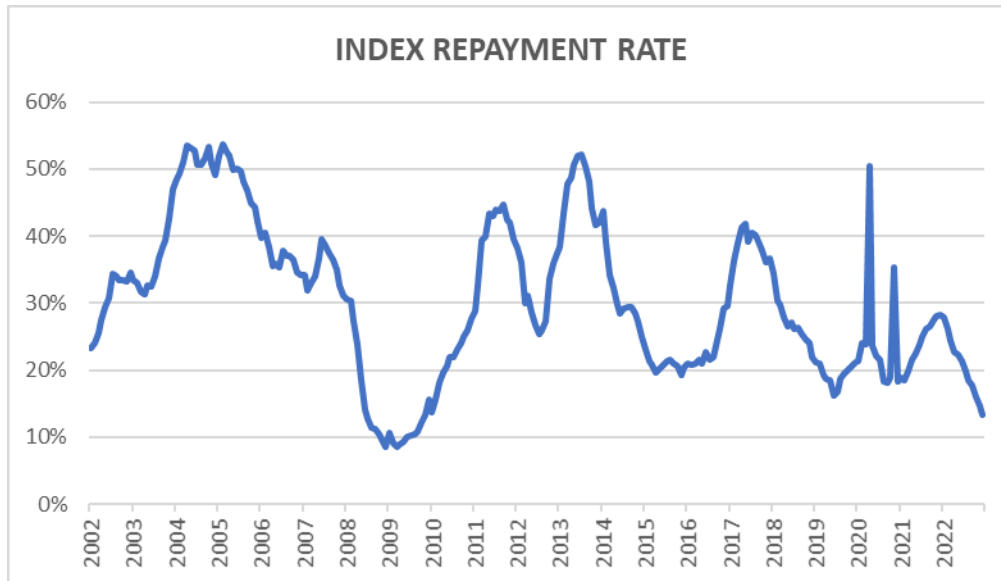
- Average or better scenarios: \$99 to par
- Stress scenarios: \$92
- Tail scenarios: <\$87

Some of our members also believe a vector should be used in the Tail scenario.

B. Maturities and Prepayments

The NAIC proposes that non-defaulting portions of each loan mature based on legal maturity. We hold that loans should be based on amortization schedules, not legal maturity given the impact on tail risk. For example, there will be different results in the tails if using 5-year amortization assumptions rather than the 7-year weighted average life for assumptions in the default data.

The proposed methodology states that no prepayments will be assumed. This assumption conflicts with the historical prepayment experience of leveraged loans and may have a material skewing effect on the NAIC’s modeling results. The chart below shows the historical prepayment experience of leveraged loans based on LCD data:



Similar to our recommendation for reinvestment prices, we suggest following a simplified scenario-based similar to the below:

- Average or better scenarios: 20% prepayment
- Stress scenarios: 10% prepayment
- Tail scenarios: <8.7% prepayment

C. Assigning Ratings to Underlying Loans

To set the applicable default rating, the SSG will use ratings from Moody's, S&P, and Fitch unless the SVO has assigned an NAIC Designation Category, in which case, the NAIC Designation Category will be used. We believe that limiting (or giving the appearance of limiting) ratings on the underlying loans to the specifically named agencies in the Proposed Methodology could adversely impact market competition and unduly restrict diversity in opinions among credit rating agencies. Appreciating that there must be a balanced approach to promote competition while ensuring performance guardrails are in place, SFA welcomes the opportunity to have a further dialogue with the NAIC on this topic, particularly in light of the VOSTF's broader initiatives relating to rating agencies.

D. Correlation Risk



We understand that the current stress methodology does not explicitly model correlation. However, as the pandemic has revealed and continues to reveal there is contagion between industries that had previously been thought to be uncorrelated.

The impact of correlation risk on CLO tranches is uneven. Investors further down the capital structure will be more exposed to the underlying pool and the correlation risk that exists within that pool. Therefore, we believe that correlation should be incorporated as sudden shifts in credit correlation will disproportionately impact the risk distribution within CLOs.

E. Cash Flow Assumptions

Each CLO could have unique structural protections and risk – and these features can significantly impact the cashflow waterfalls. When evaluating cash flows, models must accurately incorporate all these features including priority of payments, asset spreads, liability spreads, the CLO capital structure, the amortization schedule of the CLOs relative to the underlying leveraged loan portfolio, and loan recovery and default timing. Therefore it is imperative that the cash flow analytics engine used by the NAIC accurately reflects the material differences in these features – and is readily accessible to market participants to review. SFA recommends that the SVO seriously consider a cash flow analytics engine that is already used extensively across the market as the source of CLO waterfalls for a given security. This would facilitate insurance companies and other market participants replication of the NAIC’s analysis without having to expend additional funds for a separate service.

F. Additional Considerations

Other considerations raised by our members include questions around ongoing surveillance and frequency of updating NAIC designations, and potential communication from NAIC to market participants that promotes transparency, similar to how credit watch placements are communicated today. Additionally, there were question about how bespoke deals or new CLO features would be addressed on an ongoing basis. Some members asked about the timing of RBC assignments, and noted that investment decisions would be impacted of RBC assignments are not available when deals are priced. Finally, some members raised questions around how middle market CLOs would be treated, and what the NAIC’s approach might be for assessing credit quality of non-publicly traded companies often found in middle market CLO portfolios.

As noted earlier our current feedback is necessarily incomplete, as we cannot assess the NAIC’s proposed methodology without full knowledge of the assumptions and scenarios that will inform the models.

Once again, we thank you for the opportunity to share our members’ views on these points and look forward to continuing engaging with you on these topics. If you have any questions, please do not hesitate to contact SFA staff.

SFA Response to NAIC VOS (E) Task Force
Proposed Move Towards Internal Modeling,
CLO Modeling Assumptions
February 17, 2022
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Regards,

A handwritten signature in black ink, appearing to read "K. Leo", positioned above a horizontal line.

Kristi Leo
President, Structured Finance Association