July 12, 2023

VIA ELECTRONIC SUBMISSION

Ms. Carrie Mears, Chair
Valuation of Securities Task Force

Mr. Eric Kolchinsky, Director
Structured Securities Group

National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Re: CLO Modeling Ad Hoc Technical Group Assessment of Pre-Payment and Discount Assumptions in Potential CLO Financial Model

Dear Ms. Mears and Mr. Kolchinksy,

The American Investment Council ("AIC")[1] appreciates the opportunity to comment on the National Association of Insurance Commissioners ("NAIC") CLO Modeling Ad Hoc Technical Group's ("Ad Hoc Group") proposals for pre-payment and purchase discount assumptions in the collateralized loan obligation ("CLO") financial model currently under consideration by the NAIC Structured Security Group ("SSG"). Although we continue to strongly believe that it is neither necessary nor appropriate to subject CLOs to a new NAIC financial modeling process,[2] the purpose of this letter is to highlight the material benefits of the pre-pay and discount features in modern CLOs. Consequently, evidence-based pre-pay and purchase discount assumptions are essential components of any viable CLO financial model.

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[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.

[2] See our letters to you dated July 15, 2022 and February 17, 2023 for more details.

A stated goal of the Ad Hoc Group is to demonstrate the effects of CLO pre-pay and discount features to regulators.[3] Accordingly, the SSG tested six proxy CLOs under a model that includes modest pre-pay and discount assumptions.[4] As expected, the preliminary Pre-Pay/Discount Purchase Results published by the SSG[5] indicate that pre-payment and purchase discount assumptions:

1) Increase the cashflows to equity for all six proxy CLOs tested and in all three stress scenarios;
2) Increase the overall balance sheet cash flows for five out of the six test CLO deals in Scenarios A and B;[6] and
3) Reduce the overall balance sheet cash flows for all six test CLOs in Scenario C.[7]

Despite this, and the report's finding that there are "significant benefits" to the discount purchase assumption, the SSG has proposed to move forward with a "no pre-pay/no discount" model on the basis that (i) the "enormous" amounts of extra cash generated is a modeling anomaly and without equivalent assumption in the risk-based capital ("RBC") C-1 framework; and (ii) the pre-pay/discount assumptions would add complexity to the model and could cause unintended consequences.

This proposal is a concerning step in the wrong direction: it is inconsistent with Ad Hoc Group members' mutual goal of developing a model that is fit for purpose and it is at odds with the SSG's own preliminary findings. While it may be true that a pre-pay/purchase discount assumption is not currently contemplated in the RBC C-1 framework and that including these assumptions would add complexity to the model, those facts alone do not justify supporting a CLO model that fails to account for these critical features. In fact, investors routinely assume prepayments and reinvestment at a discount in their scenarios to evaluate CLOs.[8]

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[3] See NAIC *Operations and goals of the CLO ad-hoc group* to Carrie Mears, Chair, Valuation of Securities (E) Task Force dated March 6. 2023, *available at*: https://content.naic.org/sites/default/files/national_meeting/2023%20VOSTF%20Spring%20NM%20Materials%20v4.pdf at attachment 4.

[4] The model included assumptions of a 10% constant prepayment rate of CLOs' underlying loans and a purchase price discount of 8% on CLO reinvestments (*i.e.*, $92 purchase price).

[5] NAIC SSG Pre-Pay / Discount Purchase Results*, available at*: https://content.naic.org/sites/default/files/industry-ssg-clo-5.31.23-clo-exposure-methodology-update.pdf.

[6] Scenario A assumes the average historical default rate and recovery rate for CLOs' underlying loans; Scenario B assumes the average historical default rate and a "stepdown" recovery rate for CLOs' underlying loans. *See* NAIC Beta Test Scenarios (A, B, and C) for the Ad-Hoc Group Discussion, *available at*: https://content.naic.org/sites/default/files/industry-ssg-clo-beta-test-scenarios-abc.pdf.

[7] Scenario C assumes a one-standard deviation default rate and a "stepdown" recovery rate for CLOs' underlying loans. *Id.*

[8] The SSG has raised the issue of reinvestment at a discount accurately reflecting credit risk of assets. In fact, there is ample evidence that discount prices at time of stress substantially over-represent the risk of loss, and such prices include illiquidity discounts. The loan market traded at 60-70 in 2008-2009 – if loan prices during periods of stress accurately reflected credit risk, these loans would have experienced a 30-40% loss rate, which obviously did not occur. In other words, loan prices during periods of economic stress reflect both credit risk and illiquidity risk. This allows for the reasonable expectation of par build in a term structure that does not require forced sales.

With respect to the current RBC framework, the SSG and Ad Hoc Group should consult with the American Academy of Actuaries ("Academy") as it assesses the current RBC framework and consider pausing CLO model development until the Academy's more comprehensive analysis is complete. With respect to the complexity of CLO modeling, we reiterate our recommendation that the SSG engage a qualified independent consultant to consider a more robust CLO financial model that takes pre-pay and purchase discounts into account.

Indeed, the SSG's willingness to accept the American Council of Life Insurers ("ACLI") or "ACLI-Modified" pre-pay and purchase discount assumptions as a potential alternative directly contradicts its position that proper pre-pay/discount assumptions are too complex or should not be utilized – rather, the pertinent questions appear to be what levels of pre-payment and purchase discount should be incorporated into the model, whether those factors affect other factors underpinning the model and whether those assumptions should change tranche by tranche. To that end – and while we appreciate the ACLI and the SSG providing alternatives to the "no pre-pay/no purchase discount" assumption – it is essential that these alternative proposals be exposed for a proper comment period that permits stakeholders and regulators to adequately assess those assumptions and propose appropriate alternatives. Additionally, in order for stakeholders to provide meaningful comment and responses to any proposed alternatives, the underlying "work" also must be exposed for review and/or published for public consideration. It is unclear based on what has been provided to the public how the proposed haircuts or treatment of the pre-pay/discount assumptions were developed. In order to maintain an open and transparent process, we respectfully request that the SSG publish any comment letters received in response to the pre-payment and purchase discount proposals, and any other comments that have been or will subsequently be submitted to the SSG with respect to the SSG's consideration of a potential CLO model.

The below comments are limited to the NAIC's proposal for a no prepayment and no purchase discount assumption.

I. <u>The Criteria Used to Choose Model Assumptions and Stress Scenarios are Fundamentally Flawed</u>

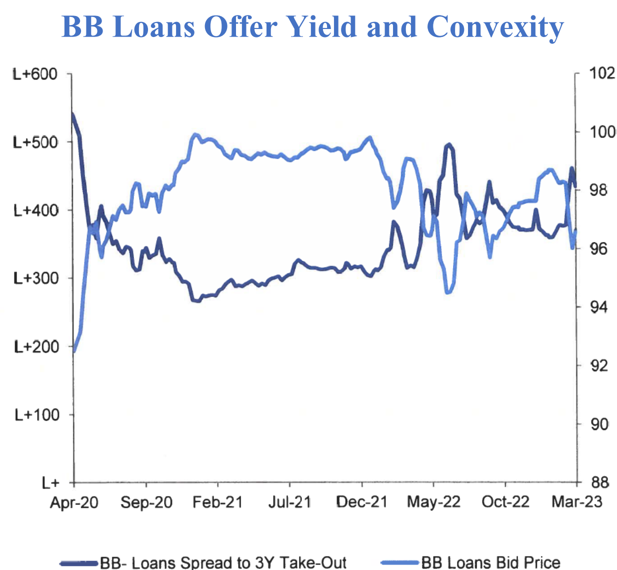
Model assumptions should reflect real-world practice and empirical observations so that the RBC factors, which are the eventual output of the CLO model, appropriately reflect CLO credit risk. The SSG's claim that it is making "no assumptions" masks the fact that it actually assumes *zero prepayments* and *zero purchase discounts*. And, as explained in greater detail below, the assumptions of zero prepayments and zero purchase discount are inappropriate and will result in a flawed model. In addition, and while we appreciate that the Ad Hoc Group has not yet assessed potential stress scenarios, we are concerned that any future stress scenarios will be wrong if they include zero prepayment and zero purchase discount assumptions.

Historically, in times of economy-wide stress, the stress will be manifested first in loan prices declining, and then in the slowdown of prepayments. Potential defaults and associated recoveries would only come into play much later. As a result, stress tests that consider only prepayments or only defaults will fail to capture the effects of the economic cycles. For example, a mild recession that results in interest-rate increases and expansion of risk premiums without a

change in defaults will not affect CLO pricing or cashflows under those assumptions. Even during extreme market stress, such as the Great Financial Crisis, the increase in default rates lags behind the decline in prepayments by a few quarters. In other words, a rock-bottom prepayment rate and a sky-high default rate did not occur at the same time.

In addition, the SSG has not provided an explanation for how the prepayment rate and purchase price assumptions will change other CLO model inputs, if at all. We reiterate the comment we made in previous letters that the piecemeal exposure of model components makes it incredibly difficult to assess the full model and the interplay between each input. For example, purchase prices of the underlying loans are generally correlated to the credit quality and the spread. Therefore, changes in purchase price would impact two of the critical factors of the CLO cash flows – weighted average spread ("WAS") and weighted average rating factor ("WARF"). ***Figure 1**,* below, shows the inverse relationship between bid prices and offer yields for BB-rated leveraged loans.[9] The higher the price, the lower the yield, and, conversely, the lower the price, the higher the yield. Any reasonable modeling must consider the interactions between the purchase price and spread. One cannot simply change the purchase discount assumptions without also changing the yield for the underlying collateral.

***Figure 1**. Bid Price and Offer Yield for BB-Rated Leveraged Loans*



II. The Model Assumptions Fail to Reflect the Benefits of CLOs' Active Management

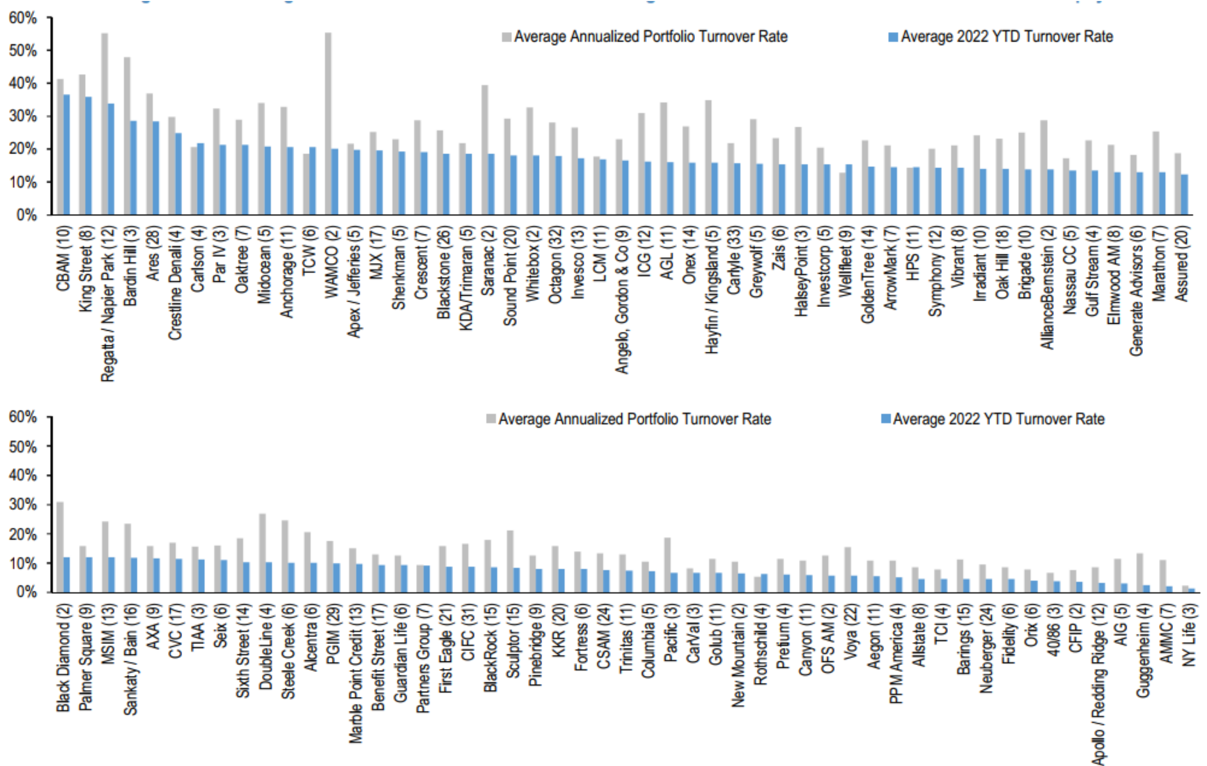
A mechanical purchase discount exercise fails to reflect the benefits of CLOs' active management. As we have noted previously, CLOs are actively managed investment vehicles. As such, CLO managers play an essential role in the performance of CLOs.

[9] See Bryan Park Funding CLO Series, Marathon Asset Management, May 2023, p. 21.

CLOs typically have a 4-5 year reinvestment period, during which CLO managers are able to actively manage CLOs' underlying assets, subject to the conditions specified in the indenture.[10] ***Figure 2***, below, shows that there is a wide spectrum of portfolio turnover rates (*i.e.*, the rate at which the manager purchases and sells the underlying loans) across different CLO managers.[11] For example, while CBAM and King Street have an average of approximately 36% turnover rates for 2022, others have a turnover rate of close to 0%.

Figure 2. *Average Portfolio Turnover Rate by CLO Managers*

Exhibit 5: Average US CLO Manager 2022YTD Sales Turnover Rate vs Average Annualized Sales Turnover Rate since deal first pay date



Source: J.P. Morgan, INTEX. Based on 1,030 US 2.0 CLO portfolios (excluding MM, Static, and Enhanced CLOs) with a first pay date prior to January 1st, 2022 and in reinvestment period as of September 28th, 2022, and a deal factor >=95%. Excludes managers with only 1 CLO in the sample. Based on trades available as of September 26th, 2022 (reporting date may vary).

Reinvestment by CLO managers is crucial in determining returns. CLO managers must adhere to specific criteria known as "Collateral Quality Tests" on credit quality, diversification, recovery rate, average spread, and average life. CLO managers are also required to obey rules governing the concentration of the loan portfolio, which define the maximum allowable percentage of loans under different categories, such as CCC-rated, single obligor, 1st lien senior secured loans, and covenant-lite loans. To differentiate themselves, CLO managers must exercise prudent credit risk evaluation and trading decisions. This is why an assessment of the CLO manager is one of the pricing factors of CLO tranches. This is also why rating agencies explicitly evaluate CLO

[10] See GAO-21-167, Financial Stability: Agencies Have Not Found Leveraged Lending to Significantly Threaten Stability but Remain Cautious Amid Pandemic, p. 10, *available at*: https://www.gao.gov/assets/gao-21-167.pdf.

[11] See J.P. Morgan Global Credit Research, Plugging Loan Liquidity, Sep 20, 2022.

managers' ability to assess CLOs' credit risk.[12] The proposed CLO model ignores this critical factor.

Not considering the dynamics of reinvestment effectively assumes that CLO managers play no role, which is contradictory to how the market functions. When evaluating CLO performance in a highly-stressed market in particular, the significant impact of CLO managers on reinvestments should not be underestimated.

III. A Zero Purchase Discount Assumption is Inconsistent with Real-World Evidence

A zero purchase discount assumption does not comport with real-world practice or empirical observation. As we explained above, the active management of CLOs is a critical feature of the modern CLO that reduces credit risk and improves performance. A primary focus of CLO managers is to acquire loans with good credit risk at a discount using the cash received from loan repayments, a strategy commonly referred to as "par build."[13] Par build aims to improve the over-collateralization ("O/C") ratios, thereby enhancing the credit support for tranches. One effective method for building par is to acquire loans with suitable credit quality at discounted prices, using the cash received from loan repayments. The current zero purchase discount assumption means that CLO managers always purchase underlying loans at a 100% purchase price, which directly contradicts market practice.

The importance of par build (which involves purchasing loans at a discount) is further demonstrated in market participants' commentaries:

- Ares Capital Management states: "Investors and CLO trading desks spend a lot of time and effort focused on relative subordination levels among CLO tranches. Trading spreads tend to reflect these judgments. Accordingly, a trend toward par erosion or par creation can have a material impact on tranche liquidity and relative value."[14]

- King Street, the issuer of Rockford Tower CLOs, states: "[C]onsistent par build has allowed us to offset potential future credit losses and defaults, and provides increased flexibility and structural cushion to navigate through credit cycles" and "strong par build is also key in enhancing CLO debt credit enhancement levels to provide downside protection to CLO debt investors."[15]

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[12] See Moody's Global Approach to Rating Collateralized Loan Obligations, Moody's Investors Service, December 21, 2021, pp. 1-2, *available at*: https://ratings.moodys.com/api/rmc-documents/74832.

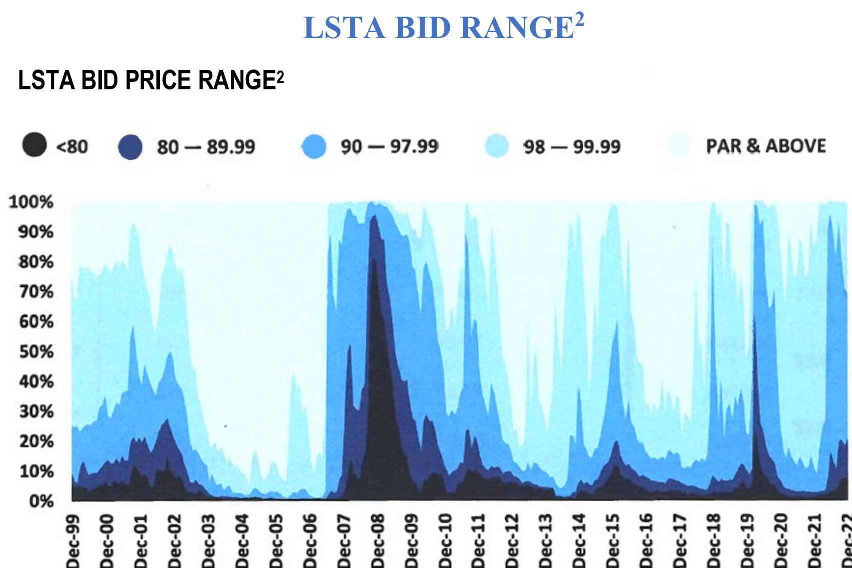
[13] See Li, M., Lu, L. Yield Book Research "CLO Manager performance in times of volatility", Aug 1 2022.

[14] Ashton, Keith, Ares Capital Management, "Investing in CLOs", 2020 Spring/Summer, *available at*: https://www.aresmgmt.com/sites/default/files/2020-06/Ares_Investing%20in%20CLOs%20White%20Paper_2020_0.pdf.

[15] See King Street, CLO Presentation, May 2023.

There is always a percentage of bid prices that are below par, including some that are substantially below par,[16] and it is common to have at least 5% of the leveraged loans priced below $80, indicating a potential substantial purchase discount for CLO managers. *See* ***Figure 3***, below.

Figure 3*. LSTA Bid Price Range, December 1999 – December 2022*[17]



IV. A Zero Prepayment Assumption Contradicts Real-World Evidence

Leveraged loans pre-pay for many reasons, including refinancing, acquisitions, carve-out or asset sales, and reorganizations, and commonly include a *mandatory* pre-pay provision.[18] The SSG's proposed zero prepayments assumption essentially assumes that all borrowers are cash-strapped so that there are zero refinancing activities. Moreover, there are no prepayments as a result of asset sale/acquisition/reorganization under each of the contemplated stress scenarios, including those that purport to present normal market conditions. Even at the low of the Great

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[16] See CLO Management, Bain Capital Credit, Q4 2022, at p. 46.

[17] From December 1999 to December 2022, there has been no instance where bid prices are always at par. Figure 3 shows the bid price range of the 100 loans underlying the S&P/LSTA Leveraged Loan index with the darkest blue region denoting the percentage bid prices that are below $80 and the lightest blue region denoting the percentage bid prices at par. Attached as ***Appendix A-1*** is a chart showing the percentage of leveraged loans from 2010 to 2022 priced below $80. As indicated in the chart, although this percentage varies over time, it is common to have at least 5% of the leveraged loans priced below $80, indicating a potential substantial purchase discount for CLO managers.

[18] See Leveraged Commentary & Data: Leveraged Loan Primer ("LCD Loan Primer"), S&P Global Market Intelligence, p. 11 ("Leveraged loans usually require a borrower to prepay with proceeds of excess cash flow, asset sales, debt issuance, or equity issuance." Mandatory prepayments are only waived "if the issuer meets a present financial hurdle.") *available at*: https://www.lcdcomps.com/d/pdf/LCD%20Loan%20Primer.pdf. Loan prepayment data for Commercial & Industrial Loans collected from over 100 domestic community banks from 2021 Q1 to 2022 Q4, finds that, for commercial and industrial loans, the modeled pre-payment rate ranged from 20%-40% in 2021 and 2022. *See*, Olson Research Associates Inc., *available at*: https://www2.olsonresearch.com/home/data-resources/loan-prepayment-peer-data.

Financial Crisis, the 12-month average leveraged loan prepayment rate was 8.7%; during the COVID pandemic, the prepayment rate was 20%.[19] *See* ***Figure 4***, below. In addition, CLOs are typically issued with a legal maturity of 12-13 years, but with a substantially shorter weighted average life of 6-10 years.[20]

Figure 4. *Historical Leveraged Loan (Last-12-Months) Repayment Rates, 2001-2022*[21]

In light of the foregoing considerations, we encourage the SSG to reconsider its proposal for a no pre-pay, no discount model and to work with the Ad Hoc Group to develop pre-pay and discount assumptions that properly account for those features, based on historical data. Failure to develop appropriate pre-pay an discount assumptions that reflect real-world practice and empirical observations will result in a flawed model. 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

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[19] We also note that the COVID-era pre-payment rate is substantially higher than "ACLI Adjusted" prepayment assumption of 15% for all normal, non-stressed market scenarios.

[20] See Pinebridge, Seeing Beyond the Complexity: An Introduction to Collateralized Loan Obligations, at p. 13, *available at*: https://www.pinebridge.com/_assets/pdfs/insights/2022/pinebridge-investments_clo-primer.pdf.

[21] See February 21, 2023 NAIC Valuation of Securities (E) Task Force Materials, Attachment C-5 at p. 10.

APPENDIX A-1

The below chart shows the percentage of leveraged loans from 2010 to 2022 priced below $80. As indicated, although this percentage varies over time, it is common to have at least 5% of the leveraged loans priced below $80, indicating a potential substantial purchase discount for CLO managers.

App. A-1 Figure. *Percentage of Leveraged Loans Priced below $80 vs. Rated 'CCC' or Below*

— CCC OR BELOW (Ex. NR)[4] — BELOW 80