<u>Pre-Pay / Discount Purchase Methodology</u>

NAIC staff has decided not to implement voluntary prepayment and discount purchase assumptions (the "PP methodology") in our modeling framework. The main rationale is that any benefit of the PP methodology is outweighed by the added uncertainty and cash flow volatility which would be required. For example, the main beneficiary of the PP methodology – the Equity tranche – will not be affected by the modeling at the current time. In addition, our review of credit rating providers (CRP) methodologies has shown that they do not assume any par-building discount purchases.

Cost benefit analysis:

SSG staff believe that financial modeling should avoid excess complexity, assumption setting and other forms of "overfit". One area of <u>necessary</u> complexity are assumptions about the nature of the reinvested collateral – for example, the rating, maturity and spread. There are two main approaches here –i) assume the portfolio remains similar or ii) assume that the manager reinvests into the minimum allowed by the Indenture. The materiality of this selection is proportional to the difference between the "actual" and the "minimum" and size of the reinvestment bucket.

The PP assumption shifts more collateral from the initial to the reinvestment bucket. Furthermore, making an assumption regarding the discount price also requires a determination of what market conditions exist at the time of purchase which allow a loan to be purchased at a discount. For example, if the discount is assumed during a base case scenario, does the discount assume lower spread? If the discount is assumed during a stress scenario, does the discount assume a higher credit stress? Staff believes that finding the right combination of these factors would be necessary if a discounted purchase is assumed.

On the other hand, there will be only minor benefits from adding this complexity. As shown in our analysis of cash flows (see https://content.naic.org/sites/default/files/industry-ssg-clo-5.31.23-clo-exposure-methodology-update.pdf), the main beneficiary of the PP methodology is the Equity tranche. Recently, the RBCIRE WG made the decision that residual tranches will be treated at a fixed percentage beginning with year-end 2024. While NAIC staff has the ability to measure the risk of the Equity tranche, that information will not be needed at the current time. As a result, the main beneficiary of the PP assumption will not be impacted by the assumption.

Benefits/stresses to non-Equity tranches are smaller and may be uneven. Since implementing the PP methodology increases the uncertainty and volatility of modeling, without any impact on the main beneficiary, staff believes that it would be imprudent to do so.

Review of CRP methodologies:

Staff has also reviewed CRP methodologies to determine the amortization and discount purchase assumptions. Our review has concluded that there are only a few references to the concerns covered by the PP assumption. Where they exist, the CRP criteria err on the conservative side of assumption setting – with fixed amortization schedules and no discount purchase par building. This comports to the recollection of NAIC staff who worked on CLOs in their former jobs at CRPs (Moody's and S&P).

The summary of our findings is in the Appendix. We realize that we may have missed something and welcome interested parties to provide references to published CRP methodologies/ Criteria.

Regulators have expressed the view that NAIC modeling should not be systematically more aggressive than the CRP allow for their own ratings. As a result, this finding argues against implementing the PP assumptions.

Conclusion:

Staff appreciates all the responses we have received from regulators and interested parties. We would like to specifically thank the ACLI for their well thought out proposal. This consultation has resulted in a number of conversations that we hope continues as we work on the next stage – scenario setting.

DBRS Morning Star

- Methodology: Cash Flow Assumptions for Corporate Credit Securitizations as of Feb 2023
- Methodology: Rating CLOs and CDOs of Large Corporate Credit as of Feb 2023

Fitch

- CLO and Corporate CDO Rating Criteria as September 8, 2022

KBRA

- Structured Credit Global Rating Methodology as of November 19, 2020

Moody's

- Moody's Global Approach to Rating Collateralized Loan Obligations as Dec 21, 2021

S&P:

- Criteria | Structured Finance | CDOs:Global Methodology And AssumptionsFor CLOs And Corporate CDOs as of Dec 21, 2019 (updated Dec. 20, 2021)
- Guidance | Criteria | Structured Finance | CDOs:Guidance: Global Methodology And Assumptions For CLOs And Corporate CDOs as of June 21, 2019 (updated on Oct. 14, 2022)

CRP	Voluntary Prepay	Discount
DBRS	"In general, no amortization or prepayment is assumed to take place during the reinvestment period, on the assumption that the manager reinvests any scheduled or unscheduled principal payments in additional collateral prior to the following payment date." (Cash Flow p 8)	"For transactions with a defined target par amount, DBRS Morningstar rates to such target par amount as is stated in the governing documents or such lower amount as is currently held in an existing transaction." (Cash Flow p 8)
Fitch	Not found	Indirect -- reinvestment illustration in Appendix 8
KBRA	"The portfolio collateral is modelled with an amortization profile appropriate for the specific collateral type and may be modelled with certain prepayment assumptions when deemed appropriate." (p 11)	"Reinvestments are incorporated based on the amount of proceeds available for that period, along with assumptions about the style of the collateral manager when appropriate." (p 11)
Moody's	"We typically do not model amortization during the reinvestment period on the assumption that the manager will reinvest all amortization proceeds it receives during the reinvestment period in assets that mature after the reinvestment period." (Section 2.3.3.4 Reinvestment Assumptions)	Not found
S&P	S&P uses as standard amortization profile (Guidance Para 37).	Not found