## Pre-Pay / Discount purchase results

We ran the six transactions under one prepayment scenario ( $10 \%$ CPR and $92 \$$ purchase price on reinvestments) to demonstrate the effects of the prepayment / discount purchase assumption. One way to compare the impact is the overall balance sheet cash flow. The greater the balance sheet cash generation, the easier it becomes to pay off the liabilities. The following table shows the difference the cash flows in the prepay scenario with that of no prepay (total CF_prepay - total_CF_noprepay):

| Deal | Scenario |  |  |
| :--- | ---: | ---: | ---: |
|  | A | B | C |
| Anchorage 17 | $62,790,624$ | $4,792,965$ | $-6,271,018$ |
| Ares 52 | $-5,436,997$ | $-3,833,876$ | $-8,652,224$ |
| Carlyle | $30,775,631$ | $3,982,701$ | $-10,398,235$ |
| Magnetite 27 | $59,135,684$ | $26,195,912$ | $-3,176,470$ |
| OHA | $66,947,776$ | $17,457,989$ | $-4,672,801$ |
| Strata | $22,683,368$ | $10,025,717$ | $-4,680,138$ |

We also compared the cashflows to equity in the two alternatives.

| Deal | Scenario |  |  |
| :--- | ---: | ---: | ---: |
|  | A | B | C |
| Anchorage 17 | $17,086,946$ | $2,120,356$ | 939,319 |
| Ares 52 | $1,747,401$ | $1,747,737$ | 577,523 |
| Carlyle | $7,281,489$ | $2,195,909$ | 435,743 |
| Magnetite 27 | $18,042,984$ | $4,337,771$ | 616,088 |
| OHA | $9,017,041$ | $4,562,706$ | $1,194,566$ |
| Strata | $12,050,427$ | $2,011,055$ | 699,300 |

Discussion.
There are significant benefits to the discount purchase assumption. For example, in case of scenario A, an additional $\$ 59$ million was generated for Magnetite 27 which Is $11.6 \%$ of the principal balance of the liabilities.

There were some unexpected differences -- primarily in scenario C and with the Ares transaction. With respect to Scenario C, we Investigated this issue further and believe that this is due to our assumption that the spread on reinvested securities is the "covenanted" weighed average spread ("WAS") instead of
the current portfolio spread. Typically, the actual spread Is higher than the minimum WAS. Both voluntary reinvestments and high defaults move large amounts of principal into the reinvestment bucket with a lower spread. This lower spread offsets the benefit of the discount In Scenario C. In addition, there appears to be an impact from negative carry on the timing of reinvestments.

A different situation appears to affect Ares 52. This transaction receives no benefit from prepays. After taking a deeper dive, we believe that there a number of factors driving this outcome. The first is a relatively short remaining reinvestment period - this lowers the time period for this benefit.

The second relates to the nature of the current Ares 52 portfolio. Ares is more ratings "bar belled" than other transactions. As a result voluntary prepayments reinvest into a more ratings homogenous portfolio which may pay less Interest as a result.

Proposals:
As a result of these runs, we want to circle back to our alternatives. In addition to the NAIC proposal, the ACLI proposed an approach based on economic scenario. While we believe that the ACLI proposal is well thought through, NAIC staff still believes that the No Prepay / No Discount is most appropriate for two main reasons:

1) the enormous amounts of extra cash generated is a modeling anomaly and without an equivalent assumption in the C1 framework; and
2) It Is also the simplest assumption -- our experience in Scenario $C$ and Ares demonstrate that complexity assumptions can have non-convex results. Given the complexity of CLOs, simpler scenarios are more likely to avoid unintended consequences.

We added an additional proposal to the table -- "ACLI Adjusted". It begins with the ACLI proposal and adds some modifications. First, it reduces the proposed prepayment rates. Second, it adds haircuts for discount purchase price. The rationale is as follows: discounts compensate for some shortcomings in the security - typically for a below market spread or higher perceived credit risk. We can model haircuts to reinvestment WAS or the reinvestment WARF depending on the scenario.

A WAS haircut is more difficult to justify in the $>85$ th percentile scenarios (where a more credit distresses situation is more likely) but is easier to apply. For example, assume a 92 price and 8 -year maturity. Ignoring discounting, we can assume 100 bps discount to WAS. $100-$ ( $100 \mathrm{bps} X 8$ yrs). Staff are not too fond of this alternative, but it could work as a compromise.

| NAIC Proposal | Scenario | Prepay | Purchase Price |
| :---: | :---: | :---: | :---: |
|  | All | None | Par |
| ACLI Adjusted | < 85th percentile | 15\% | Par |
|  | 85th to 92nd percentile | 10\% | 92 and haircut |
|  | > 92nd percentile | 5\% | 87 and haircut |
| ACLI | < 85th percentile | 20\%-30\% | "99 to par" |
|  | 85th to 92nd percentile | 10\% | "92" |
|  | > 92nd percentile | <8.7\% | "<87" |

Next Steps. We would like to hear Interested parties' feedback on this proposal.

