NEPC Research
Fund Tear Sheet

Neuberger Berman Group LLC

ERSRI—NB CLO SMA

May 2021

Product Rating: Not Applicable – Not Rated*

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Executive Summary

Neuberger Berman Group LLC ("Neuberger Berman", "NB", or the "Firm") is an employee-owned global asset management firm founded in 1939. The Firm is headquartered in New York and has offices in 36 cities across 25 countries. NB manages strategies across equity, fixed income, private equity, and hedge fund on behalf of institutions, advisors and individual investors worldwide. The Firm employs over 2,300 professionals, over 650 of which are investment professionals. NB manages $429 billion in assets, $96 billion of which is within private markets strategies.

The ERSRI—NB CLO SMA is a proposed separately managed account (the "SMA") that will invest in the junior debt tranches of third-party CLOs and the equity tranches of Neuberger Berman-managed CLOs. The proposed SMA will seek to invest $100 million into CLOs overtime and reserve an additional $25 million for opportunistic deployment. The long-term strategic target of the SMA will be 60% to CLO equity tranches and 40% to BB debt tranches with capital reserved for opportunistic investments. The SMA will leverage the Firm's non-investment grade team of over 45 dedicated investment professionals. This memo is based on meetings with Neuberger Berman, materials provided by the Firm, and publicly available information.

Preliminary Positives:

- ***Strategic mandate –*** The SMA will seek to invest an initial allocation of $100 million. The $100 million commitment will initialy be invested into CLO junior mezzanine debt tranches which will be used to fund the CLO Equity allocation over time. The SMA will move gradually towards the long-term strategic target of 60% CLO equity and 40% BB debt. An additional $25 million in "dry powder" will be reserved for opportunistic capital deployment as appropriate. The uncalled capital is reserved for opportunistic investments and is only partially deployed temporarily when needed to keep the CLO equity allocation capped at 60% of invested capital. The SMA will fund the CLO equity allocations over time through the sale of CLO debt and the reinvestment of proceeds. This mandate gives ERSRI immediate exposure to the CLO market and current debt spreads while tactically building exposure to CLO equity as opportunities arise.

- ***Conservative CLO management –*** Neuberger Berman CLOs were less active in trading underlying loans through the COVID market volatility than many similar-sized peers. While this may represent less of an "opportunistic" approach compared to others, it also reflects a conservative approach to managing CLO portfolios. Outstanding NB CLOs had low exposure to CCCs coming into COVID and experienced lower-than-market downgrades to CCC within most of its outstanding CLOs according to CLO market data from Bank of America.

- ***Team and organizational resources –*** The NB CLO team resides within the 50+ person Firm's global non-investment grade credit team responsible for over $45 billion in non-investment grade assets. This includes access to 25 research analysts, six traders and portfolio analysts, six special situations investment professionals, and five dedicated client portfolio specialists. Neuberger Berman manages $13.8 billion in CLOs. Additionally, the team has access to the broader organizational resources of a $429 billion firm.

- ***Attractive terms –*** Neuberger Berman is offering no fees at the SMA level on CLO equity and no fees on the first $25 million of CLO BB debt. A fee of 50 basis points will apply to any CLO BB debt in the portfolio in excess of $25 million. The SMA will pay CLO-level fees. NB fees at the CLO level have typically been 40-45 basis points of senior and subordinate fees, with CLO-equity level incentive fees of 20% over an attractive 12% hurdle.

Preliminary Negatives:

- ***Investment team is not exclusively focused on the SMA's strategy –*** The investment team dedicates their time to other investment products and is not solely focused on the CLO strategy or SMA. While NEPC is comfortable with the ability of the investment team to successfully manage the mandate, the team will have other interests, time commitments, and responsibilities outside of the Fund. Investment analysts focus on evaluating sector specific broadly syndicated loans and high yield bonds whether or not the Fund has exposure to them. Portfolio managers and investment committee members are responsible for the Firm's CLOs, commingled vehicles, and separately managed accounts that focus on broader non-investment grade credit, including but not limited to CLO debt and equity.

- ***No fee rebate –*** The SMA will invest in NB-managed CLO equity at the same price as NBLA II, the Firm's commingled risk retention vehicle that employs a similar strategy as the proposed SMA. NBLA II investors benefit from a rebate of a portion of the CLOs' gross management fees, but that fee rebate mechanism would not be in place for the SMA. The rebate represents an additional return-driver for the commingled fund that will not be available to ERSRI through the SMA. Although the SMA will not include the same fee rebate as the commingled vehicle, ERSRI benefits from the SMA structure by having more control over portfolio parameters, liquidity, and distributions.

- ***Limited active SMA exposure –*** The team currently manages three dedicated CLO SMAs, totaling $220 million in total commitments. This is mitigated by the Firm's broader CLO mandates which include over $1.8 billion in CLO debt exposure and $940 million (plus an additional €100 million) in dedicated CLO equity funds.

Considerations for Investing in CLO Equity:

- ***Funding gap potential –*** Asset spread tightening, with all else equal, will reduce the residual cash flows available to the equity tranche. Liability spreads are fixed at a CLO's issuance date; however, a widening of liability spreads (particularly AAA tranches) can reduce the residual cash flow available to new issue CLOs.

- ***Rising short-term interest rates (capped) –*** Most (not all) CLO assets (bank loans) exhibit LIBOR floors (ranging from 100 basis points to 120 basis points for new issues). CLO liabilities (debt notes) do not have LIBOR floors. Equity holders currently benefit as much as 400 bps to 500 bps on an annualized basis from the mismatch. As LIBOR rises to the floor level of bank loans, CLO equity returns are negatively impacted. A further rise in LIBOR — past the floor level of bank loans — is generally viewed as a positive as asset spreads will widen and a CLO's liability costs are fixed.

- ***Liquidity –*** CLO equity is not a deeply traded market during times of stress. The larger the concentration in a specific tranche, the more it should be viewed as a hold-to-maturity/hold-to-call type of investment.

- ***CLO manager selection –*** CLO manager skill varies considerably from collateral analysis, trading acumen, and structuring capabilities. There is a material difference in the performance of top and bottom quartile managers.

- ***Timing of the reinvestment period –*** Given the fixed liability costs, variable asset spreads, and defined reinvestment period of a CLO combined with cyclical nature of credit, CLO equity performance can vary significantly by vintage. We recommend diversification across vintages to avoid specific long-term timing bets on liability spreads, asset spreads, and credit default cycles.

Fund Characteristics

Investment Manager Name	Neuberger Berman Group LLC
Investment Strategy Name	ERSRI—NB CLO SMA
Firm Headquarters	New York, NY
Target Strategy	Combination of direct investments in Neuberger Berman CLO Equity and Third-Party CLO Mezzanine Debt (BB targeted rating)
Investment Mix	Long-term allocation target of 60% CLO Equity and 40% CLO Mezzanine Debt, with capital held back for Opportunistic Investing
Portfolio Manager(s)	Joseph Lynch, Stephen Casey, Pim van Schie
Management Company Inception	1939
Strategy Inception	Q3 2021 Target
Firm AUM	$429 billion
Target SMA Size	$100 million with an additional $25 million reserved for opportunistic deployment
Expected Life	Indefinite tenor; as determined by ERSRI
Liquidity	As directed by ERSRI
Management Fee	0% Fund-level; CLO fees apply
Carried Interest	0% Fund-level; CLO Fees apply; 20% after 12% hurdle (no-catch up) on Opportunistic Investments
Account Expenses	De minimus expected
Distributions	Distributions are assumed to be reinvested unless otherwise directed by ERSRI

Firm Description

Firm Overview

Neuberger Berman Group LLC ("Neuberger Berman", "NB", or the "Firm") is an employee-owned global asset management firm founded in 1939. The Firm is headquartered in New York and has offices in 36 cities across 25 countries. NB manages strategies across equity, fixed income, private equity, and hedge fund on behalf of institutions, advisors and individual investors worldwide. The Firm employs over 2,300 professionals, over 650 of which are investment professionals. NB manages $429 billion in assets, $96 billion of which is within private markets strategies.

The Firm has grown its CLO business through both in-house development and acquisitions. In 2007, Neuberger Berman expanded its market presence in CLOs through the acquisition of LightPoint. LightPoint was founded in 2002 as a leveraged loan investment manager with approximately $3.2 billion in assets under management when acquired. Stephen Casey and Joseph Lynch, two of the CLO strategy's current portfolio managers, were two of the founding members of Chicago-based LightPoint. The first U.S. dollar-denominated CLO managed by the team, LightPoint CLO III, Ltd., was issued in July 2005.

In 2015, the Firm launched its CLO tranche investing strategies. In 2017, Neuberger Berman raised a $455 million risk retention vehicle to seek to comply with US and European risk retention rules and further align interests with investors by retaining the majority equity position in US CLOs. Though no longer required under the US risk retention rules, Neuberger Berman continues to invest in the majority equity positions of its CLOs.

The Firm's leveraged loan capabilities, including the CLO strategy, are structured within the Firm's fixed income platform. NB's fixed income platform spans investment grade to non-investment grade and includes both public markets to private markets strategies.

Ownership Structure

Neuberger Berman is a private, employee-owned investment management firm with approximately 550 current employee owners. NB believes this aligns the Firm's interests its clients, supports its investment culture, and reinforces its track record of high retention rates amongst senior professionals. Neuberger Berman is 100% owned by NBSH Acquisition, LLC, which is owned by the Firm's current and former employees, directors and consultants and, in certain instances, their permitted transferees.

Team Overview

Neuberger Berman's fixed income platform comprises 170 investment professionals, including 75 research analysts. The structured credit team is a key component of the Firm's non-investment grade platform and manages over $13.8 billion in CLOs. The team reports to the Co-Heads of the Global Non-Investment Grade Credit team, Joseph Lynch and Tom O'Reilly. The team consists of over 50 investment professionals, including portfolio managers, research analysts and traders. The team's strategies include high yield, senior floating rate loans, Clos, and distressed debt.

The NB CLO strategy is managed by three portfolio managers: Stephen Casey, Joseph Lynch, and Pim van Schie. The portfolio management team has over 23 years of average experience in the non-investment grade credit markets. The portfolio managers are supported by a team of research analysts and traders. The global non-investment grade credit team provides research resources to the CLO portfolio managers and strategy.

Steve Ruh and Rachel Young are the Co-Directors of Research for the research team and are supported by an additional 26 research analysts. The team is organized by sector including consumer, technology and media, healthcare and metals, homebuilding and industrials, energy, telecommunications, cable and broadcasting, and cyclicals and transportation. The team analyzes both high yield bonds and senior floating rate loans.

The broader global non-investment grade credit team also provides trading resources to the CLO strategy. The strategy is supported by three traders that are responsible for trade execution as communicated by the portfolio managers. The chart below includes team members that spend a considerable amount of their time on the strategy:

Name	Title	Years at Firm/Years in Industry
Joseph Lynch	Managing Director; Co-Head of Global Non-Investment Grade Credit; Portfolio Manager	19 at Firm / 25 in industry
Stephen Casey	Managing Director; Portfolio Manager	19 at Firm / 26 in industry
Pim van Schie	Managing Director; Portfolio Manager	6 at Firm / 18 in industry
John Abendroth	Senior Vice President/ Senior Trader	17 at Firm / 30 in industry
Joseph Schurer	Senior Vice President/ Senior Trader	12 at Firm / 20 in industry
Quinn Murphy	Trading Associate	5 at Firm / 5 in industry

Fund Investment Strategy

Investment Strategy

The SMA will seek to invest an initial allocation of $100 million. The $100 million commitment will initialy be invested into CLO junior mezzanine debt tranches which will be used to fund the CLO Equity allocation over time. The SMA will move gradually towards the long-term strategic target of 60% CLO equity and 40% BB debt. An additional $25 million in "dry powder" will be reserved for opportunistic capital deployment as appropriate. The uncalled capital is reserved for opportunistic investments and is only partially deployed temporarily when needed to keep the CLO equity allocation capped at 60% of invested capital. The SMA will fund the CLO equity allocations over time through the sale of CLO debt and the reinvestment of proceeds. This mandate gives ERSRI immediate exposure to the CLO market and current debt spreads while tactically building exposure to CLO equity as opportunities arise.

Neuberger Berman has provided deployment assumptions based on a base case scenario, expedited timeline, and no reinvestment of proceeds. Please see Appendix A for more information.

Proposed Terms Category	Assumptions and Proposed Terms
Target Allocation	--
CLO Equity	60%
CLO BB	40%
Assumed Coupons	--
CLO Equity	18.0%
CLO BB	6.5%
SMA-level Management Fees	--
CLO Equity	0 basis points
CLO BB	50 basis points; first $25 million waived
Cash	0 basis points
Incentive Fees	20% after 12% hurdle (no-catch up) on Opportunistic Investments

Portfolio Construction Process

The portfolio construction process follows a bottom-up process where the team starts with an initial pool of loans that have passed the team's rigorous credit process and been approved by the Credit Committee. Out of this available pool of loans, the team will construct a portfolio subject to CLO portfolio guidelines and constraints, internal sector views, and market availability and liquidity.

The strategy's portfolio construction process begins by screening the market to identify the loans that the team will consider for purchase. The team's goal is to reduce the universe to a manageable size of potential investments that can then undergo detailed fundamental analysis. The team will screen out all issuers with less than $500 million of debt outstanding, defaulted securities, and issuers with less than $100 million in EBITDA. The team will also screen out asset-light companies, deep cyclicals, and companies with limited earnings visibility. The team also eliminates outliers including severely distressed and one-time issuers. From this group, the team sorts the issuers and reviews the results according to credit standing (ratings and credit statistics) and relative yield.

The analysts then focus their research efforts on what the team believes are the most attractive opportunities emerging from the screening process. The analysts will assess both credit fundamentals and relative value. Once the analyst has completed thorough due diligence on the opportunity and made a recommendation, the idea is reviewed within the appropriate sector team where the team brings different analyst perspectives to bear in the evaluation process.
After an investment idea has been thoroughly evaluated by the sector team, it is then reviewed by the senior professionals who constitute the Credit Committee.

The final step is implementation. After an investment idea is approved by the Credit Committee, implementation is the responsibility of the Portfolio Construction Team (comprising portfolio managers and the senior trader) that establishes overall portfolio structure. This team evaluates the various ideas that are available for implementation within the context of each client's investment objectives and specific investment guidelines.

Risk Management Process

Risk management is an important element of the team's philosophy. The team employs proprietary models and systems to seek to manage risk consistent with each client's investment objectives. The team works in tandem with the Firm's Risk Management team, an independent unit responsible for all the Firm's products.

The team defines risk management as its systems and tools that seek to identify, measure, and/or manage important aspects of the team's portfolio strategy and investment management relationship with clients. Regarding portfolio management, the team has systems to monitor compliance with respect to client guidelines and portfolio strategy, and it utilizes a risk management tool to assess risk relative to the client's benchmark on a daily basis.

Neuberger Berman believes that the key risk with respect to CLO investing is credit risk and the potential for price erosion that can result from deterioration in the credit standing of a high yield issuer. The team carries out extensive upfront credit analysis, but that is just the beginning of its credit process. Once the team purchases a holding, it initiates its monitoring process. Accordingly, the team seeks to obtain early warning on developments that could act as catalysts for credit deterioration by keeping close tabs on relevant data (key financial drivers, commodity prices, stock prices, regulatory developments, filings, financial results relative to their models, press releases, and management's commentary). The team also tracks loan secondary prices and these are

reviewed on a daily basis for significant price movements. In addition to portfolio manager, research analyst and trader pricing review, the team also receives a daily file on price movements from its Operations department.

Quantitative systems and tools are important to managing the team's CLO portfolios. The team's systems and models have been developed by the investment management team and the information technology team. The value added from the team's fundamental research and risk management process is evident in its successful long-term investment track record.

An important risk control tool is the team's proprietary system that compares portfolio risk characteristics with those of the benchmark index. The team obtains a feed of relevant factors that pertain to the benchmark index. Using internally developed software systems, the team closely monitors the structure of clients' portfolios relative to the benchmark index to seek to ensure that they are in compliance with portfolio strategy and client guidelines. The team utilizes its risk measurement software to monitor relevant characteristics including spread exposures, industry diversification, duration, maturity, coupon profile, credit quality and seniority. The output from its risk management system is integral to portfolio construction. Using this system, the team seeks to ensure that portfolios are structured with the desired levels of absolute risk as well as risk relative to the benchmark index.

Covenant Lite Loans

The CLO team prefers to invest in transactions governed by financial maintenance covenants. However, the team is able to get comfortable with some covenant-lite transactions for several reasons. First, it focuses its investment decision on whether the company has attractive investment characteristics, including, but not limited to, a market leading position, a variable cost structure, a strong and experienced management team and scale. If an issuer exhibits those characteristics the team then looks to ensure the issuer has an appropriate capital structure. Finally, after the first two requirements are satisfied, the team examines structural elements embedded within the issuers' credit agreement and bond indentures.

NB's CLO team is focused on issuers with significant tangible asset bases, where it has a full pledge on the collateral, as that typically ensures high recoveries in the event of default. Only after those issues have been fully vetted will the team invest in a covenant-lite transaction.

Key Professionals

Detailed Biographies

Joseph Lynch, *Managing Director, Global Head of Non-Investment Grade Credit and a Senior Portfolio Manager*

Joseph Lynch joined Neuberger Berman in 2002. Joe is the Global Head of Non-Investment Grade Credit and a Senior Portfolio Manager for Non-Investment Grade Credit focusing on loan portfolios. In addition, he sits on the Credit Committee for Non-Investment Grade Credit and serves on Neuberger Berman's Partnership Committee. Joe was a founding partner of LightPoint Capital Management LLC, which was acquired by Neuberger Berman in 2007. Prior to joining LightPoint, he was employed at ABN AMRO where he was responsible for structuring highly leveraged transactions. Joe earned a BS from the University of Illinois and an MBA from DePaul University.

Stephen Casey, CFA, *Managing Director, Senior Portfolio Manager for Non-Investment Grade Credit*

Stephen Casey, CFA, Managing Director, joined the Neuberger Berman in 2002. Stephen is a Senior Portfolio Manager for Non-Investment Grade Credit focusing on loan portfolios. In addition, he sits on the Credit Committee for Non-Investment Grade Credit. Stephen was a founding partner of LightPoint Capital Management LLC, which was acquired by Neuberger Berman in 2007. Prior to joining LightPoint, he was employed at ABN AMRO where he was responsible for structuring highly leveraged transactions. From 2016 to 2019, Stephen served on the Loan Syndications and Trading Association (LSTA) Board of Directors. He received a BS from Indiana University, an MS from the Illinois Institute of Technology and has been awarded the Chartered Financial Analyst designation.

Pim van Schie, *Managing Director, Senior Portfolio Manager for Non-Investment Grade Credit*

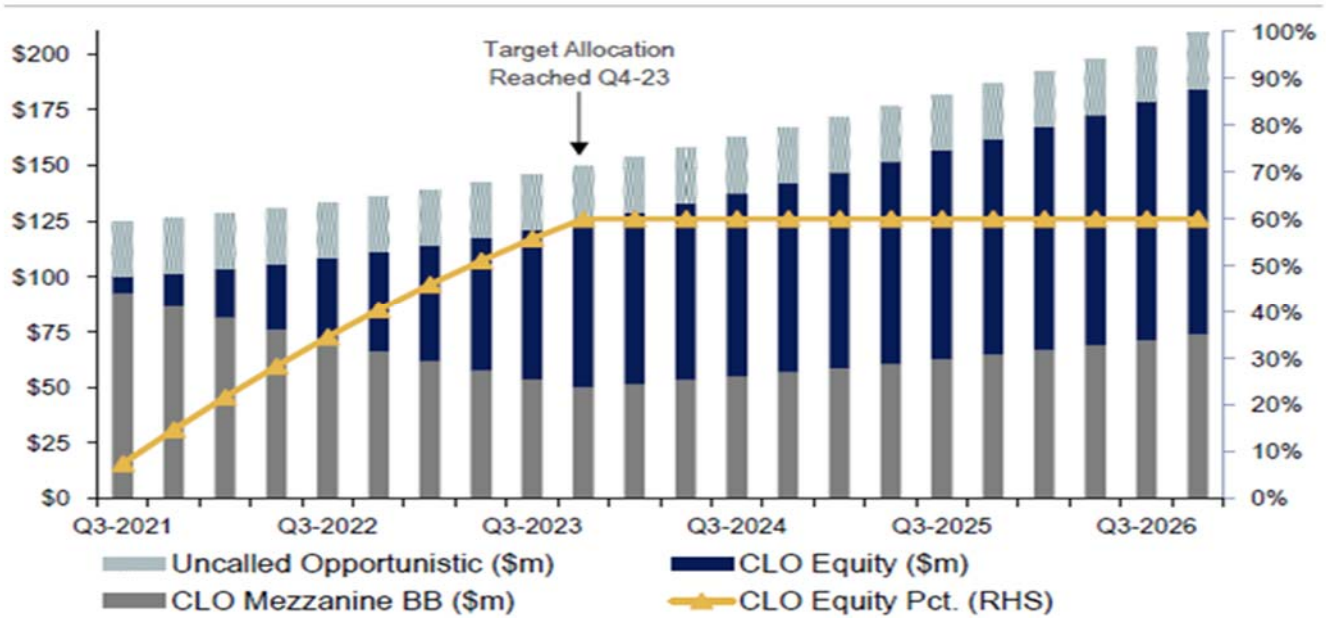
Pim Van Schie, Managing Director, joined the Firm in 2015. Pim is a Senior Portfolio Manager for Non-Investment Grade Credit focusing on Collateralized Loan Obligation (CLO) strategies. Pim was an Executive Director of CLO Banking at Morgan Stanley. Prior to that, he was a Vice President on the CLO Banking team at BNP Paribas. Pim earned a BS from Louisiana State University and an MBA from New York University.

Appendix A

ERSRI—NB CLO SMA Portfolio Assumptions

Neuberger Berman has provided detailed assumptions for the ERSRI—NB CLO SMA, including base case, a scenario in which capital is deployed quickly, and a scenario in which proceeds are not reinvested. These assumptions are for illustration purposes and may not materialize as illustrated.

Base Case Deployment Timeline Assumptions



Source: Neuberger Berman

Base Case Allocations and Deployment Assumptions

	Balances ($mm)					Activity ($mm)				
	Uncalled Opportunstic Capital	Called Opportunstic Capital	CLO BB	CLO Equity	Invested Capital	Opportunstic Capital	CLO BB	CLO Equity	Carry Used	Net Activity
Q3-2021	$ 25	$ -	$ 93	$ 8	$ 100	$25	$92.5	$7.5	($1)	$125
Q4-2021	$ 25	$ -	$ 87	$ 15	$ 102	$0	($5.7)	$7.5	($2)	-
Q1-2022	$ 25	$ -	$ 81	$ 23	$ 104	$0	($5.5)	$7.5	($2)	-
Q2-2022	$ 25	$ -	$ 76	$ 30	$ 106	$0	($5.2)	$7.5	($2)	-
Q3-2022	$ 25	$ -	$ 71	$ 38	$ 109	$0	($5.0)	$7.5	($3)	-
Q4-2022	$ 25	$ -	$ 66	$ 45	$ 111	$0	($4.7)	$7.5	($3)	-
Q1-2023	$ 25	$ -	$ 62	$ 53	$ 114	$0	($4.4)	$7.5	($3)	-
Q2-2023	$ 25	$ -	$ 58	$ 60	$ 118	$0	($4.2)	$7.5	($3)	-
Q3-2023	$ 25	$ -	$ 54	$ 68	$ 121	$0	($3.9)	$7.5	($4)	-
Q4-2023	$ 25	$ -	$ 50	$ 75	$ 125	$0	($3.6)	$7.5	($4)	-
Q1-2024	$ 25	$ -	$ 52	$ 77	$ 129	$0	$1.7	$2.5	($4)	-
Q2-2024	$ 25	$ -	$ 54	$ 80	$ 134	$0	$1.7	$2.6	($4)	-
Q3-2024	$ 25	$ -	$ 55	$ 83	$ 138	$0	$1.8	$2.7	($4)	-
Q4-2024	$ 25	$ -	$ 57	$ 85	$ 143	$0	$1.8	$2.8	($5)	-
Q1-2025	$ 25	$ -	$ 59	$ 88	$ 147	$0	$1.9	$2.8	($5)	-
Q2-2025	$ 25	$ -	$ 61	$ 91	$ 152	$0	$2.0	$2.9	($5)	-
Q3-2025	$ 25	$ -	$ 63	$ 94	$ 157	$0	$2.0	$3.0	($5)	-
Q4-2025	$ 25	$ -	$ 65	$ 97	$ 163	$0	$2.1	$3.1	($5)	-
Q1-2026	$ 25	$ -	$ 67	$ 101	$ 168	$0	$2.2	$3.2	($5)	-
Q2-2026	$ 25	$ -	$ 70	$ 104	$ 174	$0	$2.2	$3.3	($6)	-
Q3-2026	$ 25	$ -	$ 72	$ 107	$ 179	$0	$2.3	$3.5	($6)	-
Q4-2026	$ 25	$ -	$ 74	$ 111	$ 185	$0	$2.4	$3.6	($6)	-

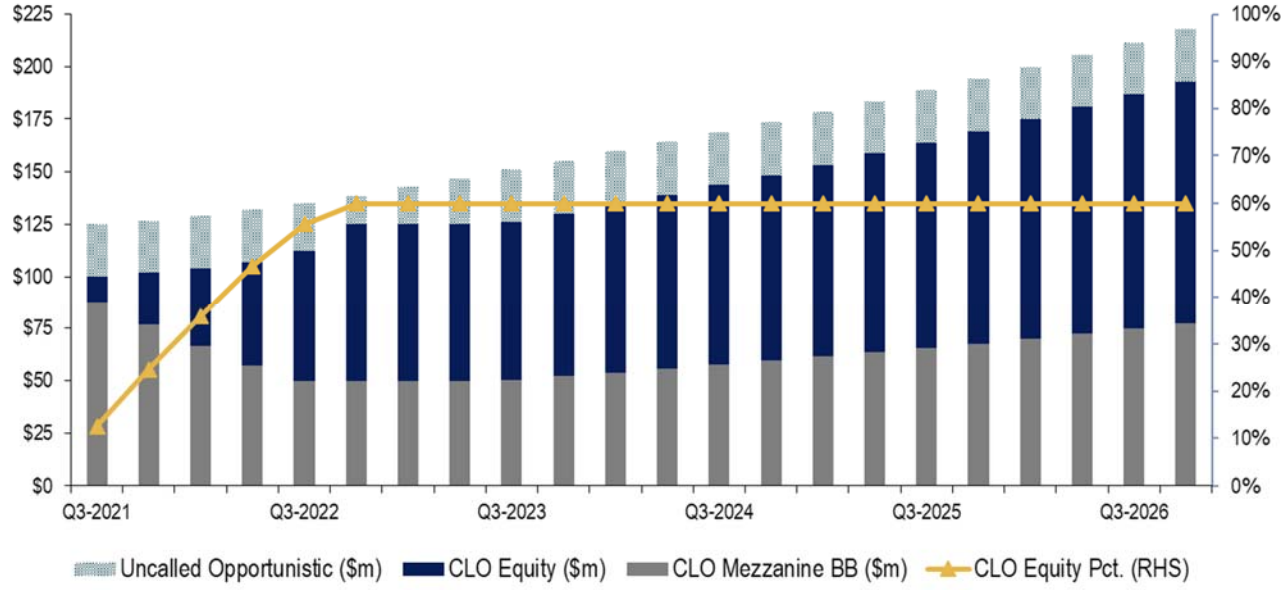
Source: Neuberger Berman

Base Case Allocations and Deployment Assumptions Continued

Net Carry	Ann Dist Rate on Invested	Mgmt Fee ($m)	Eff. Mgmt Fee (bps)	Invested Allocation	
				CLO BB	CLO Equity
$0.84	3.3%	$0.08	34bps	93%	8%
$1.76	6.9%	$0.08	33bps	85%	15%
$2.01	7.7%	$0.08	30bps	78%	22%
$2.26	8.5%	$0.07	27bps	72%	28%
$2.52	9.3%	$0.06	24bps	65%	35%
$2.78	10.0%	$0.06	21bps	60%	40%
$3.05	10.7%	$0.05	18bps	54%	46%
$3.32	11.3%	$0.05	16bps	49%	51%
$3.60	11.9%	$0.04	13bps	44%	56%
$3.88	12.4%	$0.04	12bps	40%	60%
$4.16	12.9%	$0.03	10bps	40%	60%
$4.30	12.9%	$0.03	10bps	40%	60%
$4.44	12.9%	$0.04	10bps	40%	60%
$4.58	12.9%	$0.04	11bps	40%	60%
$4.74	12.9%	$0.04	11bps	40%	60%
$4.89	12.8%	$0.04	11bps	40%	60%
$5.05	12.8%	$0.05	11bps	40%	60%
$5.22	12.8%	$0.05	12bps	40%	60%
$5.39	12.8%	$0.05	12bps	40%	60%
$5.57	12.8%	$0.05	12bps	40%	60%
$5.75	12.8%	$0.06	12bps	40%	60%
$5.94	12.8%	$0.06	13bps	40%	60%

Source: Neuberger Berman

Faster Capital Deployment Timeline Assumptions



Source: Neuberger Berman

Faster Capital Deployment Allocations and Deployment Assumptions

	Balances ($mm)					Activity ($mm)				
	Uncalled Opportunstic Capital	Called Opportunstic Capital	CLO BB	CLO Equity	Invested Capital	Opportunstic Capital	CLO BB	CLO Equity	Carry Used	Net Activity
Q3-2021	$ 25.0	$ -	$ 87.5	$ 12.5	$ 100	$25	$87.5	$12.5	($1)	$125
Q4-2021	$ 25.0	$ -	$ 76.9	$ 25.0	$ 102	$0	($10.6)	$12.5	($2)	-
Q1-2022	$ 25.0	$ -	$ 66.7	$ 37.5	$ 104	$0	($10.2)	$12.5	($2)	-
Q2-2022	$ 25.0	$ -	$ 56.9	$ 50.0	$ 107	$0	($9.8)	$12.5	($3)	-
Q3-2022	$ 22.6	$ 2.4	$ 50.0	$ 62.5	$ 113	($2)	($6.9)	$12.5	($3)	-
Q4-2022	$ 13.7	$ 11.3	$ 50.0	$ 75.0	$ 125	($9)	$0.0	$12.5	($4)	-
Q1-2023	$ 17.8	$ 7.2	$ 50.0	$ 75.0	$ 125	$4	$0.0	$0.0	($4)	-
Q2-2023	$ 22.0	$ 3.0	$ 50.0	$ 75.0	$ 125	$4	$0.0	$0.0	($4)	-
Q3-2023	$ 25.0	$ -	$ 50.5	$ 75.7	$ 126	$3	$0.5	$0.7	($4)	-
Q4-2023	$ 25.0	$ -	$ 52.1	$ 78.2	$ 130	$0	$1.7	$2.5	($4)	-
Q1-2024	$ 25.0	$ -	$ 53.9	$ 80.8	$ 135	$0	$1.7	$2.6	($4)	-
Q2-2024	$ 25.0	$ -	$ 55.7	$ 83.5	$ 139	$0	$1.8	$2.7	($4)	-
Q3-2024	$ 25.0	$ -	$ 57.5	$ 86.3	$ 144	$0	$1.8	$2.8	($5)	-
Q4-2024	$ 25.0	$ -	$ 59.4	$ 89.1	$ 149	$0	$1.9	$2.9	($5)	-
Q1-2025	$ 25.0	$ -	$ 61.4	$ 92.1	$ 153	$0	$2.0	$3.0	($5)	-
Q2-2025	$ 25.0	$ -	$ 63.4	$ 95.1	$ 159	$0	$2.0	$3.1	($5)	-
Q3-2025	$ 25.0	$ -	$ 65.5	$ 98.3	$ 164	$0	$2.1	$3.2	($5)	-
Q4-2025	$ 25.0	$ -	$ 67.7	$ 101.6	$ 169	$0	$2.2	$3.3	($5)	-
Q1-2026	$ 25.0	$ -	$ 70.0	$ 104.9	$ 175	$0	$2.2	$3.4	($6)	-
Q2-2026	$ 25.0	$ -	$ 72.3	$ 108.4	$ 181	$0	$2.3	$3.5	($6)	-
Q3-2026	$ 25.0	$ -	$ 74.7	$ 112.0	$ 187	$0	$2.4	$3.6	($6)	-
Q4-2026	$ 25.0	$ -	$ 77.1	$ 115.7	$ 193	$0	$2.5	$3.7	($6)	-

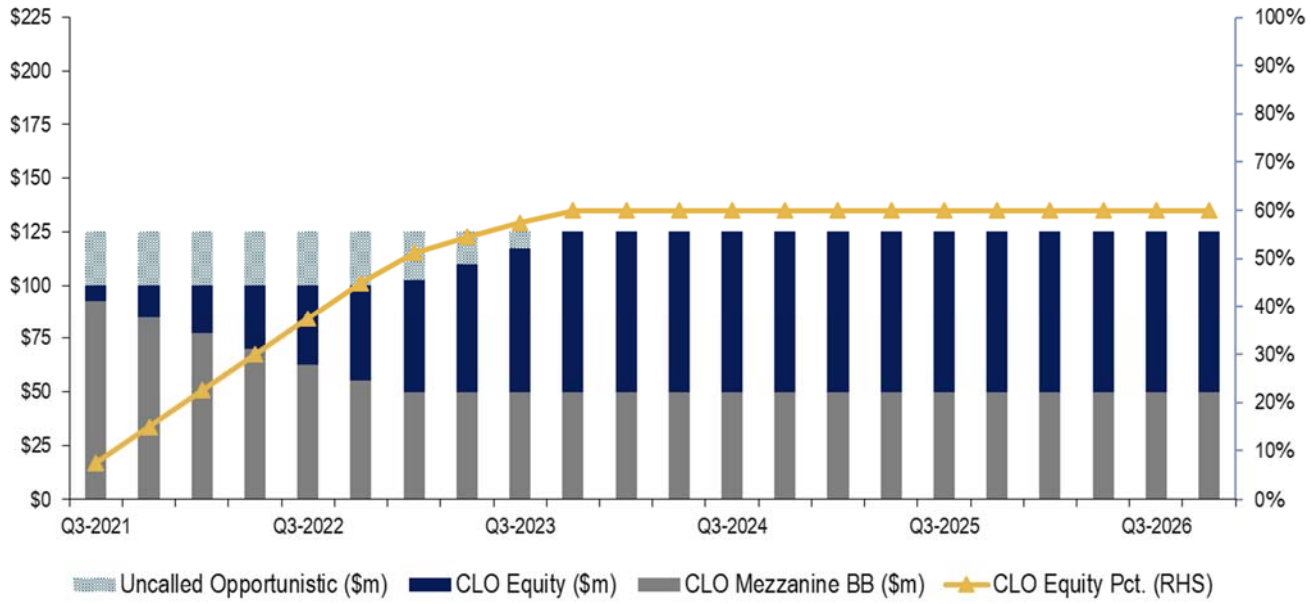
Source: Neuberger Berman

Faster Capital Deployment Allocations and Deployment Assumptions Continued

Net Carry	Ann Dist Rate on Invested	Mgmt Fee ($m)	Eff. Mgmt Fee (bps)	Invested Allocation	
				CLO BB	CLO Equity
$0.91	3.7%	$0.08	31bps	88%	13%
$1.91	7.5%	$0.08	31bps	75%	25%
$2.31	8.9%	$0.06	25bps	64%	36%
$2.72	10.2%	$0.05	20bps	53%	47%
$3.14	11.1%	$0.04	14bps	44%	56%
$3.59	11.5%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.2%	$0.03	10bps	40%	60%
$4.19	12.9%	$0.03	10bps	40%	60%
$4.33	12.9%	$0.03	10bps	40%	60%
$4.47	12.9%	$0.04	10bps	40%	60%
$4.62	12.9%	$0.04	11bps	40%	60%
$4.78	12.9%	$0.04	11bps	40%	60%
$4.93	12.9%	$0.04	11bps	40%	60%
$5.10	12.9%	$0.05	11bps	40%	60%
$5.26	12.9%	$0.05	12bps	40%	60%
$5.44	12.8%	$0.05	12bps	40%	60%
$5.62	12.8%	$0.05	12bps	40%	60%
$5.80	12.8%	$0.06	12bps	40%	60%
$5.99	12.8%	$0.06	13bps	40%	60%
$6.19	12.8%	$0.06	13bps	40%	60%

Source: Neuberger Berman

No Reinvestment Deployment Timeline Assumptions



Source: Neuberger Berman

No Reinvestment Deployment Allocations and Deployment Assumptions

	Balances ($mm)					Activity ($mm)				
	Uncalled Opportunstic Capital	Called Opportunstic Capital	CLO BB	CLO Equity	Invested Capital	Opportunstic Capital	CLO BB	CLO Equity	Carry Used	Net Activity
Q3-2021	$ 25	$ -	$ 93	$ 8	$ 100	$25	$92.5	$7.5	$0	$125
Q4-2021	$ 25	$ -	$ 85	$ 15	$ 100	$0.0	($7.5)	$7.5	$0	-
Q1-2022	$ 25	$ -	$ 78	$ 23	$ 100	$0.0	($7.5)	$7.5	$0	-
Q2-2022	$ 25	$ -	$ 70	$ 30	$ 100	$0.0	($7.5)	$7.5	$0	-
Q3-2022	$ 25	$ -	$ 63	$ 38	$ 100	$0.0	($7.5)	$7.5	$0	-
Q4-2022	$ 25	$ -	$ 55	$ 45	$ 100	$0.0	($7.5)	$7.5	$0	-
Q1-2023	$ 23	$ 3	$ 50	$ 53	$ 103	($2.5)	($5.0)	$7.5	$0	-
Q2-2023	$ 15	$ 10	$ 50	$ 60	$ 110	($7.5)	$0.0	$7.5	$0	-
Q3-2023	$ 8	$ 18	$ 50	$ 68	$ 118	($7.5)	$0.0	$7.5	$0	-
Q4-2023	$ -	$ 25	$ 50	$ 75	$ 125	($7.5)	$0.0	$7.5	$0	-
Q1-2024	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q2-2024	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q3-2024	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q4-2024	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q1-2025	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q2-2025	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q3-2025	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q4-2025	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q1-2026	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q2-2026	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q3-2026	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-
Q4-2026	$ -	$ 25	$ 50	$ 75	$ 125	$0.0	$0.0	$0.0	$0	-

Source: Neuberger Berman

No Reinvestment Deployment Allocations and Deployment Assumptions

Net Carry	**Ann Dist Rate on Invested**	**Mgmt Fee ($m)**	**Eff. Mgmt Fee (bps)**	**Invested Allocation**	
				CLO BB	CLO Equity
$0.84	3.3%	$0.08	34bps	93%	8%
$1.76	7.0%	$0.08	34bps	85%	15%
$1.98	7.9%	$0.08	30bps	78%	23%
$2.21	8.8%	$0.07	26bps	70%	30%
$2.43	9.7%	$0.06	23bps	63%	38%
$2.66	10.6%	$0.05	19bps	55%	45%
$2.88	11.2%	$0.04	15bps	49%	51%
$3.14	11.4%	$0.03	11bps	45%	55%
$3.48	11.9%	$0.03	11bps	43%	57%
$3.82	12.2%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%
$4.16	13.3%	$0.03	10bps	40%	60%

Source: Neuberger Berman

Glossary of CLO Terminology

CLO:	A collateralized loan obligation is a special purpose vehicle with securitized payments being made to different levels or tranches. The underlying assets are commercial loans made by banks who are seeking to remove them from their balance sheets. A CLO manager can add value by actively trading the underlying loan portfolio during the reinvestment period.
CLO 1.0:	CLOs that were issued before the credit crisis, pre-2008. General characteristics as compared to CLO 2.0 include: a greater number of underlying loans (200-300), looser collateral eligibility requirements (up to 10%) allocated to non-senior secured loans, longer reinvestment period (5-7 years), a longer non-call period (3-5 years) and less restrictive indentures.
CLO 2.0:	Post credit crisis issued CLOs. General characteristics as compared to CLO 1.0 include: fewer underlying loans (100-150), tighter collateral eligibility requirements (5%) allocated to non-senior secured loans, shorter reinvestment period (2-4 years), a shorter non-call period (~2 years) and more restrictive indentures.
Warehouse Period:	A large bank will warehouse (provide financing) for the CLO to purchase a portfolio of leveraged loans before the CLO manager issues notes to investors at the CLO closing. The collateral (CLO) manager must balance its own loan preferences with those of the warehousing bank and the equity investors. During this process with the majority equity investor will negotiate the terms of the CLO indentures.
Ramp-Up Period:	During this time, additional proceeds from the CLO issuance are used to further construct the portfolio. This will generally take several months to complete.
Reinvestment Period:	During this multi-year period, the CLO manager will reinvest principal proceeds from maturing loans to purchase additional later dated loans. These loans must conform to the CLO transaction documents. The CLO manager will purchase new loans to extend the performing investment time period, maintain the portfolio's credit quality and to combat a changing rate environment.
Amortization Period:	During the amortization period, the CLO manager will cease investing in new loans while the cash and other proceeds from the loan portfolio are used to retire the outstanding notes.
Waterfall Structure:	A payment structure where higher-tiered (senior) creditors receive interest and principal payments, while the lower tier creditors receive only interest payments. As the higher-tiered creditors are paid in full (interest and principal), the next tier receives payments.
Senior Tranche:	The senior tranche has the first claim to cash flows in the CLO structure. These tranches are rated AAA or AA by independent rating agencies. They are protected from credit losses by the junior tranches and have yields lower than the underlying collateral loans.
Mezzanine Tranche:	The mezzanine or junior tranche is rated below high grade, but has a higher claim to cash flows than the equity. The mezzanine tranche can be considered a leveraged investment on the underlying CLO loans. Due to the subornation of the mezzanine claims, they will pay higher coupons to compensate for higher risk.
Equity Tranche:	Is the junior most claim in the CLO structure, often referred to as the subordinated note or CLO Equity. The equity share class will receive all excess cash flows after the more senior tranches are paid. As long as the cost of issuing debt (senior & mezzanine tranches) is less than the yield on the portfolio of loans, excess cash will flow through to the CLO equity tranche.
Mark-to-Market:	The practice of valuing an asset/portfolio based on current market value of like assets, rather than book value.
Mark-to-Model:	The practice of valuing an asset/portfolio based on financial models. This method is used for hard to value level III assets and is subject to appropriate inputs, such as liquidity assumptions.
Interest Diversion Test:	Measures the collateral's ability to support each class of CLO notes. If the test is triggered, interest payments to junior tranches are suspended and used to purchase additional collateral.
Overcollateralization Test:	(OC Test) Measures the adequacy of collateral supporting each class of notes. The test is expressed as the ratio of principal collateral value over outstanding liabilities. The subordinated tranches have lower OC thresholds than the senior tranches. If the OC test fails, interest and principal cash flows are diverted from the junior classes to pay down liabilities starting with the senior most tranches. In effect, this deleverages the entire portfolio.
Interest Coverage Test:	(IC Test) Measures the underlying collateral's interest income ability to cover scheduled interest payments to the note holders. Each class of notes has its own IC test. If the IC test fails, interest and principal payments to more junior classes are suspended to pay down the liabilities of the more senior notes until the deal can once again pass the test.
Turbo Trigger:	A provision (not common) where interest cash flows are used to accelerate the repayment of subordinated (more expensive) notes. The implementation of the Turbo Trigger is dependent on all coverage tests being met and minimum IRRs on the equity tranche being realized. The Turbo

	Trigger effectively deleverages the structure, reduces the rated notes subordination and reduces the cost of financing.
Par Preservation:	Will generally trip before the OC trigger or is based on the OC trigger. Equity cash flows are diverted and used to purchase additional capital. This increases leverage, extends the equity maturity and impairs the manager's ability to game OC tests.
Event of Default:	Occurs when the OC test falls below the second threshold. At this point, the reinvestment period is terminated and all cash flows are used to retire liabilities in order of seniority.
Collateral Quality Test:	Comprised of tests to ensure that the collateral quality meets the indenture guidelines. Common parameters includes weighted average rating factor, diversity scores, weighted average life of collateral and weighted average spread.
BWIC:	Bid/Buyer Wanted in Competition is a process where debt and equity tranches of the CLO are offered to a number of dealers, the one who bids the highest will receive the chance to purchase the part or all of the security issue.
WAS:	Weighted Average Spread is the average rate that the CLO has to pay for financing (coupons/yield) to the CLO investors. It is a proportional cost of financing across all of the CLO debt tranches.
WARF:	Weighted Average Rating Factor is used by the credit rating agencies to determine the credit quality of the overall CLO portfolio and specific tranches. The rating agencies will first determine the rating factor for each underlying loan and then a proportional weighted average of the underlying loan rating factors is calculated.
Primary Issuance:	Managers who invest in new issue CLOs.
Secondary Issuance:	Managers who invest in stakes of CLOs sold on the secondary market.
Active Investment:	Managers who take a majority/control stake in CLOs so they can have the ability to call the deal.

Disclaimers and Disclosures

- Past performance is no guarantee of future results.
- The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
- Information on market indices was provided by sources external to NEPC, and other data used to prepare this report was obtained directly from the investment manager(s). While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
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In addition, it is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds, real estate and private equity:

1. Performance can be volatile and investors could lose all or a substantial portion of their investment
2. Leverage and other speculative practices may increase the risk of loss
3. Past performance may be revised due to the revaluation of investments
4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms
5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value
6. These funds are not subject to the same regulatory requirements as registered investment vehicles
7. Managers may not be required to provide periodic pricing or valuation information to investors
8. These funds may have complex tax structures and delays in distributing important tax information
9. These funds often charge high fees
10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy