

Presale:

# Madison Park Funding LX Ltd./Madison Park Funding LX LLC

December 6, 2022

## Preliminary Ratings

Class	Preliminary rating	Balance (mil. \$)	Overcollateralization (%)	Subordination (%)	Par subordination (%)	Interest rate (%)
A-1	NR	315.00	156.25	34.30	36.00	Three-month term SOFR + 2.20
A-2	NR	5.00	156.25	34.30	36.00	5.7677
B	AA (sf)	51.50	134.59	23.72	25.70	Three-month term SOFR + 3.00
C (deferrable)	A (sf)	29.75	124.61	17.62	19.75	Three-month term SOFR + 3.75
D (deferrable)	BBB- (sf)	29.50	116.08	11.56	13.85	Three-month term SOFR + 5.50
E (deferrable)	BB- (sf)	17.00	111.67	8.07	10.45	Three-month term SOFR + 8.95
Subordinated notes	NR	39.30	N/A	N/A	N/A	Residual

Note: This presale report is based on information as of Dec. 6, 2022. The ratings shown are preliminary. This report does not constitute a recommendation to buy, hold, or sell securities. Subsequent information may result in the assignment of final ratings that differ from the preliminary ratings. NR--Not rated. N/A--Not applicable.

## Executive Summary

Madison Park Funding LX Ltd. is a \$487.05 million broadly syndicated CLO managed by Credit Suisse Asset Management LLC. This is Credit Suisse Asset Management LLC's sixth U.S. CLO in 2022, which will bring its total US CLO assets under management (AUM) to \$30.1 billion.

Based on provisions in the transaction documents and the portfolio characteristics:

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## Presale: Madison Park Funding LX Ltd./Madison Park Funding LX LLC

- The transaction will be collateralized by at least 90.0% senior secured loans, cash, and eligible investments, with a minimum of 80% of the loan borrowers required to be based in the U.S..
- A maximum of 60.0% of the loans in the collateral pool can be covenant-lite.
- Of the identified underlying collateral obligations, 99.54% have credit ratings (which may include confidential ratings, private ratings, and credit estimates) assigned by S&P Global Ratings.
- Of the identified underlying collateral obligations, 93.63% have recovery ratings (which may include confidential and private ratings) assigned by S&P Global Ratings.

All or some of the notes issued by this CLO transaction contain stated interest at SOFR plus a fixed margin. At this time, the vast majority of the corporate loans are still paying a margin over LIBOR. They are expected to transition to a new rate by June 2023 when LIBOR settings will no longer be published. We will continue to monitor reference rate reform and take into account changes specific to this transaction and its underlying assets when appropriate.

## Key Credit Metrics

### Selected Credit Metrics

	Madison Park Funding LX Ltd.	Three-month average(i)
Total leverage (x)(ii)	11.39	9.65
Subordination ('AAA'/'BBB') (%)	N/A/11.56	38.36/13.15
WA cost of debt (%) (iii)	2.86	2.85
Portfolio WAS (excluding floors)(%)	3.67	3.60
Portfolio WAS (excluding floors) (%) with SOFR credit spread adjustment of 10 bps(iv)	3.74	N/A
SDR ('AAA'/'BBB') (%)	62.10/42.90	60.94/42.16
WA portfolio recovery ('AAA'/'BBB') (%)	40.28/62.14	41.82/63.47

(i)The three-month average comprises S&P Global Ratings-rated deals for the three months ended Oct. 31, 2022. (ii)Total debt to equity (excluding any class X notes, if applicable). (iii)Spread over SOFR for all classes, excluding the subordinated notes and, if applicable, any class X notes (if there is a fixed-rate tranche, SOFR is subtracted from the fixed coupon in the calculation). (iv)Incorporates a 10 bps credit spread adjustment to the LIBOR based assets. WA--Weighted average. WAS--Weighted average spread. SDR--Scenario default rate. Bps--basis points.

## Deal comparison

Compared to other broadly syndicated CLOs that we assigned preliminary ratings to in the three months ended Oct. 31, 2022, Madison Park Funding LX Ltd. has:

- A higher total leverage and a lower subordination at BBB.
- A similar weighted average cost of debt.
- A higher weighted average spread, which show a stronger underlying portfolio from a cash flow perspective.
- A higher scenario default rate (SDR) and a lower weighted average recovery rate, which show a weaker underlying portfolio from a credit perspective.

## Transaction Timeline/Participants

### Transaction Timeline

Expected closing date	Dec. 29, 2022.
Effective date	To be determined.
Non-call period end date	Oct. 25, 2024.
Reinvestment period end date	Oct. 25, 2027.
Stated maturity date	Oct. 25, 2035.
Note payment frequency	Quarterly, beginning July 25, 2023.

### Participants

Collateral manager	Credit Suisse Asset Management LLC.
Placement agent	Nomura Securities International Inc.
Trustee	Deutsche Bank Trust Co. Americas.

## Rationale

The preliminary ratings assigned to Madison Park Funding LX Ltd./Madison Park Funding LX LLC's floating rate-rate notes reflect our assessment of:

- The diversification of the collateral pool, which consists primarily of broadly syndicated speculative-grade (rated 'BB+' and lower) senior secured term loans.
- The credit enhancement provided through subordination, excess spread, and overcollateralization.
- The experience of the collateral manager's team, which can affect the performance of the rated notes through portfolio identification and ongoing management.
- The transaction's legal structure, which is expected to be bankruptcy remote.

We may choose to make qualitative adjustments to our analysis when rating CLO tranches to reflect the likelihood that changes to the credit profile of the underlying assets may affect a portfolio's credit quality in the near term. This is consistent with paragraph 15 of our criteria for analyzing CLOs (see "Global Methodology And Assumptions For CLOs And Corporate CDOs," published June 21, 2019). To do this, we may review the likelihood of near-term changes to the portfolio's credit profile by evaluating the transaction's specific risk factors. Based on our review of these factors, we believe there is adequate cushion between this CLO tranches' break-even default rates (BDRs) and scenario default rates (SDRs) to address the possibility of near-term changes to the portfolio's credit quality.

## Environmental, Social, And Governance (ESG) Factors

Our rating analysis considers a transaction's potential exposure to ESG credit factors. We regard this transaction's exposure as being broadly in line with our benchmark for the sector (see "ESG Industry Report Card: Collateralized Loan Obligations," published March 31, 2021). For CLOs, we view the credit impact of their exposure to environmental credit factors as below average, to social credit factors as below average, and to governance credit factors as average, primarily due to the diversity of the assets within the typical CLO collateral pool.

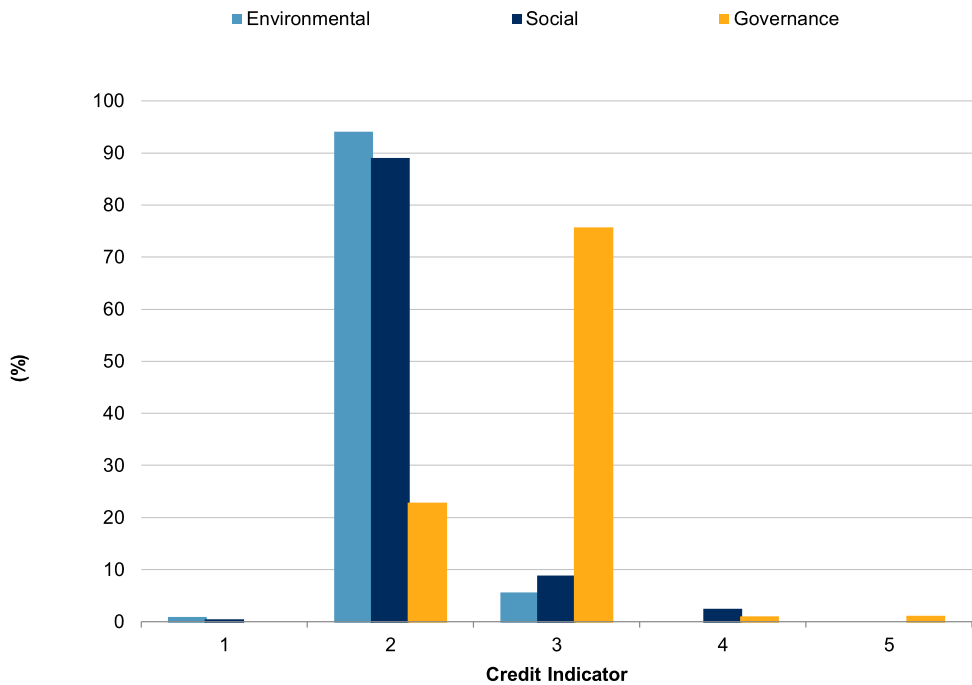
The transaction documents, based on the manager's interpretation of the relevant provisions, prohibit assets related to all or a portion of the following industries:

- Thermal coal, coal mining,
- Controversial weapon production or trading;
- Pesticides and ozone depleting substances;
- Adult entertainment;
- Tobacco; and
- Endangered wildlife trading.

Since we view the credit impact of ESG factors for this transaction as being in line with our ESG benchmark for the sector, we made no specific adjustments in our rating analysis to account for any ESG-related credit risks or opportunities.

ESG Chart

Underlying ESG Credit Indicator Distribution



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ESG Table

Corporate ESG Credit Indicator Distribution			
	Matched rate(i): 87.99%		
	Environmental	Social	Governance
Weighted average	2.05	2.13	2.80

## ESG Table (cont.)

## Corporate ESG Credit Indicator Distribution

	Matched rate(i): 87.99%		
	Environmental	Social	Governance
Credit indicators (%)			
1	0.71	0.27	0.00
2	93.89	88.85	22.66
3	5.40	8.64	75.56
4	0.00	2.24	0.79
5	0.00	0.00	0.99

(i) The notional amount of obligors with ESG indicators divided by the total notional identified amount.

## Rating Considerations

In our analysis, we considered the factors in table 1, among others.

Table 1

## Rating Considerations

Risk	Risk description	Mitigating factors
LIBOR to SOFR transition basis risk	Basis risk occurs when the base rate index of the assets does not match the base rate index of the liabilities. Similar to unhedged interest rate exposures, if the basis risk is prolonged, basis risk can generally leave a transaction exposed to interest rate fluctuations. Given the adoption of SOFR as the benchmark index on the liabilities, the transaction is currently exposed to basis risk, as a large portion of the underlying assets are currently paying off LIBOR, and it is expected that this exposure will remain unhedged.	We typically consider basis risk in our cash flow analysis by analyzing historical asset yields relative to liability yields. We also take into account transaction features that mitigate basis risk while acknowledging the magnitude of any potential exposure. After analyzing the historical performance of LIBOR against SOFR, our cash flow analysis generally assumes a conservative data-driven positive credit spread adjustment (CSA) of 10 bps on each of the underlying assets that are paying off a LIBOR based index. In addition, in line with paragraph 16 of Criteria Structured Finance CDOs: Global Methodology And Assumptions For CLOs And Corporate CDOs/our methodology, we tested the sensitivity of the transaction to evaluate the volatility, if any, of the transactions assigned ratings to that parameter, and noted that the resulting runs were within our credit stability guidelines, and more specifically within one notch. Taking a forward-looking view of the credit quality of the portfolio, it is expected that newly issued floating rate corporate loans will generally accrue interest on a non-LIBOR based index (which in most instances is expected to match the benchmark of the liabilities). In addition, through refinancing, re-pricing and/or amendment of the existing LIBOR-based loan agreements to other non-LIBOR based indices, the transaction's basis risk is expected to be gradually reduced until LIBOR ceases publication in June 2023. Furthermore, we generally understand that the I/C test, which generally compares the interest generated off of the underlying assets with that due on the outstanding liabilities, will serve as a mitigant to the interim basis risk during the aforementioned transition.

Table 1

**Rating Considerations (cont.)**

<b>Risk</b>	<b>Risk description</b>	<b>Mitigating factors</b>
Reduction in cash flow	Defaults, adverse interest rate movements, and low recoveries can reduce the cash flow generated by the underlying portfolio and affect the issuer's ability to meet its obligations in a timely manner.	S&P Global Ratings' quantitative analysis simulates various default patterns and interest rate movements under various stress scenarios, considering portfolio characteristics, payment mechanics, covenants, collateral quality tests, and excess spread.
Excess concentration in certain types of collateral obligations	The collateral manager's ability to invest in certain types of collateral is outlined in the indenture. Larger concentrations in certain obligations can introduce additional risks to the rated notes.	S&P Global Ratings' cash flow analysis generally assumes that the underlying portfolio contains the maximum allowable amount of certain types of collateral obligations to stress test the transaction for concentration risk. Examples include: 7.5% 'CCC+' or lower, 5.0% current pay, 7.5% fixed-rate, 0.0/5.0% fully deferrable/partially deferrable, and 1.0% long-dated obligations, as well as 7.5% assets paying less frequently than quarterly (but not less than semiannually). For current pay, long-dated, and 'CCC+' or lower obligations, we generally apply stresses when the exposure is greater than 10.0%, 5.0%, and 7.5%, respectively. For more details, see table 8.
Collateral manager trading performance	During the reinvestment period (and after the reinvestment period, subject to additional restrictions), the collateral manager can change the underlying portfolio's composition, thus exposing the transaction to potential deterioration in credit enhancement. The collateral manager can reinvest all proceeds received during the reinvestment period. For this particular transaction, the collateral manager can also continue to reinvest proceeds from credit risk sales or unscheduled prepayments after the reinvestment period.	The transaction documents require that any collateral obligation purchased will have equal or higher par value (or, with respect to proceeds from credit risk and defaulted obligations, that the obligation purchased with those sale proceeds will at least equal the related sale proceeds), or that the trade maintains or increases the transaction's O/C level. However, both during and after the reinvestment period, the principal collateral amount is not required to be maintained if the collateral manager has built sufficient excess par in the transaction so that the aggregate performing collateral balance is greater than or equal to the reinvestment target par balance of the portfolio after reinvestment. In addition, the indenture generally requires that each additional purchase satisfy, maintain, or improve concentration limits, coverage tests, and certain collateral quality tests. After the reinvestment period, in addition to some other requirements, the asset purchased must have the same or higher S&P Global Ratings' credit rating and the same or lower stated maturity than the asset being replaced or, as an alternative to either, the class scenario default rate must be maintained or improved and the O/C tests must be satisfied.
Divergence of the effective date portfolio from preliminary assumptions	Most underlying portfolios are not fully purchased by closing. Therefore, there is a risk that the fully ramped-up portfolio at the transaction's effective date will be materially different than the one presented to S&P Global Ratings for its preliminary analysis.	S&P Global Ratings offers collateral managers a formula-based version of its CDO Monitor at closing. This tool is intended to assist the collateral manager in maintaining a similar credit risk and cash flow profile to what was initially presented for our preliminary analysis.
Exposure to covenant-lite loans	The collateral manager can purchase covenant-lite loans (those that do not contain incurrence or maintenance covenants for the benefit of the lending party) for up to a certain percentage of the underlying portfolio (see table 8). Exposure to these types of loans may reduce the transaction's recovery prospects.	For covenant-lite loans that do not have an asset-specific recovery rating, we apply reduced recovery rates in our cash flow analysis (41.0% under a 'AAA' level of stress versus 50.0% for a senior secured first-lien loan that is not covenant-lite). In addition, the transaction documents mandate that any loan that is pari passu with a covenant-lite loan of the same obligor, or that contains a cross-default provision with the loan, will also use the reduced recovery rates regardless of whether these pari passu or cross-defaulted loans are counted as covenant-lite for the purposes of portfolio concentration limits.

Table 1

## Rating Considerations (cont.)

Risk	Risk description	Mitigating factors
Long-dated collateral obligations can introduce market value risk	A portfolio containing long-dated collateral obligations exposes a transaction to market value risk. To repay the noteholders at the transaction's maturity, the collateral manager will be forced to sell those obligations at the prevailing market price, which may be below par.	According to the transaction documents, the collateral manager can purchase up to 1% of long-dated collateral obligations and, generally, may not vote in favor of any waiver, modification, or amendment that would extend a collateral obligation's maturity beyond the notes' stated maturity. Any long-dated collateral obligations will receive a haircut in the O/C numerator. With the exception of credit amendments, the weighted average life test must generally be satisfied, if not satisfied, maintained or improved, following any maturity amendment.

O/C--Overcollateralization. BDR--Break-even default rate. SDR--Scenario default rate. WARR--Weighted average recovery rate. WAS--Weighted average spread. I/C--Interest coverage. Bps--Basis points. NRSROs--Nationally recognized statistical rating organizations.

## Collateral Manager

Credit Suisse Asset Management LLC currently manages 35 U.S. CLOs and has \$29.6 billion in total U.S. CLO AUM. Including non-CLO assets, Credit Suisse Asset Management LLC has \$59.9 billion in total AUM.

Analysis of past CLO 2.0 transactions (i.e., deals issued after the financial crisis) that are managed by Credit Suisse Asset Management LLC and its affiliates and rated by S&P Global Ratings reveals:

- An average overlap in collateral composition of 71.09%, which is higher than the average of 61.30% for all CLO 2.0 transactions rated by S&P Global Ratings.
- An average portfolio turnover rate of 15.42% over the past 12 months, which is lower than the average of 19.10% for all CLO 2.0 transactions rated by S&P Global Ratings.
- An industry concentration that favors software.
- That of the transactions that are still in the reinvestment period, 80.77% have a current par amount that is above the effective date target par.
- An average senior overcollateralization cushion of 10.20% at the transaction's closing date.

## Quantitative Analysis

In analyzing this transaction, S&P Global Ratings conducted a quantitative review consisting of two analyses: a portfolio analysis and a cash flow analysis.

## Understanding our portfolio and cash flow analyses

For the portfolio analysis, S&P Global Ratings ran the portfolio presented to us through the CDO Evaluator model, which defaults portions of the underlying collateral based on the default probability and correlation assumptions defined in S&P Global Ratings criteria. This resulted in a set of SDRs that represent expected default levels for the portfolio under the different stress scenarios associated with each rating level (see chart 1).

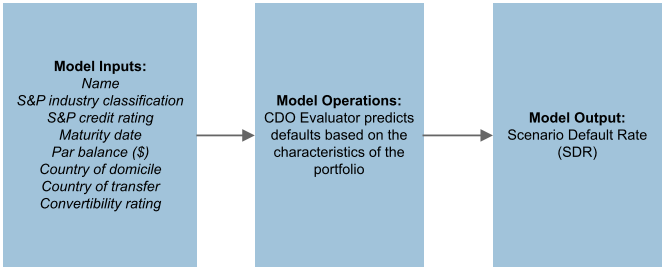
For example, the 'AAA' stress scenario assumes an extreme level of stress, one similar to what was experienced during the Great Depression, while the 'BBB' stress scenario assumes a high, but less severe, level of stress that is more akin to the 2008 recession. As a result, the portfolio will experience a higher level of defaults in the 'AAA' stress scenario than the 'BBB' stress scenario.

For the cash flow analysis, we input the transaction-specific structural features presented to us into the Standard & Poor's Cash Flow Evaluator model to generate a base case set of cash flows. These cash flows are then subjected to various default timing and interest rate stress scenarios to arrive at a BDR for each rated class of notes (see chart 2).

For each class, the BDR represents the maximum amount of defaults that it can withstand while still being able to pay timely interest and ultimate principal to its noteholders. Classes with higher subordination typically have higher BDRs.

Chart 1

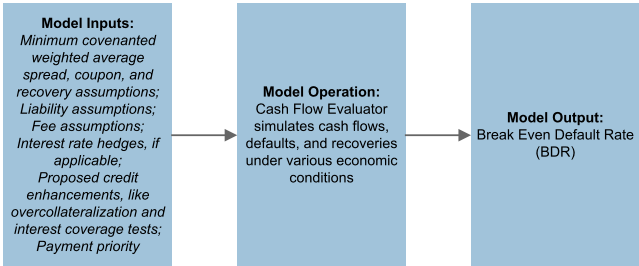
CDO Evaluator Model



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Chart 2

Standard & Poor's Cash Flow Evaluator



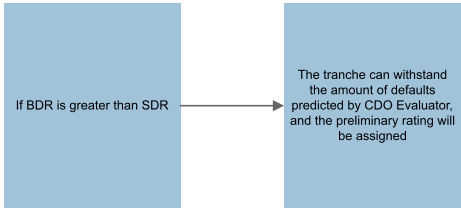
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Connecting the portfolio and cash flow analyses

For a tranche to achieve a particular rating, it must be able to withstand the level of defaults projected by the CDO Evaluator and still pay timely interest and principal (see chart 3).

Chart 3

Assignment Of Tranche Rating



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The results shown in table 2 indicate that the rated notes have sufficient credit enhancement to withstand our projected default levels. These results incorporate a 10 bps adjustment to the spread of the LIBOR based assets.



Table 2

## Credit Enhancement

Class	Preliminary rating	BDR (%)	SDR (%)	BDR cushion (%)
A-1	NR	N/A	N/A	N/A
A-2	NR	N/A	N/A	N/A
B	AA (sf)	58.46	54.30	4.16
C (deferrable)	A (sf)	51.18	48.47	2.71
D (deferrable)	BBB- (sf)	41.58	39.16	2.42
E (deferrable)	BB- (sf)	34.33	32.09	2.23

BDR--Break-even default rate. SDR--Scenario default rate.

## Supplemental tests

We also conduct a largest-industry default test and a largest-obligor default test according to "Global Methodology And Assumptions For CLOs And Corporate CDOs," published June 21, 2019. Under these assumptions, the notes can withstand the loss amounts indicated in table 3 at their preliminary rating levels.

Table 3

## Supplemental Tests

Class	Preliminary rating	Preliminary amount (mil. \$)	Largest-industry default test loss amount (mil. \$)	Largest-obligor default test loss amount (mil. \$)
A-1	NR	315.00	N/A	N/A
A-2	NR	5.00	N/A	N/A
B	AA (sf)	51.50	36.87	35.83
C (deferrable)	A (sf)	29.75	N/A	28.47
D (deferrable)	BBB- (sf)	29.50	N/A	19.93
E (deferrable)	BB- (sf)	17.00	N/A	15.65

N/A--Not applicable.

## Collateral Quality Tests

In addition to the quantitative framework, we produce and review collateral quality metrics to assess specific risks inherent in a transaction. Results for the collateral quality tests, based on the identified portfolio provided to us, are shown in table 4.

Table 4

### Collateral Quality Metrics--Performing Identified Collateral

Test	WA	Covenant	Margin
WA life (years)(i)	5.02	9.00	3.98
WAS (including floors) (%)	3.67	3.50	0.17
WAS (including floors) (%) with SOFR credit spread adjustment of 10 bps(ii)	3.74	N/A	N/A
WA fixed coupon (%) (iii)	N/A	6.50	N/A
WA rating	B	N/A	N/A

(i)The calculated value may include an adjustment to some asset maturity inputs if the resulting pool's weighted average maturity is less than the length of the reinvestment period. (ii)Incorporates a 10-bps credit spread adjustment to the LIBOR based assets. (iii)The calculated value does not give credit to excess spread, which may positively adjust the calculation when determining compliance with the covenant.

WA--Weighted average. WAS--Weighted average spread. N/A--Not applicable. Bps--Basis points.

## Portfolio Characteristics

Metrics based on the portfolio presented to S&P Global Ratings and the level of ramp-up completion are shown in tables 5A and 5B.

Table 5A

### Target Collateral Obligations

Target par balance (mil. \$)	500.00
Par balance of identified collateral (mil. \$)	430.13
Par balance of collateral not yet identified (mil. \$)	69.87
S&P Global Ratings' ratings and confidential indications (%) of identified collateral)(i)	99.54

(i)May include confidential ratings, private ratings, and credit estimates.

Table 5B

### Identified Collateral Obligations (Obligors)

No. of obligors	216
Avg. obligor holding (%)	0.46
Largest-obligor holding (%)	1.45
Smallest-obligor holding (%)	0.06

In the portfolio data referenced for this analysis, the issuer identified approximately 86.03% of the portfolio's collateral. As the portfolio composition changes, the information and results presented in tables 6 and 7 and charts 4-7 are also likely to change.

## Obligor concentration

Table 6 shows the top five obligor holdings of the underlying portfolio presented to S&P Global Ratings as of the date of this publication.

Table 6

## Top Five Obligor Holdings

Obligor reference	Industry	Security type	S&P Global Ratings' credit rating	S&P Global Ratings' implied rating	CreditWatch/Outlook	Notional amount (mil. \$)		Notional amount (%)	
						Obligor	Cumulative	Obligor	Cumulative
1	Health care providers and services	Senior secured	B+	No	Stable	6.22	6.22	1.45	1.45
2	Insurance	Senior secured	B	No	Stable	5.51	11.73	1.28	2.73
3	Aerospace and defense	Senior secured	B+	No	Stable	4.75	16.48	1.10	3.83
4	Media	Senior secured	BB-	No	Negative	4.50	20.98	1.05	4.88
5	Machinery	Senior secured	B+	No	Stable	4.50	25.48	1.05	5.92

N/A--Not applicable.

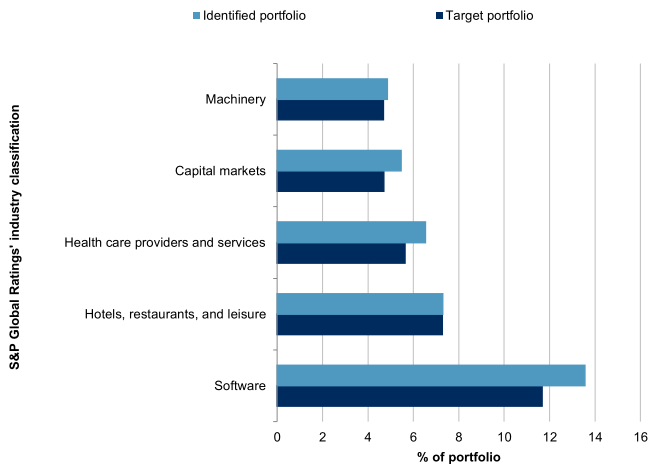
## Industry and ratings distribution

Chart 4 shows the top five industry distribution in the portfolio, and chart 5 shows the ratings distribution in the portfolio.

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Chart 4

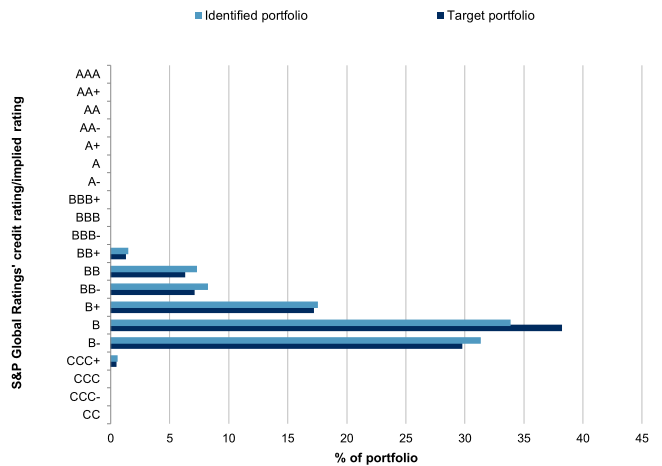
### Industry Distribution



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Chart 5

### Rating Distribution



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## Recovery rating and maturity distribution

Table 7 and chart 6 present a summary of identified portfolio S&P Global Ratings' loan recovery rates. Chart 7 shows the maturity distribution in the identified portfolio.

Table 7

### Performing Identified Collateral Modeled WARR

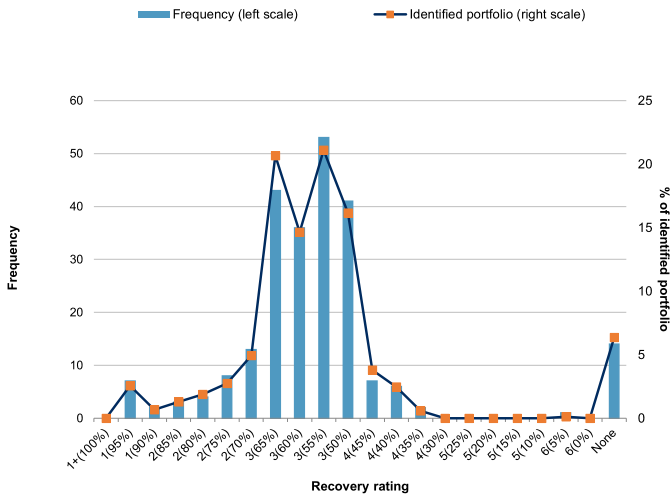
Liability rating category	WARR (%)	Min. covenanted WARR (%)
AAA (sf)	40.28	N/A
AA (sf)	49.82	49.34
A (sf)	55.64	55.11
BBB (sf)	62.14	61.65
BB (sf)	67.39	66.96

WARR--Weighted average recovery rate.

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Chart 6

### Recovery Rating Distribution

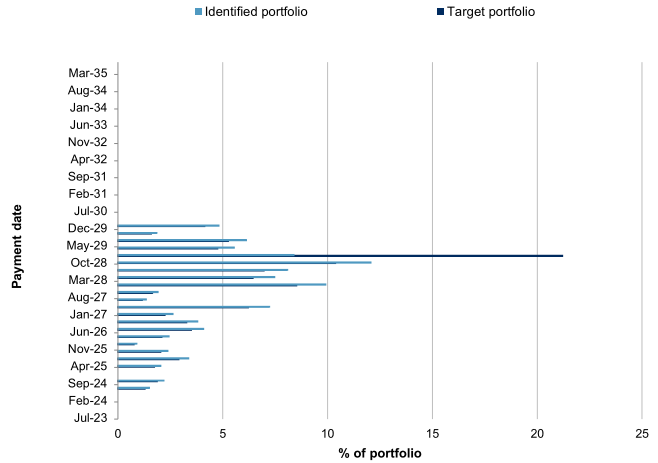


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Chart 7

### Maturity Distribution

Based on the legal final maturity date



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## Portfolio Investment Guidelines

The underlying portfolio will consist primarily of U.S. dollar-denominated senior secured loans to broadly syndicated corporate borrowers. The collateral portfolio's investment guidelines are expected to comply with the limitations shown in table 8.

Table 8

### Collateral Pool Guidelines

	Limit (%)
<b>Type of obligation</b>	
Other than senior secured loans, cash, and eligible investments	10.0
Covenant-lite loans(i)	60.0
Current pay obligations(ii)	5.0
Debtor-in-possession obligations	7.5
Deferrable obligations(ii)/partially deferrable	0.0/5.0
Delayed-drawdown and revolving obligations	10.0
Discount obligations	25.0
Fixed-rate obligations(ii)	7.5
Long-dated obligations(ii)	1.0
Obligations purchased at a price less than 60% of its principal balance/less than 50% of its principal balance	7.5/0.0
Obligations that pay interest less frequently than quarterly (but not less than semiannually)(ii)	7.5
Obligor and its affiliates: single/up to five each	2.0/2.5

Table 8

**Collateral Pool Guidelines (cont.)**

	Limit (%)
Participation interests	10.0
Second-lien and unsecured loans and permitted debt securities /Permitted Debt Security (i.e. bond)	10.0/5.0
S&P Global Ratings' industry classification: single/second largest (up to two each)/largest	10.0/13.0/15.0
S&P Global Ratings' credit rating of 'CCC+' or below(ii)	7.5
Structured finance obligations	0.0
<b>Location</b>	
Other than the U.S.	20.0
Emerging markets	0.0

(i)Covenant-lite loans are assigned lower recovery ratings than similar obligations that require continued compliance with covenants. (ii)S&P Global Ratings generally conducts its cash flow analysis assuming that the CLO holds the maximum amount of these types of obligations permitted under the transaction documents. For current pay, long-dated, and 'CCC+' or lower obligations, we generally apply stresses when the exposure is greater than 10.0%, 5.0%, and 7.5%, respectively. N/A--Not applicable.

**Risk of concentration in certain obligation types**

S&P Global Ratings considers larger concentrations in the types of obligations shown in table 9 to pose additional risk to the transaction. If the transaction can purchase those collateral obligations, our quantitative analysis would consider the risk associated with those types of obligations (see table 8 above for transaction-specific limitations).

Table 9

**Risks Of Obligation Types**

Obligation type	Risk specific to the obligation
Current pay obligations	S&P Global Ratings' criteria allow transactions to purchase current pay obligations as long as the collateral manager reasonably believes the obligor will remain current on all contractual payments (as well as other factors). Due to the increased risk associated with these obligations, they may be carried at the higher of its issue rating or 'CCC' in the portfolio analysis, which may increase the SDRs produced by the CDO Evaluator. In addition, any excess holding allowance above 10.0% is carried as defaulted in the cash-flow analysis, which will decrease the BDRs produced by the Cash Flow Evaluator.
Deferrable obligations	Obligations where interest payments may be deferred can result in a discrepancy in the timing of cash inflows and outflows. If this mismatch is significant, it may result in a shortfall in cash available to pay the rated noteholders. S&P Global Ratings conducts its cash flow analysis assuming that the transaction holds the maximum amount of deferrable obligations permitted. The timing differences will be captured in the BDRs generated by the Cash Flow Evaluator.
Fixed-rate obligations	Because interest payments for most of the rated notes are tied to a floating reference rate (initially, three-month SOFR), obligations in the underlying portfolio that pay a fixed rate create exposure to interest rate movements. Should market rates change significantly over the transaction's life, this may reduce excess spread. To account for that risk, S&P Global Ratings' cash flow analysis assumes the transaction holds the maximum amount of fixed-rate obligations permitted. The results are captured in the BDRs generated by the Cash Flow Evaluator.

Table 9

**Risks Of Obligation Types (cont.)**

Obligation type	Risk specific to the obligation
Long-dated obligations	Collateral obligations scheduled to mature after the transaction's stated maturity date introduce market value risk because the collateral manager must sell the obligations at the prevailing market price to pay the rated noteholders. To account for this risk, in the event that the allowable bucket exceeds 5.0% of the asset balance and absent any other risk mitigating factors, S&P Global Ratings' cash flow analysis haircuts the par amount of these obligations (10.0% per year after the transaction's stated maturity), which will lower the BDRs produced by the Cash Flow Evaluator. This stress may also be considered for long-dated assets that the transaction can hold after any maturity amendments.
Obligations that pay interest less frequently than quarterly	Because transactions typically require quarterly interest payments to be made to the noteholders, a portfolio consisting of collateral obligations that pay interest less frequently creates a discrepancy in the timing of cash inflows and outflows. If this mismatch is significant, it may result in a shortfall in cash available to pay the rated noteholders. S&P Global Ratings conducts its cash flow analysis assuming that the transaction holds the maximum amount of non-quarterly obligations permitted. The timing differences will be captured in the BDRs generated by the Cash Flow Evaluator.
S&P Global Ratings' rating of 'CCC+' or below	Transaction documents typically limit the amount of obligations rated 'CCC+' or below that the collateral manager can purchase. A higher concentration of obligations rated 'CCC+' or below will increase the SDRs produced by the CDO Evaluator.

SDR--Scenario default rate. BDR--Break-even default rate.

**Note Payment Considerations****Overcollateralization, interest coverage, and reinvestment overcollateralization tests**

The rated notes benefit from certain structural features that require sequential mandatory redemption upon a breach of any overcollateralization or interest coverage test. Additionally, during the reinvestment period, the rated notes benefit from the reinvestment of up to a certain amount of the excess interest proceeds captured upon breach of the transaction's reinvestment overcollateralization test (see table 10).

Table 10

**O/C, I/C, And Reinvestment O/C Tests**

Class	Actual O/C (%)	Min. O/C required (%)	Min. I/C required (%)
B	134.59	124.59	120.00
C	124.61	116.61	110.00
D	116.08	110.08	105.00
E	111.67	106.92	N/A
Reinvestment O/C(i)	111.67	107.67	N/A

(i) The reinvestment O/C test will be satisfied when the class E O/C test is equal to or higher than the specified level. O/C--Overcollateralization. I/C--Interest coverage. N/A--Not applicable.

## **Payment priorities**

Under the transaction documents, the collateral's interest and principal collections are payable according to separate payment priorities. On each payment date during and after the reinvestment period, unless an acceleration following an event of default occurs or on the stated maturity, the proceeds will be distributed in the priorities outlined in tables 11 and 12.



Table 11

### Interest Waterfall Payment Priority

Priority	Payment
1	Taxes and fees, and then administrative expenses (capped) then at the manager's discretion, deposit into the ongoing expense smoothening account (capped).
2	Base management fees then deferred base management fees(capped).
3	Deposit liquidity reserve amount into collection account then hedge payments, if applicable,).
4	Class A-1 and A-2 note interest, pro rata.
5	Class B note interest.
6	Class A/B coverage tests(i)(ii).
7	Class C note interest.
8	Class C coverage tests(i)(ii).
9	Class C note deferred interest.
10	Class D note interest.
11	Class D coverage tests(i)(ii).
12	Class D note deferred interest.
13	Class E note interest.
14	Class E coverage test(i)(ii).
15	Class E note deferred interest.
16	Reinvestment overcollateralization test (during the reinvestment period only). If it fails, use the lesser of 50% of the remaining interest proceeds or the amount needed to satisfy the test to purchase additional collateral obligations or pay according to note payment sequence(ii), at manager's election.
17	Subordinated management fees (uncapped) then deferred subordinated management fees (uncapped) then initial incentive management fees (uncapped).
18	Administrative expenses (uncapped) then hedge payments, if applicable, pro rata.
19	Deposit into supplemental reserve account, at manager's direction.
20	Specified contribution repayment amount to the contributor.
21	To the holders of the subordinated notes until incentive management threshold realized provided that if effective date ratings confirmation is not obtained, use the amount for the applications of proceeds in a special redemption or purchase collateral obligations (each to the extent necessary to obtain a rating agency confirmation), at manager's direction.
22	20% of remaining proceeds to the incentive management fee then deferred incentive management fees(capped).
23	Remaining proceeds to the holders of the subordinated notes.

(i)If it fails, pay according to the note payment sequence until each test is satisfied. (ii)Note payment sequence: Class A-1 and A-2 note interest, pro rata; then class A-1 and A-2 note principal, pro rata; then class B note interest; then class B note principal; then class C note interest and deferred interest; then class C note principal; then class D note interest and deferred interest; then class D note principal; then class E note interest and deferred interest; then class E note principal..

Table 12

### Principal Waterfall Payment Priority

Priority	Payment
1	To pay items 1-15 of the interest waterfall provided the payment of item 7 and 9 of the interest waterfall(iii) then item 10 and 12 of the interest waterfall(iii) then item 13 and 15 of the interest waterfall(iii).
2	If secured notes are to be redeemed on distribution date in connection with tax event, special redemption or optional redemption, pay according to note payment sequence(ii) or on any distribution date on or after secured notes are paid if subordinated notes are to be redeemed in connection with optional redemption the remaining proceeds will be distributed as per items 5-11 of principal waterfall.
3	During the reinvestment period, purchase additional collateral obligations or eligible investments and after the reinvestment period, purchase additional collateral obligations.
4	After the reinvestment period, pay according to note payment sequence.
5	Subordinated management fees.
6	Administrative expenses (uncapped).
7	Hedge payments, if applicable, pro rata.
8	Specified contribution repayment amount to the contributors.
9	To the holders of the subordinated notes until incentive management threshold realized.
10	20% of remaining proceeds to the incentive management fee then deferred incentive management fees(capped).
11	Remaining proceeds to the holders of the subordinated notes.

(i)If it fails, pay according to the note payment sequence until each test is satisfied. (ii)See table 11 footnotes for the note payment sequence. (iii)In each case, only to the extent that the relevant class is the controlling class.

## Application Of Standard & Poor's CDO Monitor/Compliance With Standard & Poor's CDO Monitor Test

Standard & Poor's CDO Monitor is a tool that collateral managers use during the reinvestment period to determine if a particular trade or series of trades increases the risk to the rated liabilities.

The CDO Monitor Test will be considered passing if the results indicate that the current portfolio produces an SDR that is equal to or below the transaction's BDR. There is no requirement that the CDO Monitor Test be considered after the reinvestment period, or when reinvesting proceeds from the sale of a credit risk or defaulted obligation or proceeds from an equity security.

For this transaction, the non-model version of CDO Monitor may be used as an alternative to the model-based approach. This version of CDO Monitor is built on the foundation of six portfolio benchmarks, which are used to provide insight into the characteristics that inform the way S&P Global Ratings assesses credit quality. These benchmarks are meant to enhance transparency for investors and other CLO market participants by allowing them to compare metrics across transactions and assess changes within a given CLO over time (for details, see "Standard & Poor's Introduces Non-Model Version Of CDO Monitor," published Dec. 8, 2014, and "S&P Global Ratings' Updated Assumptions For CDO Monitor Non-Model Version," published June 21, 2019).

Table 13 illustrates the benchmarks for Madison Park Funding LX Ltd. in the context of average values by vintage.

Table 13

### CDO Monitor Metrics

	Madison Park Funding LX, Ltd.	Trailing 12-month average	Difference	Typical values
S&P Global Ratings' weighted average rating factor(i)	2,722.09	2,904.52	(182.43)	2,500.00-3,000.00
Default rate dispersion(ii)	650.00	654.82	(4.82)	500.00-1,000.00
Obligor diversity measure(iii)	203.02	161.62	41.40	100.00-250.00
Industry diversity measure(iv)	24.49	20.77	3.72	12.00-22.00
Regional diversity measure(v)	1.17	1.18	(0.01)	1.00-1.30 for U.S. CLOs (higher for European CLOs)
Weighted average life (years)(vi)	5.02	4.84	0.18	4.00-7.00

(i)S&P Global Ratings' weighted average rating factor (SPWARF): The SPWARF is calculated by multiplying the par balance of each collateral obligation that has a 'CCC-' or higher rating from S&P Global Ratings by S&P Global Ratings' rating factor, then summing the total for the portfolio, and then dividing the result by the aggregate principal balance of all collateral obligations included in the calculation. (ii)Default rate dispersion (DRD): The DRD is calculated by multiplying the par balance for each collateral obligation that has a 'CCC-' or higher rating from S&P Global Ratings by the absolute value of the difference between S&P Global Ratings' rating factor and the SPWARF, then summing the total for the portfolio, and then dividing the result by the aggregate principal balance of the collateral obligations included in the calculation. (iii)Obligor diversity measure (ODM): The ODM is the measure of the effective number of obligors in the pool obtained by squaring the result for each obligor and taking the reciprocal of the sum of these squares [i.e.,  $1/\sum(i^2)$ ]. (iv)Industry diversity measure (IDM): The IDM is the effective number of industries in the pool obtained in the same way as the ODM. (v)Regional diversity measure (RDM): The RDM is the effective number of regions in the pool obtained in the same way as the ODM and IDM. (vi)Weighted average life: The portfolio's weighted average life is based on the remaining number of years to maturity for each loan.

## **Surveillance**

S&P Global Ratings will maintain active surveillance on the rated notes until the notes mature or are retired, or until its credit ratings on the transaction have been withdrawn. The purpose of surveillance is to assess whether the rated notes are performing within the initial parameters and assumptions applied to each rating category. The issuer is required under the terms of the transaction documents to supply periodic reports and notices to S&P Global Ratings to maintain continuous surveillance on the rated notes. For more information on our CLO surveillance process, see "CLO Spotlight: S&P Global Ratings' Surveillance Process For Monitoring U.S. Cash Flow CLO Transactions," published Oct. 14, 2022.

## **Related Criteria**

- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- Criteria | Structured Finance | General: Global Framework For Payment Structure And Cash Flow Analysis Of Structured Finance Securities, Dec. 22, 2020
- Criteria | Structured Finance | General: Methodology To Derive Stressed Interest Rates In Structured Finance, Oct. 18, 2019
- Criteria | Structured Finance | CDOs: Global Methodology And Assumptions For CLOs And Corporate CDOs, June 21, 2019
- Criteria | Structured Finance | Legal: U.S. Structured Finance Asset Isolation And Special-Purpose Entity Criteria, May 15, 2019
- Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- Legal Criteria: Structured Finance: Asset Isolation And Special-Purpose Entity Methodology, March 29, 2017
- General Criteria: Guarantee Criteria, Oct. 21, 2016
- Criteria | Structured Finance | General: Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- Criteria | Structured Finance | CDOs: CDOs Of Project Finance Debt: Global Methodology And Assumptions, March 19, 2014
- General Criteria: Global Investment Criteria For Temporary Investments In Transaction Accounts, May 31, 2012
- Criteria | Structured Finance | CDOs: Global CDOs Of Pooled Structured Finance Assets: Methodology And Assumptions, Feb. 21, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- Criteria | Structured Finance | CDOs: Surveillance Methodology For Global Cash Flow And Hybrid CDOs Subject To Acceleration Or Liquidation After An EOD, Sept. 2, 2009
- Criteria | Structured Finance | General: Structured Finance Criteria Introduced For Cayman

Islands Special-Purpose Entities, July 18, 2002

## **Related Research**

- A Look Back At How The COVID-19 Pandemic Affected Creditworthiness Globally, April 6, 2021
- ESG Industry Report Card: Collateralized Loan Obligations, March 31, 2021
- Scenario Analysis: How Resilient Are Middle-Market CLO Ratings?, Feb. 26, 2021
- Credit FAQ: Anatomy Of A Credit Estimate: What It Means And How We Do It, Jan. 14, 2021
- All You Need To Know About CDO Monitor, March 26, 2020
- CLO Spotlight: To 'B-' Or Not To 'B-'? A CLO Scenario Analysis In Three Acts (UPDATE), March 26, 2020
- Credit FAQ: Understanding S&P Global Ratings' Updated CLO And Corporate CDO Criteria, June 26, 2019
- CLO Spotlight: S&P Global Ratings' Updated Assumptions For CDO Monitor Non-Model Version, June 21, 2019
- Credit FAQ: Key Considerations For September 2018 Updates To CDO Evaluator Industry Codes, Sept. 26, 2018
- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- CLO Spotlight: S&P Global Ratings' Surveillance Process For Monitoring U.S. Cash Flow CLO Transactions, Oct. 14, 2022
- New Version Of CDO Evaluator (7.1) Includes Updated Corporate Industry Codes, Sept. 13, 2016
- CLO Spotlight: How S&P Global Ratings Assesses Operational And Administrative Risks Of CLO Collateral Managers, April 19, 2016
- S&P Adds Transparency To Its Effective Date Process For CLOs, April 20, 2015
- How Typical CLO Document Provisions Affect Maintenance Of Collateral Characteristics For Managed CLOs, Nov. 6, 2013
- CDO Spotlight: How Deferrable Assets In CLOs Are Treated Under Standard & Poor's Methodology, Oct. 1, 2012

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