

## Presale:

# Elmwood CLO VIII Ltd./Elmwood CLO VIII LLC (Refinancing And Extension)

March 19, 2024

## **Preliminary ratings**

Class	Preliminary rating	Balance (mil. \$)	Overcollateralization (%)	Par subordination (%)	Interest rate (%)
A-R	AAA (sf)	672.00	156.25	36.00	Three-month CME term SOFR + 1.550
B-R	AA (sf)	126.00	131.58	24.00	Three-month CME term SOFR + 2.000
C-R (deferrable)	A (sf)	63.00	121.95	18.00	Three-month CME term SOFR + 2.500
D-R (deferrable)	BBB- (sf)	63.00	113.64	12.00	Three-month CME term SOFR + 3.800
E-R (deferrable)	BB- (sf)	42.00	108.70	8.00	Three-month CME term SOFR + 6.250
F-R (deferrable)	B- (sf)	15.75	106.95	6.50	Three-month CME term SOFR + 8.000
Subordinated notes	NR	94.50	N/A	N/A	Residual

Note: This presale report is based on information as of March 19, 2024. 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**

Elmwood CLO VIII Ltd. is a \$1,076.25 million broadly syndicated CLO managed by Elmwood Asset Management LLC. This is a proposed refinancing of its March 2021 transaction.

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

- The replacement class A-R, B-R, C-R, D-R, and E-R notes are expected to be issued at a higher spread over three-month CME term SOFR than the original notes.
- The replacement class F-R notes are expected to be issued at the same spread over three-month CME term SOFR as the original notes.

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- The replacement class A-R, B-R, C-R, D-R, E-R, and F-R notes are expected to be issued at a floating spread, replacing the current floating spread.
- The stated maturity and reinvestment period will be extended by 3.25 years.
- The non-call period will be extended until April 2026.
- Of the identified underlying collateral obligations, 99.43% 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, 94.99% have recovery ratings (which may include confidential and private ratings) assigned by S&P Global Ratings.

After analyzing the changes to the transaction, we assigned our preliminary ratings to the replacement class A-R, B-R, C-R, D-R, E-R, and F-R notes. The original class A-1, A-2, B-1, B-2, C-1, C-2, D-1, D-2, E-1, E-2, F-1, and F-2 notes are expected to be fully redeemed with the proceeds from the replacement notes issued on the March 22, 2024 refinancing date. On the refinancing date, we expect to withdraw the ratings on the original notes and assign ratings to the new notes.

# **Key Credit Metrics**

#### Selected credit metrics

	Elmwood CLO VIII Ltd.	Three-month average(i)
Total leverage (x)(ii)	10.39	10.17
Par subordination ('AAA'/'BBB') (%)	36.00/12.00	35.47/12.08
WA cost of debt (%)(iii)	2.12	2.17
Portfolio WAS (excluding floors) (%)	3.74	3.71
SDR ('AAA'/'BBB') (%)	58.82/40.69	57.68/40.04
WA portfolio recovery ('AAA'/'BBB') (%)	40.52/62.09	41.92/62.84

(i)The three-month average comprises transactions rated by S&P Global Ratings during the three months ended February 29, 2024. (iii)Total debt to equity (excluding any class X debt, if applicable). (iii)Spread over SOFR for all classes, excluding the subordinated notes and, if applicable, any class X debt. Additionally, if there is a fixed-rate tranche, SOFR is subtracted from the fixed coupon in the calculation. WA--Weighted average. WAS--Weighted average spread. SDR--Scenario default rate.

## **Transaction Timeline/Participants**

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#### Transaction timeline

Expected closing date	March 22, 2024.
Effective date	N/A.
Debt payment frequency	Quarterly, beginning from July 20, 2024.
Non-call period end date	April 20, 2026.
Reinvestment period end date	April 20, 2029.
Stated maturity date	April 20, 2037.

#### N/A--Not applicable.

#### **Participants**

Collateral manager	Elmwood Asset Management LLC.				
Placement agent	J.P. Morgan Securities LLC.				
Trustee	U.S. Bank Trust Co. N.A.				

## Rationale

The preliminary ratings assigned to Elmwood CLO VIII Ltd./Elmwood CLO VIII LLC's floating-rate debt 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 debt through portfolio identification and ongoing management; and
- 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 underlying assets' credit profile 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**

We regard the exposure to environmental, social, and governance (ESG) credit factors in the transaction 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 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 sector.

The transaction documents prohibit assets related to certain activities, including but not limited to the following industries:

- Speculative oil and gas extraction;
- Thermal coal, coal mining, or coal-based power generation;

- Palm oil production;
- Opioid production and distribution;
- Controversial weapon production or trading;
- Hazardous chemicals;
- Adult entertainment:
- Tobacco;
- Payday or predatory lending;
- Weapons or firearms;
- Endangered wildlife trading;
- Private prison management or services; and
- Food commodity derivatives.

Accordingly, since the exclusion of assets from these industries does not result in material differences between the transaction and our ESG benchmark for the sector, we made no specific adjustments in our rating analysis to account for any ESG-related risks or opportunities.

## **Collateral Manager**

Elmwood Asset Management LLC currently manages 27 CLOs and has \$14.0 billion in total CLO assets under management (AUM). Including non-CLO assets, Elliott Investment Management L.P., Elmwood Asset Management LLC's majority owner, has approximately \$59.7 billion in total AUM.

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

- An average overlap in collateral composition of 95.95%, which is higher than the average of 58.02% for all CLO 2.0 transactions rated by S&P Global Ratings;
- An average portfolio turnover rate of 9.26% over the past 12 months, which is lower than the average of 15.15% for all CLO 2.0 transactions rated by S&P Global Ratings;
- An industry concentration that favors software;
- That 94.74% of the transactions that are still in their reinvestment period have a current par amount above the effective date target par; and
- An average senior overcollateralization cushion of 10.22% as of 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).

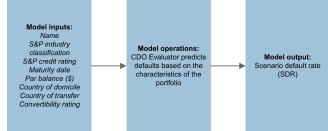
For example, the 'AAA' stress scenario assumes an extreme level of stress that is similar to what was experienced during the Great Depression, while the 'BBB' stress scenario assumes a high, but less severe, level of stress that is more akin to the 2008 recession. As a result, the portfolio will experience 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 debt (see chart 2).

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

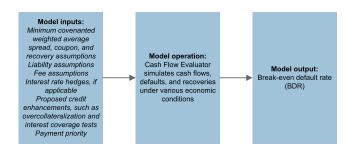
Chart 1 Chart 2

#### **CDO Evaluator**



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#### Cash Flow Evaluator



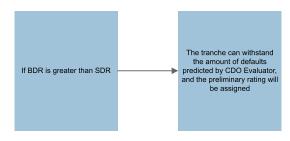
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## Connecting the portfolio and cash flow analyses

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 1 indicate that the rated debt has sufficient credit enhancement to withstand our projected default levels.

Table 1

#### Credit enhancement

Class	Preliminary rating	BDR (%)	SDR (%)	BDR cushion (%)
A-R	AAA (sf)	61.97	58.82	3.15
B-R	AA (sf)	58.60	51.45	7.15
C-R (deferrable)	A (sf)	51.42	45.92	5.51
D-R (deferrable)	BBB- (sf)	41.86	37.12	4.74
E-R (deferrable)	BB- (sf)	32.62	30.41	2.21
F-R (deferrable)	B- (sf)	27.40	24.94	2.47

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 our criteria, "Global Methodology And Assumptions For CLOs And Corporate CDOs," published June 21, 2019. Under these assumptions, the debt can withstand the loss amounts indicated in table 2 at their preliminary rating levels.

Table 2

Supplemental tests

Class	Preliminary rating	Preliminary amount (mil. \$)	Largest-industry default test loss amount (mil. \$)	Largest-obligor default test loss amount (mil. \$)
A-R	AAA (sf)	672.00	86.10	86.94
B-R	AA (sf)	126.00	76.99	73.67
C-R (deferrable)	A (sf)	63.00	N/A	59.91
D-R (deferrable)	BBB- (sf)	63.00	N/A	45.13
E-R (deferrable)	BB- (sf)	42.00	N/A	36.32
F-R (deferrable)	B- (sf)	15.75	N/A	27.24

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. The results for the collateral quality tests, based on the identified portfolio provided to us, are shown in table 3.

Table 3

## Collateral quality metrics--performing identified collateral

Test	WA	Covenant	Margin
WA life (years)(i)	5.08	9.00	3.92
WAS (including floors) (%)	3.74	3.55	0.19
WA fixed coupon (%)(ii)	4.99	6.50	(1.51)
WA rating	В	N/A	N/A

(i)The calculated value may include an adjustment to some asset maturity inputs if the resulting pool's WA maturity is less than the length of the reinvestment period. (ii)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.

## **Portfolio Characteristics**

Metrics based on the portfolio presented to S&P Global Ratings and the level of ramp-up completion are shown in tables 4A and 4B.

Table 4A

## Target collateral obligations

Target par balance (mil. \$)	1,050.00
Par balance of identified collateral (mil. \$)	1,050.00
Par balance of collateral not yet identified (mil. \$)	0.00
S&P Global Ratings' ratings and confidential indications (% of identified collateral)(i)	99.43

#### Table 4B

## Identified collateral obligations (obligors)

No. of obligors	346
Avg. obligor holding (%)	0.29
Largest-obligor holding (%)	1.63
Smallest-obligor holding (%)	0.00

In the portfolio data referenced for this analysis, the issuer identified 100.0% of the portfolio's collateral. As the portfolio composition changes, the information and results presented in tables 5 and 6 and charts 4-7 are also likely to change.

## **Obligor concentration**

Table 5 shows the top five obligor holdings of the underlying portfolio presented to S&P Global Ratings as of the date of this publication.

Table 5

#### Top obligor holdings

							nal amount mil. \$)	Notiona	l amount (%)
Obligor reference	Industry	Security type	S&P Global Ratings' credit rating	S&P Global Ratings' implied rating	CreditWatch/Outlook	Obligor	Cumulative	Obligor	Cumulative
1	Software	Senior secured	B-	No	Stable	17.47	17.47	1.66	1.66

<sup>(</sup>i)May include confidential ratings, private ratings, and credit estimates.

Table 5

## Top obligor holdings (cont.)

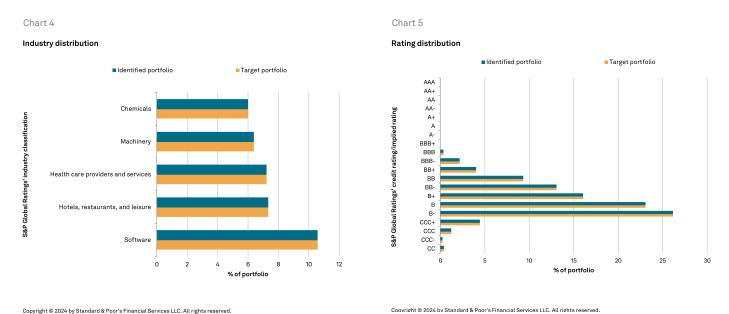
						Notional amount (mil. \$)		Notional amount (%)	
Obligor reference	Industry	Security type	S&P Global Ratings' credit rating	S&P Global Ratings' implied rating	CreditWatch/Outlook	Obligor	Cumulative	Obligor	Cumulative
2	Health care technology	Senior secured	N/A	No	N/A	10.18	27.65	0.97	2.63
3	Health care providers and services	Senior secured	B+	No	Stable	9.40	37.05	0.90	3.53
4	Hotels, restaurants, and leisure	Unsecured	B+	No	Positive	8.83	45.88	0.84	4.37
5	Diversified consumer services	Senior secured	BBB-	No	Stable	8.27	54.15	0.79	5.16

N/A--Not applicable.

# Industry and ratings distribution

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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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## Recovery rating and maturity distribution

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

Table 6

## Performing identified collateral modeled WARR

Liability rating category	WARR (%)	Min. covenanted WARR (%)
AAA (sf)	40.52	39.85
AA (sf)	50.03	49.85
A (sf)	55.73	55.65
BBB (sf)	62.09	62.16
BB (sf)	67.31	67.09
B (sf)	68.62	68.19

WARR--Weighted average recovery rate.

Chart 6

#### Recovery rating distribution

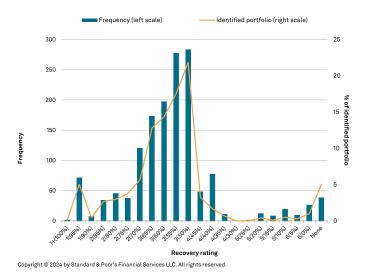
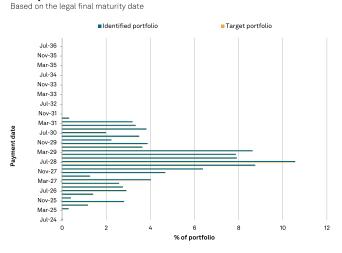


Chart 7

# Maturity distribution



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# **Debt Payment Considerations**

# Overcollateralization, interest coverage, and reinvestment overcollateralization tests

The rated debt benefits from certain structural features that require sequential mandatory redemption upon a breach of any overcollateralization or interest coverage test. In addition, during the reinvestment period, the rated debt benefits from potential diversion of excess interest

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proceeds captured upon breach of the transaction's reinvestment overcollateralization test as described in the payment priorities (see table 7).

Table 7

## O/C, I/C, and reinvestment O/C tests

Class	Actual O/C (%)	Min. O/C required (%)	Min. I/C required (%)
A-R/B-R	131.58	121.58	120.00
C-R	121.95	113.95	115.00
D-R	113.64	107.64	110.00
E-R	108.70	104.20	N/A
F-R	106.95	N/A	N/A
Reinvestment O/C(i)	106.95	102.95	N/A

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

# 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 a 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. The non-model version 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 more details, see "S&P Global Ratings' Updated Assumptions For CDO Monitor Non-Model Version," published June 21, 2019, and "Standard & Poor's Introduces Non-Model Version Of CDO Monitor," published Dec. 8, 2014).

Table 8 shows the benchmarks for Elmwood CLO VIII Ltd. in the context of average values by vintage.

Table 8

#### **CDO Monitor metrics**

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	Elmwood CLO VIII Ltd.	Trailing 12-month average	Difference	Typical values
S&P Global Ratings' weighted average rating factor(i)	2,568.00	2,545.93	22.07	2,500.00-3,000.00
Default rate dispersion(ii)	941.55	837.71	103.83	500.00-1,000.00

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Table 8

### **CDO Monitor metrics (cont.)**

	Elmwood CLO VIII Ltd.	Trailing 12-month average	Difference	Typical values
Obligor diversity measure(iii)	251.95	213.19	38.76	100.00-250.00
Industry diversity measure(iv)	23.28	23.55	(0.26)	12.00-22.00
Regional diversity measure(v)	2.94	1.18	1.75	1.00-1.30 for U.S. CLOs (higher for European CLOs)
Weighted average life (years)(vi)	4.34	4.59	(0.25)	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 the 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 the 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 (DDM): 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()^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 debt until the debt matures or is retired, or until its credit ratings on the transaction have been withdrawn. The purpose of surveillance is to assess whether the rated debt is 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 debt. For more information on our CLO surveillance process, see "CLO Spotlight: S&P Global Ratings' Surveillance Process For Monitoring 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

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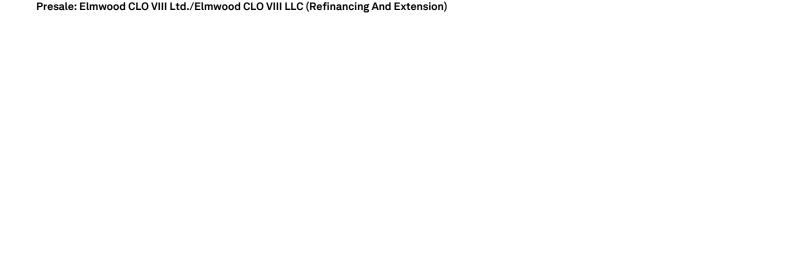
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- Legal Criteria: Structured Finance: Asset Isolation And Special-Purpose Entity Methodology, March 29, 2017
- General Criteria: Guarantee Criteria. 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: Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- 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**

- Credit FAQ: A Closer Look At Uptier Priming And Asset Drop-Down Provisions In U.S. CLOs, July 26, 2023
- Global Structured Finance 2023 Outlook, Jan. 11, 2023
- Scenario Analysis: How Resilient Are Middle-Market CLO Ratings (2022 Update), Oct. 19, 2022
- CLO Spotlight: S&P Global Ratings' Surveillance Process For Monitoring CLO Transactions, Oct. 14, 2022
- Scenario Analysis: How The Next Downturn Could Affect U.S. BSL CLO Ratings (2022 Update),
  Aug. 4, 2022
- ESG Industry Report Card: Collateralized Loan Obligations, March 31, 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
- 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

- 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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