S&P Global Ratings

Research

Presale:

Black Diamond CLO 2019-2 Ltd./Black Diamond CLO 2019-2 LLC

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(***Editor's Note:*** *S&P Global Ratings announced on April 10, 2019, that it is requesting comments on proposed revisions to its criteria for rating CLOs and corporate CDOs (see "Request For Comment: Global Methodology And Assumptions For CLOs And Corporate CDOs "). The comment period for the proposed changes ended on May 13, 2019. Any potential rating changes will depend on the final criteria adopted, as well as our assessment of the given transaction. We note that the methodology used to analyze the transaction in this presale report comes from our currently active criteria (see the Related Criteria section).)*

Preliminary Ratings

Class	Preliminary rating(i)	Balance (mil. $)	Overcollateralization (%)	Subordination (%)	Par subordination (%)	Interest rate (%)
A-1a	AAA (sf)	310.00	161.29	38.92	38.00	Three-month LIBOR + 1.43
A-1b	NR	15.00	153.85	35.96	35.00	Three-month LIBOR + 1.75
A-2	AA (sf)	51.25	132.89	25.86	24.75	Three-month LIBOR + 2.15
B (deferrable)	A (sf)	31.25	122.70	19.70	18.50	Three-month LIBOR + 3.05
C (deferrable)	BBB- (sf)	27.50	114.94	14.29	13.00	Three-month LIBOR + 4.00
D (deferrable)	BB- (sf)	22.50	109.29	9.85	8.50	Three-month LIBOR + 6.93
Subordinated notes	NR	50.00	N/A	N/A	N/A	Residual

This presale report is based on information as of June 19, 2019. 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. (i)The rating on each class of securities is preliminary and subject to change at any time. NR--Not rated. N/A--Not applicable.

Executive Summary

Black Diamond CLO 2019-2 Ltd. is a $507.5 million broadly syndicated collateralized loan obligation (CLO) managed by Black Diamond CLO 2019-2 Adviser LLC (Black Diamond), a Delaware limited liability company that is a special purpose investment management affiliate of Black

Diamond Capital Management LLC.

Based on provisions in the transaction documents and portfolio characteristics:

- The transaction will be collateralized by at least 92.50% senior secured loans and eligible investments, with a minimum of 80.00% of the loan issuers required to be based in the U.S.
- A maximum of 60.00% (or such other percentage as requested by the collateral manager and approved by more than 50.00% of the noteholders of the controlling class) of the loans in the collateral pool can be covenant-lite.
- 98.68% of the identified underlying collateral obligations have credit ratings assigned by S&P Global Ratings.
- 97.10% of the identified underlying collateral obligations have recovery ratings assigned by S&P Global Ratings.

Key Credit Metrics

Selected Credit Metrics

	Black Diamond CLO 2019-2 Ltd.	Three-month average(i)
Total leverage (x)(ii)	9.15	10.08
Subordination ('AAA'/'BBB') (%)	38.92/14.29	40.21/13.73
Weighted average cost of debt (%)(iii)	2.06	1.91
Portfolio WAS (excluding LIBOR floors) (%)	3.90	3.43
Excess spread (%)(iv)	1.84	1.52
SDR ('AAA'/'BBB') (%)	66.25/47.77	66.32/44.51
WA portfolio recovery ('AAA'/'BBB') (%)	44.37/66.14	45.27/66.71

(i)The three-month average comprises S&P Global Ratings-rated deals for the three months ended May 31, 2019. (ii)Total debt/equity (excluding any class X notes, if applicable). (iii)Spread over LIBOR for all classes, excluding the subordinated notes and, if applicable, any class X notes (if there is a fixed-rate tranche, LIBOR is subtracted from the fixed coupon in the calculation). (iv)WAS minus the weighted average cost of debt. (v)The effective number of obligors in the underlying collateral, obtained by squaring the result for each obligor and taking the reciprocal of the sum of these squares [i.e., 1/sum()^2]. WA--Weighted average. WAS--Weighted average spread. SDR--Scenario default rate.

Deal comparison

Compared to other broadly syndicated CLOs that we assigned preliminary ratings to in the three months ended May 31, 2019, Black Diamond CLO 2019-2 Ltd. has:

- A lower total leverage and a lower subordination at the 'AAA' rating level with higher subordination at the 'BBB' rating level.
- A higher weighted average cost of debt.
- A higher weighted average spread and a higher available excess spread, which show a stronger underlying portfolio from a cash flow perspective.
- A slightly lower scenario default rate at the 'AAA' rating level, a higher scenario default rate at the 'BBB' rating level, and a lower weighted average recovery rate (WARR).

Transaction Timeline/Participants

Transaction Timeline

Expected closing date	July 22, 2019
Effective date	To be determined.
Non-call period end date	July 22, 2021
Reinvestment period end date	July 22, 2024
Stated maturity date	July 23, 2032
Note payment frequency	Quarterly, beginning Jan. 23, 2020

Participants

Collateral manager	Black Diamond CLO 2019-2 Adviser LLC (a Delaware limited liability company, which is a special purpose investment management affiliate of Black Diamond Capital Management LLC).
Placement agent	Mizuho Securities USA LLC.
Trustee	U.S. Bank N.A.

Rationale

The preliminary ratings assigned to Black Diamond CLO 2019-2 Ltd.'s floating-rate notes reflect our assessment of:

- The diversified collateral pool, which consists primarily of broadly syndicated speculative-grade (rated 'BB+' and lower) senior secured term loans that are governed by collateral quality tests.
- The credit enhancement provided through the subordination of cash flows, excess spread, and overcollateralization.
- The collateral manager's experienced team, which can affect the performance of the rated notes through collateral selection, ongoing portfolio management, and trading.
- The transaction's legal structure, which is expected to be bankruptcy remote.

Rating Considerations

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

Table 1

Rating Considerations

Risk	Risk description	Mitigating factors
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 by the indenture. Larger concentrations in certain obligations can introduce additional risks to the rated notes.	S&P Global Ratings' cash flow analysis generally assumes 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' rated, 2.5% current pay, 5.0% fixed rate, 2.5% deferrable, and 5.0% assets paying less frequently than quarterly (but not less than semi-annually). For more details, see table 10.
Collateral manager trading performance	During the reinvestment period (and, subject to additional restrictions, after the reinvestment period), 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 sold is replaced with another of equal or higher par value or that the trade maintains or increases the level of the transaction's overcollateralization. In addition, the indenture generally requires that each additional purchase satisfy, maintain, or improve concentration limits, coverage tests (except principal proceeds received from defaulted obligations, which are subject to satisfaction of overcollateralization ratio tests), and certain collateral quality tests. After the reinvestment period, in addition to some other requirements, the asset purchased must have either the same or higher S&P Global Ratings' credit rating or the class scenario default rate must be maintained or improved; the asset purchased must have the same or lower stated maturity than the asset being replaced, and the overcollateralization ratio test with respect to the class D notes must be satisfied after giving effect to such reinvestment.
Divergence of 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 10). 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% under a 'AAA' level of stress versus 50% 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 which contains a cross-default provision with such loan, will also use the reduced recovery rates regardless of whether these pari passu or cross-defaulting 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 obligation 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 such obligations at the prevailing market price, which may be below par.	According to the transaction documents, the collateral manager can neither purchase any long-dated collateral obligations nor vote in favor of any waiver, modification, or amendment that would extend a collateral obligation's maturity beyond the notes' stated maturity (with the exception of any such amendment in connection with an insolvency, bankruptcy, restructuring with the purpose of avoiding insolvency, or workout of the obligor, which are otherwise not subject to the same restriction but, however, are subject to a max of 3.0% of the collateral, with anything in excess treated as defaulted obligations). In addition, the weighted average life test must generally be satisfied, maintained, or improved following any maturity amendment.

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

Collateral Manager

As of March 2019, Black Diamond Capital Management LLC managed four CLOs rated by S&P Global Ratings for approximately $1.54 billion in total CLO assets under management (AUM). Including non-CLO assets, Black Diamond Capital Management LLC has approximately $8.5 billion in total AUM (as of Dec. 31, 2018). Black Diamond was founded in 1995 and issued its first CLO in 1998. As of Feb. 1, 2019, it has issued 12 total CLO transactions, seven of which remain outstanding (with five of the seven still in their reinvestment periods).

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

- An average overlap in collateral composition of 47.69%, which is lower than the average of 56.98% for all CLO 2.0 transactions S&P Global Ratings rates.
- An average portfolio turnover rate of 30.31% over the past 12 months, which is higher than the average of 24.79% for all CLO 2.0 transactions S&P Global Ratings rates.
- An average margin of 35.97% between the quantity of covenant-lite assets held versus the maximum allowable amount, as reported by the trustee.
- Industry concentration favors health care providers and services, media, and metals and mining
- Of the transactions that are still in the reinvestment period, 100.00% have a current par amount that is above the effective date target par.
- An average senior overcollateralization cushion of 10.06% 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 scenario default rates (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 most recent 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 break-even default rate (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

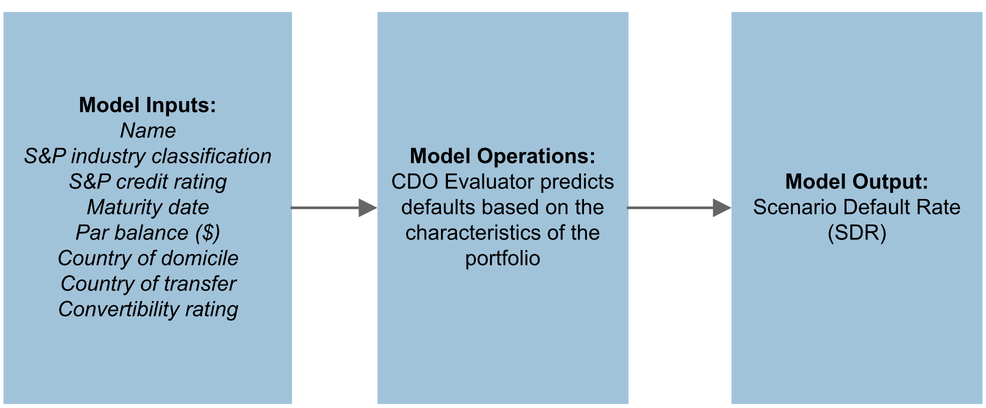
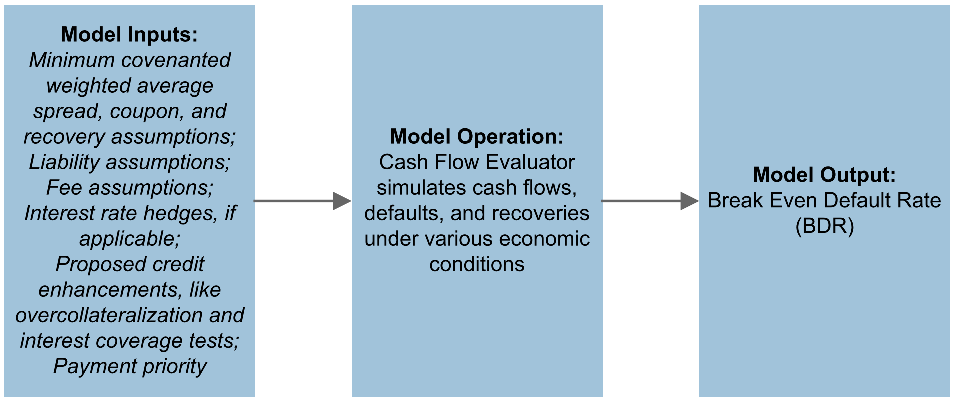


Chart 2

Standard & Poor's Cash Flow Evaluator

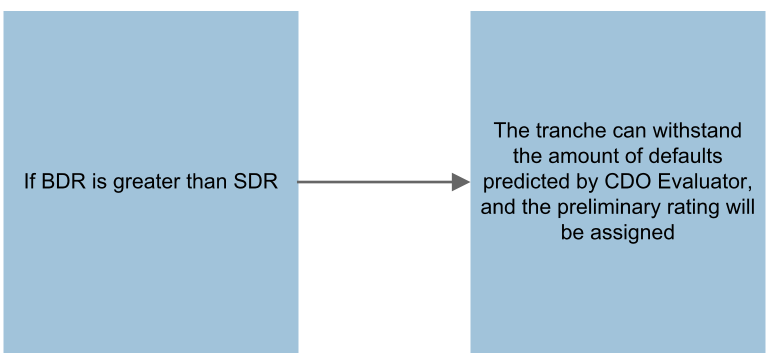


Connecting the portfolio and cash flow analyses

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



The results shown in table 2 indicate that the rated notes have sufficient credit enhancement to withstand our projected default levels.

Table 2

Credit Enhancement

Class	Subordination (%)	BDR (%)	SDR (%)	BDR cushion (%)
A-1a	38.92	68.18	66.25	1.93
A-1b	35.96	N/A	N/A	N/A
A-2	25.86	64.65	59.15	5.50
B	19.70	57.90	53.71	4.18
C	14.29	50.43	45.04	5.38
D	9.85	40.54	39.04	1.50

BDR--Break-even default rate. SDR--Scenario default rate. N/A--Not applicable.

Supplemental tests

We also conduct a largest-industry default test and largest-obligor default test according to "Global Methodologies And Assumptions For Corporate Cash Flow And Synthetic CDOs," published Aug. 8, 2016. 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-1a	AAA (sf)	310.00	40.94	47.31
A-1b	NR	15.00	N/A	N/A
A-2	AA (sf)	51.25	40.94	37.99
B	A (sf)	31.25	N/A	28.50
C	BBB- (sf)	27.50	N/A	19.00
D	BB- (sf)	22.50	N/A	14.25

NR-- Not rated. N/A--Not applicable.

Sensitivity analysis

Finally, several of the assumptions specified in the collateralized debt obligation (CDO) criteria are stressed to evaluate the sensitivity of the transaction's performance to those parameters. These stresses include:

- A negative 10% adjustment to the proposed collateral pool's recovery rates relative to each tranche's WARR.
- Defaults on the underlying portfolio biased to include the highest spread and lowest base-case recoveries.
- Intra- and inter-industry correlation adjustments as described in table 4.

Table 4

Correlation

Scenario	Within industry (%)	Between industries (%)
Below base case	15.0	5.0
Base case equals preliminary rating	20.0	7.5
Above base case	25.0	10.0

Table 5 illustrates the rating migration that would occur under each of the aforementioned scenarios.

Table 5

Sensitivity Analysis Rating Migration

		Resulting rating transition			
Class	Preliminary rating	10% recovery decrease	Spread default bias	Recovery default bias	Correlation above base case
A-1a	AAA (sf)	AA+ (sf)	AAA (sf)	AA+ (sf)	AA+ (sf)
A-1b	NR	NR	NR	NR	NR
A-2	AA (sf)	AA- (sf)	AA (sf)	AA- (sf)	AA (sf)
B	A (sf)	A- (sf)	A (sf)	BBB+ (sf)	A (sf)
C	BBB- (sf)	BB+ (sf)	BBB- (sf)	BB+ (sf)	BBB- (sf)
D	BB- (sf)	B- (sf)	B+ (sf)	B- (sf)	BB- (sf)

NR--Not rated.

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 6.

Table 6

Collateral Quality Metrics–-Performing Identified Collateral

Test	Weighted average	Covenant	Margin
Weighted average life (years)(i)	6.79	9.00	2.21
Weighted average spread (including LIBOR floors) (%)	3.90	3.85	0.05
Weighted average LIBOR floor (%)	0.99	N/A	N/A
Weighted average fixed coupon (%)(ii)	N/A	6.00	N/A
Weighted average rating	B	N/A	N/A

(i)Calculated value that assumes collateral maturing during the reinvestment period is extended by the maximum weighted-average life covenant applicable on the reinvestment period end date. (ii)The calculated value does not give credit to excess spread, which may positively adjust the calculation when determining compliance with the covenant. 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 7A and 7B.

Table 7A

Target Collateral Obligations

Target par balance (mil. $)	500.00
Par balance of identified collateral (mil. $)	380.75
Par balance of collateral not yet identified (mil. $)	119.25
Ramp-up completion (% of target par balance identified)	76.15
S&P Global Ratings' ratings and confidential indications (% of identified collateral)(i)	98.68

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

Table 7B

Identified Collateral Obligations (Obligors)

No. of obligors	146
Avg. obligor holding (%)	0.68
Largest-obligor holding (%)	1.31
Smallest-obligor holding (%)	0.08

In the portfolio data referenced for this analysis, the issuer had identified approximately 76.15% of the portfolio's collateral. As the portfolio composition changes, the information and results presented in tables 8 and9 and charts 4-7 are also likely to change.

Obligor concentration

Table 8 shows the top five obligor holdings of the underlying portfolio presented to S&P Global Ratings.

Table 8

Top Obligor Holdings As Of June 19, 2019

						Notional amount (mil. $)		Notional amount (%)	
Obligor reference	**Industry**	**Security type**	**S&P Global Ratings' rating**	**S&P Global Ratings' implied rating**	**CreditWatch/outlook**	**Obligor**	**Cumulative**	**Obligor**	**Cumulative**
1	Electric utilities	Senior Secured	*	N/A	Stable	5.00	5.00	1.00	1.00
2	Diversified consumer services	Senior Secured	BB	N/A	Stable	5.00	10.00	1.00	2.00

Table 8

Top Obligor Holdings As Of June 19, 2019 (cont.)

						Notional amount (mil. $)		Notional amount (%)	
Obligor reference	Industry	Security type	S&P Global Ratings' rating	S&P Global Ratings' implied rating	CreditWatch/outlook	Obligor	Cumulative	Obligor	Cumulative
3	Commercial services and supplies	Senior Secured	B	N/A	Stable	5.00	15.00	1.00	3.00
4	Media	Senior Secured	BB	N/A	Stable	5.00	20.00	1.00	4.00
5	Chemicals	Senior Secured	*	N/A	Stable	5.00	25.00	1.00	5.00

*Confidential Ratings. 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.

Chart 4

Industry Distribution

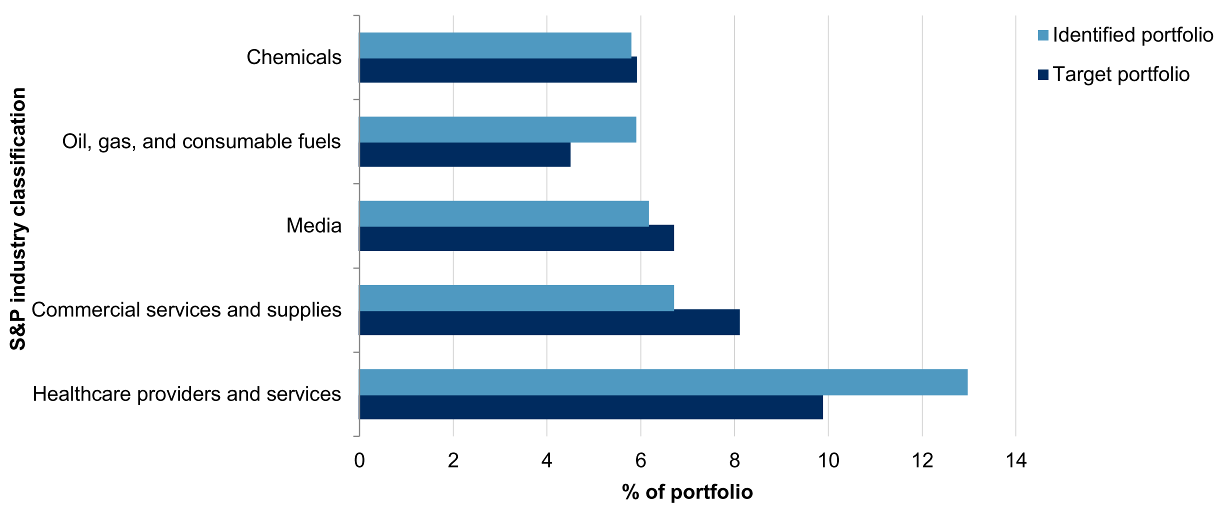
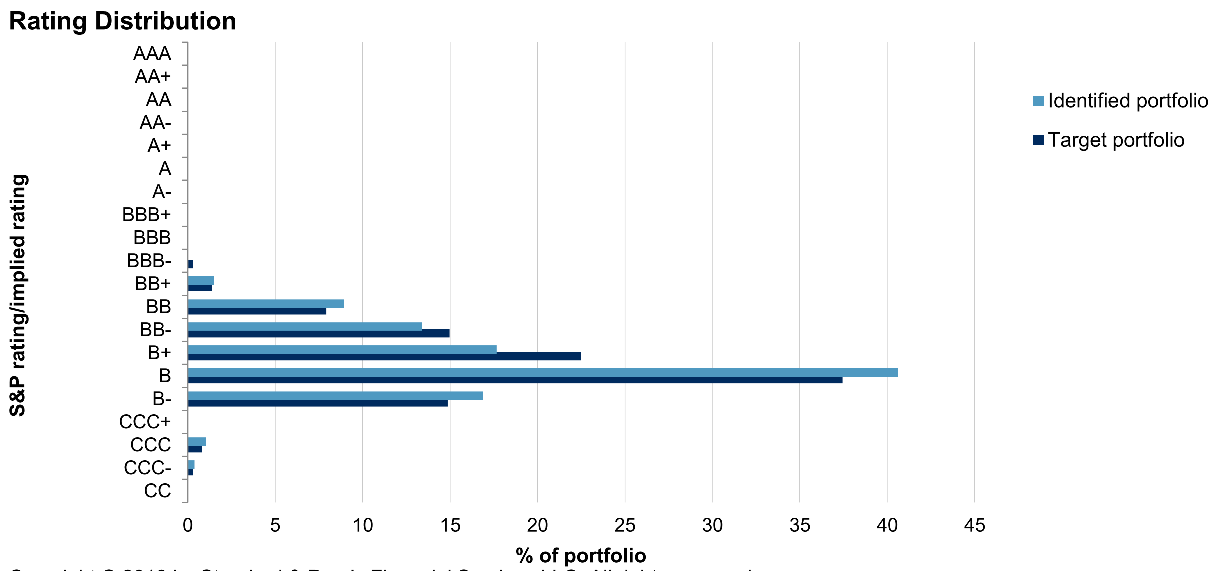


Chart 5



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Recovery rating and maturity distribution

Table 9 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 9

Performing Identified Collateral Modeled WARR

Liability rating category	WARR (%)	Min. covenanted WARR (%)
AAA (sf)	44.37	44.00
AA (sf)	54.10	53.00
A (sf)	59.76	59.00
BBB (sf)	66.14	65.50
BB (sf)	71.16	71.00

WARR--Weighted average recovery rate.

Chart 6

Recovery Indicator Distribution

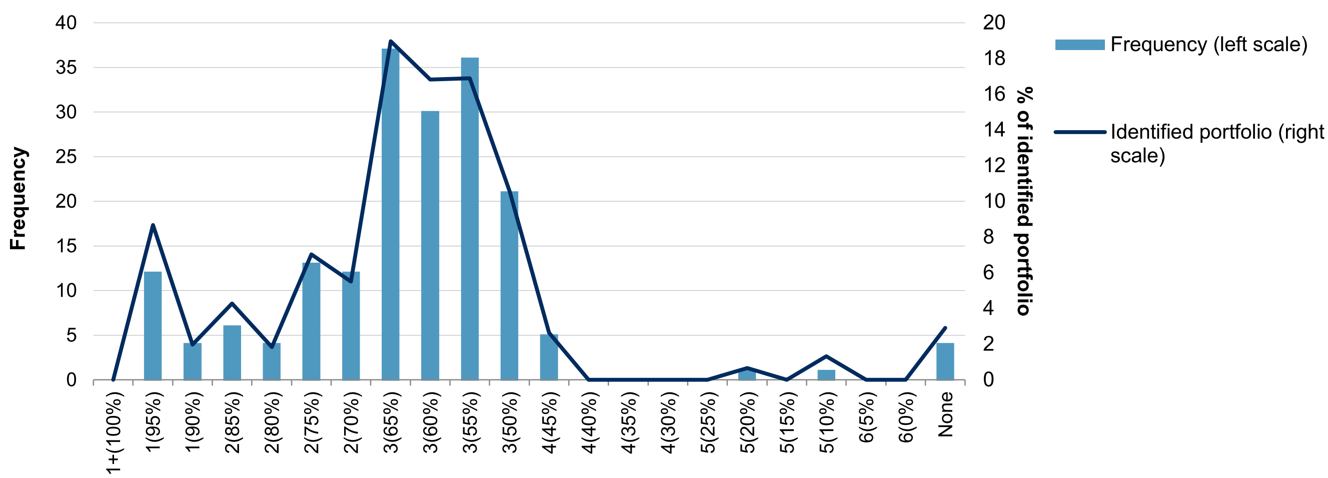
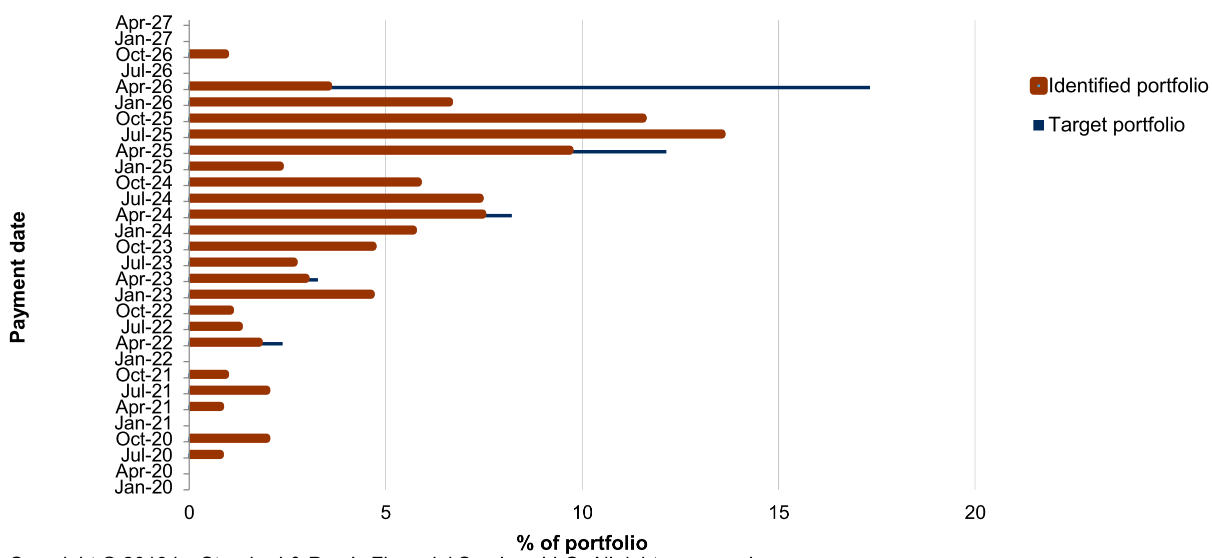


Chart 7

Maturity Distribution



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 effective date and reinvestment guidelines are expected to comply with the limitations shown in table 10.

Table 10

Collateral Pool Guidelines

	Limit (%)
Type of obligation	
Other than senior secured loans and eligible investments	7.5
Covenant-lite loans(i)(iii)	60.0
Current-pay obligations(ii)	2.5
Debtor-in-possession obligations	7.5
Deferrable obligations(ii)	2.5
Delayed-drawdown and revolving obligations	10.0
Fixed-rate obligations(ii)	5.0
Long-dated obligations(ii)	0.0
Obligations that pay interest less frequent than quarterly (but not less than semi-annually)(ii)	5.0
Obligor and its affiliates: single/up to 5 (each)	2.0/2.5
Second-lien, first-lien last-out, and unsecured loans	7.5
S&P Global Ratings' industry classification: single/second-largest/largest	10.0/12.0/15.0
S&P Global Ratings' credit rating of 'CCC+' or below(ii)	7.5
Small obligor loans	0.0
Structured finance obligations	0.0
Location	
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 collateralized loan obligation holds the maximum amount of these types of obligations permitted under the transaction documents. For long-dated and 'CCC+' and below obligations, we generally apply stresses when the exposure is greater than 5%. (iii)Or such other percentage requested by the collateral manager and approved by a majority of the controlling class.

Risk of concentration in certain obligation types

S&P Global Ratings considers larger concentrations in the types of obligations shown in table 11 to pose additional risk to the transaction. If the transaction can purchase such collateral obligations, our quantitative analysis would consider the risk associated with such types of obligations (see table 10 above for transaction-specific limitations).

Table 11

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 are carried at 'CCC-' in the portfolio analysis, which will increase the SDRs produced by the CDO Evaluator.

Table 11

Risks Of Obligation Types (cont.)

Obligation type	Risk specific to the obligation
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 the majority of the rated notes are tied to LIBOR, 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 such 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.
Long-dated obligations	Collateral obligations scheduled to mature after the transaction's stated maturity date introduce market value risk, as 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% of the asset balance, S&P Global Ratings' cash flow analysis haircuts the par amount of these obligations (10% per year after the transaction's stated maturity), which will lower the BDRs produced by the Cash Flow Evaluator. This stress would 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.

BDRs--Break-even default rates. SDRs--Scenario default rates.

Note Payment Considerations

Overcollateralization, interest coverage, and interest diversion 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 interest diversion test (see table 12).

Table 12

Overcollateralization, Interest Coverage, And Interest Diversion Tests

Class	Actual O/C (%)	Min. O/C required (%)	Min. I/C required (%)
A	132.89	122.00	120.00
B	122.70	114.50	110.00
C	114.94	108.50	105.00

Table 12

Overcollateralization, Interest Coverage, And Interest Diversion Tests (cont.)

Class	Actual O/C (%)	Min. O/C required (%)	Min. I/C required (%)
D	109.29	104.80	105.00
Interest diversion(i)	109.29	105.30	N/A

(i)The interest diversion test will be satisfied when the class D 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, the proceeds will be distributed in the priorities outlined in tables 13 and 14.

Table 13

Interest Waterfall Payment Priority

Priority	Payment
1	Taxes and fees, then administrative expenses (capped).
2	Senior collateral management fee plus any senior collateral management fee that remains due and unpaid in respect to any prior payment date.
3	Hedge payments, if applicable.
4	Class A-1a and A-1b note interest, pro rata and pari passu.
5	Class A-2 note interest.
6	Class A coverage tests(i).
7	Class B note interest.
8	Class B deferred interest.
9	Class B coverage tests(i).
10	Class C note interest.
11	Class C deferred interest.
12	Class C coverage tests(i).
13	Class D note interest.
14	Class D deferred interest.
15	Class D coverage tests(i).
16	Effective date ratings confirmation. If it is not obtained, pay according to the note payment sequence(ii) and/or purchase collateral obligations, in each case, in an amount sufficient to obtain effective date ratings confirmation.
17	Interest diversion test (during the reinvestment period only). If it fails, deposit into the principal collection subaccount (to be applied as principal proceeds) the lesser of 50% of the remaining interest proceeds and the amount needed to satisfy the test.
18	Subordinated collateral management fee, then the deferred subordinated collateral management fee.
19	Administrative expenses (uncapped), then hedge payments, if applicable.

Table 13

Interest Waterfall Payment Priority (cont.)

Priority	Payment
20	Supplemental reserve account (during the reinvestment period only) at the collateral manager's direction (capped).
21	Subordinated noteholders, up to the designated internal rate of return.
22	20% of remaing proceeds to the collateral manager incentive fee and 80% of 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-1a note principal; then class A-1b note principal; then class A-2 note principal; then class B note interest; then class B note deferred interest; then class B note principal; then class C note interest; then class C note deferred interest; then class C note principal; then class D note interest; then class D note deferred interest; and then class D note principal.

Table 14

Principal Waterfall Payment Priority

Priority	Payment
1	Items 1-5 in the interest waterfall, sequentially.
2	Item 6 in the interest waterfall(i).
3	Item 7 in the interest waterfall(iii).
4	Item 8 in the interest waterfall(iii).
5	Item 9 in the interest waterfall(i).
6	Item 10 in the interest waterfall(iii).
7	Item 11 in the interest waterfall(iii).
8	Item 12 in the interest waterfall(i).
9	Item 13 in the interest waterfall(iii).
10	Item 14 in the interest waterfall(iii).
11	Item 15 in the interest waterfall(i).
12	Effective date ratings confirmation. If it is not obtained, pay according to the note payment sequence(ii) and/or purchase collateral obligations, in each case, in an amount sufficient to obtain effective date ratings confirmation.
13	If such payment date is a redemption date (other than a partial redemption date), to make payments according to the note payment sequence(ii). On any special redemption date, pay the special redemption amount, if any, at the election of the collateral manager, according to the note payment sequence(ii).
14	During the reinvestment period, purchase additional collateral obligations. After the reinvestment period, at the manager's discretion, reinvest proceeds from the sale of credit risk obligations and unscheduled principal payments into additional collateral obligations.
15	Note payment sequence(ii).
16	Item 18 in the interest waterfall.
17	Item 19 in the interest waterfall.
18	To any contributors, pro rata.
19	Subordinated noteholders, up to the designated internal rate of return.
20	80% of remaining proceeds to the holders of the subordinated notes and 20% of remaining proceeds to the collateral manager incentive fee.

(i)If it fails, pay according to the note payment sequence until each test is satisfied. (ii)See table 13 footnotes for the note payment sequence. (iii)In each case, only to the extent that the relevant class is the controlling class.

Note redemption circumstances

Under the transaction documents, the notes can be redeemed before the stated maturity date of the transaction in the circumstances outlined in table 15.

Table 15

Note Redemption

Redemption events	Redemption terms
Optional redemption	On any business day after the non-call period, the secured notes may be redeemed at their applicable redemption price, in whole but not in part, at the direction of the collateral manager or, alternatively, if directed by more than 66.67% of the subordinated notes' aggregate outstanding amount and with the collateral manager's consent.
Mandatory redemption	If any coverage test is not met on any applicable determination date, the issuer will apply amounts available in the payment account according to the payment priority.
Refinancing	On any business day after the non-call period, any class of notes may be redeemed at their applicable redemption price, in whole but not in part, at the direction of the collateral manager or, alternatively, if directed by the holders of more than 66.67% of the subordinated notes' aggregate outstanding amount and with the collateral manager's consent by the issuance of refinancing replacement notes. Under the indenture, the issuer will obtain a partial refinancing only if certain conditions are met.
Re-pricing	On any business day after the non-call period, at the direction of the collateral manager or, alternatively, if directed by the holders of more than 66.67% of the subordinated notes' aggregate outstanding amount and with the collateral manager's consent, the spread over LIBOR on any class of notes (other than the class A-1a notes) can be reduced. It is expected that any nonconsenting noteholder will be repaid in full at their applicable redemption price.
Tax redemption	If a tax event occurs, the secured notes may be redeemed at their applicable redemption price, in whole but not in part, on any business day before their legal final maturity. Redemption can occur at the direction of the holders of at least 50% of the affected class' or the subordinated notes' aggregate outstanding amount.
Issuer purchases of secured notes	During the reinvestment period, the collateral manager, on the issuer's behalf, may purchase secured notes, in whole or in part, using principal proceeds in the collection account or other amounts designated for such purpose under the indenture. These purchases of secured notes will be subject to conditions in the transaction documents and will occur sequentially according to the payment priority.

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.

For this transaction, the non-model version of the 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).

Table 16 illustrates the benchmarks for Black Diamond CLO 2019-2 Ltd. in the context of average values by vintage.

Table 16

CDO Monitor Metrics

	Black Diamond CLO 2019-2 Ltd.	Trailing 12 month average	Difference
Expected portfolio default rate (%)(i)	27.33	28.48	(1.15)
Default rate dispersion (%)(ii)	8.16	8.86	(0.70)
Obligor diversity measure(iii)	163.15	171.30	(8.15)
Industry diversity measure(iv)	24.32	22.08	2.24
Regional diversity measure(v)	1.34	1.15	0.19
Weighted average life (years)(vi)	5.18	5.03	0.15

(i)Expected portfolio default rate (EPDR): the weighted average portfolio expected default rate expressed as a percentage of the par balance of the assets rated 'CCC-' or higher. (ii)Default rate dispersion (DRD): the weighted average absolute deviation of the asset default rates from the EPDR. (iii)Obligor diversity measure (ODM): the measure of 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 effective number of industries in the pool obtained in the same way as ODM above. (v)Regional diversity measure (RDM): the effective number of regions in the pool obtained the same way as ODM and IDM. (vi)Weighted average life (WAL): 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 S&P Global Ratings' 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 "CDO Spotlight: Standard & Poor's Surveillance Process For Monitoring U.S. Cash Flow CLO Transactions," published Oct. 19, 2016.

Related Criteria

- Criteria | Structured Finance | Legal: U.S. Structured Finance Asset Isolation And Special-Purpose Entity Criteria, May 15, 2019
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- General Criteria: Guarantee Criteria, Oct. 21, 2016
- Criteria | Structured Finance | CDOs: Global Methodologies And Assumptions For Corporate Cash Flow And Synthetic CDOs, Aug. 8, 2016
- Criteria | Structured Finance | General: Structured Finance Temporary Interest Shortfall Methodology, Dec. 15, 2015

- General Criteria: Principles For Rating Debt Issues Based On Imputed Promises, Dec. 19, 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
- 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 | CDOs: Revised CDO Current-Pay Criteria Assumptions For Corporate Debt When Issuers Announce A Distressed Exchange Or Buyback, May 18, 2009
- Criteria | Structured Finance | CDOs: The Use Of Rating-Based Haircuts In Event Of Default Overcollateralization Tests For CDOs, March 19, 2008
- Criteria | Structured Finance | CDOs: Qualification And Treatment Of Current-Pay Obligations In Global Cash Flow CLOs, July 11, 2007
- Criteria - Structured Finance - General: Structured Finance Criteria Introduced For Cayman Islands Special-Purpose Entities, July 18, 2002

Related Research

- Request For Comment: Global Methodology And Assumptions For CLOs And Corporate CDOs, April 10, 2019
- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- S&P Global Ratings' Surveillance Process For Monitoring U.S. Cash Flow CLO Transactions, Oct. 19, 2016
- New Version Of CDO Evaluator (7.1) Includes Updated Corporate Industry Codes, Sept. 13, 2016
- How S&P Global Ratings Assesses Operational And Administrative Risks Of CLO Collateral Managers, April 19, 2016
- Global Corporate Rating Trends 2016: Largest Negative Swing Since 2009, Jan. 11, 2016
- Items Updated In Corporate CDO Criteria Used To Rate CLO Transactions, Sept. 17, 2015
- S&P Adds Transparency To Its Effective Date Process For CLOs, April 20, 2015
- CDO Monitor Non-Model Approach General Definitions, March 11, 2015
- Standard & Poor's Introduces Non-Model Version Of CDO Monitor, Dec. 8, 2014
- Use Of CDO Monitor Simplified, April 7, 2014
- How Typical CLO Document Provisions Affect Maintenance Of Collateral Characteristics For Managed CLOs, Nov. 6, 2013
- How Deferrable Assets In CLOs Are Treated Under Standard & Poor's Methodology, Oct. 1, 2012
- CDO Spotlight: The Relationship Between Long-Dated Assets And Market Value Risk In U.S. Cash Flow CLOs, April 26, 2012

- Credit FAQ: What Are Credit Estimates And How Do They Differ From Ratings? April 6, 2011
- CLO Collateral Managers' Treatment Of First-Lien-Last-Out Loans Could Affect Payments To Investors, Oct. 14, 2010
- Standard & Poor's Provides Guidance For Collateral Managers And Trustees Regarding CDO Monitor, Nov. 11, 2009

In addition to the criteria specific to this type of security (listed above), the following criteria articles, which are generally applicable to all ratings, may have affected this rating action: "Counterparty Risk Framework: Methodology And Assumptions," March 8, 2019; "Post-Default Ratings Methodology: When Does Standard & Poor's Raise A Rating From 'D' Or 'SD'?," March 23, 2015; "Global Framework For Assessing Operational Risk In Structured Finance Transactions," Oct. 9, 2014; "Methodology: Timeliness of Payments: Grace Periods, Guarantees, And Use of 'D' And 'SD' Ratings," Oct. 24, 2013; "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," Oct. 1, 2012; "Methodology: Credit Stability Criteria," May 3, 2010; and "Use of CreditWatch And Outlooks," Sept. 14, 2009.