

CREDIT OPINION

21 November 2019

Pre-Sale

 Rate this Research

Closing date

December 2019

TABLE OF CONTENTS

Capital structure	1
Summary	1
Credit strengths	2
Credit challenges	2
Key characteristics	3
Asset description	5
Asset analysis	9
Securitization structure description	13
Securitization structure analysis	15
Methodology and monitoring	16
Representations & warranties: 17g-7	16
Appendices	17
Moody's related publications	21

Analyst Contacts

Jay Thacker +1.212.553.2170
AVP-Analyst
jay.thacker@moodys.com

Elena V Moldovan +1.212.553.1331
AVP-SF Legal Review
elena.moldovan@moodys.com

Lauren Bonham +1.212.553.7723
Associate Analyst
lauren.bonham@moodys.com

Regatta XVI Funding Ltd.

Pre-Sale Report

Capital structure

Exhibit 1

Provisional (P) ratings

Class	Ratings	Amount (\$ millions)	Share of capital structure (%)	Effective subordination (%) ^(a)	Assumed coupon ^(b)
A-1 Notes	(P) Aaa (sf)	372.000	61.0	38.0	3mL+ 1.36%
A-2 Notes	Not rated	15.000	2.5	35.5	3mL+ 1.75%
B Notes	Not rated	67.500	11.1	24.3	3mL+ 1.95%
C Notes	Not rated	37.500	6.2	18.0	3mL+ 2.80%
D Notes	Not rated	33.900	5.6	12.4	3mL+ 4.20%
E Notes	Not rated	22.500	3.7	8.6	3mL+ 7.45%
Sub Notes	Not rated	56.500	10.1	n/a	Residual
Total		604.900	100.0		

(a) Effective subordination is based on the target par amount of the portfolio.

(b) 3mL = 3-month USD-LIBOR.

Sources: Underwriter, Moody's Investors Service

Summary

Regatta XVI Funding Ltd. (Regatta XVI or the CLO) is a typical cash-flow CLO transaction managed by Regatta Loan Management LLC (Regatta or the manager). The CLO is backed by a \$600 million portfolio of non-investment-grade broadly syndicated loans and other assets that the manager purchases from and trades in the primary and secondary markets. In our credit analysis, we considered the attributes of the CLO's underlying assets, including the assets' average default probability, average recovery rate, diversity score, average life and average spread.

The CLO will issue several classes of notes that receive quarterly interest payments and, after the reinvestment period, principal payments, in order of seniority. In addition, the CLO will issue subordinated notes that receive only residual interest and principal payments.

This pre-sale report addresses the structure and characteristics of the proposed transaction based on the information provided to Moody's as of 21 November 2019. Investors should be aware that certain issues concerning this transaction have yet to be finalized. Upon conclusive review of all documents and legal information as well as any subsequent changes in information, Moody's will endeavor to assign definitive ratings to this transaction. The definitive ratings may differ from the provisional ratings set forth in this report. Moody's will disseminate the assignment of definitive ratings through its Client Service Desk. This report does not constitute an offer to sell or a solicitation of an offer to buy any securities, and it may not be used or circulated in connection with any such offer or solicitation.

We measured the credit risk of the CLO's notes using our Moody's CDOEdge™ model, which incorporates the CLO's structural features and asset characteristics noted above.

Credit strengths

- » *Predominantly first-lien senior secured loan exposure:* The CLO must hold a minimum of 90% first-lien senior secured loans and eligible investments. (See Asset description - Concentration Limits)
- » *No long-dated assets:* The CLO reduces the risk that the manager would need to liquidate assets remaining at the CLO's maturity date (long-dated assets) by prohibiting their purchase. (See Asset description - Concentration Limits)
- » *Remote likelihood of OC-based event of default:* An over-collateralization (OC)-based event of default and the associated liquidation of the portfolio are unlikely, because the event of default par ratio trigger of 102.50% is well below the initial OC level of 161.29%.¹ (See Additional structural analysis)
- » *No note cancellation without payment:* The CLO prohibits noteholders from surrendering their notes without receiving payments, eliminating the possibility of note cancellation to manipulate OC ratios. (See Additional structural analysis)
- » *Involuntary bankruptcy safeguards:* The CLO includes provisions that are helpful in minimizing the risks that a creditor could force an involuntary bankruptcy of the Issuer. (See Legal structure analysis)

Credit challenges

- » *Collateral quality matrix modifier allocation provisions can weaken collateral quality test covenants:* The CLO's provisions on collateral quality matrix modifier allocation could worsen a failing collateral quality test by loosening other collateral quality test thresholds. (See Additional asset analysis)
- » *Current pay asset rating requirement:* This CLO allows an instrument with a withdrawn rating to be eligible for the current pay asset treatment. (See Additional asset analysis)
- » *Unrated DIP assets:* DIP assets, that may constitute up to 7.5% of the portfolio, don't need to be rated by Moody's. (See Additional asset analysis)
- » *Larger than typical cumulative limit on purchased defaulted obligations and exchange transactions:* There is a larger than typical cumulative limit on bankruptcy exchanges. (See Additional asset analysis)
- » *No objective manager standard of care:* There is no objective standard of care in the transaction's collateral management agreement. (See Legal structure analysis)

In addition to the credit strengths and credit challenges we note above, the transaction includes the following noteworthy features.

- » *Restrictions on asset maturity amendments:* The CLO restricts the manager's ability to consent to asset maturity amendments, reducing the risk that the notes' exposure period will increase or that the manager would need to liquidate assets remaining at the CLO's maturity date (long-dated assets). (See Additional asset analysis)
- » *Designation of principal proceeds as interest proceeds:* Up to the second determination date, the manager can designate up to 1% of the target initial par as interest proceeds without consideration for the collateral quality tests and concentration limitations. (See Detailed description of the structure)
- » *Acquisition of restructured loans:* The issuer is allowed to purchase restructured loans using permitted use funds. (See Additional asset analysis)

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

- » *European Union risk retention*: The manager intends to comply with the European Union risk retention requirements. (See Additional structural analysis)

Key characteristics

Exhibit 2

CLO asset summary and related key parties

Portfolio metrics	Base-case modeling assumption*	Identified portfolio**
Portfolio par amount	\$600,000,000	\$552,836,776
Diversity score	60	80
Weighted average rating factor (WARF)	3215	2760
Weighted average spread (WAS)	3.40%	3.50%
Weighted average coupon (WAC)	6.50%	n/a
Weighted average recovery rate (WARR)	46.00%	48.01%
Weighted average life (WAL)	9.08	5.2
Key asset types	Concentration limit	
Senior secured loans, eligible investments	90.0% minimum	
Second-lien loans, senior unsecured, first-lien last out loans	10.0%	
Covenant-lite loans	65.0%	
Long-dated assets	Prohibited	
Key parties		
Manager	Regatta Loan Management LLC	

*We modeled this transaction using our base-case assumptions. We established these assumptions from a combination of the CLO's target initial par amount, the collateral quality test limits that the CLO issuer has provided, characteristics of the portfolio that the manager has identified and/or other adjustments to reflect deal-specific features.

**The identified portfolio represents the assets that the manager has identified as of the time of this report and has acquired or expects to acquire by the CLO's effective date.

Sources: Underwriter, Moody's Investors Service

This deal's WARF of 2760 is significantly below average compared to US CLO 2.0s we rate. (Its WARF is in the 20th percentile. A higher percentile indicates weaker credit quality; conversely, a lower percentile points to stronger credit quality.)

Its WAS of 3.50% is comparable to US CLO 2.0s we rate. (Its WAS is in the 60th percentile. A low percentile means lower interest proceeds generated from the underlying assets; a high percentile indicates more interest proceeds generated.)

Its WARR of 48.01% is similar to US CLO 2.0s we rate. (Its WARR is in the 50th percentile. A higher percentile indicates a higher recovery value on defaulted assets, while a lower percentile signals a lower recovery value.)

This CLO's exposure to assets with facility ratings of Caa1 or lower is 0.40%, which is significantly below average compared to US CLO 2.0s we rate. (Its Caa% is in the 10th percentile. A higher percentile means greater exposure to high credit risk assets; a lower percentile indicates lower exposure.)

The CLO's allowance for second-lien loans, senior unsecured, first-lien last out loans is similar to US CLO 2.0s we rate. The 10.00% maximum limit of the portfolio par amount of second-lien loans and unsecured loans is in the 50th percentile. CLOs with above-average limits for their portfolio could have a higher exposure to these loans that we assume will have a lower recovery rate.

Exhibit 3

CLO key dates, key parties and structural subordination

Key dates	
Closing date	December 2019
Latest effective date	June 2020
First payment date and payment frequency	July 2020 and quarterly thereafter
End of non-call period	January 2022
End of reinvestment period	January 2025
Legal final maturity	January 2033
Key parties	
Issuer	Regatta XVI Funding Ltd.
Co-issuer	Regatta XVI Funding LLC
Trustee	U.S. Bank National Association
Collateral administrator	U.S. Bank National Association
Underwriter	BNP Paribas Securities Corp.
Class	Effective subordination(%)
A-1 Notes	38.0
A-2 Notes	35.5
B Notes	24.3
C Notes	18.0
D Notes	12.4
E Notes	8.6

Source: Underwriter

Asset description

The manager will actively manage the CLO, purchasing and selling assets throughout the life of the transaction, subject to satisfying certain criteria. These criteria vary over the life of the CLO, from the closing date until the effective date (ramp-up period), from the effective date until the end of the reinvestment period (reinvestment period), and then until maturity (amortization period).

Assets at effective date

During the ramp-up period, the manager will purchase assets, subject to eligibility criteria, and must satisfy the CLO's target initial par amount, concentration limits and collateral quality tests as of the effective date. Failure to satisfy these effective date criteria will result in the diversion of interest or principal proceeds to purchase assets or repay the CLO's liabilities, until the effective date criteria are in compliance or the manager introduces other remedies.

Eligibility criteria

The types of assets that the CLO can purchase are subject to eligibility criteria. See the Appendix for a list of the CLO's key eligibility criteria.

Target initial par amount

The CLO's target initial par amount represents the minimum aggregate par amount of assets that the CLO is obligated to acquire by the effective date.

Collateral quality test

The CLO also includes collateral quality tests, designed to measure and limit key portfolio characteristics. In the exhibit below, we list each collateral quality test metric and the portfolio characteristic it is designed to limit.

Exhibit 4

Collateral quality test metrics

Metric	Portfolio characteristic
WARF	Average default probability
WARR	Average assumed recovery
WAL	Average stated maturity
Diversity score	Assets' independence
WAS	Average spread
WAC	Average coupon

Asset acquisition guidelines

CLO collateral quality matrix and modifiers

The collateral quality test limits are subject to a collateral quality matrix and modifiers, which allow the manager to choose among alternative combinations of WAS, WARF and Diversity Score limits.

In particular, the transaction will include a recovery rate modifier that will permit an increase in the WARF limit and/or a decrease in the WAS limit if the WARR exceeds its minimum limit. In addition, the transaction will also include a liability spread modifier and par modifiers.

Other adjustments to collateral quality tests

LIBOR floor adjusted spread calculation: The CLO includes LIBOR floors in its calculation of the portfolio's WAS for purposes of determining compliance with the CLO's WAS limit.

Concentration limits

The proportion of asset types in the CLO's portfolio are subject to limitations, expressed as a percentage of the portfolio's par amount, as the next two exhibits show.

Exhibit 5

Maximum and minimum concentration limits by asset type

Category	Maximum (unless otherwise indicated), prohibited or not specified
Senior secured loans, eligible investments	90.0% minimum
First-lien last-out loans, second lien loans and unsecured loans	10.0%
Fixed rate assets	7.5%
Cov-lite loans ⁽¹⁾	65.0%
Long-dated assets (unless such obligation is subject to a maturity amendment in accordance with the terms thereof)	Prohibited
Current pay assets (purchase limit/threshold for treatment as defaulted)	5.0%/7.5%
Caa assets (based on facility rating)	7.5%
Discount assets	25.0%
Delayed drawdown/revolving assets	10.0%
DIP loans	7.5%
Participations	15.0%
Aggregate third party limit	Satisfied
Total potential indebtedness more than \$150,000,000 and less than \$250,000,000	5.0%
Total potential indebtedness less than \$150,000,000	Prohibited
Single obligor:	2.0%
Except up to three obligors, each	2.5%
Collateral obligations purchased for less than the minimum price	2.5%
Payment Frequency:	
less frequently than quarterly	5.0%
less frequently than semiannually	Prohibited
Deferrable and partial deferrable	Prohibited
Securities with attached equity	Prohibited
Leases	Prohibited
Bridge loans	Prohibited
Structured finance obligations	Prohibited
Synthetic securities	Prohibited
Step-downs	Prohibited
Step-ups	Prohibited
Letter of credit	Prohibited
Emerging market obligors	Prohibited

(1) The CLO's indenture defines a "cov-lite loan" as: a loan that (a) does not contain any financial covenants or (b) (i) requires the borrower to comply with one or more financial covenants only upon the occurrence of certain actions of the borrower as identified in the underlying instrument (including, but not limited to, a debt issuance, dividend payment, share purchase, merger, acquisition or divestiture), but (ii) does not require the borrower to comply with one or more financial covenants during each reporting period, without regard to whether it has taken any specified action, provided that for all purposes a loan described in clause (a) or (b) above which either contains a cross-default or cross-acceleration provision to, or is pari passu with, another loan of the underlying obligor that requires the obligor to comply with either a financial covenant or a maintenance covenant (which maintenance covenant may require compliance only if such facility is drawn or is drawn above a threshold amount) will be deemed not to be a cov-lite loan.

Source: Transaction documents

Exhibit 6

Maximum and minimum geographic concentration limits

Geography	Maximum
Other than the US (aggregate)	20.0%
Other than the US and Canada (aggregate)	15.0%
Austria, Belgium, Denmark, Finland, France, Liechtenstein, Iceland, Luxembourg, Norway and Singapore (aggregate)	7.5%
Singapore	5.0%
Tax advantage jurisdictions (aggregate)	5.0%
Greece, Italy, Portugal, Spain (aggregate)	0.0%

Source: Transaction documents

Identified portfolio

The three exhibits below provide information about the portfolio, as of November 20, 2019, that includes assets the manager has acquired or has identified and expects to acquire by the CLO's effective date. As of the closing date, the manager will have invested approximately 85% of the CLO's issuance proceeds and will invest the remaining proceeds by the effective date.

Exhibit 7

Metrics of identified portfolio

Attribute	Metric
Portfolio par amount	\$552,836,776
Diversity score	80
WARF	2760
WAS	3.50%
WAC	n/a
WARR	48.01%
WAL	5.2

Source: Underwriter

Exhibit 8

Rating Distribution of Identified Portfolio

% relative to the identified portfolio's par amount

Facility rating	% of par
Baa2	0.2
Baa3	1.4
Ba1	2.3
Ba2	9.4
Ba3	10.2
B1	23.1
B2	46.6
B3	6.4
Caa1	0.4
Total	100.0

Obligor's default probability rating	% of par
Baa3	0.6
Ba1	1.6
Ba2	3.2
Ba3	8.8
B1	16.6
B2	38.0
B3	27.5
Caa1	3.5
Caa2	0.3
Total	100.0

Source: Underwriter

Exhibit 9

Top 5 industries of identified portfolio

% relative to the identified portfolio's par amount

Industry	% of par
Banking, Finance, Insurance & Real Estate	12.9
High Tech Industries	10.9
Hotel, Gaming & Leisure	10.3
Media: Broadcasting & Subscription	6.9
Healthcare & Pharmaceuticals	6.8
Total	47.8

Source: Underwriter

Manager

Regatta is a New York-based asset manager. The manager, as an agent for the CLO, is responsible mainly for selecting and trading assets, ensuring that the CLO is in compliance with its contractual obligations, and, together with the CLO's trustee, periodic reporting. The exhibit below details key attributes of the manager.

Exhibit 10

Manager details

Attribute	Metric
Management entity	Regatta Loan Management LLC
Assets under management	\$12.3 billion as of April 2019
Number of CLO professionals	26
Average number of years of experience	24 years (Senior management team); 13 years (Research team)
Number of CLOs currently managed	10
Average number of obligors covered per credit analyst	40-45

Source: Underwriter

Assets after effective date

After the effective date, the manager may trade assets over the life of the CLO, subject to (1) reinvestment restrictions, including those that depend on whether a CLO is in its reinvestment period, (2) the eligibility criteria, (3) the collateral quality tests, and (4) the concentration limits. The eligibility criteria, collateral quality tests, and concentration limits are the same as described in "Assets at effective date" above. If, in connection with a proposed purchase, a test or criterion is not satisfied, the degree of compliance with the test must be maintained or improved after giving effect to the investment.

However, certain trading may be prohibited if (A) we have (1) withdrawn and not reinstated the rating of Class A-1 notes or (2) downgraded the initial ratings of Class A-1 notes by one or more subcategories, and (B) the portfolio's par amount is less than the reinvestment target par balance amount. In particular, such prohibitions would apply to purchases of assets after the reinvestment period and discretionary trading during and after the reinvestment period, unless a majority of the controlling class consents to reinstate such trading. We note that the conditions restricting trading vary across CLOs, and we consider their impact in the context of each transaction.

If the CLO obtains sufficient noteholder consents, the manager can effect certain sales and purchases that do not conform to the CLO's trading criteria. The manager may sell any asset if noteholders representing at least 75% of the aggregate outstanding amount of each class of notes consent to such sale. The same condition applies to any purchases.

Reinvestment period

During the CLO's reinvestment period, the manager may engage in trading activity, including (1) sales of equity securities or assets that are credit improved, credit risk or defaulted, (2) discretionary sales, subject to an annual limit of 30% of the portfolio's par amount, and (3) purchases of assets with the proceeds of such sales and prepayments. This CLO's indenture requires all purchases to comply with the eligibility criteria, collateral quality tests, coverage tests, concentration limits and restrictions on the manager's ability to engage in trades that cause a reduction in the portfolio's par amount.

Amortization period

After the reinvestment period, the manager may (1) sell assets subject to the same restrictions that apply during the reinvestment period, and (2) if certain conditions are met, purchase assets using principal proceeds from prepayments and sales of credit risk obligations. Specifically, in addition to satisfying the trading conditions applicable during the reinvestment period, the CLO requires that the WARF test is satisfied, or, if not satisfied, then maintained or improved as compared to the level prior to the sale/prepayment. Also, each OC test needs to be satisfied. In addition, the purchased asset's rating must be at least equal to that of the sold or prepaid asset and the stated maturity date of each purchased asset cannot be later than that of the sold or prepaid asset.

Asset analysis

Primary asset analysis

Modeling

Moody's CDOEdge™ model is the principal model that we use to rate CLOs globally. Moody's CDOEdge™ estimates expected loss on a CLO's tranches using a model that is based on the binomial expansion technique and cash-flows as dictated by the CLO's structure. It relies on a number of assumptions to model assets, including average default probability, average recovery rate, diversity score, average life, and average spread of a CLO's assets.

Our base case modeling assumptions appear in the exhibit below. These assumptions are not necessarily the transaction's limits or expected levels.

Exhibit 11

Base-case modeling assumptions

Portfolio par amount	\$600,000,000
Diversity score	60
WARF	3215
WAS	3.40%
WAC	6.50%
WARR	46.00%
WAL	9.08

Source: We base our assumptions on a combination of information that the underwriter has provided, transaction documentation, and metrics of the manager's other CLOs.

WAL considerations: We modeled the portfolio's maximum 9.08 year life using an amortization profile evenly distributed over 2.5 years. We also analyzed an amortization profile that was evenly distributed over 5 years. It is important to note that the WAL, in conjunction with the assumed WARF, determines the modeled portfolio default probability. The longer the WAL, the higher the assumed default probability.

Collateral quality matrix and other adjustments: Prior to the closing date, we will model alternative combinations of the collateral quality tests, as the collateral quality matrix and modifiers specify, to help determine the assigned ratings.

Comparables

Below, we compare the key performance statistics of this manager's other CLOs. We also compare key characteristics of this CLO's assets to those of other managers' recent CLOs.

Performance of other Regatta CLOs

The manager's three recent transactions are passing their collateral quality and OC tests, as the exhibit below shows.

Exhibit 12

Comparison of characteristics: This CLO and three of the manager's other transactions

	Regatta XVI Funding Ltd.	Regatta XI Funding Ltd.	Regatta VIII Funding Ltd.	Regatta VI Funding Ltd.
Closing date	December 2019	6/26/2018	9/27/2017	5/19/2016
Reinvestment period end date	January 2025	6/26/2023	10/17/2022	7/20/2020
Maturity date	January 2033	7/17/2031	10/17/2030	7/20/2028
Trustee report date	n/a	9/30/2019	10/8/2019	9/30/2019
Total par	\$600,000,000	\$500,609,436	\$501,208,266	\$398,039,688
Defaulted par	\$0	\$0	\$0	\$0
	Base case assumptions and covenants	Reported	Covenants	Reported
				Covenants
WARF	3215	2806	2829 PASS	2835
Diversity	60	84	80 PASS	84
WAS	3.40%	3.17%	3.07% PASS	3.16% PASS
WAL (years)	9.08	5.1	8.0 PASS	5.1
WARR	46.00%	47.80%	43.00% PASS	43.00% PASS
Caa %	7.50%	0.92%	7.50% PASS	2.04%
Class A/B OC test	122.01%	131.74%	121.60% PASS	7.50% PASS
Class C OC test	113.95%	123.45%	115.30% PASS	2.19%
Class D OC test	108.09%	114.95%	108.80% PASS	7.50% PASS
Class E OC test	104.41%	108.83%	104.70% PASS	2.19%
Interest diversion test	105.41%	108.83%	105.20% PASS	7.50% PASS

Source: Trustee reports

Peer pool characteristics of Regatta XVI and other transactions

Regatta XVI is largely similar to other recently closed broadly syndicated loan CLOs, as the exhibit below shows.

Exhibit 13

Comparison of characteristics: Regatta XVI and other recently closed US BSL CLOs

Deal name	Regatta XVI Funding Ltd.	Park Avenue Institutional Advisers CLO Ltd 2019-2	Dryden 76 CLO, Ltd.
Closing date	December 2019	October 2019	October 2019
Manager	Regatta Loan Management LLC	Park Avenue Institutional Advisers LLC	PGIM, Inc.
Key modeling assumptions			
Portfolio par amount	\$600,000,000	\$400,000,000	\$400,000,000
WARF (base case)	3215	3112	3234
WAS (base case)	3.40%	3.20%	3.30%
WAC (base case)	6.50%	7.50%	4.50%
WARR (base case)	46.00%	47.00%	48.00%
WAL (base case)	9.08	9.0	9.0
Diversity score (base case)	60	60	70
Key attributes			
Reinvestment period (years)	5.0	5.0	5.0
Senior secured loans, cash and eligible investments (minimum)	90.0%	92.5%	90.0%
Caa purchase limit	7.50%	7.50%	7.50%
Subordination to the senior-most tranche	38.0%	36.3%	35.0%

Source: Moody's Investors Service

Additional asset analysis

Analysis of collateral quality and coverage tests

Restrictions on asset maturity amendments: The manager may not consent to amendments that extend the maturity of any asset beyond the legal maturity date of the notes. In addition, as a result of any amendment to an asset's maturity date, the WAL test must be satisfied. However, up to 10% of the portfolio may consist of assets whose maturities are extended without regard to WAL test or long-dated restriction if the amendment is (i) necessary to prevent the related collateral obligation from becoming defaulted or (ii) is undertaken in connection with insolvency, bankruptcy, winding up or in-court workout of the related obligor.

Collateral quality modifier allocation provisions weaken collateral quality test covenants: While collateral quality matrix selection criteria require that the manager select a minimum diversity/maximum weighted average rating/minimum weighted average spread scenario on the asset quality matrix that the underlying assets are in compliance with, there are no provisions requiring compliance after the matrix modifiers are applied.

The modifiers stipulate that on any measurement date the then-prevailing excess weighted average recovery rate (excess WARR) can be allocated to adjust the WARF and WAS covenants. However, the provision does not prohibit the reallocation from worsening the extent of a collateral quality test failure. For example, the manager could re-allocate the portions previously allocated to the WARF and WAS covenants, respectively, to improve one test at the expense of another.

Given that the CLO must maintain or improve collateral quality test compliance levels when trading the assets, the worsening of a failing collateral quality test by loosening other collateral quality test covenants and the excess WARR re-allocation over time between WARF and WAS weaken collateral quality test covenants that result in the acquisition of riskier assets by the issuer.

In particular, some deals have lowered their WAS test threshold at the expense of worsening the WARF test failure. To address this risk, we conducted additional analysis by assuming a lower WAS than the WAS covenant. We view the sensitivity of the modeling results as acceptable.

Current pay assets rating requirement: CLOs typically define a current pay asset as an obligation of an entity that is undergoing insolvency proceedings, that is current on its interest and principal payments, and that the manager believes will remain current. An instrument with a facility rating of at least Caa1/Caa2 and a market value of at least 80%/85% is typically eligible for current pay asset treatment.

However, this CLO allows an instrument with a withdrawn rating to be eligible for current pay asset treatment. This treatment could understate the amount of defaulted assets that are subject to the haircuts, and make the OC tests less effective.

To address this risk, we conducted an additional sensitivity analysis assuming a higher numerator in the OC and interest diversion tests. We view the sensitivity of the modeling results as acceptable.

Unrated DIP assets: This transaction permits the DIP assets to not be rated by Moody's. As a result, the reported WARF could underestimate the actual probability of default of the portfolio.

To address this risk, we conducted an additional sensitivity analysis by assuming a higher WARF than the covenanted level. We view the sensitivity of the modeling results as acceptable.

Larger than typical cumulative limit on purchased defaulted obligations and exchange transactions: Purchased defaulted obligations and exchange transaction permit the manager to exchange a defaulted asset for another defaulted asset or for a credit risk asset. The cumulative limit for purchased defaulted obligations is 12.5% and that for exchange transactions is 15.0%, which raises concerns that the variability of the portfolio's WARR could increase.

The purchased defaulted obligation exchanges are subject to certain restrictions, including (i) the manager's reasonable belief that the acquired obligation has a higher likelihood of recovery than the exchanged obligation, (ii) the acquired obligation is no less senior than the exchanged obligation in right of payment, (iii) either (a) Moody's rating should be equal or better or (b) Moody's DPR should be equal or better or (c) Moody's WARF should be satisfied (iv) each overcollateralization test will be satisfied, before and after an exchange or if not satisfied, maintained or improved, (v) 12.5% cumulative bucket for all purchased defaulted obligations held by the

issuer, (vi) new asset satisfies the conditions of a collateral obligation, (vii) original asset was not acquired in an exchange transaction, (viii) restricted trading period is not in effect, and (ix) acquired asset is not a long-dated obligation.

The exchange transactions are subject to certain conditions, including (i) the manager's reasonable belief that the acquired obligation has a higher likelihood of recovery than the exchanged obligation, (ii) the acquired obligation is no less senior than the exchanged obligation in right of payment, (iii) each overcollateralization test is satisfied, or if not satisfied, maintained or improved after giving effect to the exchange, (iv) sold asset was not acquired in an exchange transaction, (v) the exchange was not done during restricted trading period, (vi) cumulative limit of 15% and (vii) the acquired assets cannot be long-dated obligation.

To address the larger than typical cumulative bucket and the risk of a potential increase in the variability of the portfolio's WARR, we conducted an additional cash flow analysis assuming a lower WARR. We view the sensitivity of the modeling results to the lower WARR assumption as acceptable.

Acquisition of restructured loans: The issuer is allowed to acquire restructured loans in connection with a workout or restructuring of a collateral obligation and to purchase restructured loans using permitted use funds. These restructured loans will be treated as equity securities for overcollateralization and collateral quality test purposes.

Manager assessment

We believe that Regatta is capable of managing this CLO because of its experience in the leveraged loan market and in managing CLOs. As of April 2019, Regatta had over \$12.3 billion in assets under management. Regatta currently manages approximately \$5.1 billion across ten CLOs. The group employs 26 investment professionals, with the senior management team having an average of 24 years of experience.

We view Regatta's operational systems and controls as adequate to support its CLO platform. We maintain an on-going dialogue with the manager, both in our operations reviews and as part of our surveillance of its CLOs. We expect to conduct an on-site operations review of the manager in the coming months.

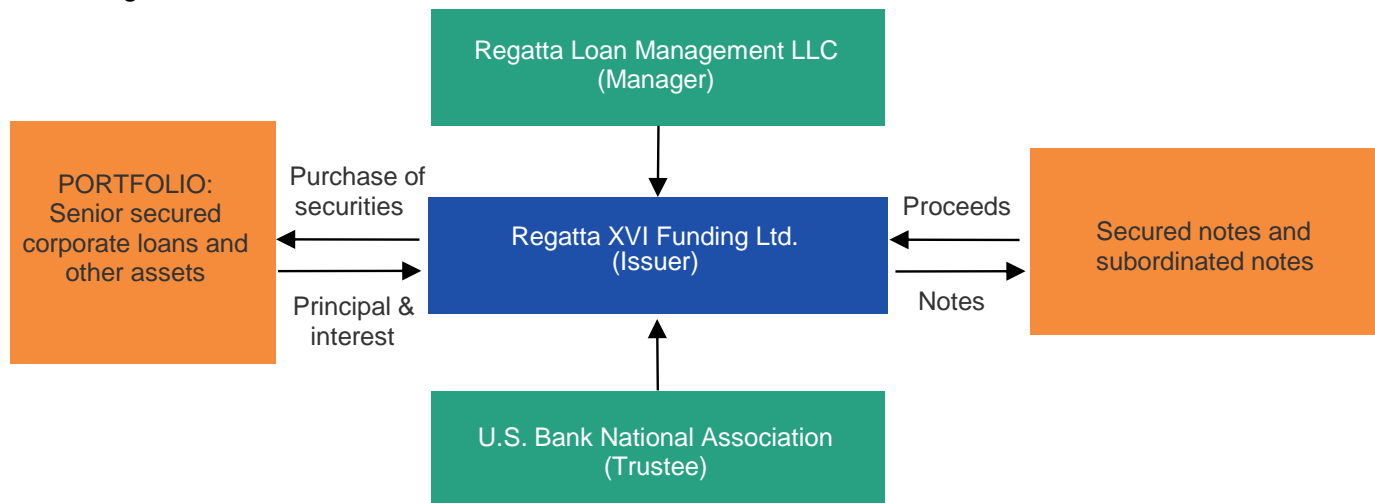
Securitization structure description

This CLO is structured using a bankruptcy-remote Cayman Islands special purpose entity that issues liabilities as listed in Exhibit 1 above. The proceeds from the issuance are invested in secured assets that generate cash flows from interest, principal, and, if the manager trades assets, trading gains or losses, as we describe in the Asset description section above. Those cash flows are distributed in accordance with the CLO's priority of payments, subject to over-collateralization (OC) and interest coverage (IC) tests.

The exhibit below shows the CLO's key parties and cash flows.

Exhibit 14

Structure diagram



Source: Moody's Investors Service

Detailed description of the structure

Priority of payments

This CLO's payment waterfall is consistent with that of a typical CLO. The CLO pays the notes sequentially in both the interest and principal waterfalls. Both waterfalls include OC and IC tests. The interest waterfall also includes an interest diversion test that is applicable during the reinvestment period. (See the Appendix for interest and principal waterfall details.)

Designation of principal proceeds as interest proceeds: Up to the second determination date, the manager can designate a certain amount of principal proceeds in the principal collection subaccount and/or the ramp-up account to be treated as interest proceeds. Such amount is limited to 1% of the portfolio's target initial par amount. While the target initial par condition must be satisfied after giving effect to the transfer, there is no requirement to maintain compliance with the overcollateralization tests, the collateral quality tests and the concentration limitations.

Coverage tests and interest diversion test

Exhibit 15

OC, interest diversion and IC tests

Tests	Trigger level	Expected initial level
Class A/B OC test	122.01%	132.01%
Class C OC test	113.95%	121.95%
Class D OC test	108.09%	114.09%
Class E OC test	104.41%	109.41%
Interest diversion test	105.41%	109.41%
Class A/B IC test	120.00%	n/a
Class C IC test	110.00%	n/a
Class D IC test	105.00%	n/a

Source: Transaction documents

Over-collateralization test: OC tests, present in all CLOs, provide protections for the CLO's notes. If the OC level for a particular class of notes falls below the OC trigger for that class, the deal diverts cash flows to the senior-most class until the breached OC ratio meets the trigger level.

Common to most CLOs, excess Caa assets are carried at their market values in the calculation of the OC ratios. Excess Caa assets are those Caa securities whose aggregate principal balance exceeds 7.5% of the portfolio's principal balance.

Interest diversion test: If the OC ratio for the Class E Notes falls below the interest diversion trigger level, the CLO will divert the lesser of 50% of available interest proceeds and the amount necessary to cure the test to purchase additional assets.

Interest coverage test: IC tests, which measure a CLO's excess interest cash flow, also provide protections for the CLO's notes. If the IC level for a particular class of notes falls below the IC trigger for that class, the deal diverts cash flows to the senior-most class until the breached IC ratio meets the trigger level.

Security interest, bankruptcy remoteness and safeguards against involuntary bankruptcy

Security interest: With minor exceptions, the assets of the CLO are pledged to the trustee for the benefit of the noteholders. Prior to closing, the CLO will certify to and provide representations affirming the validity of this pledge. The security interest granted can provide noteholders with additional protections and a greater degree of control in cases where difficulties have developed with the transaction's structure.

Bankruptcy remoteness: The CLO will be a special purpose entity, will have no prior operating history, and will be established for the limited purposes of acquiring the assets, issuing the notes, and performing certain related activities. Given this typical legal structure, we are able to analyze this transaction as bankruptcy remote.

Safeguards against CLO's involuntary bankruptcy: The CLO incorporates certain safeguards against the Issuer's involuntary bankruptcy.

Note redemption and cancellation

This CLO can effect an optional redemption of the notes by either (1) obtaining manager's certification that there will be sufficient proceeds to fully redeem all of the notes, or (2) entering into binding agreements with one or more financial or other institutions. Moreover, the transaction permits the CLO to withdraw a notice of redemption up to the day before the scheduled redemption date.

The CLO prohibits noteholders from surrendering their notes for cancellation without receiving payments.

Benchmark rate fallback language

The floating rate note coupons reference Libor which is earmarked for withdrawal after 2021. Intending to facilitate transition to an alternative reference rate, the Indenture incorporates fallback language addressing both the timing of transition and the choice of alternative reference rate.

The transaction documents provide that if, as determined by the manager, (i) there is a material disruption to Libor; (ii) there is a change in the methodology of calculating Libor; (iii) Libor ceases to exist or ceases to be reported, or the manager reasonably believes

any of the above three events will occur within six months; and no alternative reference rate has been approved by a majority of the controlling class noteholders and a majority of the holders of the subordinated notes, the manager will select a designated reference rate without any noteholder consent based on among any of the following (1) the rate proposed by the Federal Reserve's Alternative Reference Rates Committee; (2) the rate acknowledged as a standard rate by the Loan Syndications and Trading Association® or (3) the rate that is being used in at least 50% (by principal amount) of the collateral obligations included in the CLO or the floating rate securities issued in the new-issue collateralized loan obligation market in the prior month that bear interest based on a reference rate other than Libor. In all cases the fallback language provides for an adjustment factor which may increase or decrease the alternative reference rate. Notwithstanding the foregoing, for the purpose of calculating the interest due on the floating rate notes, any selected reference rate will at no time be less than 0.0% per annum.

Securitization structure analysis

Primary structural analysis

Expected loss and modeling analysis

We expect the losses on the rated notes to be consistent with our benchmark rating targets. This expectation is based on our analysis using Moody's CDOEdge™ model.

Moody's CDOEdge™ model is the principal model that we use to rate CLOs globally. Based on the binomial expansion technique, the model estimates expected loss on a CLO's tranches. It relies on a number of assumptions, including average default probability, average recovery rate, diversity, average life, and average spread of a CLO's assets. The model incorporates various scenarios for default timing and interest rate paths. The model allocates cash flows arising from the assets in accordance with the CLO's documentation. We fully describe our approach to modeling and rating CLOs in [Moody's Global Approach to Rating Collateralized Loan Obligations](#).

Additional structural analysis

OC analysis

Remote likelihood of OC-based event of default: We view the occurrence of an OC-based event of default and the associated liquidation of the portfolio as unlikely. The event of default par ratio trigger is set at 102.50%, well below the initial level of 161.29%.² The calculation, which is based on the ratio of the portfolio's par amount to the outstanding principal amount of the Class A-1 notes, incorporates haircuts for defaulted assets, but not for Caa or deep-discount assets. Portfolio liquidation following an event of default based on breach of the trigger requires consent from majority of the Class A-1 notes.

Interest rate risk

Interest rate mismatch: Because this CLO will issue only floating-rate notes, but may acquire fixed-rate assets that constitute up to 7.5% of the portfolio, there could be a mismatch between the interest cash flows on the assets and liabilities. To analyze this risk, in addition to modeling a base case assuming all floating rate assets, we modeled a case assuming that 7.5% of the portfolio constitutes fixed rate assets. The expected loss results in both cases were consistent with the assigned rating.

Note redemption and cancellation analysis

Note redemption: One way in which this CLO can effect an optional redemption of the notes relies upon the Manager's certification that there will be sufficient proceeds to fully redeem all of the notes. Although many other CLOs apply haircuts to the assets' market values when determining the sufficiency of such proceeds, thereby providing cushion against market value declines, this CLO does not incorporate such haircuts.

In addition, the CLO can effect an optional redemption of the notes if the manager provides evidence to the trustee that it has entered into binding agreements with one or more financial or other institutions to purchase all or a portion of the assets in an amount sufficient to redeem all of the outstanding notes. However, the CLO still is exposed to counterparty risk since there is no requirement for purchasing institution to have a short-term rating of P-1.

Nonetheless, we believe that the risk of failed optional redemption and subsequent payment default on the rated debt is minimal. First, the manager has the option to withdraw a notice of redemption up to and including one business day before the scheduled redemption date. Second, we believe that the Class A-1 Notes have sufficient subordination to withstand a decline in the assets' market values during an optional redemption process.

Note cancellation: The CLO's prohibiting noteholders from surrendering their notes without receiving payments eliminates the possibility of using note cancellation to manipulate OC ratios.

Legal structure analysis

Safeguards against CLO's involuntary bankruptcy: The CLO includes provisions that we view as helpful to protect it against involuntary bankruptcy. In addition to including non-petition covenants binding on all noteholders and other secured parties, the transaction incorporates an affirmative obligation of the CLO to take all actions necessary to defend and dismiss any involuntary bankruptcy or insolvency petitions or filings against the CLO. Noteholders also agree to be subject to a subordination agreement, whereby any noteholder who causes the filing of an involuntary bankruptcy petition against the CLO in violation of the non-petition covenant is deemed to acknowledge that any claim that noteholder has to the assets will be subordinated to the claims, until paid in full, of all noteholders who did not seek to file the petition.

No objective manager standard of care: The collateral management agreement (CMA) for this transaction does not contain an objective standard of care whereby the manager agrees to perform its obligations in a manner consistent with practices and procedures followed by institutional managers of national standing. However, this manager could be viewed as an institutional manager of national standing. The CMA does contain a standard of care whereby the manager agrees to use a degree of skill and attention no less than that which it exercises with respect to comparable assets that it manages for itself and others. We typically see both standards of care included in CMAs. Nonetheless, given the manager's extensive experience in the leveraged loan market and in managing CLOs, we do not expect the absence of an objective standard of care to have a material negative credit impact on the rated notes.

Tax considerations: Counsel to the Issuer is expected to opine on the Issuer's status under current United States tax law at closing. We expect such counsel will conclude that the Issuer's activities, as permitted by the transaction documents, will not cause the Issuer to be operating a trade or business in the U.S. and thus the Issuer will not be subject to U.S. federal income tax on a net income basis.

European Union risk retention: This CLO incorporates two features with the objective of complying with the European Union risk retention rule (the "EU retention requirements"). First, the manager will act as the retention holder under the EU retention requirements by retaining at least 5% of the securitized exposure in the CLO in the form of subordinated notes. Second, the manager will act as an originator under the EU retention requirements, by virtue of its obligations pursuant to a conditional sale agreement to purchase from the Issuer certain originated assets that have an aggregate principal amount equal to at least 5% of the aggregate ramp-up par amount, if certain terms and conditions are satisfied.

We believe that the rules do not introduce additional credit risk to the rated notes. On the closing date, the manager will deliver a risk retention letter to the CLO, describing certain manager undertakings intended to comply with the rules. The manager will also confirm its continued compliance with the EU retention requirements in the monthly report compiled by the issuer.

Methodology and monitoring

Rating methodologies

[Moody's Global Approach to Rating Collateralized Loan Obligations](#)

To access this report, click on the entry above. Note that this reference is current as of the date of publication of this report and that a more recent report may be available. All research may not be available to all clients.

Monitoring

If we assign definitive rating to the notes of this transaction, we will monitor the rating on an ongoing basis. We will announce and disseminate any subsequent changes in the rating through our Client Service Desk, and we will publish a performance overview on a regular basis on our website.

Representations & warranties: 17g-7

The Rule 17g-7 Report of Representations and Warranties is hereby incorporated by reference and can be found at http://www.moody.com/researchdocumentcontentpage.aspx?docid=PBS_1203081

Appendices

WARF - Sensitivity analysis

Exhibit 16

WARF - Sensitivity analysis

Class	Impact of increasing WARF by 15%	Impact of increasing WARF by 30%
A-1 Notes	-1	-3

Source: Moody's Investors Service

Modeling assumptions

The exhibit below summarizes our modeling assumptions for several key scenarios that we analyzed.

Exhibit 17

Key modeling scenarios

	WARF	WAL(a)	WAS	WARR(b)	Diversity score	WAC
Base case (100% floating-rate assets)	3215	9.08	3.40%	46.00%	60	n/a
92.5% floating rate assets and 7.5% fixed-rate assets	3215	9.08	3.40%	46.00%	60	6.50%
5-year amortization profile	3215	9.08	3.40%	46.00%	60	n/a
WARR allocation to WARF and/or WAS	3215	9.08	2.89%	46.00%	60	n/a
Current pay - withdrawn rating	3215	9.08	3.40%	46.00%	60	n/a
Unrated DIP assets	3332	9.08	3.40%	46.00%	60	n/a
Exchange transaction and purchased defaulted obligation	3215	9.08	3.40%	44.00%	60	n/a

(a) The WAL, in conjunction with the assumed WARF, determines the modeled portfolio default probability.

(b) Our methodology assumes a 50% recovery rate for a first-lien senior secured loan whose facility rating is one notch above its corporate family rating. Given that this transaction's portfolio consists of a minimum of 90% first-lien senior secured loans, our assumed portfolio average recovery rate will most likely be higher than the covenant.

Source: Moody's Investors Service

Eligibility criteria

The key eligibility criteria for any asset are as follows:

1. is a senior secured loan, a first-lien last-out loan, a second lien loan, an unsecured loan or a DIP collateral obligation;
2. is U.S. Dollar denominated and is not convertible by (a) the Issuer or (b) the obligor of such collateral obligation into any other currency, with any payments under such collateral obligation to be made only in U.S. Dollars;
3. unless such obligation is a DIP collateral obligation, is not a defaulted obligation or a credit risk obligation (unless such defaulted obligation or credit risk obligation is being acquired in connection with an exchange transaction or is a purchased defaulted obligation);
4. is not a bond, a letter of credit or other type of security;
5. is not a lease (including a finance lease);
6. is not a structured finance obligation or a synthetic security;
7. is not a deferrable obligation or a partial deferring obligation;
8. provides for a fixed amount of principal payable on scheduled payment dates and/or at maturity and does not by its terms provide for earlier amortization or prepayment at a price of less than par;
9. does not pay scheduled interest less frequently than semi-annually;
10. does not constitute margin stock;
11. gives rise only to payments that are not subject to withholding taxes, other than withholding taxes imposed on amendment fees, waiver fees, consent fees, extension fees, commitment fees or similar fees, or withholding taxes imposed pursuant to FATCA, unless the related obligor is required to make "gross-up" payments that ensure that the net amount actually received by the Issuer (after payment of all such taxes) equals the full amount that the Issuer would have received had no such taxes been imposed;
12. unless acquired in connection with an exchange transaction, has a Moody's rating (or, solely in the case of a DIP collateral obligation, had such a rating by Moody's before it was withdrawn, in the case of a point-in-time rating assigned within 12 months preceding the date of such purchase or acquisition);
13. is not a debt obligation whose repayment is subject to substantial non-credit related risk as determined by the collateral manager;
14. is not an obligation (other than a revolving collateral obligation or delayed drawdown collateral obligation) pursuant to which any future advances or payments, other than excepted advances, to the borrower or the obligor thereof may be required to be made by the Issuer;
15. will not require the Issuer, the co-Issuer or the pool of collateral to be registered as an investment company under the Investment Company Act;
16. is not the subject of an offer of exchange, or tender by its obligor or Issuer, for cash, securities or any other type of consideration other than (a) a permitted offer or (b) an exchange offer in which a loan or a security that is not registered under the Securities Act is exchanged for a loan or a security that has substantially identical terms (except for transfer restrictions) but is registered under the Securities Act or a loan or a security that would otherwise qualify for purchase under the investment criteria described under this indenture; provided that, any such security must upon acquisition by the Issuer following the exchange constitute a security received in lieu of a debt previously contracted (i.e., a collateral obligation previously acquired by the Issuer) for purposes of the loan securitization exclusion under the volcker rule;
17. is issued by a non emerging market obligor that is domiciled in the United States, a Group I Country, a Group II Country, a Group III Country or Singapore;
18. is not a zero-coupon security, a step-up obligation or a step-down obligation;

19. is not a long-dated obligation (unless such obligation is subject to a maturity amendment in accordance with the terms thereof);
20. is not a small obligor loan or an interest only security;
21. is not (a) an equity security or (b) by its terms convertible into or exchangeable for an equity security and does not include an attached equity warrant;
22. unless such obligation is being acquired in connection with an exchange transaction or is a purchased defaulted obligation, does not have a Moody's rating lower than "Caa3";
23. does not have an "f," "p," "t," or "sf" subscript assigned by S&P or an "sf" subscript assigned by Moody's;
24. if it is a "registration-required obligation" within the meaning of Section 163(f)(2)(A) of the Code, is registered;
25. is not a bridge loan;
26. is not a related obligation; and
27. is purchased at a purchase price not less than the minimum price other than in accordance with clause (q) of the concentration limitations.

Priority of payments

Application of interest proceeds

1. Taxes and fees
2. Administrative expenses, subject to a cap
3. Senior management fee
4. Payments relating to hedge agreements; pro rata
5. Interest on Class A-1
6. Interest on Class A-2
7. Interest on Class B
8. Class A/B coverage tests
9. Interest on Class C
10. Deferred interest on Class C
11. Class C coverage tests
12. Interest on Class D
13. Deferred interest on Class D
14. Class D coverage tests
15. Interest on Class E
16. Deferred interest on Class E
17. Class E coverage tests
18. During the reinvestment period, if the reinvestment test is not satisfied, up to 50% of the remaining interest proceeds may be used to purchase assets; or if the manager is unable to purchase appropriate assets, any remaining interest proceeds may be used to repay the notes sequentially

19. On the first payment date, if the ratings are not confirmed upon the effective date, all interest proceeds deposited into interest collection account
20. If the ratings are not confirmed upon the effective date, to redeem the notes sequentially until the ratings are confirmed*
21. Subordinated management fee
22. Remaining administrative expenses
23. Termination payments to defaulted swap counterparty, pro rata
24. Payment to each contributor, pro rata
25. Subordinated notes until the target return is met
26. After the target return is met, 80% of the remaining proceeds to the subordinated securities and 20% to the manager

Application of principal proceeds

1. Steps 1 through 7 of interest waterfall if not fully paid
2. Class A/B coverage test
3. Class C coverage tests
4. Class D coverage tests
5. Class E coverage tests
6. If Class C is the most senior class outstanding, payment of interest on Class C
7. If Class C is the most senior class outstanding, payment of deferred interest on Class C
8. If Class D is the most senior class outstanding, payment of interest on Class D
9. If Class D is the most senior class outstanding, payment of deferred interest on Class D
10. If Class E is the most senior class outstanding, payment of interest on Class E
11. If Class E is the most senior class outstanding, payment of deferred interest on Class E
12. On the first payment date, if the ratings are not confirmed upon the effective date, to redeem the notes sequentially until the ratings are confirmed *
13. If a special redemption date, to pay the notes in accordance with the principal payment sequence
14. During the reinvestment period, to reinvest in additional assets or after the reinvestment period, to reinvest in additional assets or eligible investments using principal proceeds from prepayments and sales of credit risk and credit improved securities
15. Make payments on the notes in accordance with the principal payment sequence
16. Steps 21 to 24 of the interest waterfall if not fully paid
17. Subordinated notes until the target return is met
18. After the target return is met, 80% of the remaining proceeds to the subordinated securities and 20% to the manager

* See [Moody's Clarifies Policy for the Issuance of RACs](#) (January 2012) which makes clear that the provision of a RAC remains entirely within Moody's discretion, and it may be that Moody's will not provide a RAC even if the transaction documents, to which Moody's is not a party, require it.

Sources used in this report

The sources we used in preparation of this report include:

- » Moody's Investors Service
- » Information from the arranger
- » CLO's legal documents
- » Information from the manager

Moody's related publications

- » [Moody's Global Approach to Rating Collateralized Loan Obligations](#)
- » [CLO Interest](#)
- » [Moody's Structured Finance Quick Check](#)
- » [CLOs - US, EMEA, Global: Market Pulse](#)
- » [CLOs – US: 2019 Outlook – Continued economic growth will foster stable performance amid weakening in loan quality, looser structure](#)
- » [CLOs – Europe: 2019 Outlook – Documentation and collateral will weaken, but performance will remain strong](#)
- » [US CLO Sector Update – Q2 2019: CLO issuance soldiers on despite volatility and mixed credit signals](#)
- » [EMEA CLO Sector Update – Q2 2019: Performance and corporate credit metrics worsened, but issuance remained solid](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

- 1 To determine the occurrence of an OC-based event of default, the CLO measures the OC ratio by dividing the portfolio's par amount by the outstanding principal amount of the senior-most notes.
- 2 To determine the occurrence of an OC-based event of default, the CLO measures the OC ratio by dividing the portfolio's par amount by the outstanding principal amount of the senior-most notes.

© 2019 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1202945