

## SECTOR IN-DEPTH

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CLOs – US:

## From covenants to cushions: Top 10 credit challenges CLOs face today

### Summary

US collateralized loan obligations (CLOs) are facing a number of expanding risks, particularly stemming from growing weaknesses in the leveraged loan market, the loosening of transaction constraints and the changing regulatory and macroeconomic environments. That said, we expect credit performance to remain stable over the next year, as time-tested CLO structures continue to compensate for weakening collateral quality against a backdrop of economic growth and a benign maturity wall.<sup>1</sup> In this report, we enumerate some of the most salient credit challenges CLOs face today.

- (1) Proposed amendments that require little or no investor consent**
- (2) Wide latitude to classify certain types of trades as "exchanges"**
- (3) Collateral quality test (CQT) adjustments that alter CLOs' risk profiles**
- (4) Relaxation of trading provisions that increase the potential for par erosion**
- (5) The undermining of over-collateralization (OC) tests via weaker par value haircuts**
- (6) Constrained trading ability via WARF and WAS erosion**
- (7) Falling weighted average recovery rate (WARR) cushion**
- (8) Declining loan recovery rate expectations owing to lower debt cushions**
- (9) Uncertainty around the timing and magnitude of loan defaults in the next downturn**
- (10) Transitioning to alternative benchmark rates in anticipation of the phase-out of LIBOR**

### **(1) Proposed amendments that require little or no investor consent**

An increasing number of CLO issuers are proposing looser standards for amending indenture terms, including those related to conforming to rating agency criteria, asset quality matrices, collateral quality tests, and trading rules, with limited or no noteholder consent.<sup>2</sup> These amendments, if adopted and implemented, could alter the terms of the CLO and could result in unanticipated modifications in portfolio credit quality or cashflows to investors. Additionally, if the organizational documents of the issuer or co-issuer are amended, the fundamental structural principles of bankruptcy remoteness could be jeopardized.

Examples of proposed flexible amendment provisions, while ultimately undermine noteholder's protections, include those that have no contractual restrictions on adopting the amendment, grant a certain class of notes a right to consent only if the manager determines that there would be a material adverse effect on the notes, or provide only objection/negative consent rights to a certain class of noteholders, who must respond within a short time.

### **(2) Wide latitude to classify certain types of trades as "exchanges"**

The widening definition of "exchanges" in CLO indentures is diminishing the effectiveness of CLO trading rules intended to limit risk taking. Historically, a typical bankruptcy exchange clause permitted the exchange of one defaulted asset for another. However, the exchange clause definition has evolved over the years, to include the exchange of both defaulted and credit risk assets for other defaulted or credit risk assets. While purchases during and after the reinvestment period are subject to, at minimum, a "maintain or improve" standard upon the existing portfolio quality metrics, these so-called exchanges are sometimes not subject to the same standard or trading restrictions. Sometimes the received asset in the exchange does not even have to meet the portfolio's eligibility criteria and could expose the transactions to additional risks that were not initially contemplated. Furthermore, the definition of a "credit risk asset" varies from deal to deal and is often relatively loose, giving managers wide latitude to designate credit risk assets.

Another provision in the CLO indenture that bypasses the standard trading restrictions is a deep discount obligation (DDO) substitution or a swapped non-discount. Typical requirements are that the newly acquired asset must have the same or a better default probability rating than the sold asset, and that the purchase price must not be less than the sale price. While these requirements guard against portfolio WARF deterioration and par inflation, they still leave CLOs open to longer WALs, lower WARRs, lower WAS and reduced par.

### **(3) CQT adjustments that alter CLOs' risk profiles**

CLOs are increasingly incorporating collateral quality test adjustments that give credit to any excess par in the transaction. However, if the deal does not need to subsequently maintain the increased levels of excess par when trading, these adjustments can worsen CLOs' risk profiles.

When adjustments are made to more than one CLO test metric, the degree of distortion varies depending on whether the tests include or exclude the same subset of assets or whether different tests include or exclude different subsets of the assets. For example, the WARF calculation may include only the best quality assets up to the portfolio's target par amount, excluding from the calculation certain excess, low-quality assets. Analogous adjustments may be made in the calculation of WARR and WAL. In addition, in WAS calculations, the denominator is often capped at the portfolio's target par amount, inflating the WAS to the extent the aggregate par amount is greater than the target par amount.

Importantly, most CLO indentures do not require any excess par build to be maintained when trading. Some even permit excess par to be designated as interest proceeds and paid to the subordinated noteholders. Therefore, the benefit of the additional subordination provided by the excess par may not remain in the transaction to mitigate the risks arising from the distorted collateral quality metrics.<sup>3</sup>

### **(4) Relaxation of trading provisions that increase the potential for par erosion**

CLOs are increasingly loosening trading provisions that require maintaining par, thus allowing deal proceeds to be used for purposes other than reinvesting or paying down notes. If par erodes as a result, effective subordination available to protect the secured notes could decline.

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While CLO trading provisions typically require par to be at least maintained or improved when the proceeds from sales or prepayments are reinvested in new assets, some transactions have been including features that could lead to par erosion. For example, some trading provisions require that the aggregate par amount be at least equal to or greater than a declining schedule of target par amount rather than the constant initial target par amount, thereby permitting portfolio par erosion through trading. In rare instances, the paydown of the Class X notes, the balance of which is typically repaid with interest proceeds, can decrease this target par amount also, subjecting the deal to a lower par standard than initially presented to the investors.

Additionally, allowing the use of principal proceeds to exercise warrants could also lead to par erosion to the extent the received equity is not sold right away and held indefinitely, increasing the uncertainty of whether the sale proceeds will return to the deal as principal proceeds.

### (5) The undermining of OC tests via weaker par value haircuts

Some CLOs carry troubled assets at par value and exclude others from default treatment, which undermine tests by essentially allowing deals to overstate OC levels.

CLOs typically haircut defaulted assets, DDOs and excess Caa-rated assets in OC tests in order to account for the potential loss of par. But an increasing number of CLO documents are carving out certain assets typically subject to such par haircuts. For example, some CLO indentures carve out from their Caa-excess allowance a number of types of assets, including: current pay assets, DIP loans, DDOs and Caa assets that are trading above par. Some indentures also do not classify an obligation as defaulted when a pari-passu obligation of the same obligor defaults unless the lenders in the other defaulted obligation have accelerated payments. Even when there is a voluntary bankruptcy proceeding by the obligor, some indentures now look for a grace period before calling it a default. As such, to the extent that the assets that would otherwise be subject to the par haircuts in the OC calculations are given full par treatment, the OC tests will be less effective.

### (6) Constrained trading ability via WARF and WAS erosion

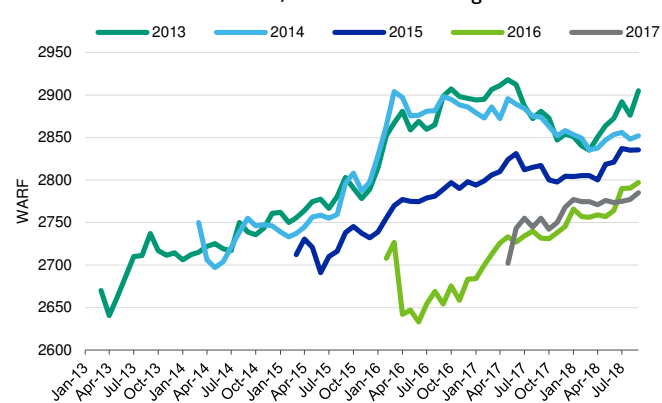
The overall worsening of CLOs' WARF, a measure of a portfolio's default probability, in tandem with declining WAS, a measure of the overall spread of the portfolio, is affording managers little room to trade off the two collateral quality metrics in order to maintain CQT compliance.

In a typical collateral quality matrix, holding diversity score constant, the lower the WAS, the lower the permitted WARF, and the higher the WAS, the higher the permitted WARF. However, as Exhibits 1 and 2 show, across all vintages, WARF has increased by about 100 while WAS has declined by about 100 basis points since 2015. Therefore CLOs have not been compensated for the portfolio's higher WARF with corresponding higher spreads.

Exhibit 1

#### CLO WARF continues to increase

Median WARF of CLOs we rate, across CLO 2.0 vintages

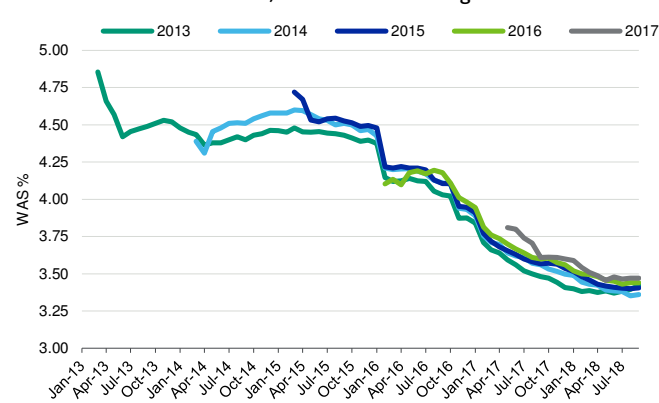


Source: Moody's Investors Service

Exhibit 2

#### CLO WAS continues to decline

Median WAS of CLOs we rate, across CLO 2.0 vintages



Source: Moody's Investors Service

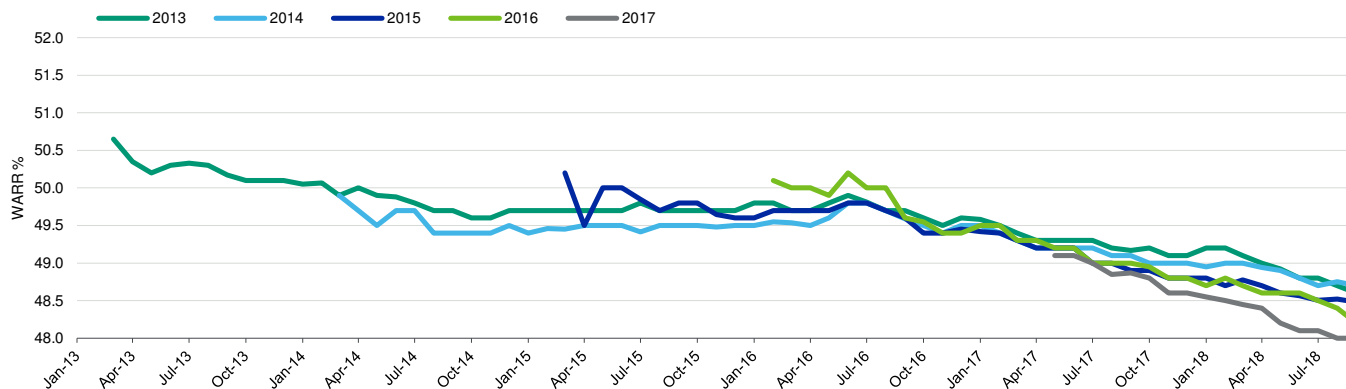
## (7) Falling WARR cushion

In an operating environment in which assets with higher recovery rates are harder to come by, CLOs may have a more difficult time trading into higher WARR portfolios, and reaching compliance with their WARF tests. Currently, the median WARR of the CLOs we rate has declined at an accelerated pace, as shown in Exhibit 3, while covenants remain at 43%. As a result, transactions have a diminished ability to use their modifiers to apply excess WARR to towards higher WARF. If WARF continues to move further out of compliance, and WARR continues to fall, portfolio parameters can differ meaningfully from the transaction's covenants.

Exhibit 3

### CLO WARR continues to decline

Median WARR of CLOs we rate, across CLO 2.0 vintages



Source: Moody's Investors Service

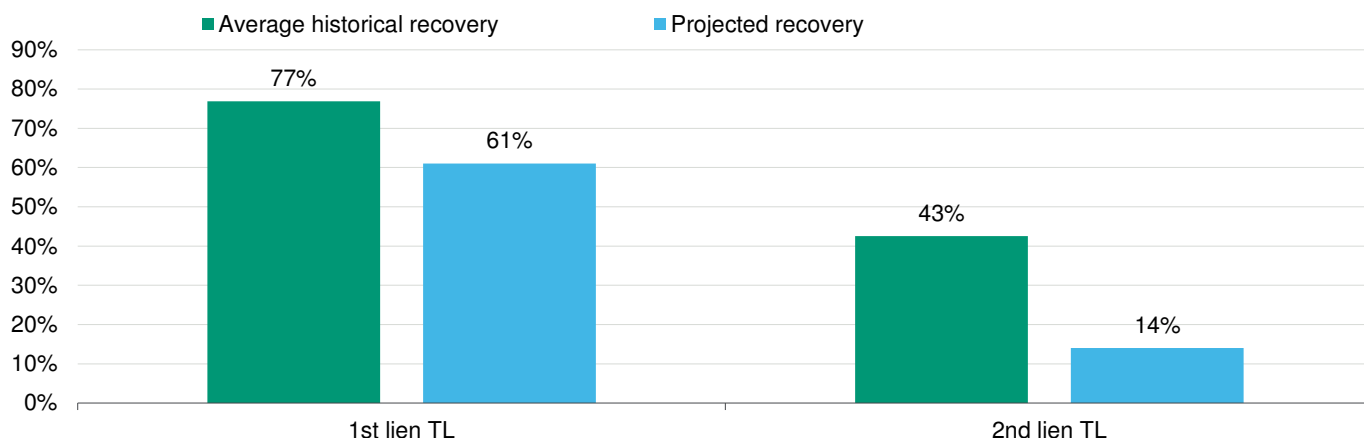
## (8) Declining loan recovery rate expectations owing to lower debt cushions

As loss-given-default expectations rise for leveraged loans, CLOs face the prospect of higher loss severities in their portfolios.

As subordinate debt cushions that serve to absorb losses beneath senior debt have eroded, our loss-given-default expectation for first-lien debt has increased substantially. An increase in the volume of first-lien debt relative to subordinated debt outstanding is driving debt cushion shrinkage. Additionally, the convergence of the leveraged loan and high-yield bond markets has led to leveraged loans acquiring more bond-like characteristics, some of which create the potential to upend or dilute the position of first-lien loans at the top of the capital structure, further undermining debt cushions.<sup>4</sup>

Based on our loss-given-default assessments, as Exhibit 4 shows, we currently expect first-lien senior-secured term loans to recover about 61% of their defaulted balances, on average, versus the long-term historical average of 77% (from 1988 through 2018).<sup>5</sup>

Exhibit 4  
**Current loss-given-default assessments point to lower future recoveries\***



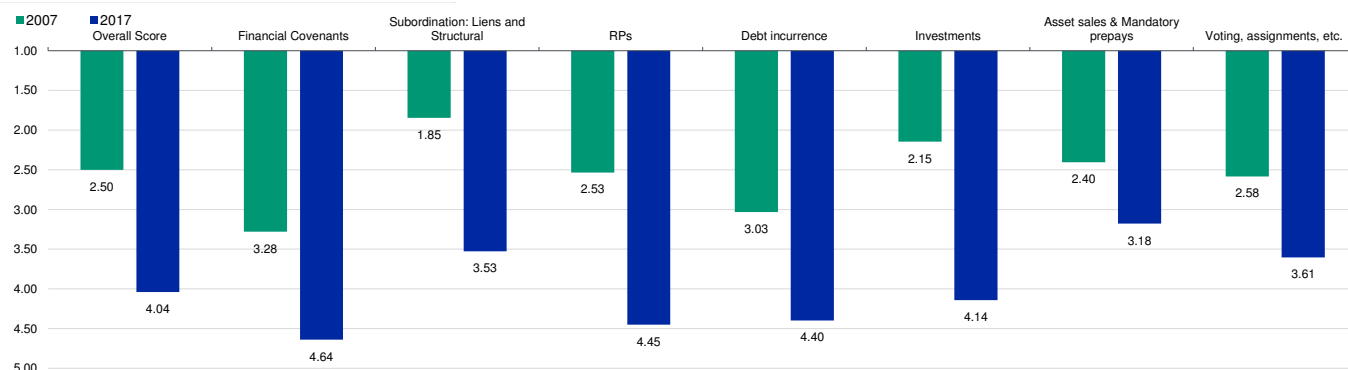
\*Historical recovery based on defaulted instruments in Moody's Ultimate Loss Given Default database; projected recovery based on LGD point estimates for loans issued by companies rated by Moody's US corporate finance group  
 Source: Moody's Investors Service

### (9) Uncertainty around the timing and magnitude of loan defaults in the next downturn

In addition to the prospect of higher loss severities in the next downturn, CLOs face the challenge of assessing the timing, duration and severity of the next recession – and accompanying default cycle. While growing weaknesses in leveraged loan credit quality, debt structures and credit protections are currently offset by the broad availability of capital and a positive economic outlook, these trends will have negative consequences for CLOs when the markets turn.

Leveraged loan covenants have been deteriorating for many years in a borrower-friendly market, leaving protections much weaker than they were in advance of the financial crisis. As we reach the end of the credit cycle, loan covenant quality is weaker today than it was in 2007 across all the risk categories that we analyze,<sup>5</sup> as Exhibit 5 shows. This deterioration in covenant quality has been driven by demanding borrowers undermining the strength of credit agreements and capital structures in leveraged loans, as investors continue to cede control because of their need to fulfill fund mandates and increase yield. Meanwhile, record CLO issuance also continues to fuel demand.<sup>7</sup>

Exhibit 5  
**Loan covenant quality is weaker today than in 2007 across all risk categories**



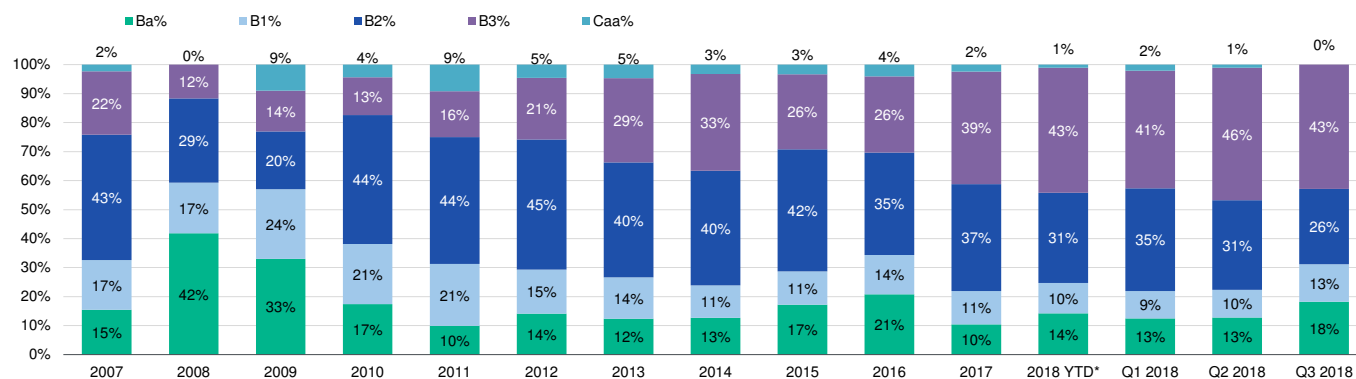
Source: Moody's Investors Service; scores on a scale of LCQ1 (strong) to LCQ5 (weakest).

Along with weaker loan covenants, the past few years have seen lower corporate credit quality. As Exhibit 6 shows, as of mid-2018, 64% of speculative-grade issuers had corporate family ratings of B2 or lower, a significant increase from 47% in 2006. And in the first half of 2018, the share of first-time issuers rated B3 or lower hit a record high of 43%. This is notable because B3 is typically the lowest rating acceptable to investors, and default rates grow exponentially at progressively lower ratings.

Exhibit 6

**The share of new issuers rated B3 remained historically high in Q3 2018**

New leveraged loan issuance rating distribution\*



\*As of September 30, 2018

Source: Moody's Investors Service

**(10) Transitioning to alternative benchmark rates in anticipation of the phase-out of LIBOR**

With no replacement rate set, and given CLOs' meaningful exposure to the base rate, the credit impact of LIBOR's phase-out is still uncertain.

CLOs currently have the largest exposure to LIBOR among the securitization sectors we rate,<sup>8</sup> with spreads on assets and liabilities typically pegged to the benchmark rate. By the end of 2021, the UK Financial Conduct Authority plans to stop supporting the publication of LIBOR, and current lack of a replacement subjects CLOs to some uncertainty in several ways.

- » First, numerous legacy deal's LIBOR definitions fall back on using the last available LIBOR rates, effectively converting variable-rate coupons into fixed-rate ones, a change that investors seeking variable-rate products likely would not welcome.
- » Second, even for the deals that do include transition language, a change to an alternative benchmark rate could introduce a new basis risk if the underlying assets and CLO liabilities adopt different base rates.
- » Third, new benchmarks may fundamentally differ from LIBOR, such as by representing collateralized borrowing with lower costs or by not reflecting the same maturities.

## Moody's related publications

[CLOs – US: 2019 Outlook – Continued economic growth will foster stable performance amid weakening in loan quality, looser structure](#), November 27, 2018

[CLOs – US: Sector Update – Q3 2018: Credit continued to weaken as investors favor risk](#), November 16, 2018

[Leveraged Loan Covenants – North America: The top 10 ways investors are forfeiting protections](#), November 13, 2018

[CLOs – US: Structural features limit credit impact of collateral quality deterioration amid strong growth in new issuance](#), August 25, 2017

[Leveraged finance – US: Convergence of bonds and loans sets stage for worse recoveries in the next downturn](#), August 16, 2018

[CLOs – US: Transaction documents can host hidden risks for CLO investors](#), July 26, 2018

[CLOs – Global: 'Cov-loose' CLOs expand risks for noteholders](#), April 5, 2018

[Structured Finance – Global: Links to LIBOR are meaningful across securitization sectors including US CLOs, UK RMBS and US subprime RMBS](#), September 13, 2017

[CLOs – US: Credit Deterioration and Low Spreads Diminish Some CLOs' Trading Flexibility](#), July 27, 2016

[CLOs – US: Lack of Restrictions on CLO Credit Risk Exchanges Can Be Credit Negative](#), August 14, 2015

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

<sup>1</sup> See [CLOs – US: 2019 Outlook – Continued economic growth will foster stable performance amid weakening loan quality, looser structure](#), November 27, 2018.

<sup>2</sup> See [CLOs – US: Transaction documents can host hidden risks for CLO investors](#), July 26, 2018.

<sup>3</sup> See [CLOs – Global: 'Cov-loose' CLOs expand risks for noteholders](#), April 5, 2018.

<sup>4</sup> See [Leveraged finance – US: Convergence of bonds and loans sets state for worse recoveries in next downturn](#), August 16, 2018.

<sup>5</sup> See [Annual default study: Corporate default and recovery rates, 1920-2017](#), February 15, 2018.

<sup>6</sup> See [North American Loan Covenant Quality Indicator – Not just cov-lite: Protections remain under siege across all risk categories](#), October 25, 2018.

<sup>7</sup> See [Leveraged Loan Covenants – North America: The top 10 ways investors are forfeiting protections](#), November 13, 2018.

<sup>8</sup> As measured by the share of tranches we rate that are tied to LIBOR, which represent a total of more than \$300 million in current balances. See our cross-sector report, [Structured Finance – Global: Links to LIBOR are meaningful across securitization sectors including US CLOs, UK RMBS and US subprime RMBS](#), September 12, 2017.

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