CLOs

Trying to bond in a loan-ly world

Proposed changes to the Volcker Rule could allow banks to purchase not only CLOs with small bond buckets, but potentially deals that are fully backed by bonds (CBOs). While attractive vs CLOs, the lower leverage and headline risk of CBOs is likely to temper the revival of this re-emerging asset class

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The recent proposal by the Fed, OCC, FDIC, SEC and CFTC focuses on changes that could have a direct effect on the CLO market, including proposed flexibility of the "loan securitization exclusion" and changes to the rules around "covered funds" (link to proposal here). The comment period for the proposal will close on 1 April 2020.

Volcker Rule proposal implications

As discussed in our Global CLO Primer, a CLO is considered a "covered fund" under the Volcker Rule and "ownership interests" in covered funds are subject to a 3% limit for Volcker-compliant entities. Holders of CLO tranches are considered to have an "ownership interest" due to manager removal rights found in CLOs, where investors can remove a manager not only after an Event of Default, but also before (e.g. breach of duty, unresolved "key person" departure).

To ensure that banks could continue to purchase CLOs – an important source of demand at the AAA level and owners of nearly $100bn of mostly senior CLO tranches currently (see Tracking Global CLO Ownership) - and that the CLO market did not shut down after implementation of the Volcker Rule, a "loan securitization" exclusion was created, under which a CLO is not considered a "covered fund" (to fit under the exclusion, the CLO cannot hold bonds in the underlying portfolio).

However, the new proposal states that, if approved, a "non-loan asset" bucket can be added to the loan securitization exclusion without CLOs being labeled as covered funds. Under the proposal, a 5% bucket of non-loan assets would be permitted, but the government agencies have asked for feedback on whether the bucket should be 5%, 10% or some other amount (question 14 of the proposal, page 37), and if the bucket should exclude or limit the type of securities allowed in the new bucket (question 15, page 38).

The other proposal relevant for the CLO market – and which could have an even larger effect on not only CLOs but also on the emerging Collateralized Bond Obligation (CBO) market – is the introduction of a safe habour clause for "senior loan or other senior debt interest" from the definition of "ownership interest".

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Under the proposal (as outlined on page 107 of the proposal and based on our understanding), banks may be able to buy not only CLOs that use the "loan securitization exclusion" to hold small buckets of bonds, but also tranches of deals that hold 100% bonds, and would not be classified as having an "ownership interest". While it is unclear what "senior interest" actually means (eg, AAA tranche, all investment-grade rated tranches or possibly all debt tranches), we think banks, which primarily purchase AAA tranches, would be able to purchase AAA-rated CBO tranches under the proposal.

Our takeaways

We think the recent proposals to the Volcker Rule will have a minor effect on CLOs, but be slightly positive for both debt and equity investors due to the greater flexibility managers will have in diversifying portfolios, especially as loan downgrade rates and repricing supply remains high (see The Tail of CQTs: Return of the Repricings).

Most CLO managers are unlikely to include bond buckets beyond a 5-10% limit, with even those at the top end of the range not fully filling those buckets before attractive relative value opportunities arise. Additionally, we expect the emergence of the CBO market to be gradual due to the lower equity leverage and more headline risks, despite those tranches looking attractive on a spread basis versus CLOs currently.

Finally, the reintroduction of bonds to the CLO market is likely to generate more negative media headlines around the asset class, especially as the CBO acronym gets used more. However, we will continue to monitor changes to both the CLO and CBO markets, and – as we set out to do in CLO Mythbusters: Fact-Checking the Headlines – we will present the facts about these two asset classes that have evolved greatly over the past two decades to the benefit of investors.

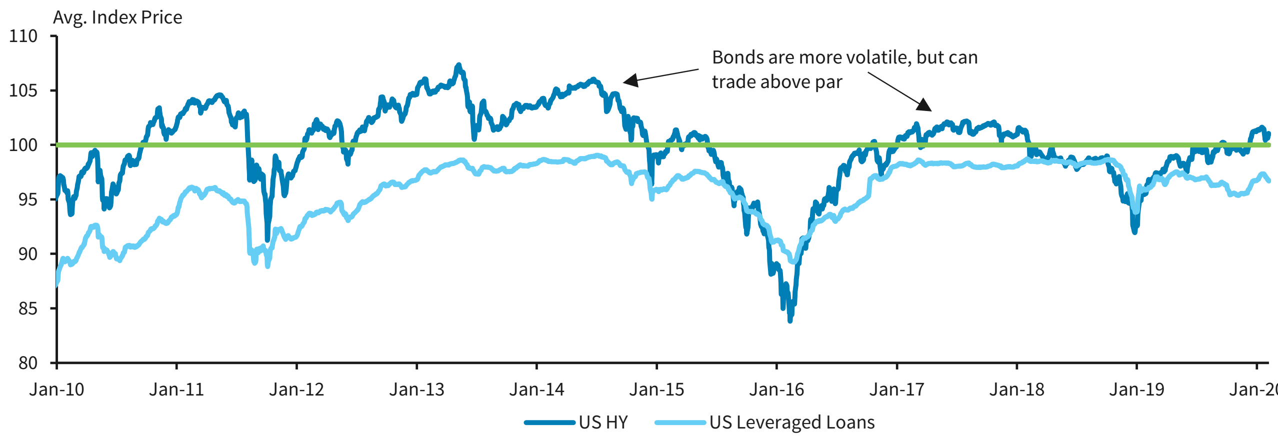
Small bond buckets: The good and the bad

The addition of bond buckets to CLOs is not new (even early post-financial crisis deals had bond buckets before the Volcker Rule was passed), and can have advantages as well as disadvantages for both debt and equity investors.

The good

One major advantage for CLOs in owning bonds is enabling managers to take advantage of the convexity afforded to bond holders, especially as liquidity in the high yield (HY) bond market is higher than in the loan market. With a typical six-month soft call period, loans rarely trade much higher than par. In contrast, HY bonds tend to have 2-3 year non-call periods, and can trade much higher than par (Figure 1).

FIGURE 1. Bonds are more volatile than loans, but can also trade much higher than par

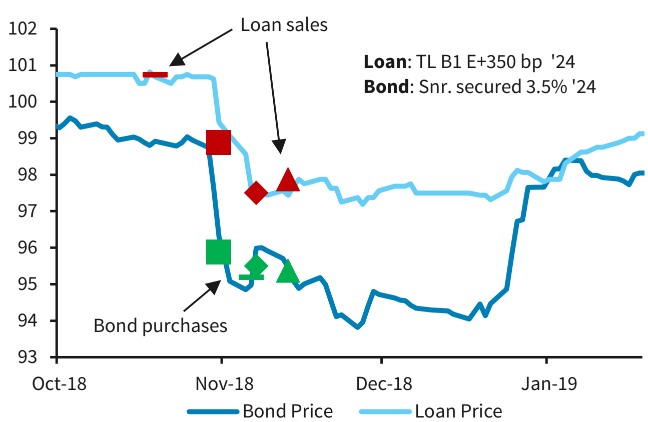


Source: S&P LCD, Bloomberg Barclays, Barclays Research

For CLO managers that have long-term fundamental views on underlying issuers and that are adept at trading their portfolio, the number of opportunities to build par increases with the ability to buy bonds. For example, in late 2018, when credit markets sold off, some European CLO managers (who can hold bonds due to taking other avenues of Volcker compliance) took the opportunity to switch from loans to bonds in the same issuer to position themselves for more price upside in the bonds. Specifically, the data show that some CLO managers sold their Stada (Nidda Healthcare) loans as prices fell, but then bought the similarly rated senior secured bond (similar rating and coupon), typically on the same day (Figure 2).

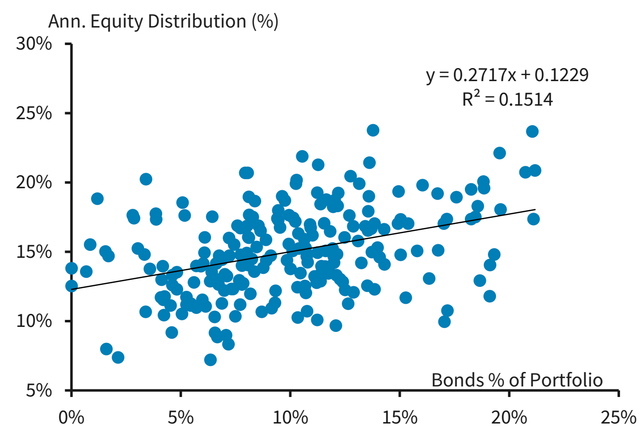
A manager who simply bought the loan at the low of 97.5 and sold at 99.5 after the price recovered, would gain just two points on the position. But a manager who originally bought the loan at par, took a loss by selling at 98, used the proceeds to buy the bond at 94 and then sold at 99 after it recovered, would gain closer to three points. Furthermore, there were some managers who did not own the loans, but simply bought the bonds after the price fell, and likely built even more par. While bond buckets in Europe are much higher than would be allowed under the proposed "loan securitization" exclusion (>20% versus just 5%), we still think the positive relationship between bond bucket usage and CLO equity distributions in Europe could apply to US CLOs (Figure 3).

FIGURE 2. Active European managers switched between loans and bonds to build more par in Q4 '18



Source: Kanerai, Intex, Markit, Barclays Reseracrh

FIGURE 3. European CLOs with higher bond buckets tend to make higher equity distributions

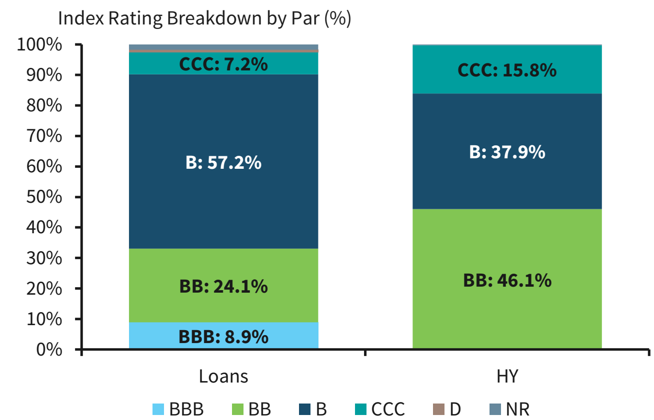


Note: Only European CLOs currently in reinvestment
Source: Kanerai, Intex, Barclays Reseracrh

The ability to include fixed coupon assets in a portfolio would also allow CLO managers to increase duration. Although the duration of the bond market has declined over the last year as more bonds now trade above their call price, bond buckets would have a different dynamic with underlying rates.

Diversification is also a potential benefit to CLO managers, who would be able to access the HY bond market. The US HY bond index, at over $1.2bn, is of higher quality than the loan market ($1.1bn outstanding), with 46% of the market rated BB (compared to 33% of the US Leveraged Loan Index rated BB- or better), as shown in Figure 4. Also, the bond market has a different sector skew to the loan market. For example, the bond market has greater energy exposure but less retail exposure than the loan market (Figure 5).

FIGURE 4. The US HY market is larger and higher rated than the loan market



Note: S&P LL index and Bloomberg Barclays US HY index

Source: S&P LCD, Bloomberg Barclays, Barclays Research

FIGURE 5. The HY market has more exposure to energy compared to the loan market

Rank	Largest US HY Bond Sectors	HY Weight (Par)	Loan Weight (Par)
1	Cable Satellite	7.7%	3.0%
2	Technology	6.6%	18.2%
3	Healthcare	6.0%	7.3%
4	Independent	5.9%	0.4%
5	Media Entertainment	4.7%	5.8%
6	Wireless	4.3%	1.2%
7	Midstream	4.2%	1.8%
8	Wirelines	4.1%	1.7%
9	Gaming	3.6%	3.3%
10	Metals and Mining	3.2%	0.9%
11	Oil Field Services	3.0%	0.8%
12	Consumer Cyc Services	2.9%	5.1%
13	Retailers	2.7%	4.2%
14	Aerospace/Defense	2.5%	1.2%
15	Packaging	2.5%	2.4%

Note: S&P LSTA Leverage Loan Index sectors mapped to Bloomberg BClass4 to match bonds
Source: S&P LCD, Bloomberg, Barclays Research

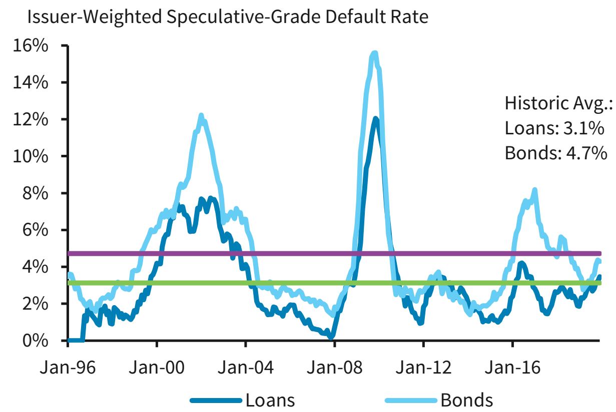
CLO managers could also benefit from the addition of bonds due to that fact that over 60% of the loan market comes from loan-only issuers. By providing allocation to the HY bond market, CLO managers would be able to invest in bond-only capital structures (see Living in a Mostly Loan-Only World), further diversifying issuer exposure.

Finally, the addition of "non-loan" buckets may allow CLOs to hold restructured assets that they have not historically been allowed to, which could help increase the final recovery prospects for an asset and bring CLO managers back to the negotiating table during a restructuring. However, as noted above, it is still unclear what restrictions the agencies may put on this bucket.

The bad

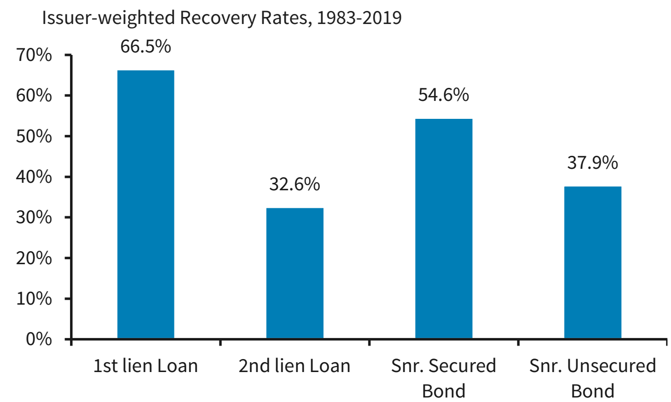
Beyond the basis mismatch between fixed and floating assets, an obvious downside to the inclusion of a bond bucket is the downward pressure on portfolio recoveries. High yield bonds historically have higher default rates (Figure 6) and lower recovery rates (Figure 7). And while heightened volatility can be a great opportunity to build par, as mentioned above, the risk of losing par is also higher.

FIGURE 6. Default rates tend to be higher for bonds versus loans...



Source: Moody's, Barclays Research

FIGURE 7. ...and historical recovery rates are lower



Source: Moody's, Barclays Research

Also, loans tend to repay at a faster rate relative to bonds, which is positive for CLO debt holders since CLOs will have more cash to purchase assets relatively cheap or pay down the CLO's debt faster in a downturn. Equity holders bear the brunt of this with potentially lower returns once the deal is called, though, as better performing assets tend to repay faster.

While repayment rates for loans tend to decline during periods of stress (eg, the trailing 12-month loan market repayment rate hit a low of 9.2% in April 2009), we believe a comparable rate for bonds would be even lower. Today, the weighted average time since issuance for the US HY market is 3.3 years – much longer than the 1.7 years for the US loan market.

Rating agencies have not specified that CLOs that introduce small bond buckets will have to bring more credit enhancement at new issue to achieve similar ratings. In fact, Fitch published a notice in July 2018 stating that they view the risk to note holders would be constrained, stating that "we would view the limiting of the bond bucket to 5% or 10% of holdings to be prudent."[1]

Furthermore, rating agencies already typically stress and rate to the worst of tests in CLOs, which already include buckets for lower priority and unsecured assets. A large number of CLOs require at least 90% of assets to be senior secured, with a typical 10% maximum limit of second lien and unsecured loans and a 5% limit of fixed rate assets.

Regardless, as a result of the increased risk with greater flexibility of asset holdings, CLO tranches (at least initially) are likely to require some spread premium to include a bond bucket, with top tier managers only likely to receive approval to include bond buckets. However, as more managers include bond buckets, the premium even for lower-tier managers should decrease over time.

[1] "Restoring Bond Buckets in US CLOs Not Raising Risk", Fitch, 12 July 2018

Big bond buckets: A tempered revival for CBOs

While it is still unclear what the agencies' final proposal will entail, the current proposal reads that banks may not only be able to buy CLOs that utilize the "loan securitization exclusion" to hold small bond buckets, but also be able to purchase vehicles that hold 100% bonds and not have the position be classified as having an "ownership interest" in a covered fund.

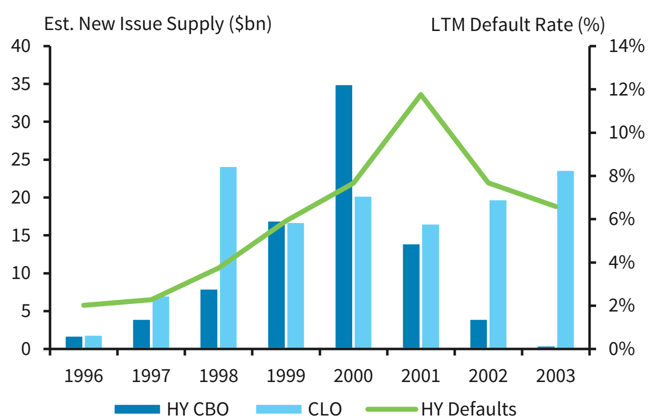
In this report, we use CBO to refer to the growing set of CLOs with large buckets for non-senior secured assets, with many having the ability to fully switch portfolio allocation to bonds from loans, and vice versa. Over $11bn of these deals have been issued since 2015 across 10 US and European managers (only one European CBO has been issued).

While the interest in CBOs should remain tame for reasons we discuss below, we expect to see confusion around the asset class to increase across the market and media, with potentially more superfluous comparisons to the CDO meltdown. It is true that CBOs greatly underperformed CLOs during the downturn of the early 2000s, but the structures, tests and restrictions on asset holdings for these CBOs have greatly evolved since.

CBOs of the past

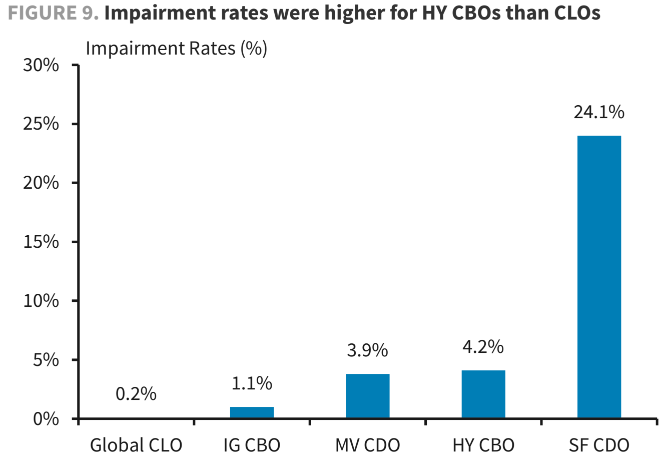
Nearly two decades ago, high-yield CBO issuance peaked at over $30bn before underlying defaults picked up dramatically, mostly driven by the telecom crash. This led to vast downgrades to CBO tranches and near loss of confidence in the product, especially as more simplistic synthetic indices were introduced around the time, causing new issue supply to slow to a halt (Figure 8). CLO tranches, on the other hand, saw much lower downgrade rates and ultimate impairment rates as loans performed relatively better during the early 2000s downturn (Figure 9).

FIGURE 8. **CBO issuance fell dramatically as HY defaults picked up**



Source: S&P, Moody's, Barclays Reserach

FIGURE 9. **Impairment rates were higher for HY CBOs than CLOs**



Note: Average 12-month Impairment Rates for 1993-2014
Source: Moody's

Despite the underperformance, Moody's cited in a 2008 report that no AAA-rated HY CBO or CLO tranche was impaired during the early 2000s downturn, even though CBOs in general saw higher impairment rates, especially lower down the capital stack[2]. Besides the increase in asset defaults, one reason for the relative underperformance of CBOs was the use of fixed-notional hedges, as most deals issued floating-rate debt but the assets were fixed rate. Thus, as CBOs began to underperform and overcollaterailzation (OC) tests required paydowns to the debt tranches, deals became over-hedged, and cash that would have gone to pay down the notes was instead utilized at the top of the waterfall to pay for the hedge.

[2] "CLOs: History, Structure, and Perspectives", Moody's, 1 August 2008

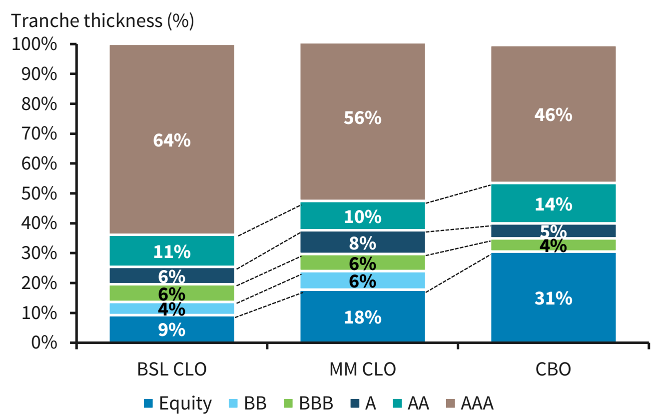
Moody's also noted that many of the tests, haircuts and rules used in CLOs and CBOs today were not around to protect debt holders in the early 2000s downturn. This includes interest diversion tests (trips before the lowest OC test to purchase additional assets with excess cash flows), excess CCC haircuts (holding CCC assets above a specific limit at market value), carrying defaulted assets at the lower of market and recovery value, as well as notching the ratings used for assets that are on upgrade/downgrade watch. Additionally, some early CBOs had large buckets for synthetic and ABS securities, which disappeared after the 2008-2009 crisis.

The "new" CBO

CBOs today are structured more conservatively than earlier vintage deals, and even include additional protections for debt holders. With structural equity leverage of only 2-3x, versus 9-11x for BSL CLOs and 4-5x for middle market (MM) CLOs, credit enhancement for CBO tranches is much higher. The median AAA credit enhancement levels for CBOs issued in 2019 was around 54% versus c.36% for BSL CLOs and c.44% for MM CLOs (Figure 10).

The extra credit enhancement in CBOs is due to the higher allowance of non-senior secured assets (typically maximum of 65-70%), second liens loans (up to around 20%) and CCC assets (15-17.5%). The CBOs, as a result, have higher WARFs and lower diversity scores relative to BSL CLOs (fewer issuers and slightly higher industry concentrations), though the minimum OC test cushion is higher (Figure 11).

FIGURE 10. CBOs have more structual enhancement than US BSL and MM CLOs



Note: Median 2019 vintage deals
Source: Intex, Barclays Research

FIGURE 11. CBOs have higher WARFs and lower diversity scores, but more min. OC test cushion

Median	BSL CLO	CBO	Diff.
Wtd. Avg. Asset Cpn.	5.3%	6.4%	+1.1%
2nd Liens %	1.4%	5.7%	+4.3%
WARF	2,862	3,355	+493
Caa %	3.4%	11.7%	+8.3%
WARR	48.1	40.1	-8.0
Wtd. Avg. Price	97.3	95.6	-1.7
Assets >100 Px	38.2%	42.9%	+4.7%
Assets <80 Px	2.9%	8.3%	+5.4%
Diversity Score	79	58	-22
Min. OC Test Cushion	401	485	+84

Note: Median of in-reinvestment deals only
Source: Kanerai, Intex, Markit, Barclays Research

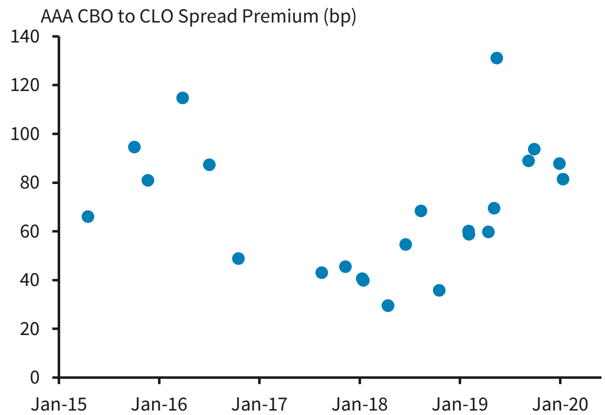
Other differences include longer final maturities for CBOs, most CBO payment dates being on a semi-annual basis versus the quarterly basis of most CLOs, the use of a weighted average coupon (WAC) test instead of a spread (WAS) test (does not give Libor credit to the floating rate assets, but incorporates any existing Libor floors) and lower incentive fee hurdle rates (around 10% versus the typical 12%).

Due to the higher equity check required for CBOs (roughly 30% of a $300-$400mn deal), we think that even if banks are able to purchase CBO tranches, the ability to take a position of that size without the assistance of a captive equity vehicle would be quite difficult. Thus, we think the reemergence of CBOs could be a more "tempered" revival.

We think the slow pick-up in CBO issuance thus far, in combination with banks being unable to purchase the AAA tranches, has led to CBO tranche spreads remaining quite wide to BSL CLOs and attractive for fixed-rate buyers (e.g. insurers).

On a swapped basis (most CBOs issued to date have fixed-rate liabilities, avoiding the issue of hedge costs, which were largely detrimental for early vintage CBOs), AAA CBO tranches are roughly 80bp wide of AAA CLO tranches (Figure 12). This is despite CBOs having materially higher credit enhancement and performing better than BSL CLOs at building adjusted par since the start of 2019 (Figure 13).

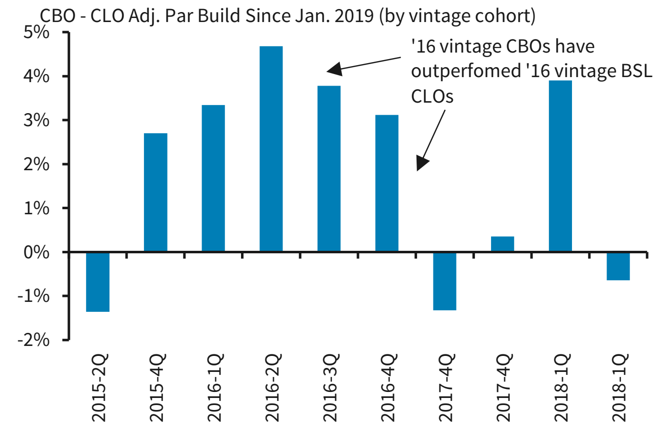
FIGURE 12. AAA CBO tranches are roughly 80bp wide of AAA BSL CLO tranches after swap cost



Note: CBO coupon swapped to floating with 9 year swap

Source: S&P LCD, Bloomberg, Intex, Barclays Research

FIGURE 13. CBOs have outperformed regular BSL CLOs in default-adjusted par build



Note: Adj. par build holds defaulted assets at market value. Each blue bar is the relative peformance of a single non-reset CBO that was issued after 2014 and that had a first payment date before January 2019
Source: S&P LCD, Bloomberg, Intex, Barclays Research

While relative performance has been positive for CBOs, future outperformance is by no means guaranteed as more managers issue their first CBO and as HY defaults could increase. And while par gains help provide cushion for future losses (though some par can typically be flushed if the deal outperforms), investors need to be prudent in understanding how par is built and sustained, especially as the mindset of an HY manager is likely to be different from that of a pure-loan manager, with the former having a total return mindset since bonds can trade well above par.

As with CLO managers, CBO managers can build par through multiple venues, with some managers building par by adding lower risk assets that have sold off or by utilizing non-loan asset buckets for strategic opportunities. For example, CBO exposure to loans ranges 52-100% currently.

As we noted above, a reallocation to HY bonds in a technical sell-off could be an attractive opportunity to build par for CBOs. A CBO manager could purchase higher rated assets that have sold off, trading interest coverage for more par coverage, and possibly improving WARF at the same time. For example, Moody's notes in a recent study that the 10 deals with the highest par-build among the CBOs they rate built 29-207bp of par in Q4 18, versus just 3bp for the median CLO. And the CBO that built the most par during that period actually decreased its Caa exposure by 1.6% and lowered its WARF by 47 points.[3]

Additional benefits to CBO structures include a weighted average coupon test that excludes Libor (but includes the floor), and a market value-based OC test. While the name of the test is likely to attract headlines (if the CBO name has not already), the test is unlike market value tests from pre-crisis structures, which required an immediate unwind of collateral when collateral prices fell. Instead, this OC test only utilizes excess cash in a deal's interest waterfall and does not require forced selling.

[3] "Opportunistic CLO/CBOs built more par in Q4, some while increasing exposure to riskier assets", Moody's, 20 March 2019.

Essentially, should the market-value overcollateralization (MVOC) test (typically set at a level to where it trips before the Interest Diversion Test) not be passing on a payment date, excess cash flows would be re-routed from equity and used to purchase additional assets. And if the WARF is above a specific level (e.g. 3400 in some deals), then half of the excess cash is used to purchase more assets while the other half is used to pay down the deal until the MVOC test is back in compliance.

Thus, even if portfolio market values fall 15-20%, causing the MVOC test to fail for a sample of recent vintage CBOs, the deals would begin to re-heal themselves by purchasing new collateral or paying down, without the need to liquidate collateral.

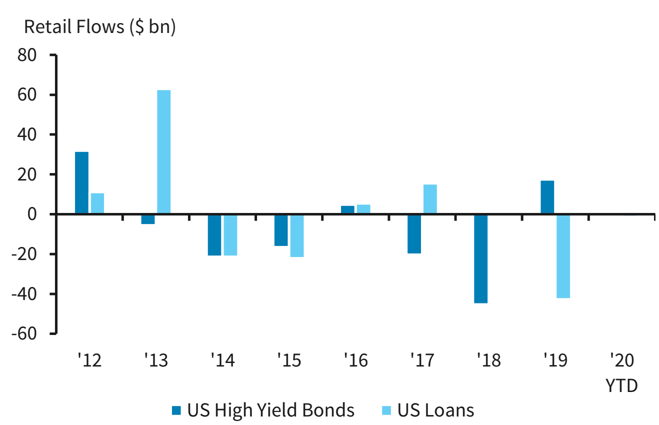
Secondary effects on HY

Assuming the proposals are passed as we understand and CLOs add 5-10% bond buckets to deals, CLOs could ultimately become buyers of more than $30bn in HY bonds (based on current US BSL CLOs outstanding), and depending on CBO issuance, that number could rise.

However, the change would not occur over night. It would take time for bond buckets to find their way into new CLOs (starting with top tier managers), and even longer to amend into currently outstanding deals. Furthermore, CLOs and CBOs are unlikely to completely fill up bond buckets to leave room for any new restructured assets or unless a technical sell-off generates attractive relative value opportunities. In fact, Moody's notes that average bond bucket utilization by US CLO managers from January 2011 to December 2013 was only c.2%[4].

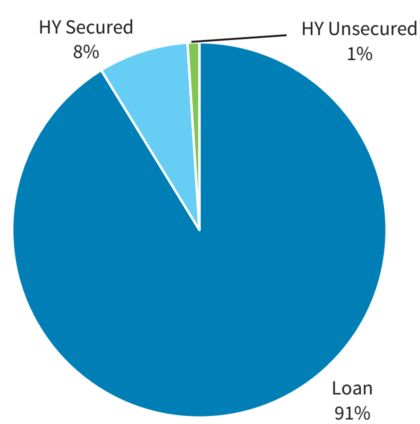
As CLOs add bonds, though, we think the secured HY market could grow. In 2019, retail outflows from loans and inflows into high yield bonds drove increased secured debt issuance as many potential loan issuers found the bond market to be relatively more attractive between the two (Figure 14). And as we have seen seen in Europe, European CLOs grew to favour secured HY bonds, which provided steady growth for the FRN market in Europe. We could see a similar dynamic in the US, with issuers flexing towards secured bond rather than loan issuance.

FIGURE 14. Loan retail funds recorded meaningful outflows in 2019 while bond funds had supportive inflows



Source: EPFR

FIGURE 15. European CLOs can purchase bonds, but HY ownership is concentration in secured notes



Note: Assets within all post-crisis European CLOs
Source: Kanerai, Intex, Barclays Research

Additionally, as CLOs and CBOs become more entwined in the HY market, we could see more loans and bonds trading in line – especially those from the same issuer given credit risk would be roughly the same (aside from lower bond recoveries).

[4] "Latest proposed Volcker amendments allow CLOs to add risk, but also better navigate changing markets", Moody's, 12 Feburary 2020.

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