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A Look at the Future of CCC Buckets in CLOs

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The proportional size of the Caa/CCC cohort in the loan market has shrunk in recent years, much as in the high yield bond market. Favorable micro fundamentals sourced from a stable macroeconomic backdrop have helped decrease the weight of CCC+ or lower-rated loans in the S&P/LSTA LLI to 7.6%, down from more than 11% in 2016. While the uptick in the proportion of this cohort in 2015 and 2016 was driven in part by stress in the commodities sectors, the recovery in the commodity complex and general economic uplift have brought current levels back close to post-recession lows.

While the current amount of CCCs is not onerous, there is always potential for the bucket to expand because of either sector-specific pressures or a broader change in the credit cycle that leads to a wave of downgrades from B to CCC. As we have noted, the loan market has become increasingly B cohort heavy, with this bucket now representing roughly 50% of the index (see *Relative Value through a Ratings Lens*). More specifically, B- loans now represent 8.4% of the index, 80bp larger than the CCC+ and below cohort. The size of the B- bucket has been larger than the weaker-rated cohort every month since March, the longest continuous streak since the end of 2007 (Figure 1).

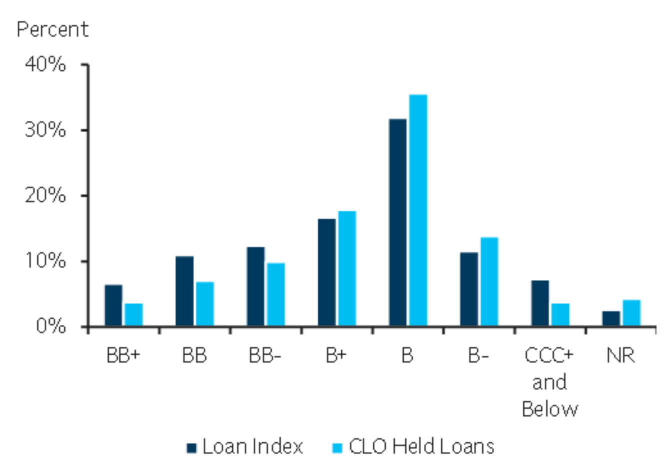
CLOs represent 55-60% of market-wide demand for loans, so restrictions embedded in CLO structures can have a significant influence on loan spreads. In this context, we examine the implications of potential downgrades, under various scenarios, on the pool of assets that CLOs can chose from based on their their CCC bucket limitations.

It is worth noting that CLOs hold an outsized proportion of B-rated loans relative to the S&P/LSTA Leveraged Loan Index (LLI) yet are under-represented in terms of BBs and CCCs (Figure 2). This is likely due to the punitive treatment of CCC holdings above a 7.5% limit. If a CLO's pool allocation to CCC assets exceeds this threshold, then the CCC-rated loans with the lowest market price have to be carried at market value rather than par, eroding overcollateralization (OC) cushions and weighing on the corresponding tests. Therefore, CLO managers are likely to avoid increasing exposure to CCC loans beyond this mandated limit and

FIGURE 1
B3/B- Now Represents a Larger Portion of the Market Than the Entire Cohort of Caa1/CCC+ and Below

Source: S&P LCD, Barclays Research

FIGURE 2
CLOs Hold an Outsized Portion of the Single-B Cohort Relative to the Loan Index



Note: The Loan Index show, above excludes second-lien and loans rated higher than BB+. CLO-held loans are those held by US non-middle market CLO 2.0s.
Source: S&P LCD, Kanerai, Barclays Research

would likely take steps to lower exposure should a wave of downgrades lead to an overfilled CCC bucket. We believe this, balanced against the need to remain in compliance with weighted average spread (WAS) tests, is an important factor in the overweighting of single-B rated credits relative to the LLI.

The current outsized amount of single-B credits, specifically those rated B3/B-, could be cumbersome in periods of increased downgrades. Per Moody's, the long-term (1970 to present) average annual migration from the broad B cohort to a lower bucket (Caa, Ca, C, or defaulted) is 10.4%. That said, as seen in Figure 3, the rate was just 5.7% in 2017, with a peak of around 20% during the recession and an uptick in 2015-16 driven by pressures across the commodity credit complexes.

Given the importance of CLOs in loan demand and limitations on owning Caa colateral, we evaluate the potential effects on the size of the Caa loan market based on three scenarios:

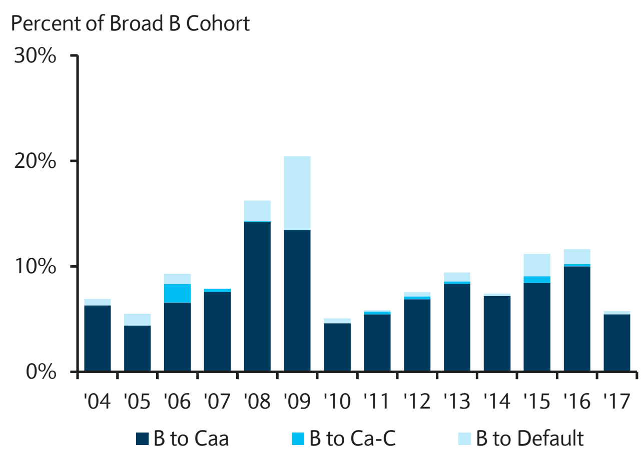
1. "Benign": A downgrade environment into the Caa category (or lower) similar to 2017.
2. "Average": A downgrade transition in line with the long-term average (1970-2017).
3. "Adverse": An high downgrade environment on the scale of 2008.

We use the notch-level migration rates from Figure 3 to estimate the net effect on the size of the Caa–rated universe. We also looked at downgrade rates for BBs that are rated Caa or worse one year later, net of upgrades for Caa names that represent outflows. We find this effect is de minimis with the exception of a small negative result in our adverse scenario. For simplicity's sake and to provide a conservative estimate, we do not account for any maturities.

As seen in Figure 4, a low downgrade scenario such as in 2017 would lead to only a slight uptick in Caa size from 8% of the LLI to 9%. Under the adverse scenario, however, the size would reach just over 15%. Given today's strong macro and credit environment, the weight of Caas in the LLI has fallen and can continue to fall – the downgrade scenarios noted here are simply an estimate of potential downgrade volumes if we are too constructive on the 12-month-forward outlook.

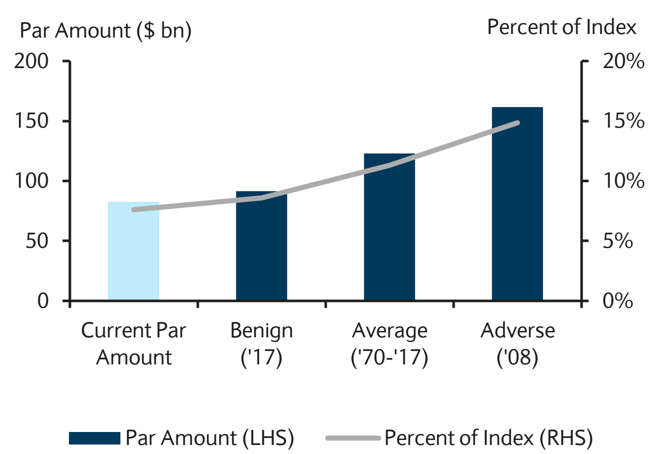
We limit our CLO analysis to Moody's-rated loans given the earlier-referenced ratings transition data from Moody's, but note that CCC/Caa buckets are generally calculated for both rating agencies, with the one resulting in a higher haircut applied to the entire CLO. We find that the most common rating for CLO-held loans is B2. As a result, we believe that

FIGURE 3
One-Year Ratings Migration for Single-B Category Credits to Caa or Below



Source: Moody's, Barclays Research

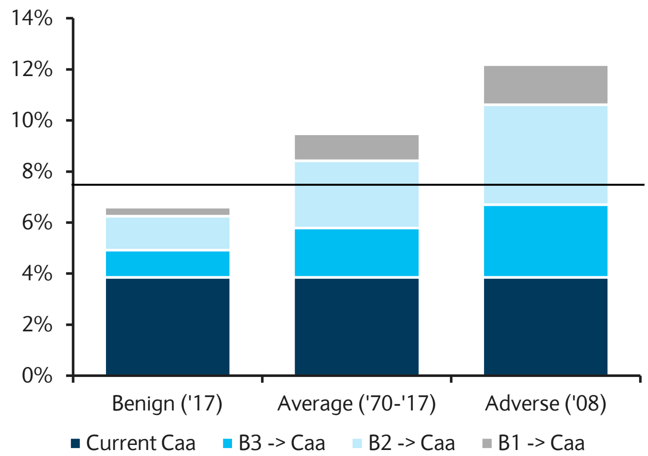
FIGURE 4
Net Effect of Rating Migration Scenarios on CCC or Below Category Size by Par and Percent of Loan Index



Note: Includes potential defaults. Source: Moody's, S&P LCD, Barclays Research

FIGURE 5

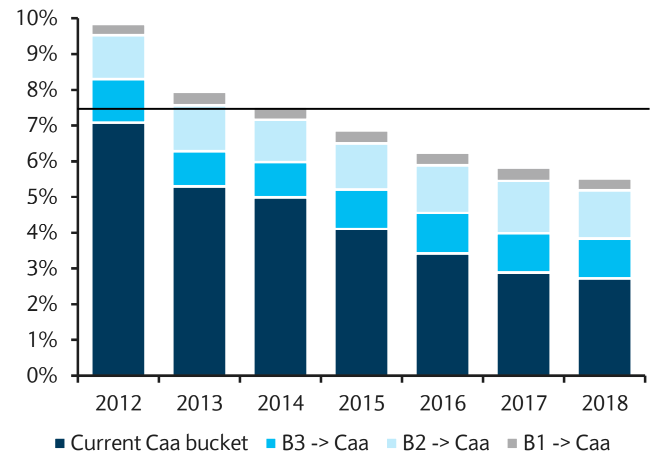
CCC Bucket in CLOs under Various Assumptions



Note: Gross migration rates shown.
Source: Kanerai, Moody's, Barclays Research

FIGURE 6

CCC Bucket by Vintage (Benign Scenario)



Source: Kanerai, Moody's, Barclays Research

loans with this rating are worth monitoring, in addition to B3 loans. If we assume average migration rates for both B2 and B3 loans, the Caa bucket would rise to 8.4%, approximately 90bp above the limit (Figure 5).

If we consider upgrades from Caa to at least B3 or downgrades from Ba3 or higher to Caa, we find that they decrease the Caa bucket by 40bp and 19bp in the benign and average scenarios, respectively, which is mostly a wash, in our view. In the adverse scenario, however, the net rate increases the Caa bucket by approximately 70bp, with the main contributor being Ba3-rated loans. However, the Ba3 contribution to the future Caa cohort is less than half of the B1 bucket's contribution, which in turn is less than half of the B2 bucket's contribution, suggesting that investors should focus on loans with B category ratings as the predominant driver of future Caas, especially in older vintage CLOs (Figure 6).

Another caveat of our analysis is that we include migrations to defaults in the Caa buckets. We do this for a few reasons:

- B3 or higher-rated loans that default are usually downgraded to Caa in anticipation of default
- B3 or higher-rated loans that default without first being downgraded to Caa still increase the Caa bucket by decreasing the denominator (defaulted loans are excluded from the size of the total collateral pool for purposes of calculating concentration limits, sich as Caa exposure, for example)
- Practically speaking, defaulted loans are treated similar to Caa buckets beyond the 7.5% limit in that they are carried at less than par (in the case of defaults, the lower of rating agency recovery assumptions or market price)

As mentioned, most managers take steps to decrease their allocation to CCCs if downgrades lead to exposure near or beyond 7.5%, making any of our estimates clear worst-case scenarios. We estimate that CLO managers could become sellers of about $500mn of loans if downgrades materialize in a benign fashion and as much as $20bn in an adverse scenario over the next year when accounting for the fact that older vintage deals may be constrained in what they can sell. Considering active management and that only 2% of the market would need to be sold in the adverse scenario, we believe that an uptick in downgrades would likely cause decompression across the ratings spectrum as cash is deployed to higher ratings cohorts, but should not overwhelm the entire market.

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