

January 29, 2020

**By Email:** rule-comments@sec.gov

Securities and Exchange Commission  
Fixed Income Market Structure Advisory Committee  
Attention: Michael Heaney, Committee Chairman  
100 F Street, NE  
Washington, DC 20549-1090

Re: Securities and Exchange Commission Fixed Income Market Structure Advisory  
Committee (File No. 265-30)

Dear Mr. Heaney,

In advance of the Securities and Exchange Commission Fixed Income Market Structure Advisory Committee (FIMSAC) meeting scheduled for February 10<sup>th</sup>, we are writing to provide our views on some of the issues currently under consideration with respect to credit rating agencies (CRAs), including the credit quality of the corporate and collateralized loan obligation (CLO) sectors, and more broadly, aspects of CRA business models. Moody's Investors Service (MIS) agrees these matters are important and merit consideration, and we are pleased to have the opportunity to contribute to the discussion. We take this opportunity to: (i) provide historical and market context; (ii) share our credit perspective on the corporate and CLO sectors; (iii) consider policy approaches to CRA business models; and (iv) identify methods to address rating shopping in the structured finance market.

## **I. The Role and Value of Credit Ratings in the Capital Markets**

As FIMSAC members are aware, capital markets enable companies and governments to raise capital to expand their operations, innovate, pay employees, provide public services, develop and improve infrastructure and much more. The U.S. capital markets are the largest and most robust in the world, with total outstanding long-term fixed income securities of approximately \$43 trillion outstanding as of year-end 2018.<sup>1</sup>

Credit ratings contribute to healthy, risk-transparent debt markets by providing a common language of credit that is informed by rigorously determined, independent and predictive credit opinions. The clarity and consistency of this approach enhances market efficiency and facilitates transparency and comparability across markets, industries, geographies and time. Transparency

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<sup>1</sup> See Securities and Financial Markets Association (SIFMA): Fixed Income Outstanding (*available at <https://www.sifma.org/resources/research/fixed-income-chart/>*)

and comparability are growing in importance as capital markets have become increasingly global and interconnected and as investors are faced with an extensive choice of investment opportunities.

CRA's provide forward-looking opinions and research on credit risk. To meet market needs over time, credit ratings that are widely used by market participants have developed important attributes, including:

- Insightful and robust analysis;
- Predictive, stable, and judicious opinions;
- Broad coverage across markets, industries, geographies and time, enabling comparability; and
- Public availability.

These attributes have enabled credit ratings to serve as a point of reference that is widely used by financial market professionals as one of their many tools to compare credit risk, thereby facilitating the efficient flow of capital worldwide. Importantly, while credit ratings provide investors with insight and analysis that helps inform investment judgments, CRA's are not gatekeepers or arbiters of investor decisions. At MIS, we intend for our credit ratings to promote dialogue and debate among market participants, whom we expect to use our opinions to enrich, rather than replace, their own credit analysis.

MIS publishes credit ratings on a wide range of debt obligations and the entities that issue such obligations in markets worldwide, including various corporate and governmental instruments, structured finance securities and commercial paper programs in more than 130 countries. As of December 31, 2018, MIS had the following rating relationships globally, including the U.S.:

- Approximately 4,800 rated non-financial corporate issuers;
- Approximately 4,100 rated financial institutions issuers (including managed investments);
- Approximately 17,600 rated public finance issuers (including sovereign, sub-sovereign and supranational issuers);
- Approximately 9,600 rated structured finance transactions; and
- Approximately 1,000 rated infrastructure and project finance issuers.

## **II. Ready access to credit in the current low interest rate, yield-seeking environment is reflected in record low average credit ratings.**

We recognize that potential credit pressures are top of mind for many market stakeholders, particularly with respect to firms that, despite weak profitability and low credit ratings, have had ready access to capital in the current environment. In turn, these conditions have also invited questions about the credit implications for CLOs.

MIS has observed and repeatedly published on lower quality credits coming to market. We note that the current distribution of our corporate credit ratings speaks to the more speculative nature of certain debt markets.

As we have previously discussed with FIMSAC, despite the breadth and depth of the Great Recession, our corporate ratings performance was very strong, powerfully rank ordering instruments against the risk of credit losses, while default rates remained below expectations during and after the financial crisis. Consequently, we have chosen to continue to use the same corporate credit criteria we had in place prior to the crisis.

Leverage is one of several factors that we consider in evaluating the creditworthiness of a bond issuer or debt security. Debt leverage has remained relatively stable for North American speculative grade companies over the period from 2006-2019. Our credit metrics for the period, based on average interest coverage, show debt/EDITDA between 2006-2019 ranging from a low of 4.3x in 2010 to a high of 5.4x in 2017 and at 5.2x as of the trailing twelve months ended September 30, 2019; and EBITDA/Interest Expense ranging from a low of 2.4x in 2008 to a high of 3.1x in 2011 and at 2.9x as of the trailing twelve months ended September 30, 2019.<sup>2</sup>

Our credit ratings on CLOs also performed very well during the crisis, with only a very few, low rated tranches experiencing credit losses. Nonetheless, in response to concerns about the credit performance of ratings in other structured finance sectors, we subsequently tightened our CLO criteria soon after the crisis and now require roughly 40% more credit enhancement to achieve a similar rating on a typical CLO transaction than we did pre-crisis. Neither our corporate ratings nor our CLO ratings show any signs of “inflation,” as average corporate ratings and, importantly, default rates by rating category have been trending down for decades.

MIS is dedicated to providing transparent and objective views of creditworthiness. Consistent with this commitment, we are pleased to provide FIMSAC with the attached *MIS Sector-In Depth: FAQ on rising corporate leverage and credit implications for CLOs* that was recently published in December 2019.<sup>3</sup>

Baa is the lowest broad rating category within investment grade. In light of the expansion of Baa debt, some market participants have expressed concerns that the creditworthiness of Baa-rated companies today may not be as strong as in the past. There are also concerns around the high-yield market's resilience in the event that a significant number of low investment-grade companies become “fallen angels,” that is, downgraded to speculative grade. While higher levels of Baa-rated debt increase the potential for downgrades to speculative grade in a recession, an increase in fallen angel debt would not likely disrupt the high-yield market by itself.

We base this conclusion on both the low historical correlation between fallen angel rates and macroeconomic conditions, as well as on our fundamental view that most Baa-rated companies have the credit strength and flexibility to weather economic downturns without lasting damage to their financial or business profiles. Historically, industry-specific considerations have driven increases in fallen angel rates. Although the size of the high-yield debt market has grown rapidly in the past two decades, fallen angel debt levels have not. For example, U.S. high-yield debt outstanding stands at about \$2.3 trillion, up from roughly \$985 billion in 2009. However, since

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<sup>2</sup> See *Moody's 3Q 2019 Investor Presentation* (November 4, 2019) (available at <https://ir.moody's.com/home/default.aspx>).

<sup>3</sup> See attached Annex I.

the financial crisis, fallen angel debt as a share of high-yield debt outstanding has remained below 5%, except for a brief period in 2016 following a series of downgrades of energy-related companies. We refer you to the full report for additional details.

### **III. Discussions on CRA business models should focus on how the system can encourage high quality ratings.**

FIMSAC also expressed an interest in CRA business models in the context of potential credit pressures and whether the issuer-pays business model could lead to inflated credit ratings.

We continue to hold the view that the debate on “*who should pay for the rating or select the CRA?*” distracts from the more central question of “*how can the system encourage high quality ratings?*” If the discussion is focused on who pays for the credit rating or selects the CRA, one quickly comes to the widely recognized view that potential conflicts are inherent in all CRA business models, and that the potential to try and exert influence over a credit rating exists *regardless* of who pays for the credit rating or selects the CRA.

In previous correspondence to the Securities and Exchange Commission (the “Commission”), MIS observed and addressed potential conflicts in different CRA business models:

“An investor-pays nationally recognized statistical rating organization (“NRSRO”) must adopt measures designed to prevent investors with large positions on particular securities from influencing the NRSRO’s ratings. An issuer-pays NRSRO must adopt measures designed to prevent issuers from influencing its ratings. Finally, a government-selected NRSRO, if that is ultimately the model that the Commission chooses to adopt, must adopt measures designed to prevent the government from influencing the NRSRO’s ratings. Consequently, when considering an alternative business model, we believe the Commission should assess whether the new system simply transfers the ability to rating shop from one set of interested parties to another.”<sup>4</sup>

As the Commission recognized in its Study on Assigned Credit Ratings<sup>5</sup> and as other policymakers<sup>6</sup> have observed, while it might be possible to mitigate fee-based conflicts by

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<sup>4</sup> See Moody’s Investors Service Letter to the U.S. Securities and Exchange Commission re: Request for Comment to Assist in Study on Assigned Credit Rating – Release No. 34-64456; File No. 4-629 (*available at <https://www.sec.gov/comments/4-629/4629-23.pdf>*).

<sup>5</sup> See SEC Report to Congress on Assigned Credit Ratings As Required by Section 939F of the Dodd-Frank Wall Street Reform and Consumer Protection Act, December 2012 (the “Study on Assigned Credit Ratings”) (*available at <https://www.sec.gov/news/studies/2012/assigned-credit-ratings-study.pdf>*)

<sup>6</sup> The European Commission published a Study on the State of the Credit Rating Market (MARKT/2014/257/F4/ST/OP) where it reviewed the operation of a limited CRA rotation model introduced for the credit ratings of resecuritisations in the EU (*available at [https://ec.europa.eu/info/sites/info/files/state-of-credit-rating-market-study-01012016\\_en.pdf](https://ec.europa.eu/info/sites/info/files/state-of-credit-rating-market-study-01012016_en.pdf)*). The study found that:

“...the majority of investors (or asset managers) we contacted seem to expect a negative impact on the market. Many investors stated that Rotation provision will significantly increase costs (directly to issuers and/or to investors who will have to get familiar with methodologies of other CRAs). Moreover, some investors indicated that the provision will reduce the ability of CRAs to accumulate knowledge and will undermine CRA’s accountability. Investors will not be able to take advantage of a long rating history as the rotation will introduce noise and volatility. Information collected from [private] issuers seem to support investors’ view. They expect the rotation requirement to increase costs for issuers, and increase volatility...”

establishing a government-initiated assignment system (“assignment system”)<sup>7</sup>, such a process raises serious concerns and introduces potential unintended consequences, including:

### 1. An assignment system would degrade the quality of information

- **Erode the quality of information available for investment decisions and weaken the value of credit ratings.** One of the chief market benefits of credit ratings is broad comparability across markets, industries, geographies and time. CRAs do not offer standardized or identical perspectives about future risks of default, nor even measure and communicate about credit in the same way – e.g., “default risk” measures versus “loss-given-default” measures; assessments of subordination; etc. A CRA’s market contribution – and value to investors – is therefore based in large part on the comprehensiveness, and thus comparability, of its credit ratings. An assignment system would disrupt this process and undermine consistent and comprehensive coverage.

In addition, as the Commission pointed out in its Study on Assigned Credit Ratings, an assignment system would result in lower quality credit ratings if the selection process allocated credit rating assignments to CRAs that “do not have sufficient resources to handle the volume of assignments or the inhouse expertise to rate a type of transaction.”

Finally, we note that an assignment system that introduces lower quality credit ratings into the market would undermine the intent and the accomplishments of the Title IX, Subtitle C of the Dodd-Frank Act (“Improvements to the Regulation of Credit Rating Agencies”), which included a number of measures designed to improve the quality of credit ratings and investor confidence in those credit ratings.

- **Discourage disclosure of confidential information during the credit rating process.** Issuers currently share confidential information, including material non-public information (MNPI), in their bilateral relationships with CRAs due to established relationships of trust and confidence that the information will be handled properly. While access to confidential information is not required to issue a credit rating, it can provide CRAs with helpful insights that allow for more stable credit ratings. Issuers will understandably have differing levels of comfort in sharing confidential information (e.g., potential acquisitions, strategic plans, competitively sensitive data) with different CRAs.
- **Reduce incentives to improve credit ratings performance and to compete on the basis of quality.** If perceived credit ratings quality is not a basis for differentiation and selection, CRAs will have little reason to compete on that basis, and might be discouraged from further investing in their processes, thought leadership, relevance, and expertise in support of ratings and research. Under these conditions, the prospect

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Moreover, as responses to our survey suggest, regulators do not expect the provision to be very effective in promoting competition (half of the respondents suggested the provision would not be effective at all, and the remaining half expected no more than some small or moderate impact) or reducing conflicts of interest (with the exception of one authority, all regulators expected the impact to be at most moderate with many responses suggesting small to no effect).”

<sup>7</sup> A government-initiated assignment system could include a blind distribution process (e.g., a lottery) or other mechanisms whereby a government agency (or a government-appointed third-party) selects CRAs.

of ratings quality decay becomes a real risk to the detriment of healthy and efficient capital markets.

## **2. An assignment system would create new potential conflicts of interest and encourage rating shopping**

- **Not eliminate or reduce existing rating shopping.** Any CRA willing to offer inflated ratings today would be just as motivated to do so in the future, even for those credit ratings for which it was randomly selected. As the Commission noted in its Study on Assigned Credit Ratings, a CRA “could be motivated to issue a favorable credit rating with the goal of being hired by the issuer at a later date and on an unrelated transaction when [the CRA] is not assigned by the [by an intermediary] to perform an initial credit rating.”<sup>8</sup> This dynamic could actually create or increase the risk of rating shopping in sectors where it currently does not exist today (e.g., the corporate debt markets) by undermining existing competition based on quality. Meanwhile, for all other credit ratings offered outside of the rotation scheme, the motivation to inflate credit ratings to obtain further mandates would remain unchanged.
- **Create new conflicts of interest.** As the Commission recognized in its Study on Assigned Credit Ratings, an assignment system administered by a government agency (or a third-party appointed by government) is not immune from potential conflicts of interest. Governments, often faced with competing financial market and social policy objectives, might be motivated to “protect” nationally or systemically important issuers such as large industrial employers or banks, or to protect ratings of government entities. Depending on how the assignment system is designed, this dynamic could lead to inflated credit ratings or otherwise influence the views of the CRA.
- **Reward less credible CRAs with guaranteed revenues.** An assignment system would perversely reward any CRAs who are currently engaging in ratings inflation by rewarding them with a steady stream of revenue, making them the primary beneficiaries of a system intended to prevent rating shopping. By definition, this outcome would be contrary to the goal of ensuring that high quality ratings are available to the market and counter-productive to any effort to curtail rating shopping.

## **3. An assignment system would create less efficient capital markets and would hurt investors and issuers**

- **Undermine global capital markets.** Capital markets have become increasingly global and interconnected, and credit ratings provide market participants with a deeper understanding of credit risk and support deeper liquidity in those markets. If the U.S. institutes an assignment system for credit ratings, it is likely that policymakers in other jurisdictions will adopt their own versions of assignment systems. The result would be a complex, cumbersome, and globally inconsistent patchwork of processes ill-equipped to support the needs of those markets.

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<sup>8</sup> Study on Assigned Credit Ratings, Section VIIA(b)(2) at pg. 74.

- **Create market inefficiencies.** By placing an intermediary between an issuer and a CRA, time to market – and the efficient provisioning and movement of debt capital between market participants – will inevitably be delayed as the assignment process plays out. Indeed, the Commission noted in its Study on Assigned Credit Ratings that an assignment system could result in delays bringing transactions to market. Further, issuers would have to bear the cost of the considerable additional time and resources needed to onboard each new CRA; a burden that would be even more substantial for frequent debt issuers. Finally, investors will not be able to take advantage of an issuer’s rating history as the assignment system will introduce volatility into to the credit ratings of the issuer simply due to the introduction of a new rating provider and not to changes in intrinsic creditworthiness.
- **Increase costs.** As noted by the Commission in its Study on Assigned Credit Ratings, an assignment system is likely to “raise costs to issuers, which could be passed on to investors.”<sup>9</sup> In addition to the direct “tax” on the market to fund the assigned CRA, both primary and secondary market costs would inevitably rise to offset the decline in information quality and credit comparability. It is inevitable that as a bond issuer accumulates an increasing number of CRAs monitoring different slices of its outstanding debt capital structure, aggregate fees will need to grow to fund this larger but more fragmented number of CRAs. Furthermore, this says nothing about the cost of executives’ time to meet regularly with all of the CRAs rating their debt. Costs will also increase for investors as they will need to familiarize themselves with methodologies of multiple CRAs.
- **Introduce operational complexities.** An assignment system would raise a number of difficult questions and concerns relating to both its application and operations.<sup>10</sup> A number of these issues, including their potential impact on credit rating quality and market functioning, were highlighted in the Study on Assigned Credit Ratings.<sup>11</sup> The answers to these questions would determine the degree to which these operational complexities would create market uncertainty and reduce market efficiency.

On balance, rather than establishing a system that shifts selection among interested parties or assigns CRAs, we believe the Commission should encourage and oversee NRSROs, regardless of their business models, based on the credibility, reliability and independence of their analysis and opinions.

For its part, MIS has implemented a number of measures and invested in an extensive infrastructure to manage potential conflicts of interest, uphold the quality of our credit ratings, reinforce our independence and increase the transparency of our credit ratings. These measures include, for example, the *MIS Policy on the Separation of Credit Rating Personnel from*

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<sup>9</sup> *Id.*

<sup>10</sup> For example, which NRSROs would be eligible for the process and on what basis? How would the process be evaluated and on what basis? What products or services would be provided following assignment through the system (e.g., initial ratings; monitoring and surveillance; related research; performance statistics)?

<sup>11</sup> Study on Assigned Credit Ratings, Section VIIA(b)(2) at pg. 75.

*Commercial Information and Activities*, which requires total separation of analytical and commercial functions to prevent commercial considerations from compromising the integrity or independence of MIS credit ratings.

#### **IV. Rating shopping in the structured finance market should be addressed.**

MIS recognizes that rating shopping continues to exist, particularly in the structured finance market, and can hinder the ability of CRAs to compete effectively on the basis of quality. The most effective way to address rating shopping is through measures that target the underlying drivers of the practice, including lack of transparency and disclosure, as well as over-reliance on credit ratings. As a result, we recommend policymakers consider the following:

- **Enhanced issuer disclosure in the structured finance market.** An issuer’s ability to rating shop stems from its control over the availability of relevant credit information, not the payment of fees. Notably, in the U.S. corporate finance market, the risk of rating shopping is substantially reduced because market participants can develop their own opinions based on information that issuers make publicly available pursuant to securities laws. The availability of information enables investors to make informed assessments as to the credibility and value provided by individual CRAs.

Conversely, equivalent information is not publicly available in the structured finance market.<sup>12</sup> In fact, the unique risk of rating shopping in the structured finance market is what led Congress to limit application of Section 939F (“the Franken Amendment”) to the structured finance market, as opposed to extending it more broadly to both the corporate and municipal debt markets.

The best way to discourage rating shopping, particularly in the structured finance market, is to require complete, comparable and accurate information that is available to all market participants in all asset classes, rather than only CRAs and interested investors. A more rigorous disclosure regime could serve a number of important purposes, including:

- Improving the quality of the credit risk information in the market;
- Fostering the greatest diversity of opinions from the widest range of market participants, including other credit opinion providers;
- Enabling greater assessment of the credibility of CRAs on a rating-by-rating basis by all market participants, which can serve as a check against ratings inflation<sup>13</sup>; and

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<sup>12</sup> While SEC Rule 17g-5 was a step in the right direction toward improving transparency in the structured finance market, it has not achieved its objectives. Rule 17g-5 has the effect of requiring Arrangers to make all of the information they provide to the hired NRSRO available simultaneously to all other NRSROs. However, the Rule 17g-5 program does not require Arrangers to make the information available more broadly to investors, non-NRSRO CRAs, or other market stakeholders.

<sup>13</sup> SEC Rule 17g-5 was intended to serve this purpose, but certain aspects of the provision operate to undermine this objective. For example, SEC Rule 17g-5 requires that the NRSRO accessing the 17g-5 website issue unsolicited ratings for at least 10% of the issuances it accesses, if it accesses 10 or more issuances for which it has not been hired to rate. NRSROs should be encouraged to view as many 17g-5 websites as possible in an effort to increase the likelihood that non-hired NRSROs will identify a transaction in which they have a

- Encouraging all market participants to form their own views of credit risk, thereby reducing the potential for misuse of credit ratings.
- **Reduce over-reliance and mechanistic use of credit ratings.** The widespread incorporation of mechanistic reliance on credit ratings into investment decisions creates the impression that credit ratings are interchangeable and can reduce the incentives to differentiate among CRAs based on the ratings' credibility. In recognition of the risks associated with over-reliance and mechanistic use of credit ratings, Congress adopted Section 939A of the Dodd-Frank Act requiring federal regulators to remove references to NRSRO credit ratings and to find alternative standards for creditworthiness. As noted by the Commission in its Study on Assigned Credit Ratings, a program administered by a government entity to assign credit ratings is contrary to these objectives, as it could suggest that credit ratings receive a government seal of approval.<sup>14</sup>

MIS has continuously supported initiatives to encourage market participants and regulators to consider carefully whether and how ratings should be used. Credit ratings facilitate dialogue and debate among institutional investors and financial market professionals. They are meant to be used as part of a wider risk assessment toolkit and should not be hardwired into investor decisions or regulatory rules in such a way that a single rating action, or even a group of actions, could trigger a disproportionate market response.

MIS is committed to meeting evolving regulatory and policymaker expectations that support the value of globally comparable credit in financial markets, which in turn strengthens the health, stability and functioning of global capital markets. We believe that thoughtful policy and regulatory action can play an important role in reinforcing high quality ratings, improving market transparency and enhancing market confidence in CRAs' products and services without intruding on the substance of rating opinions or creating incentives for market participants to over-rely on ratings.

We look forward to continued engagement with FIMSAC and the SEC on these and other important topics and would be pleased to discuss these issues with you in more detail.

Sincerely,

**/s/ Michael West**

President  
Moody's Investors Service

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different credit view from the hired NRSRO. Non-hired NRSROs more likely than not will only publish unsolicited credit opinions that vary from already published credit opinions because if their view is not substantially different, the opinion lacks the same value to the market. Eliminating the 10% requirement could therefore result in more, rather than fewer, credit opinions in the market.

<sup>14</sup> Study on Assigned Credit Ratings, Section VIIA(b)(2) at pg. 77.

## **ANNEX I**



## SECTOR IN-DEPTH

10 December 2019



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## Financial Stability – US

## FAQ on rising corporate leverage and credit implications for CLOs

## Summary

In this report, we address frequently asked questions about rising corporate leverage in the US and the credit implications for US collateralized loan obligations (CLOs).

- » **What has driven the increase in leverage? And will it trigger or exacerbate a recession?** US nonfinancial corporate leverage has climbed as a result of investors' voracious appetite for yield in a low interest rate environment. High leverage and debt levels will not likely cause a recession but could amplify and elongate the effects.
- » **What risks do Baa-rated companies pose to the financial system? Can the high-yield market absorb fallen angels?** In a recession, high levels of Baa debt would increase the potential for fallen angels (companies downgraded to speculative grade from investment grade). However, an increase in fallen angel debt, by itself, would not likely disrupt the high-yield market.
- » **Baa-rated companies today seem to have increased leverage, so why are these companies not rated speculative grade?** Our rating criteria for the Baa category has remained consistent over time and based on these criteria there has been no material deterioration in creditworthiness of Baa companies. Although the median US Baa-rated company now has moderately higher leverage than in the past, it is also substantially larger, more profitable and less burdened by interest expense than it was in 2007.
- » **What is happening in the speculative-grade market and how is that affecting CLO credit quality?** Higher leverage has weakened the ratings distribution of speculative-grade companies and will result in more defaults in the next downturn. For CLOs, investor protections will likely continue to weaken amid the easy market conditions, with loosened criteria for asset selection, trading and other activities.
- » **How do CLOs of today compare to subprime residential mortgage-backed securities (RMBS) in 2007?** Although growth of the CLO market has led some market participants to draw parallels with subprime RMBS and collateralized debt obligations, CLOs are fundamentally different in terms of asset characteristics, industry diversification and structure.
- » **How resilient would senior, higher-rated CLO tranches be in a downturn?** CLOs typically offer tranches with different cash flow priorities and rating levels. The senior-most tranches, typically rated Aaa (sf), have shown significant resilience to loss, largely as a result of high subordination levels, collateral composition and performance history.

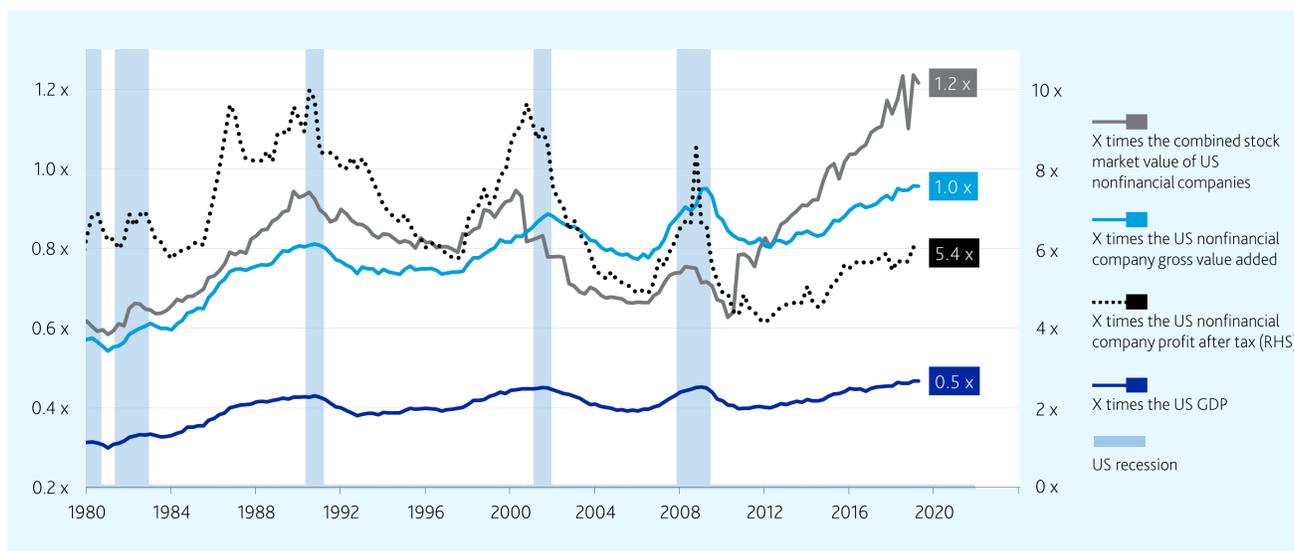
## What has driven the increase in corporate leverage? And will high leverage or elevated corporate debt levels trigger or exacerbate a recession?

US nonfinancial corporate leverage has climbed in recent years as a result of investors' voracious appetite for yield in a low interest rate environment (see Exhibit 1), even as their frustrations mount over poor credit quality of investments and weaker protections for lenders.

Many speculative-grade companies have taken advantage of easy market access in a stable credit environment while also successfully weakening investor protections in credit agreements and bond indentures. For investment-grade companies, investor demand remains robust and the opportunity to increase leverage is constrained only by the companies' own credit quality objectives.

Exhibit 1

### US nonfinancial corporate leverage



Sources: Federal Reserve Bank of St. Louis, Board of Governors of the Federal Reserve System, Bureau of Economic Analysis and Moody's Investors Service

A US recession is not our [baseline forecast](#) for 2020 or 2021, although we do expect a growth slowdown and recession risks remain elevated. If a recession were to occur, high corporate leverage and debt levels would not likely be the cause. But these factors could amplify and elongate the effects of a recession because highly levered companies would have diminished capacity for investing and hiring as a recovery starts to take shape because of the weight of their debt loads.

Regardless of when the cycle turns, the [absolute number](#) of US nonfinancial company downgrades and defaults in the next recession will likely exceed those in the 2008-09 recession. The likely record number will be the result of the increase in total corporate family ratings (CFRs)<sup>1</sup> and loan ratings<sup>2</sup> outstanding, as well as from a deterioration in the rating distributions of CFRs and loan ratings. For example, the cohort of outstanding CFRs as of December 2019 includes 1,537 CFRs, up from 1,189 for the cohort outstanding as of July 2008. The December 2019 cohort includes 1,184 loan ratings, up from 752 for the December 2008 cohort.

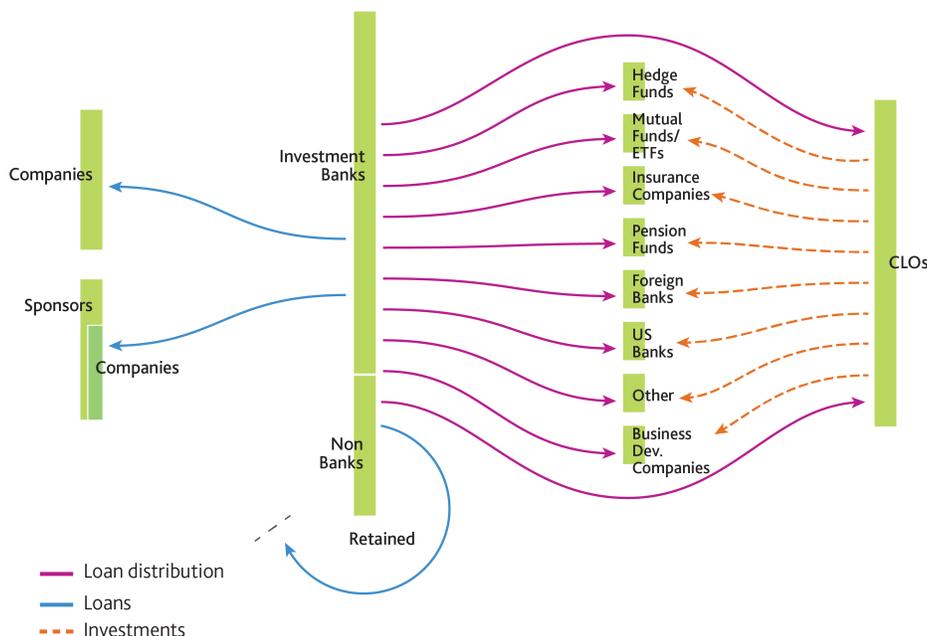
The growth in leveraged loans, which are broadly syndicated term loans to heavily indebted companies that typically have speculative-grade ratings, poses both [direct and indirect risks](#) to banks operating in the US. Although banks sell a significant portion of these loans to CLOs and other investors, they still face direct risks stemming from their loan underwriting pipelines, retained hold positions, revolving credit facilities to leveraged corporate borrowers, and loans purchased in syndication.

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](http://www.moody's.com) for the most updated credit rating action information and rating history.

Banks also have indirect exposure through their investments in CLOs and through secured lending to non-banks and investment vehicles to finance purchases of leveraged loans. At most banks these exposures are subject to conservative risk limits and are well structured. But credit market turbulence would exacerbate the risks. A pronounced downturn in the leveraged loan market could also reduce the valuation of other bank assets that are cyclical or more confidence-sensitive. And an increase in corporate defaults in the next downturn could have adverse effects on banks' consumer lending exposures if it leads to higher unemployment. Exhibit 2 presents a simplified structure of the syndicated institutional market for leveraged loans.

Exhibit 2

### Investment banks and non-banks originate and distribute a large portion of leveraged loans Institutional leveraged lending origination



Source: Moody's Investors Service

### What risks do Baa-rated companies pose to the financial system? Can the high-yield market absorb fallen angels as the credit cycle changes?

Baa is the lowest broad rating category within investment grade. The volume of US Baa-rated nonfinancial corporate debt has [risen steadily](#) in recent years, to a total face value outstanding of more than \$2.0 trillion from about \$740 billion in 2007. However, the number of Baa-rated companies has increased only 13%.

In light of the expansion of Baa debt, some market participants have expressed concerns that the creditworthiness of Baa-rated companies today may not be as strong as in the past. There are also concerns around the high-yield market's resilience in the event that a significant number of companies in this category become "fallen angels," that is, downgraded to speculative grade.

While high levels of Baa debt increase the potential for downgrades to speculative grade in a recession, an increase in [fallen angel debt](#) would not likely disrupt the high-yield market by itself. We base this conclusion on both the low historical correlation between fallen angel rates and macroeconomic conditions, as well as on our fundamental view that most Baa companies have the credit strength and flexibility to weather economic downturns without lasting damage to their financial or business profiles. Historically, industry-specific considerations have driven increases in fallen angel rates.

Although the size of the high-yield debt market has grown rapidly in the past two decades, fallen angel debt levels have not. For example, US high-yield debt outstanding stands at about \$2.3 trillion, up from roughly \$985 billion in 2009. But since the financial

crisis, fallen angel debt as a share of high-yield debt outstanding has remained below 5%, except for a brief period in 2016 following a series of downgrades to energy-related companies.

### Companies with Baa ratings today seem to have increased leverage as compared to similarly rated companies before the crisis, so why are these companies not rated speculative grade?

Our rating criteria for the Baa category has remained consistent over time. Leverage is one among many factors that we consider in evaluating the creditworthiness of an issuer. Although the median US Baa-rated company now has [moderately higher leverage](#) than in the past, it is also substantially larger, more profitable and less burdened by interest expense than it was in 2007, indicating that there has not been any material deterioration in creditworthiness since before the financial crisis.

In a downturn, the typical Baa company would have substantial ability to generate cash flow by reducing dividends, share buybacks and capital spending. Additionally, the unsecured debt capital structures of Baa companies also give them the ability to sell assets or issue secured debt if needed.

Many of today's Baa companies once carried higher ratings, but were downgraded to Baa after they loosened their financial policies. Roughly half of the total outstanding debt of Baa companies today was issued by companies previously rated A or Aa. In many cases, these companies have retained or strengthened their business profiles, offsetting to varying degrees the impact of higher leverage resulting from debt-financed acquisitions or increases in cash returns to shareholders.

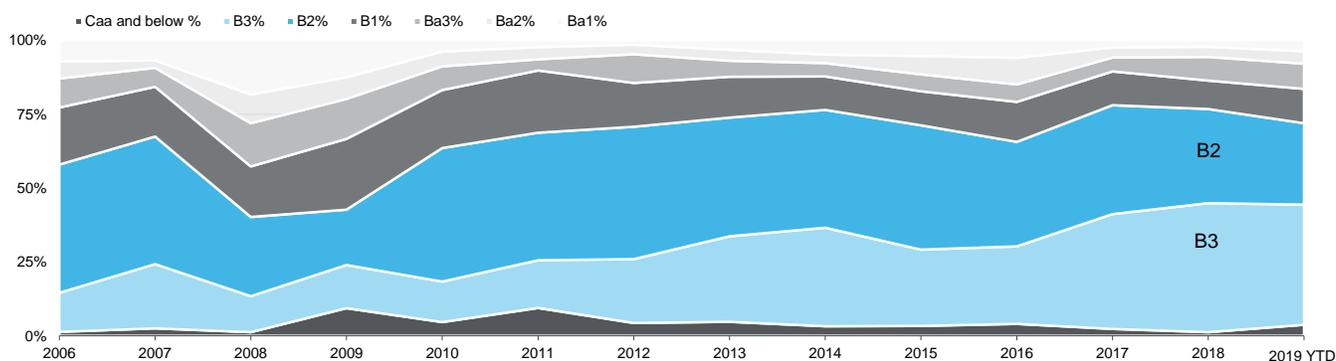
Most Baa corporate debt in the US is rated Baa1 or Baa2, which means it is two or more notches away from speculative grade. Also, most Baa3-rated corporate debt carries a stable or positive rating outlook.

### What is happening in the speculative-grade market and how is that affecting the credit quality of CLOs?

Higher leverage has weakened the ratings distribution among speculative-grade companies. The weaker ratings mix is largely the result of more small to medium-sized companies seeking new ratings, not downgrades of existing rated companies. Year to date through Nov. 1, 40% of first-time corporate issuers in North America had B3 CFRs, [twice the percentage](#) during the last recession (see Exhibit 3). Private-equity owned companies dominate low speculative-grade issuance, comprising about 80% of B3s and 60% of B2s.

Exhibit 3

#### New B3 issuance has surged



Based on CFRs for companies in the US and Canada. YTD 2019 is through Nov. 1.

Source: Moody's Investors Service

Among speculative-grade companies, leveraged loan covenants have continued to deteriorate, leaving lender protections much weaker than before the financial crisis and potentially restricting lenders' abilities to force borrowers to take action in response to negative credit events. Over the past decade, there has been a widespread acceptance of covenant-lite ("cov-lite") loans, which forego financial maintenance covenants entirely.

Although speculative-grade default rates will likely remain low [over the next 12 months](#) and refinancing risks will likely be manageable, rising leverage plus weak covenants imply more downside risks. In the next downturn, the ranks of Caa issuers could easily [exceed those](#) in the 2008-09 recession as the B3 corporate universe gets hit with downgrades.

Investor protections in CLOs, which are the single-biggest investors in leveraged loans, will likely continue to weaken amid the easy market conditions, with loosened criteria for asset selection, trading and other activities. CLOs generally retain a relatively strict set of constraints, so the term [covenant-loose](#) ("cov-loose"), rather than cov-lite, better describes CLOs that have weaker documentation constraints relative to earlier post-crisis CLOs.

Weakening loan credit quality directly affects CLO asset quality measures, and therefore collateral quality test metrics have deteriorated in line with loan trends in recent years. These risks are mitigated by the CLO structure and are incorporated into the rating analysis for CLO transactions that we rate.

Collateral losses in the event of default in CLOs may be higher with fewer loan covenants to trip and less subordinated debt to cushion loss severity. Loss-given-default estimates for assets in CLO collateral pools have gone up by five to six percentage points in the last eight years, while the overall default risk profile of loans has worsened and spreads have tightened, compressing any remaining cushions against their covenant triggers.

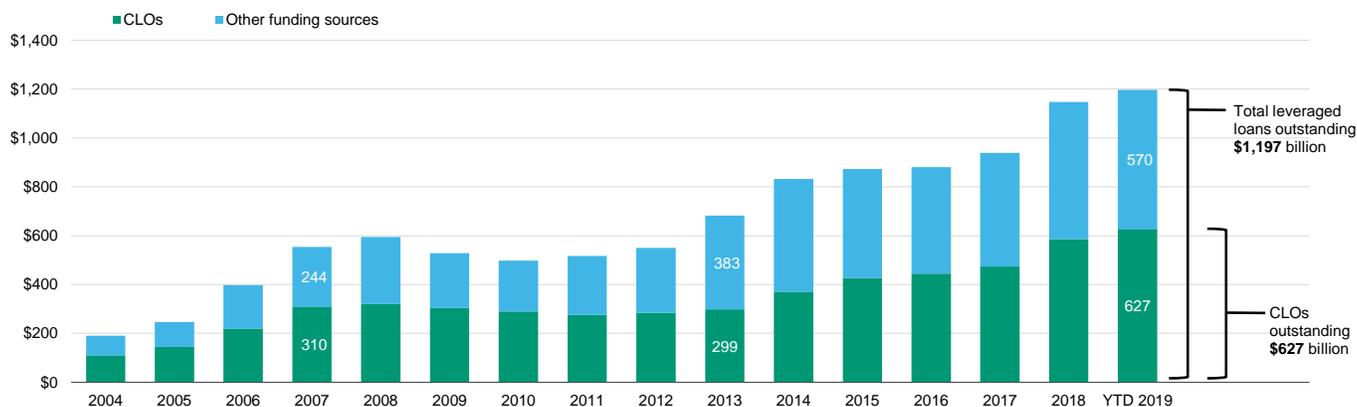
### How do CLOs of today compare to subprime RMBS in 2007, and should we be concerned about the risks?

There has been a significant increase in the total outstanding amount of US CLOs, which now exceeds \$600 billion, about double the level at the end of 2013. Meanwhile, the amount of leveraged loans has jumped to \$1.2 trillion from about \$800 billion over the same period (see Exhibit 4). This has raised concerns among some market participants who draw parallels to the subprime RMBS and collateralized debt obligations (CDOs) market. However, CLO volume and growth have been much lower in comparison. US private label RMBS issuance before the financial crisis averaged about \$1 trillion annually,<sup>3</sup> while US CLO issuance has averaged about \$105 billion annually over the past three years.<sup>4</sup>

In addition, there are other fundamental differences. CLOs are backed by more diversified asset pools than were pre-crisis CDOs. CDOs invested in already securitized assets and were concentrated in the housing industry. In contrast, CLOs invest in broadly syndicated loan obligations that are generally well diversified across many industries and are understood to be risky and publicly rated in the single B category. This diversification reduces risk in a downturn, because losses in the CLO would approximate those of the broad corporate landscape rather than those in sectors that have the most defaults or the highest spike in losses. Still, the risks to CLOs from loans to companies with very low speculative-grade ratings will likely grow as the credit cycle progresses.

Exhibit 4

#### Aggregate outstanding corporate leveraged loans in the US by funding source, since 2004 In billions



2004-12 leveraged loan percentages are estimates. YTD data is through June 30.  
Sources: Thomson Reuters and Moody's Investors Service

CLO structures are generally more robust than CDO structures, with significant over-collateralization and no derivative hedges or synthetic structures that could introduce counterparty and market value risk. CLOs, for the most part, are also managed by collateral managers with longer experience with the assets than were CDO managers.

US CLOs face [expanding risks](#), however, particularly stemming from the growing weaknesses in the leveraged loan market, the loosening of transaction constraints and the changing regulatory and macroeconomic environments. Credit quality and performance [will both likely weaken in 2020](#) as corporate leverage continues to creep up and structural protections loosen further. As collateral defaults modestly increase and economic growth slows in the US, it is likely that new CLO transactions will push for more structural flexibility and existing transactions will maneuver around shrinking leeway with regard to collateral quality tests.

### **How resilient would senior, higher-rated CLO tranches be in a downturn?**

CLOs typically offer tranches with different cash flow priorities and rating levels. A CLO's senior-most tranche, which is typically rated Aaa (sf), ordinarily comprises roughly 60%-65% of the par amount of the securitization and is supported by more than 35% non-senior tranches. Because typical CLO tranches are repaid sequentially, the senior-most tranche benefits from being repaid first and subsequent tranches will be repaid only to the extent that remaining funds are available.

In addition, CLOs typically incorporate structural mechanisms that divert cash flow from equity and junior notes to pay senior notes first in the event of material credit deterioration in the portfolio. Moreover, funds to repay tranches depend on a large, diversified pool of senior secured bank loans, which typically have corporate family ratings of B2 or B3.

Senior CLO tranches have shown significant resilience to loss, in large part as a result of high levels of subordination, asset collateral composition and performance history, and other structural credit enhancements. Historically, Aaa (sf) and Aa (sf) default rates for CLOs have been lower than for corporates.

Our structured and corporate finance teams stay in close contact to assess credit trends in the leveraged loan market. We also monitor outstanding CLOs rigorously in a number of ways. These include a monthly analysis based primarily on quantitative models that calculate tranche expected loss levels and an evaluation of key performance metrics such as changes in a portfolio's weighted average rating factor and over-collateralization. .

Since the 1990s when CLOs first appeared, few have been impaired, and tranches initially rated higher than A2 (sf) have never suffered losses, despite going through several business cycles. No US CLO tranche that we have rated since 2009 has become impaired to date. In addition, following a change to our CLO methodology, CLOs issued since 2010 have significantly higher subordination for comparably rated notes than those issued before 2010. Despite a long and benign economic period in the US, our assessment of risks in CLO pools reflects historical corporate stress scenarios.

Under a [severe downturn scenario](#), the junior CLO tranches that we rate would be at risk of significant credit quality deterioration and impairment. Senior tranches would avoid impairments in a severe downturn scenario because credit enhancement and other structural features would support their strong credit quality. Other important factors that would determine the credit effects in a downturn would include the extent of manager trading, idiosyncratic CLO structural features, trends in the loan market and the severity and length of the downturn.

## Moody's related publications

### Sector research

- » [CLOs – US: 2020 Outlook – CLOs will seek structural flexibility amid weakening collateral quality and performance](#), November 2019
- » [CLOs – US: Sector Update – Q3 2019: CLOs' performance steady amid slower issuance and increased corporate downgrades](#), November 2019
- » [US Corporate Default Monitor – Third Quarter 2019: Defaults during the first three quarters of 2019 surpassed the entire 2018 tally](#), October 2019
- » [Leveraged Finance Interest](#), October 2019
- » [Leveraged Finance – US: Loan And Bond Convergence: investors pave way for lower recoveries in next downturn](#), October 2019
- » [Nonfinancial Corporates – US: As low-rated spec-grade universe expands, more rated companies will likely default or be downgraded in the next downturn](#), September 2019
- » [CLOs – Global: In a severe downturn scenario, credit quality declines significantly, impairing junior tranches](#), September 2019
- » [Regional Banks – United States: Loan exposures to non-bank financial institutions are up, but portfolio risks vary](#), September 2019
- » [CLOs – US: Risks from lower-rated companies with concentrated business links raise stakes for CLOs in a downturn](#), August 2019
- » [US expansion is continuing but credit conditions are becoming less supportive](#), May 2019
- » [Nonfinancial Corporates – US: Fallen angels: High-yield market buffers potential transitions amid wider risks](#), May 2019
- » [Global Investment Banks: GIBs generally prepared for stress in leveraged lending; degree of impact varies](#), May 2019
- » [Nonfinancial corporates – US: Prolonged and widespread M&A activity exposes more companies to asset writedowns in the next recession](#), April 2019
- » [FAQ: The next US recession](#), April 2019
- » [Banks – United States: Leveraged lending risk rising but contained barring adverse turn in operating conditions](#), February 2019
- » [Moody's Credit Trends Webinar: Corporate credit distress and default](#), February 2019
- » [CLOs – US: As erosion of collateral quality metrics constrains reinvestments, managers turn to diversity score](#), January 2019
- » [Moody's Credit Trends Webinar, January 22, 2019: Rising corporate leverage and risks to credit markets](#), January 2019
- » [Nonfinancial Corporates – US: Credit strengths of Baa-rated companies mitigate risks of higher leverage](#), January 2019

### Topic pages

- » [Recession Risks](#)
- » [Lower-for-longer Interest Rates](#)
- » [Default Trends and Rating Transitions](#)

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](#) Moody's corporate family ratings (CFRs) are long-term ratings that reflect the relative likelihood of a default on a corporate family's debt and debt-like obligations and the expected financial loss suffered in the event of default. A CFR is assigned to a corporate family as if it had a single class of debt and a single consolidated legal entity structure. CFRs are generally employed for speculative-grade obligors, but may also be assigned to investment-grade obligors. The CFR normally applies to all affiliates under the management control of the entity to which it is assigned.
- [2](#) Loan ratings are the senior-most loan rating of an issuer, excluding ratings on asset-based loans, second-lien loans and revolvers.
- [3](#) Source: The Securities Industry and Financial Markets Association.
- [4](#) Source: Refinitiv.

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