



CLO Review: Interest Rate Hikes and Industry Strains Ignite Loan Downgrades in High-Tech and Healthcare Sectors

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Introduction

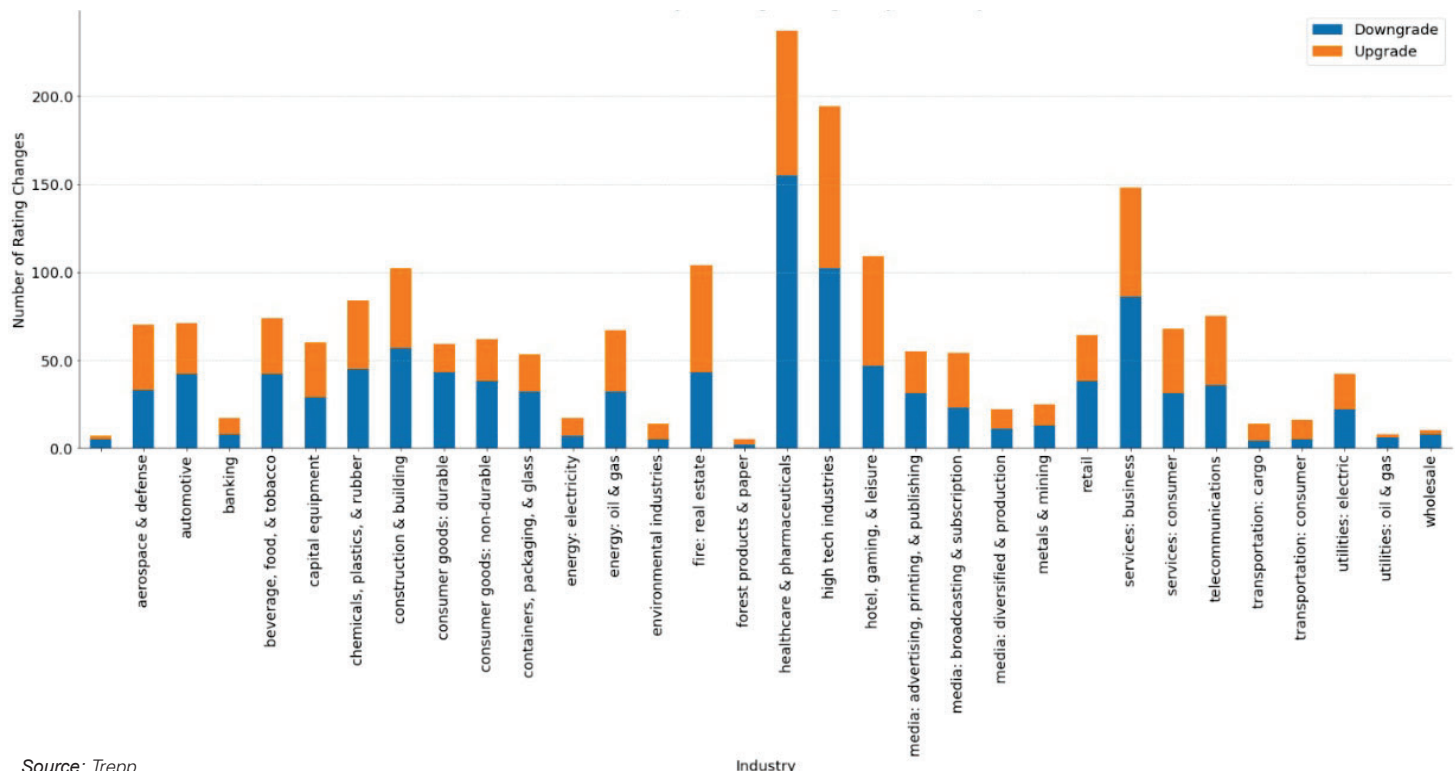
Leveraged loans have become an essential part of the financial system, providing corporations with the capital they need to grow, expand, and refinance existing debt. Collateralized Loan Obligations (CLOs) have played a crucial role in supporting the leveraged loan market by pooling loans and issuing securities. However, the increasing trend of leveraged loan downgrades in 2022 has raised concerns about the potential impact on CLOs and the broader financial market.

Leveraged loans are high-risk, high-yield loans made to companies with lower credit ratings or higher levels of existing debt. These loans are typically used to finance mergers and acquisitions, leveraged buyouts, and other significant corporate transactions. Leveraged loans are well positioned for a rising rate environment as they are floating rate instruments.

As interest rates rise, the cost of borrowing increases, which can have a significant impact on leveraged loans, particularly for borrowers with lower credit ratings. Higher interest rates can lead to increased debt service costs, making it more challenging for companies to meet financial obligations. This burden can be particularly heavy for companies that have taken on substantial amounts of debt, as is the case with leveraged loans.

In this context, the risk of rating changes becomes more pronounced, specifically when looking at downgrades. Credit rating agencies may reassess the creditworthiness of these borrowers in light of the increased interest rates and adjust their ratings accordingly. Companies with downgraded leveraged loans are likely to face even higher borrowing costs, as the perceived risk associated with these companies increases.

FIGURE 1 - 2022 RATING CHANGE BY MOODY'S INDUSTRY TYPE (TREPP)



Source: Trepp

By utilizing Trepp’s leveraged loan database, which is constructed from the collateral supporting CLOs in their system, we can scrutinize the evolution of Moody’s ratings throughout 2022. This analysis allows us to understand the resultant impacts on various industry types. Moody’s rating migration was chosen to streamline the analysis and creates consistency in the dataset.

CLO Exposure to Leveraged Loan Segmented by Moody’s Industry Type

The process of filtering out multiple Moody’s industries is essential to gain a more focused and accurate understanding of the credit landscape across various sectors. With many industries tracked by Moody’s, analyzing all of them simultaneously may dilute the insights gained from the data. To better focus our analysis, Trepp and Yield Book drilled down into the top five industries by par exposure, as shown in Table 1.

TABLE 1 - CLO EXPOSURE TO MOODY’S INDUSTRY

MOODY’S INDUSTRY	TOTAL PAR (\$B)
High Tech Industries	88.429
Healthcare & Pharmaceuticals	82.868
Services: Business	72.417
FIRE1: Real Estate	54.475
Hotel, Gaming, & Leisure	34.847
Telecommunications	34.242
Media: Broadcasting & Subscription	32.779
Construction & Building	31.846
Chemicals, Plastics, & Rubber	31.618
Services: Consumer	30.350

Source: Trepp

Upgrades versus downgrades can be viewed in two ways. The first is taking any movement in the rating as a single count, i.e., Aa1 to Aa3 would be one downgrade, or one can count each rating notch as a movement, i.e., Aa1 to Aa3 would count as two downgrades, which for ease, will be referred to as notched downgrade. Using a notched approach, we gain further insight into the rating migration. An example of this would be for Healthcare & Pharmaceuticals, which saw 155 overall downgrades in 2022, but this equated to 285 rating movements.

TABLE 2 – MOODY’S SINGLE AND NOTCHED UPGRADES AND DOWNGRADES SORTED BY EXPOSURE (TREPP)

MOODY’S INDUSTRY	UP-GRADE	DOWN-GRADE	NOTCHED UPGRADE	NOTCHED DOWN-GRADE
High Tech Industries	92	102	149	196
Healthcare & Pharmaceuticals	82	155	169	285
Services: Business	62	86	106	154
FIRE: Real Estate	61	43	126	81
Hotel, Gaming, & Leisure	62	47	124	104

Source: Trepp

Relative Upgrade and Downgrade by Loan Count

The relative downgrade or upgrade of leveraged loans by Moody’s industry matters significantly, as the distribution of loans across industries is not uniform. In some sectors, the number of loans may be relatively low compared to others, which means that the downgrade percentage within these industries can appear disproportionately large, creating a misleading perception of credit risk within certain industries. From an upgrade perspective, Transportation: Consumer saw the largest relative change, though it was driven by 39 upgrades vs. a loan pool across the year of 296. From a downgrade perspective, Oil & Gas saw 18 downgrades from a pool of 115 loans. These results highlight the need to be cautious about the potential impact of a small denominator on the interpretation of the results.

TABLE 3 - RELATIVE UPGRADE DATA (TREPP)

MOODY’S INDUSTRY	TOTAL COUNT	RELATIVE UPGRADE COUNT	RELATIVE UPGRADE PERCENTAGE
Transportation: Consumer	296	39	13.18%
Energy: Electricity	166	15	9.04%
Energy: Oil & Gas	806	72	8.93%
Utilities: Electric	617	51	8.27%
Media: Broadcasting & Subscription	787	65	8.26%

Source: Trepp

Market & Industry Deep Dive

Examining the loan rating migration for various industries provides valuable insights into the credit dynamics and associated risks within these sectors. Trepp analyzed the

TABLE 4 - RELATIVE DOWNGRADE DATA (TREPP)

MOODY'S INDUSTRY TYPE	TOTAL COUNT	RELATIVE DOWNGRADE COUNT	RELATIVE DOWNGRADE PERCENTAGE
Utilities: Oil & Gas	115	18	15.65%
Utilities: Electric	617	61	9.89%
Consumer Goods: Durable	912	84	9.21%
Energy: Oil & Gas	806	65	8.06%
Automotive	1138	91	8.00%

Source: Trepp

monthly loan migration of the top five industries with exposures in CLOs: High Tech Industries, Healthcare & Pharmaceuticals, Services: Business, FIRE: Real Estate, and Hotel, Gaming, & Leisure.

Upgrades and downgrades fluctuate throughout the year for each industry. In most cases, downgrades tend to be more pronounced than upgrades. This is particularly evident in Healthcare & Pharmaceuticals, Services: Business, and High-Tech Industries, where downgrades often outweigh upgrades by a considerable margin.

Rating changes can stem from factors such as market events, changes to loan default prediction, and adjustments to rating criteria. Event driven rating changes occur when a borrower's credit profile is significantly affected by events such as changes to cashflow along acquisitions or refinancing. Changes in default rates can signal altered credit conditions, influencing loan risk profiles. Lastly, agencies update their criteria and methodologies to better capture risks and maintain rating accuracy, leading to adjustments in loan ratings.

Looking to default rates forecasts as a driver for the downgrades, in April 2022 Moody's released its annual default study on corporate credit. Its speculative-grade default baseline scenario had a rate of 2.4%. However, according to the 2023 annual default study by Moody's, the actual default rate for 2022 was higher than predicted, at 4.3%.

The 2023 annual study shows that the inclusion of Russian issuers in the 2022 CTM (Credit Transition Model) Forecast had a significant impact on the default rates across various

sectors. Sectors such as Banking, Construction & Building, and Metals & Mining experienced dramatic increases in default rates. Other sectors, like Energy: Oil & Gas and Telecommunications, saw more moderate effects.

Along with the Russian invasion of Ukraine, another key driver to rating changes was interest rate hikes. These hikes placed increased pressure on corporate cashflows, impacting metrics such as interest coverage, free operating cashflows, and profit. S&P highlighted that although these companies have successfully employed strategies such as price increases to grow their top-line revenue and counter rising costs, most of them have experienced margin erosion to varying degrees. The median EBITA gross reported by S&P was lower in 2022 across sectors than it was in 2021, indicating that companies' earnings before interest, taxes, depreciation, and amortization have not been holding up well against the backdrop of interest rate hikes.

As recently as the first quarter of 2022, the Fed maintained the federal funds rate close to zero and persistently bought billions of dollars in bonds each month to stimulate the economy, even with inflation rates soaring to 40-year highs. This may have resulted in a false sense of security for companies across sectors that were being held up by inflated inflows from government support.

The rate hikes throughout 2022 had a notable impact on the downgrade of leveraged loans across various sectors. The High-Tech Industries experienced a significant increase in downgrades, especially between July and December 2022, coinciding with the period of substantial rate hikes. S&P data showed that technology-based companies had mixed results with improved revenue due to the need to have price

escalators in place along with swinging consumer demand, which may have hampered cashflow. This combined with higher leverage that many technology firms utilise placed strain on EBITDA and financial outlook. Similarly, Healthcare & Pharmaceuticals witnessed a growing trend in downgrades from August to November 2022, aligning with the rising base rates. S&P highlighted that Healthcare companies experienced strong demand for services and equipment throughout 2022, but staffing shortages and inflation led to low- to mid-single-digit percent margin decline. Margins declined for over 70% of companies in the sector, causing concern for an industry traditionally considered defensive and noncyclical. A prime example of this was in September 2022 when Envision Healthcare was downgraded to “C” as Moody’s cited weak liquidity with the forecast that Envision would deplete its \$1.4 billion cash reserve by the end of next year. Factors contributing to Envision’s declining profitability included pandemic-related volume declines and labour pressures, along with negative publicity from surprise medical bills.

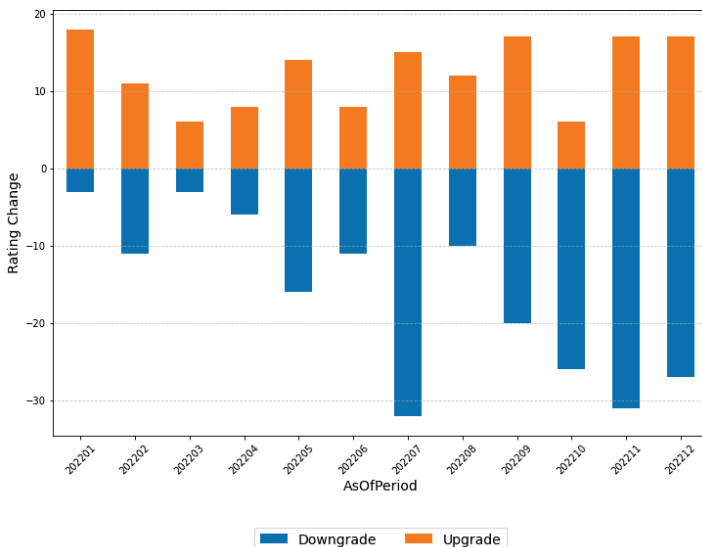
The Services: Business sector saw a consistent pattern of downgrades throughout the year, with significant downgrades occurring in February, May, November, and December 2022, following the rate hikes. This industry is likely to face strained debt service capacity, with around

67% of ‘B-’ or equivalent ‘B3’ rated business and consumer service companies may face negative free operating cash flow (FOCF) and insufficient interest coverage.

In the FIRE: Real Estate sector, downgrades were relatively stable until November and December 2022, when they notably increased as rate hikes continued.

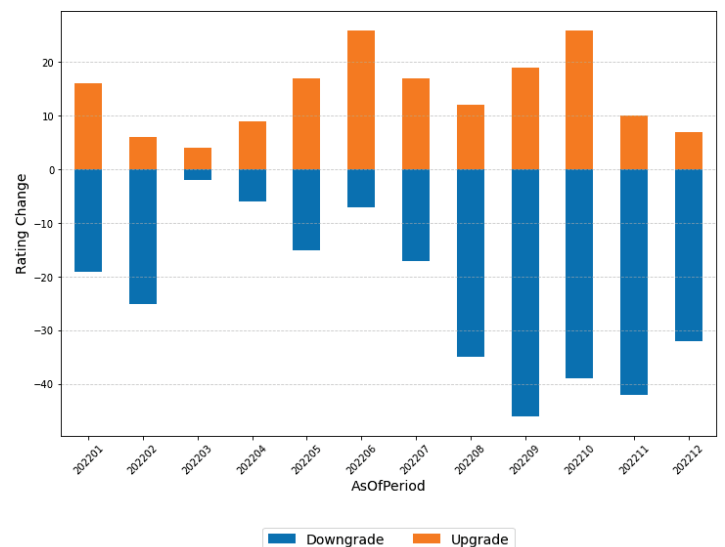
Pinebridge research recommended focusing on companies and sectors with consistent revenue streams that can perform well in a recessionary environment. This includes specific technology and software credits, as well as select opportunities in healthcare. Although healthcare tends to be resilient in low-growth or recessionary conditions, a cautious approach and thorough risk analysis are necessary. Some healthcare segments, particularly providers, face regulatory and legislative challenges, coupled with higher labour costs and workforce shortages. However, a recessionary environment with increased unemployment may alleviate labour cost pressures by intensifying job competition. Conversely, cyclical sectors such as retail, automotive, and other consumer discretionary-related segments are likely to encounter difficulties, such as demand declines. This also applies to industrials, which have shown strength in recent years, but may exhibit weakness moving forward.

FIGURE 2 - MOODY’S RATING CHANGE BY HIGH TECH INDUSTRIES (TREPP)



Source: Trepp

FIGURE 3 - MOODY’S RATING CHANGE BY HEALTHCARE & PHARMACEUTICALS (TREPP)



Source: Trepp

FIGURE 4 - MOODY'S RATING CHANGE BY SERVICES: BUSINESS (TREPP)

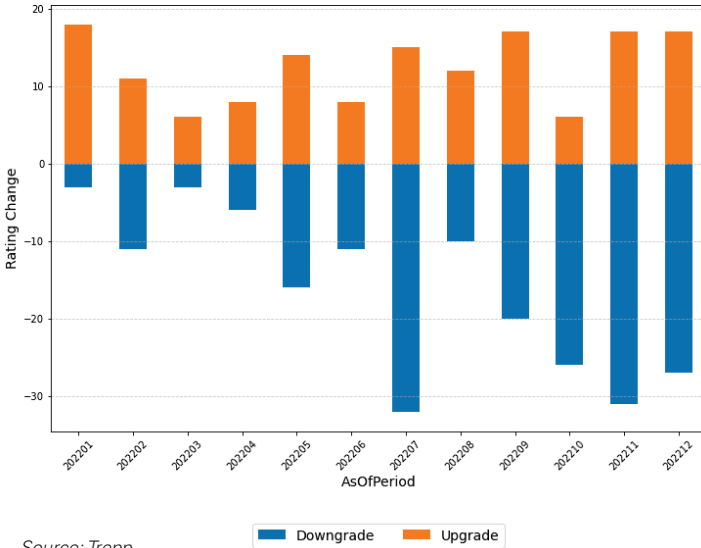


FIGURE 5 - MOODY'S RATING CHANGE BY FIRE: REAL ESTATE (TREPP)

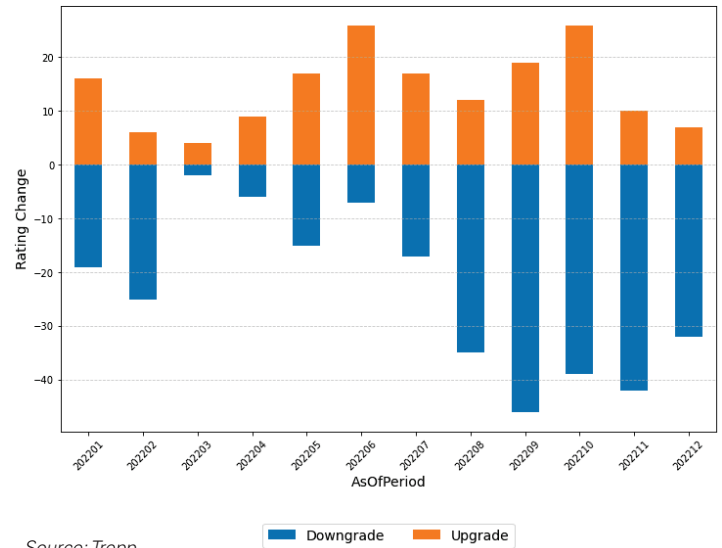
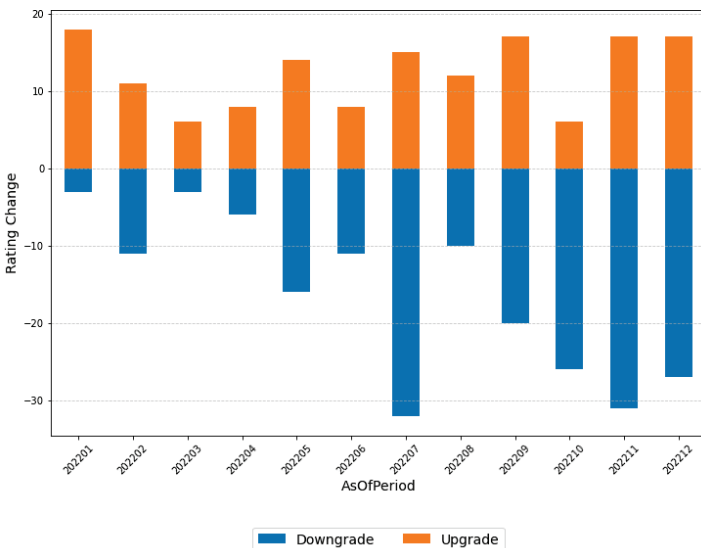


FIGURE 6 - MOODY'S RATING CHANGE BY HOTEL, GAMING & LEISURE (TREPP)

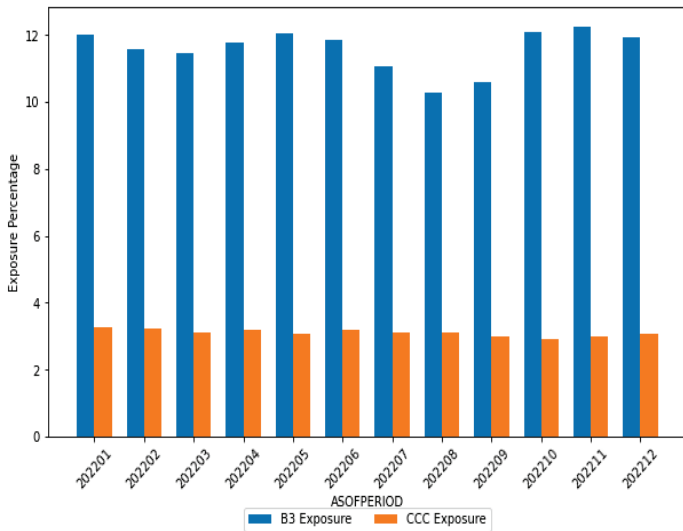


Rating Concentration and Downgrades

Broadly syndicated CLOs typically permit up to 7.5% of Caa/CCC-rated Loans, which are subject to strict concentration limits and collateral quality testing. Exceeding these limits results in haircuts or discounts to protect the overcollateralization levels for CLO tranches, and loans may be treated as defaulted if downgraded significantly. This can restrict a CLO's ability to reinvest principal proceeds or require new assets to have higher credit quality, potentially limiting suitable asset availability if downgrades persist.

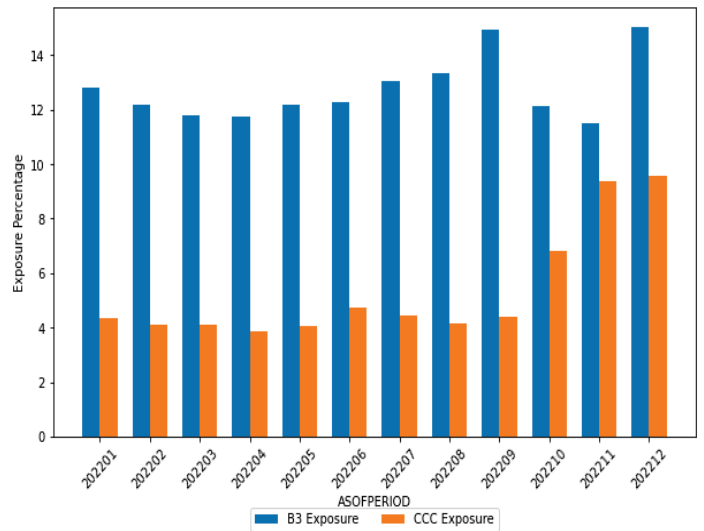
Caa/CCC-rated Loans exceeding concentration limits are typically carried at market value or the lower of market value and recovery rate for overcollateralization test purposes. CLO indentures often require the inclusion of the lowest market value Caa/CCC-rated loans in the excess. Consequently, large-scale downgrades of a CLO's loan portfolio below B3/B- could lead to failing overcollateralization tests, resulting in the amortization of secured notes using interest proceeds.

FIGURE 7 - B3 AND CAA EXPOSURE AS A PERCENTAGE OF TOTAL PAR FOR HIGH TECH INDUSTRIES (TREPP)



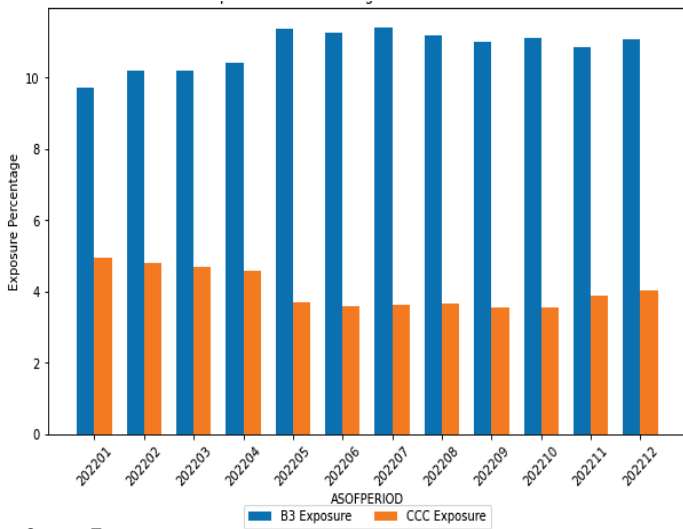
Source: Trepp

FIGURE 8 - B3 AND CAA EXPOSURE AS A PERCENTAGE OF TOTAL PAR FOR HEALTHCARE & PHARMACEUTICALS (TREPP)



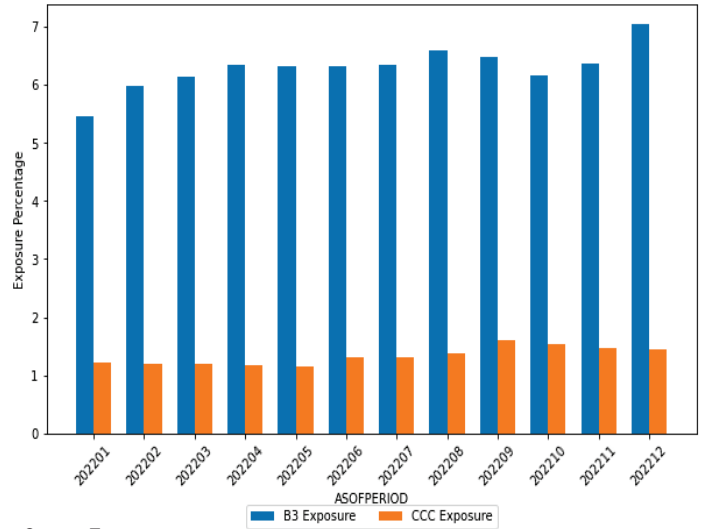
Source: Trepp

FIGURE 9 - B3 AND CAA EXPOSURE AS A PERCENTAGE OF TOTAL PAR FOR SERVICES: BUSINESS (TREPP)



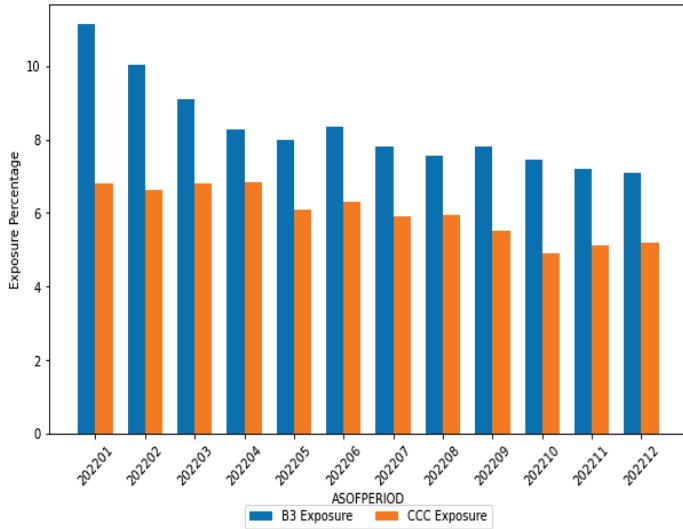
Source: Trepp

FIGURE 10 - B3 AND CAA EXPOSURE AS A PERCENTAGE OF TOTAL PAR FOR FIRE: REAL ESTATE (TREPP)



Source: Trepp

FIGURE 11 - FIGURE 10 - B3 AND CAA EXPOSURE AS A PERCENTAGE OF TOTAL PAR FOR HOTEL, GAMING & LEISURE (TREPP)



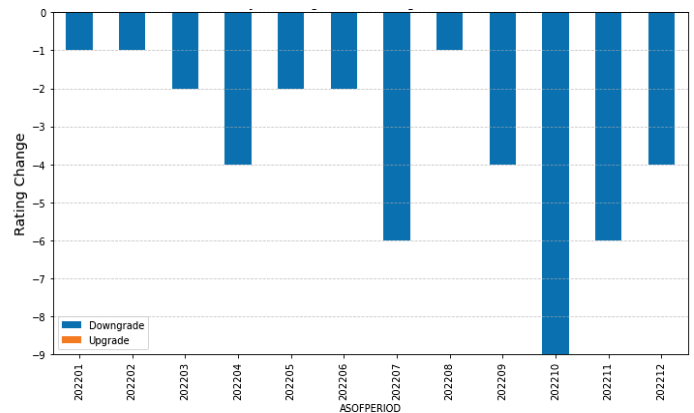
Source: Trepp

As a growing number of leveraged loans are downgraded to B3/B-, they come close to crossing this threshold, which could force CLO managers to divest from these loans to comply with the concentration limitations. Consequently, this may lead to reduced liquidity and higher funding costs for borrowers with these downgraded loans, as CLOs are one of the major sources of demand. Furthermore, such divestments could place further pressure on loan prices, amplifying the negative effects on CLOs and the broader leveraged loan market.

When viewing the downgrades over time, Trepp and Yield Book can see that downgrades to the B3 region have been increasing over the year, with November and December seeing the highest volume, which as mentioned will stress CLO's Caa/CCC covenants. Looking at this further, there is a greater proportion of downgrades to Caa1 or below than upgrades out of the Caa1 or below group, indicating that credit quality is deteriorating across the asset class.

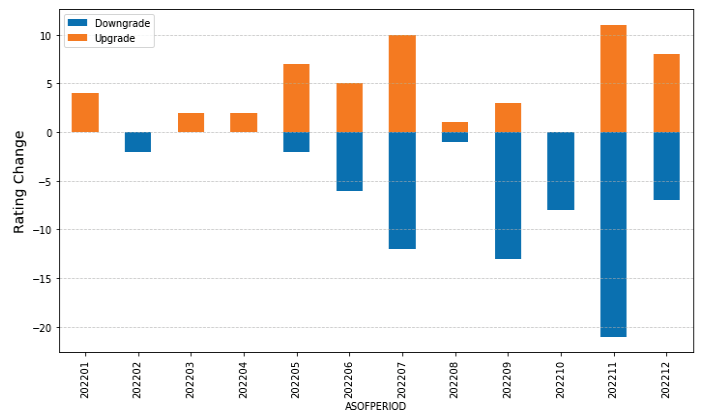
S&P reported that deficits in cash flow are the primary concern for issuers with ratings of 'B' ('B2') and below. With the median free operating cash flow (FOCF)-to-debt ratio for 'B-' ('B3') issuers declining in 2022. Therefore, any decrease in earnings or downward revisions to forecasts will increase the likelihood of downgrades and negative outlook adjustments.

FIGURE 12 - MOODY'S DOWNGRADE TO B3 BY HIGH TECH INDUSTRIES (TREPP)



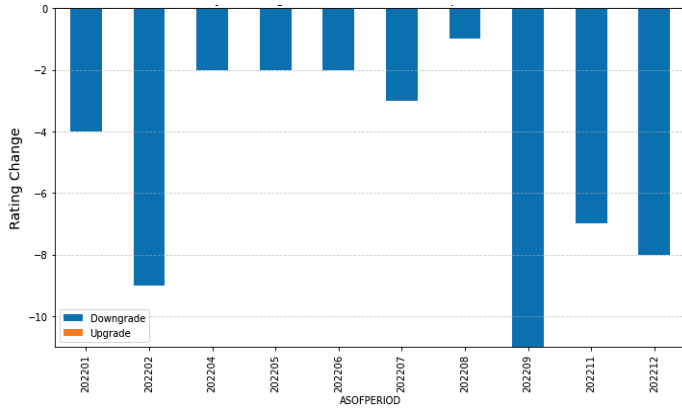
Source: Trepp

FIGURE 13 - MOODY'S CAA RATING CHANGE BY HIGH TECH INDUSTRIES (TREPP)



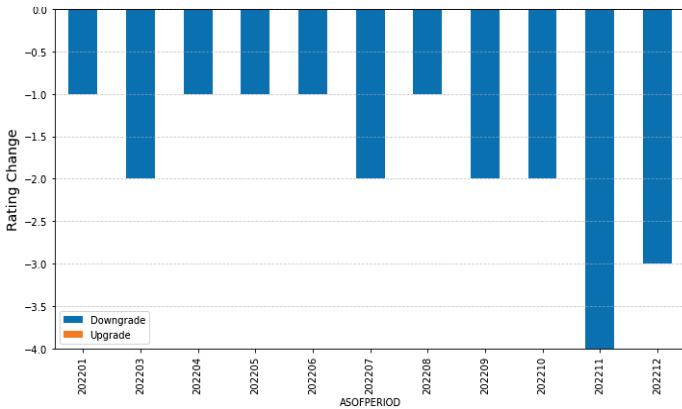
Source: Trepp

FIGURE 14 MOODY'S DOWNGRADE TO B3 BY HEALTH-CARE & PHARMACEUTICALS (TREPP)



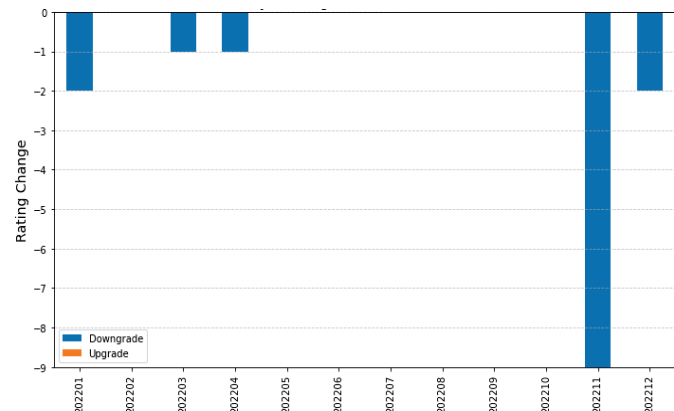
Source: Trepp

FIGURE 15-MOODY'S CAA RATING CHANGE BY HEALTH-CARE & PHARMACEUTICALS (TREPP)



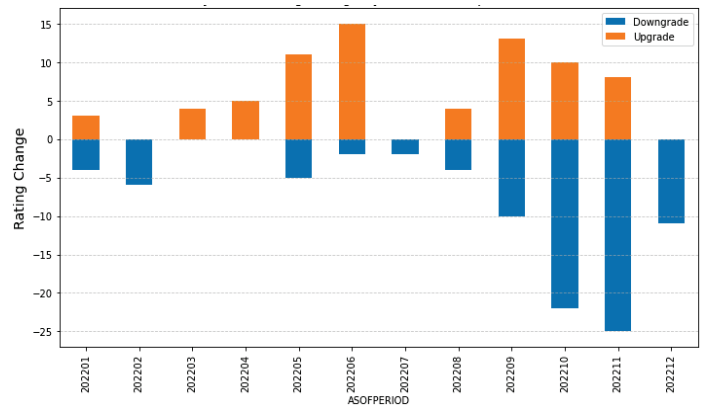
Source: Trepp

FIGURE 16 - MOODY'S DOWNGRADE TO B3 BY SERVICES: BUSINESS (TREPP)



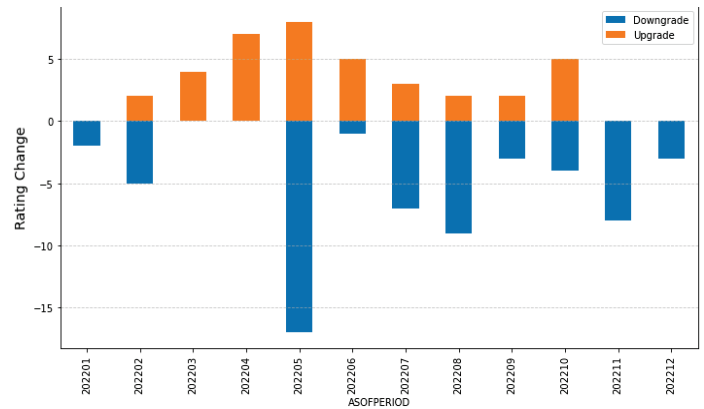
Source: Trepp

FIGURE 17 - MOODY'S CAA RATING CHANGE BY SERVICES: BUSINESS (TREPP)



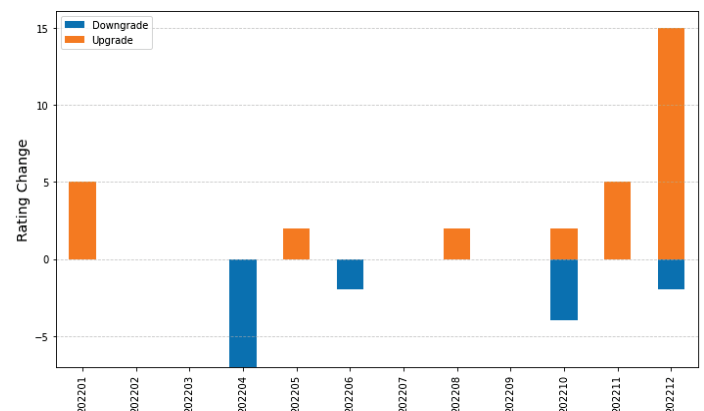
Source: Trepp

FIGURE 18 - MOODY'S DOWNGRADE TO B3 BY FIRE: REAL ESTATE (TREPP)



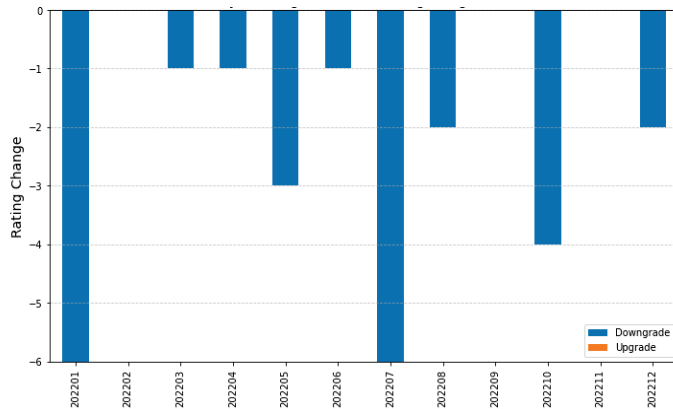
Source: Trepp

FIGURE 19 - MOODY'S CAA RATING CHANGE TO B3 BY FIRE: REAL ESTATE (TREPP)



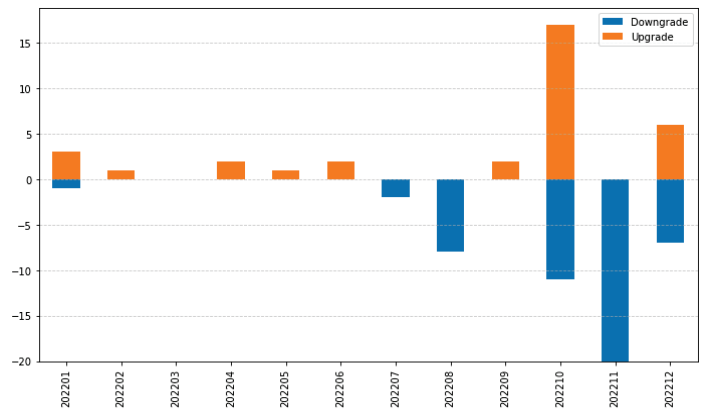
Source: Trepp

FIGURE 20 - MOODY'S DOWNGRADE TO B3 BY HOTEL, GAMING & LEISURE FIGURE (TREPP)



Source: Trepp

FIGURE 21 - MOODY'S CAA RATING CHANGE TO B3 BY HOTEL, GAMING & LEISURE (TREPP)



Source: Trepp

Conclusion

Throughout 2022, there has been a notable increase in leveraged loan downgrades. These downgrades can be attributed to various factors, including worsening economic conditions, high corporate debt levels, and increased scrutiny from credit rating agencies. Companies with already weak credit profiles have been particularly susceptible to downgrades, as rating agencies have adopted a more conservative approach in response to growing concerns about the sustainability of corporate debt.

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