

ZAIS Insights

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Corporate bond and CLO spreads to diverge

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- Fed tightening is expected to ...
- ... widen corporate bond spreads ...
- ... and tighten CLO spreads
- Main risk is financial and economic instability

In an accompanying note (*Stubbornly Low Treasury Yields*)¹ we outlined our view on Fed tightening and the expected impact on the 10-year Treasury yield. We expect 200 bps of Fed funds rate hikes by the end of 2023, and the start of the Fed balance sheet unwind by the middle of this year. We believe this will push the 10-year yield

higher, but not above the past range, which we think is capped around 3%.

In this note we look at the possible impact of Fed tightening on corporate bond spreads and the counterpart in structured credits, namely CLOs. We view the relationship between Fed policy and credit spreads as complex and involving other economic, credit and financial factors.

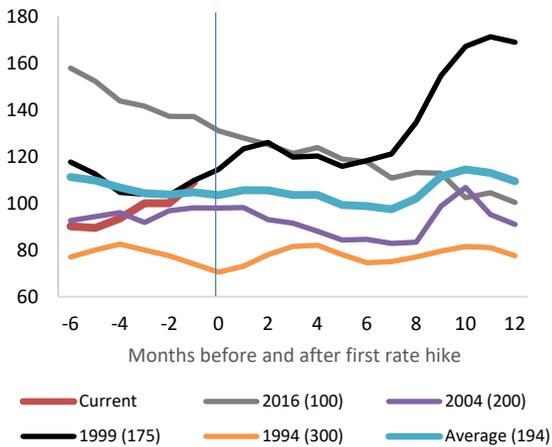
We believe corporate bond spreads will widen as the Fed tightens, while CLO spreads should tighten, given their floating rate nature. In our view, investors in structured credits should fare better once the Fed starts tightening policy as long as it does not lead to financial and economic instability.

Corporate bond spreads and Fed policy

The link between Fed policy and corporate bond spreads is not straight forward. Charts 1 and 2 show no stable pattern in HG and HY spreads during the last four Fed tightening periods. Most striking is the contrast between 1999 (rising spreads) and 2016 (falling spreads). Furthermore, there is no evidence that the degree of Fed rate hikes leads to a particular spread outcome.

Chart 1: HG spreads during Fed tightening

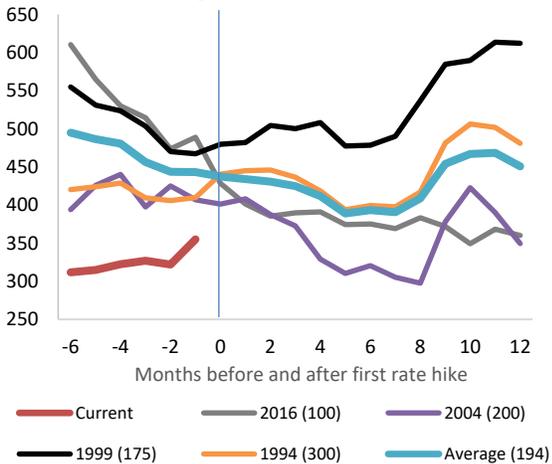
bps OAS, Fed tightening over first 12 months in parenthesis of legend



Source: BAML ²

Chart 2: HY spreads during Fed tightening

bps OAS, Fed tightening over first 12 months in parenthesis of legend



Source: BAML ³

However, we find it particularly eye-catching that current HY spreads (but not HG spreads) are significantly lower than they have been at any of the four prior Fed tightening periods.

Our analysis suggests that most of the HY spread difference between now and prior Fed tightening periods can be explained by the excess liquidity stemming from the last round of quantitative easing. As a result, we estimate that Fed balance sheet adjustment (we assume a reduction in Treasury holdings of \$925 billion by the end of 2023) could lift HY spreads by 30 bps, all else being equal.

Fundamental and financial conditions

Based on our analysis, corporate bond spreads are primarily a function of economic and credit fundamentals as well as financial conditions. In this framework, Fed policy impacts spreads more indirectly through economic, credit and financial conditions.

The table below shows our estimates of how the different spread drivers affected HY spreads during the periods shown. In 1999, toward the end of the dot-com bubble, economic, credit and financial conditions all deteriorated when the Fed started to tighten, pushing HY spreads higher.

Table: Est'd Breakdown of HY spreads

bps, 12 months changes from start of tightening

| | Economic | Credit | Financial | Fed ¹ | Other | Total |
|-----------------------|----------|--------|-----------|------------------|-------|-------|
| 1994 | -70 | -25 | +24 | 0 | +75 | +4 |
| 1999 | +29 | +26 | +30 | 0 | +61 | +146 |
| 2004 | +39 | -23 | -45 | 0 | +13 | -17 |
| 2016 | -91 | -1 | -63 | +3 | +85 | -68 |
| 2018 | +20 | -23 | +143 | +7 | -31 | +116 |
| Last 6 m ² | -24 | -2 | +132 | -6 | -72 | +28 |

1. "Fed" stands for Treasury holdings by the Fed
2. Change over last 6 months from mid Feb 2022

Source: ZAIS estimates ⁴

In 2016, economic and financial conditions improved and credit fundamentals remained stable when the Fed started to tighten.

However, the situation reversed in 2018 when the Fed signaled more rate hikes after it had started the balance sheet reductions. Credit fundamentals improved but the economy started to slow and financial conditions deteriorated significantly.

Over the last six months, economic conditions improved and credit fundamentals remained stable.

Based on our analysis, the main reason for the spread widening over the last six months was a deterioration in financial conditions, especially the move in bank lending standards from super easy to modestly easy and the rise in equity market uncertainty.⁵

We believe the recent deterioration in financial conditions is linked to the rising expectation of Fed tightening.

Corporate bond spreads to move higher

Looking ahead we think that financial conditions will tighten further as the Fed starts to hike interest rates. However, our base view is that Fed tightening will not derail the economy and we believe credit conditions will remain stable. This should somewhat offset the impact of financial tightening.

As a result, we expect HG spreads to rise modestly (up to 25 bps). We think HY spreads will rise more (max 100 bps) also because Fed balance sheet adjustment will withdraw liquidity from the HY market as outlined before.

The key risk is a sharp deterioration in economic, credit and financial conditions, which could widen corporate bond spreads to an extent similar to past recession periods.

CLO spreads expected to tighten ...

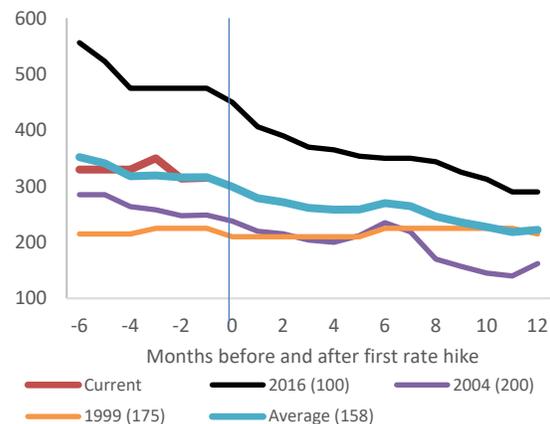
CLO spreads are the structured credit counterparts to corporate bond spreads, as they, too, are underpinned by corporate debt. The reaction of CLO spreads to Fed tightening differs structurally from corporate bond spreads. CLOs are floating rate products and the spread is calculated over short-term interest rates (in the past 3-months LIBOR and now, increasingly, 3-months SOFR).

Unlike long-duration fixed income products such as corporate bonds, floating-rate products benefit from rising interest payments without capital-value losses when interest rates increase. As a result, demand for floating rate products typically increases when interest rates rise.

Charts 3 and 4 show BBB and BB CLO spreads (similar rating categories to HG and HY corporate bonds) during the last three Fed tightening cycles (CLO issuance only started in the late 1990s): on average, BBB and BB CLO spreads tightened 98 bps and 165 bps respectively during the first 12 months of Fed interest rate hikes.

Chart 3: BBB CLO spreads during Fed tightening

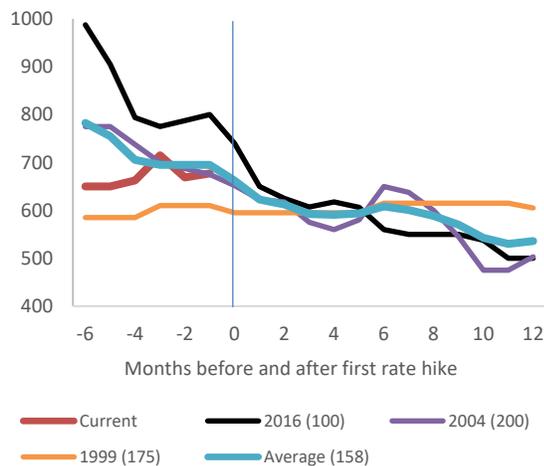
bps over Libor, Fed tightening over first 12 months in parenthesis of legend



Source: BAML⁶

Chart 4: BB CLO spreads during Fed tightening

bps over Libor, Fed tightening over first 12 months in parenthesis of legend



Source: BAML⁷

All else being equal, we estimate that 100 bps of Fed rate hikes lead to roughly 50 bps and 80 bps tighter BBB and BB CLO spreads, respectively. Thus, our base scenario of 200 bps Fed rate hikes by the end of 2023 would reduce BBB CLO spreads by an estimated 100 bps and BB CLO spreads by an estimated 160 bps.

... but mind the gaps

However, our analysis also suggests that other factors are likely to mitigate the decline in CLO spreads. In a worst-case

scenario, this could completely offset the spread-tightening impact from Fed rate hikes.

First, based on our analysis, CLOs also benefitted from the liquidity flush triggered by Fed bond purchases in recent years. We estimate that a reduction in Fed Treasury holdings of \$925 billion by the end of 2023 would lift CLO spreads by up to 50 bps.

Second, we think this effect is likely to be increased by general financial tightening. Taking this into account, we estimate that the spread tightening potential is reduced by about half, to 50 bps for BBB CLOs and 80 bps for BB CLOs.

Furthermore, the experience of 1999 shows that Fed rate hikes may not lead to CLO spread tightening (see Charts 3 and 4 again), if coupled with a sharp deterioration in economic, credit and financial conditions.

In summary, our spread analysis suggests that CLOs are likely to fare better than corporate bonds if the Fed tightens policy as we expect it.

More information

As always, we are available to discuss our views with you. Please contact your Client Relations representative at +1 732 978 9722 or zais.clientrelations@zaisgroup.com

¹ ZAIS Insight, February, 2022; <https://www.zaisgroup.com/stubbornly-low-treasury-yields.html>

² Ice Data Indices, LLC, ICE BofA US Corporate Index Option-Adjusted Spread [BAMLC0A0CM], retrieved from FRED, Federal Reserve Bank of St. Louis; February 14, 2022.

<https://fred.stlouisfed.org/series/BAMLC0A0CM>

³ Ice Data Indices, LLC, ICE BofA US High Yield Index Option-Adjusted Spread [BAMLH0A0HYM2], retrieved from FRED,

Federal Reserve Bank of St. Louis; February 14, 2022.

<https://fred.stlouisfed.org/series/BAMLH0A0HYM2>

⁴ The spread breakdown is based on a regression by ZAIS Research of monthly HY spreads from 1990 to 2021 on:

- Manufacturing ISM
- Capacity utilization
- Employment ratio
- Profit margin
- Leverage ratio

-
- Interest coverage
 - Bank lending standards
 - VIX
 - Fed Treasury holdings

⁵ Board of Governors of the Federal Reserve System (US), Net Percentage of Domestic Banks Tightening Standards for Commercial and Industrial Loans to Large and Middle-Market Firms [DRTSCILM], retrieved from FRED, Federal Reserve Bank of St. Louis; February 14, 2022.
<https://fred.stlouisfed.org/series/DRTSCILM>

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Chicago Board Options Exchange, CBOE Volatility Index: VIX [VIXCLS], retrieved from FRED, Federal Reserve Bank of St. Louis; February 13, 2022.

<https://fred.stlouisfed.org/series/VIXCLS>

⁶ BAML, US CLO spreads, BofA CLO Factbook; 04-Feb-2022.

<https://markets.ml.com/clos>

⁷ BAML, US CLO spreads, BofA CLO Factbook; 04-Feb-2022.

<https://markets.ml.com/clos>

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