

High Yield

Compositional Changes Clutter Comparison of HY and IG

The high yield to investment grade spread ratio has increased meaningfully since reaching its post-crisis lows in mid-2018. Adjusting for shifts in ratings and duration in the two markets, we find that the spread ratio has climbed to the highest level since the crisis

The high yield market started the year on a strong note, with spreads tightening 20bp in the first two weeks of January. Spreads have sold off significantly since then and are now 57bp wide of the low reached on January 13, widening as a result of the large amount of new issue supply last week and concerns about the spread of coronavirus more recently.

While some of those concerns have eased, the sentiment toward risk assets has continued to weaken relative to higher-quality markets. For example, HYG, the largest high yield-dedicated ETF, recorded an outflow of \$1.4bn (approximately 8% of assets) last Friday, its largest one-day outflow on record. In fact, high yield-dedicated ETFs have lost 5% of assets since peaking at \$60.7bn on January 15.

As a result of this weakening sentiment, the high yield to investment grade spread ratio has widened to 3.8x, up from 3.5x at the end of the year. This year's move is a continuation of a trend seen since the summer of 2018, when the high yield to investment grade spread ratio hit its post-crisis lows of 2.8x, and places the current level much closer to the post-recession highs (Figure 1).

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Spread Ratio 4.5x 4.0x 3.5x 3.0x 2.5x '16 '20 '12 '13 '14 '15 '17 '18 '19 High Yield / Credit Corp **— — -** Minimum --- Maximum

FIGURE 1. The High Yield to Investment Grade Spread Ratio Is Trading at the High End of Its Post-Crisis Range

Source: Bloomberg, Barclays Research

While the historical high yield to investment grade spread range provides some context for the relationship between the two markets, changes in the markets need to be considered to facilitate a more apples-to-apples comparison. Specifically, investment grade has gotten lower in quality and longer in duration in recent years, both of which should be a drag on investment grade spreads, all else equal. Conversely, the high yield market has improved in quality and gotten much shorter in duration, supporting tighter high yield spreads, all else equal.

Since the end of 2011, the weighted average rating of the investment grade index has declined by almost half of a rating notch as a result of the continued growth of BBBs as a percentage of that market (Figure 2). Conversely, the weight of BBs as a percentage of the high yield market has continued to grow, supporting an improvement in quality. As a result, the ratings of the two markets have converged, which, on the surface, should support a lower high yield to investment grade spread ratio.

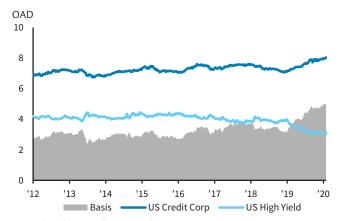
An additional tailwind suggesting compression of the ratio has come from the shift in duration of the two markets (Figure 3). The duration of the investment grade market has increased nearly 0.5 years since the end of 2011, largely because the maturity of the index has extended by a full year. Conversely, duration for high yield has declined by more than 0.7 years over the same period, primarily because after last year's rally, the majority of bonds are call constrained. This shorter duration brings increased negative convexity for much of the high yield market, as shifts in yields will result in greater price declines than price increases, capping upside for most high yield bonds (see *Shorter Duration Capping Upside Potential*).

FIGURE 2. Investment Grade Quality Has Declined While High Yield Quality Has Improved



Source: Bloomberg, Barclays Research

FIGURE 3. Duration Has Increased for Investment Grade but Declined for High Yield



Source: Bloomberg, Barclays Research

In order to make a more apples-to-apples comparison for the high yield to investment grade spread ratio over time, the rating and duration shifts in the indices need to be accounted for. We calculate adjusted spreads for the investment grade and high yield indices by leaving duration and rating bucket weights unchanged since the end of 2011. These analyses could be run individually (ratings adjustment only and/or duration adjustment only), but to avoid double-counting, we break down each index into specific ratings and duration buckets. For example, at the end of 2011, BB bonds with a duration of 3-6 years represented 26% of the entire high yield index – we keep that 26% weight consistent at all points in our analysis and only let moves in the spread of each bucket affect the index-wide spread level.

Figure 4 highlights the adjustment made for the investment grade universe. When duration and ratings buckets were held at 2011 year-end weights, the adjusted spread of the index is 88bp, 11bp tighter than the current level. This makes sense because the actual investment grade index is lower in quality and longer in duration than our adjusted index calculation. Conversely, the high yield index would be at 424bp if it resembled the 2011 weights, 53bp wider than it is currently (Figure 5).

FIGURE 4. Investment Grade Spreads Would Be 11bp Tighter If Duration and Ratings Buckets Were Held at 2011 Year-End Weights

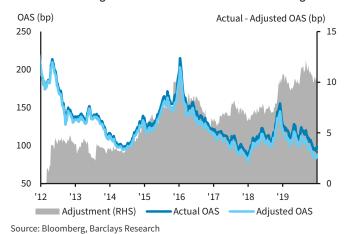
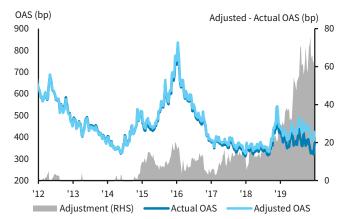


FIGURE 5. High Yield Spreads Would Be 53bp Wider If Duration and Ratings Buckets Were Held at 2011 Year-End Weights



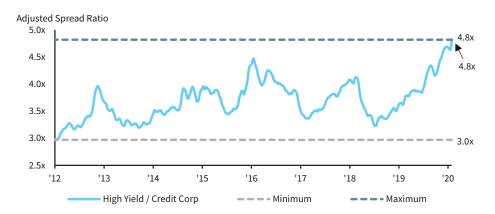
Source: Bloomberg, Barclays Research

Using these adjusted levels, we can create a better proxy for the high yield to investment grade relationship by removing the effects of shifts in quality and duration. Figure 1 above shows the spread ratio between the unadjusted levels (the dark blue line in Figure 5 divided by the dark

blue line in Figure 4), and Figure 6 shows the adjusted ratio (the light blue line in Figure 5 divided by the light blue line in Figure 4).

As seen below, the adjusted spread ratio has reached its highest level since the crisis, at 4.8x, up from 3.3x in mid-2018 and well above the long-term average of 3.7x. This highlights high yield's cheapness relative to investment grade, especially given the shifting dynamics of the two markets.

FIGURE 6. The Adjusted High Yield to Investment Grade Spread Ratio Is at the Highest Level since the Crisis



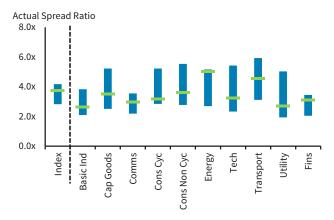
Source: Bloomberg, Barclays Research

Taking this analysis further, we evaluate the actual and adjusted spread ratios across broad sectors. Figure 7 shows the current actual (or "unadjusted") spread ratios for each sector relative to its lowest and highest levels since the end of 2011. The current index-wide level of 3.8x, low of 2.8x, and high of 4.1x seen in Figure 1 can be seen in Figure 7 as well. The actual high yield/investment grade spread ratio for consumer cyclical is the closest to its long-term lows, while energy is the sector currently trading closest to its long-term highs. Energy is understandably at the high end of the range, as CCCs represent a greater portion of high yield energy now than they did in at the end of 2011, compared with a decline of 2.9% for CCCs as a percent of the high yield market over the same period.

Figure 8 highlights the adjusted spread ratios using the same analysis to account for shifts in ratings and duration used for the index above (as seen in Figure 6). Each sector reached its adjusted high and low levels at different points over the past eight years; therefore, just because the index is at its all-time high does not necessarily mean that all sectors should be at their highs as well. The capital goods and basic industry sectors saw the greatest moves toward their adjusted high ratios relative to their unadjusted ratios, with energy remaining near the high point.

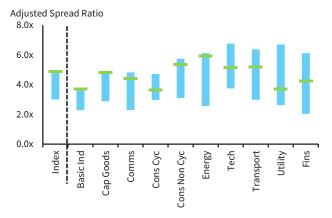
Even when we remove CCC and below-rated credits from our analysis, the adjusted spread ratio at the index level is at an all-time high. While the underperformance of these lower-rated cohorts in 2019 contributed to the increase in spread ratio, the contribution was minor, with the BB and B cohorts still trading well wide of investment grade when shifts in rating and duration are accounted for. Although we do not expect high yield and investment grade ratings and durations to return to 2011 year-end levels anytime soon, adjusting for these shifts helps contextualize the relationship between the two markets and provides a better baseline for comparison.

FIGURE 7. Actual High Yield to Investment Grade Spread Ratios



Source: Bloomberg, Barclays Research

FIGURE 8. Adjusted High Yield to Investment Grade Spread Ratios



Source: Bloomberg, Barclays Research

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