



INVESTMENT UPDATE

This month we wanted to take a deeper dive into an often-overlooked sector of the credit markets: BB-rated corporate bonds. These bonds fall just outside the threshold to be deemed “investment grade” by the credit rating agencies and are the highest-rated bonds within the “high yield” or “junk” cohort of the corporate bond market.

Given their junk status, risk-averse investors often consider BB-rated bonds overly risky, lumping them in with their lower-rated B and CCC/C high-yield brethren. This is reflected in the yield premiums that BB-rated corporate bonds command over BBB-rated corporate bonds, their closest investment grade counterparts. But this could be a classic case of “guilt by association.” As the historical data shows, the incremental level of default risk investors assume by owning BB-rated bonds, on average, isn’t terribly higher than that of owning BBB-rated bonds. Yet excess returns for the BB bucket compare favorably to BBBs and other fixed income segments. As such, BB rated corporate bonds provide fertile ground for value-minded, active investors.

Before digging into the risk and return data, it’s helpful to first frame BBs from a high level. The BB bucket is a crossroads of sorts in the corporate bond market between investment grade and traditional high yield. It’s the breeding ground for “rising stars”—high-yield companies with improving credit profiles and ratings that are in the process of migrating to investment grade. It’s also the next stop for “fallen angels,” companies with deteriorating credit profiles and ratings that have fallen from investment grade to high yield. The BB bucket also contains “BB-for-life” credits that are unlikely to see their ratings migrate higher to the BBB category or lower to the B bucket. In these cases, rating upside can be capped, and downside can be limited by a combination of factors impacting a company’s business and/or financial risk profiles, including size and scale, industry fundamentals and commercial dynamics, cash flow volatility, financial policy, and credit metrics, among other factors.

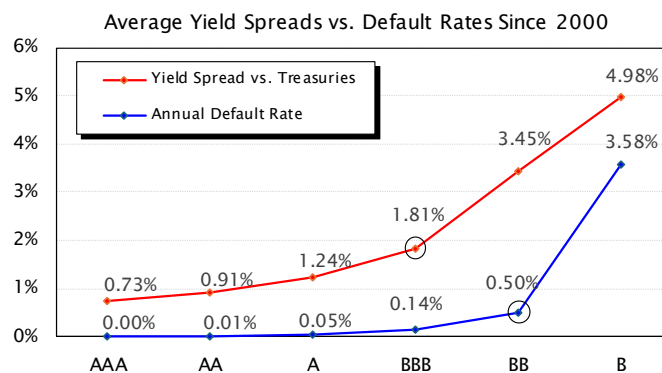
Size does matter to the rating agencies. While some BB companies are bellwether US and global companies, in general the BB bucket (and high yield more broadly) is populated by smaller,

and in some cases privately-owned, companies. By contrast, investment grade corporates are typically larger, public companies with global operations, which helps support investment grade credit ratings (all else equal).

The BB bucket is a relatively small sub-segment of the broader corporate bond universe. With a \$730 billion market value, BBs make up roughly half of the \$1.4 trillion high-yield corporate bond market, but are dwarfed by the \$7.1 trillion investment grade corporate bond category and the \$3.3 trillion BBB ratings bucket. BBs’ 3.1 year duration is less than half that of both investment grade corporates and the BBB bucket (duration is a measure of interest rate sensitivity). The duration of the BB category more closely aligns with

the intermediate (i.e., 1–10 year) investment grade corporate and intermediate BBB subsectors. Considering their relatively modest size, one can understand how BBs could be overlooked in the first place.

For bond investors, the primary consideration when evaluating an issuer’s credit profile is the certainty of whether they will be paid their scheduled



interest payments and receive their principal back at maturity. If either of these do not occur, the issuer is in default. The blue line on the chart on this page plots one-year forward default rates by credit rating bucket—the historical percentage, since 2000, of issuers at a given credit rating that have defaulted over one-year periods. As the blue line shows, the historical annual default rate for investment-grade issuers is virtually non-existent, increasing from 0.00% for AAA-rated corporate bonds to 0.14% for BBB-rated bonds. Moving to the junk cohort, the default rate for BBs increases to just 0.50% before ballooning to 3.58% for the B-rated bucket and 26.9% for CCC/C-rated bonds (not shown).

The red line on the chart plots average yield spreads over similar maturity Treasuries for each rating category over the past 25 years. As we move down the rating spectrum, yield spreads increase as investors demand increased compensation for the higher levels of default risk they are assuming. Over this period, AAA-rated corporate bonds have offered yields averaging 73bps (0.73%) higher than comparable Treasuries, and that advantage

increases to 181bps for BBB-rated corporates. The slope of the red line pivots higher as BB-rated bonds command a 345bps yield premium over comparable Treasuries before increasing to a 498bps premium for B-rated corporates.

Comparing the inflection points of the slopes of the two lines is telling. Spreads pivot higher as we drop from the BBB-rating category, but default risk pivots higher below the BB-rating bucket. In this context BB-rated corporate bonds compare favorably to BBBs. Moving from BBB-rated corporates to BBs, investors take on an incremental 0.36% of default risk but pick up an additional 1.64% in yield. Admittedly, default risk increases by nearly 4x while spread compensation doesn't quite double. But the increased default risk is relatively minute in absolute terms, averaging just one-half of 1% annually since 2000. The 3.45% absolute yield spread over Treasuries has handsomely compensated BB-rated corporate bond investors for taking on a relatively modest amount of default risk.

The crossroads nature of the BB bucket makes it ripe for active security selection. Active managers that roll up their sleeves and perform fundamental credit analysis should be able to weed out weaker credits, reducing their potential default risk. By seeking out improving credits before they become rising stars and conversely, excluding deteriorating credits that are likely to fall out of the BB index, active managers can generate alpha (returns in excess of the benchmark) by capturing spread compression as BBs migrate to BBB, while avoiding spread widening that occurs as BBs fall to B.

Where are spreads today? Absolute yield spreads over Treasuries are near 25-year tight for both investment grade and high yield corporate bonds. The current yield spread for the average BB-rated bond is 180bps, compared to BBBs at 98bps. This 82bps yield pick up over BBBs is half that of the 25-year average of 164bps and is in the 16th percentile over this period. However, the BB-BBB relationship doesn't look as pricey when evaluating it on a relative (ratio) basis. By this measure, the BB/BBB spread ratio is 1.84x—the 55th percentile, a more reasonable valuation (the historical average is 1.83x and the 25-year tight is 1.30x).

The combination of sizeable yield pickup and relatively low default risk has, over time, produced attractive excess returns for BBs relative to other segments of the bond market. Excess returns measure “duration neutral” returns by taking total returns and subtracting the total return of a portfolio of like-duration Treasuries. This measure strips the impact of changes in interest rates out of total returns, allowing for investors to more easily compare returns of portfolios with differing durations.

The chart on this page plots various fixed income segments' excess returns against each segment's standard deviation of returns (a measure of volatility and proxy for risk) over the past 25 years. The upward sloping red trendline shows the positive relationship between excess return and standard deviation; as risk increases, expected excess returns increase. Makes sense. Portfolios above the red trendline historically have generated higher excess returns for their level of risk; they can be said to be more efficient. Portfolios below the trendline historically offer less return than expected for their level of risk.

There is a strong linear risk-return relationship among the fixed income segments. For the most part, the various segments plot essentially on top of the red trendline, indicating that historical excess returns are relatively in line with expected excess returns for each segment's given level of volatility. BB corporate bonds are a clear outlier, with the highest level of excess returns of all

the segments, historically generating 90bps more excess return than expected for their level of volatility. This far surpasses the incremental (or decremental) excess return offered by any of the other fixed income segments.

Considering the relative historical risk and returns, BBs can be used to augment an investment grade

bond portfolio, with the size of the allocation informed by the relative BB-BBB and BB/BBB valuations. This allows active managers to swap less efficient investment grade corporates (below the trendline) for more efficient BBs (above the trendline), adding incremental yield and excess return with only a modest increase in default risk and volatility.

It's important to highlight that past performance isn't necessarily indicative of future returns and that where you start matters as well. Excess returns in the one-year period for BBs, and all other sub-segments of the corporate bond market, are considerably below historical returns (1.86% for BBs and 1.04%, for BBBs), reflecting tight starting yield spreads a year ago. Still, BBs did generate higher excess returns than BBBs, and those incremental excess returns, when measured as a proportion of overall BB excess returns, were consistent with historical proportions.

For those willing to take on some additional risk, the BB bucket provides fertile ground for value-minded, active investors. It is the sweet spot of sorts within the corporate bond universe, providing significantly higher yields and returns than investment grade corporates, with substantially lower default risk and return volatility than the broader high-yield corporate bond segment.

