Rocaton

INSIGHTS

Declining Quality of the Long Corporate Credit Universe: Implications for Plan Sponsors

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EXECUTIVE SUMMARY

- The average credit quality of the Bloomberg Barclays Long Corporate Index, as measured by the rating agencies, has steadily declined over the last 10 years. Investors, particularly corporate defined benefit plans, should consider the implications of the changing composition of the index on their portfolios.
- High quality (A or Better) corporate bond indexes are highly concentrated. Attempting to control quality by limiting the BBB allocation reduces sector and issuer diversification and introduces additional concentration risks that likely outweigh the risks of including BBB corporates, in our view.
- If controlling average credit quality at the portfolio level is an objective, plan sponsors can use Treasuries and/or introduce other long duration fixed income sectors such as long Agency CMOs or taxable municipals to upgrade overall portfolio quality without eliminating BBB corporates.
- Investors concerned about holding concentrated positions in lower rated credits could also consider selecting an issuer capped benchmark to help limit exposure to idiosyncratic issuer events. Considering additional long duration alternatives such as corporate private placements, commercial mortgages and infrastructure debt may also provide diversification benefits and reduce issuer concentration.

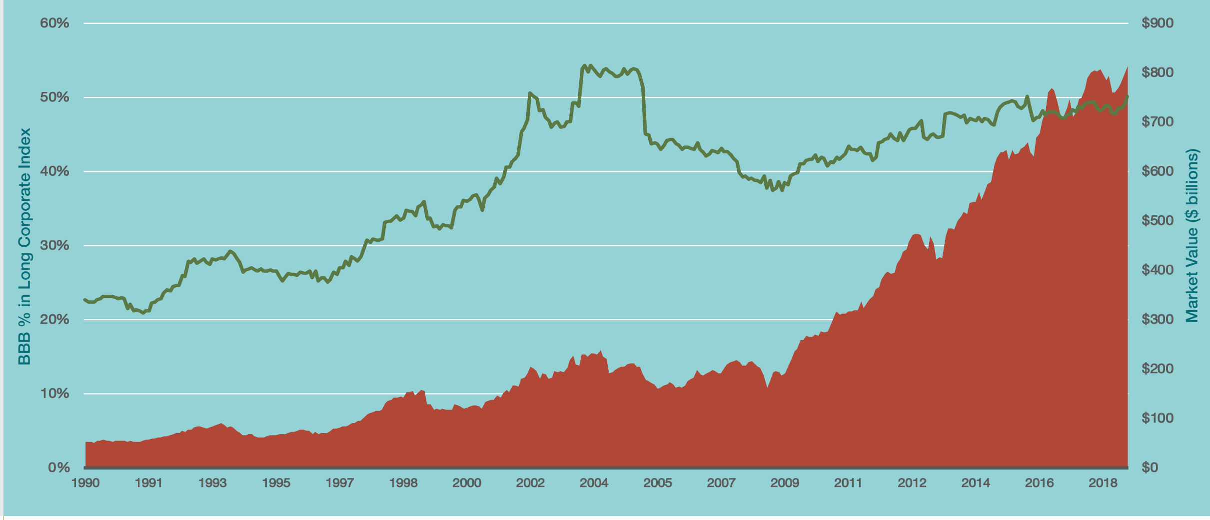
Introduction

Long BBB-rated corporate credit has steadily increased in absolute and relative terms since the Great Financial Crisis, and now comprises 50% of the Bloomberg Barclays Long Corporate Index (Long Corporate Index), up from 38% in 2008 (Figure 1). Many investors, particularly plan sponsors with a liability that is discounted by higher quality corporate bonds (typically AA rated for accounting purposes), should consider the implications of this decline in credit quality. This paper will examine the efficacy of including long BBB rated corporate bonds as part of the liability hedging opportunity set and offer suggestions for those concerned with the downward trend in quality and the inherent concentration risks posed by selecting a long corporate benchmark.

We believe that the evolving credit quality of the Long Corporate Index also demonstrates an inherent risk that arises from rigidly defining the acceptable opportunity set in terms of a published benchmark. Given that the Long Corporate Index (and many other fixed income indexes) are capitalization weighted, benchmark composition is dependent on issuance trends that affect benchmark characteristics including quality, industry, and issuer concentration. These shifts may not always be consistent with investor objectives or risk tolerance. To mitigate this risk, Rocaton recommends investors not blindly follow published indices and consider fixed income sectors offering return and risk characteristics that may reduce migration and concentration risk and improve diversification and enhance return. While we will use the Bloomberg Barclays Long Corporate Index and quality subcomponents in this analysis, we would note that many defined benefit plans implement this allocation through the Bloomberg Barclays Long Credit Index. The Long Credit Index includes additional security types including taxable municipals, sovereigns and foreign agency issues which collectively comprise ~13% of the index as of September 30, 2018. Our conclusions apply to both benchmarks, which are largely similar in terms of construction and have a very similar BBB weighting.

Figure 1:

BBB Weight in the Long Corporate Index



Source: Through September 30, 2018. Based on the Bloomberg Barclays Long Corporate Index.

Implications for Investors

Historical Characteristics

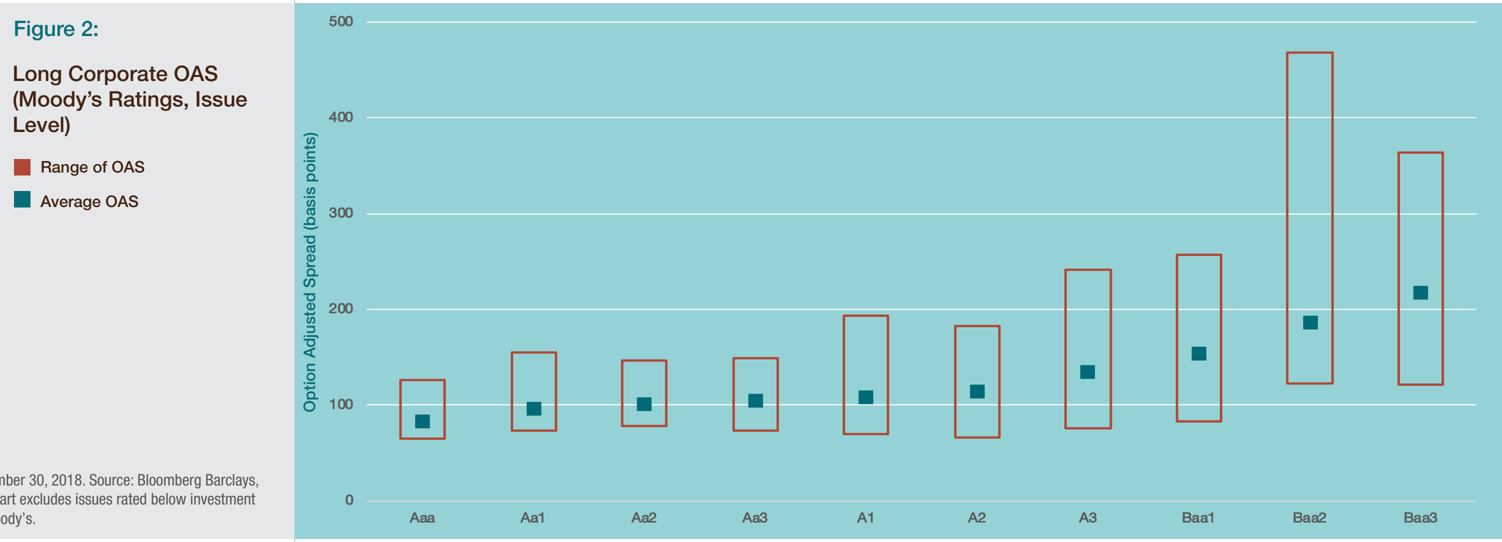
Long BBB Corporates have historically offered higher yields than other investment grade quality cohorts and have outperformed over long term trailing-periods. Over the 30-year trailing period ending September 30, 2018, the Long BBB Corporate Index generated an annualized 94 basis points of excess return relative to duration neutral Treasuries, while the Long Corporate Index provided 54 basis points of excess return. The Long A Corporate Index fared worse, delivering just 18 basis points of excess return above duration neutral Treasuries in this period. While long BBBs have outperformed on a duration neutral basis, the long BBB segment of the index, as it is currently constructed, is ≈1.1 years shorter than the A or Better Index. Due in part to this difference, higher quality components of the Long Corporate Index have exhibited higher absolute volatility relative to the Long BBB Corporate Index due to its longer duration.

An important reason BBBs have historically outperformed higher quality cohorts (particularly A-rated corporates) is because BBB-rated companies have a greater incentive to maintain or improve their rating to avoid falling to below investment grade status, given the significant increase in financing costs faced by high yield issuers. Therefore, it does not follow that all BBBs are uniformly more "risky" than single-A rated corporates, particularly in terms of risk of issuer specific spread widening. This phenomenon is illustrated by credit migration statistics. Based on average five-year migration rates from 1970-2017 provided by Moody's, 8.0% of BBBs were downgraded to BB, while 14.6% of single A's were downgraded to BBB on average. Notably, BBBs have also been upgraded at a higher rate than single A's (12.3% vs. 7.3%).

With exception of the highest rated cohorts, corporate credit is highly correlated irrespective of quality segment. The correlation between Long BBB and Long A corporate returns have never been lower than 90% over a 3-year rolling period, despite duration, industry, and quality mismatches. Importantly, these two quality segments collectively comprise 86% of the long corporate market. While going "up in quality" within corporates may help avoid some spread volatility and defaults in periods of

Figure 2:

Long Corporate OAS (Moody's Ratings, Issue Level)



As of September 30, 2018. Source: Bloomberg Barclays, Moody's. Chart excludes issues rated below investment grade by Moody's.

corporate stress, the portfolio's allocation to Treasuries would likely mitigate drawdown more effectively than limiting the use of BBB credit. Given the high correlation to A-rated credit, giving up diversification and increasing the portfolio's concentration creates new risks as a result of being over-exposed to a small number of large issuers.

Current Environment

Many market observers have noted that the current credit cycle appears to have persisted for an above average length of time and many point to decreasing quality as evidence of late cycle dynamics playing out in credit markets. 30-year BBB issuance has exceeded 50% of total long issuance in every calendar year since 2011 (J.P. Morgan), in part due to accommodative financing conditions and above average levels of M&A. In part due to M&A fueled borrowing, leverage has also increased across the corporate market. Net leverage of BBB rated nonfinancial corporates is 2.9x in 2017, up from 1.7x in 2000. However, due in part to low rates, interest coverage has also improved over this period. (PIMCO, J.P. Morgan). Coverage ratios are ultimately highly sensitive to the future path of interest rates and economic conditions.

Some may submit that employing a quality constrained index, such as the Bloomberg Barclays Long Corporate A or Better Index, is an effective defense against portfolio downgrades and/or defaults. However, headwinds will oftentimes affect certain industries and issuers more so than others that extend across credit quality. These occurrences may be magnified in more concentrated, quality constrained indexes. The extreme spread widening that impacted the energy and commodities segments in 2014 through early 2016, and their subsequent recovery is one such example. Figure 2 demonstrates that within each ratings notch, there can be significant differences between the highest and lowest spread. As ratings decline, those differences become more pronounced. Active managers typically assert that the most "inefficient" segment of the long corporate market is the BBB-rated cohort because there is often more issuer spread dispersion. Eliminating BBB rated credits from the opportunity set removes a large swath of potential improving credit stories that provide skilled active managers the ability to add alpha.

Implementation Considerations

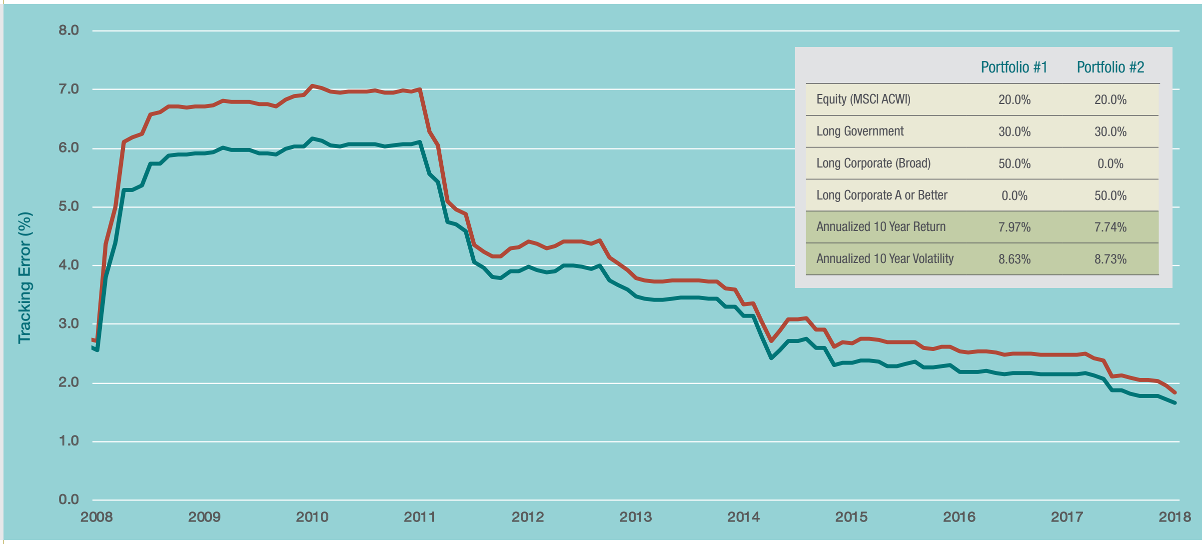
Consider the Risks

When structuring the long corporate allocation in a defined benefit plan, exposures and expected tracking error should be viewed and measured at the composite level in part because plans also have meaningful exposure to corporate risk through their risk-seeking allocation which can include public and private equities that are lower in the capital structure. As such, focusing entirely on closely tracking changes in the value of the liability may result in taking risks in the asset portfolio that are sub-optimal over the long-term. Pension liability discount curves also have "noise" embedded in them due to their construction methodologies and therefore a certain amount of funded status volatility is either 1) un-hedgeable or 2) it would not be advisable to attempt to perfectly hedge the exposures in the liability discount curves. Allowing a manager to invest in BBB securities in a liability hedging portfolio may help generate a return that is in line with or greater than the discount rate of the liability without introducing too much additional volatility at the plan level.

Figure 3 provides a hypothetical example based on 2 portfolios with 80% in LDI assets tracking a pension liability proxied by the Long AA Corporate Index. The first portfolio allocates 50% to the Long Corporate Index, while the second portfolio allocates 50% to the A or Better Long Corporate Index. The 3-year rolling tracking error differential between the portfolios spiked coming out of the Great Financial Crisis, but have directionally tracked each other closely over the 10-year period. At the portfolio level, this hypothetical portfolio produced an annualized 27 basis points of excess return over for the portfolio that allocated to the Long Corporate Index relative to the A or Better Index (excluding any active management effect). This historical experience demonstrates that the diversification and yield advantage of long BBBs have provided a benefit at the total plan level while not unduly increasing tracking error to the liability.

Figure 3:

Tracking Error to Pension Liablity (proxy for Funded Status Volatility)*



	Portfolio #1	Portfolio #2
Equity (MSCI ACWI)	20.0%	20.0%
Long Government	30.0%	30.0%
Long Corporate (Broad)	50.0%	0.0%
Long Corporate A or Better	0.0%	50.0%
Annualized 10 Year Return	7.97%	7.74%
Annualized 10 Year Volatility	8.63%	8.73%

Analysis as of September 30, 2018. *Liability Proxied as 100% Long Corporate AA Index

Managing Concentration and Credit Quality

Concentration risk is a key reason it may not be advisable to eliminate BBB credits from the corporate allocation. Figure 4 compares the Long Corporate Index to the Long Corporate A or Better Index and illustrates the increase in issuer concentration that results from using a higher quality benchmark. That said, the broad Long Corporate Index could also be considered quite concentrated, with 20% of the index in the top 10 issuers. To mitigate this, one could consider employing a capitalization constrained index to cap exposure to specific issuer above a certain size. Limits to BBB exposure at the issuer level could also be contemplated. In addition to long Agency CMOs and taxable municipals, introducing LDI alternatives such as corporate private placements, commercial mortgages and infrastructure debt may provide diversification benefits and reduce issuer concentration as well. Specific plan circumstances, including funded status, liquidity considerations, etc. will also factor into the implementation decision.

Plan sponsors should avoid equating credit ratings as the sole predictive measure of credit risk and evaluate quality at the portfolio level. It is important to recognize that there are multiple ways to achieve a desired credit quality, including controlling the Treasury and corporate mix, to meet desired targets. As we have described in previous Insights, plan sponsors may also want to consider introducing "liability hedging alternatives", which have reasonable correlations to the liability while providing comparable return to long corporate bonds and additional diversification benefits. LDI alternatives such as long Agency CMOs and long taxable municipals can increase portfolio quality with less default risk than public corporates.

Figure 4:

Comparison of Long Corporate Indexes

	Long Corporate	Long Corporate A or Better
Issuers	430	202
Issues	1,857	947
Market Value ($B)	$1,621	$807
Average Quality	A3/Baa1	A1/A2
Top 10 Issuers	20.2%	30.9%
OAS (bps)	153	121
Yield-to-Worst	4.68%	4.36%
Duration (Years)	13.6	14.0

Analysis as of September 30, 2018. Source: Factset, Bloomberg Barclays.

Conclusion

The average credit quality of the Bloomberg Barclays Long Corporate Index has steadily declined over the last 10 years. However, while the increase of the long BBB corporate weight is notable, the inherent concentration and lack of diversification of quality constrained long corporate indexes are major risks that should also be considered, in our view. In addition, long BBBs have historically offered higher spreads and span a relatively large opportunity set within the broad Long Corporate Index. Furthermore, we believe the evolving credit quality of the Long Corporate Index demonstrates an inherent risk that arises from rigidly defining the acceptable opportunity set in terms of a published benchmark. If controlling credit quality is an objective, rotating a portion of the liability hedging portfolio into Treasuries or LDI alternatives including Agency CMOs and taxable municipals could be considered. Utilizing an issuer constrained benchmark could also help mitigate risk of an idiosyncratic event from the largest issuers. Finally, any considered changes should be made with total portfolio exposures and characteristics in mind including specific plan circumstances to avoid taking risks that are sub-optimal to achieving the plan objectives.

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