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LIABILITY DRIVEN INVESTING

DIVING DEEPER INTO LDI BENCHMARKS

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As plan sponsors progress along their LDI journeys, they will likely employ a range of fixed income benchmarks. In the early stages, it is common to utilize a standard long-duration benchmark; while in the later stages, they are likely to gravitate towards a more custom solution. Across all stages, the benchmark is likely to differ from the narrow, and in many ways, uninvestable AA–rated corporate universe, which is typically used to determine the liability discount rate. Previously, we have considered these differences from a credit-ratings perspective. In this mailer, we delve in a step further and explore deviations in sector positioning.

AN UNINVESTABLE BENCHMARK

The narrow, AA-rated discount rate universe lacks sufficient diversification for most investors.

- When constructing an LDI portfolio, plan sponsors often consider the discount-rate methodology used to value their liabilities. Most corporate defined benefit pension plans calculate their liabilities using discount rates based on high-quality corporate bonds. In particular, accounting liabilities are typically valued using yields on AA-rated corporate bonds.
- The Bloomberg Barclays Long AA-rated Corporate Index consists of 43 issuers, or 117 issues. Most prudent investors would argue that this universe is too small to construct a portfolio with sufficient diversification. Therefore, it may be necessary to invest in securities that fall outside of the liability discount-rate universe.
- In past mailers, we have examined the rationale for expanding the fixed income benchmark beyond the narrow AA-rated universe dictated by the discount-rate methodology. In this mailer, we turn our focus to one of the more subtle byproducts of expanding the benchmark, namely that the sector and subsector allocations within these larger universes can differ substantially from those of the narrower AA-rated discount curve.

Top five issuers account for over 50% of Bloomberg Barclays Long AA-rated Corporate Index (2/28/2019)

Top Five Issuers - BloomBarc Indices			
Long AA Corporate Index		Long Corporate Index	
APPLE	18%	AT&T	3%
WALMART	15%	VERIZON	3%
ROYAL DUTCH SHELL	14%	COMCAST	2%
NEXTERA ENERGY	8%	ANHEUSER-BUSCH	2%
BERKSHIRE HATHAWAY	7%	MICROSOFT	2%

BENEATH THE HEADLINES

Ratings don't tell the full story of benchmark differences – consider sector and subsector exposures.

- The table (right) shows a sector breakdown of the Bloomberg Barclays Long AA-rated Corporate Index and the broader Bloomberg Barclays Long Corporate index. The Industrial sector accounts for over 70% of both indices, while the Finance sector makes up 10% and 17%, respectively.
- On the surface, both indices look highly concentrated to the Industrial sector. This may suggest that expanding the portfolio to the broader Long Corporate Index has little effect on the sector weightings. However, beneath the headline numbers, the subsector breakout reveals a different story.
- When further exploring the Industrial sector, we see significant differences. Within the Communications subsector, there are no AA-rated issuers. However, in the broader Long Corporate Index, the introduction of large issuers like AT&T, Comcast, and Verizon raise the weight up to 15%.
- Within the Finance sector, we find a similar story. The expansion of the index from AA-rated only to broad long corporate causes the subsector weightings to shift from a concentration in insurance companies to a more diversified exposure consisting of banks, REITS, and other finance companies.
- These subsector differences, driven by the scarcity of AA-rated long corporate bonds, suggest that it is prudent to look beyond the simple ratings differentials between the two indices when trying to explain the drivers of volatility between plan liabilities and hedging portfolios.

Sector Allocations – BloomBarc Indices (2/28/2019)

Sector Distribution (%)	Long AA Corporate Index	Long Corporate Index
Industrial	79.2	71.3
Basic Industry	0.4	4.3
Capital Goods	0.0	5.1
Consumer Cyclical	15.4	5.8
Consumer Non-Cyclical	22.3	18.7
Energy	18.0	11.3
Technology	18.2	6.7
Transportation	1.8	3.7
Communications	0.0	15.0
Other Industrial	3.2	0.8
Finance	10.0	16.8
Banking	1.7	8.6
Brokerage	1.6	0.5
Finance Companies	0.0	0.7
Insurance	6.7	6.2
REITS	0.0	0.9
Utility	10.9	11.9

Source: Bloomberg Barclays as of 2/28/19. The views contained in this report are those of IR+M and are based on information obtained by IR+M from sources that are believed to be reliable. This report is for informational purposes only and is not intended to provide specific advice, recommendations for, or projected returns of any particular IR+M product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission from Income Research & Management.

SECTORS/QUALITY CORRELATIONS

Correlations support an equal focus on sectors and ratings.

- Within LDI mandates, plan sponsors often place significant focus on ratings buckets. Expanding outside the AA-rated universe can introduce volatility versus the liability discount curve. However, the sector positioning of a portfolio is usually evaluated relative to the benchmark rather than in relation to the plan's liabilities, with even less focus placed on subsector differences.

- Focusing on the Industrial sector, we see in the table (right) that there are strong correlations across the different ratings buckets. In particular, correlations between AA-rated industrials and BBB-rated industrials are above 0.90. This supports the thesis that introducing securities outside the AA-rated universe can be an effective way to improve diversification without necessarily adding excess volatility versus plan liabilities.

- Similarly, when looking across sectors, we see that within the broad Bloomberg Barclays Long Corporate Index, cross-sector correlations are comparable to those between different ratings buckets. We conclude that sector differentials are no less meaningful than ratings differentials when constructing hedging portfolios.

- The implications of these sector and subsector differences are not normally severe enough to warrant the creation of custom sector benchmarks for most clients. The desire to build robust, diverse, and investible universes outside of the narrow liability AA-rated universe typically supersedes the desire to closely match the discount curve constituents, from both a ratings and also a sector perspective.

- However, the significant sector and subsector differentials are an often overlooked consideration when attempting to understand the implications of both passive and active approaches to hedging plan liabilities.

10-Year Excess Return Correlations – Long Industrial by Rating (2/28/2019)

	AAA	AA	A	BBB
AAA	1.00			
AA	0.91	1.00		
A	0.89	0.97	1.00	
BBB	0.85	0.93	0.97	1.00

10-Year Excess Return Correlations – Long Corporate by Sector (2/28/2019)

	Total	Industrial	Utility	Financial
Total	1.00			
Industrial	0.99	1.00		
Utility	0.95	0.92	1.00	
Financial	0.95	0.89	0.90	1.00

MAKING ACTIVE “ACTIVE”

“Passive” hedging portfolios introduce “naïvely active” exposures versus plan liabilities.

- A passive fixed income portfolio, managed against the Long Corporate Index will, by design, have different sector (and to a greater degree, subsector) allocations versus the more narrowly-defined plan liabilities. The sector overweights and underweights between the passive portfolio and the liabilities will mirror the differences between the Long AA-rated Corporate Index and the broader Long Corporate Index.

- These differences effectively create active positioning versus the plan liabilities. However, in a passive portfolio, these active positions may be thought of as “naïvely” active because they have been created through benchmark differences rather than through an active choice to overweight or underweight a particular sector for fundamental or technical reasons.

- It is our view that active sector positioning should be derived through a view on the relative value of sectors and subsectors, driven by bottom-up fundamental credit analysis. This approach is consistent with our belief that plan sponsors should take a holistic approach to hedging liabilities, rather than attempting to reconstruct the narrowly-defined benchmark from which liabilities are calculated. The selective use of A/BBB-rated bonds, out of index holdings, and sector rotation are key tools for helping sponsors maintain pace with their downgrade-immune liabilities.

As plan sponsors progress along their LDI journeys, they may increase their focus on protecting gains in funded status. We feel understanding the limitations of traditional fixed income benchmarks and implementing effective active management are both key in constructing effective hedging portfolios. At IR+M, we manage $20 billion in LDI assets across both standard and custom hedging portfolios, as we work with our clients to address the challenges of hedging pension liabilities.

Source: Bloomberg Barclays as of 2/28/19. The views contained in this report are those of IR+M and are based on information obtained by IR+M from sources that are believed to be reliable. This report is for informational purposes only and is not intended to provide specific advice, recommendations for, or projected returns of any particular IR+M product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission from Income Research & Management.

100 Federal Street, 30th Floor Boston, MA 02110 (617) 330-9333 www.incomeresearch.com