

LDI Market Updates

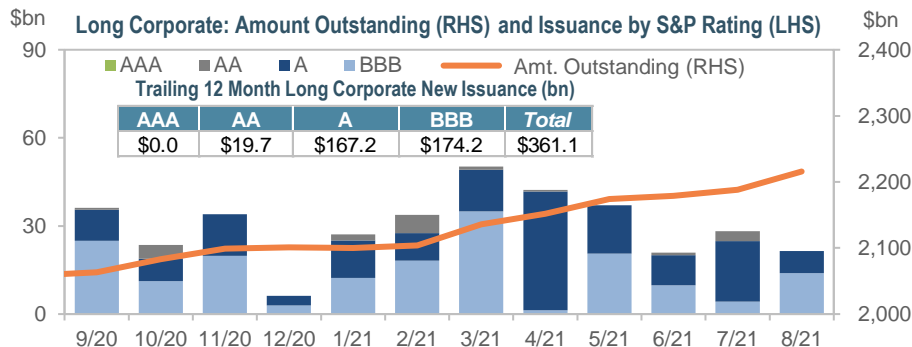
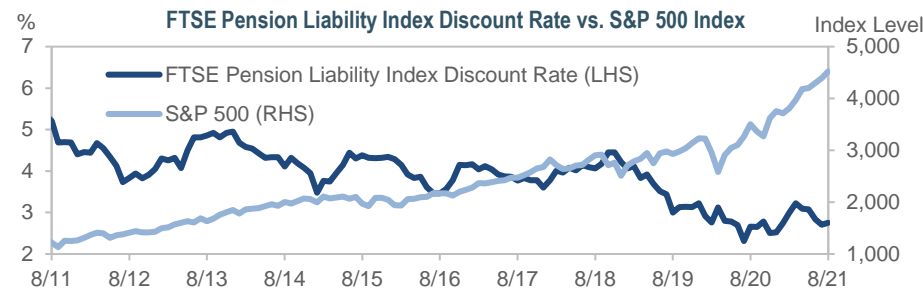
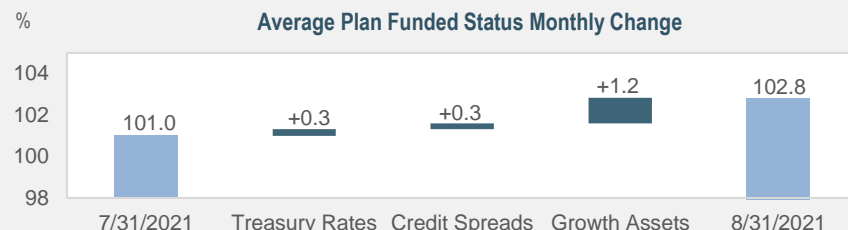
- Discount rates increased in August by 0.06%, to 2.49% from 2.43%.
- Equity markets reached new, all-time highs after the S&P 500 rose another 2.9%, further incentivizing pension plans to consider de-risking.
- The long corporate market was relatively quiet, particularly in the final two weeks of the month, with long issuance totaling \$20 billion.
- Long corporate spreads leaked 2bps wider month-over-month, from 122bps to 124bps, with day-over-day spread moves limited to just 3bps or less in August.

Rates Monitor	08/21	07/21	MoM Change	12/20	YTD Change
IR+M Average Plan Discount Rate (%)	2.49	2.43	0.06	2.22	0.27
Bloom Barc Long Corp Yield (%)	2.99	2.94	0.05	2.78	0.21
Bloom Barc Long Corp A+ Yield (%)	2.76	2.70	0.06	2.49	0.27
Bloom Barc Long Corp BBB Yield (%)	3.21	3.16	0.05	3.07	0.14
Long Corp Spreads (bps)	124	122	2	140	(16)
Curve (Long Corp - Int Corp) (bps)	62	60	2	72	(10)

IR+M Funded Status Monitor

- Our sample Average Plan funded status increased by 1.8% during August, closing at 102.8%; positive returns on growth assets and rising discount rates pushed its funded status higher month-over-month.

Funded Status (%)	08/21	07/21	MoM Change	12/20	YTD Change
Average Plan	102.8	101.0	1.8	91.8	11.0
End Stage Plan	110.8	109.5	1.3	102.8	8.0
Young Plan	94.2	92.1	2.1	80.0	14.2



IR+M LDI Corner: It's Not Over Until It's Over

- In light of recent funded status gains, we have seen de-risking activity pick up. A number of our clients are now exploring/executing partial or full terminations. This is consistent with the Secure Retirement Institute survey¹ – annuity sales were up 39% YoY in the second quarter, the highest increase in over a decade.
- As sponsors approach a pension risk transfer, their needs evolve and their desired levels of liability hedges may increase. The LDI portfolio objectives may become minimizing the volatility of any final cash requirements, providing liquidity for a bulk lump sum offering, and maximizing potential for an asset-in-kind transfer (possibly resulting in modest premium savings).
- Choosing an LDI partner is as crucial at the end of a plan's journey as it was at the beginning. Our experience navigating late-stage transactions has taught us:
 - A hands-on portfolio management approach mitigates funded status volatility as the liability changes.
 - A keen focus on best operations helps the manager minimize transaction costs, manage liquidity needs, and facilitate asset-in-kind transfers.
 - Consistent communication with all stakeholders is the key to success!

¹ Source: LIMRA

IR+M DISCLOSURE STATEMENT

Disclosures:

Sources: Milliman, FTSE Russell (formerly Citigroup), Bloomberg Barclays, Bloomberg, and JPMorgan. All data in the above commentary is as of 8/31/21. Yields are represented as of the aforementioned date and are subject to change. 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. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively “Bloomberg”). BARCLAYS® is a trademark and service mark of Barclays Bank Plc (collectively with its affiliates, “Barclays”), used under license. Bloomberg or Bloomberg’s licensors, including Barclays, own all proprietary rights in the Bloomberg Barclays Indices. Neither Bloomberg nor Barclays approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

IR+M Funded Status Monitor Assumptions:

Detailed methodology and assumptions for the IR+M Funded Status Monitor can be found at:

<http://www.incomeresearch.com/wp-content/uploads/2021/01/IRM-Funded-Status-Monitor-2021.pdf>.

	End Stage	Average	Young
Target Liability Duration (Years)	8-10	12-14	15-17
Funded Ratio at Inception (i.e., 12/31/2019)	100.0%	89.8%	80.0%
Asset Allocations	End Stage	Average	Young
US Equity	12%	27%	38%
International Equity	3%	17%	22%
US REITS	0%	2%	5%
Private Equity	0%	4%	5%
Growth Assets Allocation	15%	50%	70%
Long Government Fixed Income	5%	10%	10%
Long Credit Fixed Income	30%	25%	10%
Intermediate Government Fixed Income	5%	5%	5%
Intermediate Credit Fixed Income	45%	10%	5%
Fixed Income Allocation	85%	50%	30%