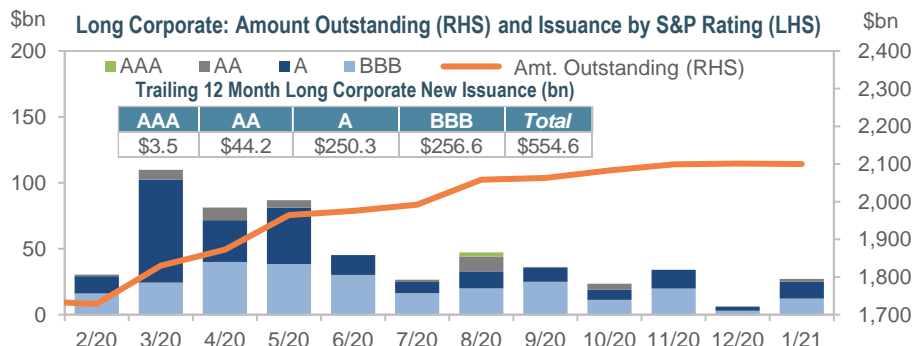
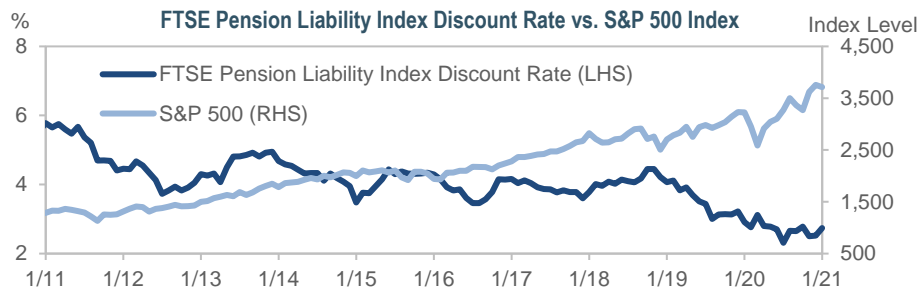


## LDI Market Updates

- Discount rates increased by 0.20%, from 2.22% to 2.42%.
- Growth assets largely underperformed, with the S&P 500 Index down over 1%, as the market digested mixed economic and political headlines.
- Investors continued to extend duration in search of yield, which flattened credit curves, as intermediate spreads widened relative to long corporate spreads.
- Issuers priced \$27 billion of long bonds, in-line with January 2020, but over 40% lower than the 2020 record-breaking calendar year average.

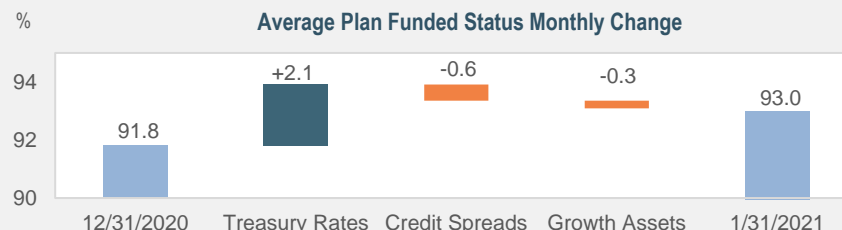
Rates Monitor	01/21	12/20	YTD Change
IR+M Average Plan Discount Rate (%)	2.42	2.22	0.20
Bloom Barc Long Corp Yield (%)	2.98	2.78	0.20
Bloom Barc Long Corp A+ Yield (%)	2.70	2.49	0.21
Bloom Barc Long Corp BBB Yield (%)	3.26	3.07	0.19
Long Corp Spreads (bps)	140	140	0
Curve (Long Corp - Int Corp) (bps)	70	72	(2)



## IR+M Funded Status Monitor

- Our sample Average Plan funded status increased by 1.2% during January, closing at 93.0%; higher discount rates drove its funded status higher despite negative asset returns.

Funded Status (%)	01/21	12/20	YTD Change
Average Plan	93.0	91.8	1.2
End Stage Plan	103.5	102.8	0.7
Young Plan	83.8	80.0	3.8



## IR+M LDI Corner: Don't Delay, Rebalance Today

- Fiscal year-end is a prudent time to revisit a plan's investment strategy while considering updated actuarial valuation results, the plan sponsor's financial position, and the economic environment.
- Timely rebalancing can minimize asset-liability tracking error, but potential delays may occur. The following may help to streamline the process:
  - Actuarial valuation results should be delivered immediately upon completion to all necessary parties (e.g., sponsor, consultant, LDI manager) in order to facilitate swift decision-making.
  - Investment guidelines can be structured to allow fiduciaries to move assets per a defined glide path without formal Board approval.
  - An active LDI manager should move as quickly as market conditions allow while maintaining duration exposure and target hedge ratios.
  - Regular intra-year funded status monitoring and well-organized moves to de-risk can effectively capture market gains.
  - Prompt and healthy communication among stakeholders further mitigates a plan's funded status volatility.

# 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 1/31/21. 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
<b>Target Liability Duration (Years)</b>	8-10	12-14	15-17
<b>Funded Ratio at Inception (i.e., 12/31/2019)</b>	100.0%	89.8%	80.0%
<b>Asset Allocations</b>	<b>End Stage</b>	<b>Average</b>	<b>Young</b>
<b>US Equity</b>	12%	27%	38%
<b>International Equity</b>	3%	17%	22%
<b>US REITS</b>	0%	2%	5%
<b>Private Equity</b>	0%	4%	5%
<b>Growth Assets Allocation</b>	15%	50%	70%
<b>Long Government Fixed Income</b>	5%	10%	10%
<b>Long Credit Fixed Income</b>	30%	25%	10%
<b>Intermediate Government Fixed Income</b>	5%	5%	5%
<b>Intermediate Credit Fixed Income</b>	45%	10%	5%
<b>Fixed Income Allocation</b>	85%	50%	30%