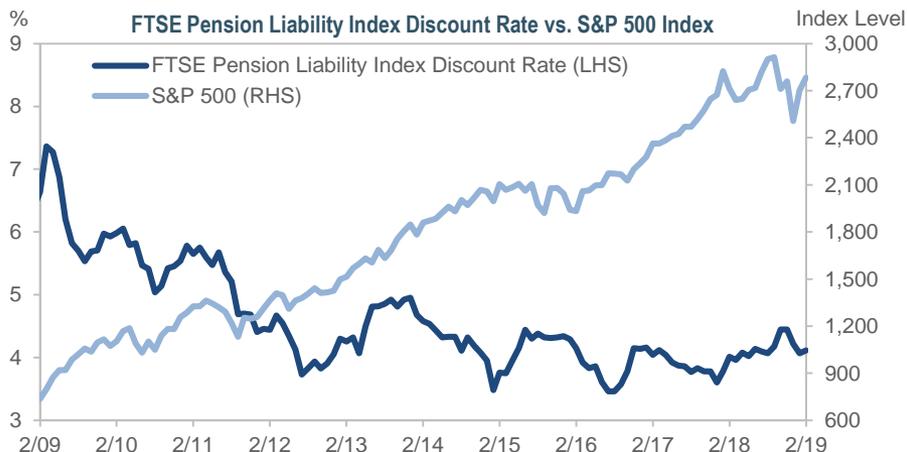


LDI Highlights

- Corporate pension funded status improved by 1.2% during February to close the month at 92.6%.
  - Continued equity-market strength drove the rise in funded status, as the S&P 500 Index returned approximately 3.2%.
  - Discount rates rose by 4bps to close the month at 4.11%, which also contributed to the increase in funded status.
- Robust issuance persisted in February, as long-duration supply was over \$30 billion, with over half coming from BBB-rated issuers.
- A healthy appetite for risk supported corporate credit markets, and long corporate spreads tightened by 5bps to close at 173bps.
- Spread curve steepening continued, as the difference between long corporate and intermediate corporate spreads widened by 4bps.

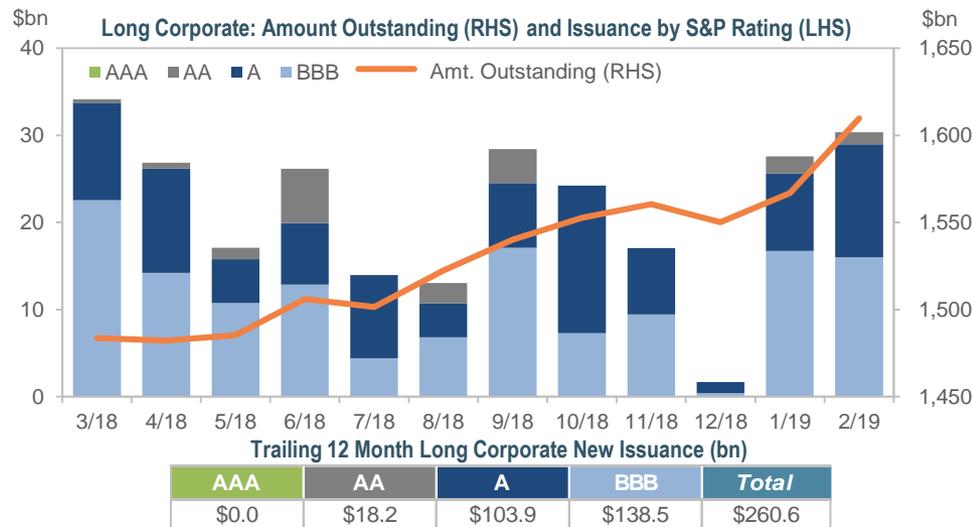
Rates Monitor	2/28/19	1/31/19	12/31/18
FTSE Pension Liability Discount Rate (%)	4.11	4.07	4.22
Bloom Barc Long Corporate Yield (%)	4.69	4.66	4.91
Bloom Barc Long Corporate A+ Yield (%)	4.24	4.19	4.40
Bloom Barc Long Corporate BBB Yield (%)	5.09	5.07	5.36
30 Year Swap Spread (bps)	-21	-20	-17



IR+M LDI Corner: Securitized – Tactical or Strategic?

- The role of securitized bonds within an LDI portfolio is often discussed. Typically, we see securitized bonds used in two distinct ways:
  - Tactically – Manager initiated: A manager with a credit benchmark may invest in securitized bonds when they think the sector offers attractive relative value, particularly in shorter-duration mandates or for hedging shorter keyrates in custom portfolios.
  - Strategically – Sponsor/consultant initiated: As plans continue to allocate assets to fixed income, there may be concern about over-concentration in traditional credit. A securitized allocation within the benchmark may provide diversification benefits.
- It is key to understand the sponsor’s goals when utilizing the securitized sector. At times, the relative value of securitized versus corporate bonds, particularly in longer-dated securities, may not warrant an out-of-benchmark position for corporate mandates.
  - However, at a broader strategic level, the benefits of diversification could merit a long-term strategic allocation by the plan sponsor.

Glidepath Monitor	2/28/19	1/31/19	12/31/18	12/31/15
Funded Status (%)	92.6	91.4	89.7	81.7
Long Corporate Spreads (bps)	173	178	200	227
Curve (Long Corp - Int. Corp) (bps)	77	73	69	88



Sources: Milliman (Historical numbers revised as of 3/31/18), FTSE Russell (formerly Citigroup), Bloomberg Barclays, Bloomberg, and JPMorgan. All data in the above commentary is as of 2/28/19. 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.