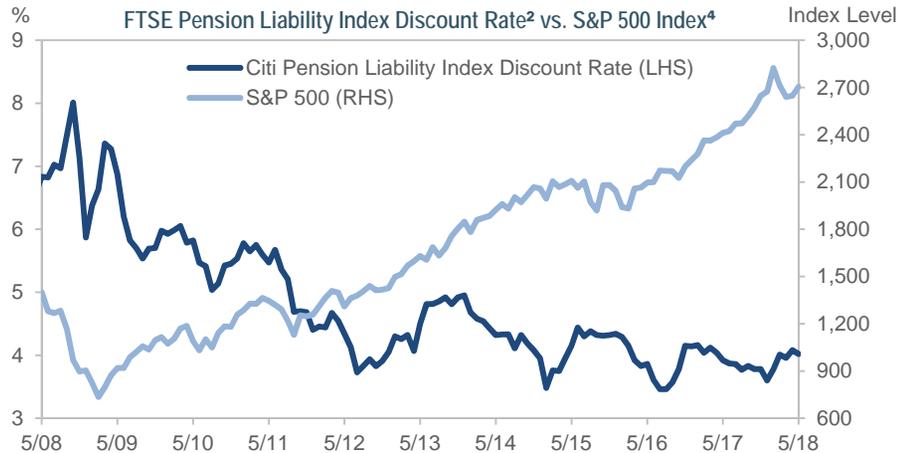


LDI Highlights

- For the month, corporate pension funded status was unchanged at 92%, as corporate yields and equities moved in opposite directions.¹
 - The FTSE pension discount rate followed long-dated Treasury yields lower, falling 6bps during the month.²
 - Equity markets rose during May, with the S&P 500 returning 2.2%, as strong US economic data provided a positive tailwind.⁴
- Long corporate issuance took a breather during May, as only \$17 billion priced during the month, representing 15% of total issuance, the lowest level since June 2017.⁵
 - Despite the decline, year-to-date long-end issuance remains well above last year's record setting pace by \$22 billion.
- Long-end spreads widened 12bps during the month, pushing the 10s30s spread curve to its steepest level year-to-date.³

Rates Monitor	5/31/18	4/30/18	12/31/17
FTSE Pension Liability Discount Rate ² (%)	4.02	4.08	3.60
Bloom Barc Long Corporate Yield ³ (%)	4.56	4.56	4.02
Bloom Barc Long Corporate A+ Yield ³ (%)	4.23	4.26	3.69
Bloom Barc Long BBB Corp Yield ³ (%)	4.92	4.88	4.37
30 Year Swap Spread ⁴ (bps)	-8	-11	-20

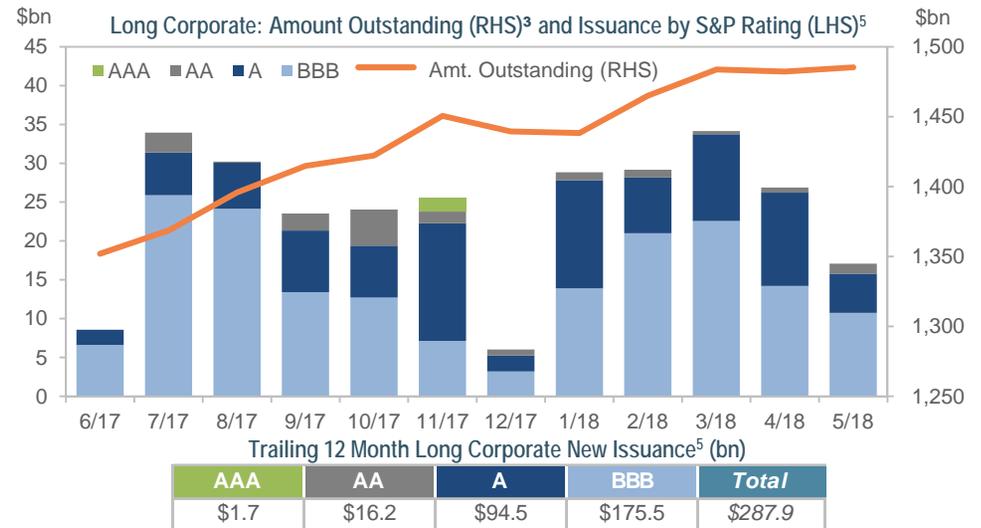

LDI MONITOR

May 31, 2018

IR+M LDI Corner: The Secret of Getting Ahead is Getting Started

- In late 2013, average funded status rose into a low 90's post-crisis high, and plan sponsors that took the opportunity to implement LDI strategies at the time, likely benefited. Funded status has again reached similar levels and we believe that fewer plan sponsors this time around will miss the opportunity to act.
- Although discount rates for most plans remain significantly lower than in 2013, the large number of long-end buyers may signal that we are operating in a new supply/demand environment, which could reduce the focus on rates as a driver of de-risking.
- For sponsors who did not implement LDI strategies in 2013, buoyant equity markets dampened the impact of falling rates. Today, we are later in the credit cycle and face significant macro-uncertainty. As a result, sponsors may be less optimistic about similar performance.
- In 2013, funded status improvements were largely driven by discount rates. More recently, one of the biggest drivers has been plan sponsor contributions driven by increasing PBGC premiums and tax reform. As our experience suggests, many sponsors are more likely to protect contributions than market gains.

Glidepath Monitor	5/31/18	4/30/18	12/31/17	12/31/14
Funded Status ¹ (%)	91.6	91.6	87.6	81.5
Long Corporate Spreads ³ (bps)	163	151	137	186
Curve ³ (Long Corp - Int. Corp) (bps)	70	64	64	79


¹Milliman (Historical numbers revised as of 3/31/18); ²FTSE Russell; ³Bloomberg Barclays; ⁴Bloomberg; ⁵JP Morgan

All data in the above commentary is as of 5/31/18. 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.