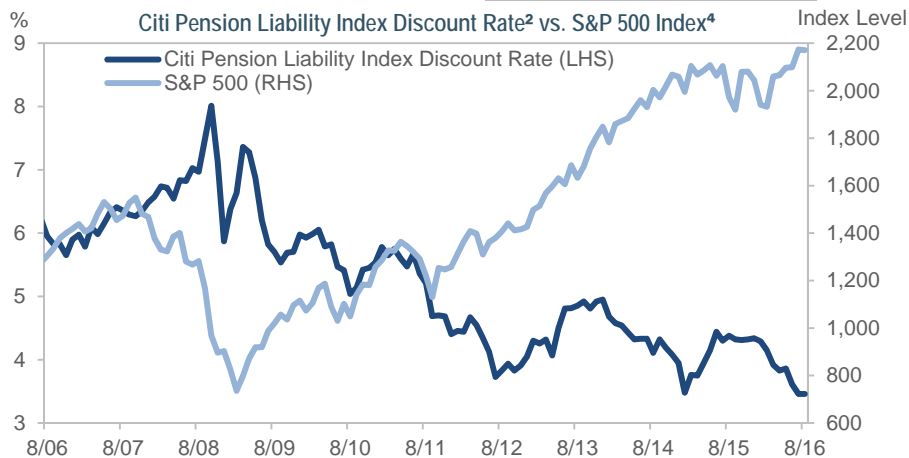


LDI Highlights

- Corporate pension funded status remained flat at 75.7% during August, as discount rates and equities were mostly unchanged.<sup>1</sup>
  - Despite being unchanged month-over-month, corporate pension discount rates remain at all-time lows, while equity markets hover around all-time highs.
- Persistent low rates continue to entice firms to issue bonds at a robust pace, as total corporate issuance during the month reached \$110 billion, marking the heaviest level of August issuance in the past 15 years.<sup>6</sup>
  - Long-dated issuance comprised 19% of the total or roughly \$21 billion.
- The 10s30s credit spread curve ended the month at 54bps, the steepest level post-crisis. Long-dated bonds have outperformed over the past three months, pushing yields lower while spread moves have been muted.<sup>6</sup>

Rates Monitor	8/31/16	7/31/16	12/31/15
Citigroup Pension Discount Rate <sup>2</sup> (%)	3.46	3.46	4.34
Barclays Long Credit Yield <sup>3</sup> (%)	3.96	3.98	5.02
Barclays Long Corporate Yield <sup>3</sup> (%)	3.99	4.00	5.06
Barclays Long BBB Corporate Yield <sup>3</sup> (%)	4.43	4.47	5.60
30 Year Swap Rate <sup>4</sup> (%)	1.70	1.74	2.64
Long BBB Corp. Yield <sup>3</sup> - Citi Pension Discount Rate <sup>2</sup> (bps)	97	101	126



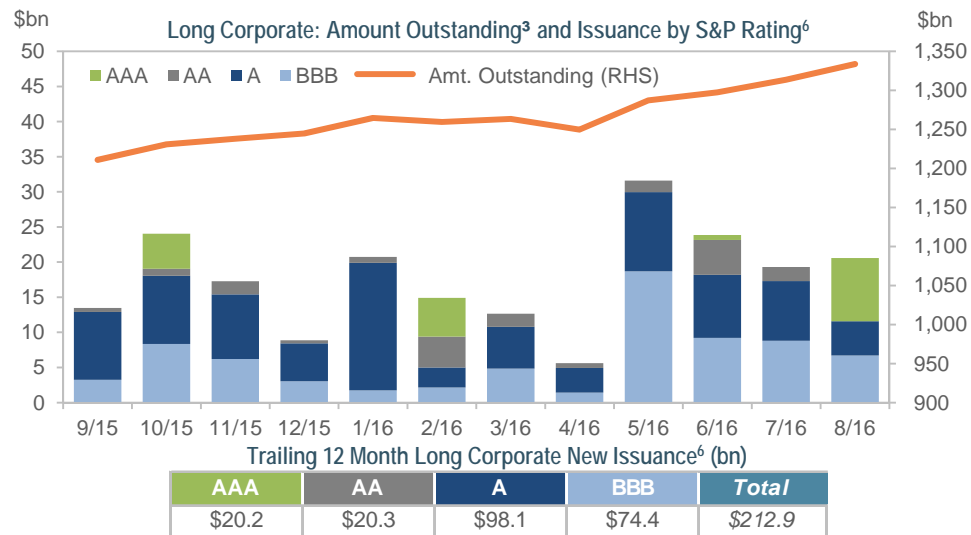
LDI MONITOR

August 31, 2016

IR+M LDI Corner: Thinking Outside the Benchmark

- As plan sponsors progress along their LDI journeys, they will increasingly focus on protecting potential funded status gains. Typically, this involves a transition from growth assets to hedging assets that are designed to reduce funded status volatility.
- While traditional long corporate bonds will likely remain the largest part of most hedging portfolios, the high demand from LDI investors could make it increasingly difficult to source the desired bonds at favorable prices.
- Plan sponsors may expand their investing toolkits by utilizing some alternative high-quality sectors. Broadening the investible universe may provide diversification benefits as well as opportunities to outperform the plan liabilities.
- In our recent mailer (available through our website [HERE](#)), we highlight a few of the ideas that IR+M may utilize as we build LDI portfolios to help plan sponsors meet their goals.

Glidepath Monitor	8/31/16	7/31/16	12/31/15	8/31/15	8/31/13
Funded Status <sup>1</sup> (%)	75.7	75.7	81.7	82.7	84.9
Long Credit Rates <sup>5</sup> (%)	3.96	3.98	5.02	4.95	5.27
Long Credit Spreads <sup>5</sup> (bps)	196	206	225	224	188
Curve <sup>3</sup> (Long Cred - Int. Cred) (bps)	182	190	210	224	271
Curve <sup>3</sup> (Long G/C - Agg) (bps)	129	135	161	173	216



<sup>1</sup>Milliman; <sup>2</sup>Citigroup; <sup>3</sup>Barclays; <sup>4</sup>Bloomberg; <sup>5</sup>Long rates and long spreads represented by Barclays Long Credit Index yield and spread; <sup>6</sup>JP Morgan

All data in the above commentary is as of 8/31/16. 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.