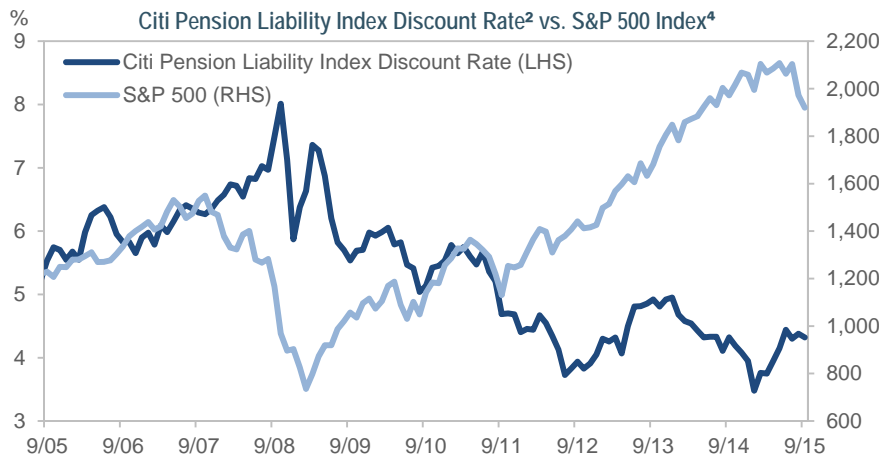


LDI Highlights

- Corporate pension funded status declined for a fourth straight month, falling 1.6% to end the third quarter at 81.7%<sup>1</sup>, the lowest level since March.
  - Declining asset values and increasing liability valuations were driven by a -2.6% return for the S&P 500 Index<sup>4</sup> and a -6bps decline in discount rates<sup>2</sup>.
- Long corporate issuance increased month-over-month but remained below the 2015 average, as some issuers sat on the sidelines amidst market volatility.
- The 10s30s credit spread curve continued to flatten, as demand in the intermediate portion of the curve waned, and the long end became more attractive due to weakness overseas and the Federal Reserve's no-hike decision.

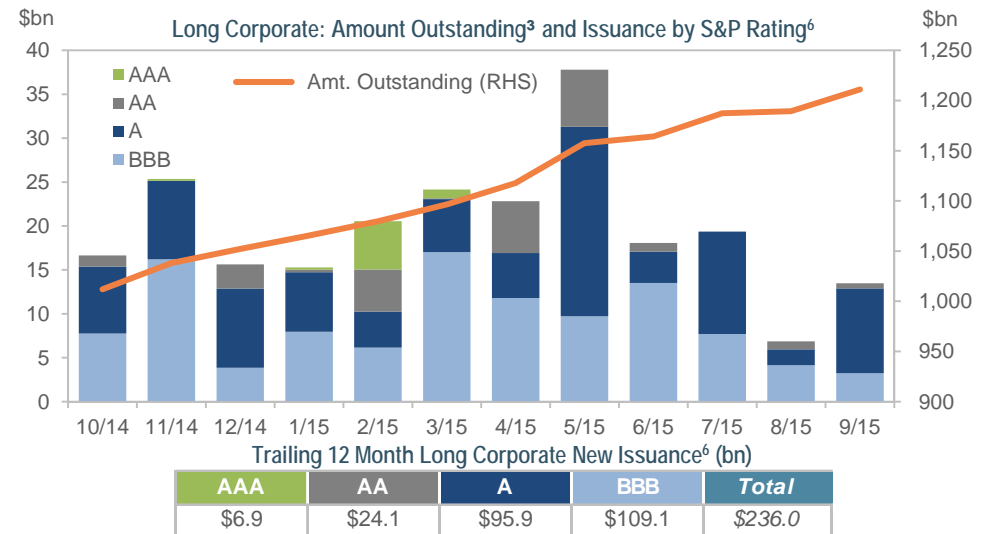
Rates Monitor	9/30/15	8/31/15	12/31/14
Citigroup Pension Discount Rate <sup>2</sup> (%)	4.32	4.38	3.95
Barclays Long Credit Yield <sup>3</sup> (%)	4.92	4.95	4.40
Barclays Long Corporate Yield <sup>3</sup> (%)	4.92	4.97	4.42
Barclays Long BBB Corporate Yield <sup>3</sup> (%)	5.44	5.44	4.80
30 Year Swap Rate <sup>4</sup> (%)	2.52	2.66	2.70
Long BBB Corp. Yield <sup>3</sup> - Citi Pension Discount Rate <sup>2</sup> (bps)	112	106	85



IR+M LDI Corner: Practical Customization

- Towards the later stages of their LDI glidepaths, plan sponsors often trend towards custom mandates with benchmarks that more closely target their plan liabilities.
- Sponsors will commonly customize within separate accounts, but for some smaller plans, a separate account is not always a viable option. Minimum account size requirements and potentially higher costs at smaller sizes can be prohibitive.
- One solution in the marketplace is to allocate across a combination of short, intermediate and long funds, regularly rebalancing to target a specific liability duration. Furthermore, utilizing a blend of government and credit funds can enable sponsors to target the required credit hedge at different points on the glidepath.
- At IR+M, we focus on bringing practical solutions to our LDI clients, using a range of strategies and vehicle types to help plan sponsors of all sizes meet their LDI goals.

Glidepath Monitor	9/30/15	8/31/15	12/31/14	9/30/14	9/30/12
Funded Status <sup>1</sup> (%)	81.7	83.3	81.5	83.6	75.0
Long Credit Rates <sup>5</sup> (%)	4.92	4.95	4.40	4.63	4.34
Long Credit Spreads <sup>5</sup> (bps)	230	224	185	164	191
Curve <sup>3</sup> (Long Cred - Int. Cred) (bps)	231	224	199	227	239
Curve <sup>3</sup> (Long G/C - Agg) (bps)	178	173	151	172	200



<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>J.P. Morgan  
 All data in the above commentary is as of 9/30/15. 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.