

LDI Highlights

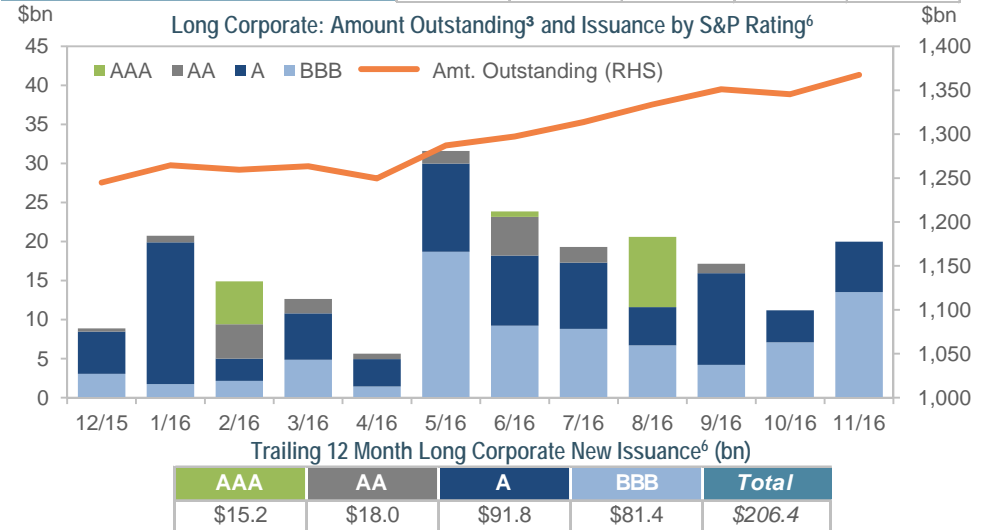
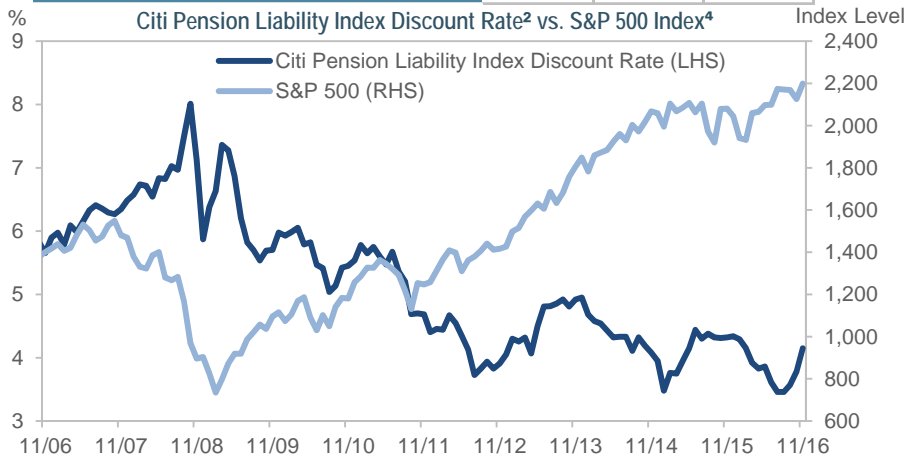
IR+M LDI Corner: Post Election Volatility

- Corporate pension funded status benefitted from a sharp increase in discount rates and strong equity market performance during November, as the measure improved 3.0% to 80.3%, its largest month-over-month increase since February 2015.¹
 - The Citigroup Pension Discount Rate rose by 37bps², the second highest month-over-month increase in the past five years, while the S&P 500 Index returned 3.4%.³
- Long corporate issuance is on pace for its lightest year relative to total corporate issuance since 2012, as M&A activity slowed and borrowing rates increased.⁶
- The 10s30s credit spread curve flattened 4bps during November, ending the month at 41bps; year-to-date the curve has ranged between 40-54bps.⁶

- Post-election, interest in de-risking strategies heightened for many plan sponsors, as interest rates and equity markets moved favorably for funded status. However, despite this increased focus on LDI, current demand for long-corporate bonds has largely been driven by overseas buyers and insurance companies as plan sponsors remain on the sidelines.
- Predicting when pension buyers will move assets into fixed income can be tricky. While a large number of plans are committed to de-risking glidepaths, it is likely that many remain significantly below their triggers, as both long-corporate yields and funded status still lag the recent highs of 2013. For plans operating without a glidepath, the temptation may be to look at recent funded status gains as an indicator of further improvements to come.
- One lesson investors learned from 2016 is that predicting macro events is far from easy. As we look to take advantage of market opportunities, we will be working with our clients to assess the de-risking prospects presented by funded status gains and to help them position themselves for the uncertain environment ahead.

Rates Monitor	11/30/16	10/31/16	12/31/15
Citigroup Pension Discount Rate ² (%)	4.15	3.78	4.34
Bloom Barc Long Credit Yield ³ (%)	4.62	4.22	5.02
Bloom Barc Long Corporate Yield ³ (%)	4.62	4.24	5.06
Bloom Barc Long BBB Corp Yield ³ (%)	5.04	4.65	5.60
30 Year Swap Rate ⁴ (%)	2.43	2.06	2.64
Long BBB Corp. Yield ³ - Citi Pension Discount Rate ² (bps)	89	87	126

Glidepath Monitor	11/30/16	10/31/16	12/31/15	11/30/15	11/30/13
Funded Status ¹ (%)	80.3	77.3	81.7	82.4	87.6
Long Credit Rates ⁵ (%)	4.62	4.22	5.02	4.91	5.21
Long Credit Spreads ⁵ (bps)	180	188	225	217	173
Curve ³ (Long Cred - Int. Cred) (bps)	191	195	210	218	295
Curve ³ (Long G/C - Agg) (bps)	140	141	161	165	233



¹Milliman; ²Citigroup; ³Bloomberg Barclays; ⁴Bloomberg; ⁵Long rates and long spreads represented by Bloomberg Barclays Long Credit Index yield and spread; ⁶JP Morgan
 All data in the above commentary is as of 11/30/16. 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.