# IR+M INCOME RESEARCH + MANAGEMENT

# LDI MONITOR

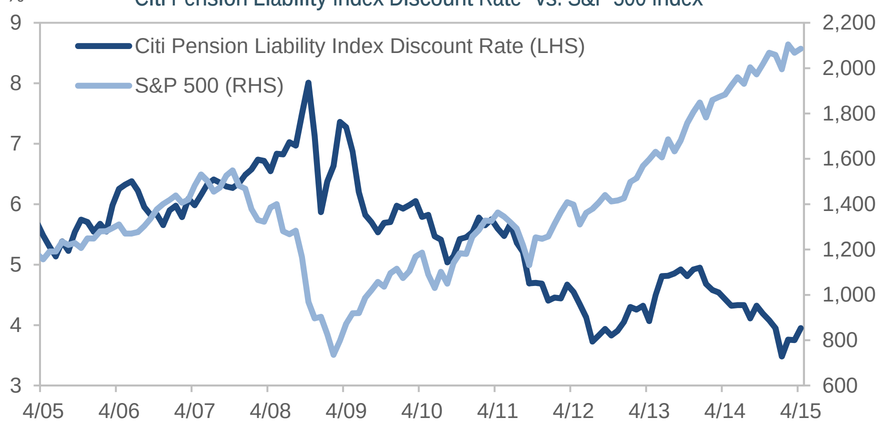
April 30, 2015

## LDI Highlights

- The funded status of corporate pensions rose by 1% to 81% in April, driven by rising discount rates; asset returns were relatively flat.
    - Long AA-rated corporate yields rose by 18bps following long-dated Treasury rates higher on the month and are now 46bps higher than the year-to-date low of 3.47%.
- Year-to-date corporate issuance reached $420 billion during April, setting a new record-issuance pace to begin the year.
    - Long-corporate issuance made up $85 billion (20%) of the total year-to-date, versus an average of $36 billion (13%) since 2000.
- The 10s30s credit-spread curve flattened slightly during April but remains at a historically steep level at 50bps.

| Rates Monitor | 4/30/15 | 3/31/15 | 12/31/14 |
|---|---|---|---|
| Citigroup Pension Discount Rate[1] (%) | 3.95 | 3.75 | 3.95 |
| Barclays Long Credit Yield[3] (%) | 4.41 | 4.24 | 4.40 |
| Barclays Long Corporate Yield[3] (%) | 4.43 | 4.24 | 4.42 |
| Barclays Long BBB Corporate Yield[3] (%) | 4.81 | 4.60 | 4.80 |
| 30 Year Swap Rate[4] (%) | 2.53 | 2.40 | 2.70 |
| Long BBB Corp. Yield[3] – Citi Pension Discount Rate[1] (bps) | 86 | 85 | 85 |

Citi Pension Liability Index Discount Rate[1] vs. S&P 500 Index[4]

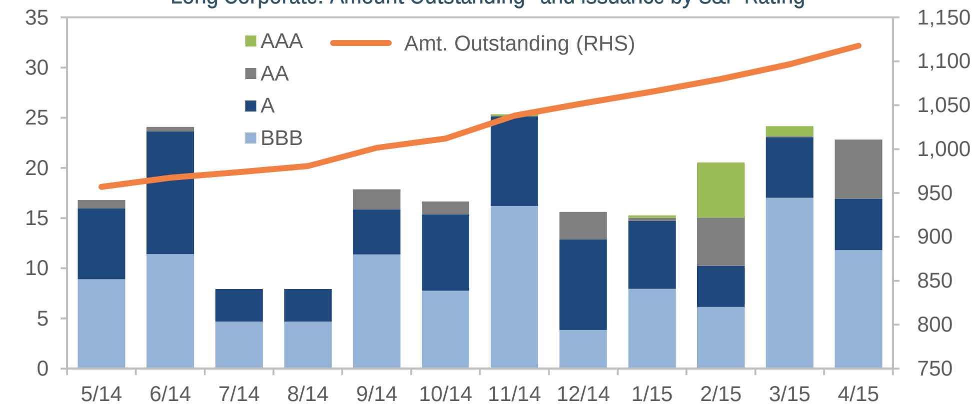



## IR+M LDI Corner: Supply and Demand – Staying Ahead of the Curve

- Many investors believe that a surge in long-bond demand will accompany rising rates and that this demand could cause the curve to flatten. Less often considered is how the supply side will change to meet this demand.
- Investors often assume that long-bond issuance will increase during a curve-flattening environment, as the incremental additional cost of issuing long bonds declines.
- Historically, however, there is little evidence that this relationship exists. We have not seen significant growth in long-bond issuance during recent curve-flattening environments, nor has there been a decline in issuance during recent curve-steepening environments. This is exemplified by the current credit curve and record issuance levels.
- Long-bond issuance appears to be driven more by overall rates than by the steepness of the curve. As a result, plan sponsors may want to consider increasing their exposure to long bonds before any potential rate-induced increase in demand.

| Glidepath Monitor | 4/30/15 | 3/31/15 | 12/31/14 | 4/30/14 | 4/30/12 |
|---|---|---|---|---|---|
| Funded Status[1] (%) | 81 | 80 | 83 | 85 | 82 |
| Long Credit Rates[5] (%) | 4.41 | 4.24 | 4.40 | 4.71 | 4.84 |
| Long Credit Spreads[5] (bps) | 186 | 187 | 185 | 150 | 209 |
| Curve[3] (Long Cred - Int. Cred) (bps) | 217 | 203 | 199 | 249 | 241 |
| Curve[3] (Long G/C - Agg) (bps) | 164 | 152 | 151 | 192 | 191 |

Long Corporate: Amount Outstanding[3] and Issuance by S&P Rating[2]




Trailing 12 Month Long Corporate New Issuance[2] (bn)

| AAA | AA | A | BBB | *Total* |
|---|---|---|---|---|
| $6.9 | $18.4 | $77.9 | $111.8 | *$215.0* |

[1]Citigroup; [2]JP Morgan; [3]Barclays; [4]Bloomberg; [5]Long rates and Long spreads represented by Barclays Long Credit Index yield and spread