INCOME RESEARCH + MANAGEMENT

LDI MONITOR

February 29, 2020

LDI Highlights

- Corporate pension funded status decreased by 3.5% to 82.2%, the lowest level since 2016; year-to-date, funded status has fallen by 6.8%.
    - Investor concern over the impact of the spread of the coronavirus caused equity markets to fall by over 8% in February.
    - Discount rates fell to an all-time low of 2.76%, a decrease of almost 50bps since 2019.
- Long-issuance totaled over $30 billion, an increase of $2 billion month-over-month, despite issuers remaining on the sidelines for a full week.
- The risk-off tone continued and pushed long corporate spreads 22bps wider to 171bps, the widest level since October 2019.
- Spread curves steepened by 3bps, as demand for risk was limited and long-end corporate spreads widened by 22bps.

Rates Monitor	2/29/20	1/31/20	12/31/19
FTSE Pension Liability Discount Rate (%)	2.76	2.91	3.22
Bloom Barc Long Corporate Yield (%)	3.22	3.35	3.60
Bloom Barc Long Corporate A+ Yield (%)	2.82	2.98	3.25
Bloom Barc Long Corporate BBB Yield (%)	3.61	3.70	3.94
30 Year Swap Spread (bps)	-38	-33	-30

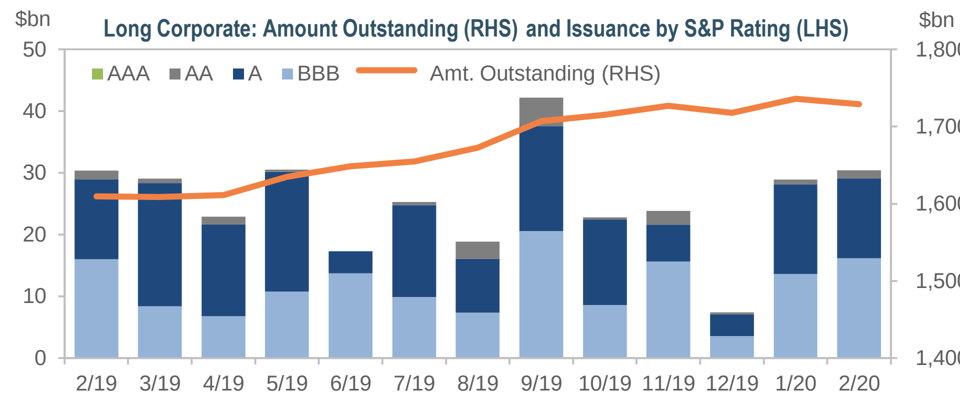
Special Update IR+M LDI Corner: Opportunity to Re-risk within an LDI Framework

- Many sponsors are re-balancing or considering tactical tilts into growth assets from hedging assets in response to recent falling equity markets and low interest rates, conditions similar to those present in 2008.
- In particular, during 2008, plans increased equities from 48% to 53% but decreased alternatives from 20% to 14%; fixed income ticked up from 32% to 33%.
- Sponsors may be tempted to re-risk the broader portfolio asset allocation, and this may be an opportune time to further re-risk within the LDI portfolio by selling government bonds and purchasing corporates at wide levels.
- Retaining corporates will increase credit exposure (enhancing the ability to hedge high-quality corporate based discount rates), and long-term expected returns.

IR+M LDI Corner: What If Rates Go Negative?

- Treasury yields across the curve continue to fall to new record lows. While still unlikely, we are approaching the possibility of negative interest rates.
    - In a negative interest rate environment, counterintuitive relationships hold – i.e., the present value liability is greater than the sum of future benefit payments.
- A well-constructed LDI portfolio that addresses duration and basis risk should move in tandem with liabilities regardless of a positive or negative interest rate environment.
    - An effective LDI strategy should actively target duration neutrality and employ careful security selection to add incremental alpha.
- Chasing return may lead to a higher allocation to growth assets. However, the higher basis risk of equities can work against the funded status if/when rates normalize.
- Derivatives may be an appropriate solution for cash balance plans because the inherent 0% floor of interest crediting rates will be more difficult to hedge.

Glidepath Monitor	2/29/20	1/31/20	12/31/19	12/31/15
Funded Status (%)	82.2	85.7	89.0	81.7
Long Corporate Spreads (bps)	171	149	136	227
Curve (Long Corp - Int. Corp) (bps)	76	73	66	88



Trailing 12 Month Long Corporate New Issuance (bn)

AAA	AA	A	BBB	*Total*
$0.0	$15.2	$149.2	$135.0	$299.5

Sources: Milliman (Historical numbers revised as of 3/31/19), FTSE Russell (formerly Citigroup), Bloomberg Barclays, Bloomberg, and JPMorgan