Impact on Funded Status

Pension Strategy & Analytics | May 18, 2020
Funded Status Update (YTD through 5/15/2020)

Impact on Sample Corporate Pension Plan*

<table>
<thead>
<tr>
<th></th>
<th>12/31/2019</th>
<th>YTD Impact</th>
<th>5/15/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets ($mm)</td>
<td>870.0</td>
<td>-2.5%</td>
<td>848.0</td>
</tr>
<tr>
<td>Liabilities ($mm)</td>
<td>1,000.0</td>
<td>+3.9%</td>
<td>1,039.2</td>
</tr>
<tr>
<td>Funded Status (%)</td>
<td>87.0%</td>
<td>-5.4%</td>
<td>81.6%</td>
</tr>
</tbody>
</table>

*Sample Plan: Liability Duration of 13.0yrs and the following asset allocation: 25% S&P500, 15% EAFE, 5% EM Equity, 45% US Long Gov/Credit, 5% US Aggregate, 2.5% US High Yield, 2.5% EMD. Analysis assumes no rebalancing. Interest Rate Hedge Ratio = 50%

The sample corporate plan funded status fell 5.4% from 12/31 through 5/15/2020

Lower treasury rates, offset by wider spreads led to a ~30bps decrease in discount rates over the period

Public equities and credit have sold off leaving most asset classes with negative returns and resulting in a -2.5% portfolio return YTD

More de-risked plans with less public equity exposure would see more moderate funded status decreases but results will vary depending on the hedge portfolio credit exposure

Pension Discount Curve Change

Asset Class Returns

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In contrast to our baseline portfolio example:

- A more **De-Risked** portfolio would have fared better from lower public equity exposure and protection from falling interest rates. However, a higher exposure to corporate credit in the hedge portfolio has caused funded status deterioration.

- A more **Total Return Oriented** portfolio would have fared worse, with similar public equity levels but less duration exposure in the fixed income to act as a ballast in volatile markets.

**Daily Funded Status Tracking**

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### Impact of Rebalancing

#### YTD Funded Status Change as of 5/15/2020

<table>
<thead>
<tr>
<th>Rebalancing Frequency</th>
<th>None</th>
<th>Daily</th>
<th>Monthly</th>
<th>Quarterly</th>
<th>Quarterly - 1day</th>
<th>Quarterly - 2day</th>
<th>Quarterly - 7day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td>-5.4%</td>
<td>-5.0%</td>
<td>-5.7%</td>
<td>-5.2%</td>
<td>-5.2%</td>
<td>-5.1%</td>
<td>-4.9%</td>
</tr>
<tr>
<td><strong>Total Return</strong></td>
<td>-9.2%</td>
<td>-8.7%</td>
<td>-9.2%</td>
<td>-8.9%</td>
<td>-8.9%</td>
<td>-8.8%</td>
<td>-8.3%</td>
</tr>
<tr>
<td><strong>De-Risked</strong></td>
<td>-4.0%</td>
<td>-3.7%</td>
<td>-4.1%</td>
<td>-3.9%</td>
<td>-3.9%</td>
<td>-3.8%</td>
<td>-3.8%</td>
</tr>
</tbody>
</table>

Quarterly-Xday rebalancing policy executes the rebalance X trading days prior to the quarter end rather than precisely on the quarter end.

- The preceding analysis assumes no rebalancing and allows asset allocation to drift.
- The table on the left calculates YTD funded status change under a range of different rebalancing policies.
- The colored heatmap ranks rebalancing policies for each portfolio from best to worst YTD funded status performance.
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