Impact on Funded Status

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Funded Status Update (YTD through 6/24/2020)

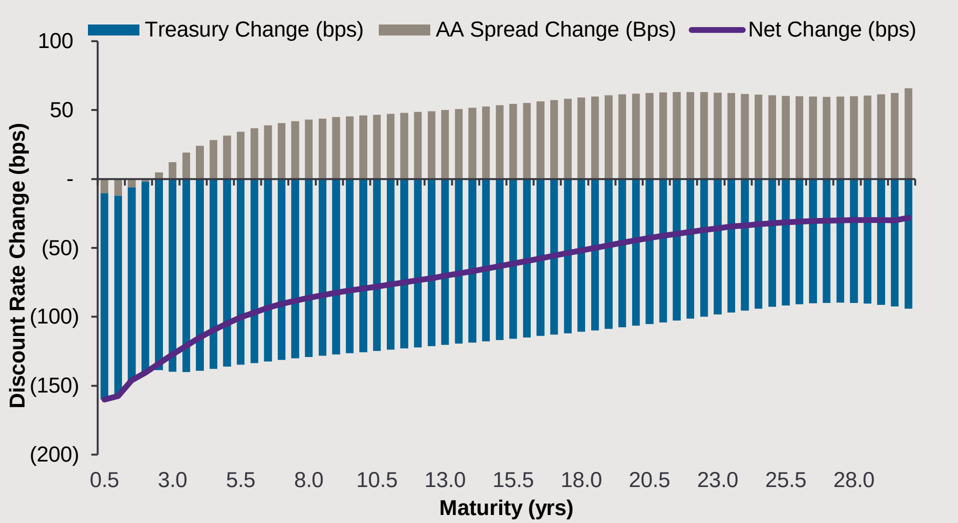
Impact on Sample Corporate Pension Plan*

	12/31/2019	YTD Impact	6/24/2020
Assets ($mm)	870.0	+2.4%	891.2
Liabilities ($mm)	1,000.0	+7.2%	1,072.4
Funded Status (%)	87.0%	**-3.9%**	83.1%

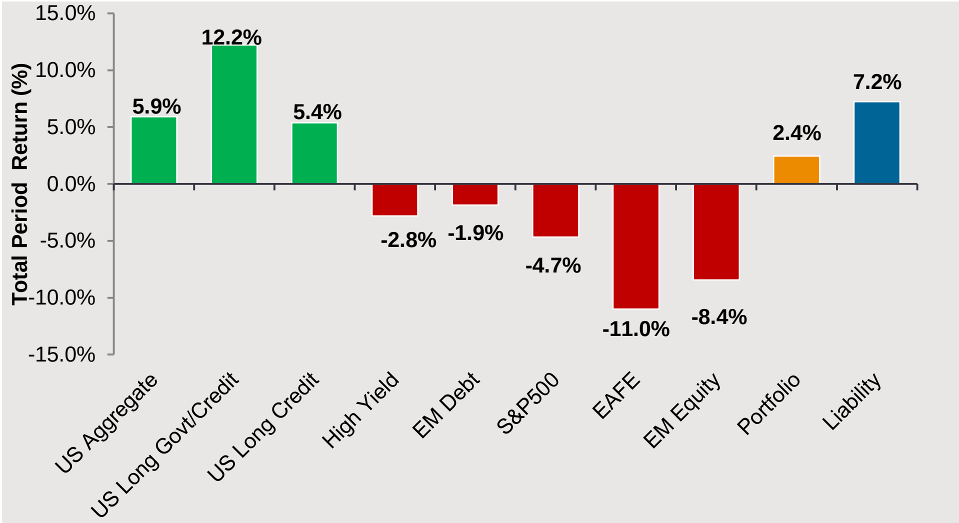
*Sample Plan: Liability Duration of 13.0yrs and the following asset allocation: 25% S&P500, 15% EAFE, 5% EM Equity, 45% US Long Gov/Credit, 5% US Aggregate, 2.5% US High Yield, 2.5% EMD. Analysis assumes no rebalancing. **Interest Rate Hedge Ratio = 50%**

- The sample corporate plan funded status **fell 3.9%** from 12/31 through 6/24/2020
- Lower treasury rates, offset by wider spreads led to a ~**54bps decrease** in discount rates over the period
- Year-to-date, assets have returned **+2.4%** versus a **+7.2%** liability return
    - 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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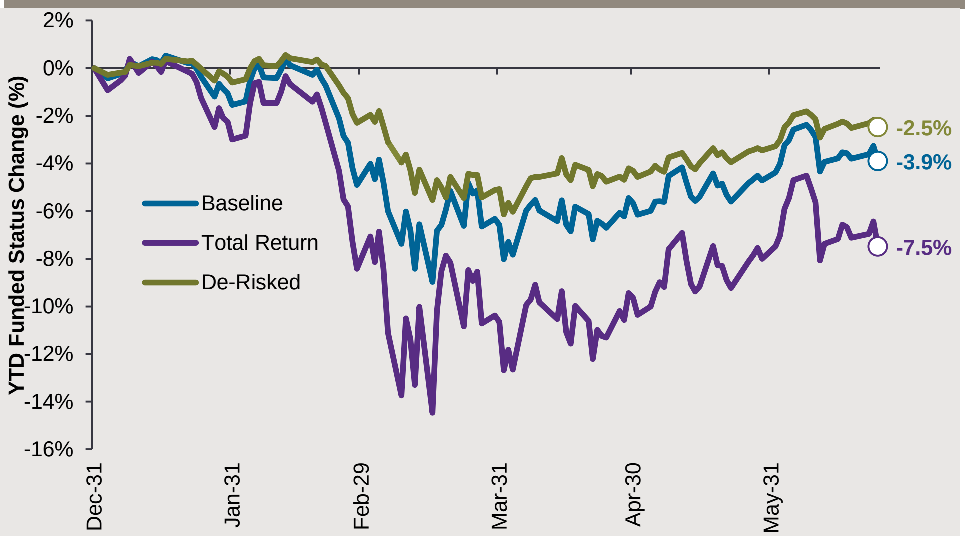
Archetypal Sample Plans

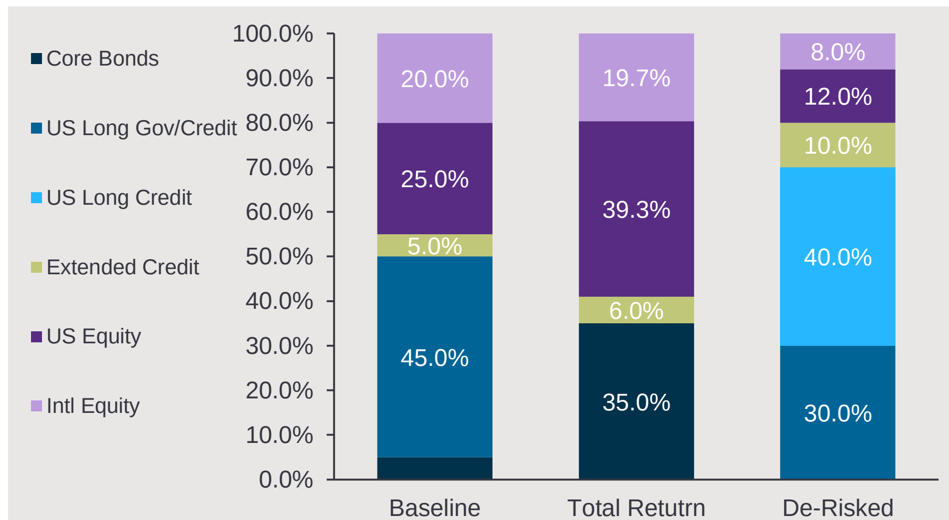
Portfolio	Hedge Ratio (%)	YTD Funded Status Change (%)
Baseline	50%	**-3.9%**
Total Return	15%	**-7.5%**
De-Risked	75%	**-2.5%**

- 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



Archetypal Sample Portfolios



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Impact of Rebalancing

YTD Funded Status Change as of 6/24/2020

	Rebalancing Frequency						
	None	Daily	Monthly	Quarterly	Quarterly - 1day	Quarterly - 2day	Quarterly - 7day
Baseline	-3.9%	-3.1%	-3.8%	-3.3%	-3.3%	-3.2%	-3.0%
Total Return	-7.5%	-6.6%	-7.3%	-6.9%	-6.9%	-6.8%	-6.1%
De-Risked	-2.5%	-1.9%	-2.4%	-2.1%	-2.1%	-2.1%	-2.0%

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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