



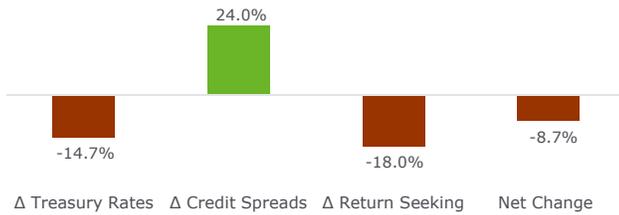
NEPC PENSION FUNDED STATUS MONITOR

MARCH 31 2020

The funded status of a typical corporate pension plan experienced steep declines in the first quarter as assets took a nosedive amid intensifying concerns around the COVID-19 pandemic, with the funded status of a total-return plan falling by around 8.7%. However the funded status stayed remarkably stable for plans with higher interest rate hedge ratios and lower equity allocations, according to NEPC's hypothetical open- and frozen-pension plans.

HYPOTHETICAL OPEN/TOTAL-RETURN PLAN

Funded Status Attribution



↓ The funded status of a total-return plan fared worse than a hedged plan as equities sold off amid mounting concerns around the COVID-19 outbreak; falling Treasury yields were offset by widening credit spreads for plan liabilities.

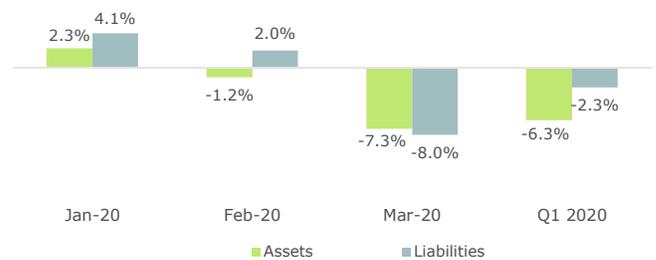


HYPOTHETICAL FROZEN/LDI-FOCUSED PLAN

Funded Status Attribution



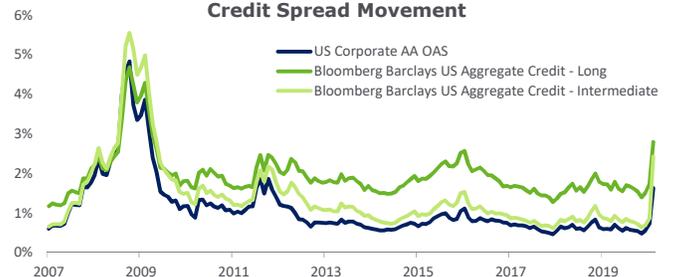
↓ The LDI-focused plan experienced much less volatility in funded status due to its lower equity allocation and the rally of Treasury bonds amid a flight to quality. The plan is 75% hedged, as of March 31.



RATE MOVEMENT

Treasury yields fell to historic lows, with the short end moving into negative territory for a few days in March. Yields on 30-year Treasuries cratered 104 basis points over the quarter while credit spreads widened significantly, resulting in nearly flat discount rates for plan liabilities in the first quarter. The discount rate for the open Total-return plan rose 18 basis points to 3.48% for the three months ended March 31, while the discount rate of the frozen LDI-focused plan increased 21 basis points to 3.33%. The flight to quality was a windfall for long-dated Treasuries and STRIPS, with the Long Treasury Index returning 20.9% for the quarter. Conversely, with long-credit spreads widening 140 basis points, long credit posted quarterly losses of 4.7%.

Credit Spread Movement



RETIREE BUYOUT INDEX

The Buyout Index for Retirees is estimated to be approximately **110.3%** of PBO, as of March 31.

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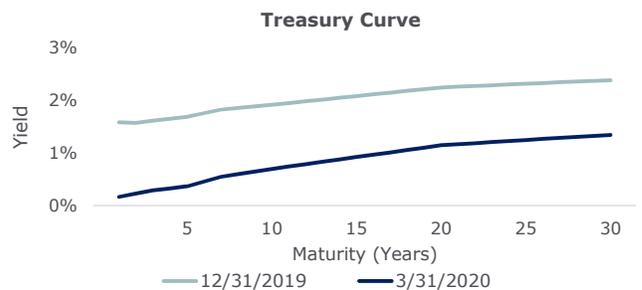
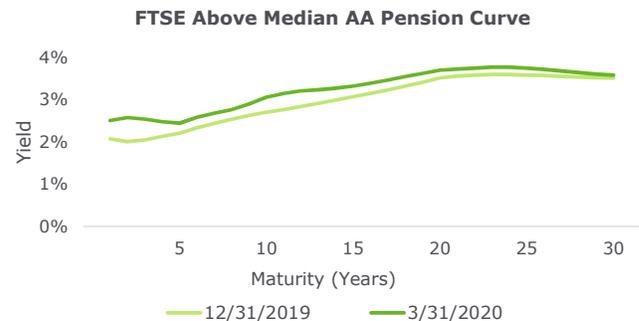
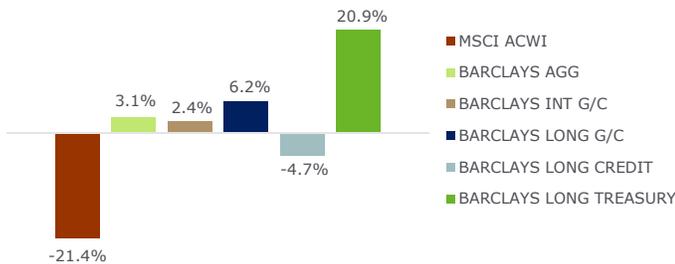
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CONSIDERATIONS FOR PLAN SPONSORS

Volatility rocked markets in the first quarter as many parts of the world economy ground to an abrupt halt amid stringent restrictions on travel and gatherings in efforts to contain the coronavirus pandemic. Equities fell precipitously and rates dropped to historic lows. In response, Congress passed the CARES Act, allowing defined benefit plans to delay their 2020 plan contributions to January 1, 2021. At NEPC, we recommend plan sponsors reap gains from Treasury allocations, especially STRIPS, and lean into credit as spreads have widened. We also suggest maintaining a long-term investment approach and bracing for continued market volatility, and consider building up a quarter of liquidity for benefit payments. During this unprecedented time, NEPC is proactively advising clients on rebalancing and market opportunities.

MARKET ENVIRONMENT AND YIELD CURVE MOVEMENT



US stocks declined 12% in March and 20% in the first quarter, while international developed and emerging market equities fell 23% and 24%, respectively, during the same period. The MSCI ACWI declined by 21%.

Treasuries fell across the curve, and the yield curve steepened, with long Treasuries returning 21% for the three months ended March 31, according to the Barclays Long Treasury Index. AA corporate spreads widened 115 basis points in the first quarter, offsetting the decline in Treasury rates, and leaving discount rates unchanged or slightly higher for many plans.

DISCLOSURES

Liability returns are based on the FTSE Above Median Pension Discount Curve. Liabilities for the two hypothetical plans are based on sample benefit payments of two unique plans, set equal to stable duration targets as of December 31, 2018. The Total-Return plan reflects an open plan with a 15-year duration, while the LDI-Focused plan represents a frozen plan with a 10-year duration. The benefit payments are not rolled forward each month to maintain the duration targets. No future benefit accruals or benefit payments are assumed in order to isolate the performance of plan's liabilities due to changes in interest rates. The funded status of each hypothetical plan was set at 90% funded as of December 31, 2018.

The Total Return plan assumes an allocation of 60% Global Equity, 40% Core Bonds. The LDI Focused Plan assumes an asset allocation of 40% Global Equity and 30% Long Credit, 20% Long Treasuries, 10% Intermediate Govt/Credit, with a greater emphasis on hedging liability duration. Monthly rebalancing is assumed. We do not assume any fees, expenses, benefit payments or contributions are made during the year in order to isolate the impact of market returns on the hypothetical allocations.

NEPC's Retiree Buyout Index is estimated using midpoint annuity purchase rates published by Brentwood Advisors, discounted against the cash flows of a sample retiree population, and compare with the same discounted cashflows using the FTSE Above Median Pension Discount Curve. Actual annuity pricing may vary substantially based on multiple factors.

Asset benchmarks used to measure asset returns are sourced from FactSet: MSCI ACWI index, Barclays Aggregate index, Barclays Intermediate Gov/Credit index, Barclays Long Gov/Credit index, Barclays Long Credit index, Barclays Long Treasury index, Barclays US Aggregate Intermediate Credit spread, Barclays US Aggregate Long Credit spread, and US Corporate AA Option Adjusted Spread.

Past performance is no guarantee of future results.