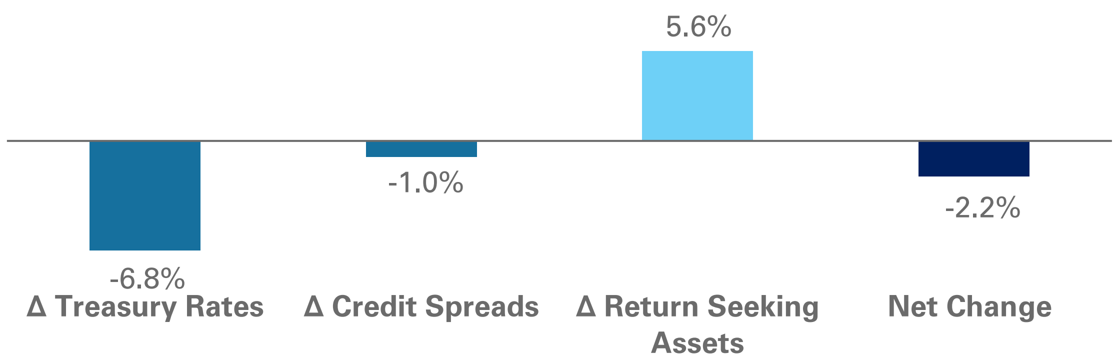
NEPC PENSION MONITOR

NOVEMBER 2022

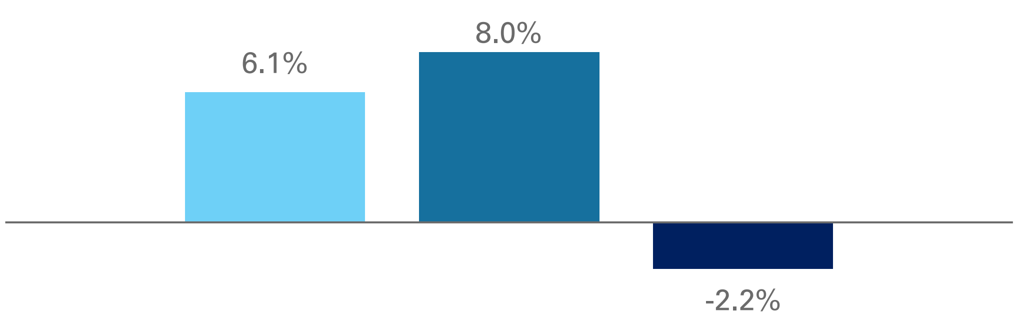
Corporate pension plans experienced mixed changes in funded status in November amid declining discount rates and rallying equities. The Treasury yield curve lowered and remained inverted between the one- and 10-year tenors. Total-return plans likely suffered declines in funded status from lower discount rates. Many LDI-oriented plans saw improvements in funded status due to positive equity returns and protection against the reversal in discount rates. NEPC's hypothetical pension plans witnessed a funded status reduction of 2.2% for the total-return plan compared to a gain of 2% for the LDI-focused plan.

HYPOTHETICAL OPEN/TOTAL-RETURN PLAN

Funded Status Attribution



The funded status of the total-return plan decreased 2.2% due to lower yields, which resulted in higher liabilities that were offset partially by positive returns in equities.

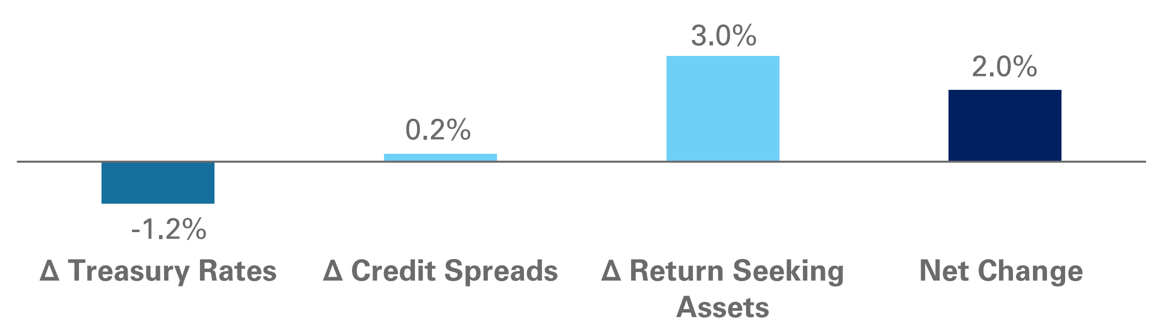


November 30, 2022

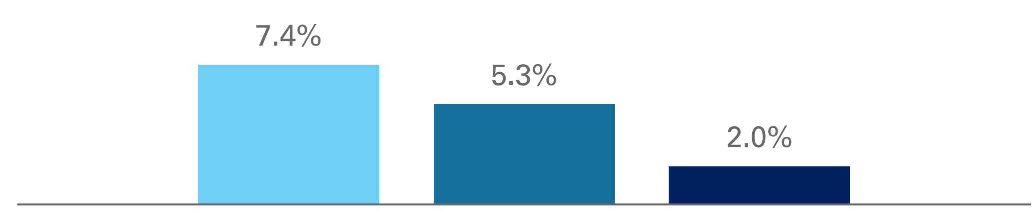
Assets Liabilities Net

HYPOTHETICAL FROZEN/LDI-FOCUSED PLAN

Funded Status Attribution



The funded status of the LDI-focused plan increased 2% due to lower yields resulting in higher liabilities that were offset by positive returns in equities. The plan is 82% hedged as of November 30.



November 30, 2022

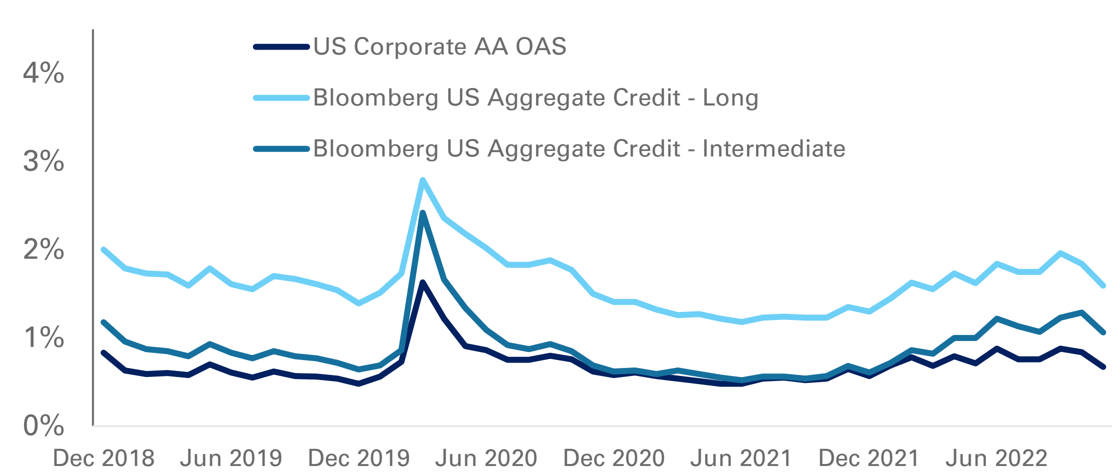
Assets Liabilities Net

RATE MOVEMENT COMMENTARY

The Treasury curve declined at tenors greater than one year but remains inverted from the one- to 10-year tenors. Yields on the 10- and 30-year Treasuries decreased 42 basis points to 3.68% and 3.80% respectively. Long-credit spreads narrowed 25 basis points and intermediate spreads contracted 23 basis points.

The movement in Treasury rates and credit spreads lowered pension discount rates used to discount pension liabilities. The discount rates for NEPC's hypothetical pension plans decreased 55-56 basis points with the open total-return plan rate decreasing to 5.22%, while the discount rate for the frozen LDI-focused plan fell to 5.13%.

Credit Spread Movement



RETIREE BUYOUT INDEX

The Buyout Index for retirees is estimated to be approximately **105.3%** of PBO, as of November 30, 2022

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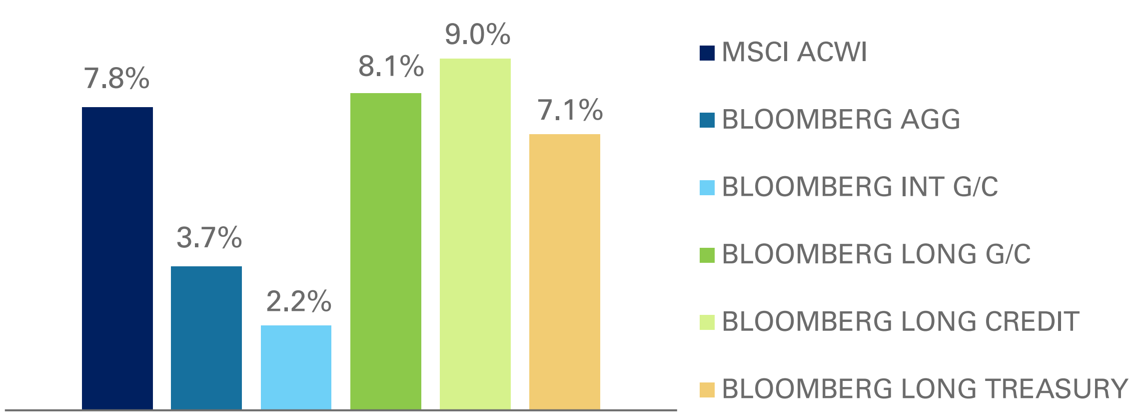
NEPC PENSION MONITOR

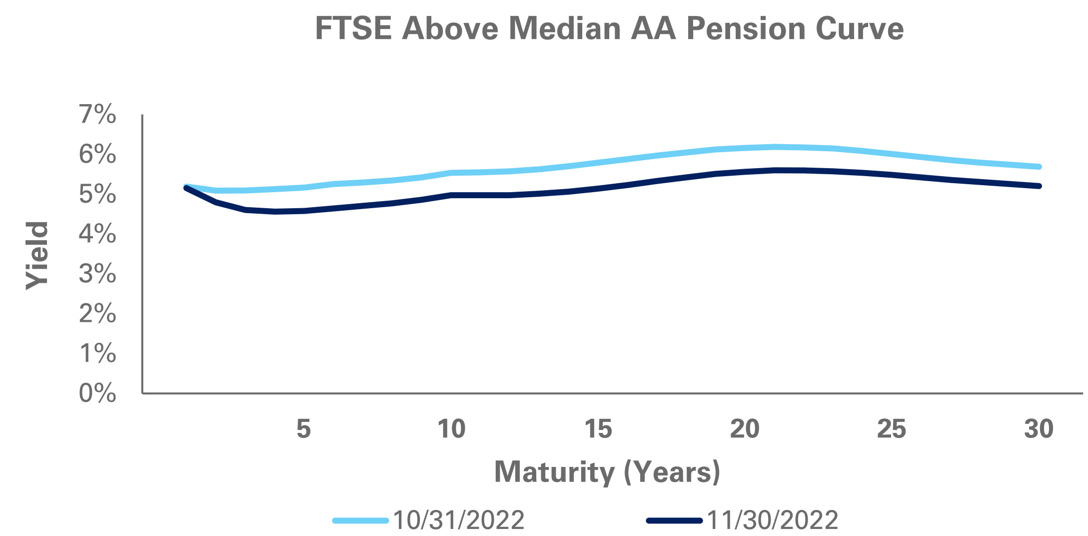
NOVEMBER 2022

PLAN SPONSOR CONSIDERATIONS

Equities were largely positive in November adding to gains from fixed-income markets. Treasury yields generally declined, and the yield curve remained inverted between the one- and 10-year tenors. This resulted in lower discount rates used for valuing pension liabilities. At NEPC, we anticipate continued volatility and the potential for market disruption. Plan sponsors should remain diligent about monitoring sources of change in funded status versus expectations as equities and interest rates are likely to remain volatile. This includes closely monitoring hedge ratio ranges to avoid becoming overhedged to interest rates as yields rise.

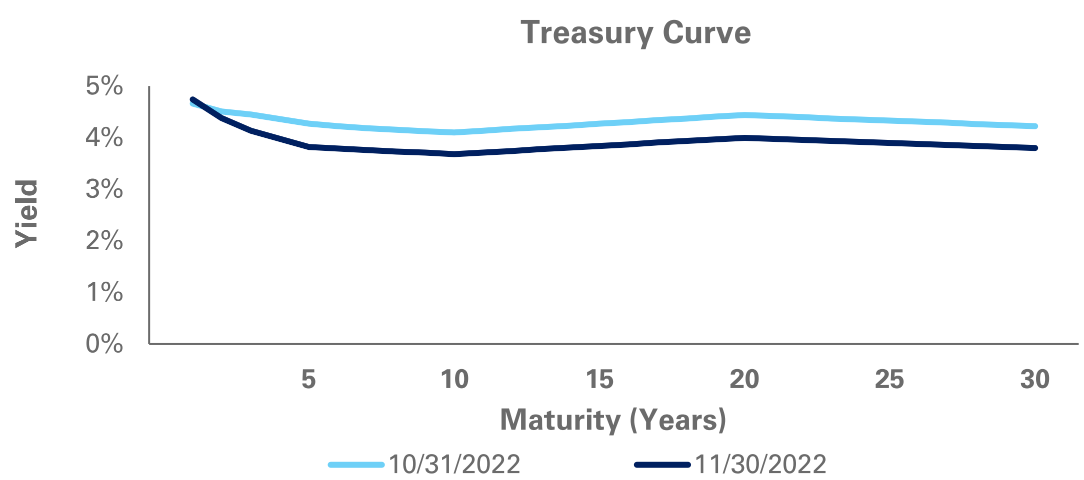
MARKET ENVIRONMENT AND YIELD CURVE MOVEMENT





Equities rallied in November with U.S. stocks gaining 5.6%, according to the S&P 500 Index, international developed markets returning 11.3%, according to the MSCI EAFE Index, and emerging market equities up 14.8%, according to the MSCI EM Index. Globally, the MSCI ACWI Index returned 7.8% in November.

The Treasury curve declined at tenors greater than one year but remained inverted from the one- to 10-year tenors. This resulted in gains for fixed income, particularly for longer durations, as the Bloomberg Long Treasury Index rose 7.1% and the Bloomberg Long Credit Index was up 9%.



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 reset at 100% funded as of December 31, 2021.

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 government/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 compared 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.