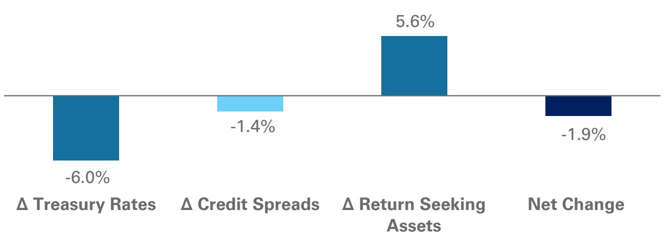
NEPC PENSION MONITOR

NOVEMBER 2023

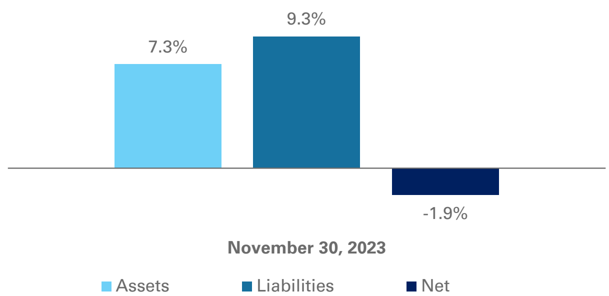
In November, pension plan sponsors experienced significantly lower liability discount rates as interest rates reversed course, falling from year-to-date highs. During this period, global public equities also posted strong gains, while the Treasury yield curve declined across most tenors. Total-return-focused plans likely experienced mixed changes in funded status due to lower discount rates offset by strong equity performance. NEPC's hypothetical total-return pension plan experienced a decline of 1.9% in funded status compared to an increase of 2.9% for the LDI-focused plan.

HYPOTHETICAL OPEN/TOTAL-RETURN PLAN

Funded Status Attribution

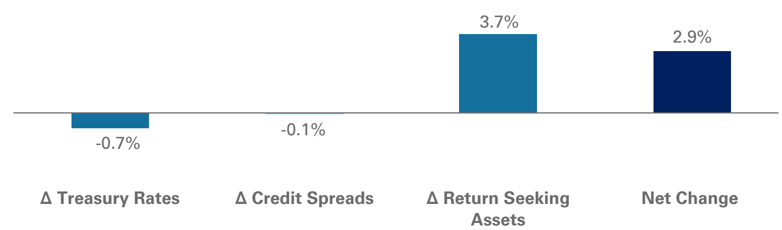


The funded status of the total-return plan decreased due to higher liabilities from lower Treasury rates, offsetting gains from return-seeking assets.

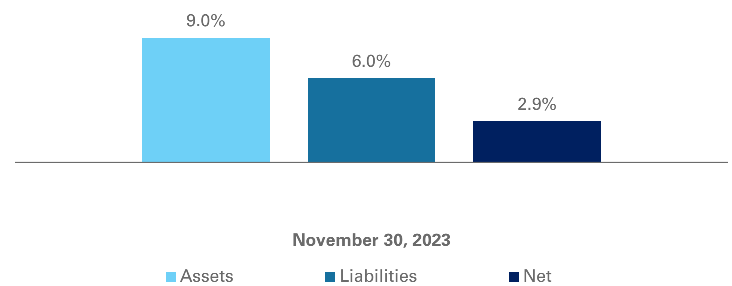


HYPOTHETICAL FROZEN/LDI-FOCUSED PLAN

Funded Status Attribution



The funded status of the LDI-focused plan increased due to gains from return-seeking assets. The plan is 86.7% hedged as of November 30.

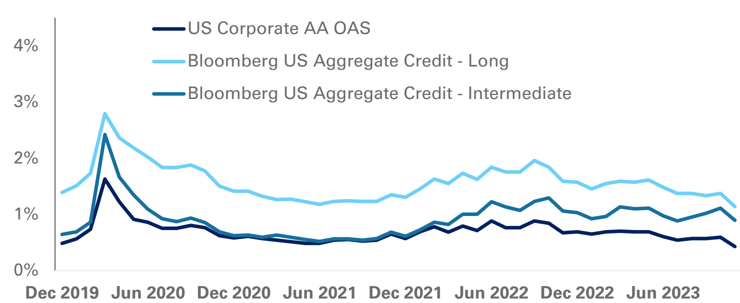


RATE MOVEMENT COMMENTARY

The Treasury yield curve decreased by around 50 basis points in November, and remained inverted from the one- to 10-year tenors. The 10-year yield fell 51 basis points to 4.37%, while the 30-year yield decreased 50 basis points to 4.54%. Rates across the yield curve have now fallen on a year-to-date basis.

The movement in Treasury rates and credit spreads resulted in lower pension discount rates used to discount pension liabilities. The discount rates for NEPC's hypothetical pension plans decreased about 66 basis points to 5.59% for the open total-return plan, while the discount rate for the frozen LDI-focused plan was down around 65 basis points to 5.53%.

Credit Spread Movement



RETIREE BUYOUT INDEX

The Buyout Index for retirees is estimated to be approximately **103.7%** of PBO, as of November 30, 2023

RECENT INSIGHTS FROM NEPC

Taking Stock: Not Out of the Woods Yet Despite Tame Inflation Data

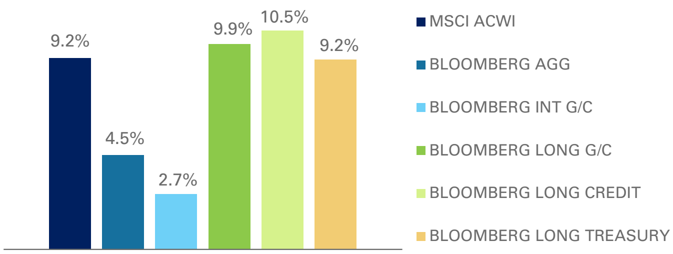
NEPC PENSION MONITOR

NOVEMBER 2023

PLAN SPONSOR CONSIDERATIONS

Public equities posted strong gains in November, and long-dated fixed-income markets also recorded robust returns due to a decline in Treasury rates. Treasury yields fell in November with the yield curve shifting lower. A modest contraction in credit spreads also contributed to lower discount rates used for valuing pension liabilities. At NEPC, we anticipate continued market 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 longer-maturity rates with a flatter yield curve.

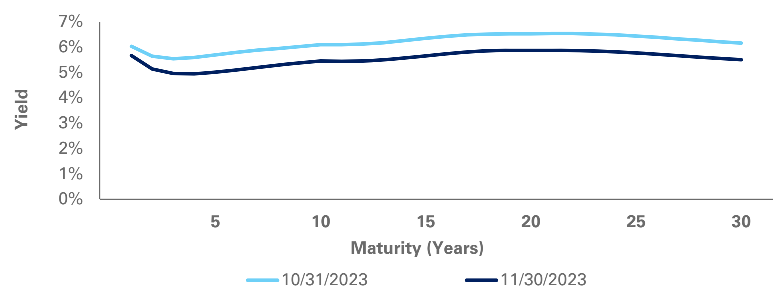
MARKET ENVIRONMENT AND YIELD CURVE MOVEMENT



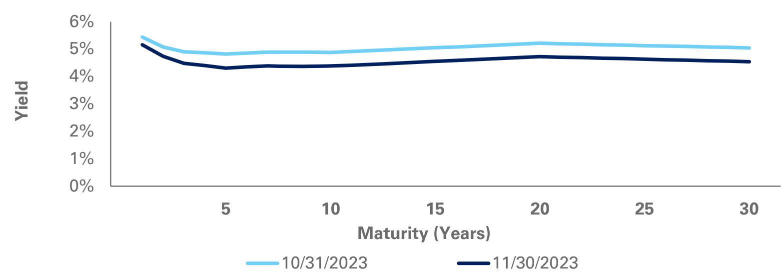
In November, U.S. equities gained 9.1%, according to the S&P 500 Index. During the same period, non-U.S. equities performed similarly to U.S. stocks with international developed markets gaining 9.3%, according to the MSCI EAFE Index. Emerging market equities were up 8%% last month, according to the MSCI EM Index. Broadly, global equities rose 9.2% during the same period, according to the MSCI ACWI Index.

In November, the Treasury curve decreased by approximately 50 basis from the previous month at tenors 10 and greater and remained inverted from the one- to 10-year tenors. This resulted in gains for fixed-income markets, with long-credit fixed income experiencing modestly higher gains compared to long Treasuries. During the month, the Bloomberg Long Treasury Index rose 9.2% and the Bloomberg Long Credit Index returned 10.5%.

FTSE Above Median AA Pension Curve



Treasury Curve



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 to 90% funded (Total-Return) and 100% funded (LDI-focused) as of December 31, 2022.

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.