MEKETA
INVESTMENT GROUP

# UNITE HERE Local 25 and Hotel Association of Washington, D.C. Pension Fund

## Investment Review

## June 7, 2024

Fund Evaluation Report

# Agenda

1. Economic and Market Update Data as of April 30, 2024
2. Executive Summary
3. Pension Fund Update as of March 31, 2024
4. Asset Allocation Discussion
   - Grouping of Asset Classes Discussion
   - Asset Allocation Review and Risk Analysis
5. Investment Policy Statement Updates
   - Updated Investment Policy Statement – Summary of Changes
   - Investment Policy Statement – CLEAN
   - Investment Policy Statement - REDLINE
6. Appendices
   - Meketa Investment Group Corporate Update
   - Disclaimer, Glossary, and Notes

# Economic and Market Update

Data as of April 30, 2024

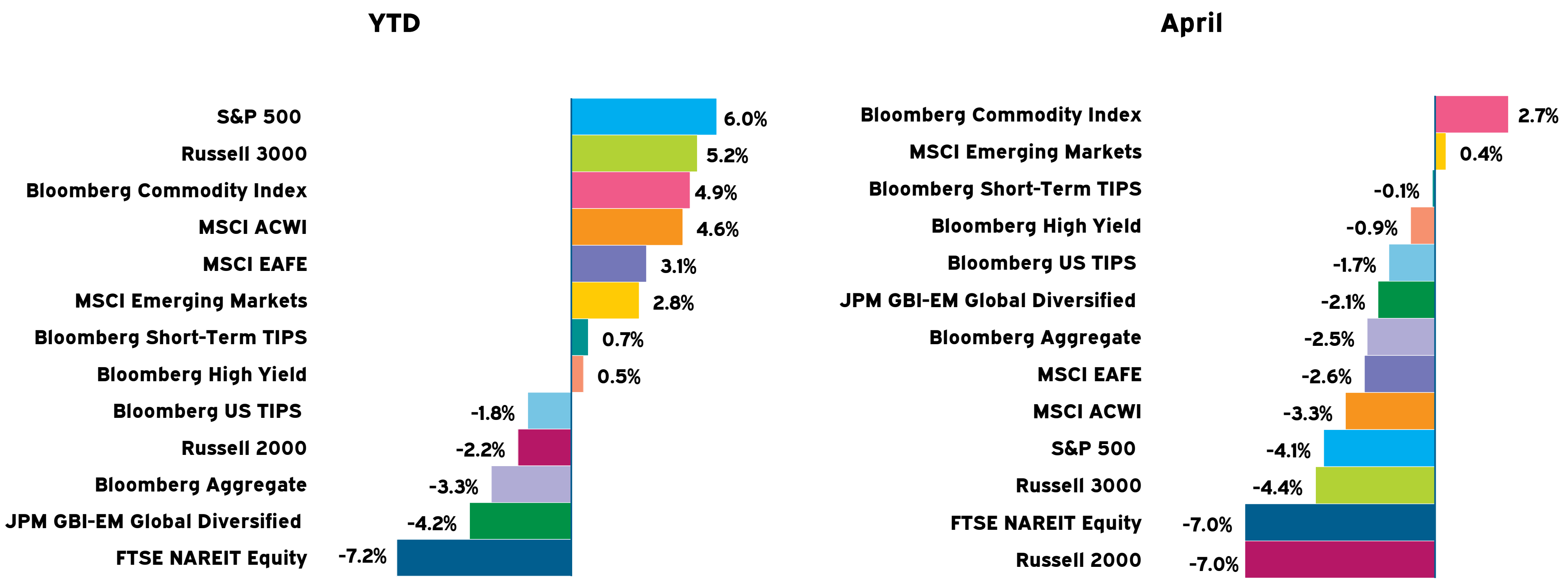
## Commentary

→ Stronger than expected inflation and employment data in the US weighed on both stocks and bonds in April.

- Major central banks have largely paused interest rate hikes with expectations that many will still cut rates, but the uneven pace of falling inflation and economic growth could desynchronize the pace of rate cuts.
- Inflation pressures have eased in most countries from their pandemic peaks, but some uncertainty remains and levels are still above most central bank targets. Headline and core inflation measures in the US met expectations at 3.4% and 3.6% for April, respectively, and represented slight declines from the prior month.
- After rising 10% in the first quarter the US equity markets (Russell 3000 index) fell 4.4% in April. Except for utilities, most sectors, particularly those sensitive to interest rates, fell for the month.
- Non-US developed equity markets also fell in April (-2.6%) but by less than US equities. Local currency returns fared better in the month of April (0.9%) given the strengthening US dollar.
- Emerging market equities (+0.4%) beat developed market equities as coordinated buying of Chinese exchange traded funds (ETFs) by state-backed financial services companies helped boost Chinese stocks (+6.6%). The stronger dollar also hurt performance in emerging markets for US investors with returns in local currency terms 1.0% higher.
- Rising interest rates weighed on bonds, with the broad US bond market declining -2.5% in April.

→ Looking to the rest of this year, the paths of inflation and monetary policy, China's economic disorder and slowing economic growth, the many looming elections, and the wars in Ukraine and Israel will be key.

## Index Returns[1]




→ After a strong start to the year in the first quarter most asset classes declined in April, particularly equities.

→ Higher than expected inflation data broadly weighed on markets and dashed hopes of near-term cuts in interest rates.

[1] Source: Bloomberg. Data is as of April 30, 2024.

## Domestic Equity Returns[1]

| Domestic Equity | April (%) | Q1 (%) | YTD (%) | 1 YR (%) | 3 YR (%) | 5 YR (%) | 10 YR (%) |
|---|---|---|---|---|---|---|---|
| S&P 500 | -4.1 | 10.6 | 6.0 | 22.7 | 8.1 | 13.2 | 12.4 |
| Russell 3000 | -4.4 | 10.0 | 5.2 | 22.3 | 6.3 | 12.4 | 11.8 |
| Russell 1000 | -4.3 | 10.3 | 5.6 | 22.8 | 7.0 | 12.9 | 12.1 |
| Russell 1000 Growth | -4.2 | 11.4 | 6.7 | 31.8 | 8.5 | 16.5 | 15.5 |
| Russell 1000 Value | -4.3 | 9.0 | 4.3 | 13.4 | 5.2 | 8.6 | 8.4 |
| Russell MidCap | -5.4 | 8.6 | 2.7 | 16.4 | 2.4 | 9.0 | 9.4 |
| Russell MidCap Growth | -5.8 | 9.5 | 3.1 | 20.7 | 0.7 | 9.5 | 10.8 |
| Russell MidCap Value | -5.2 | 8.2 | 2.6 | 14.1 | 3.3 | 8.1 | 7.9 |
| Russell 2000 | -7.0 | 5.2 | -2.2 | 13.3 | -3.2 | 5.8 | 7.2 |
| Russell 2000 Growth | -7.7 | 7.6 | -0.7 | 12.4 | -5.9 | 5.0 | 7.6 |
| Russell 2000 Value | -6.4 | 2.9 | -3.7 | 14.0 | -0.7 | 6.0 | 6.4 |

### US Equities: The Russell 3000 fell 4.4% in April after a strong first quarter.

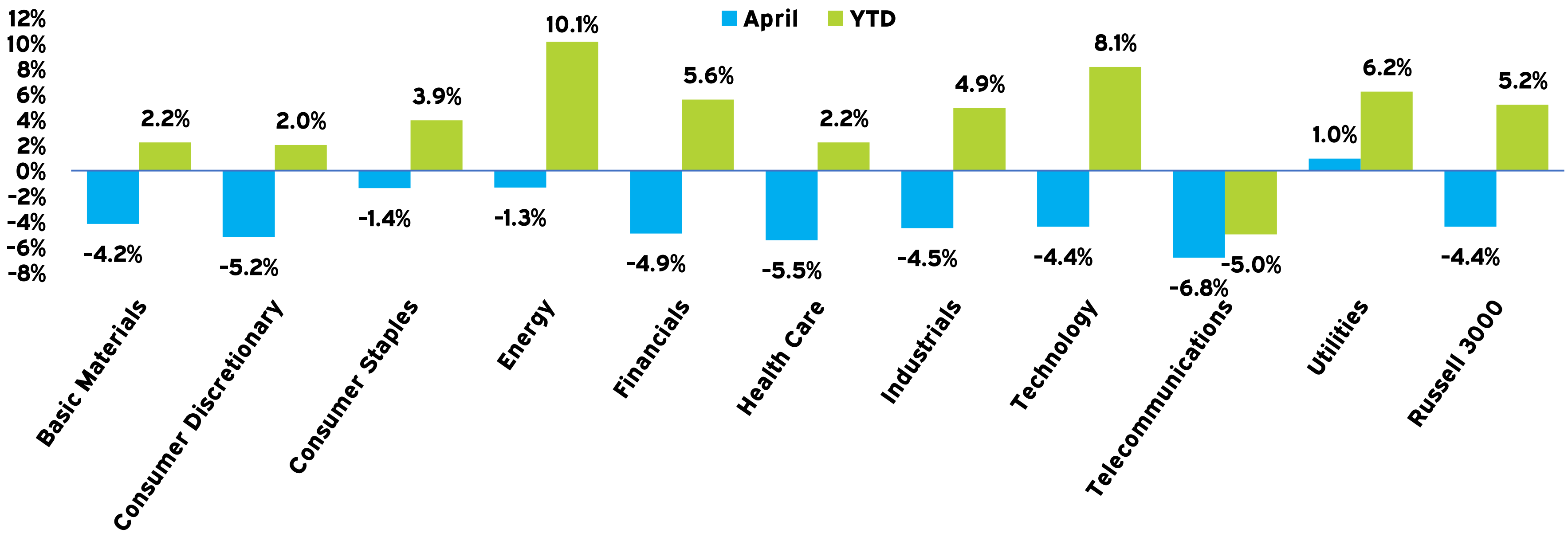
→ US stocks declined in April, given stronger than expected employment and inflation reports. The strong economic data weighed on hopes for the Federal Reserve to lower rates in the near term.

→ Large cap stocks outperformed small cap stocks for the month. Several large cap technology-related stocks reported strong Q1 earnings, including Alphabet and Microsoft, which partly drove the divergence.

→ After the "Magnificent 7" stocks fueled the performance of the US equity market in 2023, these stocks have deviated in 2024. Most notably, Tesla and Apple have significantly lagged the broader market this year.

[1] Source: Bloomberg. Data is as of April 30, 2024.

## Russell 3000 Sector Returns[1]




→ Most sectors fell in April, particularly those most sensitive to interest rates. The defensive utilities sector was the only area to post a gain for the month.

→ Except for telecommunications, all sectors held onto positive returns for the year-to-date period despite the April declines. The energy sector (10.1%) is up the most this year given rising oil prices followed by the technology sector (8.1%) driven by artificial intelligence-related companies.

[1] Source: Bloomberg. Data is as of April 30, 2024.

## Foreign Equity Returns[1]

| Foreign Equity | April (%) | Q1 (%) | YTD (%) | 1 YR (%) | 3 YR (%) | 5 YR (%) | 10 YR (%) |
|---|---|---|---|---|---|---|---|
| MSCI ACWI ex. US | -1.8 | 4.7 | 2.8 | 9.3 | 0.3 | 5.0 | 3.9 |
| MSCI EAFE | -2.6 | 5.8 | 3.1 | 9.3 | 2.9 | 6.2 | 4.4 |
| MSCI EAFE (Local Currency) | -0.9 | 10.0 | 9.0 | 15.2 | 8.6 | 8.4 | 7.5 |
| MSCI EAFE Small Cap | -3.0 | 2.4 | -0.6 | 5.1 | -3.6 | 3.7 | 4.5 |
| MSCI Emerging Markets | 0.4 | 2.4 | 2.8 | 9.9 | -5.7 | 1.9 | 3.0 |
| MSCI Emerging Markets (Local Currency) | 1.4 | 4.5 | 6.0 | 12.9 | -2.4 | 4.1 | 5.9 |
| MSCI EM ex. China | -1.6 | 4.0 | 2.3 | 17.6 | 0.6 | 5.6 | 3.9 |
| MSCI China | 6.6 | -2.2 | 4.3 | -6.8 | -17.5 | -5.5 | 2.1 |

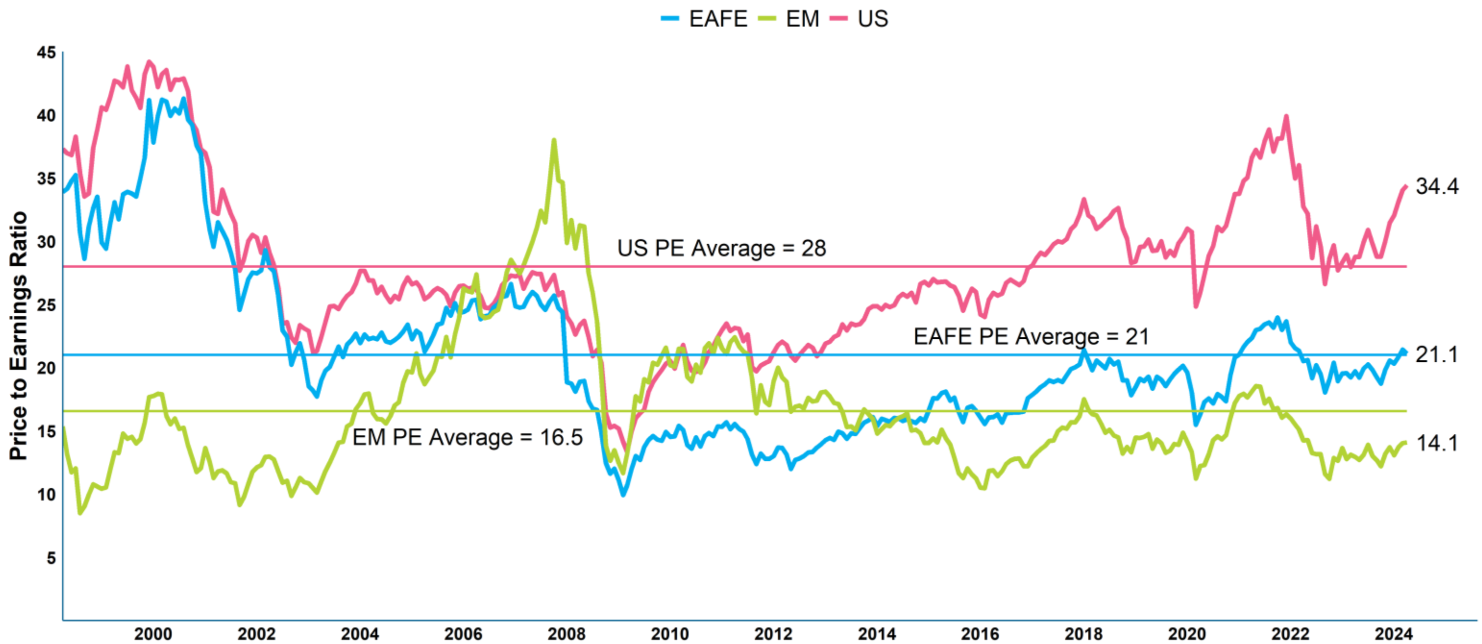
### Foreign Equity: Developed international equities (MSCI EAFE) fell 2.6% in April while emerging market equities (MSCI EM) rose 0.4%.

→ Developed markets particularly in Eurozone countries saw losses in April driven in part by higher than expected US inflation numbers and hawkish comments from the Fed; UK equities outperformed given higher weights in value sectors. Japan equities saw a correction especially in the large cap space; the yen remained weak. The appreciation of the US dollar lowered returns for US investors by 1.7% for the month.

→ Emerging market equities were the only area to see positive performance for the month, driven by China's rebound. Emerging markets ex.-China posted losses but less than developed markets. China saw the highest performance for April, with positive developments (and easing restrictions) in the real estate sector and financial intervention in financial markets driving results. The appreciation of the US dollar also weighed on emerging market returns for US investors.

[1] Source: Bloomberg. Data is as of April 30, 2024.

## Equity Cyclically Adjusted P/E Ratios[1]




- → Despite the sell-off in April, the US equity price-to-earnings ratio remained elevated and above its 21st century average.
- → International market valuations also fell in April and remain well below the US. In the case of developed markets, valuations are now close to the long-term average, while emerging market valuations remain well below its long-term average.

[1] US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of April 2024. The average line is the long-term average of the US, EM, and EAFE PE values from April 1998 to the recent month-end respectively.

## Fixed Income Returns[1]

| Fixed Income | April (%) | Q1 (%) | YTD (%) | 1 YR (%) | 3 YR (%) | 5 YR (%) | 10 YR (%) | Current Yield (%) | Duration (Years) |
|---|---|---|---|---|---|---|---|---|---|
| Bloomberg Universal | -2.3 | -0.5 | -2.8 | -0.3 | -3.1 | 0.2 | 1.5 | 5.6 | 5.9 |
| Bloomberg Aggregate | -2.5 | -0.8 | -3.3 | -1.5 | -3.5 | -0.2 | 1.2 | 5.3 | 6.1 |
| Bloomberg US TIPS | -1.7 | -0.1 | -1.8 | -1.3 | -1.6 | 2.1 | 1.9 | 5.0 | 6.7 |
| Bloomberg Short-term TIPS | -0.1 | 0.8 | 0.7 | 2.8 | 1.9 | 3.1 | 2.0 | 5.1 | 2.5 |
| Bloomberg High Yield | -0.9 | 1.5 | 0.5 | 9.0 | 1.5 | 3.7 | 4.3 | 8.1 | 3.7 |
| JPM GBI-EM Global Diversified (USD) | -2.1 | -2.1 | -4.2 | 1.8 | -3.0 | -0.3 | -0.6 | 6.8 | 5.0 |

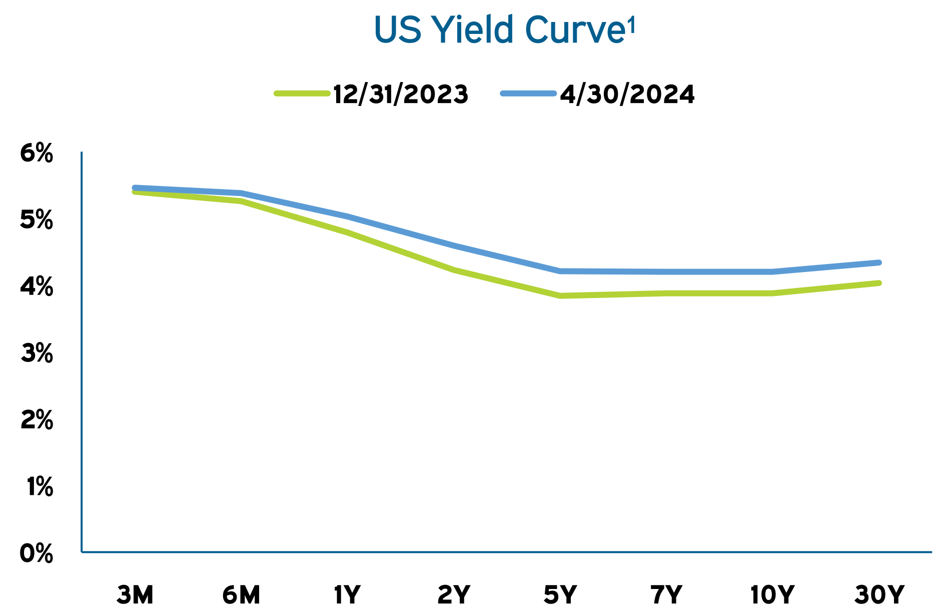
## Fixed Income: The Bloomberg Universal index fell 2.3% in April.

→ Bonds also felt pressure in April of above expectations economic data and the related shift in interest rate expectations. The anticipated start date of interest rate cuts has been pushed back as well as the number of cuts for 2024.

→ The broad US bond market (Bloomberg Aggregate) fell 2.5% with the broad TIPS market declining 1.7%. The less interest rate sensitive short-term TIPS index fell only slightly (0.1%) for the month.

→ High yield bonds (-0.9%) also declined, but by less than the broad market with spreads remaining relatively tight to Treasury equivalents.

[1] Source: Bloomberg. JPM GBI-EM data is from PARis. Data is as of April 30, 2024. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.



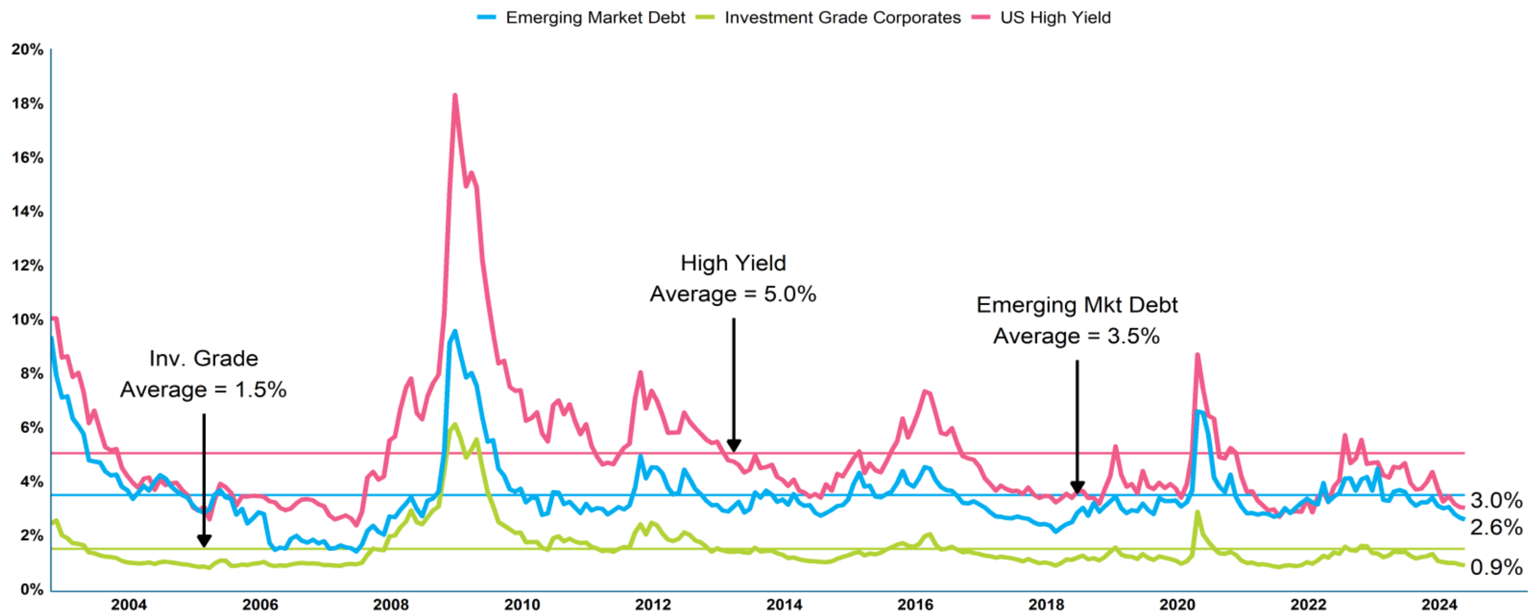

→ Interest rates moved significantly higher over the month due to the largely above expectations economic data, particularly inflation, and the related shifts in monetary policy expectations.

→ The more policy sensitive two-year Treasury yield rose by 42 basis points to just over 5.0%, while the ten-year Treasury yield increased by 48 basis points to a year-to-date high of 4.7%.

→ The yield curve remained inverted at month-end, with the spread between the two-year and ten-year Treasury at -35 basis points.

[1] Source: Bloomberg. Data is as of April 30, 2024.

## Credit Spreads vs. US Treasury Bonds[1]



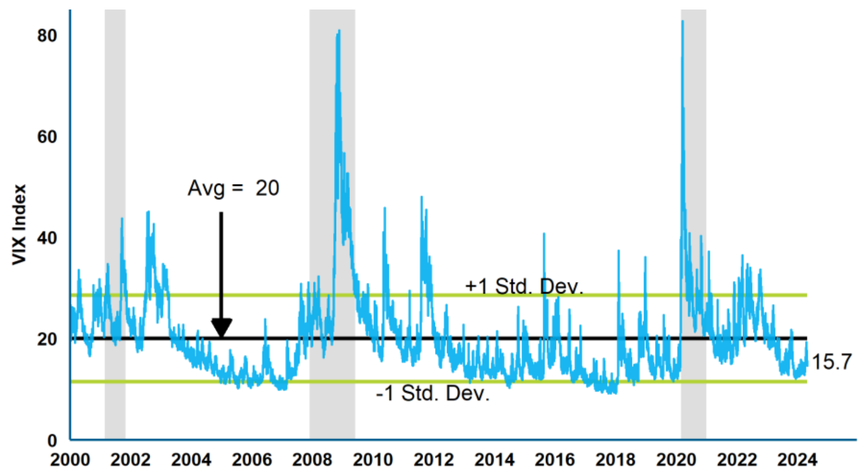

→ A positive economic outlook along with expectations of slightly lower interest rates by year-end has led to an increased risk appetite. This has benefited credit, with spreads (the added yield above a comparable maturity Treasury) narrowing.

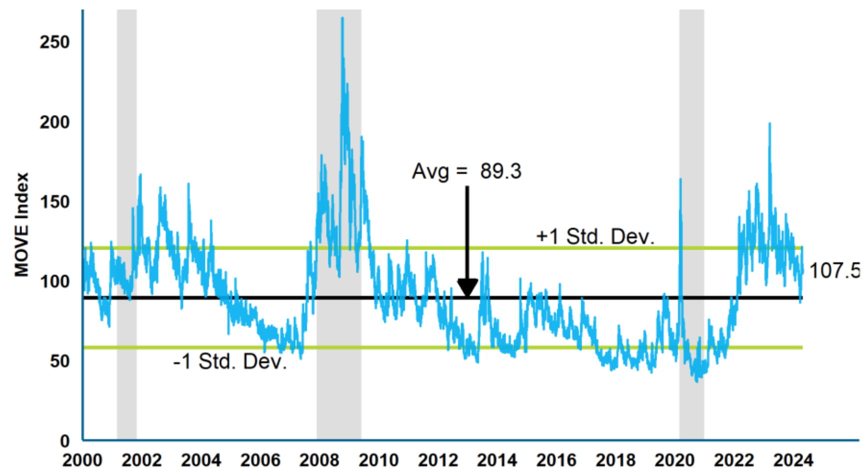
→ In April credit spreads were steady near post-pandemic lows with all spreads remaining below their respective long-run averages, particularly high yield.

→ Despite spreads being relatively tight, yields generally remain at above average levels compared to the last two decades, particularly for short-term issues.

[1] Source: Bloomberg. Data is as of April 30, 2024. Average lines denote the average of the investment grade, high yield, and emerging market spread values from September 2002 to the recent month-end, respectively.

## Equity and Fixed Income Volatility[1]



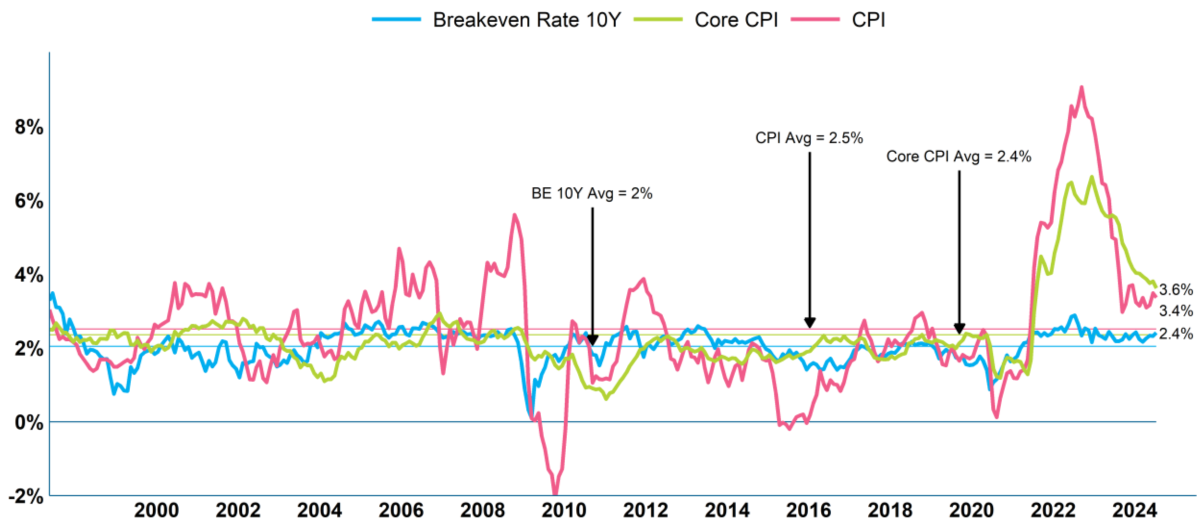




→ Strong economic data and the potential for policy rates to stay higher than previously anticipated drove volatility in the stock and bond markets in April. Both measures finished the month off their mid-month peaks though.

→ Volatility in equities (VIX) ended April below its long-run average while volatility in bonds (MOVE) rose above its long-run average.

[1] Equity Volatility – Source: FRED. Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of April 2024. The average line indicated is the average of the VIX and MOVE values between January 2000 and April 2024.

## US Ten-Year Breakeven Inflation and CPI[1]




→ Year-over-year headline inflation fell in April (3.5% to 3.4%) and met expectations.

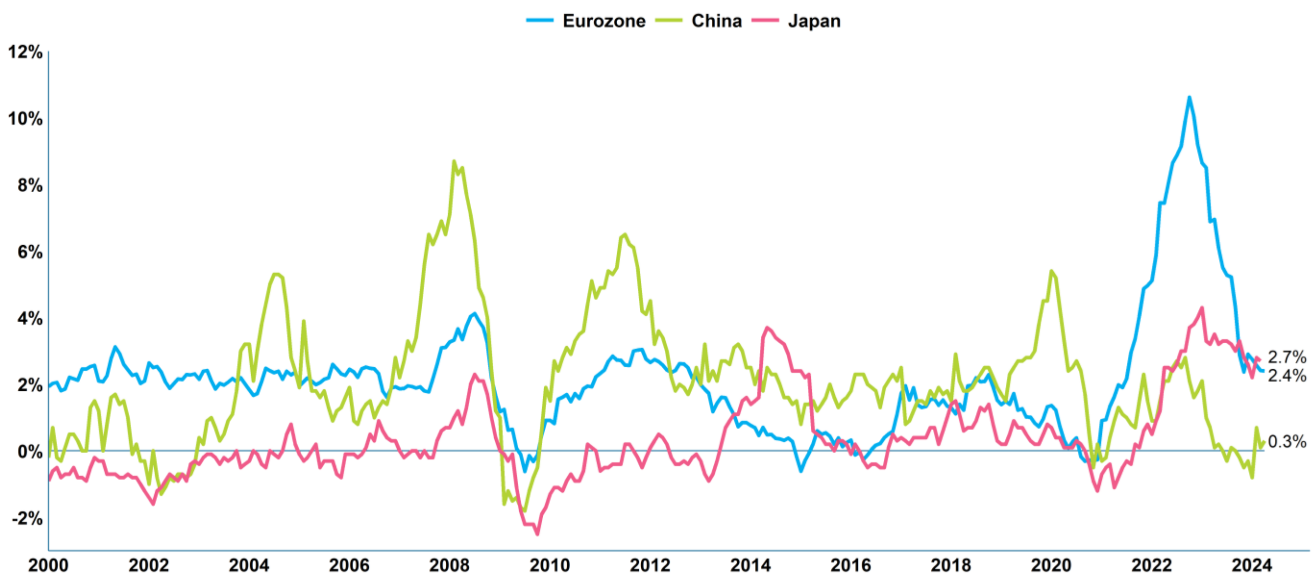
→ Month-over-month inflation rose 0.3% in April, slightly below the March gain of 0.4%. Energy (mainly gasoline) and shelter accounted for more than seventy percent of inflation gains in April, with food prices unchanged.

→ Core inflation (excluding food and energy) also fell in April (3.8% to 3.6%) and matched expectations. Shelter, transportation (particularly car insurance), and medical care services all rose for the month while new and used cars and furnishings fell.

→ Inflation expectations (breakevens) have remained relatively stable despite the significant volatility in inflation.

[1] Source: FRED. Data is as April 2024. The CPI and 10 Year Breakeven average lines denote the average values from February 1997 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

## Global Inflation (CPI Trailing Twelve Months)[1]




→ Outside the US, inflation is also easing across major economies from the recent peaks.

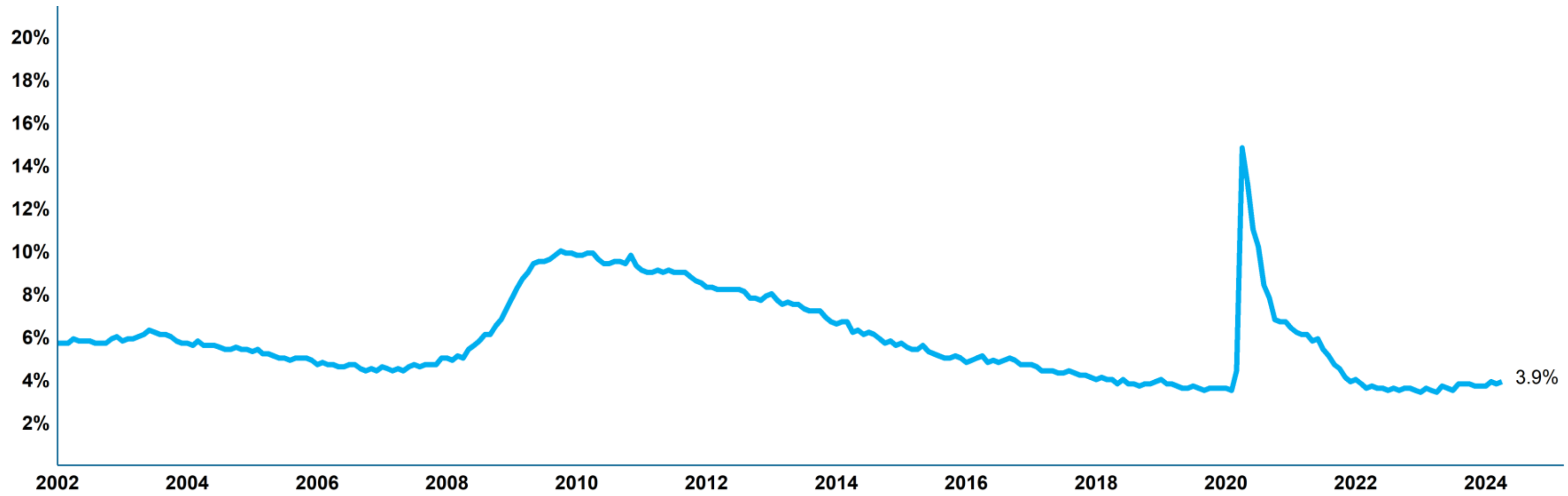
→ In the eurozone, inflation experienced a dramatic decline last year but remains above the central bank's 2% target. In April, inflation held steady at 2.4%, a level below the 3.4% year-over-year reading in the US.

→ Inflation in Japan has slowly declined from the early 2023 peak of 4.3%, but it remains near levels not seen in a decade. In the most recent reading, inflation fell slightly from 2.8% to 2.7%.

→ In China, inflation levels remain well below other major economies given slowing economic growth. Prices did rise in April though from 0.1% to 0.3% as policy stimulus and liquidity injections into banks helped ease financial conditions.

[1] Source: Bloomberg. Data is April 30, 2024, except Japan which is as of March 31, 2024.

## US Unemployment[1]

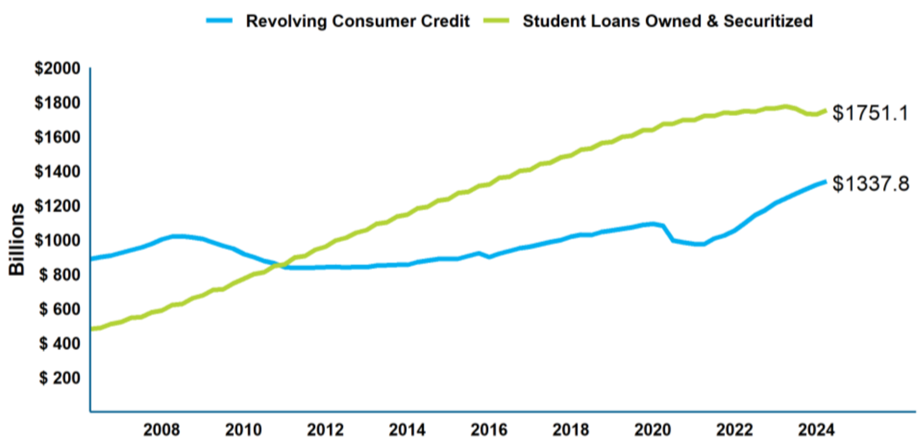



- → Overall, the US labor market remains healthy, with the unemployment rate low (3.9%), wage growth around 4% annually, and initial claims for unemployment staying subdued.
- → In April jobs added came in below expectations at 175,000 compared to 240,000, while the March number was revised upward (303,000 to 315,000). The healthcare sector added the most jobs followed by the social assistance, transportation and warehouse, and retail sectors.
- → The unemployment rate held steady at 3.9% and wage growth dropped slightly from 4.1% to 3.9% compared to a year prior, a level well off the 6.0% peak, but above inflation levels.
- → Quit rates have declined, and layoffs are stable, with 1.3 job openings per unemployed worker.

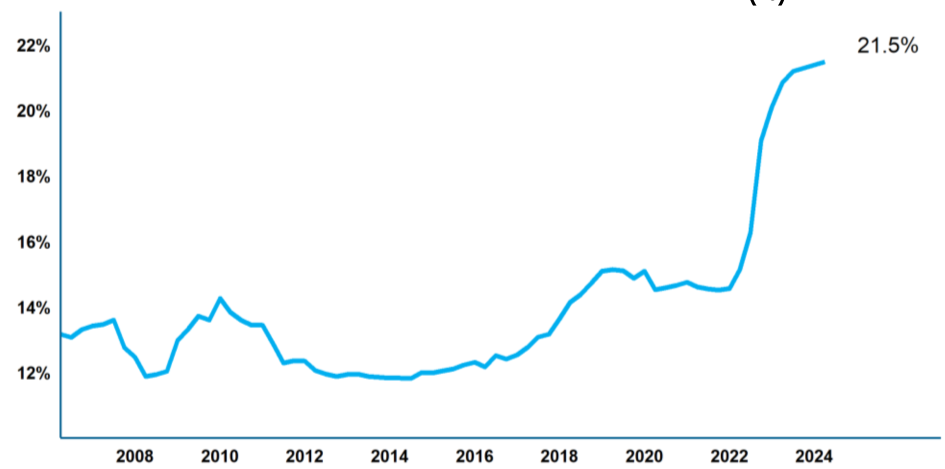
[1] Source: FRED. Data is as April 30, 2024.

## US Consumer Under Stress?[1]

### Revolving Consumer Credit & Student Loans ($B)




### Consumer Credit Card Interest Rates (%)




→ Despite the strong labor market and higher wages, pressures have started to build on the US consumer. This is an important consideration as consumer spending has been a key driver of economic growth.

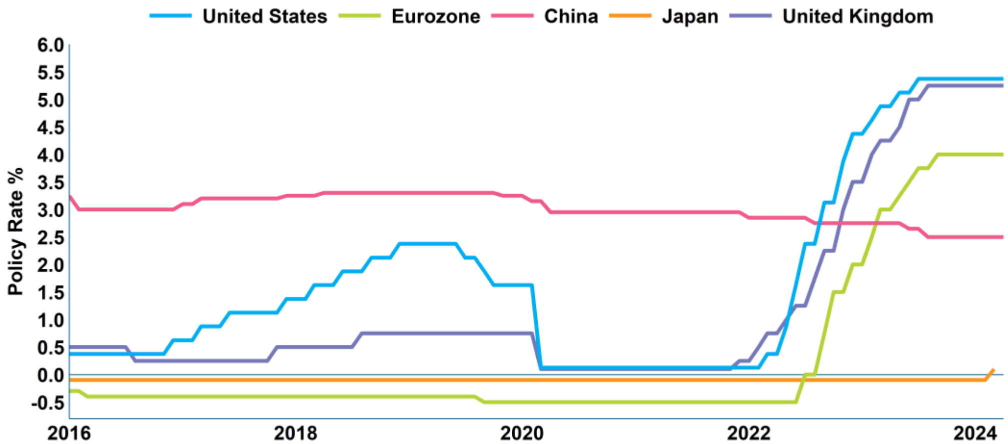
→ Revolving consumer credit surged to new highs in 2023 even as credit card interest rates hit levels not seen before (the prior peak was around 19% in the 1980s). Recently, we have also seen payment delinquencies on credit cards and auto loans start to increase, particularly for younger people.

→ The return of student loan repayments after a three-year pandemic-related reprieve could add to pressures on consumers' budgets. This might be partially mitigated by recently initiated repayment and forgiveness programs.

→ It is worth noting though that many people locked in low-rate fixed mortgages before rates increased and many corporations issued debt at very low levels, reducing the sensitivity to higher rates.

[1] Source: FRED. Data is as of March 31, 2024. Revolving Consumer Credit data is seasonally adjusted to remove distortions during the holiday season.

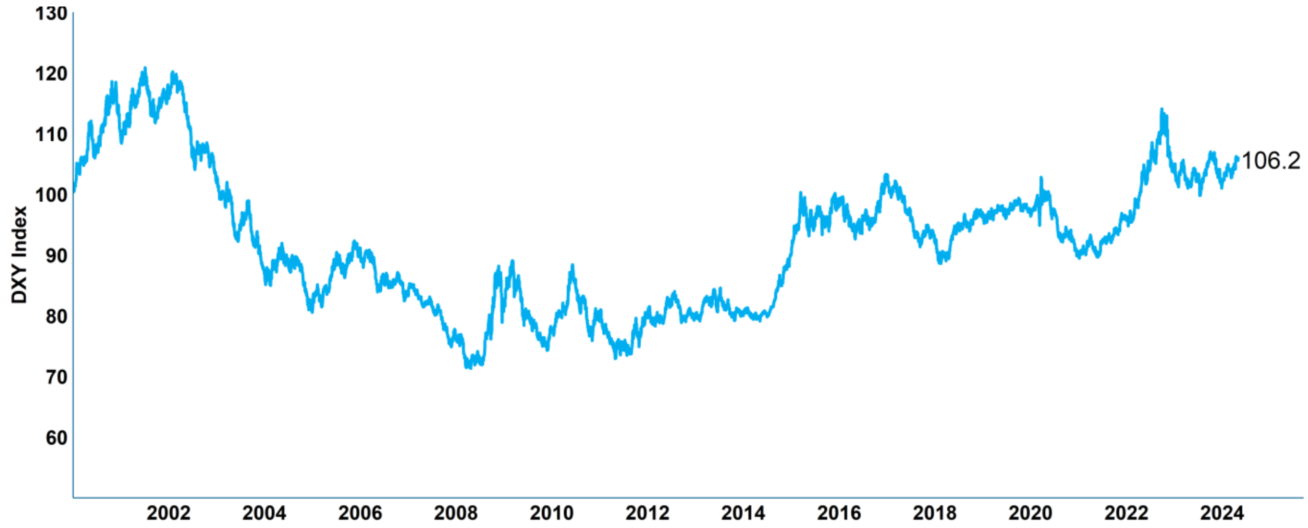
## Policy Rates[1]




- → The Fed has been on hold since July 2023 when it raised rates to a range of 5.25%-5.50%. Markets are now pricing in fewer than two rate cuts this year, down from close to seven late last year, as inflation has not reached their inflation target and the labor market remains relatively strong.
- → The European and UK central banks also recently paused their rate increases on slowing inflation. It appears that the European Central Bank could be one of the first central banks to cut rates with expectations over 95% for a June cut.
- → Given the return of inflation driven by wage growth the Bank of Japan (BOJ) recently ended the final negative interest rate policy, stopped purchasing exchange traded funds (ETFs), and moved away from its yield curve control.
- → The central bank in China has maintained interest rates at record low levels and continues to inject liquidity into the banking system, as weaker-than-expected economic data appears to indicate a widespread slowdown.

[1] Source: Bloomberg. Data is as of April 30, 2024.

## US Dollar vs. Broad Currencies[1]




→ The dollar continued to appreciate in April versus a basket of currencies of major trading partners.

→ Strong economic data in the US may delay policy rate cuts this year, which could contribute to continued upward pressure on the dollar as other countries pivot to rate cuts.

[1] Source: Bloomberg. Data as of April 30, 2024.

## Summary

### Key Trends:

→ According to the International Monetary Fund (IMF), global growth this year is expected to match the 2023 estimate at around 3.1% with most major economies predicted to avoid a recession. Continued strong economic growth does run the risk of inflation and interest rates staying higher for longer.

→ Key economic data in the US has recently started to come in below forecasts with expectations continuing to evolve for the timing and pace of interest rate cuts.

→ Outside the US we could see other central banks start cutting rates ahead of the Fed, with the European Central Bank (ECB) particularly in focus. The risk of policy errors remains elevated as central banks try to further reduce inflation toward targets while not tipping their economies into recession.

→ US consumers could feel pressure as certain components of inflation (e.g., shelter and insurance) remain high, borrowing costs are elevated, and the job market may weaken.

→ A focus for US equities going forward will be whether earnings can remain resilient if growth slows. Also, the future paths of the large technology companies that have driven market gains will be important.

→ Equity valuations remain lower in emerging and developed markets, but risks remain, including China's economic uncertainty and on-going weakness in the real estate sector which could spill over into key trading partners' economies. Japan's recent tightening of monetary policy along with changes in corporate governance in the country could influence relative results.

# Executive Summary

## Executive Summary

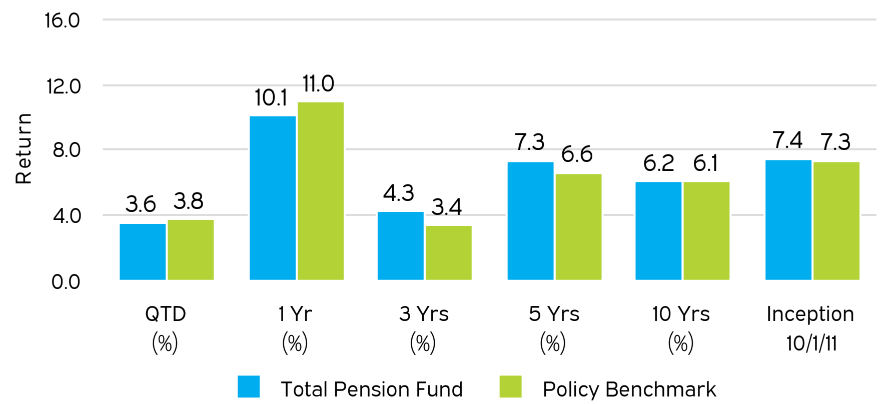
- → The Pension Fund's assets rose in the quarter (3.6%), ending the month of March valued at $330.0 million. The Fund has gained $13.2 million from the start of the year.
- → Cash flows into the fund have continued to grow, with a net cash inflow of $5.0 million over the trailing twelve months.
- → All asset classes were within the IPS' ranges at quarter end.
- → In the first quarter, the Fund gained 3.6% net of fees, underperforming the Policy Benchmark by 0.2% and outperforming the Target Policy Benchmark and Actual Allocation Benchmark by 0.6% and 0.5%, respectively.
- → Over the trailing year, the Pension Fund underperformed the Policy benchmark by 0.9% and beat the Target Policy Benchmark and Actual Allocation Benchmark by 0.9% and 1.1%, respectively.
- → The Fund continues to show less volatility on both an absolute basis and a relative basis. Within its peer group, the Fund ranks in the lowest quartile in annualized standard deviation.
- → The Equity portfolio (7.9%) underperformed the MSCI ACWI (8.2%) in the quarter, as the Fund's small cap and value biases underperformed the growthier large cap stocks.
- → After falling sharply in the fourth quarter of 2023, interest rates ticked back up to start the year buoyed by resilient economic data. This shift, along with lowered expectations for significant rate cuts in 2024, caused declines in bond prices.
- → Private equity investments continue to perform well, with the aggregate since inception IRR of 21.7% through the latest valuation date of 12/31/2023.

# Pension Fund Update
# As of March 31, 2024

## Portfolio Objective

The Pension Fund was established to provide income to retirees. The Pension Fund's assets are structured to provide growth from capital gains and income, while maintaining sufficient liquidity and stability to meet beneficiary payments. The assets of the Pension Fund will be invested with a long-term horizon consistent with the participant demographics and the goals of the Pension Fund.

## Gross Return Summary

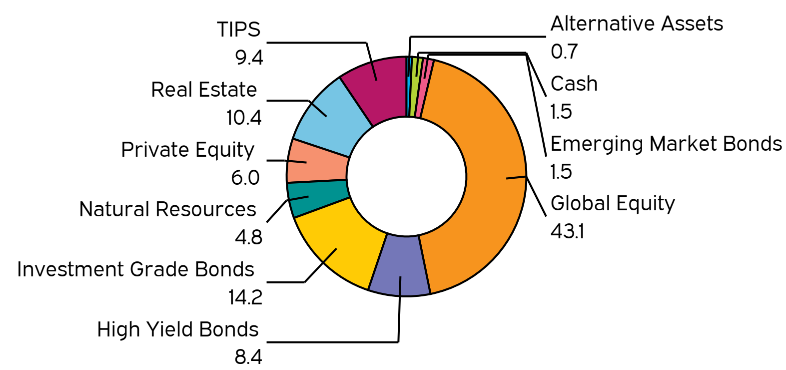



| | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Since Inception | Inception Date |
|---|---|---|---|---|---|---|---|
| Total Pension Fund | 3.6 | 10.1 | 4.3 | 7.3 | 6.2 | 7.4 | 10/01/2011 |
| Policy Benchmark | 3.8 | 11.0 | 3.4 | 6.6 | 6.1 | 7.3 | |
| Target Policy Benchmark | 3.0 | 9.2 | 3.9 | 7.0 | 6.5 | 7.7 | |
| Actual Allocation Benchmark | 3.1 | 9.0 | 3.3 | 6.0 | 5.6 | 7.0 | |

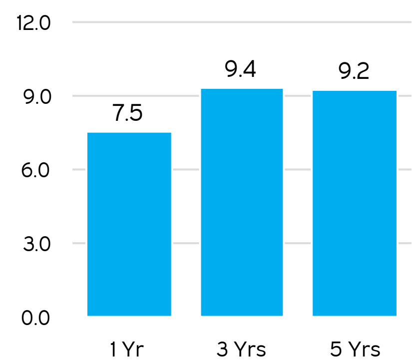
## Summary of Cash Flows

| | Quarter-To-Date | One Year |
|---|---|---|
| **Total Pension Fund** | | |
| Beginning Market Value | 316,814,542 | 295,443,667 |
| Net Cash Flows | 1,973,267 | 5,030,438 |
| Net Investment Change | 11,238,178 | 29,551,881 |
| Ending Market Value | 330,025,986 | 330,025,986 |

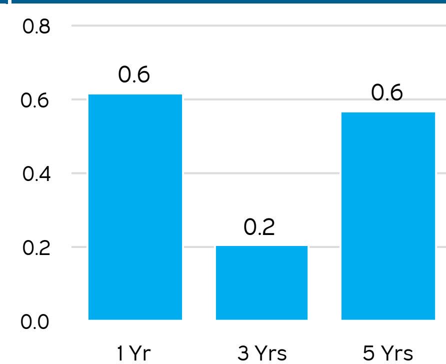
## Current Allocation




## Annualized Standard Deviation




## Sharpe Ratio

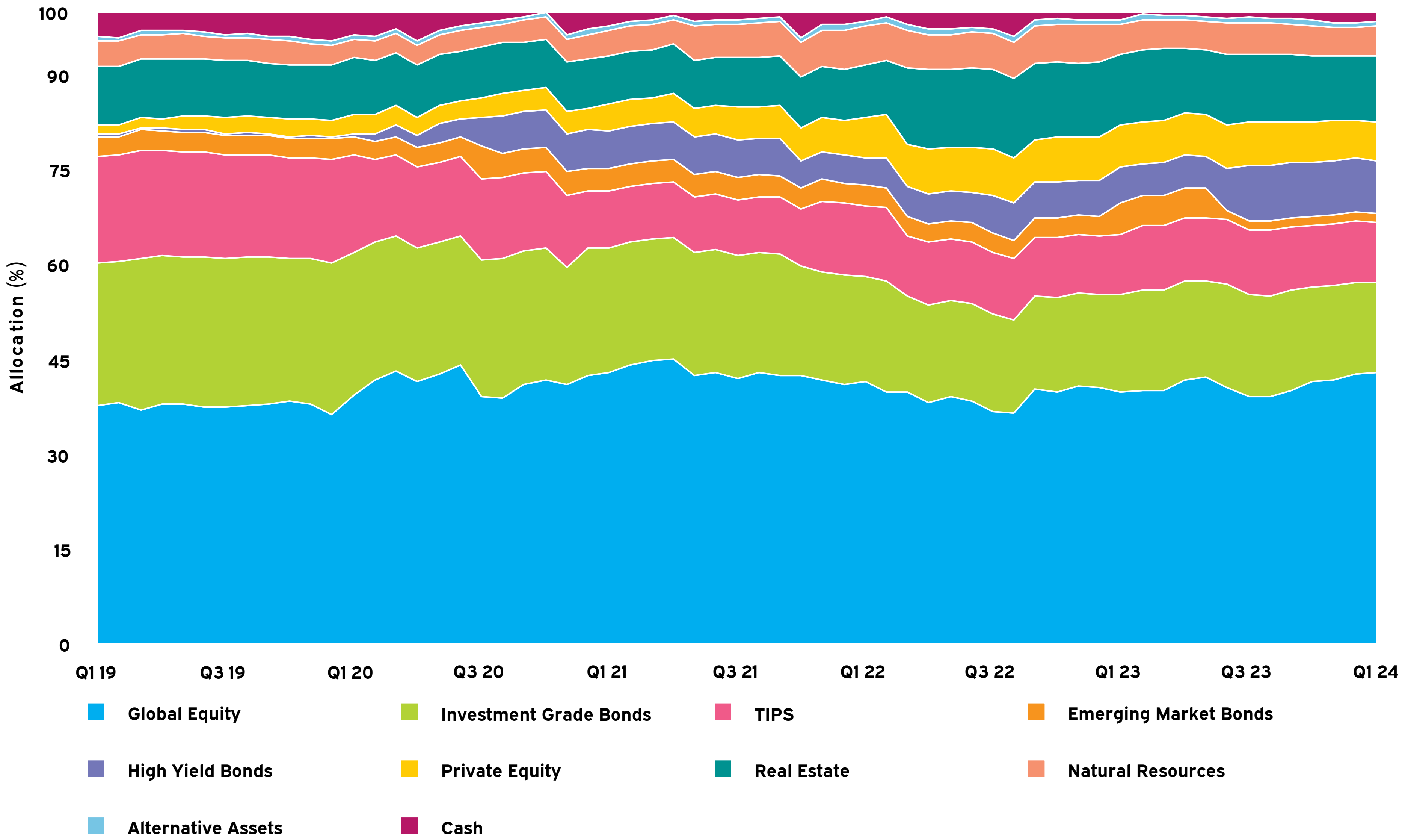


## Allocation vs. Targets and Policy

| | Current Balance ($) | Current Allocation (%) | Policy (%) | Difference (%) | Policy Range (%) | Within IPS Range? |
|---|---|---|---|---|---|---|
| US Equity | $89,564,858 | 27.1 | 25.0 | 2.1 | 15.0 - 35.0 | Yes |
| Developed Market Equity | $37,674,107 | 11.4 | 10.0 | 1.4 | 5.0 - 20.0 | Yes |
| Emerging Market Equity | $14,927,476 | 4.5 | 7.0 | -2.5 | 0.0 - 20.0 | Yes |
| Investment Grade Bonds | $46,907,835 | 14.2 | 14.0 | 0.2 | 8.0 - 25.0 | Yes |
| TIPS | $31,138,741 | 9.4 | 10.0 | -0.6 | 0.0 - 20.0 | Yes |
| Emerging Market Bonds | $4,885,209 | 1.5 | 7.0 | -5.5 | 0.0 - 15.0 | Yes |
| High Yield Bonds | $27,710,182 | 8.4 | 5.0 | 3.4 | 0.0 - 15.0 | Yes |
| Private Equity | $19,722,110 | 6.0 | 5.0 | 1.0 | 0.0 - 10.0 | Yes |
| Real Estate | $34,421,222 | 10.4 | 12.0 | -1.6 | 0.0 - 15.0 | Yes |
| Natural Resources | $15,726,294 | 4.8 | 5.0 | -0.2 | 0.0 - 10.0 | Yes |
| Alternative Assets | $2,427,117 | 0.7 | 0.0 | 0.7 | 0.0 - 5.0 | Yes |
| Cash | $4,920,835 | 1.5 | 0.0 | 1.5 | 0.0 - 5.0 | Yes |
| **Total** | **$330,025,986** | **100.0** | **100.0** | | | |

Equity regional allocations based on March 31, 2024 manager holdings.

## Asset Allocation History



MEKETA

# UNITE HERE Local 25 & Hotel Assoc of Washington, DC Pension Fund

## Total Pension Fund | As of March 31, 2024

### Asset Class Performance Summary

| | Market Value ($) | % of Portfolio | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Inception (%) | Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| **Total Pension Fund** | **330,025,986** | **100.0** | **3.6** | **10.1** | **4.3** | **7.3** | **6.2** | **7.4** | **Oct-11** |
| **Total Pension Fund (Net)** | **330,025,986** | **100.0** | **3.5** | **9.9** | **4.1** | **7.1** | **5.9** | **7.2** | **Oct-11** |
| *Policy Benchmark* | | | *3.8* | *11.0* | *3.4* | *6.6* | *6.1* | *7.3* | |
| *Target Policy Benchmark* | | | *3.0* | *9.2* | *3.9* | *7.0* | *6.5* | *7.7* | |
| *Actual Allocation Benchmark* | | | *3.1* | *9.0* | *3.3* | *6.0* | *5.6* | *7.0* | |
| **Global Equity** | **142,166,441** | **43.1** | **8.0** | **23.6** | **8.0** | **12.3** | **9.8** | **11.9** | **Oct-11** |
| **Global Equity (Net)** | **142,166,441** | **43.1** | **7.9** | **23.3** | **7.7** | **11.9** | **9.4** | **11.7** | **Oct-11** |
| *MSCI AC World Index (Net)* | | | *8.2* | *23.2* | *7.0* | *10.9* | *8.7* | *10.6* | |
| **Investment Grade Bond Assets** | **46,907,835** | **14.2** | **-0.6** | **2.2** | **-2.2** | **0.6** | **1.8** | **2.3** | **Oct-11** |
| **Investment Grade Bond Assets (Net)** | **46,907,835** | **14.2** | **-0.6** | **2.1** | **-2.2** | **0.6** | **1.7** | **2.2** | **Oct-11** |
| *Blmbg. U.S. Aggregate Index* | | | *-0.8* | *1.7* | *-2.5* | *0.4* | *1.5* | *1.6* | |
| **TIPS Assets** | **31,138,741** | **9.4** | **0.6** | **2.4** | **1.5** | **3.2** | **2.5** | **2.0** | **Dec-11** |
| **TIPS Assets (Net)** | **31,138,741** | **9.4** | **0.6** | **2.4** | **1.5** | **3.1** | **2.4** | **1.9** | **Dec-11** |
| *Blmbg. U.S. TIPS Index* | | | *-0.1* | *0.5* | *-0.5* | *2.5* | *2.2* | *1.8* | |
| **Emerging Market Debt Assets** | **4,885,209** | **1.5** | **3.0** | **13.6** | **-0.3** | **1.8** | **2.3** | **1.9** | **Mar-12** |
| **Emerging Market Debt Assets (Net)** | **4,885,209** | **1.5** | **2.8** | **12.9** | **-0.8** | **1.4** | **1.7** | **1.4** | **Mar-12** |
| *JPM EMBI Global Diversified* | | | *2.0* | *11.3* | *-1.4* | *0.7* | *3.0* | *3.4* | |
| **High Yield Bonds Assets** | **27,710,182** | **8.4** | **2.5** | **11.6** | **3.6** | **4.1** | **4.5** | **5.1** | **Sep-12** |
| **High Yield Bonds Assets (Net)** | **27,710,182** | **8.4** | **2.4** | **11.1** | **3.2** | **3.8** | **4.0** | **4.6** | **Sep-12** |
| *Blmbg. U.S. Corp: High Yield Index* | | | *1.5* | *11.2* | *2.2* | *4.2* | *4.4* | *5.2* | |
| **Real Estate Assets (Net)** | **34,421,222** | **10.4** | **-1.1** | **-9.1** | **0.8** | **1.2** | **5.1** | **5.9** | **Oct-11** |
| *NCREIF ODCE Equal Weighted (Net)* | | | *-2.4* | *-12.3* | *2.8* | *3.0* | *6.2* | *7.1* | |
| *Dow Jones U.S. Select REIT TR USD* | | | *-0.4* | *10.6* | *3.7* | *3.0* | *5.9* | *8.2* | |

See appendix for Policy Benchmark descriptions.

| | Market Value ($) | % of Portfolio | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Inception (%) | Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| **Natural Resources Assets** | 15,726,294 | 4.8 | 2.2 | 2.4 | 8.7 | 8.8 | 4.6 | 4.4 | Sep-12 |
| **Natural Resources Assets (Net)** | 15,726,294 | 4.8 | 2.2 | 2.2 | 8.6 | 8.7 | 4.5 | 4.3 | Sep-12 |
| *S&P Global LargeMidcap Resources & Commodities Index* | | | *1.1* | *0.9* | *8.7* | *8.6* | *4.3* | *4.1* | |
| **Private Equity Assets** | 19,722,110 | 6.0 | 0.6 | 0.8 | 11.7 | 19.1 | 19.8 | 22.1 | May-13 |
| **Private Equity Assets (Net)** | 19,722,110 | 6.0 | 0.6 | 0.8 | 11.7 | 19.1 | 19.8 | 22.1 | May-13 |
| *Preqin Private Equity 1Q Lagged* | | | *0.0* | *4.8* | *12.5* | *15.5* | *14.1* | *14.7* | |
| **Private Placement Assets** | 2,427,117 | 0.7 | | | | | | | |
| **Cash** | 4,920,835 | 1.5 | | | | | | | |

## Trailing Net Performance

| | Market Value ($) | % of Portfolio | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Inception (%) | Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| **Total Pension Fund** | **330,025,986** | **100.0** | **3.5** | **9.9** | **4.1** | **7.1** | **5.9** | **7.2** | **Oct-11** |
| *Policy Benchmark* | | | *3.8* | *11.0* | *3.4* | *6.6* | *6.1* | *7.3* | |
| *Target Policy Benchmark* | | | *3.0* | *9.2* | *3.9* | *7.0* | *6.5* | *7.7* | |
| *Actual Allocation Benchmark* | | | *3.1* | *9.0* | *3.3* | *6.0* | *5.6* | *7.0* | |
| **Global Equity** | **142,166,441** | **43.1** | **7.9** | **23.3** | **7.7** | **11.9** | **9.4** | **11.7** | **Oct-11** |
| *MSCI AC World Index (Net)* | | | *8.2* | *23.2* | *7.0* | *10.9* | *8.7* | *10.6* | |
| ASB Equity Index | 40,358,382 | 12.2 | 10.5 | 29.8 | 11.5 | 15.0 | -- | 13.2 | Aug-15 |
| *S&P 500 Index* | | | *10.6* | *29.9* | *11.5* | *15.0* | *--* | *13.2* | |
| SSgA Russell 1000 Value Index | 2,004,065 | 0.6 | 9.0 | 20.3 | 8.1 | -- | -- | 11.7 | Feb-21 |
| *Russell 1000 Value Index* | | | *9.0* | *20.3* | *8.1* | *--* | *--* | *11.7* | |
| SSgA Russell 1000 Growth | 25,162,304 | 7.6 | 11.4 | 39.0 | -- | -- | -- | 27.3 | Sep-22 |
| *Russell 1000 Growth Index* | | | *11.4* | *39.0* | *--* | *--* | *--* | *27.4* | |
| Fidelity Small Cap Index Fund | 3,626,672 | 1.1 | 5.2 | -- | -- | -- | -- | 5.2 | Jan-24 |
| *Russell 2000 Index* | | | *5.2* | *--* | *--* | *--* | *--* | *5.2* | |
| Artisan Global Value | 15,995,695 | 4.8 | 7.3 | 23.9 | 7.6 | 10.1 | -- | 9.2 | Feb-17 |
| *MSCI AC World Index (Net)* | | | *8.2* | *23.2* | *7.0* | *10.9* | *--* | *10.6* | |
| First Eagle Global Value | 21,006,479 | 6.4 | 6.6 | 13.7 | 7.0 | 8.7 | -- | 7.7 | Feb-17 |
| *MSCI AC World Index (Net)* | | | *8.2* | *23.2* | *7.0* | *10.9* | *--* | *10.6* | |
| Kopernik Global All-Cap Fund | 4,962,968 | 1.5 | 1.1 | 11.1 | 4.8 | 12.9 | -- | 8.0 | Feb-17 |
| *MSCI AC World Index (Net)* | | | *8.2* | *23.2* | *7.0* | *10.9* | *--* | *10.6* | |

| | Market Value ($) | % of Portfolio | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Inception (%) | Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| SSgA MSCI EAFE Index | 17,239,872 | 5.2 | 5.9 | 15.6 | 5.1 | 7.7 | -- | 6.2 | Oct-18 |
| *MSCI EAFE (Net)* | | | *5.8* | *15.3* | *4.8* | *7.3* | *--* | *5.9* | |
| SSgA Emerging Markets | 11,810,003 | 3.6 | 2.3 | 7.6 | -5.2 | 2.1 | -- | 5.1 | Apr-16 |
| *MSCI Emerging Markets (Net)* | | | *2.4* | *8.2* | *-5.1* | *2.2* | *--* | *5.3* | |
| **Investment Grade Bond Assets** | **46,907,835** | **14.2** | **-0.6** | **2.1** | **-2.2** | **0.6** | **1.7** | **2.2** | **Oct-11** |
| *Blmbg. U.S. Aggregate Index* | | | *-0.8* | *1.7* | *-2.5* | *0.4* | *1.5* | *1.6* | |
| Vanguard Intermediate-Term Corporate Bond Index | 7,897,238 | 2.4 | -0.2 | 4.6 | -1.4 | 1.7 | 2.8 | 2.6 | Dec-12 |
| *Blmbg. U.S. Credit Corp 5-10 Year Index* | | | *-0.2* | *4.8* | *-1.4* | *1.8* | *2.9* | *2.7* | |
| AFL-CIO Housing Investment Trust | 4,222,334 | 1.3 | -0.3 | 2.0 | -2.8 | 0.0 | 1.3 | 1.5 | Oct-11 |
| *Blmbg. U.S. Aggregate Index* | | | *-0.8* | *1.7* | *-2.5* | *0.4* | *1.5* | *1.6* | |
| *Blmbg. U.S. Mortgage TR* | | | *-1.0* | *1.4* | *-2.8* | *-0.4* | *1.1* | *1.2* | |
| SSgA U.S. Aggregate Bond Index | 34,788,263 | 10.5 | -0.7 | 1.7 | -2.4 | 0.4 | -- | 1.2 | Oct-18 |
| *Blmbg. U.S. Aggregate Index* | | | *-0.8* | *1.7* | *-2.5* | *0.4* | *--* | *1.2* | |
| **TIPS Assets** | **31,138,741** | **9.4** | **0.6** | **2.4** | **1.5** | **3.1** | **2.4** | **1.9** | **Dec-11** |
| *Blmbg. U.S. TIPS Index* | | | *-0.1* | *0.5* | *-0.5* | *2.5* | *2.2* | *1.8* | |
| Vanguard Short-Term TIPS | 23,180,956 | 7.0 | 0.9 | 3.2 | 2.2 | 3.2 | -- | 2.6 | Dec-16 |
| *BBg U.S. TIPS 0-5 Years* | | | *0.8* | *3.2* | *2.2* | *3.2* | *--* | *--* | |
| SSgA TIPS Index | 7,957,785 | 2.4 | 0.0 | 0.3 | -0.6 | 2.4 | -- | 2.7 | Oct-18 |
| *Blmbg. U.S. TIPS Index* | | | *-0.1* | *0.5* | *-0.5* | *2.5* | *--* | *2.8* | |

**Total Pension Fund | As of March 31, 2024**

| | Market Value ($) | % of Portfolio | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Inception (%) | Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| **Emerging Market Debt Assets** | **4,885,209** | **1.5** | **2.8** | **12.9** | **-0.8** | **1.4** | **1.7** | **1.4** | **Mar-12** |
| *JPM EMBI Global Diversified* | | | *2.0* | *11.3* | *-1.4* | *0.7* | *3.0* | *3.4* | |
| Payden Emerging Markets Bond Fund | 4,885,209 | 1.5 | 2.8 | 12.9 | -0.8 | -- | -- | 1.5 | May-19 |
| *JPM EMBI Global Diversified* | | | *2.0* | *11.3* | *-1.4* | *--* | *--* | *0.7* | |
| **High Yield Bonds Assets** | **27,710,182** | **8.4** | **2.4** | **11.1** | **3.2** | **3.8** | **4.0** | **4.6** | **Sep-12** |
| *Blmbg. U.S. Corp: High Yield Index* | | | *1.5* | *11.2* | *2.2* | *4.2* | *4.4* | *5.2* | |
| SKY Harbor Broad High Yield Market | 18,028,620 | 5.5 | 2.2 | 10.3 | 1.2 | 3.7 | 3.8 | 4.7 | Sep-12 |
| *Blmbg. U.S. Corp: High Yield Index* | | | *1.5* | *11.2* | *2.2* | *4.2* | *4.4* | *5.2* | |
| Aristotle Floating Rate Income Fund | 9,681,562 | 2.9 | 2.6 | 12.9 | 6.2 | -- | -- | 7.6 | May-20 |
| *Credit Suisse Leveraged Loan Index* | | | *2.5* | *12.4* | *5.8* | *--* | *--* | *8.4* | |
| **Real Estate Assets** | **34,421,222** | **10.4** | **-1.1** | **-9.1** | **0.8** | **1.2** | **5.1** | **5.9** | **Oct-11** |
| *NCREIF ODCE Equal Weighted (Net)* | | | *-2.4* | *-12.3* | *2.8* | *3.0* | *6.2* | *7.1* | |
| *Dow Jones U.S. Select REIT TR USD* | | | *-0.4* | *10.6* | *3.7* | *3.0* | *5.9* | *8.2* | |
| SSgA U.S. REIT Index | 19,307,051 | 5.9 | -0.4 | 10.3 | 3.6 | 2.9 | -- | 4.1 | Oct-18 |
| *Dow Jones U.S. Select REIT TR USD* | | | *-0.4* | *10.6* | *3.7* | *3.0* | *--* | *4.2* | |
| AFL-CIO Building Investment Trust | 10,130,467 | 3.1 | -1.0 | -29.0 | -11.0 | -6.4 | 0.7 | 2.7 | Oct-11 |
| *NCREIF ODCE Equal Weighted (Net)* | | | *-2.4* | *-12.3* | *2.8* | *3.0* | *6.2* | *7.1* | |
| *NCREIF Property Index* | | | *-1.0* | *-7.2* | *3.6* | *3.8* | *6.4* | *7.3* | |
| DRA Growth & Income Fund VIII | 444,430 | 0.1 | | | | | | | |
| DRA Growth & Income Fund IX | 1,655,872 | 0.5 | | | | | | | |

Private Real Estate Assets reflect the most recent NAV (12/31/2023) adjusted for subsequent cash flows.

| | Market Value ($) | % of Portfolio | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Inception (%) | Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| DRA Growth & Income Fund X LLC | 2,883,402 | 0.9 | | | | | | | |
| **Natural Resources Assets** | **15,726,294** | **4.8** | **2.2** | **2.2** | **8.6** | **8.7** | **4.5** | **4.3** | **Sep-12** |
| *S&P Global LargeMidcap Resources & Commodities Ind* | | | *1.1* | *0.9* | *8.7* | *8.6* | *4.3* | *4.1* | |
| SSgA S&P Global Large MidCap Natural Resources Index | 10,113,211 | 3.1 | 1.3 | 1.2 | 9.1 | 9.0 | 4.6 | 4.4 | Sep-12 |
| *S&P Global LargeMidcap Resources & Commodities Ind* | | | *1.1* | *0.9* | *8.7* | *8.6* | *4.3* | *4.1* | |
| First Eagle Institutional Gold, LP | 5,613,083 | 1.7 | 3.8 | 3.8 | -- | -- | -- | 4.1 | Jul-21 |
| *60% Gold (Spot)/ 40% FTSE Gold Mines* | | | *4.2* | *6.7* | *--* | *--* | *--* | *3.7* | |
| **Private Equity Assets** | **19,722,110** | **6.0** | **0.6** | **0.8** | **11.7** | **19.1** | **19.8** | **22.1** | **May-13** |
| *Preqin Private Equity 1Q Lagged* | | | *0.0* | *4.8* | *12.5* | *15.5* | *14.1* | *14.7* | |
| Ridgemont Equity Partners I | 72,917 | 0.0 | | | | | | | |
| SVB Strategic Investors Fund VIII | 6,410,703 | 1.9 | | | | | | | |
| Trilantic Capital Partners VI (North America), L.P. | 2,718,938 | 0.8 | | | | | | | |
| Flagship Pioneering Special Opportunities Fund II, L.P. | 944,520 | 0.3 | | | | | | | |
| Ironsides Direct Investment Fund V, L.P. | 3,371,044 | 1.0 | | | | | | | |
| Ironsides Partnership Fund V, L.P. | 2,382,298 | 0.7 | | | | | | | |
| Lightspeed Venture Partners Select IV | 1,782,073 | 0.5 | | | | | | | |
| KPS Special Situations Fund V | 1,043,185 | 0.3 | | | | | | | |
| Vitruvian Investment Partnership IV | 996,432 | 0.3 | | | | | | | |

Private Equity Assets reflect the most recent NAV (12/31/2023) adjusted for subsequent cash flows. SVB Strategic Investors VIII is as of 9/30/2023 adjusted for subsequent cash flows.

| | Market Value ($) | % of Portfolio | QTD (%) | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | Inception (%) | Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| **Private Placement Assets** | **2,427,117** | **0.7** | | | | | | | |
| ULLICO Class A | 2,427,117 | 0.7 | | | | | | | |
| **Cash** | **4,920,835** | **1.5** | | | | | | | |
| Cash | 4,920,835 | 1.5 | | | | | | | |

## Calendar Year Net Returns

| | 2023 (%) | 2023 (%) | 2022 (%) | 2021 (%) | 2020 (%) | 2019 (%) | 2018 (%) | 2017 (%) | 2016 (%) | 2015 (%) | 2014 (%) | 2013 (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Pension Fund** | **3.5** | **10.5** | **-10.0** | **12.1** | **12.4** | **15.6** | **-2.6** | **11.5** | **7.7** | **-1.4** | **5.2** | **10.2** |
| *Policy Benchmark* | *3.8* | *11.7* | *-13.3* | *11.6* | *11.9* | *17.7* | *-4.0* | *14.4* | *6.1* | *0.9* | *5.7* | *12.6* |
| *Target Policy Benchmark* | *3.0* | *10.0* | *-10.4* | *13.4* | *11.9* | *16.9* | *-3.0* | *14.8* | *9.3* | *-1.1* | *5.7* | *10.7* |
| *Actual Allocation Benchmark* | *3.2* | *10.3* | *-9.5* | *11.9* | *12.0* | *15.3* | *-4.6* | *14.3* | *8.5* | *-0.2* | *6.0* | *12.1* |
| **Global Equity** | **7.9** | **23.8** | **-16.9** | **17.0** | **19.2** | **26.8** | **-7.5** | **21.1** | **9.2** | **-1.2** | **5.5** | **23.2** |
| *MSCI AC World Index (Net)* | *8.2* | *22.2* | *-18.4* | *18.5* | *16.3* | *26.6* | *-9.4* | *24.0* | *7.9* | *-2.4* | *4.2* | *22.8* |
| ASB Equity Index | 10.5 | 26.3 | -18.1 | 28.6 | 18.4 | 31.4 | -4.4 | 21.8 | 11.9 | -- | -- | -- |
| *S&P 500 Index* | *10.6* | *26.3* | *-18.1* | *28.7* | *18.4* | *31.5* | *-4.4* | *21.8* | *12.0* | -- | -- | -- |
| SSgA Russell 1000 Value Index | 9.0 | 11.5 | -7.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Russell 1000 Value Index* | *9.0* | *11.5* | *-7.5* | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SSgA Russell 1000 Growth | 11.4 | 42.7 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Russell 1000 Growth Index* | *11.4* | *42.7* | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Fidelity Small Cap Index Fund | 5.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Russell 2000 Index* | *5.2* | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Artisan Global Value | 7.3 | 26.8 | -13.4 | 15.7 | 6.7 | 24.1 | -12.8 | -- | -- | -- | -- | -- |
| *MSCI AC World Index (Net)* | *8.2* | *22.2* | *-18.4* | *18.5* | *16.3* | *26.6* | *-9.4* | -- | -- | -- | -- | -- |
| First Eagle Global Value | 6.6 | 13.2 | -6.2 | 12.6 | 8.7 | 20.6 | -8.2 | -- | -- | -- | -- | -- |
| *MSCI AC World Index (Net)* | *8.2* | *22.2* | *-18.4* | *18.5* | *16.3* | *26.6* | *-9.4* | -- | -- | -- | -- | -- |
| Kopernik Global All-Cap Fund | 1.1 | 15.2 | -9.5 | 18.2 | 35.4 | 14.4 | -11.1 | -- | -- | -- | -- | -- |
| *MSCI AC World Index (Net)* | *8.2* | *22.2* | *-18.4* | *18.5* | *16.3* | *26.6* | *-9.4* | -- | -- | -- | -- | -- |
| SSgA MSCI EAFE Index | 5.9 | 18.6 | -14.2 | 11.6 | 8.2 | 22.4 | -- | -- | -- | -- | -- | -- |
| *MSCI EAFE (Net)* | *5.8* | *18.2* | *-14.5* | *11.3* | *7.8* | *22.0* | -- | -- | -- | -- | -- | -- |
| SSgA Emerging Markets | 2.3 | 9.6 | -20.1 | -2.6 | 18.2 | 18.3 | -14.6 | 37.2 | -- | -- | -- | -- |
| *MSCI Emerging Markets (Net)* | *2.4* | *9.8* | *-20.1* | *-2.5* | *18.3* | *18.4* | *-14.6* | *37.3* | -- | -- | -- | -- |

| | 2023 (%) | 2023 (%) | 2022 (%) | 2021 (%) | 2020 (%) | 2019 (%) | 2018 (%) | 2017 (%) | 2016 (%) | 2015 (%) | 2014 (%) | 2013 (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Investment Grade Bond Assets** | **-0.6** | **6.1** | **-12.9** | **-1.5** | **7.6** | **9.0** | **-0.4** | **3.8** | **3.1** | **0.6** | **5.9** | **-2.0** |
| *Blmbg. U.S. Aggregate Index* | *-0.8* | *5.5* | *-13.0* | *-1.5* | *7.5* | *8.7* | *0.0* | *3.5* | *2.6* | *0.5* | *6.0* | *-2.0* |
| Vanguard Intermediate-Term Corporate Bond Index | -0.2 | 8.9 | -14.1 | -1.5 | 9.6 | 14.0 | -1.7 | 5.5 | 5.3 | 0.9 | 7.5 | -1.8 |
| *Blmbg. U.S. Credit Corp 5-10 Year Index* | *-0.2* | *8.8* | *-13.9* | *-1.5* | *9.7* | *14.3* | *-1.7* | *5.6* | *5.6* | *0.9* | *7.3* | *-1.6* |
| AFL-CIO Housing Investment Trust | -0.3 | 5.2 | -13.5 | -1.0 | 6.2 | 7.8 | 0.2 | 3.2 | 1.9 | 1.1 | 6.1 | -2.4 |
| *Blmbg. U.S. Aggregate Index* | *-0.8* | *5.5* | *-13.0* | *-1.5* | *7.5* | *8.7* | *0.0* | *3.5* | *2.6* | *0.5* | *6.0* | *-2.0* |
| SSgA U.S. Aggregate Bond Index | -0.7 | 5.6 | -13.1 | -1.5 | 7.6 | 8.7 | -- | -- | -- | -- | -- | -- |
| *Blmbg. U.S. Aggregate Index* | *-0.8* | *5.5* | *-13.0* | *-1.5* | *7.5* | *8.7* | *--* | *--* | *--* | *--* | *--* | *--* |
| **TIPS Assets** | **0.6** | **4.4** | **-5.5** | **5.6** | **7.2** | **6.0** | **-0.3** | **1.9** | **4.7** | **-1.7** | **4.1** | **-8.8** |
| *Blmbg. U.S. TIPS Index* | *-0.1* | *3.9* | *-11.8* | *6.0* | *11.0* | *8.4* | *-1.3* | *3.0* | *4.7* | *-1.4* | *3.6* | *-8.6* |
| Vanguard Short-Term TIPS | 0.9 | 4.6 | -2.8 | 5.3 | 5.0 | 4.8 | 0.6 | 0.8 | -- | -- | -- | -- |
| *BBg U.S. TIPS 0-5 Years* | *0.8* | *4.6* | *-2.7* | *5.3* | *5.1* | *4.8* | *0.6* | *--* | *--* | *--* | *--* | *--* |
| SSgA TIPS Index | 0.0 | 3.9 | -12.0 | 5.9 | 11.0 | 8.4 | -- | -- | -- | -- | -- | -- |
| *Blmbg. U.S. TIPS Index* | *-0.1* | *3.9* | *-11.8* | *6.0* | *11.0* | *8.4* | *--* | *--* | *--* | *--* | *--* | *--* |
| **Emerging Market Debt Assets** | **2.8** | **11.5** | **-17.1** | **-1.7** | **6.7** | **17.3** | **-8.5** | **11.6** | **14.0** | **-7.0** | **-3.7** | **-10.7** |
| *JPM EMBI Global Diversified* | *2.0* | *11.1* | *-17.8* | *-1.8* | *5.3* | *15.0* | *-4.3* | *10.3* | *10.2* | *1.2* | *7.4* | *-5.2* |
| Payden Emerging Markets Bond Fund | 2.8 | 11.5 | -17.1 | -1.7 | 6.7 | -- | -- | -- | -- | -- | -- | -- |
| *JPM EMBI Global Diversified* | *2.0* | *11.1* | *-17.8* | *-1.8* | *5.3* | *--* | *--* | *--* | *--* | *--* | *--* | *--* |
| **High Yield Bonds Assets** | **2.4** | **12.5** | **-8.4** | **5.8** | **1.2** | **13.3** | **-0.7** | **5.9** | **12.8** | **-2.1** | **1.8** | **7.3** |
| *Blmbg. U.S. Corp: High Yield Index* | *1.5* | *13.4* | *-11.2* | *5.3* | *7.1* | *14.3* | *-2.1* | *7.5* | *17.1* | *-4.5* | *2.5* | *7.4* |
| SKY Harbor Broad High Yield Market | 2.2 | 11.8 | -13.4 | 6.4 | 7.0 | 13.4 | -2.7 | 7.6 | 15.4 | -3.7 | 1.1 | 9.3 |
| *Blmbg. U.S. Corp: High Yield Index* | *1.5* | *13.4* | *-11.2* | *5.3* | *7.1* | *14.3* | *-2.1* | *7.5* | *17.1* | *-4.5* | *2.5* | *7.4* |
| Pacific Funds Floating Rate Income Fund | 2.6 | 13.9 | -0.8 | 4.6 | -- | -- | -- | -- | -- | -- | -- | -- |
| *Credit Suisse Leveraged Loan Index* | *2.5* | *13.0* | *-1.1* | *5.4* | *--* | *--* | *--* | *--* | *--* | *--* | *--* | *--* |
| **Real Estate Assets** | **-1.1** | **-10.3** | **-4.2** | **21.7** | **-1.4** | **7.8** | **7.0** | **5.7** | **8.0** | **12.2** | **14.9** | **7.0** |
| *NCREIF ODCE Equal Weighted (Net)* | *-2.4* | *-13.3* | *7.6* | *21.9* | *0.8* | *5.2* | *7.3* | *6.9* | *8.3* | *14.2* | *11.4* | *12.4* |
| *Dow Jones U.S. Select REIT TR USD* | *-0.4* | *14.0* | *-26.0* | *45.9* | *-11.2* | *23.1* | *-4.2* | *3.8* | *6.6* | *4.5* | *31.9* | *1.3* |

| | 2023 (%) | 2023 (%) | 2022 (%) | 2021 (%) | 2020 (%) | 2019 (%) | 2018 (%) | 2017 (%) | 2016 (%) | 2015 (%) | 2014 (%) | 2013 (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SSgA U.S. REIT Index | -0.4 | 13.8 | -26.0 | 45.8 | -11.2 | 22.9 | -- | -- | -- | -- | -- | -- |
| *Dow Jones U.S. Select REIT TR USD* | *-0.4* | *14.0* | *-26.0* | *45.9* | *-11.2* | *23.1* | *--* | *--* | *--* | *--* | *--* | *--* |
| AFL-CIO Building Investment Trust | -1.0 | -34.0 | -3.4 | 12.7 | -0.8 | 3.1 | 7.1 | 4.5 | 6.8 | 14.3 | 12.0 | 9.7 |
| *NCREIF ODCE Equal Weighted (Net)* | *-2.4* | *-13.3* | *7.6* | *21.9* | *0.8* | *5.2* | *7.3* | *6.9* | *8.3* | *14.2* | *11.4* | *12.4* |
| *NCREIF Property Index* | *-1.0* | *-7.9* | *5.5* | *17.7* | *1.6* | *6.4* | *6.7* | *7.0* | *8.0* | *13.3* | *11.8* | *11.0* |
| DRA Growth & Income Fund VIII | | | | | | | | | | | | |
| DRA Growth & Income Fund IX | | | | | | | | | | | | |
| DRA Growth & Income Fund X LLC | | | | | | | | | | | | |
| **Natural Resources Assets** | **2.2** | **1.9** | **11.1** | **24.0** | **2.2** | **16.0** | **-9.2** | **18.7** | **30.7** | **-27.3** | **-9.7** | **-2.6** |
| *S&P Global LargeMidcap Resources & Commodities Index* | *1.1* | *-1.6* | *14.7* | *26.3* | *1.5* | *15.9* | *-9.4* | *18.1* | *30.8* | *-27.5* | *-9.9* | *-2.9* |
| SSgA S&P Global Large MidCap Natural Resources Index | 1.3 | -1.4 | 15.1 | 26.5 | 2.2 | 16.0 | -9.2 | 18.7 | 30.7 | -27.3 | -9.7 | -2.6 |
| *S&P Global LargeMidcap Resources & Commodities Index* | *1.1* | *-1.6* | *14.7* | *26.3* | *1.5* | *15.9* | *-9.4* | *18.1* | *30.8* | *-27.5* | *-9.9* | *-2.9* |
| First Eagle Institutional Gold, LP | 3.8 | 9.3 | -0.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *60% Gold (Spot)/ 40% FTSE Gold Mines* | *4.2* | *12.2* | *-6.0* | *--* | *--* | *--* | *--* | *--* | *--* | *--* | *--* | *--* |
| **Private Equity Assets** | **0.6** | **0.4** | **15.0** | **45.2** | **19.9** | **19.1** | **30.7** | **9.1** | **29.9** | **16.1** | **35.1** | **--** |
| *Preqin Private Equity 1Q Lagged* | *0.0* | *7.1* | *2.9* | *44.7* | *17.0* | *10.2* | *15.7* | *18.0* | *10.2* | *10.9* | *16.4* | *--* |
| Ridgemont Equity Partners I | | | | | | | | | | | | |
| SVB Strategic Investors Fund VIII | | | | | | | | | | | | |
| Trilantic Capital Partners VI (North America), L.P. | | | | | | | | | | | | |
| Flagship Pioneering Special Opportunities Fund II, L.P. | | | | | | | | | | | | |
| Ironsides Direct Investment Fund V, L.P. | | | | | | | | | | | | |
| Ironsides Partnership Fund V, L.P. | | | | | | | | | | | | |
| Lightspeed Venture Partners Select IV | | | | | | | | | | | | |
| KPS Special Situations Fund V | | | | | | | | | | | | |

| | 2023 (%) | 2023 (%) | 2022 (%) | 2021 (%) | 2020 (%) | 2019 (%) | 2018 (%) | 2017 (%) | 2016 (%) | 2015 (%) | 2014 (%) | 2013 (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vitruvian Investment Partnership IV | | | | | | | | | | | | |
| **Private Placement Assets** | | | | | | | | | | | | |
| ULLICO Class A | | | | | | | | | | | | |
| **Cash** | | | | | | | | | | | | |
| Cash | | | | | | | | | | | | |

## Risk Return Statistics

| | 3 Yrs (%) Total Pension Fund | 5 Yrs (%) Total Pension Fund |
|---|---|---|
| **RETURN SUMMARY STATISTICS** | | |
| Maximum Return | 5.2 | 6.0 |
| Minimum Return | -5.9 | -6.3 |
| Return | 4.1 | 7.1 |
| Excess Return | 1.9 | 5.3 |
| Excess Performance | 0.7 | 0.5 |
| **RISK SUMMARY STATISTICS** | | |
| Beta | 0.9 | 0.9 |
| Up Capture | 91.8 | 90.7 |
| Down Capture | 85.3 | 82.1 |
| **RISK/RETURN SUMMARY STATISTICS** | | |
| Standard Deviation | 9.4 | 9.2 |
| Sortino Ratio | 0.3 | 0.9 |
| Alpha | 1.0 | 1.3 |
| Sharpe Ratio | 0.2 | 0.6 |
| Excess Risk | 9.3 | 9.3 |
| Tracking Error | 1.9 | 2.1 |
| Information Ratio | 0.3 | 0.2 |
| **CORRELATION STATISTICS** | | |
| R-Squared | 1.0 | 1.0 |
| Actual Correlation | 1.0 | 1.0 |

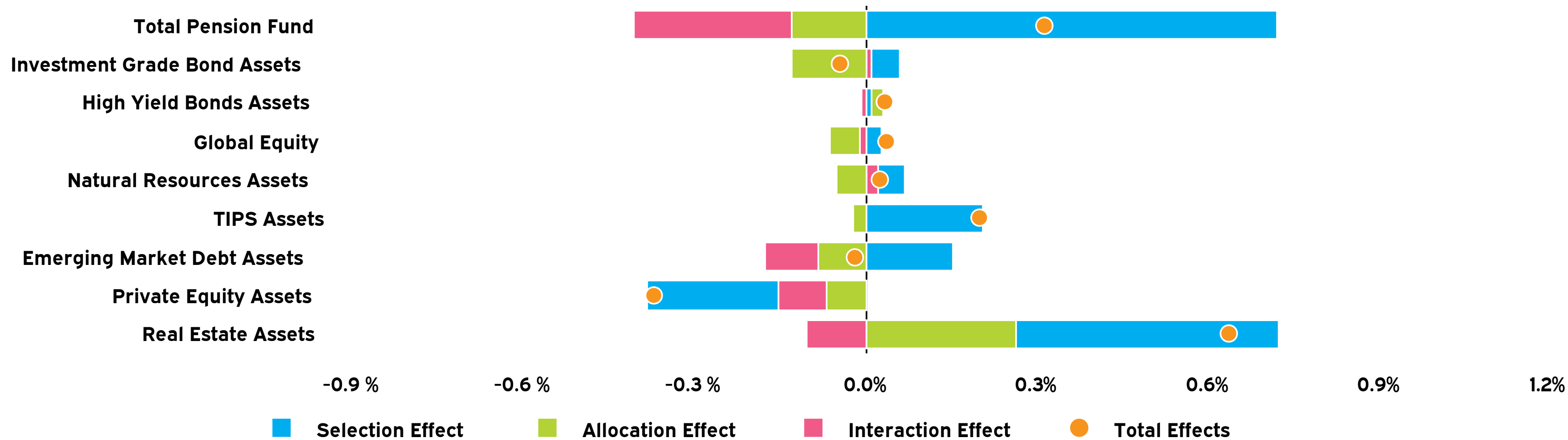
## Statistics Summary
## 3 Years Ending March 31, 2024

| | Return | Standard Deviation | Information Ratio | Beta | Sharpe Ratio | Tracking Error |
|---|---|---|---|---|---|---|
| Total Pension Fund | 4.1 | 9.4 | 0.3 | 0.9 | 0.2 | 1.9 |
| Policy Benchmark | 3.4 | 10.5 | - | 1.0 | 0.1 | 0.0 |
| Global Equity | 7.7 | 15.6 | 0.3 | 0.9 | 0.4 | 2.0 |
| MSCI AC World Index (Net) | 7.0 | 16.4 | - | 1.0 | 0.3 | 0.0 |
| ASB Equity Index | 11.5 | 17.3 | -1.4 | 1.0 | 0.6 | 0.0 |
| S&P 500 Index | 11.5 | 17.3 | - | 1.0 | 0.6 | 0.0 |
| SSgA Russell 1000 Value Index | 8.1 | 16.2 | -0.3 | 1.0 | 0.4 | 0.0 |
| Russell 1000 Value Index | 8.1 | 16.2 | - | 1.0 | 0.4 | 0.0 |
| SSgA Russell 1000 Growth | - | - | - | - | - | - |
| Russell 1000 Growth Index | 12.5 | 20.8 | - | 1.0 | 0.6 | 0.0 |
| Fidelity Small Cap Index Fund | - | - | - | - | - | - |
| Russell 2000 Index | -0.1 | 21.1 | - | 1.0 | 0.0 | 0.0 |
| Artisan Global Value | 7.6 | 16.2 | 0.1 | 0.9 | 0.4 | 6.4 |
| MSCI AC World Index (Net) | 7.0 | 16.4 | - | 1.0 | 0.3 | 0.0 |
| First Eagle Global Value | 7.0 | 13.4 | -0.1 | 0.8 | 0.4 | 6.3 |
| MSCI AC World Index (Net) | 7.0 | 16.4 | - | 1.0 | 0.3 | 0.0 |
| Kopernik Global All-Cap Fund | 4.8 | 14.9 | -0.2 | 0.7 | 0.2 | 11.5 |
| MSCI AC World Index (Net) | 7.0 | 16.4 | - | 1.0 | 0.3 | 0.0 |
| SSgA MSCI EAFE Index | 5.1 | 16.6 | 1.7 | 1.0 | 0.2 | 0.2 |
| MSCI EAFE (Net) | 4.8 | 16.6 | - | 1.0 | 0.2 | 0.0 |

| | Return | Standard Deviation | Information Ratio | Beta | Sharpe Ratio | Tracking Error |
|---|---|---|---|---|---|---|
| SSgA Emerging Markets | -5.2 | 18.2 | 0.0 | 1.0 | -0.3 | 1.9 |
| MSCI Emerging Markets (Net) | -5.1 | 17.5 | - | 1.0 | -0.4 | 0.0 |
| Investment Grade Bond Assets | -2.2 | 7.3 | 0.8 | 1.0 | -0.6 | 0.3 |
| Blmbg. U.S. Aggregate Index | -2.5 | 7.1 | - | 1.0 | -0.7 | 0.0 |
| Vanguard Intermediate-Term Corporate Bond Index | -1.4 | 8.7 | 0.0 | 1.0 | -0.4 | 0.3 |
| Blmbg. U.S. Credit Corp 5-10 Year Index | -1.4 | 8.7 | - | 1.0 | -0.4 | 0.0 |
| AFL-CIO Housing Investment Trust | -2.8 | 6.8 | -0.4 | 1.0 | -0.8 | 1.0 |
| Blmbg. U.S. Aggregate Index | -2.5 | 7.1 | - | 1.0 | -0.7 | 0.0 |
| SSgA U.S. Aggregate Bond Index | -2.4 | 7.1 | 0.1 | 1.0 | -0.7 | 0.2 |
| Blmbg. U.S. Aggregate Index | -2.5 | 7.1 | - | 1.0 | -0.7 | 0.0 |
| TIPS Assets | 1.5 | 4.2 | 0.6 | 0.6 | -0.2 | 3.0 |
| Blmbg. U.S. TIPS Index | -0.5 | 7.1 | - | 1.0 | -0.4 | 0.0 |
| Vanguard Short-Term TIPS | 2.2 | 3.2 | -0.2 | 1.0 | -0.1 | 0.1 |
| BBg U.S. TIPS 0-5 Years | 2.2 | 3.2 | - | 1.0 | -0.1 | 0.0 |
| SSgA TIPS Index | -0.6 | 7.0 | -0.3 | 1.0 | -0.4 | 0.2 |
| Blmbg. U.S. TIPS Index | -0.5 | 7.1 | - | 1.0 | -0.4 | 0.0 |
| Emerging Market Debt Assets | -0.8 | 11.6 | 0.3 | 1.1 | -0.2 | 2.0 |
| JPM EMBI Global Diversified | -1.4 | 10.7 | - | 1.0 | -0.3 | 0.0 |
| Payden Emerging Markets Bond Fund | -0.8 | 11.6 | 0.3 | 1.1 | -0.2 | 2.0 |
| JPM EMBI Global Diversified | -1.4 | 10.7 | - | 1.0 | -0.3 | 0.0 |
| High Yield Bonds Assets | 3.2 | 5.7 | 0.2 | 0.7 | 0.1 | 3.4 |
| Blmbg. U.S. Corp: High Yield Index | 2.2 | 8.3 | - | 1.0 | 0.0 | 0.0 |

| | Return | Standard Deviation | Information Ratio | Beta | Sharpe Ratio | Tracking Error |
|---|---|---|---|---|---|---|
| SKY Harbor Broad High Yield Market | 1.2 | 7.4 | -0.5 | 0.9 | -0.2 | 2.1 |
| Blmbg. U.S. Corp: High Yield Index | 2.2 | 8.3 | - | 1.0 | 0.0 | 0.0 |
| Aristotle Floating Rate Income Fund | 6.2 | 3.9 | 0.5 | 1.1 | 0.9 | 0.8 |
| Credit Suisse Leveraged Loan Index | 5.8 | 3.6 | - | 1.0 | 0.9 | 0.0 |
| Real Estate Assets | 0.8 | 11.0 | -0.2 | 0.6 | -0.1 | 9.9 |
| NCREIF ODCE Equal Weighted (Net) | 2.8 | 9.7 | - | 1.0 | 0.1 | 0.0 |
| SSgA U.S. REIT Index | 3.6 | 21.3 | -1.2 | 1.0 | 0.2 | 0.1 |
| Dow Jones U.S. Select RESI | 3.7 | 21.4 | - | 1.0 | 0.2 | 0.0 |
| AFL-CIO Building Investment Trust | -11.0 | 15.6 | -1.1 | 1.0 | -0.8 | 12.2 |
| NCREIF ODCE Equal Weighted (Net) | 2.8 | 9.7 | - | 1.0 | 0.1 | 0.0 |
| Natural Resources Assets | 8.6 | 17.5 | -0.1 | 0.8 | 0.4 | 5.5 |
| S&P Global LargeMidcap Resources & Commodities Ind | 8.7 | 20.0 | - | 1.0 | 0.4 | 0.0 |
| SSgA S&P Global Large MidCap Natural Resources Index | 9.1 | 19.9 | 0.5 | 1.0 | 0.4 | 0.5 |
| S&P Global LargeMidcap Resources & Commodities Ind | 8.7 | 20.0 | - | 1.0 | 0.4 | 0.0 |
| First Eagle Institutional Gold, LP | - | - | - | - | - | - |
| 60% Gold (Spot)/ 40% FTSE Gold Mines | 4.5 | 21.7 | - | 1.0 | 0.2 | 0.0 |

## Attribution Summary Chart




## Attribution Summary

| | Policy Weight (%) | Wtd. Actual Return (%) | Wtd. Index Return (%) | Excess Return (%) | Selection Effect (%) | Allocation Effect (%) | Interaction Effect (%) | Total Effect (%) |
|---|---|---|---|---|---|---|---|---|
| Investment Grade Bond Assets | 14.0 | 2.2 | 1.7 | 0.5 | 0.0 | -0.1 | 0.0 | 0.0 |
| High Yield Bonds Assets | 5.0 | 11.6 | 11.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Global Equity | 42.0 | 23.6 | 23.2 | 0.3 | 0.0 | -0.1 | 0.0 | 0.0 |
| Natural Resources Assets | 5.0 | 2.4 | 0.9 | 1.4 | 0.0 | -0.1 | 0.0 | 0.0 |
| TIPS Assets | 10.0 | 2.4 | 0.5 | 2.0 | 0.2 | 0.0 | 0.0 | 0.2 |
| Emerging Market Debt Assets | 7.0 | 13.6 | 11.3 | 2.3 | 0.2 | -0.1 | -0.1 | 0.0 |
| Private Equity Assets | 5.0 | 0.8 | 4.8 | -4.0 | -0.2 | -0.1 | -0.1 | -0.4 |
| Real Estate Assets | 12.0 | -8.9 | -12.3 | 3.4 | 0.5 | 0.3 | -0.1 | 0.6 |
| **Total Pension Fund** | **100.0** | **10.1** | **9.8** | **0.3** | **0.7** | **-0.1** | **-0.3** | **0.3** |

Gross of fees.

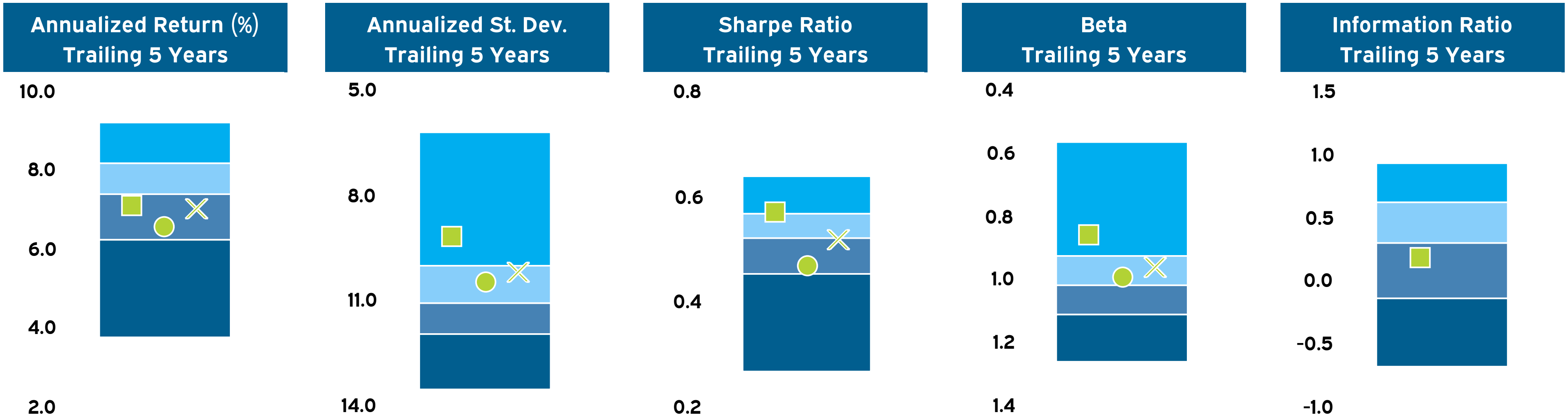
Differences in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by PARis.

## Cash Flow Summary
## Quarter to Date

| | Beginning Market Value | Net Cash Flows | Net Investment Change | Ending Market Value |
|---|---|---|---|---|
| ASB Equity Index | 36,510,229 | - | 3,848,152 | 40,358,382 |
| SSgA Russell 1000 Value Index | 1,838,807 | - | 165,259 | 2,004,065 |
| SSgA Russell 1000 Growth | 22,588,384 | - | 2,573,920 | 25,162,304 |
| Fidelity Small Cap Index Fund | 3,447,679 | - | 178,993 | 3,626,672 |
| Artisan Global Value | 14,907,020 | - | 1,088,675 | 15,995,695 |
| First Eagle Global Value | 19,711,048 | - | 1,295,431 | 21,006,479 |
| Kopernik Global All-Cap Fund | 4,909,023 | - | 53,945 | 4,962,968 |
| SSgA MSCI EAFE Index | 16,284,537 | - | 955,336 | 17,239,872 |
| SSgA Emerging Markets | 11,544,919 | - | 265,084 | 11,810,003 |
| Vanguard Intermediate-Term Corporate Bond Index | 7,916,749 | - | -19,511 | 7,897,238 |
| AFL-CIO Housing Investment Trust | 4,233,669 | - | -11,335 | 4,222,334 |
| SSgA U.S. Aggregate Bond Index | 35,044,747 | - | -256,484 | 34,788,263 |
| Vanguard Short-Term TIPS | 22,994,242 | - | 186,714 | 23,180,956 |
| SSgA TIPS Index | 7,959,114 | - | -1,328 | 7,957,785 |
| Payden Emerging Markets Bond Fund | 4,750,016 | - | 135,193 | 4,885,209 |
| SKY Harbor Broad High Yield Market | 17,634,954 | - | 393,666 | 18,028,620 |
| Aristotle Floating Rate Income Fund | 9,434,426 | - | 247,136 | 9,681,562 |
| SSgA U.S. REIT Index | 17,872,431 | 1,500,000 | -65,379 | 19,307,051 |
| AFL-CIO Building Investment Trust | 10,236,189 | - | -105,723 | 10,130,467 |
| DRA Growth & Income Fund VIII | 540,065 | - | -95,635 | 444,430 |
| DRA Growth & Income Fund IX | 1,783,813 | -78,098 | -49,843 | 1,655,872 |
| DRA Growth & Income Fund X LLC | 2,990,135 | -49,615 | -57,118 | 2,883,402 |
| SSgA S&P Global Large MidCap Natural Resources Index | 9,979,970 | - | 133,240 | 10,113,211 |
| First Eagle Institutional Gold, LP | 5,409,975 | - | 203,108 | 5,613,083 |

**Total Pension Fund | Quarter To Date Ending March 31, 2024**

| | Beginning Market Value | Net Cash Flows | Net Investment Change | Ending Market Value |
|---|---|---|---|---|
| Ridgemont Equity Partners I | 183,728 | -117,197 | 6,386 | 72,917 |
| SVB Strategic Investors Fund VIII | 6,410,703 | - | - | 6,410,703 |
| Trilantic Capital Partners VI (North America), L.P. | 2,773,744 | -15,865 | -38,941 | 2,718,938 |
| Flagship Pioneering Special Opportunities Fund II, L.P. | 908,376 | 25,000 | 11,144 | 944,520 |
| Ironsides Direct Investment Fund V, L.P. | 3,481,015 | -179,565 | 69,594 | 3,371,044 |
| Ironsides Partnership Fund V, L.P. | 2,327,578 | - | 54,720 | 2,382,298 |
| Lightspeed Venture Partners Select IV | 1,750,544 | - | 31,529 | 1,782,073 |
| KPS Special Situations Fund V | 1,053,980 | 1,782 | -12,577 | 1,043,185 |
| Vitruvian Investment Partnership IV | 938,606 | 70,933 | -13,108 | 996,432 |
| ULLICO Class A | 2,427,117 | - | - | 2,427,117 |
| Cash | 4,037,008 | 815,891 | 67,936 | 4,920,835 |
| **Total** | **316,814,542** | **1,973,267** | **11,238,178** | **330,025,986** |




| Annualized Return (%) | | |
|---|---|---|
| Total Pension Fund | 7.1 | (57) |
| Policy Benchmark | 6.6 | (70) |
| Target Policy Benchmark | 7.0 | (59) |
| 5th Percentile | 9.2 | |
| 1st Quartile | 8.1 | |
| Median | 7.3 | |
| 3rd Quartile | 6.2 | |
| 95th Percentile | 3.8 | |
| Population | 236 | |

| Annualized St. Dev. | | |
|---|---|---|
| Total Pension Fund | 9.2 | (16) |
| Policy Benchmark | 10.5 | (35) |
| Target Policy Benchmark | 10.2 | (28) |
| 5th Percentile | 6.3 | |
| 1st Quartile | 10.1 | |
| Median | 11.1 | |
| 3rd Quartile | 12.0 | |
| 95th Percentile | 13.6 | |
| Population | 236 | |

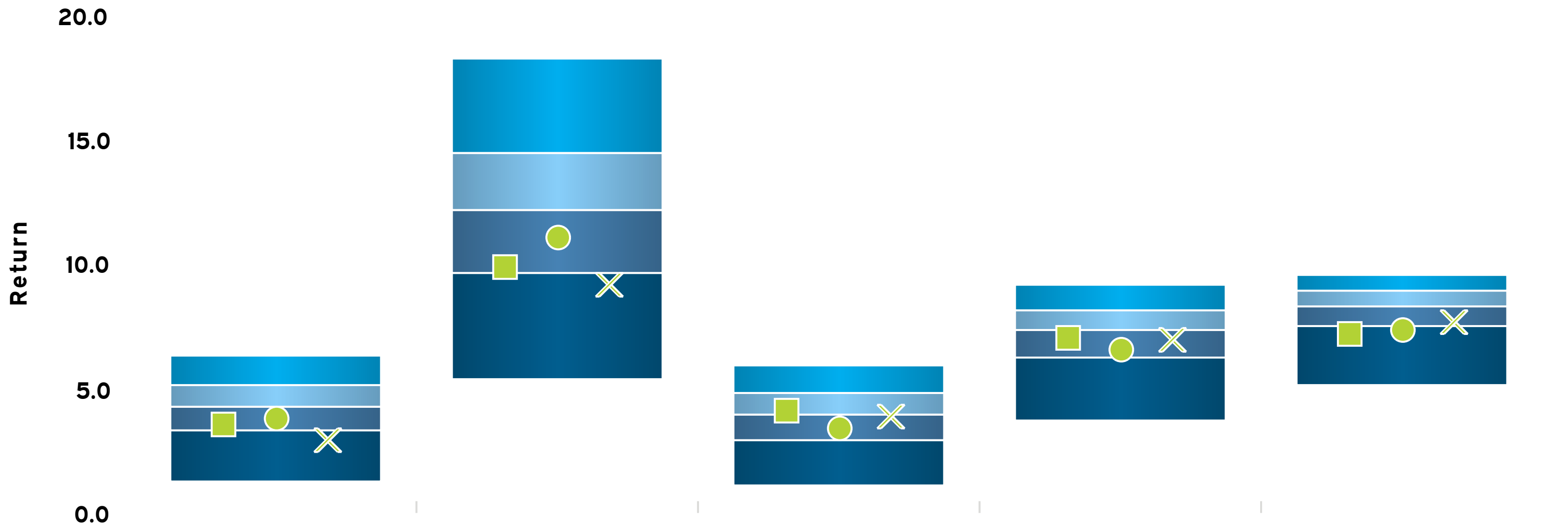
| Sharpe Ratio | | |
|---|---|---|
| Total Pension Fund | 0.6 | (24) |
| Policy Benchmark | 0.5 | (71) |
| Target Policy Benchmark | 0.5 | (52) |
| 5th Percentile | 0.6 | |
| 1st Quartile | 0.6 | |
| Median | 0.5 | |
| 3rd Quartile | 0.5 | |
| 95th Percentile | 0.3 | |
| Population | 236 | |

| Beta | | |
|---|---|---|
| Total Pension Fund | 0.9 | (18) |
| Policy Benchmark | 1.0 | (42) |
| Target Policy Benchmark | 1.0 | (33) |
| 5th Percentile | 0.6 | |
| 1st Quartile | 0.9 | |
| Median | 1.0 | |
| 3rd Quartile | 1.1 | |
| 95th Percentile | 1.3 | |
| Population | 236 | |

| Information Ratio | | |
|---|---|---|
| Total Pension Fund | 0.2 | (58) |
| Policy Benchmark | - | |
| 5th Percentile | 0.9 | |
| 1st Quartile | 0.6 | |
| Median | 0.3 | |
| 3rd Quartile | -0.1 | |
| 95th Percentile | -0.7 | |
| Population | 236 | |

InvMetrics Taft-Hartley DB < $500mm

## InvMetrics Taft-Hartley DB < $500mm




| | Quarter | 1 Year | 3 Years | 5 Years | Since Inception |
|---|---|---|---|---|---|
| Total Pension Fund | 3.5 (72) | 9.9 (72) | 4.1 (45) | 7.1 (57) | 7.2 (81) |
| Policy Benchmark | 3.8 (66) | 11.0 (63) | 3.4 (64) | 6.6 (70) | 7.3 (79) |
| Target Policy Benchmark | 3.0 (82) | 9.2 (78) | 3.9 (51) | 7.0 (59) | 7.7 (73) |
| | | | | | |
| 5th Percentile | 6.3 | 18.3 | 6.0 | 9.2 | 9.6 |
| 1st Quartile | 5.2 | 14.5 | 4.9 | 8.1 | 8.9 |
| Median | 4.3 | 12.1 | 3.9 | 7.3 | 8.3 |
| 3rd Quartile | 3.3 | 9.6 | 2.9 | 6.2 | 7.5 |
| 95th Percentile | 1.3 | 5.3 | 1.1 | 3.8 | 5.2 |
| | | | | | |
| Population | 341 | 281 | 241 | 236 | 178 |

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

## Annual Investment Expense Analysis

| | Fee Schedule | Market Value | Estimated Annual Fee (%) | Estimated Annual Fee $ |
|---|---|---|---|---|
| ASB Equity Index | 0.02 % of Assets | 40,358,382 | 0.02 | 6,054 |
| SSgA Russell 1000 Value Index | 0.02 % of Assets | 2,004,065 | 0.02 | 401 |
| SSgA Russell 1000 Growth | 0.02 % of Assets | 25,162,304 | 0.02 | 5,032 |
| Fidelity Small Cap Index Fund | 0.03 % of Assets | 3,626,672 | 0.03 | 907 |
| Artisan Global Value | 1.06 % of Assets | 15,995,695 | 1.06 | 169,554 |
| First Eagle Global Value | 0.78 % of Assets | 21,006,479 | 0.78 | 163,851 |
| Kopernik Global All-Cap Fund | 0.90 % of Assets | 4,962,968 | 0.90 | 44,667 |
| SSgA MSCI EAFE Index | 0.04 % of Assets | 17,239,872 | 0.04 | 6,896 |
| SSgA Emerging Markets | 0.08 % of Assets | 11,810,003 | 0.08 | 9,448 |
| Vanguard Intermediate-Term Corporate Bond Index | 0.05 % of Assets | 7,897,238 | 0.05 | 3,949 |
| AFL-CIO Housing Investment Trust | 0.35 % of Assets | 4,222,334 | 0.35 | 14,778 |
| SSgA U.S. Aggregate Bond Index | 0.03 % of Assets | 34,788,263 | 0.03 | 8,697 |
| Vanguard Short-Term TIPS | 0.04 % of Assets | 23,180,956 | 0.04 | 9,272 |
| SSgA TIPS Index | 0.04 % of Assets | 7,957,785 | 0.04 | 3,183 |
| Payden Emerging Markets Bond Fund | 0.53 % of Assets | 4,885,209 | 0.53 | 25,892 |
| SKY Harbor Broad High Yield Market | 0.36 % of First $50 M<br>0.00 % Thereafter | 18,028,620 | 0.36 | 64,903 |
| Aristotle Floating Rate Income Fund | 0.72 % of Assets | 9,681,562 | 0.72 | 69,707 |
| SSgA U.S. REIT Index | 0.06 % of Assets | 19,307,051 | 0.06 | 11,584 |
| AFL-CIO Building Investment Trust | 0.90 % of Assets | 10,130,467 | 0.90 | 91,174 |
| DRA Growth & Income Fund VIII | 0.90 % of Assets | 444,430 | 0.90 | 4,000 |
| DRA Growth & Income Fund IX | 0.90 % of Assets | 1,655,872 | 0.90 | 14,903 |
| DRA Growth & Income Fund X LLC | 0.90 % of Assets | 2,883,402 | 0.90 | 25,951 |
| SSgA S&P Global Large MidCap Natural Resources Index | 0.10 % of Assets | 10,113,211 | 0.10 | 10,113 |
| First Eagle Institutional Gold, LP | 0.45 % of Assets | 5,613,083 | 0.45 | 25,259 |

| | Fee Schedule | Market Value | Estimated Annual Fee (%) | Estimated Annual Fee $ |
|---|---|---|---|---|
| Ridgemont Equity Partners I | 2.00 % of Assets | 72,917 | 2.00 | 1,458 |
| SVB Strategic Investors Fund VIII | 0.95 % of Assets | 6,410,703 | 0.95 | 60,902 |
| Trilantic Capital Partners VI (North America), L.P. | Performance Based 1.75 % and 20.00 % | 2,718,938 | 1.75 | 47,581 |
| Flagship Pioneering Special Opportunities Fund II, L.P. | 1.00 % of Assets | 944,520 | 1.00 | 9,445 |
| Ironsides Direct Investment Fund V, L.P. | 0.25% of Committed Capital | 3,371,044 | - | - |
| Ironsides Partnership Fund V, L.P. | 0.25% of Committed Capital | 2,382,298 | - | - |
| Lightspeed Venture Partners Select IV | 2.00% of Committed Capital | 1,782,073 | - | - |
| KPS Special Situations Fund V | 1.25% of Committed Capital | 1,043,185 | - | - |
| Vitruvian Investment Partnership IV | 1.93 % of Assets | 996,432 | 1.93 | 19,181 |
| ULLICO Class A | 0.00 % of Assets | 2,427,117 | 0.00 | - |
| Cash | 0.00 % of Assets | 4,920,835 | 0.00 | - |
| **Total Pension Fund** | | **330,025,986** | **0.28** | **928,742** |

## Benchmark History

| From Date | To Date | Benchmark |
|---|---|---|
| Policy Benchmark | | |
| 09/30/2011 | Present | 36.0% Blmbg. U.S. Universal Index, 52.0% MSCI AC World Index (Net), 12.0% NCREIF ODCE Equal Weighted (Net) |
| Target Policy Benchmark | | |
| 06/30/2011 | Present | 25.0% Russell 3000 Index, 14.0% Blmbg. U.S. Aggregate Index, 5.0% Blmbg. U.S. Corp: High Yield Index, 10.0% MSCI EAFE (Net), 3.5% JPM GBI-EM Global Diversified, 12.0% NCREIF ODCE Equal Weighted (Net), 5.0% S&P Global LargeMidcap Resources & Commodities Ind, 7.0% MSCI Emerging Markets (Net), 10.0% Blmbg. U.S. TIPS Index, 3.5% JPM EMBI Global Diversified, 5.0% Preqin Private Equity 1Q Lagged |

Actual Allocation Benchmark reflects the asset classes set forth in the Fund's investment policy statement, weighted for the Fund's actual investments and performance of the indexes referenced above.

# Asset Allocation Discussion

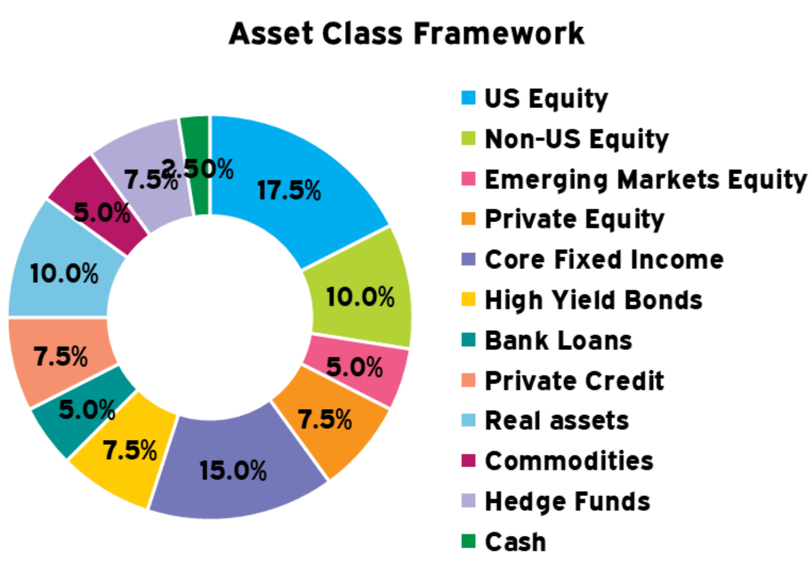
# Grouping of Asset Classes Discussion

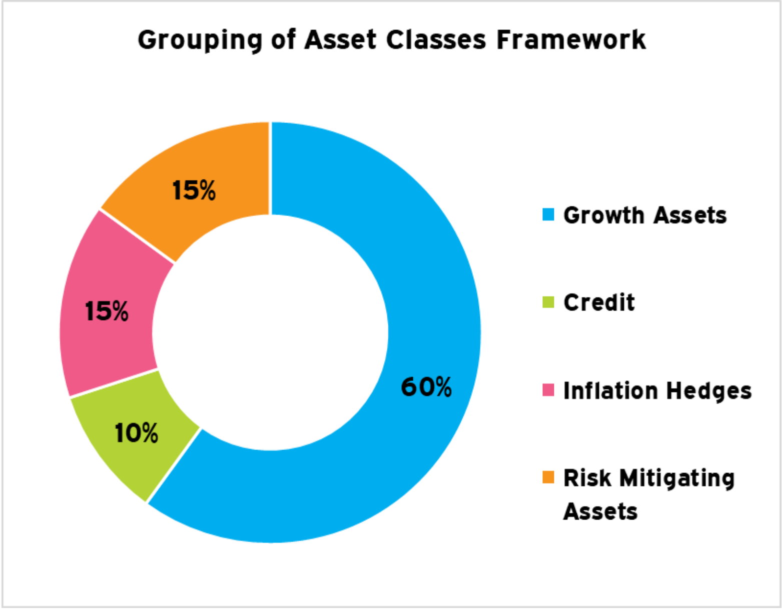
## Introduction to the Grouping of Asset Classes

→ In a grouping of asset classes framework, assets are aligned based on their role within a portfolio versus an arbitrary naming technique.

→ Grouping of asset classes represents a departure from the classic asset class allocation paradigm.

## Grouping Framework Examples



## Framework Comparison

| Asset Class Framework | Grouping of Asset Classes Framework |
|---|---|
| → Organizes Investments based on type of investment. | → Organizes investments by primary risk drivers and/or function/role |
| → Fundamental drivers of results not necessarily prioritized | → Improves transparency into the portfolio's true risk posture |
| → Often leads to "diversification in name only" | → Incorporates portfolio flexibility to address continually changing product offerings |
| → Portfolios often contain "alternatives" allocations that are catch all buckets | → Shifts the oversight prism to "bad times" |
| → Works well during "normal times" | → Requires new strategies to be truly additive in an economic and intuitive sense |
| → Historically applicable when investments were primarily public equities and investment grade bonds | → Improves full-cycle and intra-Asset/Liability portfolio risk positioning |

## Key Takeaways

→ The utilization of a grouping framework seeks to improve portfolio transparency and oversight, particularly for key decision makers such as boards or investment committees.

→ A grouping of asset classes framework helps to separate and define the fiduciary and oversight roles of boards and staff.

- Provides clear and intuitive insight into fundamental risks and functions of each portfolio component.
- May improve implementation flexibility.
- Easy integration of non-traditional asset classes and investment strategies.
- Highly customizable with no consensus on what the framework should look like.
- Many institutional investors utilize a hybrid functional/asset class framework.

→ The adoption of such a framework is not a source of alpha or outperformance.

→ The methodology for designing an aggregate portfolio does not materially change whether one utilizes a grouping of asset classes or a traditional asset class framework.

## Categorizing Investments

→ Categorial delineations are inherent to the ordering of the human mind in order to provide a balance between high-level comprehension and granular details.

→ Humans divide the world into classes to decrease the amount of information they must retain without materially impacting the level of understanding.

→ As it relates to research on this topic, one of the most widely accepted theories is that of natural categories that was proposed by Dr. Eleanor Rosch in the 1970s.2

- Dr. Rosch argued that humans utilize a natural conceptual hierarchy that consists of three levels: superordinate, basic, and subordinate.

→ As it relates to grouping or functional, versus asset allocation frameworks, one can think of asset classes as the "basic" level and functional classes as the "superordinate" level.

- Still, many investors segment the superordinate level into two components (e.g., strategic level and sub-class level).

| | | |
|---|---|---|
| Functional Classes = | Superordinate | Ex. Animal |
| Asset Classes = | Basic | Ex. Dog |
| Strategic Level and Sub-Class Level = | Subordinate | Ex. German Shepherd, Dalmatian, etc. |

## Putting It All Together

→ A more descriptive name for the "grouping of asset classes" is the "functional, risk-based allocation framework."

- Overarching strategic classes commonly used in functional frameworks tend to have key risks (factors) that drive most of the return variability within the classes.
- Assets within a "growth class" are explicitly exposed to economic growth risk, which means they are susceptible to changes in global economic growth and/or corporate profitability.
  - Growth risk is pervasive across asset classes and/or strategies that target meaningful levels of return (i.e., near, at, or above that of public equities).
- Whereas a "diversification class" is driven by a variety of other risks, such as duration risk, volatility risk, and time series momentum.
  - This concept shares some overlap with traditional risk parity and factor investing strategies.

→ The core philosophy behind a grouping framework rests on investor awareness of the driving factors within each class and its role in the portfolio.

- Grouping asset classes encourages investors to be cognizant of tail events.

## Drawbacks/Challenges

→ There are two significant challenges to the grouping of asset classes.

→ The first challenge pertains to the high degree of abstraction.

- While the framework tilts the portfolio review lens towards the major risks and functions within a portfolio, this comes at the cost of decreased detail and granularity.
- There will certainly be times where key decision makers want to examine specific asset level exposures, and this may require peering through multiple layers.
- Relatedly, Grouping frameworks make comparing allocations across peer groups challenging.

→ The second challenge relates to the actual design/construction of the classes.

- In a perfect world, asset classes would be "pure" in the sense that they are largely driven by a single factor.
- While there are certain asset classes where this is more or less true (e.g., US Treasury bonds,), this tends to be more of exception than the rule.
- Real assets and TIPS, for example, have a variety of driving forces and economic sensitivities.
  - This is an example of the imprecise nature of Grouping frameworks.

## Summary

→ Meketa believes grouping asset classes allows for better risk management by our client's boards and our investment team.

→ The grouping of asset classes provides clients and the Meketa investment team with a method of evaluating risk and risk posture as we aggregate specific asset classes that tend to produce similar returns (or at least similar directional tendencies) under specific economic scenarios.

## Functional Asset Allocation Framework

→ The below table highlights Meketa's functional framework to provide additional context to our approach.

| Group of Asset Classes | Generally Included Asset Classes | Risk Profile | Summary of Functional Category |
|---|---|---|---|
| Growth Assets | Public Equity (including all sub-categories), Private Equity, Risk Seeking Hedge Funds | High | Category will do best when the economy is doing well. These assets are seeking to capture future cash flows available through potential future earnings of a company. |
| Credit Assets | High Yield, Bank Loans, Emerging Market Debt, Private Credit | High | Category tends to generate a higher income stream based on obligation to pay by an issuing entity (e.g. corporate, sovereign, quasi-sovereign). |
| Inflation Hedging Assets | TIPS, Global Linkers, Real Estate (Public and Private), Infrastructure, Natural Resources (public and private), Commodities, MLPs. | Variable depending on the included asset classes | The intention is to provide diversification across both equity orientated assets and fixed income-oriented assets. Generally, these assets should perform best during periods of uncertain or persistent inflation. |
| Risk Mitigating Assets | Investment Grade Bonds, Long USTs, Long STRIPS, Risk Mitigating Hedge Funds, Cash | Low to Moderate | These assets seek to provide benefits in periods of equity market stress (Risk Mitigating Hedge Funds) alongside income generating assets with defensive tendencies. |

# Asset Allocation Review and Risk Analysis

# Introduction & Executive Summary

## Introduction

→ The Board is expected to do an annual review of asset allocation. On a regular basis a larger scale review is done to help provide additional context or possible consideration of changes for the Fund.

→ The last formal asset allocation review with the Trustees was conducted in 2021, after the actuarial assumed rate of return was lowered to 6.8%.

- We presented an update in 2023 that showed the year over year change in expected return and risk with the current asset allocation.
- At the March 2024 meeting there was an initial discussion on potential changes to the allocation.

→ This document is comprehensive and provides more than the Trustees may need or require. Our goal is to provide a perspective of the tradeoffs available to the Trustees as they select an asset allocation.

→ There is no right or wrong asset allocation for the Fund.

## Executive Summary

→ This document presents the current asset allocation policy and alternative asset allocation options for the Fund.

→ Following our last discussion, we focused on two options that maintain or expand private markets investing, along with some additional changes.

- The Fund placed a prohibition on additional Private Market commitments in 2020. This was lifted following the March 2024 meeting.

→ We present two alternative policy portfolios for the Trustees to consider alongside the current approach. Two modifications that are consistent in both alternatives, and changes that we consider important are:

- Move away from targets to individual equity geographies.
- Remove Emerging Market Debt.

→ We provide various approaches to assessing risk in order to provide a "mosaic" of the risks faced by the Fund, and to highlight the tradeoffs inherent to different policy portfolios.

# Asset Allocation Overview

# Asset Allocation

## *What is Asset Allocation?*

→ Asset allocation refers to the distribution of assets across a number of asset classes that exhibit different correlations with each other. Each asset class exhibits a unique combination of risk and reward. The expected and realized long-term returns vary by asset class, as does the interim volatility of those returns. Some asset classes, like equities, exhibit high degrees of volatility, but also offer high returns over time. Other asset classes, like cash, experience very little volatility, but offer limited return potential.

## *Why is Asset Allocation important?*

→ The distribution of assets across various asset classes exerts a major influence on the return behavior of the aggregate pool over short and long time periods.

## *How does Asset Allocation affect aggregate performance?*

→ In addition to exhibiting unique characteristics, each asset class interacts differently with other asset classes. Because of low correlations, the likelihood that any two asset classes will move together in the same direction is limited, with the movement of one asset class often offsetting another's. Combining asset classes allows investors to control more fully the aggregate risk and return of their portfolios, and to benefit from the reduction in volatility that stems from diversification.

## Developing Investment Objectives

### *What is the Fund's long-term return objective?*

→ Meet or exceed Policy Benchmark.

→ Meet or exceed actuarial assumed rate of return of 6.75%.

→ Achieve and maintain a fully funded pension plan.

### *What are the Fund's risk objectives?*

→ Minimize volatility in asset values and contribution levels from year to year.

→ Limit the risk and/or extent of short-term losses.

→ Minimize the risk of permanent capital impairment.

## Developing Investment Constraints

***What is the overall time horizon for the Fund?***

→ On-going concern, with long-term time horizon for majority of assets.

***What are the liquidity needs of the Fund?***

→ Net cash inflows of approximately $4.0 million in 2023.

→ Outstanding unfunded commitments to private markets commitments of $2.9 million.

***What are the legal and regulatory constraints under which the Fund operates?***

→ ERISA

→ DOL regulations

***Are there any other considerations that must be evaluated?***

→ Hours/contributions are expected to increase/decrease in the near/long term.

→ Ratio of active to retired participants in the Plan.

# Proposed Policy Options

## Asset Allocation Policy Options[1]

| | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| **Growth Assets** | **47** | **50** | **52** |
| US Equity | 25 | 0 | 0 |
| Developed Market Equity (non-US) | 10 | 0 | 0 |
| Emerging Market Equity | 7 | 0 | 0 |
| Global Equity | 0 | 43 | 43 |
| Private Equity | 5 | 7 | 9 |
| **Credit Assets** | **12** | **12** | **8** |
| High Yield Bonds and Bank Loans | 5 | 12 | 8 |
| Emerging Market Bonds (major) | 7 | 0 | 0 |
| **Inflation Hedges** | **27** | **20** | **20** |
| TIPS | 10 | 0 | 0 |
| Short-term TIPS | 0 | 5 | 2 |
| Real Estate | 12 | 8 | 8 |
| REITs | 0 | 0 | 0 |

[1] Expected return and standard deviation are based upon Meketa Investment Group's Annual Capital Markets Expectations. Throughout this document, returns for periods longer than one year are annualized.

| | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| Natural Resources (Public) | 5 | 2 | 3 |
| Gold Mining | 0 | 1 | 1 |
| Gold (Metal) | 0 | 1 | 1 |
| Infrastructure (Private) | 0 | 3 | 5 |
| **Risk Mitigating Assets** | **14** | **18** | **20** |
| Investment Grade Bonds | 14 | 16 | 16 |
| Long-term Government Bonds | 0 | 2 | 4 |
| **Expected Return (20 years)** | **8.01** | **8.02** | **8.28** |
| **Standard Deviation** | **11.8** | **11.7** | **12.3** |
| **Probability of Achieving 6.75% over 20 Years** | **68.2** | **68.4** | **70.9** |

# Diversification & Risk Analysis

## Diversification

→ The primary motive for diversifying a portfolio is to reduce risk.

→ Diversification is the sole “free lunch” available to investors. That is, it represents the only way to reduce risk without reducing expected returns.

→ Therefore, investments should be allocated across multiple classes of assets, based in part on the expected correlation of their returns.

→ Within each asset type, investments should be distributed across strategies and risk factors to further reduce volatility.

## Types of Risk Analysis Addressed

→ Risk budgeting[1]

- Attributes overall portfolio risks to specific asset classes
- Highlights the source and scale of portfolio-level risk

→ MPT-based risk analytics

- Includes worst-case return expectations and Value at Risk (VaR)[2]
- Relies on assumptions underlying Modern Portfolio Theory (MPT)

→ Convexity

- Examines a portfolio's sensitivity to upside and downside market movements

→ Scenario analysis

- Stress tests policy portfolios using actual historical examples
- Stress tests policy portfolios under specific hypothetical scenarios

[1] Risk budgeting seeks to decompose the aggregate risk of a portfolio into different sources (in this case, by asset class), with risk defined as standard deviation.
[2] VaR is a risk measure that estimates the maximum loss on a portfolio over a given time horizon and a given confidence level (usually 95% or 99%).

## MPT-Based Risk Analysis

| Scenario | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| Worst Case Returns (1) | | | |
| One Year (annualized) | -16.1 | -16.0 | -16.8 |
| Three Years (annualized) | -6.7 | -6.6 | -7.0 |
| Five Years (annualized) | -3.6 | -3.5 | -3.8 |
| Ten Years (annualized) | -0.3 | -0.2 | -0.4 |
| Twenty Years (annualized) | 2.0 | 2.1 | 2.1 |
| Probability of Experiencing Negative Returns | | | |
| One Year | 24.0 | 23.8 | 24.2 |
| Three Years | 11.0 | 10.9 | 11.2 |
| Five Years | 5.7 | 5.6 | 5.8 |
| Ten Years | 1.3 | 1.2 | 1.3 |
| Twenty Years | 0.1 | 0.1 | 0.1 |

[1] "Worst Case Returns" refers to the 99.7th percentile return.

## Historical Negative Scenario Analysis[1]
## (*Cumulative* Return)

| Scenario | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| Post-COVID Rate Hikes(Jan 2022-Oct 2023) | -10.3 | -8.1 | -9.1 |
| COVID-19 Market Shock (Feb 2020-Mar 2020) | -19.6 | -19.0 | -18.6 |
| Taper Tantrum (May - Aug 2013) | -2.2 | -0.9 | -1.0 |
| Global Financial Crisis (Oct 2007 - Mar 2009) | -25.3 | -25.9 | -25.6 |
| Popping of the TMT Bubble (Apr 2000 - Sep 2002) | -10.9 | -12.4 | -13.6 |
| LTCM (Jul - Aug 1998) | -9.8 | -6.7 | -7.1 |
| Asian Financial Crisis (Aug 97 - Jan 98) | 0.8 | 1.9 | 2.4 |
| Rate spike (1994 Calendar Year) | 0.1 | 3.1 | 2.6 |
| Early 1990s Recession (Jun - Oct 1990) | -5.7 | -5.0 | -4.7 |
| Crash of 1987 (Sep - Nov 1987) | -11.7 | -9.0 | -9.2 |
| Strong dollar (Jan 1981 - Sep 1982) | 4.3 | 2.0 | 2.1 |
| Volcker Recession (Jan - Mar 1980) | -4.6 | -4.6 | -4.9 |
| Stagflation (Jan 1973 - Sep 1974) | -19.4 | -17.3 | -17.5 |

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

## Historical Positive Scenario Analysis[1]
## (*Cumulative* Return)

| Scenario | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| Covid Recovery (Apr 2020-Dec 2021) | 49.3 | 48.9 | 51.0 |
| Global Financial Crisis Recovery (Mar 2009 - Nov 2009) | 36.1 | 35.7 | 35.5 |
| Best of Great Moderation (Apr 2003 - Feb 2004) | 29.8 | 27.3 | 28.3 |
| Peak of the TMT Bubble (Oct 1998 - Mar 2000) | 38.2 | 33.9 | 36.3 |
| Plummeting Dollar (Jan 1986 - Aug 1987) | 54.3 | 53.9 | 55.4 |
| Volcker Recovery (Aug 1982 - Apr 1983) | 32.9 | 30.4 | 31.5 |
| Bretton Wood Recovery (Oct 1974 - Jun 1975) | 28.2 | 25.2 | 25.9 |

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

## Stress Testing: Impact of Negative Market Movements (Expected Return under Negative Conditions)[1]

| Scenario | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| 10-year Treasury Bond rates rise 100 bps | 3.6 | 3.3 | 3.4 |
| 10-year Treasury Bond rates rise 200 bps | -2.2 | -2.3 | -2.7 |
| 10-year Treasury Bond rates rise 300 bps | -2.5 | -3.3 | -3.5 |
| Baa Spreads widen by 50 bps, High Yield by 200 bps | 0.7 | 0.5 | 0.8 |
| Baa Spreads widen by 300 bps, High Yield by 1000 bps | -21.5 | -20.6 | -20.5 |
| Trade Weighted Dollar gains 10% | -3.7 | -4.6 | -4.6 |
| Trade Weighted Dollar gains 20% | -1.4 | -2.2 | -2.3 |
| U.S. Equities decline 10% | -5.2 | -5.1 | -5.3 |
| U.S. Equities decline 25% | -16.3 | -15.4 | -15.7 |
| U.S. Equities decline 40% | -26.0 | -24.5 | -24.8 |

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

## Stress Testing: Impact of Positive Market Movements (Expected Return under Positive Conditions)[1]

| Scenario | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| 10-year Treasury Bond rates drop 100 bps | 2.4 | 1.8 | 2.1 |
| 10-year Treasury Bond rates drop 200 bps | 11.2 | 10.2 | 10.8 |
| 10-year Treasury Bond rates drop 300 bps | 14.2 | 13.2 | 14.0 |
| Baa Spreads narrow by 30bps, High Yield by 100 bps | 6.8 | 6.3 | 6.6 |
| Baa Spreads narrow by 100bps, High Yield by 300 bps | 13.7 | 13.1 | 12.9 |
| Trade Weighted Dollar drops 10% | 7.8 | 7.5 | 7.7 |
| Trade Weighted Dollar drops 20% | 21.3 | 20.7 | 22.0 |
| U.S. Equities rise 10% | 6.2 | 5.8 | 6.2 |
| U.S. Equities rise 30% | 15.8 | 14.1 | 14.8 |

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

## Inflation Stress Testing: Negative Scenarios
## (Expected Return under Negative Inflationary Conditions)[1]

| Scenario | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| Inflation slightly higher than expected | -0.4 | -0.3 | -0.3 |
| Inflation meaningfully higher than expected | -5.6 | -5.1 | -5.3 |
| Low Growth and Low Inflation | -8.1 | -7.6 | -7.6 |
| Low Growth and High Inflation | -12.2 | -11.5 | -11.8 |
| Brief, moderate inflation spike | -3.4 | -3.1 | -3.4 |
| Extended, moderate inflation spike | -5.9 | -5.4 | -5.7 |
| Brief, extreme inflation spike | -7.6 | -6.9 | -7.2 |
| Extended, extreme inflation spike | -9.8 | -8.8 | -9.0 |

[1] See the Appendix for further details.

## Inflation Stress Testing: Positive Scenarios
## (Expected Return under Positive Inflationary Conditions)[1]

| Scenario | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| High Growth and Low Inflation | 10.5 | 9.8 | 9.7 |
| High Growth and Moderate Inflation | 7.9 | 7.4 | 7.1 |
| High Growth and High Inflation | 5.1 | 4.7 | 4.3 |

[1] See the Appendix for further details.

# Liquidity Analysis

## Liquidity Stress Test Introduction

→ The Fund must maintain adequate liquidity to satisfy benefit payments and to avoid having to sell assets at distressed prices if possible.

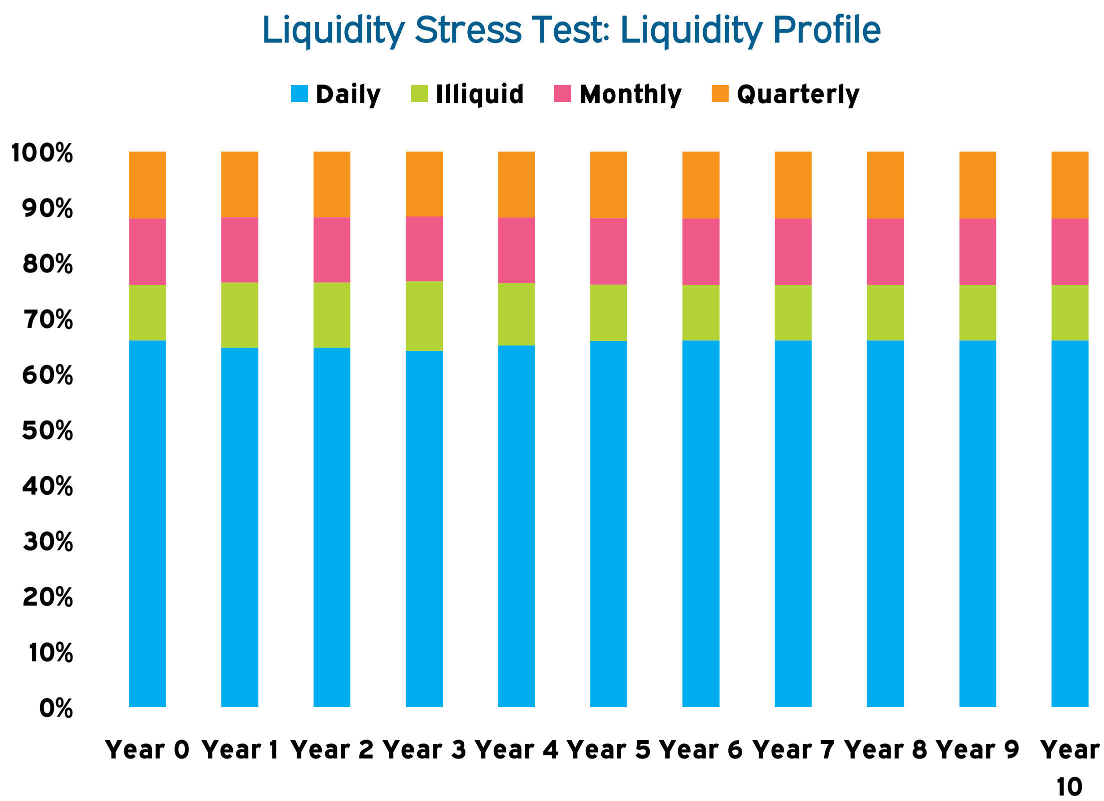
→ We conducted an extreme stress test to analyze the Fund's liquidity. Specifically, we evaluated whether the Fund could:

- Continue to meet its benefit obligations and expenses (including any obligations to fund commitments to private market managers),
- While staying within its target allocation ranges,
- And at what cost (i.e., to what extent would it be forced to sell stressed or distressed assets)?

→ The scenario is designed to be extreme.

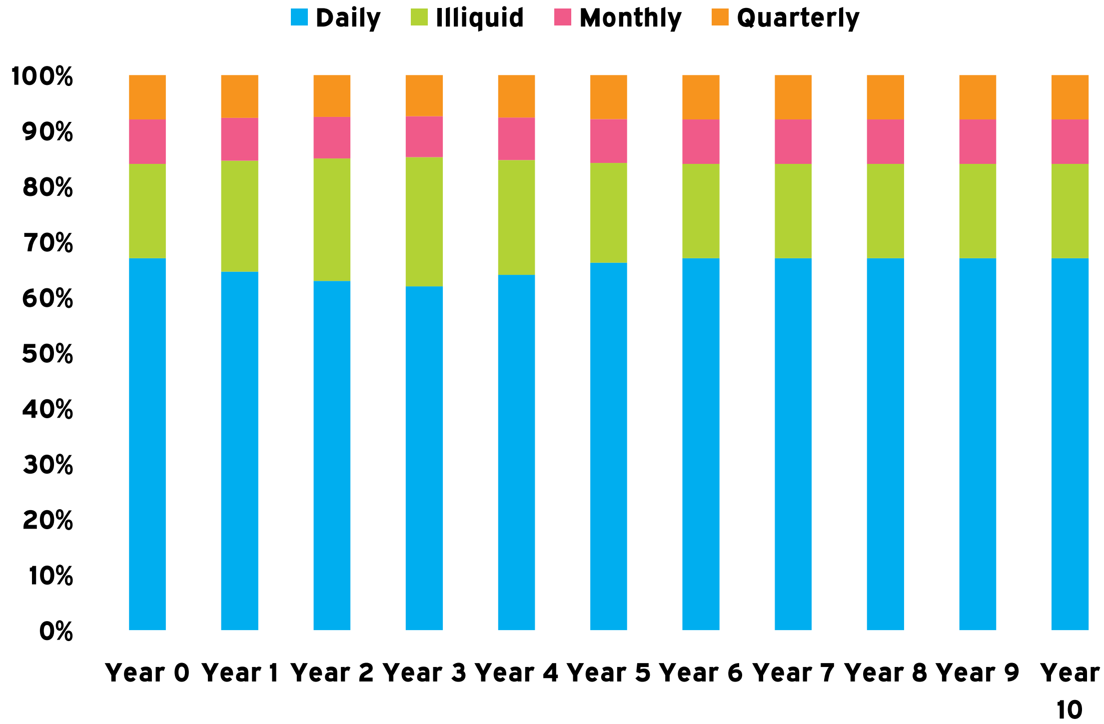
- In years 1 – 3, we use the returns produced by each asset class in 4Q07, 2008, and 1Q09, respectively. In years 4 – 5, we assume the expected returns for each asset class (i.e., no rebound).
- We assume net inflows of ~$4 million per year.
- We assume closed-end funds offer no liquidity in years 1 – 4, and very limited liquidity in year 5.
- We assume the Fund would rebalance toward its policy targets each year.

We show the results for "Increase Private Markets" as this policy has a higher percentage of assets that are illiquid. We consider this the most extreme case to test the liquidity of the fund.

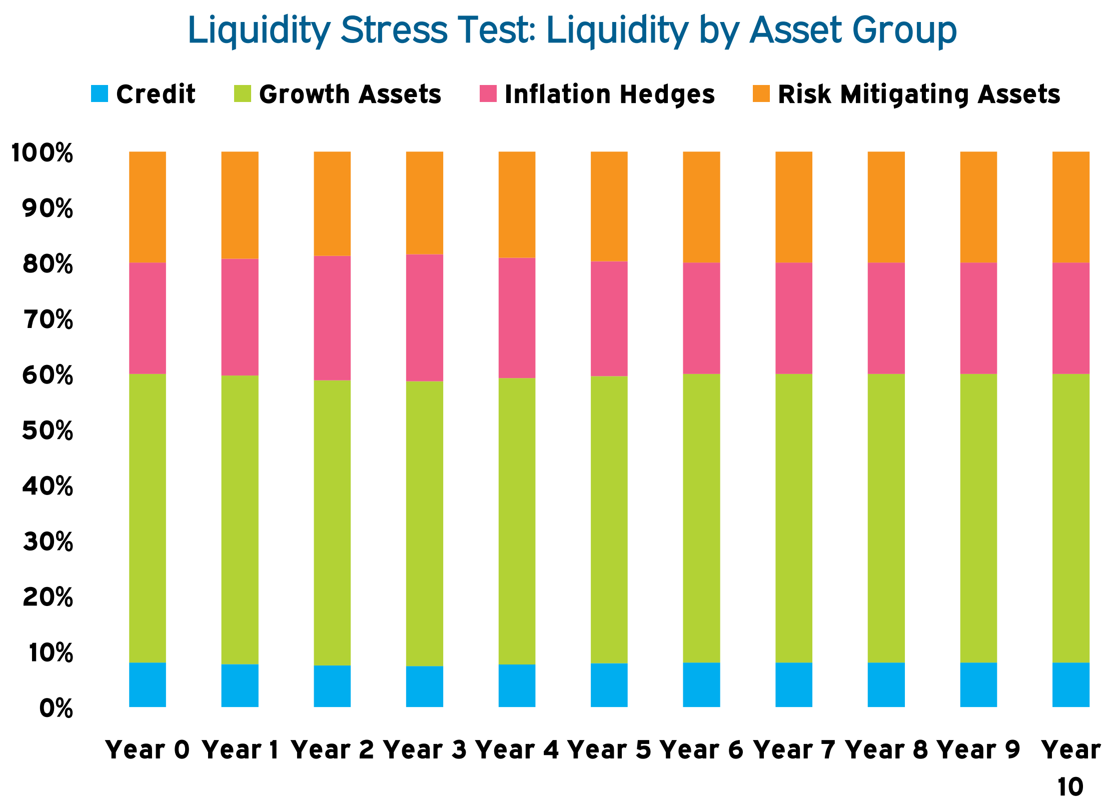



→ At the trough, the policy portfolio would have 60% of its assets in daily liquid vehicles.

## Liquidity Stress Test: Liquidity Profile



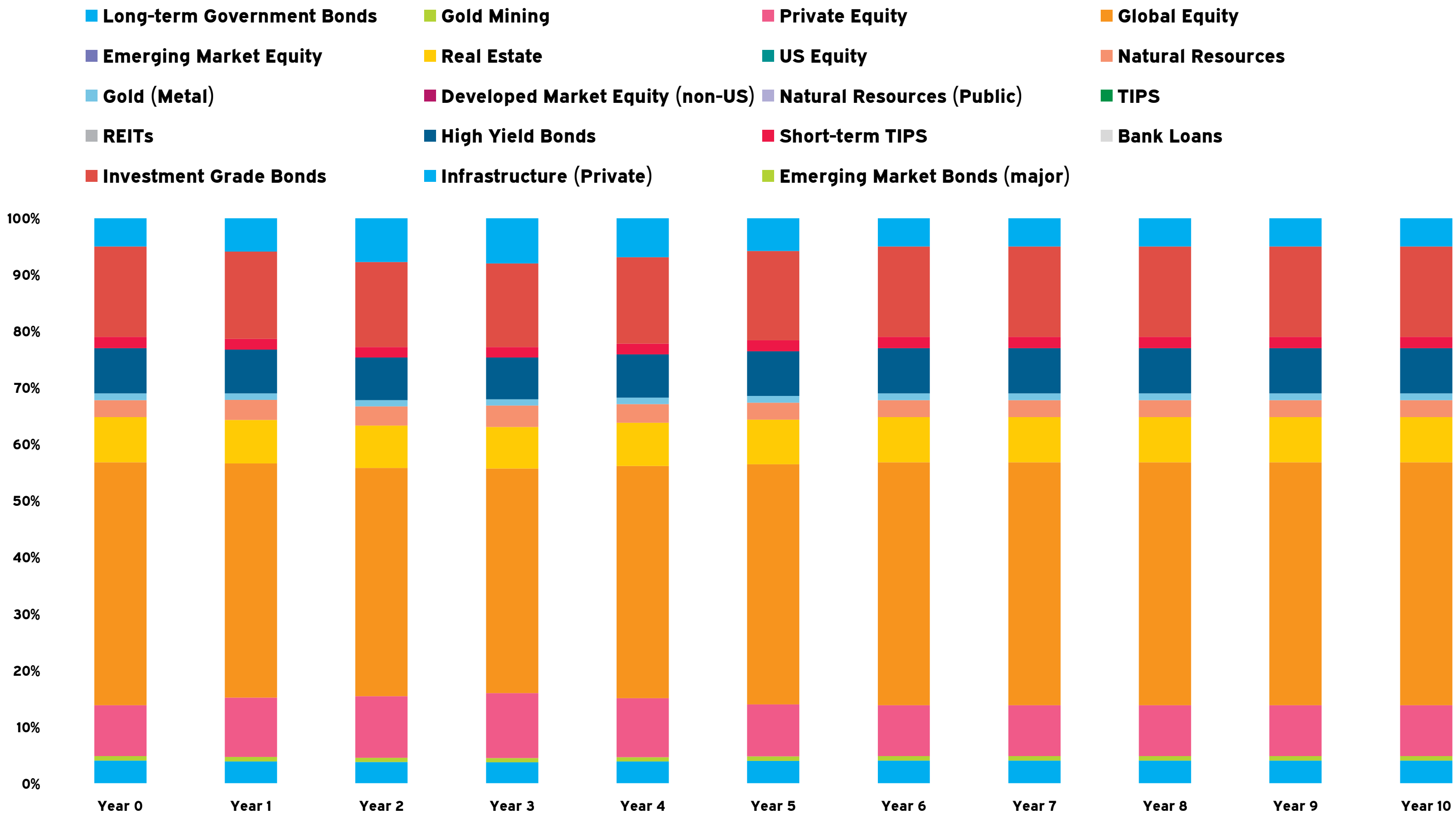

→ At the trough, the policy portfolio would have more than 60% of its assets in daily liquid vehicles.




→ A stressful market environment would alter the asset allocation.

→ However, rebalancing of the liquid assets would bring most asset classes back to their targets.

## Liquidity Stress Test: Impact on Asset Allocation



## Liquidity Stress Test: Summary

| Metric | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Starting Market Value | 315.00 | 315.00 | 321.77 | 249.18 | 238.79 | 261.99 | 286.85 | 313.84 | 342.88 | 374.18 | 407.97 |
| Portfolio Return | | 0.82% | -23.66% | -5.74% | 7.98% | 7.92% | 7.84% | 7.82% | 7.82% | 7.82% | 7.82% |
| Total Net Flows (External and Private Markets) | | -3.91 | -1.86 | 0.99 | 5.01 | 6.52 | 8.73 | 9.35 | 9.61 | 7.16 | 7.82 |
| Flows As Percentage of Market Value | | -1.24% | -0.58% | 0.40% | 2.10% | 2.49% | 3.04% | 2.98% | 2.80% | 1.91% | 1.92% |
| Net Flows (External) | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.40 | 4.40 | 4.40 | 4.40 | 4.40 |
| Net Flows (Private Markets) | | -7.91 | -5.86 | -3.01 | 1.01 | 2.52 | 4.33 | 4.95 | 5.21 | 2.76 | 3.42 |
| Private Market Contributions | | 13.16 | 9.82 | 11.69 | 9.25 | 8.34 | 7.01 | 8.96 | 8.96 | 11.32 | 14.47 |
| Private Market Distributions | | 5.25 | 3.97 | 8.68 | 10.26 | 10.86 | 11.34 | 13.91 | 14.16 | 14.08 | 17.90 |
| Ending Market Value | 315.00 | 321.77 | 249.18 | 238.79 | 261.99 | 286.85 | 313.84 | 342.88 | 374.18 | 407.97 | 444.39 |
| Remaining Liquid Market Value | 261.45 | 257.43 | 194.24 | 183.19 | 207.83 | 235.27 | 260.49 | 284.59 | 310.57 | 338.61 | 368.84 |
| Total Illiquid Assets | 53.55 | 64.34 | 54.94 | 55.60 | 54.16 | 51.58 | 53.35 | 58.29 | 63.61 | 69.35 | 75.55 |
| Percentage of Illiquid Assets | 17.00% | 19.99% | 22.05% | 23.28% | 20.67% | 17.98% | 17.00% | 17.00% | 17.00% | 17.00% | 17.00% |
| Assets Sold in Duress | | 0.00 | -1.32 | 0.70 | 2.56 | 1.57 | 2.28 | 2.28 | 2.28 | 2.28 | 0.00 |
| Percentage of Cash Flows Sold in Duress | | 0.00% | 71.08% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Percentage of Assets Sold in Duress | | 0.00% | 0.41% | 0.28% | 1.07% | 0.60% | 0.79% | 0.73% | 0.66% | 0.61% | 0.00% |
| Ratio of Liquid Assets to Total Net Flows | | 65.81 | 104.61 | | | | | | | | |
| Ratio of Liquid Assets to External Flows and Contributions | | 28.10 | 33.36 | 23.82 | 39.58 | 54.26 | 99.83 | 62.48 | 68.13 | 48.94 | 36.61 |

# Summary and Recommendations

## Previously Proposed Asset Allocation Policy Options

| | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| **Growth Assets** | **47** | **50** | **52** |
| US Equity | 25 | 0 | 0 |
| Developed Market Equity (non-US) | 10 | 0 | 0 |
| Emerging Market Equity | 7 | 0 | 0 |
| Global Equity | 0 | 43 | 43 |
| Private Equity | 5 | 7 | 9 |
| **Credit Assets** | **12** | **12** | **8** |
| High Yield Bonds and Bank Loans | 5 | 6 | 8 |
| Emerging Market Bonds (major) | 7 | 0 | 0 |
| **Inflation Hedges** | **27** | **20** | **20** |
| TIPS | 10 | 0 | 0 |
| Short-term TIPS | 0 | 5 | 2 |
| Real Estate | 12 | 8 | 8 |
| REITs | 0 | 0 | 0 |

| | Current Allocation (%) | Match Current Private Markets (%) | Increase Private Markets (%) |
|---|---|---|---|
| Natural Resources (Public) | 5 | 2 | 3 |
| Gold Mining | 0 | 1 | 1 |
| Gold (Metal) | 0 | 1 | 1 |
| Infrastructure (Private) | 0 | 3 | 5 |
| **Risk Mitigating Assets** | **14** | **18** | **20** |
| Investment Grade Bonds | 14 | 16 | 16 |
| Long-term Government Bonds | 0 | 2 | 4 |
| **Expected Return (20 years)** | **8.01** | **8.02** | **8.28** |
| **Standard Deviation** | **11.8** | **11.7** | **12.3** |
| **Sharpe Ratio** | **0.47** | **0.47** | **0.47** |
| **Probability of Achieving 6.75% over 20 Years** | **68.2** | **68.4** | **70.9** |

## Recommendations

- → Meketa Investment Group consider all of the options viable.
- → Generally, Meketa advises defined benefit clients to use their long-term time horizon to take advantage of premiums available in private markets.
- → We consider the use of a Global Equity target beneficial for a variety of reasons, primarily, the ability to control the allocation more effectively.
- → The risk and reward of emerging market debt has changed over the last 10 years, leading to our view that better risk and reward is available elsewhere.
- → If changes are voted on at this meeting, we would work with counsel to update the Investment Policy Statement and consider any updates to policy benchmarks.

# Appendices

## Scenario Return Inputs

| Asset Class | Benchmark Used |
|---|---|
| Investment Grade Bonds | Bloomberg US Aggregate |
| TIPS | Bloomberg Global Inflation Linked: US TIPS |
| Intermediate Government Bonds | Bloomberg US Treasury: Intermediate |
| Long-term Government Bonds | Bloomberg US Treasury: Long |
| Emerging Market Bonds (local) | Bloomberg EM Local Currency Government Diversified |
| Bank Loans | Credit Suisse Leveraged Loan |
| High Yield Bonds | Bloomberg US Corporate High Yield |
| Direct Lending | Cliffwater Direct Lending Index |
| Real Estate | NCREIF Property Index |
| Core Private Real Estate | Cambridge Associates Proxy IRR Returns |
| Value-Added Real Estate | Cambridge Associates Proxy IRR Returns |
| Opportunistic Real Estate | Cambridge Associates Proxy IRR Returns |
| REITs | FTSE NAREIT All Equity REITS |
| Infrastructure (Private) | Cambridge Associates Proxy IRR Returns |
| Natural Resources (Private) | Cambridge Associates Proxy IRR Returns |
| Timberland | NCREIF Timberland |
| Commodities | Bloomberg Commodity Index |
| US Equity | Russell 3000 |
| Developed Markets Equity (non-US) | MSCI EAFE |
| Emerging Markets Equity | MSCI Emerging Markets |
| Private Equity | Cambridge Associates Proxy IRR Returns |
| Long-Short | HFRI Equity Hedge |
| Global Macro | HFRI Macro |
| Hedge Funds | HFRI Fund Weighted Composite |
| Private Debt | Cambridge Associates Proxy IRR Returns |

## Negative Historical Scenario Returns - Sample Inputs

| | Post-COVID Rate Hikes (Jan 2022-Oct 2023) | Covid-19 Market Shock (Feb 2020-Mar 2020) | Taper Tantrum (May - Aug 2013) | Global Financial Crisis (Oct 2007 - Mar 2009) | Popping of the TMT Bubble (Apr 2000 - Sep 2002) | LTCM (Jul - Aug 1998) |
|---|---|---|---|---|---|---|
| Cash Equivalents | 5.5 | 0.4 | 0.0 | 2.6 | 9.9 | 0.8 |
| Short-term Investment Grade Bonds | -1.6 | 0.4 | -0.1 | 7.9 | 21.9 | 1.6 |
| Investment Grade Bonds | -15.4 | -0.9 | -3.7 | 8.5 | 28.6 | 1.8 |
| Long-term Corporate Bonds | -30.7 | -18.4 | -9.3 | -10.3 | 26.9 | -0.6 |
| Long-term Government Bonds | -38.5 | 12.7 | -11.6 | 24.2 | 35.5 | 4.1 |
| TIPS | -13.2 | -0.4 | -8.5 | 8.2 | 37.4 | 0.7 |
| Global Inflation Linked Bonds | -25.7 | -6.5 | -7.4 | -3.9 | 39.7 | 0.7 |
| High Yield Bonds | -7.1 | -20.8 | -2.0 | -22.8 | -6.3 | -5.0 |
| Bank Loans | 8.8 | -20.3 | 0.8 | -23.7 | 6.3 | 0.7 |
| Direct Lending | 12.2 | -4.8 | 2.6 | -3.3 | -2.0 | -2.6 |
| Foreign Bonds | -22.0 | -4.5 | -3.2 | 2.1 | 8.5 | 3.5 |
| Emerging Market Bonds (major) | -15.8 | -15.3 | -11.5 | -5.0 | 6.3 | -28.2 |
| Emerging Market Bonds (local) | -12.9 | -13.9 | -14.3 | -7.9 | 7.2 | -34.1 |
| US Equity | -11.6 | -35.0 | 3.0 | -45.8 | -43.8 | -15.4 |
| Developed Market Equity (non-US) | -12.1 | -32.7 | -2.2 | -52.1 | -46.7 | -11.5 |
| Emerging Market Equity | -21.8 | -31.2 | -9.4 | -51.2 | -43.9 | -26.7 |
| Global Equity | -12.9 | -33.6 | -0.7 | -49.3 | -46.7 | -14.0 |
| Private Equity/Debt | 7.5 | -7.8 | 5.7 | -27.7 | -23.6 | -3.2 |
| Private Equity | 1.7 | -7.4 | 5.8 | -28.2 | -26.2 | -3.3 |
| Private Debt | 13.6 | -10.1 | 4.6 | -22.3 | -1.8 | -2.3 |
| REITs | -31.4 | -41.0 | -13.3 | -63.0 | 45.4 | -15.3 |
| Core Private Real Estate | -1.9 | 0.7 | 3.6 | -10.6 | 23.6 | 2.3 |
| Value-Added Real Estate | -4.0 | -3.5 | 3.0 | -32.2 | 25.4 | 0.0 |
| Opportunistic Real Estate | 9.1 | -8.6 | 4.0 | -25.7 | 21.4 | 1.5 |
| Natural Resources (Private) | 16.0 | -22.1 | 2.5 | -31.2 | -3.9 | -16.9 |
| Timberland | 18.4 | 0.1 | 1.3 | 20.7 | -1.5 | 0.5 |
| Farmland | 12.5 | -0.1 | 3.3 | 26.7 | 11.4 | 0.8 |
| Commodities (naïve) | 12.4 | -18.9 | -2.4 | -36.9 | 18.5 | -12.0 |
| Infrastructure (Core Private) | 13.6 | -1.3 | 3.7 | -0.8 | 24.8 | -0.3 |
| Hedge Funds | -2.1 | -9.1 | -0.4 | -17.8 | -2.1 | -9.4 |
| Long-Short | -9.5 | -10.9 | 1.0 | -26.4 | -8.8 | -8.3 |
| Hedge Fund of Funds | -3.3 | -7.6 | -0.5 | -19.5 | -0.4 | -7.7 |

# Negative Historical Scenario Returns - Sample Inputs (continued)

| | Rate spike (1994 Calendar Year) | Crash of 1987 (Sep - Nov 1987) | Strong dollar (Jan 1981 - Sep 1982) | Volcker Recession (Jan - Mar 1980) | Stagflation (Jan 1973 - Sep 1974) |
|---|---|---|---|---|---|
| Cash Equivalents | 3.9 | 1.4 | 24.4 | 2.9 | 13.5 |
| Short-term Investment Grade Bonds | 0.5 | 2.3 | 29.9 | -2.6 | 4.3 |
| Investment Grade Bonds | -2.9 | 2.2 | 29.9 | -8.7 | 7.9 |
| Long-term Corporate Bonds | -5.8 | 1.5 | 29.6 | -14.1 | -12.0 |
| Long-term Government Bonds | -7.6 | 2.6 | 28.4 | -13.6 | -1.8 |
| TIPS | -7.5 | 2.8 | 15.6 | -7.8 | 4.3 |
| Global Inflation Linked Bonds | -7.9 | 2.9 | 16.5 | -8.3 | 4.5 |
| High Yield Bonds | -1.0 | -3.6 | 6.9 | -2.3 | -15.5 |
| Bank Loans | 10.3 | -1.7 | 3.3 | -1.1 | -7.5 |
| Direct Lending | 7.6 | -2.3 | 3.2 | -1.0 | -7.2 |
| Foreign Bonds | 5.3 | -0.3 | 34.8 | -6.5 | -1.4 |
| Emerging Market Bonds (major) | -18.9 | -9.2 | -1.6 | -2.6 | -20.2 |
| Emerging Market Bonds (local) | -22.8 | -11.0 | -2.0 | -3.2 | -23.9 |
| US Equity | 1.3 | -29.5 | -2.3 | -4.1 | -42.6 |
| Developed Market Equity (non-US) | 7.8 | -14.5 | -18.0 | -7.0 | -36.3 |
| Emerging Market Equity | -7.3 | -25.3 | -12.1 | -6.6 | -44.2 |
| Global Equity | 5.0 | -20.5 | -11.1 | -5.4 | -40.4 |
| Private Equity/Debt | 13.2 | -0.7 | -2.7 | -2.5 | -18.2 |
| Private Equity | 14.2 | -0.5 | -3.9 | -2.7 | -20.1 |
| Private Debt | 6.2 | -1.8 | 3.0 | -1.0 | -6.9 |
| REITs | -3.5 | -19.5 | 2.5 | -3.6 | -33.9 |
| Core Private Real Estate | 6.4 | 2.5 | 23.9 | 5.5 | -4.4 |
| Value-Added Real Estate | 6.5 | 4.3 | 44.2 | 9.6 | -7.6 |
| Opportunistic Real Estate | 18.8 | 3.1 | 30.7 | 7.0 | -5.6 |
| Natural Resources (Private) | 12.6 | -9.9 | -9.5 | -9.1 | 19.3 |
| Timberland | 15.4 | 9.2 | 23.6 | -7.4 | 5.5 |
| Farmland | 9.4 | 5.3 | 13.3 | -4.2 | 3.1 |
| Commodities (naïve) | 16.6 | 1.8 | -16.0 | -9.6 | 139.5 |
| Infrastructure (Core Private) | -11.5 | -0.1 | -0.2 | -0.1 | -0.5 |
| Hedge Funds | 4.1 | -7.8 | -3.8 | -1.9 | -15.7 |
| Long-Short | 2.6 | -10.0 | -4.9 | -2.5 | -19.8 |
| Hedge Fund of Funds | -3.5 | -5.7 | -2.7 | -1.4 | -11.5 |

## Positive Historical Scenario Returns - Sample Inputs

| | Covid-19 Recovery (Apr 2020 – Dec 2021) | Global Financial Crisis Recover (Mar 2009 - Nov 2009) | Best of Great Moderation (Apr 2003 - Feb 2004) | Peak of the TMT Bubble (Oct 1998 - Mar 2000) | Plummeting Dollar (Jan 1986 - Aug 1987) | Volcker Recovery (Aug 1982 - Apr 1983) | Bretton Wood Recovery (Oct 1974 - Jun 1975) |
|---|---|---|---|---|---|---|---|
| Cash Equivalents | 0.1 | 0.1 | 0.9 | 6.7 | 10.0 | 6.0 | 4.5 |
| Short-term Investment Grade Bonds | 1.1 | 4.3 | 2.8 | 5.3 | 13.2 | 15.4 | 5.0 |
| Investment Grade Bonds | 2.6 | 9.0 | 4.6 | 1.7 | 14.4 | 26.4 | 9.2 |
| Long-term Corporate Bonds | 18.0 | 28.8 | 11.3 | -3.1 | 15.9 | 42.1 | 17.5 |
| Long-term Government Bonds | -7.2 | 2.0 | 4.9 | -2.3 | 15.4 | 33.6 | 11.8 |
| TIPS | 15.6 | 14.3 | 9.1 | 6.3 | 10.2 | 11.5 | 4.1 |
| Global Inflation Linked Bonds | 18.9 | 24.7 | 9.6 | 6.6 | 10.8 | 12.1 | 4.3 |
| High Yield Bonds | 29.1 | 49.1 | 21.8 | 2.1 | 24.9 | 23.3 | 19.3 |
| Bank Loans | 24.8 | 32.9 | 10.1 | 6.1 | 11.1 | 10.4 | 8.7 |
| Direct Lending | 25.0 | 9.4 | 23.7 | 26.8 | 5.4 | 8.2 | 8.3 |
| Foreign Bonds | 5.2 | 23.4 | 15.2 | -7.0 | 44.5 | 32.3 | 17.9 |
| Emerging Market Bonds (major) | 15.7 | 27.0 | 20.6 | 49.0 | 38.9 | 21.6 | 21.0 |
| Emerging Market Bonds (local) | 7.0 | 37.5 | 25.2 | 61.0 | 48.4 | 26.5 | 25.7 |
| US Equity | 92.0 | 51.6 | 37.2 | 50.2 | 64.8 | 59.3 | 55.1 |
| Developed Market Equity (non-US) | 55.4 | 60.5 | 56.7 | 53.0 | 140.0 | 29.6 | 34.6 |
| Emerging Market Equity | 50.9 | 94.6 | 79.4 | 101.3 | 126.5 | 52.1 | 53.4 |
| Global Equity | 75.2 | 59.9 | 46.2 | 54.8 | 98.7 | 46.3 | 43.8 |
| Private Equity/Debt | 97.8 | 18.8 | 23.3 | 82.4 | 19.0 | 13.7 | 18.4 |
| Private Equity | 101.5 | 16.7 | 23.7 | 90.0 | 21.6 | 14.8 | 20.2 |
| Private Debt | 41.2 | 28.7 | 20.4 | 21.3 | 5.9 | 7.9 | 8.0 |
| REITs | 75.1 | 82.5 | 44.6 | -5.2 | 51.8 | 47.4 | 42.5 |
| Core Private Real Estate | 21.4 | -12.1 | 9.0 | 18.1 | 13.1 | 6.8 | 4.5 |
| Value-Added Real Estate | 36.6 | -22.4 | 10.9 | 22.0 | 23.6 | 11.9 | 7.8 |
| Opportunistic Real Estate | 41.1 | -14.8 | 13.6 | 27.9 | 16.7 | 8.6 | 5.7 |
| Natural Resources (Private) | 45.4 | 57.6 | 36.1 | 22.2 | 78.3 | 30.2 | 14.8 |
| Timberland | 9.9 | -3.7 | 8.5 | 20.5 | 28.6 | 20.0 | 8.7 |
| Farmland | 11.3 | 4.5 | 9.6 | 10.4 | 15.9 | 11.3 | 5.0 |
| Commodities (naïve) | 60.5 | 28.9 | 30.6 | 17.1 | 27.6 | 6.2 | -20.2 |
| Infrastructure (Core Private) | 32.7 | 6.9 | 8.5 | 33.0 | 1.4 | 0.6 | 0.6 |
| Hedge Funds | 39.3 | 20.1 | 22.4 | 52.8 | 30.6 | 13.8 | 14.5 |
| Long-Short | 54.1 | 25.9 | 25.3 | 81.4 | 40.8 | 18.0 | 18.9 |
| Hedge Fund of Funds | 29.1 | 10.3 | 13.3 | 36.8 | 21.3 | 9.7 | 10.3 |

# Stress Test Return Assumptions - Sample Inputs[1]

| | 10-year Treasury Bond rates rise 100 bps | 10-year Treasury Bond rates rise 200 bps | 10-year Treasury Bond rates rise 300 bps | Baa Spreads widen by 50 bps, High Yield by 200 bps | Baa Spreads widen by 300 bps, High Yield by 1000 bps | Trade Weighted Dollar gains 10% | Trade Weighted Dollar gains 20% | US Equities decline 10% | US Equities decline 25% | US Equities decline 40% |
|---|---|---|---|---|---|---|---|---|---|---|
| Cash Equivalents | -0.2 | -0.4 | -0.5 | 2.8 | 1.1 | 3.6 | 1.3 | 2.8 | 2.3 | 0.4 |
| Short-term Investment Grade Bonds | -1.2 | -2.4 | -3.6 | 2.2 | 1.5 | 0.8 | 1.4 | 0.8 | 0.7 | 0.8 |
| Investment Grade Bonds | -4.0 | -7.6 | -10.7 | 3.9 | -0.4 | 0.8 | 4.2 | 1.3 | 0.7 | -1.0 |
| Long-term Corporate Bonds | -8.2 | -15.1% | -19.8 | 2.6 | -13.4 | -1.0 | 8.1 | -1.4 | -8.3 | -12.3 |
| Long-term Government Bonds | -9.5 | -17.2 | -21.8 | 7.8 | 7.3 | 1.8 | 12.8 | 1.0 | 2.6 | 2.4 |
| TIPS | -4.3 | -8.5 | -11.6 | 2.8 | -6.1 | -2.4 | -0.2 | 1.6 | -2.3 | -8.7 |
| Global Inflation Linked Bonds | -1.9 | -9.1 | -11.9 | 2.4 | -11.1 | -4.0 | -4.8 | 1.1 | -5.4 | -16.3 |
| High Yield Bonds | 2.4 | -4.6 | -3.6 | -1.8 | -23.0 | -4.1 | -0.6 | -5.4 | -15.5 | -21.2 |
| Bank Loans | 1.5 | -1.1 | -5.1% | -2.8 | -20.8 | -2.9 | -0.6 | -3.6 | -13.2 | -17.4 |
| Direct Lending | 0.3 | -2.4 | -6.3 | -1.8 | -9.5 | -3.3 | -0.8 | -3.3 | -7.8 | -5.9 |
| Foreign Bonds | -4.6 | -9.9 | -15.7 | 6.6 | -2.9 | -4.5 | -8.8 | 0.1 | -4.6 | -9.2 |
| Emerging Market Bonds (major) | 0.7 | -6.5 | -3.6 | -0.1 | -14.7 | -2.6 | -4.2 | -4.4 | -12.5 | -15.4 |
| Emerging Market Bonds (local) | 1.6 | -6.6 | -3.0 | 0.1 | -12.4 | -2.8 | -11.7 | -3.8 | -12.9 | -19.8 |
| US Equity | 6.8 | -1.8 | 2.8 | -1.1 | -31.6 | -3.4 | 1.9 | -10.0 | -25.0 | -40.0 |
| Developed Market Equity (non-US) | 8.6 | 0.1 | -5.5 | 0.4 | -34.6 | -12.8 | -8.6 | -8.4 | -22.2 | -39.2 |
| Emerging Market Equity | 9.2 | 1.4 | 0.1% | -1.0 | -41.9 | -15.2 | -14.4 | -10.7 | -28.3 | -43.0 |
| Global Equity | 7.2 | -0.8 | -0.5 | -0.6 | -33.0 | -8.8 | -5.3 | -9.2 | -23.8 | -39.0 |
| Private Equity/Debt | 6.0 | 0.6 | -5.5 | -0.1 | -22.1 | -2.7 | -6.8 | -9.0 | -22.1 | -25.0 |
| Private Equity | 6.3 | 0.6 | -5.3 | 0.0 | -22.3 | -2.7 | -6.0 | -9.8 | -22.9 | -25.3 |
| Private Debt | 2.3 | -1.1 | -6.2 | -1.8 | -15.8 | -2.3 | -4.2 | -3.9 | -12.8 | -14.9 |
| REITs | 3.3 | -5.1 | 1.1 | -3.7 | -36.4 | -1.3 | 12.1 | -7.0 | -31.9 | -54.1 |
| Core Private Real Estate | 1.9 | 4.3 | 5.0 | 2.0 | -7.1 | 2.7 | 9.7 | 1.1 | -8.5 | -14.0 |
| Value-Added Real Estate | 4.2 | 7.1 | 14.1 | 7.2 | -13.5 | 13.7 | 6.4 | 1.9 | -13.6 | -23.1 |
| Opportunistic Real Estate | 3.8 | 6.7 | 9.9 | 1.1 | -20.6 | 2.3 | 15.6 | -0.6 | -17.1 | -26.3 |
| Natural Resources (Private) | 9.2 | 3.5 | -7.5 | -0.3 | -25.0 | -5.6 | -14.5 | -1.7 | -14.5 | -24.8 |
| Timberland | 1.6 | 2.6 | -9.9 | 5.0 | 6.9 | 2.9 | 8.6 | 0.7 | 2.7 | 3.9 |
| Farmland | 2.4 | 0.9 | -9.2 | 3.9 | 10.1 | 1.3 | 8.0 | 1.1 | 4.9 | 10.3 |
| Commodities (naïve) | 8.7 | 6.1 | -6.6 | -4.3 | -25.0 | -3.4 | -24.0 | 5.2 | -11.1 | -37.8 |
| Infrastructure (Core Private) | 0.6 | -4.2 | -6.1 | 1.2 | 0.1 | -0.7 | 3.6 | -0.4 | -5.0 | -7.8 |
| Hedge Funds | 2.6 | -1.9 | -5.1 | -0.6 | -14.5 | -2.2 | -1.7 | -4.3 | -12.2 | -15.7 |
| Long-Short | 4.7 | -2.3 | -4.2 | -0.1 | -21.0 | -3.7 | -4.3 | -7.5 | -17.7 | -23.5 |
| Hedge Fund of Funds | 1.8 | -2.5 | -5.7 | -1.3 | -14.8 | -2.9 | -2.4 | -4.9 | -12.5 | -16.0 |

[1] Assumptions are based on performance for each asset class during historical periods that resembled these situations.

## 'Anti' Stress Test Return Assumptions - Sample Inputs[1]

| | 10-year Treasury Bond rates drop 100 bps | 10-year Treasury Bond rates drop 200 bps | 10-year Treasury Bond rates drop 300 bps | Baa Spreads narrow by 30bps, High Yield by 100 bps | Baa Spreads narrow by 100bps, High Yield by 300 bps | Trade Weighted Dollar drops 10% | Trade Weighted Dollar drops 20% | US Equities rise 10% | US Equities rise 30% |
|---|---|---|---|---|---|---|---|---|---|
| Cash Equivalents | 0.2 | 0.3 | 0.4 | 0.8 | 0.2 | 2.0 | 4.5 | 2.3 | 3.1 |
| Short-term Investment Grade Bonds | 1.2 | 2.5 | 3.8 | 0.4 | 2.0 | 1.5 | 3.3 | 0.7 | 1.6 |
| Investment Grade Bonds | 4.3 | 8.9 | 14.0 | 1.1 | 3.9 | 2.5 | 9.4 | 1.8 | 3.8 |
| Long-term Corporate Bonds | 9.4 | 20.9 | 33.8 | 3.6 | 14.5 | 5.6 | 15.8 | 3.6 | 7.7 |
| Long-term Government Bonds | 11.6 | 24.9 | 40.5 | 0.1 | -0.6 | 1.8 | 22.2 | 3.4 | 5.7 |
| TIPS | 4.7 | 9.8 | 15.6 | 0.9 | 5.9 | 3.8 | 7.8 | 1.5 | 2.2 |
| Global Inflation Linked Bonds | 3.0 | 6.4 | 7.7 | 1.8 | 7.4 | 5.9 | 8.4 | 1.6 | 3.2 |
| High Yield Bonds | 2.8 | 8.9 | 9.8 | 6.8 | 25.7 | 7.7 | 8.6 | 4.8 | 10.6 |
| Bank Loans | -0.2 | 2.2 | 2.9 | 4.0 | 16.4 | 4.3 | 0.6 | 2.2 | 4.5 |
| Direct Lending | -0.5 | 0.3 | 1.2 | 4.8 | 5.6 | 1.5 | 4.1 | 1.8 | 3.7 |
| Foreign Bonds | 5.7 | 11.3 | 18.8 | 1.4 | 7.4 | 9.9 | 21.3 | 2.2 | 6.8 |
| Emerging Market Bonds (major) | 3.1 | 7.4 | 8.1 | 5.2 | 15.5 | 7.4 | 15.4 | 5.4 | 11.1 |
| Emerging Market Bonds (local) | 3.7 | 9.7 | 10.4 | 5.3 | 17.5 | 10.3 | 19.1 | 5.9 | 12.7 |
| US Equity | 3.4 | 15.2 | 18.6 | 11.2 | 18.7 | 7.9 | 24.4 | 10.0 | 30.0 |
| Developed Market Equity (non-US) | -2.4 | 16.3 | 18.0 | 9.3 | 18.2 | 13.1 | 47.3 | 6.1 | 17.8 |
| Emerging Market Equity | 0.5 | 17.6 | 22.9 | 8.9 | 34.1 | 19.7 | 46.9 | 8.6 | 26.5 |
| Global Equity | 0.7 | 15.1 | 18.1 | 9.4 | 19.5 | 11.1 | 35.4 | 8.1 | 24.1 |
| Private Equity/Debt | 2.4 | 4.3 | 5.1 | 9.8 | 9.5 | 7.3 | 16.3 | 10.2 | 13.4 |
| Private Equity | 2.5 | 4.3 | 5.0 | 9.9 | 8.3 | 7.2 | 16.9 | 10.9 | 14.1 |
| Private Debt | 0.8 | 1.8 | 2.7 | 7.2 | 12.7 | 4.8 | 5.9 | 4.5 | 6.6 |
| REITs | 2.6 | 14.2 | 18.5 | 8.8 | 27.0 | 6.5 | 24.8 | 9.5 | 23.0 |
| Core Private Real Estate | 1.0 | 1.6 | 1.5 | 3.8 | -3.5 | 1.2 | 5.5 | 2.8 | 3.6 |
| Value-Added Real Estate | 2.7 | 6.4 | 6.3 | 4.8 | -9.4 | 0.9 | 12.6 | 5.8 | 7.4 |
| Opportunistic Real Estate | 0.1 | 3.9 | 4.0 | 5.5 | -5.5 | -0.4 | 11.4 | 4.6 | 6.2 |
| Natural Resources (Private) | 0.5 | 11.0 | 14.6 | 8.0 | 23.5 | 13.0 | 23.9 | 5.1 | 12.6 |
| Timberland | 6.4 | 9.2 | 11.6 | 4.8 | -0.6 | 3.8 | 12.9 | 6.3 | 5.5 |
| Farmland | 3.2 | 4.2 | 5.6 | 6.3 | 3.8 | 3.4 | 7.8 | 5.2 | 4.1 |
| Commodities (naïve) | -2.6 | -3.2 | -3.0 | 2.5 | 9.8 | 13.6 | -2.5 | 3.0 | 4.0 |
| Infrastructure (Core Private) | 0.8 | -4.3 | -3.7 | 6.8 | 4.8 | 3.5 | -2.3 | 2.0 | 2.9 |
| Hedge Funds | 3.3 | 4.8 | 4.8 | 5.4 | 11.3 | 6.0 | 9.3 | 5.5 | 9.8 |
| Long-Short | 3.3 | 5.8 | 5.5 | 6.4 | 12.3 | 7.8 | 15.2 | 6.9 | 13.3 |
| Hedge Fund of Funds | 2.5 | 3.9 | 4.0 | 4.5 | 10.2 | 5.1 | 8.3 | 4.6 | 8.8 |

[1] Assumptions are based on performance for each asset class during historical periods that resembled these situations.

## Inflation Scenario Description

| Scenario | Scenario Description |
|---|---|
| Inflation slightly higher than expected | Inflation is .05% above inflation expectation (i.e. surprise inflation is .05%). .05% is the 25th percentile of positive, historical surprise inflation. |
| Inflation moderately higher than expected | Inflation is .15% above inflation expectation (i.e. surprise inflation is .15%). .15% is the median of positive, historical surprise inflation. |
| Inflation meaningfully higher than expected | Inflation is .3% above inflation expectation (i.e. surprise inflation is .3%). .3% is the 75th percentile of positive, historical surprise inflation. |
| High Growth and Low Inflation | The real GDP growth rate is 1% and inflation is .07%. 1% GDP growth is the 75th percentile of historical GDP growth and .07% inflation is the 25th percentile of historical inflation. |
| High Growth and Moderate Inflation | The real GDP growth rate is 1% and inflation is .25%. 1% GDP growth is the 75th percentile of historical GDP growth and .25% inflation is the median of historical inflation. |
| High Growth and High Inflation | The real GDP growth rate is 1% and inflation is .5%. 1% GDP growth is the 75th percentile of historical GDP growth and .5% inflation is the 75th percentile of historical inflation. |
| Low Growth and Low Inflation | The real GDP growth rate is .3% and inflation is .07%. .3% GDP growth is the 25th percentile of historical GDP growth and .07% inflation is the 25th percentile of historical inflation. |
| Low Growth and Moderate Inflation | The real GDP growth rate is .3% and inflation is .25%. .3% GDP growth is the 25th percentile of historical GDP growth and .25% inflation is the median of historical inflation. |
| Low Growth and High Inflation | The real GDP growth rate is .3% and inflation is .5%. .3% GDP growth is the 25th percentile of historical GDP growth and .5% inflation is the 75th percentile of historical inflation. |
| Very brief, moderate inflation spike | Inflation is .45% and lasts for 1-2 months. .45% is the 75th percentile of historical inflation. |
| Brief, moderate inflation spike | Inflation is .45% and lasts for 4-8 months. .45% is the 75th percentile of historical inflation. |
| Extended, moderate inflation spike | Inflation is .45% and lasts for 12+ months. .45% is the 75th percentile of historical inflation. |
| Very brief, extreme inflation spike | Inflation is .9% and lasts for 1-2 months. .9% is the 95th percentile of historical inflation. |
| Brief, extreme inflation spike | Inflation is .9% and lasts for 4-8 months. .9% is the 95th percentile of historical inflation. |
| Extended, extreme inflation spike | Inflation is .9% and lasts for 12+ months. .9% is the 95th percentile of historical inflation. |

## Notes and Disclaimers

[1] The returns shown in the Policy Options and Risk Analysis sections rely on estimates of expected return, standard deviation, and correlation developed by Meketa Investment Group. To the extent that actual return patterns to the asset classes differ from our expectations, the results in the table will be incorrect. However, our inputs represent our best unbiased estimates of these simple parameters.

[2] The returns shown in the Policy Options and Risk Analysis sections use a lognormal distribution, which may or may not be an accurate representation of each asset classes' future return distribution. To the extent that it is not accurate in whole or in part, the probabilities listed in the table will be incorrect. As an example, if some asset classes' actual distributions are even more right-skewed than the lognormal distribution (i.e., more frequent low returns and less frequent high returns), then the probability of the portfolio hitting a given annual return will be lower than that stated in the table.

[3] The standard deviation bars in the chart in the Risk Analysis section do not indicate the likelihood of a 1, 2, or 3 standard deviation event—they simply indicate the return we expect if such an event occurs. Since the likelihood of such an event is the same across allocations regardless of the underlying distribution, a relative comparison across policy choices remains valid.

# Investment Policy Statement Updates

# Updated Investement Policy Statement – Summary of Changes

## Background

→ At the March meeting a discussion on the Pension Fund's asset allocation led us to consider the structure and contents of the Investment Policy Statement (IPS).

→ Working with Fund Counsel, Meketa revised the IPS for the consideration of the Trustees. The revisions included removal of language, addition of language and a new appendix detail for the Trustees to consider.

→ In this report we include two version of the IPS:

- Full Marked Up version with comments to ensure you have all of the edits, major and minor.
- Clean version that accepts all of the edits contemplated in the Full Marked Up version.

→ The next two pages detail the substantive components modified in the IPS.

→ If a decision on the Asset Allocation, the Grouping of Assets or both are made we will return at the September meeting with an additional update to the IPS and an analysis of proposed revisions to benchmarks due to the possible changes to Asset Allocation.

## Material Changes

| IPS Section | Edit | Rationale |
|---|---|---|
| II.B | Removed reference to the actual "current" assumed rate of return | The actuarially assumed return rate may change occasionally, eliminating any potential of the IPS stating one figure and the actuary stating another. |
| III.C | Removed the constraint on "no more than 20% of Pension Fund assets" invested in managers with more than 30 days until a redemption can be made | Section XII introduced this constraint. With the removal of section XII this too should be under consideration for removal. |
| VI.C | Introduction of asset class grouping | Asset class grouping allows the Trustees to have a potentially more informed knowledge of groups of assets that are either impacted by or have the same risk and return dynamics. |
| VII.B | A modification to maintain more guidance around the review of performance and Pension Fund Benchmarks. | This edit was meant to clarify terms or details around benchmarking the Pension Fund. Meketa considers this approach and using an appendix for explicit details a best practice for Trustees. |

| IPS Section | Edit | Rationale |
|---|---|---|
| XII | Removal of this section | Section was added during the COVID-19 pandemic due to the impact the pandemic had on the employment of members. |
| Appendix A | Provides a more updated version. Includes asset class groupings and policy benchmark names for each asset class used by the Pension Fund. Includes ranges for asset class groupings as a new feature. | These additions make clear the specific targets, ranges and benchmarks for performance comparison in the IPS in one Section. |
| Appendix B (OLD) | The deleted appendix B was a series of capital market assumptions expected risk and return along with correlation to asset classes that were not specific to the Pension Fund. | This information is typically provided to the Trustees annually and does not provide any guidance, restriction or position. |
| Appendix B (NEW) | The new appendix B details the Policy Benchmark weights and benchmarks along with a simple benchmark detail with weights and benchmarks | Meketa considers this a best practice to be specific about benchmarks in an appendix to avoid confusion around the performance comparison benchmarks. |

# UNITE HERE LOCAL 25 AND HOTEL ASSOCIATION OF WASHINGTON, D.C. PENSION FUND INVESTMENT POLICY STATEMENT

Adopted June 7, 2024

The purpose of this document is to set forth the investment-related goals and objectives of the Board of Trustees (the "Trustees") of the UNITE HERE Local 25 and Hotel Association of Washington, D.C. Pension Fund (the "Pension Fund"), and to establish guidelines for the implementation of investment strategy.

Any revisions to this document may be made only with the approval of the Trustees.

The Trustees recognize that a stable, well-articulated investment policy is crucial to the long-term success of the Pension Fund. As such, the Trustees have developed this Investment Policy Statement with the following goals in mind:

- To clearly and explicitly establish the objectives and constraints that govern the investment of the Pension Fund's assets,

- To establish a long-term target asset allocation with the goal of meeting the Pension Fund's objectives given the explicit constraints, and

- To protect the financial health of the Pension Fund through the implementation of this stable long-term investment policy.

The Trustees may delegate certain fiduciary functions relating to Pension Fund's investments, including the Trustees' responsibilities under this Investment Policy Statement, to any committee comprising one or more members of the Board of Trustees (the "Investment Committee"). As the context so requires, any reference in this Investment Policy Statement to the Trustees shall be deemed to include reference to any Investment Committee duly appointed by the Trustees.

The Trustees have engaged Meketa Fiduciary Management, LLC ("Meketa") as their investment consultant in accordance with Section 3(21) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA") (the "Investment Consultant"), to, among other things, assist them in meeting these goals and developing and effectuating this Investment Policy Statement. The Trustees have also engaged Meketa to serve as an investment manager in accordance with

Section 3(38) of ERISA (the "Discretionary Investment Manager") to, among other things, identify, evaluate and select investment managers and/or investment vehicles consistent with this Investment Policy Statement. Meketa's responsibilities in its respective roles as Investment Consultant and Discretionary Investment Manager are more fully set forth in its Investment Consulting and Advisory Services Agreement with the Fund. In addition, Meketa shall be the "named fiduciary" under Section 402(c)(3) of ERISA for the sole purpose of appointing any ERISA Manager as defined in Section X.

## I. Pension Fund Goals

The Pension Fund was established to provide income to retirees. The Pension Fund's assets are structured to provide growth from capital gains and income, while maintaining sufficient liquidity and stability to meet beneficiary payments.

## II. Investment Objectives

The investment strategy of the Pension Fund is designed to ensure the prudent investment of funds in such a manner as to provide real growth of assets over time while protecting the value of the assets from undue volatility or risk of loss.

### A. Risk Objectives

- To accept a level of market risk consistent with moderate interim volatility without sacrificing the potential for long-term real growth of assets.
- To use diversification to minimize exposure to company, industry specific, and asset class specific risks in the aggregate investment portfolio.
- To avoid extreme levels of volatility that could adversely affect the Pension Fund's ability to provide benefits.

### B. Return Objective

- Within the risk constraints outlined above, to achieve an absolute return over the long term at least equal to the Pension Fund's actuarially assumed investment rate of return.

## III. Investment Constraints

### A. Legal and Regulatory

The Trustees intend that the assets of the Pension Fund at all times are invested in accordance with the provisions of ERISA and Department of Labor regulations. The Trustees will retain legal counsel when appropriate to review contracts and provide advice with respect to applicable statutes and regulations.

### B. Time Horizon

The Pension Fund will be managed on a going-concern basis. The assets of the Pension Fund will be invested with a long-term time horizon consistent with the participant demographics and the goals of the Pension Fund.

### C. Liquidity

The Trustees intend to maintain sufficient liquidity to meet anticipated participant and beneficiary payments.

### D. Tax Considerations

The Pension Fund is a tax-exempt entity. Therefore, investments and strategies will be evaluated on a basis that is indifferent to taxable status, except where the prospect of Unrelated Business Taxable Income ("UBTI") and/or Unrelated Debt Financed Income ("UDFI") is a concern.

## IV. Risk and Return Considerations

The Trustees accept the risks associated with investing in the capital markets (market risks) but will minimize wherever possible those risks for which the Pension Fund is unlikely to be compensated (non-market or diversifiable risks).

## V. Diversification

The Trustees recognize that a primary element of risk control is diversification. Therefore, investments will be allocated across multiple classes of assets, chosen in part for the expected correlation of their returns. Within each asset type, investments will be distributed across many individual holdings, thus further reducing volatility. In addition, each separate account investment manager's guidelines will specify the largest permissible investment in any one asset and will set other diversification requirements.

## VI. Asset Allocation

The Trustees recognize that the allocation of monies to various asset classes will be the major determinant of the Pension Fund's return and risk experience over time. Therefore, the Trustees will establish targets and ranges for allocation of investments, with the assistance of the Investment Consultant, across those asset classes that, based on historical and expected returns and risks, provide the highest likelihood of meeting the Pension Fund's investment objectives.

### A. Permissible Asset Classes

Appendix A sets forth asset classes and sub-asset classes in which Fund assets may be invested.

### B. Expected Returns, Risks, and Correlations for Permissible Asset Classes

In determining the appropriate allocation, the expected return and risk behavior of each asset class and the likely interaction of various asset classes in a portfolio will be considered.

### C. Long-Term Target Allocations

Based on the investment objectives and constraints of the Pension Fund, and on the expected behavior of the permissible asset classes, the Trustees will specify a long-term target allocation for each class of permissible assets. These targets will be expressed as a percentage of the Pension Fund's overall market value, surrounded by a band of permissible variation.

The long-term target allocations are intended as strategic goals, not short-term imperatives. Thus, it is permissible for the overall Pension Fund's asset allocation to deviate from the long-term target. Deviations from targets that occur due to capital market changes are discussed below.

The Pension Fund's target allocations and ranges for all permissible asset classes are shown in Appendix A.

Appendix A also shows target allocations and ranges for the following groups of asset classes that are expected to have similar risk and reward profiles or roles within the Pension Fund:

| Asset Class Grouping | Acceptable Asset Classes |
|---|---|
| Growth Assets | Public Equity<br>Private Equity |
| Credit Assets | High Yield Bonds<br>Bank Loans<br>Emerging Market Debt |
| Inflation Hedging Assets | TIPS<br>Gold and Gold Equity<br>Real Estate (Public and Private)<br>Natural Resources (Public)<br>Infrastructure |
| Risk Mitigating Assets | Investment Grade Bonds<br>Long-Term Government Bonds<br>Cash |

**D. Rebalancing**

In general, cash flows to and from the Pension Fund will be directed by the Discretionary Investment Manager in such a manner as to move each asset class toward its target allocation.

However, the Discretionary Investment Manager has the discretion to adjust allocations within the permissible allocation ranges, based on the risk/reward outlooks for permissible asset classes.

The Discretionary Investment Manager will rebalance the Fund's portfolio from time to time in order to correct any material deviations from the target ranges set forth in this Investment Policy Statement.

## VII. Review of Investment Policy, Asset Allocation, and Performance

### A. Review of Investment Policy and Asset Allocation

The Investment Policy Statement will be reviewed periodically to ensure that the objectives and constraints remain appropriate.

However, the Trustees recognize the need for a stable long-term policy for the Pension Fund, and major changes to this policy statement are expected to be made only when significant developments in the circumstances, objectives, or constraints of the Pension Fund occur.

The asset allocation of the Pension Fund will be reviewed with the Investment Consultant on an ongoing basis, and at least annually. In general, the Trustees intend that the Pension Fund will adhere to its long-term target allocations, and that major changes to these targets will be made only in response to significant developments in the circumstances, objectives, or constraints of the Pension Fund or in capital market opportunities.

## B. Review of Performance

The Trustees, with the advice of the Investment Consultant, will evaluate the performance of the Pension Fund relative to its objectives and to the returns available from the capital markets during the period under review. In general, the Trustees will evaluate performance relative to benchmarks, rather than absolute performance. The benchmark for each asset class is shown in Appendix A; the total Fund performance will be evaluated relative to a "Policy Benchmark" that weights the returns of available market indices on the basis of the Pension Fund's target investment structure, and a "Simple Benchmark" consisting of a broad-based equity and fixed income index. Appendix B sets forth the Policy Benchmark and Simple Benchmark and their component weighted indices.

Performance goals are based upon a long-term investment horizon; therefore, interim fluctuations should be viewed with appropriate perspective.

In light of the uncertainties and complexities of investment markets, the Trustees recognize and acknowledge that a reasonable level of risk must be assumed to provide an opportunity to achieve the long-term investment objectives of the Policy. The Discretionary Investment Manager will seek to manage the Pension assets at a risk level (as measured by standard deviation over a full market cycle) that is equal to or less than that of the Policy Benchmark. The Trustees recognize that, in some periods, the risk level may exceed that of the Policy Benchmark due to the market environment, in which case the Investment Consultant will discuss this issue with the Trustees.

## VIII. Investment Operating Costs

To control investment operating costs at every level of the Pension Fund:

- Investment fees and associated professional fees will be evaluated as part of any investment decision and minimized to the extent appropriate;
- Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover;
- If appropriate, assets will be transferred in-kind during manager transitions and Pension Fund restructurings to eliminate unnecessary turnover expenses; and
- Separate account managers will be instructed to minimize brokerage and execution costs.
-

## IX. Voting of Proxies

The Trustees intend to delegate to each Manager (as defined in Section X below) the responsibility for voting all proxies for the securities under its management. To the extent that the voting of proxies is so delegated, the Trustees expect that managers will execute all proxies in a timely fashion. The Trustees expect the Managers to whom proxy voting is delegated to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions. The Investment Consultant will ensure all proxy votes for separately managed accounts are provided to the Fund Office periodically.

## X. Managers

The Trustees have delegated to the Discretionary Investment Manager discretion to use a combination of investment management approaches and styles for all approved asset classes. The Discretionary Investment Manager may engage any investment management organization to manage the Pension Fund's assets either (i) in a non-plan asset vehicle (a "Non-Plan Asset Manager") or (ii) in a "plan asset" vehicle in a manner consistent with ERISA, including ERISA's provisions regarding fiduciary responsibilities and prohibited transactions (an "ERISA Manager" and together with Non-Plan Asset Managers, the "Managers").

All Manager appointments will specify the asset class and/or specific assets for which the Manager will be retained. The appointment of Managers will take into account information about the Manager including, but not limited to:

- Organizational Stability
- Philosophy
- Process
- Resources
- Performance and Risks
- Operating Costs

Each Manager that is appointed to manage a portion of the Pension Fund's assets as an ERISA Manager must qualify as an "investment manager" within the meaning of Section 3(38) of ERISA and must acknowledge in writing that it is a "fiduciary" with respect to such assets within the meaning of Section 3(21) of ERISA. Each ERISA Manager is expected to manage the Pension Fund's assets allocated to its management in accordance with this Investment Policy Statement, any applicable Manager-specific guidelines, and federal and state law including, without limitation, the fiduciary responsibility and prohibited transaction provisions of ERISA. Each ERISA Manager will perform its duties in the sole interest of Pension Fund participants and beneficiaries and "with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and like aims." The Trustees will neither assume any obligation or responsibility for the direct management of the Pension Fund's assets allocated to ERISA Managers nor be liable for any acts or omissions of any ERISA Manager that result in any loss to the Pension Fund.

The Discretionary Investment Manager has the discretion to select and replace Managers. As a result, the Discretionary Investment Manager is responsible for performing due diligence on the Managers. The Discretionary Investment Manager will meet with the Managers as needed to perform such due diligence.

## XI. Forbidden Assets and Strategies

Each separate account Manager will be furnished by the Discretionary Investment Manager with a list of asset types and investment strategies (if any) that are forbidden as part of its guidelines.

No investment vehicle may include the following strategies:

**A.** Short Selling of physical equity or debt securities. Short selling is the process of selling shares of a security (equity or debt) without owning them, hoping to buy them back at a future date in the expectation that their price will drop.

**B.** Arbitrage strategies of any company or companies. Arbitrage strategies seek to exploit small pricing inefficiencies between related securities.

REMOVAL OF XII

**BOARD OF TRUSTEES OF THE UNITE HERE LOCAL 25 AND HOTEL ASSOCIATION OF WASHINGTON, D.C. PENSION FUND**

By:______________________________________

Paul Schwalb, Chair

By:______________________________________

Solomon Keene, Secretary

**MEKETA FIDUCIARY MANAGEMENT, LLC**

By:______________________________________

Name and Title:__________________________

## APPENDIX A

## PERMISSIBLE ASSET CLASSES AND ASSET ALLOCATION TARGETS

| Asset Class/Benchmark | Target (%) | Allowable Ranges (%) |
|---|---|---|
| **Growth Assets** | **47** | 32-62 |
| Public Domestic Equity | 25 | 15-35 |
| Russell 3000 | | |
| International Developed Market Equity | 10 | 5-20 |
| MSCI EAFE | | |
| International Emerging Markets Equity | 7 | 0-20 |
| MSCI Emerging Markets | | |
| Private Equity | 5 | 0-10 |
| Preqin Private Equity 1Q Lagged | | |
| **Credit Assets** | **12** | **0-20** |
| High Yield Bonds | 5 | 0-15 |
| Bloomberg US High Yield TR | | |
| Emerging Market Bonds | 7 | 0-15 |
| JPM GBI-EM Global Diversified | | |
| **Inflation Hedging Assets** | **27** | **12-35** |
| TIPS | 10 | 0-20 |
| Bloomberg US TIPS TR | | |
| Core Private Real Estate | 8 | 0-15 |
| NCREIF ODCE | | |
| Value-Added Real Estate | 4 | 0-10 |
| NCREIF ODCE | | |

| | | |
|---|---|---|
| Natural Resources | 5 | 0-10 |
| S&P Global Large MidCap Commodity and Resources | | |
| **Risk Mitigating Assets** | 14 | **7-28** |
| Investment Grade Bonds | 14 | 8-25 |
| Bloomberg US Aggregate TR | | |
| Cash | <5 | 0-10 |
| 91-Day T-Bill | | |

Set forth below are the targets for each group of asset classes described in Section VII.

| Asset Class Groupings | Minimum | Target | Maximum |
|---|---|---|---|
| Growth Assets | **32** | 47 | 62 |
| Credit | 0 | 12 | 20 |
| Inflation Hedges | 12 | 27 | 35 |
| Risk-Mitigating Assets | 7 | 14 | 28 |

# APPENDIX B

## PENSION FUND BENCHMARKS

**Policy Benchmark**

Growth Assets

- 25% Russell 3000 Index
- 10% MSCI EAFE Index
- 7% MSCI Emerging Markets Index
- 5% Preqin Private Equity, 1 Quarter Lag

Credit Assets

- 5% Bloomberg US Corporate High Yield
- 3.5% JP Morgan Government Bond Index- Emerging Markets Global Diversified (JPM GBI-EM)
- 3.5% JP Morgan Emerging Markets Bond Index Global Diversified

Inflation Hedges

- 10% Bloomberg US TIPS Total Return Value ("Bloomberg US TIPS TR")
- 5% S&P Global LargeMidCap Commodity and Resources Index ("S&P Global Large/MidCap Commodity and Resources NR USD")
- 12% National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index – Open End Diversified Core Equity ("NCREIF ODCE (net)")

Risk Mitigating Assets

- 14% Bloomberg US Aggregate Total Return Value ("Bloomberg US Aggregate TR")

**Simple Benchmark**

- 60% MSCI All Country World Return Net Index from Morgan Stanley Capital International (the "MSCI ACWI")
- 40% Bloomberg Global Aggregate Bond Index (the "Global Agg")

# UNITE HERE Local 25 and Hotel Association of Washington, D.C. Pension Fund Investment Policy Statement

Adopted ~~September 24, 2020~~June 7, 2024

Commented [BD1]: Update per new future date adopted. -USE JUNE

The purpose of this document is to set forth the investment-related goals and objectives of the Board of Trustees of the UNITE HERE Local 25 and Hotel Association of Washington, D.C. Pension Fund (the "Pension Fund"), and to establish guidelines for the implementation of investment strategy.

Any revisions to this document may be made only with the approval of the Board of Trustees of the Pension Fund (the "Trustees").

The Trustees of the Pension Fund recognize that a stable, well-articulated investment policy is crucial to the long-term success of the Pension Fund. As such, the Trustees have developed this Investment Policy Statement with the following goals in mind:

- To clearly and explicitly establish the objectives and constraints that govern the investment of the Pension Fund's assets,

- To establish a long-term target asset allocation with the goal of meeting the Pension Fund's objectives given the explicit constraints, and

- To protect the financial health of the Pension Fund through the implementation of this stable long-term investment policy.

The Trustees may delegate certain fiduciary functions relating to Pension Fund's investments, including the Trustees' responsibilities under this Investment Policy Statement, to any committee comprising one or more members of the Board of Trustees (the "Investment Committee"). As the context so requires, any reference in this Investment Policy Statement to the Trustees shall be deemed to include reference to any Investment Committee duly appointed by the Trustees.

The Trustees have engaged Meketa Fiduciary Management, LLC ("Meketa") as their investment consultant in accordance with Section 3(21) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA") (the "Investment Consultant"), to, among other things, assist them in meeting these goals and developing and effectuating this Investment Policy Statement. The Trustees have also engaged Meketa to serve as an investment manager in accordance with Section 3(38) of ERISA (the "Discretionary Investment Manager") to, among other things, identify, evaluate and select investment managers and/or investment vehicles consistent with this Investment Policy Statement.

Meketa's responsibilities in its respective roles as Investment Consultant and Discretionary Investment Manager are more fully set forth in its Investment Consulting and Advisory Services Agreement with the Fund. In addition, Meketa shall be the "named fiduciary" under Section 402(c)(3) of ERISA for the sole purpose of appointing any ERISA Manager as defined in Section X.

## I. UNITE HERE Local 25 and Hotel Association of Washington, D.C. Pension Fund Goals

The Pension Fund was established to provide income to retirees. The Pension Fund's assets are structured to provide growth from capital gains and income, while maintaining sufficient liquidity and stability to meet beneficiary payments.

## II. Investment Objectives

The investment strategy of the Pension Fund is designed to ensure the prudent investment of funds in such a manner as to provide real growth of assets over time while protecting the value of the assets from undue volatility or risk of loss.

### A. Risk Objectives

- To accept a level of market risk consistent with moderate interim volatility without sacrificing the potential for long-term real growth of assets.
- To use diversification to minimize exposure to company, industry specific, and asset class specific risks in the aggregate investment portfolio.
- To avoid extreme levels of volatility that could adversely affect the Pension Fund's ability to provide benefits.

### B. Return Objective

- Within the risk constraints outlined above, to achieve an absolute return over the long term at least equal to the Pension Fund's actuarially assumed investment rate of return~~actuarial assumption~~. ~~of 6.75% as of 2017.~~

Commented [BD2]: Consider removal of actual figure? We could take a poll internally to know what the client base at Meketa does inside their IPS. My intuition is this is less frequently embedded and usually more generic ending the sentence at "assumption.".

## III. Investment Constraints

### A. Legal and Regulatory

The Trustees intend that the assets of the Pension Fund at all times are invested in accordance with the provisions of ERISA and Department of Labor regulations. The Trustees will retain legal counsel when appropriate to review contracts and provide advice with respect to applicable statutes and regulations.

### B. Time Horizon

The Pension Fund will be managed on a going-concern basis. The assets of the Pension Fund will be invested with a long-term time horizon consistent with the participant demographics and the goals of the Pension Fund.

### C. Liquidity

The Trustees intend to maintain sufficient liquidity to meet anticipated participant and beneficiary payments. ~~In addition, no more than 20% of the Pension Fund's assets may be invested in investment vehicles in which the Fund's investment cannot be fully redeemed within 30 days.~~

Commented [BD3]: Possible modifications:
1. Strike this sentence.
2. Modify the percentage of assets
3. Modify the "fully redeemed" language to provide more flexibility (SKY example, FE or other non-MF vehicles).
4. Act on both the % and the days.

### D. Tax Considerations

The Pension Fund is a tax-exempt entity. Therefore, investments and strategies will be evaluated on a basis that is indifferent to taxable status, except where the prospect of Unrelated Business Taxable Income ("UBTI") and/or Unrelated Debt Financed Income ("UDFI") is a concern.

Commented [BD4]: Is it appropriate to state what should be done here as it relates to UBTI and UDFI?

## IV. Risk and Return Considerations

The Trustees accept the risks associated with investing in the capital markets (market risks)~~,~~ but will minimize wherever possible those risks for which the Pension Fund is unlikely to be compensated (non-market or diversifiable risks).

## V. Diversification

The Trustees of the Pension Fund recognize that a primary element of risk control is diversification. Therefore, investments will be allocated across multiple classes of assets, chosen in part for the expected correlation of their returns. Within each asset type, investments will be distributed across many individual holdings, thus further reducing volatility. In addition, each separate account investment manager's guidelines will specify the largest permissible investment in any one asset~~,~~ and will set other diversification requirements.

## VI. Asset Allocation

The Trustees recognize that the allocation of monies to various asset classes will be the major determinant of the Pension Fund's return and risk experience over time. Therefore, the Trustees will establish targets and ranges for allocation of investments, with the assistance of the Investment Consultant, across those asset classes that, based on historical and expected returns and risks, provide the highest likelihood of meeting the Pension Fund's investment objectives.

### A. Permissible Asset Classes

Appendix ~~"~~A~~"~~ ~~(attached hereto and made a part of this Policy)~~ sets forth asset classes and sub-asset classes in which Fund ~~Assets~~ assets may be invested.

### B. Expected Returns, Risks, and Correlations for Permissible Asset Classes

In determining the appropriate allocation, the expected return and risk behavior of each asset class and the likely interaction of various asset classes in a portfolio will be considered. ~~Current expected return and risk behavior of each asset class and the likely interaction of various asset classes can be found in Appendices B and C, which appendices will be updated from time to time based on the recommendation of the Investment Consultant.~~

**Commented [BD5]:** See appendix B and C. Consider removal.

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### C. Long-Term Target Allocations

Based on the investment objectives and constraints of the Pension Fund, and on the expected behavior of the permissible asset classes, the Trustees will specify a long-term target allocation for each class of permissible assets. These targets will be expressed as a percentage of the Pension Fund's overall market value, surrounded by a band of permissible variation.

The long-term target allocations are intended as strategic goals, not short-term imperatives. Thus, it is permissible for the overall Pension Fund's asset allocation to deviate from the long-term target. Deviations from targets that occur due to capital market changes are discussed below.

The Pension Fund's target allocations and ranges for all permissible asset classes are shown in Appendix A.

Appendix A also shows target allocations and ranges for the following groups of asset classes that are expected to have similar risk and reward profiles ~~and/or functions~~ or roles within the Pension Fund:

| Asset Class Grouping | Acceptable Asset Classes |
|---|---|
| Growth Assets | Public Equity<br>Private Equity |
| Credit Assets | High Yield Bonds<br>Bank Loans<br>Emerging Market Debt |
| Inflation Hedging Assets | TIPS<br>Gold and Gold Equity<br>Real Estate (Public and Private)<br>Natural Resources (Public)<br>Infrastructure |
| Risk Mitigating Assets | Investment Grade Bonds<br>Long-Term Government Bonds<br>Cash |

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### D. Rebalancing

In general, cash flows to and from the Pension Fund will be directed by the Discretionary Investment Manager in such a manner as to move each asset class toward its target allocation.

However, the Discretionary Investment Manager has the discretion to adjust allocations within the permissible allocation ranges, based on the risk/reward outlooks for permissible asset classes.

The Discretionary Investment Manager will rebalance the Fund's portfolio from time to time in order to correct any material deviations from the target ranges set forth in this Investment Policy Statement.

## VII. Review of Investment Policy, Asset Allocation, and Performance

### A. Review of Investment Policy and Asset Allocation

The Investment Policy Statement will be reviewed periodically to ensure that the objectives and constraints remain appropriate. However, the Trustees recognize the need for a stable long-term policy for the Pension Fund, and major changes to this policy statement are expected to be made only when significant developments in the circumstances, objectives, or constraints of the Pension Fund occur.

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The asset allocation of the Pension Fund will be reviewed with the Investment Consultant on an ongoing basis, and at least annually. In general, the Trustees intend that the Pension Fund will adhere to its long-term target allocations, and that major changes to these targets will be made only in response to significant developments in the circumstances, objectives, or constraints of the Pension Fund or in capital market opportunities.

## B. Review of Performance

The Trustees, with the advice of the Investment Consultant, will ~~specifically~~ evaluate the performance of the Pension Fund relative to its objectives and to the returns available from the capital markets during the period under review. In general, the Trustees will evaluate performance relative to benchmarks, rather than absolute performance. ~~Specifically,~~ The benchmark for each asset classis shown in Appendix A; the total Fund performance will be evaluated relative to a "~~customp~~Policy ~~benchmark~~Benchmark" that weights the returns of available market indices on the basis of the Pension Fund's target investment structure, and a "Simple Benchmark" consisting of a broad-based equity and fixed income index. Appendix B sets forth the Policy Benchmark and Simple Benchmark and their component weighted indices~~ to assess the implementation of the Pension Fund's investment strategy.~~ ~~The Pension Fund shall maintain specific policy benchmarks using a pertinent combination of the indices noted in appendix CB for the explicit underlying asset classes.~~

Performance goals are based upon a long-term investment horizon; therefore, interim fluctuations should be viewed with appropriate perspective.

In light of the uncertainties and complexities of investment markets, the Trustees recognize and acknowledge that a reasonable level of risk must be assumed to provide an opportunity to achieve the long-term investment objectives of the Policy. The Discretionary Investment Manager will seek to manage the Pension assets at a risk level (as measured by standard deviation over a full market cycle) that is equal to or less than that of the Policy Benchmark. The Trustees recognize that, in some periods, the risk level may exceed that of the Policy Benchmark due to the market environment, in which case the Investment Consultant will discuss this issue with the Trustees.

~~The Pension Fund is anticipated to functional framework to group assetgroups of asset classes that are expected to have similar risk and reward profiles and/or~~

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**Commented [BD8]:** Added per e-mail traffic from Amayerson on 5/30.

**Commented [BD9]:** Potential consideration: Add an appendix that lays out two items. First is the "functional framework" and second is the benchmark used for each asset class.

**Commented [WD10R9]:** Add to appendix

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**Commented [AM11]:** I moved this paragraph and the paragraph below from Appendix B (this paragraph was also in this section). What interim fluctuations are being referred to here?

**Commented [BD12R11]:** In reading the clean version of this I am proposing we remove it from this document. It is similar to the paragraph below.

~~functions. A description of the functional framework and asset classes can be found belowBA.~~ ~~The Pension Fund will also be measured against a "Simple Benchmark" consisting of a fixed allocation of two broad based equity and fixed income indiciesindices, which will show the benefits and/or drawbacks from investing the Pension Fund assets in a diversified portfolio. Performance goals are based upon a long-term investment horizon; therefore, interim fluctuations should be viewed with appropriate perspective. BThe policy benchmark's , as well as the weighted components of athe Simple BenchmarkThe Simple Benchmark uses two asset classes, one for equity and one for fixed income. specific weightings shall be found in Appendix C.~~

Commented [AM13]: The term "asset class" is used to describe the groupings in both Appendix A and Appendix B, which is confusing - see comment above. If Appendix A is to be retained, discuss whether we want to refer to the functional framework groupings as "groups of asset classes."

Commented [BD14R13]: Change functional framework to read "Groups of Asset Classes"

| Asset Class | Representative Index |
|---|---|
| POSSIBLE REMOVAL Domestic Equity | POSSIBLE REMOVAL - Russell 3000 |
| POSSIBLE REMOVAL International Equity | POSSIBLE REMOVAL - MSCI EAFE |
| POSSIBLE REMOVAL Emerging Markets Equity | POSSIBLE REMOVAL - MSCI Emerging Markets |
| NEW/Replacement CLASS Global Equity | MSCI All Country World Investable Market Index (IMI~~)~~ |
| Private Equity | Preqin Private Equity 1Q Lagged<br>POSSIBLE CHANGE Russell 3000 + 2% 1Q Lagged<br>RETROACTIVELY to INCEPTION of PE |
| High Yield Bonds | Bloomberg US High Yield TR |
| Bank Loans | Credit Suisse Leveraged Loan Index |
| POSSIBLE REMOVOAL - Emerging Market Debt | POSSIBLE REMOVAL - JPM GBI-EM Global Diversified |
| TIPS | Bloomberg US TIPS TR |
| Possible NEW Asset Class Gold | POSSIBLE NEW Benchmark 60% Gold (Spot)/40% FTSE Gold Mines |
| Real Estate | NCREIF ODCE |
| Natural Resources ~~(Public)~~ | S&P Global LargeMidCap Commodity and Resources |
| POSSIBLE NEW Infrastructure | Possible NEW Benchmark DJ Brookfield Global Infrastructure 1Q Lagged |
| Investment-Grade Bonds | Bloomberg US Aggregate TR |
| POSSIBLE NEW Long-Term Government Bonds | Bloomberg US Government Long TR |
| Cash | 91-Day T-Bill |

Commented [AM16R15]: Assuming the asset classes in this table match the asset classes in Appendix A, it probably makes more sense to include the indices for each asset class immediately below the asset classes listed in the table in Appendix A rather than including this chart here, which is somewhat random.

Commented [BD17R15]: Edits made to these. I am including POSSIBLE REMOVAL and POSSIBLE NEW on asset classes and benchmarks, where appropriate.

Commented [BD18R15]: Resolved chain after a discussion with Amayerson. This was added to appendix and removed from the body of the IPS.

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Commented [BD15]: This is Illustrative. Once format is agreed upon we can add the Pension Fund's current policy target benchmark index details. Would highlight this would modify upon a AA vote.
CURRENT Policy Target BM below:
25.0% Russell 3000 Index, 1
4.0% Blmbg. U.S. Aggregate Index,
5.0% Blmbg. U.S. Corp: High Yield Index,
10.0% MSCI EAFE (Net),
3.5% JPM GBI-EM Global Diversified, 12.0% NCREIF ODCE Equal Weighted (Net),
5.0% S&P Global LargeMidcap Resources & Commodities Ind,
7.0% MSCI Emerging Markets (Net),
10.0% Blmbg. U.S. TIPS,
3.5% JPM EMBI Global Diversified,
5.0% Preqin Private Equity 1Q Lagged

~~The Pension Fund's Assets are anticipated to use groups of asset classes that are expected to have similar risk and reward profiles and/or functions.~~

| ~~Asset Class Grouping~~ | ~~Acceptable Asset Classes~~ |
|---|---|

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| | |
|---|---|
| ~~Growth Assets~~ | ~~Public Equity~~<br>~~Private Equity~~ |
| ~~Credit Assets~~ | ~~High Yield Bonds~~<br>~~Bank Loans~~<br>~~Emerging Market Debt~~ |
| ~~Inflation Hedging Assets~~ | ~~TIPS~~<br>~~Gold and Gold Equity~~<br>~~Real Estate (Public and Private)~~<br>~~Natural Resources (Public)~~<br>~~Infrastructure~~ |
| ~~Risk Mitigating Assets~~ | ~~Investment Grade Bonds~~<br>~~Long-Term Government Bonds~~<br>~~Cash~~ |

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## VIII. Investment Operating Costs

To control investment operating costs at every level of the Pension Fund:

- Investment fees and associated professional fees will be evaluated as part of any investment decision and minimized to the extent appropriate;
- Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover;
- If appropriate, assets will be transferred in-kind during manager transitions and Pension Fund restructurings to eliminate unnecessary turnover expenses; and
- Separate account managers will be instructed to minimize brokerage and execution costs.

## IX. Voting of Proxies

The Trustees intend to delegate ~~the responsibility~~ to each ~~individua~~l M~~m~~anager (as defined in Section X below) the responsibility for voting all proxies for the securities under its management. To the extent that the voting of proxies is so delegated, the Trustees expect that managers will execute all proxies in a timely fashion. The Trustees expect the managers to whom proxy voting is delegated to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions. The Investment Consultant will ensure all proxy votes for separately managed accounts are provided to the Fund Office periodically.

**Commented [BD19]:** Capital M?

## X. Managers

The Trustees have delegated to the Discretionary Investment Manager discretion to use a combination of investment management approaches and styles for all approved asset classes. The Discretionary Investment Manager may engage any investment management organization to manage the Pension Fund's assets either (i) in a non-plan asset vehicle (a "Non-Plan Asset Manager") or (ii) in a "plan asset" vehicle in a manner consistent with ERISA, including ERISA's provisions regarding fiduciary responsibilities and prohibited transactions (an "ERISA Manager" and together with Non-Plan Asset Managers, the "Managers").

All Manager appointments will specify the asset class and/or specific assets for which the Manager will be retained. The appointment of Managers will take into account information about the Manager including, but not limited to:

- Organizational Stability
- Philosophy
- Process
- Resources
- Performance and Risks
- Operating Costs

Each Manager that is appointed to manage a portion of the Pension Fund's assets as an ERISA Manager must qualify as an "investment manager" within the meaning of Section 3(38) of ERISA and must acknowledge in writing that it is a "fiduciary" with respect to such assets within the meaning of Section 3(21) of ERISA. Each ERISA Manager is expected to manage the Pension Fund's assets allocated to its management in accordance with this Investment Policy

Statement, any applicable Manager-specific guidelines, and federal and state law including, without limitation, the fiduciary responsibility and prohibited transaction provisions of ERISA. Each ERISA Manager will perform its duties in the sole interest of Pension Fund participants and beneficiaries and "with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and like aims." The Trustees will neither assume any obligation or responsibility for the direct management of the Pension Fund's assets allocated to ERISA Managers nor be liable for any acts or omissions of any ERISA Manager that result in any loss to the Pension Fund.

Commented [BD20]: Seeking confirmation that this is still appropriate and no suggested changes are possible.

The Discretionary Investment Manager has the discretion to select and replace Managers. As a result, the Discretionary Investment Manager is responsible for performing due diligence on the Managers. The Discretionary Investment Manager will meet with the Managers as needed to perform such due diligence.

## XI. Forbidden Assets and Strategies

Each separate account Manager will be furnished by the Discretionary Investment Manager with a list of asset types and investment strategies (if any) that are forbidden as part of its guidelines.

No investment vehicle may include the following strategies:

**A.** Short Selling of physical equity or debt securities. Short selling is the process of selling shares of a security (equity or debt) without owning them, hoping to buy them back at a future date in the expectation that their price will drop.

**B.** Arbitrage strategies of any company or companies. Arbitrage strategies seek to exploit small pricing inefficiencies between related securities.

## ~~XII. Illiquid Investment Restriction due to COVID-19~~

~~Due to the negative impact to the cash flow from the Covid-19 crisis, the Discretionary Investment Manager shall not make new investments in ANY investment vehicles in which the Fund's investment cannot be fully redeemed within 30 days until further authorization from the Board of Trustees.~~

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**BOARD OF TRUSTEES OF THE UNITE HERE LOCAL 25 AND HOTEL ASSOCIATION OF WASHINGTON, D.C. PENSION FUND**

By:____________________________________

~~John Boardman~~Paul Schwalb, Chair

Commented [BD21]: Modify to Paul

By:____________________________________

Solomon Keene, Secretary

**MEKETA FIDUCIARY MANAGEMENT, LLC**

By:____________________________________

Name and Title:_________________________

# Appendix A

## PERMISSIBLE ASSET CLASSES AND Asset Allocation Targets

| Asset Class | Target (%) | ~~Proposed~~ Allowable Ranges (%) | Policy Benchmark |
|---|---|---|---|
| Growth Assets~~Total Equity~~ | 47~~52~~ | 32-62 | Custom Weighted average of below components |
| Public Domestic Equity | 25 | 15-35 | Russell 3000 |
| International Developed Market Equity | 10 | 5-20 | MSCI EAFE |
| International Emerging Market Equity | 7 | 0-20 | MSCI Emerging Markets |
| Private Equity | 5 | 0-10 | Preqin Private Equity 1Q Lagged |
| Credit Assets~~Total Fixed Income~~ | 12~~36~~ | 0-20 | Custom Weighted average of below components |
| High Yield Bonds | 5 | 0-15 | Bloomberg US High Yield TR |
| Emerging Market Bonds | 7 | 0-15 | JPM GBI-EM Global Diversified |
| Inflation Hedging Assets~~Total Real Estate~~ | 27~~12~~ | 12-35 | Custom Weighted average of below components |
| TIPS | 10 | 0-20 | |
| Core Private Real Estate | 8 | 0-15 | NCREIF ODCE |
| Value-Added Real Estate | 4 | 0-10 | NCREIF ODCE |
| Natural Resources | 5 | 0-10 | S&P Global LargeMidCap Commodity and Resources |
| Risk Mitigating Assets | 14 | 7-28 | Custom Weighted average of below components |

**Commented [BD22]:** To be updated upon vote of Trustees.

**Commented [BD23]:** Post discussion with Amayerson benchmarks moved to below each respective current asset class for this dialogue and small header changes made.

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| | | | |
|---|---|---|---|
| Investment Grade Bonds ~~Value-Added Real Estate~~ | 14~~4~~ | 8-25~~0-10~~ | Bloomberg US Aggregate TR |
| Cash | <5 | 0-10 | 91-Day T-Bill |

Below we detail the targets ~~to~~for each ~~of the~~ group ~~s~~ of asset classes described in Section VII.

Commented [AM24]: Can the two charts be combined?

| Asset Class Groupings | Minimum | Target | Maximum |
|---|---|---|---|
| Growth Assets | 32 | 47 | 62 |
| Credit | 0 | 12 | 20 |
| Inflation Hedges | 12 | 27 | 35 |
| Risk-Mitigating Assets | 7 | 14 | 28 |

Commented [AM25]: Should this be maximum?

Commented [BD26R25]: Edit made.

# ~~APPENDIX B~~

**Commented [BD27]:** Discuss the practical reasons on having this as an appendix.

## ~~TWENTY-YEAR ANNUALIZED RETURN AND VOLATILITY EXPECTATIONS~~

| ~~Asset Class~~ | ~~Expected Return (%)~~ | ~~Volatility (%)~~ |
|---|---|---|
| ~~Fixed Income~~ | | |
| ~~Cash Equivalents~~ | ~~2.9~~ | ~~1.0~~ |
| ~~Short-term Investment Grade Bonds~~ | ~~2.6~~ | ~~1.0~~ |
| ~~Investment Grade Bonds~~ | ~~3.0~~ | ~~4.0~~ |
| ~~Investment Grade Corporate Bonds~~ | ~~3.6~~ | ~~7.0~~ |
| ~~Long-term Government Bonds~~ | ~~3.2~~ | ~~12.0~~ |
| ~~Long-term STRIPS~~ | ~~3.4~~ | ~~19.0~~ |
| ~~TIPS~~ | ~~2.9~~ | ~~7.0~~ |
| ~~High Yield Bonds~~ | ~~5.2~~ | ~~11.0~~ |
| ~~Bank Loans~~ | ~~5.0~~ | ~~9.0~~ |
| ~~Foreign Bonds~~ | ~~2.4~~ | ~~8.0~~ |
| ~~Emerging Market Bonds (major)~~ | ~~4.5~~ | ~~11.0~~ |
| ~~Emerging Market Bonds (local)~~ | ~~4.8~~ | ~~14.0~~ |
| ~~Equities~~ | | |
| ~~U.S. Equity~~ | ~~7.4~~ | ~~17.0~~ |
| ~~Developed Market Equity~~ | ~~7.9~~ | ~~19.0~~ |
| ~~Emerging Market Equity~~ | ~~9.1~~ | ~~24.0~~ |
| ~~Frontier Market Equity~~ | ~~10.0~~ | ~~21.0~~ |
| ~~Global Equity~~ | ~~7.8~~ | ~~17.0~~ |
| ~~Private Equity/Debt~~ | ~~9.1~~ | ~~23.0~~ |
| ~~Buyouts~~ | ~~9.4~~ | ~~24.0~~ |
| ~~Venture Capital~~ | ~~9.3~~ | ~~34.0~~ |
| ~~Mezzanine Debt~~ | ~~7.0~~ | ~~15.0~~ |
| ~~Distressed Debt~~ | ~~7.0~~ | ~~20.0~~ |
| ~~Real Assets~~ | | |
| ~~Real Estate~~ | ~~7.5~~ | ~~15.0~~ |
| ~~REITs~~ | ~~7.0~~ | ~~26.0~~ |
| ~~Core Private Real Estate~~ | ~~6.3~~ | ~~11.0~~ |
| ~~Value Added Real Estate~~ | ~~8.4~~ | ~~18.0~~ |
| ~~Opportunistic Real Estate~~ | ~~9.9~~ | ~~24.0~~ |
| ~~Natural Resources (Public)~~ | ~~8.3~~ | ~~22.0~~ |
| ~~Natural Resources (Private)~~ | ~~8.8~~ | ~~21.0~~ |
| ~~Commodities (naïve)~~ | ~~4.3~~ | ~~17.0~~ |
| ~~Infrastructure (Public)~~ | ~~7.5~~ | ~~17.0~~ |
| ~~Core Infrastructure (Private)~~ | ~~6.7~~ | ~~14.0~~ |
| ~~Non-Core Infrastructure (Private)~~ | ~~9.1~~ | ~~22.0~~ |
| ~~Other~~ | | |
| ~~Hedge Funds~~ | ~~4.9~~ | ~~7.0~~ |
| ~~Long-Short~~ | ~~4.3~~ | ~~9.0~~ |
| ~~Event-Driven~~ | ~~5.8~~ | ~~8.0~~ |
| ~~Global Macro~~ | ~~4.6~~ | ~~5.0~~ |
| ~~Risk Parity (10% vol)~~ | ~~5.4~~ | ~~10.0~~ |
| ~~Tactical Asset Allocation~~ | ~~4.4~~ | ~~10.0~~ |

~~Source: Meketa Investment Group's 2020 Annual Asset Study.~~

# ~~Appendix C~~

## ~~Expected Correlations~~

| | ~~Investment Grade Bonds~~ | ~~TIPS~~ | ~~High Yield Bonds~~ | ~~U.S. Equity~~ | ~~Developed Market Equity~~ | ~~Emerging Market Equity~~ | ~~Private Equity/Debt~~ | ~~Real Estate~~ | ~~Natural Resources (private)~~ | ~~Commodities~~ | ~~Core Infrastructure (private)~~ | ~~Hedge Funds~~ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~Investment Grade Bonds~~ | ~~1.00~~ | | | | | | | | | | | |
| ~~TIPS~~ | ~~0.80~~ | ~~1.00~~ | | | | | | | | | | |
| ~~High Yield Bonds~~ | ~~0.20~~ | ~~0.30~~ | ~~1.00~~ | | | | | | | | | |
| ~~U.S. Equity~~ | ~~0.05~~ | ~~0.00~~ | ~~0.70~~ | ~~1.00~~ | | | | | | | | |
| ~~Developed Market Equity~~ | ~~0.05~~ | ~~0.15~~ | ~~0.70~~ | ~~0.90~~ | ~~1.00~~ | | | | | | | |
| ~~Emerging Market Equity~~ | ~~0.05~~ | ~~0.15~~ | ~~0.70~~ | ~~0.80~~ | ~~0.90~~ | ~~1.00~~ | | | | | | |
| ~~Private Equity/Debt~~ | ~~0.05~~ | ~~0.05~~ | ~~0.65~~ | ~~0.85~~ | ~~0.80~~ | ~~0.75~~ | ~~1.00~~ | | | | | |
| ~~Real Estate~~ | ~~0.20~~ | ~~0.10~~ | ~~0.50~~ | ~~0.50~~ | ~~0.45~~ | ~~0.40~~ | ~~0.45~~ | ~~1.00~~ | | | | |
| ~~Natural Resources (private)~~ | ~~0.10~~ | ~~0.10~~ | ~~0.45~~ | ~~0.65~~ | ~~0.60~~ | ~~0.60~~ | ~~0.55~~ | ~~0.45~~ | ~~1.00~~ | | | |
| ~~Commodities~~ | ~~0.05~~ | ~~0.30~~ | ~~0.40~~ | ~~0.35~~ | ~~0.55~~ | ~~0.60~~ | ~~0.30~~ | ~~0.15~~ | ~~0.65~~ | ~~1.00~~ | | |
| ~~Core Infrastructure (private)~~ | ~~0.30~~ | ~~0.30~~ | ~~0.60~~ | ~~0.55~~ | ~~0.55~~ | ~~0.50~~ | ~~0.45~~ | ~~0.60~~ | ~~0.60~~ | ~~0.35~~ | ~~1.00~~ | |
| ~~Hedge Funds~~ | ~~0.05~~ | ~~0.20~~ | ~~0.70~~ | ~~0.80~~ | ~~0.85~~ | ~~0.85~~ | ~~0.65~~ | ~~0.45~~ | ~~0.65~~ | ~~0.65~~ | ~~0.60~~ | ~~1.00~~ |

# ~~Appendix B~~

**Commented [BD28]:** Same as B

**Commented [BD29]:** Possible additions—Functional framework and detailed description of BM by asset class.

## Functional Framework

The Pension Fund uses a functional framework to group asset classes that are expected to have similar risk and reward profiles and/or function. The table below illustrates the functional framework asset allocation.

| Functional Framework | Constituent Asset Classes |
|---|---|
| Growth Assets | Public Equity<br>Private Equity |
| Credit Assets | High Yield Bonds<br>Bank Loans<br>Emerging Market Debt |
| Inflation Hedging Assets | TIPS<br>Gold and Gold Equity<br>Real Estate (Public and Private)<br>Natural Resources (Public and Private)<br>Infrastructure (Private) |
| Risk Mitigating Assets | Investment Grade Bonds<br>Long-Term UST<br>Cash |

Below we detail the targets to each of the functional frameworks.

## Appendix B

## Pension Fund Benchmarks

In light of the uncertainties and complexities of investment markets, the Trustees recognize and acknowledges that a reasonable level of risk must be assumed to provide an opportunity to achieve the long-term investment objectives of the Policy. The Discretionary Investment Manager will seek to manage the Pension assets at a risk level (as measured by standard deviation over a full market

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~~cycle) that is equal to or less than that of the Policy Benchmark. The Trustees recognize that, in some periods, the risk level may exceed that of the Policy Benchmark, in which case the Trustees should consider the market environment during that time to determine the acceptability of the realized risk of the Pension Fund relative to the policy benchmarks.~~

~~The policy benchmark is the primary benchmark for assessing investment performance over extended periods. Performance goals are based upon a long-term investment horizon; therefore, interim fluctuations should be viewed with an appropriate perspective.~~

Policy Benchmark

Growth Assets

- 25% Russell 3000 Index~~;~~
- 10% MSCI EAFE Index~~;~~
- 7% MSCI Emerging Markets Index~~;~~
- 5% Preqin Private Equity, 1 Quarter Lag~~;~~

Credit Assets

- 5% Bloomberg US Corporate High Yield~~;~~
- 3.5% JP Morgan Government Bond Index- Emerging Markets Global Diversified (JPM GBI-EM)~~;~~
- 3.5% JP Morgan Emerging Markets Bond Index Global Diversified~~;~~

Inflation Hedges

- 10% Bloomberg US TIPS Total Return Value ("Bloomberg US TIPS TR")~~;~~
- 5% S&P Global LargeMidCap Commodity and Resources Index ("S&P Global Large/MidCap Commodity and Resources NR USD")~~;~~
- 12% National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index – Open End Diversified Core Equity ("NCREIF ODCE (net)")~~;~~

Risk Mitigating Assets

- 14% Bloomberg US Aggregate Total Return Value ("Bloomberg US Aggregate TR")~~;~~

Simple Benchmark

- 60% ~~weight to the~~ MSCI All Country World Return Net Index from Morgan Stanley Capital International (the "MSCI ACWI")~~; and~~
- 40% ~~weight to the~~ Bloomberg Global Aggregate Bond Index (the "Global Agg")~~.~~

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# Appendices

MEKETA

# Corporate Update | 1Q.2024


BOSTON CHICAGO LONDON MIAMI NEW YORK PORTLAND SAN DIEGO

MEKETA.COM

**7**
Offices

**240+**
Employees

**250+**
Clients

**$1.8T**
Assets Under Advisement

**$300B**
Assets in Alternative Investments

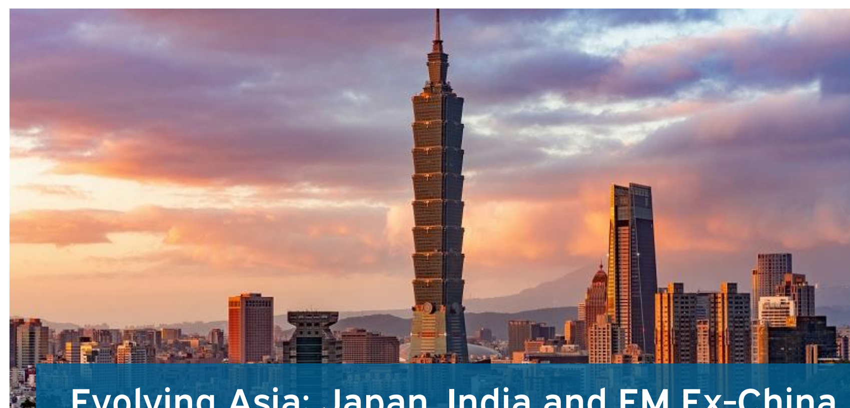
**98%**
Client Retention Rate

**5:1**
Client | Consultant Ratio

**Meketa Investment Group is proud to work for over 20 million American families everyday!**

## UPCOMING EVENTS

Q2 Investment Perspectives Webcast
July 2024



Evolving Asia: Japan, India and EM Ex-China
September 2024

Client and employee counts as of March 31, 2024; assets as of September 30, 2023.
Client retention rate is one minus the number of clients lost divided by the number of clients at prior year-end.

## THOUGHT LEADERSHIP

### Read our February Connectives “From Philosophy to Fees”

As an institutional investor, venturing into the realm of outsourcing investment management responsibilities to an Outsourced Chief Investment Officer (OCIO), the decision carries significant weight and must align with the institutional investor’s overarching goal: ensuring the sustainability of long-term promises to beneficiaries or constituents.

In this paper we discuss five questions that the institution may ask during the selection process of an OCIO provider. It is important for an entity to answer from their unique perspective. These questions not only reflect the depth of due diligence required but also encourage alignment with a fund’s strategic objectives and risk appetite.

Read more here:
https://meketa.com/news/meketa-connectives-from-philosophy-to-fees/

### Read our recent white paper “European Buyouts”

The European buyout market possesses characteristics that are unique from the US market, which may present a different set of opportunities to investors. Having one broad geographical basket that encompasses the numerous countries in Europe may bring potential challenges, but might also offer opportunities to develop competitive advantages for managers who are ingrained in the ecosystem and have access to local networks.

In this research note, we focus on the buyout market, as it tends to be the most prominent private equity strategy in Europe. While there are venture capital and growth equity strategies that focus on Europe, they comprise only a small portion of Europe’s private equity market.

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Read more here:
https://meketa.com/leadership/european-buyouts/

### Read the second installment in our Japan 2.0 series “The Case for Japanese Equities”

Part one of this series (“Japan 2.0: A New Paradigm?”) discussed the history of the Japanese economy, summarizing the evolution of Japan’s economic boom of the 1980s through the decades of weak economic growth and low inflation from the 1990s to the present.

In this paper, we focus on equity market reforms in Japan designed to boost shareholder returns, activism, raise stock market valuations, promote mergers and acquisitions (“M&A”), and unlock trillions of household savings held in cash.

Read more here:
https://meketa.com/leadership/japan-2-0-the-case-for-japanese-equities-part-ii/

## MEKETA VALUES COMMUNITY

On February 3, Meketa East participated in *Cycle for Survival*. This is the 5th year that Team Meketa has participated in this event, where 100% of the proceeds go to directly to cancer research.

Cycle for Survival is the official rare cancer fundraising program of Memorial Sloan Kettering Cancer Center (MSK). Since 2007, the community has raised more than $376M for rare cancer research at MSK, fueling countless lifesaving advances benefiting people around the world.

CYCLE FOR SURVIVAL

MEMORIAL SLOAN KETTERING | EQUINOX

INTEGRITY • STEWARDSHIP • SERVICE • CULTURE • DIVERSITY • COMMUNITY

## MEKETA IN THE NEWS

Infrastructure Investor

### Going deep on due diligence

By Amy Carroll | 2.1.24

Read full article here

Lisa Bacon, principal at Meketa Investment Group, adds: "Succession planning is something that we have always paid a lot of attention to, but a number of funds have recently either had a third party come in to take a passive stake as a way of supporting a transition or have sold the whole firm.

"We are starting to see a lot more examples of how this can play out and so it is an area we are looking at very closely."

Bacon also points to inflation linkage as an important aspect of due diligence in the current environment. Gordon Bajnai, head of global infrastructure at Campbell Lutyens agrees: "Resilience to high inflation is something LPs are examining carefully, and I have to say most quality managers are standing up to that scrutiny well."

Despite an understanding that firms need fees to operate, Infrastructure Investor's LP Perspectives 2024 Study shows management fees are coming under pressure. "We always try to get the best deals we can for our clients, including a first close discount," says Bacon.

Pensions&Investments

### US retirement plans recover half of 2022 losses amid no-show recession

Douglas Appell | 2.12.24

Read full article here

That dispersion is unsurprising, given corporate sponsors' various mixes of growth assets and liability-driven investment hedges, noted Jonathan Camp, a Chicago-based managing principal with consulting firm Meketa Investment Group advising clients on LDI programs.

In the wake of last year's big rebound in equity markets, corporate clients with large exposures to growth assets would have reported relatively strong gains. But even clients with large LDI programs — liable to suffer a decline in assets in a rising rate environment — had reason to be "very, very happy with their results in 2023," as higher discount rates reduced their liabilities, leaving funded status intact, Camp said.

Many big corporate plans, meanwhile, have taken additional steps in recent years — such as pension risk transfers to insurance companies — to accelerate the drop in their DB assets, Camp noted.

WSJ PRO PRIVATE EQUITY

### Liquidity Chase: Funds and Investors Create Their Own Path to Exits

*Some fund investors are taking matters into their own hands*

By JENNIFER ROSSA | 2024

Read full article here

"Leverage on top of leverage should always get people's attention," said John Haggerty, director of private-markets investments at Meketa Investment Group. However, Haggerty added that when he sees GPs use these facilities, they generally think carefully about how much debt is healthy for the portfolio. Meketa has six or seven debt-related items in a roughly 90-item checklist for limited partnership agreements related to issues that include use case, amount and the permission required for debt, he said, up from two or three a few years ago.

## Celebrating this Quarter

### Meketa expands employee ownership with new shareholders.

Principals Zachary Driscoll and Stephanie Sorg have joined the firm's ownership group, bringing the total number to more than 70 shareholders.

**Zachary Driscoll, CFA**

**Stephanie Sorg, CAIA**

**Read the full article here:**
https://meketa.com/news/meketa-investment-group-expands-employee-ownership-team-2/

"Meketa is a people-first organization and our employee ownership is a testament to our commitment to not only recognize but also reward the hard work, dedication, and innovation our team continues to bring to the table every day. As we continue to grow and evolve, our employees remain our most valuable asset," said Stephen McCourt, Managing Principal and Co-Chief Executive Officer, Meketa.

"Last year provided an incredible opportunity for us to continue connecting with clients and offering our hand in partnership. Our success is directly linked to our clients entrusting us with the stewardship of their assets. I am incredibly optimistic about what Meketa and our clients can accomplish as we continue to focus on helping them achieve their long-term financial goals," said Peter Woolley, Managing Principal and Co-Chief Executive Officer, Meketa.

### Meketa releases our 2024 diversity, equity, and inclusion ("DEI") annual questionnaire results summary

In 2020 as a next step in our commitment to Diversity, Equity, and Inclusion (DEI), Meketa Investment Group formally launched a new initiative to gather data from public and private market asset management firms within our proprietary database. The initiative focused on evaluating asset management firm's efforts to understand DEI more thoroughly within their organizations. 2023 marks the fourth year in a row we have asked firms to complete our questionnaire to report on their work in this area, and we are excited to share with you the results of these findings today.

We are pleased to report that our 2024 questionnaire was more extensive and garnered a higher participation rate from asset managers, further deepening the insights gleaned from last year's analysis. As we remain committed to making the institutional investment industry more resilient and equitable, we look forward to continuing this initiative on an annual basis and sharing the results with our clients and the marketplace for years to come.

**Read the full article here:**
https://meketa.com/leadership/2023-diversity-equity-and-inclusion-annual-questionnaire-results-summary/

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**Credit Risk:** Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security).

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

**Jensen's Alpha:** A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate+Beta*(market return-Risk Free Rate)].

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

**Maturity:** The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

**Sharpe Ratio:** A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

**STIF Account:** Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

**Yield to Maturity:** The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays $5 a year interest on each $100 par value. To figure its current yield, divide $5 by $95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay $100 for the bond that can be bought now for $95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

| | | | | |
|---|---|---|---|---|
| 5% (discount) / 5 (yrs. to maturity) | = | 1% pro rata, plus 5.26% (current yield) | = | 6.26% (yield to maturity) |

**Yield to Worst:** The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

**NCREIF Property Index (NPI):** Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

**NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE):** Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991



Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.