



Employees' Retirement System of the City of Norfolk

September 10, 2025

Investment Committee Meeting

- 1. Economic and Market Update**
- 2. Executive Summary**
- 3. Performance Summary**
 - July 31, 2025
- 4. Asset Allocation Review**
- 5. Appendices**
 - June 30, 2025, Fund Evaluation Report
 - Corporate Update
 - Disclaimer, Glossary, and Notes

Economic and Market Update

Data as of July 31, 2025

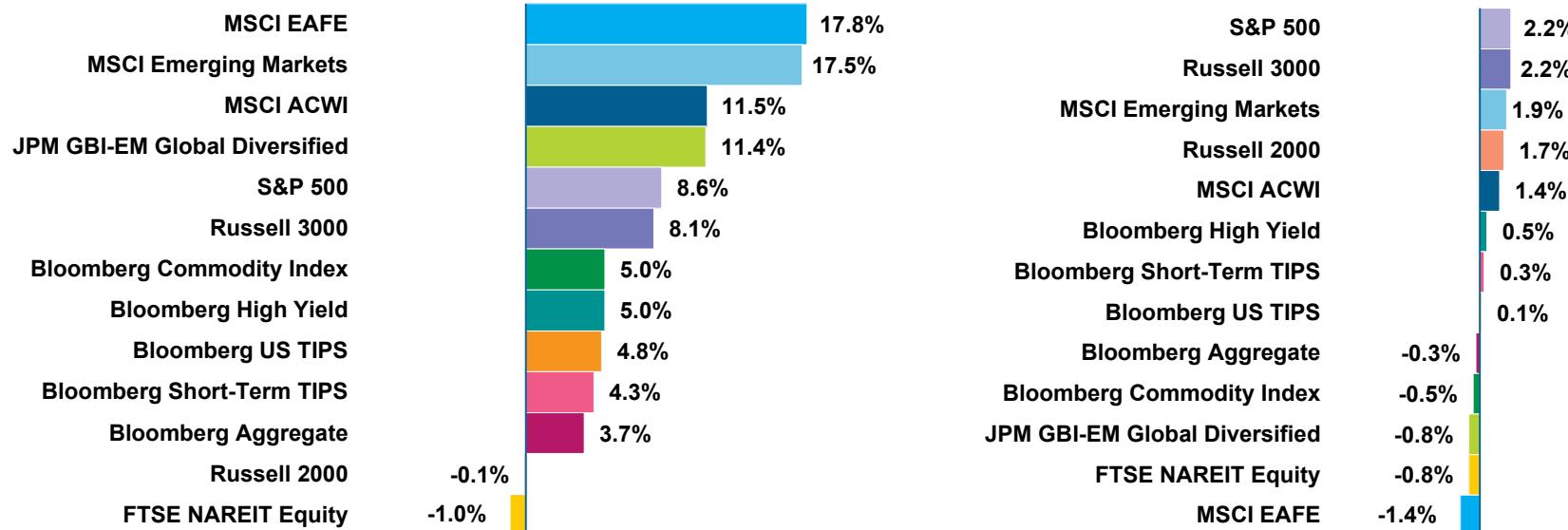
Commentary

Markets were mixed in July, with US and emerging market stocks outperforming non-US developed markets while bond market returns were also mixed. Global trade and monetary policy uncertainty continued to confound market sentiment. Substantial downward revisions for the US job markets reignited market expectations for rate cuts later this year.

- US stocks continued their rally in July with the Russell 3000 returning 2.2% and US large cap growth stocks outperformed in July with the Russell 1000 Growth Index returning 3.8%.
- After a strong first half of 2025 non-US developed-market stocks faced a strengthening US dollar and declined in July (MSCI EAFE: -1.4%) however, in local currency terms the index rose 1.4%.
- Emerging market equities (MSCI Emerging Markets) returned 1.95% in July hampered by a stronger dollar but rose 3.4% in local currency terms. Chinese stocks (MSCI China) continued to benefit from considerable policy support gaining 4.8%.
- In late July, the Federal Reserve held steady while US economic data remained mixed and pass-through price effects from delayed tariffs remain on the horizon, adding to the complicated economic outlook headline pressures from the Administration regarding Powell's removal and the high-profile removal of the head of the Bureau of Labor Statistics have roiled market sentiment.
- With the delayed or partial implementation of the Liberation Day tariffs, market inflation expectations have remained somewhat elevated even though economic data in the US, Europe, and China continue to deteriorate. High yield and TIPS had positive returns in July, while other major bond markets were negative.
- Uncertainty could weigh on market sentiment in the coming months especially the potential impacts of tariff policies on the economy, inflation, and Fed policy. The track of the US deficit, China's economy and relations with the US, as well as concerns over elevated valuations and weakening earnings in the US equity market will also be important data points for the rest of this year.

Index Returns¹

YTD July



- After tariff-related market volatility in April, global equity markets rallied on the general pausing of tariffs and announcements of trade agreements.
- US stocks outperformed non-US stocks in July and fixed income markets were mixed with high yield and TIPS finishing the month in positive territory.

¹ Source: Bloomberg. Data is as of July 31, 2025.

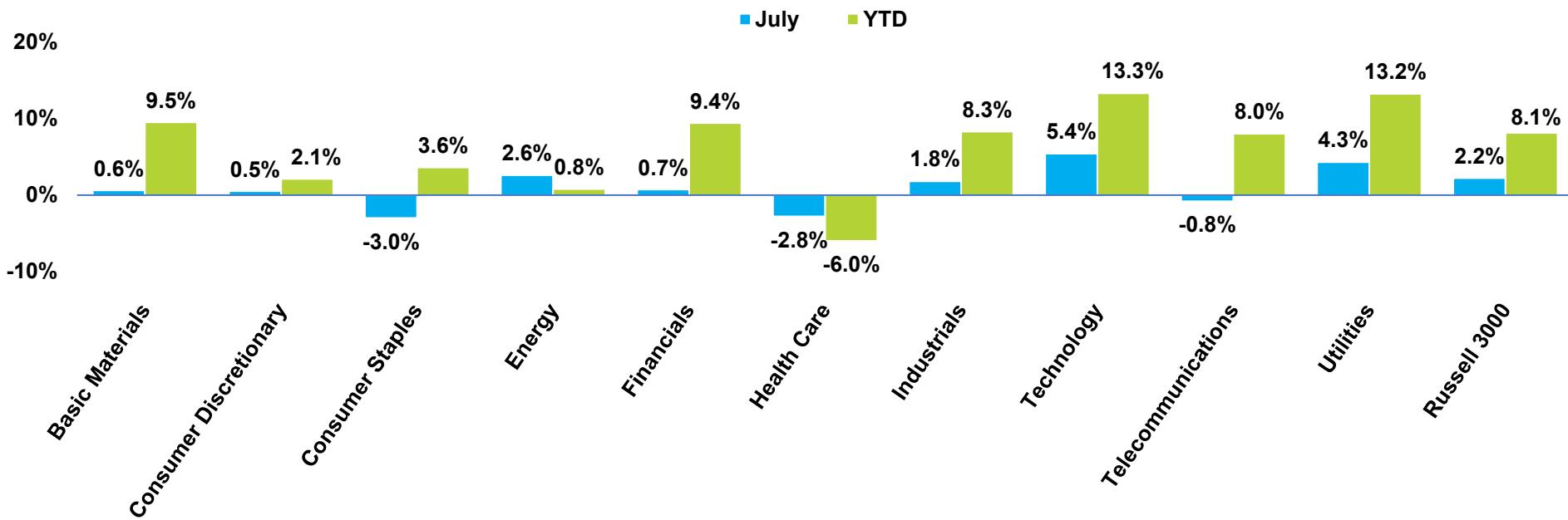
Domestic Equity Returns¹

Domestic Equity	July (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	2.2	8.6	16.3	17.1	15.9	13.7
Russell 3000	2.2	8.1	15.7	16.4	15.2	13.0
Russell 1000	2.2	8.5	16.5	16.9	15.5	13.4
Russell 1000 Growth	3.8	10.1	23.7	22.5	17.3	17.0
Russell 1000 Value	0.6	6.6	8.8	10.6	13.2	9.2
Russell MidCap	1.9	6.8	12.1	11.4	12.2	10.0
Russell MidCap Growth	2.0	12.0	28.3	17.6	11.4	12.2
Russell MidCap Value	1.8	5.0	7.1	8.9	13.1	8.6
Russell 2000	1.7	-0.1	-0.6	7.0	9.8	7.4
Russell 2000 Growth	1.7	1.2	3.2	9.1	7.0	7.3
Russell 2000 Value	1.8	-1.5	-4.3	4.8	12.4	7.2

US Equities: The Russell 3000 index returned +2.2% in July and +8.1% year-to-date.

- US stocks rose in July despite a slight uptick in inflation. The Trump administration announced several trade agreements with major trading partners, and a favorable GDP report was well received by investors.
- Technology led all sectors during July, continuing their strong performance year-to-date. Several large companies, such as Alphabet and Microsoft, reported strong earnings in July, which helped to drive the indices higher.
- Large cap growth and midcap growth stocks outperformed large cap and midcap value in July. Much of the gains in the Russell MidCap Growth Index in the year-to-date period have been driven by the performance of the software company Palantir.

¹ Source: Bloomberg. Data is as of July 31, 2025.

Russell 3000 Sector Returns¹

- Technology stocks led all sectors in July, continuing their strong run year-to-date. NVIDIA, Microsoft, and Broadcom, three major AI players, led from a contribution perspective.
- Utilities had a strong July and have generated strong returns year-to-date. Companies in this sector are benefiting from increased electricity needs for AI and an expectation of lower interest rates soon.
- On a year-to-date basis, all sectors are in positive territory with the exception of Health Care stocks where UnitedHealth, Eli Lilly, and Merck have been the main detractors.

¹ Source: Bloomberg. Data is as of July 31, 2025.

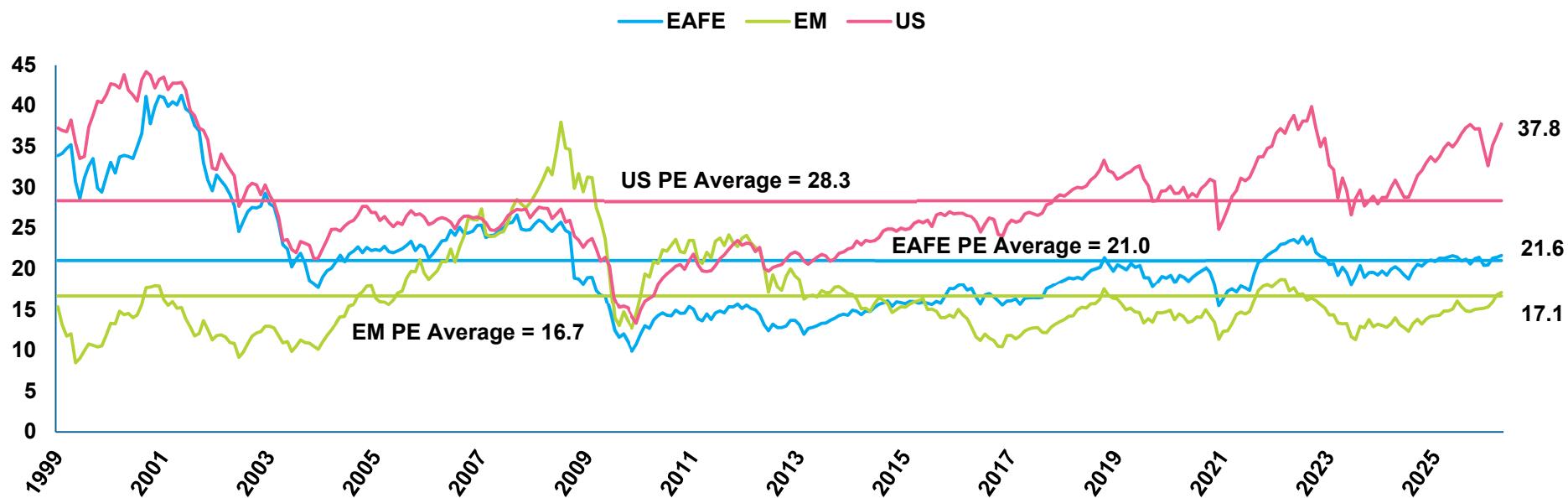
Foreign Equity Returns¹

Foreign Equity	July (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI Ex US	-0.3	17.6	14.7	12.6	9.1	6.1
MSCI EAFE	-1.4	17.8	12.8	13.5	10.3	6.1
MSCI EAFE (Local Currency)	1.4	9.3	8.7	12.0	12.3	6.8
MSCI EAFE Small Cap	-0.1	20.8	15.8	10.8	8.5	6.4
MSCI Emerging Markets	1.9	17.5	17.2	10.5	5.4	5.8
MSCI Emerging Markets (Local Currency)	3.4	14.5	16.0	11.6	6.9	7.3
MSCI EM ex China	0.8	15.5	9.4	11.7	9.7	6.9
MSCI China	4.8	23.0	42.1	8.2	-1.8	3.8

Foreign Equity: Developed international equities (MSCI EAFE) returned -1.4% in July and +17.8% year-to-date and the Emerging Markets index rose 1.9% in July and +17.5% year-to-date.

- Developed markets were mixed in July shaped by tariff negotiations, currency moves (namely the strengthening USD), and earnings surprises. Eurozone equities posted modest gains in local terms following a US-EU tariff deal, although Technology and export-heavy sectors lagged amid slowing GDP growth. Japan ended the month higher, with many investors reacting positively to the election results and a favorable trade deal with the US.
- Emerging markets slightly outperformed developed peers. China was a top performer, benefitting from tariff talks, the anti-involution trade (aim at reducing price competition), and continued AI enthusiasm.

¹ Source: Bloomberg. Data is as of July 31, 2025.

Equity Cyclically Adjusted P/E Ratios¹

- After a considerable pullback in April, US stock valuations rallied and finished the month of July well above the long-run average at 37.8. They continue to trade well above their long-run cyclically adjusted P/E average of 28.3.
- Non-US developed stocks have performed very well this year and at the end of July their valuations remained close to their long-run P/E ratio of 21.
- Emerging market stocks continued to rally this year and are now trading at valuations slightly above their long-run 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 June 2025. 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.

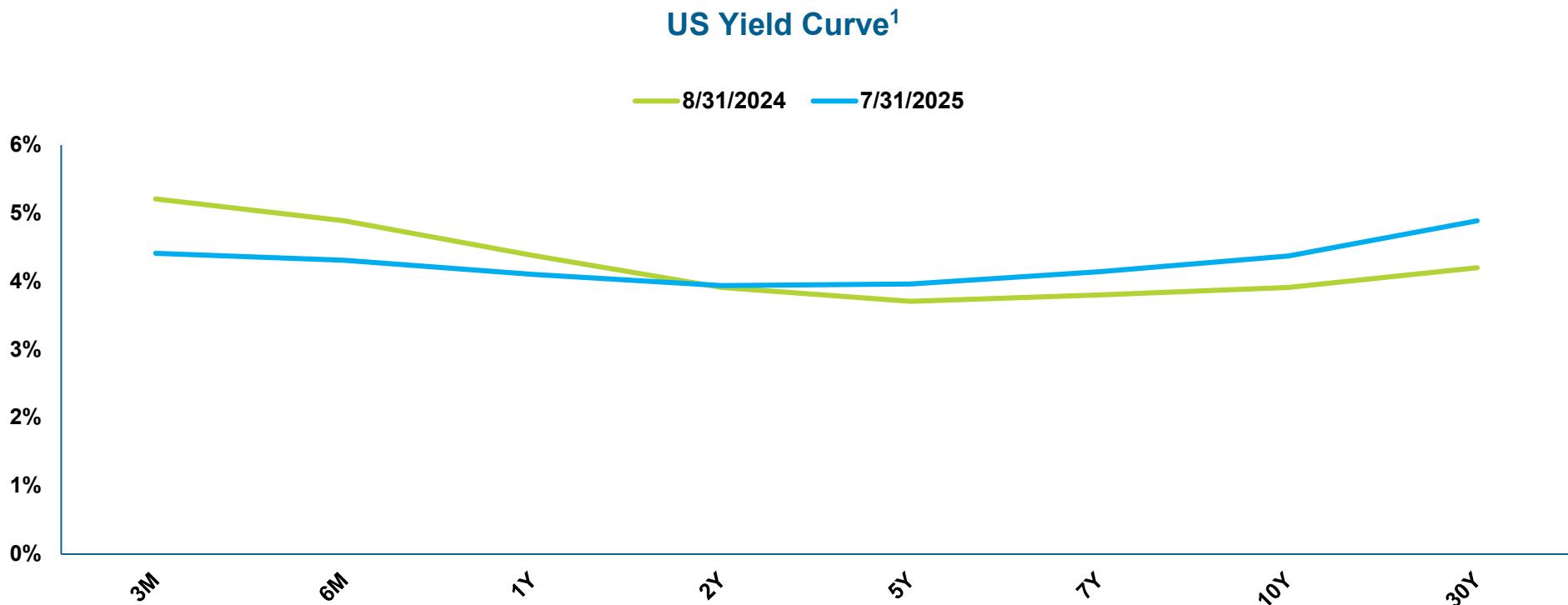
Fixed Income Returns¹

Fixed Income	July (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-0.1	3.9	4.0	2.4	-0.5	2.0	4.8	5.9
Bloomberg Aggregate	-0.3	3.7	3.4	1.6	-1.1	1.7	4.6	6.1
Bloomberg US TIPS	0.1	4.8	4.1	0.9	1.2	2.7	4.3	6.6
Bloomberg Short-term TIPS	0.3	4.3	5.9	3.4	3.7	2.9	4.0	2.6
Bloomberg US Long Treasury	-0.9	2.1	-2.8	-4.8	-9.1	-0.3	4.9	14.6
Bloomberg High Yield	0.5	5.0	8.7	8.0	5.1	5.5	7.1	3.2
JPM GBI-EM Global Diversified (USD)	-0.8	11.4	10.5	8.1	1.1	2.3	--	--

Fixed Income: The Bloomberg Universal index fell slightly -0.1% in July returning +3.9% year-to-date.

- In the bond market, easing of trade tensions post early-April and increased clarity on country-specific trade agreements, and rising concerns over expansionary US fiscal policies, continued to drive results.
- A broad shift higher in the US yield curve resulted in weak performance for US sovereign debt, but strong risk appetite by investors provided positive performance for credit indexes.
- Short (+0.3%) and longer dated (+0.1%) Treasury Inflation-Protected Securities (“TIPS”) also provided positive performance as inflation risks remained elevated and growth expectations remained positive.
- Given the improving risk sentiment high yield (+0.5%) led the way for the month. While emerging market debt underperformed for the month, year-to-date performance solidly exceeded other indices, with the depreciation of the US dollar being a key driver.

¹ Source: Bloomberg. Data is as of July 31, 2025. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration, respectively. JPM GBI-EM data is from J.P. Morgan. Current yield and duration data is not available.

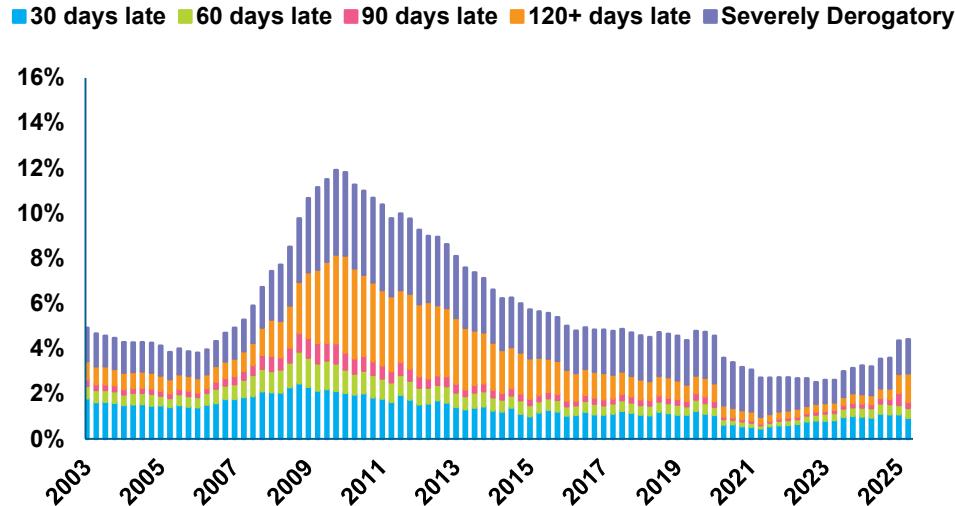


- Fiscal concerns related to a growing US government debt load and interest expense continue to dominate headlines and market participant concerns, as does ongoing inflation-related uncertainty.
- The policy sensitive 2-year nominal Treasury yield was volatile, rising to 3.9% in July.
- The 10-year nominal Treasury was also volatile and ended the period higher by 14 bps (4.4%), while the 30-year nominal Treasury increased slightly less (13 basis points) over the month to end at 4.9%.

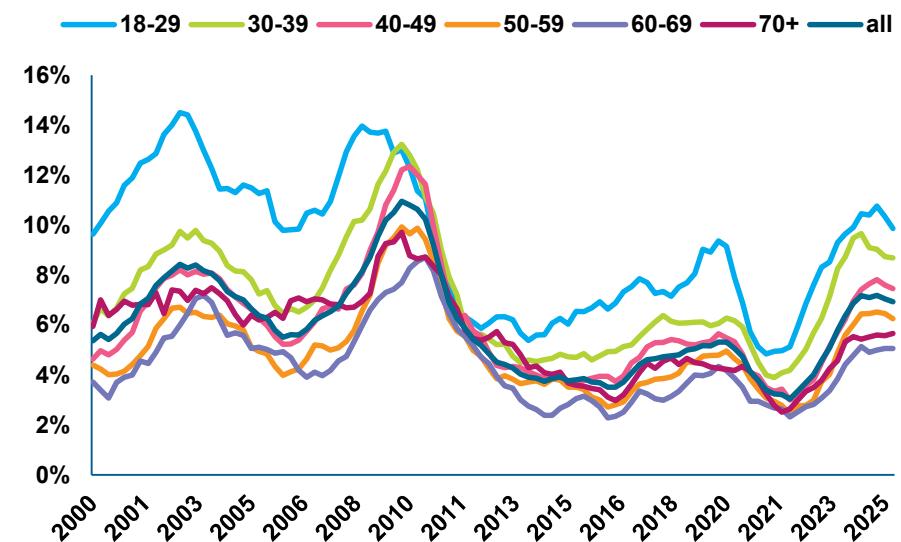
¹ Source: Bloomberg. Data is as of July 31, 2025. The August 2024 Treasury yields are shown as a reference before the first interest rate cut.

Stress is Building Among US Consumers

Total Balance by Delinquency Status¹



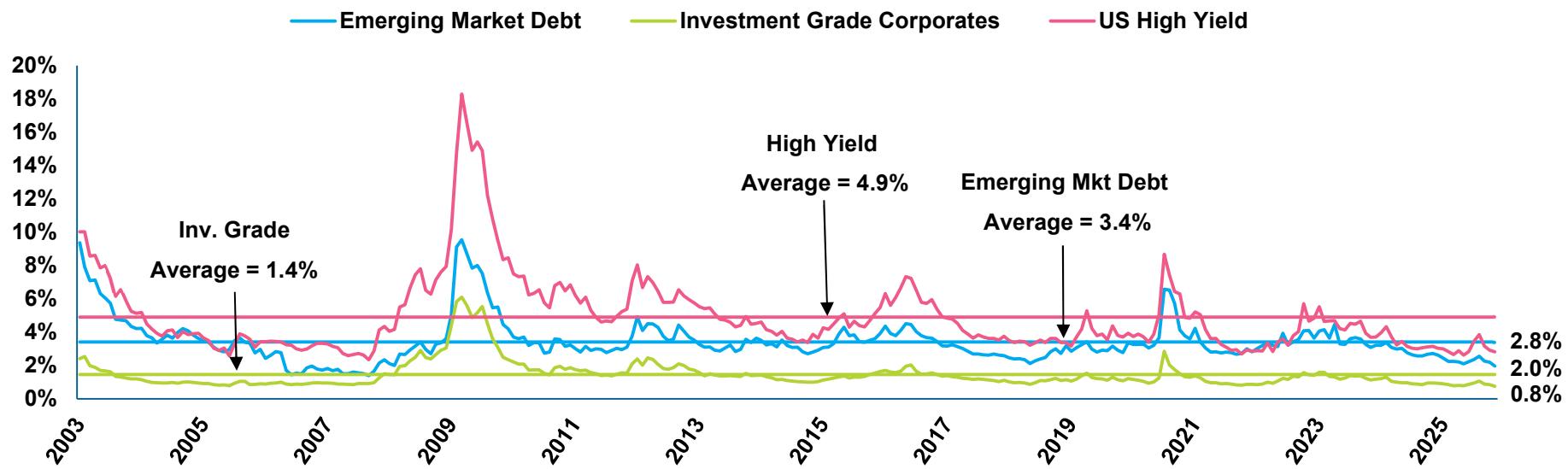
Transition into Serious Delinquency for Credit Cards by Age²



- Signs of stress on the US consumer have started to emerge given persistently higher prices and interest rates.
- After falling to historic lows during the pandemic, loan delinquencies recently started to increase.
- Parts of the credit card market, particularly for younger cohorts, have begun to show stress as most borrowers are subject to variable and higher borrowing costs. Total delinquencies are below pre-pandemic levels though.
- The restarting of student loan payments and reporting for those in default could add pressures to consumers going forward.

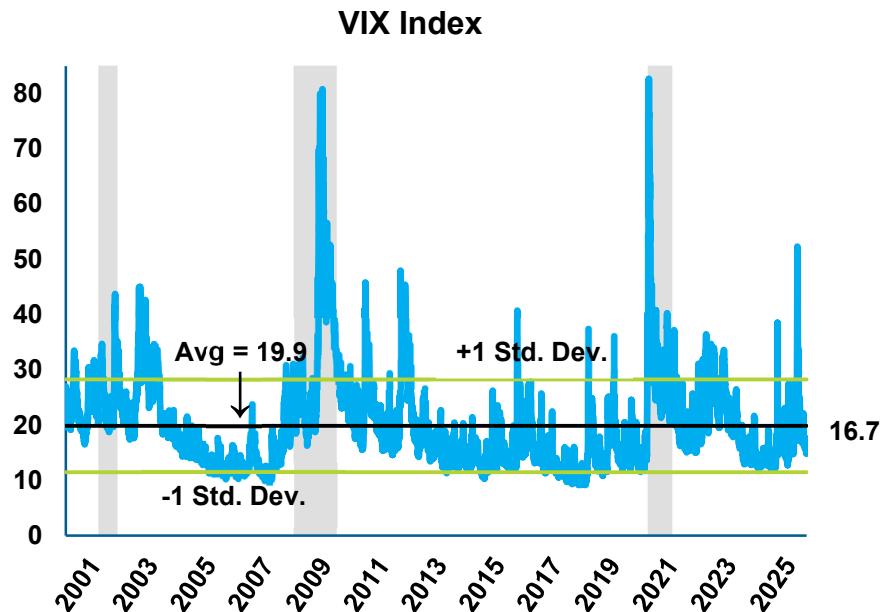
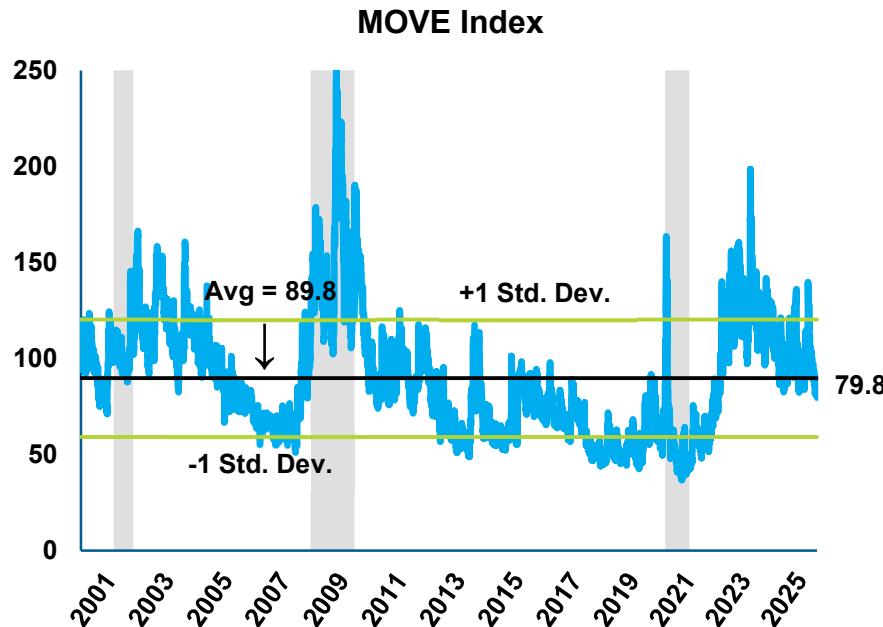
¹ Source: New York Federal Reserve, Quarterly Household Debt and Credit Report, February 2025. See also FRED. Data is as of June 30, 2025.

² Source: New York Federal Reserve, Quarterly Household Debt and Credit Report, February 2025. See also FRED. Data is as of June 30, 2025.

Credit Spreads vs. US Treasury Bonds¹

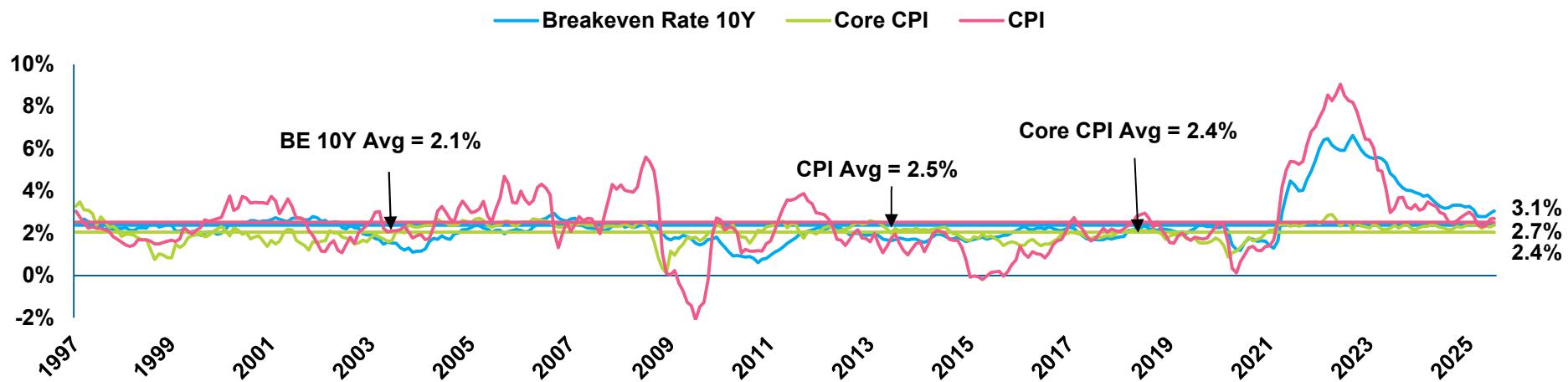
- Despite considerable uncertainty about the looming impact of tariffs and fiscal policy, credit spreads tightened in July.
- Investment grade spreads (the difference in yield from a comparable Treasury) spiked in the risk-off environment in April but have continued to fall.
- High yield spreads moved the most (2.9% to 2.8%) in July. At the peak of uncertainty in April, they crossed above 4.5%. Emerging market spreads declined in July (2.0% from 2.2%).
- All yield spreads remained below their respective long-run averages, especially high yield (2.8% versus 4.9%).

¹ Source: Bloomberg. Data is as of July 31, 2025. 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 Volatility¹

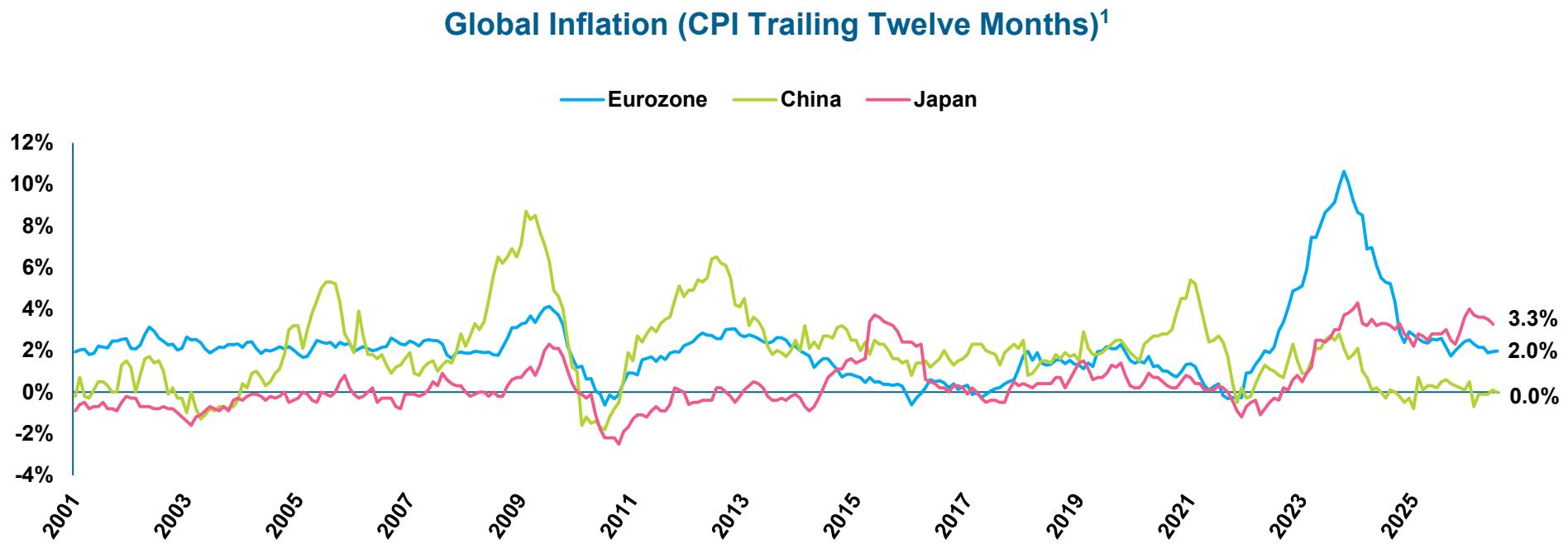
- Equity volatility spiked in April after the “Liberation Day” tariff announcement. Bond and equity volatility levels have continued to decline since April, finishing July below their long-run average.
- MOVE Index measuring bond volatility has continued to stabilize in July and finished July near its 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 July 31, 2025. The average line indicated is the average of the VIX and MOVE values between January 2000 and July 2025.

US Ten-Year Breakeven Inflation and CPI¹

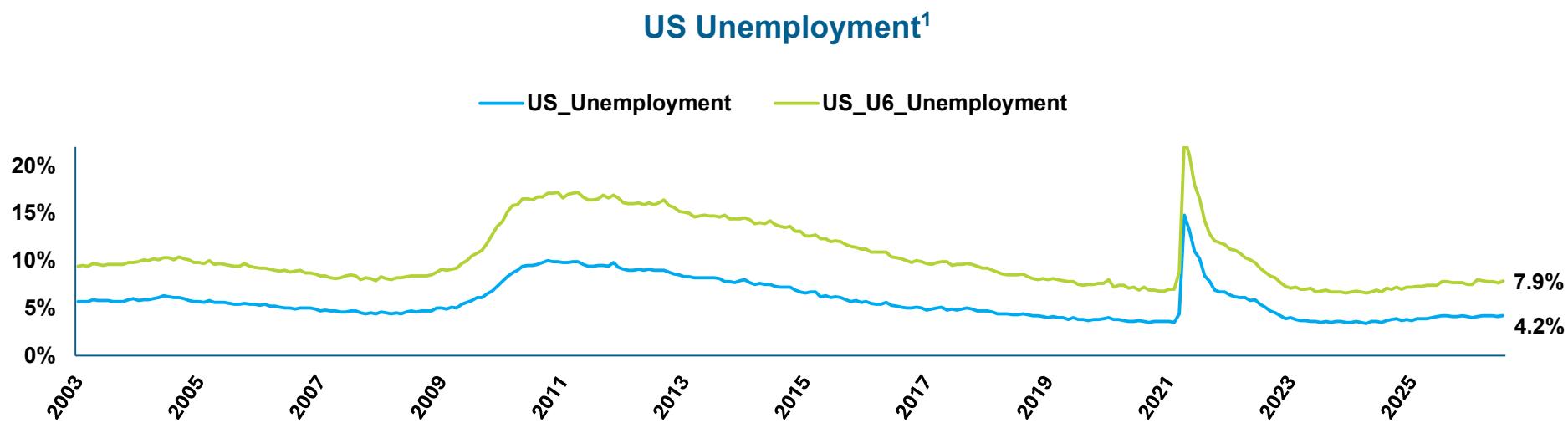
- Inflation has been slow to return to the Fed's 2% average target with headline inflation rising 0.2% in July and 2.7% year-on-year; while energy prices declined 1.1% in July gains in shelter (0.2%) was the primary factor in July's month increase while food costs held steady.
- Core inflation remains elevated above target, rising 0.3% month-on-month and 3.1% year-on-year with price rises from shelter, owner's equivalent rent, and medical costs contributing to the month's gain.
- While there remains considerable uncertainty regarding the ultimate inflationary impact of import tariffs as many have been deferred, the core services less inflation index has risen 3.6% over the past year with shelter (3.7%), transport (3.6%), and medical care (+4.3%) driving higher inflation.
- Longer-dated inflation expectations (breakevens) remained around 2.4% amidst on-going tariff and fiscal policy uncertainty. However, shorter-dated inflation swap pricing and survey-based measures suggest a continued upside risk to prices.

¹ Source: FRED. Data is as of July 2025. 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.



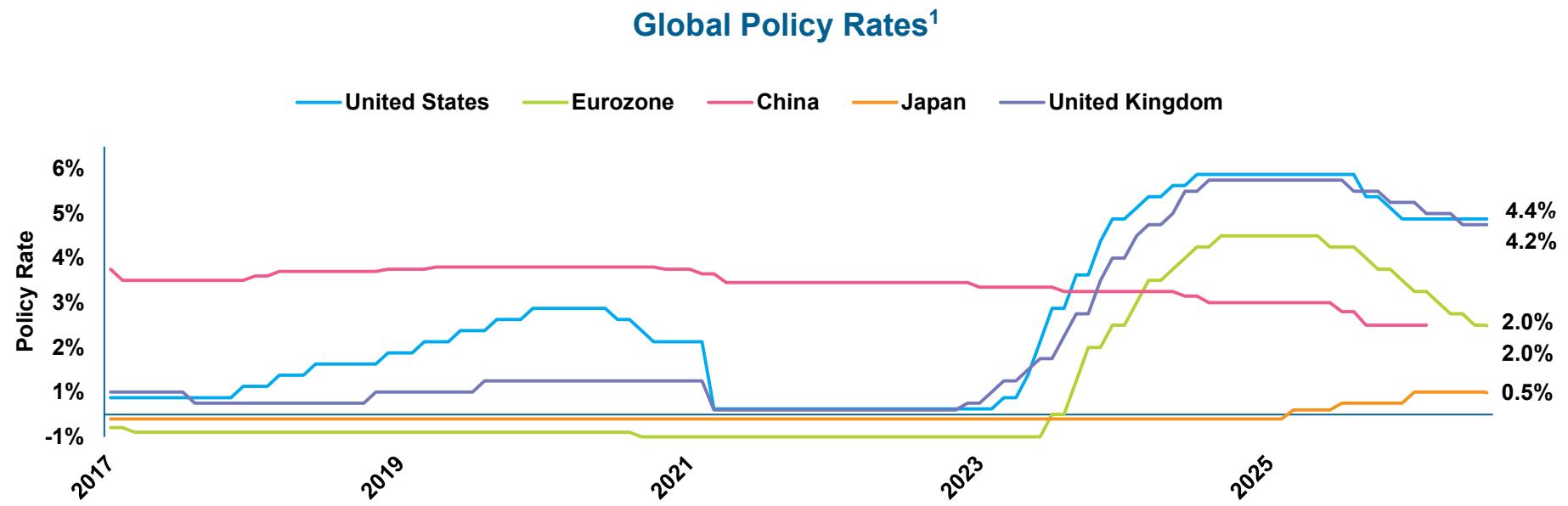
- Inflation in the eurozone is at the ECB target of 2% and after cutting rates in June, the ECB held rates steady in July.
- The Bank of Japan has raised its inflation outlook to 2.5 – 3% for the rest of the year and has held rates steady at 0.5% while communicating a hawkish tone regarding possible rate hikes in the future.
- In China inflation remains below target at just 0.8% year-on-year and after considerable policy stimulus over the past year, the Peoples Bank of China (PBOC) has held rates steady in June and July.

¹ Source: Bloomberg. Data is as of July 2025, except Japan which is as of June 2025.



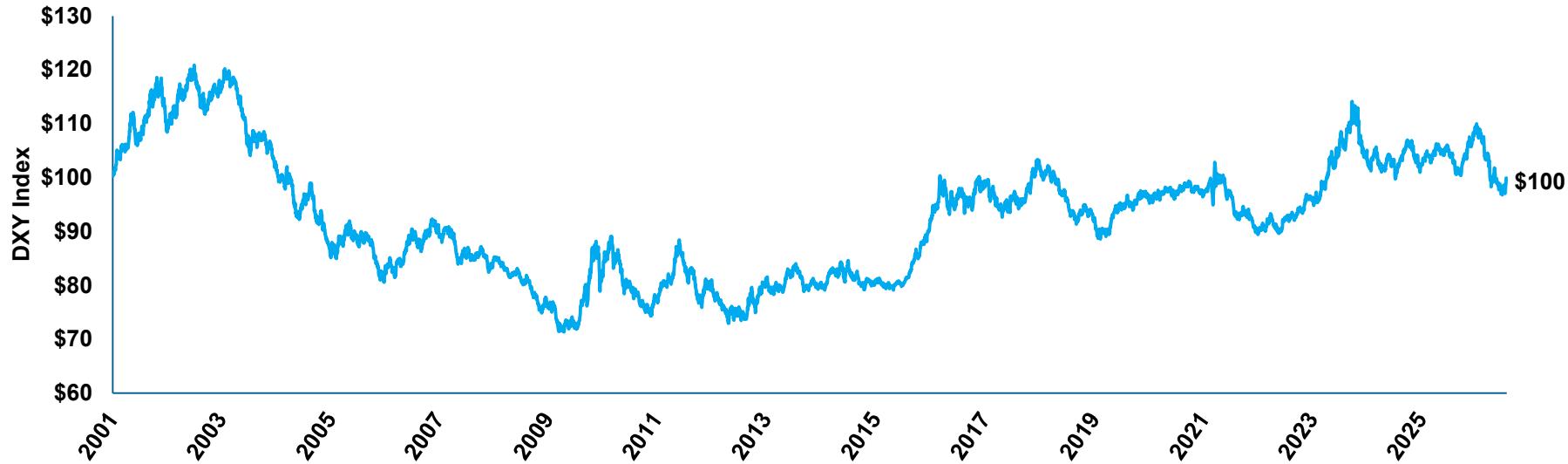
- In July, the US added 73,000 jobs while job gains in May and June were revised substantially lower while the unemployment rate was little changed at 4.2%.
- The Bureau of Labor Statistics revised lower the number of jobs created in May (-144,000 jobs) and June (-133,000 jobs) and added 275,000 new job entrants in July bringing the total number of new young workers looking for their first job to 985,000 this year.
- Health Care (+55,000) and Social Assistance (+17,000) added the most jobs in July, while the Federal government continued to lose jobs (-12,000).
- Hires (5.2M) outnumbered separations (5.1M) with quits (3.1M) exceeding layoffs (1.6M).
- Initial claims for unemployment remain relatively low and annual wage growth, although trending down, came in at 3.7% year-over-year for June.

¹ Source: FRED and BLS. Data is as of July 31, 2025.



- While the Fed remains on hold, other central banks have continued to ease policy rates. Expectations are now for the Fed to cut rates just over 2 times to 3.7% by year end as unemployment revisions indicate a weaker than expected labor market.
- The ECB cut its policy rate in June with inflation matching the 2% target. The Bank of England held rates steady in June at 4.25% as inflation reaccelerated to 3.6% in June as regulated energy prices rose. After cutting rates in May of last year, China's central bank has held rates steady although disinflationary pressures continue to be a concern.
- Japan kept rates at current levels in the face of an uncertain inflationary and trade pressures but voted to slow its purchase of Japanese sovereign debt in a continuing retreat from quantitative easing.

¹ Source: Bloomberg. Data is as of July 31, 2025, except China which is as of February 28, 2025. United States rate is the mid-point of the Federal Funds Target Rate range. Eurozone rate is the ECB Deposit Facility Announcement Rate. Japan rate is the Bank of Japan Unsecured Overnight Call Rate Expected. China rate is the China Central Bank 1-Year Medium Term Interest Rate. UK rate is the UK Bank of England Official Bank Rate.

US Dollar vs. Broad Currencies¹

- The US dollar hit near-historic highs in January of 2025 and has since seen its value decline through May, however in July, the US dollar recovered slightly.
- Typically, higher interest rates support the US dollar but recent concerns over changing US administration policies and slowing growth have weighed on the value of the US dollar.

¹ Source: Bloomberg. Data as of July 31, 2025.

Key Trends:

- According to the International Monetary Fund's (IMF) April annual report, global growth in 2025 was downgraded in early 2025 but has since been revised slightly higher from +2.8% to +3.1%. The US growth surprised to the upside in the second quarter after negative growth in the first quarter of 2025. The IMF revised its growth outlook for the US slightly higher from growth forecast saw one of the larger declines for 2025 (+1.8% to +1.9%). China's growth forecast was revised slightly higher for 2025 on US-China trade tensions declining somewhat for this year (+4.6% to +4.8%), while growth in the EU is projected to be slightly higher (+1.0 from 0.9%) in 2025.
- Despite the recent pause and negotiations related to tariffs, many questions remain. Overall, higher tariff levels and continued uncertainty could weigh on growth while increasing prices. Inflation levels and recent developments with tariffs will likely lead to a slower pace of interest rate cuts by the Fed. Uncertainty in the US and the potential for slower growth could continue the rotation out of US assets and put continued downward pressure on the dollar.
- Some signs of stress have started to emerge on the US consumer with sentiment weakening since the start of the year. Consumers are particularly concerned about losing their jobs and the potential for higher prices. Overall, risk to economic growth and to inflation from tariffs, as well as elevated borrowing costs, could put further pressure on consumers and lead to a weaker job market. The recent resumption of collecting and reporting delinquent student loans could be a further headwind to consumption.
- US equities have largely recovered from substantial losses experienced during the first week of April; most companies reporting earnings growth above 10% in July and early August and prospects of future rate cuts from the Fed has seen the US stock market hit new highs.
- Trade tensions between the US and China will remain a key focus. Recently, the two countries agreed on a 90-day truce with the US lowering its maximum tariff rate on Chinese goods from 145% to 30%, with a 10% baseline level. China agreed to lower its 125% tariff on American goods to 10%. Questions remain about what will happen after the 90-day period. Notably, tariff levels on China remain higher than where they previously were.

Executive Summary

Executive Summary

- In July, markets delivered mixed performance, with US equities slightly outperforming their international counterparts. Fixed income markets remained volatile, despite rising expectations for a potential rate cut in September.
- The table below reflects the latest valuation data through July 2025.

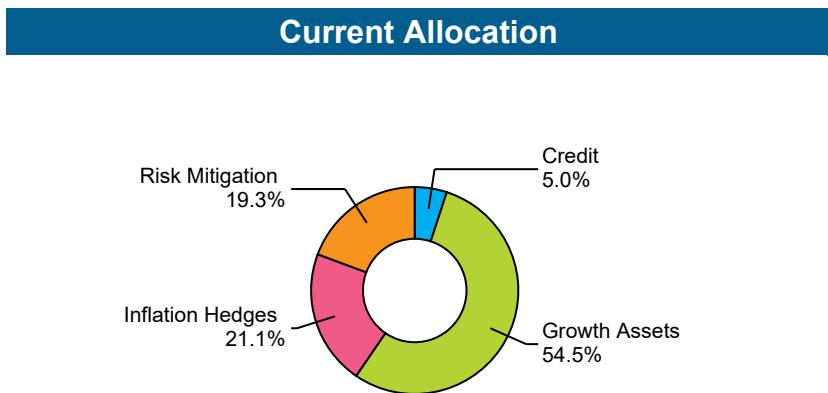
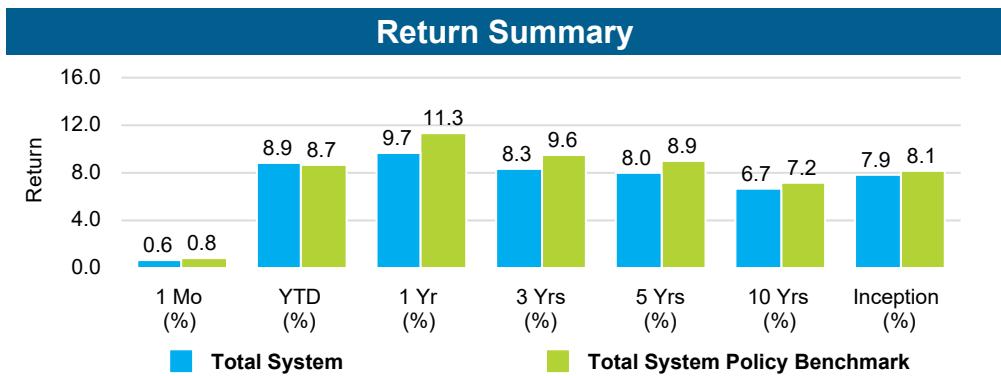
NERS	July 31, 2025	June 30, 2025	May 31, 2025
Total Fund Balance	\$1.46 Billion	\$1.42 Billion	\$1.38 Billion
Funded Status	94%	91%	89%
NERS Assumed Rate of Return	6.75%	6.75%	6.75%
FYTD Rate of Return	0.6%	11.3%	8.0%
12 Months Trailing Rate of Return	9.7%	11.3%	9.0%
Monthly Rate of Return	0.6%	3.0%	2.9%
Monthly Gains/Losses	\$8.4 million	\$43.2 million	\$40.3 million
Monthly Net Cash Flow	\$35.2 million	-\$8.6 million	-\$8.0 million

- The Actuarial Determined Contribution rates for Fiscal Year 2026 are:
 - NERS: \$34.5 million
 - VRS: 7.84%
- In the first week of July, a contribution of \$43.2 million was received by State Street and invested in line with the asset allocation policy.
- As of July 31, the System was inside of its target asset allocation ranges for all asset classes.

Performance Summary

Portfolio Objective

The Employees' Retirement System of the City of Norfolk is a long-term investor whose objective is to enable the System to provide retirement income for plan participants and beneficiaries. The System's strategy is to generate a return that meets the long-term return objective, while minimizing volatility.



	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Total System	0.6	8.9	9.7	8.3	8.0	6.7	7.9	10/01/1990
Total System Policy Benchmark	0.8	8.7	11.3	9.6	8.9	7.2	8.1	

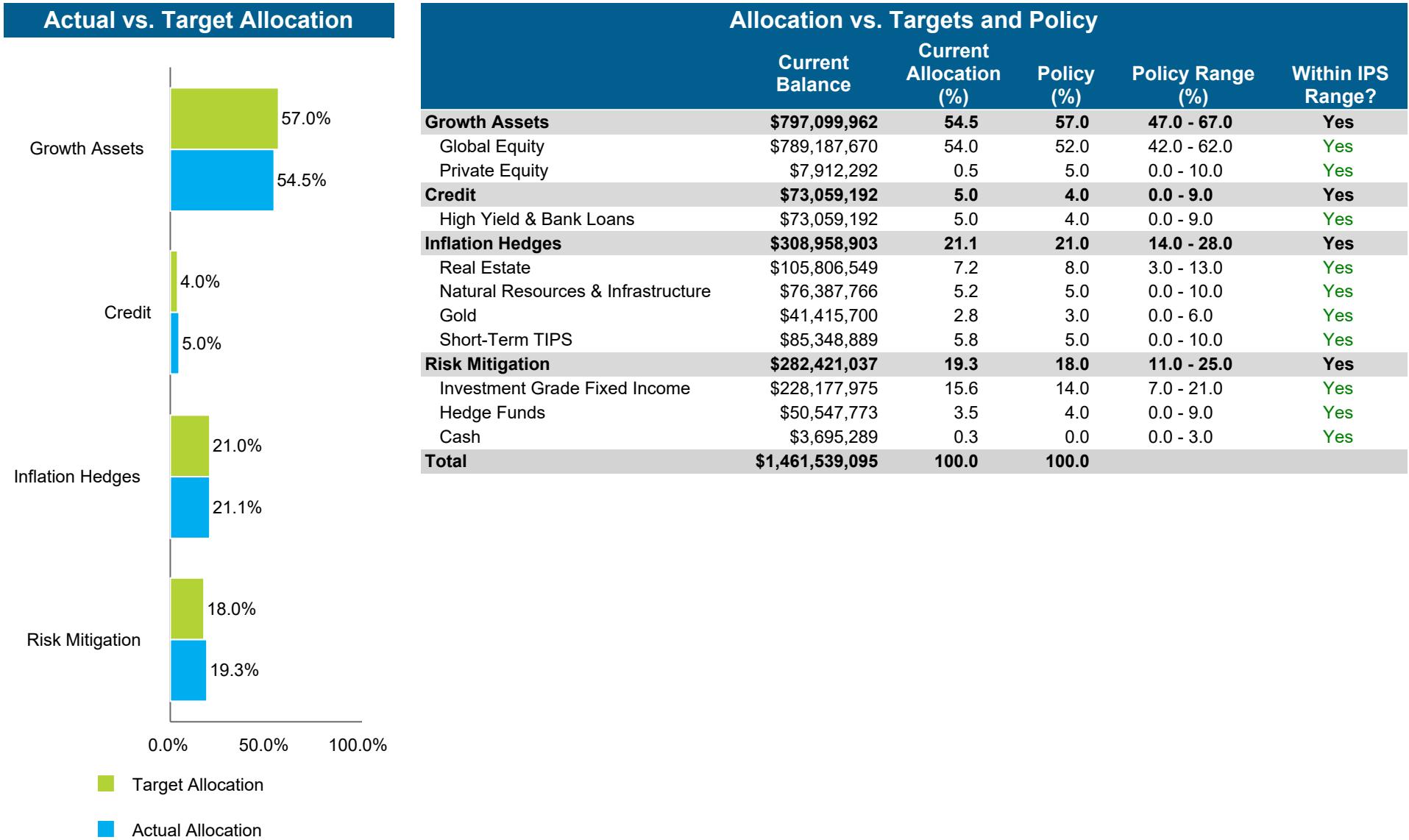


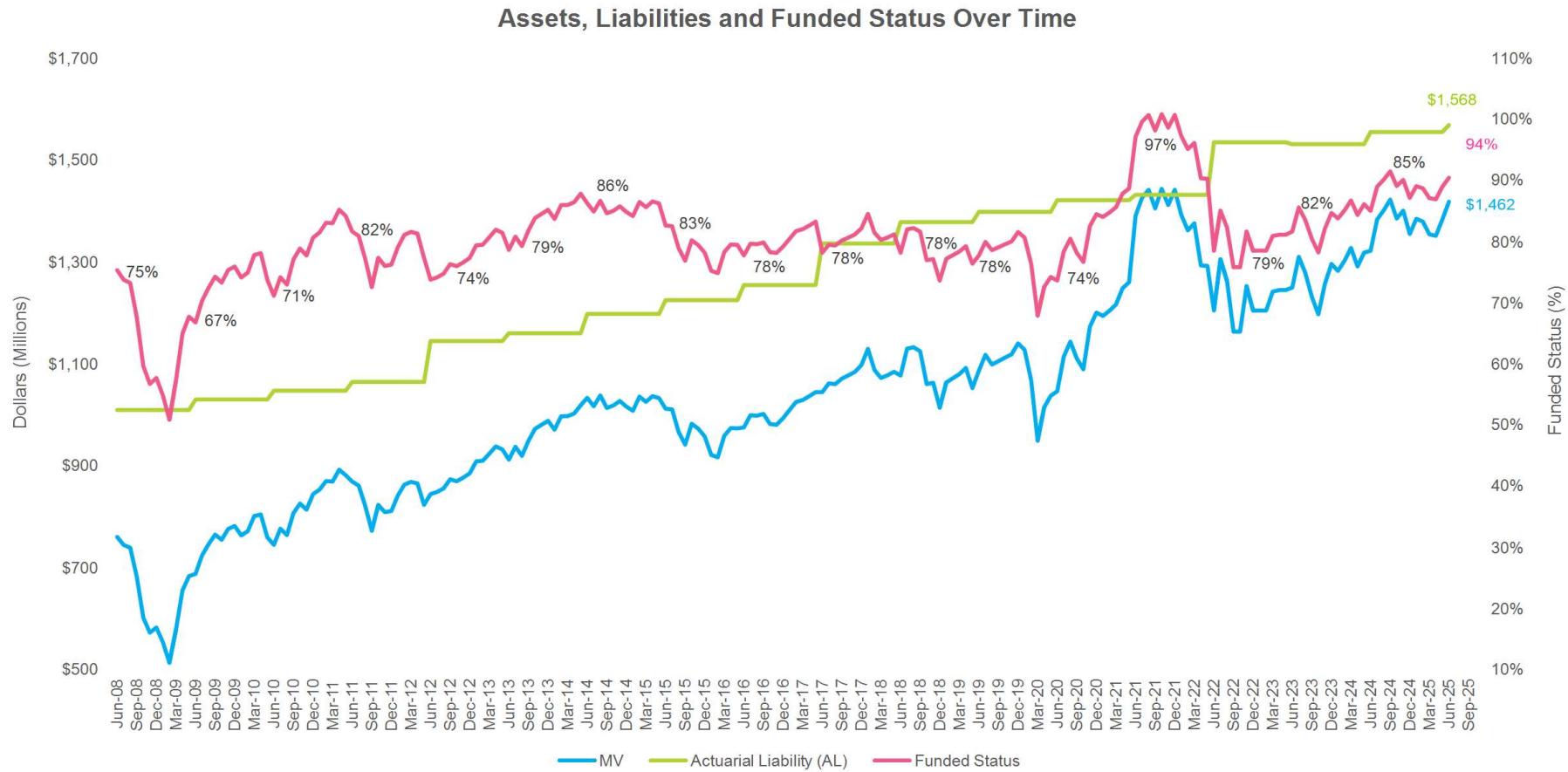
Summary of Cash Flows

	Last Month	Year-To-Date	One Year
Total System			
Beginning Market Value	1,417,934,696	1,354,588,745	1,383,198,363
Net Cash Flow	35,212,811	-14,304,908	-54,758,126
Net Investment Change	8,391,587	121,255,258	133,098,857
Ending Market Value	1,461,539,095	1,461,539,095	1,461,539,095

Fiscal Year begins July 1.

Performance Update | As of July 31, 2025





As of June 30, 2025, Total Plan Actuarial Liability (AL) is \$1.568 billion and the Actuarial Value of Assets (AVA) is \$1.377 billion for an Actuarial Funded Ratio (AVA/AL) of 88%. Using the Market Value of Assets (MVA), the Market Funded Ratio (MVA/AL) was approximately 91% in June 2025 and 94% in July 2025.

Performance Update | As of July 31, 2025

Asset Class Performance Summary												
	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date		
Total System	1,461,539,095	100.0	0.6	8.9	9.7	8.3	8.0	6.7	7.9		Oct-90	
Total System Policy Benchmark			0.8	8.7	11.3	9.6	8.9	7.2	8.1			
Total Fund Actual Allocation Benchmark			0.8	9.2	11.1	--	--	--	--			
Total Fund Public Benchmark			0.9	9.4	12.0	11.1	8.2	7.3	8.2			
Growth Assets	797,099,962	54.5	1.1	11.2	13.2	--	--	--	15.5		Dec-22	
Growth Assets Custom Benchmark			1.3	10.3	15.2	--	--	--	17.0			
Global Equity	789,187,670	54.0	1.1	11.3	13.3	13.5	12.1	9.8	9.3		Oct-90	
Global Equity Policy Benchmark			1.3	11.3	15.1	14.7	12.5	9.8	9.7			
Private Equity	7,912,292	0.5										
MSCI ACWI + 3% 1Q Lag			1.2	0.3	15.2	--	--	--	17.4			
Credit	73,059,192	5.0	1.4	6.7	9.5	--	--	--	9.9		May-23	
Credit Custom Benchmark			0.6	4.4	8.1	--	--	--	9.7			
High Yield & Bank Loans	73,059,192	5.0	1.4	6.7	9.5	--	--	--	9.9		May-23	
High Yield & Bank Loans Custom Benchmark			0.6	4.4	8.1	--	--	--	9.7			
Inflation Hedges	308,958,903	21.1	0.3	9.4	9.4	--	--	--	2.2		Dec-22	
Inflation Hedges Custom Benchmark			0.4	10.4	9.0	--	--	--	2.5			
Real Estate	105,806,549	7.2	0.1	1.7	3.9	-5.4	0.9	2.8	5.4		Apr-11	
NCREIF ODCE (Net)			0.0	1.7	2.7	-6.2	2.5	4.4	6.7			
Natural Resources & Infrastructure	76,387,766	5.2	1.2	12.9	7.3	--	--	--	4.8		Apr-23	
S&P Global LargeMidcap Resources & Commodities NR USD			1.5	15.6	6.3	--	--	--	3.8			
Gold	41,415,700	2.8	-1.1	34.6	35.1	--	--	--	22.1		Apr-23	
60% Gold (Spot)/ 40% FTSE Gold Mines			0.0	37.6	37.1	--	--	--	24.9			
Short-Term TIPS	85,348,889	5.8	0.3	4.4	5.9	--	--	--	5.1		Mar-23	
Blmbg. U.S. TIPS 0-5 Year			0.3	4.3	5.9	--	--	--	5.5			
Risk Mitigation	282,421,037	19.3	-0.6	2.1	0.7	--	--	--	2.4		Dec-22	
Risk Mitigation Custom Benchmark			-0.2	2.4	2.2	--	--	--	3.1			
Investment Grade Fixed Income	228,177,975	15.6	-0.4	3.2	2.0	1.1	-1.3	1.6	5.0		Oct-90	
Blmbg. U.S. Aggregate Index			-0.3	3.7	3.4	1.6	-1.1	1.7	5.0			
Intermediate-Term Bonds	179,517,843	12.3	-0.3	3.6	3.5	2.2	-0.7	1.9	5.1		Oct-90	
Blmbg. U.S. Aggregate Index			-0.3	3.7	3.4	1.6	-1.1	1.7	5.0			

Total Fund Public Benchmark consists of 74% MSCI ACWI IMI / 26% Bloomberg US Aggregate. Historical varies. See benchmark history page for additional benchmark detail.
 Fiscal Year begins July 1.

Performance Update | As of July 31, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Long-Term Bonds	48,660,132	3.3	-0.9	2.2	-2.9	--	--	--	-1.2	Mar-23
<i>Bloomberg U.S. Treasury: Long</i>			-0.9	2.1	-2.8	--	--	--	-1.2	
Hedge Funds	50,547,773	3.5	-1.3	-2.7	-4.6	--	--	--	-1.5	Apr-23
<i>Hedge Fund Custom Benchmark</i>			-0.2	-2.1	-2.1	--	--	--	1.4	
Cash	3,695,289	0.3								

Fiscal Year begins July 1.

Performance Update | As of July 31, 2025

Trailing Net Performance											
	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date	
Total System	1,461,539,095	100.0	0.6	8.9	9.7	8.3	8.0	6.7	7.9	Oct-90	
Total System Policy Benchmark			0.8	8.7	11.3	9.6	8.9	7.2	8.1		
Total Fund Actual Allocation Benchmark			0.8	9.2	11.1	--	--	--	--		
Total Fund Public Benchmark			0.9	9.4	12.0	11.1	8.2	7.3	8.2		
Growth Assets	797,099,962	54.5	1.1	11.2	13.2	--	--	--	15.5	Dec-22	
Growth Assets Custom Benchmark			1.3	10.3	15.2	--	--	--	17.0		
Global Equity	789,187,670	54.0	1.1	11.3	13.3	13.5	12.1	9.8	9.3	Oct-90	
Global Equity Policy Benchmark			1.3	11.3	15.1	14.7	12.5	9.8	9.7		
SSgA Russell 1000 Growth Index	84,041,586	5.8	3.8	10.1	23.7	--	--	--	32.0	Mar-23	
<i>Russell 1000 Growth Index</i>			3.8	10.1	23.7	--	--	--	32.0		
SSgA Russell 1000 Value Index	42,950,537	2.9	0.6	6.6	8.7	--	--	--	12.8	Mar-23	
<i>Russell 1000 Value Index</i>			0.6	6.6	8.8	--	--	--	12.9		
DF Dent Small Cap Growth Fund	16,623,441	1.1	2.5	-0.7	-1.1	--	--	--	7.5	Jun-24	
<i>Russell 2000 Growth Index</i>			1.7	1.2	3.2	--	--	--	9.7		
DFA U.S. Small Cap Value Portfolio	4,933,760	0.3	1.4	-2.1	--	--	--	--	0.5	Nov-24	
<i>Russell 2000 Value Index</i>			1.8	-1.5	--	--	--	--	-0.9		
SSgA Russell 3000 Index	221,902,699	15.2	2.2	8.0	15.6	--	--	--	21.9	Mar-23	
<i>Russell 3000 Index</i>			2.2	8.1	15.7	--	--	--	21.9		
SSgA MSCI EAFE	103,184,792	7.1	-1.4	18.1	13.1	--	--	--	14.1	Mar-23	
<i>MSCI EAFE</i>			-1.4	17.8	12.8	--	--	--	13.8		
SSgA Emerging Markets Index	19,527,167	1.3	1.7	17.2	16.0	--	--	--	13.5	Mar-23	
<i>MSCI Emerging Markets</i>			1.9	17.5	17.2	--	--	--	14.1		
ABS China Direct	10,791,503	0.7	6.6	23.3	38.3	--	--	--	6.2	Mar-23	
<i>MSCI China</i>			4.8	23.0	42.1	--	--	--	11.5		
ABS EM ex China Direct	24,548,792	1.7	0.5	15.2	8.4	--	--	--	15.8	Mar-23	
<i>MSCI EM ex China (Net)</i>			0.8	15.5	9.4	--	--	--	15.5		
Kopernik Global All-Cap	41,442,229	2.8	-1.4	34.6	27.3	--	--	--	18.3	Apr-23	
<i>MSCI AC World Index</i>			1.4	11.5	15.9	--	--	--	18.7		
First Eagle Global Equity	125,909,636	8.6	-0.2	12.2	11.8	--	--	--	13.7	Apr-23	
<i>MSCI AC World Index</i>			1.4	11.5	15.9	--	--	--	18.7		
J. Stern & Co. World Stars Global Equity Fund	93,331,527	6.4	1.1	8.7	9.9	--	--	--	15.3	Feb-24	
<i>MSCI AC World IMI Index</i>			1.3	11.3	15.1	--	--	--	18.6		

Performance Update | As of July 31, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Equity	7,912,292	0.5								
MSCI ACWI + 3% 1Q Lag			1.2	0.3	15.2	--	--	--	17.4	
NexPhase Capital Fund V, L.P.	853,993	0.1								
Vitruvian Investment Partnership V	644,843	0.0								
Lexington Capital Partners X, L.P.	5,000,593	0.3								
Flagship Pioneering Fund VIII, L.P.	391,016	0.0								
Gauge Capital IV, L.P.	431,002	0.0								
KPS Special Situations Fund VI, L.P.	367,204	0.0								
Oakley Capital VI	67,095	0.0								
Mainsail Partners VII	136,546	0.0								
Falfurrias Capital Partners VI, L.P.	20,000	0.0								
Credit	73,059,192	5.0	1.4	6.7	9.5	--	--	--	9.9	May-23
Credit Custom Benchmark			0.6	4.4	8.1	--	--	--	9.7	
High Yield & Bank Loans	73,059,192	5.0	1.4	6.7	9.5	--	--	--	9.9	May-23
High Yield & Bank Loans Custom Benchmark			0.6	4.4	8.1	--	--	--	9.7	
Sculptor Credit Opportunities Overseas Fund	27,996,094	1.9	2.3	9.2	9.2	--	--	--	7.6	May-23
Blmbg. Global High Yield Index			0.4	7.2	11.3	--	--	--	11.8	
Brigade High Income Fund	45,063,099	3.1	0.8	4.8	9.9	--	--	--	11.7	May-23
60% Bloomberg U.S. Corporate High Yield & 40% S&P UBS Lev Loans			0.6	4.5	8.2	--	--	--	9.7	
Inflation Hedges	308,958,903	21.1	0.3	9.4	9.4	--	--	--	2.2	Dec-22
Inflation Hedges Custom Benchmark			0.4	10.4	9.0	--	--	--	2.5	
Real Estate	105,806,549	7.2	0.1	1.7	3.9	-5.4	0.9	2.8	5.4	Apr-11
NCREIF ODCE			0.0	1.7	2.7	-6.2	2.5	4.4	6.7	
JP Morgan Asset Management Strategic Property Fund	45,446,424	3.1	0.2	2.1	4.1	-7.7	1.2	3.5	6.2	Apr-11
NCREIF ODCE			0.0	1.7	2.7	-6.2	2.5	4.4	6.7	
UBS Trumbull Property Fund	19,998,340	1.4	0.0	2.6	3.2	-7.3	-0.1	1.7	3.7	Dec-11
NCREIF ODCE			0.0	1.7	2.7	-6.2	2.5	4.4	6.4	
Morgan Stanley Prime Property Fund	40,361,784	2.8	0.0	1.4	--	--	--	--	1.4	Jan-25
NCREIF ODCE			0.0	1.7	--	--	--	--	1.7	
Natural Resources & Infrastructure	76,387,766	5.2	1.2	12.9	7.3	--	--	--	4.8	Apr-23
S&P Global LargeMid Commodity & Resources			1.5	15.6	6.3	--	--	--	3.8	
SSgA S&P Global LargeMidCap Natural Resources Index	58,473,111	4.0	1.5	15.7	6.5	--	--	--	3.9	Apr-23
S&P Global LargeMid Commodity & Resources			1.5	15.6	6.3	--	--	--	3.8	
JP Morgan Infrastructure Investments Fund	17,914,655	1.2	0.0	4.6	10.1	--	--	--	10.2	Oct-23
Dow Jones Brookfield Global Infrastructure			-1.3	10.7	14.9	--	--	--	18.5	

Private Equity funds are March 31, 2025 market values adjusted for subsequent cash flows.

Performance Update | As of July 31, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Gold	41,415,700	2.8	-1.1	34.6	35.1	--	--	--	22.1	Apr-23
60% Gold (Spot)/ 40% FTSE Gold Mines			0.0	37.6	37.1	--	--	--	24.9	
First Eagle Institutional Gold Fund, LP	41,415,700	2.8	-1.1	34.6	35.1	--	--	--	22.1	Apr-23
60% Gold (Spot)/ 40% FTSE Gold Mines			0.0	37.6	37.1	--	--	--	24.9	
Short-Term TIPS	85,348,889	5.8	0.3	4.4	5.9	--	--	--	5.1	Mar-23
Blmbg. U.S. TIPS 0-5 Year			0.3	4.3	5.9	--	--	--	5.5	
Vanguard Short-Term TIPS Index	85,348,889	5.8	0.3	4.4	5.9	--	--	--	4.9	Apr-23
Blmbg. U.S. TIPS 0-5 Year			0.3	4.3	5.9	--	--	--	4.9	
Risk Mitigation	282,421,037	19.3	-0.6	2.1	0.7	--	--	--	2.4	Dec-22
Risk Mitigation Custom Benchmark			-0.2	2.4	2.2	--	--	--	3.1	
Investment Grade Fixed Income	228,177,975	15.6	-0.4	3.2	2.0	1.1	-1.3	1.6	5.0	Oct-90
Blmbg. U.S. Aggregate Index			-0.3	3.7	3.4	1.6	-1.1	1.7	5.0	
Intermediate-Term Bonds	179,517,843	12.3	-0.3	3.6	3.5	2.2	-0.7	1.9	5.1	Oct-90
Blmbg. U.S. Aggregate Index			-0.3	3.7	3.4	1.6	-1.1	1.7	5.0	
SSgA US Aggregate Bond	47,005,634	3.2	-0.3	3.7	3.4	1.6	-1.1	1.7	2.7	Jan-09
Blmbg. U.S. Aggregate Index			-0.3	3.7	3.4	1.6	-1.1	1.7	2.7	
Wellington Core Bond	97,262,505	6.7	-0.2	3.6	3.4	--	--	--	3.8	May-23
Blmbg. U.S. Aggregate Index			-0.3	3.7	3.4	--	--	--	3.1	
Brandywine U.S. Fixed Income	35,249,704	2.4	-0.4	3.6	3.7	--	--	--	3.1	Jun-23
Blmbg. U.S. Aggregate Index			-0.3	3.7	3.4	--	--	--	3.7	
Long-Term Bonds	48,660,132	3.3	-0.9	2.2	-2.9	--	--	--	-1.2	Mar-23
Blmbg. U.S. Treasury: Long			-0.9	2.1	-2.8	--	--	--	-1.2	
SSgA Long US Treasury Index	48,660,132	3.3	-0.9	2.2	-2.9	--	--	--	-1.2	Mar-23
Blmbg. U.S. Treasury: Long			-0.9	2.1	-2.8	--	--	--	-1.2	
Hedge Funds	50,547,773	3.5	-1.3	-2.7	-4.6	--	--	--	-1.5	Apr-23
Hedge Fund Custom Benchmark			-0.2	-2.1	-2.1	--	--	--	1.4	
36 South Kohinoor Series (Cayman) Fund	13,406,513	0.9	-0.7	0.3	-0.3	--	--	--	0.6	Apr-23
HFR/EurekaHedge Long Vol Blended Benchmark			-0.5	5.0	7.9	--	--	--	0.5	
BH-DG Systematic Trading Master Fund	14,129,322	1.0	-3.1	-9.1	-15.7	--	--	--	-6.9	Apr-23
SG Trend Index			0.0	-10.0	-13.0	--	--	--	-2.0	
Lombard Odier Bear Convexity	5,803,665	0.4	-2.3	0.2	-1.6	--	--	--	-1.0	Apr-23
HFR/EurekaHedge Long Vol Blended Benchmark			-0.5	5.0	7.9	--	--	--	0.5	
Alpstone Global Macro Fund	17,208,273	1.2	0.0	-0.3	2.0	--	--	--	1.3	May-23
HFRI Macro (Total) Index			0.1	-1.2	-0.5	--	--	--	2.5	
Cash	3,695,289	0.3								
Cash	3,695,289	0.3								

Performance Update | As of July 31, 2025

 Annual Investment Expense Analysis
 As of July 31, 2025

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee (%)
Total System		\$1,461,539,095	\$4,624,064	0.32
Growth Assets		\$797,099,962	\$1,954,304	0.25
Global Equity		\$789,187,670	\$1,899,469	0.24
SSgA Russell 1000 Growth Index	0.02 % of Assets	\$84,041,586	\$16,808	0.02
SSgA Russell 1000 Value Index	0.02 % of Assets	\$42,950,537	\$8,590	0.02
DF Dent Small Cap Growth Fund	0.85 % of Assets	\$16,623,441	\$141,299	0.85
DFA U.S. Small Cap Value Portfolio	0.31 % of Assets	\$4,933,760	\$15,295	0.31
SSgA Russell 3000 Index	0.02 % of Assets	\$221,902,699	\$44,381	0.02
SSgA MSCI EAFE	0.04 % of Assets	\$103,184,792	\$41,274	0.04
SSgA Emerging Markets Index	0.08 % of Assets	\$19,527,167	\$15,622	0.08
ABS China Direct	0.65 % of Assets	\$10,791,503	\$70,145	0.65
ABS EM ex China Direct	0.50 % of Assets	\$24,548,792	\$122,744	0.50
Kopernik Global All-Cap	0.75 % of Assets	\$41,442,229	\$310,817	0.75
First Eagle Global Equity	0.55 % of Assets	\$125,909,636	\$692,503	0.55
J. Stern & Co. World Stars Global Equity Fund	0.45 % of Assets	\$93,331,527	\$419,992	0.45
Private Equity		\$7,912,292	\$54,835	0.69
NexPhase Capital Fund V, L.P.	2.00 % of Assets	\$853,993	\$17,080	2.00
Vitruvian Investment Partnership V	1.90 % of Assets	\$644,843	\$12,252	1.90
Lexington Capital Partners X, L.P.	1.00% on committed capital.	\$5,000,593	-	-
Flagship Pioneering Fund VIII, L.P.	2.00 % of Assets	\$391,016	\$7,820	2.00
Gauge Capital IV, L.P.	2.00 % of Assets	\$431,002	\$8,620	2.00
KPS Special Situations Fund VI, L.P.	1.25 % of Assets	\$367,204	\$4,590	1.25
Oakley Capital VI	2.00 % of Assets	\$67,095	\$1,342	2.00
Mainsail Partners VII	2.00 % of Assets	\$136,546	\$2,731	2.00
Falfurrias Capital Partners VI, L.P.	2.00 % of Assets	\$20,000	\$400	2.00

Performance Update | As of July 31, 2025

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee (%)
Credit		\$73,059,192	\$514,289	0.70
High Yield & Bank Loans		\$73,059,192	\$514,289	0.70
Sculptor Credit Opportunities Overseas Fund	Performance Based 1.00 % and 20.00 %	\$27,996,094	\$279,961	1.00
Brigade High Income Fund	0.52 % of Assets	\$45,063,099	\$234,328	0.52
Inflation Hedges		\$308,958,903	\$1,371,225	0.44
Real Estate		\$105,806,549	\$930,588	0.88
JP Morgan Asset Management Strategic Property Fund	0.91 % of Assets	\$45,446,424	\$413,562	0.91
UBS Trumbull Property Fund	0.96 % of First \$10 M 0.83 % of Next \$15 M 0.81 % of Next \$25 M 0.79 % of Next \$50 M 0.67 % of Next \$150 M 0.60 % of Next \$150 M 0.56 % of Next \$200 M 0.52 % Thereafter	\$19,998,340	\$177,986	0.89
Morgan Stanley Prime Property Fund	0.84 % of Assets	\$40,361,784	\$339,039	0.84
Natural Resources & Infrastructure		\$76,387,766	\$228,662	0.30
SSgA S&P Global LargeMidCap Natural Resources Index	0.10 % of Assets	\$58,473,111	\$58,473	0.10
JP Morgan Infrastructure Investments Fund	0.95 % of Assets	\$17,914,655	\$170,189	0.95
Gold		\$41,415,700	\$186,371	0.45
First Eagle Institutional Gold Fund, LP	0.45 % of Assets	\$41,415,700	\$186,371	0.45
Short-Term TIPS		\$85,348,889	\$25,605	0.03
Vanguard Short-Term TIPS Index	0.03 % of Assets	\$85,348,889	\$25,605	0.03
Risk Mitigation		\$282,421,037	\$784,245	0.28
Investment Grade Fixed Income		\$228,177,975	\$242,938	0.11
Intermediate-Term Bonds		\$179,517,843	\$228,340	0.13
SSgA US Aggregate Bond	0.02 % of Assets	\$47,005,634	\$9,401	0.02
Wellington Core Bond	0.12 % of Assets	\$97,262,505	\$116,715	0.12
Brandywine U.S. Fixed Income	0.29 % of Assets	\$35,249,704	\$102,224	0.29
Long-Term Bonds		\$48,660,132	\$14,598	0.03
SSgA Long US Treasury Index	0.03 % of Assets	\$48,660,132	\$14,598	0.03

Performance Update | As of July 31, 2025

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee (%)
Hedge Funds				
36 South Kohinoor Series (Cayman) Fund	Performance Based 1.00 % and 20.00 %	\$13,406,513	\$134,065	1.00
BH-DG Systematic Trading Master Fund	0.93 % of Assets	\$14,129,322	\$131,403	0.93
Lombard Odier Bear Convexity	Performance Based 0.75 % and 27.50 %	\$5,803,665	\$43,527	0.75
Alpstone Global Macro Fund	Performance Based 1.35 % and 20.00 %	\$17,208,273	\$232,312	1.35
Cash		\$3,695,289	-	-
Cash		\$3,695,289	-	-

		Benchmark History
From Date	To Date	Benchmark
Total System		
01/01/2024	Present	14.0% Blmbg. U.S. Aggregate Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 4.0% Hedge Fund Custom Benchmark, 8.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 52.0% MSCI AC World IMI Index (Net), 5.0% Blmbg. U.S. TIPS 0-5 Year, 5.0% S&P Global LargeMid Commodity & Resources (Net), 2.0% S&P UBS Leveraged Loan Index, 3.0% 60% Gold (Spot)/ 40% FTSE Gold Mines, 5.0% MSCI ACWI + 3% 1Q Lag
12/01/2022	01/01/2024	14.0% Blmbg. U.S. Aggregate Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 4.0% HFRI Macro (Total) Index, 8.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 52.0% MSCI AC World IMI Index (Net), 5.0% Blmbg. U.S. TIPS 0-5 Year, 5.0% S&P Global LargeMid Commodity & Resources (Net), 2.0% S&P UBS Leveraged Loan Index, 3.0% 60% Gold (Spot)/ 40% FTSE Gold Mines, 5.0% MSCI ACWI + 3% 1Q Lag
05/01/2016	12/01/2022	30.0% Blmbg. U.S. Aggregate Index, 7.5% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 7.5% Alerian MLP Index, 55.0% MSCI AC World IMI Index (Net)
03/01/2016	05/01/2016	33.0% Russell 3000 Index, 30.0% Blmbg. U.S. Aggregate Index, 7.5% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 22.0% MSCI AC World ex USA (Net), 7.5% Alerian MLP Index
02/01/2013	03/01/2016	33.0% Russell 3000 Index, 35.0% Blmbg. U.S. Aggregate Index, 5.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 22.0% MSCI AC World ex USA (Net), 5.0% Alerian MLP Index
03/01/2011	02/01/2013	36.0% Russell 3000 Index, 35.0% Blmbg. U.S. Aggregate Index, 5.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 24.0% MSCI AC World ex USA (Net)
09/01/2009	03/01/2011	36.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 24.0% MSCI AC World ex USA (Net)
06/01/2009	09/01/2009	42.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 18.0% MSCI AC World ex USA (Net)
06/01/2006	06/01/2009	42.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 18.0% MSCI EAFE (Net)
07/01/2003	06/01/2006	60.0% S&P 500 Index, 40.0% Blmbg. U.S. Aggregate Index
10/01/2002	07/01/2003	55.0% S&P 500 Index, 45.0% Blmbg. U.S. Aggregate Index
10/01/1990	10/01/2002	50.0% S&P 500 Index, 50.0% Blmbg. U.S. Aggregate Index

Total Fund Public benchmark consists of 74% MSCI ACWI IMI / 26% Bloomberg US Aggregate. Historical Varies.

Total Fund 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.

From Date	To Date	Benchmark History	Benchmark
Growth Assets			
12/01/2022	Present	91.0% MSCI AC World IMI Index (Net), 9.0% MSCI ACWI + 3% 1Q Lag	
Global Equity			
05/01/2016	Present	100.0% MSCI AC World IMI Index (Net)	
09/01/2009	05/01/2016	60.0% Russell 3000 Index, 40.0% MSCI AC World ex USA (Net)	
06/01/2009	09/01/2009	70.0% Russell 3000 Index, 30.0% MSCI AC World ex USA (Net)	
01/01/2006	06/01/2009	70.0% Russell 3000 Index, 30.0% MSCI EAFE (Net)	
10/01/1990	01/01/2006	100.0% S&P 500 Index	
Credit			
12/01/2022	Present	50.0% Blmbg. U.S. Corp: High Yield Index, 50.0% S&P UBS Leveraged Loan Index	
High Yield & Bank Loans			
12/31/1992	Present	50.0% Blmbg. U.S. Corp: High Yield Index, 50.0% S&P UBS Leveraged Loan Index	
Inflation Hedges			
12/01/2022	Present	38.0% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 24.0% Blmbg. U.S. TIPS 1-5 Year Index, 24.0% S&P Global LargeMid Commodity & Resources (Net), 14.0% 60% Gold (Spot)/ 40% FTSE Gold Mines	
Risk Mitigation			
01/01/2024	Present	78.0% Blmbg. U.S. Aggregate Index, 22.0% Hedge Fund Custom Benchmark	
12/01/2022	01/01/2024	78.0% Blmbg. U.S. Aggregate Index, 22.0% HFRI Macro (Total) Index	
Hedge Funds			
01/01/2025	Present	33.3% HFRI Macro (Total) Index, 33.3% SG Trend Index, 33.3% HFR / EurekaHedge Long Volatility Blended Benchmark	
01/01/2024	01/01/2025	33.3% HFRI Macro (Total) Index, 33.3% SG Trend Index, 33.3% CBOE Eurekahedge Long Volatility Hedge Fund Index	
03/01/2023	01/01/2024	100.0% HFRI Macro (Total) Index	

Asset Allocation Review

Introduction

Introduction**Introduction**

- At the May Investment Committee meeting Meketa presented three alternative asset allocation policies. All three options slightly reduced the overall return and risk of the System, but still maintained a higher return than the assumed rate.
- In the original policies, we reduced public equity and increased fixed income, adding a new dedicated target to private credit.
- Based on feedback we received, an alternative Policy D has been created.
 - The primary reason for adding private credit was due to its attractive yield.
 - While not as significant, other asset classes offer enhanced yield including investment grade bonds, infrastructure, and high yield & bank loans.
- As an alternative, Policy D proposes a smaller decrease in global equity and an increase in high yield & bank loans, infrastructure, and investment grade bonds in order to achieve a similar yield while still reducing risk.
- In addition, a liquidity analysis is provided at the conclusion as well.

Proposed Policy Options

 Asset Allocation Policy Options¹

	Current (%)	Policy C (%)	Policy D (%)
Growth Assets	57	45	47
Global Equity	52	40	42
Private Equity	5	5	5
Credit	4	11	7
High Yield Bonds & Bank Loans	4	6	7
Private Credit	0	5	0
Inflation Hedges	21	23	26
Short-term TIPS	5	5	5
Real Estate	8	8	8
Natural Resources	2	2	2
Gold ²	3	3	3
Infrastructure	3	5	8
Risk Mitigation	18	21	20
Investment Grade Bonds	10	13	12
Long-term Government Bonds	4	4	4
RMS Hedge Funds ³	4	4	4
Expected Return (20 years)	8.12	8.04	8.01
Expected Return (20 years) Adjusted ⁴	7.80	7.80	7.76
Standard Deviation	12.0	10.9	11.0
Probability of Achieving 6.75% over 20 Years	69.3	70.0	69.3

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. Green/red are relative to the Current Policy.

² Gold allocation is 1/3 miners and 2/3 Gold Bullion.

³ RMS Hedge Funds consist of Trend Following, Long Volatility, and Global Macro.

⁴ Modified US Equity expected return.

Review of Proposed Asset Allocation Policies

- The Current Policy meets the return objectives of the System. As a result, we are not looking to dramatically change the asset allocation but rather make enhancements on the margins.
- Policy C adds exposure to private credit as an alternative option to maintain a similar return and reduce risk.
- Revised Policy D has a similar return with slightly less risk as compared to the Current Policy.
 - Revised Policy D considers a decline in the target to global equities by 10%, as reducing equity risk is the primary tool for decreasing overall risk in the System.
 - High yield bonds & bank loans, infrastructure, and investment grade bonds would increase in target as a result.
 - The increased allocation to fixed income and infrastructure considers the increase in interest rates as an opportunity to earn a more attractive return.

Diversification and 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 budgeting¹
 - 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
 - Relies on assumptions underlying Modern Portfolio Theory ("MPT")
- 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.

MPT-Based Risk Analysis

Scenario	Current (%)	Policy C (%)	Policy D (%)
Worst Case Returns ¹			
One Year (annualized)	-16.3	-14.5	-14.7
Three Years (annualized)	-6.8	-5.6	-5.8
Five Years (annualized)	-3.6	-2.7	-2.8
Ten Years (annualized)	-0.3	0.3	0.2
Twenty Years (annualized)	2.1	2.5	2.4
Probability of Experiencing Negative Returns			
One Year	24.0	22.1	22.5
Three Years	11.0	9.2	9.5
Five Years	5.7	4.3	4.5
Ten Years	1.3	0.8	0.8
Twenty Years	0.1	0.0	0.0
Probability of Achieving at least a 6.75% Return			
One Year	54.5	54.7	54.5
Three Years	57.7	58.0	57.7
Five Years	60.0	60.3	60.0
Ten Years	63.9	64.5	63.9

→ Revised Policy D has the same expectation of reaching the target return over the long term as the Current Policy.

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

Historical Negative Scenario Analysis¹ (Cumulative Return)

Scenario	Current (%)	Policy C (%)	Policy D (%)
Post-COVID Rate Hikes (Jan 2022 - Oct 2023)	-9.0	-7.0	-7.3
COVID-19 Market Shock (Feb 2020 - Mar 2020)	-19.8	-16.7	-17.1
Taper Tantrum (May - Aug 2013)	-1.2	-1.0	-1.1
Global Financial Crisis (Oct 2007 - Mar 2009)	-26.9	-22.3	-22.5
Popping of the TMT Bubble (Apr 2000 - Sep 2002)	-16.1	-9.2	-9.6
LTCM (Jul - Aug 1998)	-7.8	-6.2	-6.4
Asian Financial Crisis (Aug 1997 - Jan 1998)	0.8	1.9	1.6
Rate spike (1994 Calendar Year)	2.9	2.4	2.0
Early 1990s Recession (Jun - Oct 1990)	-5.1	-3.9	-4.2
Crash of 1987 (Sep - Nov 1987)	-10.4	-8.0	-8.4
Strong dollar (Jan 1981 - Sep 1982)	0.3	2.8	2.1
Volcker Recession (Jan - Mar 1980)	-4.1	-3.8	-3.8
Stagflation (Jan 1973 - Sep 1974)	-18.6	-14.1	-14.7

→ Revised Policy D would have performed better in declining equity markets in comparison to the Current Policy.

¹ In periods where the ideal benchmark was not yet available, we used the next closest benchmark(s) as a proxy.

Historical Positive Scenario Analysis¹ (Cumulative Return)

Scenario	Current (%)	Policy C (%)	Policy D (%)
Covid Recovery (Apr 2020 - Dec 2021)	51.6	45.9	46.5
Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	37.5	33.0	33.3
Real Estate and Buyout Boom (Oct 2004 - Sept 2007)	59.3	56.0	55.4
Best of Great Moderation (Apr 2003 - Feb 2004)	30.1	26.2	26.5
Peak of the TMT Bubble (Oct 1998 - Mar 2000)	36.6	31.9	32.9
Short Rate Decrease Cycle (Jan 1995-Dec 1995)	17.3	16.5	16.2
Recession Recovery (Nov 1990 - March 1992)	11.8	12.4	12.4
Plummeting Dollar (Jan 1986 - Aug 1987)	61.7	51.0	52.7
Long Rate Decrease Cycle (June 1984 - August 1986)	92.2	79.8	81.4
Volcker Recovery (Aug 1982 - Apr 1983)	32.7	28.7	29.1
Bretton Wood Recovery (Oct 1974 - Jun 1975)	27.6	23.3	23.9

→ The Current Policy would have been the best option for capturing most of the upside in strongly positive markets.

¹ 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 (%)	Policy C (%)	Policy D (%)
10-year Treasury Bond rates rise 100 bps	3.8	3.0	3.1
10-year Treasury Bond rates rise 200 bps	-1.8	-2.1	-2.2
10-year Treasury Bond rates rise 300 bps	-2.7	-3.5	-3.3
Baa Spreads widen by 50 bps, High Yield by 200 bps	0.7	0.8	0.8
Baa Spreads widen by 300 bps, High Yield by 1000 bps	-20.9	-18.2	-18.3
Trade Weighted Dollar gains 10%	-4.9	-4.1	-4.2
Trade Weighted Dollar gains 20%	-1.7	-1.1	-0.9
US Equities decline 10%	-5.2	-4.3	-4.4
US Equities decline 25%	-15.6	-13.7	-13.9
US Equities decline 40%	-25.4	-22.1	-22.5
Bull Steeperener	1.7	1.8	1.8

- Each policy portfolio has a different sensitivity to four major risk factors: interest rates, credit spreads, currency fluctuations, and equity values.
- The System's primary risk factors would continue to be an equity market decline and a widening of credit spreads, no matter the policy.

¹ Assumes that assets not directly exposed to the factor are affected nonetheless.

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

Scenario	Current (%)	Policy C (%)	Policy D (%)
10-year Treasury Bond rates drop 100 bps	1.9	2.0	2.0
10-year Treasury Bond rates drop 200 bps	11.0	9.6	9.6
10-year Treasury Bond rates drop 300 bps	14.2	12.6	12.7
Baa Spreads narrow by 30bps, High Yield by 100 bps	6.4	5.8	5.9
Baa Spreads narrow by 100bps, High Yield by 300 bps	13.0	11.9	12.0
Trade Weighted Dollar drops 10%	8.0	7.2	7.3
Trade Weighted Dollar drops 20%	23.3	19.7	20.0
US Equities rise 10%	6.0	5.4	5.5
US Equities rise 30%	15.4	13.1	13.4
Bear Steepener	4.6	3.6	3.7

→ The portfolio with the least downside risk is likewise the portfolio that participates least in upside scenarios.

¹ Assumes that assets not directly exposed to the factor are affected nonetheless.

Inflation Stress Testing: Negative Scenarios (Expected Return under Negative Inflationary Conditions)

Scenario	Current (%)	Policy C (%)	Policy D (%)
Inflation slightly higher than expected	-0.3	-0.2	-0.2
Inflation meaningfully higher than expected	-5.5	-4.5	-4.6
Low Growth and Low Inflation	-7.8	-6.5	-6.8
Low Growth and High Inflation	-12.2	-10.1	-10.4
Brief, moderate inflation spike	-3.3	-2.8	-2.9
Extended, moderate inflation spike	-5.7	-4.7	-4.9
Brief, extreme inflation spike	-7.2	-6.0	-6.2
Extended, extreme inflation spike	-9.1	-7.5	-7.8

- Each of the alternative policies performs better than the Current Policy in the scenarios where inflation does the most harm.

Inflation Stress Testing: Positive Scenarios
(Expected Return under Positive Inflationary Conditions)

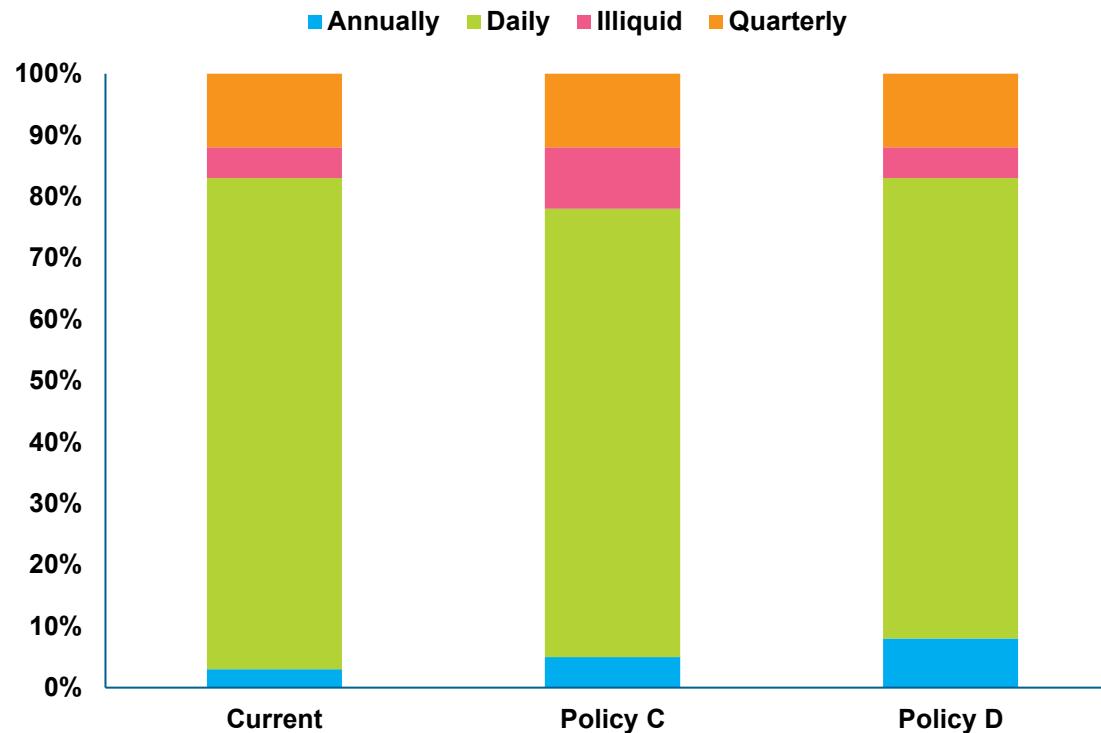
Scenario	Current (%)	Policy C (%)	Policy D (%)
High Growth and Low Inflation	10.4	8.5	9.0
High Growth and Moderate Inflation	7.6	6.3	6.7
High Growth and High Inflation	4.7	3.9	4.3

→ The Current Policy performs better than each of the alternative policies in positive inflationary conditions.

Liquidity Risk

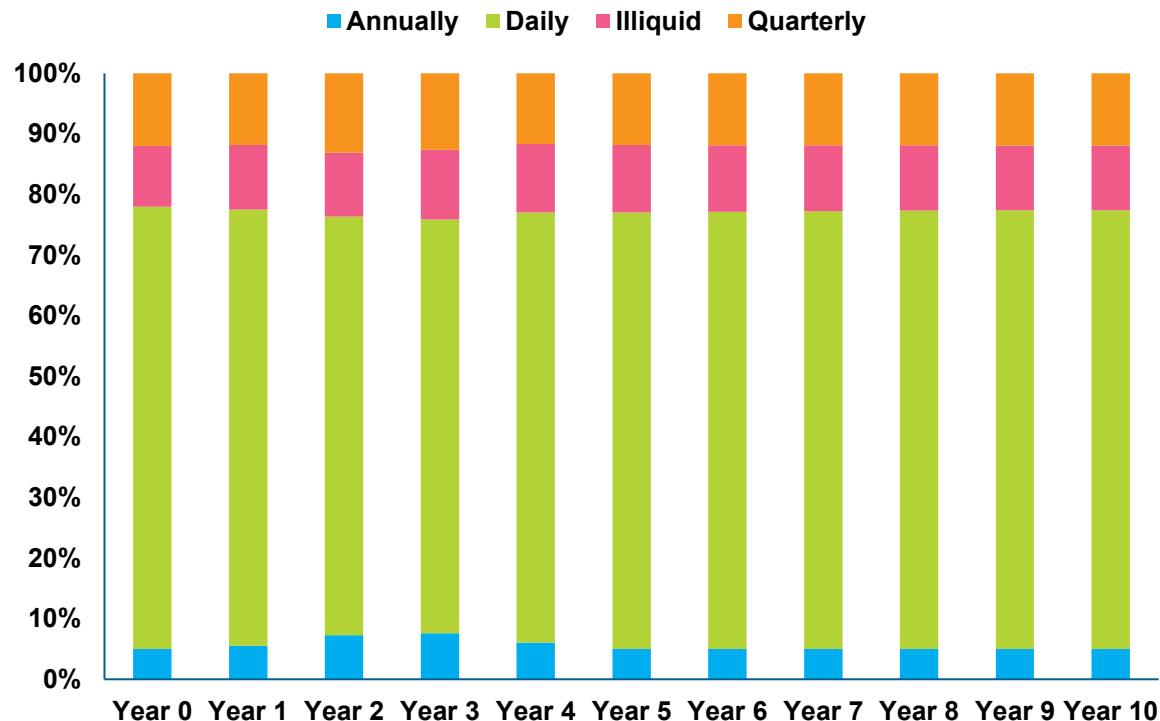
- Liquidity risk is a meaningful risk that is generally not captured in traditional asset allocation processes.
- The System must maintain adequate liquidity to satisfy benefit payments and to avoid having to sell illiquid assets at distressed prices if possible.

Liquidity Profile



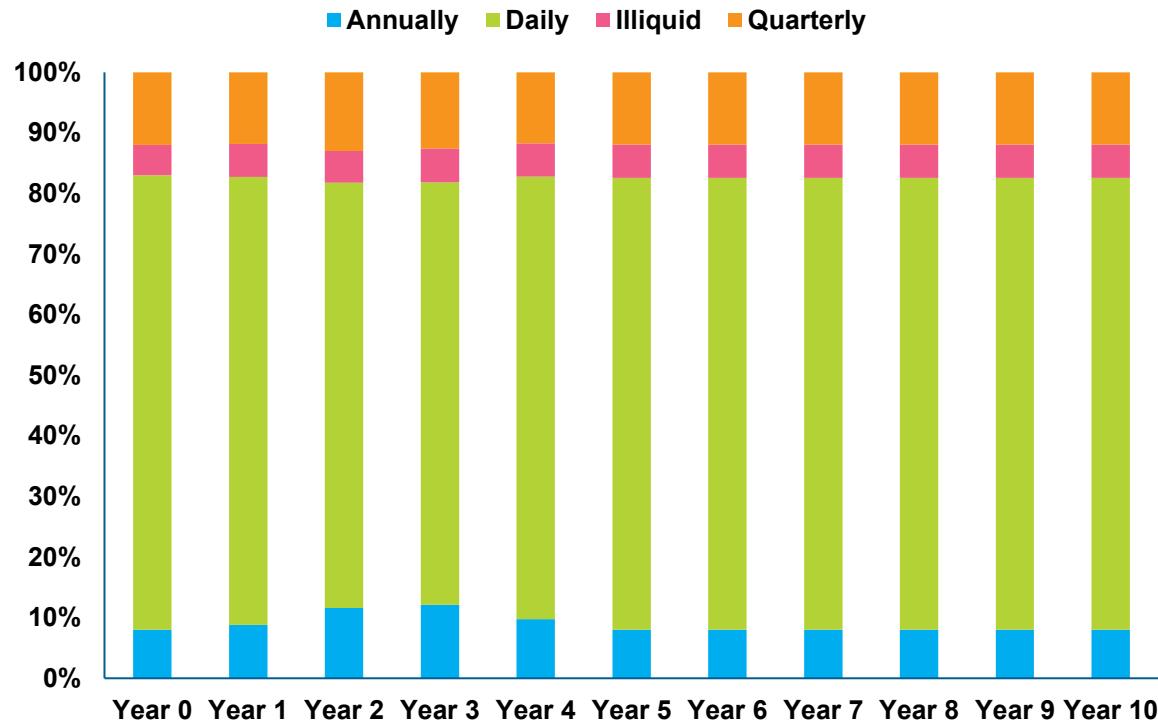
- Each policy portfolio has at least 73% allocated to daily-liquid assets.

Liquidity Stress Test: Liquidity Profile (for Policy C)



- In an extreme market event (e.g., GFC like returns and no sharp recover), accounting for making benefit payments and rebalancing, the System has sufficient liquidity.
- At the trough, the policy portfolio would have 68% of its assets in daily liquid vehicles.

Liquidity Stress Test: Liquidity Profile (for Policy D)



- In an extreme market event (e.g., GFC like returns and no sharp recover), accounting for making benefit payments and rebalancing, the System has sufficient liquidity.
- At the trough, the policy portfolio would have 70% of its assets in daily liquid vehicles.

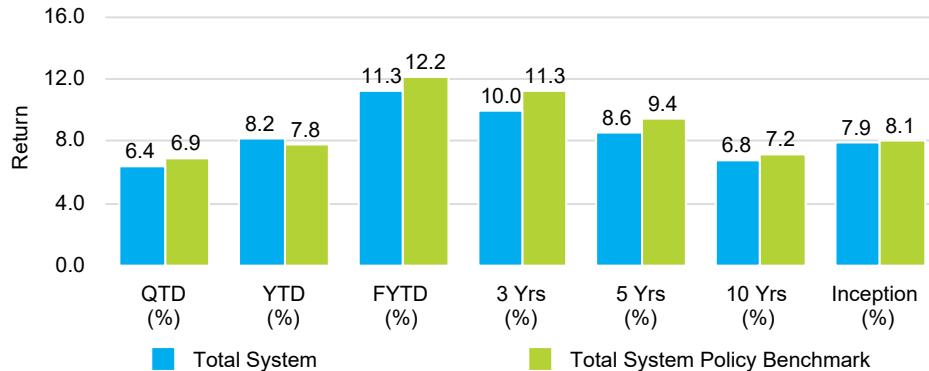
Appendices

Performance Update | As of June 30, 2025

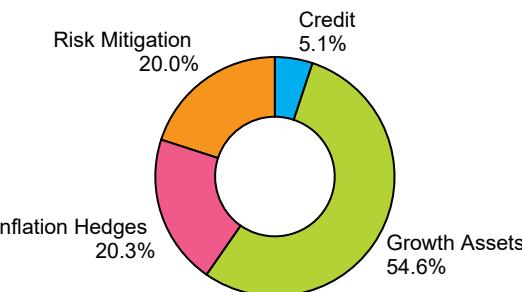
Portfolio Objective

The Employees' Retirement System of the City of Norfolk is a long-term investor whose objective is to enable the System to provide retirement income for plan participants and beneficiaries. The System's strategy is generate a return that meets the long-term return objective, while minimizing volatility.

Return Summary

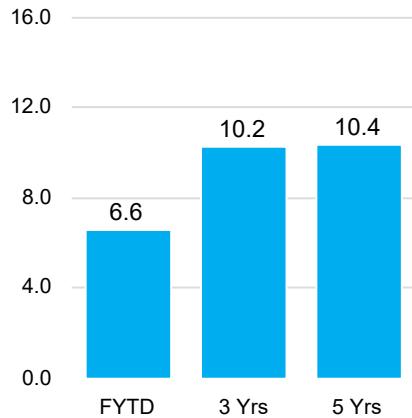


Current Allocation

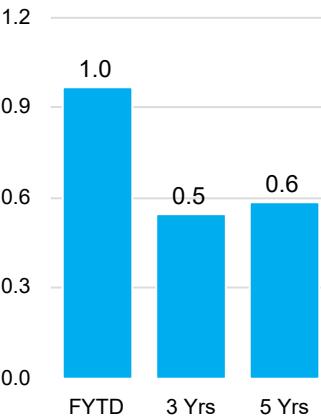


	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Total System	6.4	8.2	11.3	10.0	8.6	6.8	7.9	10/01/1990
Total System Policy Benchmark	6.9	7.8	12.2	11.3	9.4	7.2	8.1	

Annualized Standard Deviation



Sharpe Ratio



Summary of Cash Flows

Quarter-To-Date

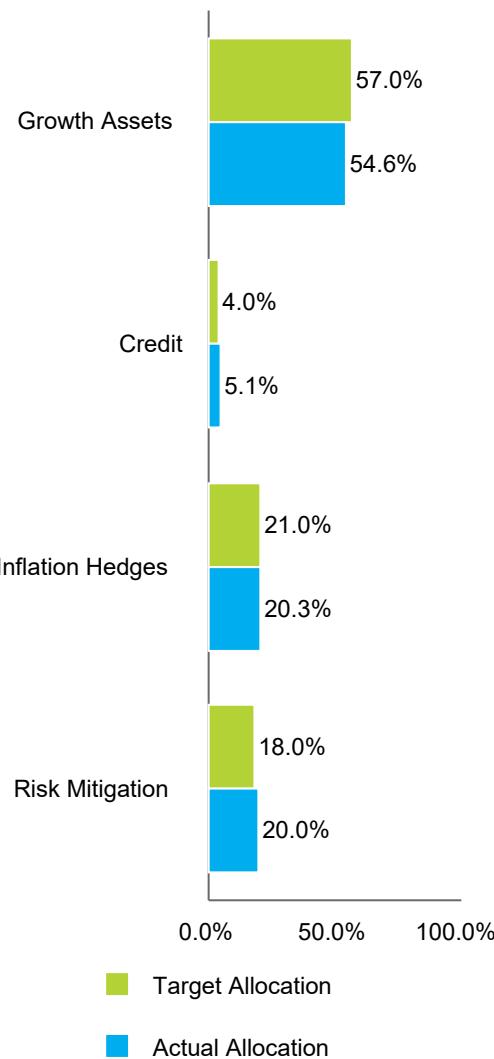
Fiscal Year-To-Date

Total System

Beginning Market Value	1,354,001,340	1,321,626,225
Net Cash Flow	-24,806,997	-55,532,505
Net Investment Change	88,740,354	151,840,976
Ending Market Value	1,417,934,696	1,417,934,696

Fiscal Year begins July 1.

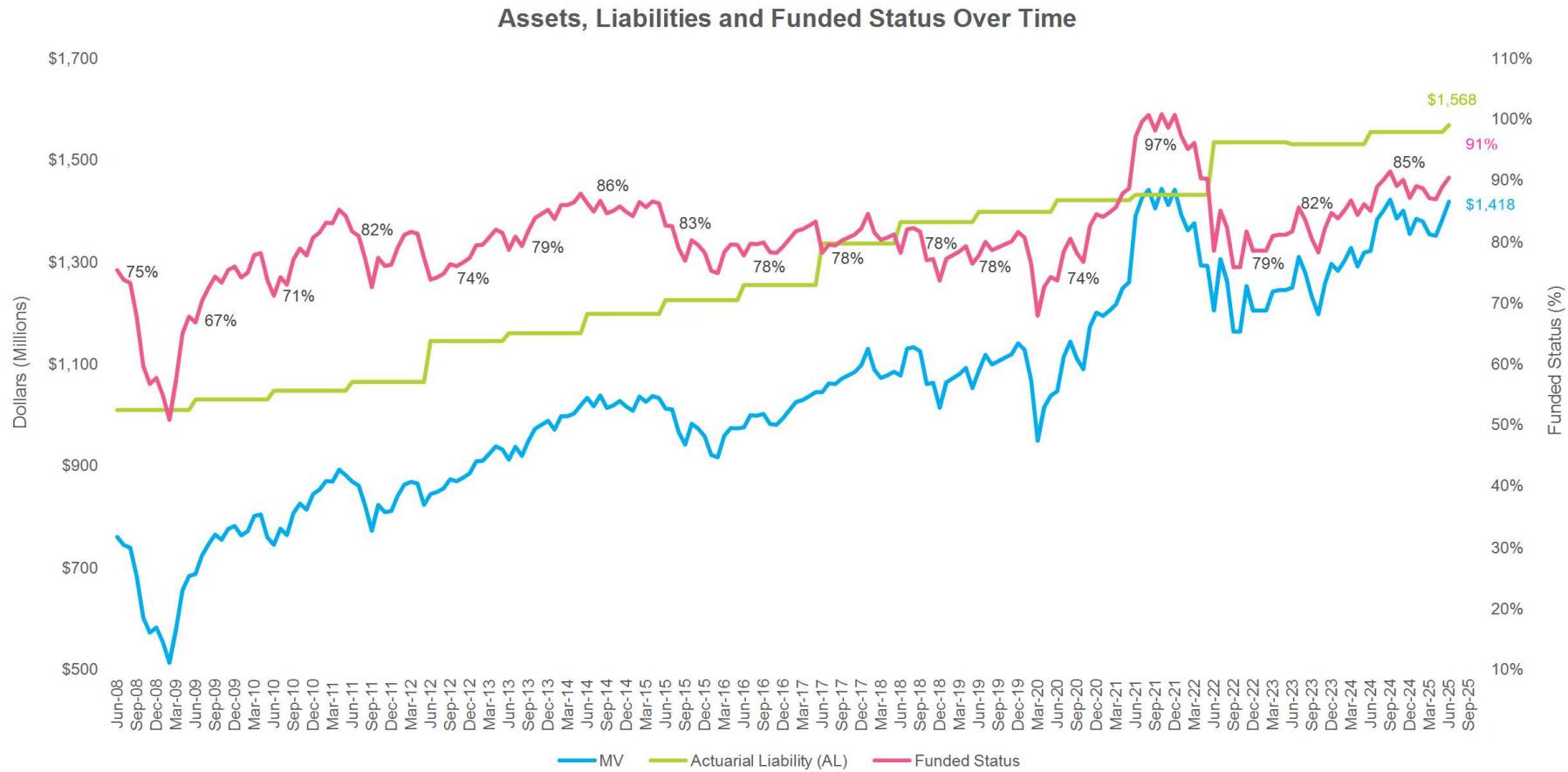
Actual vs. Target Allocation



Allocation vs. Targets and Policy

	Current Balance	Current Allocation (%)	Policy (%)	Policy Range (%)	Within IPS Range?
Growth Assets	\$773,751,827	54.6	57.0	47.0 - 67.0	Yes
Global Equity	\$765,941,902	54.0	52.0	42.0 - 62.0	Yes
Private Equity	\$7,809,925	0.6	5.0	0.0 - 10.0	Yes
Credit	\$72,302,582	5.1	4.0	0.0 - 9.0	Yes
High Yield & Bank Loans	\$72,302,582	5.1	4.0	0.0 - 9.0	Yes
Inflation Hedges	\$288,368,278	20.3	21.0	14.0 - 28.0	Yes
Real Estate	\$105,931,443	7.5	8.0	3.0 - 13.0	Yes
Natural Resources & Infrastructure	\$75,511,752	5.3	5.0	0.0 - 10.0	Yes
Gold	\$36,854,219	2.6	3.0	0.0 - 6.0	Yes
Short-Term TIPS	\$70,070,863	4.9	5.0	0.0 - 10.0	Yes
Risk Mitigation	\$283,512,010	20.0	18.0	11.0 - 25.0	Yes
Investment Grade Fixed Income	\$229,090,489	16.2	14.0	7.0 - 21.0	Yes
Hedge Funds	\$51,229,008	3.6	4.0	0.0 - 9.0	Yes
Cash	\$3,192,513	0.2	0.0	0.0 - 3.0	Yes
Total	\$1,417,934,696	100.0	100.0		

Performance Update | As of June 30, 2025



As of June 30, 2025, Total Plan Actuarial Liability (AL) is \$1.568 billion and the Actuarial Value of Assets (AVA) is \$1.377 billion for an Actuarial Funded Ratio (AVA/AL) of 88%. Using the Market Value of Assets (MVA), the Market Funded Ratio (MVA/AL) was approximately 89% in May 2025 and 91% in June 2025.

Performance Update | As of June 30, 2025

	Asset Class Performance Summary										
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date	
Total System	1,417,934,696	100.0	6.4	8.2	11.3	10.0	8.6	6.8	7.9		Oct-90
Total System Policy Benchmark			6.9	7.8	12.2	11.3	9.4	7.2	8.1		
Total Fund Actual Allocation Benchmark			7.2	8.4	12.3	--	--	--	--		
Total Fund Public Benchmark			8.9	8.4	13.4	12.7	8.8	7.3	8.2		
Growth Assets	773,751,827	54.6	10.5	10.1	14.1	--	--	--	15.5		Dec-22
Growth Assets Custom Benchmark			10.5	8.9	15.5	--	--	--	17.0		
Global Equity	765,941,902	54.0	10.6	10.1	14.2	15.8	13.0	9.8	9.3		Oct-90
Global Equity Policy Benchmark			11.6	9.8	15.9	16.8	13.4	9.7	9.7		
Private Equity	7,809,925	0.6									
MSCI ACWI + 3% 1Q Lag			-0.6	-0.8	10.3	--	--	--	17.6		
Credit	72,302,582	5.1	3.1	5.3	9.0	--	--	--	9.6		May-23
Credit Custom Benchmark			2.9	3.8	8.9	--	--	--	9.8		
High Yield & Bank Loans	72,302,582	5.1	3.1	5.3	9.0	--	--	--	9.6		May-23
High Yield & Bank Loans Custom Benchmark			2.9	3.8	8.9	--	--	--	9.8		
Inflation Hedges	288,368,278	20.3	2.8	9.1	11.9	--	--	--	2.1		Dec-22
Inflation Hedges Custom Benchmark			3.1	9.9	10.4	--	--	--	2.5		
Real Estate	105,931,443	7.5	0.5	1.6	6.2	-5.1	0.9	2.8	5.5		Apr-11
NCREIF ODCE (Net)			0.8	1.7	2.7	-6.2	2.5	4.4	6.7		
Natural Resources & Infrastructure	75,511,752	5.3	4.5	11.6	7.2	--	--	--	4.4		Apr-23
S&P Global LargeMidcap Resources & Commodities NR USD			5.2	13.9	6.2	--	--	--	3.2		
Gold	36,854,219	2.6	8.4	36.1	47.5	--	--	--	23.6		Apr-23
60% Gold (Spot)/ 40% FTSE Gold Mines			9.2	37.6	48.8	--	--	--	26.0		
Short-Term TIPS	70,070,863	4.9	1.0	4.0	6.5	--	--	--	5.2		Mar-23
Blmbg. U.S. TIPS 0-5 Year			1.0	4.0	6.5	--	--	--	5.6		

See benchmark history page for benchmark detail.

Performance Update | As of June 30, 2025

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Risk Mitigation	283,512,010	20.0	-0.1	2.7	3.2	--	--	--	2.7	Dec-22
<i>Risk Mitigation Custom Benchmark</i>			0.7	2.7	4.1	--	--	--	3.3	
Investment Grade Fixed Income	229,090,489	16.2	0.5	3.6	5.3	2.1	-0.9	1.7	5.1	Oct-90
<i>Blmbg. U.S. Aggregate Index</i>			1.2	4.0	6.1	2.5	-0.7	1.8	5.0	
Intermediate-Term Bonds	179,986,336	12.7	1.2	3.9	6.4	3.1	-0.3	2.0	5.1	Oct-90
<i>Blmbg. U.S. Aggregate Index</i>			1.2	4.0	6.1	2.5	-0.7	1.8	5.0	
Long-Term Bonds	49,104,153	3.5	-1.5	3.1	1.5	--	--	--	-0.9	Mar-23
<i>Blmbg. U.S. Treasury: Long</i>			-1.5	3.1	1.6	--	--	--	-0.8	
Hedge Funds	51,229,008	3.6	-2.5	-1.4	-4.3	--	--	--	-0.9	Apr-23
<i>Hedge Fund Custom Benchmark</i>			-1.2	-2.0	-2.9	--	--	--	1.5	
Cash	3,192,513	0.2								

Performance Update | As of June 30, 2025

Trailing Net Performance												
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date		
Total System	1,417,934,696	100.0	6.4	8.2	11.3	10.0	8.6	6.8	7.9			Oct-90
Total System Policy Benchmark			6.9	7.8	12.2	11.3	9.4	7.2	8.1			
Total Fund Actual Allocation Benchmark			7.2	8.4	12.3	--	--	--	--			--
Total Fund Public Benchmark			8.9	8.4	13.4	12.7	8.8	7.3	8.2			
Growth Assets	773,751,827	54.6	10.5	10.1	14.1	--	--	--	15.5			Dec-22
Growth Assets Custom Benchmark			10.5	8.9	15.5	--	--	--	17.0			
Global Equity	765,941,902	54.0	10.6	10.1	14.2	15.8	13.0	9.8	9.3			Oct-90
Global Equity Policy Benchmark			11.6	9.8	15.9	16.8	13.4	9.7	9.7			
SSgA Russell 1000 Growth Index	76,034,113	5.4	17.8	6.1	17.1	--	--	--	31.2			Mar-23
<i>Russell 1000 Growth Index</i>			17.8	6.1	17.2	--	--	--	31.2			
SSgA Russell 1000 Value Index	42,703,538	3.0	3.8	6.0	13.6	--	--	--	13.0			Mar-23
<i>Russell 1000 Value Index</i>			3.8	6.0	13.7	--	--	--	13.1			
DF Dent Small Cap Growth Fund	13,258,310	0.9	4.7	-3.1	7.0	--	--	--	5.6			Jun-24
<i>Russell 2000 Growth Index</i>			12.0	-0.5	9.7	--	--	--	8.8			
DFA U.S. Small Cap Value Portfolio	4,867,696	0.3	5.2	-3.5	--	--	--	--	1.9			Nov-24
<i>Russell 2000 Value Index</i>			5.0	-3.2	--	--	--	--	-2.7			
SSgA Russell 3000 Index	215,059,830	15.2	11.0	5.7	15.2	--	--	--	21.6			Mar-23
<i>Russell 3000 Index</i>			11.0	5.8	15.3	--	--	--	21.7			
SSgA MSCI EAFE	99,666,663	7.0	12.0	19.8	18.0	--	--	--	15.3			Mar-23
<i>MSCI EAFE</i>			11.8	19.4	17.7	--	--	--	15.0			
SSgA Emerging Markets Index	19,206,878	1.4	11.2	15.3	14.9	--	--	--	13.3			Mar-23
<i>MSCI Emerging Markets</i>			12.0	15.3	15.3	--	--	--	13.7			
ABS China Direct	10,125,623	0.7	4.6	15.7	25.4	--	--	--	3.5			Mar-23
<i>MSCI China</i>			2.0	17.3	33.8	--	--	--	9.7			
ABS EM ex China Direct	24,417,390	1.7	18.6	14.6	7.5	--	--	--	16.2			Mar-23
<i>MSCI EM ex China (Net)</i>			16.5	14.5	9.4	--	--	--	15.7			
Kopernik Global All-Cap	42,017,581	3.0	19.1	36.5	34.7	--	--	--	19.7			Apr-23
<i>MSCI AC World Index</i>			11.5	10.0	16.2	--	--	--	18.8			
First Eagle Global Equity	126,224,079	8.9	7.5	12.5	16.7	--	--	--	14.4			Apr-23
<i>MSCI AC World Index</i>			11.5	10.0	16.2	--	--	--	18.8			
J. Stern & Co. World Stars Global Equity Fund	92,360,201	6.5	11.2	7.5	8.0	--	--	--	15.5			Feb-24
<i>MSCI AC World IMI Index</i>			11.6	9.8	15.9	--	--	--	18.7			

Performance Update | As of June 30, 2025

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Equity	7,809,925	0.6								
MSCI ACWI + 3% 1Q Lag			-0.6	-0.8	10.3	--	--	--	17.6	
NexPhase Capital Fund V, L.P.	853,993	0.1								
Vitruvian Investment Partnership V	644,843	0.0								
Lexington Capital Partners X, L.P.	5,000,593	0.4								
Flagship Pioneering Fund VIII, L.P.	331,016	0.0								
Gauge Capital IV, L.P.	388,635	0.0								
KPS Special Situations Fund VI, L.P.	367,204	0.0								
Oakley Capital VI	67,095	0.0								
Mainsail Partners VII	136,546	0.0								
Falfurrias Capital Partners VI, L.P.	20,000	0.0								
Credit	72,302,582	5.1	3.1	5.3	9.0	--	--	--	9.6	May-23
Credit Custom Benchmark			2.9	3.8	8.9	--	--	--	9.8	
High Yield & Bank Loans	72,302,582	5.1	3.1	5.3	9.0	--	--	--	9.6	May-23
High Yield & Bank Loans Custom Benchmark			2.9	3.8	8.9	--	--	--	9.8	
Sculptor Credit Opportunities Overseas Fund	27,600,402	1.9	3.3	6.8	6.0	--	--	--	6.8	May-23
Blmbg. Global High Yield Index			4.9	6.8	13.0	--	--	--	12.1	
Brigade High Income Fund	44,702,180	3.2	2.7	4.0	11.4	--	--	--	11.7	May-23
60% Bloomberg U.S. Corporate High Yield & 40% S&P UBS Lev Loans			3.0	3.9	9.2	--	--	--	9.8	
Inflation Hedges	288,368,278	20.3	2.8	9.1	11.9	--	--	--	2.1	Dec-22
Inflation Hedges Custom Benchmark			3.1	9.9	10.4	--	--	--	2.5	
Real Estate	105,931,443	7.5	0.5	1.6	6.2	-5.1	0.9	2.8	5.5	Apr-11
NCREIF ODCE			0.8	1.7	2.7	-6.2	2.5	4.4	6.7	
JP Morgan Asset Management Strategic Property Fund	45,424,417	3.2	1.0	1.9	4.0	-7.7	1.2	3.5	6.3	Apr-11
NCREIF ODCE			0.8	1.7	2.7	-6.2	2.5	4.4	6.7	
UBS Trumbull Property Fund	20,145,242	1.4	1.3	2.6	3.2	-7.3	-0.1	1.7	3.7	Dec-11
NCREIF ODCE			0.8	1.7	2.7	-6.2	2.5	4.4	6.5	
Morgan Stanley Prime Property Fund	40,361,784	2.8	0.3	1.4	--	--	--	--	1.4	Jan-25
NCREIF ODCE			0.8	1.7	--	--	--	--	1.7	

Private Equity asset market values are based on March 31, 2025 fair market values and adjusted for subsequent cash flows.

Performance Update | As of June 30, 2025

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Natural Resources & Infrastructure	75,511,752	5.3	4.5	11.6	7.2	--	--	--	4.4	Apr-23
S&P Global LargeMid Commodity & Resources			5.2	13.9	6.2	--	--	--	3.2	
SSgA S&P Global LargeMidCap Natural Resources Index	57,597,097	4.1	5.2	14.0	6.3	--	--	--	3.3	Apr-23
S&P Global LargeMid Commodity & Resources			5.2	13.9	6.2	--	--	--	3.2	
JP Morgan Infrastructure Investments Fund	17,914,655	1.3	2.2	4.6	10.1	--	--	--	10.7	Oct-23
Dow Jones Brookfield Global Infrastructure			4.4	12.2	24.3	--	--	--	20.4	
Gold	36,854,219	2.6	8.4	36.1	47.5	--	--	--	23.6	Apr-23
60% Gold (Spot)/ 40% FTSE Gold Mines			9.2	37.6	48.8	--	--	--	26.0	
First Eagle Institutional Gold Fund, LP	36,854,219	2.6	8.4	36.1	47.5	--	--	--	23.6	Apr-23
60% Gold (Spot)/ 40% FTSE Gold Mines			9.2	37.6	48.8	--	--	--	26.0	
Short-Term TIPS	70,070,863	4.9	1.0	4.0	6.5	--	--	--	5.2	Mar-23
Blmbg. U.S. TIPS 0-5 Year			1.0	4.0	6.5	--	--	--	5.6	
Vanguard Short-Term TIPS Index	70,070,863	4.9	1.0	4.0	6.5	--	--	--	4.9	Apr-23
Blmbg. U.S. TIPS 0-5 Year			1.0	4.0	6.5	--	--	--	4.9	
Risk Mitigation	283,512,010	20.0	-0.1	2.7	3.2	--	--	--	2.7	Dec-22
Risk Mitigation Custom Benchmark			0.7	2.7	4.1	--	--	--	3.3	
Investment Grade Fixed Income	229,090,489	16.2	0.5	3.6	5.3	2.1	-0.9	1.7	5.1	Oct-90
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	2.5	-0.7	1.8	5.0	
Intermediate-Term Bonds	179,986,336	12.7	1.2	3.9	6.4	3.1	-0.3	2.0	5.1	Oct-90
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	2.5	-0.7	1.8	5.0	
SSgA US Aggregate Bond	47,126,265	3.3	1.2	4.0	6.1	2.6	-0.7	1.8	2.8	Jan-09
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	2.5	-0.7	1.8	2.8	
Wellington Core Bond	97,480,500	6.9	1.0	3.8	6.1	--	--	--	4.1	May-23
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	--	--	--	3.3	
Brandywine U.S. Fixed Income	35,379,571	2.5	1.5	3.9	7.5	--	--	--	3.4	Jun-23
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	--	--	--	4.0	
Long-Term Bonds	49,104,153	3.5	-1.5	3.1	1.5	--	--	--	-0.9	Mar-23
Blmbg. U.S. Treasury: Long			-1.5	3.1	1.6	--	--	--	-0.8	
SSgA Long US Treasury Index	49,104,153	3.5	-1.5	3.1	1.5	--	--	--	-0.9	Mar-23
Blmbg. U.S. Treasury: Long			-1.5	3.1	1.6	--	--	--	-0.8	
Hedge Funds	51,229,008	3.6	-2.5	-1.4	-4.3	--	--	--	-0.9	Apr-23
Hedge Fund Custom Benchmark			-1.2	-2.0	-2.9	--	--	--	1.5	
36 South Kohinoor Series (Cayman) Fund	13,498,958	1.0	-1.2	1.0	0.1	--	--	--	1.0	Apr-23
HFR/EurekaHedge Long Vol Blended Benchmark			3.2	5.5	8.4	--	--	--	0.7	

JP Morgan Infrastructure Investments Fund is based on June 30, 2025 fair market value and adjusted for subsequent cash flows.

Performance Update | As of June 30, 2025

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
BH-DG Systematic Trading Master Fund	14,578,440	1.0	-2.6	-6.2	-16.5	--	--	--	-5.9	Apr-23
SG Trend Index				-5.6	-10.0	-15.0	--	--	-2.0	
Lombard Odier Bear Convexity	5,938,189	0.4	-1.9	2.5	3.1	--	--	--	0.0	Apr-23
HFR/EurekaHedge Long Vol Blended Benchmark				3.2	5.5	8.4	--	--	0.7	
Alpstone Global Macro Fund	17,213,421	1.2	-3.5	-0.3	1.8	--	--	--	1.4	May-23
HFR Macro (Total) Index				-1.3	-1.2	-1.2	--	--	2.5	
Cash	3,192,513	0.2								
Cash	3,192,513	0.2								

Performance Update | As of June 30, 2025

	Fiscal Year Performance					
	Fiscal Year 2025	Fiscal Year 2024	Fiscal Year 2023	Fiscal Year 2022	Fiscal Year 2021	Fiscal Year 2020
Total System	11.3	10.4	8.4	-10.0	25.9	0.6
<i>Total System Policy Benchmark</i>	12.2	12.1	9.5	-10.0	26.5	1.3
<i>Total Fund Actual Allocation Benchmark</i>	12.3	11.6	--	--	--	--
<i>Total Fund Public Benchmark</i>	13.4	14.2	10.5	-14.1	24.1	4.6
Growth Assets	14.1	17.4	--	--	--	--
<i>Growth Assets Custom Benchmark</i>	15.5	19.3	--	--	--	--
Global Equity	14.2	17.4	15.8	-16.2	41.6	1.6
<i>Global Equity Policy Benchmark</i>	15.9	18.4	16.1	-16.5	40.9	1.2
SSgA Russell 1000 Growth Index	17.1	33.5	--	--	--	--
<i>Russell 1000 Growth Index</i>	17.2	33.5	--	--	--	--
SSgA Russell 1000 Value Index	13.6	13.0	--	--	--	--
<i>Russell 1000 Value Index</i>	13.7	13.1	--	--	--	--
SSgA Russell 3000 Index	15.2	23.1	--	--	--	--
<i>Russell 3000 Index</i>	15.3	23.1	--	--	--	--
DF Dent Small Cap Growth Fund	7.0	--	--	--	--	--
<i>Russell 2000 Growth Index</i>	9.7	--	--	--	--	--
DFA U.S. Small Cap Value Portfolio	--	--	--	--	--	--
<i>Russell 2000 Value Index</i>	--	--	--	--	--	--
SSgA MSCI EAFE	18.0	11.7	--	--	--	--
<i>MSCI EAFE</i>	17.7	11.5	--	--	--	--
SSgA Emerging Markets Index	14.9	11.6	--	--	--	--
<i>MSCI Emerging Markets</i>	15.3	12.5	--	--	--	--
ABS China Direct	25.4	-6.3	--	--	--	--
<i>MSCI China</i>	33.8	-1.6	--	--	--	--
ABS EM ex China Direct	7.5	17.8	--	--	--	--
<i>MSCI EM ex China (Net)</i>	9.4	18.5	--	--	--	--
Kopernik Global All-Cap	34.7	11.8	--	--	--	--
<i>MSCI AC World Index</i>	16.2	19.4	--	--	--	--
First Eagle Global Equity	16.7	10.5	--	--	--	--
<i>MSCI AC World Index</i>	16.2	19.4	--	--	--	--
J. Stern & Co. World Stars Global Equity Fund	8.0	--	--	--	--	--
<i>MSCI AC World IMI Index</i>	15.9	--	--	--	--	--

Performance Update | As of June 30, 2025

Fiscal Year 2025 Fiscal Year 2024 Fiscal Year 2023 Fiscal Year 2022 Fiscal Year 2021 Fiscal Year 2020

Private Equity		9.0	9.8	--	--	--	--	--
NexPhase Capital Fund V, L.P.								
Vitruvian Investment Partnership V								
Lexington Capital Partners X, L.P.								
Flagship Pioneering Fund VIII, L.P.								
Gauge Capital IV, L.P.								
KPS Special Situations Fund VI, L.P.								
Oakley Capital VI								
Mainsail Partners VII								
Falfurrias Capital Partners VI, L.P.								
Credit		9.0	9.8	--	--	--	--	--
<i>Credit Custom Benchmark</i>		8.9	10.8	--	--	--	--	--
High Yield & Bank Loans		9.0	9.8	--	--	--	--	--
<i>High Yield & Bank Loans Custom Benchmark</i>		8.9	10.8	--	--	--	--	--
Sculptor Credit Opportunities Overseas Fund		6.0	6.4	--	--	--	--	--
<i>Blmbg. Global High Yield Index</i>		13.0	11.8	--	--	--	--	--
Brigade High Income Fund		11.4	12.3	--	--	--	--	--
<i>60% Bloomberg U.S. Corporate High Yield & 40% S&P UBS Lev Loans</i>		9.2	10.7	--	--	--	--	--
Inflation Hedges		11.9	1.9	--	--	--	--	--
<i>Inflation Hedges Custom Benchmark</i>		10.4	1.2	--	--	--	--	--
Real Estate		6.2	-8.4	-12.1	18.1	3.7	-0.3	
<i>NCREIF ODCE</i>		2.7	-10.0	-10.7	28.3	7.1	1.3	
JP Morgan Asset Management Strategic Property Fund		4.0	-14.9	-11.3	27.5	6.1	1.2	
<i>NCREIF ODCE</i>		2.7	-10.0	-10.7	28.3	7.1	1.3	
UBS Trumbull Property Fund		3.2	-8.6	-15.6	23.5	1.1	-1.9	
<i>NCREIF ODCE</i>		2.7	-10.0	-10.7	28.3	7.1	1.3	
Morgan Stanley Prime Property Fund		--	--	--	--	--	--	
<i>NCREIF ODCE</i>		--	--	--	--	--	--	
Natural Resources & Infrastructure		7.2	6.8	--	--	--	--	--
<i>S&P Global LargeMid Commodity & Resources</i>		6.2	5.2	--	--	--	--	--
SSgA S&P Global LargeMidCap Natural Resources Index		6.3	5.2	--	--	--	--	--
<i>S&P Global LargeMid Commodity & Resources</i>		6.2	5.2	--	--	--	--	--
JP Morgan Infrastructure Investments Fund		10.1	--	--	--	--	--	--
<i>Dow Jones Brookfield Global Infrastructure</i>		24.3	--	--	--	--	--	--

Performance Update | As of June 30, 2025

	Fiscal Year 2025	Fiscal Year 2024	Fiscal Year 2023	Fiscal Year 2022	Fiscal Year 2021	Fiscal Year 2020
Gold	47.5	15.3	--	--	--	--
60% Gold (Spot)/ 40% FTSE Gold Mines	48.8	17.8	--	--	--	--
First Eagle Institutional Gold Fund, LP	47.5	15.3	--	--	--	--
60% Gold (Spot)/ 40% FTSE Gold Mines	48.8	17.8	--	--	--	--
Short-Term TIPS	6.5	5.4	--	--	--	--
Blmbg. U.S. TIPS 0-5 Year	6.5	5.4	--	--	--	--
Vanguard Short-Term TIPS Index	6.5	5.4	--	--	--	--
Blmbg. U.S. TIPS 0-5 Year	6.5	5.4	--	--	--	--
Risk Mitigation	3.2	0.5	--	--	--	--
Risk Mitigation Custom Benchmark	4.1	3.2	--	--	--	--
Investment Grade Fixed Income	5.3	0.9	0.1	-10.5	0.2	8.6
Blmbg. U.S. Aggregate Index	6.1	2.6	-0.9	-10.3	-0.3	8.7
Intermediate-Term Bonds	6.4	3.1	0.0	-10.5	0.2	8.6
Blmbg. U.S. Aggregate Index	6.1	2.6	-0.9	-10.3	-0.3	8.7
SSgA US Aggregate Bond	6.1	2.6	-0.9	-10.3	-0.3	8.8
Blmbg. U.S. Aggregate Index	6.1	2.6	-0.9	-10.3	-0.3	8.7
Wellington Core Bond	6.1	4.0	--	--	--	--
Blmbg. U.S. Aggregate Index	6.1	2.6	--	--	--	--
Brandywine U.S. Fixed Income	7.5	0.5	--	--	--	--
Blmbg. U.S. Aggregate Index	6.1	2.6	--	--	--	--
Long-Term Bonds	1.5	-5.7	--	--	--	--
Blmbg. U.S. Treasury: Long	1.6	-5.6	--	--	--	--
SSgA Long US Treasury Index	1.5	-5.7	--	--	--	--
Blmbg. U.S. Treasury: Long	1.6	-5.6	--	--	--	--
Hedge Funds	4.3	-1.2	--	--	--	--
Hedge Fund Custom Benchmark	-2.9	4.8	--	--	--	--
36 South Kohinoor Series (Cayman) Fund	0.1	0.6	--	--	--	--
HFR/EurekaHedge Long Vol Blended Benchmark	8.4	-3.7	--	--	--	--
BH-DG Systematic Trading Master Fund	-16.5	-4.7	--	--	--	--
SG Trend Index	-15.0	4.1	--	--	--	--
Lombard Odier Bear Convexity	3.1	-2.9	--	--	--	--
HFR/EurekaHedge Long Vol Blended Benchmark	8.4	-3.7	--	--	--	--
Alpstone Global Macro Fund	1.8	1.1	--	--	--	--
HFR Macro (Total) Index	-1.2	5.9	--	--	--	--
Cash						

Performance Update | As of June 30, 2025

		Risk Return Statistics	
		3 Yrs (%) Total System	5 Yrs (%) Total System
RETURN SUMMARY STATISTICS			
Maximum Return		5.8	8.3
Minimum Return		-7.3	-7.3
Return		10.0	8.6
Excess Return		5.6	6.1
Excess Performance		-1.3	-0.8
RISK SUMMARY STATISTICS			
Beta		1.0	1.0
Up Capture		98.2	98.3
Down Capture		107.3	104.0
RISK/RETURN SUMMARY STATISTICS			
Standard Deviation		10.2	10.4
Sortino Ratio		0.8	0.9
Alpha		-1.4	-0.8
Sharpe Ratio		0.5	0.6
Excess Risk		10.3	10.4
Tracking Error		1.1	1.0
Information Ratio		-1.0	-0.8
CORRELATION STATISTICS			
R-Squared		1.0	1.0
Actual Correlation		1.0	1.0

Performance Update | As of June 30, 2025

Statistics Summary 3 Years Ending June 30, 2025						
	Return	Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total System	10.0	10.2	-1.0	1.0	0.5	1.1
Total System Policy Benchmark	11.3	10.0	-	1.0	0.7	0.0
Growth Assets	-	-	-	-	-	-
Growth Assets Custom Benchmark	-	-	-	-	-	-
Global Equity	15.8	14.3	-0.8	1.0	0.8	1.2
Global Equity Policy Benchmark	16.8	14.7	-	1.0	0.8	0.0
SSgA Russell 1000 Growth Index	-	-	-	-	-	-
Russell 1000 Growth Index	25.8	18.4	-	1.0	1.1	0.0
SSgA Russell 1000 Value Index	-	-	-	-	-	-
Russell 1000 Value Index	12.8	15.7	-	1.0	0.6	0.0
DF Dent Small Cap Growth Fund	-	-	-	-	-	-
Russell 2000 Growth Index	12.4	22.3	-	1.0	0.4	0.0
DFA U.S. Small Cap Value Portfolio	-	-	-	-	-	-
Russell 2000 Value Index	7.5	22.7	-	1.0	0.2	0.0
SSgA Russell 3000 Index	-	-	-	-	-	-
Russell 3000 Index	19.1	16.0	-	1.0	0.9	0.0
SSgA MSCI EAFE	-	-	-	-	-	-
MSCI EAFE	16.0	15.2	-	1.0	0.8	0.0
SSgA Emerging Markets Index	-	-	-	-	-	-
MSCI Emerging Markets	9.7	16.9	-	1.0	0.4	0.0
ABS China Direct	-	-	-	-	-	-
MSCI China	3.1	32.4	-	1.0	0.1	0.0
ABS EM ex China Direct	-	-	-	-	-	-
MSCI EM ex China (Net)	13.2	15.2	-	1.0	0.6	0.0
Kopernik Global All-Cap	-	-	-	-	-	-
MSCI AC World Index	17.3	14.6	-	1.0	0.9	0.0
First Eagle Global Equity	-	-	-	-	-	-
MSCI AC World Index	17.3	14.6	-	1.0	0.9	0.0

Performance Update | As of June 30, 2025

	Return	Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Credit	-	-	-	-	-	-
Credit Custom Benchmark	-	-	-	-	-	-
High Yield & Bank Loans	-	-	-	-	-	-
High Yield & Bank Loans Custom Benchmark	9.8	4.3	-	1.0	1.1	0.0
Sculptor Credit Opportunities Overseas Fund	-	-	-	-	-	-
Blmbg. Global High Yield Index	11.8	7.2	-	1.0	1.0	0.0
Brigade High Income Fund	-	-	-	-	-	-
60% Bloomberg U.S. Corporate High Yield & 40% S&P UBS Lev Loans	9.8	4.7	-	1.0	1.1	0.0
Inflation Hedges	-	-	-	-	-	-
Inflation Hedges Custom Benchmark	-	-	-	-	-	-
Real Estate	-5.1	5.2	0.2	0.5	-1.8	5.4
NCREIF ODCE	-6.2	5.0	-	1.0	-2.1	0.0
JP Morgan Asset Management Strategic Property Fund	-7.7	4.4	-0.4	0.6	-2.8	4.0
NCREIF ODCE	-6.2	5.0	-	1.0	-2.1	0.0
UBS Trumbull Property Fund	-7.3	6.1	-0.5	1.1	-1.9	2.4
NCREIF ODCE	-6.2	5.0	-	1.0	-2.1	0.0
Morgan Stanley Prime Property Fund	-	-	-	-	-	-
NCREIF ODCE	-6.2	5.0	-	1.0	-2.1	0.0
Natural Resources & Infrastructure	-	-	-	-	-	-
S&P Global LargeMid Commodity & Resources	5.9	16.8	-	1.0	0.2	0.0
SSgA S&P Global LargeMidCap Natural Resources Index	-	-	-	-	-	-
S&P Global LargeMid Commodity & Resources	5.9	16.8	-	1.0	0.2	0.0
JP Morgan Infrastructure Investments Fund	-	-	-	-	-	-
Dow Jones Brookfield Global Infrastructure	7.9	16.1	-	1.0	0.3	0.0
Gold	-	-	-	-	-	-
60% Gold (Spot)/ 40% FTSE Gold Mines	23.2	20.3	-	1.0	0.9	0.0
First Eagle Institutional Gold Fund, LP	-	-	-	-	-	-
60% Gold (Spot)/ 40% FTSE Gold Mines	23.2	20.3	-	1.0	0.9	0.0
Short-Term TIPS	-	-	-	-	-	-
Blmbg. U.S. TIPS 0-5 Year	4.0	3.0	-	1.0	-0.2	0.0
Vanguard Short-Term TIPS Index	-	-	-	-	-	-
Blmbg. U.S. TIPS 0-5 Year	4.0	3.0	-	1.0	-0.2	0.0
Risk Mitigation	-	-	-	-	-	-
Risk Mitigation Custom Benchmark	-	-	-	-	-	-

Performance Update | As of June 30, 2025

	Return	Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Investment Grade Fixed Income	2.1	8.7	-0.2	1.2	-0.2	1.9
Blmbg. U.S. Aggregate Index	2.5	7.2	-	1.0	-0.2	0.0
Intermediate-Term Bonds	3.1	7.5	1.2	1.0	-0.1	0.5
Blmbg. U.S. Aggregate Index	2.5	7.2	-	1.0	-0.2	0.0
SSgA US Aggregate Bond	2.6	7.2	0.0	1.0	-0.2	0.2
Blmbg. U.S. Aggregate Index	2.5	7.2	-	1.0	-0.2	0.0
Wellington Core Bond	-	-	-	-	-	-
Blmbg. U.S. Aggregate Index	2.5	7.2	-	1.0	-0.2	0.0
Brandywine U.S. Fixed Income	-	-	-	-	-	-
Blmbg. U.S. Aggregate Index	2.5	7.2	-	1.0	-0.2	0.0
Long-Term Bonds	-	-	-	-	-	-
Blmbg. U.S. Treasury: Long	-3.7	15.2	-	1.0	-0.5	0.0
SSgA Long US Treasury Index	-	-	-	-	-	-
Blmbg. U.S. Treasury: Long	-3.7	15.2	-	1.0	-0.5	0.0
Hedge Funds	-	-	-	-	-	-
Hedge Fund Custom Benchmark	-	-	-	-	-	-
36 South Kohinoor Series (Cayman) Fund	-	-	-	-	-	-
HFR/EurekaHedge Long Vol Blended Benchmark	-0.6	5.6	-	1.0	-0.9	0.0
BH-DG Systematic Trading Master Fund	-	-	-	-	-	-
SG Trend Index	-4.4	11.6	-	1.0	-0.7	0.0
Lombard Odier Bear Convexity	-	-	-	-	-	-
HFR/EurekaHedge Long Vol Blended Benchmark	-0.6	5.6	-	1.0	-0.9	0.0
Alpstone Global Macro Fund	-	-	-	-	-	-
HFRI Macro (Total) Index	1.4	4.6	-	1.0	-0.6	0.0

Private Market Investments Overview

Asset Sleeve	Vintage Year	Commitment	Unfunded	Total Contributions	Total Distributions	Unrealized Value	Last Reported Date
Falfurrias Capital Partners Fund VI	2024	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -	\$ -	2025-03-31
Flagship Pioneering Fund VIII, L.P.	2023	\$ 3,000,000	\$ 2,655,000	\$ 344,596	\$ -	\$ 301,016	2025-03-31
Gauge Capital Fund IV	2024	\$ 2,000,000	\$ 1,579,946	\$ 420,054	\$ -	\$ 388,635	2025-03-31
KPS Special Situations Fund VI	2023	\$ 3,000,000	\$ 2,623,715	\$ 376,285	\$ 331	\$ 367,204	2025-03-31
Lexington Capital Partners X, L.P.	2022	\$ 8,500,000	\$ 4,187,778	\$ 4,553,520	\$ 359,051	\$ 5,107,573	2025-03-31
Linden Capital Partners VI, L.P.	2024	\$ 3,000,000	\$ 3,000,000	\$ -	\$ -	\$ -	2025-03-31
Mainsail Partners VII, L.P.	2025	\$ 2,800,000	\$ 2,800,000	\$ -	\$ -	\$ -	2025-03-31
Mountaingate Capital Fund III	2024	\$ 2,800,000	\$ 2,800,000	\$ -	\$ -	\$ -	2025-03-31
NexPhase Capital Fund V, L.P.	2022	\$ 3,000,000	\$ 2,632,964	\$ 367,036	\$ -	\$ 253,942	2025-03-31
Oakley Capital Fund VI	2025	\$ 3,137,720	\$ 3,043,103	\$ 94,617	\$ -	\$ 67,095	2025-03-31
SSC Partners III-A, L.P.	2025	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -	2025-03-31
Sterling Group Partners VI, L.P.	2024	\$ 2,200,000	\$ 2,200,000	\$ -	\$ -	\$ -	2025-03-31
Vitruvian Investment Partnership V, L.P.	2023	\$ 3,024,060	\$ 2,559,929	\$ 467,817	\$ 3,685	\$ 401,203	2025-03-31
Total Private Equity		\$ 39,961,780	\$ 33,582,436	\$ 6,623,925	\$ 363,067	\$ 6,886,669	
Grand Total		\$ 39,961,780	\$ 33,582,436	\$ 6,623,925	\$ 363,067	\$ 6,886,669	

Performance Update | 1 Month Ending June 30, 2025

	Cash Flow Summary			
	Beginning Market Value (\$)	Net Cash Flow	Net Investment Change	Ending Market Value (\$)
SSgA Russell 1000 Growth Index	20,989,542	51,350,000	3,694,571	76,034,113
SSgA Russell 1000 Value Index	41,293,502	-	1,410,036	42,703,538
DF Dent Small Cap Growth Fund	12,888,215	-	370,094	13,258,310
DFA U.S. Small Cap Value Portfolio	4,647,800	-	219,897	4,867,696
SSgA Russell 3000 Index	204,685,672	-	10,374,158	215,059,830
SSgA MSCI EAFE	69,898,190	27,650,000	2,118,473	99,666,663
SSgA Emerging Markets Index	18,077,274	-	1,129,604	19,206,878
ABS China Direct	9,745,547	-	380,076	10,125,623
ABS EM ex China Direct	22,710,381	-	1,707,009	24,417,390
Kopernik Global All-Cap	38,886,992	-	3,130,589	42,017,581
First Eagle Global Equity	121,796,017	-	4,428,062	126,224,079
Artisan Global Opportunities	78,579,513	-79,362,033	782,519	-
J. Stern & Co. World Stars Global Equity Fund	89,018,852	-	3,341,349	92,360,201
NexPhase Capital Fund V, L.P.	601,248	252,716	29	853,993
Vitruvian Investment Partnership V	381,249	243,644	19,951	644,843
Lexington Capital Partners X, L.P.	5,109,141	-106,980	-1,568	5,000,593
Flagship Pioneering Fund VIII, L.P.	333,038	-	-2,022	331,016
Gauge Capital IV, L.P.	356,929	-	31,706	388,635
KPS Special Situations Fund VI, L.P.	367,356	-	-152	367,204
Oakley Capital VI	94,613	-	-27,518	67,095
Mainsail Partners VII	136,546	-	-	136,546
Falfurrias Capital Partners VI, L.P.	-	20,000	-	20,000
Sculptor Credit Opportunities Overseas Fund	27,321,185	-	279,217	27,600,402
Brigade High Income Fund	43,913,094	-	789,086	44,702,180
JP Morgan Asset Management Strategic Property Fund	45,243,730	-	180,687	45,424,417
UBS Trumbull Property Fund	19,879,731	-	265,511	20,145,242
Morgan Stanley Prime Property Fund	40,242,208	-	119,576	40,361,784
SSgA S&P Global LargeMidCap Natural Resources Index	55,105,514	-	2,491,583	57,597,097
JP Morgan Infrastructure Investments Fund	17,526,990	-	387,665	17,914,655

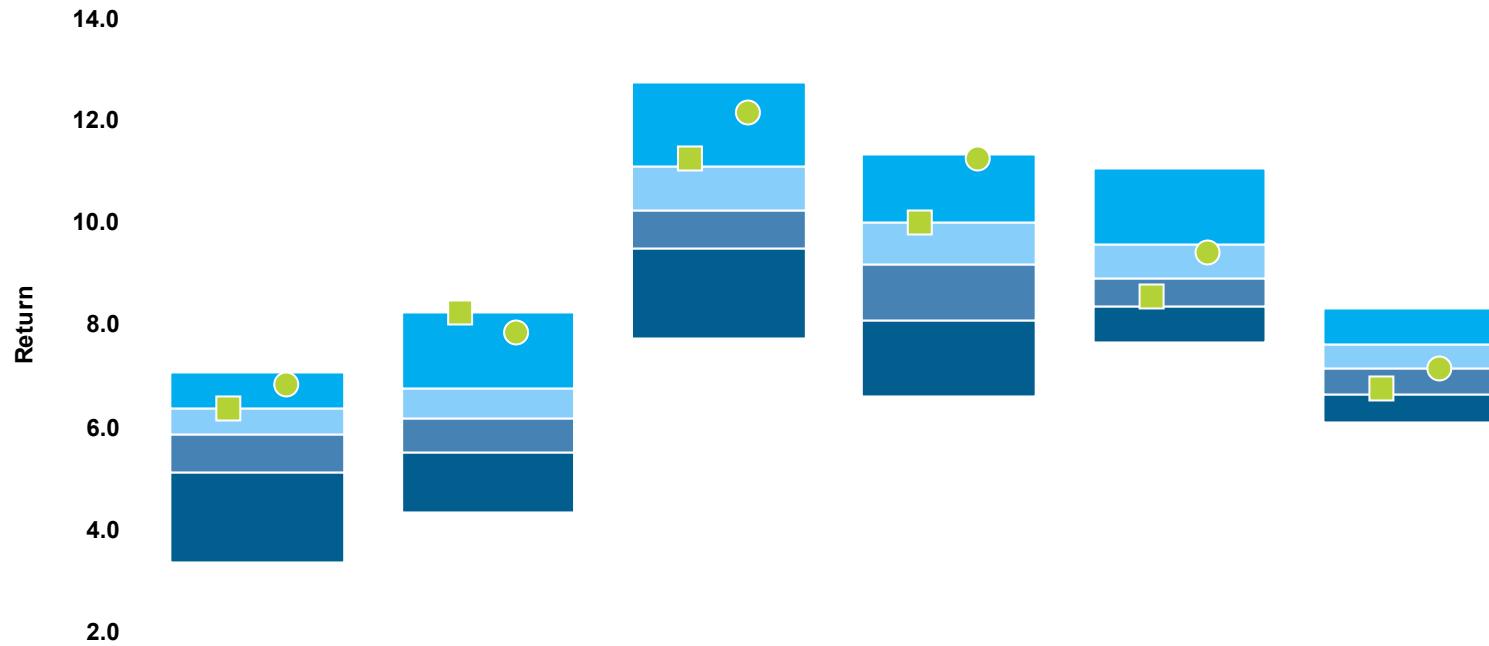
Performance Update | 1 Month Ending June 30, 2025

	Beginning Market Value (\$)	Net Cash Flow	Net Investment Change	Ending Market Value (\$)
First Eagle Institutional Gold Fund, LP	36,409,277	-	444,942	36,854,219
Vanguard Short-Term TIPS Index	69,699,042	-	371,821	70,070,863
SSgA US Aggregate Bond	46,408,834	-	717,431	47,126,265
Wellington Core Bond	104,936,435	-9,000,000	1,544,064	97,480,500
Brandywine U.S. Fixed Income	34,824,505	-	555,067	35,379,571
SSgA Long US Treasury Index	47,907,831	-	1,196,322	49,104,153
36 South Kohinoor Series (Cayman) Fund	13,619,738	-	-120,780	13,498,958
BH-DG Systematic Trading Master Fund	13,795,842	-	782,598	14,578,440
Lombard Odier Bear Convexity	5,996,147	-	-57,958	5,938,189
Alpstone Global Macro Fund	17,072,652	-	140,769	17,213,421
Cash	2,830,902	350,662	10,949	3,192,513
Total	1,383,331,273	-8,601,991	43,205,415	1,417,934,696



Total System	10.0 (26)	Total System	10.2 (84)	Total System	0.5 (57)	Total System	1.0 (86)	Total System	-1.0 (79)
Total System Policy Benchmark	11.3 (8)	Total System Policy Benchmark	10.0 (80)	Total System Policy Benchmark	0.7 (17)	Total System Policy Benchmark	1.0 (84)	Total System Policy Benchmark	-
5th Percentile	11.4	5th Percentile	5.1	5th Percentile	0.8	5th Percentile	0.5	5th Percentile	0.1
1st Quartile	10.0	1st Quartile	6.7	1st Quartile	0.6	1st Quartile	0.7	1st Quartile	-0.4
Median	9.2	Median	8.1	Median	0.6	Median	0.8	Median	-0.8
3rd Quartile	8.1	3rd Quartile	9.5	3rd Quartile	0.5	3rd Quartile	0.9	3rd Quartile	-1.0
95th Percentile	6.6	95th Percentile	11.4	95th Percentile	0.3	95th Percentile	1.1	95th Percentile	-1.2
Population	106	Population	106	Population	106	Population	106	Population	106

InvMetrics All Public DB Plans > \$1B



	QTD (%)	YTD (%)	FYTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
■ Total System	6.4 (26)	8.2 (6)	11.3 (16)	10.0 (26)	8.6 (63)	6.8 (70)
● Total System Policy Benchmark	6.9 (11)	7.8 (7)	12.2 (9)	11.3 (8)	9.4 (31)	7.2 (51)
5th Percentile	7.1	8.2	12.7	11.4	11.0	8.3
1st Quartile	6.4	6.8	11.1	10.0	9.6	7.6
Median	5.9	6.2	10.3	9.2	8.9	7.2
3rd Quartile	5.1	5.5	9.5	8.1	8.4	6.7
95th Percentile	3.4	4.4	7.7	6.6	7.7	6.1
Population	110	110	110	106	101	96

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Performance Update | As of June 30, 2025
**Annual Investment Expense Analysis
As of June 30, 2025**

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Growth Assets		\$773,751,827	\$1,928,712	0.25
Global Equity		\$765,941,902	\$1,875,924	0.24
SSgA Russell 1000 Growth Index	0.02 % of Assets	\$76,034,113	\$15,207	0.02
SSgA Russell 1000 Value Index	0.02 % of Assets	\$42,703,538	\$8,541	0.02
DF Dent Small Cap Growth Fund	0.95 % of Assets	\$13,258,310	\$125,954	0.95
DFA U.S. Small Cap Value Portfolio	0.31 % of Assets	\$4,867,696	\$15,090	0.31
SSgA Russell 3000 Index	0.02 % of Assets	\$215,059,830	\$43,012	0.02
SSgA MSCI EAFE	0.04 % of Assets	\$99,666,663	\$39,867	0.04
SSgA Emerging Markets Index	0.08 % of Assets	\$19,206,878	\$15,366	0.08
ABS China Direct	0.65 % of Assets	\$10,125,623	\$65,817	0.65
ABS EM ex China Direct	0.50 % of Assets	\$24,417,390	\$122,087	0.50
Kopernik Global All-Cap	0.75 % of Assets	\$42,017,581	\$315,132	0.75
First Eagle Global Equity	0.55 % of Assets	\$126,224,079	\$694,232	0.55
J. Stern & Co. World Stars Global Equity Fund	0.45 % of Assets	\$92,360,201	\$415,621	0.45
Private Equity		\$7,809,925	\$52,788	0.68
NexPhase Capital Fund V, L.P.	2.00 % of Assets	\$853,993	\$17,080	2.00
Vitruvian Investment Partnership V	1.90 % of Assets	\$644,843	\$12,252	1.90
Lexington Capital Partners X, L.P.	1.00% on committed capital.	\$5,000,593	-	-
Flagship Pioneering Fund VIII, L.P.	2.00 % of Assets	\$331,016	\$6,620	2.00
Gauge Capital IV, L.P.	2.00 % of Assets	\$388,635	\$7,773	2.00
KPS Special Situations Fund VI, L.P.	1.25 % of Assets	\$367,204	\$4,590	1.25
Oakley Capital VI	2.00 % of Assets	\$67,095	\$1,342	2.00
Mainsail Partners VII	2.00 % of Assets	\$136,546	\$2,731	2.00
Falfurrias Capital Partners VI, L.P.	2.00 % of Assets	\$20,000	\$400	2.00

Performance Update | As of June 30, 2025

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Credit		\$72,302,582	\$508,455	0.70
High Yield & Bank Loans		\$72,302,582	\$508,455	0.70
Sculptor Credit Opportunities Overseas Fund	Performance Based 1.00 % and 20.00 %	\$27,600,402	\$276,004	1.00
Brigade High Income Fund	0.52 % of Assets	\$44,702,180	\$232,451	0.52
Inflation Hedges		\$288,368,278	\$1,346,251	0.47
Real Estate		\$105,931,443	\$931,599	0.88
JP Morgan Asset Management Strategic Property Fund	0.91 % of Assets	\$45,424,417	\$413,362	0.91
UBS Trumbull Property Fund	0.96 % of First \$10 M 0.83 % of Next \$15 M 0.81 % of Next \$25 M 0.79 % of Next \$50 M 0.67 % of Next \$150 M 0.60 % of Next \$150 M 0.56 % of Next \$200 M 0.52 % Thereafter	\$20,145,242	\$179,198	0.89
Morgan Stanley Prime Property Fund	0.84 % of Assets	\$40,361,784	\$339,039	0.84
Natural Resources & Infrastructure		\$75,511,752	\$227,786	0.30
SSgA S&P Global LargeMidCap Natural Resources Index	0.10 % of Assets	\$57,597,097	\$57,597	0.10
JP Morgan Infrastructure Investments Fund	0.95 % of Assets	\$17,914,655	\$170,189	0.95
Gold		\$36,854,219	\$165,844	0.45
First Eagle Institutional Gold Fund, LP	0.45 % of Assets	\$36,854,219	\$165,844	0.45
Short-Term TIPS		\$70,070,863	\$21,021	0.03
Vanguard Short-Term TIPS Index	0.03 % of Assets	\$70,070,863	\$21,021	0.03

Performance Update | As of June 30, 2025

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Risk Mitigation		\$283,512,010	\$791,221	0.28
Investment Grade Fixed Income		\$229,090,489	\$243,734	0.11
Intermediate-Term Bonds		\$179,986,336	\$229,003	0.13
SSgA US Aggregate Bond	0.02 % of Assets	\$47,126,265	\$9,425	0.02
Wellington Core Bond	0.12 % of Assets	\$97,480,500	\$116,977	0.12
Brandywine U.S. Fixed Income	0.29 % of Assets	\$35,379,571	\$102,601	0.29
Long-Term Bonds		\$49,104,153	\$14,731	0.03
SSgA Long US Treasury Index	0.03 % of Assets	\$49,104,153	\$14,731	0.03
Hedge Funds		\$51,229,008	\$547,487	1.07
36 South Kohinoor Series (Cayman) Fund	Performance Based 1.00 % and 20.00 %	\$13,498,958	\$134,990	1.00
BH-DG Systematic Trading Master Fund	0.93 % of Assets	\$14,578,440	\$135,579	0.93
Lombard Odier Bear Convexity	Performance Based 0.75 % and 27.50 %	\$5,938,189	\$44,536	0.75
Alpstone Global Macro Fund	Performance Based 1.35 % and 20.00 %	\$17,213,421	\$232,381	1.35
Cash		\$3,192,513	-	-
Cash		\$3,192,513	-	-
Total System		\$1,417,934,696	\$4,574,639	0.32

Performance Update | As of June 30, 2025

Fund	July '24 - Dec '24	Monthly Management Fees Paid (\$)							
		Jan	Feb	Mar	Apr	May	Jun	CYTD	
SSgA Russell 1000 Growth Index	2,999	-	1,130	-	-	-	1,122	2,252	
SSgA Russell 1000 Value Index	3,652	-	2,033	-	-	-	2,056	4,089	
SSgA Russell 3000 Index	18,740	-	9,030	-	-	-	9,854	18,885	
SSgA MSCI EAFE	17,690	-	10,353	-	-	-	7,012	17,365	
SSgA Emerging Markets Index	15,061	-	4,993	2,577	-	-	3,605	11,176	
DF Dent Small Cap Growth Fund	77,651	11,091	10,579	10,024	9,849	10,203	10,496	62,242	
DFA U.S. Small Cap Growth Fund	3,998	1,341	1,270	1,196	1,132	1,201	1,257	7,397	
ABS China Direct	27,445	4,740	4,728	5,112	5,242	5,078	5,279	30,179	
ABS EM ex China Direct	56,352	8,879	8,948	8,617	8,582	8,875	9,463	53,363	
Kopernik Global All-Cap*	140,018	28,769	26,175	31,405	26,876	29,725	31,081	174,030	
First Eagle Global Equity	341,848	54,096	54,096	54,096	53,771	55,846	57,877	329,780	
Artisan Global Opportunities*	302,498	49,953	44,290	41,720	42,649	39,290	19,841	237,744	
J. Stern & Co. World Stars Global Equity	129,504	22,940	31,217	29,378	30,778	34,177	35,012	183,502	
NexPhase Capital Fund V	-	-	-	-	-	59,487	-	59,487	
Vitruvian Investment Partnership V	50,046	-	-	-	-	-	-	-	
Lexington Capital Partners X	-	-	-	21,250	-	-	-	21,250	
Flagship Pioneering Fund VIII, L.P.	-	13,247	-	-	11,001	-	-	24,248	
Gauge Capital IV, L.P.	33,045	-	-	27,371	-	-	-	27,371	
KPS Special Situations Fund VI, L.P.	-	-	-	-	-	-	-	-	
Oakley Capital VI	-	-	-	-	-	-	-	-	
Mainsail Partners VII	-	-	-	-	-	-	-	-	
Falfurrias Capital Partners VI, L.P.	-	-	-	-	-	-	12,444	12,444	
Sculptor Credit Opportunities Overseas Fund	130,762	22,264	20,109	22,264	22,027	22,761	22,027	131,452	
Brigade High Income Fund*	82,124	16,892	16,977	16,867	11,024	19,029	19,371	100,161	
JP Morgan Strategic Property Fund	201,788	101,951	-	-	103,485	-	-	205,436	
UBS Trumbull Property Fund	91,640	43,195	-	-	41,096	-	-	84,292	
Morgan Stanley Prime Property Fund	-	-	-	7,141	-	-	84,109	91,249	
SSgA US REIT	12,076	-	3,457	2,213	3,658	-	-	9,328	
SSgA S&P Global LargeMidCap NR Index	26,133	-	8,713	4,547	-	-	13,379	26,640	
JP Morgan Infrastructure Investments Fund	68,600	-	-	35,685	-	-	36,557	72,242	
First Eagle Institutional Gold Fund, LP	118,128	15,281	14,977	17,484	18,355	13,674	13,839	93,610	
Vanguard Short-Term TIPS Index*	13,836	2,265	2,291	2,313	2,330	2,323	2,336	13,860	
SSgA US Aggregate Bond	3,829	-	2,184	-	-	-	2,160	4,343	
Wellington Core Bond*	66,245	11,238	11,497	10,843	9,957	12,243	11,373	67,151	
Brandywine U.S. Fixed Income	26,894	-	17,129	-	-	17,385	-	34,515	
SSgA Long US Treasury Index	7,388	-	2,450	1,236	-	-	3,701	7,386	
36 South Kohinoor Series (Cayman) Fund	67,712	11,303	10,354	11,679	11,587	11,632	11,133	67,687	
BH-DG Systematic Trading Master Fund	75,557	12,420	11,265	12,092	10,913	10,605	11,223	68,517	
Lombard Odier Bear Convexity	21,793	3,593	3,699	3,785	3,841	3,750	3,714	22,381	
Alpstone Global Macro	115,381	19,932	20,313	20,246	19,098	19,228	19,387	118,203	
Total	2,350,433	455,390	354,258	401,138	447,252	376,512	460,707	2,495,257	

*In some instances, NERS is invested in a pooled vehicle so a separate fee isn't charged at the Plan level. The fee is reflected in the NAV. Estimated based on management fee and market value.

In some instances, additional expenses are charged but the above table only reflects management fees.

Artisan fee for the month of June represents an estimate of the fee paid on the liquidation.

		Benchmark History	Benchmark
From Date	To Date		
Total System			
01/01/2024	Present	14.0% Blmbg. U.S. Aggregate Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 4.0% Hedge Fund Custom Benchmark, 8.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 52.0% MSCI AC World IMI Index (Net), 5.0% Blmbg. U.S. TIPS 0-5 Year, 5.0% S&P Global LargeMid Commodity & Resources (Net), 2.0% S&P UBS Leveraged Loan Index, 3.0% 60% Gold (Spot)/ 40% FTSE Gold Mines, 5.0% MSCI ACWI + 3% 1Q Lag	
12/01/2022	01/01/2024	14.0% Blmbg. U.S. Aggregate Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 4.0% HFRI Macro (Total) Index, 8.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 52.0% MSCI AC World IMI Index (Net), 5.0% Blmbg. U.S. TIPS 0-5 Year, 5.0% S&P Global LargeMid Commodity & Resources (Net), 2.0% S&P UBS Leveraged Loan Index, 3.0% 60% Gold (Spot)/ 40% FTSE Gold Mines, 5.0% MSCI ACWI + 3% 1Q Lag	
05/01/2016	12/01/2022	30.0% Blmbg. U.S. Aggregate Index, 7.5% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 7.5% Alerian MLP Index, 55.0% MSCI AC World IMI Index (Net)	
03/01/2016	05/01/2016	33.0% Russell 3000 Index, 30.0% Blmbg. U.S. Aggregate Index, 7.5% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 22.0% MSCI AC World ex USA (Net), 7.5% Alerian MLP Index	
02/01/2013	03/01/2016	33.0% Russell 3000 Index, 35.0% Blmbg. U.S. Aggregate Index, 5.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 22.0% MSCI AC World ex USA (Net), 5.0% Alerian MLP Index	
03/01/2011	02/01/2013	36.0% Russell 3000 Index, 35.0% Blmbg. U.S. Aggregate Index, 5.0% NCREF Fund Index-Open End Diversified Core Equity (VW) (Net), 24.0% MSCI AC World ex USA (Net)	
09/01/2009	03/01/2011	36.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 24.0% MSCI AC World ex USA (Net)	
06/01/2009	09/01/2009	42.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 18.0% MSCI AC World ex USA (Net)	
06/01/2006	06/01/2009	42.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 18.0% MSCI EAFE (Net)	
07/01/2003	06/01/2006	60.0% S&P 500 Index, 40.0% Blmbg. U.S. Aggregate Index	
10/01/2002	07/01/2003	55.0% S&P 500 Index, 45.0% Blmbg. U.S. Aggregate Index	
10/01/1990	10/01/2002	50.0% S&P 500 Index, 50.0% Blmbg. U.S. Aggregate Index	

Total Fund Public benchmark consists of 74% MSCI ACWI IMI / 26% Bloomberg US Aggregate. Historical Varies.

Total Fund 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.

Performance Update | As of June 30, 2025

From Date	To Date	Benchmark History	Benchmark
Growth Assets			
12/01/2022	Present	91.0% MSCI AC World IMI Index (Net), 9.0% MSCI ACWI + 3% 1Q Lag	
Global Equity			
05/01/2016	Present	100.0% MSCI AC World IMI Index (Net)	
09/01/2009	05/01/2016	60.0% Russell 3000 Index, 40.0% MSCI AC World ex USA (Net)	
06/01/2009	09/01/2009	70.0% Russell 3000 Index, 30.0% MSCI AC World ex USA (Net)	
01/01/2006	06/01/2009	70.0% Russell 3000 Index, 30.0% MSCI EAFE (Net)	
10/01/1990	01/01/2006	100.0% S&P 500 Index	
Credit			
12/01/2022	Present	50.0% Blmbg. U.S. Corp: High Yield Index, 50.0% S&P UBS Leveraged Loan Index	
High Yield & Bank Loans			
12/31/1992	Present	50.0% Blmbg. U.S. Corp: High Yield Index, 50.0% S&P UBS Leveraged Loan Index	
Inflation Hedges			
12/01/2022	Present	38.0% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 24.0% Blmbg. U.S. TIPS 1-5 Year Index, 24.0% S&P Global LargeMid Commodity & Resources (Net), 14.0% 60% Gold (Spot)/ 40% FTSE Gold Mines	
Risk Mitigation			
01/01/2024	Present	78.0% Blmbg. U.S. Aggregate Index, 22.0% Hedge Fund Custom Benchmark	
12/01/2022	01/01/2024	78.0% Blmbg. U.S. Aggregate Index, 22.0% HFRI Macro (Total) Index	
Hedge Funds			
01/01/2025	Present	33.3% HFRI Macro (Total) Index, 33.3% SG Trend Index, 33.3% HFR / EurekaHedge Long Volatility Blended Benchmark	
01/01/2024	01/01/2025	33.3% HFRI Macro (Total) Index, 33.3% SG Trend Index, 33.3% CBOE Eurekahedge Long Volatility Hedge Fund Index	
03/01/2023	01/01/2024	100.0% HFRI Macro (Total) Index	

Corporate Update



Meketa Investment Group is proud to work for over 30 million American families everyday!



Client and employee counts as of March 31, 2025; assets under advisement as of December 31, 2024; assets in alternative investments as of December 31, 2024.

Client retention rate is one minus the number of clients lost divided by the number of clients at prior year-end. Average over the previous five years.

THOUGHT LEADERSHIP



Converging Paths or Persistent Gaps? Understanding Valuations Across Public and Private Equity

Valuations play a critical role in shaping long-term investment outcomes and are often considered to be an important determinant of future performance. Therefore, it is natural for allocators of large pools of assets to examine valuations across different markets. An area that has drawn attention in recent years is the comparison of valuations for the stock market and private equity, as both public and private equity valuations are near all-time highs. In this research note, we aim to evaluate where private equity valuations are relative to public markets, with a focus on North American buyout strategies and US equities, and what implications this may have.

Read more here:

<https://meketa.com/leadership/converging-paths-or-persistent-gaps-understanding-valuations-across-public-and-private-equity/>

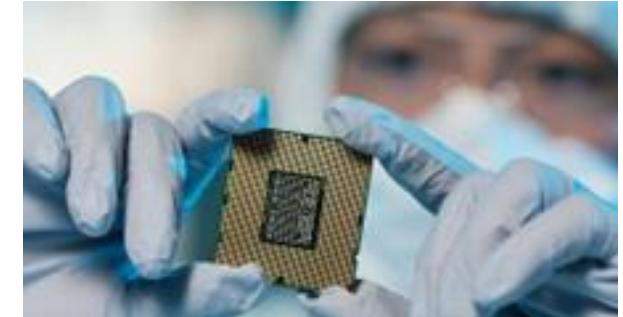


Sustaining Missions and Navigating Markets: Frameworks for Endowment and Foundation Spending Policies

Our focus in this paper is on endowments and foundations that aim to maintain intergenerational equity, and how best to maintain this goal through spending policy development.

Read more here:

<https://meketa.com/leadership/sustaining-missions-and-navigating-markets-frameworks-for-endowment-and-foundation-spending-policies/>



AI Infrastructure Investment

Since OpenAI launched its generative artificial intelligence application, ChatGPT, in late 2022, AI has catapulted to the forefront of technology companies in the US.

The growing competition in AI development has driven a significant surge in investments in technological research and innovation. In the US, the so-called “Magnificent Seven” companies have each developed their own proprietary large language models (LLMs).

Read more here:

<https://meketa.com/leadership/ai-infrastructure-investment>

ANNOUNCING OUR NEWEST SHAREHOLDER



Matt Curran
Research Consultant

HONORS AND AWARDS FOR MEKETA'S DECORATED LEADERS



Congratulations to Meketa's Mika Malone, CAIA on being named to Chief Investment Officer magazine's 2025 Knowledge Brokers list!

The annual Knowledge Brokers list honors influential and insightful investment consultants, recognizing them for their strategic counsel and success in connecting asset owners with impactful investment opportunities. Mika's leadership, thoughtful guidance, and client-first mindset continue to make a lasting impact both at Meketa and across the industry.

View the full story here:
<https://www.linkedin.com/feed/update/urn:li:activity:7330986008714383361>

Corporate Update



The Voice for Public Pensions

Meketa is proud to have received a 2025 Pension Partners of the Year Award from the National Conference on Public Employee Retirement Systems (NCPERS).

"Education is a crucial component of our service to clients and the wider pension fund industry" said Stephen McCourt, co-CEO, Meketa Investment Group. "We're honored to be recognized by NCPERS, and we're especially proud of the contributions of our colleagues Judy Chambers and David Sancewich, whose efforts have helped trustees navigate an increasingly complex investment landscape."

View full story here:
<https://www.linkedin.com/feed/update/urn:li:activity:7343354503682768897>

CONGRATULATIONS TO ALAN SPATRICK ON CELEBRATING 45 YEARS WITH MEKETA

Alan's journey at Meketa Investment Group spans an incredible 45 years, making him a living archive of the firm's history, evolution, and ethos. As employee number three, he has witnessed and influenced Meketa's transformation from a small operation to a sophisticated institutional investment advisory firm.



View the full story here: **Celebrating 45 Years of Inspiration Insights from the Archive of Alan Spatrick, Meketa Consultant, from His Journey Along the Way**
https://meketa.com/wp-content/uploads/2025/03/MEKETA_Anniversary-Alan-Spatrick.pdf

MEKETA IN THE WILD



Corporate Update

IPEM Conference

Meketa's **Balaj Singh, CFA, CAIA** enjoyed moderating a panel at April's Pensions & Investments x IPEM conference, 2025 Private Markets: The LP Perspective. Balaj and his fellow panelists discussed the state of private equity and how LPs are monitoring their private equity portfolios to ensure they meet investment objectives, noting "private equity investing is not about a "set it and forget it" mentality."

Talking Hedge

It was great to hear Meketa's **Zachary Driscoll, CFA** moderate the panel, Leveraging Total Portfolio Principles to Compound Better, at last month's Talking Hedge Austin conference. The discussion offered valuable insights and was a great kick-off to the event.

PREA Institute

Christy Fields from Meketa had the pleasure of leading the session, The Performance of Real Estate and Other Alternatives, at the conference in Chicago, with **Rajeev Ranade** joining as well. The Institute is dedicated to exploring real estate investment where theory meets practice, fostering insightful discussions and innovative ideas.

MEKETA IN THE NEWS

Pensions&Investments

Expanding the Playbook – Private Equity's Evolving Opportunities in Sports | April 30, 2025
Commentary by Balaj Singh, Senior Private Markets Analyst

"For private equity investors, the sports sector offers the allure of cultural relevance, anticipated steady demand and growing institutional acceptance. But it also requires patience, creativity and an understanding that this is not your typical PE asset class. The playbook is still being written."

EQDerivatives

Long Volatility Gains Momentum, Trend Strategies Show Resilience Amid Market Corrections
By Quratalain Tejani | May 7, 2025

Meketa said risk mitigating strategies helped institutional clients navigate volatility as markets tumbled in April. Long volatility strategies proved effective in mitigating risk, and should a drawdown or inflationary themes continue to extend, trend following strategies will be ready to take the baton.

Meketa's risk management framework, which is categorized into first responders, such as long volatility, second responders, such as trend following and diversifiers, is helping investors weather equity drawdowns and potentially benefit from bear market conditions. Ryan Lobdell, head of marketable alternatives, highlighted that many of these strategies have stood their ground during the recent market selloffs, despite liquidity concerns expressed by some.

"The vast majority of these [systematic strategies] trade futures contracts on different types of assets, such as equity, equity indices, rates, currencies [and] commodities.," said Zack Driscoll, research consultant at Meketa.

"Many first responder strategies, [such as long volatility], did quite well over the first week to 10 days of April," said Lobdell. "There has been an uptick in interest, but in terms of people actually putting dollars to work, I think that's been a hit or miss because of liquidity constraints within private markets allocations."

Second responder strategies, such as trend following, tend to perform well during bear markets or prolonged drawdowns — especially when asset managers take long and short positions across macro markets within a six-week to six-month time horizon, Lobdell said. "This played out during the global financial crisis and again in 2022, when persistent market trends created favorable conditions for these approaches. But in times like the mid-April market selloffs, or the beginning of COVID-19, when trends rapidly reverse, the performance of the strategy can suffer in the short term as it repositions. If equities are trending down, trend followers will likely be net sellers, leading to negative correlations to equities." This, Lobdell said, may produce an attractive profile, such as convexity.

Diversifiers, such as global macro, equity market neutral, relative value, event-driven, insurance-linked securities, alternative risk premia and multistrategies, act as hedges and contribute to returns during bull and flat equity markets, particularly when bonds might be failing to deliver the required portfolio protection, Lobdell and Driscoll highlighted. "[These] diversified sets of hedges or protection in a portfolio tend to not do as well when there's no trend. When markets move sideways and are choppy, like we've seen, that's a harder environment for them to succeed in," Driscoll said. **"Ultimately, no single group of a risk management functional framework, or a single strategy within a group, is likely to effectively fulfill all objectives. We work hard to educate clients on the role of the framework and how each strategy within interacts, to manage their expectations."**



How Companies With Frozen, Overfunded Pensions Approach the Future

By Matt Toledo | May 1, 2025

Corporations are increasingly evaluating de-risking options for their pension funds, while also adding risk to their portfolios.

"The majority of plans that are frozen and just a little bit overfunded are still targeting termination," says **Jonathan Camp**, a managing principal at Meketa. "But we have seen an uptick in companies that are opening back up their plans. ... Some of these frozen plans that have excess assets—let's say they are 5% or 10% overfunded—that's when [the sponsors] start to have to think to [themselves]: Are we going to terminate the plan and then use those assets for some other purpose?"

How Frozen, Surplus-Asset Plans Are Investing

"If you're 100% or over 100% funded, you're going to have a heavier allocation to bonds—the higher quality, the better," says Camp. "So typically Treasurys, AAA bonds, AA bonds...you're generally focused on investment-grade, high-quality corporate bonds."

Will More Plans Like IBM Reopen?

"The plans that I see that are frozen and using their assets to open back up and offer new benefits, from what I've seen, they tend to be cash balance plans," Camp says, noting that other types of plans are not unfreezing their pensions.

Disclaimer, Glossary, and Notes

THIS REPORT (THE “REPORT”) HAS BEEN PREPARED FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE “RECIPIENT”).

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT, AND IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. THE INFORMATION CONTAINED HEREIN, INCLUDING ANY OPINIONS OR RECOMMENDATIONS, REPRESENTS OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND IS SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK, AND THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

THE INFORMATION USED TO PREPARE THIS REPORT MAY HAVE BEEN OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. SOME OF THIS REPORT MAY HAVE BEEN PRODUCED WITH THE ASSISTANCE OF ARTIFICIAL INTELLIGENCE (“AI”) TECHNOLOGY. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY, ADEQUACY, VALIDITY, RELIABILITY, AVAILABILITY, OR COMPLETENESS OF ANY INFORMATION CONTAINED HEREIN, WHETHER OBTAINED EXTERNALLY OR PRODUCED BY THE AI.

THE RECIPIENT SHOULD BE AWARE THAT THIS REPORT MAY INCLUDE AI-GENERATED CONTENT THAT MAY NOT HAVE CONSIDERED ALL RISK FACTORS. THE RECIPIENT IS ADVISED TO CONSULT WITH THEIR MEKETA ADVISOR OR ANOTHER PROFESSIONAL ADVISOR BEFORE MAKING ANY FINANCIAL DECISIONS OR TAKING ANY ACTION BASED ON THE CONTENT OF THIS REPORT. WE BELIEVE THE INFORMATION TO BE FACTUAL AND UP TO DATE BUT DO NOT ASSUME ANY RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE CONTENT PRODUCED. UNDER NO CIRCUMSTANCES SHALL WE BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES OR ANY DAMAGES WHATSOEVER, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE, OR OTHER TORT, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THIS CONTENT. IT IS IMPORTANT FOR THE RECIPIENT TO CRITICALLY EVALUATE THE INFORMATION PROVIDED.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE “FORWARD-LOOKING STATEMENTS,” WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS “MAY,” “WILL,” “SHOULD,” “EXPECT,” “AIM,” “ANTICIPATE,” “TARGET,” “PROJECT,” “ESTIMATE,” “INTEND,” “CONTINUE,” OR “BELIEVE,” OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS REPORT ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS REPORT.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

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 its 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%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = \frac{1\% \text{ pro rata, plus}}{5.26\% \text{ (current yield)}} = 6.26\% \text{ (yield to maturity)}$$

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

The Russell Indices®, TM, SM are trademarks/service marks of the Frank Russell Company.

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.