



East Bay Municipal Utility District Employees' Retirement System

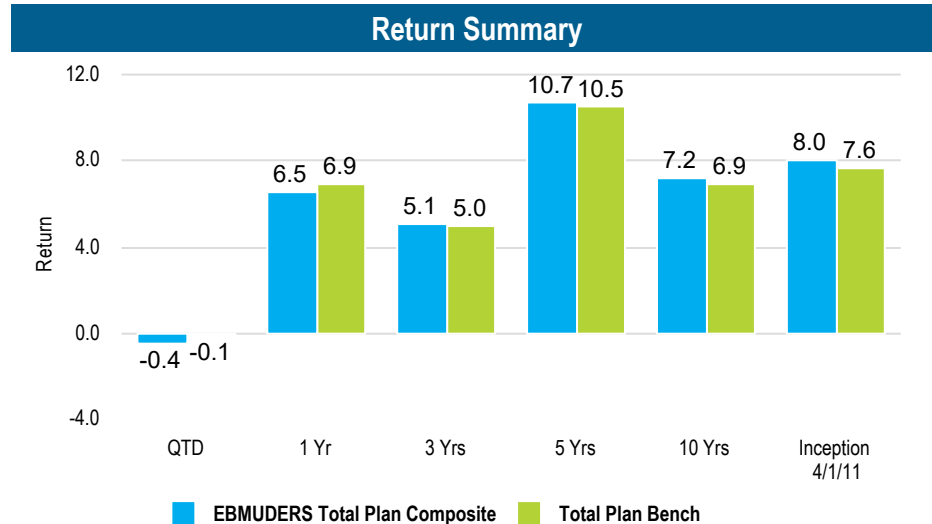
May 22, 2025

Q1 2025 Performance Report

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Introduction

EBMUDERS Total Plan Composite | As of March 31, 2025



	Summary of Cash Flows	
	QTD	1 Yr
EBMUDERS Total Plan Composite		
Beginning Market Value	\$2,632,474,028	\$2,467,112,853
Net Cash Flow	-\$19,168,000	-\$27,566,068
Net Investment Change	-\$10,407,874	\$163,351,370
Ending Market Value	\$2,602,898,155	\$2,602,898,155

	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)
EBMUDERS Total Plan Composite - Net	-0.4	6.5	5.1	10.7	7.2	--
EBMUDERS Total Plan Composite - Gross	-0.4	6.7	5.2	10.8	7.4	7.6
<i>Total Plan Bench</i>	<i>-0.1</i>	<i>6.9</i>	<i>5.0</i>	<i>10.5</i>	<i>6.9</i>	<i>7.2</i>
InvMetrics Public DB > \$1B Median	0.6	5.8	4.3	10.0	6.8	7.1

Historical net returns for the Total Portfolio Aggregate are currently available from 2Q 2011.

EBMUDERS | As of March 31, 2025

	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EBMUDERS Total Plan Composite	2,602,898,155	100.0	-0.4	6.5	5.1	10.7	7.2	8.0	Apr-11
<i>Total Plan Bench</i>			<i>-0.1</i>	<i>6.9</i>	<i>5.0</i>	<i>10.5</i>	<i>6.9</i>	<i>7.6</i>	
US Equity Composite	966,728,822	37.1	-4.7	7.2	8.2	18.1	11.9	12.5	Apr-11
<i>Russell 3000 Hybrid</i>			<i>-4.7</i>	<i>7.2</i>	<i>8.2</i>	<i>18.2</i>	<i>11.8</i>	<i>12.4</i>	
Non-US Equity Composite	643,029,802	24.7	5.6	6.7	5.1	11.4	4.6	6.3	Jul-95
<i>MSCI ACWI xUS (blend)</i>			<i>5.4</i>	<i>6.6</i>	<i>5.0</i>	<i>11.5</i>	<i>5.5</i>	<i>5.5</i>	
Covered Calls Composite	364,576,665	14.0	-3.3	7.5	6.3	12.8	8.2	9.0	Feb-14
<i>Cboe S&P 500 Buy Write Index</i>			<i>-3.1</i>	<i>9.8</i>	<i>4.6</i>	<i>11.7</i>	<i>6.4</i>	<i>6.6</i>	
Real Estate Composite	52,987,518	2.0	0.4	9.4	-0.5	8.0	6.3	5.7	Jan-07
<i>Real Estate Composite Benchmark</i>			<i>0.9</i>	<i>9.1</i>	<i>1.1</i>	<i>8.4</i>	<i>6.3</i>	<i>6.8</i>	
Fixed Income Composite	572,451,240	22.0	2.6	4.9	1.9	1.6	2.1	2.7	Apr-11
<i>Fixed Income Composite Bench</i>			<i>2.4</i>	<i>5.3</i>	<i>2.0</i>	<i>1.4</i>	<i>2.2</i>	<i>2.7</i>	
Cash Composite	3,124,108	0.1	1.3	5.0	3.9	2.7	2.0	1.4	Aug-10
<i>FTSE 3 Month T-Bill</i>			<i>1.1</i>	<i>5.2</i>	<i>4.4</i>	<i>2.7</i>	<i>1.9</i>	<i>1.3</i>	

Economic and Market Update

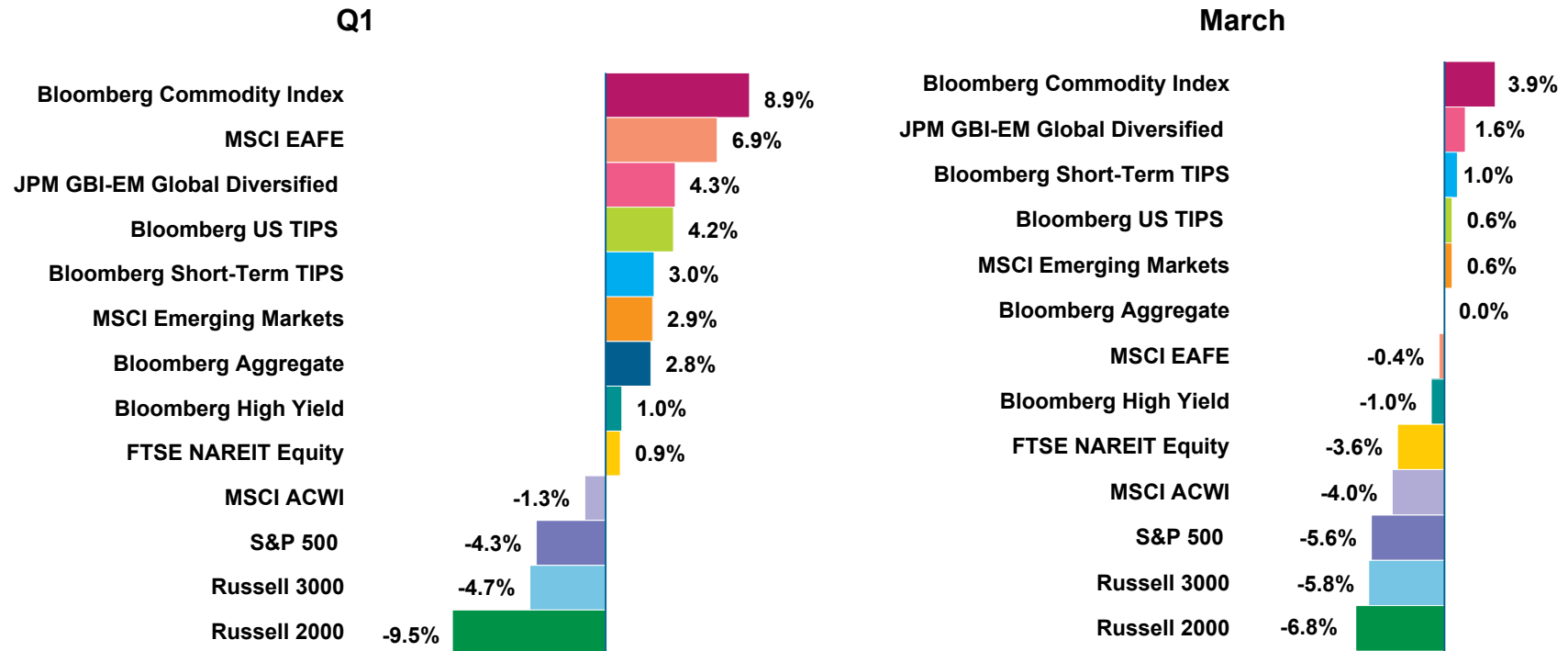
Data as of March 31, 2025

Commentary

In the first quarter of 2025, investment flows rotated out of US stocks to non-US stocks while bond markets rallied on uncertainty related to tariffs and growth.

- Domestic equities sold off in the first quarter (Russell 3000: -4.7%) with growth underperforming value, small-cap trailing large-cap, and defensive sectors outperforming.
- Non-US developed market stocks (MSCI EAFE: +6.9%) outperformed US markets at the start of the year, supported by rate cuts from the ECB, EU planned increases in defense spending, and a weakening US dollar.
- Emerging market equities returned +2.9% in the first quarter, largely supported by a rally in Chinese stocks (they rose an impressive +15.0%) on DeepSeek AI enthusiasm.
- In February, the Federal Reserve held rates steady with inflation, while improving, remaining above target and with the unemployment rate at near historic lows.
- Most fixed income markets posted positive returns in the first quarter with the broad bond market (Bloomberg Aggregate) up 2.8%. Long Treasuries (+4.7%) were the best performer in the falling rate environment while high yield bonds (+1.0%) produced the smallest gains given the economic uncertainty in the US.
- Looking ahead, continued uncertainty related to the US administration's tariff policies and their impact on the economy, inflation, and Fed policy will be key. The path of China's economy and relations with the US, as well as concerns over elevated valuations and technology-driven concentration in the US equity market will also be important focuses of 2025.

Index Returns¹



- At the end of the first quarter, global investors rotated away from the US, with domestic equities in negative territory (particularly small cap), while other asset classes were positive.
- Commodities led the way during the quarter due to safe havens like gold, while non-US developed markets followed, driven by strong results in Europe.
- In March, ahead of tariff announcements in the US, riskier assets generally sold off.

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

Domestic Equity Returns¹

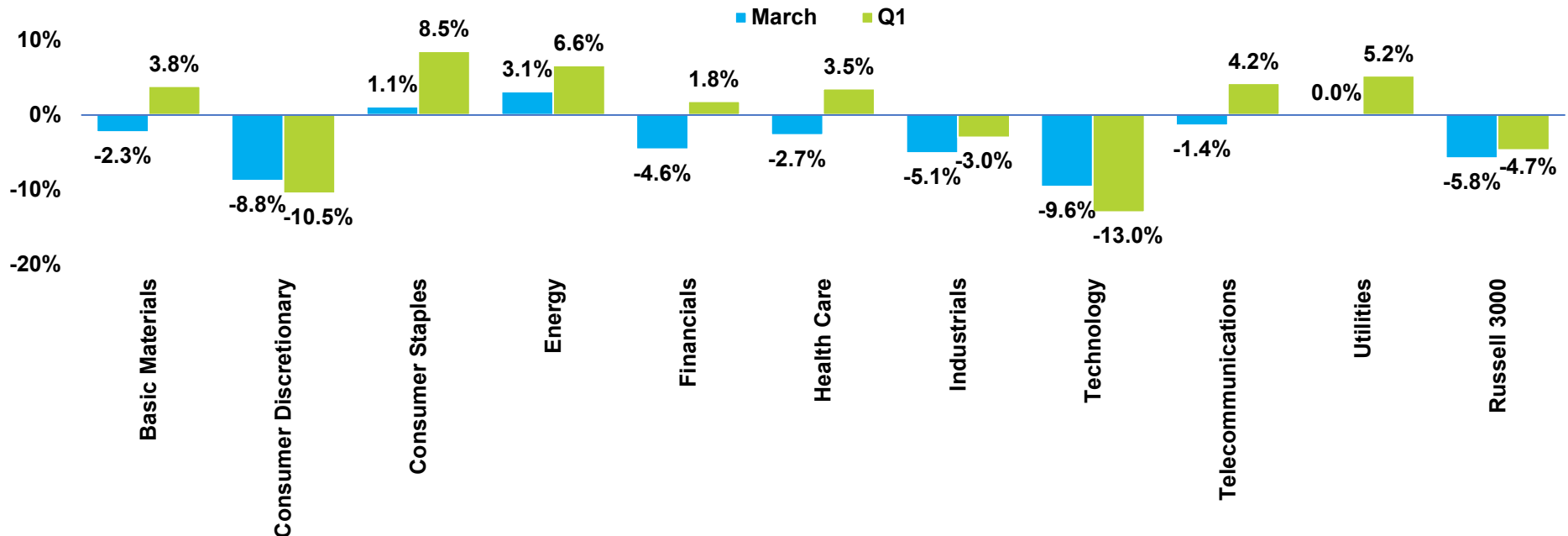
Domestic Equity	March (%)	Q1 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	-5.6	-4.3	8.3	9.1	18.6	12.5
Russell 3000	-5.8	-4.7	7.2	8.2	18.2	11.8
Russell 1000	-5.8	-4.5	7.8	8.6	18.4	12.2
Russell 1000 Growth	-8.4	-10.0	7.8	10.1	20.1	15.1
Russell 1000 Value	-2.8	2.1	7.2	6.6	16.1	8.8
Russell MidCap	-4.6	-3.4	2.6	4.6	16.3	8.8
Russell MidCap Growth	-7.4	-7.1	3.6	6.2	14.8	10.1
Russell MidCap Value	-3.7	-2.1	2.3	3.8	16.7	7.6
Russell 2000	-6.8	-9.5	-4.0	0.5	13.3	6.3
Russell 2000 Growth	-7.6	-11.1	-4.9	0.8	10.8	6.1
Russell 2000 Value	-6.0	-7.7	-3.1	0.0	15.3	6.1

US Equities: In the first quarter the Russell 3000 fell -4.7%.

- After a strong start to the year, US equities ended the quarter lower. In late January China's DeepSeek introduced an AI model comparable to market leaders but at a much lower cost. This took investors by surprise and heavily weighed on technology stocks, particularly the "Magnificent 7". Renewed trade tensions between the US and its trading partners also caused investors to lower expectations.
- Growth stocks were harder hit than value stocks across the market cap spectrum. In the large cap space, this dynamic was driven by technology stocks (NVIDIA, Broadcom, Microsoft, Apple), along with Tesla. In the small cap space, where the divergence was less pronounced, technology stocks were again the driver, mainly due to software and semiconductor stocks.
- Small cap stocks (Russell 2000) trailed large cap stocks (Russell 1000) over the quarter as recession fears grew.

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

Russell 3000 Sector Returns¹



- There was wide performance dispersion among sectors in the first quarter, from -13.0% (technology) to +8.5% (consumer staples). Overall, the defensive sectors performed better than growth-oriented sectors.
- The so-called “Magnificent 7” stocks came under pressure weighing on both the technology and consumer discretionary sectors. The announcement of DeepSeek out of China and weak results from Tesla and Amazon drove results.
- Consumer staples was a bright spot as more defensive, dividend-paying stocks, such as Coca-Cola and Philip Morris International, fared relatively well. Energy and utilities also performed well due to broader growth and inflation concerns.

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

Foreign Equity Returns¹

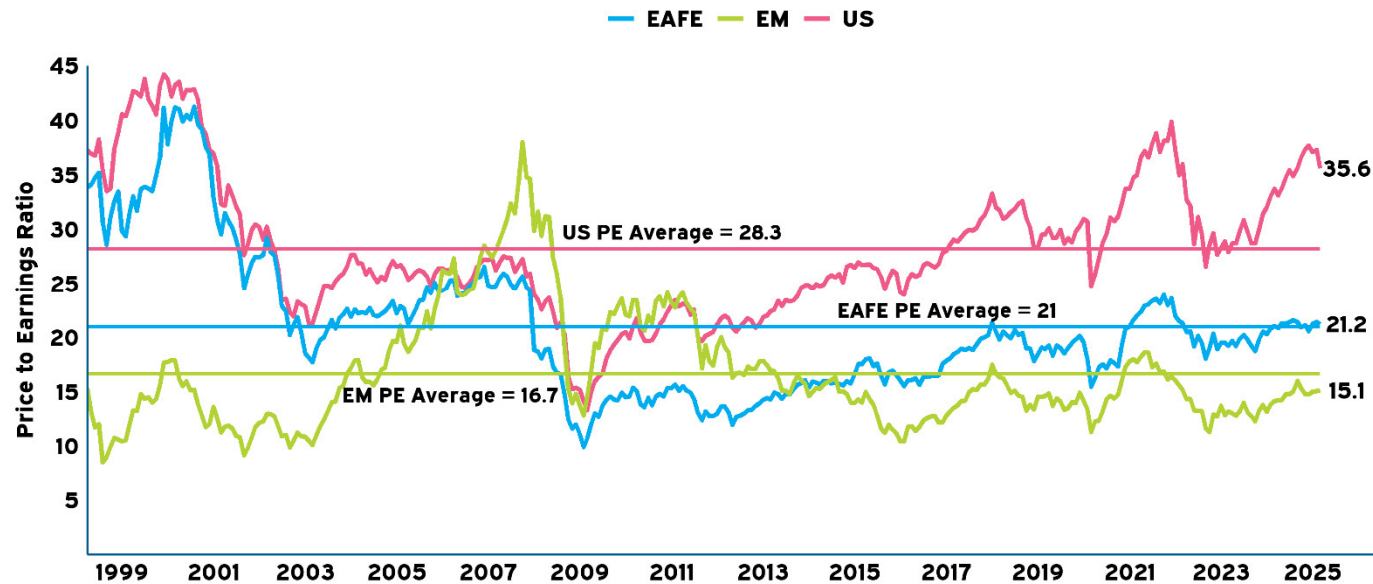
Foreign Equity	March (%)	Q1 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI Ex US	-0.2	5.2	6.1	4.5	10.9	5.0
MSCI EAFE	-0.4	6.9	4.9	6.0	11.8	5.4
MSCI EAFE (Local Currency)	-2.8	2.9	4.1	8.7	13.2	6.3
MSCI EAFE Small Cap	0.5	3.7	3.1	0.9	9.9	5.3
MSCI Emerging Markets	0.6	2.9	8.1	1.4	7.9	3.7
MSCI Emerging Markets (Local Currency)	0.3	2.7	11.1	4.7	9.6	5.7
MSCI EM ex China	0.0	-1.7	-2.1	0.7	12.0	4.5
MSCI China	2.0	15.0	40.4	3.5	1.5	2.5

Foreign Equity: Developed international equities (MSCI EAFE) returned 6.9% in the first quarter and emerging market equities (MSCI Emerging Markets) rose 2.9%.

- By contrast to the US, developed market equities rose in the first quarter benefiting from the rotation away from US technology companies. Eurozone stocks saw the highest returns, driven by plans in Germany to increase defense and infrastructure spending, strong gains in the financial sector (particularly banks), and continued rate cuts from the ECB. The UK followed closely behind, with gains led by returns in large cap energy and financials. Japan saw moderate losses, due to global trade uncertainties hurting exporters.
- Emerging markets saw modest gains in the first quarter, driven largely by China. China's gains were a combination of improving sentiment towards tech following DeepSeek's promising AI debut and the announcement of additional stimulus measures. Brazil was another strong performer in Q1, benefitting from strong commodity gains and a strengthening currency. India saw declines due to slowing growth and weakening demand for their exports.

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

Equity Cyclically Adjusted P/E Ratios¹



- Valuations in US stocks came down over the quarter but remained at a significant premium to non-US developed and emerging market stocks.
- US equities, priced at 35.6 times earnings, continued to trade well above their long-run P/E average of 28.3.
- Non-US developed market valuations (21.2 times) increased over the quarter due in part to strong results in Europe and are trading slightly above their long-term average. Emerging market valuations (15.1 times) also increased in Q1 but remain below 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 March 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.

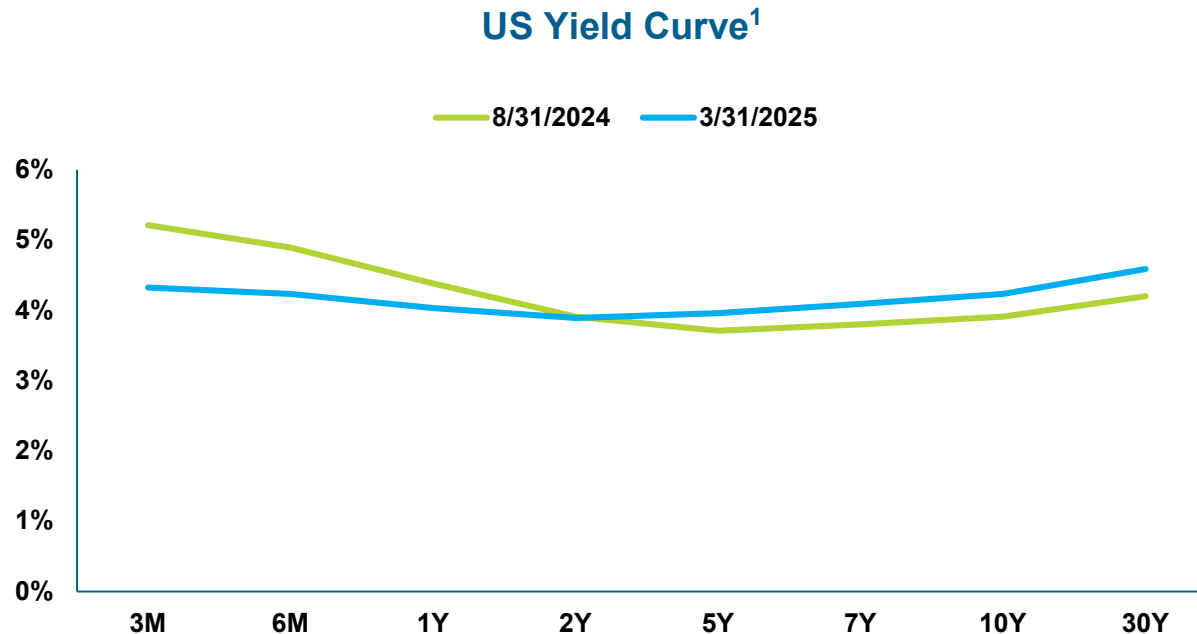
Fixed Income Returns¹

Fixed Income	March (%)	Q1 (%)	1 Yr (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	0.0	2.7	5.2	1.0	0.3	1.8	4.9	5.9
Bloomberg Aggregate	0.0	2.8	4.9	0.5	-0.4	1.5	4.6	6.1
Bloomberg US TIPS	0.6	4.2	6.2	0.1	2.4	2.5	4.2	6.8
Bloomberg Short-term TIPS	1.0	3.0	7.0	3.2	4.1	2.8	4.1	2.4
Bloomberg US Long Treasury	-0.9	4.7	1.3	-7.2	-7.9	-0.6	4.6	14.9
Bloomberg High Yield	-1.0	1.0	7.7	5.0	7.3	5.0	7.7	3.5
JPM GBI-EM Global Diversified (USD)	1.6	4.3	4.0	2.7	2.3	1.3	--	--

Fixed Income: The Bloomberg Universal index rose 2.7% in the first quarter.

- Uncertainty related to tariffs and growing worries about economic growth drove investors to high quality bonds over the quarter.
- The broad US bond market (Bloomberg Aggregate) rose 2.8% with both short- (+3.0%) and longer-dated (+4.2%) TIPS outperforming as inflation risks rose modestly. Long-term Treasuries (+4.7%) particularly benefited in this environment of uncertainty and falling interest rates.
- High yield bonds (+1.0%) rose the least during the quarter as uncertainty and risk aversion grew ahead of the planned tariff announcement from the US in early April.

¹ Source: Bloomberg. Data is as of March 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.

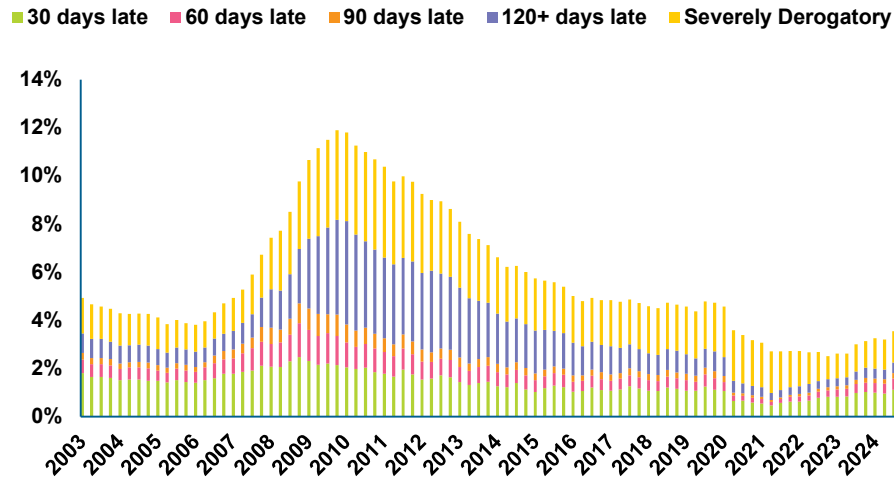


- US Treasury yields declined significantly over the quarter, as investors expressed concerns about the potential policies of the new US administration, economic data related to consumers weakened, and overall growth expectations fell.
- The more policy sensitive 2-year Treasury yield fell from 4.24% to 3.89%, while the 10-year Treasury yield declined from 4.57% to 4.21%.
- After the Fed started reducing interest rates in September 2024, the yield curve stopped being inverted (short-term interest rates higher than long-term interest rates) given expectations for inflation to continue to decline and policy rates to continue lower.

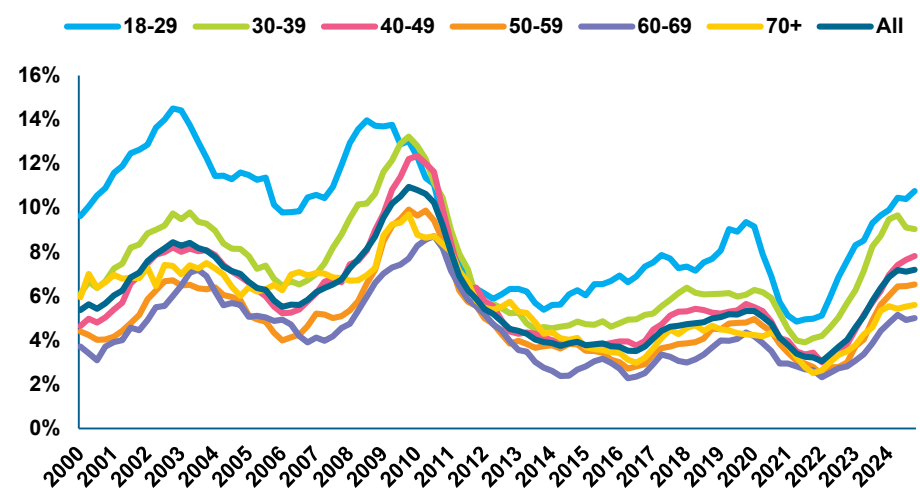
¹ Source: Bloomberg. Data is as of March 31, 2025. The August 2024 Treasury yields are shown as a reference before the first interest rate cut.

Stress is Building on US Consumers

Total Balance by Delinquency Status¹



Transition into Serious Delinquency for Credit Cards by Age²

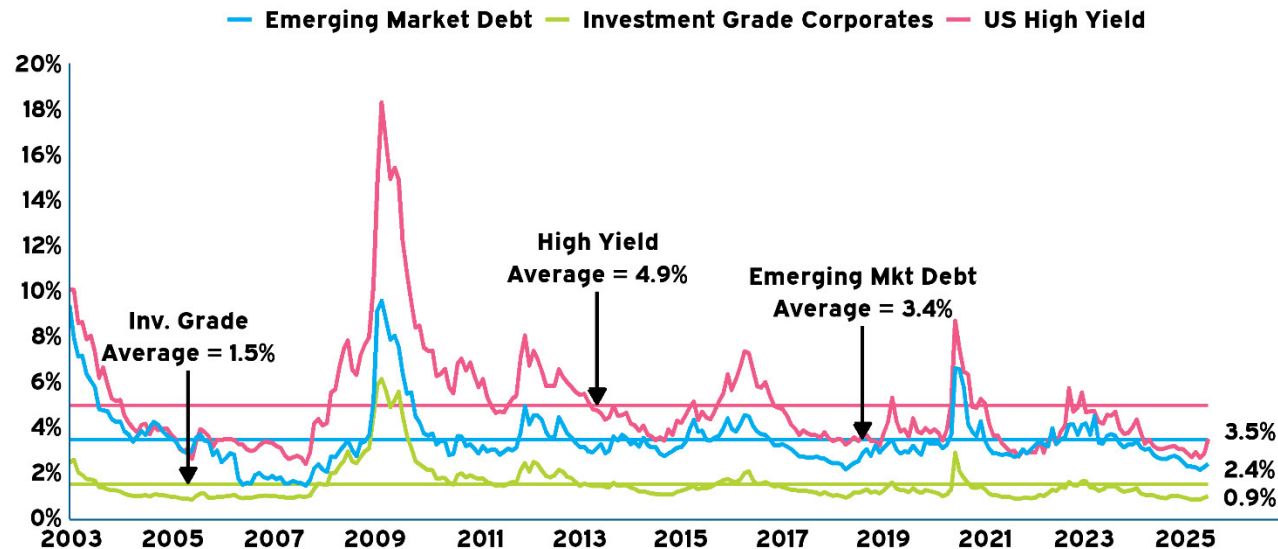


- Some signs of stress on the US consumer have started to emerge given persistently higher prices and interest rates.
- After falling to historic lows during the pandemic, loan delinquencies recently started rising.
- While some segments of the credit market have started to show signs of stress, total delinquencies remain well below pre-pandemic levels.
- While total delinquency rates are below pre-pandemic levels, the credit card segment is showing more signs of distress where borrowers are subject to variable and higher borrowing costs.
- Credit card delinquencies are rising rapidly, especially for borrowers under the age of forty.

¹ Source: New York Federal Reserve, Quarterly Household Debt and Credit Report, February 2025. See also FRED. Data is as of February 28, 2025.

² Source: FRED. Data is as of February 28, 2025.

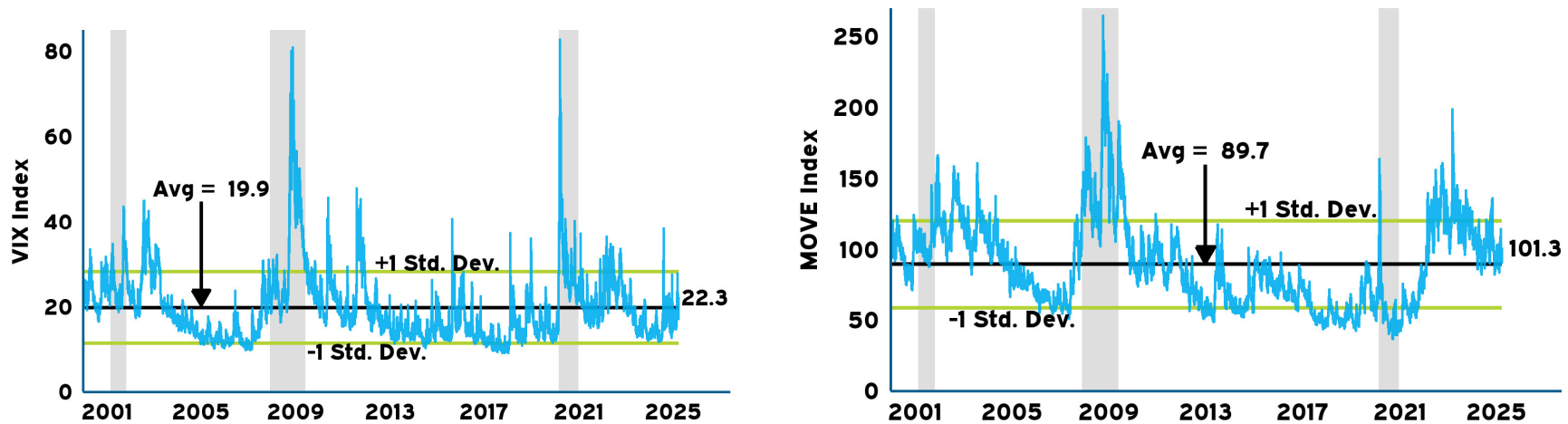
Credit Spreads vs. US Treasury Bonds¹



- Given all the uncertainty, spreads (the yield above a comparable maturity Treasury) widened in the first quarter.
- High yield spreads moved the most (2.9% to 3.5%) due to the concerns related to the US economy.
- All yield spreads remained below their respective long-run averages, particularly high yield (3.5% versus 4.9%).
- Although spreads are tight, absolute bond yields remain at above-average levels compared to the last two decades.

¹ Source: Bloomberg. Data is as March 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.

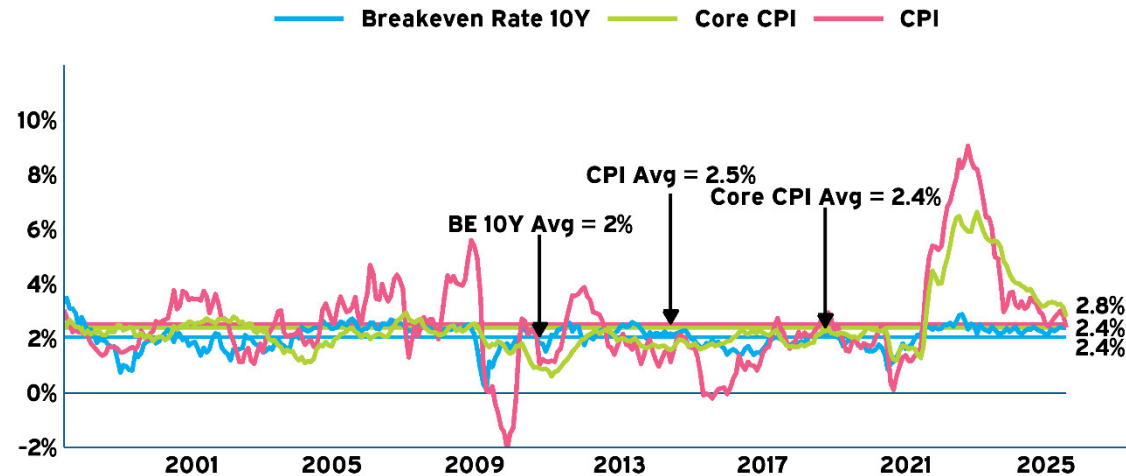
Equity and Fixed Income Volatility¹



- Bond and equity volatility rose in the first quarter driven mainly by policy and trade uncertainty.
- Volatility levels (VIX) in the US stock market and bond market (MOVE) finished the quarter above their respective long-run averages.

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 March 31, 2025. The average line indicated is the average of the VIX and MOVE values between January 2000 and March 2025.

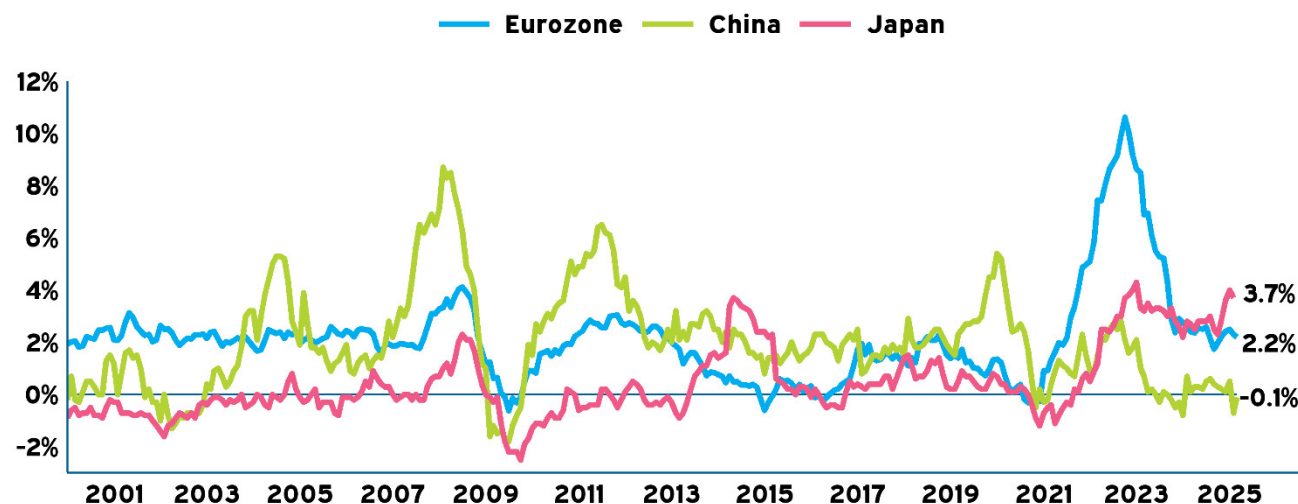
US Ten-Year Breakeven Inflation and CPI¹



- While inflation has been slow to return to the Fed's 2% average target, over the quarter the year-over-year rate fell from 2.9% to 2.4%. The month-over-month rate moved into negative territory at quarter-end (-0.1%). A slowing in the rate of increase in the services sector along with a drop in energy prices contributed to the recent decline.
- Core inflation year-over-year also declined over the quarter (3.2% to 2.8%) with the month-over-month rate slowing to 0.1%. A decline in the pace of shelter price increases drove results.
- Inflation expectations (breakevens) stayed relatively stable over the quarter as investors continued to evaluate the potential inflationary impacts of the new US administration's policies.

¹ Source: FRED. Data is as of March 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.

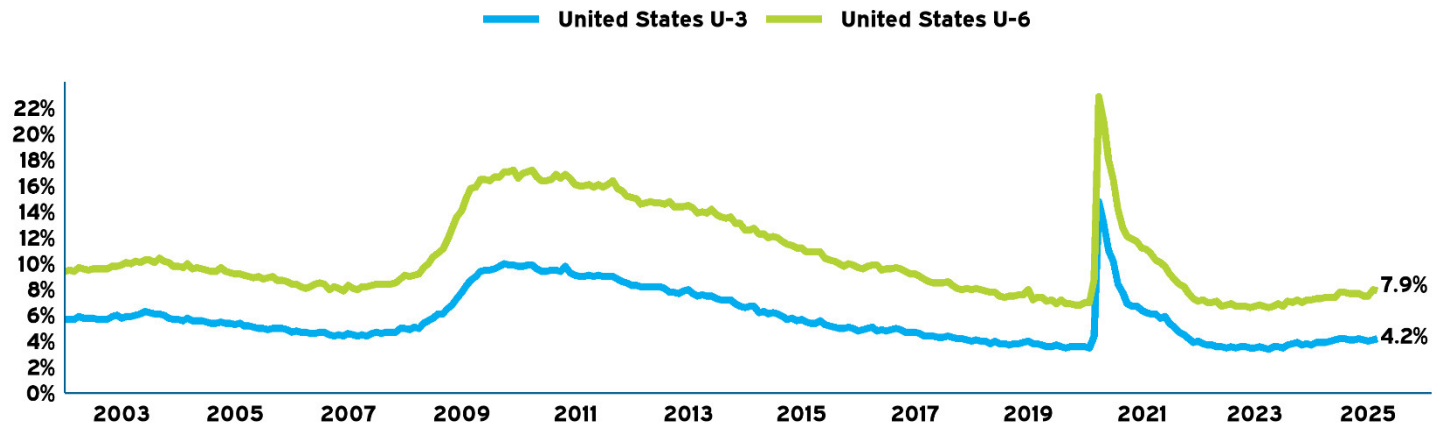
Global Inflation (CPI Trailing Twelve Months)¹



- Inflation in the eurozone fell over the quarter (2.4% to 2.2%), due largely to declines in energy costs and services. Levels remain slightly below the US.
- The latest reading of inflation in Japan dropped from 4.0% to 3.7% as energy subsidies were reintroduced.
- In China, despite record policy stimulus consumer prices moved back into negative territory over the quarter. In March, prices fell by 0.1% compared to a year prior, a lower decline than the February reading of -0.7%. Despite years of policy stimulus to counter the real estate crisis and economy, the Chinese consumer has remained weak.

¹ Source: Bloomberg. Data is as March 2025, except Japan which is as of February 2025.

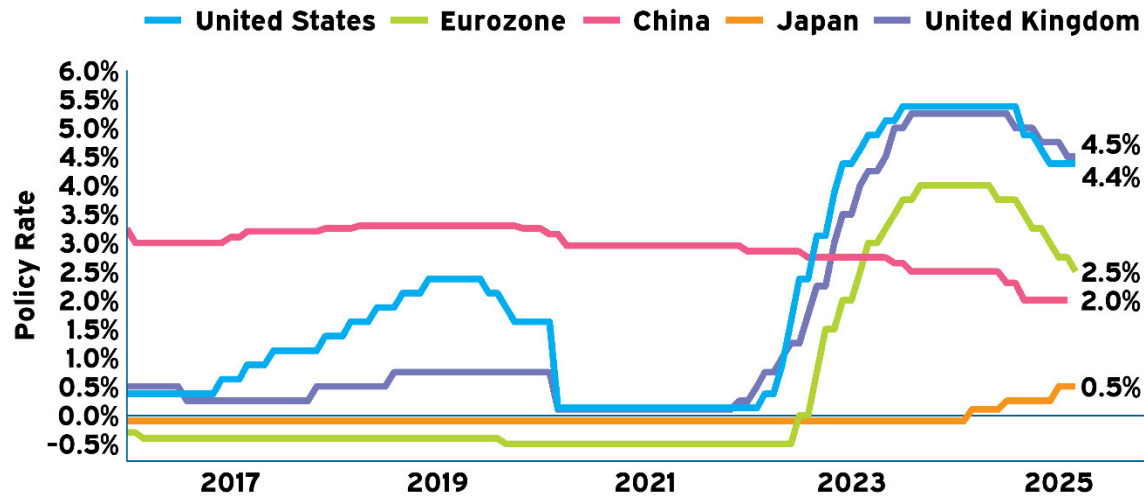
US Unemployment¹



- In March, the US added 228,000 jobs (above expectations of 140,000). The unemployment rate rose slightly to 4.2% but remained in the tight range of 4.0% to 4.2% it has been in since May of last year. There were 7.1 million jobseekers (little changed from the prior reading) of which 1.5 million have been without work for more than 27 weeks.
- A broader measure of total unemployed (U-6) that includes those marginally attached to the labor force and employed part-time for economic reasons, fell slightly to 7.9%.
- Health care (+54k), social assistance (+24k), retail (+24k), and transportation (+23k) added jobs in March while the Federal government lost 4,000 jobs adding to the 11,000 lost in February.
- The last reading of job opening fell slightly to 7.6 million, a level well below the pandemic highs (>12 million); the number of openings exceeded the number of unemployed workers looking for work (7.1 million).
- Separations (5.3 million) and hires (5.4 million) remained steady and average hourly wages continued to grow at approximately 4.0% annually.

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

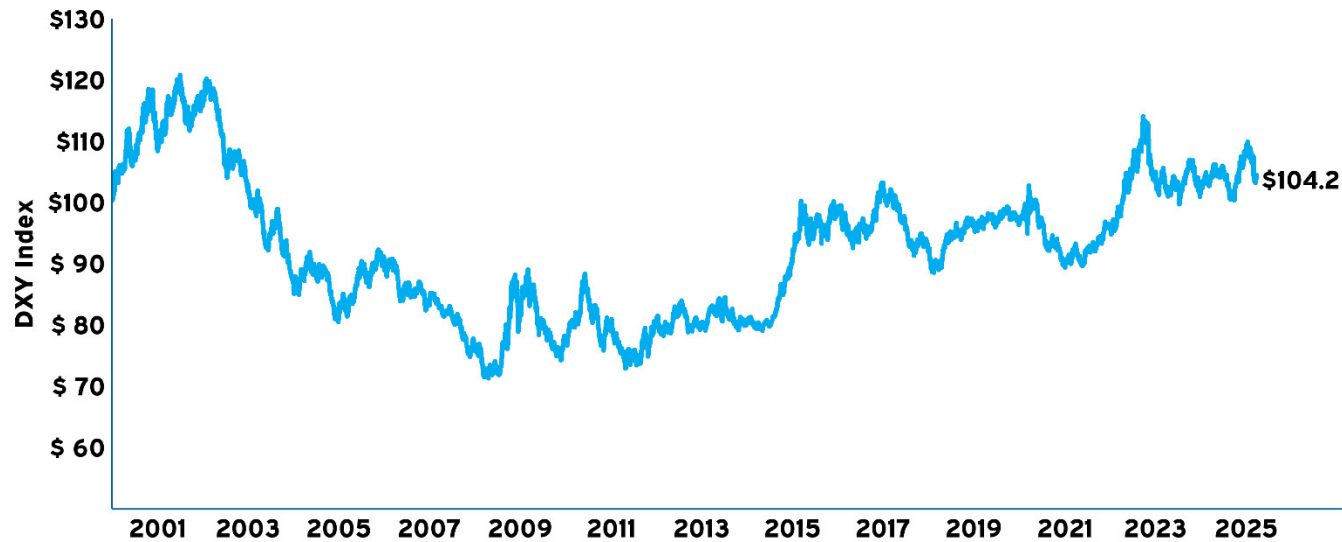
Policy Rates¹



- The Fed kept US interest rates steady at their March meeting after reducing rates by 0.25% twice over the final quarter of 2024 to a range of 4.25% to 4.50%. Given growing concerns about growth, markets recently increased expectations for the number of rate cuts in 2025 to over three.
- In February, the Bank of England cut interest rates for the third time by 0.25% to 4.5%, while in March the European Central Bank cut rates by another 0.25% to 2.5%. In addition to cutting interest rates, the People's Bank of China has also reduced reserve requirements, lowered mortgage rates, and supported the stock market.
- In contrast to many other central banks, the Bank of Japan increased interest rates in January to 0.5%, in the face of persistent inflation. Rate cutting by other major central banks are complicating prospects for further policy rate hikes in Japan.

¹ Source: Bloomberg. Data is as of March 31, 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



- After largely strengthening through 2024, the US dollar recently started to weaken.
- Concerns over changing US administration policies, slower growth, and corresponding lower yields have recently weighed on the value of the dollar.

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

Summary

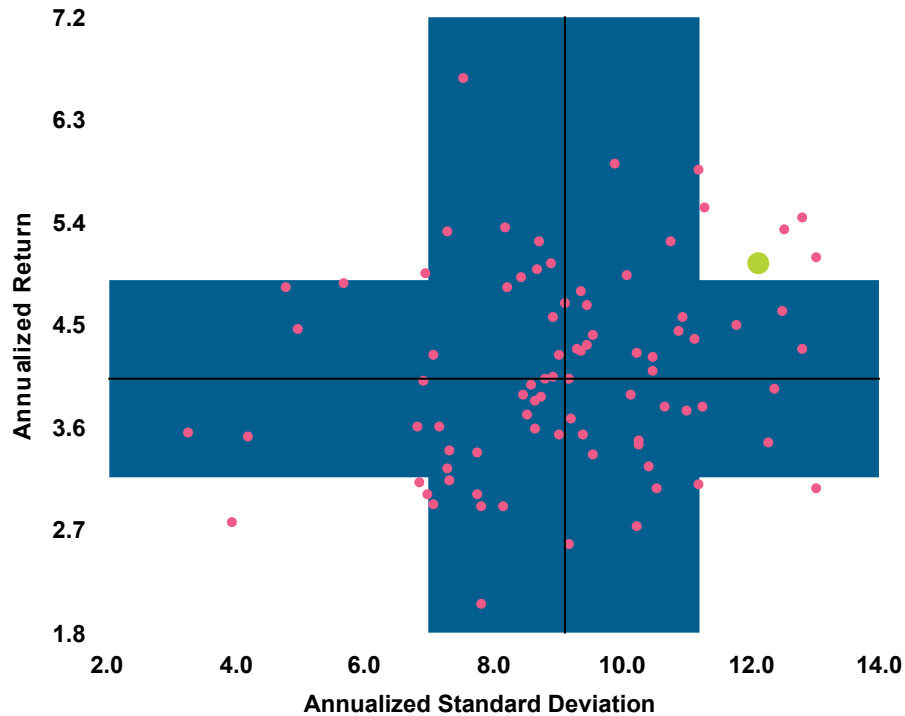
Key Trends:

- According to the International Monetary Fund's (IMF) January report, global growth in 2025 is expected to be slightly higher than 2024 (3.3% versus 3.2%). Growth forecast in the US (+2.7%) and China (+4.6%) are lower for this year compared to last, while growth in the EU (+1.0%) is projected to be slightly higher in 2025.
- Elevated levels of uncertainty along with higher tariffs could weigh on growth while at the same time fan inflation. Inflation levels 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 the pressure on the dollar.
- Signs of stress have started to emerge on the US consumer with sentiment weakening. 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.
- US equities have recently come under pressure. A focus going forward will be whether earnings can remain resilient if growth slows. Also, the future paths of the large technology companies that have driven market gains will continue to be important.
- Trade tensions between the US and China will remain a key focus. As tariffs have soared on both sides, China has allowed its currency to weaken against the dollar. Outside of tariffs, China continues to focus on supporting its economy/asset prices with a suite of fiscal and financial policy stimulus measures. Advances in AI technologies have also contributed to some optimism. Despite the policy support, consumer spending is still weak and issues remain in the real estate sector.

First Quarter Performance Review

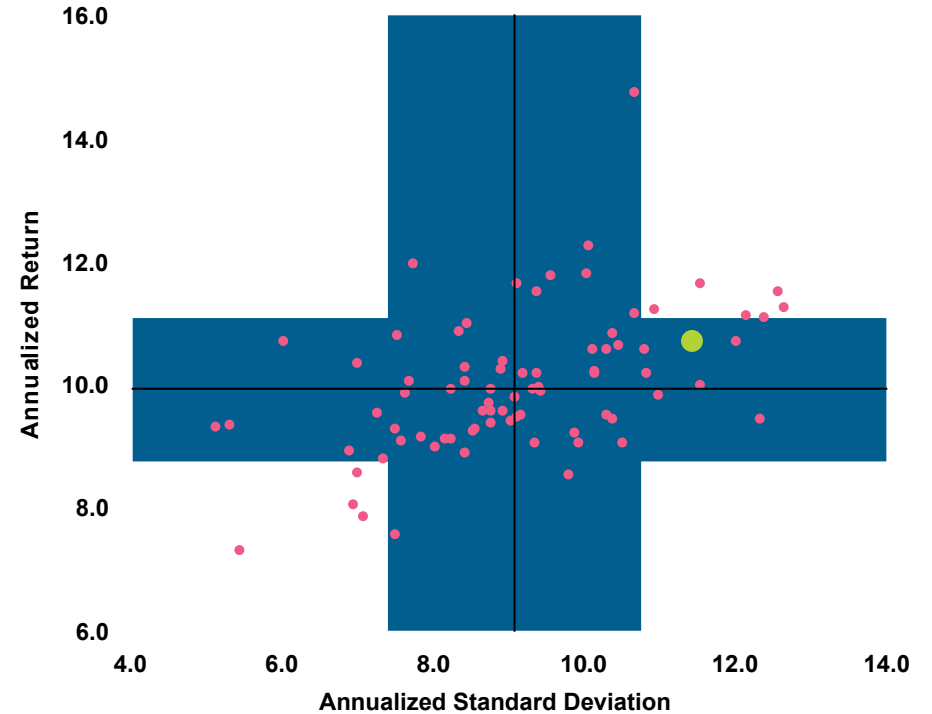
EBMUDERS | As of March 31, 2025

Annualized Return vs. Annualized Standard Deviation
3 Years Ending March 31, 2025



● InvMetrics All Public DB Plans > \$1B
● EBMUDERS Total Plan Composite

Annualized Return vs. Annualized Standard Deviation
5 Years Ending March 31, 2025



● InvMetrics All Public DB Plans > \$1B
● EBMUDERS Total Plan Composite

3 Years Ending March 31, 2025

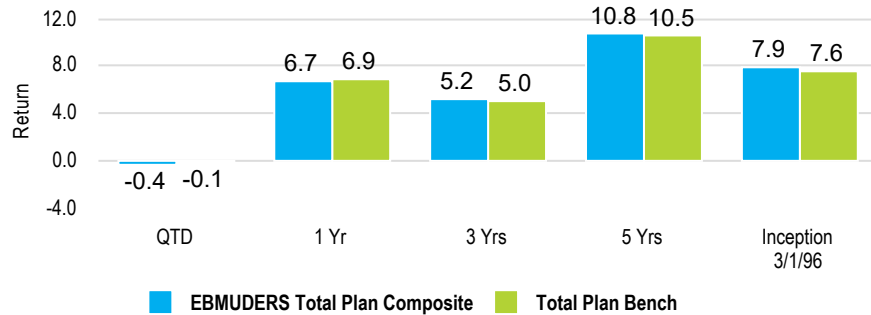
	Return	Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	5.1	12.1	0.1
Total Plan Bench	5.0	11.2	0.1

5 Years Ending March 31, 2025

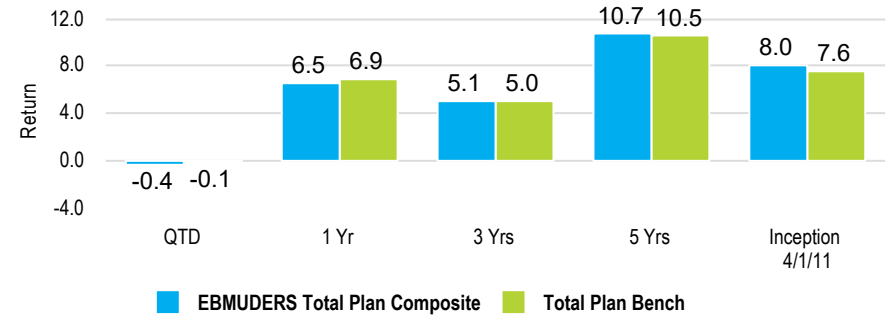
	Return	Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	10.7	11.4	0.7
Total Plan Bench	10.5	10.8	0.8

EBMUDERS Total Plan Composite | As of March 31, 2025

Trailing Performance - Gross

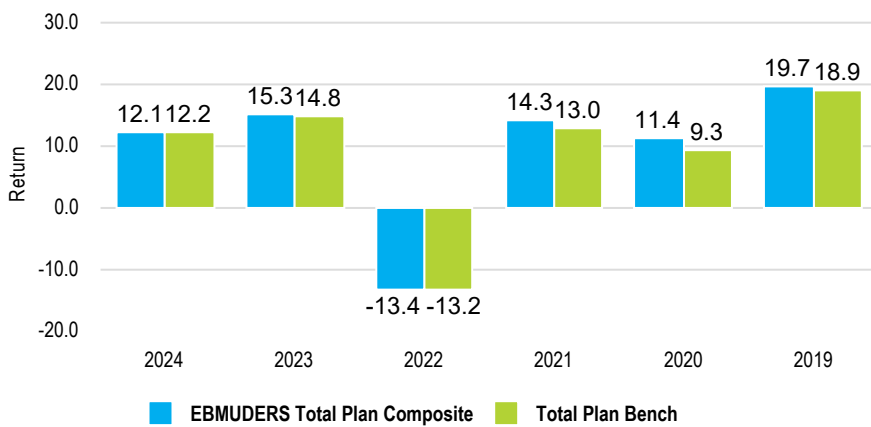


Trailing Performance - Net

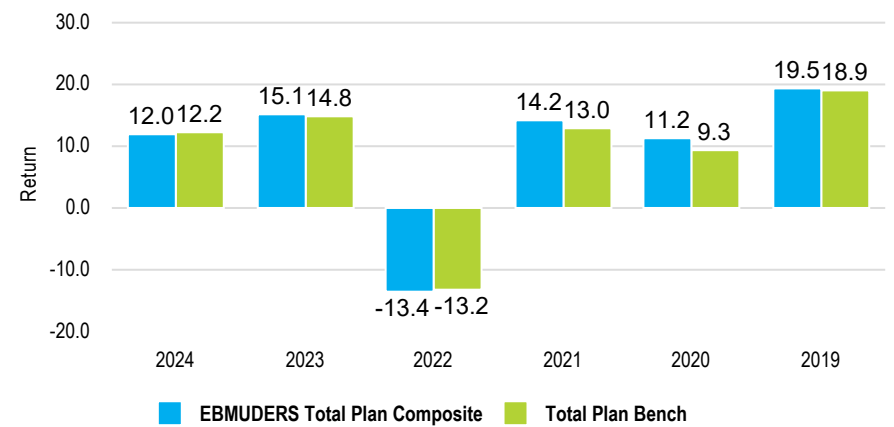


	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2024 (%)	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)
EBMUDERS Total Plan Composite	-0.4	6.5	5.1	10.7	7.2	12.0	15.1	-13.4	14.2	11.2	19.5
EBMUDERS Total Plan Composite	-0.4	6.7	5.2	10.8	7.4	12.1	15.3	-13.4	14.3	11.4	19.7
Total Plan Bench	-0.1	6.9	5.0	10.5	6.9	12.2	14.8	-13.2	13.0	9.3	18.9
InvMetrics Public DB > \$1B Median	0.6	5.8	4.3	10.0	6.8	9.2	11.4	-10.3	16.0	11.8	17.3

12-month Performance - Gross

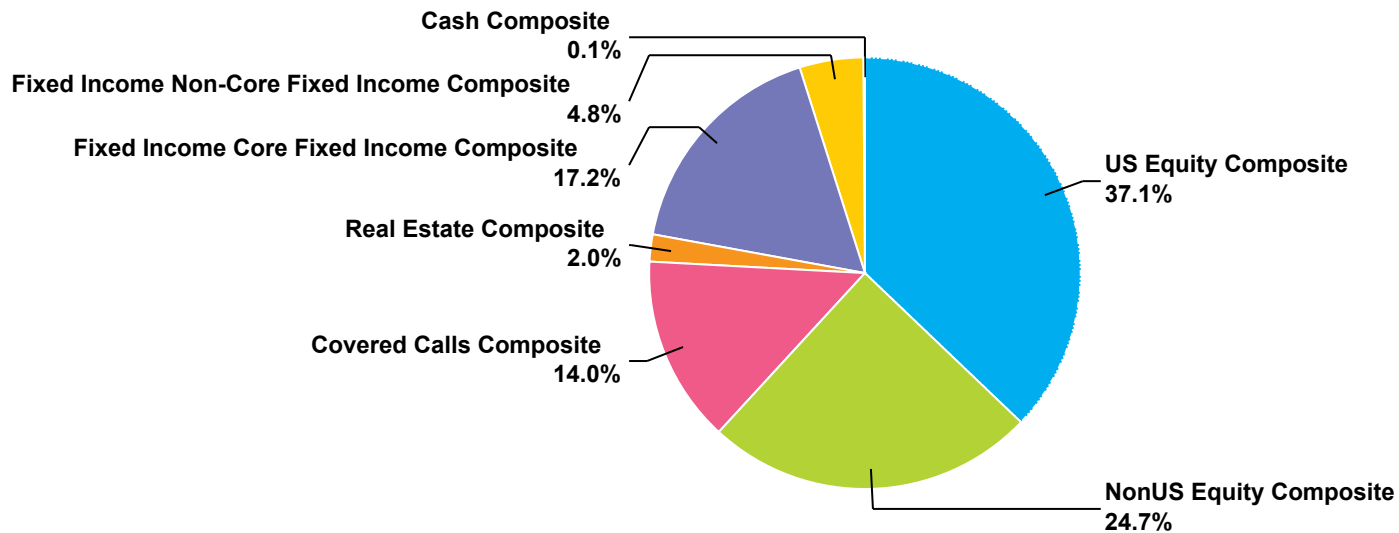


12-month Performance - Net



Actual vs Target Allocation | As of March 31, 2025

Allocation vs. Targets and Policy				
	Current Balance (\$)	Current Allocation (%)	Policy (%)	Policy Range (%)
Domestic Equity	\$966,728,822	37.1	33.5	28.5 - 38.5
International Equity	\$643,029,802	24.7	25.0	20.0 - 30.0
Covered Calls	\$364,576,665	14.0	14.0	11.0 - 17.0
Real Estate	\$52,987,518	2.0	2.5	0.5 - 4.5
Core Fixed Income	\$448,033,219	17.2	20.0	17.0 - 23.0
Non-Core Fixed Income	\$124,418,021	4.8	5.0	3.0 - 7.0
Cash	\$3,124,108	0.1	0.0	0.0 - 5.0
Total	\$2,602,898,155	100.0	100.0	



Policy Targets reflect stage 1 Interim Policy Targets per the Evolving Policy Plan.
Actual allocations may deviate from Policy Targets and ranges during the asset allocation transition.

Manager Performance - Net of Fees | As of March 31, 2025

	Market Value (\$)	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
EBMUDERS Total Plan Composite	2,602,898,155	-0.4	6.5	5.1	10.7
<i>Total Plan Bench</i>		<i>-0.1</i>	<i>6.9</i>	<i>5.0</i>	<i>10.5</i>
US Equity Composite	966,728,822	-4.7	7.2	8.2	18.1
<i>Russell 3000 Hybrid</i>		<i>-4.7</i>	<i>7.2</i>	<i>8.2</i>	<i>18.2</i>
Northern Trust Russell 3000	965,960,038	-4.7	7.2	8.2	18.2
<i>Russell 3000 Index</i>		<i>-4.7</i>	<i>7.2</i>	<i>8.2</i>	<i>18.2</i>
Non US Equity Composite	643,029,802	5.6	6.7	5.1	11.4
<i>MSCI ACWI xUS (blend)</i>		<i>5.4</i>	<i>6.6</i>	<i>5.0</i>	<i>11.5</i>
Northern Trust ACWI ex US	643,029,802	5.6	6.7	5.1	11.0
<i>MSCI AC World ex USA index</i>		<i>5.4</i>	<i>6.6</i>	<i>5.0</i>	<i>11.5</i>

Manager Performance - Net of Fees | As of March 31, 2025

	Market Value (\$)	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Covered Calls Composite	364,576,665	-3.3	7.5	6.3	12.8
<i>Cboe S&P 500 Buy Write Index</i>		<i>-3.1</i>	<i>9.8</i>	<i>4.6</i>	<i>11.7</i>
Parametric BXM	178,320,537	-2.7	7.3	6.1	12.5
<i>Cboe S&P 500 Buy Write Index</i>		<i>-3.1</i>	<i>9.8</i>	<i>4.6</i>	<i>11.7</i>
Parametric Delta Shift	186,256,128	-3.8	8.0	7.0	16.6
<i>Cboe S&P 500 Buy Write Index</i>		<i>-3.1</i>	<i>9.8</i>	<i>4.6</i>	<i>11.7</i>

Manager Performance - Net of Fees | As of March 31, 2025

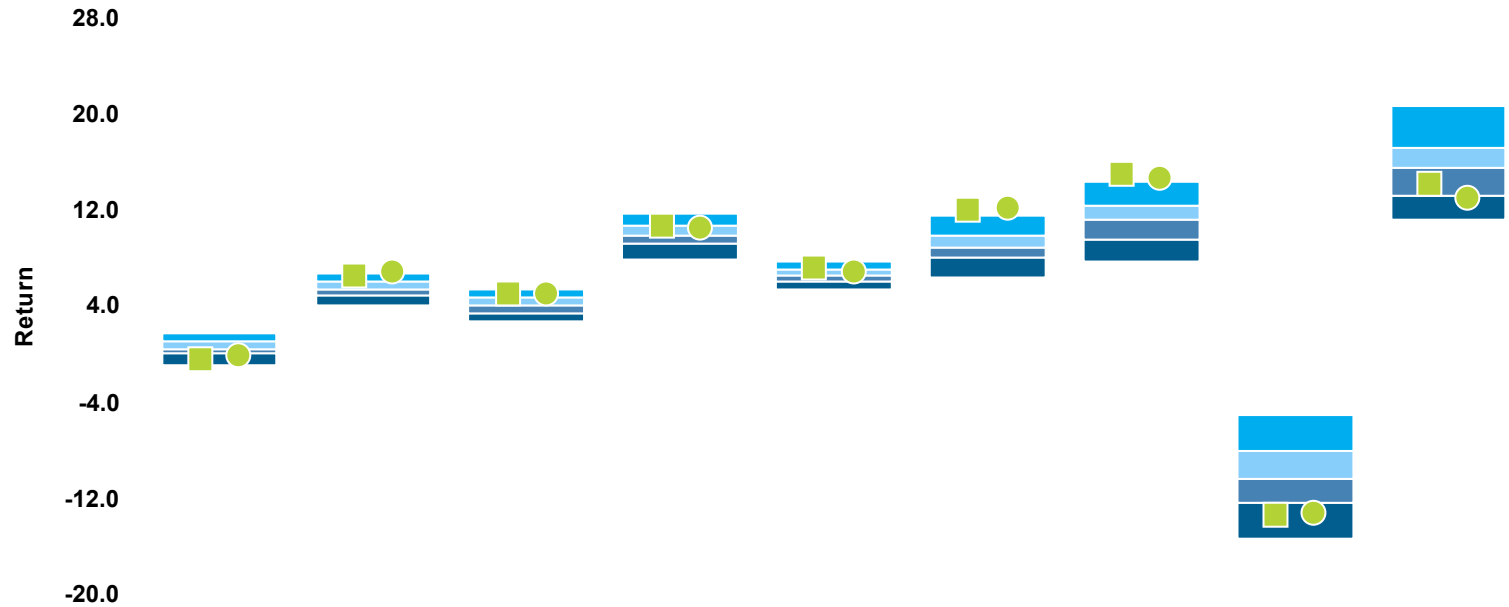
	Market Value (\$)	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Core Fixed Income Composite	448,033,219	3.1	4.8	1.1	0.5
<i>Fixed Income Core Composite Bench</i>		<i>2.8</i>	<i>4.9</i>	<i>1.0</i>	<i>0.0</i>
CS McKee	226,987,279	2.7	4.8	0.9	0.1
<i>Blmbg. U.S. Aggregate Index</i>		<i>2.8</i>	<i>4.9</i>	<i>0.5</i>	<i>-0.4</i>
Garcia Hamilton	221,045,940	3.5	4.8	1.2	0.8
<i>Blmbg. U.S. Aggregate Index</i>		<i>2.8</i>	<i>4.9</i>	<i>0.5</i>	<i>-0.4</i>
Non-Core Fixed Income Composite	124,418,021	0.8	5.5	4.8	6.1
<i>Fixed Income Non-Core Composite Bench</i>		<i>0.8</i>	<i>7.1</i>	<i>5.9</i>	<i>6.8</i>
MacKay Shields (HY)	64,320,922	1.1	5.9	5.8	7.3
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>1.0</i>	<i>7.6</i>	<i>5.8</i>	<i>7.2</i>
Federated Investment Counseling (Bank Loans)	60,097,098	0.6	5.5	3.7	4.9
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>0.8</i>	<i>6.3</i>	<i>5.9</i>	<i>6.3</i>

Manager Performance - Net of Fees | As of March 31, 2025

	Market Value (\$)	QTR (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Real Estate Composite	52,987,518	0.4	9.4	-0.5	8.0
<i>Real Estate Composite Benchmark</i>		<i>0.9</i>	<i>9.1</i>	<i>1.1</i>	<i>8.4</i>
RREEF America II Lag	52,987,518	0.4	-1.5	-3.8	2.1
<i>NCREIF NPI Lag</i>		<i>0.9</i>	<i>0.4</i>	<i>-0.8</i>	<i>3.1</i>

RREEF results are lagged 1 quarter.

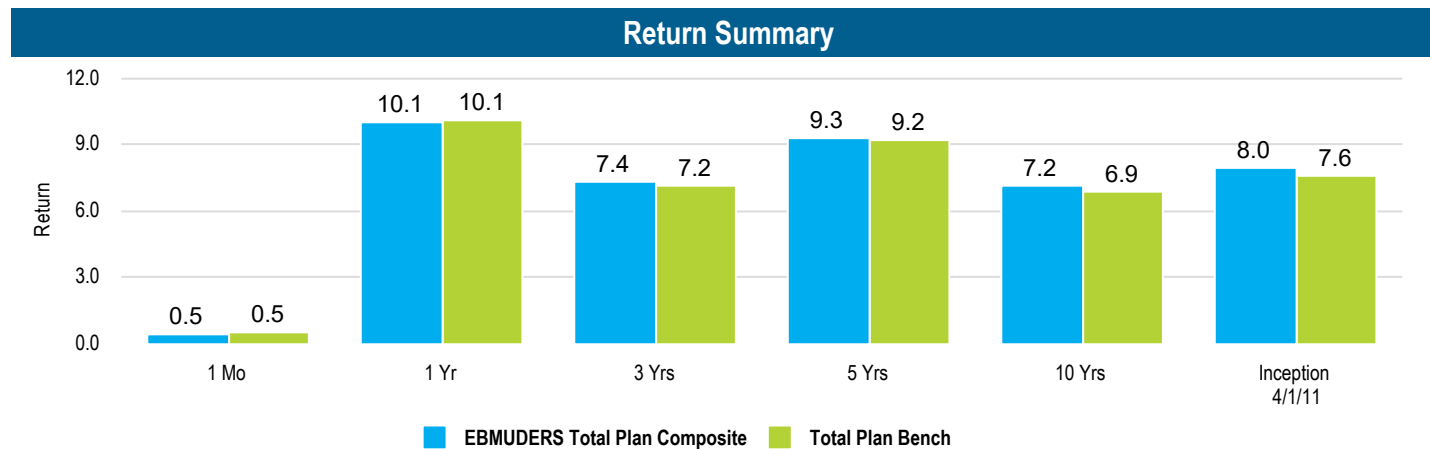
InvMetrics Public Plans > \$1B Return Comparison March 31, 2025



	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2024 (%)	2023 (%)	2022 (%)	2021 (%)
■ EBMUDERS Total Plan Composite	-0.4 (86)	6.5 (9)	5.1 (13)	10.7 (25)	7.2 (21)	12.0 (3)	15.1 (4)	-13.4 (86)	14.2 (64)
● Total Plan Bench	-0.1 (82)	6.9 (3)	5.0 (14)	10.5 (31)	6.9 (30)	12.2 (2)	14.8 (4)	-13.2 (83)	13.0 (78)
5th Percentile	1.8	6.7	5.4	11.8	7.8	11.6	14.4	-5.0	20.7
1st Quartile	1.0	6.1	4.7	10.7	7.1	10.0	12.5	-8.0	17.2
Median	0.5	5.5	4.0	9.9	6.6	8.9	11.3	-10.3	15.6
3rd Quartile	0.1	4.9	3.4	9.3	6.1	8.0	9.6	-12.3	13.2
95th Percentile	-0.8	4.0	2.8	7.9	5.4	6.5	7.7	-15.3	11.2
Population	88	88	86	81	77	183	201	191	223

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

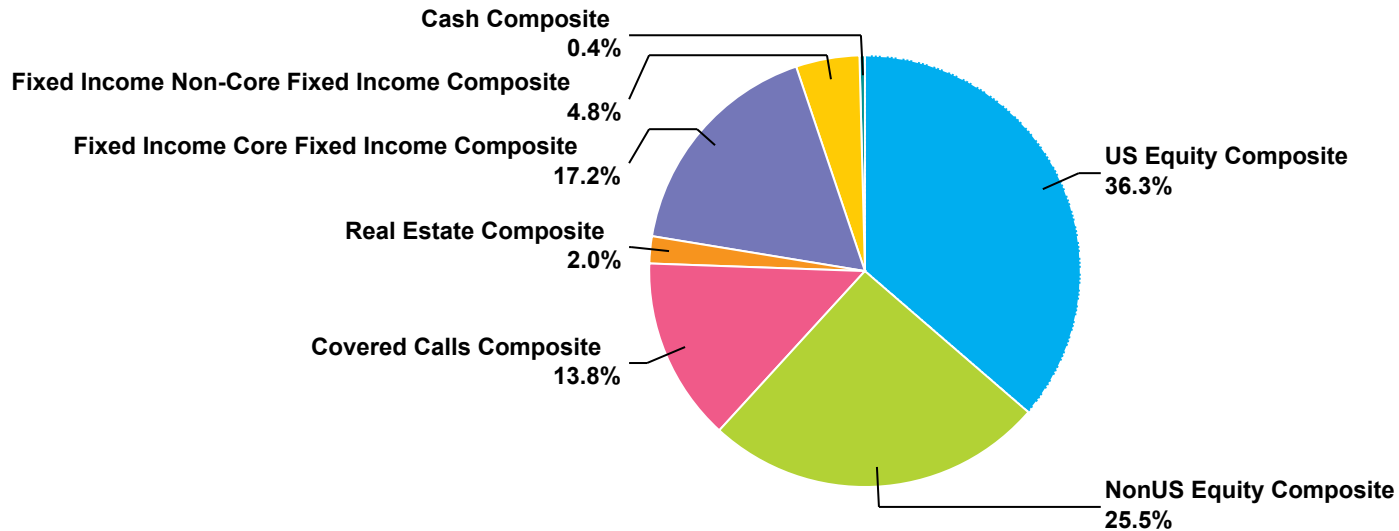
Summary of Cash Flows		
	1 Mo	1 Yr
EBMUDERS Total Plan Composite		
Beginning Market Value	\$2,602,898,155	\$2,396,611,666
Net Cash Flow	-\$2,524,000	-\$26,867,965
Net Investment Change	\$12,636,825	\$243,267,279
Ending Market Value	\$2,613,010,980	\$2,613,010,980



Benchmark definitions are listed at the end of this report.

Actual vs Target Allocation | As of April 30, 2025

Allocation vs. Targets and Policy				
	Current Balance (\$)	Current Allocation (%)	Policy (%)	Policy Range (%)
Domestic Equity	\$949,401,747	36.3	33.5	28.5 - 38.5
International Equity	\$665,326,959	25.5	25.0	20.0 - 30.0
Covered Calls	\$359,784,348	13.8	14.0	11.0 - 17.0
Real Estate	\$52,987,518	2.0	2.5	0.5 - 4.5
Core Fixed Income	\$450,399,729	17.2	20.0	17.0 - 23.0
Non-Core Fixed Income	\$124,354,440	4.8	5.0	3.0 - 7.0
Cash	\$10,756,239	0.4	0.0	0.0 - 5.0
Total	\$2,613,010,980	100.0	100.0	



Policy Targets reflect stage 1 Interim Policy Targets per the Evolving Policy Plan.
Actual allocations may deviate from Policy Targets and ranges during the asset allocation transition.

EBMUDERS | As of April 30, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
EBMUDERS Total Plan Composite	2,613,010,980	100.0	0.5	10.2	7.5	9.4	7.4	7.6	9.4	Aug-84
<i>Total Plan Benchmark</i>			<i>0.5</i>	<i>10.1</i>	<i>7.2</i>	<i>9.2</i>	<i>6.9</i>	<i>7.2</i>	<i>9.5</i>	
US Equity Composite	949,401,747	36.3	-0.8	11.3	11.4	15.1	11.8	10.2	11.5	Aug-84
<i>Russell 3000 Hybrid</i>			<i>-0.7</i>	<i>11.4</i>	<i>11.4</i>	<i>15.1</i>	<i>11.7</i>	<i>10.2</i>	<i>--</i>	
Non-US Equity Composite	665,326,959	25.5	3.5	12.5	8.7	10.7	4.8	6.1	6.7	Jul-95
<i>MSCI ACWI xUS (blend)</i>			<i>3.7</i>	<i>12.5</i>	<i>8.6</i>	<i>10.6</i>	<i>5.3</i>	<i>5.9</i>	<i>5.6</i>	
Covered Calls Composite	359,784,348	13.8	-1.3	8.4	8.3	11.0	8.2	--	9.0	Feb-14
<i>Cboe S&P 500 Buy Write Index</i>			<i>-1.6</i>	<i>9.5</i>	<i>5.7</i>	<i>10.3</i>	<i>6.1</i>	<i>5.6</i>	<i>6.4</i>	
Real Estate Composite	52,987,518	2.0	0.0	14.4	0.8	7.9	7.2	--	6.2	Jan-07
<i>Real Estate Composite Benchmark</i>			<i>0.0</i>	<i>13.1</i>	<i>1.8</i>	<i>7.6</i>	<i>6.6</i>	<i>7.8</i>	<i>6.8</i>	
Fixed Income Composite	574,754,169	22.0	0.4	8.0	3.1	1.3	2.4	3.6	6.6	Aug-84
<i>Fixed Income Composite Benchmark</i>			<i>0.3</i>	<i>7.7</i>	<i>2.9</i>	<i>1.0</i>	<i>2.2</i>	<i>3.5</i>	<i>6.3</i>	
Cash Composite	10,756,239	0.4	0.9	4.8	4.2	2.7	2.1	2.0	2.9	Apr-96
<i>FTSE 3 Month T-Bill</i>			<i>0.4</i>	<i>5.1</i>	<i>4.5</i>	<i>2.7</i>	<i>1.9</i>	<i>1.7</i>	<i>2.3</i>	

Benchmark definitions are listed at the end of this report.

Manager Performance - Gross of Fees | As of April 30, 2025

	Market Value (\$)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
EBMUDERS Total Plan Composite	2,613,010,980	0.5	10.2	7.5	9.4
<i>Total Plan Bench</i>		<i>0.5</i>	<i>10.1</i>	<i>7.2</i>	<i>9.2</i>
US Equity Composite	949,401,747	-0.8	11.3	11.4	15.1
<i>Russell 3000 Hybrid</i>		<i>-0.7</i>	<i>11.4</i>	<i>11.4</i>	<i>15.1</i>
Northern Trust Russell 3000	948,595,836	-0.8	11.3	11.4	15.1
<i>Russell 3000 Index</i>		<i>-0.7</i>	<i>11.4</i>	<i>11.4</i>	<i>15.1</i>
Non US Equity Composite	665,326,959	3.5	12.5	8.7	10.7
<i>MSCI ACWI xUS (blend)</i>		<i>3.7</i>	<i>12.5</i>	<i>8.6</i>	<i>10.6</i>
Northern Trust ACWI ex US	665,326,959	3.5	12.5	8.7	10.3
<i>MSCI AC World ex USA index</i>		<i>3.7</i>	<i>12.5</i>	<i>8.6</i>	<i>10.6</i>
Covered Calls Composite	359,784,348	-1.3	8.4	8.3	11.0
<i>Cboe S&P 500 Buy Write Index</i>		<i>-1.6</i>	<i>9.5</i>	<i>5.7</i>	<i>10.3</i>
Parametric BXM	175,008,117	-1.9	7.3	7.7	11.1
<i>Cboe S&P 500 Buy Write Index</i>		<i>-1.6</i>	<i>9.5</i>	<i>5.7</i>	<i>10.3</i>
Parametric Delta Shift	184,776,231	-0.8	9.9	9.8	14.1
<i>Cboe S&P 500 Buy Write Index</i>		<i>-1.6</i>	<i>9.5</i>	<i>5.7</i>	<i>10.3</i>

Manager Performance - Gross of Fees | As of April 30, 2025

	Market Value (\$)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Core Fixed Income Composite	450,399,729	0.5	8.7	2.4	0.2
<i>Fixed Income Core Composite Bench</i>		<i>0.4</i>	<i>8.0</i>	<i>2.1</i>	<i>-0.2</i>
CS McKee	227,887,693	0.4	8.2	2.6	-0.2
<i>Blmbg. U.S. Aggregate Index</i>		<i>0.4</i>	<i>8.0</i>	<i>2.0</i>	<i>-0.7</i>
Garcia Hamilton	222,512,036	0.7	9.2	2.3	0.6
<i>Garcia Hamilton Blended Benchmark</i>		<i>0.4</i>	<i>8.0</i>	<i>2.2</i>	<i>0.2</i>
Non-Core Fixed Income Composite	124,354,440	0.0	5.4	5.5	5.8
<i>Fixed Income Non-Core Composite Bench</i>		<i>0.0</i>	<i>6.5</i>	<i>6.2</i>	<i>6.2</i>
MacKay Shields (HY)	64,232,142	-0.1	6.1	6.5	6.8
<i>Mackay Shields Blended Benchmark</i>		<i>0.0</i>	<i>7.1</i>	<i>6.5</i>	<i>6.5</i>
Federated Investment Counseling (Bank Loans)	60,122,298	0.1	5.0	4.6	4.8
<i>Federated Investment Counseling Blended Benchmark</i>		<i>-0.1</i>	<i>5.9</i>	<i>6.0</i>	<i>5.8</i>
Real Estate Composite	52,987,518	0.0	14.4	0.8	7.9
<i>Real Estate Composite Benchmark</i>		<i>0.0</i>	<i>13.1</i>	<i>1.8</i>	<i>7.6</i>
RREEF America II Lag	52,987,518	0.0	-0.5	-2.9	2.9
<i>NCREIF NPI Lag</i>		<i>0.0</i>	<i>0.4</i>	<i>-0.8</i>	<i>3.1</i>

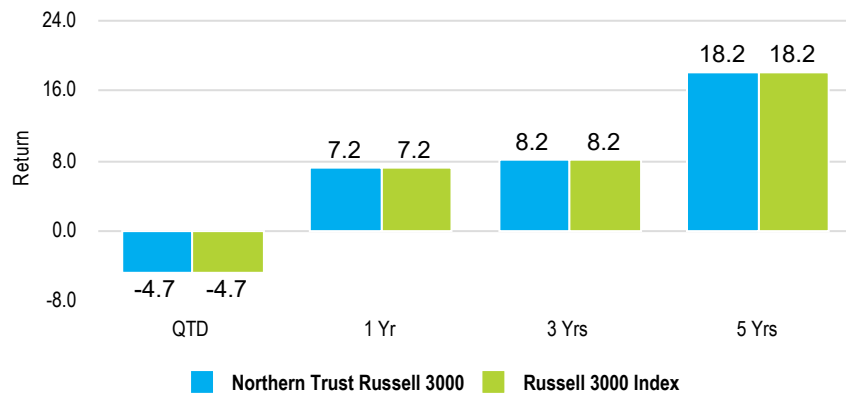
Manager Performance - Gross of Fees | As of April 30, 2025

	Market Value (\$)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Cash Composite	10,756,239	0.9	4.8	4.2	2.7
Cash LAIF	10,756,239	0.9	4.8	4.2	2.7
<i>FTSE 3 Month T-Bill</i>		<i>0.4</i>	<i>5.1</i>	<i>4.5</i>	<i>2.7</i>

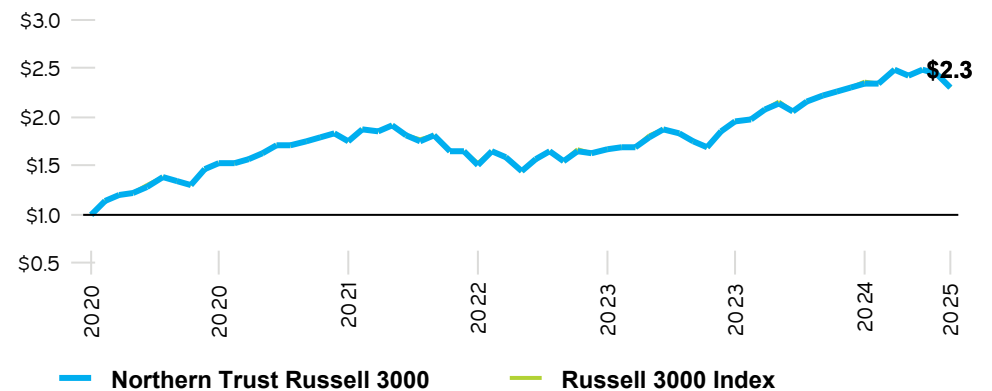
Statistics Summary 5 Years Ending March 31, 2025

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Northern Trust Russell 3000	0.0	1.0	-0.6	0.9	0.1	1.0	99.8	99.9
Russell 3000 Index	0.0	1.0	-	0.9	0.0	1.0	100.0	100.0

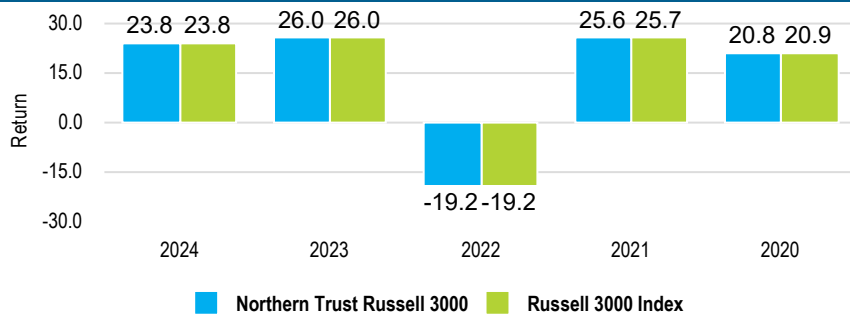
Return Summary



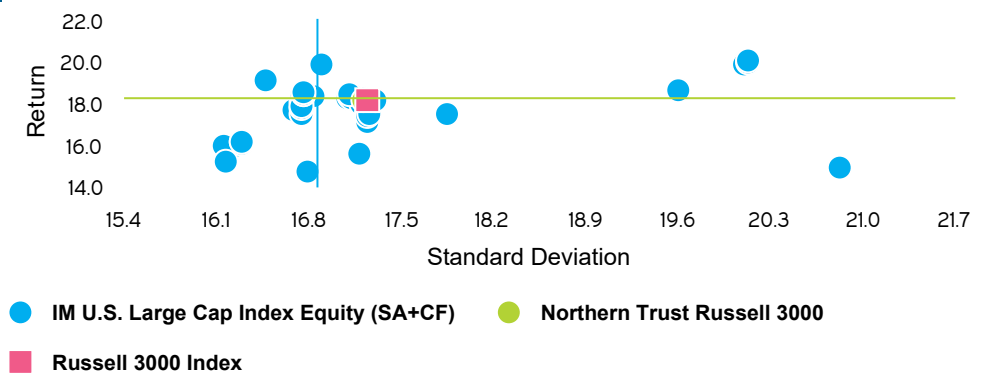
Investment Growth



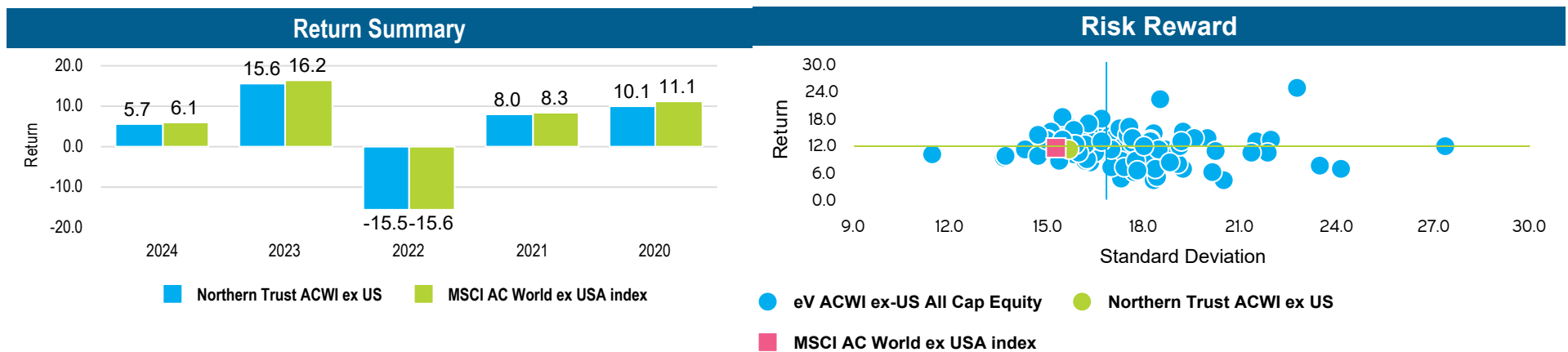
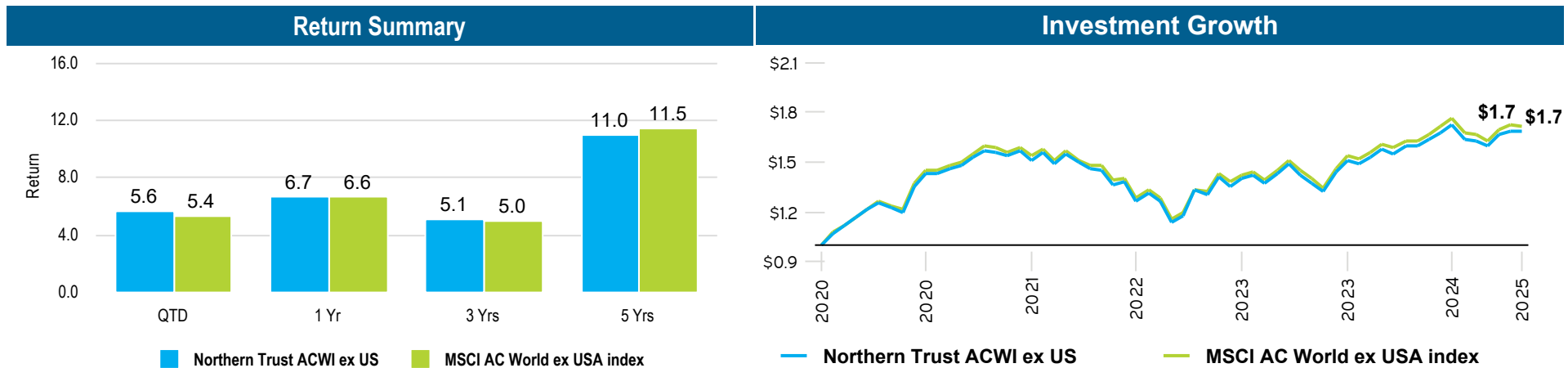
Return Summary



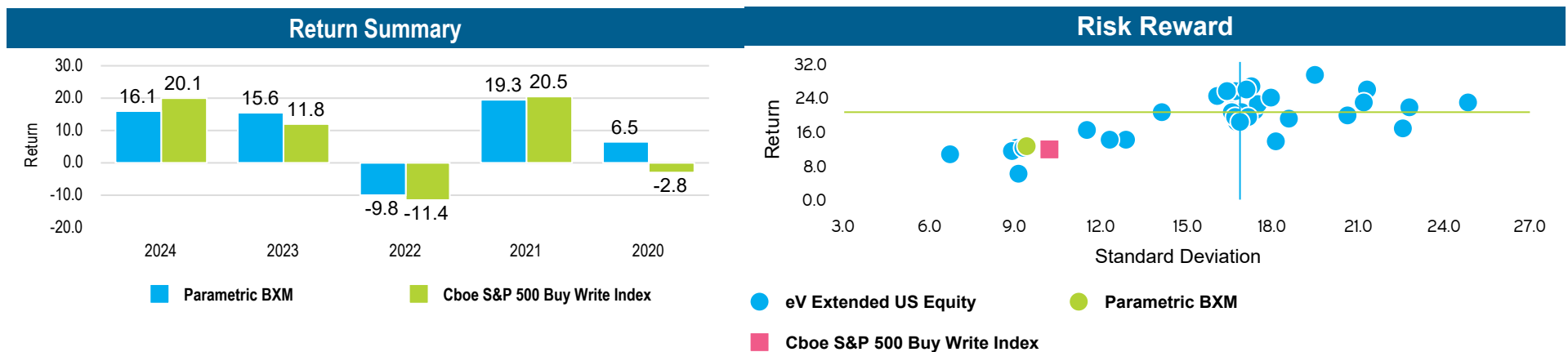
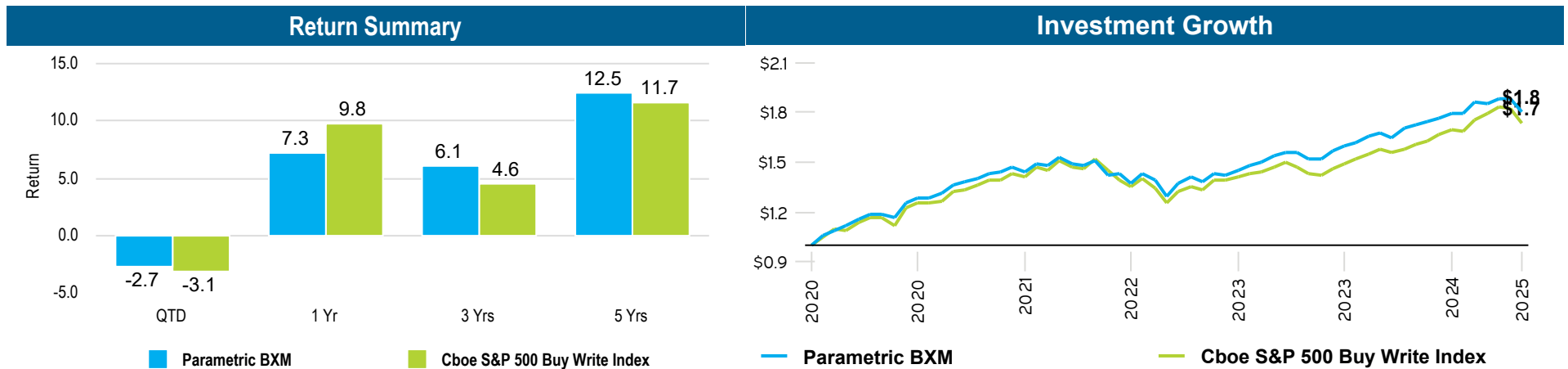
Risk Reward



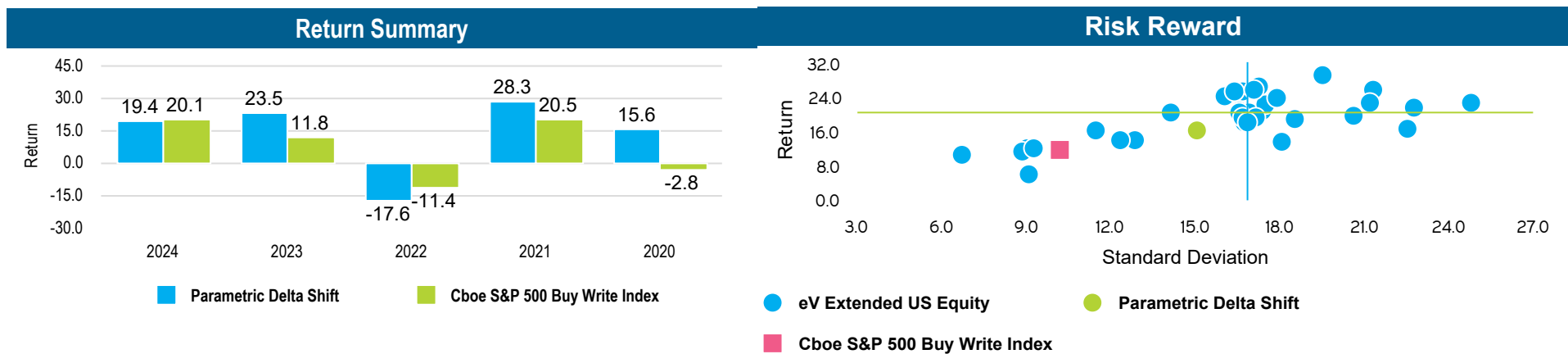
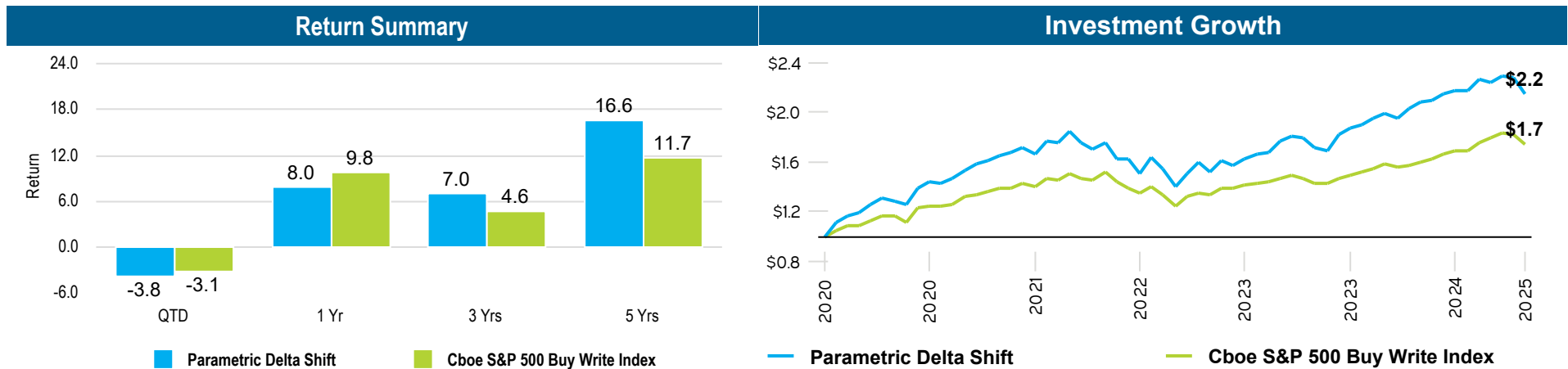
Statistics Summary 5 Years Ending March 31, 2025								
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Northern Trust ACWI ex US	-0.6	1.0	-0.2	0.6	1.7	1.0	101.6	104.9
MSCI AC World ex USA index	0.0	1.0	-	0.6	0.0	1.0	100.0	100.0



Statistics Summary 5 Years Ending March 31, 2025								
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Parametric BXM	2.4	0.9	0.2	1.0	3.9	0.9	94.5	80.3
Cboe S&P 500 Buy Write Index	0.0	1.0	-	0.9	0.0	1.0	100.0	100.0

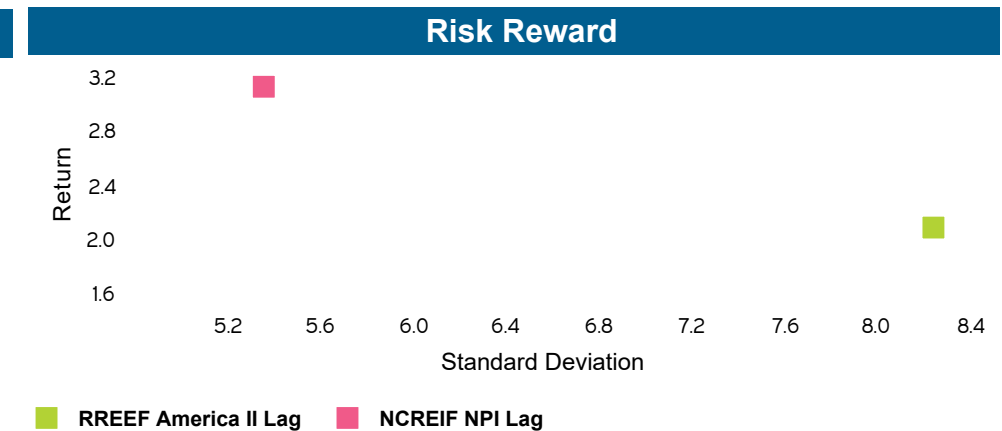
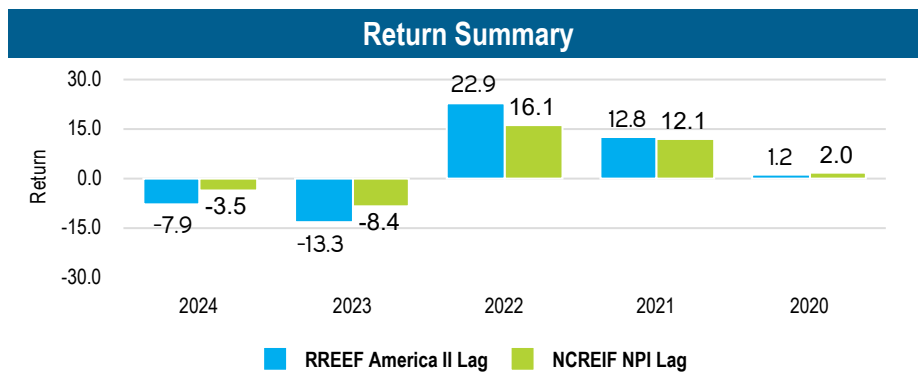
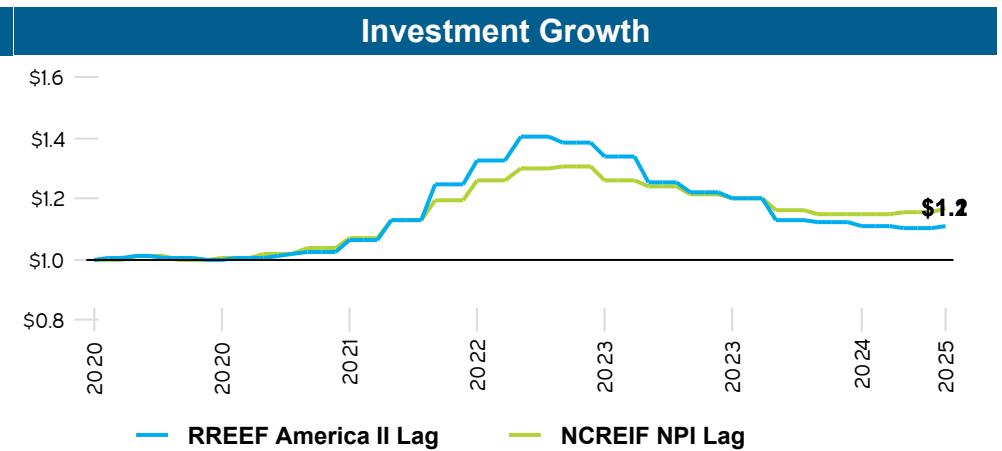
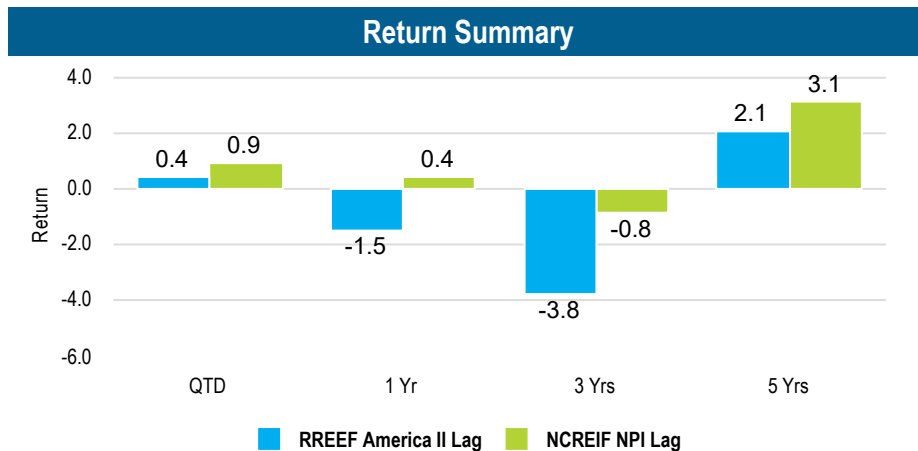


Statistics Summary 5 Years Ending March 31, 2025									
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture	
Parametric Delta Shift	1.2	1.3	0.7	0.9	7.6	0.8	142.9	143.5	
Cboe S&P 500 Buy Write Index	0.0	1.0	-	0.9	0.0	1.0	100.0	100.0	



RREEF American II Lag | As of March 31, 2025

Statistics Summary 5 Years Ending March 31, 2025								
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
RREEF America II Lag	-2.0	1.4	-0.2	0.0	3.8	0.8	112.0	155.9
NCREIF NPI Lag	0.0	1.0	-	0.1	0.0	1.0	100.0	100.0

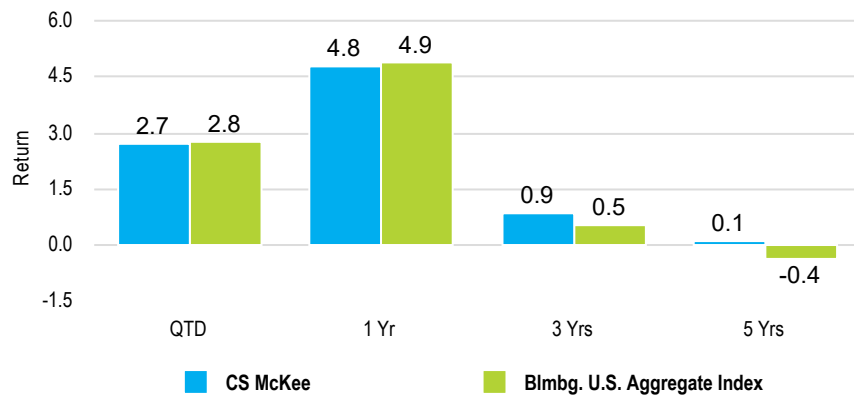


CS McKee | As of March 31, 2025

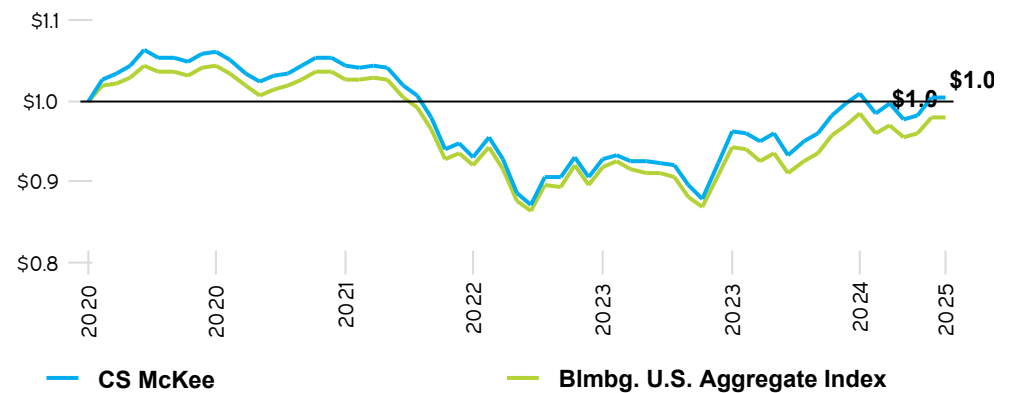
Statistics Summary 5 Years Ending March 31, 2025

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
CS McKee	0.5	1.0	0.7	-0.3	0.7	1.0	107.0	100.9
Blmbg. U.S. Aggregate Index	0.0	1.0	-	-0.4	0.0	1.0	100.0	100.0

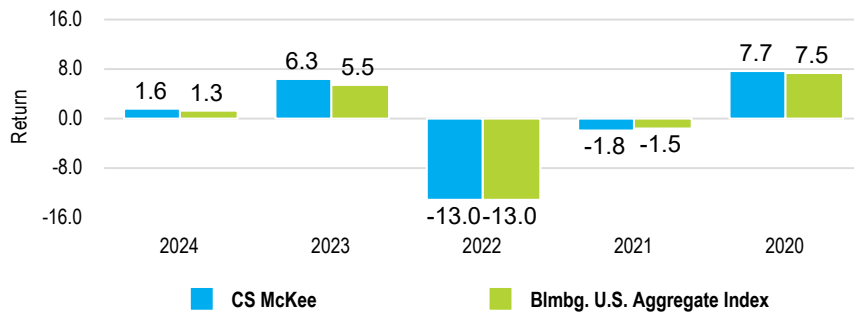
Return Summary



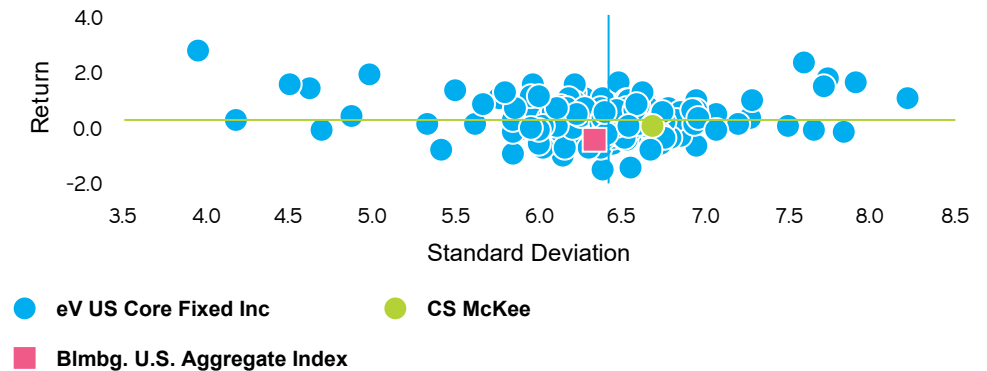
Investment Growth



Return Summary



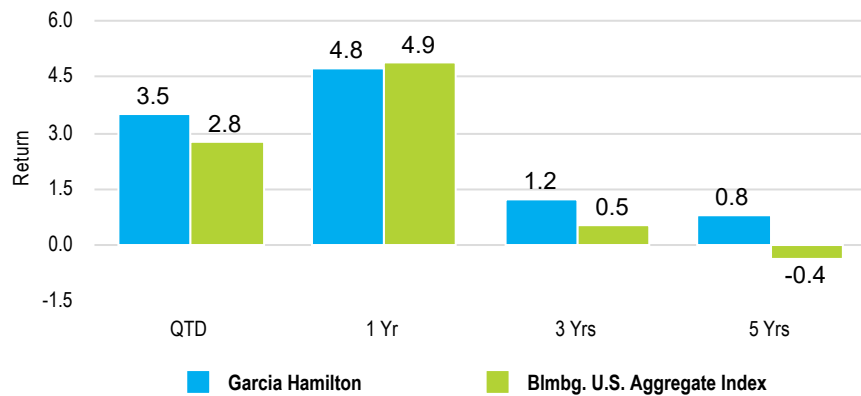
Risk Reward



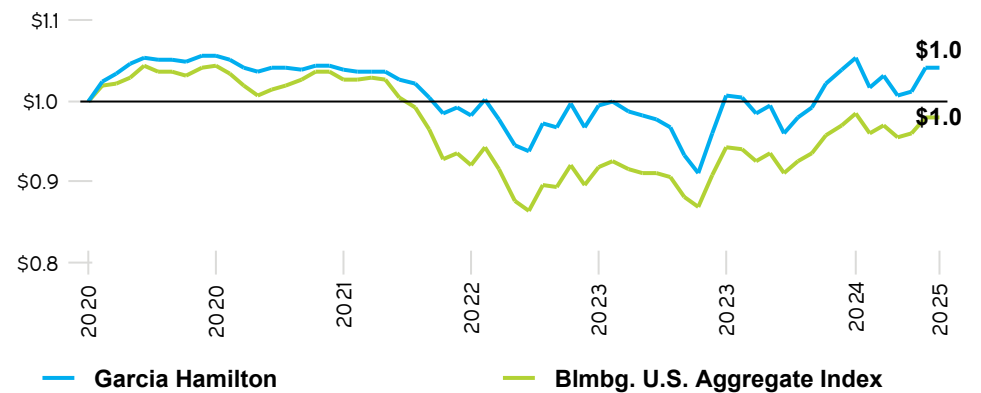
Statistics Summary 5 Years Ending March 31, 2025

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Garcia Hamilton	1.2	1.0	0.6	-0.2	2.0	0.9	107.0	92.7
Blmbg. U.S. Aggregate Index	0.0	1.0	-	-0.4	0.0	1.0	100.0	100.0

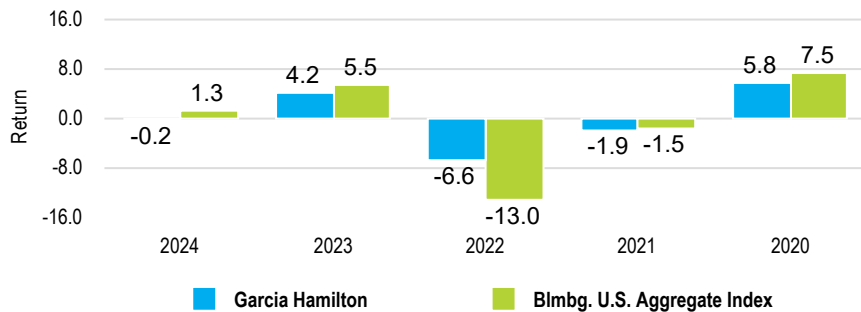
Return Summary



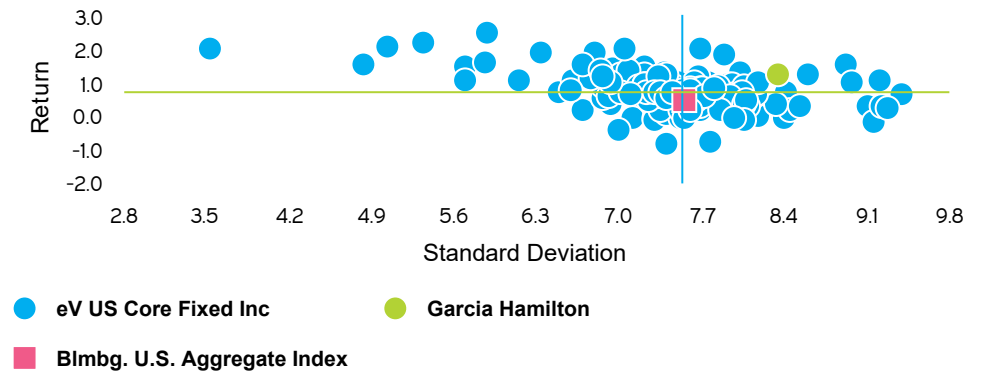
Investment Growth



Return Summary

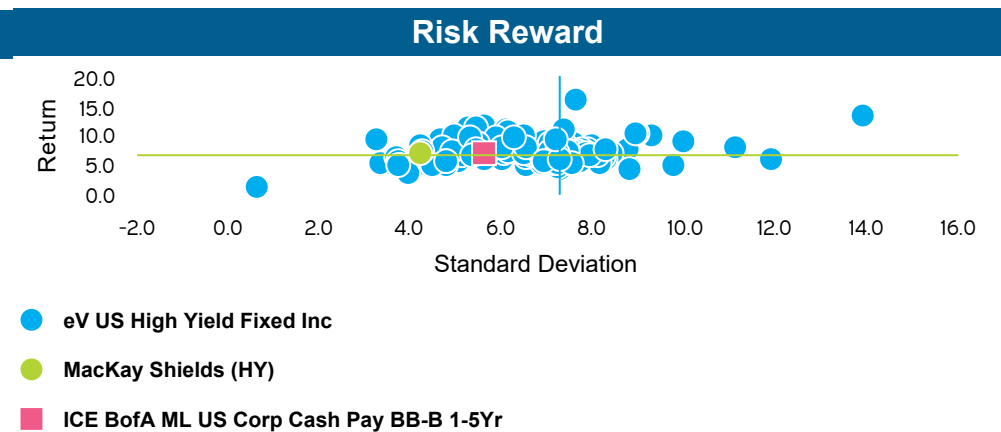
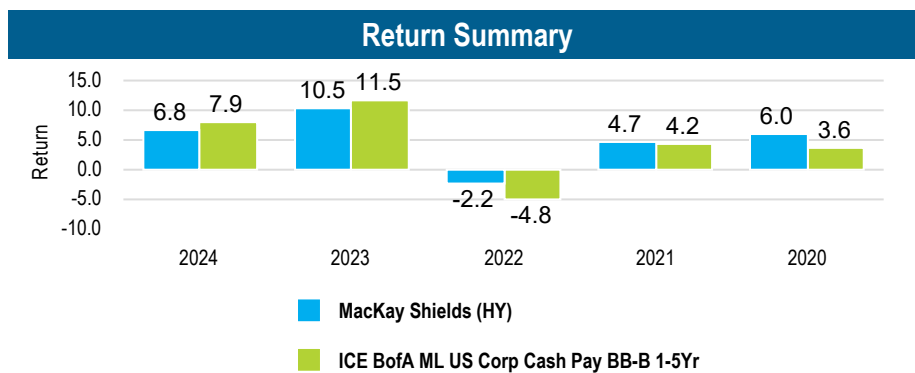
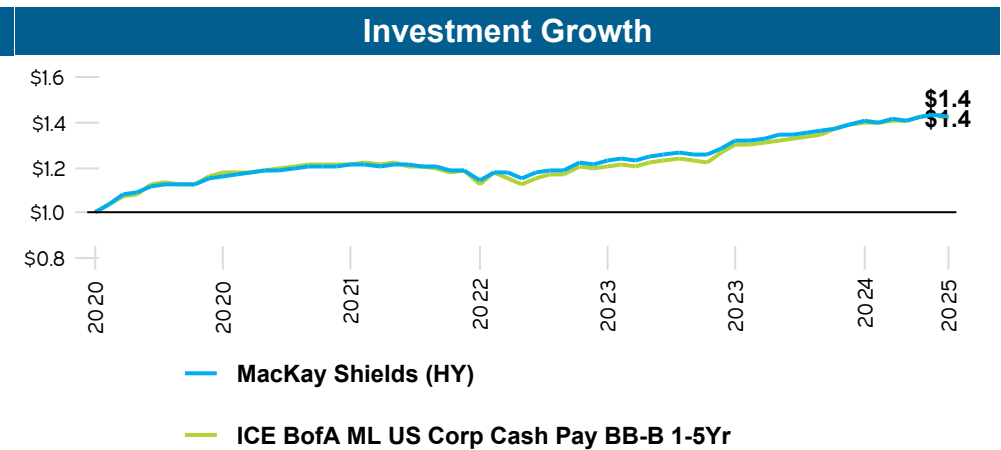
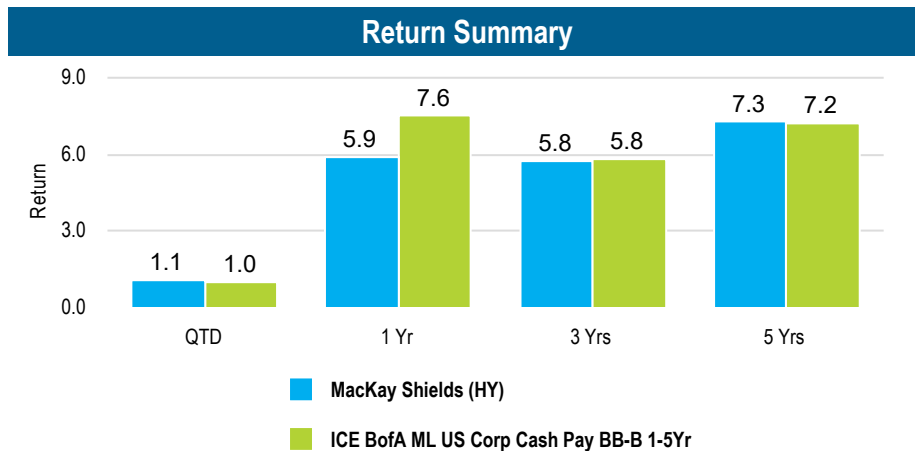


Risk Reward



Mackay Shields | As of March 31, 2025

Statistics Summary 5 Years Ending March 31, 2025								
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Mackay Shields (HY)	1.9	0.7	0.0	1.1	1.9	0.9	83.4	55.2
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr	0.0	1.0	-	0.8	0.0	1.0	100.0	100.0

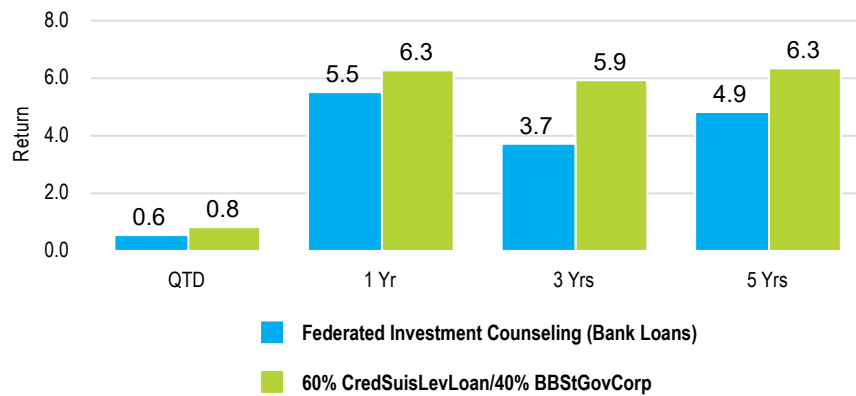


Federated Investment Counseling (Bank Loans) | As of March 31, 2025

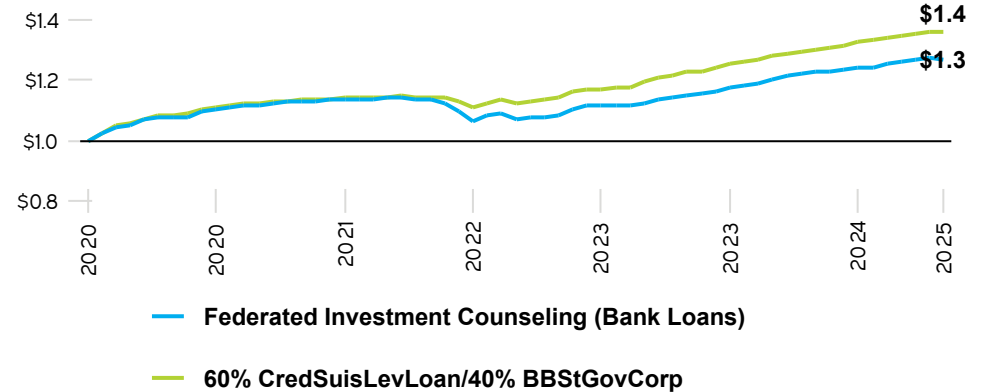
Statistics Summary 5 Years Ending March 31, 2025

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Federated Investment Counseling (Bank Loans)	-2.8	1.2	-1.0	0.7	1.4	0.8	92.2	192.1
60% CredSuisLevLoan/40% BBStGovCorp	0.0	1.0	-	1.6	0.0	1.0	100.0	100.0

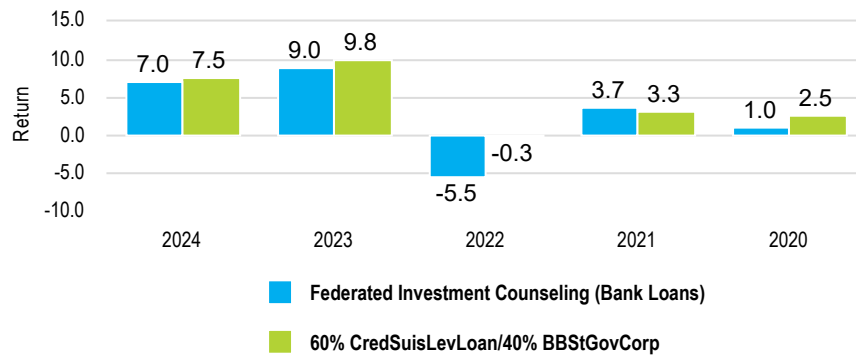
Return Summary



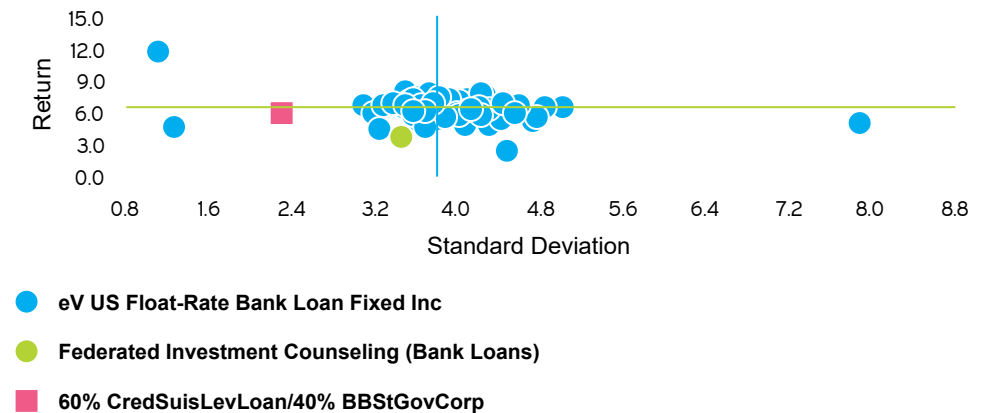
Investment Growth



Return Summary



Risk Reward



Benchmark History		
From Date	To Date	Benchmark
EBMUDERS Total Plan Composite		
10/01/2024	Present	33.5% Russell 3000 Index, 20.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 14.0% Cboe S&P 500 Buy Write Index, 2.5% S&P UBS Leveraged Loans, 2.5% Blmbg. U.S. Corp: High Yield Index
02/01/2023	10/01/2024	2.5% Real Estate Composite, 25.0% Russell 3000 Index, 20.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 20.0% Cboe S&P 500 Buy Write Index, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
12/01/2019	02/01/2023	2.5% Real Estate Composite, 25.0% Russell 3000 Index, 10.0% Blmbg. Intermed. U.S. Government/Credit, 10.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 20.0% Cboe S&P 500 Buy Write Index, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	2.5% Real Estate Composite, 25.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 15.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 20.0% Cboe S&P 500 Buy Write Index, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% 50% BBG EM Hard Cur Agg: Sovereign/50% BBG EM USD Aggregate Corporate TR
07/01/2018	03/01/2019	2.5% Real Estate Composite, 25.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 15.0% Blmbg. U.S. Aggregate Index, 25.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
04/01/2014	07/01/2018	2.5% Real Estate Composite, 40.0% Russell 3000 Index, 5.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 10.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
03/01/2014	04/01/2014	2.5% Real Estate Composite, 40.0% Russell 3000 Index, 15.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index, 2.5% Morningstar LSTA U.S. Performing Loans, 2.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%, 20.0% Cboe S&P 500 Buy Write Index, 2.5% NCREIF NPI Lag
11/01/2011	03/01/2014	2.5% Real Estate Composite, 50.0% Russell 3000 Index, 20.0% MSCI AC World ex USA index, 25.0% Blmbg. U.S. Universal Index, 2.5% NCREIF NPI Lag
01/01/2008	11/01/2011	50.0% Russell 3000 Index, 20.0% MSCI AC World ex USA index, 25.0% Blmbg. U.S. Universal Index, 5.0% NCREIF NPI Lag
01/01/2007	01/01/2008	50.0% Russell 3000 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI AC World ex USA index, 5.0% NCREIF NPI Lag
10/01/2005	01/01/2007	50.0% Russell 3000 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag
04/01/2005	10/01/2005	10.0% Russell 2000 Index, 30.0% S&P 500 Index, 10.0% S&P MidCap 400 Index, 25.0% Blmbg. U.S. Aggregate Index, 20.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag
09/01/1998	04/01/2005	10.0% Russell 2000 Index, 33.0% S&P 500 Index, 10.0% S&P MidCap 400 Index, 30.0% Blmbg. U.S. Aggregate Index, 17.0% MSCI EAFE (Net)

Benchmark History | As of March 31, 2025

From Date	To Date	Benchmark
07/01/1978	09/01/1998	30.0% S&P 500 Index, 30.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill, 15.0% MSCI EAFE (Net), 5.0% NCREIF NPI Lag, 15.0% Wilshire 5000 Total Market Index

Fixed Income Composite

10/01/2024	Present	80.0% Blmbg. U.S. Aggregate Index, 10.0% S&P UBS Leveraged Loans, 10.0% Blmbg. U.S. Corp: High Yield Index
02/01/2023	10/01/2024	80.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
12/01/2019	02/01/2023	40.0% Blmbg. Intermed. U.S. Government/Credit, 40.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	20.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 60.0% Blmbg. U.S. Aggregate Index, 10.0% 60% CredSuisLevLoan/40% BBStGovCorp, 10.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
07/01/2018	03/01/2019	20.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 60.0% Blmbg. U.S. Aggregate Index, 10.0% Morningstar LSTA U.S. Performing Loans, 10.0% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
04/01/2014	07/01/2018	25.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 50.0% Blmbg. U.S. Aggregate Index, 12.5% Morningstar LSTA U.S. Performing Loans, 12.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
03/01/2014	04/01/2014	75.0% Blmbg. U.S. Aggregate Index, 12.5% Morningstar LSTA U.S. Performing Loans, 12.5% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%
01/01/2008	03/01/2014	100.0% Blmbg. U.S. Universal Index
01/01/1976	01/01/2008	100.0% Blmbg. U.S. Aggregate Index

Fixed Income Core Fixed Income Composite

02/01/2023	Present	100.0% Blmbg. U.S. Aggregate Index
12/01/2019	02/01/2023	50.0% Blmbg. Intermed. U.S. Government/Credit, 50.0% Blmbg. U.S. Aggregate Index

Fixed Income Non-Core Fixed Income Composite

10/01/2024	Present	50.0% S&P UBS Leveraged Loans, 50.0% Blmbg. U.S. Corp: High Yield Index
12/01/2019	10/01/2024	50.0% 60% CredSuisLevLoan/40% BBStGovCorp, 50.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2019	12/01/2019	50.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 25.0% 60% CredSuisLevLoan/40% BBStGovCorp, 25.0% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
03/01/2014	03/01/2019	50.0% Bloomberg U.S. Gov/Credit 1-3 Year Index, 25.0% Morningstar LSTA U.S. Performing Loans, 25.0% Blmbg. U.S. High Yield 1-5 Yr Cash Pay 2%

Manager Watch Screens

Northern Trust Russell 3000| As of March 31, 2025

Manager Performance			
	QTD	1 Yr	3 Yrs
Northern Trust Russell 3000	-4.7	7.2	8.2
Russell 3000 Index	-4.7	7.2	8.2

Short-Term Criteria (rolling 12-month periods)

Tracking Error > 0.30% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Tracking Error > 0.25% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

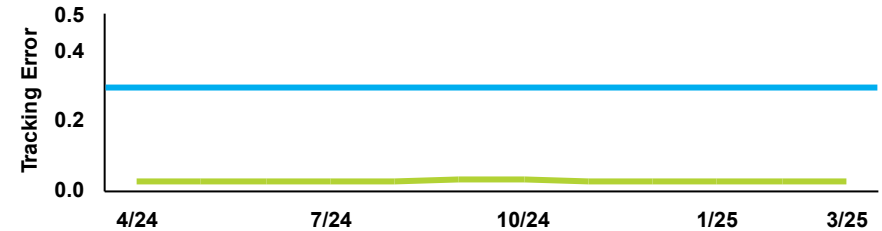
Fund annualized return < benchmark annualized return -0.40% for 6 consecutive months

Current Status: **Acceptable**

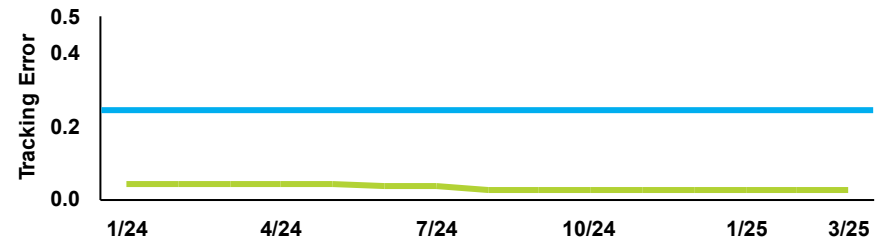
Overall Status:

Acceptable

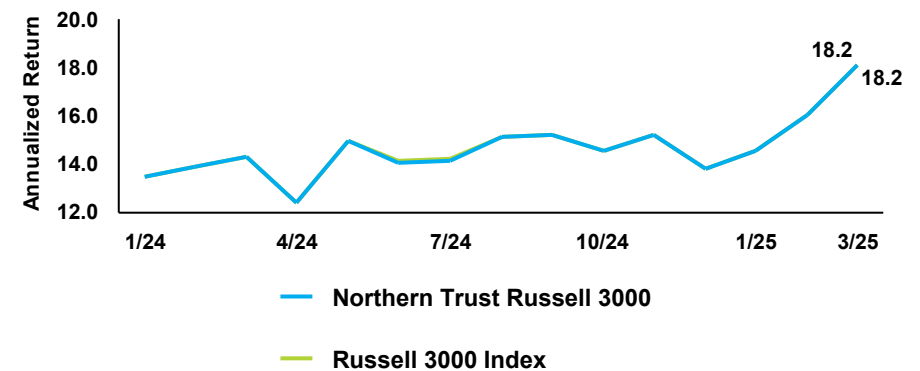
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Medium-Term Performance Evaluation



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Northern Trust ACWI ex US	5.6	6.7	5.1	11.0
MSCI AC World ex USA index	5.4	6.6	5.0	11.5

Short-Term Criteria (rolling 12-month periods)

Tracking Error > 1.75% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Tracking Error > 1.5% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

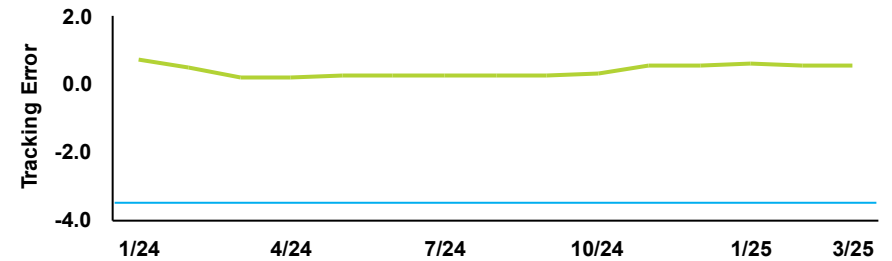
Fund annualized return < benchmark annualized return -0.50% for 6 consecutive months

Current Status: **Acceptable**

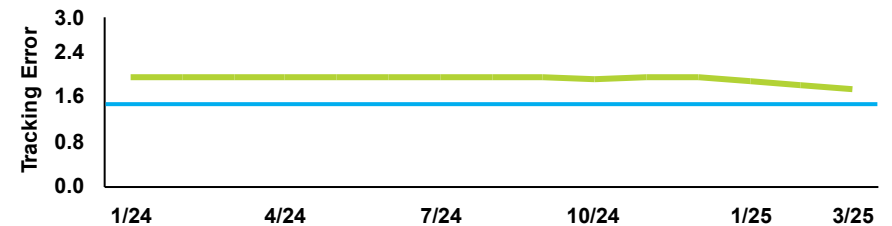
Overall Status:

Acceptable

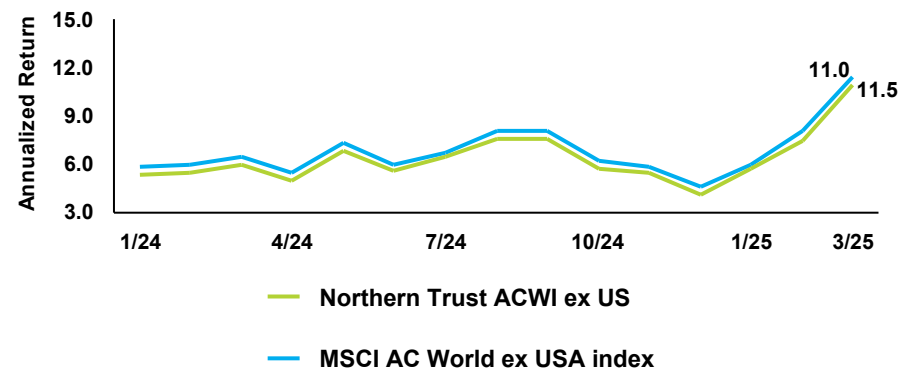
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance Evaluation



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Parametric BXM	-2.7	7.3	6.1	12.5
Cboe S&P 500 Buy Write Index	-3.1	9.8	4.6	11.7

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

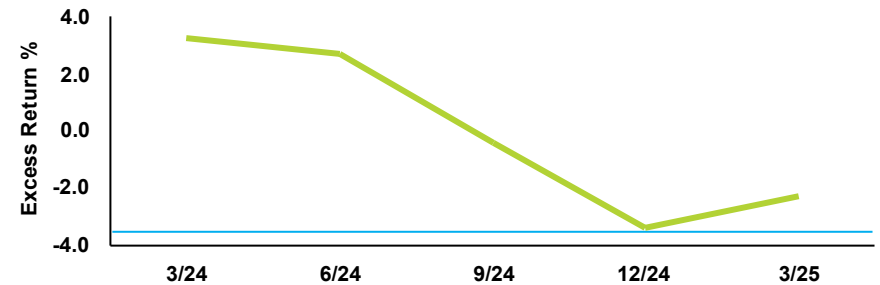
VRR < 0.97 for 6 consecutive months

Current Status: **Acceptable**

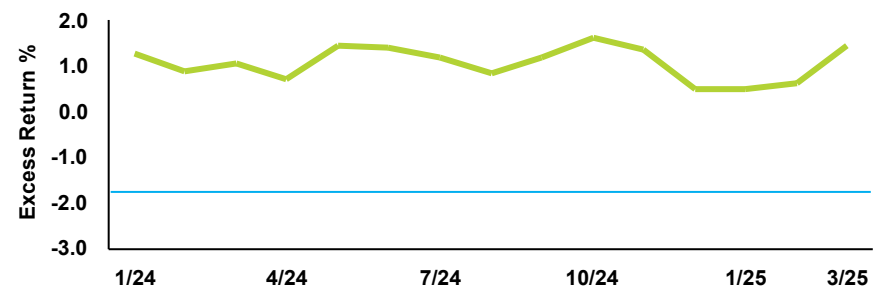
Overall Status:

Acceptable

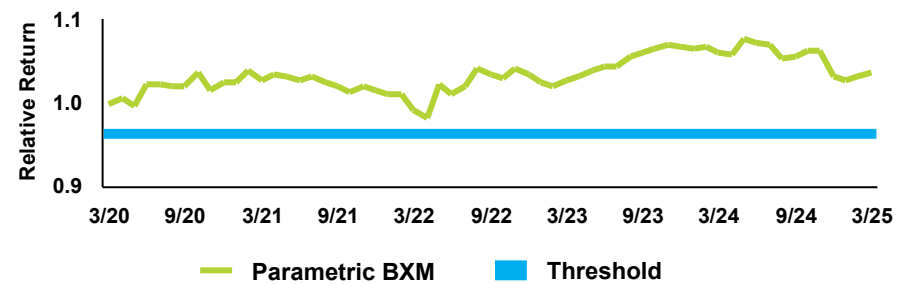
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance



Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs (%)
Parametric Delta Shift	-3.8	8.0	7.0	16.6
Cboe S&P 500 Buy Write Index	-3.1	9.8	4.6	11.7

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

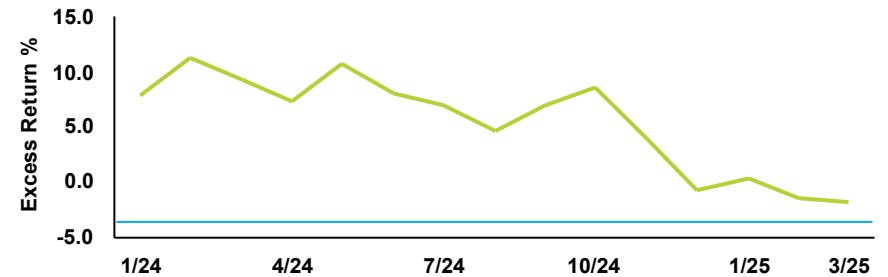
VRR < 0.97 for 6 consecutive months

Current Status: **Acceptable**

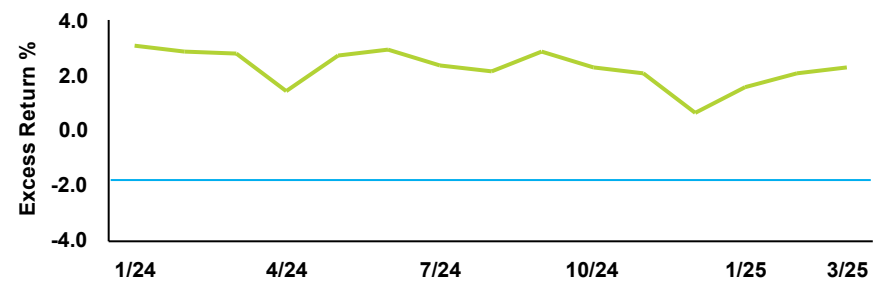
Overall Status:

Acceptable

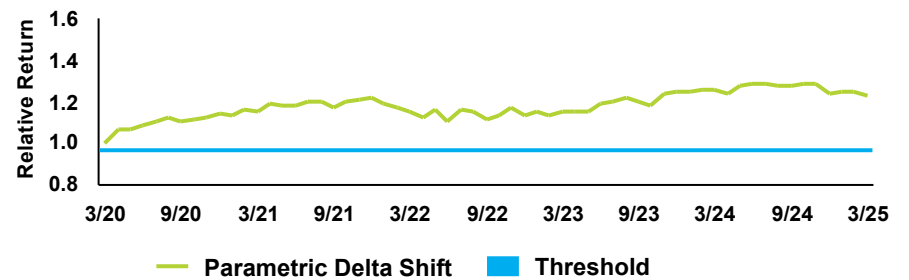
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance Evaluation



— Parametric Delta Shift — Threshold

Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
CS McKee	2.7	4.8	0.9	0.1
Bmbg. U.S. Aggregate Index	2.8	4.9	0.5	-0.4

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -1.5% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

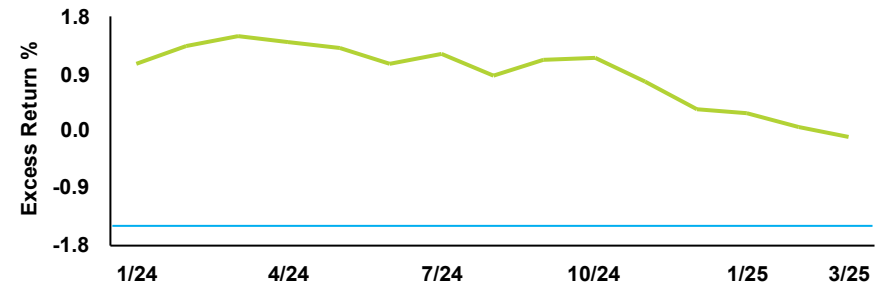
VRR < 0.98 for 6 consecutive months

Current Status: **Acceptable**

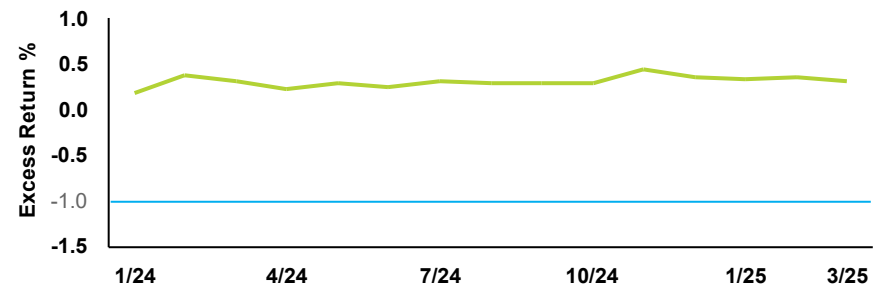
Overall Status:

Acceptable

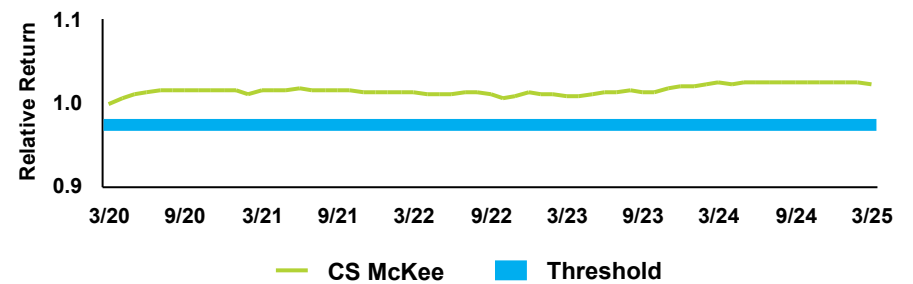
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance



Manager Performance			
	QTD	1 Yr	3 Yrs
Garcia Hamilton	3.5	4.8	1.2
BImbg. U.S. Aggregate Index	2.8	4.9	0.5

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -1.5% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

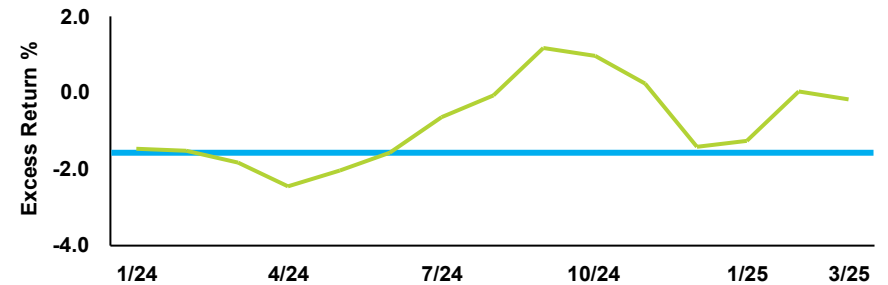
VRR < 0.98 for 6 consecutive months

Current Status: **Acceptable**

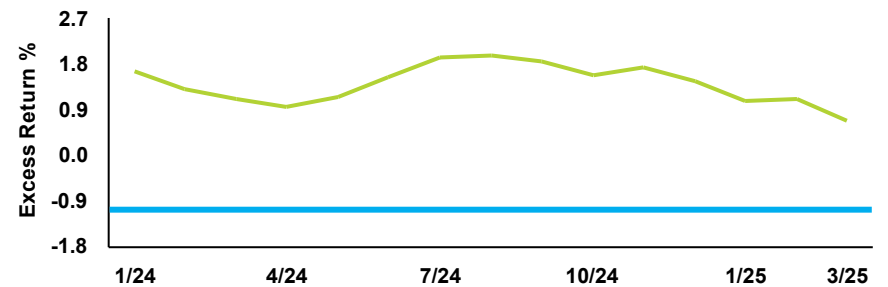
Overall Status:

Acceptable

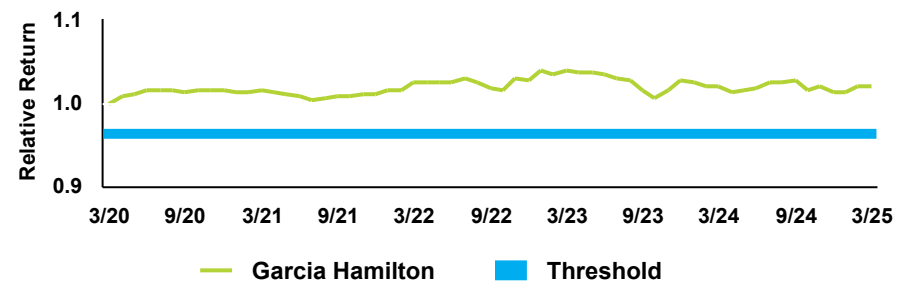
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance



Manager Performance			
	QTD	1 Yr	3 Yrs
Mackay Shields (HY)	1.1	5.9	5.8
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr	1.0	7.6	5.8

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

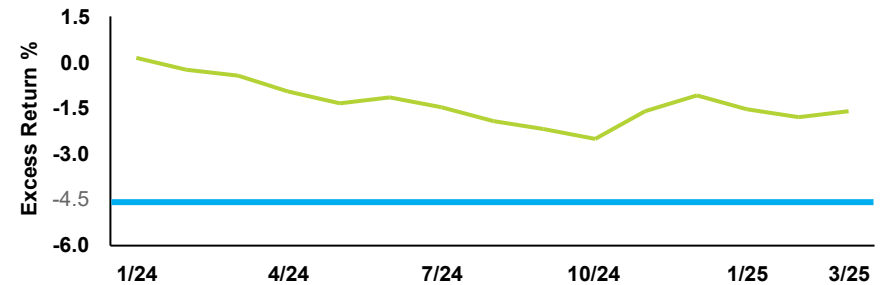
VRR < 0.97 for 6 consecutive months

Current Status: Not Applicable

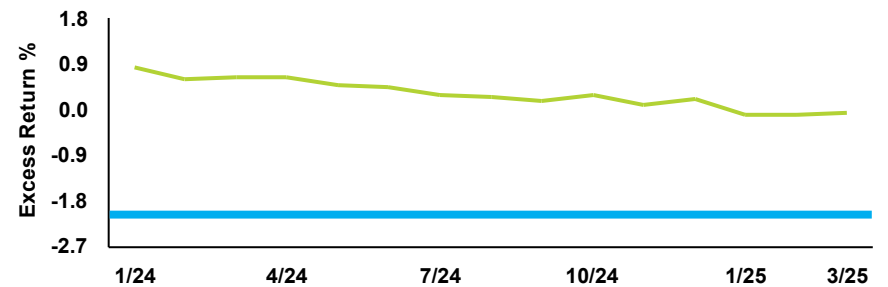
Overall Status:

Acceptable

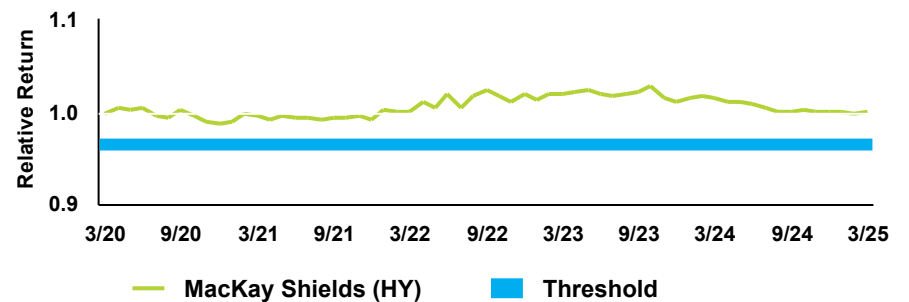
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance



Manager Performance			
	QTD	1 Yr	3 Yrs
Federated Investment Counseling (Bank Loans)	0.6	5.5	3.7
60% CredSuisLevLoan/40% BBStGovCorp	0.8	6.3	5.9

Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

Current Status: **Acceptable**

Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

Current Status: **Acceptable**

Long-Term Criteria (60+ months)

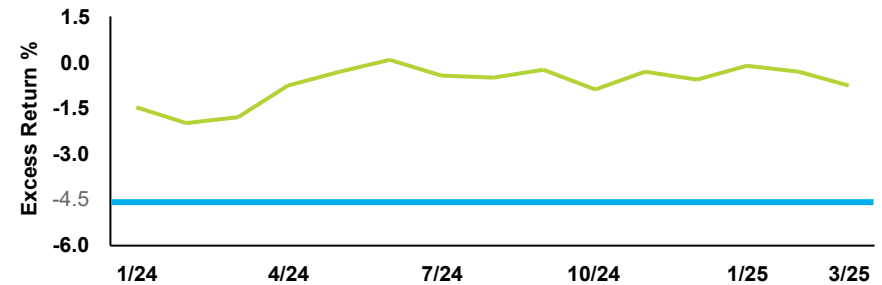
VRR < 0.97 for 6 consecutive months

Current Status: **Acceptable**

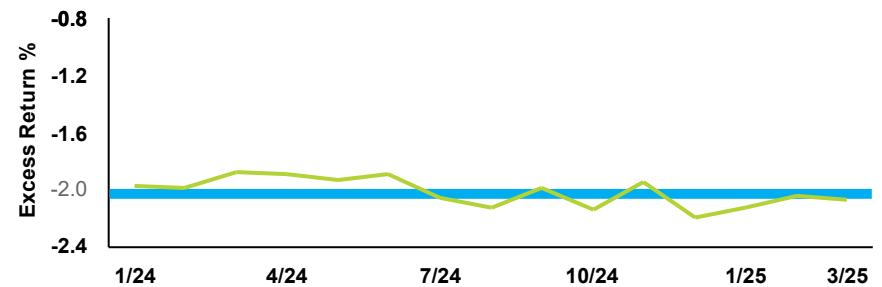
Overall Status:

Acceptable

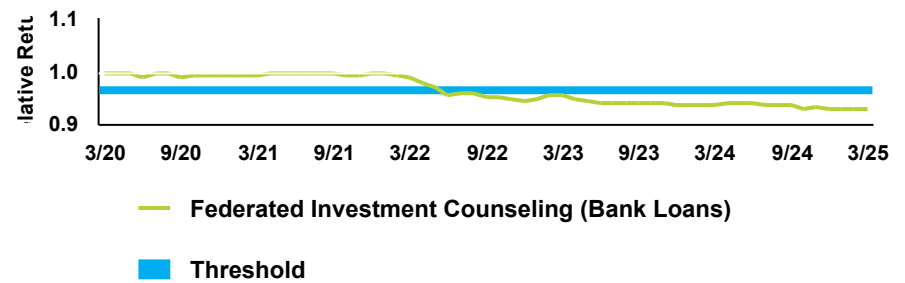
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance



Performance Monitoring Summary

Portfolio	Violation Type (Window) ¹	Date of Initial Violation	Correction Action(s)	Current Status			
				Current Status	Est. Beg. Date of Current Status	Months Since Est. Beg. Date	Performance Since Est. Beg. Date ²³
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--	--	--	--	--	--	--	--

→ No managers are currently on watch.

¹ Defined as: Short-Term (12 months), Medium-Term (36 months), Long-Term (60 months).

² Annualized for periods greater than 12 months.

³ Performance figures not yet available.

Quantitative Compliance Monitoring per Watch Criteria

Active Management Criteria

- Active investment managers are expected to outperform their respective passive benchmarks related to both their asset class and investment style.
- Relative excess performance that falls below the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.

Passive Management Criteria

- Passive investment managers are expected to track the performance of their respective passive benchmarks related to both their asset class and their investment style.
- Tracking error is a measure of how closely a portfolio follows the index to which it is benchmarked.
- For short- and medium-term performance monitoring, a portfolio with tracking error that is above the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.
- For long-term performance monitoring, relative excess performance that falls below the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.

Quantitative Monitoring Results - Overall Status Summary

	Prior Qtr Status	Current Qtr Status
Northern Trust – R3000	Acceptable	Acceptable
Northern Trust – ACWIXUS	Acceptable	Acceptable
Parametric – BXM	Acceptable	Acceptable
Parametric – Delta Shift	Acceptable	Acceptable
Van Hulzen	Acceptable	Acceptable
CS McKee	Acceptable	Acceptable
Garcia Hamilton	Acceptable	Acceptable
Mackay Shields – Short Term HY	Acceptable	Acceptable
Federated – Bank Loans	Acceptable	Acceptable
CenterSquare	Acceptable	Acceptable

Investment Performance Criteria by Asset Class

Asset Class	Short-term (rolling 12-month periods)	Medium-term (rolling 36-month periods)	Long-term (60+ months)
Domestic Equity - Passive	Tracking error > 0.30%	Tracking error > 0.25% for 6 consecutive months	Fund annualized return < benchmark annualized return -0.40% for 6 consecutive months
Non-US Equity - Passive	Tracking error > 1.75%	Tracking error > 1.5% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.50% for 6 consecutive months
Covered Calls - Active	Fund return < benchmark return - 3.5%	Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls - Replication	Fund return < benchmark return - 3.5%	Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.40% for 6 consecutive months
Fixed Income - Core – Active	Fund return < benchmark return - 1.5%	Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months
Fixed Income - Core – Passive	Tracking error > 0.25%	Tracking error > 0.20% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.30% for 6 consecutive months
Fixed Income - Non-Core	Fund return < benchmark return - 4.5%	Fund annualized return < benchmark annualized return - 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months

All criteria are on an annualized basis.

VRR – Value Relative Ratio – is calculated as: manager cumulative return / benchmark cumulative return.

Manager Compliance Certification Responses

Manager Compliance Certification Responses

Qualitative Compliance Monitoring per EBMUDERS Investment Policy

Each of EBMUDERS managers is required to respond to a questionnaire on a quarterly basis to certify their compliance with EBMUDERS Investment Policy Statement and provide an update on specific qualitative indicators to be evaluated.

These indicators include:

- Compliance with the guidelines of 'Eligible Investments' for the manager's specific mandate
- Any litigation or governmental regulatory proceedings involving the firm/manager
- Changes to the manager's investment outlook, investment strategy, and/or portfolio structure
- Personnel changes to the investment team responsible for the EBMUDERS mandate
- Significant personnel changes at the management level of the firm
- Material client terminations
- Compliance with EBMUDERS current Investment Policy Statement

The manager's responses are rated based on the potential effects these factors could pose to the performance and management of the EBMUDERS portfolio.

Reasons for heightened concern triggering Watch status include, but are not limited to:

- Instability of key members of the portfolio management team and organization
- Changes in investment strategy and style
- Failure to comply with investment guidelines

A summary of manager responses as of the latest quarter-end is provided below.

Manager Compliance Certification Responses

Manager Compliance Certification Responses

Manager	Asset Class	Question 1 Compliance with 'Eligible Investments' for mandate	Question 2 Good standing as Registered Investment Advisor	Question 3 Litigation?	Question 4 Changes in manager's investment outlook, strategy, structure	Question 5 Investment team personnel changes	Question 6 Management level personnel changes	Question 7 Material business changes	Question 8 Compliance with IPS
Northern Trust R3000	Domestic Equity – All Cap	Yes	Yes	No	No	No	Yes*	No	Yes
Northern Trust ACWI ex US	International Equity	Yes	Yes	No	No	No	Yes*	No	Yes
Parametric	Covered Calls	Yes	Yes	No	No	No	Yes*	No	Yes
CS McKee	Fixed Income – Core	Yes	Yes	No	No	No	No	No	Yes
Garcia Hamilton	Fixed Income – Core	Yes	Yes	No	No	No	No	No	Yes
Mackay Shields	Fixed Income – Short-term HY	Yes	Yes	No	No	No	No	No	Yes
Federated	Fixed Income – Bank Loans	Yes	Yes	No	No	No	No	No	Yes
RREEF	Real Estate	Yes	Yes	No	No	No	No	No	Yes

■ no concern
 ■ low concern
 ■ high concern (Watch status)

* see detailed manager response below

Northern Trust – R3000 and ACWI ex US

Question 6: Have there been any significant personnel changes at the management level of the Firm during the quarter?

- **Senior Management Changes:** As a result of the constantly changing landscape of asset management, we believe the occasional organizational changes are a natural progression and necessary in order to adapt to new market and regulatory environments. The most recent changes to senior personnel are the following:
- January 2025: Darrell Hassler assumed the role of Head of Strategic Content.
 - March 2025: Eric Williams, Head of Capital Structure and Senior Portfolio Manager for our high yield strategies left the firm. With his departure, we recently hired five individuals to strengthen our credit investing, trading and fundamental credit research capabilities.

Parametric

Question 6: Have there been any significant personnel changes at the management level of the Firm during the quarter?

- Paul Bouchey, Managing Director and Global Head of Research, transitioned into a different role within Research. Effective January 1, 2025, his new title is Managing Director, Applied Research. Ben Davis, Managing Director, Research, stepped into the Global Head of Research role on January 1, 2025.
- Tom Seto, Head of Parametric Investment Management, retired effective February 2025. As part of this transition, effective January 1, 2025, Gordon Wotherspoon became Head of Equity SMA and Jennifer Mihara became Head of Equity Fund Management. Mr. Wotherspoon and Ms. Mihara both report into Brian Herscovici, COO of Investments for Parametric.
- After 14 years at Parametric, James Barrett, Managing Director and Head of Client Development, retired from Parametric, effective February 2025. James led the Parametric distribution and marketing teams.

Required California AB 2833 Disclosure – RREEF AMERICA II

Effective January 1, 2017 RREEF America REIT II, Inc. ("alternative investment vehicle") is required to provide to the East Bay Municipal Utility District ("public investment fund" or "District") specific information at least annually pursuant to Section 7514.7 of the California Government Code ("Section 7514.7").

1. The fees and expenses that the public investment fund pays directly to the alternative investment vehicle, the fund manager, or related parties.
 - EBMUD: includes intermediate and partnership fees – January 2024 – December 2024 = \$509,593.04
2. The public investment fund's pro rata share of fees and expenses not included in paragraph (1) that are paid from the alternative investment vehicle to the fund manager or related parties.

\$0.00
3. The public investment fund's pro rata share of carried interest distributed to the fund manager or related parties.

N/A
4. The public investment fund's pro rata share of aggregate fees and expenses paid by all of the portfolio companies held within the alternative investment vehicle to the fund manager or related parties.
 - EBMUD: includes intermediate and partnership fees – January 2024 – December 2024 = \$509,593.04
5. Any additional information described in subdivision (b) of Section 6254.26.

N/A
6. The gross and net rate of return of each alternative investment vehicle since inception.

Gross = 5.7% Net = 4.8% (as of December 31, 2024)¹
7. Any other information required to be collected pursuant to Section 7514.7.

N/A

¹ Please note that since inception returns provided represent the client's time frame in the Fund, and not the returns of the Fund as a whole.

Appendix

Glossary of Terms

Alpha: The premium an investment earns above a set standard. This is usually measured in terms of a common index (i.e., how the stock performs independent of the market). An Alpha is usually generated by regressing a security's excess return on the S&P 500 excess return.

Annualized Performance: The annual rate of return that when compounded t times generates the same t -period holding return as actually occurred from period 1 to period t .

Batting Average: Percentage of periods a portfolio outperforms a given index.

Beta: The measure of an asset's risk in relation to the Market (for example, the S&P 500) or to an alternative benchmark or factors. Roughly speaking, a security with a Beta of 1.5 will have moved, on average, 1.5 times the market return.

Bottom-up: A management style that de-emphasizes the significance of economic and market cycles, focusing instead on the analysis of individual stocks.

Dividend Discount Model: A method to value the common stock of a company that is based on the present value of the expected future dividends.

Growth Stocks: Common stock of a company that has an opportunity to invest money and earn more than the opportunity cost of capital.

Information Ratio: The ratio of annualized expected residual return to residual risk. A central measurement for active management, value added is proportional to the square of the information ratio.

R-Squared: Square of the correlation coefficient. The proportion of the variability in one series that can be explained by the variability of one or more other series a regression model. A measure of the quality of fit. 100% R-square means perfect predictability.

Standard Deviation: The square root of the variance. A measure of dispersion of a set of data from its mean.

Sharpe Ratio: A measure of a portfolio's excess return relative to the total variability of the portfolio.

Style Analysis: A returns-based analysis using a multi-factor attribution model. The model calculates a product's average exposure to particular investment styles over time (i.e., the product's normal style benchmark).

Top-down: Investment style that begins with an assessment of the overall economic environment and makes a general asset allocation decision regarding various sectors of the financial markets and various industries.

Tracking Error: The standard deviation of the difference between the performance of a portfolio and an appropriate benchmark.

Turnover: For mutual funds, a measure of trading activity during the previous year, expressed as a percentage of the average total assets of the fund. A turnover rate of 25% means that the value of trades represented one-fourth of the assets of the fund.

Value Stocks: Stocks with low price/book ratios or price/earnings ratios. Historically, value stocks have enjoyed higher average returns than growth stocks (stocks with high price/book or P/E ratios) in a variety of countries.

Definition of Benchmarks

BC Aggregate: an index comprised of approximately 6,000 publicly traded investment-grade bonds including U.S. Government, mortgage-backed, corporate, and yankee bonds with an approximate average maturity of 10 years.

BC High Yield: covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. Must be rated high-yield (Ba1/BB+ or lower) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. All issues must have at least one year to final maturity regardless of call features and have at least \$150 million par amount outstanding.

BC Multiverse Non-US Hedged: provides a broad-based measure of the international fixed-income bond market. The index represents the union of the BC Global Aggregate Index and the BC Global High Yield Index. In this sense, the term "Multiverse" refers to the concept of multiple universes in a single macro index.

BC US Credit: includes publicly issued U.S. corporate and foreign debentures and secured notes that which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$250 million. Issues must be publicly issued, dollar-denominated and non-convertible.

BC US Government: includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government).

BC Universal: includes market coverage by the Aggregate Bond Index fixed rate debt issues, which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$100 million) and includes exposures to high yield CMBS securities. All returns are market value weighted inclusive of accrued interest.

Citigroup 3-Month Treasury Bills (T-bills): tracks the performance of U.S. Treasury bills with 3-month maturity.

MSCI ACWI x US ND: comprises both developed and emerging markets less the United States. As of August 2008, the index consisted of 23 countries classified as developed markets and 25 classified as emerging markets. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

MSCI EAFE Free (Europe, Australasia, Far East) ND: is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the US & Canada. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

MSCI EM (Emerging Markets) GD: is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. This series approximates the maximum possible dividend reinvestment. The amount reinvested is the entire dividend distributed to individuals resident in the country of the company, but does not include tax credits.

MSCI Europe is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, this index consisted of the following 16 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

MSCI Pacific is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in the Pacific region. As of June 2007, this index consisted of the following 5 Developed Market countries: Australia, Hong Kong, Japan, New Zealand, and Singapore.

NAREIT Index: consists of all tax-qualified REITs listed on the New York Stock Exchange, American Stock Exchange, and the NASDAQ National Market System. The data is market weighted.

NCREIF Property Index: the NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Returns are gross of fees; including income, realized gains/losses, and appreciation/depreciation; and are market value weighted. Index is lagged one quarter.

Russell 1000: measures the performance of the 1,000 largest securities in the Russell 3000 Index. Russell 1000 is highly correlated with the S&P 500 Index and capitalization-weighted.

Russell 1000 Growth: measures the performance of those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

Russell 1000 Value: measures the performance of those Russell 1000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

Russell 2000: measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Russell 2000 Growth: measures the performance of those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-to-earnings ratios.

Russell 2000 Value: measures the performance of those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-to-earnings ratios.

Russell 3000: represents the largest 3,000 US companies based on total market capitalization, representing approximately 98% of the investable US equity market.

Value Relative Ratio (VRR): Performance metric used to evaluate long-term manager performance relative to a benchmark and to highlight compounded over/under performance data over a certain time frame. VRR is calculated by the growth of a dollar invested with the manager divided by the growth of a dollar invested in the benchmark for the same time period.

Risk Metric Description – Rationale for Selection and Calculation Methodology**US Equity Markets**

Metric: $P/E \text{ ratio} = \text{Price} / \text{"Normalized" earnings for the S\&P 500 Index}$

To represent the price of US equity markets, we have chosen the S&P 500 index. This index has the longest published history of price, is well known, and also has reliable, long-term, published quarterly earnings. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the S&P 500 index). Equity markets are very volatile. Prices fluctuate significantly during normal times and extremely during periods of market stress or euphoria. Therefore, developing a measure of earnings power (E) which is stable is vitally important, if the measure is to provide insight. While equity prices can and do double, or get cut in half, real earnings power does not change nearly as much. Therefore, we have selected a well known measure of real, stable earnings power developed by Yale Professor Robert Shiller known as the Shiller E-10. The calculation of E-10 is simply the average real annual earnings over the past 10 years. Over 10 years, the earnings shenanigans and boom and bust levels of earnings tend to even out (and often times get restated). Therefore, this earnings statistic gives a reasonably stable, slow-to-change estimate of average real earnings power for the index. Professor Shiller's data and calculation of the E-10 are available on his website at <http://www.econ.yale.edu/~shiller/data.htm>. We have used his data as the base for our calculations. Details of the theoretical justification behind the measure can be found in his book *Irrational Exuberance* [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005].

Developed Equity Markets Excluding the US

Metric: $P/E \text{ ratio} = \text{Price} / \text{"Normalized" earnings for the MSCI EAFE Index}$

To represent the price of non-US developed equity markets, we have chosen the MSCI EAFE index. This index has the longest published history of price for non-US developed equities. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the MSCI EAFE index). The price level of this index is available starting in December 1969. Again, for the reasons described above, we elected to use the Shiller E-10 as our measure of earnings (E). Since 12/1972, a monthly price earnings ratio is available from MSCI. Using this quoted ratio, we have backed out the implied trailing-twelve month earnings of the EAFE index for each month from 12/1972 to the present. These annualized earnings are then inflation adjusted using CPI-U to represent real earnings in US dollar terms for each time period. The Shiller E-10 for the EAFE index (10 year average real earnings) is calculated in the same manner as detailed above.

However, we do not believe that the pricing and earnings history of the EAFE markets are long enough to be a reliable representation of pricing history for developed market equities outside of the US. Therefore, in constructing the Long-Term Average Historical P/E for developed ex-US equities for comparison purposes, we have elected to use the US equity market as a developed market proxy, from 1881 to 1982. This lowers the Long-Term Average Historical P/E considerably. We believe this methodology provides a more realistic historical comparison for a market with a relatively short history.

Emerging Market Equity Markets

Metric: Ratio of Emerging Market P/E Ratio to Developed Market P/E Ratio

To represent the Emerging Markets P/E Ratio, we have chosen the MSCI Emerging Market Free Index, which has P/E data back to January 1995 on Bloomberg. To represent the Developed Markets PE Ratio, we have chosen the MSCI World Index, which also has data back to January 1995 on Bloomberg. Although there are issues with published, single time period P/E ratios, in which the denominator effect can cause large movements, we feel that the information contained in such movements will alert investors to market activity that they will want to interpret.

US Private Equity Markets

Metrics: S&P LCD Average EBITDA Multiples Paid in LBOs and US Quarterly Deal Volume

The Average Purchase Price to EBITDA multiples paid in LBOs is published quarterly by S&P in their LCD study. This is the total price paid (both equity and debt) over the trailing-twelve month EBITDA (earnings before interest, taxes, depreciation and amortization) as calculated by S&P LCD. This is the relevant, high-level pricing metric that private equity managers use in assessing deals. Data is published monthly.

US quarterly deal volume for private equity is the total deal volume in \$ billions (both equity and debt) reported in the quarter by Thomson Reuters Buyouts. This metric gives a measure of the level of activity in the market. Data is published quarterly.

US Private Real Estate Markets

Metrics: US Cap Rates, Cap Rate Spreads, and Transactions as a % of Market Value

Real estate cap rates are a measure of the price paid in the market to acquire properties versus their annualized income generation before financing costs (NOI=net operating income). The data, published by NCREIF, describes completed and leased properties (core) on an unleveraged basis. We chose to use current value cap rates. These are capitalization rates from properties that were revalued during the quarter. This data relies on estimates of value and therefore tends to be lagging (estimated prices are slower to rise and slower to fall than transaction prices). The data is published quarterly.

Spreads between the cap rate (described above) and the 10-year nominal Treasury yield, indicate a measure of the cost of properties versus a current measure of the cost of financing.

Transactions as a % of Market Value Trailing-Four Quarters is a measure of property turnover activity in the NCREIF Universe. This quarterly metric is a measure of activity in the market.

Credit Markets Fixed Income

Metric: Spreads

The absolute level of spreads over treasuries and spread trends (widening / narrowing) are good indicators of credit risk in the fixed income markets. Spreads incorporate estimates of future default, but can also be driven by technical dislocations in the fixed income markets. Abnormally narrow spreads (relative to historical levels) indicate higher levels of valuation risk, wide spreads indicate lower levels of valuation risk and / or elevated default fears. Investment grade bond spreads are represented by the Barclays Capital US Corporate Investment Grade Index Intermediate Component. The high yield corporate bond spreads are represented by the Barclays Capital US Corporate High Yield Index.

Measure of Equity Market Fear / Uncertainty

Metric: VIX – Measure of implied option volatility for US equity markets

The VIX is a key measure of near-term volatility conveyed by implied volatility of S&P 500 index option prices. VIX increases with uncertainty and fear. Stocks and the VIX are negatively correlated. Volatility tends to spike when equity markets fall.

Measure of Monetary Policy

Metric: Yield Curve Slope

We calculate the yield curve slope as the 10 year treasury yield minus the 1 year treasury yield. When the yield curve slope is zero or negative, this is a signal to pay attention. A negative yield curve slope signals lower rates in the future, caused by a contraction in economic activity. Recessions are typically preceded by an inverted (negatively sloped) yield curve. A very steep yield curve (2 or greater) indicates a large difference between shorter-term interest rates (the 1 year rate) and longer-term rates (the 10 year rate). This can signal expansion in economic activity in the future, or merely higher future interest rates.

Measures of US Inflation Expectations

Metrics: Breakeven Inflation and Inflation Adjusted Commodity Prices

Inflation is a very important indicator impacting all assets and financial instruments. Breakeven inflation is calculated as the 10 year nominal treasury yield minus the 10 year real yield on US TIPS (treasury inflation protected securities). Abnormally low long-term inflation expectations are indicative of deflationary fears. A rapid rise in breakeven inflation indicates an acceleration in inflationary expectations as market participants sell nominal treasuries and buy TIPS. If breakeven inflation continues to rise quarter over quarter, this is a signal of inflationary worries rising, which may cause Fed action and / or dollar decline.

Commodity price movement (above the rate of inflation) is an indication of anticipated inflation caused by real global economic activity putting pressure on resource prices. We calculate this metric by adjusted in the Dow Jones UBS Commodity Index (formerly Dow Jones AIG Commodity Index) by US CPI-U. While rising commodity prices will not necessarily translate to higher US inflation, higher US inflation will likely show up in higher commodity prices, particularly if world economic activity is robust.

These two measures of anticipated inflation can, and often are, conflicting.

Measures of US Treasury Bond Interest Rate Risk

Metrics: 10-Year Treasury Forward-Looking Real Yield and 10-Year Treasury Duration

The expected annualized real yield of the 10 year US Treasury Bond is a measure of valuation risk for US Treasuries. A low real yield means investors will accept a low rate of expected return for the certainty of receiving their nominal cash flows. Meketa estimates the expected annualized real yield by subtracting an estimate of expected 10 year inflation (produced by the Survey of Professional Forecasters as collected by the Federal Reserve Bank of Philadelphia), from the 10 year Treasury constant maturity interest rate.

Duration for the 10-Year Treasury Bond is calculated based on the current yield and a price of 100. This is a measure of expected percentage movements in the price of the bond based on small movements in percentage yield. We make no attempt to account for convexity.

Definition of “Extreme” Metric Readings

A metric reading is defined as “extreme” if the metric reading is in the top or bottom decile of its historical readings. These “extreme” reading should cause the reader to pay attention. These metrics have reverted toward their mean values in the past.

RISK METRICS DESCRIPTION – Meketa Market Sentiment Indicator

What is the Meketa Market Sentiment Indicator (MMSI)?

The MMSI is a measure meant to gauge the market's sentiment regarding economic growth risk. Growth risk cuts across most financial assets, and is the largest risk exposure that most portfolios bear. The MMSI takes into account the momentum¹ (trend over time, positive or negative) of the economic growth risk exposure of publicly traded stocks and bonds, as a signal of the future direction of growth risk returns; either positive (risk seeking market sentiment), or negative (risk averse market sentiment).

How do I read the Meketa Market Sentiment Indicator (MMSI) graph?

Simply put, the MMSI is a color coded indicator that signals the market's sentiment regarding economic growth risk. It is read left to right chronologically. A green indicator on the MMSI indicates that the market's sentiment towards growth risk is positive. A gray indicator indicates that the market's sentiment towards growth risk is neutral or inconclusive. A red indicator indicates that the market's sentiment towards growth risk is negative. The black line on the graph is the level of the MMSI. The degree of the signal above or below the neutral reading is an indication the signal's current strength.

How is the Meketa Market Sentiment Indicator (MMSI) Constructed?

The MMSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:

1. Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months)
2. Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration U.S. Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight). The scale of this measure is adjusted to match that of the stock return momentum measure.

The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure. The color reading on the graph is determined as follows:

1. If both stock return momentum and bond spread momentum are positive = GREEN (positive)
2. If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive)
3. If both stock return momentum and bond spread momentum are negative = RED (negative)

What does the Meketa Market Sentiment Indicator (MMSI) mean? Why might it be useful?

There is strong evidence that time series momentum is significant and persistent.² In particular, across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12 month period. The MMSI is

¹ Momentum is defined as the persistence of relative performance. There is a significant amount of academic evidence indicating that positive momentum (e.g., strong performing stocks over the recent past continue to post strong performance into the near future) exists over near-to-intermediate holding periods. See, for example, "Understanding Momentum," *Financial Analysts Journal*, Scowcroft, Sefton, March, 2005.

² "Time Series Momentum" Moskowitz, Ooi, Pedersen, August 2010 <http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

Appendix

constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.

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