



Quarterly Investment Performance Analysis

Santa Barbara County Employees' Retirement System

Period Ended: March 31, 2023



2022 Greenwich Quality Leader Award

RVK is 1 of 3 firms in the Overall U.S. Investment Consulting “large consultants” category to receive a 2022 *Coalition Greenwich Quality Leader* award. We are proud to be the only firm in this category to receive recognition for a 6th consecutive year. Coalition Greenwich issued the award on April 25, 2023, based on their February through November 2022 study. No direct or indirect compensation has been paid by RVK in connection with obtaining or using this award.



***We are deeply grateful for your continued confidence and support.
From all of us here at RVK, thank you for the opportunity to serve you!***

Award Criteria

- Understanding of Client Goals and Objectives
- Advice on Long-Term Asset Allocation and Liability Issues
- Advice on DC Plan Structure and Design
- Communication of Philosophy and Investment Beliefs
- Proactive Advice and Innovative Ideas
- Client Satisfaction with Manager Recommendations
- Usefulness of Written Investment Performance Reviews
- Sufficient Professional Resources
- Credibility with Investment Committee or Trustees
- Capability of Consultants Assigned to Clients
- Responsiveness and Prompt Follow-up on Client Requests
- Timeliness in Providing Written Reports
- Usefulness of Personal Meetings
- Reasonable Fees Relative to Value Delivered

Please refer to the following URL to learn more:

<https://www.greenwich.com/asset-management/investment-consultants-support-us-asset-owners-volatile-markets>

Overview of RVK Performance Reports

	Monthly Investment Performance Analysis	Quarterly Investment Performance Analysis
Frequency	Typically available by the 15th business day following month end	Typically available 30-45 calendar days following quarter end
Analytics Included		
Capital Markets Review (abbreviated)	✓	
Capital Markets Review (with full asset class detail)		✓
Monthly Portfolio Highlights or Executive Summary	✓	✓
Manager Monitoring/Investment Manager Updates/Watch List		✓
Asset Allocation By Manager and Schedule of Investable Assets	✓	✓
Asset Allocation vs. Target Allocation	✓	✓
Plan Asset Overview	✓	✓
Total Fund Asset Allocation & Ranks vs. Peers		✓
Trailing Performance	✓	
Trailing & Fiscal Year Performance (including ranks)		✓
Total Fund IDP Attribution		✓
Composite Profile Pages (including ranks)		✓
Private Credit AltInvest Report	✓	✓
Investment Manager Profile Pages (including ranks)		✓
Fee Schedule for Public Investment Managers	✓	✓
Underlying Indices of SBCERS Policy Index		✓
Work Plan		✓

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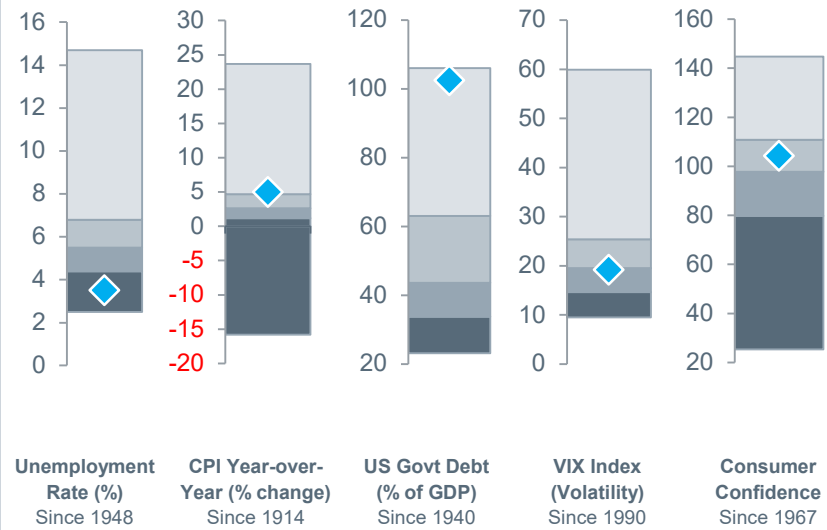
Capital Markets Review



First Quarter Economic Environment

During Q1, both defensive and risk assets generally provided positive returns, following a difficult environment in 2022 characterized by geopolitical risk and rising interest rates. Although, capital markets continued to experience bouts of volatility. Despite this volatility, broad equity market indexes finished Q1 in positive territory. The broad bond market delivered positive returns in Q1 as market participants changed expectations on future interest rate moves from pricing in rate hikes to discounting rate pauses, or in some circumstances, cuts. Internationally, moderate winter temperatures helped to ease energy price inflation in Europe, but the uncertainty around supply shortages persisted due to the ongoing war in Ukraine. The FOMC decided to increase the federal funds rate in Q1 to a target range between 4.75% - 5.00%, representing a second straight monthly increase of 0.25% after a string of 0.50% to 0.75% increases. The FOMC's actions demonstrated continued focus on combating inflation, although FOMC data indicated that most officials expect only one more rate hike in 2023. The most recent data release indicated that Headline CPI for March came in slightly below average expectations, with estimated year-over-year inflation of 5.00%. Recessionary risks remained a concern, and recent FOMC minutes indicated that members thought it was increasingly likely that the US will enter a recession later in 2023 due to banking sector stresses. The IMF revised its global GDP growth forecast at the end of the quarter to 2.80%, a decline from its January 2023 forecast of 2.90%.

Key Economic Indicators



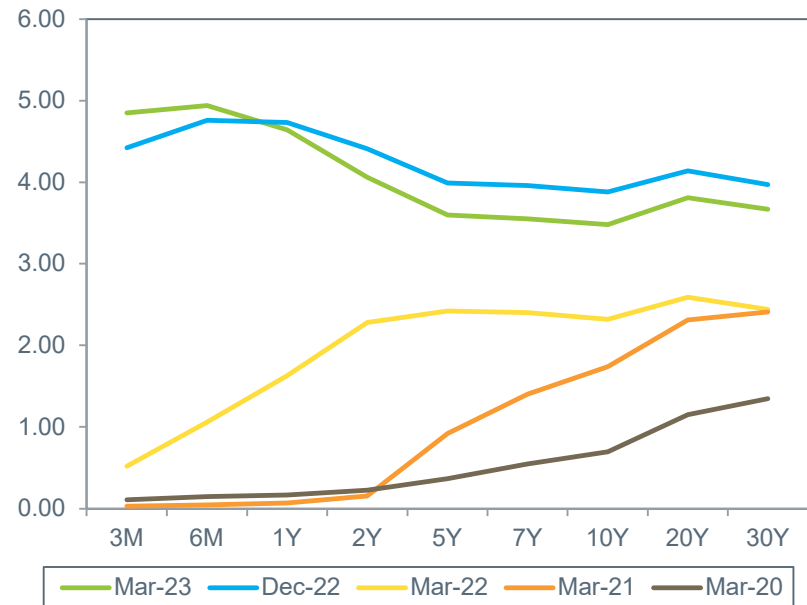
Economic Indicators

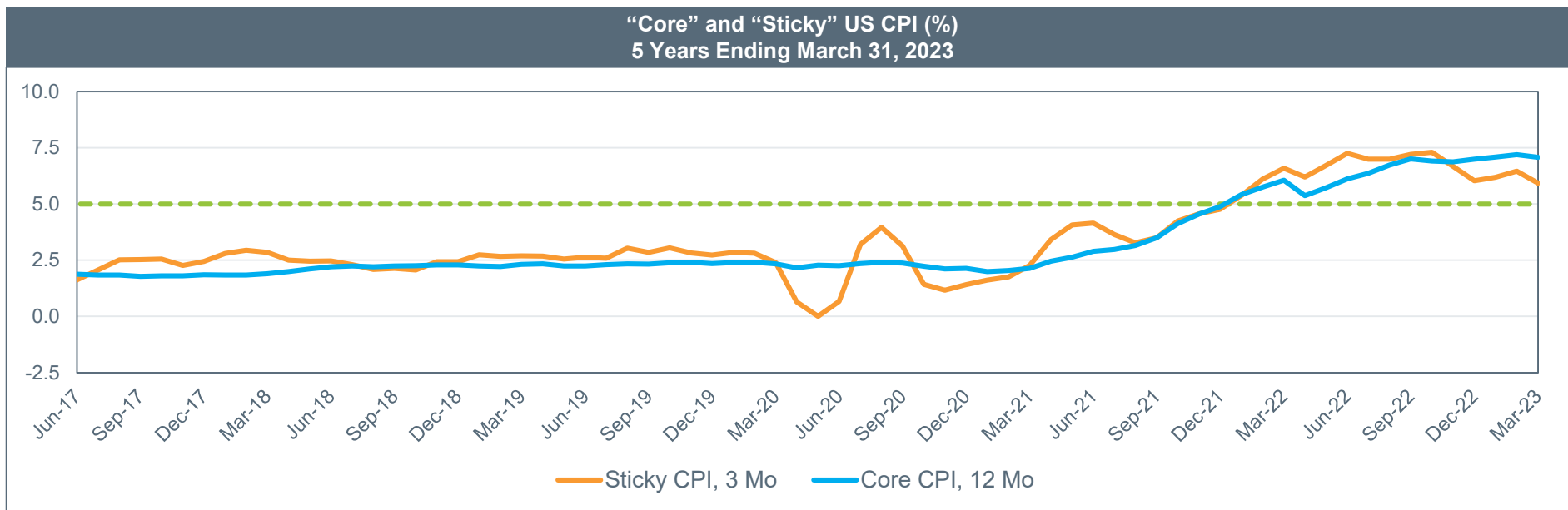
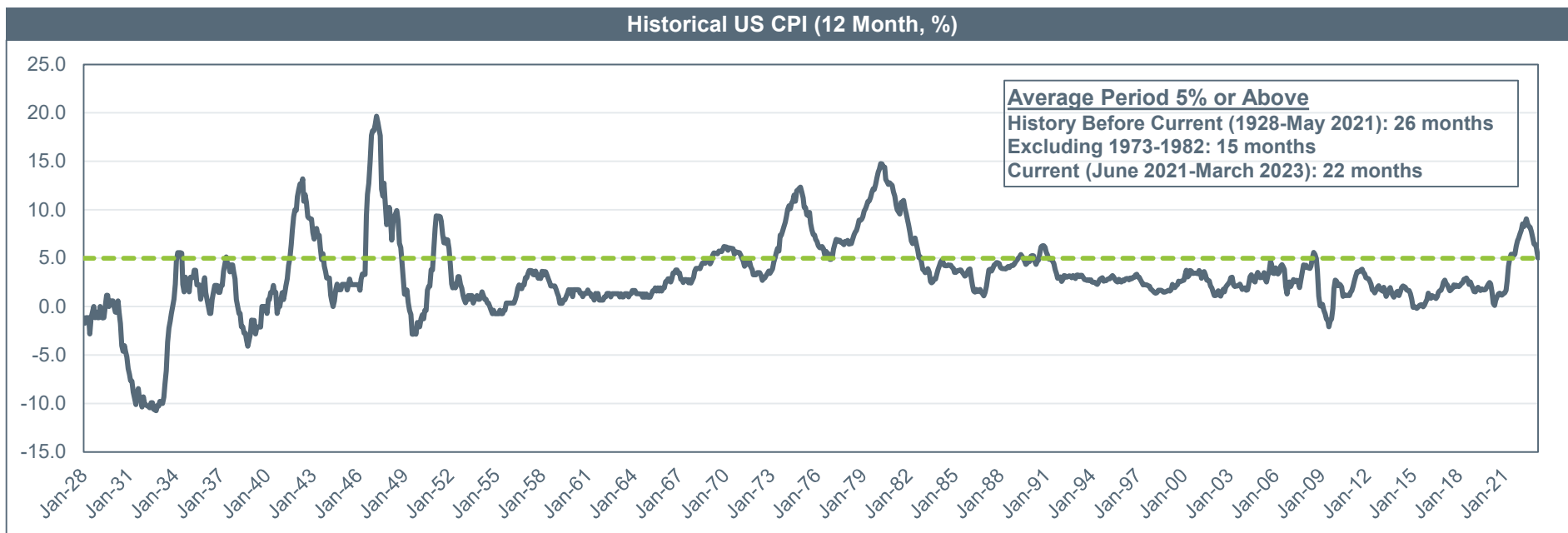
	Mar-23	Dec-22	Mar-22	Mar-20	20 Yr
Federal Funds Rate (%)	4.83 ▲	4.33	0.33	0.08	1.34
Breakeven Infl. - 5 Yr (%)	2.47 ▲	2.38	3.43	0.53	1.93
Breakeven Infl. - 10 Yr (%)	2.33 ▲	2.30	2.83	0.93	2.09
CPI YoY (Headline) (%)	5.0 ▼	6.5	8.5	1.5	2.5
Unemployment Rate (%)	3.5 —	3.5	3.6	4.4	6.0
Real GDP YoY (%)	1.6 ▲	0.9	3.7	0.8	2.0
PMI - Manufacturing	46.3 ▼	48.4	57.1	49.1	53.6
USD Total Wtd Idx	119.48 ▼	121.40	115.35	122.55	103.40
WTI Crude Oil per Barrel (\$)	75.7 ▼	80.3	100.3	20.5	68.4
Gold Spot per Oz (\$)	1,979 ▲	1,824	1,937	1,577	1,179

Market Performance (%)

	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	7.50	7.50	-7.73	11.19	12.24
Russell 2000	2.74	2.74	-11.61	4.71	8.04
MSCI EAFE (Net)	8.47	8.47	-1.38	3.52	5.00
MSCI EAFE SC (Net)	4.92	4.92	-9.83	0.87	5.86
MSCI Emg Mkts (Net)	3.96	3.96	-10.70	-0.91	2.00
Bloomberg US Agg Bond	2.96	2.96	-4.78	0.90	1.36
ICE BofAML 3 Mo US T-Bill	1.07	1.07	2.50	1.41	0.87
NCREIF ODCE (Gross)	-3.16	-3.16	-3.07	7.52	9.45
FTSE NAREIT Eq REIT (TR)	2.68	2.68	-19.19	6.02	5.97
HFRI FOF Comp	0.71	0.71	-1.94	3.10	3.24
Bloomberg Cmdty (TR)	-5.36	-5.36	-12.49	5.36	-1.72

Treasury Yield Curve (%)





As of March 31, 2023. Sources: US Bureau of Labor Statistics, Federal Reserve Bank of Cleveland, and Federal Reserve Bank of Atlanta. Core CPI is represented by the Revised FRB Cleveland Trimmed Mean, 12-month. Sticky CPI is represented by the FRB Atlanta Sticky-Price Index, 3-month.

First Quarter Review

Broad Market

US equity markets performed well in Q1 overall, despite market turmoil caused by the banking sector in March and uncertainty regarding the Fed's path for short-term interest rates. The Russell 1000 Index was up 7.5%, while the Russell 2000 Index was up 2.7%. At the beginning of Q1, US stocks were buoyed by investor optimism after economic data indicated that inflation continued to cool, leading to expectations that the Fed's rate hiking cycle could end soon. However, the remainder of Q1 saw significant volatility due to both bank failures and weakening earnings.

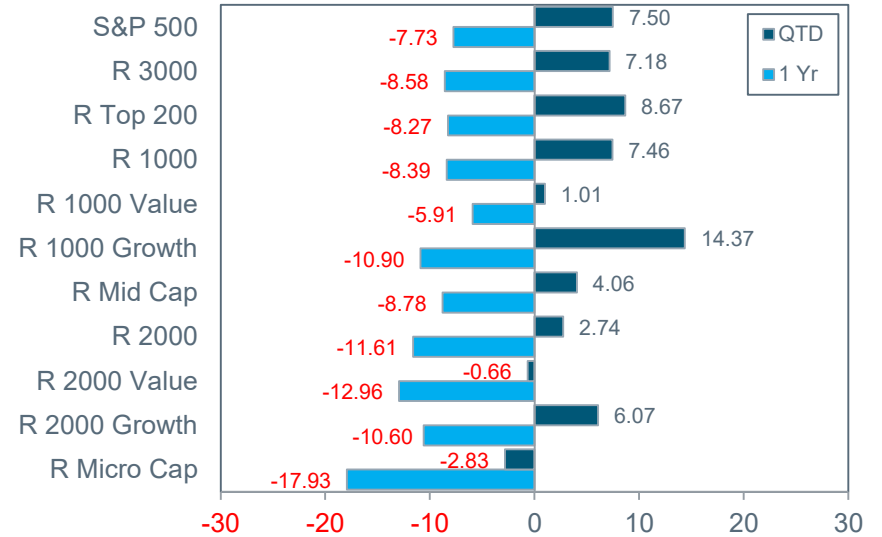
Market Cap

Active large- and mid-cap managers across all style groups struggled to outpace their respective benchmarks in Q1. Small-cap managers performed well, with value-oriented managers having a better success rate than core and growth managers.

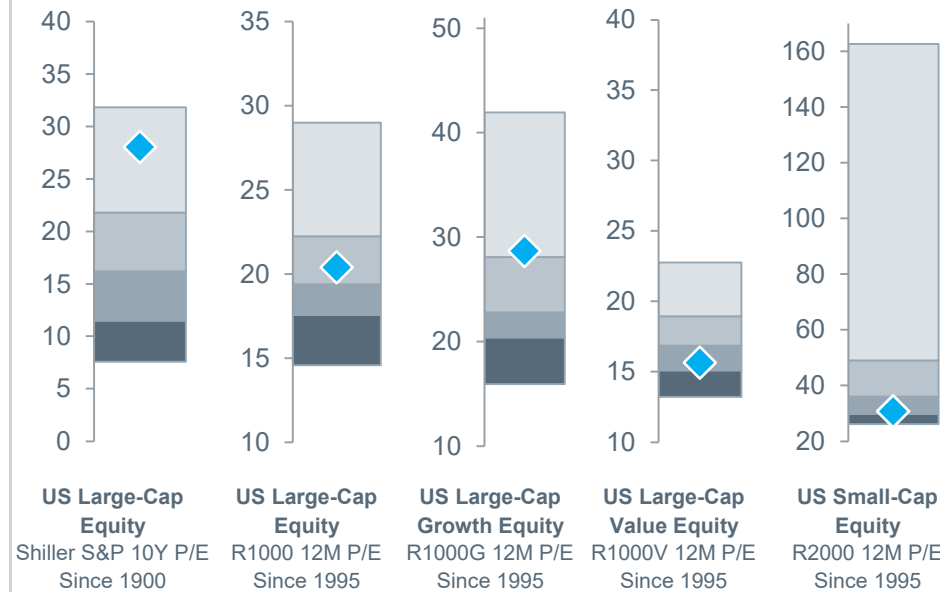
Style and Sector

There was a strong rotation back into growth stocks across market capitalizations in Q1. The Russell 1000 Growth and Russell 2000 Growth indexes exceeded their value counterparts by 13.4% and 6.7%, respectively. Information technology and communication services were the best performing sectors while energy, healthcare, financials, and utilities were the largest contractors.

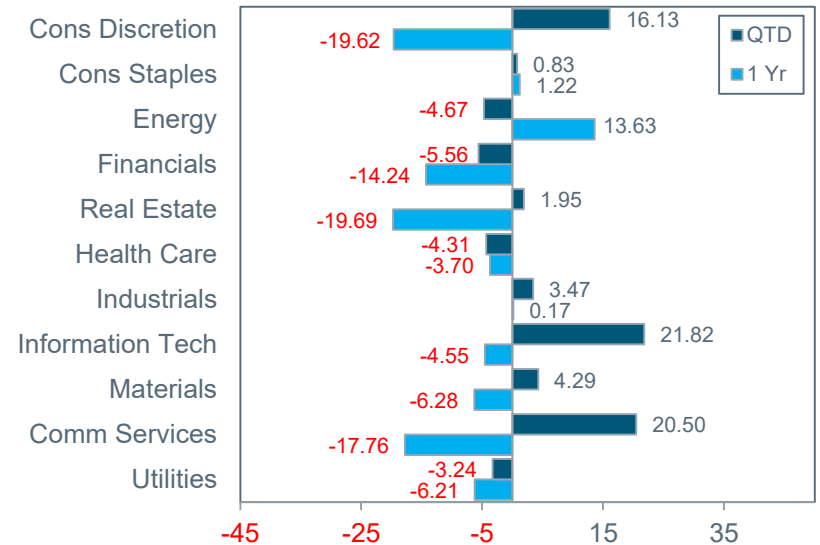
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.

First Quarter Review

Developed Markets

Q1 represented another strong showing for developed international equity markets, with the MSCI EAFE returning 8.5%, which outperformed both US as well as emerging markets. Growth stocks outperformed value stocks during the quarter, but they still lagged when measured over the trailing three-year period. Small-cap stocks underperformed large-cap stocks. Active management was broadly additive during the quarter.

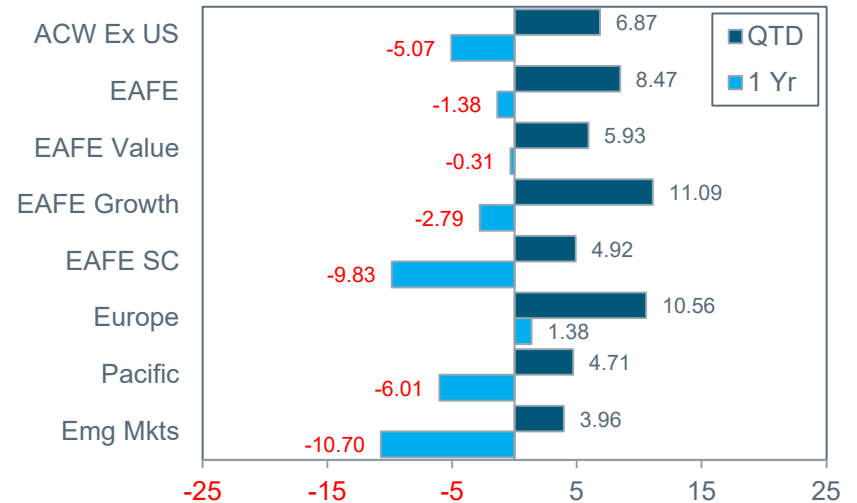
Emerging Markets

Although concerns about bank stability began in the US, they soon spread to Europe. After turmoil at Swiss bank Credit Suisse, UBS stepped in at the end of March to buy the troubled firm for \$3.25 billion, averting a major failure.

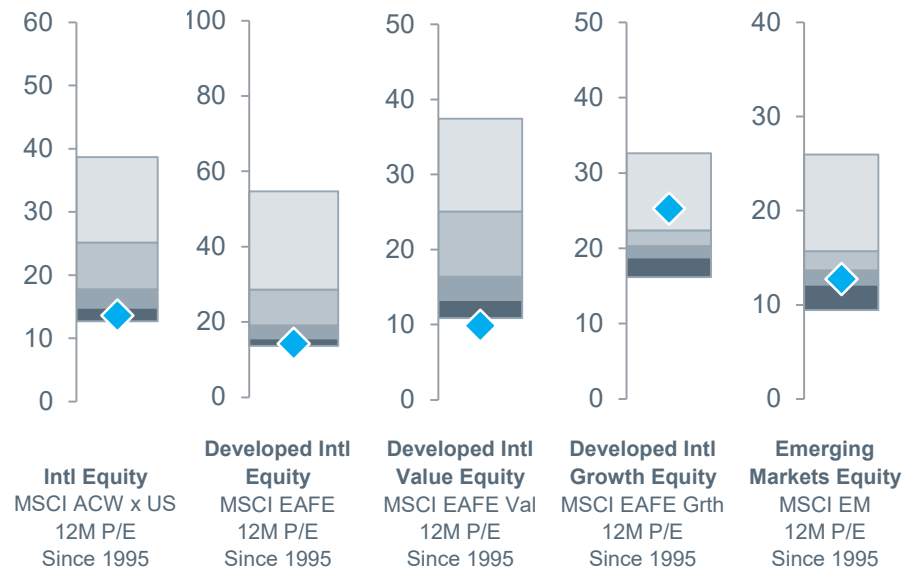
Market Cap & Style

As noted above, emerging markets continued to lag developed markets during Q1 with the MSCI Emerging Market Index returning 4.0%.

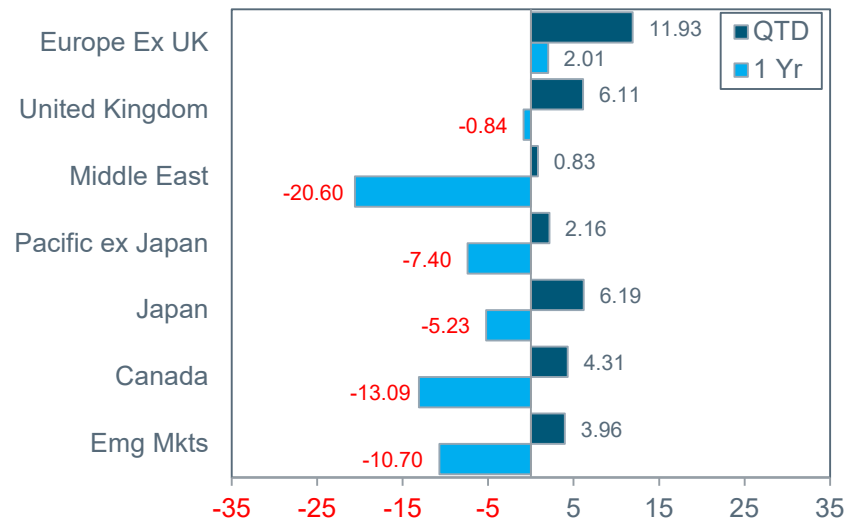
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers. All returns are shown net of foreign taxes on dividends.

First Quarter Review

Broad Market

The decline in yields across Treasury notes and bonds produced a tailwind for fixed income markets, as the Bloomberg US Aggregate Bond Index experienced its best quarter in three years, returning 3.0% in Q1. However, volatility from 2022 continued into the new year as the Fed appeared to maintain its focus on fighting inflation. After initially declining in January, intermediate and long-term Treasury yields rose in February before falling again in March.

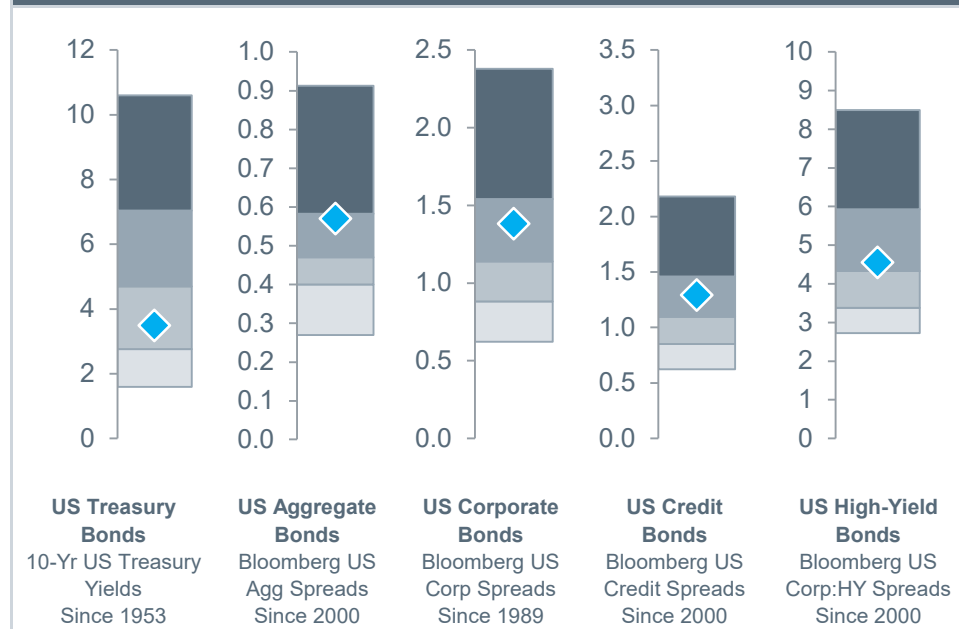
Credit Market

Corporate credit rallied to start the year amid expectations for a more dovish Fed. The optimism proved to be short-lived, however, as the banking crisis pushed spreads wider again in March. The Bloomberg US Credit Index returned 3.5% in Q1, lagging the Bloomberg US High Yield Index return of 3.6%.

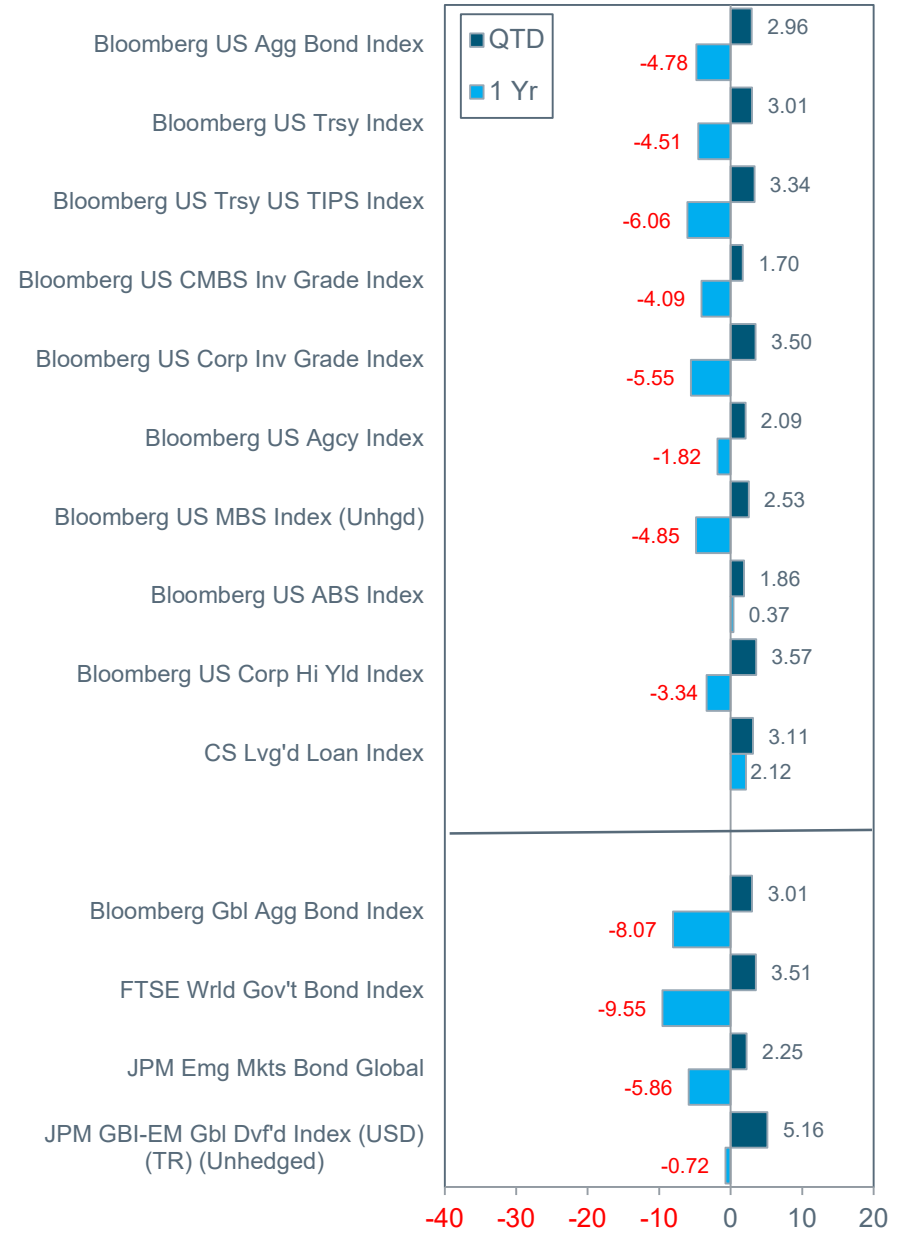
Emerging Market Debt

Emerging market debt added to its recent rally, with the JPMorgan EMBI Global Diversified Index returning 1.9% in Q1, benefitting from the decline in Treasury yields. Despite a resurgence in February, the US dollar weakened over the quarter vs. emerging market currencies, and the JPMorgan GBI-EM Global Diversified Index ended the quarter up 5.2%.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service. Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.



First Quarter Review - Absolute Return

General Market - Hedge Funds

During Q1, hedge funds broadly delivered positive results across most peer groups. Led by strong conditions for long/short equity and fixed income trading, the HFRI Fund-Weighted Composite Index delivered a quarterly return of 1.3%. Macro-oriented strategies, one of the top performing peer groups in 2022, widely struggled in Q1, driven by shifting momentum across interest rate and commodity trends that provided strong tailwinds in recent quarters. Although there were significant fluctuations throughout, overall alpha was broadly flat for the quarter, with longs performing above global indices as shorts struggled.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely generally posted positive returns during Q1 with moderate dispersion. Almost all active managers with significant diversification underperformed a US centric blend of 60% equity and 40% fixed income during the quarter, which favored larger market cap companies globally.

First Quarter Review - Real Assets

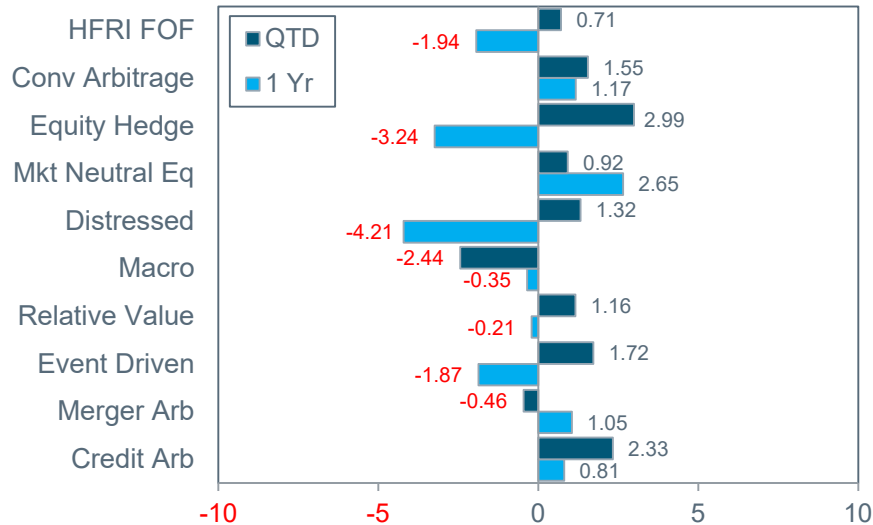
General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategy (DIS) managers tracked closely by RVK generally underperformed a US-centric blend of 60% equity and 40% fixed income over the quarter. Managers with larger exposures to TIPS and energy commodities, lagged peers most significantly in a quarter where strong equity performance on a global basis outperformed nearly all inflation sensitive asset classes.

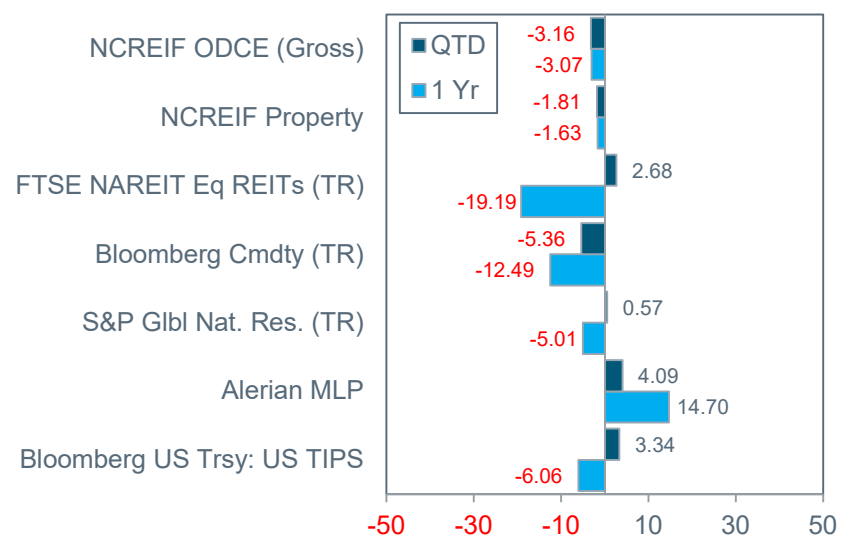
General Market - Real Estate

Core private real estate returned -3.2% in Q1 (gross of fees), as reported by the NCREIF ODCE Index. The total return comprised of 0.8% income and -4.0% price appreciation. Income returns continue to trend at the lower end of historical levels, while price appreciation continues to trend negatively. Investors of publicly traded real estate outperformed private market, delivering a Q1 total return of 1.5%, as measured by FTSE NAREIT All REIT Index.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

As of March 31, 2023

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
Best	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	19.96	43.24	16.09	8.47
	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	18.40	28.71	7.47	7.50
	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	18.31	27.11	1.46	5.76
	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	16.12	22.17	-5.31	4.92
	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	12.34	14.82	-11.19	3.96
	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	10.99	11.26	-11.85	3.57
	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.42	10.88	10.10	-13.01	3.34
	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	7.82	6.17	-14.45	2.96
	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	7.51	5.96	-18.11	2.74
	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	7.11	5.28	-20.09	2.68
	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	1.19	0.05	-20.44	1.57
	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.79	7.69	0.67	-1.55	-21.39	1.07
	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.57	5.34	-3.12	-2.52	-24.37	-3.16
Worst	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-8.00	-2.54	-27.09	-5.36
	S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Net) - Int'l Dev.	MSCI EAFE SC (Net) - Int'l SC	MSCI EM (Net) - Int'l Emg Mkts	Bloombrg US Agg Bond - FI	Bloombrg US Corp Hi Yield - FI	Bloombrg US Trsy US TIPS - FI	Bloombrg US Gov Credit Lng - FI	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombrg Cmdty (TR) - Commod.	ICE BofAML 3 Mo T-Bill - Cash Equiv	

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.



Total Fund





Total Fund Summary

The Total Fund market value was \$4.02 billion as of March 31, 2023, an increase of approximately \$119.2 million from the previous quarter. The Total Fund returned 3.72% for the first quarter, net of fees, and ranked in the 52nd percentile among the Public Plans \$1B-\$5B peer group. The Total Fund underperformed the Policy Benchmark by 46 basis points and the Dynamic Policy Benchmark by 23 basis points.

All asset classes were within their respective target ranges as of March 31, 2023.

Contributors to Total Fund Performance

Developed Non-US Equity, US Equity, and Emerging Markets Equity had the highest absolute performance during the quarter, returning 9.08%, 6.55%, and 4.91%, respectively.

Performance relative to the Policy Benchmark was aided by Real Estate, Emerging Markets, and Developed Non-US Equity strong relative performance, which beat their benchmarks by 513, 95, and 61 basis points, respectively.

Performance relative to the Dynamic Policy Benchmark was positively impacted by individual manager relative outperformance, including ORG Real Estate, RHJ, and RBC, which beat their benchmarks by 513, 414, and 220 basis points, respectively.

Detractors from Total Fund Performance

Real Estate, Private Equity, and Non-Core Fixed Income had the lowest absolute performance during the quarter, returning -0.04%, 1.82%, and 2.79%, respectively.

Performance versus the Policy Benchmark was hurt by the weak relative performance of Private Equity, US Equity, and Non-Core Fixed Income which lagged their benchmarks by 616, 63, and 44 basis points, respectively.

Performance relative to the Dynamic Policy Benchmark was negatively impacted by individual manager underperformance, including Dimensional US Small Cap, Nuveen, and BNY HEDI which lagged their benchmarks by 198, 111, and 104 basis points, respectively.

All performance referenced is net of fees.
Total Fund performance excludes 130 RHR and Treasury Cash.

**Santa Barbara County Employees' Retirement System
Manager Monitoring**

As of March 31, 2023

	Significant Events (Yes/No)	Last Meeting with Board of Retirement	Last Meeting with RVK	Last RVK On-Site at Manager Office	Comments
U.S. Equity					
BNY Mellon HEDI (SA)	No		February 2022	September 2022	
BNY Mellon R1000 Index - NL (CF)	No		February 2022	September 2022	
Dimensional U.S. Small Cap Value (CF)	No	November 2020	November 2021	April 2018	
RHJ Small Cap Opportunities (SA)	No	April 2016	November 2021	October 2019	
Developed Market Non-U.S. Equity					
PanAgora Dynamic International Equity (SA)	No		September 2022	June 2017	
Artisan Non-U.S. Growth (SA)	No		April 2023	May 2018	
Acadian Non-US Small Cap Equity (CF)	No	April 2023	January 2023	June 2022	
Emerging Market Equity					
DFA Emg Mkts Value;I (DFEVX)	No	November 2020	June 2022	April 2018	
RBC Emerging Markets Equity (CF)	No	March 2022	March 2023	February 2019	
Core Fixed Income					
Garcia Hamilton Core Fixed Income (SA)	Yes	April 2023	March 2023	December 2019	Gilbert Garcia has filed for Mayor, though he has not made a final decision on whether he will officially run.
PGIM Core Plus Fixed Income (CF)	No	March 2018	November 2022	May 2022	

**Santa Barbara County Employees' Retirement System
Manager Monitoring**

As of March 31, 2023

	Significant Events (Yes/No)	Last Meeting with Board of Retirement	Last Meeting with RVK	Last RVK On-Site at Manager Office	Comments
Non-Core Fixed Income					
Wellington Blended Opportunistic EMD (CF)	No	July 2022	November 2022	November 2022	
Beach Point Leveraged Loan (CF)	No		August 2022	August 2019	
AG Direct Lending Fund III, LP	No	April 2023	March 2023	October 2021	
AG Direct Lending Fund IV, LP	No	April 2023	March 2023	October 2021	
AG Direct Lending Evergreen Fund, LP	No	April 2023	March 2023	October 2021	
First Eagle Direct Lending Fund IV, LLC	No	February 2021	September 2022	October 2019	
Deerpath Capital V, LP	No	June 2021	March 2023	March 2020	
Deerpath Capital VI, LP	No	June 2021	Mar-23	March 2020	
PIMCO Private Income Fund OnShore Feeder LLC	No	April 2019	October 2022	August 2022	
First Eagle Direct Lending V-B, LLC	No	February 2021	September 2022	October 2019	
Real Return					
BNY Mellon TIPS	No		February 2021	April 2019	
Cohen & Steers Real Assets Fund (CIT)	No	July 2017	February 2023	August 2022	
Nuveen Real Asset Income Fund (SA)	No	July 2017	February 2023	November 2018	
Private Natural Resources	No	February 2023	-	-	
Private Infrastructure	No	February 2023	-	-	
Private Equity					
Hamilton Lane	No	February 2023	-	-	
Real Estate					
ORG	No	February 2023	-	-	

INVESTMENT MANAGER UPDATES

Garcia Hamilton Core Fixed Income

Gilbert Garcia has filed for Mayor, though he has not made a final decision on whether he will officially run.

Opinion: RVK has discussed this with Mr. Garcia and will continue to monitor the situation.

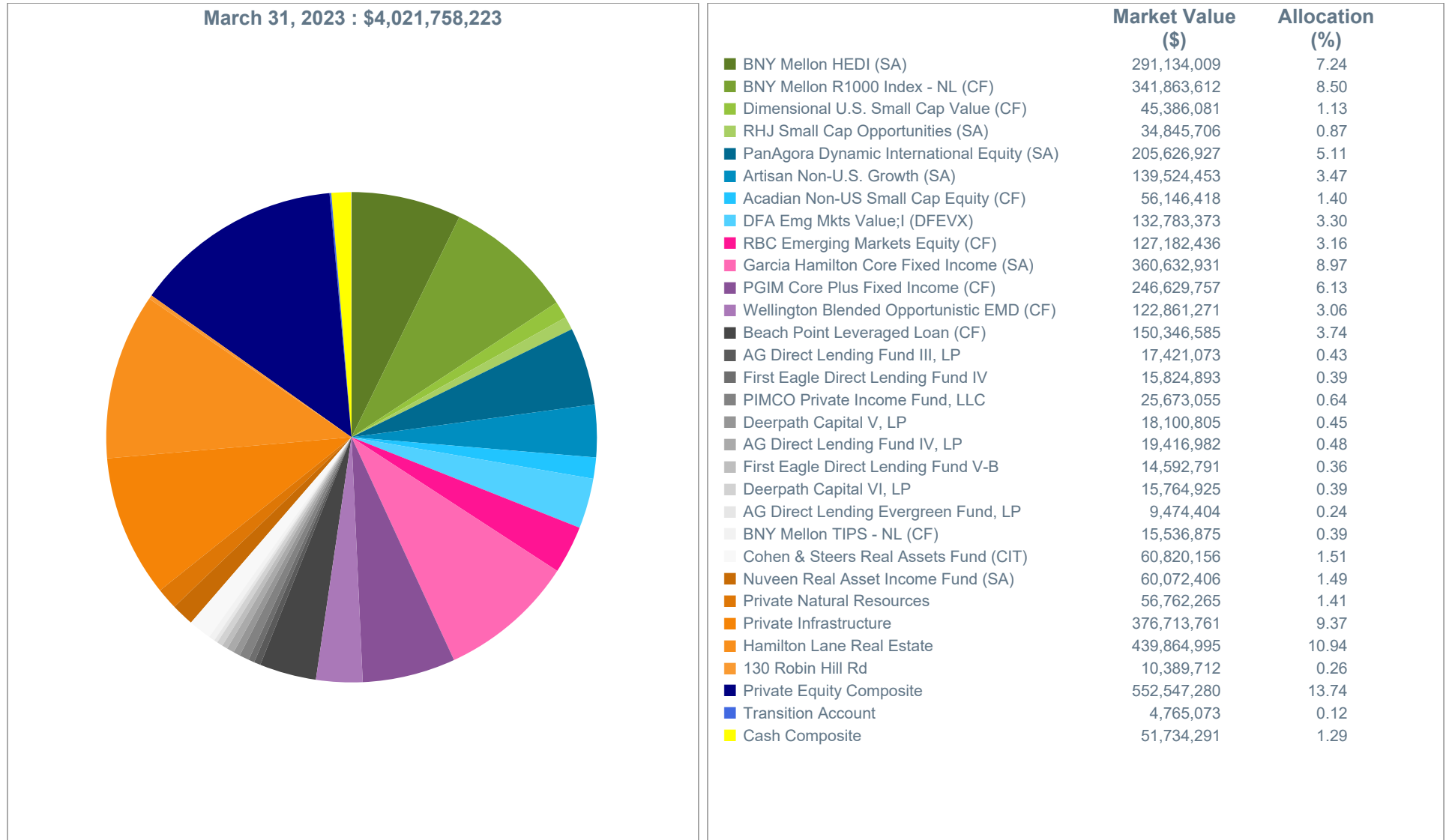
Asset Class	Investment Manager	Inception Date	Test 1: If the Manager's rolling, five-year return (net of fees) falls below the rolling, five-year benchmark return for three (3) consecutive quarters.			Test 2: If the Manager's rolling, five-year return (net of fees) for three (3) consecutive quarters ranks in the bottom third of the General Consultant's peer group universe.			Watch List Status	Watch List Status	Qualitative Factor(s) Resulting in Watch List Addition											Benchmark	Peer Group		
			✓ indicates failed test	Watch List Status			✓ indicates failed test	Watch List Status			Explanation														
			2022 Q3	2022 Q4	2023 Q1	2022 Q3	2022 Q4	2023 Q1			A	B	C	D	E	F	G	H	I	J					
U.S. Equity	Dimensional U.S. Small Cap Value (CF)	4/1/2005																					Russell 2000 Index	U.S. Small Cap Value Equity	
	RHJ Small Cap Opportunities (SA)	6/1/2016																						Russell 2000 Index	U.S. Small Cap Growth Equity
Developed Market non-U.S. Equity	PanAgora Dynamic International Equity (SA)	5/1/2009																						MSCI EAFE Index (USD) (Net)	EAFE Core
	Artisan Non-U.S. Growth (SA)	2/1/2014																						MSCI EAFE Index (USD) (Net)	EAFE Growth
	Acadian Non-US Small Cap Equity (CF)	12/1/2020																						MSCI EAFE Sm Cap Index (USD) (Net)	International SMID Cap Equity
Emerging Markets Equity	DFA Emg Mkts Value;I (DFEVX)	5/1/2013																						MSCI Emg Mkts Index (USD) (Net)	Emerging Markets Equity
	RBC Emerging Markets Equity (CF)	9/1/2016																						MSCI Emg Mkts Index (USD) (Net)	Emerging Markets Equity
Core Fixed Income	Garcia Hamilton Core Fixed Income (SA)	9/1/2017																						Bloomberg US Agg Bond Index	U.S. Broad Market Core Fixed Income
	PGIM Core Plus Fixed Income (CF)	6/1/2018																						Bloomberg US Agg Bond Index	U.S. Broad Market Core+ Fixed Income
Non-Core Fixed Income	Wellington Blended Opportunistic EMD (CF)	4/1/2020																						Wellington Blended Benchmark	Emerging Markets Debt
	Beach Point Leveraged Loan (CF)	10/1/2012																						CS Lvg'd Loan Index	U.S. Bank Loans
Real Return	Cohen & Steers Real Assets Fund (CIT)	9/1/2017																						Cohen & Steers Real Assets Custom Index	N/A
	Nuveen Real Asset Income Fund (SA)	9/1/2017																						Nuveen Real Asset Income Blend Index	N/A

Qualitative Factors Resulting in Watch List Additions:

- A. Violation of investment guidelines
- B. Deviation from stated investment style or shifts in the firm's philosophy or process
- C. Turnover of one or more key personnel
- D. Change in firm ownership or structure
- E. Significant loss of clients and/or assets under management
- F. Significant and persistent lack of responsiveness to client requests
- G. The initiation of significant litigation or regulatory action
- H. Failure to disclose significant information, including potential conflicts of interest
- I. Chronic violations of SBCERS' Investment Policy Statement
- J. Any other issue or situation of which the General Investment Consultant and/or Board become aware that is deemed material

Santa Barbara County Employees' Retirement System
 Asset Allocation By Manager and Schedule of Investable Assets

As of March 31, 2023



Schedule of Investable Assets Ex Treasury Cash					
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
FYTD	3,859,132,211	-39,523,536	182,298,109	4,001,906,784	4.76

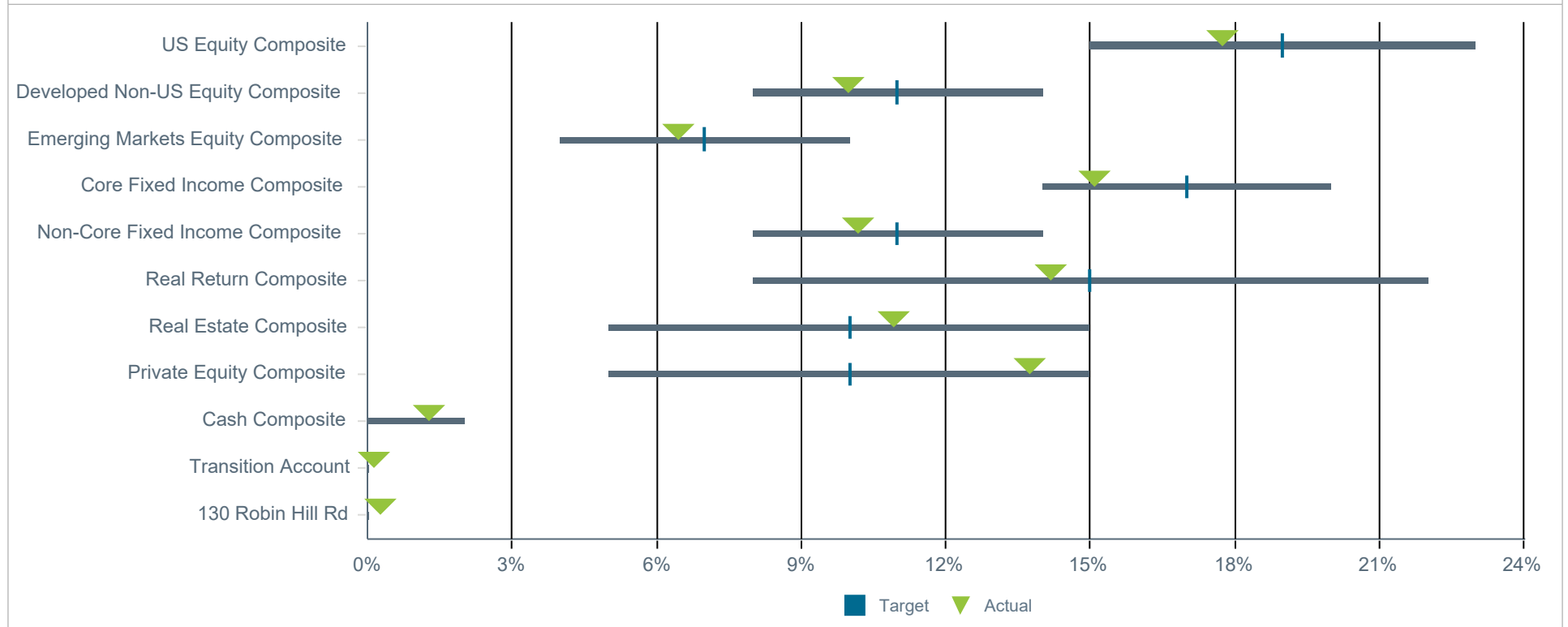
Performance shown is net of fees and provided by BNY Mellon. Allocations shown may not sum up to 100% exactly due to rounding. Schedule of Investable Assets excludes Treasury Cash. The fiscal year ends 06/30. Total fund market value includes residual assets from terminated managers, including Copper Rock, First Eagle, Guggenheim, Hotchkis & Wiley, and New Star.



Santa Barbara County Employees' Retirement System
Asset Allocation vs Target Allocation

As of March 31, 2023

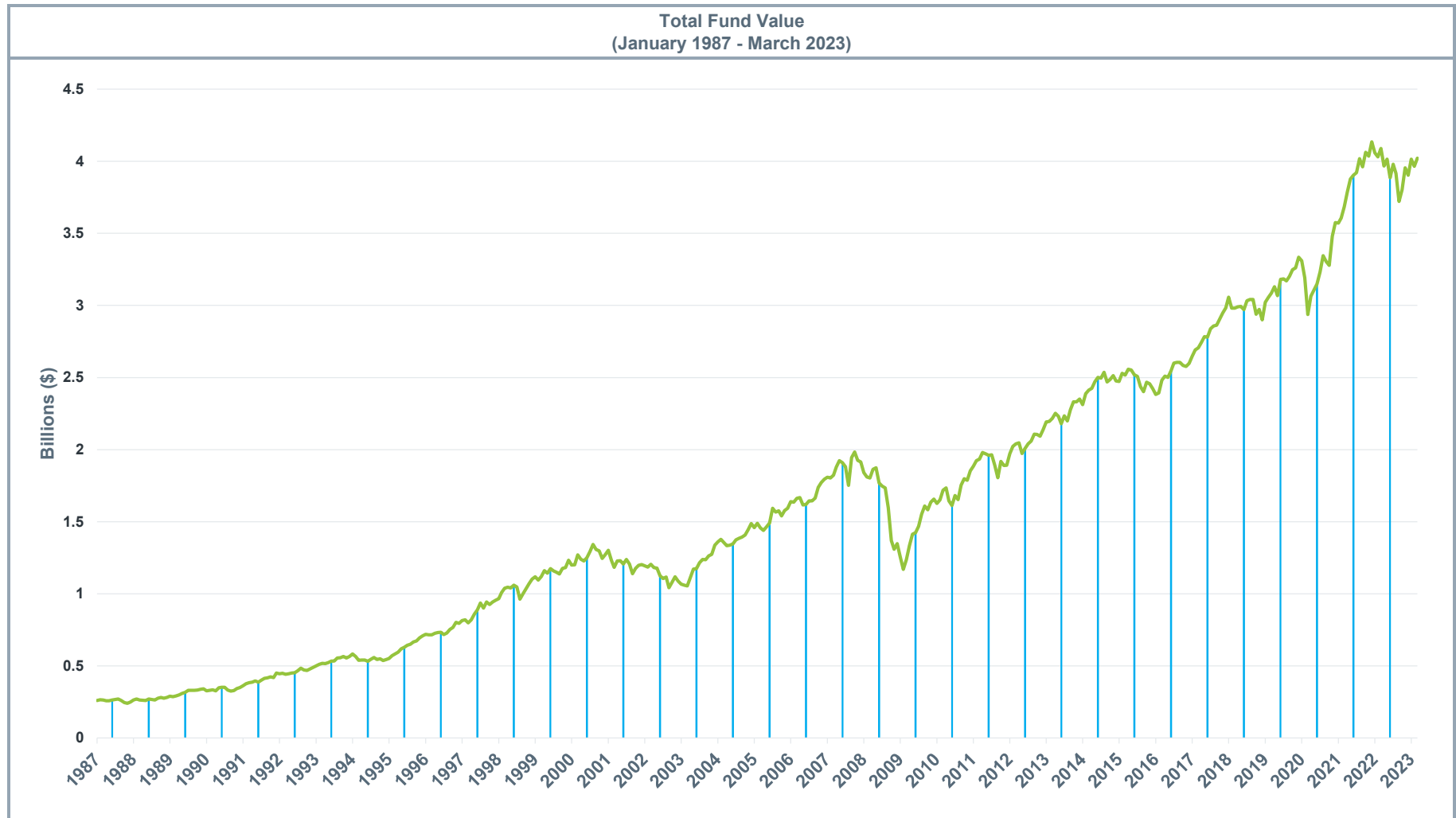
	Market Value (\$)	Allocation (%)	Lower Range (%)	Target (%)	Upper Range (%)
Total Fund Composite	4,021,758,223	100.0	-	100.0	-
US Equity Composite	713,229,408	17.7	15.0	19.0	23.0
Developed Non-US Equity Composite	402,166,591	10.0	8.0	11.0	14.0
Emerging Markets Equity Composite	259,965,809	6.5	4.0	7.0	10.0
Core Fixed Income Composite	607,230,352	15.1	14.0	17.0	20.0
Non-Core Fixed Income Composite	409,959,250	10.2	8.0	11.0	14.0
Real Return Composite	569,905,463	14.2	8.0	15.0	22.0
Real Estate Composite	439,864,995	10.9	5.0	10.0	15.0
Private Equity Composite	552,547,280	13.7	5.0	10.0	15.0
Cash Composite	51,734,291	1.3	0.0	0.0	2.0
Transition Account	4,765,073	0.1	0.0	0.0	0.0
130 Robin Hill Rd	10,389,712	0.3	0.0	0.0	0.0



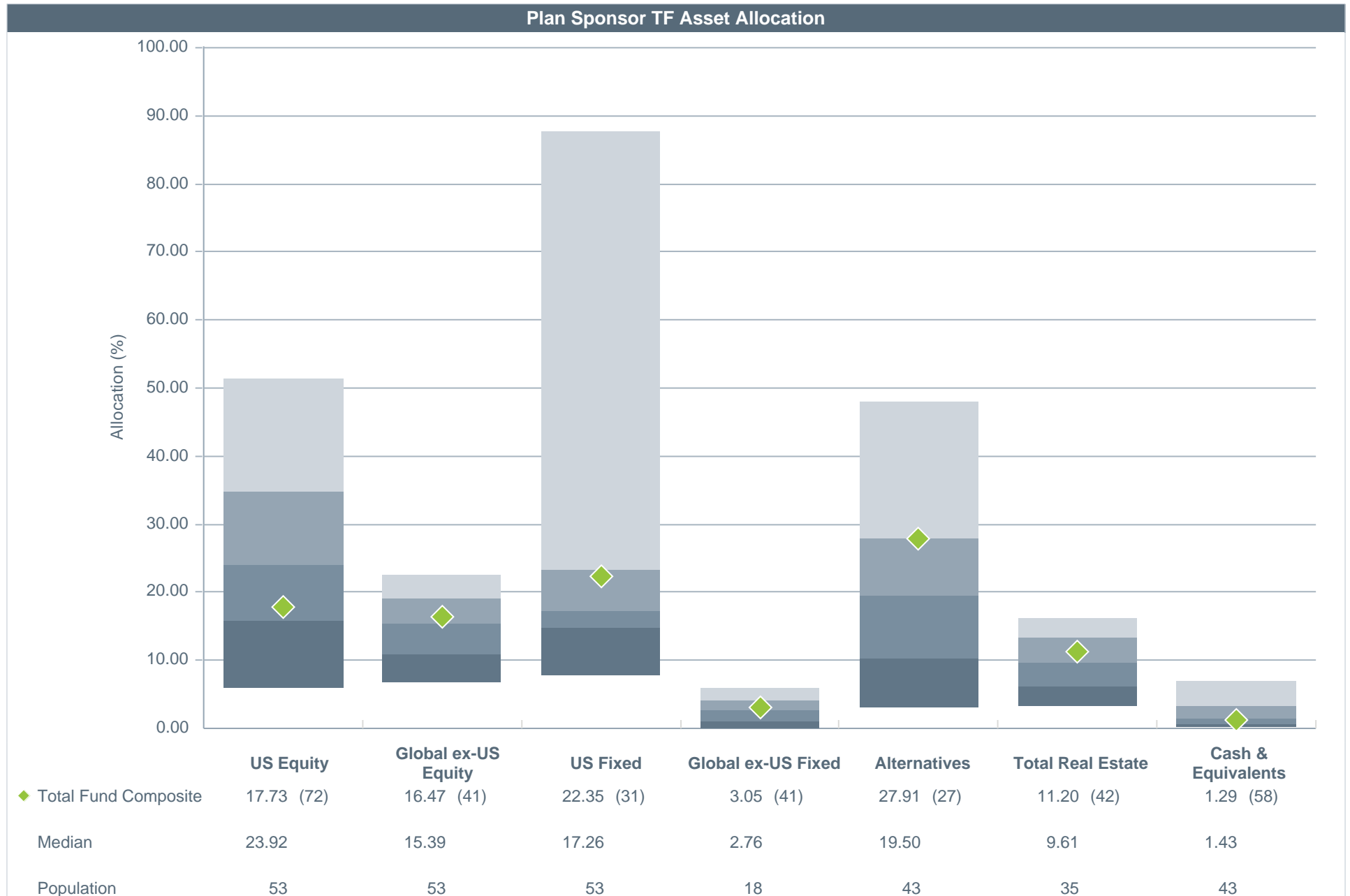
Allocations shown may not sum up to 100% exactly due to rounding. Market value for the Transition Account represents residual assets from portfolio restructuring. Composite market values includes residual assets from liquidated managers.



	Market Value (\$)	Performance (%)											
		FYTD	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014	FY 2013	Since Incep.
Total Fund	4,021,758,223	4.76	0.28	25.20	-0.10	7.74	7.80	10.49	1.37	0.42	15.25	8.10	8.18



Performance shown is net of fees and is annualized for periods greater than one year. The fiscal year for Santa Barbara County Employees' Retirement System ends 06/30. Inception date for the Total Fund is 01/01/1987. Total Fund performance excludes Treasury Cash.



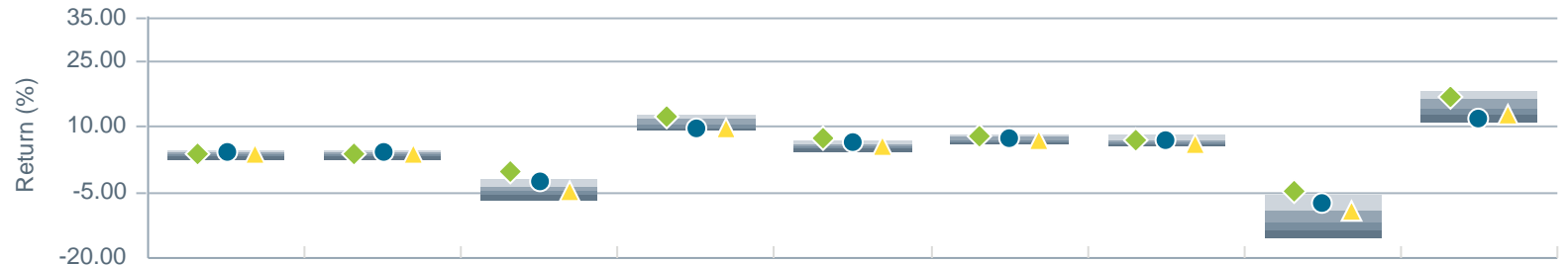
Parentheses contain percentile ranks. Global ex-US Fixed consists of Wellington Blended Opportunistic EMD (CF). US Fixed includes the Transition Account. Allocation to Total Real Estate includes 130 Robin Hill Road.



Santa Barbara County Employees' Retirement System
 All Public Plans \$1B-\$5B
 Plan Sponsor Peer Group Analysis

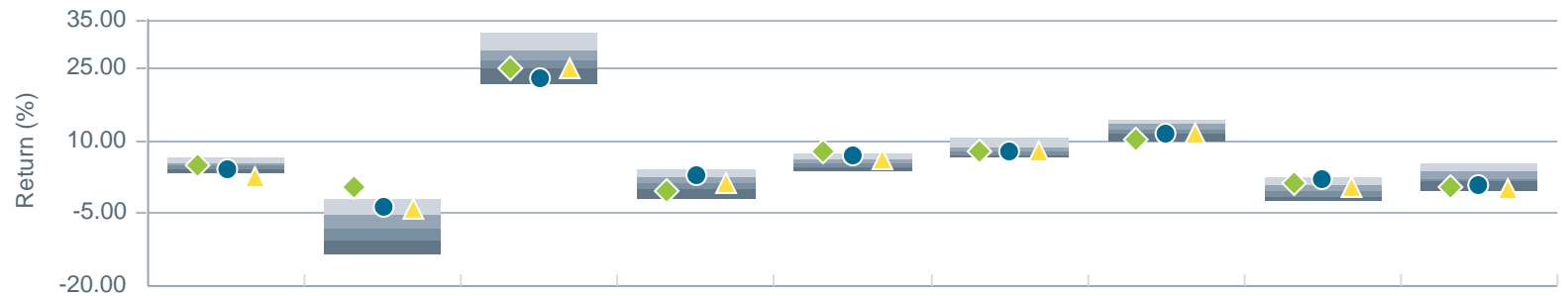
As of March 31, 2023

Trailing Performance



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021
◆ Total Fund Composite	3.72 (52)	3.72 (52)	-0.09 (1)	12.35 (13)	7.31 (3)	8.13 (11)	6.94 (31)	-4.71 (4)	16.80 (21)
● SBCERS Policy Benchmark	4.18 (39)	4.18 (39)	-2.47 (6)	9.54 (87)	6.48 (18)	7.72 (30)	6.88 (36)	-7.43 (8)	12.20 (87)
▲ SBCERS Dynamic Policy Benchmark	3.95 (46)	3.95 (46)	-4.47 (43)	9.57 (86)	5.83 (45)	7.26 (43)	6.31 (64)	-9.02 (21)	12.74 (82)
Median	3.73	3.73	-4.72	10.78	5.57	7.03	6.53	-11.74	14.35
Population	38	38	36	35	35	35	34	64	88

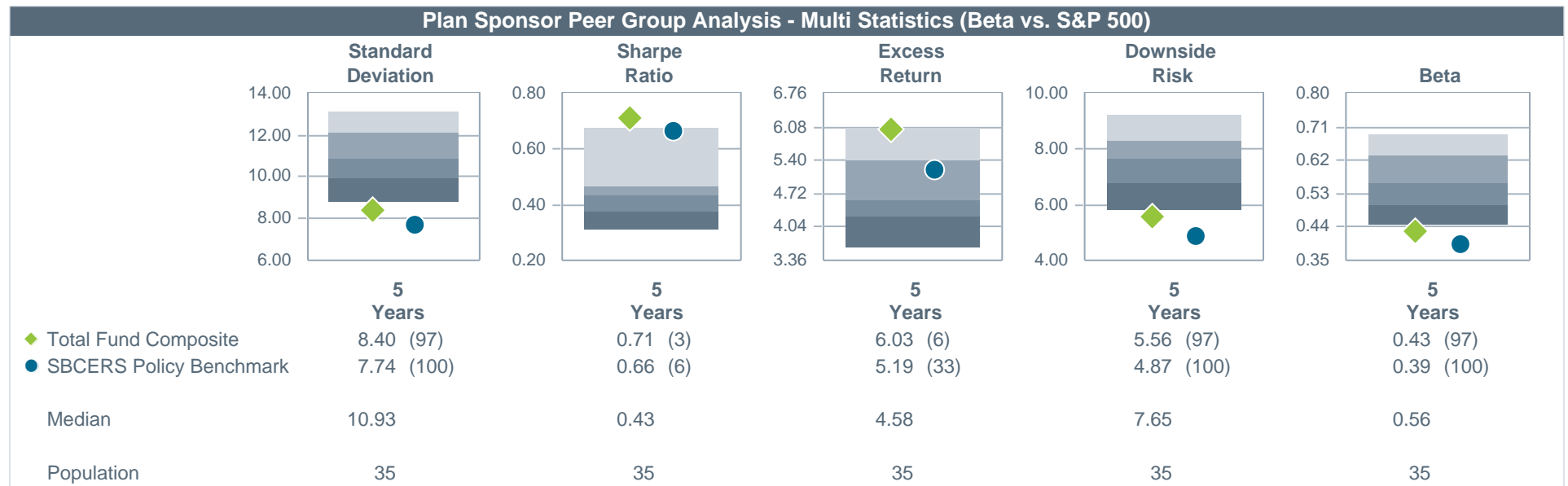
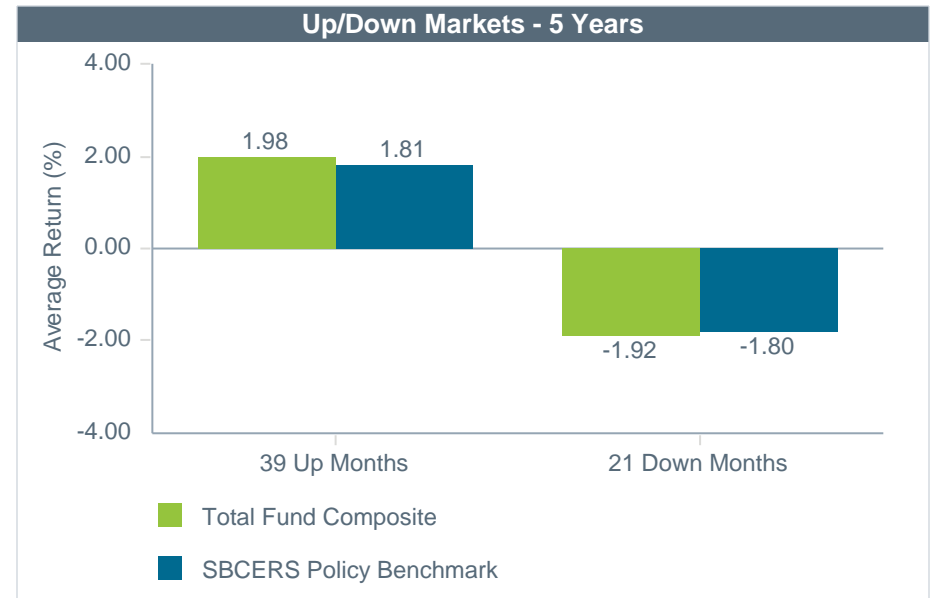
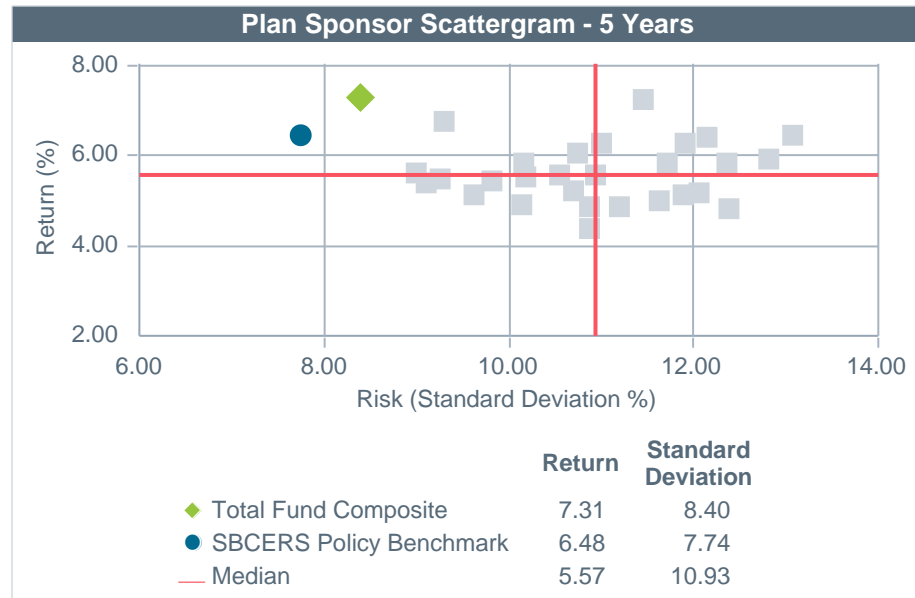
Fiscal Year Performance



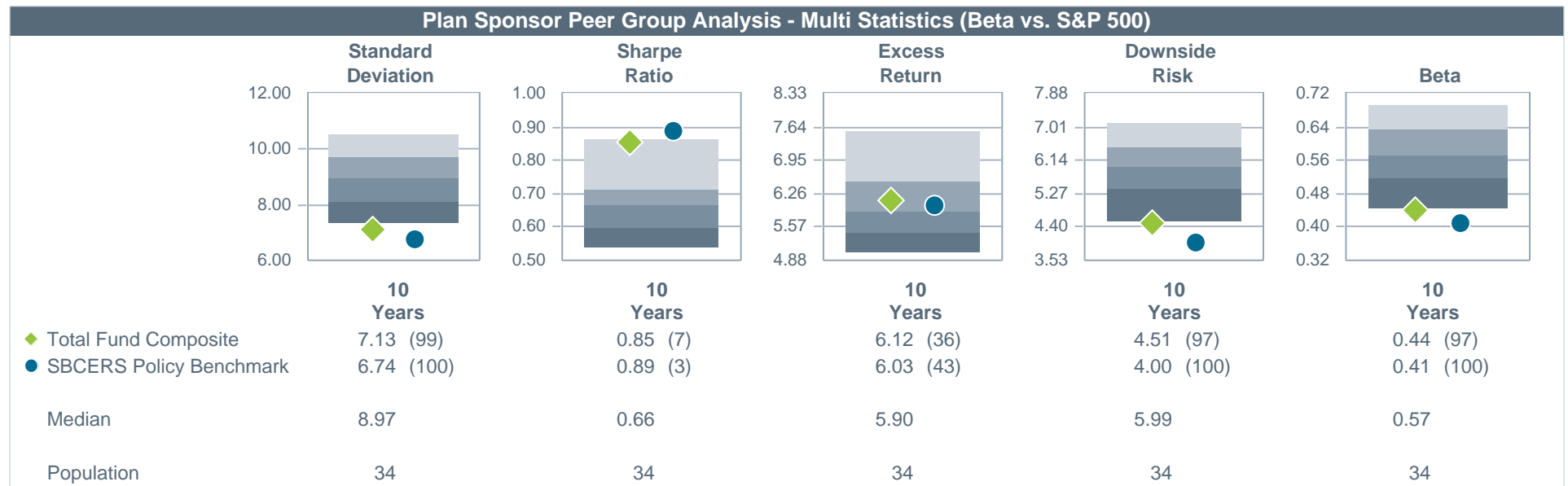
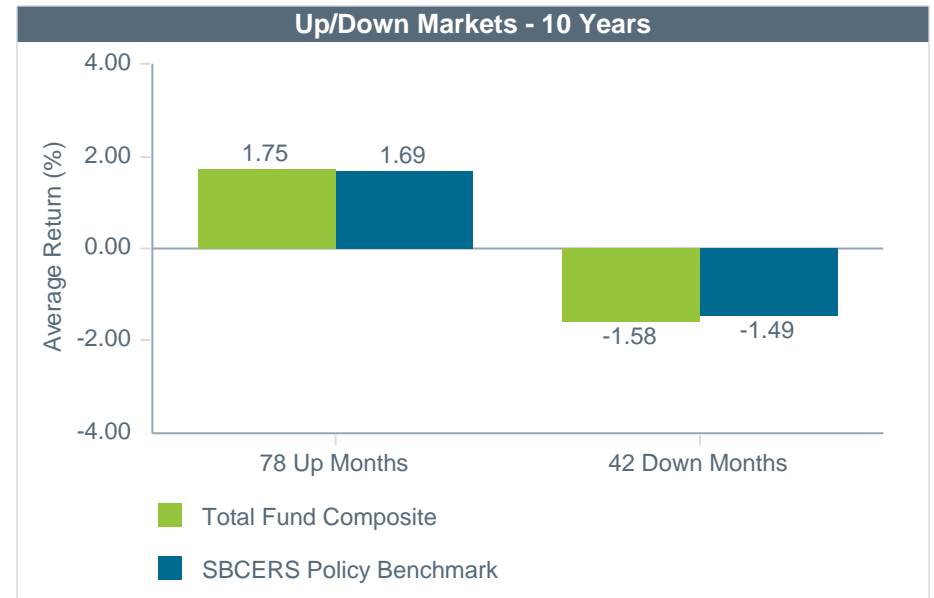
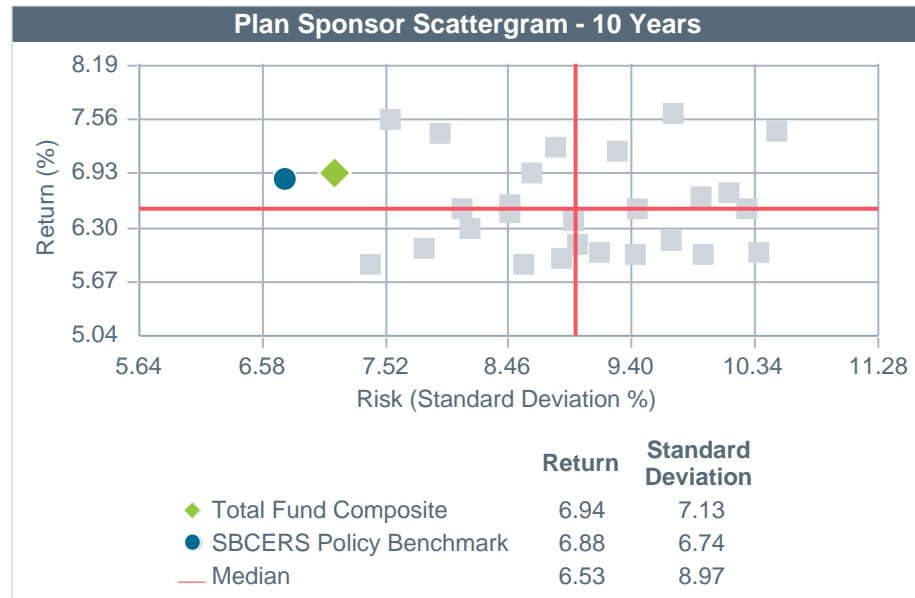
	FYTD	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015
◆ Total Fund Composite	4.86 (50)	0.43 (3)	25.24 (74)	-0.11 (78)	7.76 (3)	7.80 (56)	10.49 (91)	1.37 (17)	0.42 (91)
● SBCERS Policy Benchmark	4.12 (84)	-3.59 (10)	22.97 (92)	2.99 (17)	7.29 (9)	7.77 (57)	11.47 (76)	2.28 (8)	0.97 (85)
▲ SBCERS Dynamic Policy Benchmark	2.54 (100)	-4.13 (14)	25.11 (74)	1.15 (57)	6.36 (23)	7.92 (48)	11.58 (74)	0.65 (35)	0.01 (93)
Median	4.85	-8.18	26.92	1.26	5.38	7.88	12.31	-0.20	2.32
Population	37	69	96	85	66	49	51	49	48

Performance shown is net of fees. Parentheses contain percentile ranks. The fiscal year ends 06/30. Total Fund performance excludes 130 RHR and Treasury Cash.

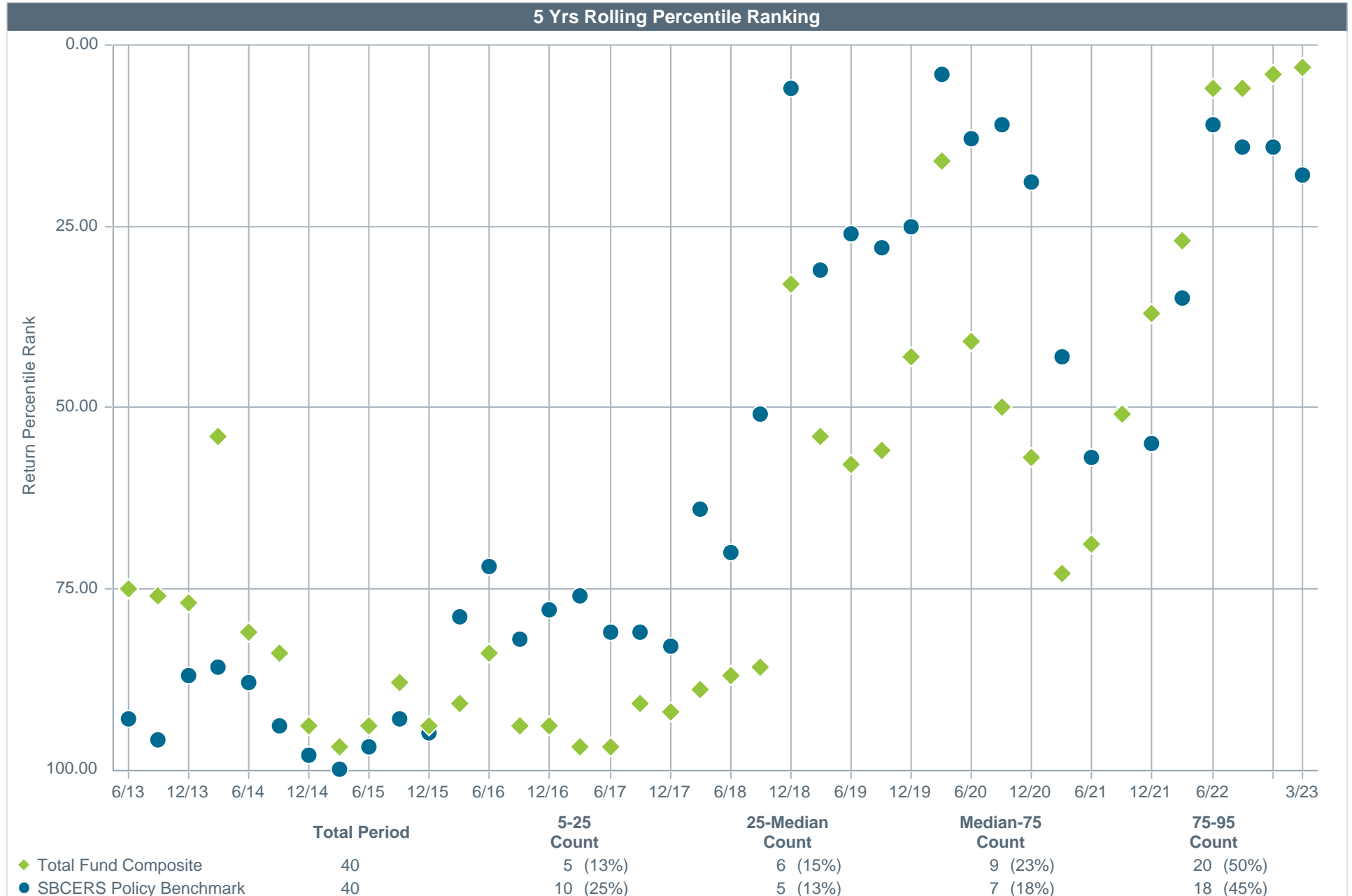




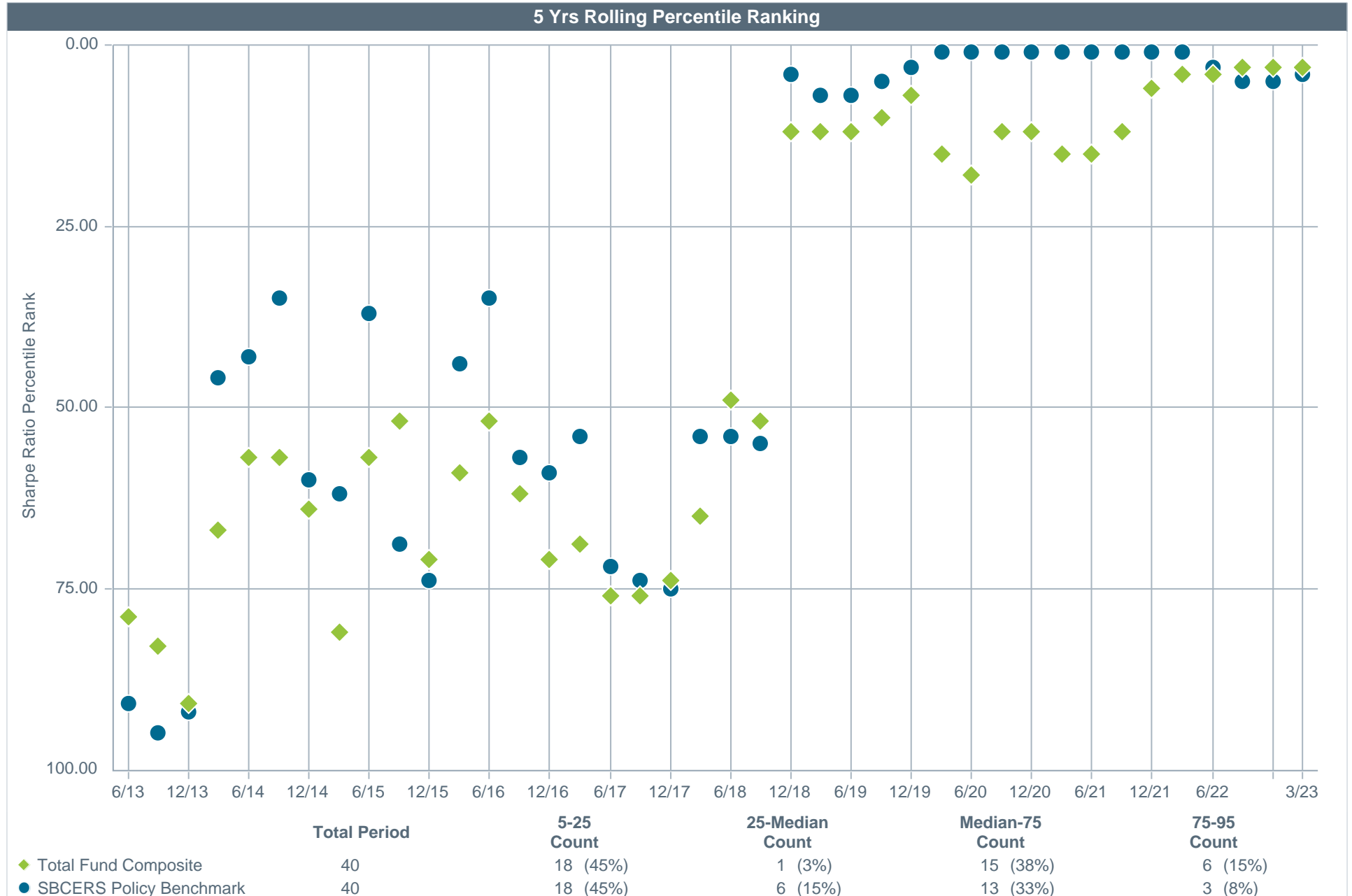
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Total Fund performance excludes 130 RHR and Treasury Cash.



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Total Fund performance excludes 130 RHR and Treasury Cash.

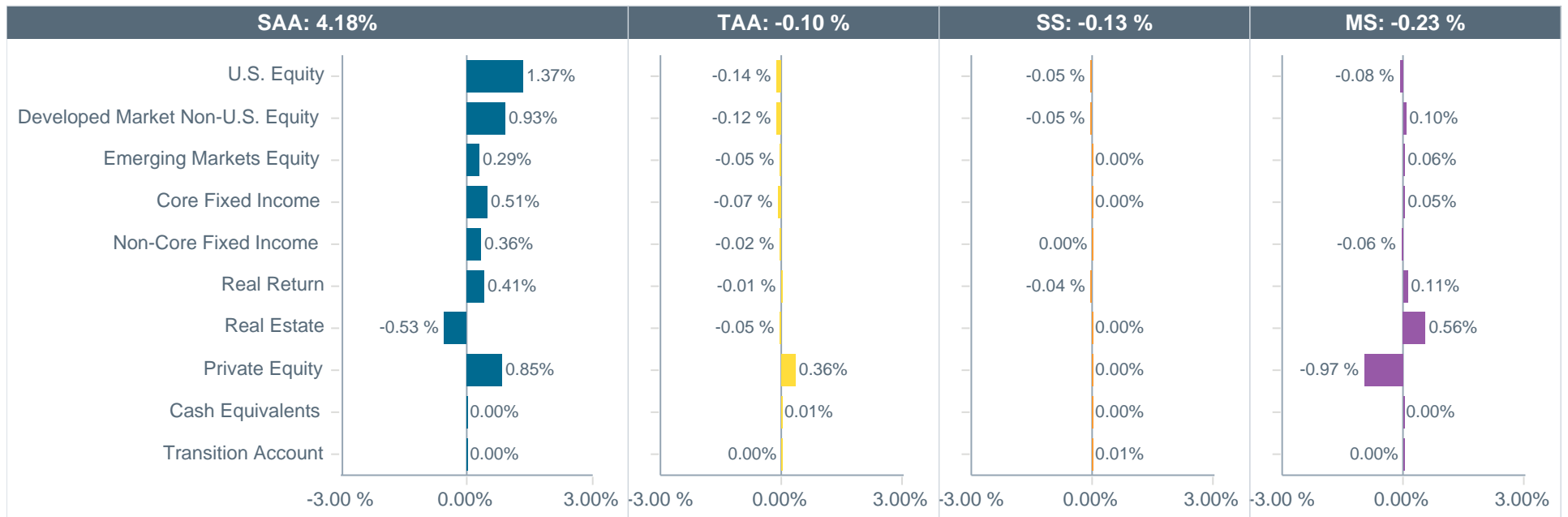
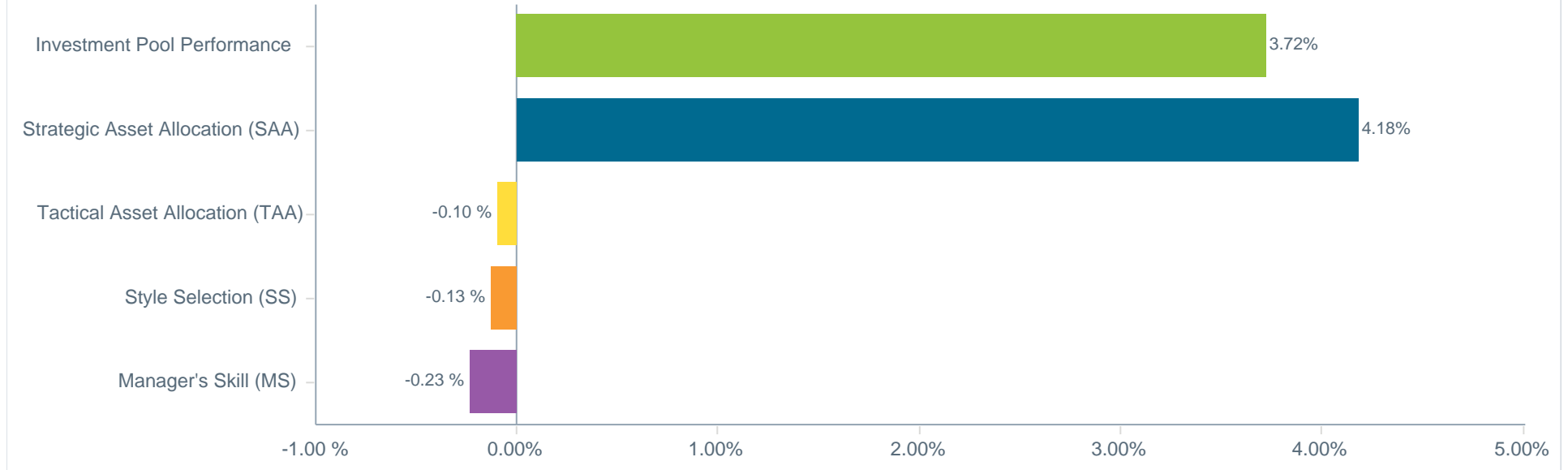


Ranks shown are based on net of fees performance. Total Fund performance excludes 130 RHR and Treasury Cash.



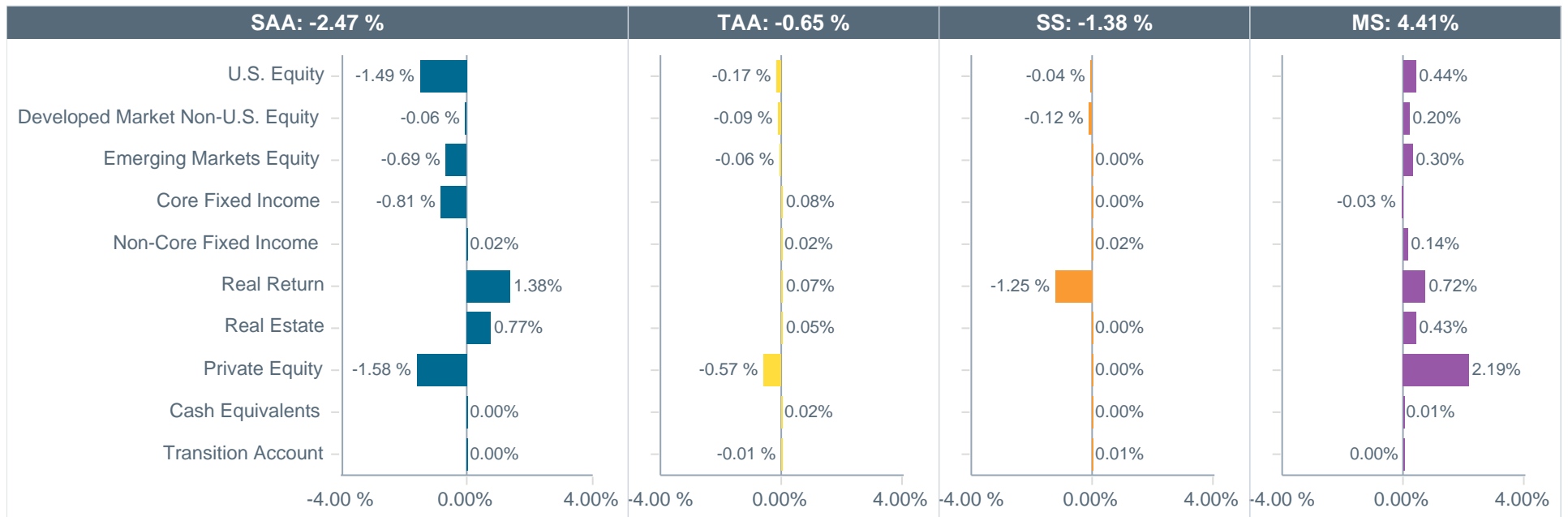
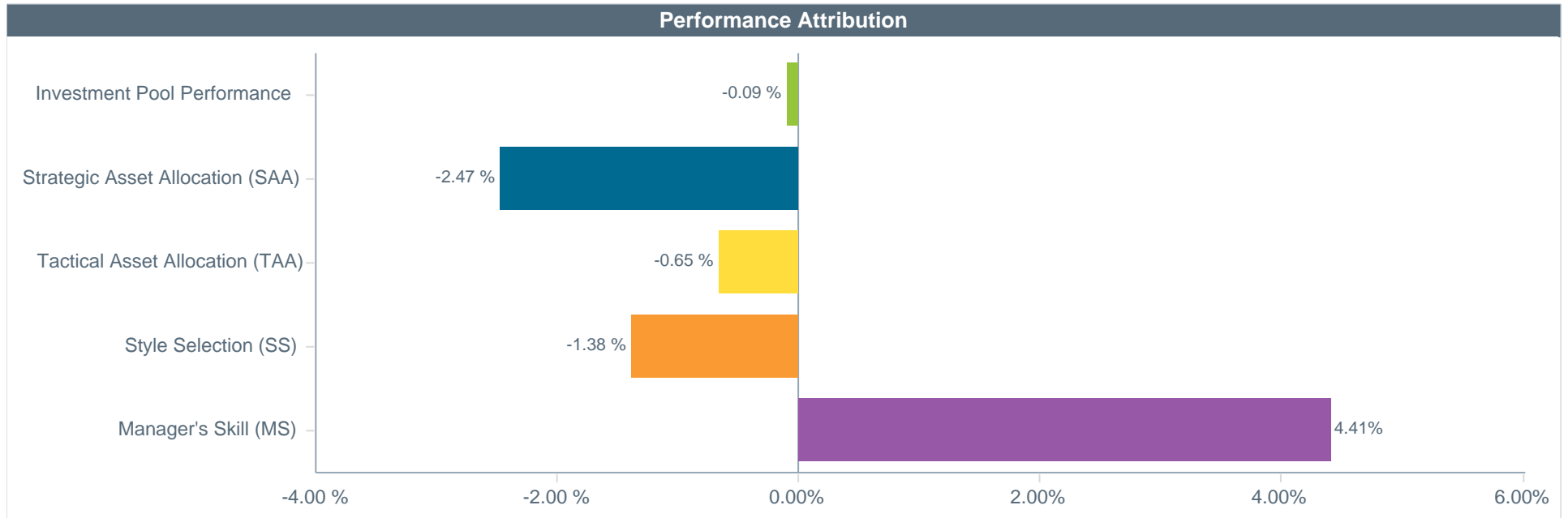
Ranks shown are based on net of fees performance. Total Fund performance excludes 130 RHR and Treasury Cash.

Performance Attribution



Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation. Total Fund performance excludes 130 RHR and Treasury Cash.





Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation. Total Fund performance excludes 130 RHR and Treasury Cash.



Santa Barbara County Employees' Retirement System
Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund Composite	4,021,758,223	100.00	3.70	3.70	4.76	-0.20	12.24	7.24	8.09	6.91	8.18	01/01/1987
Total Fund Ex 130 Robin Hill Rd	4,011,368,512	99.74	3.72	3.72	4.86	-0.09	12.35	7.31	8.13	6.94	8.18	01/01/1987
SBCERS Policy Benchmark			4.18	4.18	4.12	-2.47	9.54	6.48	7.72	6.88	N/A	
Difference			-0.46	-0.46	0.74	2.38	2.81	0.83	0.41	0.06	N/A	
SBCERS Dynamic Policy Benchmark			3.95	3.95	2.54	-4.47	9.57	5.83	7.26	6.31	N/A	
Difference			-0.23	-0.23	2.32	4.38	2.78	1.48	0.87	0.63	N/A	
US Equity Composite	713,229,408	17.73	6.55	6.55	9.95	-6.19	18.71	11.02	12.13	11.75	10.65	01/01/1987
Russell 3000 Index			7.18	7.18	9.75	-8.58	18.48	10.45	11.99	11.73	10.38	
Difference			-0.63	-0.63	0.20	2.39	0.23	0.57	0.14	0.02	0.27	
US Large Cap Equity Composite	632,997,621	15.74	6.98	6.98	10.10	-6.34	18.13	11.57	N/A	N/A	12.46	06/01/2016
Russell 1000 Index			7.46	7.46	9.93	-8.39	18.55	10.87	12.23	12.01	12.17	
Difference			-0.48	-0.48	0.17	2.05	-0.42	0.70	N/A	N/A	0.29	
US Small Cap Equity Composite	80,231,787	1.99	3.33	3.33	8.72	-5.00	25.42	5.82	N/A	N/A	9.41	06/01/2016
Russell 2000 Index			2.74	2.74	6.75	-11.61	17.51	4.71	8.55	8.04	8.17	
Difference			0.59	0.59	1.97	6.61	7.91	1.11	N/A	N/A	1.24	
Developed Non-US Equity Composite	402,166,591	10.00	9.08	9.08	14.79	-0.31	12.43	3.06	5.47	5.29	6.68	07/01/2012
MSCI EAFE Index (USD) (Net)			8.47	8.47	15.36	-1.38	12.99	3.52	6.21	5.00	6.42	
Difference			0.61	0.61	-0.57	1.07	-0.56	-0.46	-0.74	0.29	0.26	
Emerging Markets Equity Composite	259,965,809	6.46	4.91	4.91	4.88	-5.85	12.88	1.09	5.89	2.66	3.62	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			3.96	3.96	0.84	-10.70	7.83	-0.91	4.91	2.00	2.93	
Difference			0.95	0.95	4.04	4.85	5.05	2.00	0.98	0.66	0.69	
Core Fixed Income Composite	607,230,352	15.10	3.38	3.38	0.19	-4.86	-1.37	1.24	N/A	N/A	1.28	07/01/2017
Bloomberg US Agg Bond Index			2.96	2.96	-0.09	-4.78	-2.77	0.90	0.88	1.36	0.74	
Difference			0.42	0.42	0.28	-0.08	1.40	0.34	N/A	N/A	0.54	
Non-Core Fixed Income Composite	409,959,250	10.19	2.79	2.79	6.45	1.84	6.55	2.04	N/A	N/A	2.42	07/01/2017
Custom Non-Core Fixed Income Benchmark			3.23	3.23	6.67	0.03	6.04	2.46	4.12	3.11	2.77	
Difference			-0.44	-0.44	-0.22	1.81	0.51	-0.42	N/A	N/A	-0.35	

Performance shown is net of fees and provided by BNY Mellon. Performance is annualized for periods greater than one year. Total Fund performance excludes Treasury Cash. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark. The fiscal year ends 06/30. Composite market values includes residual assets from liquidated managers.



Santa Barbara County Employees' Retirement System
 Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Return Composite	569,905,463	14.17	3.30	3.30	4.95	6.13	13.97	7.81	N/A	N/A	7.25	07/01/2017
Consumer Price Index+4%			2.70	2.70	4.91	9.18	9.57	8.03	7.58	6.74	7.85	
Difference			0.60	0.60	0.04	-3.05	4.40	-0.22	N/A	N/A	-0.60	
Custom Real Return Benchmark			2.37	2.37	3.41	1.35	10.57	5.97	N/A	N/A	5.77	
Difference			0.93	0.93	1.54	4.78	3.40	1.84	N/A	N/A	1.48	
Real Estate Composite	439,864,995	10.94	-0.04	-0.04	3.42	12.44	15.34	12.85	12.17	12.22	7.82	04/01/2006
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-5.17	-5.17	-0.55	6.55	8.97	7.72	7.57	9.11	6.38	
Difference			5.13	5.13	3.97	5.89	6.37	5.13	4.60	3.11	1.44	
Private Equity Composite	552,547,280	13.74	1.82	1.82	-1.22	0.22	21.18	17.57	17.23	16.19	11.46	06/01/2006
Russell 3000+3% Index (1 Qtr Lag)			7.98	7.98	-12.79	-16.78	10.28	12.05	14.37	15.50	11.98	
Difference			-6.16	-6.16	11.57	17.00	10.90	5.52	2.86	0.69	-0.52	

Performance shown is net of fees and provided by BNY Mellon. Performance is annualized for periods greater than one year. Total Fund performance excludes Treasury Cash. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark. The fiscal year ends 06/30. Composite market values includes residual assets from liquidated managers.



Santa Barbara County Employees' Retirement System
Asset Allocation & Performance - Fiscal Year

As of March 31, 2023

	Allocation		Performance (%)										
	Market Value (\$)	%	FYTD	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014	FY 2013
Total Fund Composite	4,021,758,223	100.00	4.76	0.28	25.20	-0.10	7.74	7.80	10.49	1.37	0.42	15.25	8.10
Total Fund Ex 130 Robin Hill Rd	4,011,368,512	99.74	4.86	0.43	25.24	-0.11	7.76	7.80	10.49	1.37	0.42	15.25	8.10
SBCERS Policy Benchmark			4.12	-3.59	22.97	2.99	7.29	7.77	11.47	2.28	0.97	15.72	9.21
Difference			0.74	4.02	2.27	-3.10	0.47	0.03	-0.98	-0.91	-0.55	-0.47	-1.11
SBCERS Dynamic Policy Benchmark			2.54	-4.13	25.11	1.15	6.36	7.92	11.58	0.65	0.01	16.50	7.84
Difference			2.32	4.56	0.13	-1.26	1.40	-0.12	-1.09	0.72	0.41	-1.25	0.26
US Equity Composite	713,229,408	17.73	9.95	-11.24	41.39	6.08	11.05	15.53	14.82	3.22	6.31	25.01	19.58
Russell 3000 Index			9.75	-13.87	44.16	6.53	8.98	14.78	18.51	2.14	7.29	25.22	21.46
Difference			0.20	2.63	-2.77	-0.45	2.07	0.75	-3.69	1.08	-0.98	-0.21	-1.88
US Large Cap Equity Composite	632,997,621	15.74	10.10	-10.88	39.45	7.64	13.54	14.95	13.48	N/A	N/A	N/A	N/A
Russell 1000 Index			9.93	-13.04	43.07	7.48	10.02	14.54	18.03	2.93	7.37	25.35	21.24
Difference			0.17	2.16	-3.62	0.16	3.52	0.41	-4.55	N/A	N/A	N/A	N/A
US Small Cap Equity Composite	80,231,787	1.99	8.72	-14.10	61.83	-9.34	-9.65	21.14	24.44	N/A	N/A	N/A	N/A
Russell 2000 Index			6.75	-25.20	62.03	-6.63	-3.31	17.57	24.60	-6.73	6.49	23.64	24.21
Difference			1.97	11.10	-0.20	-2.71	-6.34	3.57	-0.16	N/A	N/A	N/A	N/A
Developed Non-US Equity Composite	402,166,591	10.00	14.79	-17.41	29.60	-5.62	1.78	6.23	16.86	-6.62	-0.92	23.53	19.66
MSCI EAFE Index (USD) (Net)			15.36	-17.77	32.35	-5.13	1.08	6.84	20.27	-10.16	-4.22	23.57	18.62
Difference			-0.57	0.36	-2.75	-0.49	0.70	-0.61	-3.41	3.54	3.30	-0.04	1.04
Emerging Markets Equity Composite	259,965,809	6.46	4.88	-16.84	39.80	-11.30	5.80	5.86	22.55	-9.97	-6.02	12.12	4.09
MSCI Emg Mkts Index (USD) (Net)			0.84	-25.28	40.90	-3.39	1.21	8.20	23.75	-12.05	-5.12	14.31	2.87
Difference			4.04	8.44	-1.10	-7.91	4.59	-2.34	-1.20	2.08	-0.90	-2.19	1.22
Core Fixed Income Composite	607,230,352	15.10	0.19	-10.15	0.88	8.63	7.62	1.34	N/A	N/A	N/A	N/A	N/A
Bloomberg US Agg Bond Index			-0.09	-10.29	-0.34	8.74	7.87	-0.40	-0.31	6.00	1.86	4.37	-0.69
Difference			0.28	0.14	1.22	-0.11	-0.25	1.74	N/A	N/A	N/A	N/A	N/A
Non-Core Fixed Income Composite	409,959,250	10.19	6.45	-6.02	10.92	-2.28	5.43	0.37	N/A	N/A	N/A	N/A	N/A
Custom Non-Core Fixed Income Benchmark			6.67	-8.81	11.11	-1.05	7.44	1.85	8.86	2.75	-1.98	8.51	6.22
Difference			-0.22	2.79	-0.19	-1.23	-2.01	-1.48	N/A	N/A	N/A	N/A	N/A

Performance shown is net of fees and provided by BNY Mellon. Total Fund performance excludes Treasury Cash. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark. The fiscal year ends 06/30. Composite market values includes residual assets from liquidated managers.



Santa Barbara County Employees' Retirement System
 Asset Allocation & Performance - Fiscal Year

As of March 31, 2023

	Allocation		Performance (%)										
	Market Value (\$)	%	FYTD	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014	FY 2013
Real Return Composite	569,905,463	14.17	4.95	12.55	23.53	-7.17	6.27	3.90	N/A	N/A	N/A	N/A	N/A
Consumer Price Index+4%			4.91	13.42	9.61	4.67	5.71	6.99	5.70	5.04	4.13	6.15	5.82
Difference			0.04	-0.87	13.92	-11.84	0.56	-3.09	N/A	N/A	N/A	N/A	N/A
Custom Real Return Benchmark			3.41	5.65	16.55	-2.14	5.22	5.32	N/A	N/A	N/A	N/A	N/A
Difference			1.54	6.90	6.98	-5.03	1.05	-1.42	N/A	N/A	N/A	N/A	N/A
Real Estate Composite	439,864,995	10.94	3.42	36.10	9.75	5.56	9.50	12.27	9.20	13.75	10.31	12.26	10.37
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-0.55	27.26	1.47	3.93	6.55	7.11	7.36	12.62	12.40	12.74	9.68
Difference			3.97	8.84	8.28	1.63	2.95	5.16	1.84	1.13	-2.09	-0.48	0.69
Private Equity Composite	552,547,280	13.74	-1.22	27.41	55.88	-1.02	13.64	15.69	18.96	4.69	11.12	20.27	12.21
Russell 3000+3% Index (1 Qtr Lag)			-12.79	15.28	67.40	-6.40	12.03	17.23	21.61	2.65	15.74	26.29	18.00
Difference			11.57	12.13	-11.52	5.38	1.61	-1.54	-2.65	2.04	-4.62	-6.02	-5.79

Performance shown is net of fees and provided by BNY Mellon. Total Fund performance excludes Treasury Cash. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark. The fiscal year ends 06/30. Composite market values includes residual assets from liquidated managers.



Santa Barbara County Employees' Retirement System
Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Equity Composite	713,229,408	17.73	6.55	6.55	9.95	-6.19	18.71	11.02	12.13	11.75	10.65	01/01/1987
Russell 3000 Index			7.18	7.18	9.75	-8.58	18.48	10.45	11.99	11.73	10.38	
Difference			-0.63	-0.63	0.20	2.39	0.23	0.57	0.14	0.02	0.27	
US Large Cap Equity Composite	632,997,621	15.74	6.98	6.98	10.10	-6.34	18.13	11.57	N/A	N/A	12.46	06/01/2016
Russell 1000 Index			7.46	7.46	9.93	-8.39	18.55	10.87	12.23	12.01	12.17	
Difference			-0.48	-0.48	0.17	2.05	-0.42	0.70	N/A	N/A	0.29	
BNY Mellon HEDI (SA)	291,134,009	7.24	6.42	6.42	10.33	-3.79	17.70	12.31	12.88	N/A	10.95	05/01/2019
Russell 1000 Index			7.46	7.46	9.93	-8.39	18.55	10.87	12.23	12.01	10.40	
Difference			-1.04	-1.04	0.40	4.60	-0.85	1.44	0.65	N/A	0.55	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	9.31	-7.77	17.55	10.27	11.55	11.28	9.87	
Rank			55	55	31	7	47	5	12	N/A	16	
BNY Mellon R1000 Index - NL (CF)	341,863,612	8.50	7.45	7.45	9.91	-8.41	18.58	10.98	12.32	12.09	10.51	05/01/2019
Russell 1000 Index			7.46	7.46	9.93	-8.39	18.55	10.87	12.23	12.01	10.40	
Difference			-0.01	-0.01	-0.02	-0.02	0.03	0.11	0.09	0.08	0.11	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	9.31	-7.77	17.55	10.27	11.55	11.28	9.87	
Rank			32	32	39	61	19	27	22	20	28	
US Small Cap Equity Composite	80,231,787	1.99	3.33	3.33	8.72	-5.00	25.42	5.82	N/A	N/A	9.41	06/01/2016
Russell 2000 Index			2.74	2.74	6.75	-11.61	17.51	4.71	8.55	8.04	8.17	
Difference			0.59	0.59	1.97	6.61	7.91	1.11	N/A	N/A	1.24	
Dimensional U.S. Small Cap Value (CF)	45,386,081	1.13	0.76	0.76	11.53	-2.08	33.06	7.97	9.85	9.19	8.49	04/01/2005
Russell 2000 Index			2.74	2.74	6.75	-11.61	17.51	4.71	8.55	8.04	7.59	
Difference			-1.98	-1.98	4.78	9.53	15.55	3.26	1.30	1.15	0.90	
Russell 2000 Val Index			-0.66	-0.66	2.74	-12.96	21.01	4.55	7.86	7.22	6.75	
Difference			1.42	1.42	8.79	10.88	12.05	3.42	1.99	1.97	1.74	
IM U.S. Small Cap Value Equity (MF) Median			0.68	0.68	6.66	-7.14	25.68	5.66	8.16	7.57	6.86	
Rank			49	49	13	12	11	13	14	14	3	
RHJ Small Cap Opportunities (SA)	34,845,706	0.87	6.88	6.88	5.27	-8.54	17.68	3.36	N/A	N/A	8.90	06/01/2016
Russell 2000 Index			2.74	2.74	6.75	-11.61	17.51	4.71	8.55	8.04	8.17	
Difference			4.14	4.14	-1.48	3.07	0.17	-1.35	N/A	N/A	0.73	
Russell 2000 Grth Index			6.07	6.07	10.72	-10.60	13.36	4.26	8.74	8.49	8.38	
Difference			0.81	0.81	-5.45	2.06	4.32	-0.90	N/A	N/A	0.52	
IM U.S. Small Cap Growth Equity (MF) Median			6.24	6.24	9.54	-11.42	15.45	6.89	10.37	9.14	10.05	
Rank			40	40	89	24	28	89	N/A	N/A	69	

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Santa Barbara County Employees' Retirement System
 Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Developed Non-US Equity Composite	402,166,591	10.00	9.08	9.08	14.79	-0.31	12.43	3.06	5.47	5.29	6.68	07/01/2012
MSCI EAFE Index (USD) (Net)			8.47	8.47	15.36	-1.38	12.99	3.52	6.21	5.00	6.42	
Difference			0.61	0.61	-0.57	1.07	-0.56	-0.46	-0.74	0.29	0.26	
PanAgora Dynamic International Equity (SA)	205,626,927	5.11	8.66	8.66	15.31	-0.45	14.68	2.67	5.71	5.37	7.84	05/01/2009
MSCI EAFE Index (USD) (Net)			8.47	8.47	15.36	-1.38	12.99	3.52	6.21	5.00	7.05	
Difference			0.19	0.19	-0.05	0.93	1.69	-0.85	-0.50	0.37	0.79	
IM EAFE Core (MF) Median			8.52	8.52	14.19	-0.96	12.80	3.09	5.78	4.77	6.81	
Rank			46	46	29	41	19	64	52	22	16	
Artisan Non-U.S. Growth (SA)	139,524,453	3.47	8.69	8.69	16.00	-0.14	9.19	3.45	5.74	N/A	4.23	02/01/2014
MSCI EAFE Index (USD) (Net)			8.47	8.47	15.36	-1.38	12.99	3.52	6.21	5.00	4.16	
Difference			0.22	0.22	0.64	1.24	-3.80	-0.07	-0.47	N/A	0.07	
IM EAFE Growth (MF) Median			9.70	9.70	14.59	-3.03	11.27	3.73	6.46	5.33	4.80	
Rank			63	63	24	23	85	61	73	N/A	74	
Acadian Non-US Small Cap Equity (CF)	56,146,418	1.40	5.73	5.73	11.14	-8.51	N/A	N/A	N/A	N/A	4.25	12/01/2020
MSCI EAFE Sm Cap Index (USD) (Net)			4.92	4.92	9.54	-9.83	12.07	0.87	5.26	5.86	-1.29	
Difference			0.81	0.81	1.60	1.32	N/A	N/A	N/A	N/A	5.54	
IM International SMID Cap Equity (MF) Median			6.38	6.38	10.50	-8.38	13.07	1.19	5.43	5.15	-1.60	
Rank			69	69	41	52	N/A	N/A	N/A	N/A	14	

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Santa Barbara County Employees' Retirement System
Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Emerging Markets Equity Composite	259,965,809	6.46	4.91	4.91	4.88	-5.85	12.88	1.09	5.89	2.66	3.62	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			3.96	3.96	0.84	-10.70	7.83	-0.91	4.91	2.00	2.93	
Difference			0.95	0.95	4.04	4.85	5.05	2.00	0.98	0.66	0.69	
DFA Emg Mkts Value;I (DFEVX)	132,783,373	3.30	3.74	3.74	3.18	-7.88	16.23	0.24	6.19	N/A	2.19	05/01/2013
MSCI Emg Mkts Index (USD) (Net)			3.96	3.96	0.84	-10.70	7.83	-0.91	4.91	2.00	1.94	
Difference			-0.22	-0.22	2.34	2.82	8.40	1.15	1.28	N/A	0.25	
MSCI Emg Mkts Val Index (USD) (Net)			3.91	3.91	1.56	-9.44	10.04	-1.15	3.92	0.69	0.69	
Difference			-0.17	-0.17	1.62	1.56	6.19	1.39	2.27	N/A	1.50	
IM Emerging Markets Equity (MF) Median			5.02	5.02	2.83	-9.28	7.93	-1.08	4.67	1.77	1.66	
Rank			76	76	47	35	8	26	19	N/A	35	
RBC Emerging Markets Equity (CF)	127,182,436	3.16	6.16	6.16	6.73	-3.63	9.98	1.84	N/A	N/A	4.98	09/01/2016
MSCI Emg Mkts Index (USD) (Net)			3.96	3.96	0.84	-10.70	7.83	-0.91	4.91	2.00	3.96	
Difference			2.20	2.20	5.89	7.07	2.15	2.75	N/A	N/A	1.02	
MSCI Emg Mkts Grth Index (USD) (Net)			4.00	4.00	0.20	-11.87	5.65	-0.79	5.78	3.18	4.67	
Difference			2.16	2.16	6.53	8.24	4.33	2.63	N/A	N/A	0.31	
IM Emerging Markets Equity (MF) Median			5.02	5.02	2.83	-9.28	7.93	-1.08	4.67	1.77	3.70	
Rank			27	27	21	9	29	12	N/A	N/A	21	
Core Fixed Income Composite	607,230,352	15.10	3.38	3.38	0.19	-4.86	-1.37	1.24	N/A	N/A	1.28	07/01/2017
Bloomberg US Agg Bond Index			2.96	2.96	-0.09	-4.78	-2.77	0.90	0.88	1.36	0.74	
Difference			0.42	0.42	0.28	-0.08	1.40	0.34	N/A	N/A	0.54	
Garcia Hamilton Core Fixed Income (SA)	360,632,931	8.97	3.51	3.51	-0.13	-3.94	-1.57	1.14	N/A	N/A	0.99	09/01/2017
Bloomberg US Agg Bond Index			2.96	2.96	-0.09	-4.78	-2.77	0.90	0.88	1.36	0.53	
Difference			0.55	0.55	-0.04	0.84	1.20	0.24	N/A	N/A	0.46	
IM U.S. Broad Market Core Fixed Income (MF) Median			3.14	3.14	-0.02	-5.31	-1.85	0.85	0.99	1.32	0.48	
Rank			15	15	59	8	39	26	N/A	N/A	11	
PGIM Core Plus Fixed Income (CF)	246,629,757	6.13	3.19	3.19	0.78	-5.75	-0.62	N/A	N/A	N/A	1.56	06/01/2018
Bloomberg US Agg Bond Index			2.96	2.96	-0.09	-4.78	-2.77	0.90	0.88	1.36	0.94	
Difference			0.23	0.23	0.87	-0.97	2.15	N/A	N/A	N/A	0.62	
IM U.S. Broad Market Core+ Fixed Income (MF) Median			3.23	3.23	0.47	-5.51	-1.07	1.07	1.32	1.48	1.12	
Rank			56	56	36	57	32	N/A	N/A	N/A	27	

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Santa Barbara County Employees' Retirement System
Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Non-Core Fixed Income Composite	409,959,250	10.19	2.79	2.79	6.45	1.84	6.55	2.04	N/A	N/A	2.42	07/01/2017
Custom Non-Core Fixed Income Benchmark			3.23	3.23	6.67	0.03	6.04	2.46	4.12	3.11	2.77	
Difference			-0.44	-0.44	-0.22	1.81	0.51	-0.42	N/A	N/A	-0.35	
Wellington Blended Opportunistic EMD (CF)	122,861,271	3.05	3.93	3.93	8.07	-2.50	1.51	N/A	N/A	N/A	-2.98	03/01/2020
Wellington Blended Index			3.51	3.51	6.90	-3.83	0.46	-1.44	1.15	0.29	-3.80	
Difference			0.42	0.42	1.17	1.33	1.05	N/A	N/A	N/A	0.82	
IM Emerging Markets Debt (MF) Median			1.76	1.76	5.61	-6.07	1.43	-0.74	1.62	0.73	-3.75	
Rank			1	1	16	24	49	N/A	N/A	N/A	36	
Beach Point Leveraged Loan (CF)	150,346,585	3.74	3.72	3.72	7.69	1.99	7.75	3.25	3.31	3.45	3.73	10/01/2012
Credit Suisse Lvg'd Loan Index			3.11	3.11	6.77	2.12	8.38	3.55	4.57	3.86	4.05	
Difference			0.61	0.61	0.92	-0.13	-0.63	-0.30	-1.26	-0.41	-0.32	
IM U.S. Bank Loans (MF) Median			2.95	2.95	6.63	1.12	6.95	2.36	3.46	2.82	3.04	
Rank			6	6	16	25	22	8	59	10	6	
AG Direct Lending Fund III, LP	17,421,073	0.43										11/01/2018
First Eagle Direct Lending Fund IV	15,824,893	0.39										06/01/2019
PIMCO Private Income Fund, LLC	25,673,055	0.64										11/01/2019
AG Direct Lending Fund IV, LP	19,416,982	0.48										06/01/2021
Deerpath Capital V, LP	18,100,805	0.45										11/01/2020
Deerpath Capital VI, LP	15,764,925	0.39										11/01/2021
First Eagle Direct Lending Fund V-B	14,592,791	0.36										06/01/2021
AG Direct Lending Evergreen Fund, LP	9,474,404	0.24										09/01/2022

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Santa Barbara County Employees' Retirement System
Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Return Composite	569,905,463	14.17	3.30	3.30	4.95	6.13	13.97	7.81	N/A	N/A	7.25	07/01/2017
Consumer Price Index+4%			2.70	2.70	4.91	9.18	9.57	8.03	7.58	6.74	7.85	
Difference			0.60	0.60	0.04	-3.05	4.40	-0.22	N/A	N/A	-0.60	
Custom Real Return Benchmark			2.37	2.37	3.41	1.35	10.57	5.97	N/A	N/A	5.77	
Difference			0.93	0.93	1.54	4.78	3.40	1.84	N/A	N/A	1.48	
Public Real Return Composite	136,429,437	3.39	1.06	1.06	-1.00	-9.88	9.64	4.15	N/A	N/A	4.00	07/01/2017
BNY Mellon TIPS - NL (CF)	15,536,875	0.39	2.91	2.91	-0.62	-6.68	1.54	2.81	2.35	1.41	2.82	05/01/2019
Bloomberg US Trsy US TIPS Index			3.34	3.34	0.02	-6.06	1.75	2.94	2.44	1.49	2.98	
Difference			-0.43	-0.43	-0.64	-0.62	-0.21	-0.13	-0.09	-0.08	-0.16	
IM U.S. TIPS (MF) Median			3.05	3.05	0.02	-6.09	2.14	2.67	2.22	1.12	2.75	
Rank			64	64	82	74	68	40	36	27	45	
Cohen & Steers Real Assets Fund (CIT)	60,820,156	1.51	-0.21	-0.21	-1.25	-11.01	15.08	5.87	N/A	N/A	5.49	09/01/2017
Cohen & Steers Real Assets Custom Index			-0.25	-0.25	-0.74	-10.86	13.95	4.77	5.33	2.37	4.50	
Difference			0.04	0.04	-0.51	-0.15	1.13	1.10	N/A	N/A	0.99	
Nuveen Real Asset Income Fund (SA)	60,072,406	1.49	1.85	1.85	-0.29	-9.82	9.34	3.11	N/A	N/A	2.52	09/01/2017
Nuveen Real Asset Income Blend Index			2.96	2.96	1.00	-9.78	8.09	2.82	3.79	4.06	2.18	
Difference			-1.11	-1.11	-1.29	-0.04	1.25	0.29	N/A	N/A	0.34	
Private Real Return Composite	433,476,026	10.78	3.92	3.92	7.88	18.41	14.86	10.85	N/A	N/A	10.18	07/01/2017
Private Natural Resources	56,762,265	1.41	2.42	2.42	1.93	6.20	6.84	4.41	5.95	N/A	4.93	10/01/2013
Consumer Price Index+4% (1 Qtr Lag)			0.98	0.98	6.31	10.71	9.12	7.93	7.43	6.70	6.66	
Difference			1.44	1.44	-4.38	-4.51	-2.28	-3.52	-1.48	N/A	-1.73	
Private Infrastructure	376,713,761	9.37	4.15	4.15	8.94	20.73	16.63	12.37	14.30	N/A	-1.77	01/01/2014
Consumer Price Index+4%			2.70	2.70	4.91	9.18	9.57	8.03	7.58	6.74	6.95	
Difference			1.45	1.45	4.03	11.55	7.06	4.34	6.72	N/A	-8.72	

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Santa Barbara County Employees' Retirement System
 Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate Composite	439,864,995	10.94	-0.04	-0.04	3.42	12.44	15.34	12.85	12.17	12.22	7.82	04/01/2006
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-5.17	-5.17	-0.55	6.55	8.97	7.72	7.57	9.11	6.38	
Difference			5.13	5.13	3.97	5.89	6.37	5.13	4.60	3.11	1.44	
ORG Real Estate	439,864,995	10.94	-0.04	-0.04	3.42	12.44	15.34	12.85	12.24	12.43	7.81	04/01/2006
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-5.17	-5.17	-0.55	6.55	8.97	7.72	7.57	9.11	6.38	
Difference			5.13	5.13	3.97	5.89	6.37	5.13	4.67	3.32	1.43	
Private Equity Composite	552,547,280	13.74	1.82	1.82	-1.22	0.22	21.18	17.57	17.23	16.19	11.46	06/01/2006
Russell 3000+3% Index (1 Qtr Lag)			7.98	7.98	-12.79	-16.78	10.28	12.05	14.37	15.50	11.98	
Difference			-6.16	-6.16	11.57	17.00	10.90	5.52	2.86	0.69	-0.52	

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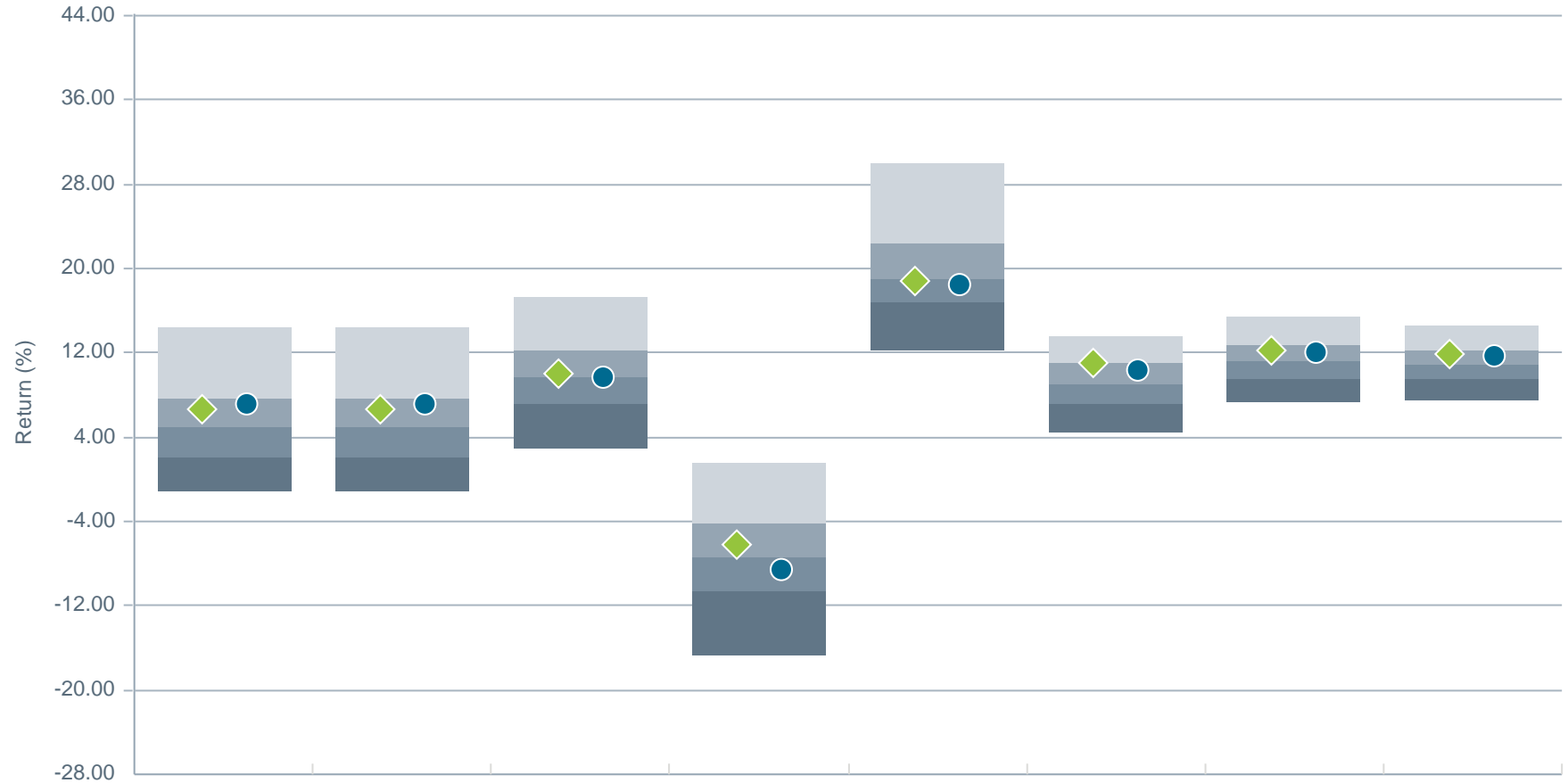


Composite Profiles



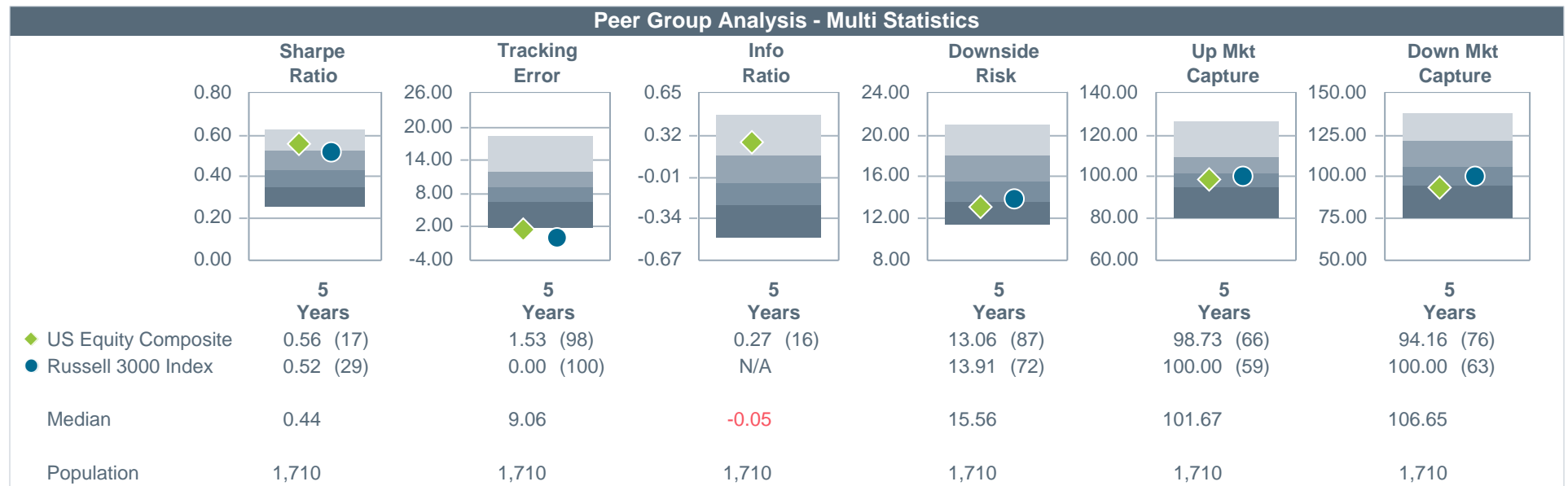
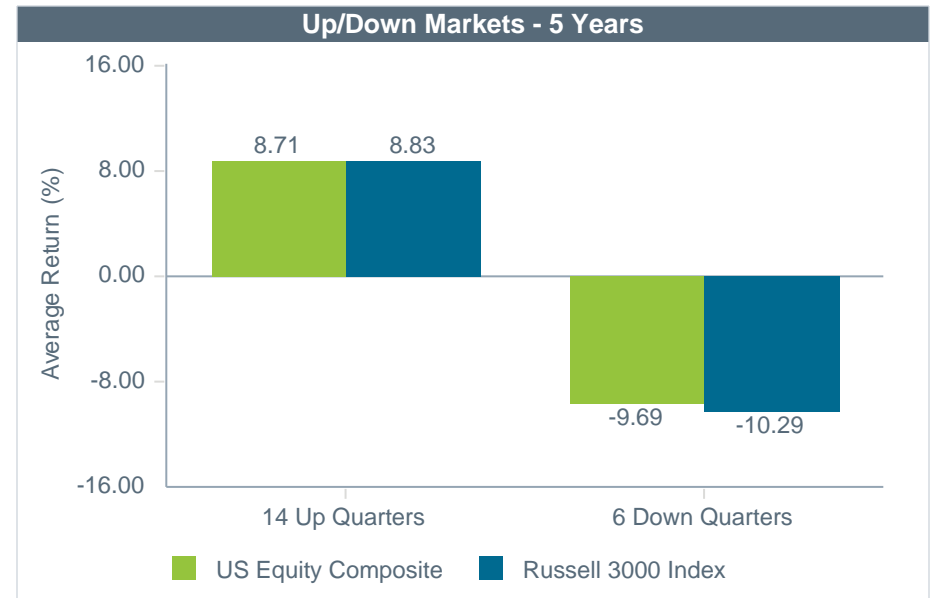
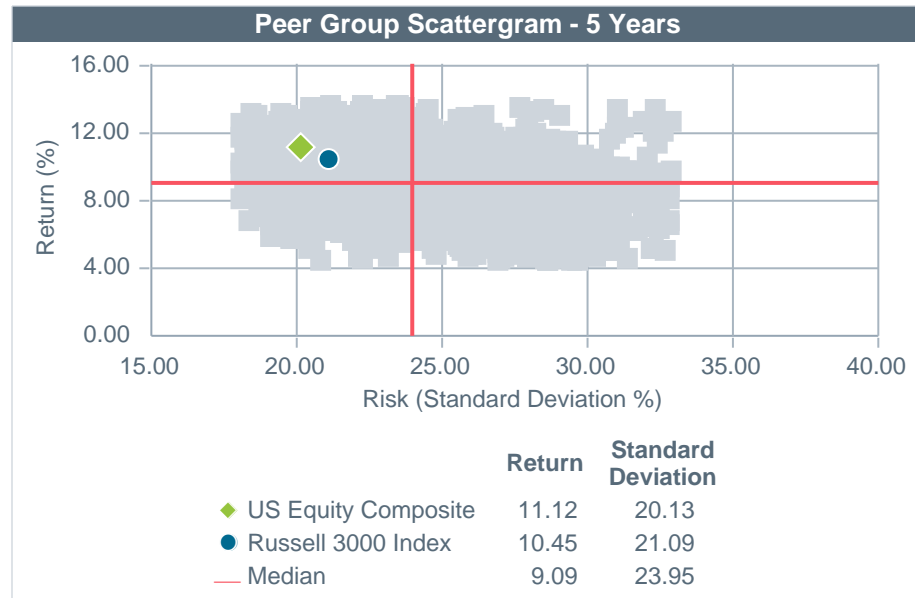
Santa Barbara County Employees' Retirement System
 US Equity Composite vs. IM US Equity (SA+CF)
 Peer Group Analysis

As of March 31, 2023



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ US Equity Composite	6.57 (38)	6.57 (38)	10.01 (45)	-6.11 (41)	18.81 (53)	11.12 (24)	12.27 (34)	11.91 (34)
● Russell 3000 Index	7.18 (33)	7.18 (33)	9.75 (51)	-8.58 (64)	18.48 (60)	10.45 (33)	11.99 (40)	11.73 (36)
5th Percentile	14.36	14.36	17.25	1.52	30.04	13.65	15.40	14.57
1st Quartile	7.73	7.73	12.16	-4.09	22.43	11.01	12.75	12.26
Median	5.03	5.03	9.76	-7.30	18.97	9.09	11.24	10.89
3rd Quartile	2.01	2.01	7.21	-10.53	16.83	7.16	9.55	9.48
95th Percentile	-1.16	-1.16	2.98	-16.71	12.18	4.42	7.34	7.44
Population	1,804	1,804	1,799	1,796	1,752	1,710	1,639	1,518

Performance shown is gross of fees. Parentheses contain percentile ranks.



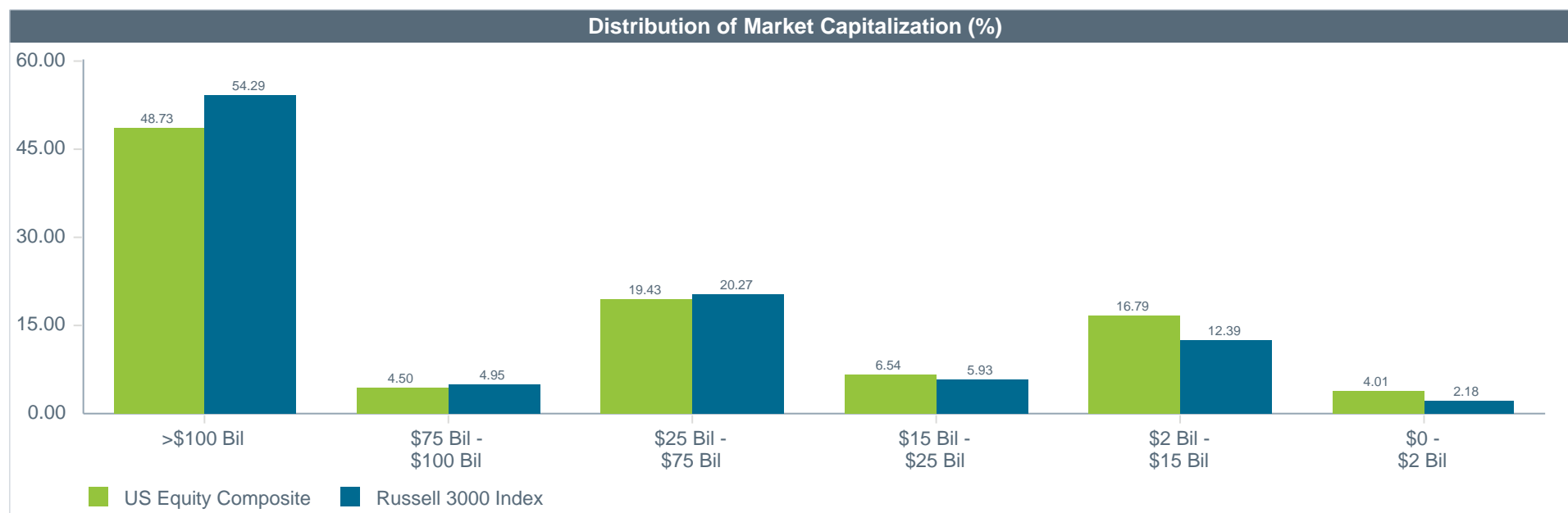
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

Santa Barbara County Employees' Retirement System
 US Equity Composite vs. Russell 3000 Index
 Portfolio Characteristics

As of March 31, 2023

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	5.74	6.17	-0.43	27.11
Microsoft Corp	5.20	5.37	-0.17	20.52
Amazon.com Inc	1.82	2.29	-0.47	22.96
Alphabet Inc	1.56	1.55	0.01	17.57
Alphabet Inc	1.50	1.36	0.14	17.21
Berkshire Hathaway Inc	1.40	1.39	0.01	-0.04
Unitedhealth Group Inc	1.11	1.10	0.01	-10.54
NVIDIA Corporation	1.10	1.64	-0.54	90.10
Johnson & Johnson	1.09	1.02	0.07	-11.64
Meta Platforms Inc	1.08	1.17	-0.09	76.12
% of Portfolio	21.60	23.06	-1.46	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	429,557	462,697
Median Mkt. Cap (\$M)	3,704	2,051
Price/Earnings Ratio	19.71	19.78
Price/Book Ratio	4.02	3.95
5 Yr. EPS Growth Rate (%)	18.56	18.82
Current Yield (%)	1.57	1.64
Beta (5 Years, Monthly)	0.96	1.00
Number of Securities	1,933	2,928

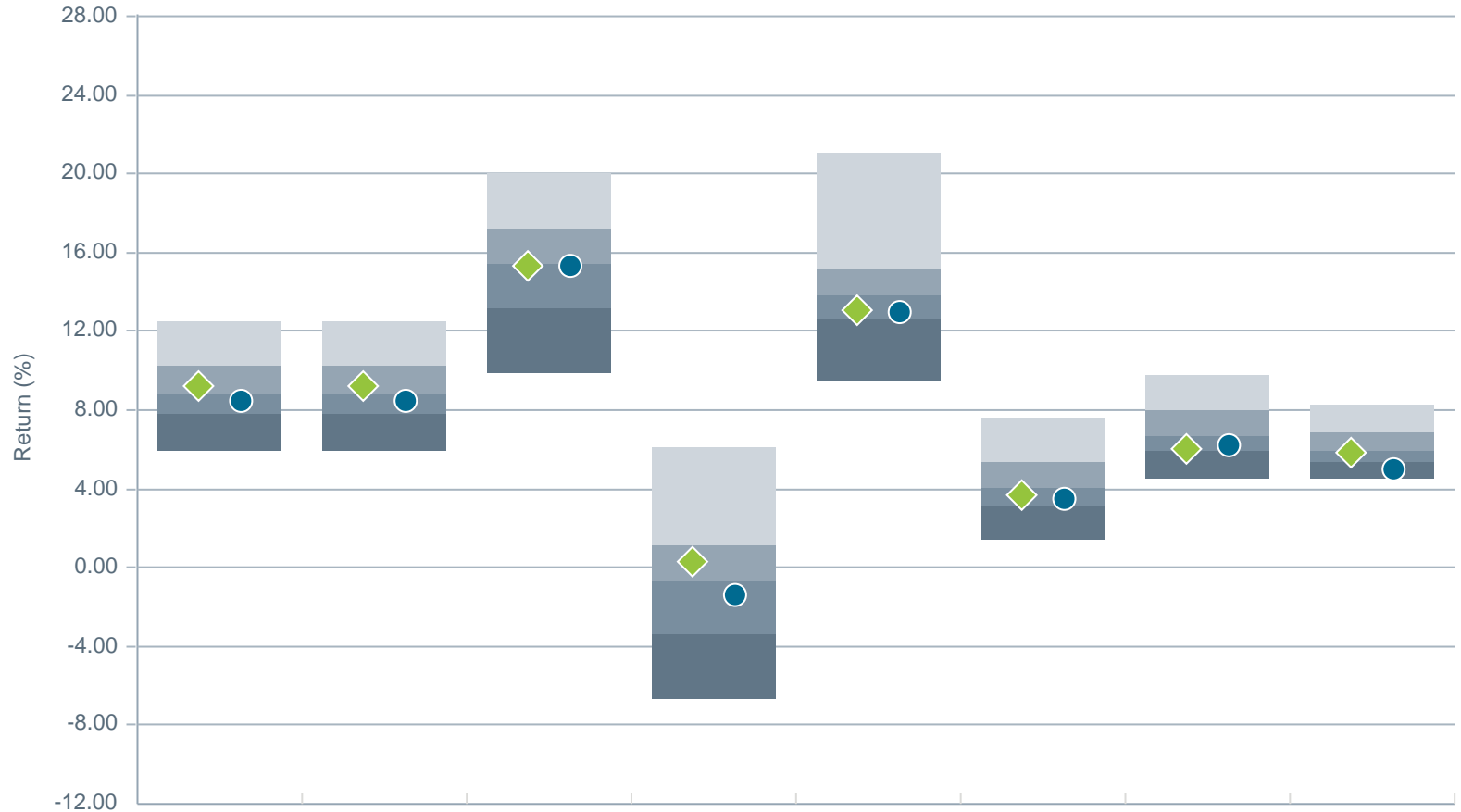


Alphabet Inc. is shown twice in the Top Ten Equity Holdings, but represents two different share classes: GOOGL (Class A) and GOOG (Class C).



Santa Barbara County Employees' Retirement System
 Dev'd Mkt. Non-US Equity Composite vs. IM All EAFE (SA+CF)
 Peer Group Analysis

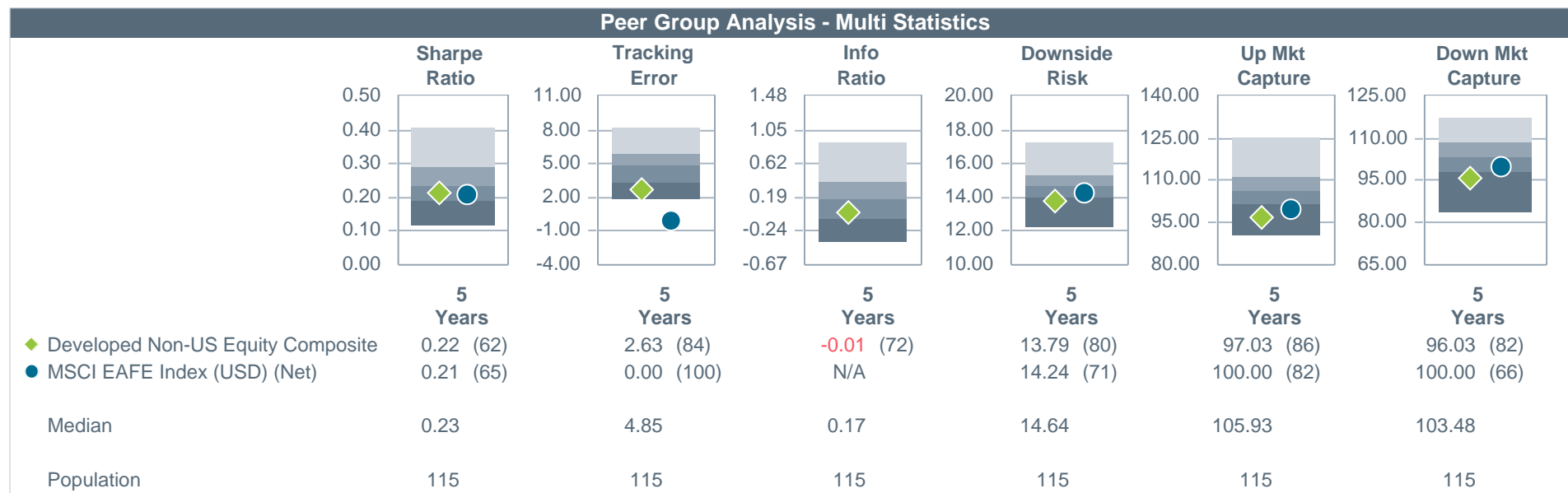
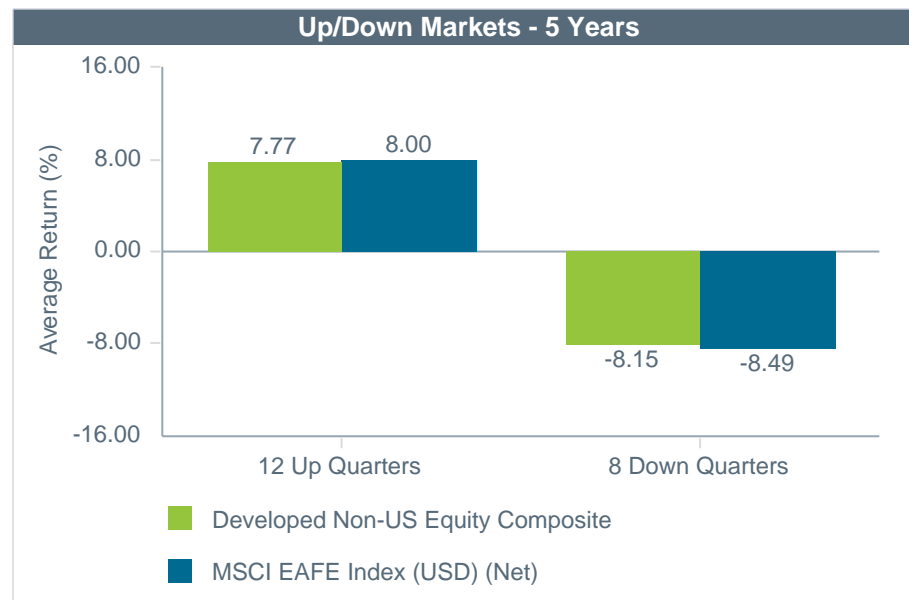
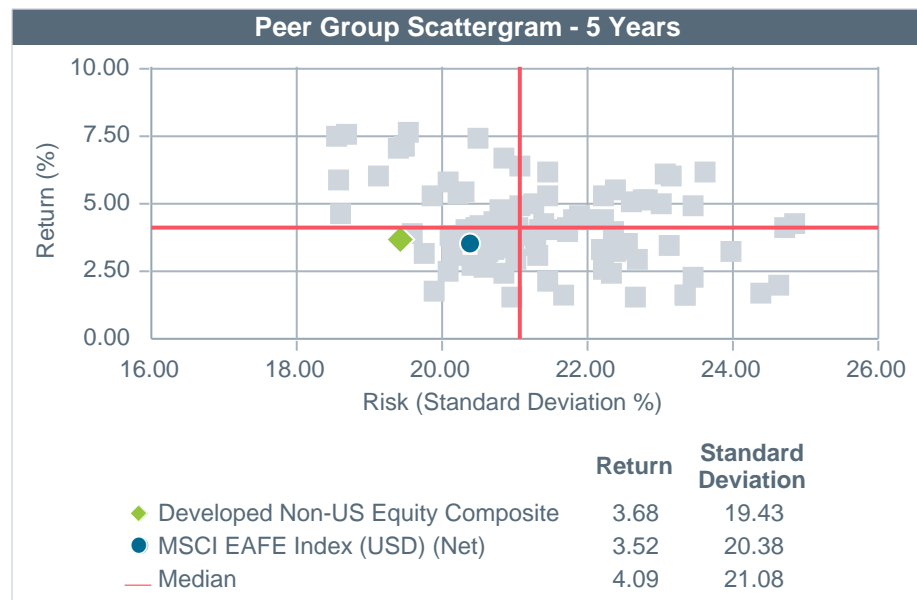
As of March 31, 2023



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ Developed Non-US Equity Composite	9.19 (43)	9.19 (43)	15.28 (54)	0.29 (34)	13.11 (59)	3.68 (62)	6.07 (71)	5.86 (54)
● MSCI EAFE Index (USD) (Net)	8.47 (65)	8.47 (65)	15.36 (52)	-1.38 (61)	12.99 (61)	3.52 (64)	6.21 (67)	5.00 (85)
5th Percentile	12.51	12.51	20.01	6.11	21.02	7.64	9.74	8.30
1st Quartile	10.25	10.25	17.16	1.11	15.12	5.33	7.96	6.85
Median	8.83	8.83	15.42	-0.67	13.80	4.09	6.69	5.97
3rd Quartile	7.77	7.77	13.18	-3.33	12.56	3.14	5.93	5.34
95th Percentile	5.97	5.97	9.85	-6.63	9.54	1.46	4.55	4.55
Population	116	116	116	116	116	115	113	111

Performance shown is gross of fees. Parentheses contain percentile ranks.





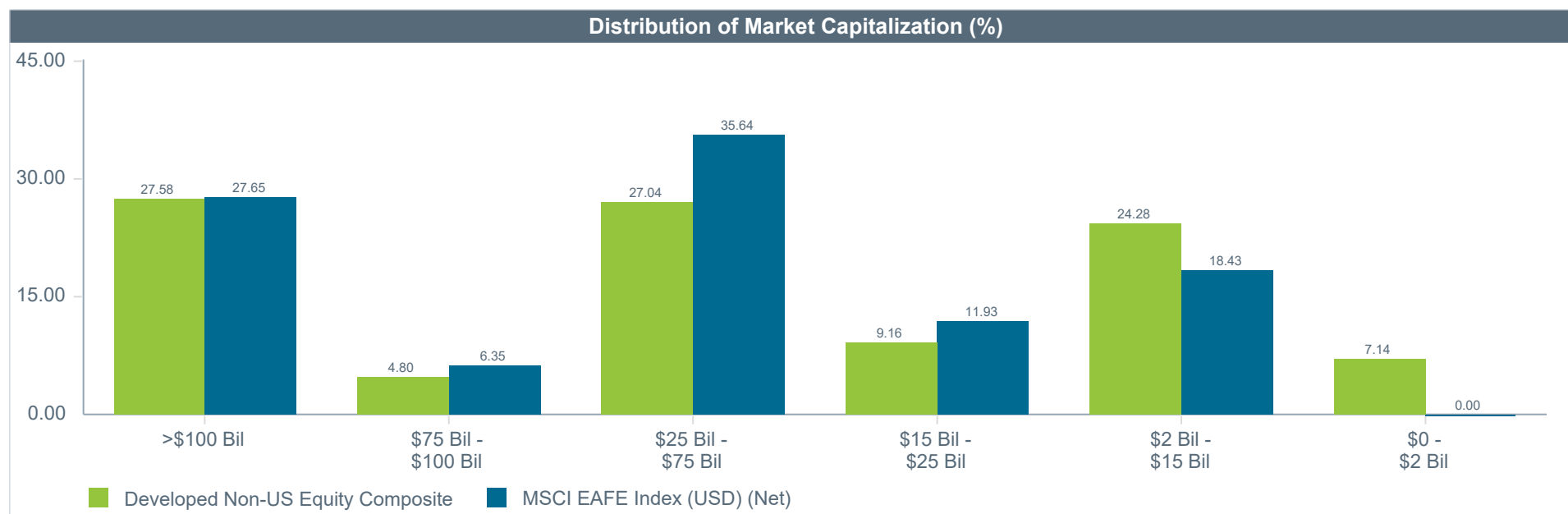
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

Santa Barbara County Employees' Retirement System
 Developed Non-US Equity Composite vs. MSCI EAFE Index (USD) (Net)
 Portfolio Characteristics

As of March 31, 2023

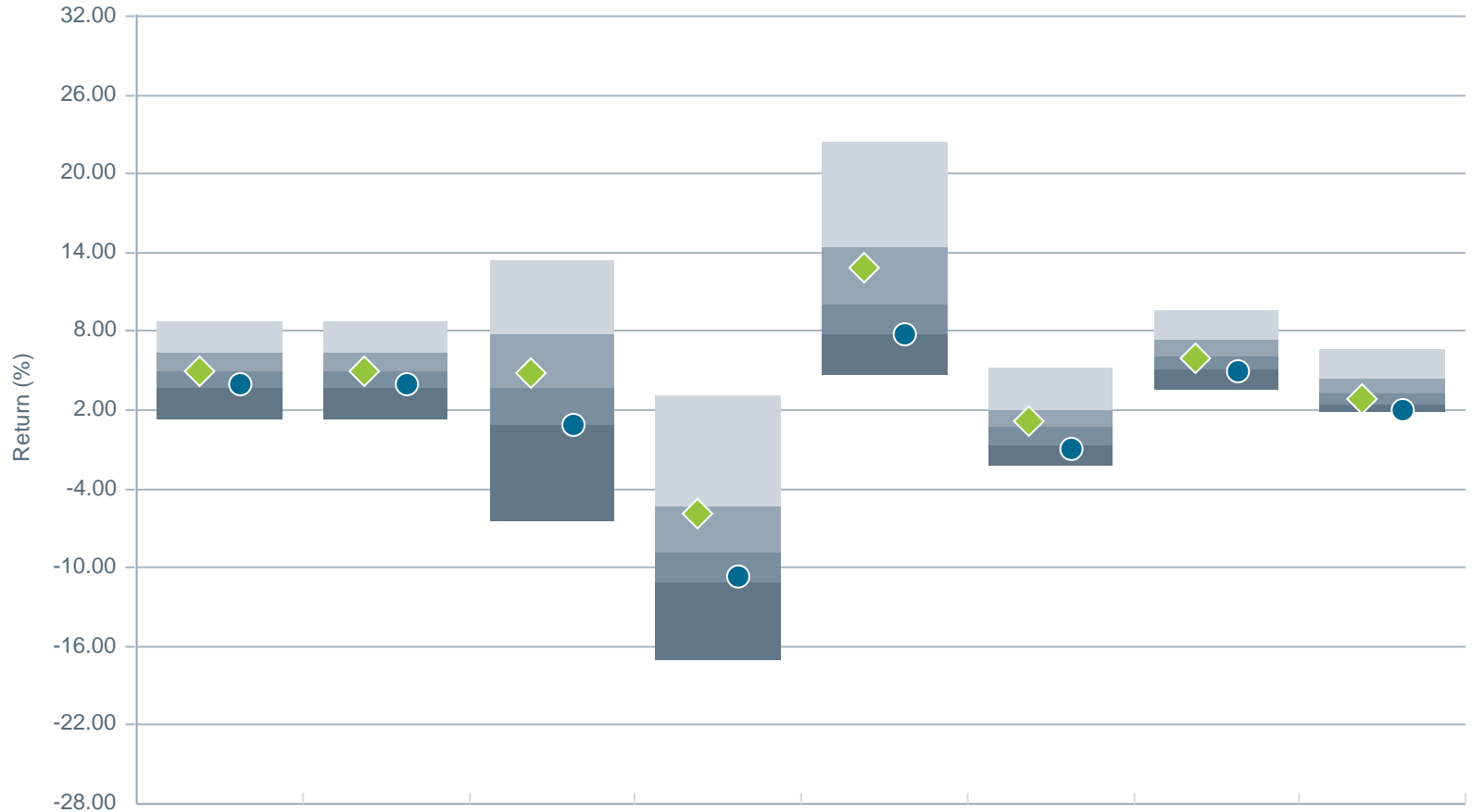
Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Nestle SA, Cham Und Vevey	2.49	2.19	0.30	5.30
Novo Nordisk A/S	2.00	1.71	0.29	18.42
Lvmh Moet Hennessy Louis Vuitton	1.85	1.66	0.19	26.25
UBS Group AG	1.77	0.46	1.31	13.48
Deutsche Telekom AG	1.66	0.51	1.15	21.90
Shell Plc	1.65	1.31	0.34	2.79
Deutsche Boerse AG Frankfurt	1.61	0.24	1.37	13.03
Linde Plc	1.48	0.00	1.48	8.27
L'Air Liquide SA	1.42	0.57	0.85	18.40
Alibaba Group Holding Ltd	1.40	0.00	1.40	15.99
% of Portfolio	17.33	8.65	8.68	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	96,835	83,612
Median Mkt. Cap (\$M)	651	12,647
Price/Earnings Ratio	13.46	13.61
Price/Book Ratio	2.70	2.58
5 Yr. EPS Growth Rate (%)	11.18	8.67
Current Yield (%)	3.01	3.25
Beta (5 Years, Monthly)	0.91	1.00
Number of Securities	1,865	795



Santa Barbara County Employees' Retirement System
 Emerging Mkt. Equity Composite vs. IM Emerging Markets Equity (SA+CF)
 Peer Group Analysis

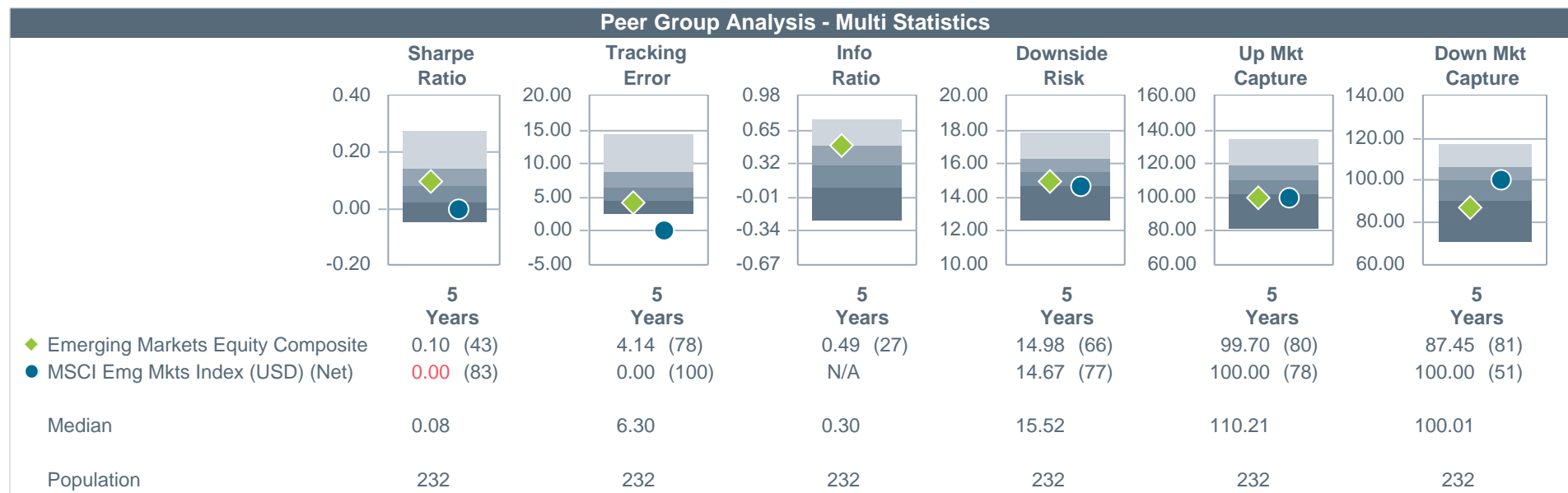
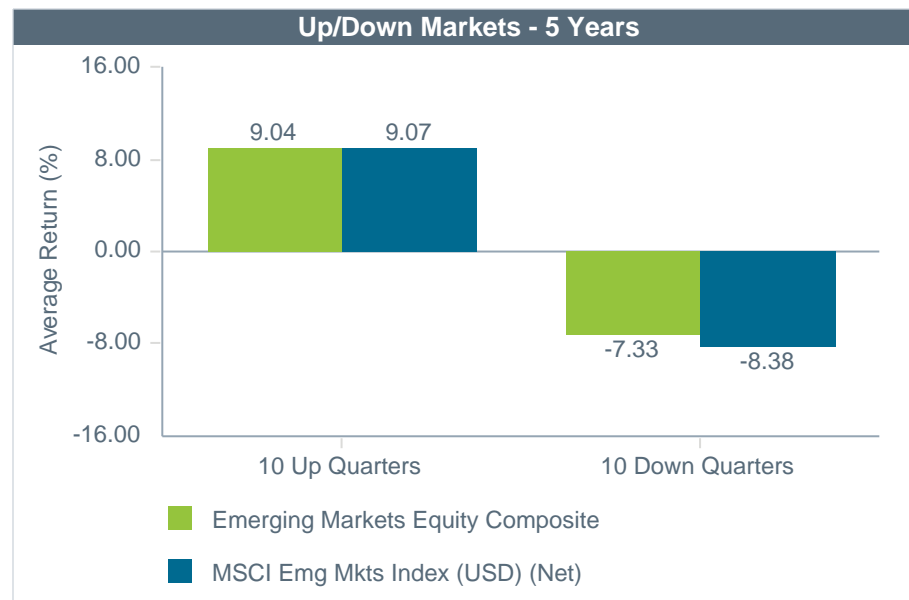
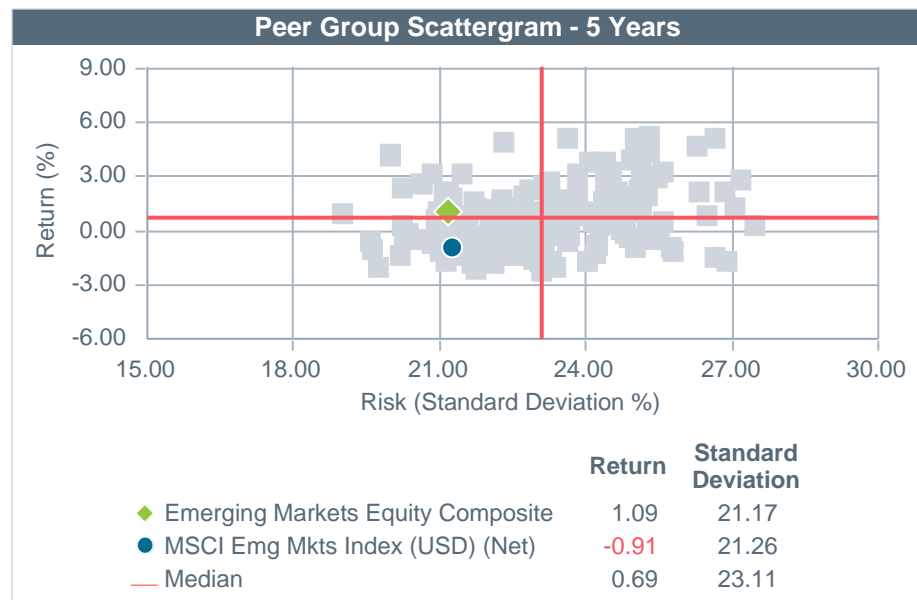
As of March 31, 2023



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ Emerging Markets Equity Composite	4.91 (52)	4.91 (52)	4.88 (43)	-5.85 (28)	12.88 (31)	1.09 (39)	5.89 (55)	2.78 (66)
● MSCI Emg Mkts Index (USD) (Net)	3.96 (72)	3.96 (72)	0.84 (77)	-10.70 (72)	7.83 (75)	-0.91 (80)	4.91 (80)	2.00 (90)
5th Percentile	8.69	8.69	13.38	3.13	22.35	5.29	9.59	6.67
1st Quartile	6.31	6.31	7.83	-5.36	14.46	1.96	7.31	4.34
Median	4.94	4.94	3.75	-8.78	10.01	0.69	6.07	3.30
3rd Quartile	3.66	3.66	0.94	-11.04	7.82	-0.74	5.10	2.49
95th Percentile	1.36	1.36	-6.43	-16.98	4.68	-2.25	3.57	1.84
Population	277	277	276	276	259	232	217	174

Performance shown is gross of fees. Parentheses contain percentile ranks.





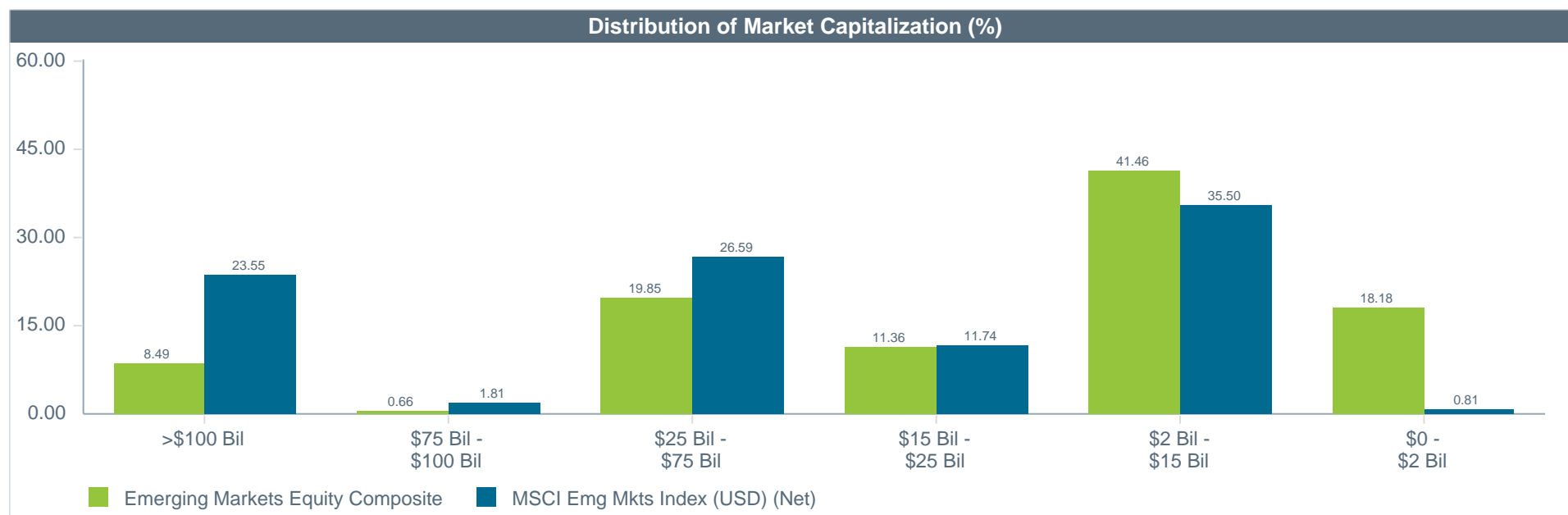
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

Santa Barbara County Employees' Retirement System
Emerging Markets Equity Composite vs. MSCI Emg Mkts Index (USD) (Net)
Portfolio Characteristics

As of March 31, 2023

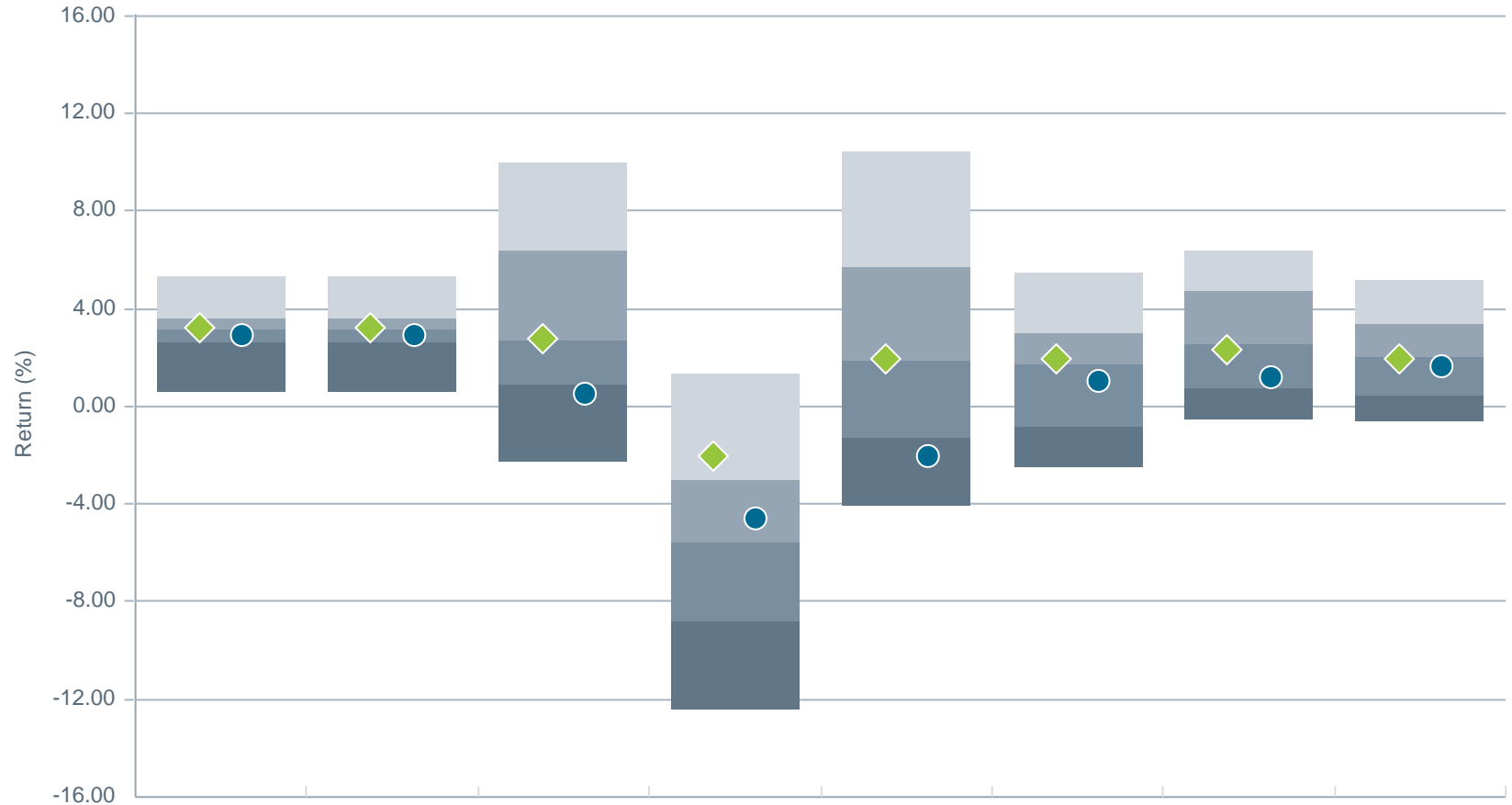
Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Reliance Industries Ltd	2.92	1.31	1.61	-7.84
China Construction Bank Corp	2.52	0.95	1.57	3.39
SK Hynix Inc	1.54	0.57	0.97	14.12
Hon Hai Precision Industry Co Ltd	1.21	0.65	0.56	5.04
Ping An Insurance Group	1.20	0.63	0.57	-1.73
Alibaba Group Holding Ltd	1.11	2.89	-1.78	15.62
Ind. & Com. Bank of China Ltd	1.09	0.46	0.63	3.28
Housing Development Fin Corp Ltd	0.97	0.84	0.13	0.24
Bank of China Ltd	0.93	0.46	0.47	5.27
Axis Bank Ltd	0.93	0.36	0.57	-7.41
% of Portfolio	14.42	9.12	5.30	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	32,040	102,229
Median Mkt. Cap (\$M)	457	6,315
Price/Earnings Ratio	7.18	11.01
Price/Book Ratio	1.61	2.42
5 Yr. EPS Growth Rate (%)	10.82	15.03
Current Yield (%)	5.68	3.35
Beta (5 Years, Monthly)	0.95	1.00
Number of Securities	3,302	1,379



Santa Barbara County Employees' Retirement System
 Fixed Income Composite vs. IM Global Fixed Income (SA+CF)
 Peer Group Analysis

As of March 31, 2023



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ Fixed Income	3.20 (47)	3.20 (47)	2.77 (49)	-2.04 (18)	1.93 (50)	1.93 (46)	2.30 (57)	1.99 (51)
● Bloomberg US Unv Bond Index	2.93 (67)	2.93 (67)	0.55 (80)	-4.61 (41)	-2.02 (85)	1.05 (60)	1.24 (69)	1.62 (54)
5th Percentile	5.32	5.32	9.97	1.32	10.45	5.47	6.35	5.19
1st Quartile	3.61	3.61	6.38	-2.98	5.68	3.01	4.71	3.38
Median	3.16	3.16	2.69	-5.54	1.86	1.70	2.58	2.06
3rd Quartile	2.64	2.64	0.91	-8.79	-1.30	-0.81	0.76	0.44
95th Percentile	0.63	0.63	-2.24	-12.38	-4.05	-2.51	-0.52	-0.56
Population	180	180	180	180	177	165	156	139

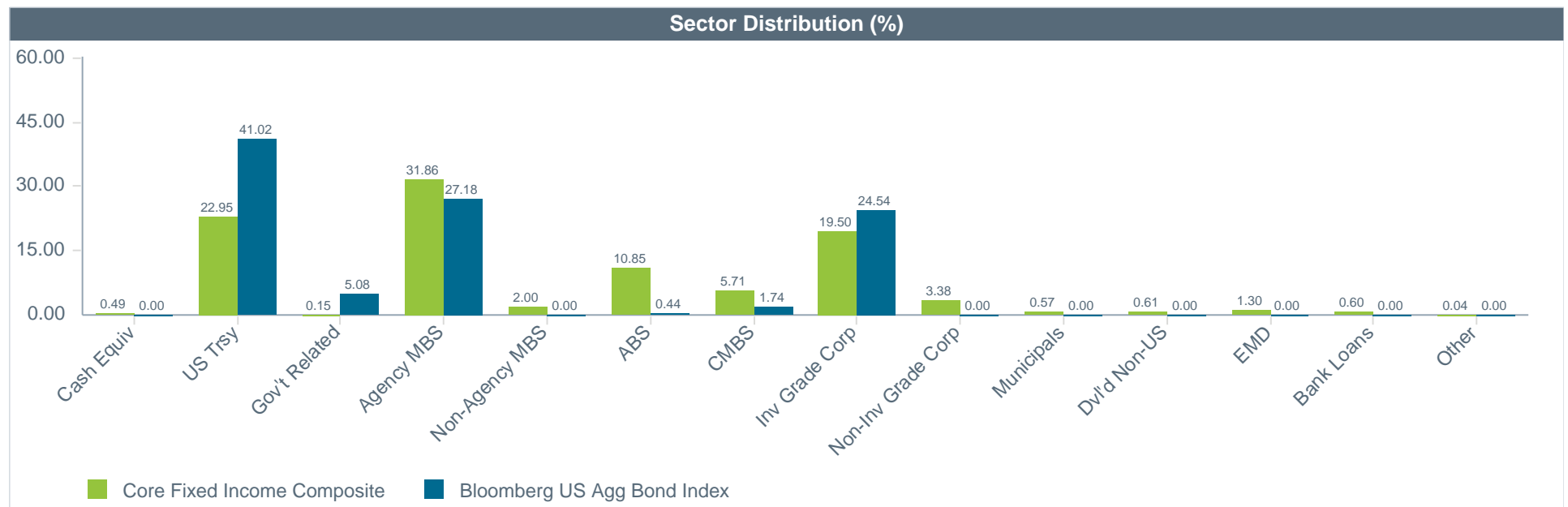
Performance shown is gross of fees. Parentheses contain percentile ranks.



Santa Barbara County Employees' Retirement System
 Core Fixed Income Composite vs. Bloomberg US Agg Bond Index
 Portfolio Characteristics

As of March 31, 2023

Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	8.20	8.50
Avg. Quality	Aa2	Aa1/Aa2
Convexity	0.83	0.59
Coupon Rate (%)	3.56	2.79
Current Yield (%)	3.86	N/A
Effective Duration	6.60	6.33
Yield To Maturity (%)	5.11	4.40
Yield To Worst (%)	5.07	4.40

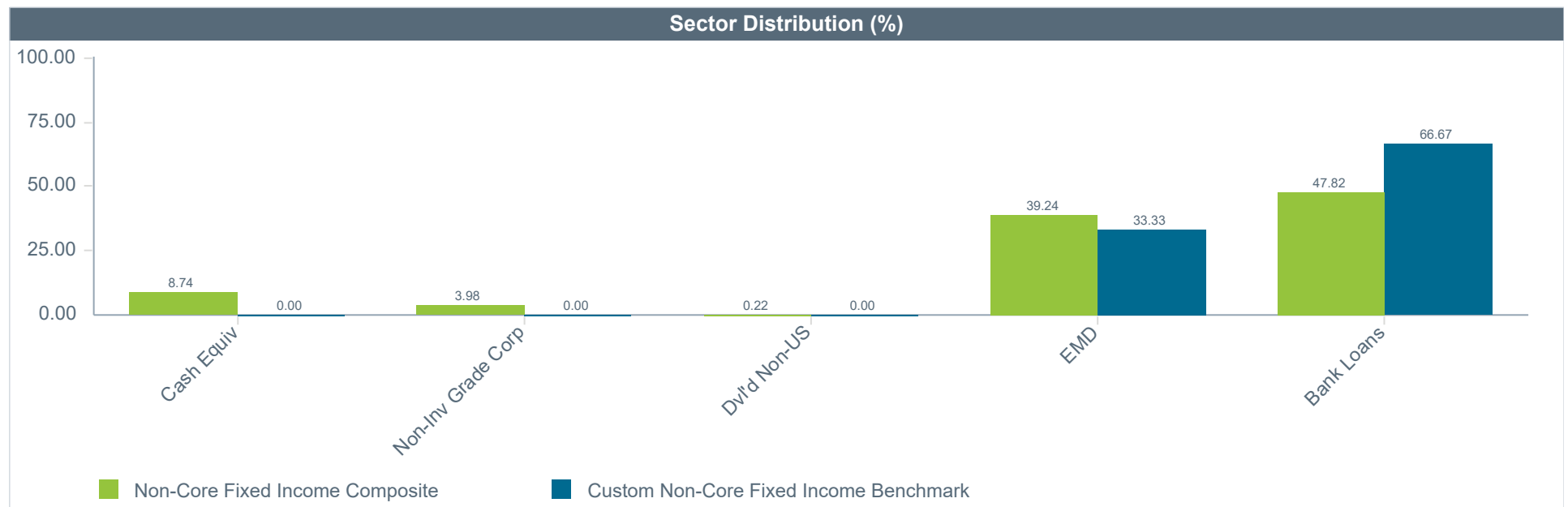


Allocation to "Other" consists of equity and swaps.

Santa Barbara County Employees' Retirement System
 Non-Core Fixed Income Composite vs. Custom Non-Core Fixed Income Benchmark
 Portfolio Characteristics

As of March 31, 2023

Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	6.62	6.07
Avg. Quality	Ba2	Ba2
Coupon Rate (%)	5.65	7.47
Current Yield (%)	8.09	8.07
Modified Duration	2.74	N/A
Yield To Maturity (%)	N/A	8.90



Please see the Addendum for custom index definitions. Non-Core Fixed Income Composite portfolio characteristics and sector distribution exclude private credit funds.



Santa Barbara County Employees' Retirement System
Alternative Investment Private Credit Fund Performance Listing

As of December 31, 2022

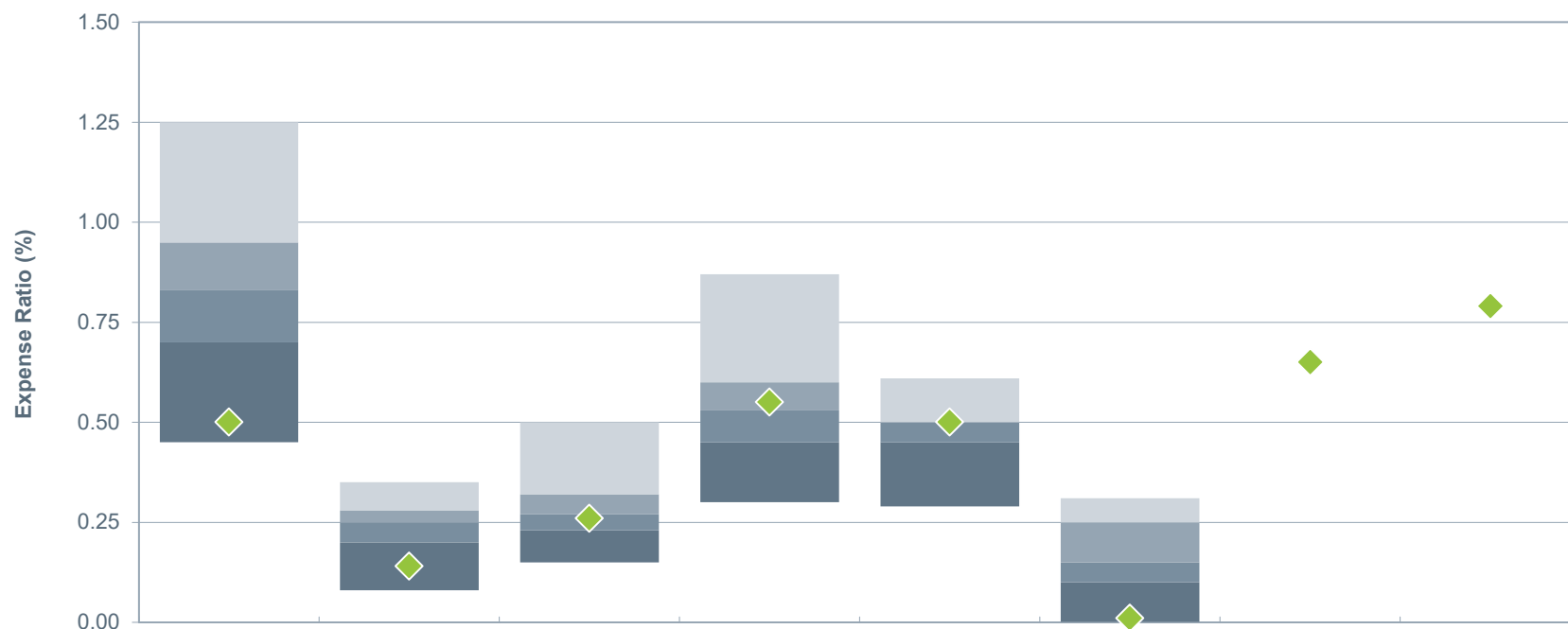
Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Index IRR (%)	Fund Multiple
AG Direct Lending Fund III, LP	2018	Private Credit - Direct Lending	25,000,000	23,035,117	13,503,653	17,788,864	10.40	3.90	1.36
First Eagle Direct Lending Fund IV	2019	Private Credit - Direct Lending	20,000,000	37,102,322	23,587,845	16,529,782	6.43	3.71	1.08
PIMCO Private Income Fund Onshore Feeder LLC	2019	Private Credit - Direct Lending	20,000,000	20,000,000	0	25,673,055	9.39	5.00	1.28
AG Direct Lending Fund IV, LP	2020	Private Credit - Direct Lending	20,000,000	17,129,726	1,421,156	18,764,314	14.97	0.23	1.18
Deerpath Capital V, LP	2020	Private Credit - Direct Lending	20,000,000	18,338,462	2,218,389	18,828,602	7.93	2.58	1.15
Deerpath Capital VI, LP	2021	Private Credit - Direct Lending	20,000,000	15,460,563	903,186	15,764,925	8.19	-0.61	1.08
First Eagle Direct Lending Fund V-B	2021	Private Credit - Direct Lending	20,000,000	15,292,750	3,518,493	13,040,188	9.06	-1.08	1.08
AG Direct Lending Evergreen Fund LP	2022	Private Credit - Direct Lending	20,000,000	9,500,000	0	9,474,404	N/M	N/M	1.00
			165,000,000	155,858,939	45,152,722	135,864,134	9.23	3.18	1.16

Certain valuations (marked with a "**") are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the Credit Suisse Lvg'd Loan Index assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital.





Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).
The fee peer groups consist of only institutional share classes.
Peer group data is sourced from eVestment & Morningstar.



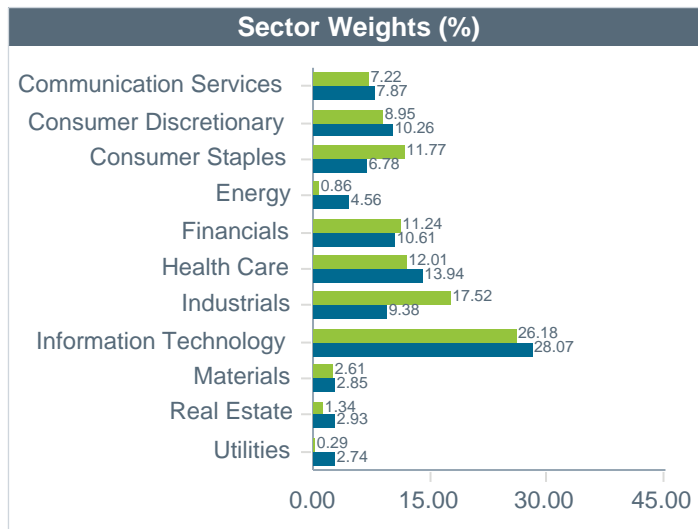
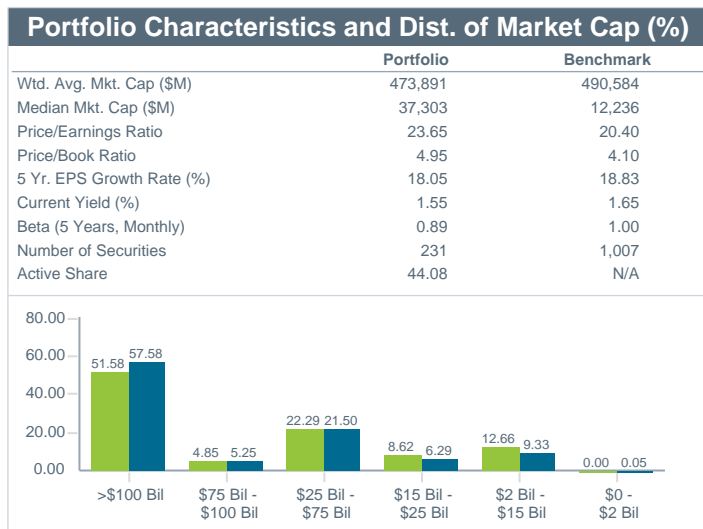
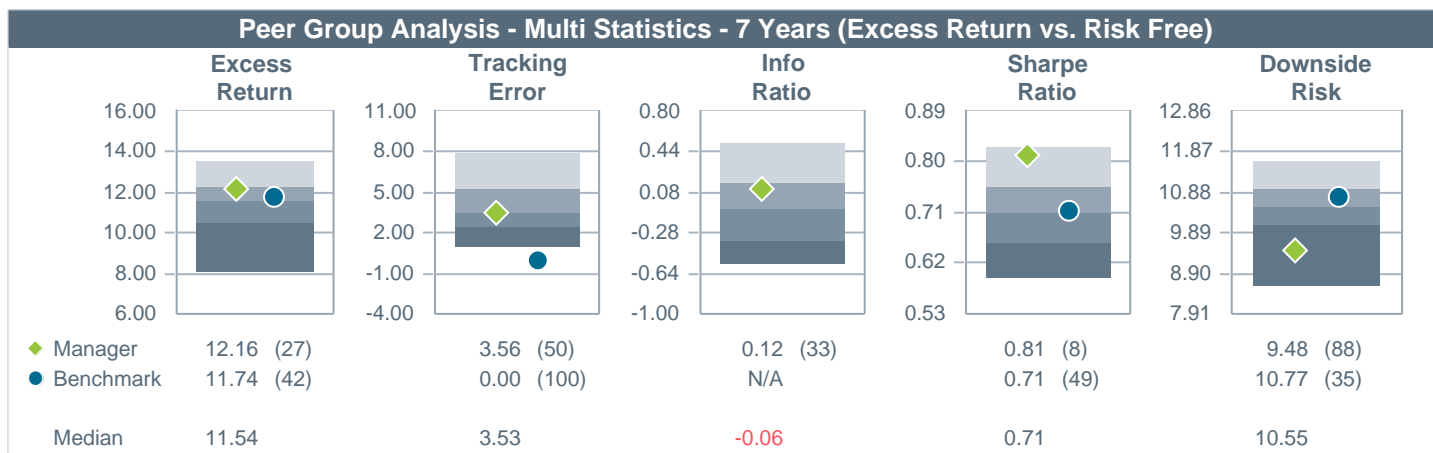
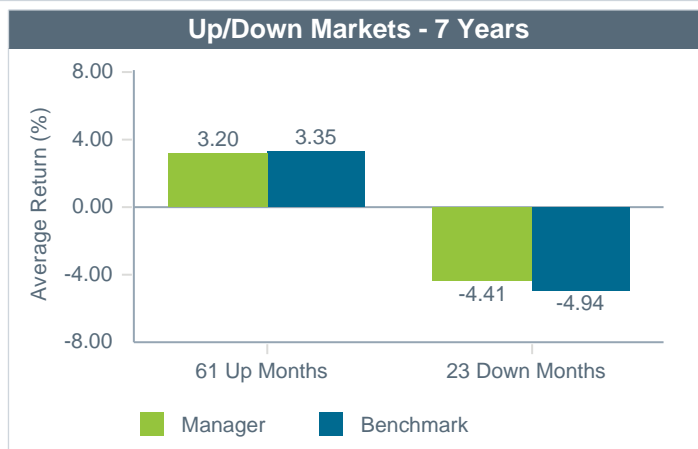
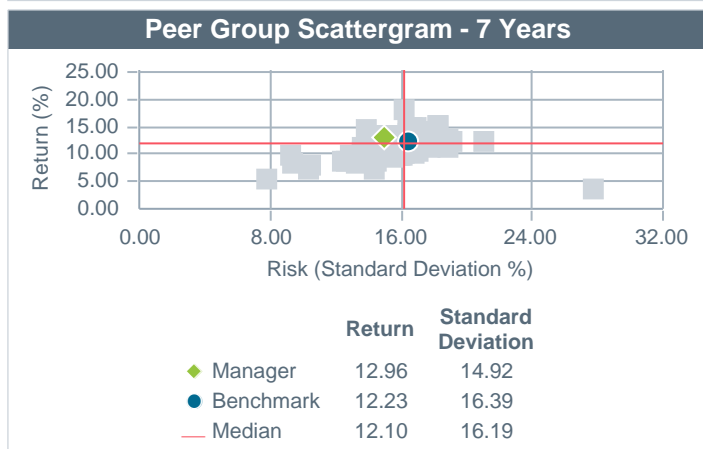
Fund	RBC Emerging Markets Equity (CF)	Garcia Hamilton Core Fixed Income (SA)	PGIM Core Plus Fixed Income (CF)	Wellington Blended Opportunistic EMD (CF)	Beach Point Leveraged Loan (CF)	BNY Mellon TIPS - NL (CF)	Cohen & Steers Real Assets Fund (CIT)	Nuveen Real Asset Income Fund (SA)
Peer Group	Emerging Market Equity (SA+CF)	U.S. Broad Market Core Fixed Income (SA+CF)	U.S. Broad Market Core+ Fixed Income (SA+CF)	Emerging Markets Debt (SA+CF)	U.S Bank Loans (SA+CF)	U.S. TIPS (SA+CF)		
Fund Expense Ratio	0.50	0.14	0.26	0.55	0.50	0.01	0.65	0.79
Median Expense Ratio	0.83	0.25	0.27	0.53	0.50	0.15	N/A	N/A
Percentile Rank	7	10	45	63	82	6	N/A	N/A
Population	398	375	271	172	59	36	N/A	N/A

Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).
The fee peer groups consist of only institutional share classes.
Peer group data is sourced from eVestment & Morningstar.

Investment Manager Profiles



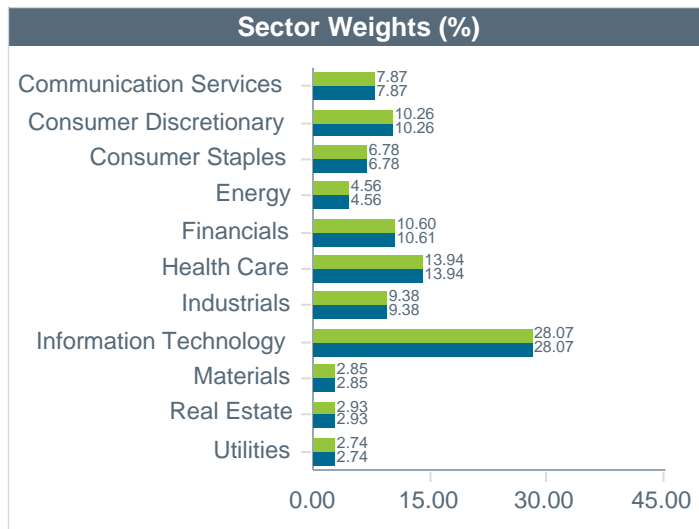
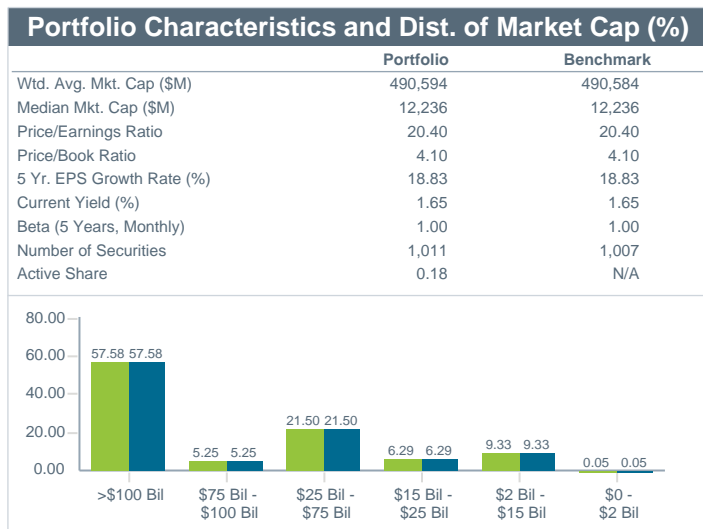
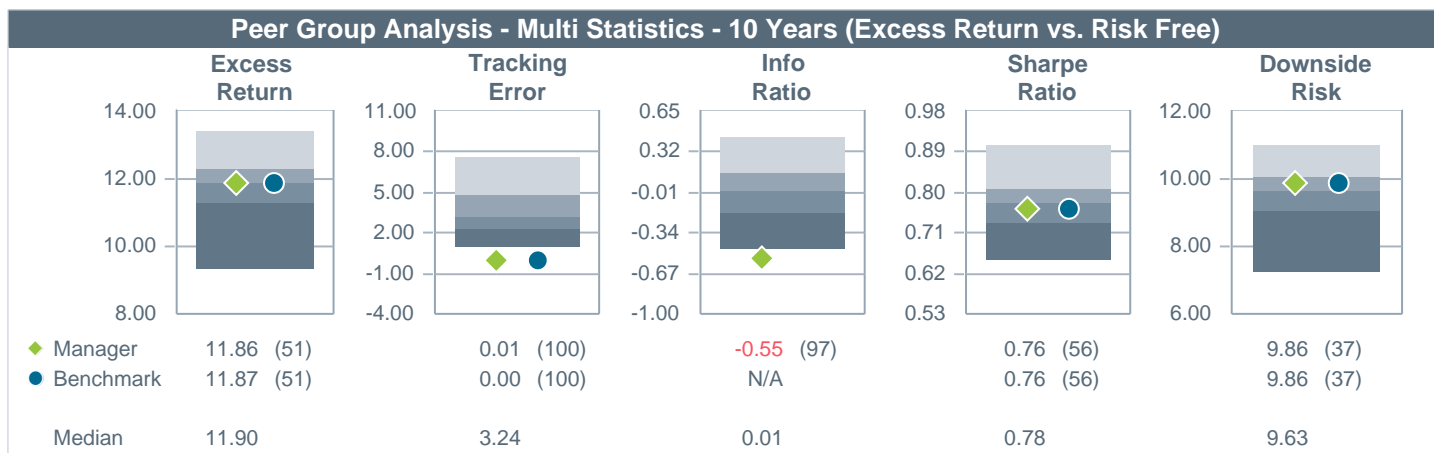
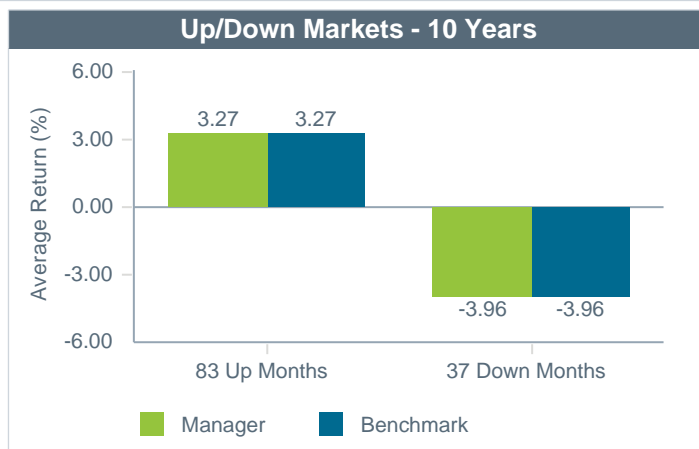
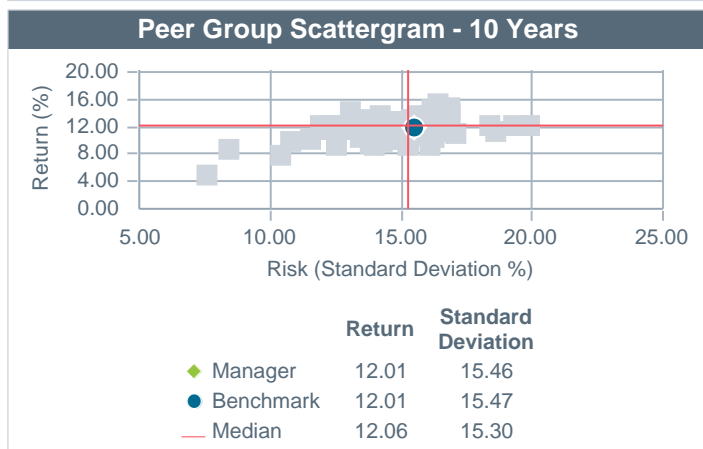
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	6.43	-3.74	17.76	12.38	12.96	N/A	-15.07	25.37	18.63	32.61	-0.05
Benchmark	7.46	-8.39	18.55	10.87	12.23	12.01	-19.13	26.45	20.96	31.43	-4.78
Difference	-1.03	4.65	-0.79	1.51	0.73	N/A	4.06	-1.08	-2.33	1.18	4.73
Peer Group Median	6.36	-7.07	18.28	10.34	12.10	12.06	-16.49	27.71	17.54	30.03	-5.07
Rank	48	18	62	10	22	N/A	41	68	45	22	9
Population	179	177	173	169	164	145	204	212	229	256	277



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance prior to 04/11/2019 is represented by Rhumblin HEDI (SA).



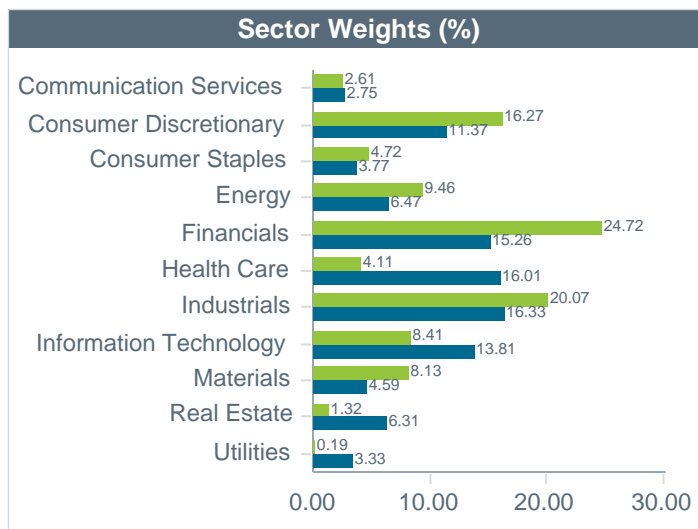
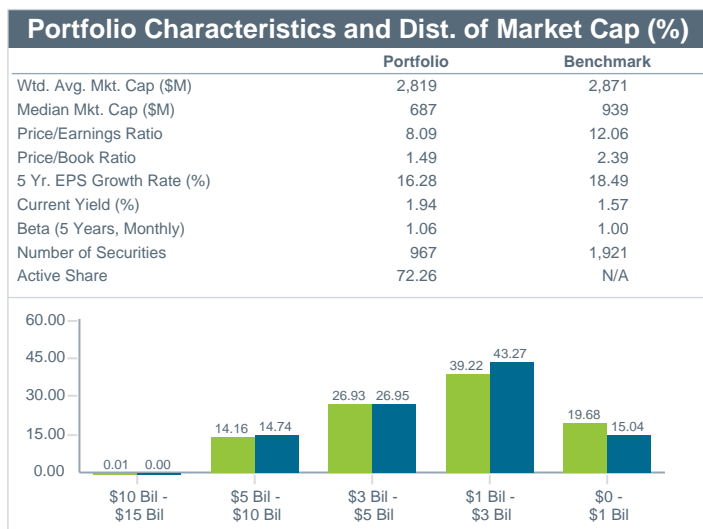
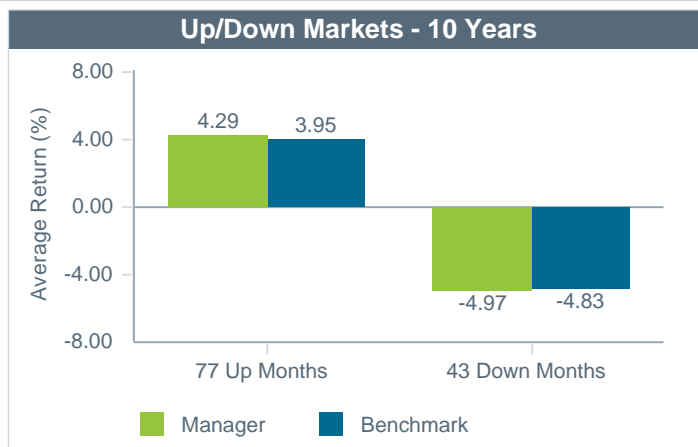
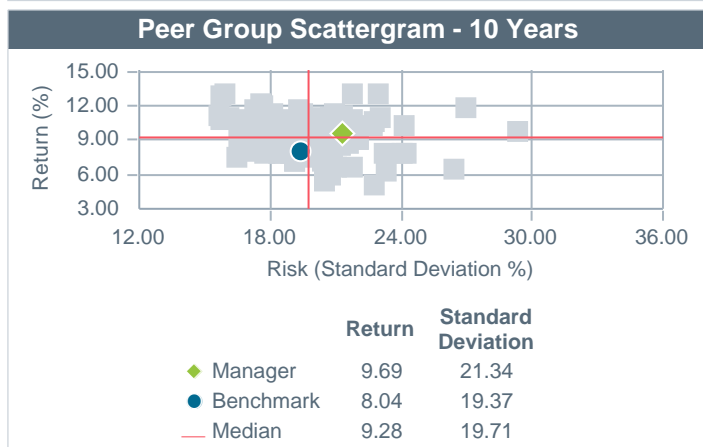
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.46	-8.40	18.53	10.86	12.22	12.01	-19.14	26.46	20.91	31.42	-4.77
Benchmark	7.46	-8.39	18.55	10.87	12.23	12.01	-19.13	26.45	20.96	31.43	-4.78
Difference	0.00	-0.01	-0.02	-0.01	-0.01	0.00	-0.01	0.01	-0.05	-0.01	0.01
Peer Group Median	6.36	-7.07	18.28	10.34	12.10	12.06	-16.49	27.71	17.54	30.03	-5.07
Rank	27	75	45	38	44	53	75	59	30	34	46
Population	179	177	173	169	164	145	204	212	229	256	277



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.



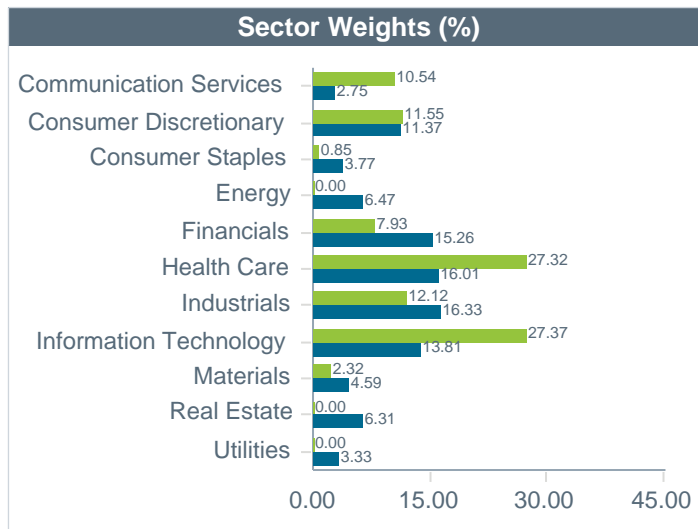
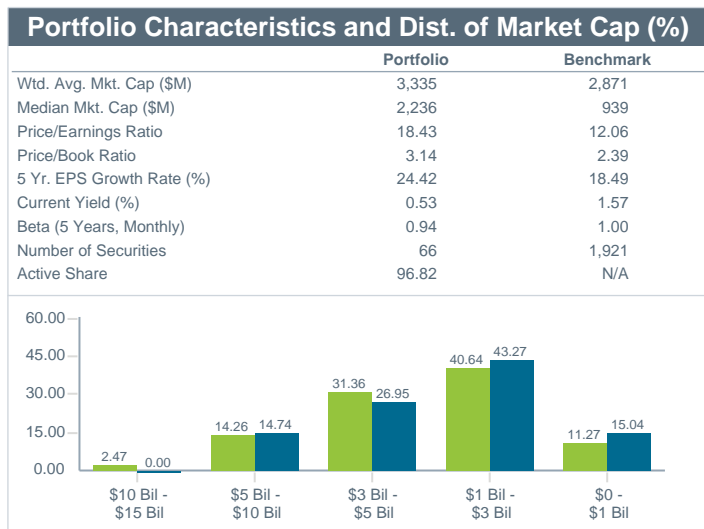
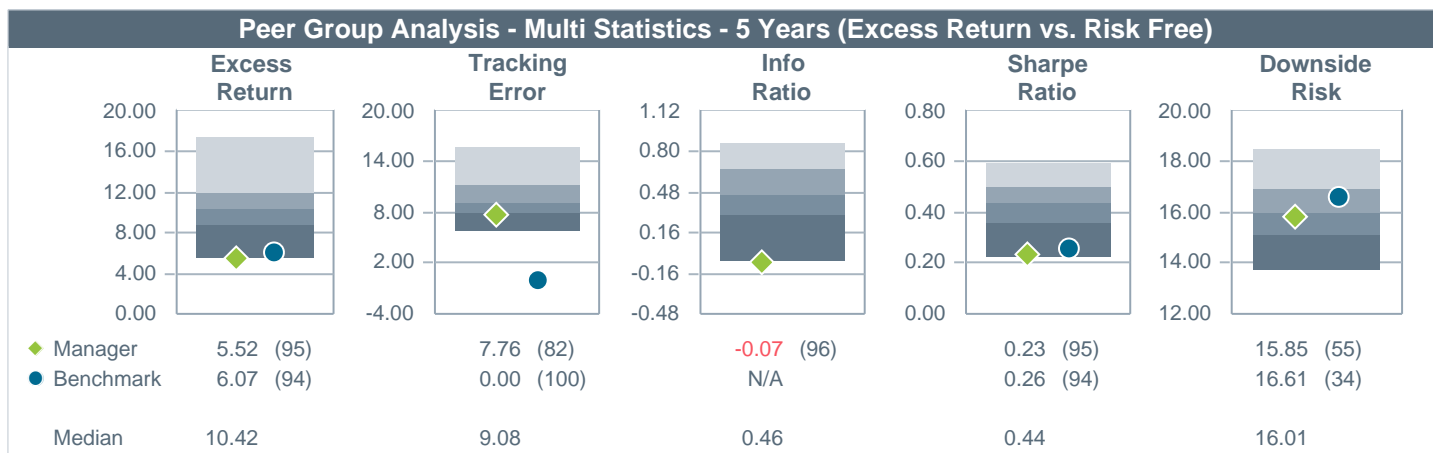
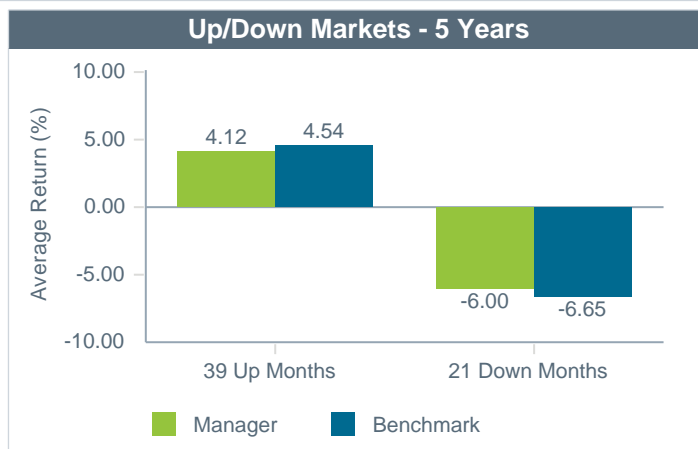
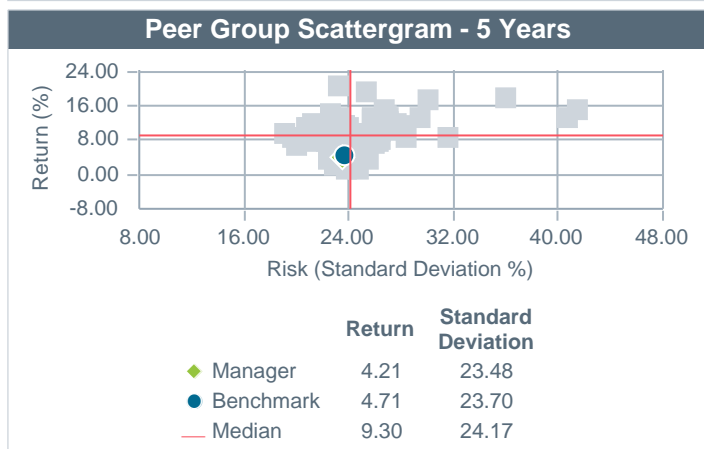
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	0.83	-1.80	33.53	8.42	10.33	9.69	-1.62	40.61	3.47	19.22	-14.84
Benchmark	2.74	-11.61	17.51	4.71	8.55	8.04	-20.44	14.82	19.96	25.53	-11.01
Difference	-1.91	9.81	16.02	3.71	1.78	1.65	18.82	25.79	-16.49	-6.31	-3.83
Peer Group Median	2.34	-5.04	24.50	6.85	9.59	9.28	-10.61	29.80	5.13	24.99	-14.08
Rank	76	25	7	27	36	41	6	9	56	86	59
Population	160	160	156	152	149	141	169	177	189	195	212



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



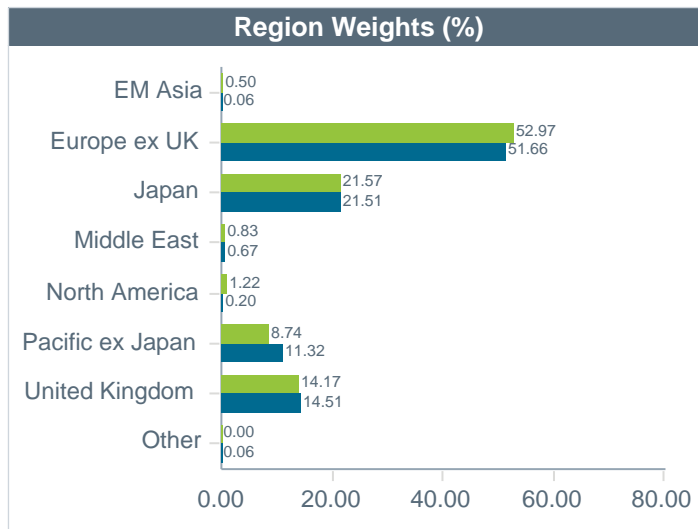
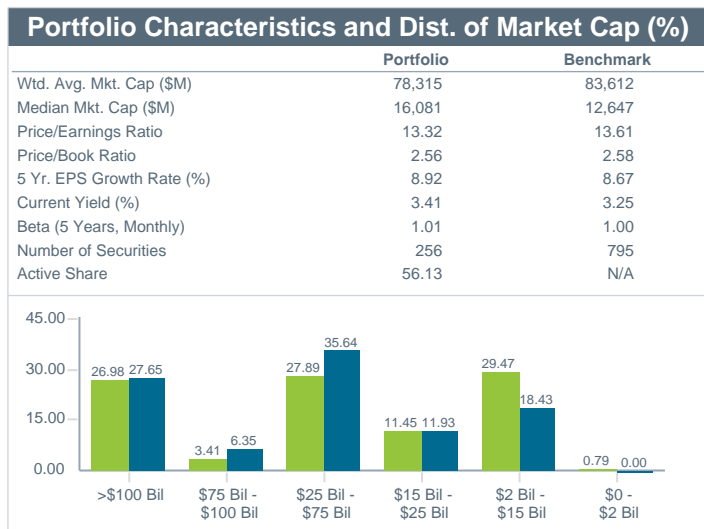
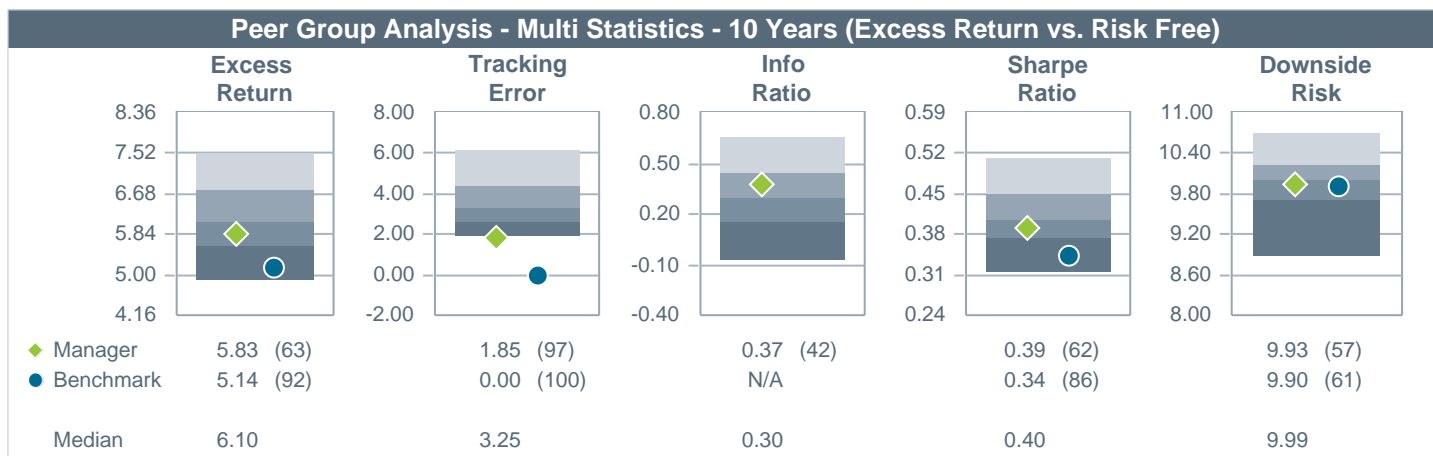
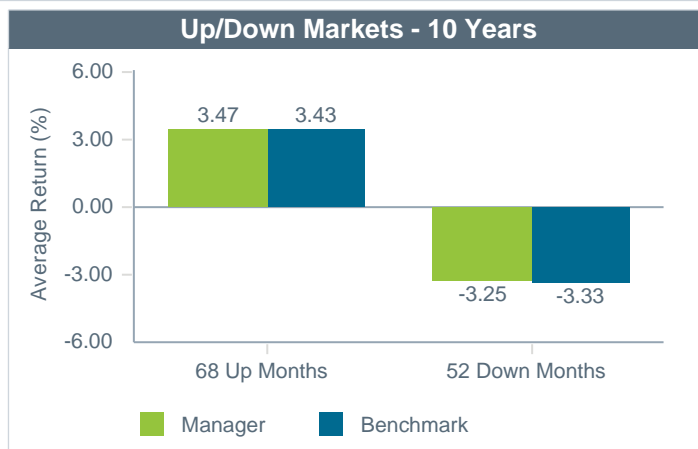
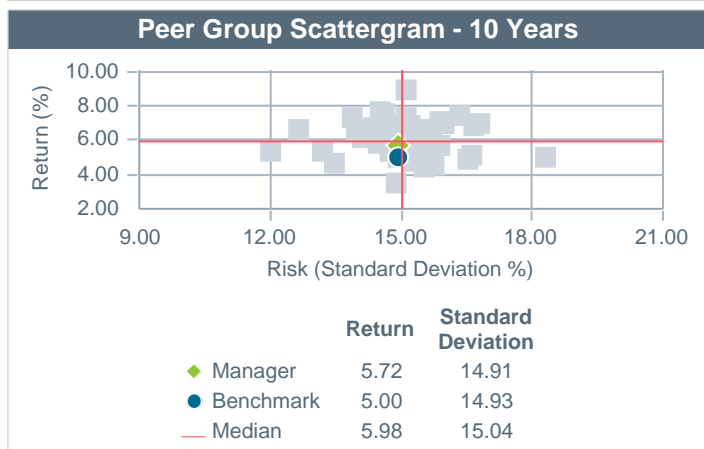
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.08	-7.77	18.63	4.21	N/A	N/A	-23.84	16.27	24.70	18.89	-6.24
Benchmark	2.74	-11.61	17.51	4.71	8.55	8.04	-20.44	14.82	19.96	25.53	-11.01
Difference	4.34	3.84	1.12	-0.50	N/A	N/A	-3.40	1.45	4.74	-6.64	4.77
Peer Group Median	7.19	-10.55	17.83	9.30	12.69	11.40	-27.24	11.57	42.40	28.99	-3.83
Rank	53	32	39	95	N/A	N/A	29	38	88	92	67
Population	116	115	113	112	108	102	126	133	139	148	159



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



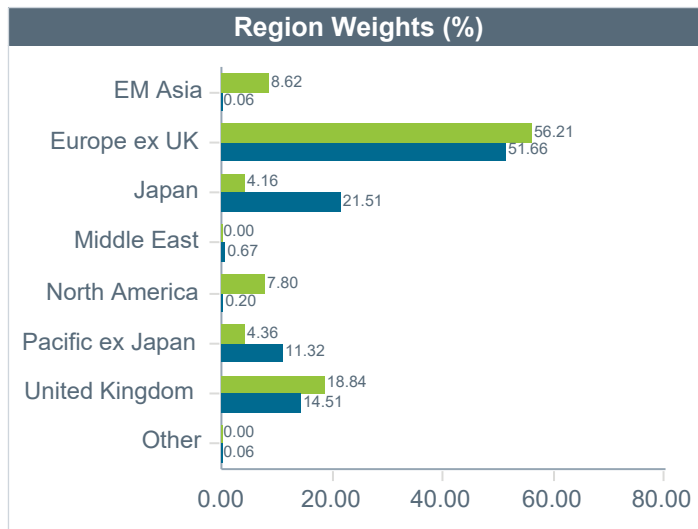
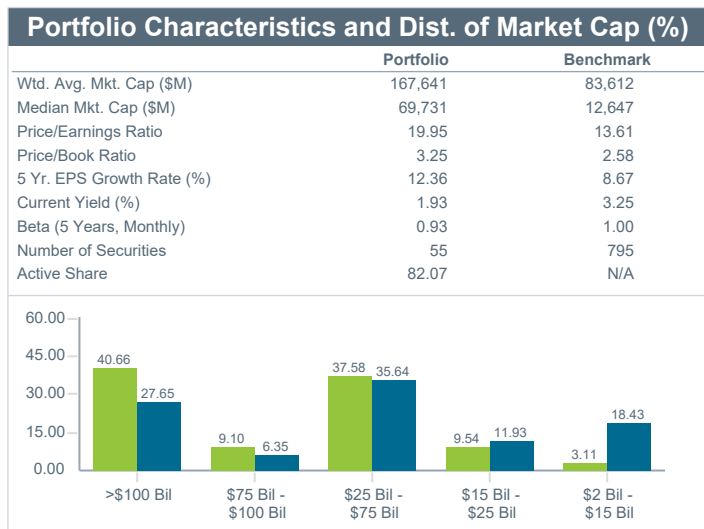
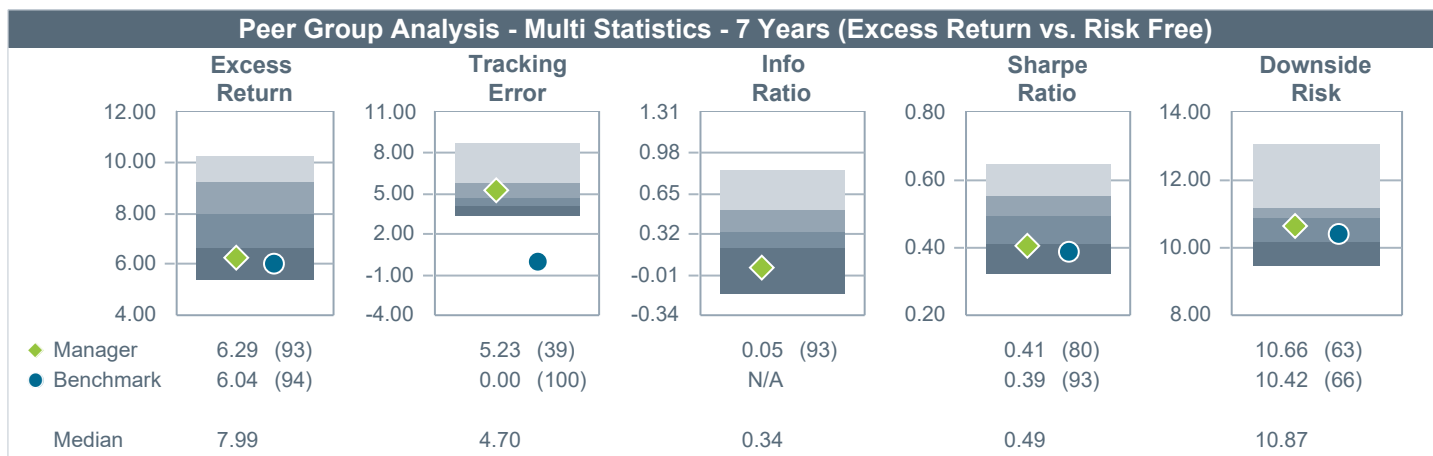
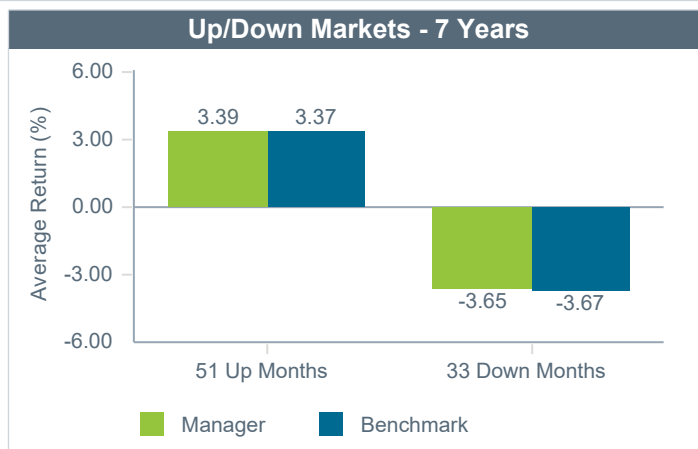
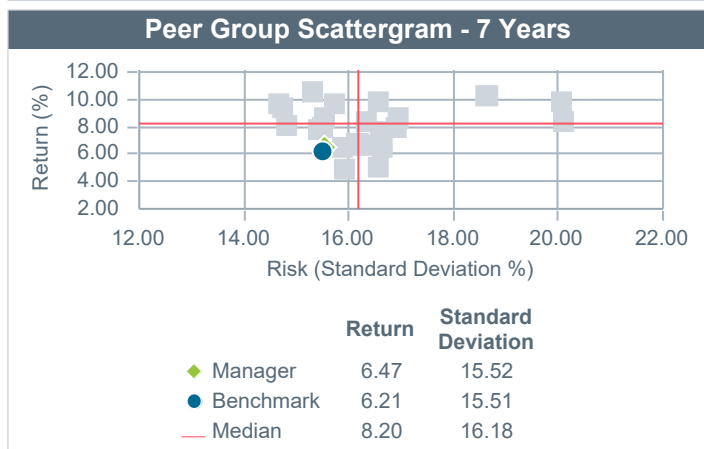
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	8.75	-0.11	15.05	3.00	6.05	5.72	-13.32	13.94	6.62	17.67	-15.30
Benchmark	8.47	-1.38	12.99	3.52	6.21	5.00	-14.45	11.26	7.82	22.01	-13.79
Difference	0.28	1.27	2.06	-0.52	-0.16	0.72	1.13	2.68	-1.20	-4.34	-1.51
Peer Group Median	8.43	-1.09	13.85	3.99	6.69	5.98	-14.57	11.96	8.70	23.71	-14.37
Rank	40	33	17	82	73	59	30	27	70	94	72
Population	67	67	66	66	65	62	68	72	80	85	90



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	8.87	0.58	9.94	4.17	6.47	N/A	-18.72	10.33	6.93	30.66	-9.79
Benchmark	8.47	-1.38	12.99	3.52	6.21	5.00	-14.45	11.26	7.82	22.01	-13.79
Difference	0.40	1.96	-3.05	0.65	0.26	N/A	-4.27	-0.93	-0.89	8.65	4.00
Peer Group Median	9.14	-3.28	13.23	5.49	8.20	6.76	-21.03	12.69	20.07	26.99	-14.12
Rank	57	3	95	91	93	N/A	32	79	95	19	14
Population	26	26	26	26	26	26	28	35	36	37	39



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



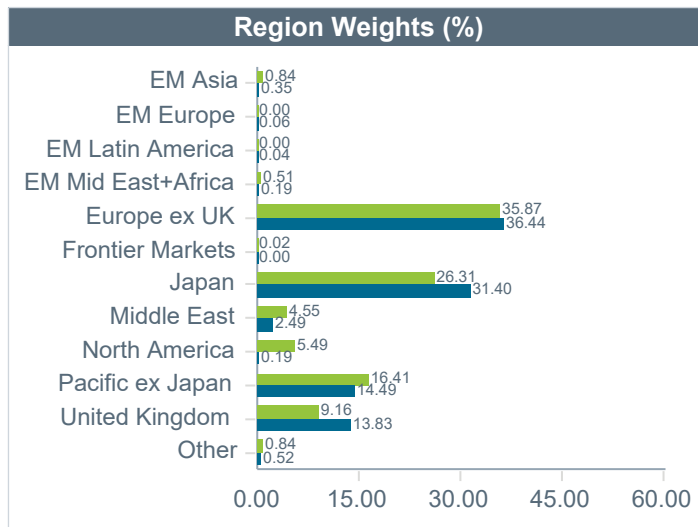
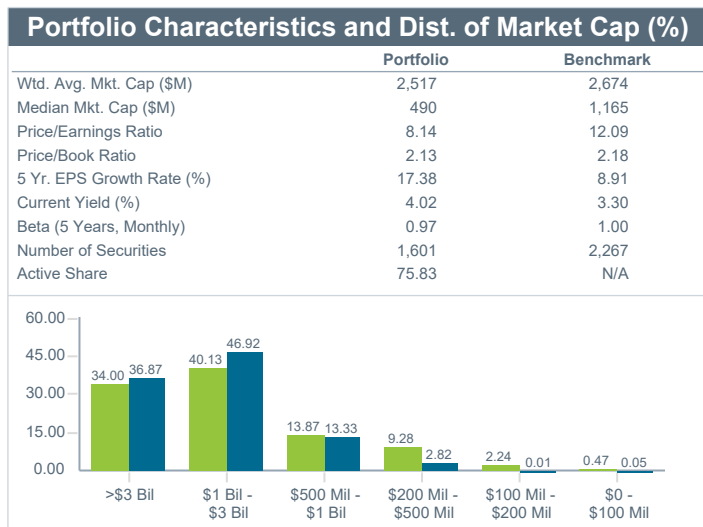
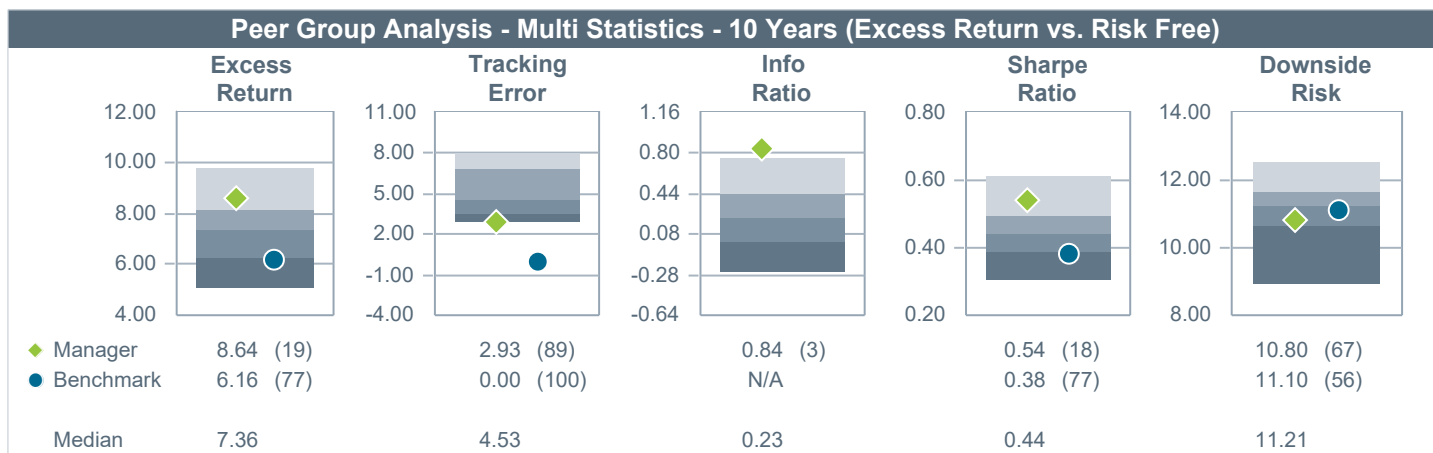
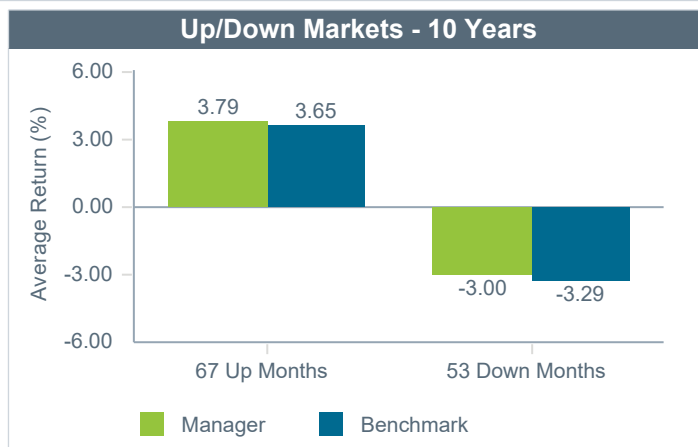
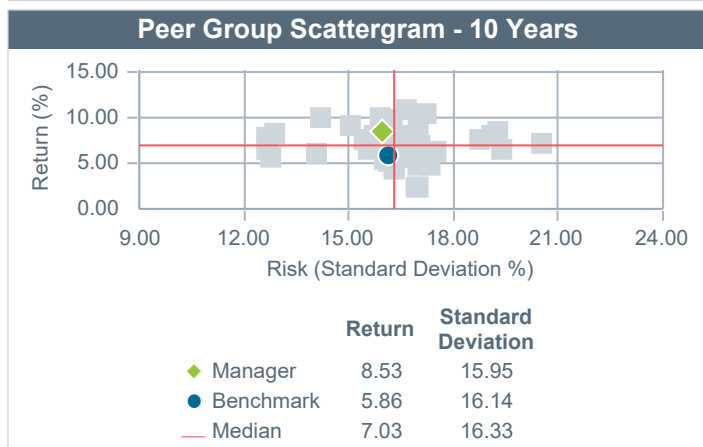
Manager: Acadian Int'l Sm Cap (CF)

As of March 31, 2023

Benchmark: MSCI EAFE Sm Cap Index (USD) (Net)

Peer Group: IM International Small Cap Equity (SA+CF)

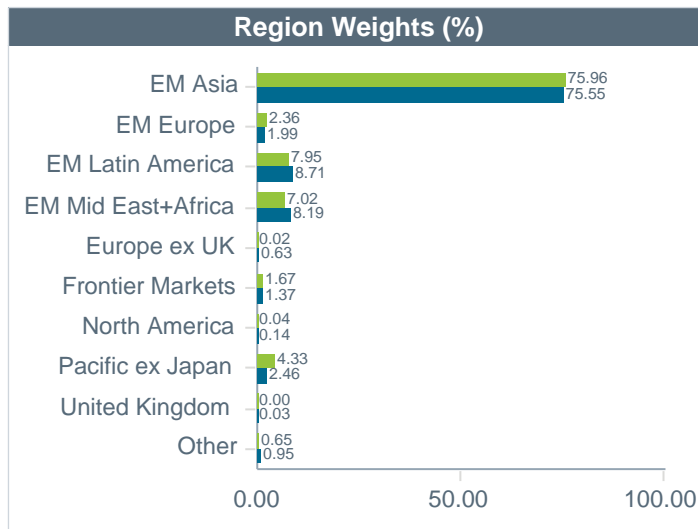
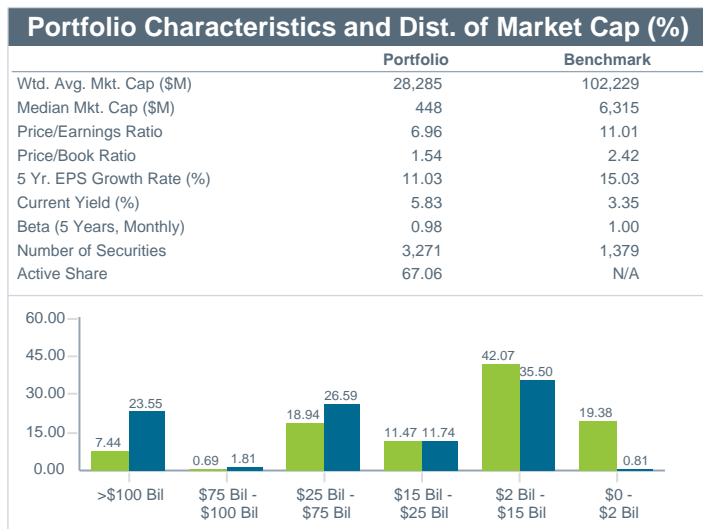
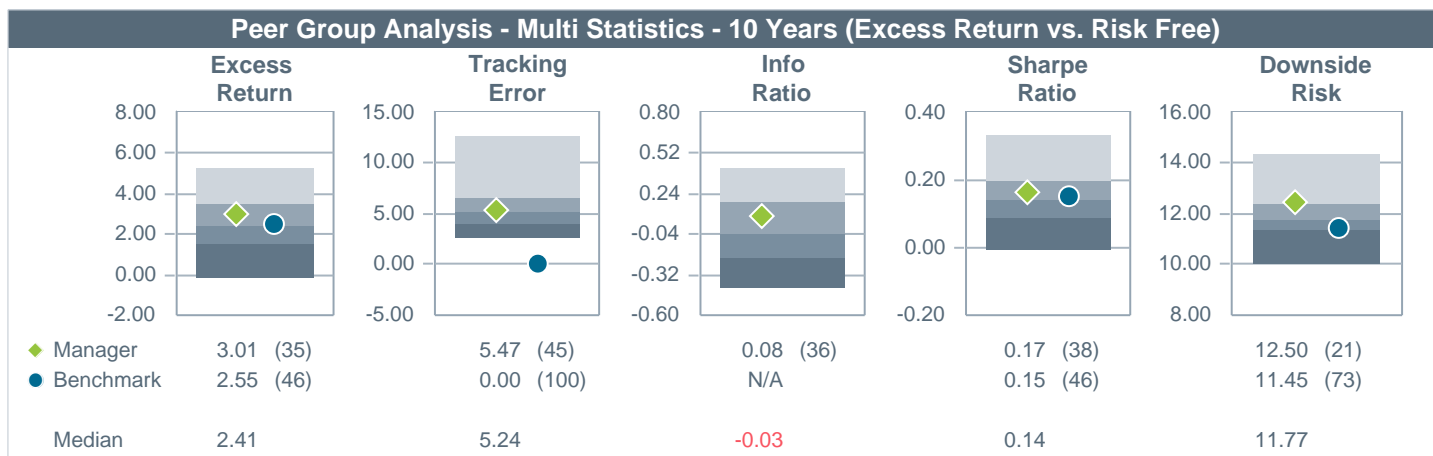
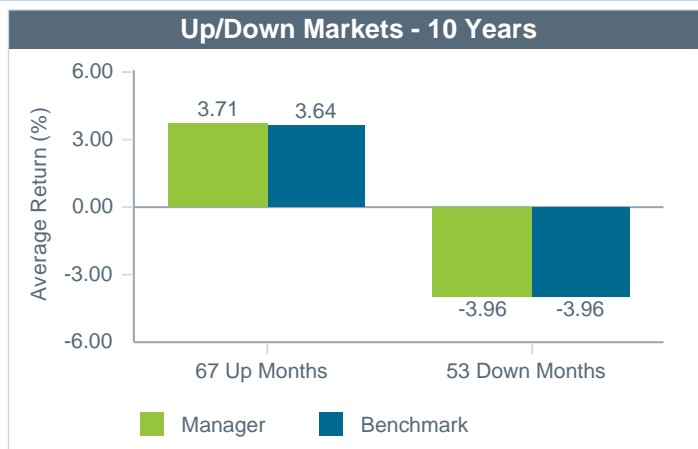
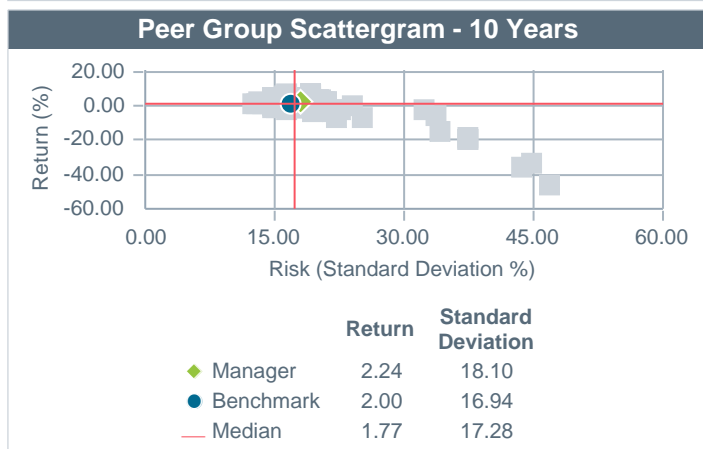
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	5.97	-7.59	17.14	3.44	8.13	8.53	-18.38	20.63	14.27	23.71	-18.54
Benchmark	4.92	-9.83	12.07	0.87	5.26	5.86	-21.39	10.10	12.34	24.96	-17.89
Difference	1.05	2.24	5.07	2.57	2.87	2.67	3.01	10.53	1.93	-1.25	-0.65
Peer Group Median	6.51	-7.35	14.21	2.57	6.67	7.03	-21.48	13.78	13.73	24.78	-17.85
Rank	64	52	26	37	29	18	35	10	49	57	55
Population	111	111	106	99	90	70	118	116	128	129	135



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" represents Jersey, Luxembourg, and Gurensy.



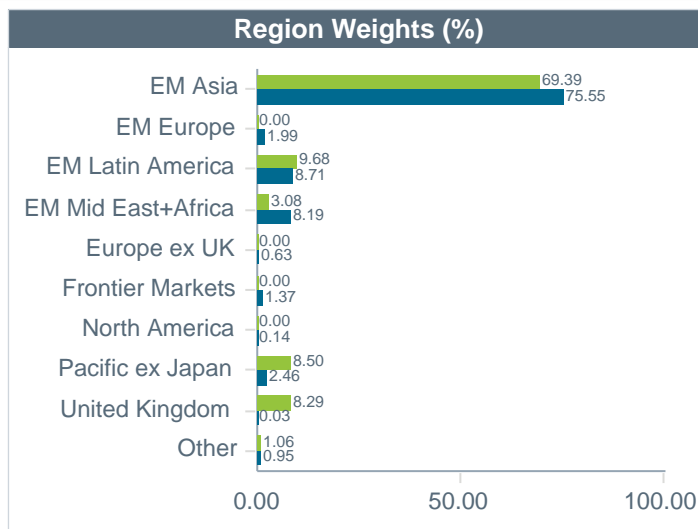
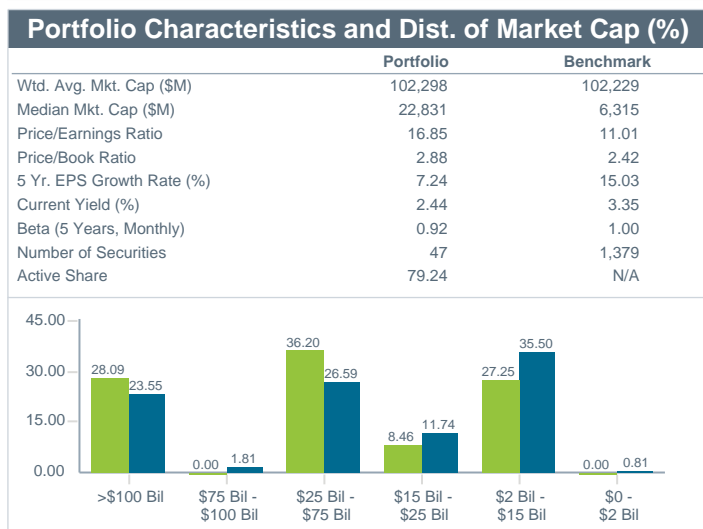
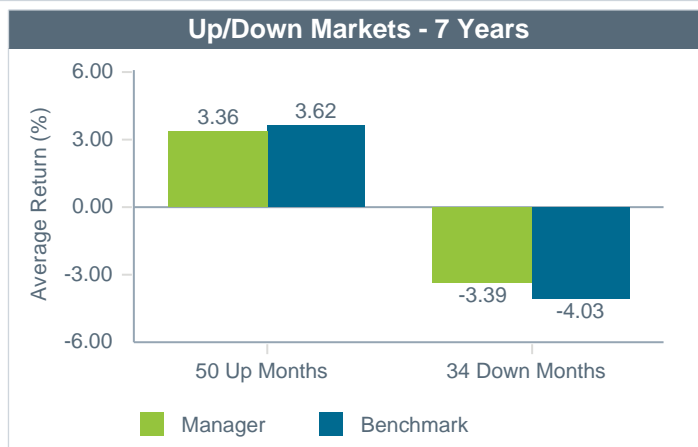
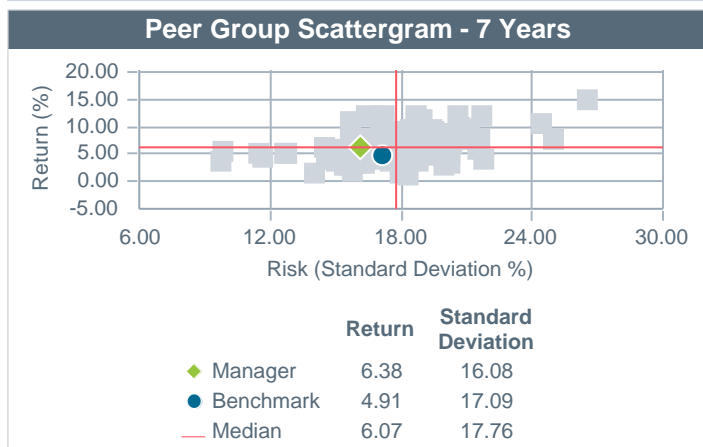
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.74	-7.88	16.23	0.20	6.17	2.24	-10.74	12.41	2.73	9.64	-11.93
Benchmark	3.96	-10.70	7.83	-0.91	4.91	2.00	-20.09	-2.54	18.31	18.42	-14.57
Difference	-0.22	2.82	8.40	1.11	1.26	0.24	9.35	14.95	-15.58	-8.78	2.64
Peer Group Median	5.02	-9.28	7.93	-1.08	4.67	1.77	-22.44	-1.62	17.66	20.17	-16.45
Rank	76	35	8	27	20	38	4	9	92	91	12
Population	828	789	702	615	529	368	772	765	780	821	818



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" represents Russia, Kuwait, Cyprus, and Panama.



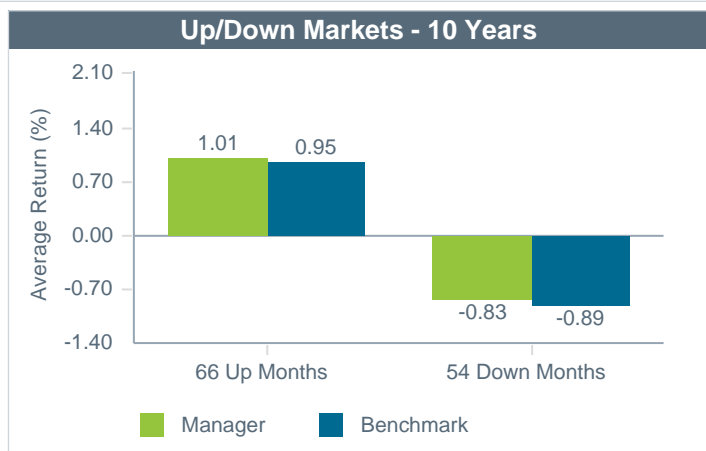
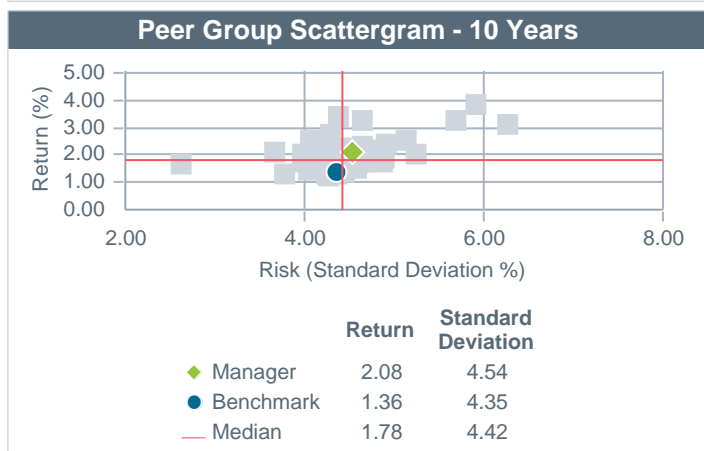
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	6.33	-2.99	10.70	2.51	6.38	N/A	-13.25	-3.56	17.39	18.93	-9.52
Benchmark	3.96	-10.70	7.83	-0.91	4.91	2.00	-20.09	-2.54	18.31	18.42	-14.57
Difference	2.37	7.71	2.87	3.42	1.47	N/A	6.84	-1.02	-0.92	0.51	5.05
Peer Group Median	4.94	-8.78	10.01	0.69	6.07	3.30	-19.72	0.75	18.93	20.64	-15.23
Rank	25	16	45	19	44	N/A	21	69	58	59	10
Population	277	276	259	232	217	174	291	306	334	358	358



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" represents Argentina.

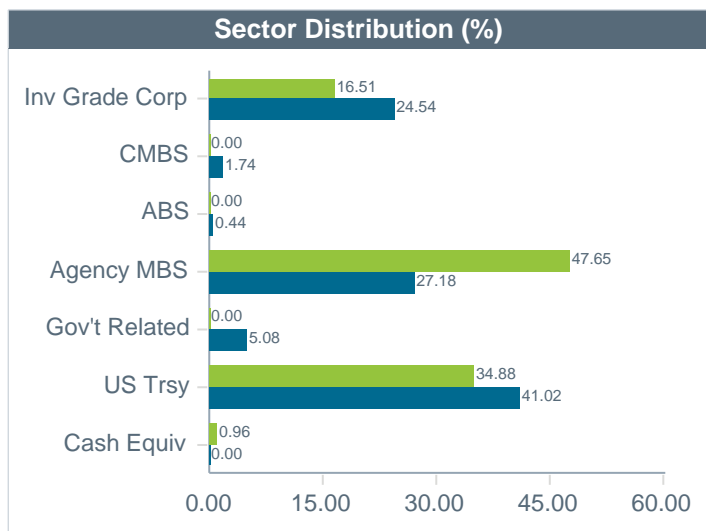


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.55	-3.80	-1.42	1.30	1.36	2.08	-11.28	-2.20	8.59	7.56	1.00
Benchmark	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.59	0.98	1.35	0.40	0.48	0.72	1.73	-0.65	1.08	-1.16	0.99
Peer Group Median	3.16	-4.67	-1.82	1.34	1.39	1.78	-12.96	-1.23	8.51	9.18	0.06
Rank	11	10	35	55	53	20	9	100	47	95	7
Population	130	130	130	127	125	122	140	147	155	157	164



Portfolio Characteristics

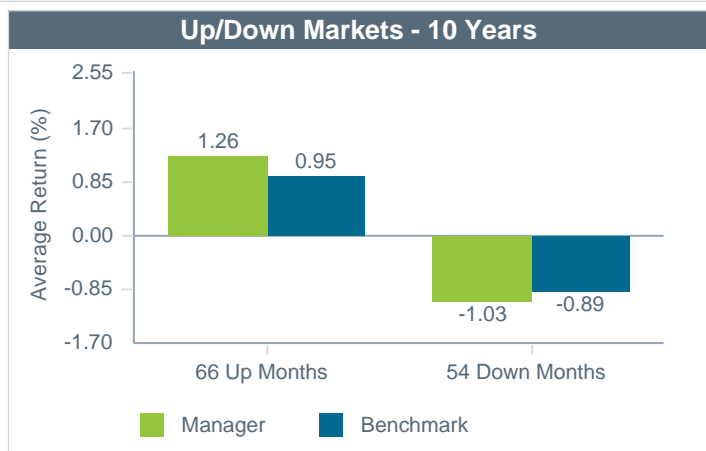
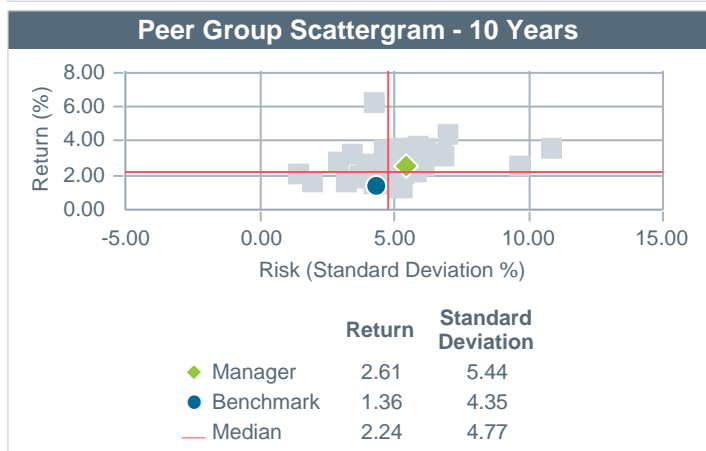
	Portfolio	Benchmark
Effective Duration	6.80	6.33
Spread Duration	3.55	N/A
Avg. Maturity	8.00	8.50
Avg. Quality	Aa1	Aa1/Aa2
Yield To Maturity (%)	4.22	4.40
Coupon Rate (%)	2.92	2.79
Current Yield (%)	3.14	N/A
Holdings Count	38	13,278



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

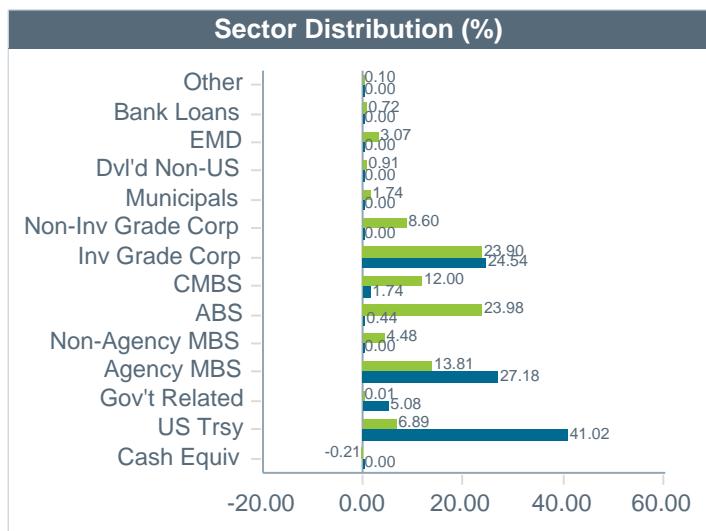


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.25	-5.50	-0.37	1.69	2.32	2.61	-14.31	-0.66	9.55	11.67	-0.13
Benchmark	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.29	-0.72	2.40	0.79	1.44	1.25	-1.30	0.89	2.04	2.95	-0.14
Peer Group Median	3.19	-4.65	-0.37	1.75	2.02	2.24	-12.91	-0.24	8.96	9.94	-0.24
Rank	47	83	51	55	34	24	92	68	36	15	43
Population	140	139	136	131	127	124	149	156	164	167	174



Portfolio Characteristics

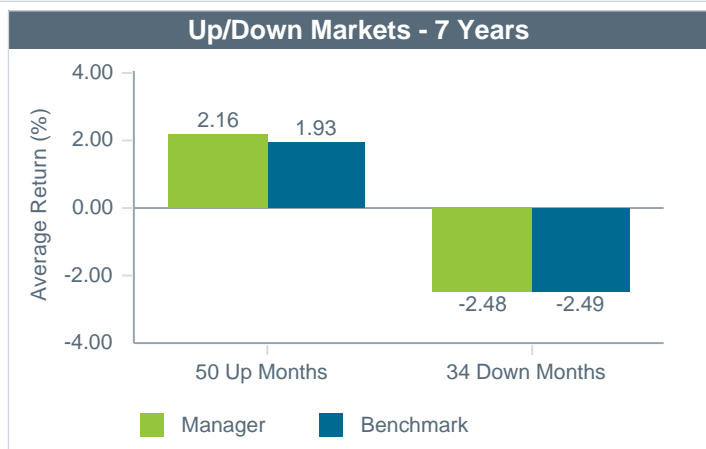
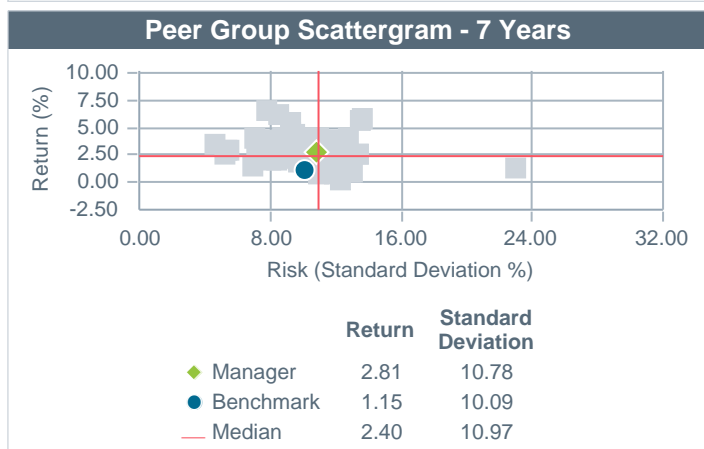
	Portfolio	Benchmark
Effective Duration	6.27	6.33
Spread Duration	3.75	N/A
Avg. Maturity	8.61	8.50
Avg. Quality	A1	Aa1/Aa2
Yield To Maturity (%)	6.19	4.40
Coupon Rate (%)	4.35	2.79
Current Yield (%)	4.73	N/A
Holdings Count	1,105	13,278



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of equity and swaps.

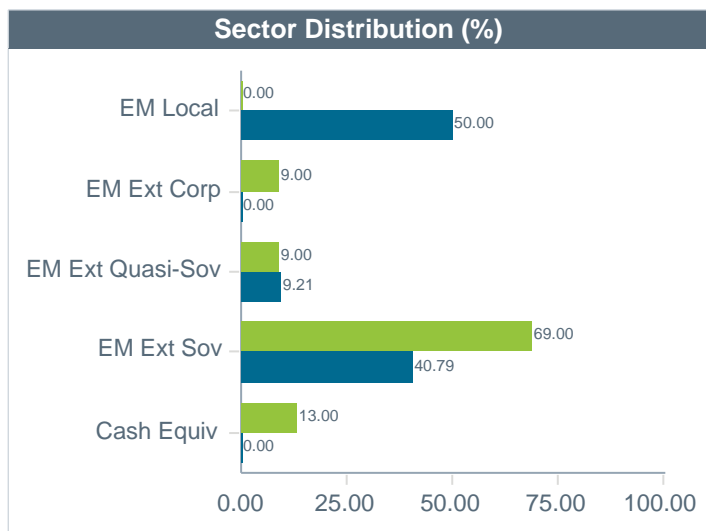


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	4.16	-1.79	2.18	-0.12	2.81	N/A	-13.45	-5.10	6.62	17.23	-5.61
Benchmark	3.51	-3.83	0.46	-1.44	1.15	0.29	-14.75	-5.32	4.02	14.31	-5.15
Difference	0.65	2.04	1.72	1.32	1.66	N/A	1.30	0.22	2.60	2.92	-0.46
Peer Group Median	2.35	-3.46	2.66	-0.11	2.40	1.70	-12.28	-2.12	6.72	14.30	-5.23
Rank	27	39	65	51	35	N/A	59	70	52	6	58
Population	119	118	117	113	108	82	130	138	149	159	169



Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	5.71	5.88
Spread Duration	5.62	3.39
Avg. Maturity	8.85	9.57
Avg. Quality	Baa2	Ba2
Yield To Maturity (%)	7.37	7.34
Coupon Rate (%)	5.22	5.20
Current Yield (%)	6.36	5.68
Holdings Count	156	1,264



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

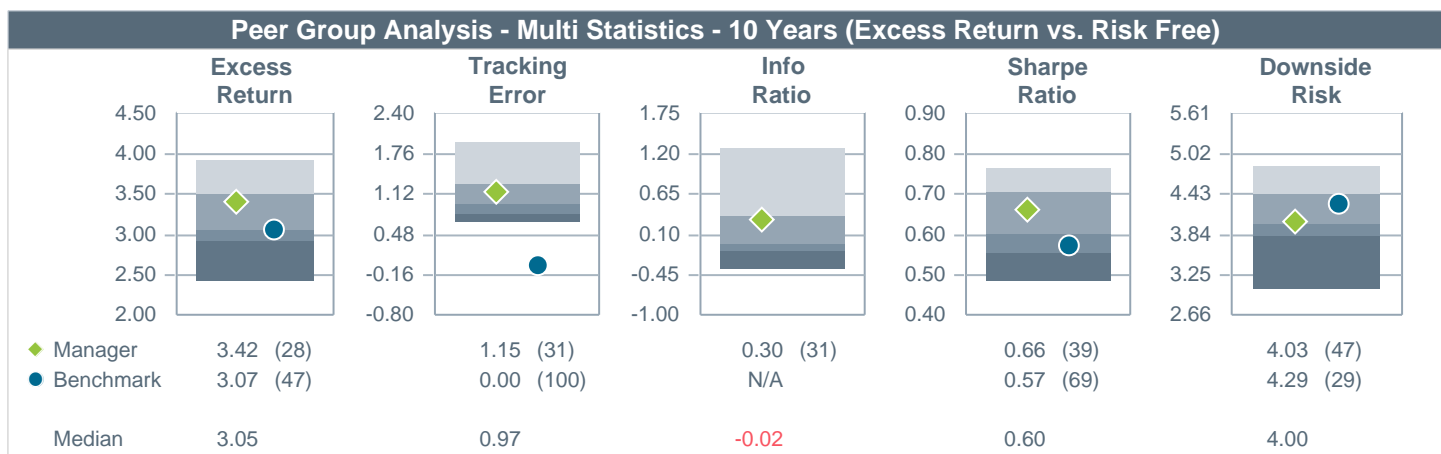
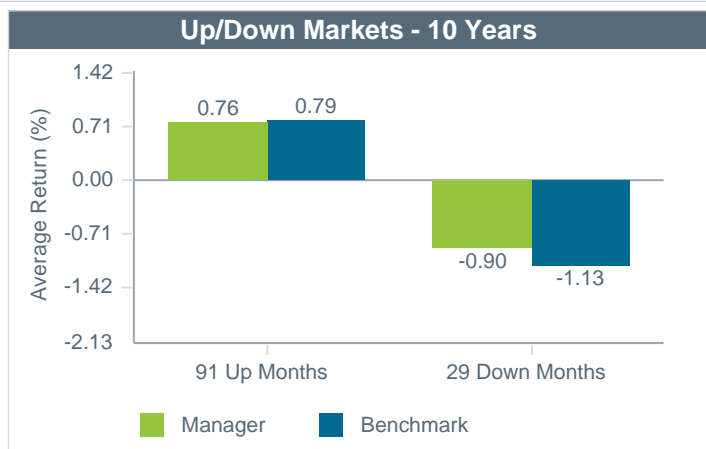
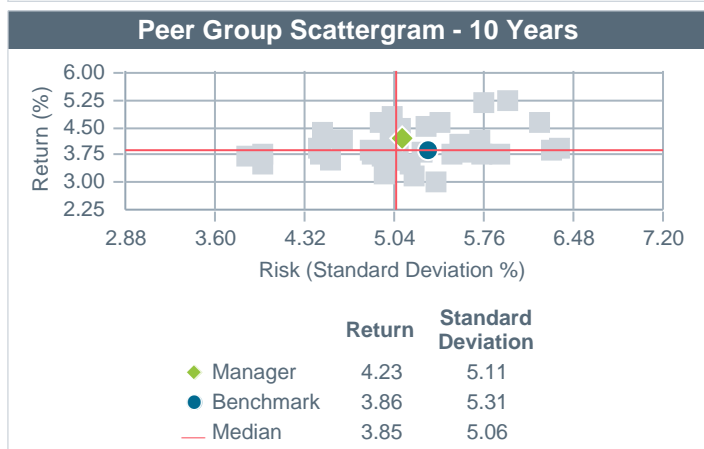
Manager: Beach Point Leveraged Loan (CF)

As of March 31, 2023

Benchmark: Credit Suisse Lvg'd Loan Index

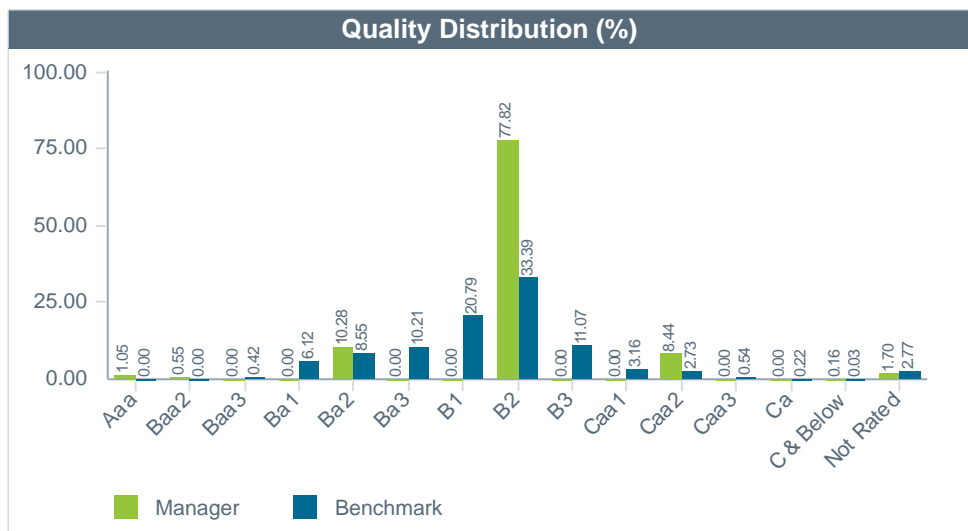
Peer Group: IM U.S. Bank Loans (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.85	2.46	8.30	3.96	4.05	4.23	-1.26	5.11	3.36	9.28	0.64
Benchmark	3.11	2.12	8.38	3.55	4.57	3.86	-1.06	5.40	2.78	8.17	1.14
Difference	0.74	0.34	-0.08	0.41	-0.52	0.37	-0.20	-0.29	0.58	1.11	-0.50
Peer Group Median	3.15	2.97	8.09	3.75	4.50	3.85	-0.87	5.34	2.67	8.71	0.80
Rank	10	57	35	25	91	28	67	55	29	34	65
Population	47	47	46	45	43	41	52	54	57	60	67



Portfolio Characteristics

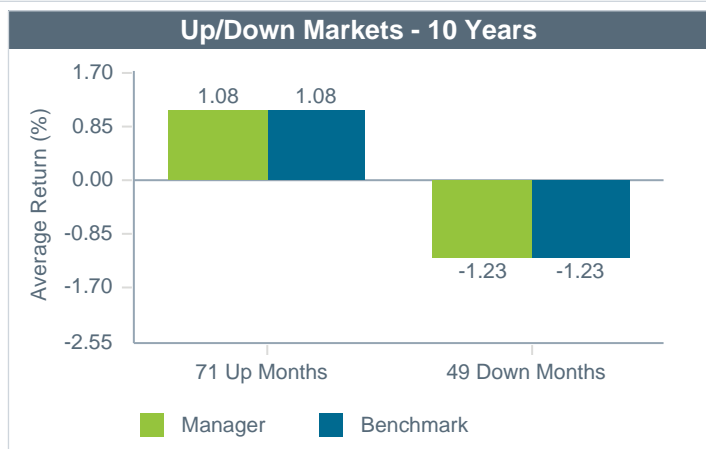
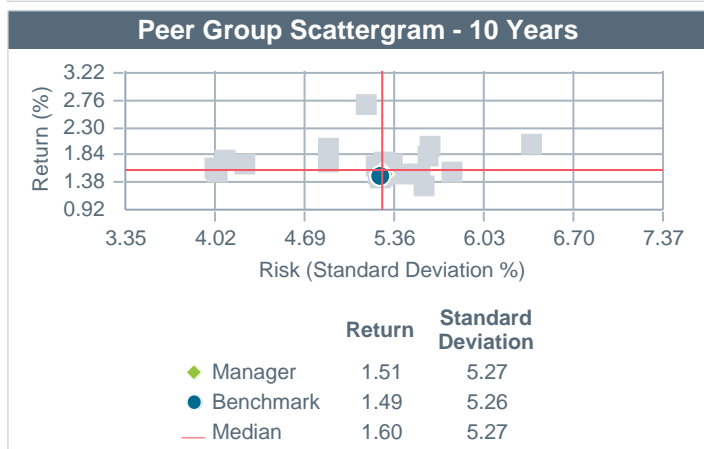
	Portfolio	Benchmark
Effective Duration	N/A	0.25
Spread Duration	N/A	N/A
Avg. Maturity	4.80	4.32
Avg. Quality	B2	Ba2
Yield To Maturity (%)	N/A	9.68
Coupon Rate (%)	6.00	8.60
Current Yield (%)	9.50	9.27
Holdings Count	144	1,688



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

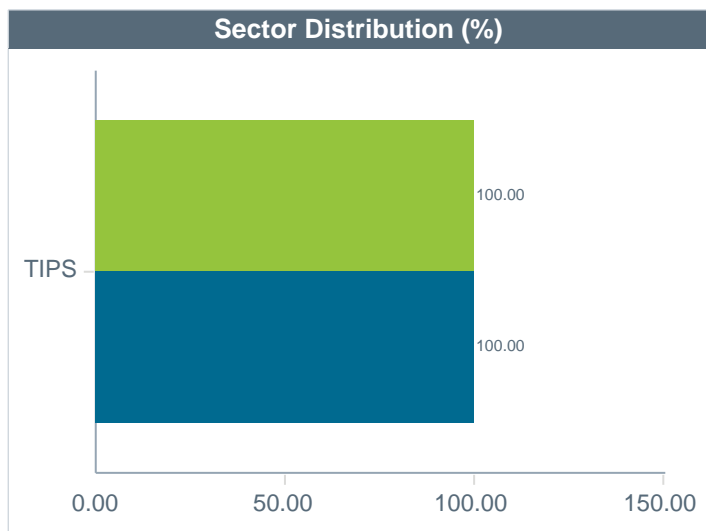


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.34	-6.09	1.81	2.98	2.48	1.51	-11.83	6.14	10.97	8.43	-1.26
Benchmark	3.34	-6.06	1.75	2.94	2.44	1.49	-11.85	5.96	10.99	8.43	-1.26
Difference	0.00	-0.03	0.06	0.04	0.04	0.02	0.02	0.18	-0.02	0.00	0.00
Peer Group Median	3.41	-5.91	2.05	3.08	2.58	1.60	-11.76	5.92	11.01	8.44	-1.23
Rank	63	74	65	57	78	82	59	17	55	55	59
Population	27	27	26	26	26	25	30	31	33	34	38



Portfolio Characteristics

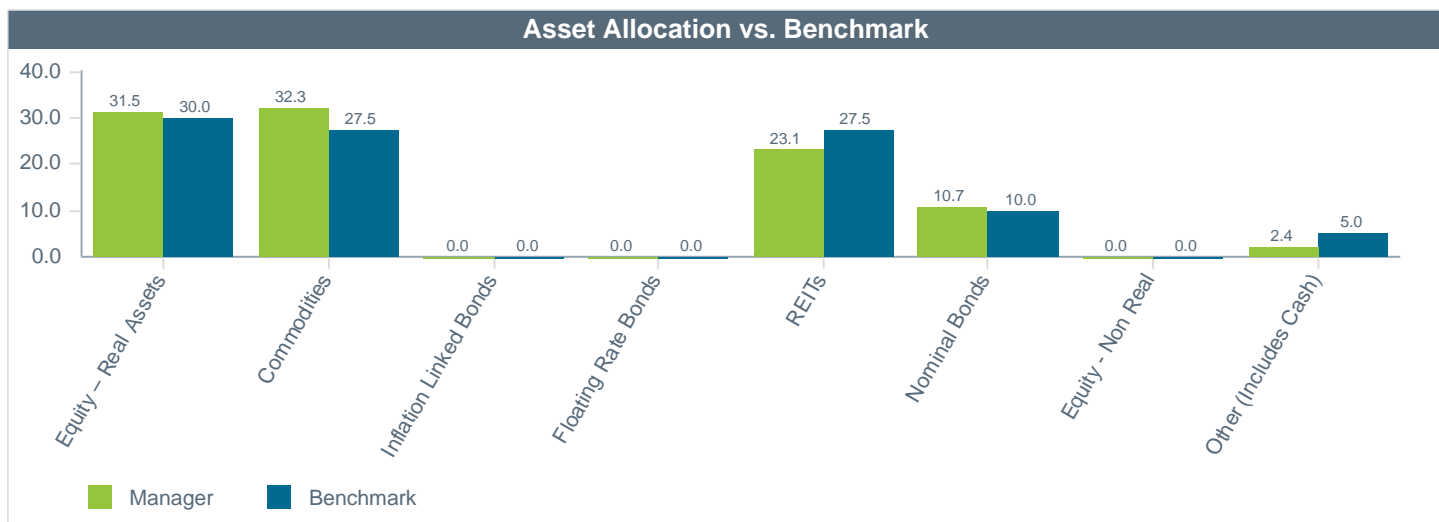
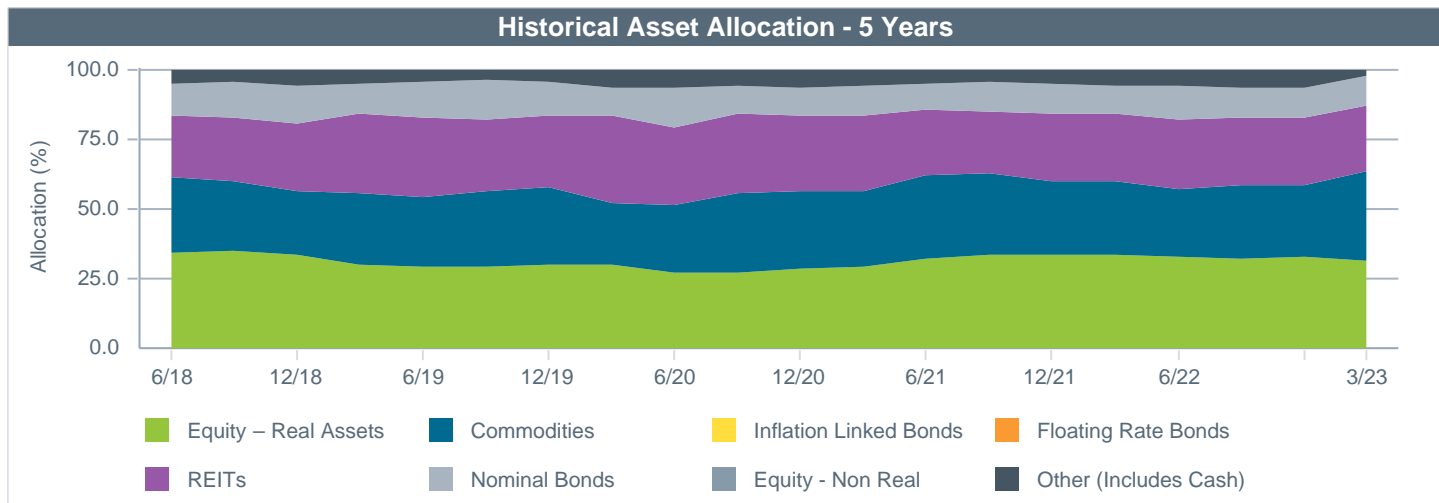
	Portfolio	Benchmark
Effective Duration	6.88	5.05
Spread Duration	N/A	5.05
Avg. Maturity	7.40	7.39
Avg. Quality	Aaa/Aaa	Aaa
Yield To Maturity (%)	4.02	4.07
Coupon Rate (%)	0.68	0.68
Current Yield (%)	0.72	N/A
Holdings Count	48	48



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance prior to 05/2019 is represented by BNY Mellon TIPS - SL (CF).



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	-0.21	-11.12	15.04	5.83	N/A	N/A	-2.12	23.63	-0.50	17.57	-8.24
Benchmark	-0.26	-10.87	14.06	4.87	5.43	2.45	-3.02	21.23	-2.00	16.53	-7.48
Difference	0.05	-0.25	0.98	0.96	N/A	N/A	0.90	2.40	1.50	1.04	-0.76



Historical Statistics - 5 Years

	Manager	Benchmark	S&P 500 Index (Cap Wtd)	Bloomberg US Agg Bond Index
Standard Deviation	13.55	14.10	18.48	5.42
Sharpe Ratio	0.38	0.31	0.59	-0.07
Downside Risk	9.83	10.40	12.30	3.84
Excess Return	5.22	4.39	10.97	-0.35

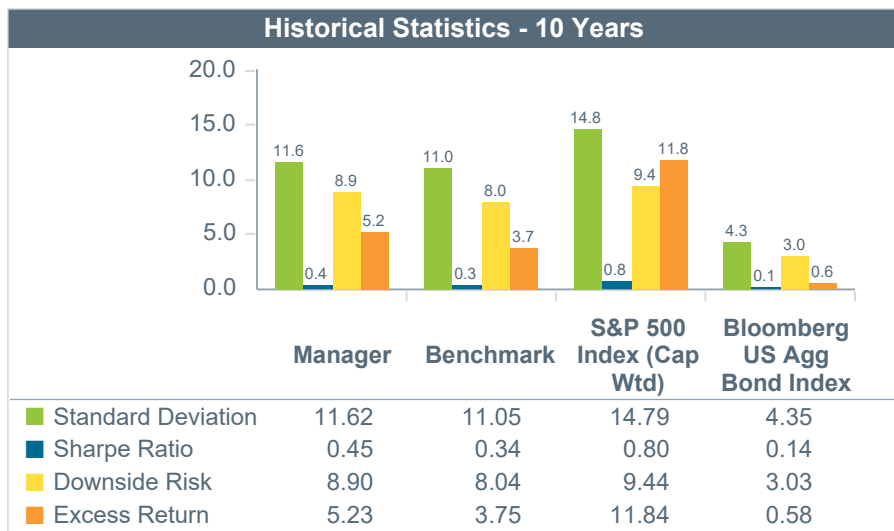
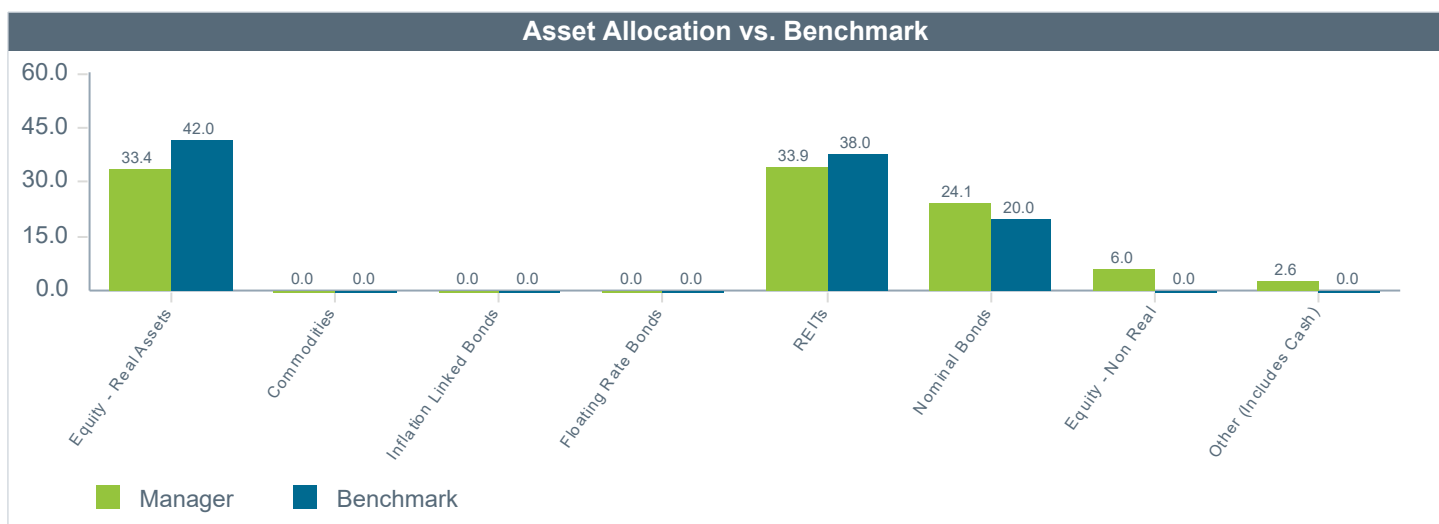
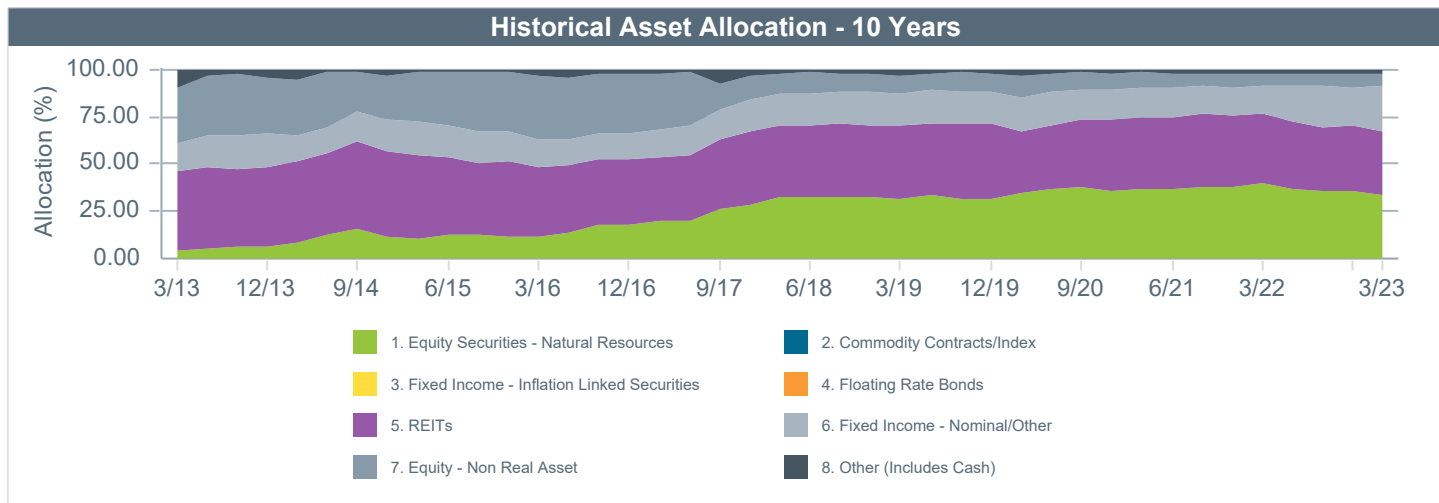
Actual Correlation - 5 Years

	Actual Correlation
Benchmark	0.99
S&P 500 Index (Cap Wtd)	0.83
Russell 2000 Index	0.80
MSCI EAFE Index (USD) (Net)	0.86
MSCI Emg Mkts Index (USD) (Net)	0.76
Bloomberg US Agg Bond Index	0.29
Bloomberg US Trsy US TIPS Index	0.51
Wilshire US REIT Index	0.84
HFRI FOF Comp Index	0.78
Bloomberg Cmnty Index (TR)	0.84
ICE BofAML 3 Mo US T-Bill Index	-0.30
Cons Price Index (Unadjusted)	0.09

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Primary Real Return strategies and asset classes are represented by the colored shades. Allocation to Equity – Real Assets includes listed infrastructure and natural resource equities. Allocation to "Other" includes gold and cash equivalents. Please see the Addendum for custom index definitions.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.10	-8.96	10.34	3.94	5.04	5.52	-11.19	13.05	-2.24	24.25	-5.41
Benchmark	2.96	-9.78	8.09	2.82	3.79	4.06	-14.24	11.22	0.81	20.01	-6.59
Difference	-0.86	0.82	2.25	1.12	1.25	1.46	3.05	1.83	-3.05	4.24	1.18



Actual Correlation - 10 Years

	Actual Correlation
Benchmark	0.98
S&P 500 Index (Cap Wtd)	0.78
Russell 2000 Index	0.72
MSCI EAFE Index (USD) (Net)	0.79
MSCI Emg Mkts Index (USD) (Net)	0.72
Bloomberg US Agg Bond Index	0.48
Bloomberg US Trsy US TIPS Index	0.59
Wilshire US REIT Index	0.83
HFRI FOF Comp Index	0.76
Bloomberg Cmnty Index (TR)	0.49
ICE BofAML 3 Mo US T-Bill Index	-0.18
Cons Price Index (Unadjusted)	0.01

Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Primary Real Return strategies and asset classes are represented by the colored shades and are denoted by categories 1 through 5. Historical asset allocation prior to client inception is represented by Nuveen Real Asset Inc;I (NRIIX). Please see the Addendum for custom index definitions.



Addendum & Glossary



Performance Related Comments

- RVK, Inc. began monitoring the assets of the Santa Barbara County Employees' Retirement System in 06/2016. Prior historical data was provided by the previous investment consultant.
- Inception dates shown represent the first full month following initial funding.
- Performance is annualized for periods greater than one year.
- Total Fund performance excludes Treasury Cash.
- Performance shown is provided by BNY Mellon.
- Historical performance prior to 04/11/2019 for BNY Mellon HEDI (SA), BNY Mellon R1000 Index - NL (CF), and BNY Mellon TIPS - NL (CF) is represented by RhumbLine HEDI (SA), SSgA Russell 1000 Index - NL (CF), and BlackRock TIPS (CF), respectively.

Custom Index Comments

- RVK began calculating the SBCERS Policy Benchmark on 04/01/2016. Historical performance was provided by the previous consultant. The passive **Policy Benchmark** currently consists of 19% Russell 3000 Index, 11% MSCI EAFE Index (USD) (Net), 7% MSCI Emg Mkts Index (USD) (Net), 17% Bloomberg US Agg Bond Index, 11% Custom Non-Core Fixed Income Benchmark, 15% Consumer Price Index+4%, 10% NCREIF ODCE Index (AWA) (Net) (Monthly) (1 Qtr Lag), and 10% Russell 3000 Index+3% (1 Qtr Lag).
- The active **SBCERS Dynamic Policy Benchmark** is calculated monthly using beginning of month manager weights applied to each corresponding primary benchmark return.
- The passive **Custom Non-Core Fixed Income Benchmark** currently consists of 25% Wellington Blended Benchmark and 75% CS Lvg'd Loan Index. Prior to 09/01/2022 the benchmark consisted of 33.3% Wellington Blended Benchmark, and 66.6% CS Lvg'd Loan Index. Prior to 12/01/2020 the benchmark consisted of 33.3% Bloomberg US Corp Hi Yld Index, 33.3% Wellington Blended Benchmark, and 33.3% CS Lvg'd Loan Index.
- The passive **Wellington Blended Benchmark** currently consists of 50% JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged) and 50% JPM Emg Mkts Bond Gbl Dvf'd Index (TR).
- The active **Custom Real Return Benchmark** is calculated monthly using beginning of month manager weights within the Real Return Composite applied to each corresponding primary benchmark return.
- The passive **Cohen & Steers Real Assets Custom Index** is a custom benchmark created by the manager and currently consists of 27.5% FTSE EPRA/NAREIT Dvld Index (USD) (Net), 27.5% Bloomberg Cmdty Index (TR), 15% S&P Gbl Natural Res Sect Index (TR), 15% DJ Brookfield Gbl Infrastructure Index, 10% ICE BofAML 1-3 Yr US Corp Index, and 5% Gold Spot Per Ounce Index. Prior to 9/30/2013 benchmark consisted of 30% FTSE EPRA/NAREIT Dvld Index (USD) (Net), 30% Bloomberg Cmdty Index (TR), 20% S&P Gbl Natural Res Sect Index (TR), 12.5% ICE BofAML 1-3 Yr Corp Index, and 7.5% Gold Spot Per Ounce Index.
- The passive **Nuveen Real Asset Income Blend Index** is a custom benchmark created by the manager and currently consists of 22% S&P Global Infrastructure Index (Net), 25% FTSE EPRA/NAREIT Devl'd Index (USD) (Net), 20% Bloomberg US Corp Hi Yld Index, 13% FTSE NAREIT Preferred Stock Index, and 20% ICE Hybrid & Preferred Infrastructure 7% Issuer Constrained Custom Index. Prior to 4/01/2021 benchmark consisted of 28% S&P Gbl Infrastructure Index, 21% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), 18% Wells Fargo Hybrid & Preferred Securities REIT Index, 15% Bloomberg Global Capital Securities Index and 18% Bloomberg US Corp Hi Yld Index.

**Santa Barbara County Employees' Retirement System
Fee Schedule for Public Investment Managers**

As of March 31, 2023

	Fee Schedule	Market Value As of 03/31/2023 (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Fund Public Assets		2,449,211,284	7,158,627	0.29
U.S. Equity Composite				
BNY Mellon HEDI (SA)	0.02 % of Assets	291,134,009	58,227	0.02
BNY Mellon R1000 Index - NL (CF)	0.01 % of Assets	341,863,612	34,186	0.01
Dimensional U.S. Small Cap Value (CF)	0.28 % of Assets	45,386,081	127,081	0.28
RHJ Small Cap Opportunities (SA)	0.80 % of First \$50 M 0.60 % Thereafter	34,845,706	278,766	0.80
Dev'd Mkt. Non-U.S. Equity Composite				
PanAgora Dynamic International Equity (SA)	0.33 % of First \$100 M 0.30 % of Next \$100 M 0.25 % Thereafter	205,626,927	644,067	0.31
Artisan Non-U.S. Growth (SA)	0.80 % of First \$50 M 0.60 % Thereafter	139,524,453	937,147	0.67
Acadian Non-US Small Cap Equity (CF)	0.75 % of Assets	56,146,418	421,098	0.75
Emerging Mkt. Equity Composite				
DFA Emg Mkts Value;I (DFEVX)	0.44 % of Assets	132,783,373	584,247	0.44
RBC Emerging Markets Equity (CF)	0.50 % of Assets	127,182,436	635,912	0.50
Core Fixed Income Composite				
Garcia Hamilton Core Fixed Income (SA)	0.25 % of First \$25 M 0.20 % of Next \$25 M 0.15 % of Next \$50 M 0.14 % of Next \$100 M 0.10 % Thereafter	360,632,931	488,133	0.14
PGIM Core Plus Fixed Income (CF)	0.26 % of Assets	246,629,757	641,237	0.26
Non-Core Fixed Income Composite				
Wellington Blended Opportunistic EMD (CF)	0.55 % of Assets	122,861,271	675,737	0.55
Beach Point Leveraged Loan (CF)	0.50 % of Assets	150,346,585	751,733	0.50
Public Real Return Composite				
BNY Mellon TIPS - NL (CF)	0.01 % of Assets	15,536,875	1,554	0.01
Cohen & Steers Real Assets Fund (CIT)	0.65 % of Assets	60,820,156	395,331	0.65
Nuveen Real Asset Income Fund (SA)	0.80 % of First \$50 M 0.75 % of Next \$50 M 0.65 % Thereafter	60,072,406	475,543	0.79

**Santa Barbara County Employees' Retirement System
Addendum
Underlying Indices of SBCERS Policy Index**

As of March 31, 2023

Time Period	Composition	Time Period	Composition	Time Period	Composition
11/01/1999-12/31/2001	45.0% Russell 3000 Index 20.0% MSCI EAFE 28.5% Lehman Aggregate 4.5% SB World Gov Bond 2.0% CG 3-Month U.S. T-Bill	06/01/2012-04/30/2013	21.0% Russell 3000 Index 2.0% HFRI Composite 9.0% MSCI EAFE 10.0% MSCI Emerging Markets 1.0% MSCI Frontier Markets 10.0% Barclays Capital Aggregate 4.0% JPM GBI Global ex. U.S. 3.0% JPM GBI - Emerging Global Diversified 7.0% Barclays Capital U.S. Tips 4.0% Barclays High Yield 2.0% CSFB Leveraged Loan Index 3.0% Dow Jones-UBS Commodity Index 2.0% S&P Global Large Mid Comm and NR 3.0% CPI+4% Lagged 2.0% Dow Jones Brookfield Global Infra. 2.0% CPI+4% Lagged 7.0% Russell 3000+3% Lagged 6.0% NCREIF ODCE Lagged 2.0% NAREIT Equity REITs Lagged 0.0% 90 Day T-Bills	04/01/2016-06/30/2017	23.0% Russell 3000 Index 9.0% MSCI EAFE Index (USD) (Net) 10.0% MSCI Emerging Markets Index (USD) (Net) 1.0% MSCI Frontier Markets Index (USD) (Net) 10.0% Bloomberg US Aggregate Bond Index 4.0% JP Morgan Global Government Bond Excluding US Index 3.0% Stone Harbor Blended Benchmark 7.0% Bloomberg US Treasury: US TIPS Index 4.0% Bloomberg US Corporate: High Yield Index 2.0% Credit Suisse Leveraged Loan Index 3.0% Bloomberg Commodity Index (Total Return) 2.0% S&P Gbl Lg Mid Cap Commodity & Resources Index (USD) (Gross) 3.0% Consumer Price Index+4% (1 Qtr Lag) 2.0% Dow Jones Brookfield Global Infrastructure Composite Index (Net) 2.0% Consumer Price Index+4% 7.0% Russell 3000 Index+3% (1 Qtr Lag) 6.0% NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag) 2.0% FTSE NAREIT All Equity REITs Total Return Index (1 Qtr Lag) 0.0% ICE BofA Merrill Lynch 3 Month US Treasury Bill Index
01/01/2002-12/31/2006	49.0% Russell 3000 Index 19.0% MSCI AC Wild ex U.S. 27.0% Lehman Universal 4.0% DJ Wilshire REIT Full Cap 1.0% CG 3-Month U.S. T-Bill	05/01/2013-03/31/2016	23.0% Russell 3000 Index 9.0% MSCI EAFE 10.0% MSCI Emerging Markets 1.0% MSCI Frontier Markets 10.0% Barclays Capital Aggregate 4.0% JPM GBI Global ex. U.S. 3.0% JPM GBI - Emerging Global Diversified 7.0% Barclays Capital U.S. Tips 4.0% Barclays High Yield 2.0% CSFB Leveraged Loan Index 3.0% Dow Jones-UBS Commodity Index 2.0% S&P Global Large Mid Comm and NR 3.0% CPI+4% Lagged 2.0% Dow Jones Brookfield Global Infra. 2.0% CPI+4% Lagged 7.0% Russell 3000+3% Lagged 6.0% NCREIF ODCE Lagged 2.0% NAREIT Equity REITs Lagged 0.0% 90 Day T-Bills	07/01/2017-Present	19.0% Russell 3000 Index 11.0% MSCI EAFE Index (USD) (Net) 7.0% MSCI Emerging Markets Index (USD) (Net) 17.0% Bloomberg US Aggregate Bond Index 11.0% Custom Non-Core Fixed Income Benchmark 15.0% Consumer Price Index+4% 10.0% NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag) 10.0% Russell 3000 Index+3% (1 Qtr Lag)
01/01/2007-12/31/2008	48.0% Russell 3000 Index 19.0% MSCI ACWI ex U.S. 26.0% Lehman Universal 2.0% Russell 3000+3% 4.0% NCREIF / T-Bill+3% (50/50) 1.0% CG 3-Month U.S. T-Bill				
01/01/2009-02/28/2009	47.0% Russell 3000 Index 18.0% MSCI ACWI ex U.S. 25.0% BC U.S. Universal 4.0% Russell 3000+3% Index 5.0% NCREIF / T-Bill+3% (50/50) 1.0% CG 3-Month U.S. T-Bill				
03/01/2009-06/30/2010	37.0% Russell 3000 Index 18.0% MSCI ACWI ex U.S. 32.0% BC U.S. Universal 4.0% T-Bill Lag 1 Qtr Lag 4.0% NCREIF Index Lag 1 QTR 3.0% Russell 3000 Lag 1 QTR 2.0% CG 3-Month U.S. T-Bill				
07/01/2010-02/28/2011	37.0% Russell 3000 Index (includes 2% Covered Calls) 18.0% MSCI ACW ex U.S. 32.0% BC U.S. Universal 4.0% T-Bill Lag 1 QTR (Real Return) 4.0% NCREIF Index Lag 1 QTR 3.0% Russell 3000 Lag 1 QTR (Private Equity) 2.0% CG 3-Month U.S. Bill				
03/01/2011-05/31/2012	37.0% Russell 3000 Index (includes 2% Covered Calls) 18.0% MSCI ACW ex U.S. 30.0% BC U.S. Universal 4.0% T-Bill Lag 1 QTR (Real Return) 4.0% NCREIF Index Lag 1 QTR 5.0% Russell 3000 Lag 1 QTR (Private Equity) 2.0% CG 3-Month U.S. Bill				

RVK, Inc. began calculating performance for the SBCERS Policy Index in 06/2016. Prior performance data was provided by the previous investment consultant.



The following work plan outlines RVK's proposed action items for Santa Barbara County Employees' Retirement System. The proposed timing for future meetings is intended to correspond with anticipated meeting dates for the Board.

Action Item	Anticipated Presentation	Status	Comments
Q4 Performance Report	February 2023	Completed	
Capital Market Assumptions	March 2023	Completed	
Private Credit Pacing Study	April 2023	Completed	
Asset Allocation	April 2023	Completed	
Q1 Performance Report	May 2023	In Progress	
Strategic Plan	June 2023	In Progress	
Private Credit Recommendation	July 2023	In Progress	
Q2 Performance Report	August 2023	In Progress	

Glossary

Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers), such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters, such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment Grade			Lower Credit Quality – Below Investment Grade		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

Benchmark Effect - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Box Plots - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1st quartile, 2nd quartile, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd quartile meet.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data. Attribution to "other" is the result of securities based in industries that do not fit into any GICS classification.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider. Attribution to "other" is the result of securities based in countries/regions that do not fit into any MSCI classification.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, and names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

Capital Markets Review -

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.



Glossary

- Federal Funds Rate** - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.
- Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.
- Purchasing Managers Index (PMI)** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.
- Real Gross Domestic Product (Real GDP)** - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.
- Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.
- US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.
- VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."
- Cash Flow Effect** – The composite's active return minus the sum of each managers' active return minus the benchmark effect.
- Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.
- Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.
- Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.
- Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.
- Current Yield** - The annual income of a security divided by the security's current price.
- Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.
- Downside Risk** - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.
- Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.
- Effective Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.
- Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.
- Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.
- Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.
- Expense Ratios** - Morningstar is the source for mutual fund expense ratios.
- Gain/Loss** - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.
- Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.
- Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.
- Liability Driven Investing (LDI)** - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.
- Estimated Funded Status** - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.
- Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.
- Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.
- Duration of Assets** - The dollar-weighted average duration of all the individual Plan assets.
- Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and

Glossary

multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Modified Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

Mutual Fund Performance - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

Net Cash Flow - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

Peer Groups -

Plan Sponsor Peer Groups - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans.

Investment Manager Peer Groups - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value 100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - RVK calculates performance for investment managers and composites using different methodologies.

Investment Managers - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of $\geq 10\%$ of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

Composites - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Price to Earnings Ratio - The ratio valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

Private Equity Quartile Ranks - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Return - Compounded rate of return for the period.

% Return - The time-weighted rate of return of a portfolio for a given period.

Risk Free Benchmark - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.

Glossary

RVK Liquidity Rating - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Stable Value (Plan Sponsor Directed)	50
TIPS	95	Hedge Funds of Funds	35
US Large Cap Equity	95		
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Global Equity	90	<u>Not Liquid Investments</u>	
Non-US Large Cap Equity	90	Core Real Estate	25
Global Tactical Asset Allocation	88	Core Plus Real Estate	15
MLPs	85	Non-Core Real Estate	5
US Mid Cap Equity	85	Private Equity	5
US SMid Cap Equity	85	Private Credit	5
US Small Cap Equity	85		
REITs	85		
Non-US Small Cap Equity	85		
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Thematic Classification - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u>	<u>Capital Appreciation</u>	<u>Capital Preservation</u>	<u>Inflation</u>
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Bank Loans
	Preferred Securities	Asset Backed Fixed Income	Core Real Estate
	High Yield	Domestic Core Plus Fixed Income	Real Return
	Convertible Fixed Income	Mortgage Backed Fixed Income	Inflation Hedges
	TALF Funds	International Developed Fixed Income	REITs
	Distressed Debt	Cash Equivalents	Commodities
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

Time Period Abbreviations - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

Total Fund Attribution - The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

Strategic Asset Allocation (SAA) - The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns.

Tactical Asset Allocation (TAA) - The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

Style Selection (SS) - The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

Manager's Skill (MS) - The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.

Total Fund Beta - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.



Glossary

Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolio's return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

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