



# Quarterly Investment Performance Analysis

Santa Barbara County Employees' Retirement System

Period Ended: December 31, 2022



## Overview of RVK Performance Reports

	Monthly Investment Performance Analysis	Quarterly Investment Performance Analysis
<b>Frequency</b>	Typically available by the 15th business day following month end	Typically available 30-45 calendar days following quarter end
<b>Analytics Included</b>		
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



**Fourth Quarter Economic Environment**

In Q4, equity and fixed income markets delivered improved results while continuing to experience elevated volatility. However, positive quarterly returns came on the tail of a significantly negative year for many investors. Regarding economic conditions, the impact of tightening monetary policy and persistent inflation, combined with supply shocks and an energy crisis in Europe, are leading to increasing odds of a global recession in 2023. On a relatively positive note, recent data indicates that the inflationary environment is showing signs of abating. Notably, the US Consumer Price Index declined for a sixth straight month in December with a reading of 6.5%, the lowest level since October 2021. In December, the FOMC did slow the pace of policy rate hikes with a 50 basis point increase, following a series of four straight 75 basis point increases. Internationally, the war in Ukraine caused an energy price shock and trade tensions continue to test economic and political relationships across multiple regions. Within emerging markets, investor attention is focused on China with some pointing to signs of a softening stance toward pandemic restrictions as reason to be optimistic regarding the country's outlook. However, these views are countered with concerns over indications of social unrest and the consolidation of power around President Xi Jinping. With all this considered, global GDP growth forecasts continue to moderate with the OECD forecasting growth of 3.1% in 2022 with an expected decline to 2.2% global GDP growth in 2023.

**Key Economic Indicators**



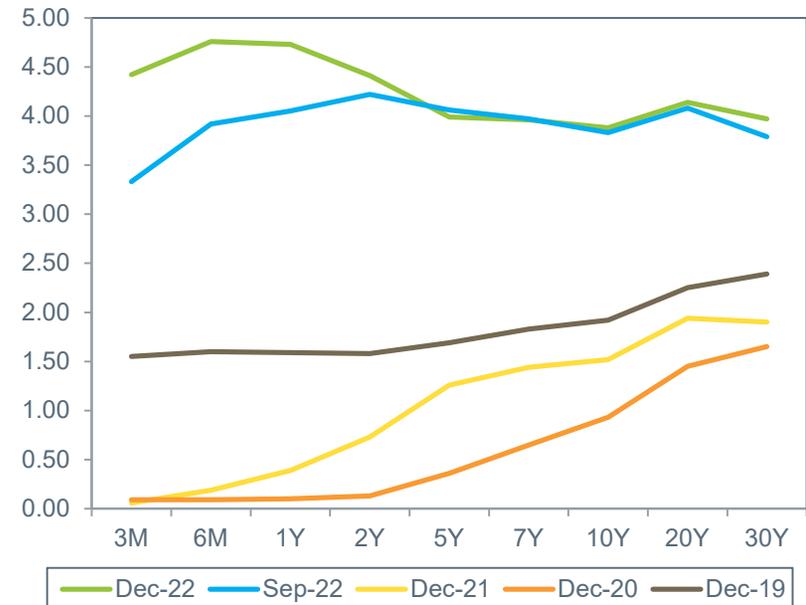
**Economic Indicators**

	Dec-22	Sep-22	Dec-21	Dec-19	20 Yr
Federal Funds Rate (%)	4.33 ▲	3.08	0.07	1.55	1.30
Breakeven Infl. - 5 Yr (%)	2.38 ▲	2.16	2.91	1.70	1.92
Breakeven Infl. - 10 Yr (%)	2.30 ▲	2.15	2.59	1.79	2.08
CPI YoY (Headline) (%)	6.5 ▼	8.2	7.0	2.3	2.5
Unemployment Rate (%)	3.5 —	3.5	3.9	3.6	6.0
Real GDP YoY (%)	1.0 ▼	1.8	5.7	2.6	2.0
PMI - Manufacturing	48.4 ▼	50.9	58.8	47.9	53.7
USD Total Wtd Idx	121.51 ▼	127.64	115.37	114.67	103.33
WTI Crude Oil per Barrel (\$)	80.3 ▲	79.5	75.2	61.1	67.9
Gold Spot per Oz (\$)	1,824 ▲	1,661	1,829	1,517	1,160

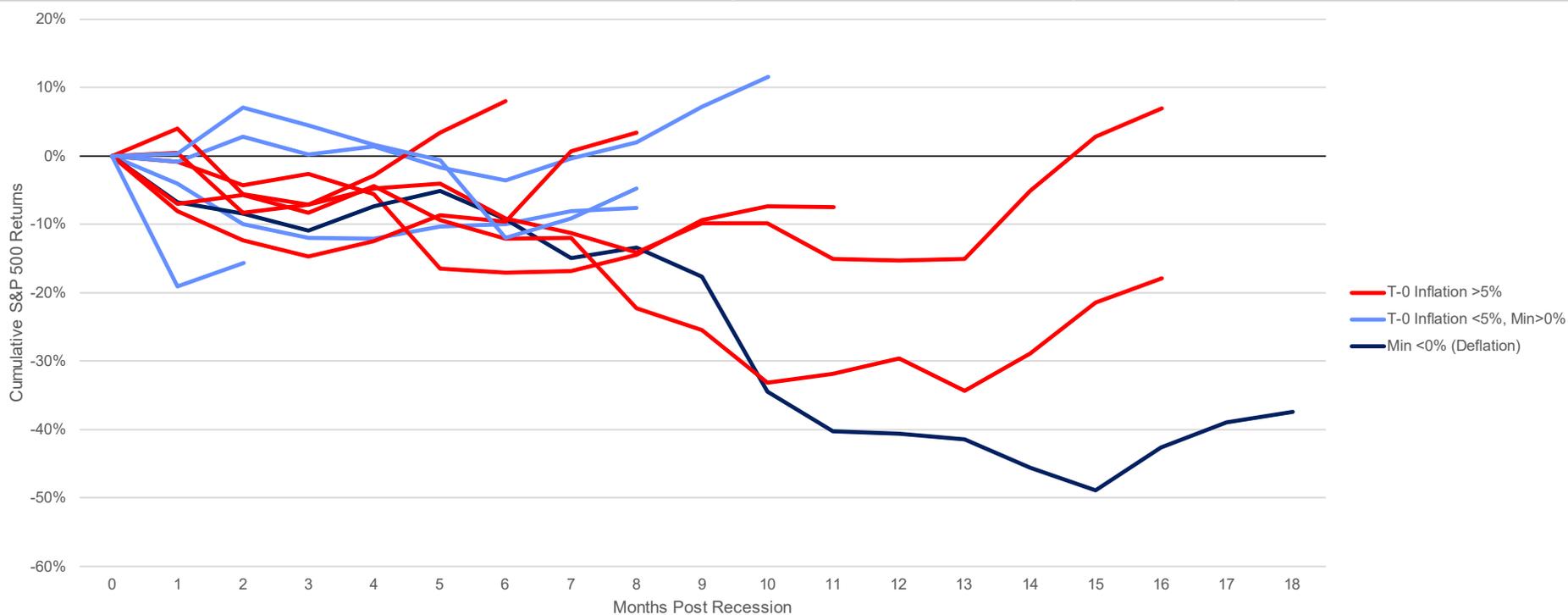
**Market Performance (%)**

	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	7.56	-18.11	-18.11	9.42	12.56
Russell 2000	6.23	-20.44	-20.44	4.13	9.01
MSCI EAFE (Net)	17.34	-14.45	-14.45	1.54	4.67
MSCI EAFE SC (Net)	15.79	-21.39	-21.39	-0.05	6.21
MSCI Emg Mkts (Net)	9.70	-20.09	-20.09	-1.40	1.44
Bloomberg US Agg Bond	1.87	-13.01	-13.01	0.02	1.06
ICE BofAML 3 Mo US T-Bill	0.84	1.46	1.46	1.26	0.76
NCREIF ODCE (Gross)	-4.96	7.47	7.47	8.68	10.10
FTSE NAREIT Eq REIT (TR)	5.24	-24.37	-24.37	3.68	6.53
HFRI FOF Comp	1.79	-5.25	-5.25	3.02	3.51
Bloomberg Cmdty (TR)	2.22	16.09	16.09	6.44	-1.29

**Treasury Yield Curve (%)**



### S&P 500 Performance - Recessionary Periods and Inflation Levels (1957 - Present)



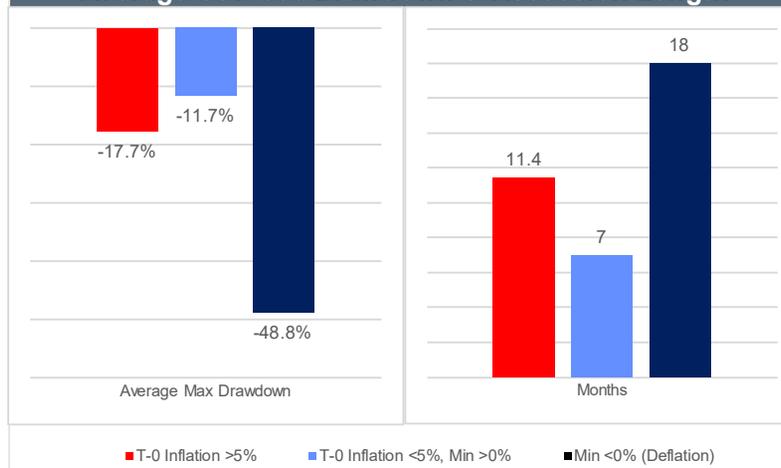
#### Recession Statistics

Start Date	Length Months	YoY CPI% @ T-0	Max YoY CPI%	Min YoY CPI%	Max Drawdown From T-0	Cumulative Return
9/30/1957	8	2.9	3.4	2.8	-12.0%	-7.6%
5/31/1960	10	1.6	1.6	0.9	-3.6%	11.6%
1/31/1970	11	5.9	5.9	5.0	-17.0%	-7.5%
12/31/1973	16	8.4	11.2	8.4	-34.2%	-17.9%
2/29/1980	6	13.0	13.5	12.1	-7.1%	8.0%
8/31/1981	16	9.9	9.9	4.1	-15.3%	7.0%
8/31/1990	8	5.5	6.0	4.6	-14.7%	3.4%
4/30/2001	8	3.0	3.0	1.7	-11.9%	-4.7%
1/31/2008	18	3.9	5.5	-2.0	-48.8%	-37.4%
3/31/2020	2	1.2	1.2	0.3	-19.1%	-15.7%

#### Averages

T-0 Inflation > 5%	11.4	8.5	9.3	6.8	-17.7%	-1.4%
T-0 Inflation < 5%, Min > 0%	7.0	2.2	2.3	1.4	-11.7%	-4.1%
Min < 0% (Deflation)	18.0	3.9	5.5	-2.0	-48.8%	-37.4%

#### Average S&P 500 Drawdown & Recession Length



Performance for each period begins where T-0 is equal to the start of an official recession and runs until the official end of the recession (as reported by the National Bureau of Economic Reporting).

Inflation is measured as the YoY % change in CPI. T-0 = the official recession start date.

Max and Min refer to the maximum and minimum observed YoY CPI% change during the recessionary period.

Source: RVK calculations, based on data from S&P Dow Jones Indices and FRED Database.

Fourth Quarter Review

**Broad Market**

US equity markets experienced a decrease in volatility in Q4 with short term spikes around CPI release dates and Fed meetings. Returns were positive across market cap and style groups in Q4. The reversal to growth seen in Q3 was short-lived, as value stocks led growth by a wide margin in Q4. Energy had its best year on record with the S&P 500 Energy Index gaining 65.72%.

**Market Cap**

This year marks the worst performance of US equities across market cap groups since the GFC, and only the third time in the last 15 years that the Russell 3000 Index has generated negative returns.

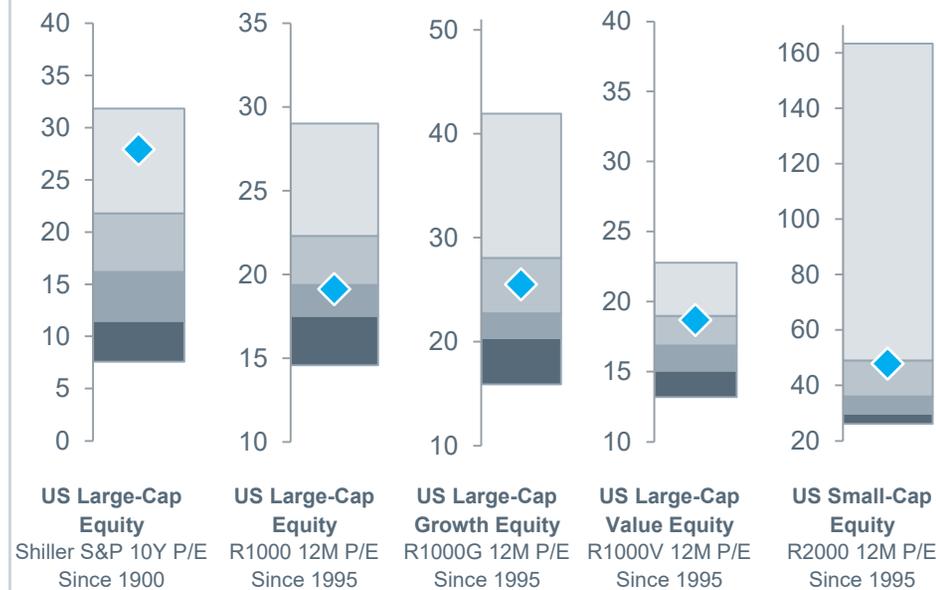
**Style and Sector**

Value-oriented managers had a higher success rate than core or growth managers in the small- and mid-cap spaces, while large-cap core and growth managers fared better than value managers. Growth managers across the market cap spectrum struggled to provide downside protection in 2022, while value and core managers were broadly successful.

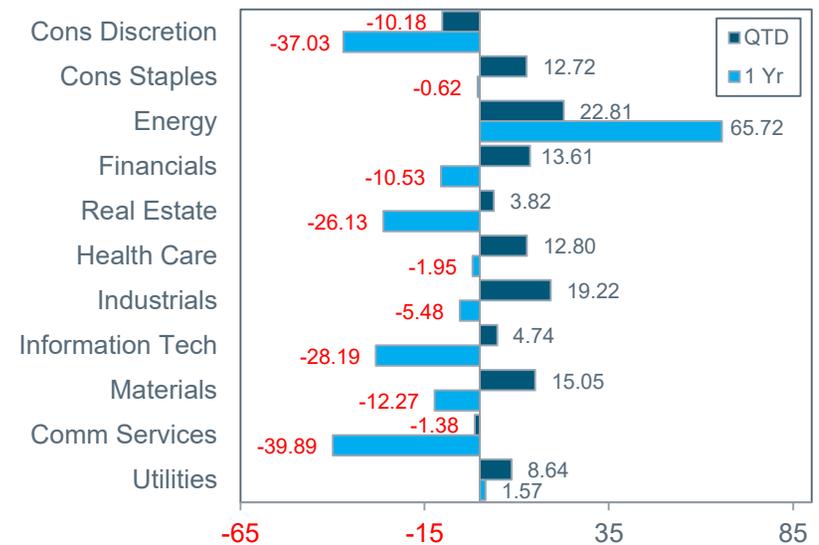
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition (2000). P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.



**Fourth Quarter Review**

**Developed Markets**

International developed markets meaningfully outperformed their domestic counterparts in Q4 with the MSCI EAFE Index realizing a 17.3% return for the period. Value stocks rebounded back into favor, outperforming growth in a reversal from the prior quarter, while large-cap continued its outperformance over small-cap stocks. Overall, market trends pointed to investors anticipating moderating inflation and easing of rate hikes despite the ongoing uncertainty led by the conflict in Ukraine and near-term recession fears.

**Emerging Markets**

Emerging markets lagged behind developed during the quarter with the MSCI Emerging Markets Index finishing with a 9.7% return. Value stocks narrowly outperformed growth and large-cap beat small-cap.

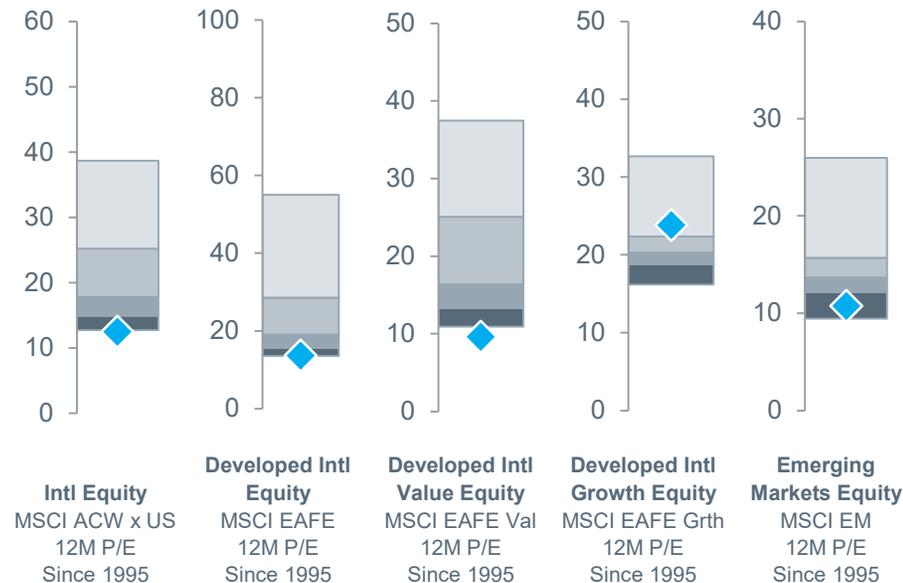
**Market Cap & Style**

The majority of active managers in emerging markets outperformed the index in Q4; however, active managers in international developed mostly underperformed.

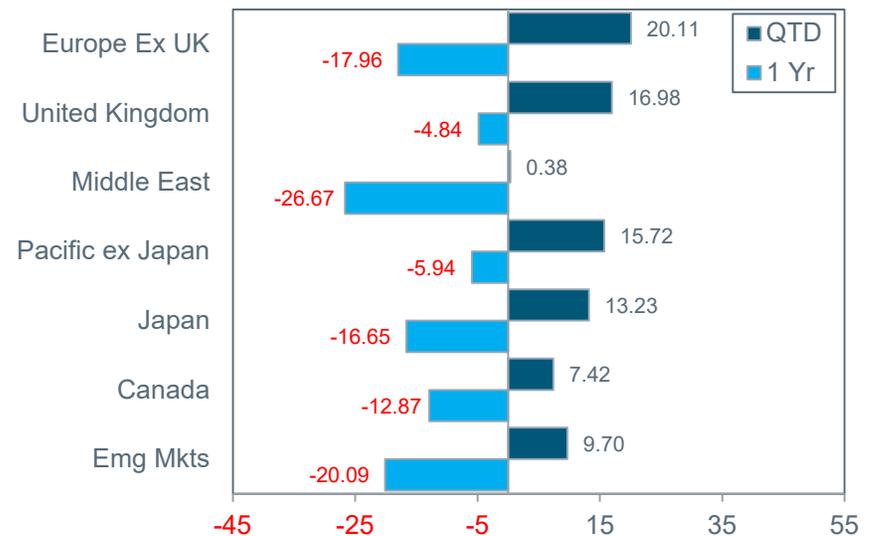
**MSCI Style and Capitalization Market Performance (%)**



**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.

Fourth Quarter Review

**Broad Market**

The Bloomberg US Aggregate Index finished Q4 with a return of 1.9%, capping off a decline of -13.0% in 2022, the most negative calendar year on record for the index. The year was defined by rising interest rates, as treasury yields rose 236 basis points from 1.5% to 3.9% as measured by the 10-year US Treasury yield. The Federal Reserve aggressively hiked the Federal Funds rate in response to persistent inflation over the course of the year.

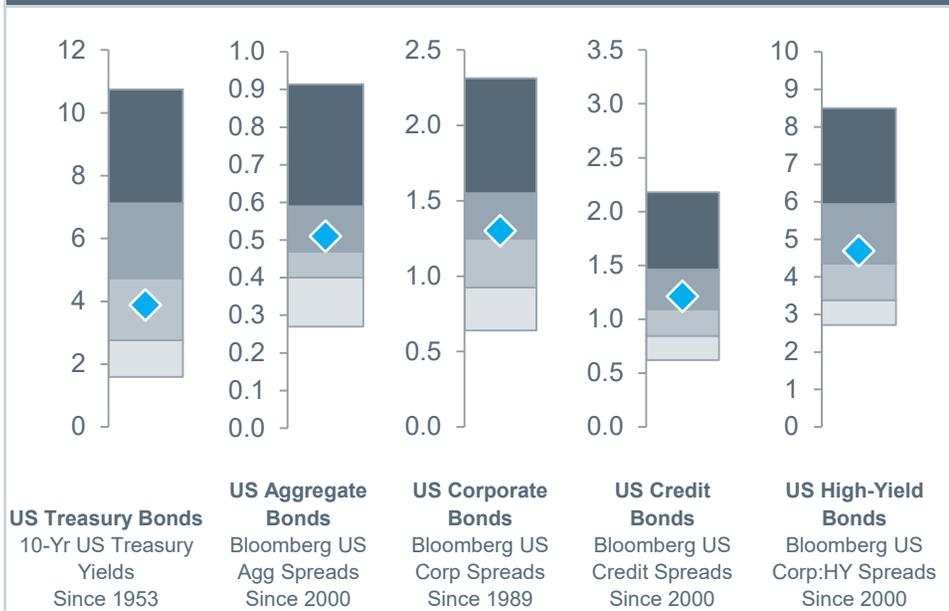
**Credit Market**

US investment grade corporate bonds rebounded in Q4 as low supply and softer Federal Reserve rhetoric bolstered credit markets. Non-investment grade corporate credit relatively outperformed investment grade over the year.

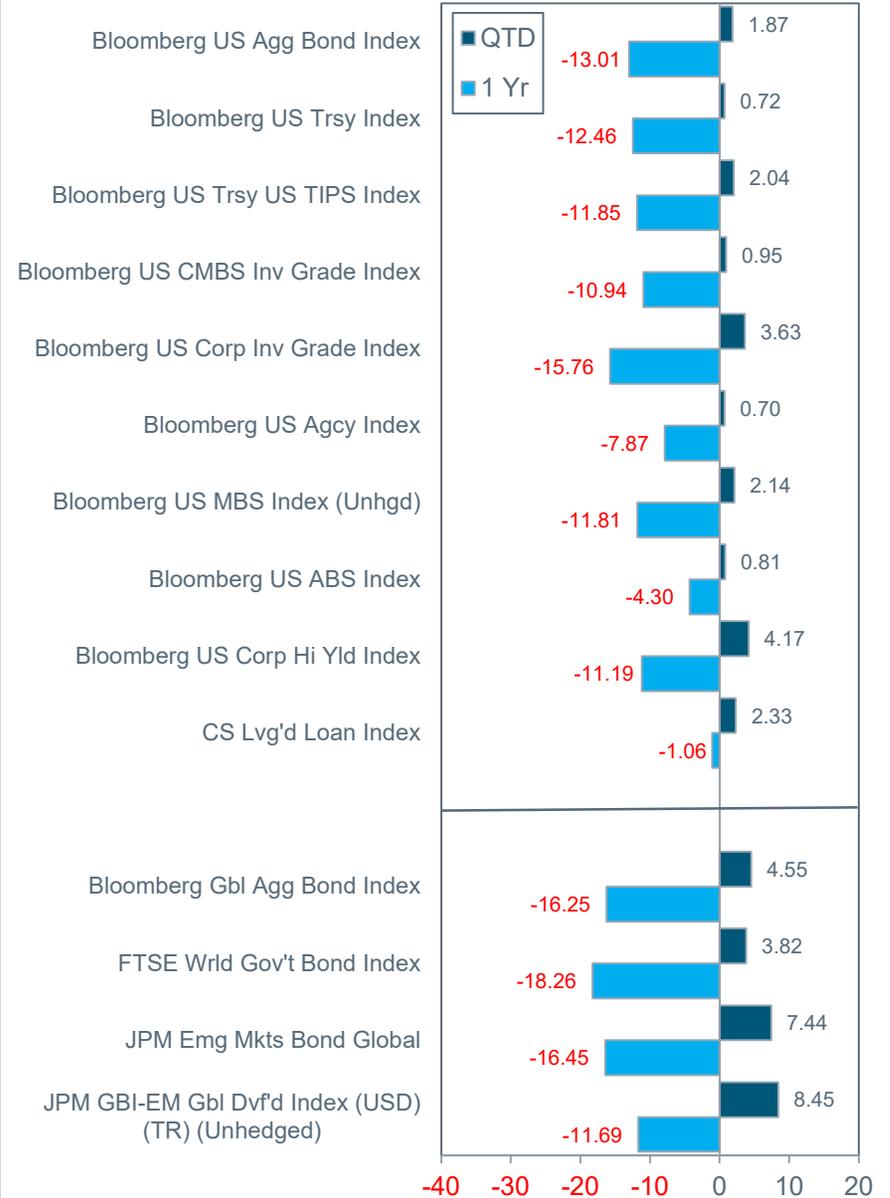
**Emerging Market Debt**

Conditions in global fixed income markets were defined by concerns over low growth, persistent inflation, rising interest rates, a strong US Dollar, and geopolitical conflict. The Bloomberg Global Aggregate Index returned 1.0% in Q4 and -11.2% in 2022, while the JPM EMBI Global Diversified returned 8.1% and -17.8% over these respective periods.

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.



**Fourth Quarter Review - Absolute Return**

**General Market - Hedge Funds**

Despite a highly challenging market backdrop, hedge funds broadly delivered much-needed capital preservation to institutional investors. The year also ended on a strong note given most managers were reducing leverage and overall market exposure going into Q4. The HFRI Fund-Asset-Weighted Composite Index delivered an annual return of 1.0% while its Asset-Weighted counterpart ended the year at -4.0%.

**General Market - Global Tactical Asset Allocation (GTAA)**

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely posted significant gains with moderate dispersion to close an otherwise challenging year. Given a strong quarter for non-US equity, as well as value-oriented equity within the US, nearly all active managers with significant diversification outperformed a US centric blend of 60% equity and 40% fixed income. The top performing long-biased GTAA strategies were those who have included meaningful market neutral idiosyncratic relative valuation exposures. While those who moderately underperformed peers benefitted from a value bias despite maintaining US equity and fixed income exposures.

**Fourth Quarter Review - Real Assets**

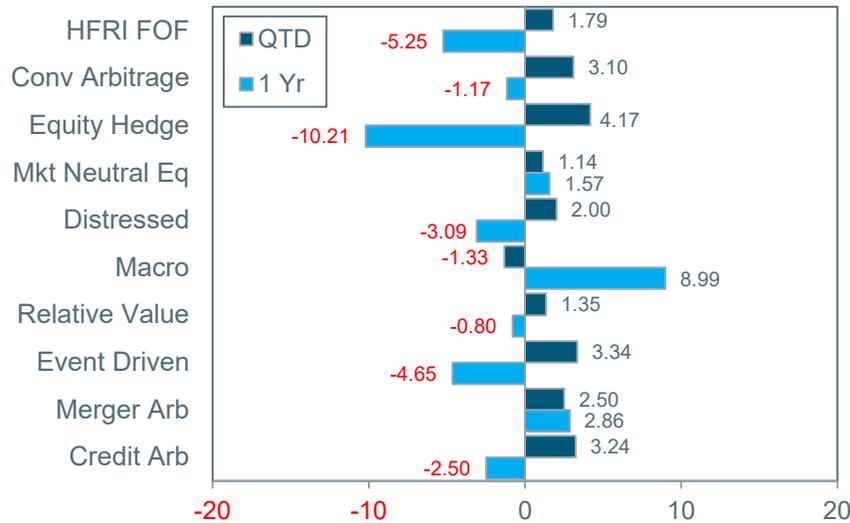
**General Market - Diversified Inflation Strategies (DIS)**

DIS managers tracked closely by RVK have outperformed a US-centric blend of 60% equity and 40% fixed income both year to date, and over the quarter. After responding positively to record inflationary pressures in Q1 of 2022, DIS posted losses in the second and third quarters that followed. Strong Q4 performance has materialized across the peer group, with those who rely on income-oriented investment processes and those who hold larger TIPS allocation lagging the group to a moderate degree.

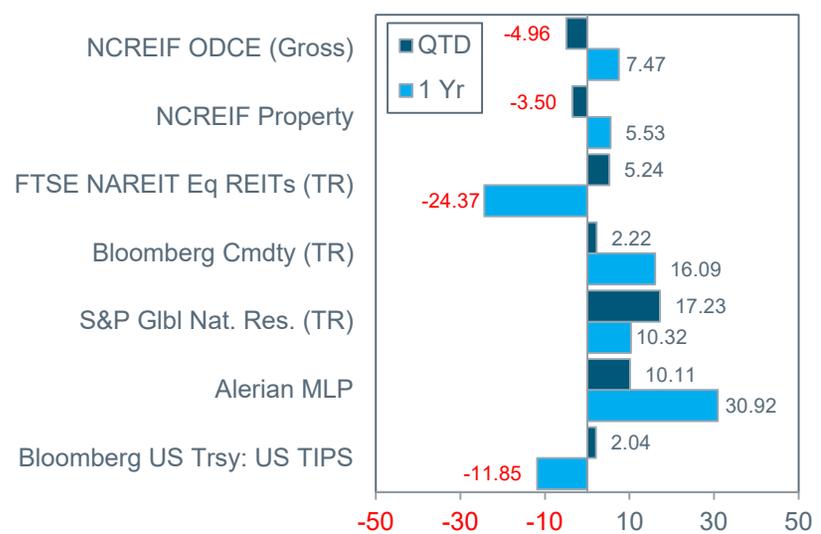
**General Market - Real Estate**

Core private real estate generated a negative return of -5.0% in Q4 (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with the total return comprising of 0.8% income and -5.8% price appreciation. Investors of publicly traded real estate significantly outperformed their private market counterparts by a meaningful margin. Publicly traded real estate delivered a fourth quarter total return of 4.5%, as measured by FTSE/NAREIT All REITs Index.

**HFRI Hedge Fund Performance (%)**



**Real Asset Performance (%)**



Annual Asset Class Performance

As of December 31, 2022

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	CYTD
Best	8.44	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
	5.24	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
	2.06	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
	-2.35	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	-5.25
	-10.01	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
	-21.37	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
	-26.16	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
	-33.79	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
	-35.65	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
	-37.00	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
	-37.74	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
	-43.33	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.73	7.69	0.67	-1.55	-21.39
	-47.01	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
Worst	-53.33	-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
	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 \$3.90 billion as of December 31, 2022, an increase of approximately \$182.0 million from the previous quarter. The Total Fund returned 4.86% for the fourth quarter, net of fees, and ranked in the 69<sup>th</sup> percentile among the Public Plans \$1B-\$5B peer group. The Total Fund outperformed the Policy Benchmark by 20 basis points and the Dynamic Policy Benchmark by 83 basis points.

All asset classes were within their respective target ranges as of December 31, 2022.

### Contributors to Total Fund Performance

Developed Non-US Equity, Emerging Markets, and US Equity had the highest absolute performance during the quarter, returning 15.05%, 11.85%, and 8.05%, respectively.

Performance relative to the Policy Benchmark was aided by Private Equity, Emerging Markets, and Real Return strong relative performance, which beat their benchmarks by 401, 215, and 211 basis points, respectively.

Performance relative to the Dynamic Policy Benchmark was positively impacted by individual manager relative outperformance, including Dimensional US Small Cap Value, RBC, and Private Infrastructure, which beat their benchmarks by 824, 388, and 170 basis points, respectively.

### Detractors from Total Fund Performance

Private Equity, Real Estate, and Core Fixed Income had the lowest absolute performance during the quarter, returning 0.25%, 1.46%, and 2.15%, respectively.

Performance versus the Policy Benchmark was hurt by the weak relative performance of Developed Non-US Equity and Non-Core Fixed Income, which lagged their benchmarks by 229 and 6 basis points, respectively.

Performance relative to the Dynamic Policy Benchmark was negatively impacted by individual manager underperformance, including First Eagle, Rice Hall James, and Private Natural Resources which lagged their benchmarks by 552, 313, and 170 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 December 31, 2022

	Significant Events (Yes/No)	Last Meeting with Board of Retirement	Last Meeting with RVK	Last RVK On-Site at Manager Office	Comments
<b>U.S. Equity</b>					
BNY Mellon HEDI	No		February 2022	September 2022	
BNY Mellon R1000 Index - NL	No		February 2022	September 2022	
Dimensional U.S. Small Cap Value	No	November 2020	November 2021	April 2018	
RHJ Small Cap Opportunities	No	April 2016	November 2021	October 2019	
<b>Developed Market Non-U.S. Equity</b>					
First Eagle International Value Equity	No		November 2022	May 2018	
PanAgora Dynamic International Equity	No		September 2022	June 2017	
Artisan Non-U.S. Growth	No		November 2022	May 2018	
Acadian Non-US Small Cap Equity (CF)	No		January 2023	June 2022	
<b>Emerging Market Equity</b>					
DFA Emg Mkts Value;I (DFEVX)	No	November 2020	June 2022	April 2018	
RBC Emerging Markets Equity	No	March 2022	April 2022	February 2019	
<b>Core Fixed Income</b>					
Garcia Hamilton Core Fixed Income	No	June 2017	September 2022	December 2019	
PGIM Core Plus Fixed Income (CF)	Yes	March 2018	November 2022	May 2022	PGIM announced the retirement of Mike Lillard (Head of PGIM Fixed Income), Mike Collins (Senior Portfolio Manager), and Terence Wheat (Co-Head of US IG Corporate Bonds) effective April 2024. This marks a continuation of recent retirements from PGIM as part of their long term succession planning. RVK is currently reviewing this announcement.

Santa Barbara County Employees' Retirement System  
 Manager Monitoring

As of December 31, 2022

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

## INVESTMENT MANAGER UPDATES

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### PGIM Core Plus Fixed Income (SA)

PGIM announced the retirement of Mike Lillard (Head of PGIM Fixed Income), Mike Collins (Senior Portfolio Manager), and Terence Wheat (Co-Head of US IG Corporate Bonds) effective April 2024.

***Opinion: This marks a continuation of recent retirements from PGIM as part of their long term succession planning. RVK is currently reviewing this announcement.***

Asset Class	Investment Manager	Inception Date	✓ indicates failed test			Watch List Status	✓ indicates failed test			Watch List Status	Qualitative Factor(s) Resulting in Watch List Addition											Benchmark	Peer Group				
			2022 Q2	2022 Q3	2022 Q4		2022 Q2	2022 Q3	2022 Q4		A	B	C	D	E	F	G	H	I	J	Explanation						
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	First Eagle International Value Equity (SA)	6/1/2014																								MSCI EAFE Index (USD) (Net)	EAFE Value
	PanAgora Dynamic International Equity (SA)	5/1/2009				On Watch (2021 Q1)				On Watch (2021 Q1)																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				N/A (Insufficient Performance History)				N/A (Insufficient Performance History)																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

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

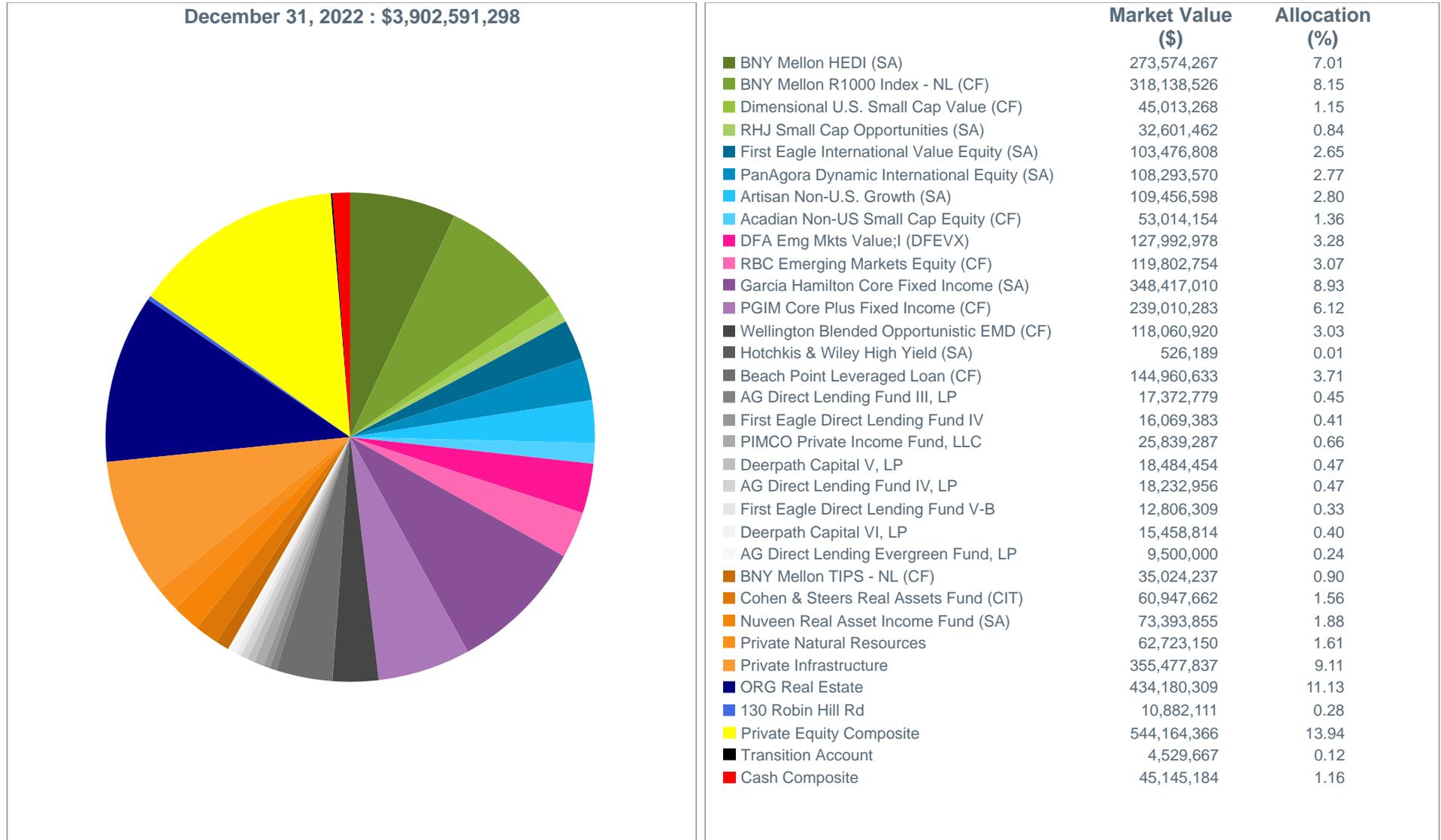
Asset Class	Investment Manager	Inception Date	✓ indicates failed test			Watch List Status	✓ indicates failed test			Watch List Status	Qualitative Factor(s) Resulting in Watch List Addition											Benchmark	Peer Group			
			2022 Q2	2022 Q3	2022 Q4		2022 Q2	2022 Q3	2022 Q4		A	B	C	D	E	F	G	H	I	J	Explanation					
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				N/A (Insufficient Performance History)				N/A (Insufficient Performance History)															Bloomberg US Agg Bond Index	U.S. Broad Market Core+ Fixed Income
Non-Core Fixed Income	Wellington Blended Opportunistic EMD (CF)	4/1/2020				N/A (Insufficient Performance History)				N/A (Insufficient Performance History)															Wellington Blended Benchmark	Emerging Markets Debt
	Beach Point Leveraged Loan (CF)	10/1/2012																								CS Lvg'd Loan Index
Real Return	Cohen & Steers Real Assets Fund (CIT)	9/1/2017								N/A (No Comparable Universe)															Cohen & Steers Real Assets Custom Index	N/A
	Nuveen Real Asset Income Fund (SA)	9/1/2017								N/A (No Comparable Universe)																Nuveen Real Asset Income Blend Index

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 December 31, 2022



Schedule of Investable Assets Ex Treasury Cash					
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
<b>FYTD</b>	<b>3,859,132,211</b>	<b>-20,430,576</b>	<b>38,985,156</b>	<b>3,877,686,790</b>	<b>1.02</b>

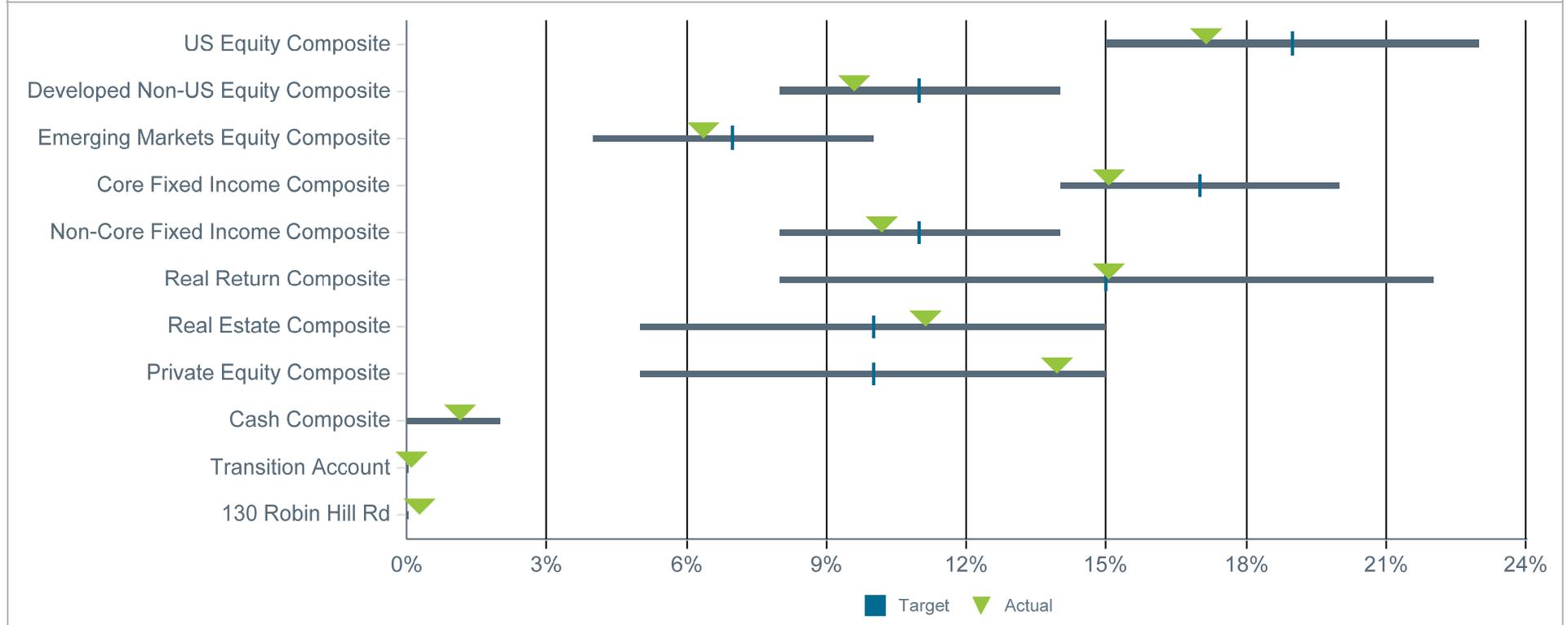
Performance shown is net of fees and provided by BNY Mellon. Allocations shown may not sum up to 100% exactly due to rounding. Schedule of Investable Assets excludes Treasury Cash. The fiscal year ends 06/30. Market value for Hotchkis & Wiley represents residual assets from liquidation. Total fund market value includes residual assets from liquidated managers.



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

As of December 31, 2022

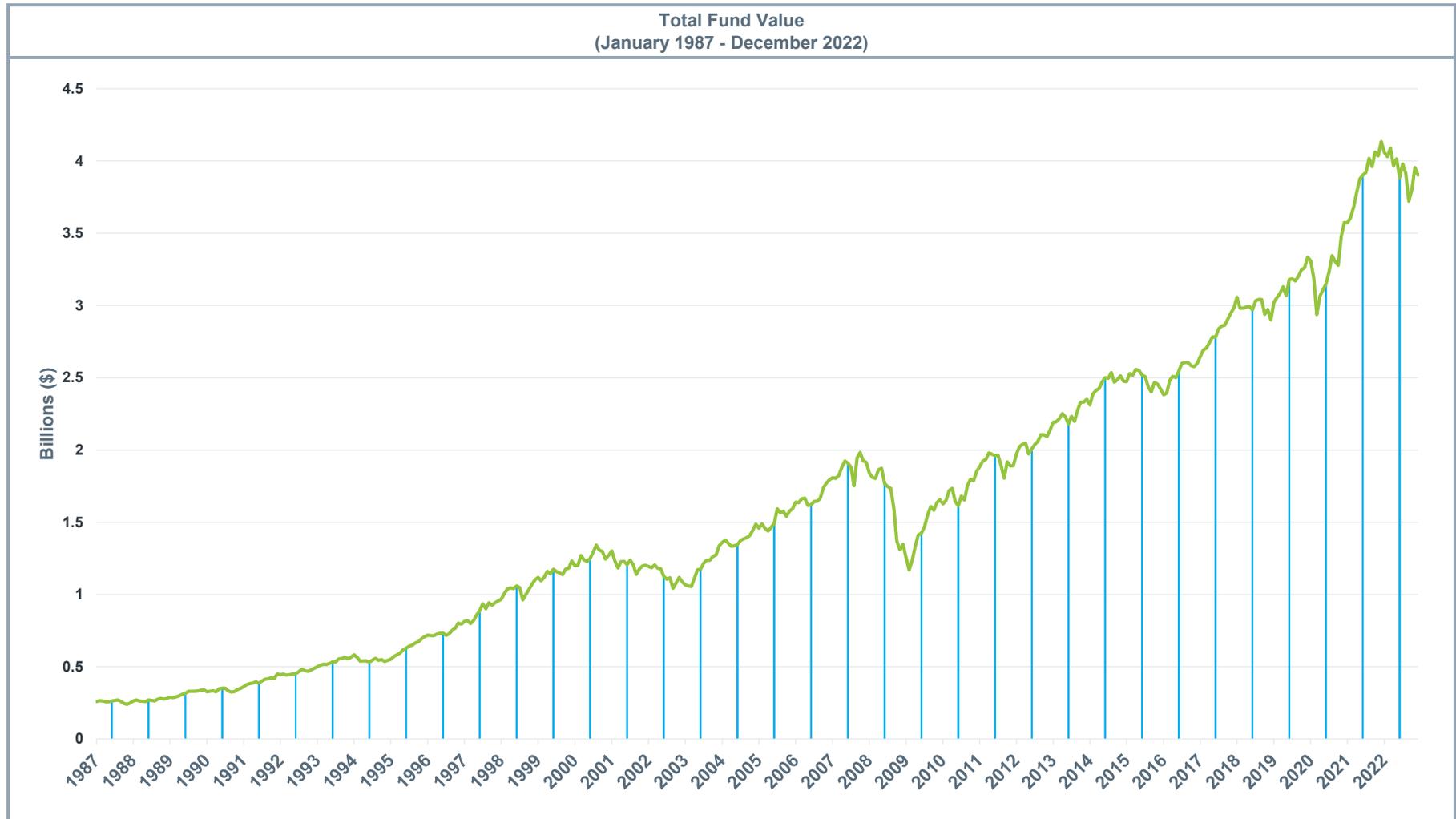
	Market Value (\$)	Allocation (%)	Lower Range (%)	Target (%)	Upper Range (%)
Total Fund Composite	3,902,591,298	100.0	-	100.0	-
US Equity Composite	669,327,523	17.2	15.0	19.0	23.0
Developed Non-US Equity Composite	374,276,519	9.6	8.0	11.0	14.0
Emerging Markets Equity Composite	247,795,732	6.3	4.0	7.0	10.0
Core Fixed Income Composite	587,411,422	15.1	14.0	17.0	20.0
Non-Core Fixed Income Composite	397,311,725	10.2	8.0	11.0	14.0
Real Return Composite	587,566,741	15.1	8.0	15.0	22.0
Real Estate Composite	434,180,309	11.1	5.0	10.0	15.0
Private Equity Composite	544,164,366	13.9	5.0	10.0	15.0
Cash Composite	45,145,184	1.2	0.0	0.0	2.0
Transition Account	4,529,667	0.1	0.0	0.0	0.0
130 Robin Hill Rd	10,882,111	0.3	0.0	0.0	0.0



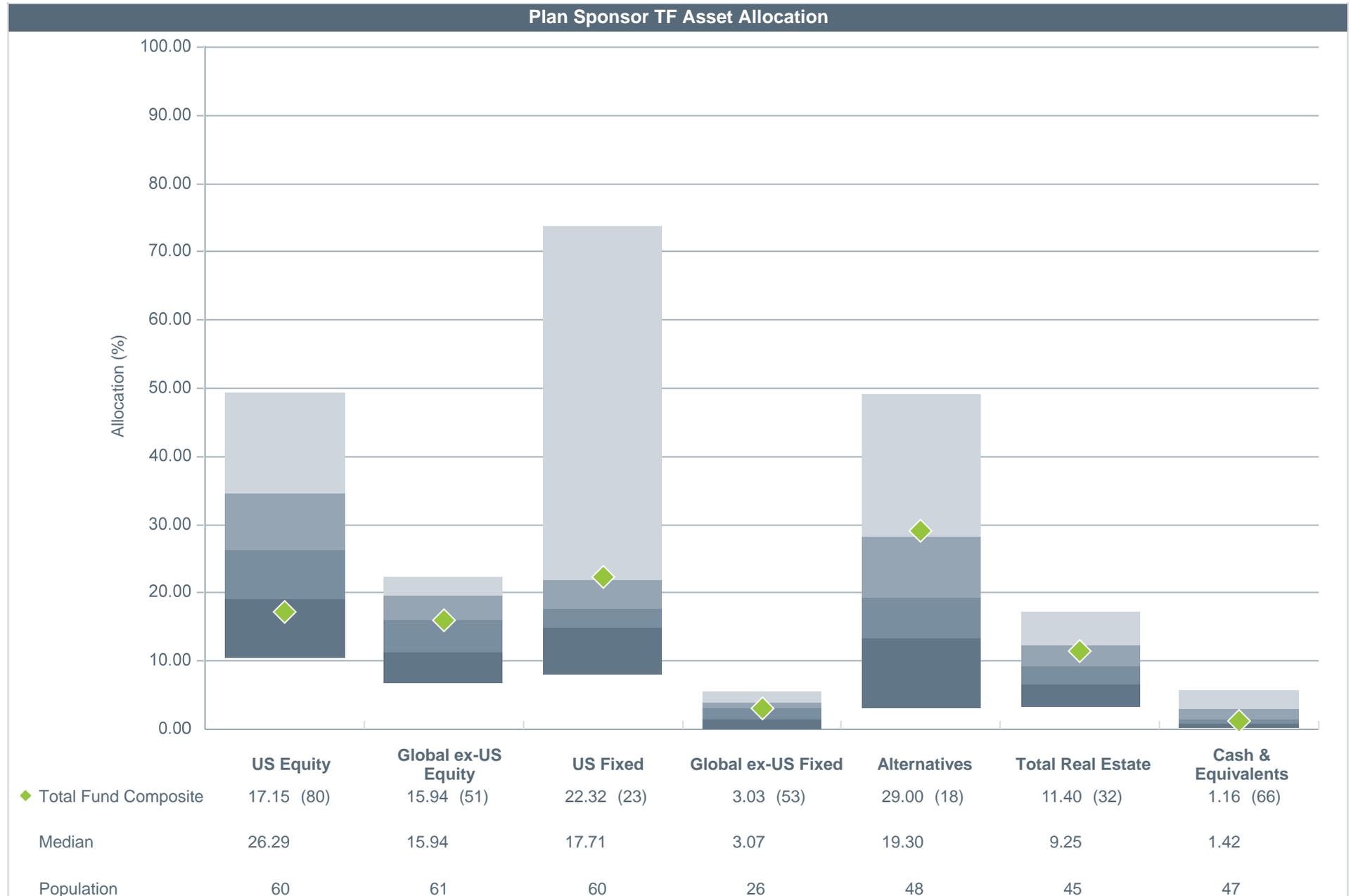
Allocations shown may not sum up to 100% exactly due to rounding. Market value for the Transition Account represents residual assets from portfolio restructuring. Composite market values includes residual assets from liquidated managers.



	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	3,902,591,298	1.02	0.28	25.20	-0.10	7.74	7.80	10.49	1.37	0.42	15.25	8.10	8.13



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.

Trailing Performance



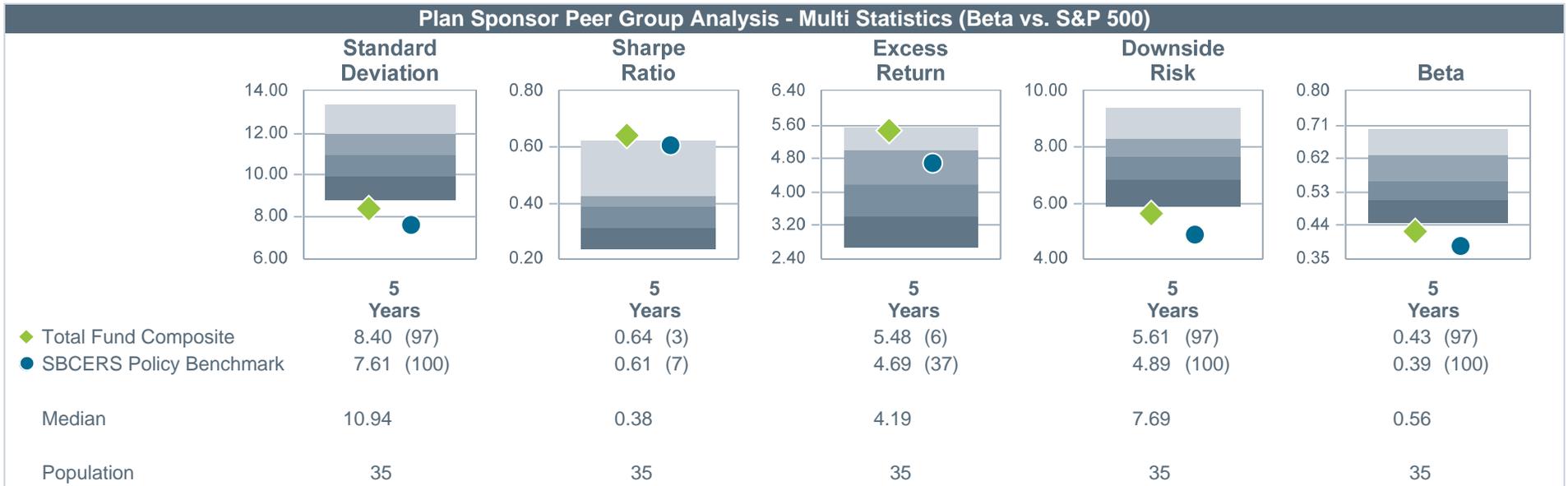
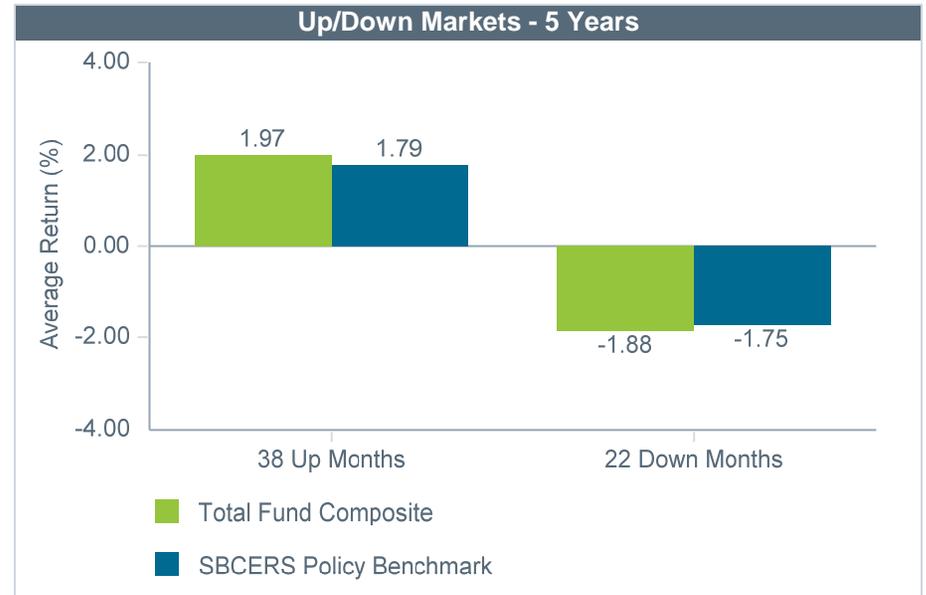
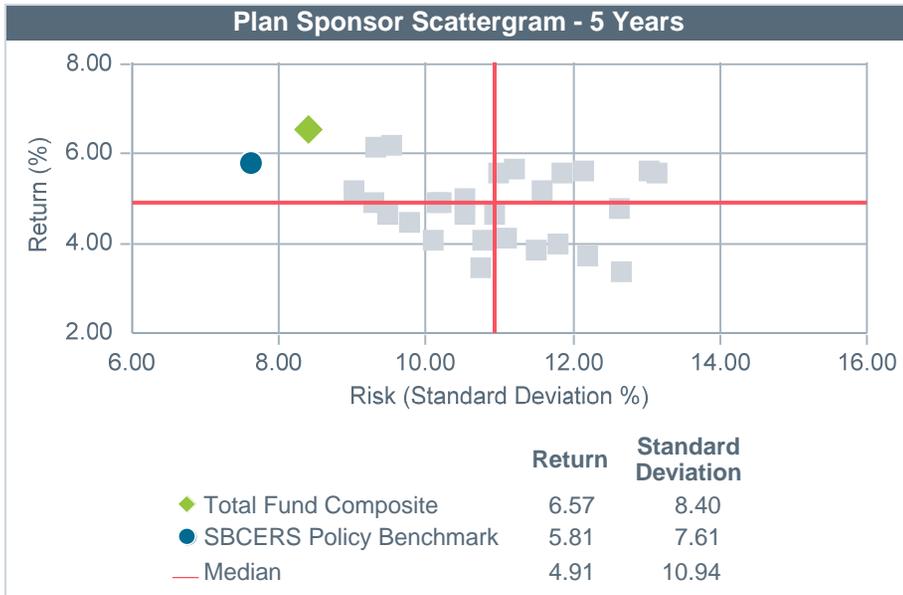
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020
◆ Total Fund Composite	4.86 (69)	-4.71 (1)	-4.71 (1)	6.43 (3)	6.57 (4)	7.98 (7)	6.88 (44)	16.80 (21)	8.32 (89)
● SBCERS Policy Benchmark	4.66 (79)	-7.42 (5)	-7.42 (5)	5.04 (20)	5.81 (17)	7.79 (11)	6.77 (52)	12.20 (87)	11.56 (45)
▲ SBCERS Dynamic Policy Benchmark	4.03 (93)	-9.02 (16)	-9.02 (16)	4.23 (51)	5.03 (44)	7.19 (36)	6.20 (74)	12.74 (81)	10.41 (63)
Median	5.39	-12.00	-12.00	4.25	4.91	6.67	6.83	14.35	11.20
Population	40	38	38	36	35	35	33	90	107

Fiscal Year Performance

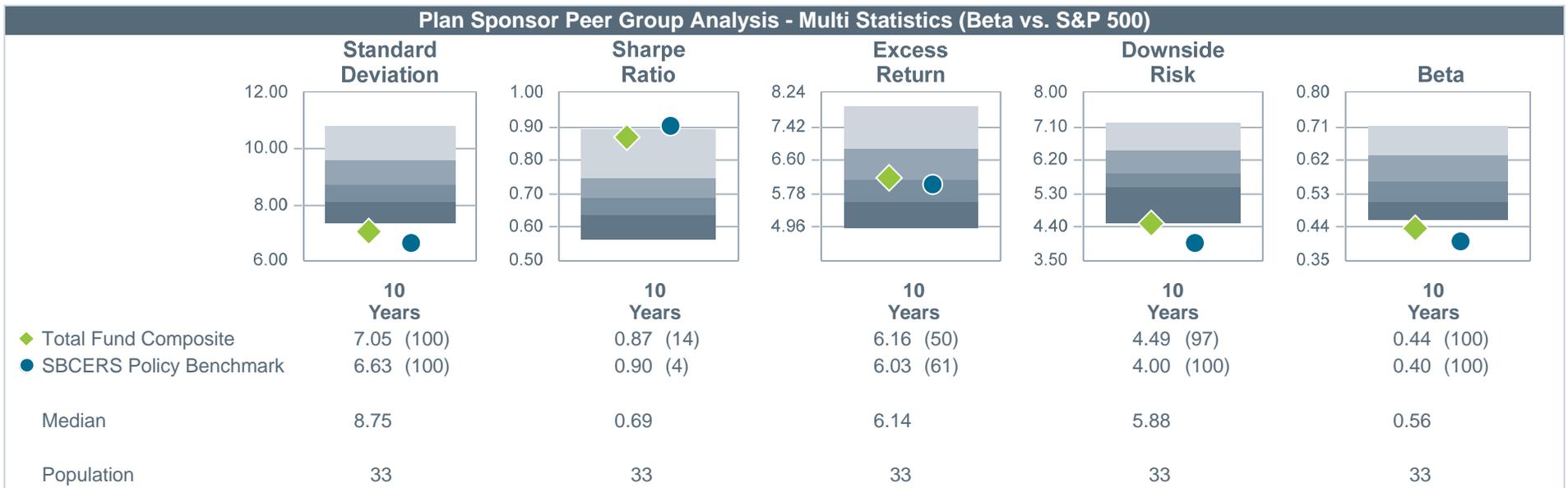
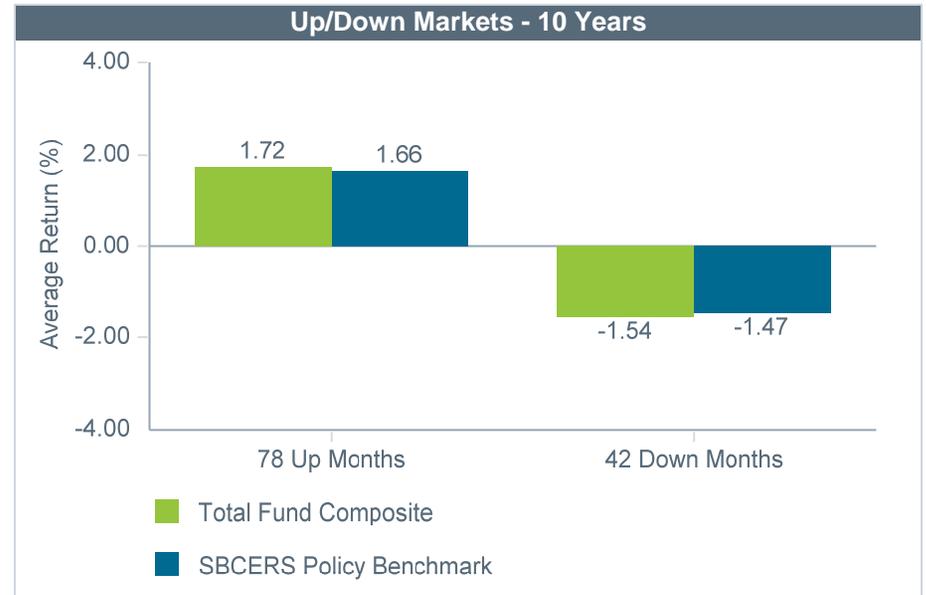
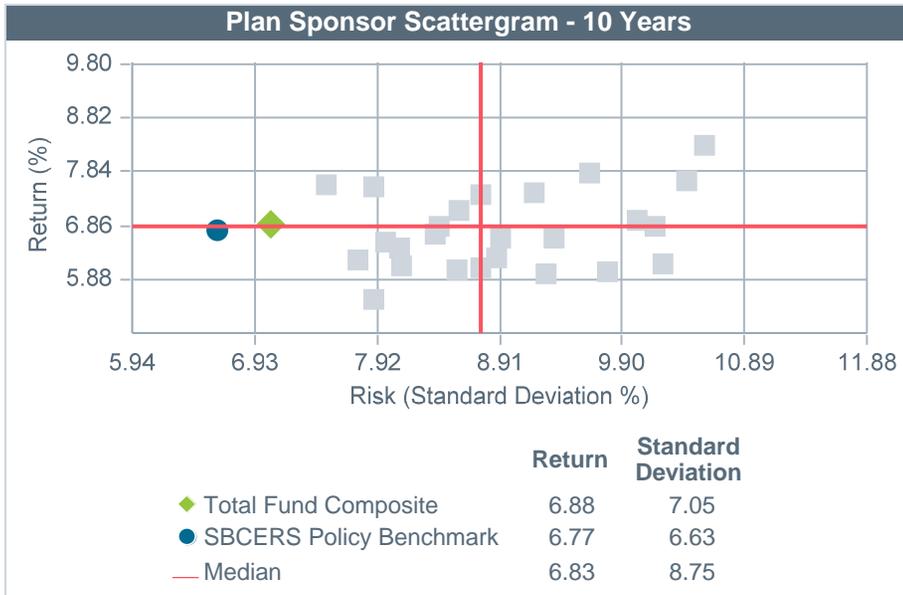


	FYTD	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015
◆ Total Fund Composite	1.10 (49)	0.43 (3)	25.24 (74)	-0.11 (79)	7.76 (5)	7.80 (55)	10.49 (88)	1.37 (15)	0.42 (87)
● SBCERS Policy Benchmark	-0.04 (94)	-3.59 (11)	22.97 (92)	2.99 (17)	7.29 (11)	7.77 (56)	11.47 (74)	2.28 (7)	0.97 (82)
▲ SBCERS Dynamic Policy Benchmark	-1.35 (100)	-4.13 (15)	25.11 (75)	1.15 (55)	6.36 (23)	7.92 (48)	11.58 (72)	0.65 (35)	0.01 (90)
Median	1.07	-8.18	26.92	1.26	5.40	7.88	12.27	-0.21	2.25
Population	40	71	98	89	73	55	58	57	56

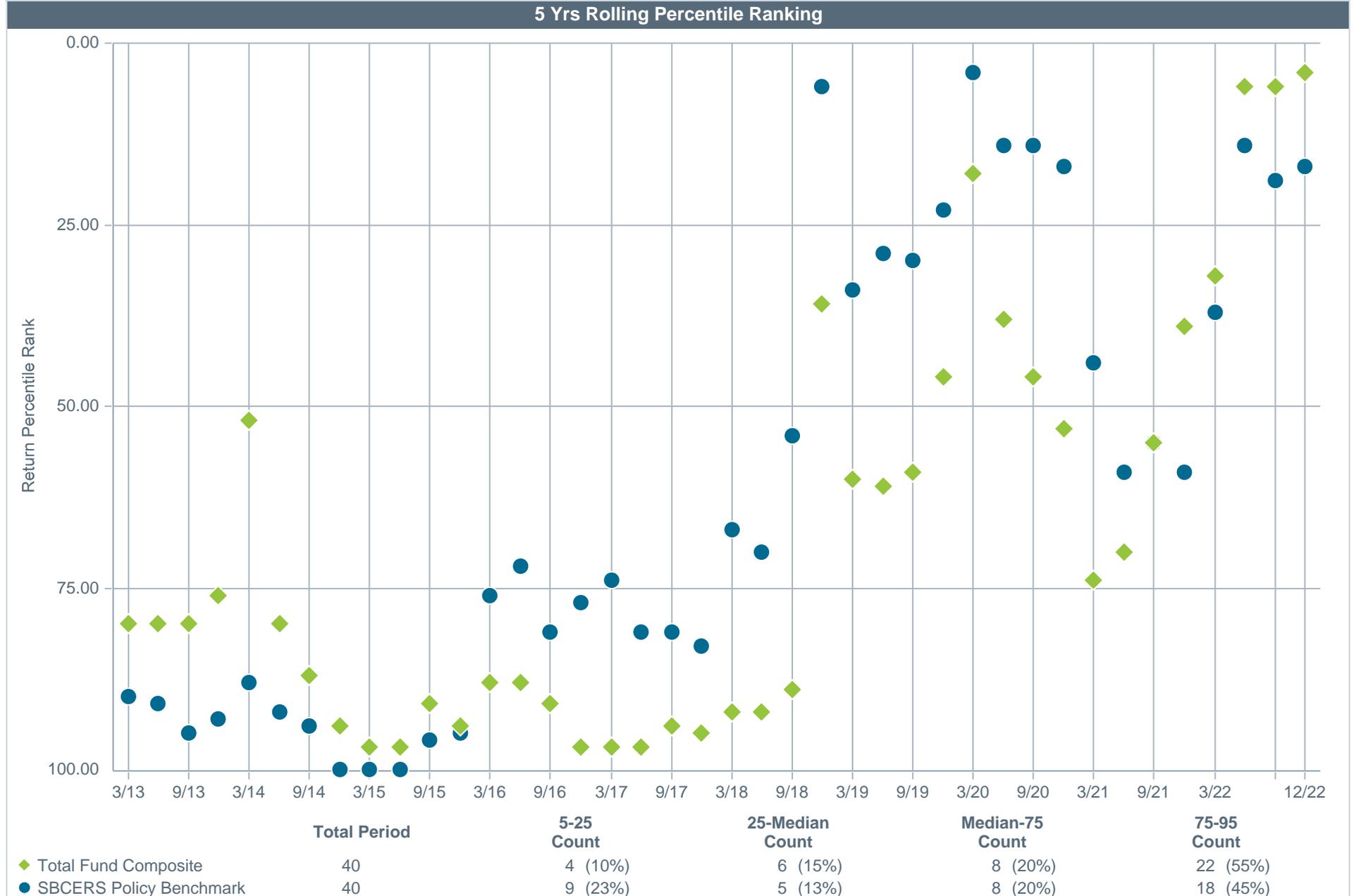
Performance shown is net of fees. Parentheses contain percentile ranks. The fiscal year ends 06/30. Total Fund performance excludes 130 RHR and Treasury Cash.



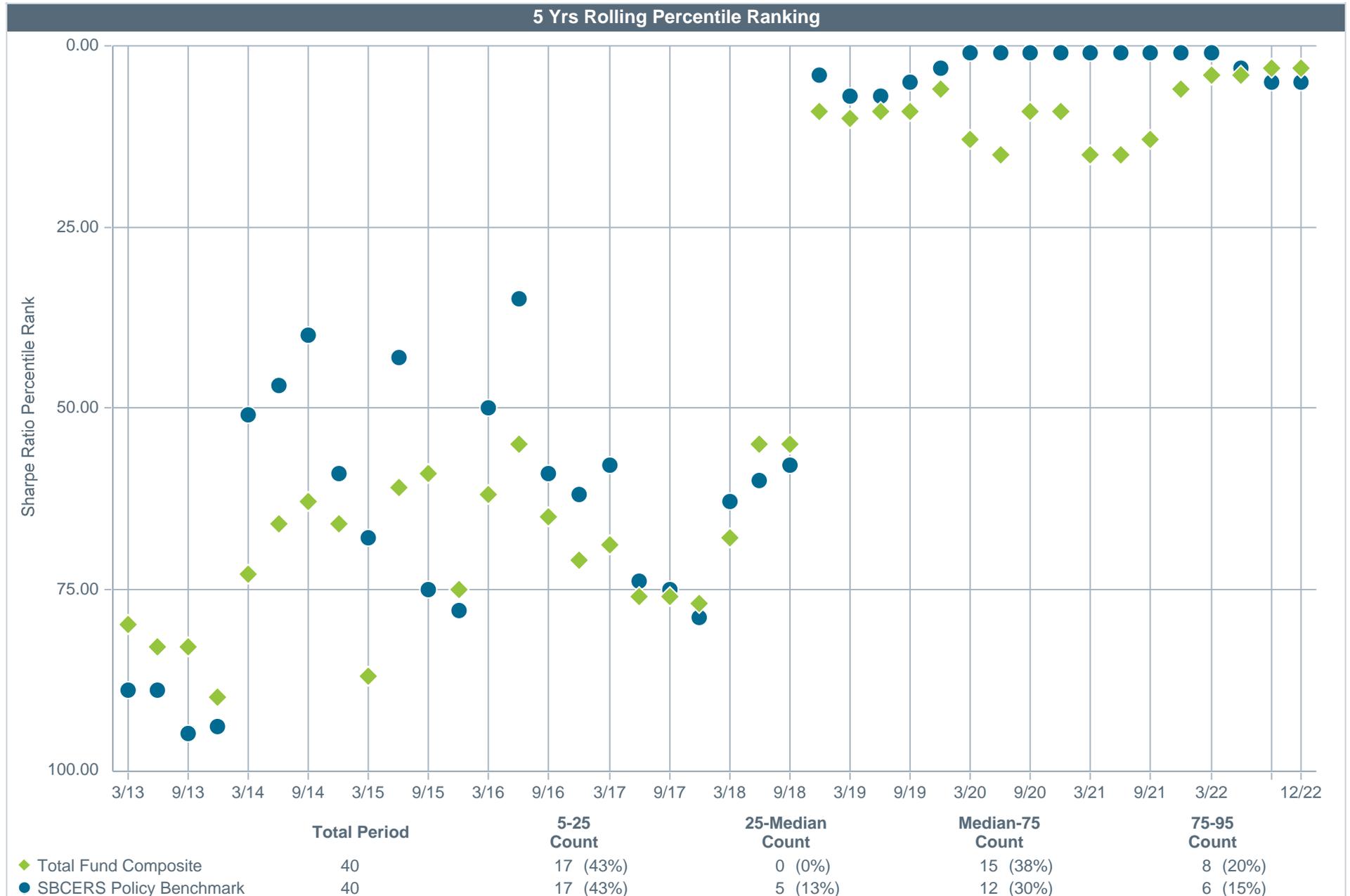
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Total Fund performance excludes 130 RHR and Treasury Cash.



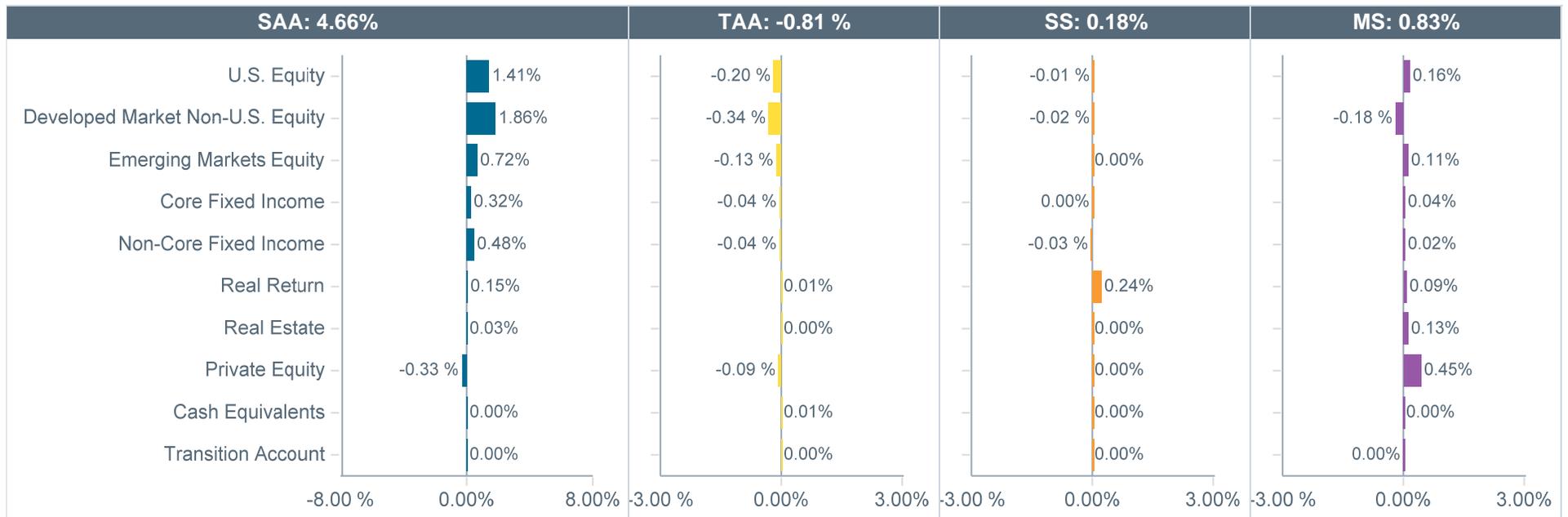
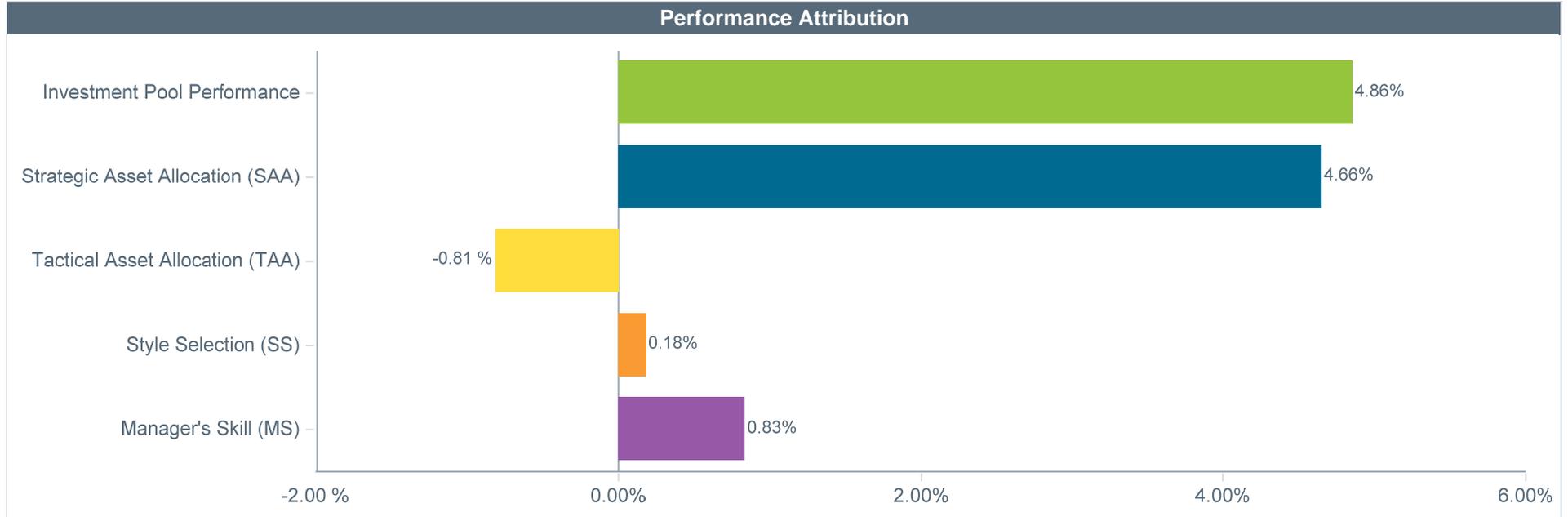
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Total Fund performance excludes 130 RHR and Treasury Cash.



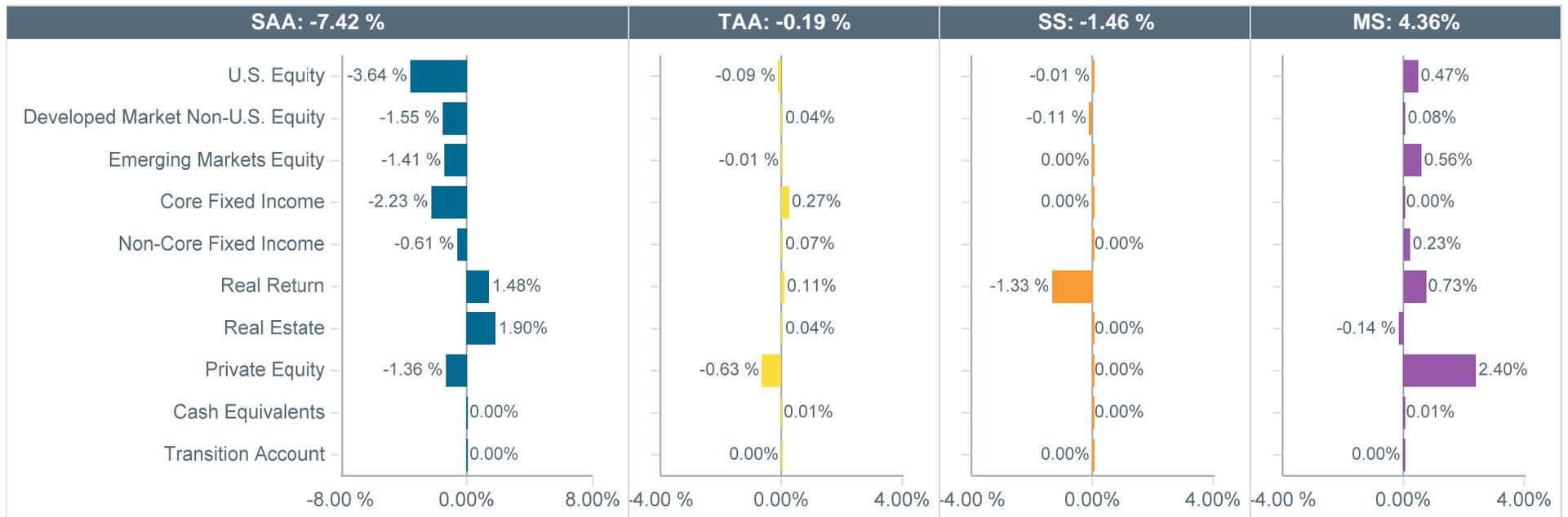
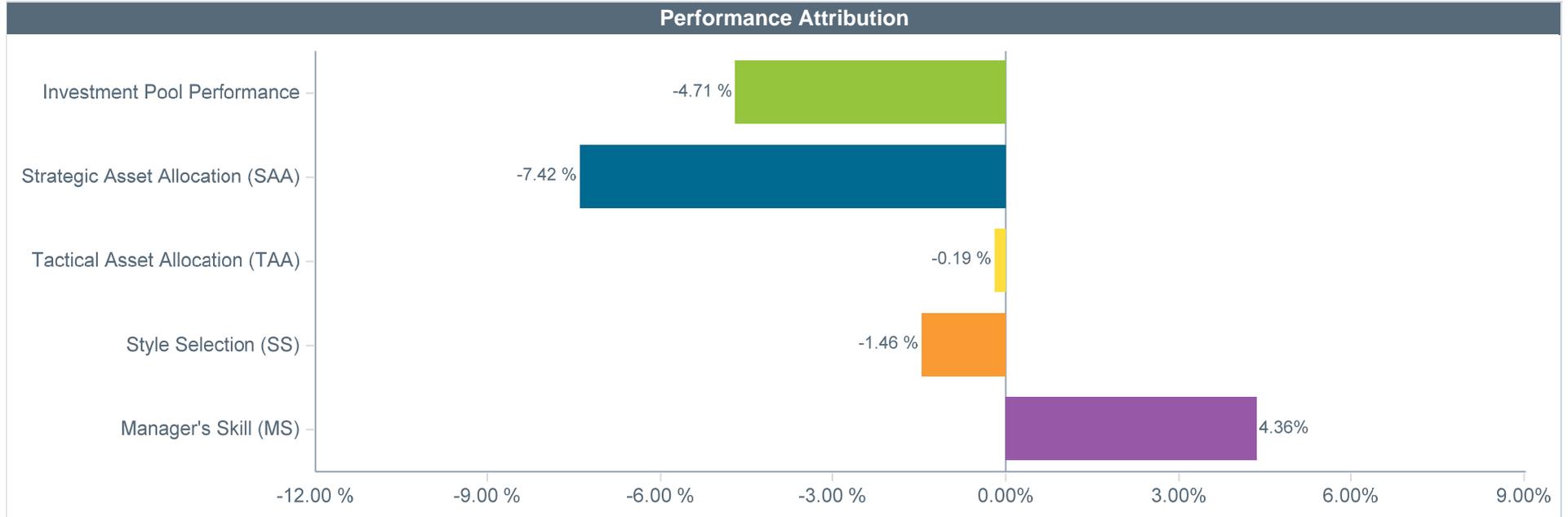
Ranks shown are based on net of fees performance. Total Fund performance excludes 130 RHR and Treasury Cash.



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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.



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

As of December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Total Fund Composite</b>	<b>3,902,591,298</b>	<b>100.00</b>	<b>4.82</b>	<b>1.02</b>	<b>-4.83</b>	<b>-4.83</b>	<b>6.35</b>	<b>6.51</b>	<b>7.94</b>	<b>6.86</b>	<b>8.13</b>	<b>01/01/1987</b>
<b>Total Fund Ex 130 Robin Hill Rd</b>	<b>3,891,709,188</b>	<b>99.72</b>	<b>4.86</b>	<b>1.10</b>	<b>-4.71</b>	<b>-4.71</b>	<b>6.43</b>	<b>6.57</b>	<b>7.98</b>	<b>6.88</b>	<b>8.13</b>	<b>01/01/1987</b>
SBCERS Policy Benchmark			4.66	-0.04	-7.42	-7.42	5.04	5.81	7.79	6.77	N/A	
Difference			0.20	1.14	2.71	2.71	1.39	0.76	0.19	0.11	N/A	
SBCERS Dynamic Policy Benchmark			4.03	-1.35	-9.02	-9.02	4.23	5.03	7.19	6.20	N/A	
Difference			0.83	2.45	4.31	4.31	2.20	1.54	0.79	0.68	N/A	
<b>US Equity Composite</b>	<b>669,327,523</b>	<b>17.15</b>	<b>8.05</b>	<b>3.18</b>	<b>-16.84</b>	<b>-16.84</b>	<b>7.72</b>	<b>9.54</b>	<b>11.37</b>	<b>12.14</b>	<b>10.53</b>	<b>01/01/1987</b>
Russell 3000 Index			7.18	2.40	-19.21	-19.21	7.07	8.79	11.04	12.13	10.25	
Difference			0.87	0.78	2.37	2.37	0.65	0.75	0.33	0.01	0.28	
<b>US Large Cap Equity Composite</b>	<b>591,712,793</b>	<b>15.16</b>	<b>7.87</b>	<b>2.92</b>	<b>-17.33</b>	<b>-17.33</b>	<b>7.69</b>	<b>9.95</b>	<b>N/A</b>	<b>N/A</b>	<b>11.81</b>	<b>06/01/2016</b>
Russell 1000 Index			7.24	2.30	-19.13	-19.13	7.35	9.13	11.26	12.37	11.43	
Difference			0.63	0.62	1.80	1.80	0.34	0.82	N/A	N/A	0.38	
<b>US Small Cap Equity Composite</b>	<b>77,614,730</b>	<b>1.99</b>	<b>9.40</b>	<b>5.21</b>	<b>-12.88</b>	<b>-12.88</b>	<b>7.74</b>	<b>5.56</b>	<b>N/A</b>	<b>N/A</b>	<b>9.24</b>	<b>06/01/2016</b>
Russell 2000 Index			6.23	3.91	-20.44	-20.44	3.10	4.13	7.90	9.01	8.05	
Difference			3.17	1.30	7.56	7.56	4.64	1.43	N/A	N/A	1.19	
<b>Developed Non-US Equity Composite</b>	<b>374,276,519</b>	<b>9.59</b>	<b>15.05</b>	<b>5.24</b>	<b>-14.56</b>	<b>-14.56</b>	<b>0.02</b>	<b>1.04</b>	<b>3.94</b>	<b>4.92</b>	<b>5.96</b>	<b>07/01/2012</b>
MSCI EAFE Index (USD) (Net)			17.34	6.36	-14.45	-14.45	0.87	1.54	4.53	4.67	5.75	
Difference			-2.29	-1.12	-0.11	-0.11	-0.85	-0.50	-0.59	0.25	0.21	
<b>Emerging Markets Equity Composite</b>	<b>247,795,732</b>	<b>6.35</b>	<b>11.85</b>	<b>-0.03</b>	<b>-12.26</b>	<b>-12.26</b>	<b>-0.09</b>	<b>0.27</b>	<b>5.94</b>	<b>2.17</b>	<b>3.24</b>	<b>07/01/2012</b>
MSCI Emg Mkts Index (USD) (Net)			9.70	-2.99	-20.09	-20.09	-2.69	-1.40	5.17	1.44	2.62	
Difference			2.15	2.96	7.83	7.83	2.60	1.67	0.77	0.73	0.62	
<b>Core Fixed Income Composite</b>	<b>587,411,422</b>	<b>15.05</b>	<b>2.15</b>	<b>-3.08</b>	<b>-12.98</b>	<b>-12.98</b>	<b>-2.40</b>	<b>0.47</b>	<b>N/A</b>	<b>N/A</b>	<b>0.73</b>	<b>07/01/2017</b>
Bloomberg US Agg Bond Index			1.87	-2.97	-13.01	-13.01	-2.71	0.02	0.89	1.06	0.24	
Difference			0.28	-0.11	0.03	0.03	0.31	0.45	N/A	N/A	0.49	
<b>Non-Core Fixed Income Composite</b>	<b>397,311,725</b>	<b>10.18</b>	<b>4.26</b>	<b>3.56</b>	<b>-3.24</b>	<b>-3.24</b>	<b>0.84</b>	<b>1.66</b>	<b>N/A</b>	<b>N/A</b>	<b>2.02</b>	<b>07/01/2017</b>
Custom Non-Core Fixed Income Benchmark			4.32	3.52	-5.69	-5.69	0.09	1.99	4.28	2.95	2.34	
Difference			-0.06	0.04	2.45	2.45	0.75	-0.33	N/A	N/A	-0.32	

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 December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Real Return Composite</b>	<b>587,566,741</b>	<b>15.06</b>	<b>3.09</b>	<b>1.59</b>	<b>6.70</b>	<b>6.70</b>	<b>7.91</b>	<b>6.79</b>	<b>N/A</b>	<b>N/A</b>	<b>6.96</b>	<b>07/01/2017</b>
Consumer Price Index+4%			0.98	2.15	10.71	10.71	9.12	7.93	7.43	6.70	7.69	
Difference			2.11	<b>-0.56</b>	<b>-4.01</b>	<b>-4.01</b>	<b>-1.21</b>	<b>-1.14</b>	N/A	N/A	<b>-0.73</b>	
Custom Real Return Benchmark			2.48	1.01	1.84	1.84	5.51	5.10	N/A	N/A	5.59	
Difference			0.61	0.58	4.86	4.86	2.40	1.69	N/A	N/A	1.37	
<b>Real Estate Composite</b>	<b>434,180,309</b>	<b>11.13</b>	<b>1.46</b>	<b>3.46</b>	<b>20.74</b>	<b>20.74</b>	<b>15.92</b>	<b>13.45</b>	<b>12.96</b>	<b>12.48</b>	<b>7.94</b>	<b>04/01/2006</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			0.31	4.87	20.96	20.96	11.38	9.26	8.87	9.91	6.82	
Difference			1.15	<b>-1.41</b>	<b>-0.22</b>	<b>-0.22</b>	4.54	4.19	4.09	2.57	1.12	
<b>Private Equity Composite</b>	<b>544,164,366</b>	<b>13.94</b>	<b>0.25</b>	<b>-2.99</b>	<b>3.60</b>	<b>3.60</b>	<b>21.54</b>	<b>18.29</b>	<b>16.97</b>	<b>16.21</b>	<b>11.52</b>	<b>06/01/2006</b>
Russell 3000+3% Index (1 Qtr Lag)			<b>-3.76</b>	<b>-19.24</b>	<b>-15.16</b>	<b>-15.16</b>	10.93	11.87	14.23	14.73	11.66	
Difference			4.01	16.25	18.76	18.76	10.61	6.42	2.74	1.48	<b>-0.14</b>	

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

As of December 31, 2022

	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
<b>Total Fund Composite</b>	<b>3,902,591,298</b>	<b>100.00</b>	<b>1.02</b>	<b>0.28</b>	<b>25.20</b>	<b>-0.10</b>	<b>7.74</b>	<b>7.80</b>	<b>10.49</b>	<b>1.37</b>	<b>0.42</b>	<b>15.25</b>	<b>8.10</b>
<b>Total Fund Ex 130 Robin Hill Rd</b>	<b>3,891,709,188</b>	<b>99.72</b>	<b>1.10</b>	<b>0.43</b>	<b>25.24</b>	<b>-0.11</b>	<b>7.76</b>	<b>7.80</b>	<b>10.49</b>	<b>1.37</b>	<b>0.42</b>	<b>15.25</b>	<b>8.10</b>
SBCERS Policy Benchmark			-0.04	-3.59	22.97	2.99	7.29	7.77	11.47	2.28	0.97	15.72	9.21
Difference			1.14	4.02	2.27	-3.10	0.47	0.03	-0.98	-0.91	-0.55	-0.47	-1.11
SBCERS Dynamic Policy Benchmark			-1.35	-4.13	25.11	1.15	6.36	7.92	11.58	0.65	0.01	16.50	7.84
Difference			2.45	4.56	0.13	-1.26	1.40	-0.12	-1.09	0.72	0.41	-1.25	0.26
<b>US Equity Composite</b>	<b>669,327,523</b>	<b>17.15</b>	<b>3.18</b>	<b>-11.24</b>	<b>41.39</b>	<b>6.08</b>	<b>11.05</b>	<b>15.53</b>	<b>14.82</b>	<b>3.22</b>	<b>6.31</b>	<b>25.01</b>	<b>19.58</b>
Russell 3000 Index			2.40	-13.87	44.16	6.53	8.98	14.78	18.51	2.14	7.29	25.22	21.46
Difference			0.78	2.63	-2.77	-0.45	2.07	0.75	-3.69	1.08	-0.98	-0.21	-1.88
<b>US Large Cap Equity Composite</b>	<b>591,712,793</b>	<b>15.16</b>	<b>2.92</b>	<b>-10.88</b>	<b>39.45</b>	<b>7.64</b>	<b>13.54</b>	<b>14.95</b>	<b>13.48</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Russell 1000 Index			2.30	-13.04	43.07	7.48	10.02	14.54	18.03	2.93	7.37	25.35	21.24
Difference			0.62	2.16	-3.62	0.16	3.52	0.41	-4.55	N/A	N/A	N/A	N/A
<b>US Small Cap Equity Composite</b>	<b>77,614,730</b>	<b>1.99</b>	<b>5.21</b>	<b>-14.10</b>	<b>61.83</b>	<b>-9.34</b>	<b>-9.65</b>	<b>21.14</b>	<b>24.44</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Russell 2000 Index			3.91	-25.20	62.03	-6.63	-3.31	17.57	24.60	-6.73	6.49	23.64	24.21
Difference			1.30	11.10	-0.20	-2.71	-6.34	3.57	-0.16	N/A	N/A	N/A	N/A
<b>Developed Non-US Equity Composite</b>	<b>374,276,519</b>	<b>9.59</b>	<b>5.24</b>	<b>-17.41</b>	<b>29.60</b>	<b>-5.62</b>	<b>1.78</b>	<b>6.23</b>	<b>16.86</b>	<b>-6.62</b>	<b>-0.92</b>	<b>23.53</b>	<b>19.66</b>
MSCI EAFE Index (USD) (Net)			6.36	-17.77	32.35	-5.13	1.08	6.84	20.27	-10.16	-4.22	23.57	18.62
Difference			-1.12	0.36	-2.75	-0.49	0.70	-0.61	-3.41	3.54	3.30	-0.04	1.04
<b>Emerging Markets Equity Composite</b>	<b>247,795,732</b>	<b>6.35</b>	<b>-0.03</b>	<b>-16.84</b>	<b>39.80</b>	<b>-11.30</b>	<b>5.80</b>	<b>5.86</b>	<b>22.55</b>	<b>-9.97</b>	<b>-6.02</b>	<b>12.12</b>	<b>4.09</b>
MSCI Emg Mkts Index (USD) (Net)			-2.99	-25.28	40.90	-3.39	1.21	8.20	23.75	-12.05	-5.12	14.31	2.87
Difference			2.96	8.44	-1.10	-7.91	4.59	-2.34	-1.20	2.08	-0.90	-2.19	1.22
<b>Core Fixed Income Composite</b>	<b>587,411,422</b>	<b>15.05</b>	<b>-3.08</b>	<b>-10.15</b>	<b>0.88</b>	<b>8.63</b>	<b>7.62</b>	<b>1.34</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Bloomberg US Agg Bond Index			-2.97	-10.29	-0.34	8.74	7.87	-0.40	-0.31	6.00	1.86	4.37	-0.69
Difference			-0.11	0.14	1.22	-0.11	-0.25	1.74	N/A	N/A	N/A	N/A	N/A
<b>Non-Core Fixed Income Composite</b>	<b>397,311,725</b>	<b>10.18</b>	<b>3.56</b>	<b>-6.02</b>	<b>10.92</b>	<b>-2.28</b>	<b>5.43</b>	<b>0.37</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Custom Non-Core Fixed Income Benchmark			3.52	-8.81	11.11	-1.05	7.44	1.85	8.86	2.75	-1.98	8.51	6.22
Difference			0.04	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 December 31, 2022

	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
<b>Real Return Composite</b>	<b>587,566,741</b>	<b>15.06</b>	<b>1.59</b>	<b>12.55</b>	<b>23.53</b>	<b>-7.17</b>	<b>6.27</b>	<b>3.90</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Consumer Price Index+4%			2.15	13.42	9.61	4.67	5.71	6.99	5.70	5.04	4.13	6.15	5.82
Difference			<b>-0.56</b>	<b>-0.87</b>	13.92	<b>-11.84</b>	0.56	<b>-3.09</b>	N/A	N/A	N/A	N/A	N/A
Custom Real Return Benchmark			1.01	5.65	16.55	<b>-2.14</b>	5.22	5.32	N/A	N/A	N/A	N/A	N/A
Difference			0.58	6.90	6.98	<b>-5.03</b>	1.05	<b>-1.42</b>	N/A	N/A	N/A	N/A	N/A
<b>Real Estate Composite</b>	<b>434,180,309</b>	<b>11.13</b>	<b>3.46</b>	<b>36.10</b>	<b>9.75</b>	<b>5.56</b>	<b>9.50</b>	<b>12.27</b>	<b>9.20</b>	<b>13.75</b>	<b>10.31</b>	<b>12.26</b>	<b>10.37</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			4.87	27.26	1.47	3.93	6.55	7.11	7.36	12.62	12.40	12.74	9.68
Difference			<b>-1.41</b>	8.84	8.28	1.63	2.95	5.16	1.84	1.13	<b>-2.09</b>	<b>-0.48</b>	0.69
<b>Private Equity Composite</b>	<b>544,164,366</b>	<b>13.94</b>	<b>-2.99</b>	<b>27.41</b>	<b>55.88</b>	<b>-1.02</b>	<b>13.64</b>	<b>15.69</b>	<b>18.96</b>	<b>4.69</b>	<b>11.12</b>	<b>20.27</b>	<b>12.21</b>
Russell 3000+3% Index (1 Qtr Lag)			<b>-19.24</b>	15.28	67.40	<b>-6.40</b>	12.03	17.23	21.61	2.65	15.74	26.29	18.00
Difference			16.25	12.13	<b>-11.52</b>	5.38	1.61	<b>-1.54</b>	<b>-2.65</b>	2.04	<b>-4.62</b>	<b>-6.02</b>	<b>-5.79</b>

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

As of December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Equity Composite</b>	<b>669,327,523</b>	<b>17.15</b>	<b>8.05</b>	<b>3.18</b>	<b>-16.84</b>	<b>-16.84</b>	<b>7.72</b>	<b>9.54</b>	<b>11.37</b>	<b>12.14</b>	<b>10.53</b>	<b>01/01/1987</b>
Russell 3000 Index			7.18	2.40	-19.21	-19.21	7.07	8.79	11.04	12.13	10.25	
Difference			0.87	0.78	2.37	2.37	0.65	0.75	0.33	0.01	0.28	
<b>US Large Cap Equity Composite</b>	<b>591,712,793</b>	<b>15.16</b>	<b>7.87</b>	<b>2.92</b>	<b>-17.33</b>	<b>-17.33</b>	<b>7.69</b>	<b>9.95</b>	<b>N/A</b>	<b>N/A</b>	<b>11.81</b>	<b>06/01/2016</b>
Russell 1000 Index			7.24	2.30	-19.13	-19.13	7.35	9.13	11.26	12.37	11.43	
Difference			0.63	0.62	1.80	1.80	0.34	0.82	N/A	N/A	0.38	
<b>BNY Mellon HEDI (SA)</b>	<b>273,574,267</b>	<b>7.01</b>	<b>8.61</b>	<b>3.68</b>	<b>-15.11</b>	<b>-15.11</b>	<b>8.04</b>	<b>10.79</b>	<b>12.55</b>	<b>N/A</b>	<b>9.86</b>	<b>05/01/2019</b>
Russell 1000 Index			7.24	2.30	-19.13	-19.13	7.35	9.13	11.26	12.37	8.98	
Difference			1.37	1.38	4.02	4.02	0.69	1.66	1.29	N/A	0.88	
IM U.S. Large Cap Core Equity (MF) Median			7.82	2.41	-18.72	-18.72	6.96	8.77	10.64	11.68	8.61	
Rank			37	30	18	18	22	5	4	N/A	17	
<b>BNY Mellon R1000 Index - NL (CF)</b>	<b>318,138,526</b>	<b>8.15</b>	<b>7.24</b>	<b>2.29</b>	<b>-19.15</b>	<b>-19.15</b>	<b>7.48</b>	<b>9.27</b>	<b>11.37</b>	<b>12.44</b>	<b>9.10</b>	<b>05/01/2019</b>
Russell 1000 Index			7.24	2.30	-19.13	-19.13	7.35	9.13	11.26	12.37	8.98	
Difference			0.00	-0.01	-0.02	-0.02	0.13	0.14	0.11	0.07	0.12	
IM U.S. Large Cap Core Equity (MF) Median			7.82	2.41	-18.72	-18.72	6.96	8.77	10.64	11.68	8.61	
Rank			62	53	59	59	34	34	22	19	33	
<b>US Small Cap Equity Composite</b>	<b>77,614,730</b>	<b>1.99</b>	<b>9.40</b>	<b>5.21</b>	<b>-12.88</b>	<b>-12.88</b>	<b>7.74</b>	<b>5.56</b>	<b>N/A</b>	<b>N/A</b>	<b>9.24</b>	<b>06/01/2016</b>
Russell 2000 Index			6.23	3.91	-20.44	-20.44	3.10	4.13	7.90	9.01	8.05	
Difference			3.17	1.30	7.56	7.56	4.64	1.43	N/A	N/A	1.19	
<b>Dimensional U.S. Small Cap Value (CF)</b>	<b>45,013,268</b>	<b>1.15</b>	<b>14.47</b>	<b>10.68</b>	<b>-1.93</b>	<b>-1.93</b>	<b>12.27</b>	<b>7.31</b>	<b>10.08</b>	<b>10.51</b>	<b>8.56</b>	<b>04/01/2005</b>
Russell 2000 Index			6.23	3.91	-20.44	-20.44	3.10	4.13	7.90	9.01	7.54	
Difference			8.24	6.77	18.51	18.51	9.17	3.18	2.18	1.50	1.02	
Russell 2000 Val Index			8.42	3.42	-14.48	-14.48	4.70	4.13	8.23	8.48	6.89	
Difference			6.05	7.26	12.55	12.55	7.57	3.18	1.85	2.03	1.67	
IM U.S. Small Cap Value Equity (MF) Median			11.70	5.29	-11.09	-11.09	6.79	4.73	8.12	8.53	6.95	
Rank			8	8	8	8	8	11	15	10	3	
<b>RHJ Small Cap Opportunities (SA)</b>	<b>32,601,462</b>	<b>0.84</b>	<b>3.10</b>	<b>-1.51</b>	<b>-24.51</b>	<b>-24.51</b>	<b>2.52</b>	<b>3.38</b>	<b>N/A</b>	<b>N/A</b>	<b>8.16</b>	<b>06/01/2016</b>
Russell 2000 Index			6.23	3.91	-20.44	-20.44	3.10	4.13	7.90	9.01	8.05	
Difference			-3.13	-5.42	-4.07	-4.07	-0.58	-0.75	N/A	N/A	0.11	
Russell 2000 Grth Index			4.13	4.38	-26.36	-26.36	0.65	3.51	7.09	9.20	7.75	
Difference			-1.03	-5.89	1.85	1.85	1.87	-0.13	N/A	N/A	0.41	
IM U.S. Small Cap Growth Equity (MF) Median			4.47	3.37	-27.54	-27.54	3.50	6.11	8.95	9.80	9.42	
Rank			72	95	30	30	64	84	N/A	N/A	70	

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

As of December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Developed Non-US Equity Composite</b>	<b>374,276,519</b>	<b>9.59</b>	<b>15.05</b>	<b>5.24</b>	<b>-14.56</b>	<b>-14.56</b>	<b>0.02</b>	<b>1.04</b>	<b>3.94</b>	<b>4.92</b>	<b>5.96</b>	<b>07/01/2012</b>
MSCI EAFE Index (USD) (Net)			17.34	6.36	-14.45	-14.45	0.87	1.54	4.53	4.67	5.75	
Difference			-2.29	-1.12	-0.11	-0.11	-0.85	-0.50	-0.59	0.25	0.21	
<b>First Eagle International Value Equity (SA)</b>	<b>103,476,808</b>	<b>2.65</b>	<b>11.82</b>	<b>2.88</b>	<b>-7.15</b>	<b>-7.15</b>	<b>1.47</b>	<b>2.14</b>	<b>4.34</b>	<b>N/A</b>	<b>3.18</b>	<b>06/01/2014</b>
MSCI EAFE Index (USD) (Net)			17.34	6.36	-14.45	-14.45	0.87	1.54	4.53	4.67	2.53	
Difference			-5.52	-3.48	7.30	7.30	0.60	0.60	-0.19	N/A	0.65	
IM EAFE Value (MF) Median			19.61	5.82	-10.43	-10.43	1.31	0.30	3.33	3.50	1.26	
Rank			100	97	29	29	43	4	25	N/A	9	
<b>PanAgora Dynamic International Equity (SA)</b>	<b>108,293,570</b>	<b>2.77</b>	<b>17.26</b>	<b>6.12</b>	<b>-13.62</b>	<b>-13.62</b>	<b>1.41</b>	<b>0.64</b>	<b>4.01</b>	<b>5.04</b>	<b>7.33</b>	<b>05/01/2009</b>
MSCI EAFE Index (USD) (Net)			17.34	6.36	-14.45	-14.45	0.87	1.54	4.53	4.67	6.55	
Difference			-0.08	-0.24	0.83	0.83	0.54	-0.90	-0.52	0.37	0.78	
IM EAFE Core (MF) Median			17.19	4.85	-15.44	-15.44	0.82	1.25	4.21	4.26	6.30	
Rank			48	25	21	21	28	68	59	19	18	
<b>Artisan Non-U.S. Growth (SA)</b>	<b>109,456,598</b>	<b>2.80</b>	<b>15.93</b>	<b>6.73</b>	<b>-19.32</b>	<b>-19.32</b>	<b>-2.06</b>	<b>1.78</b>	<b>3.90</b>	<b>N/A</b>	<b>3.38</b>	<b>02/01/2014</b>
MSCI EAFE Index (USD) (Net)			17.34	6.36	-14.45	-14.45	0.87	1.54	4.53	4.67	3.33	
Difference			-1.41	0.37	-4.87	-4.87	-2.93	0.24	-0.63	N/A	0.05	
IM EAFE Growth (MF) Median			15.31	4.69	-23.33	-23.33	0.49	1.93	4.70	4.85	3.92	
Rank			32	10	23	23	95	56	85	N/A	71	
<b>Acadian Non-US Small Cap Equity (CF)</b>	<b>53,014,154</b>	<b>1.36</b>	<b>15.32</b>	<b>5.12</b>	<b>-19.15</b>	<b>-19.15</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>2.01</b>	<b>12/01/2020</b>
MSCI EAFE Sm Cap Index (USD) (Net)			15.79	4.41	-21.39	-21.39	-0.93	-0.05	4.45	6.21	-3.69	
Difference			-0.47	0.71	2.24	2.24	N/A	N/A	N/A	N/A	5.70	
IM International SMID Cap Equity (MF) Median			15.62	3.77	-21.91	-21.91	-0.31	0.01	4.34	5.08	-4.01	
Rank			53	28	38	38	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 December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Emerging Markets Equity Composite</b>	<b>247,795,732</b>	<b>6.35</b>	<b>11.85</b>	<b>-0.03</b>	<b>-12.26</b>	<b>-12.26</b>	<b>-0.09</b>	<b>0.27</b>	<b>5.94</b>	<b>2.17</b>	<b>3.24</b>	<b>07/01/2012</b>
MSCI Emg Mkts Index (USD) (Net)			9.70	-2.99	-20.09	-20.09	-2.69	-1.40	5.17	1.44	2.62	
Difference			2.15	2.96	7.83	7.83	2.60	1.67	0.77	0.73	0.62	
<b>DFA Emg Mkts Value;I (DFEVX)</b>	<b>127,992,978</b>	<b>3.28</b>	<b>10.27</b>	<b>-0.54</b>	<b>-10.74</b>	<b>-10.74</b>	<b>1.02</b>	<b>-0.06</b>	<b>6.93</b>	<b>N/A</b>	<b>1.86</b>	<b>05/01/2013</b>
MSCI Emg Mkts Index (USD) (Net)			9.70	-2.99	-20.09	-20.09	-2.69	-1.40	5.17	1.44	1.58	
Difference			0.57	2.45	9.35	9.35	3.71	1.34	1.76	N/A	0.28	
MSCI Emg Mkts Val Index (USD) (Net)			9.77	-2.26	-15.83	-15.83	-2.62	-1.59	4.47	0.06	0.31	
Difference			0.50	1.72	5.09	5.09	3.64	1.53	2.46	N/A	1.55	
IM Emerging Markets Equity (MF) Median			9.94	-2.29	-22.45	-22.45	-3.16	-1.74	4.53	1.24	1.20	
Rank			46	34	4	4	13	23	10	N/A	32	
<b>RBC Emerging Markets Equity (CF)</b>	<b>119,802,754</b>	<b>3.07</b>	<b>13.58</b>	<b>0.53</b>	<b>-13.82</b>	<b>-13.82</b>	<b>-1.25</b>	<b>0.46</b>	<b>N/A</b>	<b>N/A</b>	<b>4.19</b>	<b>09/01/2016</b>
MSCI Emg Mkts Index (USD) (Net)			9.70	-2.99	-20.09	-20.09	-2.69	-1.40	5.17	1.44	3.48	
Difference			3.88	3.52	6.27	6.27	1.44	1.86	N/A	N/A	0.71	
MSCI Emg Mkts Grth Index (USD) (Net)			9.64	-3.65	-23.96	-23.96	-2.93	-1.33	5.73	2.68	4.21	
Difference			3.94	4.18	10.14	10.14	1.68	1.79	N/A	N/A	-0.02	
IM Emerging Markets Equity (MF) Median			9.94	-2.29	-22.45	-22.45	-3.16	-1.74	4.53	1.24	3.00	
Rank			7	24	9	9	28	18	N/A	N/A	25	
<b>Core Fixed Income Composite</b>	<b>587,411,422</b>	<b>15.05</b>	<b>2.15</b>	<b>-3.08</b>	<b>-12.98</b>	<b>-12.98</b>	<b>-2.40</b>	<b>0.47</b>	<b>N/A</b>	<b>N/A</b>	<b>0.73</b>	<b>07/01/2017</b>
Bloomberg US Agg Bond Index			1.87	-2.97	-13.01	-13.01	-2.71	0.02	0.89	1.06	0.24	
Difference			0.28	-0.11	0.03	0.03	0.31	0.45	N/A	N/A	0.49	
<b>Garcia Hamilton Core Fixed Income (SA)</b>	<b>348,417,010</b>	<b>8.93</b>	<b>2.06</b>	<b>-3.51</b>	<b>-11.41</b>	<b>-11.41</b>	<b>-2.11</b>	<b>0.31</b>	<b>N/A</b>	<b>N/A</b>	<b>0.39</b>	<b>09/01/2017</b>
Bloomberg US Agg Bond Index			1.87	-2.97	-13.01	-13.01	-2.71	0.02	0.89	1.06	0.00	
Difference			0.19	-0.54	1.60	1.60	0.60	0.29	N/A	N/A	0.39	
IM U.S. Broad Market Core Fixed Income (MF) Median			1.71	-3.05	-13.66	-13.66	-2.72	-0.07	0.92	1.02	-0.08	
Rank			21	84	7	7	20	22	N/A	N/A	14	
<b>PGIM Core Plus Fixed Income (CF)</b>	<b>239,010,283</b>	<b>6.12</b>	<b>2.29</b>	<b>-2.33</b>	<b>-14.52</b>	<b>-14.52</b>	<b>-2.55</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.96</b>	<b>06/01/2018</b>
Bloomberg US Agg Bond Index			1.87	-2.97	-13.01	-13.01	-2.71	0.02	0.89	1.06	0.35	
Difference			0.42	0.64	-1.51	-1.51	0.16	N/A	N/A	N/A	0.61	
IM U.S. Broad Market Core+ Fixed Income (MF) Median			1.81	-2.64	-13.75	-13.75	-2.46	0.10	1.17	1.20	0.45	
Rank			23	35	70	70	57	N/A	N/A	N/A	25	

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 December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Non-Core Fixed Income Composite</b>	<b>397,311,725</b>	<b>10.18</b>	<b>4.26</b>	<b>3.56</b>	<b>-3.24</b>	<b>-3.24</b>	<b>0.84</b>	<b>1.66</b>	<b>N/A</b>	<b>N/A</b>	<b>2.02</b>	<b>07/01/2017</b>
Custom Non-Core Fixed Income Benchmark			4.32	3.52	-5.69	-5.69	0.09	1.99	4.28	2.95	2.34	
Difference			-0.06	0.04	2.45	2.45	0.75	-0.33	N/A	N/A	-0.32	
<b>Wellington Blended Opportunistic EMD (CF)</b>	<b>118,060,920</b>	<b>3.03</b>	<b>8.38</b>	<b>3.98</b>	<b>-14.01</b>	<b>-14.01</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-4.54</b>	<b>03/01/2020</b>
Wellington Blended Index			8.29	3.27	-14.75	-14.75	-5.66	-1.86	1.77	-0.18	-5.29	
Difference			0.09	0.71	0.74	0.74	N/A	N/A	N/A	N/A	0.75	
IM Emerging Markets Debt (MF) Median			8.62	3.96	-15.10	-15.10	-4.27	-1.19	2.02	0.50	-4.72	
Rank			57	49	40	40	N/A	N/A	N/A	N/A	47	
<b>Beach Point Leveraged Loan (CF)</b>	<b>144,960,633</b>	<b>3.71</b>	<b>3.21</b>	<b>3.83</b>	<b>-1.74</b>	<b>-1.74</b>	<b>1.63</b>	<b>2.64</b>	<b>3.06</b>	<b>3.33</b>	<b>3.46</b>	<b>10/01/2012</b>
Credit Suisse Lvg'd Loan Index			2.33	3.55	-1.06	-1.06	2.34	3.24	4.31	3.78	3.84	
Difference			0.88	0.28	-0.68	-0.68	-0.71	-0.60	-1.25	-0.45	-0.38	
IM U.S. Bank Loans (MF) Median			2.63	3.64	-2.23	-2.23	1.10	2.02	3.23	2.73	2.79	
Rank			7	40	36	36	24	16	59	12	9	
<b>AG Direct Lending Fund III, LP</b>	<b>17,372,779</b>	<b>0.45</b>										<b>11/01/2018</b>
<b>First Eagle Direct Lending Fund IV</b>	<b>16,069,383</b>	<b>0.41</b>										<b>06/01/2019</b>
<b>PIMCO Private Income Fund, LLC</b>	<b>25,839,287</b>	<b>0.66</b>										<b>11/01/2019</b>
<b>AG Direct Lending Fund IV, LP</b>	<b>18,232,956</b>	<b>0.47</b>										<b>06/01/2021</b>
<b>Deerpath Capital V, LP</b>	<b>18,484,454</b>	<b>0.47</b>										<b>11/01/2020</b>
<b>Deerpath Capital VI, LP</b>	<b>15,458,814</b>	<b>0.40</b>										<b>11/01/2021</b>
<b>First Eagle Direct Lending Fund V-B</b>	<b>12,806,309</b>	<b>0.33</b>										<b>06/01/2021</b>
<b>AG Direct Lending Evergreen Fund, LP</b>	<b>9,500,000</b>	<b>0.24</b>										<b>09/01/2022</b>

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

As of December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Real Return Composite</b>	<b>587,566,741</b>	<b>15.06</b>	<b>3.09</b>	<b>1.59</b>	<b>6.70</b>	<b>6.70</b>	<b>7.91</b>	<b>6.79</b>	<b>N/A</b>	<b>N/A</b>	<b>6.96</b>	<b>07/01/2017</b>
Consumer Price Index+4%			0.98	2.15	10.71	10.71	9.12	7.93	7.43	6.70	7.69	
Difference			2.11	-0.56	-4.01	-4.01	-1.21	-1.14	N/A	N/A	-0.73	
Custom Real Return Benchmark			2.48	1.01	1.84	1.84	5.51	5.10	N/A	N/A	5.59	
Difference			0.61	0.58	4.86	4.86	2.40	1.69	N/A	N/A	1.37	
<b>Public Real Return Composite</b>	<b>169,365,754</b>	<b>4.34</b>	<b>4.88</b>	<b>-2.04</b>	<b>-8.07</b>	<b>-8.07</b>	<b>2.34</b>	<b>3.46</b>	<b>N/A</b>	<b>N/A</b>	<b>3.99</b>	<b>07/01/2017</b>
<b>BNY Mellon TIPS - NL (CF)</b>	<b>35,024,237</b>	<b>0.90</b>	<b>1.82</b>	<b>-3.43</b>	<b>-12.02</b>	<b>-12.02</b>	<b>1.14</b>	<b>2.06</b>	<b>2.57</b>	<b>1.08</b>	<b>2.21</b>	<b>05/01/2019</b>
Bloomberg US Trsy US TIPS Index			2.04	-3.21	-11.85	-11.85	1.21	2.11	2.60	1.12	2.27	
Difference			-0.22	-0.22	-0.17	-0.17	-0.07	-0.05	-0.03	-0.04	-0.06	
IM U.S. TIPS (MF) Median			1.96	-3.05	-11.71	-11.71	1.17	1.91	2.29	0.78	2.11	
Rank			65	66	63	63	51	40	21	26	42	
<b>Cohen &amp; Steers Real Assets Fund (CIT)</b>	<b>60,947,662</b>	<b>1.56</b>	<b>6.92</b>	<b>-1.04</b>	<b>-2.00</b>	<b>-2.00</b>	<b>6.42</b>	<b>5.41</b>	<b>N/A</b>	<b>N/A</b>	<b>5.80</b>	<b>09/01/2017</b>
Cohen & Steers Real Assets Custom Index			7.19	-0.49	-3.04	-3.04	4.73	4.33	6.13	2.46	4.77	
Difference			-0.27	-0.55	1.04	1.04	1.69	1.08	N/A	N/A	1.03	
<b>Nuveen Real Asset Income Fund (SA)</b>	<b>73,393,855</b>	<b>1.88</b>	<b>4.79</b>	<b>-2.11</b>	<b>-11.98</b>	<b>-11.98</b>	<b>-1.43</b>	<b>2.08</b>	<b>N/A</b>	<b>N/A</b>	<b>2.29</b>	<b>09/01/2017</b>
Nuveen Real Asset Income Blend Index			4.74	-1.91	-14.24	-14.24	-1.30	1.51	4.08	4.14	1.72	
Difference			0.05	-0.20	2.26	2.26	-0.13	0.57	N/A	N/A	0.57	
<b>Private Real Return Composite</b>	<b>418,200,987</b>	<b>10.72</b>	<b>2.19</b>	<b>3.82</b>	<b>19.27</b>	<b>19.27</b>	<b>13.40</b>	<b>10.62</b>	<b>N/A</b>	<b>N/A</b>	<b>9.90</b>	<b>07/01/2017</b>
<b>Private Natural Resources</b>	<b>62,723,150</b>	<b>1.61</b>	<b>-0.55</b>	<b>-0.48</b>	<b>6.40</b>	<b>6.40</b>	<b>5.55</b>	<b>4.97</b>	<b>5.65</b>	<b>N/A</b>	<b>4.79</b>	<b>10/01/2013</b>
Consumer Price Index+4% (1 Qtr Lag)			1.15	5.28	12.53	12.53	9.15	7.91	7.34	6.62	6.73	
Difference			-1.70	-5.76	-6.13	-6.13	-3.60	-2.94	-1.69	N/A	-1.94	
<b>Private Infrastructure</b>	<b>355,477,837</b>	<b>9.11</b>	<b>2.68</b>	<b>4.60</b>	<b>21.81</b>	<b>21.81</b>	<b>15.19</b>	<b>11.96</b>	<b>10.70</b>	<b>N/A</b>	<b>-2.26</b>	<b>01/01/2014</b>
Consumer Price Index+4%			0.98	2.15	10.71	10.71	9.12	7.93	7.43	6.70	6.83	
Difference			1.70	2.45	11.10	11.10	6.07	4.03	3.27	N/A	-9.09	

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

As of December 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Real Estate Composite</b>	<b>434,180,309</b>	<b>11.13</b>	<b>1.46</b>	<b>3.46</b>	<b>20.74</b>	<b>20.74</b>	<b>15.92</b>	<b>13.45</b>	<b>12.96</b>	<b>12.48</b>	<b>7.94</b>	<b>04/01/2006</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			0.31	4.87	20.96	20.96	11.38	9.26	8.87	9.91	6.82	
Difference			1.15	-1.41	-0.22	-0.22	4.54	4.19	4.09	2.57	1.12	
<b>ORG Real Estate</b>	<b>434,180,309</b>	<b>11.13</b>	<b>1.46</b>	<b>3.46</b>	<b>20.74</b>	<b>20.74</b>	<b>15.92</b>	<b>13.45</b>	<b>12.96</b>	<b>12.60</b>	<b>7.94</b>	<b>04/01/2006</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			0.31	4.87	20.96	20.96	11.38	9.26	8.87	9.91	6.82	
Difference			1.15	-1.41	-0.22	-0.22	4.54	4.19	4.09	2.69	1.12	
<b>Private Equity Composite</b>	<b>544,164,366</b>	<b>13.94</b>	<b>0.25</b>	<b>-2.99</b>	<b>3.60</b>	<b>3.60</b>	<b>21.54</b>	<b>18.29</b>	<b>16.97</b>	<b>16.21</b>	<b>11.52</b>	<b>06/01/2006</b>
Russell 3000+3% Index (1 Qtr Lag)			-3.76	-19.24	-15.16	-15.16	10.93	11.87	14.23	14.73	11.66	
Difference			4.01	16.25	18.76	18.76	10.61	6.42	2.74	1.48	-0.14	

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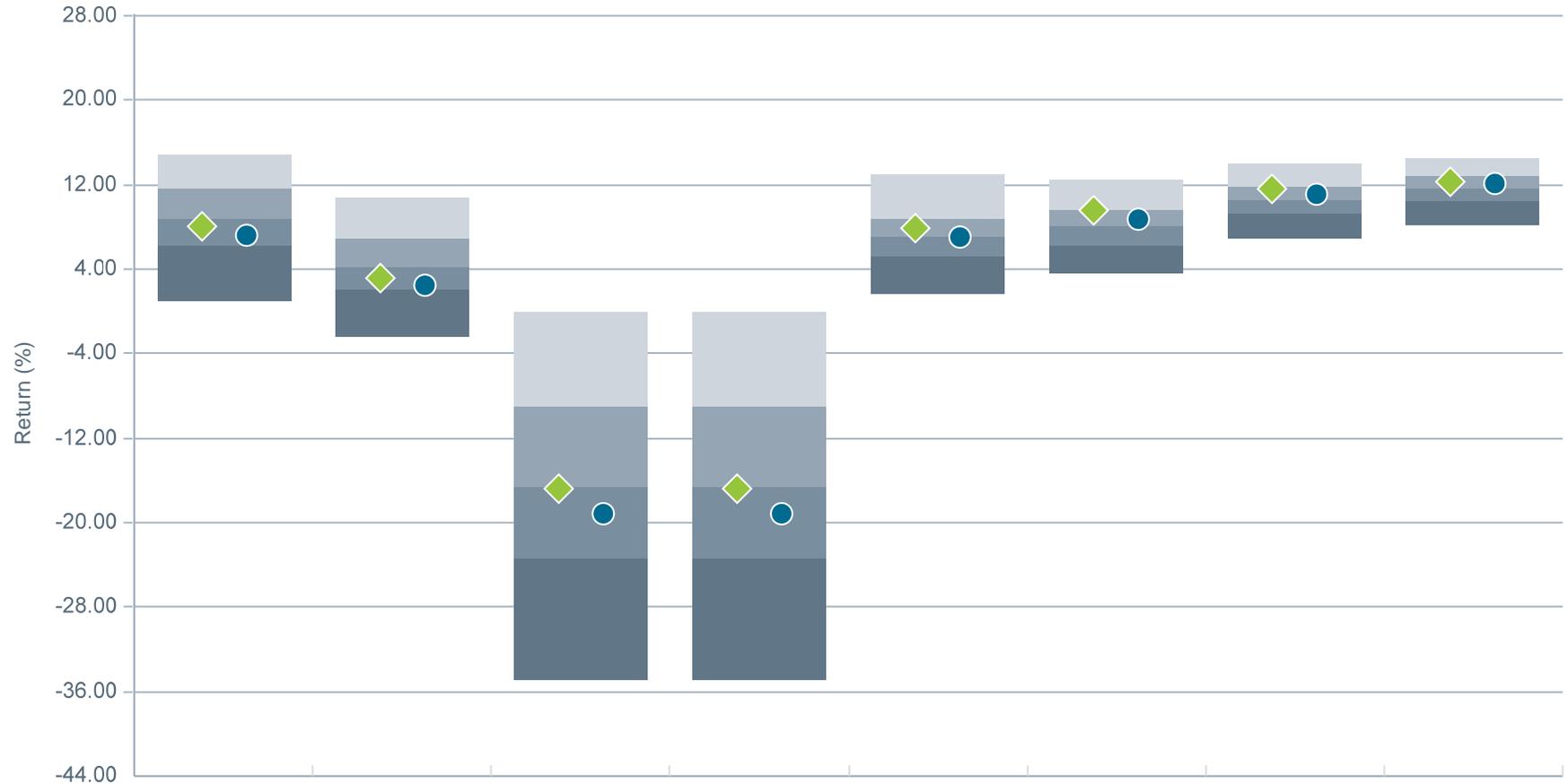


# Composite Profiles



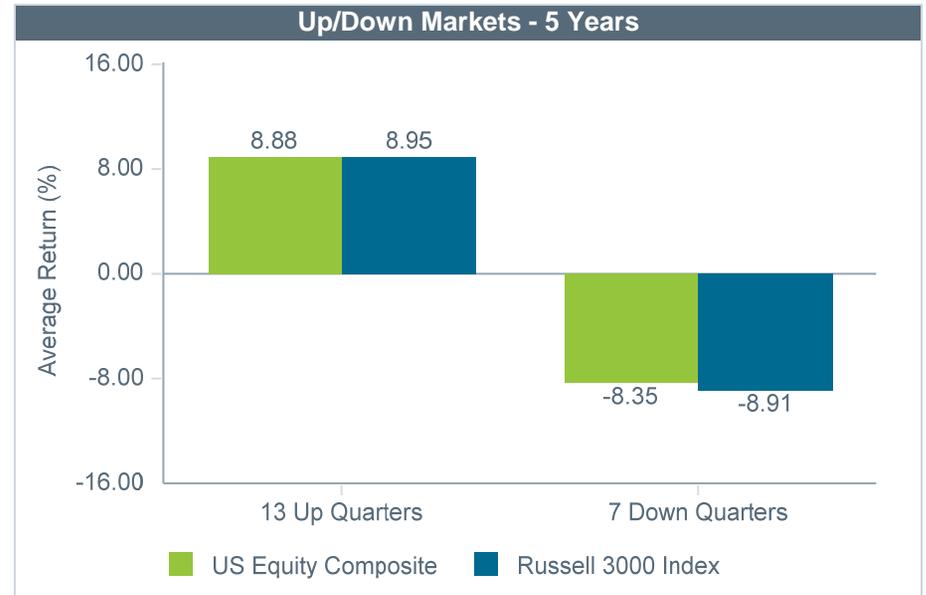
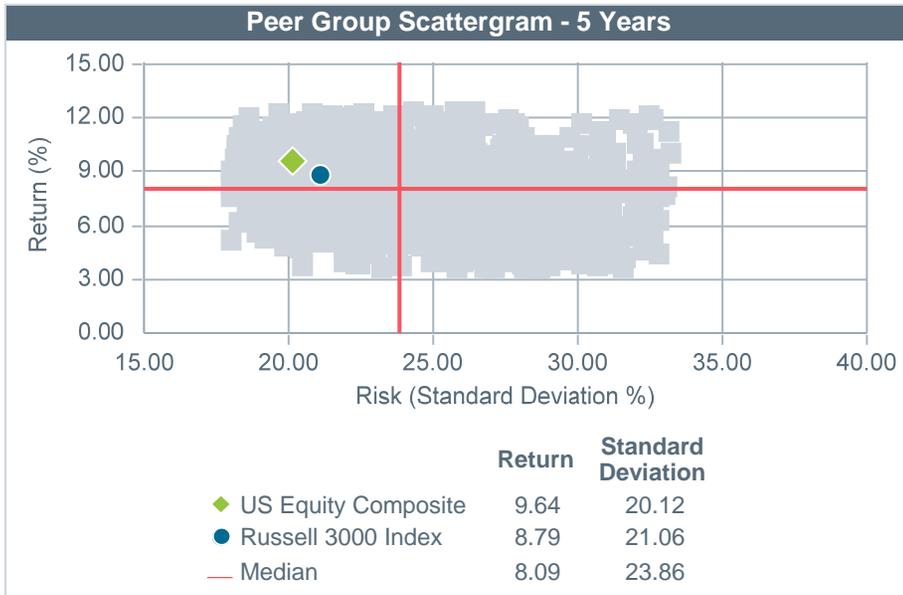
Santa Barbara County Employees' Retirement System  
 US Equity Composite vs. IM US Equity (SA+CF)  
 Peer Group Analysis

As of December 31, 2022



	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ US Equity Composite	8.07 (56)	3.23 (61)	-16.76 (51)	-16.76 (51)	7.82 (37)	9.64 (25)	11.53 (29)	12.31 (36)
● Russell 3000 Index	7.18 (68)	2.40 (70)	-19.21 (64)	-19.21 (64)	7.07 (50)	8.79 (39)	11.04 (40)	12.13 (40)
5th Percentile	14.87	10.80	0.00	0.00	12.92	12.38	14.03	14.43
1st Quartile	11.58	6.87	-8.98	-8.98	8.76	9.58	11.70	12.71
Median	8.68	4.24	-16.59	-16.59	7.06	8.09	10.56	11.66
3rd Quartile	6.25	2.14	-23.43	-23.43	5.15	6.19	9.16	10.43
95th Percentile	0.94	-2.46	-34.94	-34.94	1.67	3.61	6.87	8.26
Population	1,845	1,842	1,838	1,838	1,790	1,748	1,672	1,544

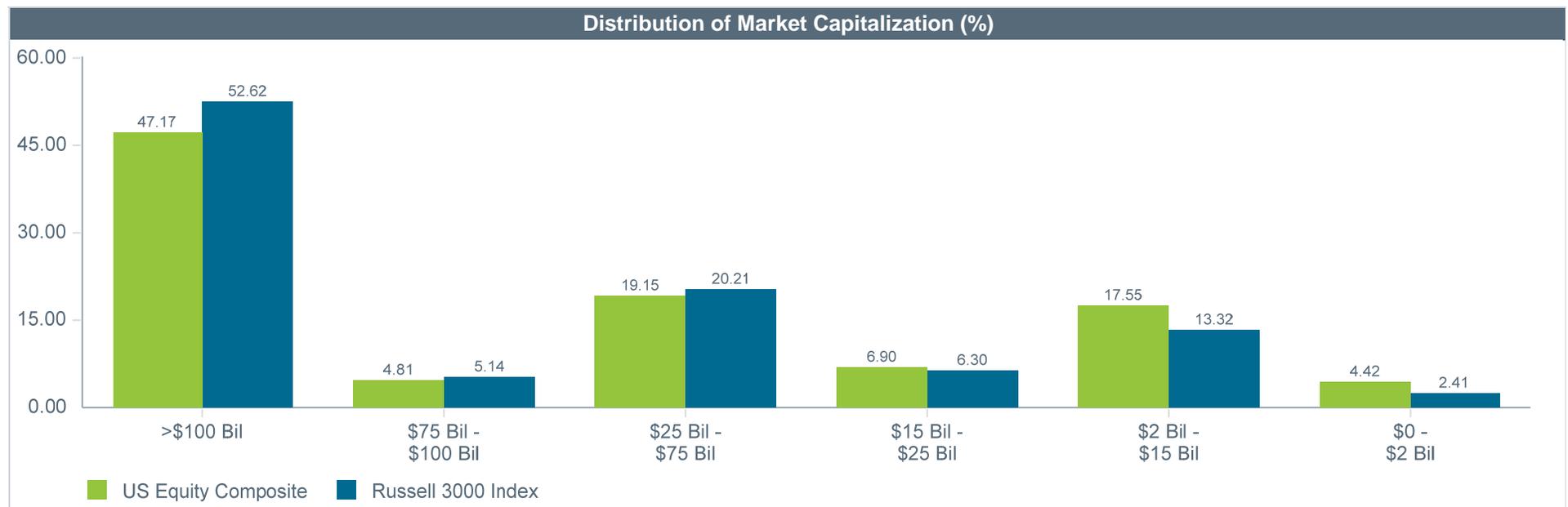
Performance shown is gross of fees. Parentheses contain percentile ranks.



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

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	4.85	5.18	-0.33	-5.83
Microsoft Corp	4.64	4.76	-0.12	3.26
Amazon.com Inc	1.59	1.98	-0.39	-25.66
Berkshire Hathaway Inc	1.50	1.48	0.02	15.68
Alphabet Inc	1.43	1.41	0.02	-7.76
Alphabet Inc	1.38	1.25	0.13	-7.72
Unitedhealth Group Inc	1.34	1.31	0.03	5.30
Johnson & Johnson	1.33	1.23	0.10	8.83
Procter & Gamble Co (The)	1.02	0.95	0.07	20.91
Visa Inc	0.98	0.91	0.07	17.22
% of Portfolio	20.06	20.46	-0.40	

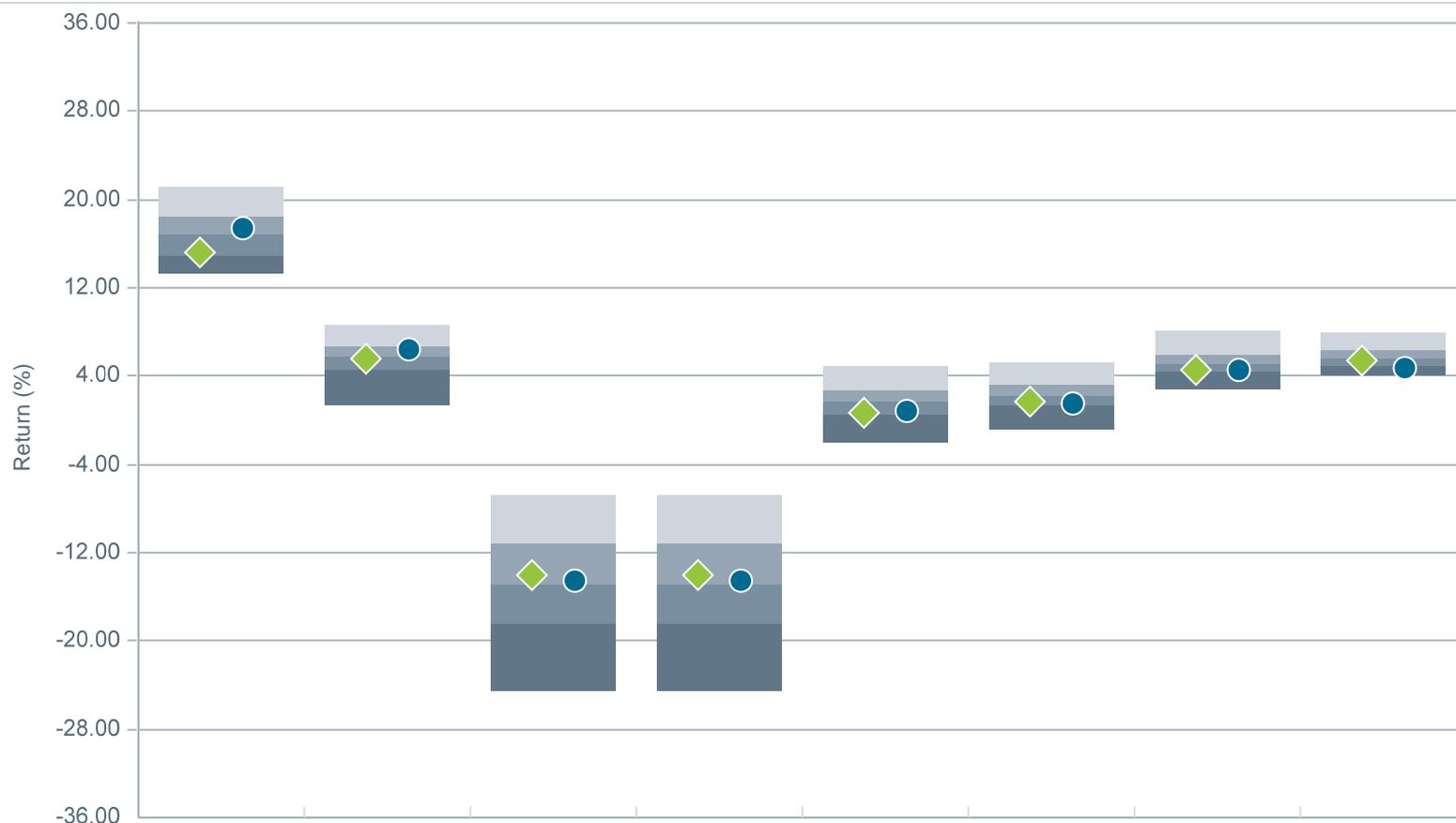
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	332,977	354,764
Median Mkt. Cap (\$M)	3,626	1,954
Price/Earnings Ratio	18.12	18.12
Price/Book Ratio	3.75	3.64
5 Yr. EPS Growth Rate (%)	17.09	17.90
Current Yield (%)	1.64	1.72
Beta (5 Years, Monthly)	0.96	1.00
Number of Securities	1,930	2,960



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

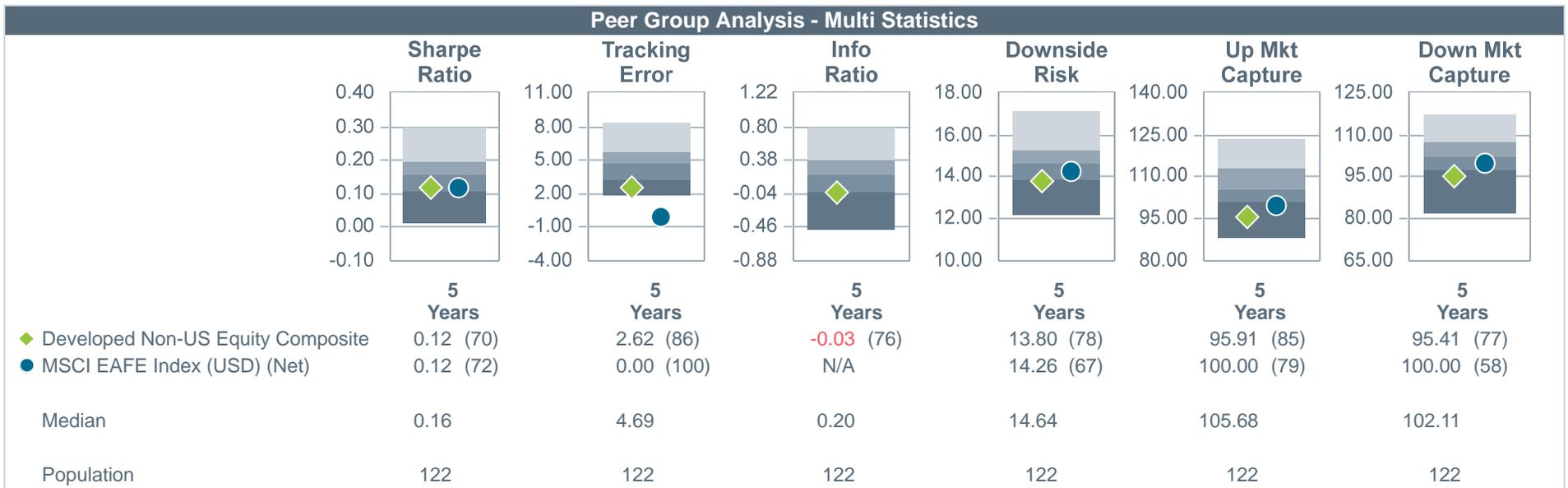
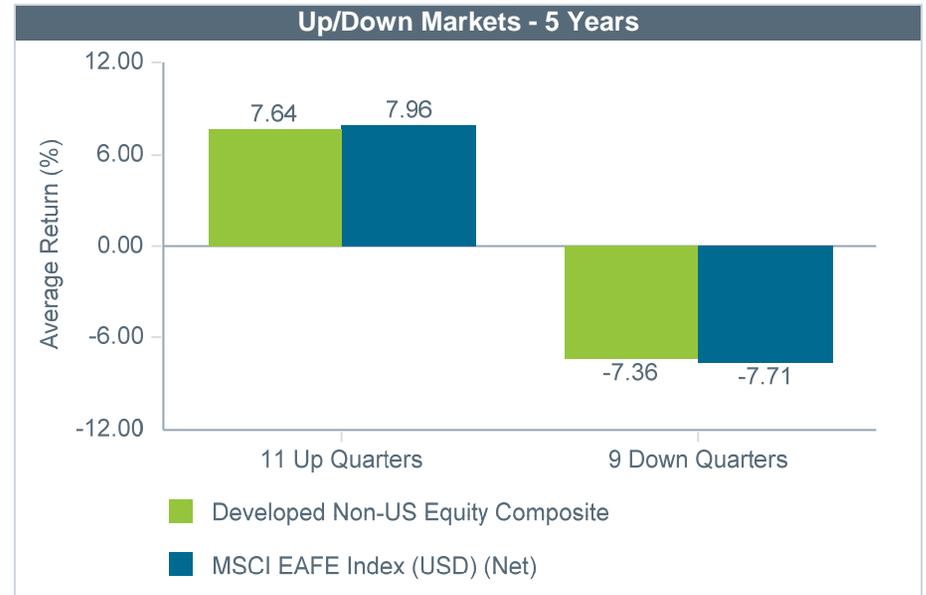
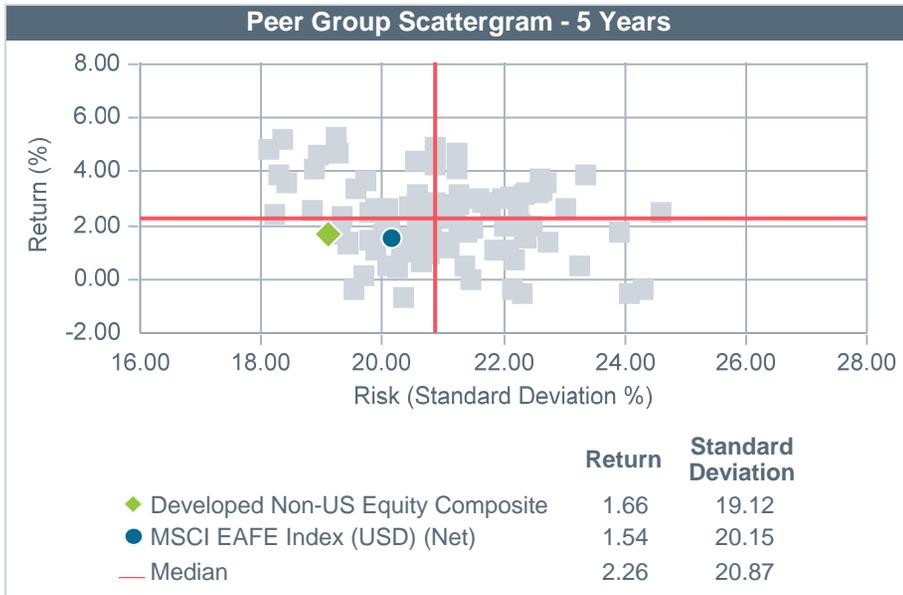
Santa Barbara County Employees' Retirement System  
 Dev'd Mkt. Non-US Equity Composite vs. IM All EAFE (SA+CF)  
 Peer Group Analysis

As of December 31, 2022



	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ Developed Non-US Equity Composite	15.22 (71)	5.58 (57)	-14.00 (41)	-14.00 (41)	0.65 (73)	1.66 (67)	4.55 (71)	5.48 (52)
● MSCI EAFE Index (USD) (Net)	17.34 (43)	6.36 (38)	-14.45 (45)	-14.45 (45)	0.87 (68)	1.54 (68)	4.53 (73)	4.67 (84)
5th Percentile	21.16	8.64	-6.73	-6.73	4.87	5.31	8.16	7.92
1st Quartile	18.36	6.69	-11.13	-11.13	2.66	3.20	6.00	6.46
Median	16.85	5.75	-14.94	-14.94	1.72	2.26	5.06	5.52
3rd Quartile	14.96	4.58	-18.47	-18.47	0.42	1.30	4.43	4.97
95th Percentile	13.35	1.33	-24.54	-24.54	-1.98	-0.78	2.95	4.01
Population	123	123	123	123	123	122	120	118

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



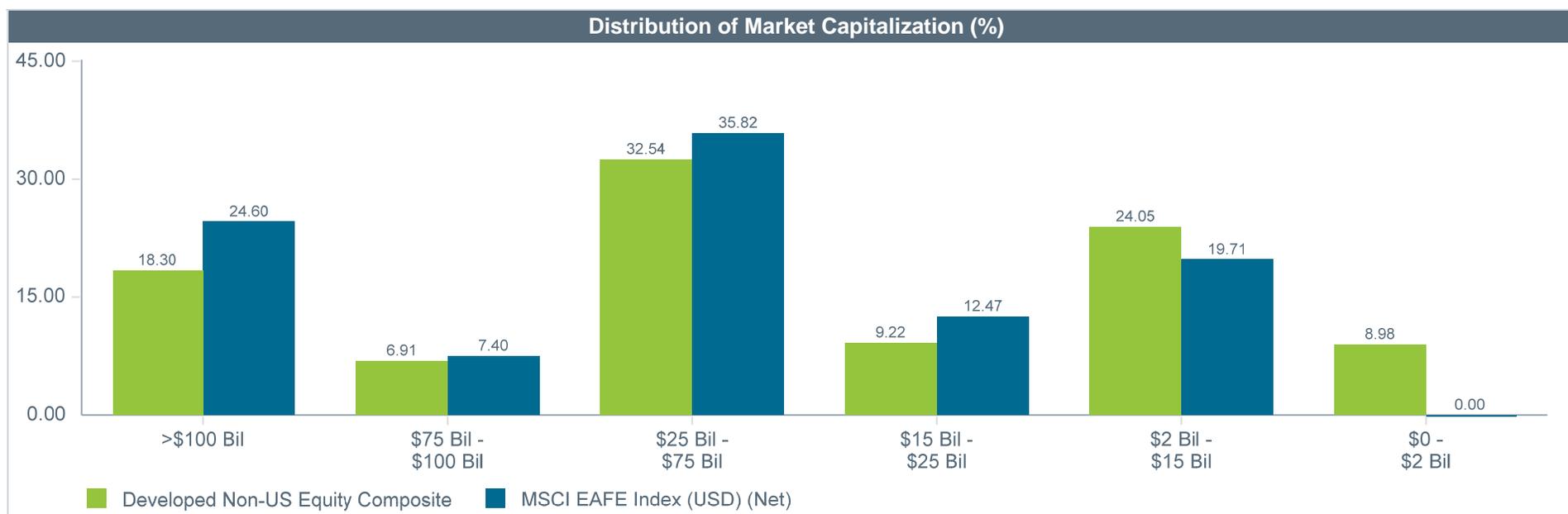
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

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

As of December 31, 2022

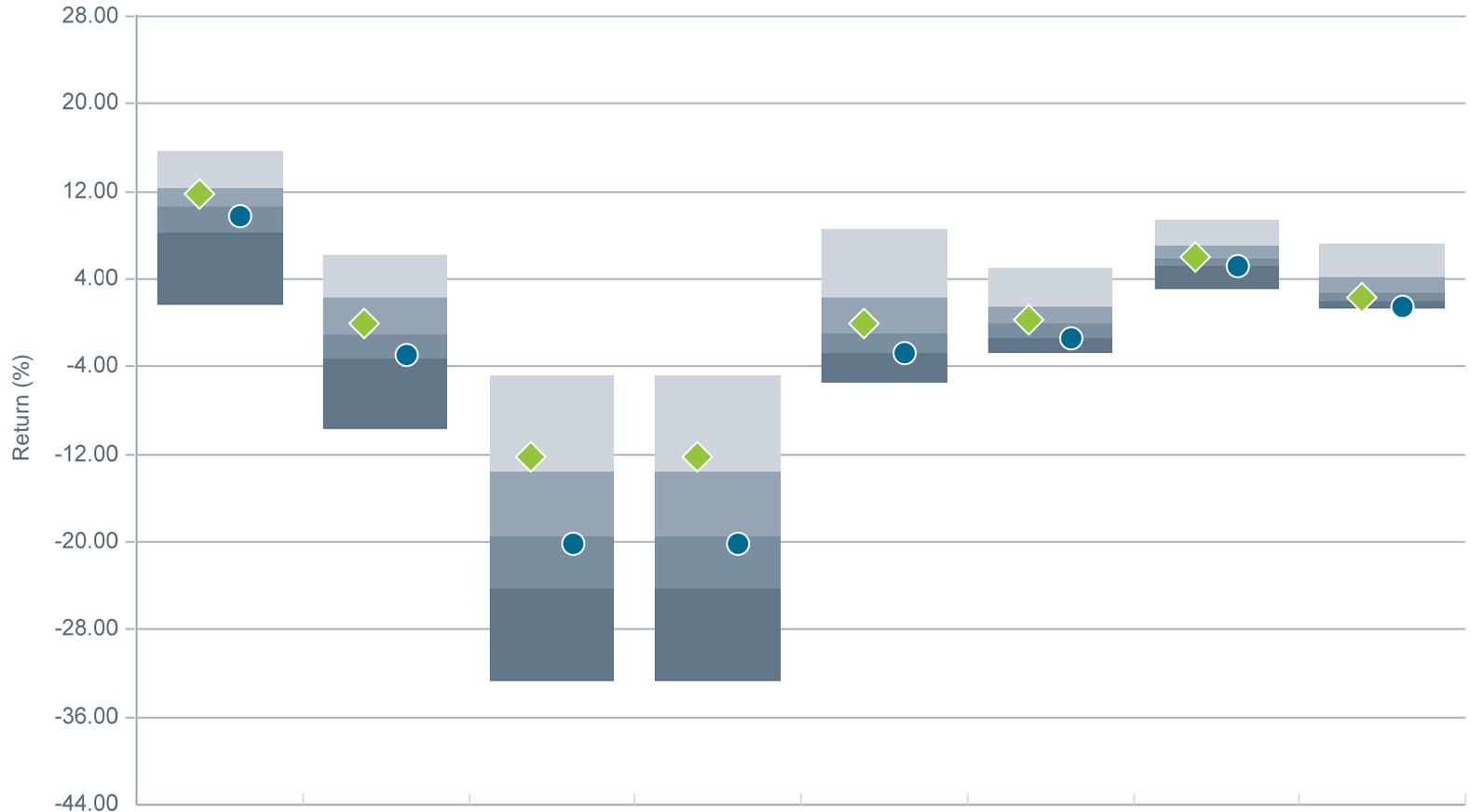
Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
SPDR Gold Trust	2.82	0.00	2.82	9.68
Shell Plc	1.68	1.43	0.25	12.99
Nestle SA, Cham Und Vevey	1.61	2.24	-0.63	6.20
Schlumberger Ltd	1.57	0.00	1.57	49.43
Linde Plc	1.48	0.00	1.48	19.66
Cie Financiere Richemont AG, Zug	1.47	0.47	1.00	34.98
BNP Paribas	1.37	0.44	0.93	33.10
Deutsche Boerse AG Frankfurt	1.32	0.23	1.09	4.56
Deutsche Telekom AG	1.29	0.45	0.84	16.13
Novo Nordisk A/S	1.28	1.57	-0.29	34.34
% of Portfolio	15.89	6.83	9.06	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	67,921	76,741
Median Mkt. Cap (\$M)	683	11,973
Price/Earnings Ratio	12.00	12.91
Price/Book Ratio	2.29	2.44
5 Yr. EPS Growth Rate (%)	11.78	10.54
Current Yield (%)	3.20	3.45
Beta (5 Years, Monthly)	0.91	1.00
Number of Securities	1,924	796



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

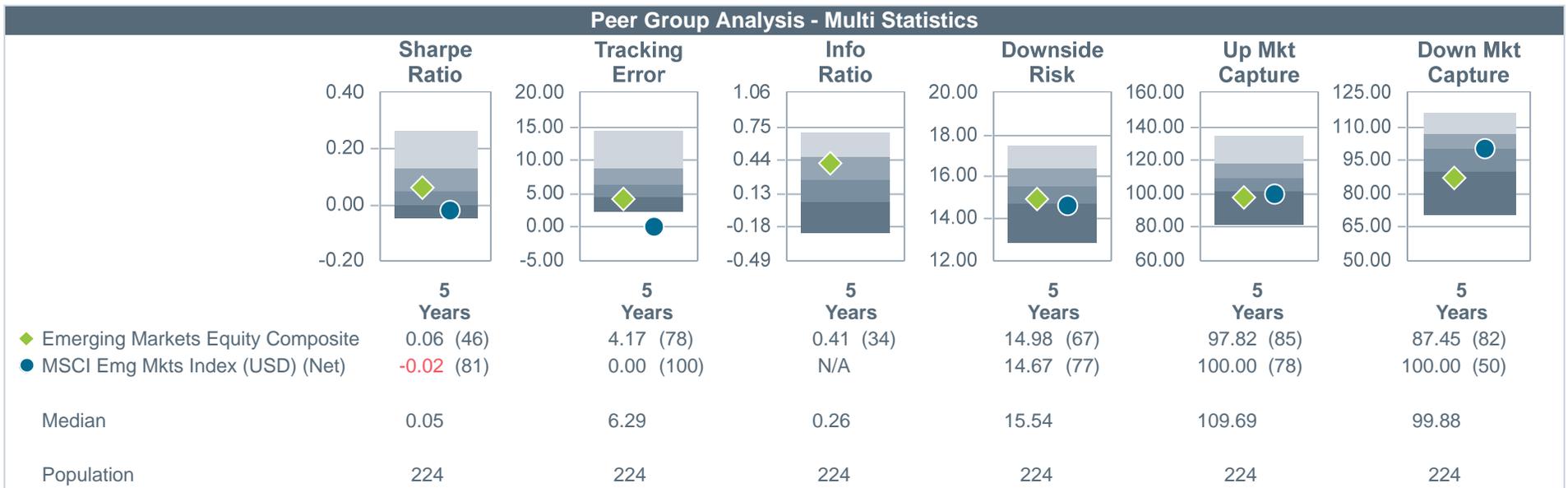
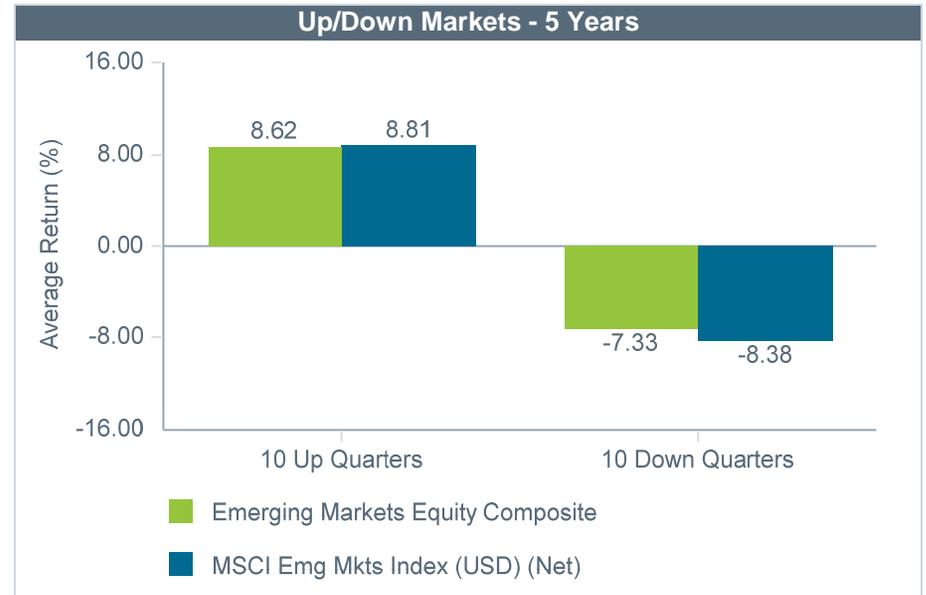
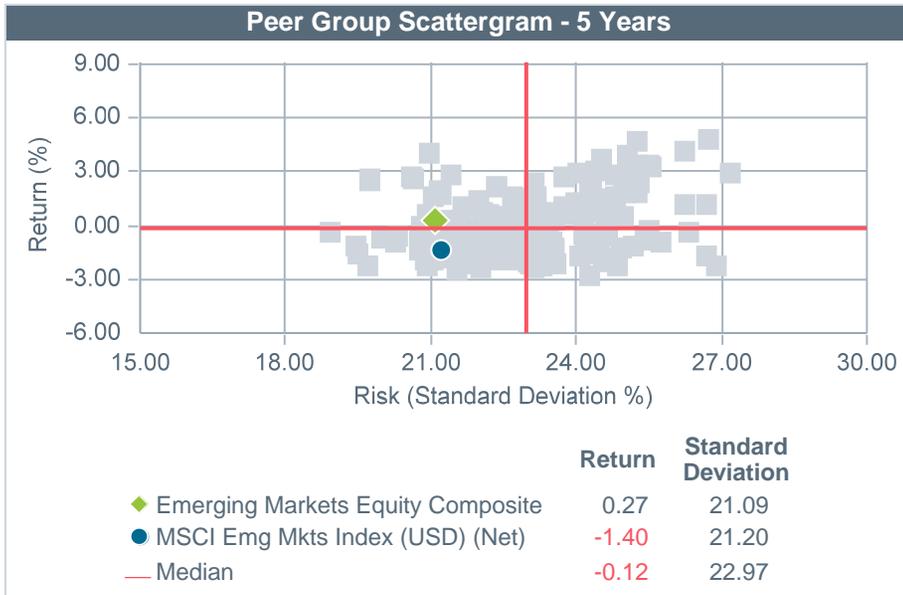
As of December 31, 2022



	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ Emerging Markets Equity Composite	11.85 (29)	-0.03 (40)	-12.26 (19)	-12.26 (19)	-0.09 (41)	0.27 (44)	5.96 (47)	2.30 (68)
● MSCI Emg Mkts Index (USD) (Net)	9.70 (63)	-2.99 (70)	-20.09 (54)	-20.09 (54)	-2.69 (72)	-1.40 (75)	5.17 (74)	1.44 (89)
5th Percentile	15.67	6.28	-4.82	-4.82	8.48	4.97	9.48	7.23
1st Quartile	12.30	2.27	-13.60	-13.60	2.36	1.53	6.96	4.17
Median	10.59	-1.03	-19.57	-19.57	-0.98	-0.12	5.86	2.82
3rd Quartile	8.29	-3.22	-24.28	-24.28	-2.83	-1.41	5.10	2.01
95th Percentile	1.58	-9.67	-32.69	-32.69	-5.50	-2.76	3.13	1.23
Population	270	270	268	268	252	224	211	171

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





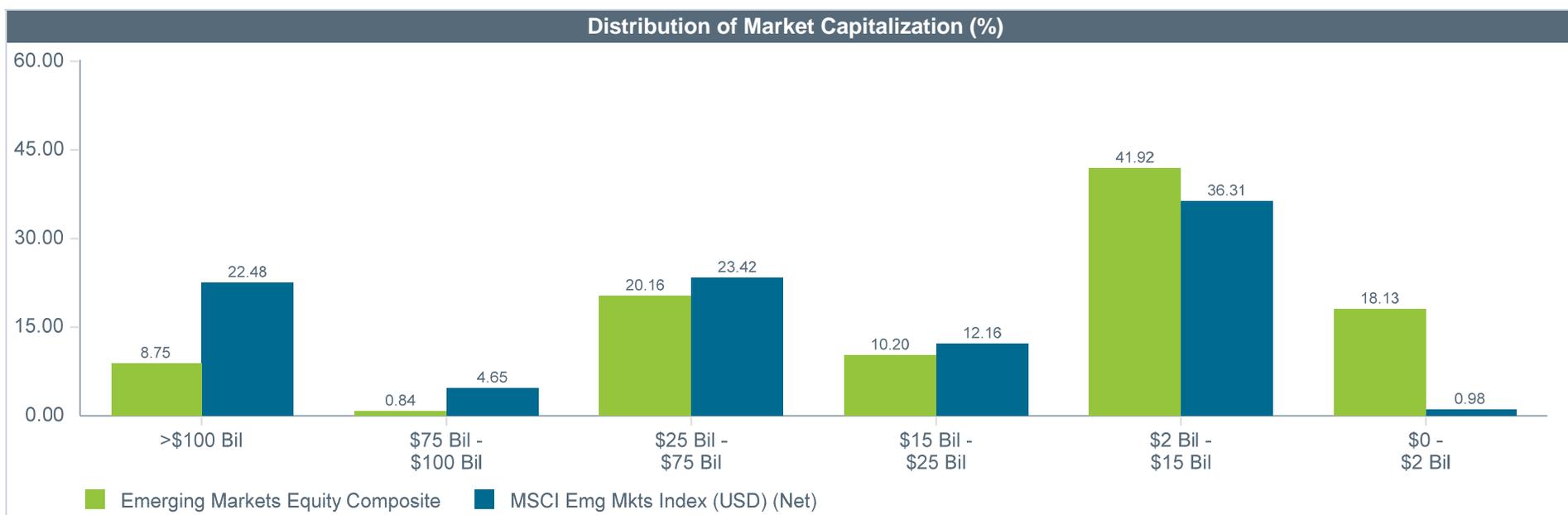
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

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

As of December 31, 2022

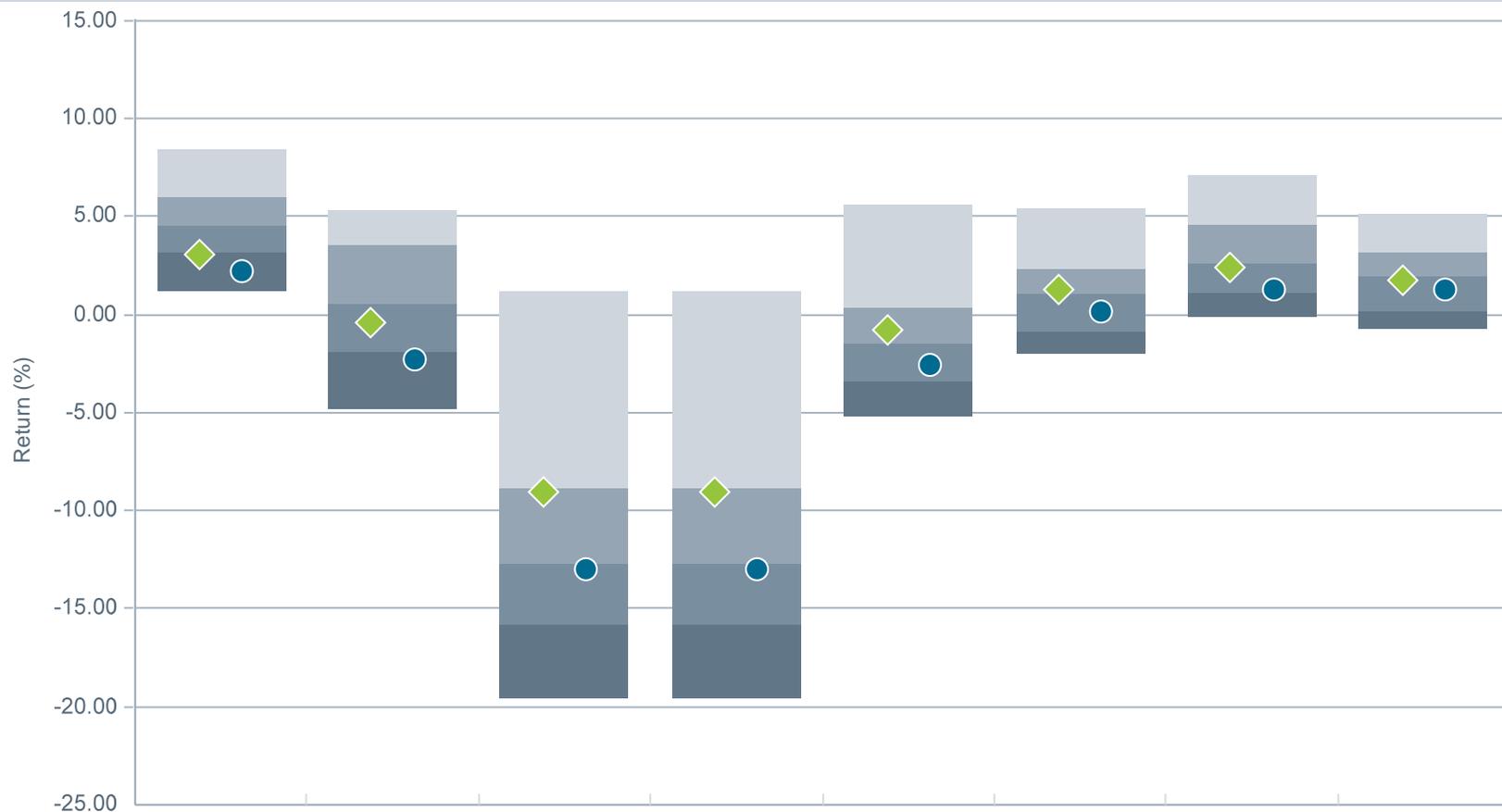
Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Reliance Industries Ltd	3.19	1.48	1.71	5.33
China Construction Bank Corp	2.49	0.95	1.54	8.44
Ping An Insurance Group	1.50	0.66	0.84	32.65
SK Hynix Inc	1.37	0.51	0.86	3.05
Hon Hai Precision Industry Co Ltd	1.16	0.64	0.52	1.35
Ind. & Com. Bank of China Ltd	1.06	0.46	0.60	9.98
Axis Bank Ltd	1.01	0.41	0.60	25.22
Alibaba Group Holding Ltd	0.99	2.59	-1.60	11.39
Housing Development Fin Corp Ltd	0.98	0.87	0.11	13.36
Petroleo Brasileiro Sa Petr Preferred	0.89	0.35	0.54	-3.70
% of Portfolio	14.64	8.92	5.72	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	31,646	87,061
Median Mkt. Cap (\$M)	450	6,202
Price/Earnings Ratio	6.90	10.90
Price/Book Ratio	1.67	2.61
5 Yr. EPS Growth Rate (%)	13.74	15.46
Current Yield (%)	5.43	3.26
Beta (5 Years, Monthly)	0.94	1.00
Number of Securities	3,280	1,377



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

As of December 31, 2022



	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ Fixed Income	3.04 (79)	-0.42 (55)	-9.00 (26)	-9.00 (26)	-0.81 (44)	1.28 (43)	2.41 (54)	1.73 (53)
● Bloomberg US Unv Bond Index	2.24 (87)	-2.31 (82)	-12.99 (52)	-12.99 (52)	-2.54 (66)	0.18 (65)	1.26 (75)	1.33 (55)
5th Percentile	8.39	5.28	1.18	1.18	5.58	5.46	7.07	5.15
1st Quartile	6.02	3.51	-8.86	-8.86	0.37	2.33	4.62	3.15
Median	4.57	0.50	-12.67	-12.67	-1.44	1.09	2.63	1.97
3rd Quartile	3.18	-1.90	-15.81	-15.81	-3.36	-0.89	1.14	0.18
95th Percentile	1.20	-4.79	-19.56	-19.56	-5.21	-2.03	-0.11	-0.71
Population	188	188	187	187	184	173	167	144

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



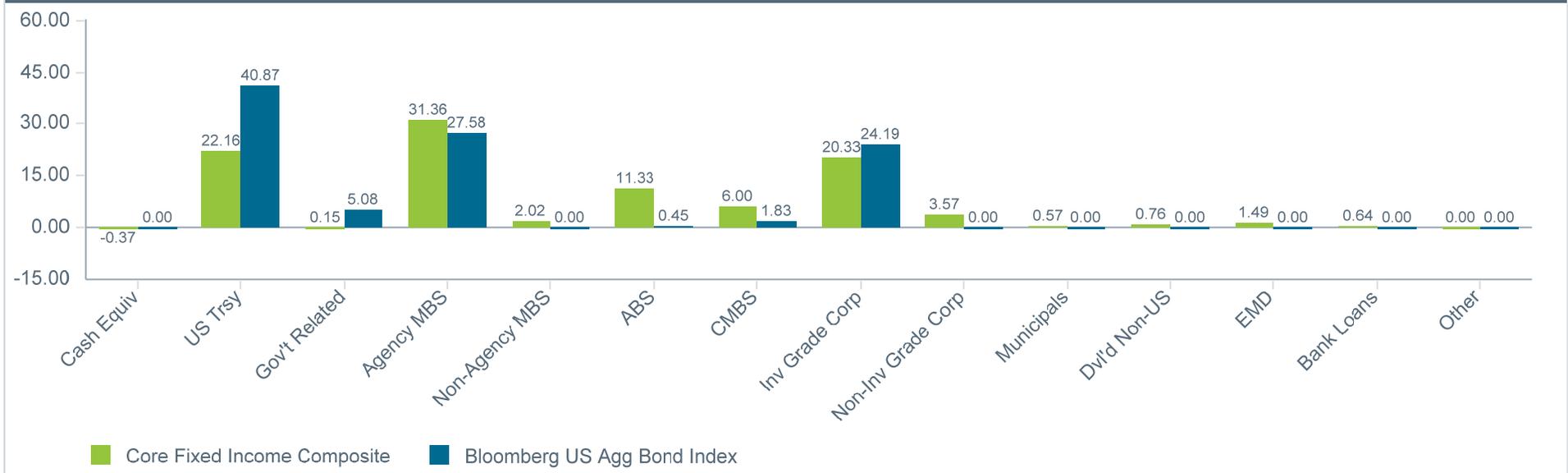
Santa Barbara County Employees' Retirement System  
 Core Fixed Income Composite vs. Bloomberg US Agg Bond Index  
 Portfolio Characteristics

As of December 31, 2022

Portfolio Characteristics

	Portfolio	Benchmark
Avg. Maturity	8.14	8.44
Avg. Quality	Aa2/Aa3	Aa1/Aa2
Convexity	0.86	0.61
Coupon Rate (%)	3.48	2.69
Current Yield (%)	3.90	N/A
Effective Duration	6.64	6.17
Yield To Maturity (%)	5.41	4.68
Yield To Worst (%)	5.39	4.68

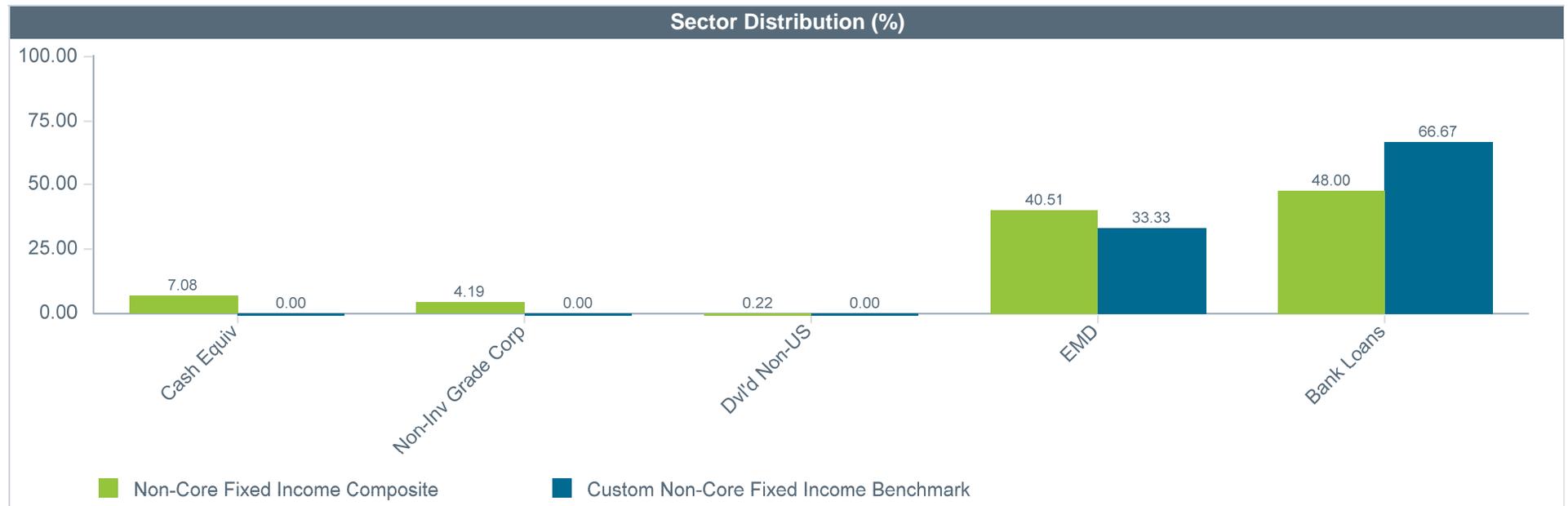
Sector Distribution (%)



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

As of December 31, 2022

Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	6.89	6.41
Avg. Quality	Ba2	Ba2
Coupon Rate (%)	5.59	5.39
Current Yield (%)	7.91	5.73
Modified Duration	2.95	N/A
Yield To Maturity (%)	9.88	6.78



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

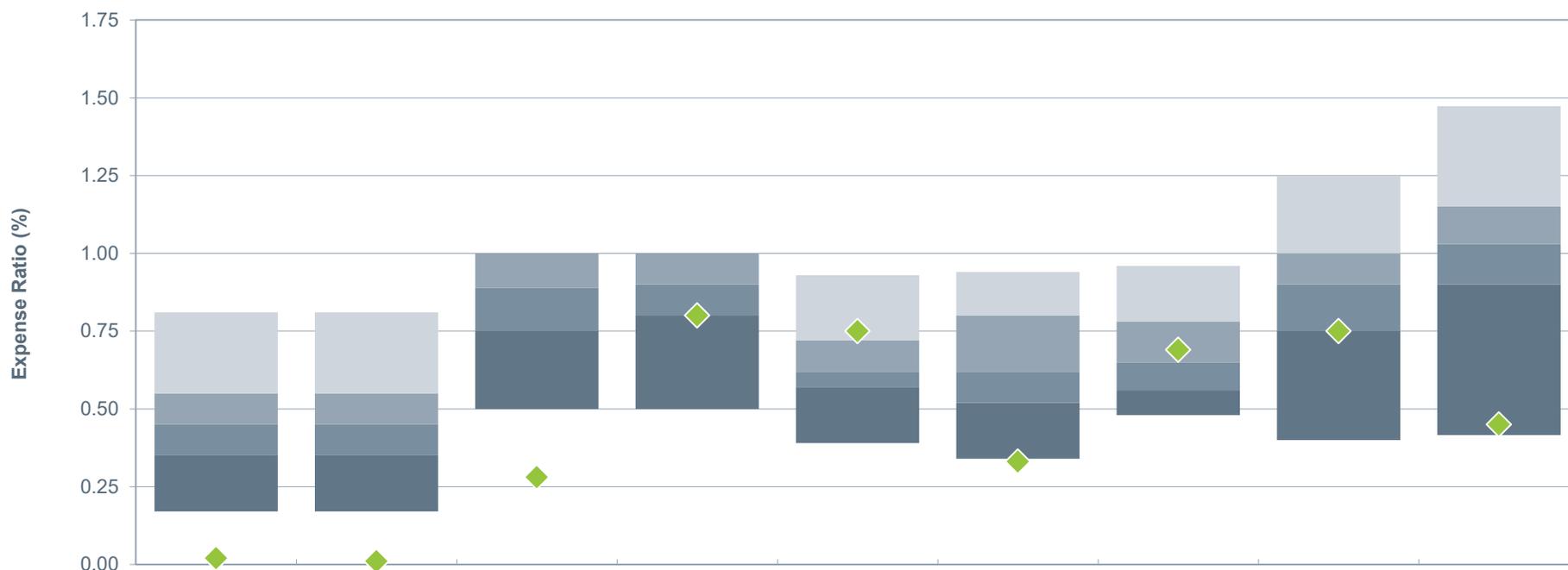


Santa Barbara County Employees' Retirement System  
Alternative Investment Private Credit Fund Performance Listing

As of September 30, 2022

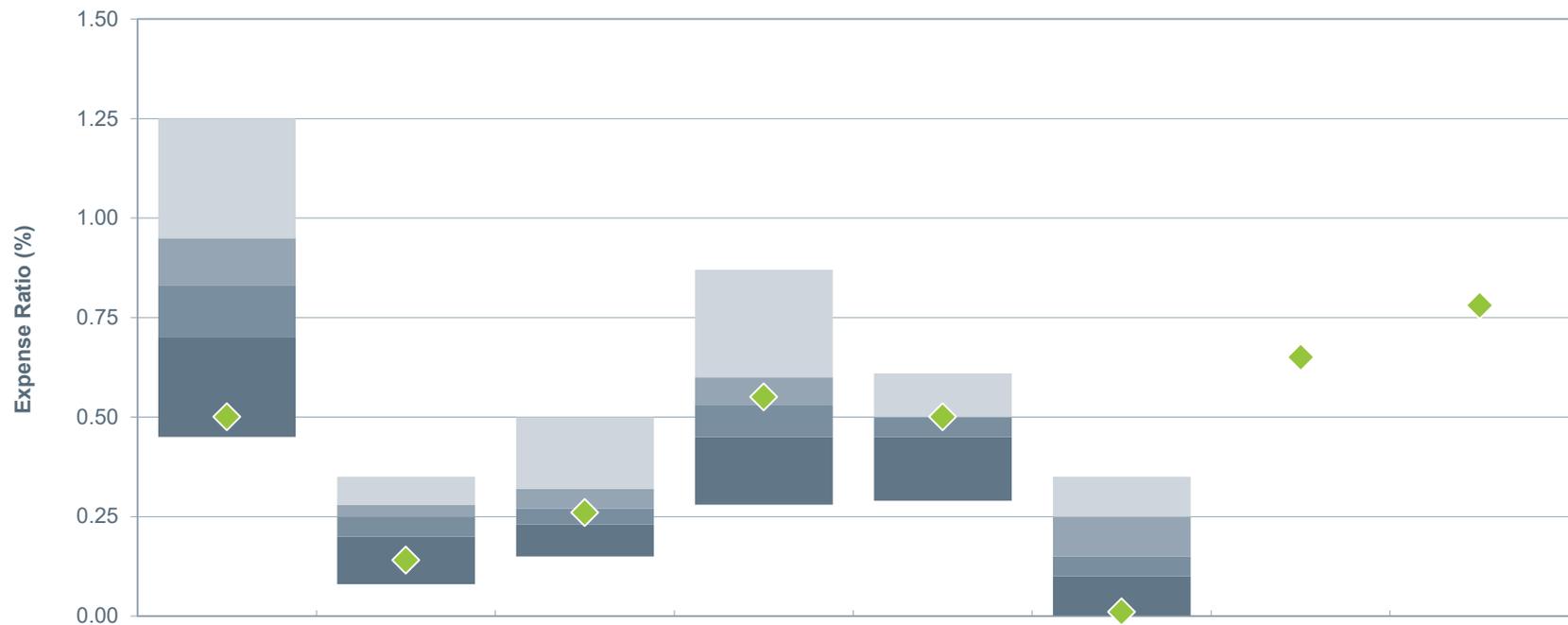
Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Index IRR (%)	Fund Multiple
AG Direct Lending Fund III, LP	2018	Private Credit - Direct Lending	25,000,000	23,035,117	12,225,748	18,650,684	10.44	3.66	1.34
First Eagle Direct Lending Fund IV	2019	Private Credit - Direct Lending	20,000,000	35,832,505	22,884,338	15,717,755	6.43	3.19	1.08
PIMCO Private Income Fund Onshore Feeder LLC	2019	Private Credit - Direct Lending	20,000,000	20,000,000	0	25,839,287	10.65	4.55	1.29
AG Direct Lending Fund IV, LP	2020	Private Credit - Direct Lending	20,000,000	17,129,726	1,085,994	18,568,118	15.71	-1.99	1.15
Deerpath Capital V, LP	2020	Private Credit - Direct Lending	20,000,000	18,338,462	1,887,825	18,815,018	7.99	1.55	1.13
Deerpath Capital VI, LP	2021	Private Credit - Direct Lending	20,000,000	15,166,503	609,126	15,458,814	N/M	N/M	1.06
First Eagle Direct Lending Fund V-B	2021	Private Credit - Direct Lending	20,000,000	13,184,027	3,518,493	10,697,586	9.08	-3.48	1.08
AG Direct Lending Evergreen Fund LP	2022	Private Credit - Direct Lending	20,000,000	7,000,000	0	6,970,004	N/M	N/M	1.00
			<b>165,000,000</b>	<b>149,686,340</b>	<b>42,211,525</b>	<b>130,717,266</b>	<b>9.62</b>	<b>2.42</b>	<b>1.16</b>

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	BNY Mellon HEDI (SA)	BNY Mellon R1000 Index - NL (SA)	Dimensional U.S. Small Cap Value (CF)	RHJ Sm Cap Opportunities (SA)	First Eagle International Value Equity (SA)	PanAgora Dynamic International Equity (SA)	Artisan Non-U.S. Growth (SA)	Acadian Non-US Small Cap Equity (CF)	DFA Emg Mkts Value;I (DFEVX)
Peer Group	U.S. Large Cap Core Equity (SA+CF)	U.S. Large Cap Core Equity (SA+CF)	U.S. Small Cap Value Equity (SA+CF)	U.S. Small Cap Growth Equity (SA+CF)	EAFE Value (SA)	EAFE Core (SA)	EAFE Growth (SA)	International Small Cap Equity (SA+CF)	Emerging Markets Equity (MF)
<b>Fund Expense Ratio</b>	<b>0.02</b>	<b>0.01</b>	<b>0.28</b>	<b>0.80</b>	<b>0.75</b>	<b>0.33</b>	<b>0.69</b>	<b>0.75</b>	<b>0.45</b>
Median Expense Ratio	0.45	0.45	0.89	0.90	0.62	0.62	0.65	0.90	1.03
Percentile Rank	1	1	2	27	82	5	67	27	7
Population	590	590	481	502	84	219	48	221	218

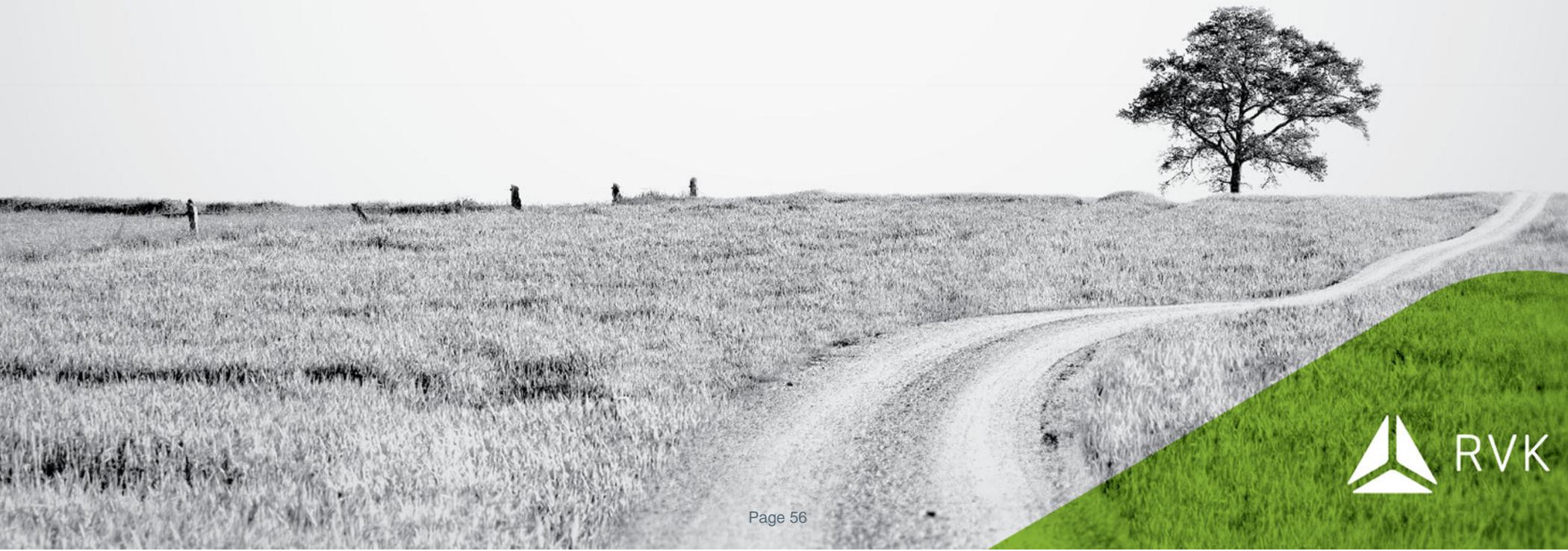
Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).  
The fee peer groups consist of only institutional share classes.  
Peer group data is sourced from eVestment & Morningstar.



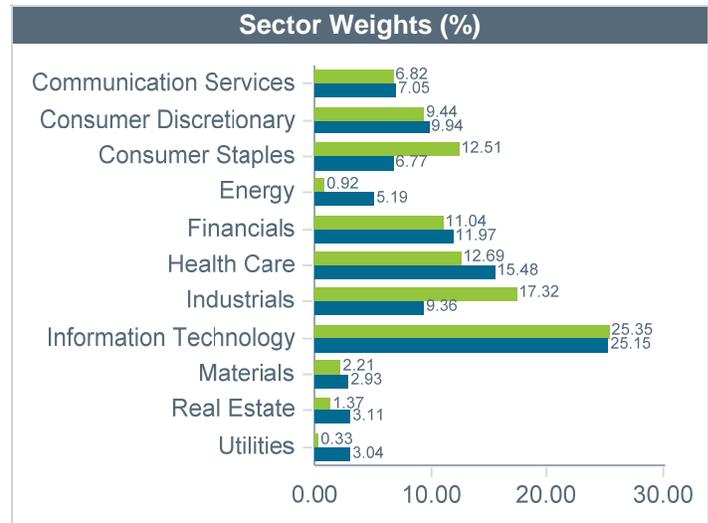
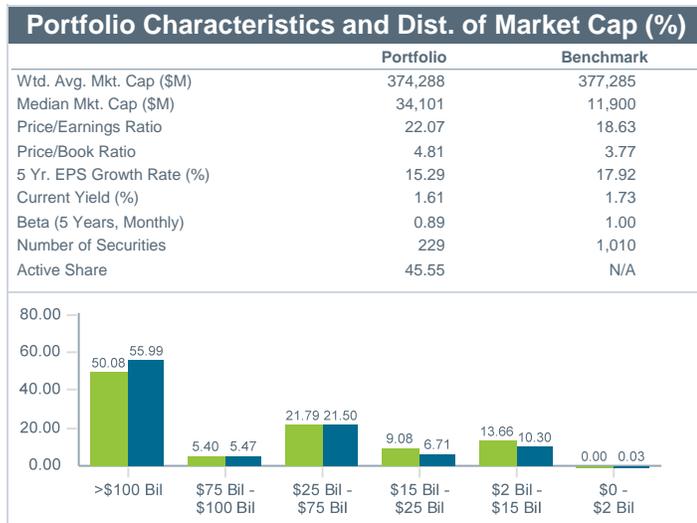
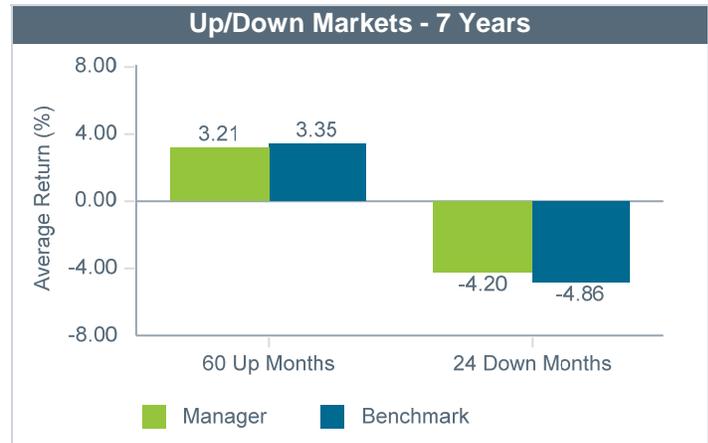
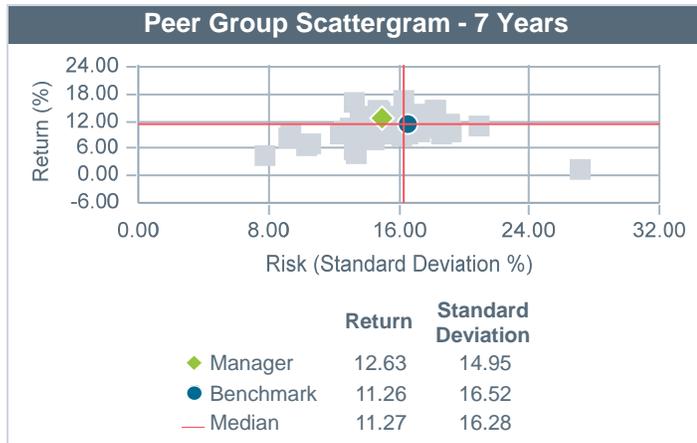
Fund	RBC Emerging Markets Equity (CF)	Garcia Hamilton Core Fixed Income (SA)	PGIM Core Plus Fixed Income (CF)	Wellington Blended Opportunistic EMD (CF)	Beach Point Leveraged Loan (CF)	BNY Mellon TIPS - NL (CF)	Cohen & Steers Real Assets Fund (CIT)	Nuveen Real Asset Income Fund (SA)
Peer Group	Emerging 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	0.78
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	391	376	269	172	59	39	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



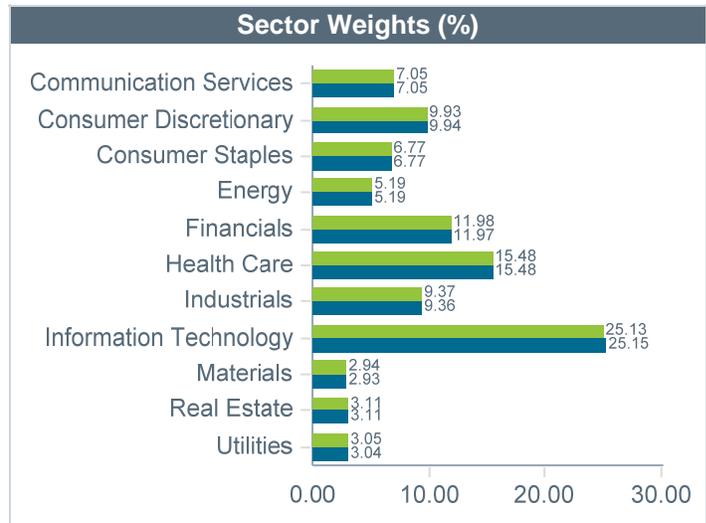
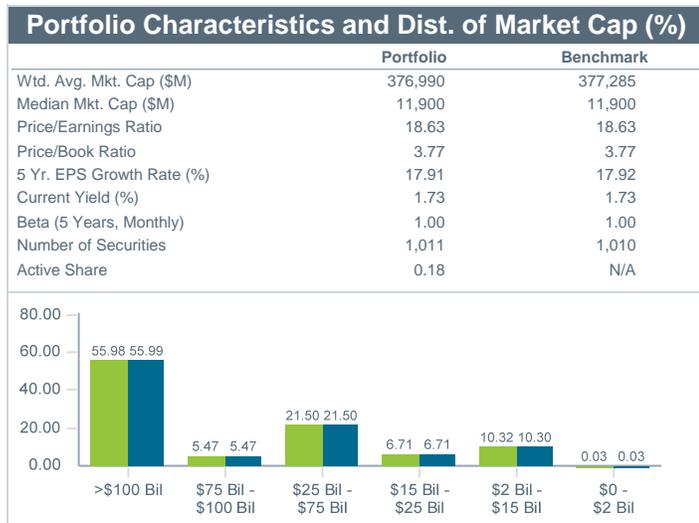
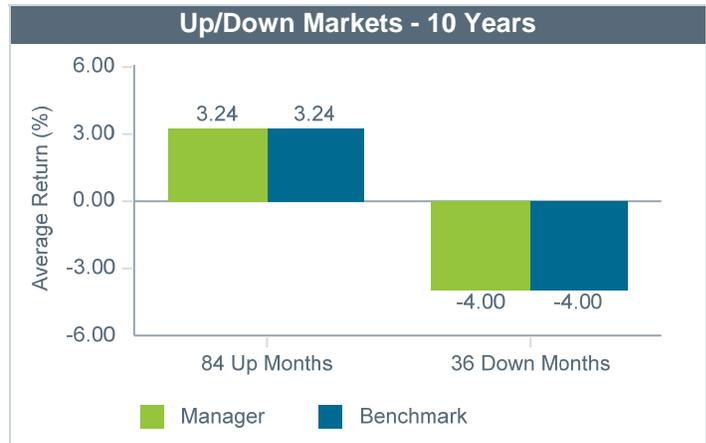
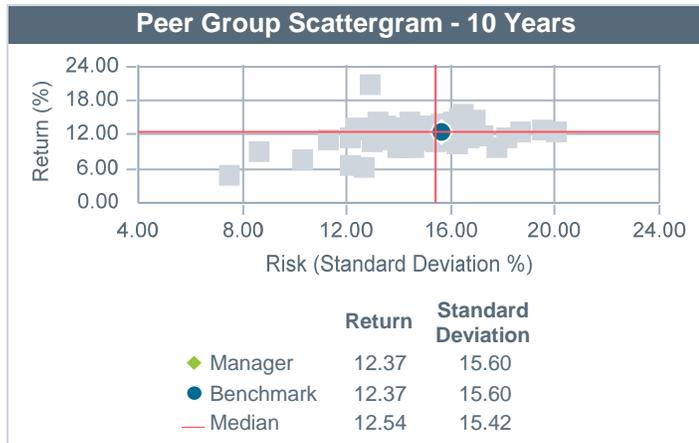
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	8.62	-15.07	8.10	10.86	12.63	N/A	25.37	18.63	32.61	-0.05	23.27
Benchmark	7.24	-19.13	7.35	9.13	11.26	12.37	26.45	20.96	31.43	-4.78	21.69
Difference	1.38	4.06	0.75	1.73	1.37	N/A	-1.08	-2.33	1.18	4.73	1.58
Peer Group Median	8.08	-16.86	7.47	9.08	11.27	12.54	27.77	17.54	30.03	-5.07	22.09
Rank	43	38	33	12	14	N/A	69	44	21	9	35
Population	185	184	179	174	170	148	208	225	254	276	302



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).



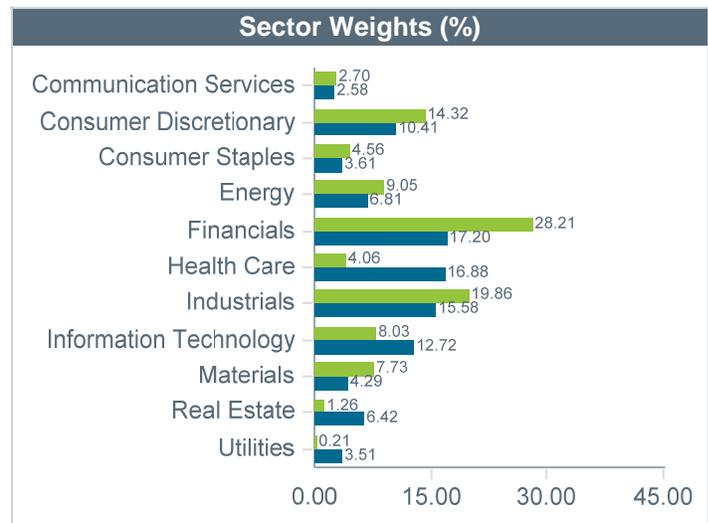
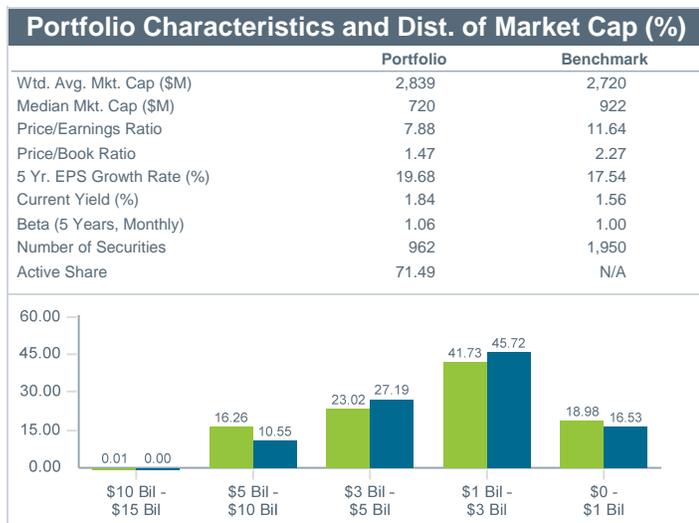
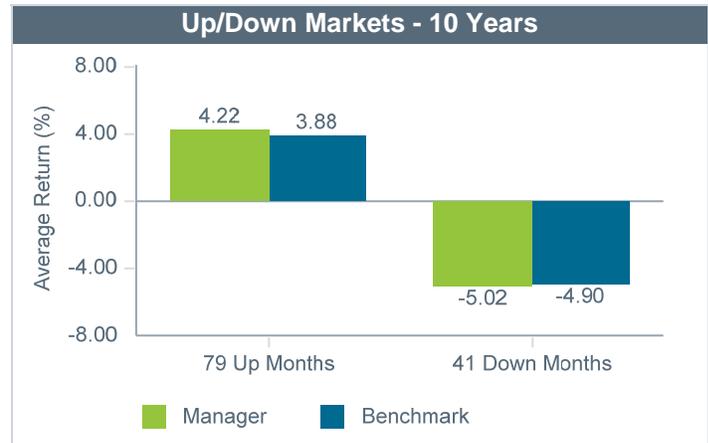
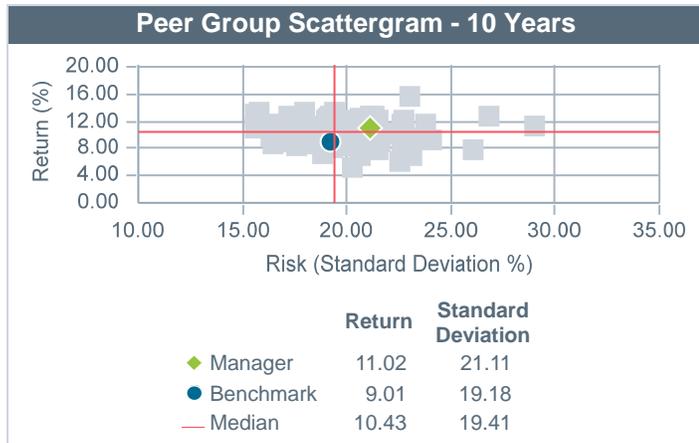
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	7.25	-19.14	7.33	9.12	11.25	12.37	26.46	20.91	31.42	-4.77	21.68
Benchmark	7.24	-19.13	7.35	9.13	11.26	12.37	26.45	20.96	31.43	-4.78	21.69
Difference	0.01	-0.01	-0.02	-0.01	-0.01	0.00	0.01	-0.05	-0.01	0.01	-0.01
Peer Group Median	8.08	-16.86	7.47	9.08	11.27	12.54	27.77	17.54	30.03	-5.07	22.09
Rank	73	73	54	50	51	59	60	30	34	46	57
Population	185	184	179	174	170	148	208	225	254	276	302



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



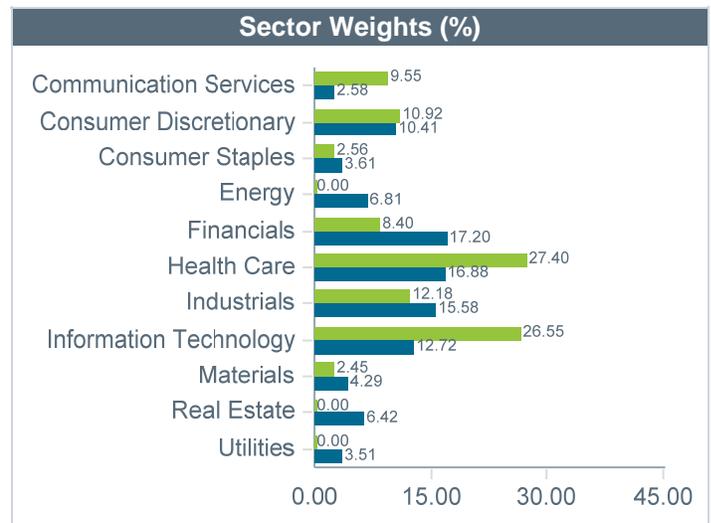
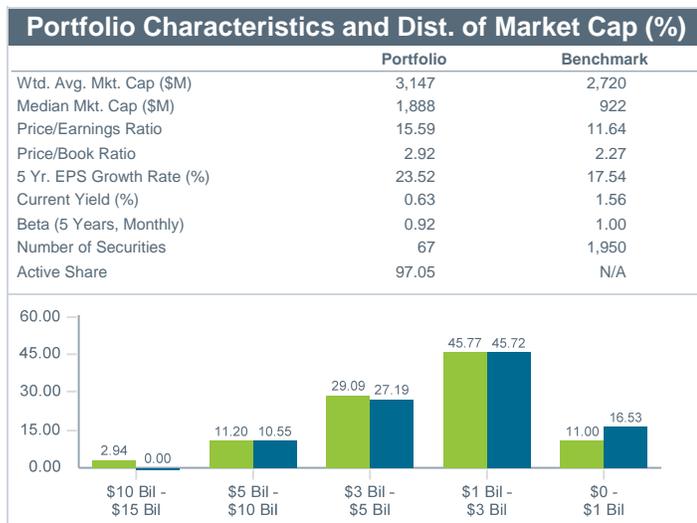
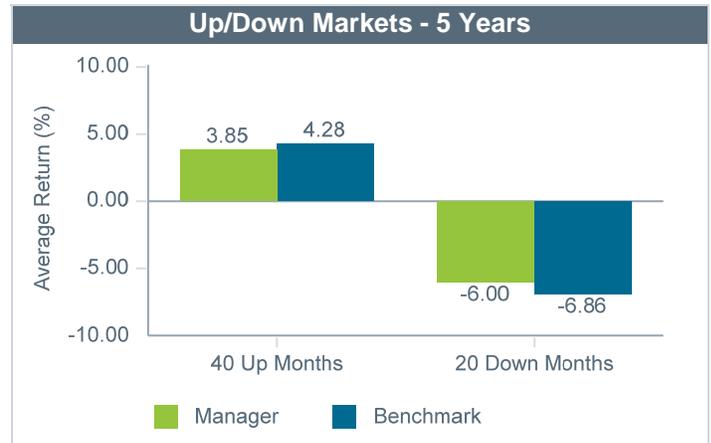
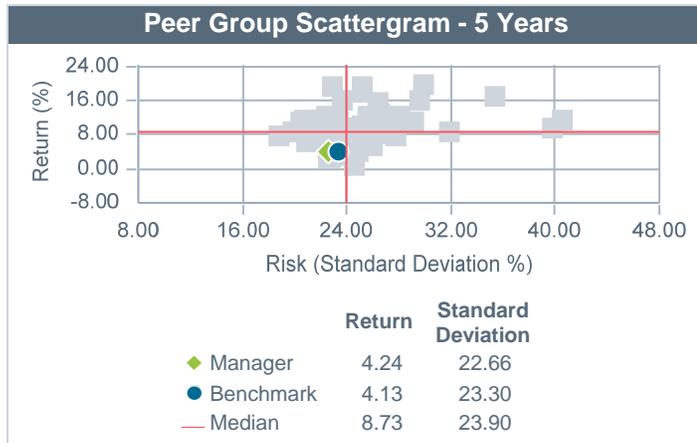
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	14.54	-1.62	12.70	7.76	10.57	11.02	40.61	3.47	19.22	-14.84	7.68
Benchmark	6.23	-20.44	3.10	4.13	7.90	9.01	14.82	19.96	25.53	-11.01	14.65
Difference	8.31	18.82	9.60	3.63	2.67	2.01	25.79	-16.49	-6.31	-3.83	-6.97
Peer Group Median	11.05	-10.85	7.53	5.74	9.59	10.43	30.09	5.16	25.07	-14.08	11.59
Rank	10	6	7	23	28	32	9	56	86	59	77
Population	166	166	161	157	153	145	176	188	194	212	219



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



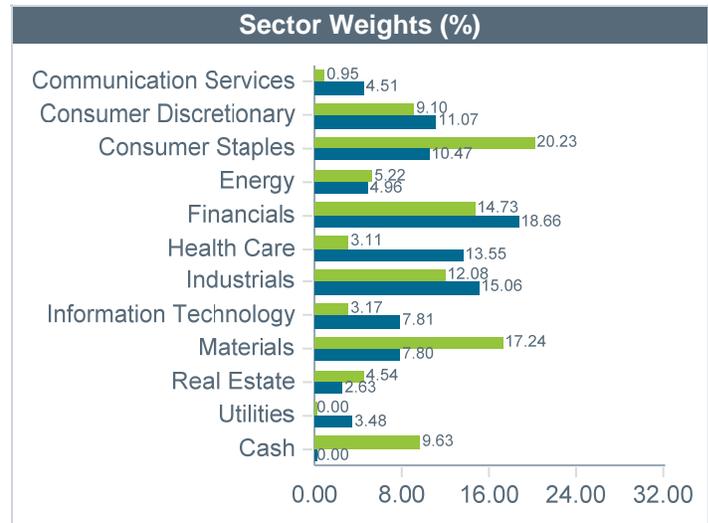
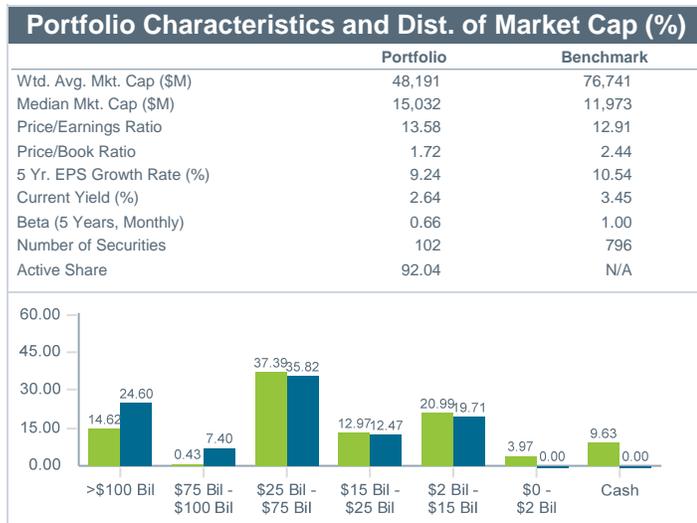
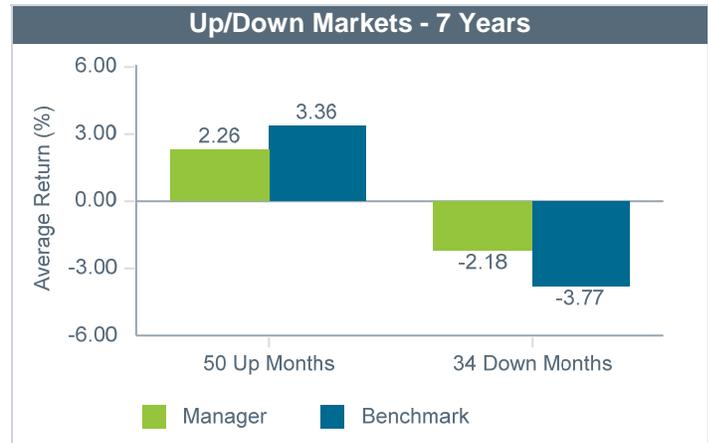
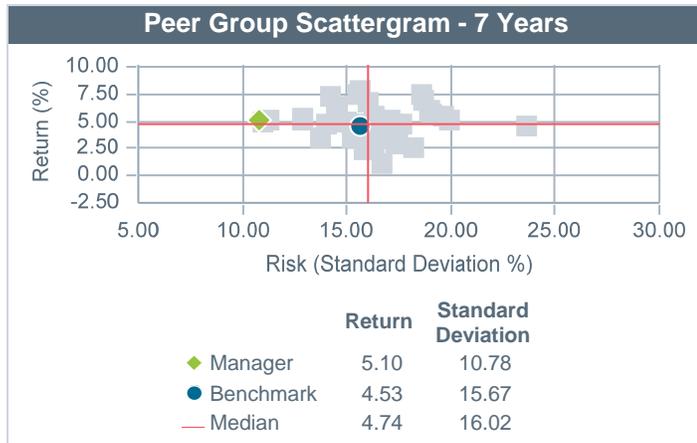
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
<b>Manager</b>	<b>3.31</b>	<b>-23.84</b>	<b>3.36</b>	<b>4.24</b>	<b>N/A</b>	<b>N/A</b>	<b>16.27</b>	<b>24.70</b>	<b>18.89</b>	<b>-6.24</b>	<b>28.77</b>
Benchmark	6.23	-20.44	3.10	4.13	7.90	9.01	14.82	19.96	25.53	-11.01	14.65
Difference	-2.92	-3.40	0.26	0.11	N/A	N/A	1.45	4.74	-6.64	4.77	14.12
Peer Group Median	4.52	-27.30	5.50	8.73	11.29	12.24	11.54	42.32	28.99	-3.83	24.16
Rank	63	28	75	94	N/A	N/A	37	88	92	67	26
Population	117	116	114	112	107	102	130	138	148	159	161



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



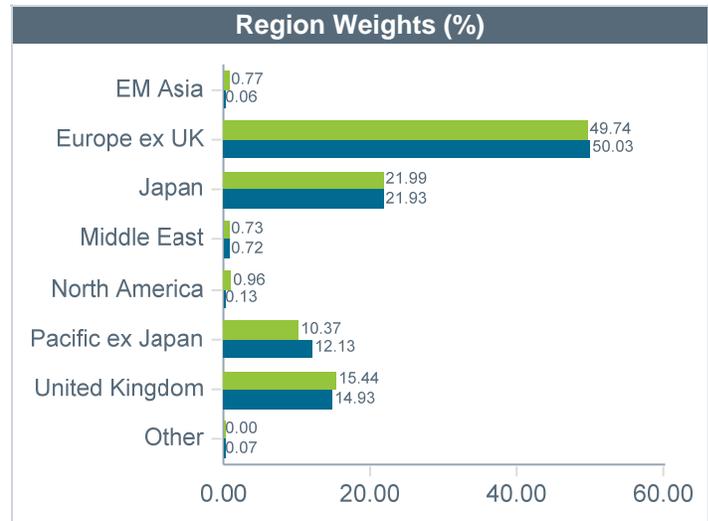
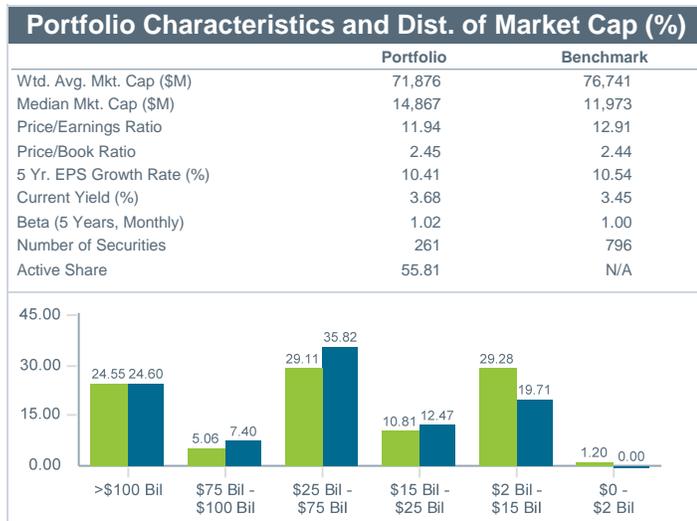
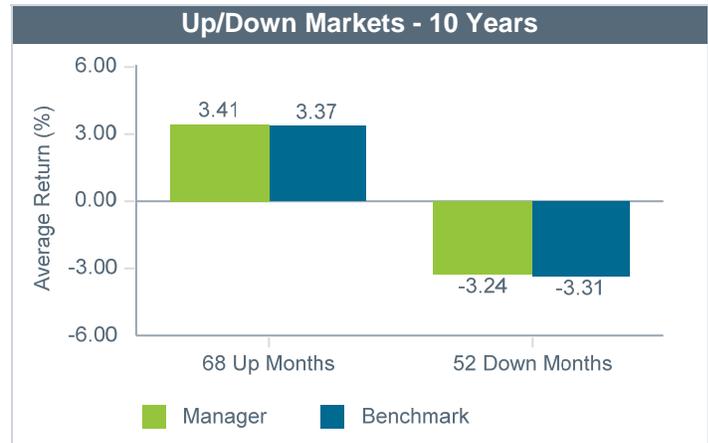
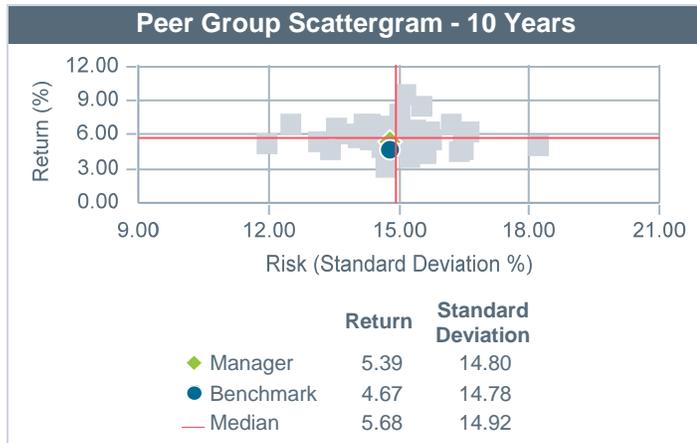
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	12.02	-6.43	2.29	2.91	5.10	N/A	5.97	7.93	18.69	-9.17	15.42
Benchmark	17.34	-14.45	0.87	1.54	4.53	4.67	11.26	7.82	22.01	-13.79	25.03
Difference	-5.32	8.02	1.42	1.37	0.57	N/A	-5.29	0.11	-3.32	4.62	-9.61
Peer Group Median	18.03	-10.01	1.25	1.71	4.74	5.13	11.38	4.45	21.10	-15.75	24.82
Rank	100	12	35	19	37	N/A	94	27	74	5	100
Population	43	43	43	42	42	42	45	50	56	58	60



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Approximately 76% of the allocations to "materials" represents allocations to gold.



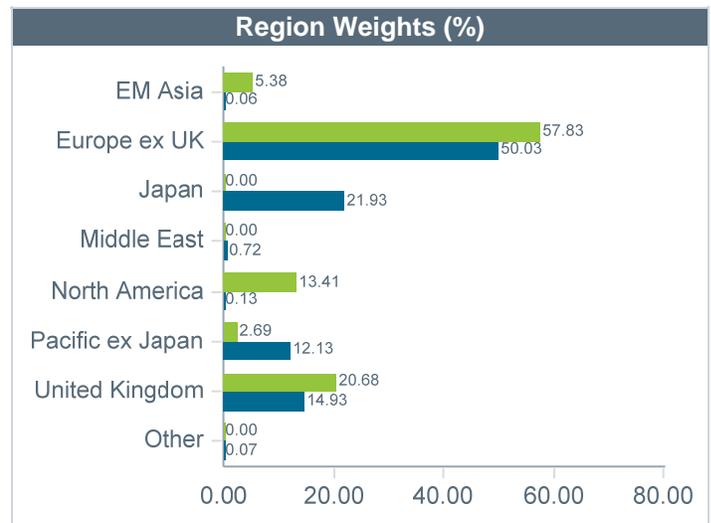
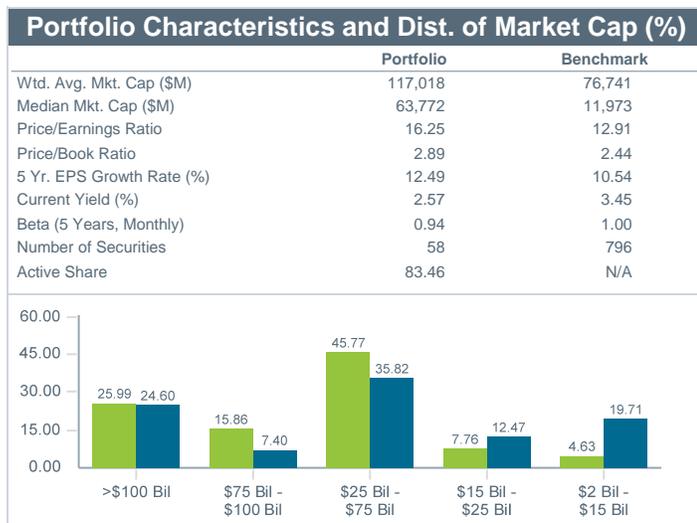
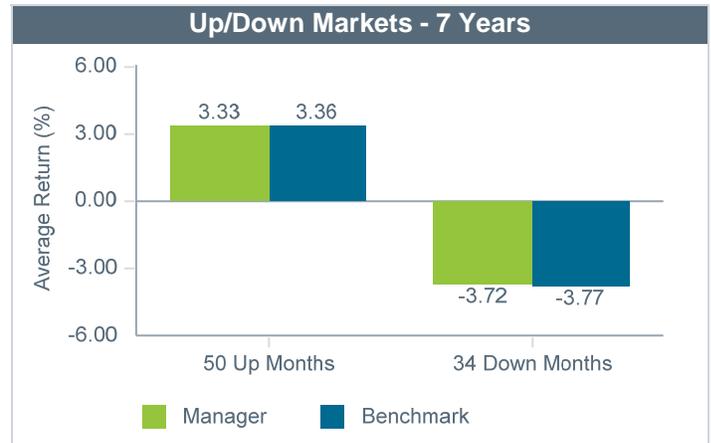
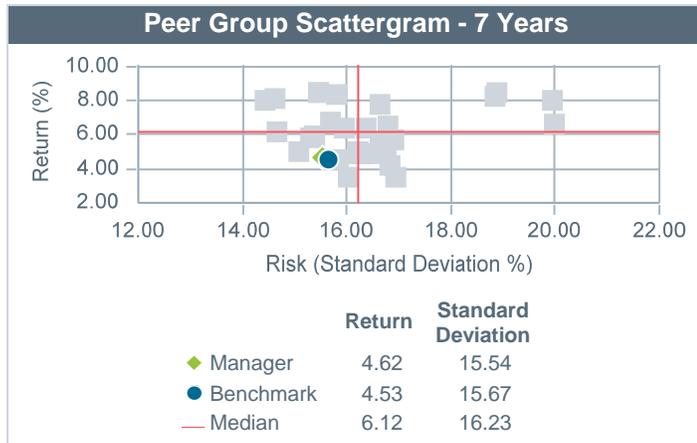
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	17.35	-13.32	1.73	0.97	4.34	5.39	13.94	6.62	17.67	-15.30	24.20
Benchmark	17.34	-14.45	0.87	1.54	4.53	4.67	11.26	7.82	22.01	-13.79	25.03
Difference	0.01	1.13	0.86	-0.57	-0.19	0.72	2.68	-1.20	-4.34	-1.51	-0.83
Peer Group Median	17.13	-14.57	1.70	2.29	5.09	5.68	11.96	8.44	23.60	-14.40	25.87
Rank	45	30	48	87	74	64	27	70	94	71	77
Population	68	68	67	67	66	63	72	81	86	92	100



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



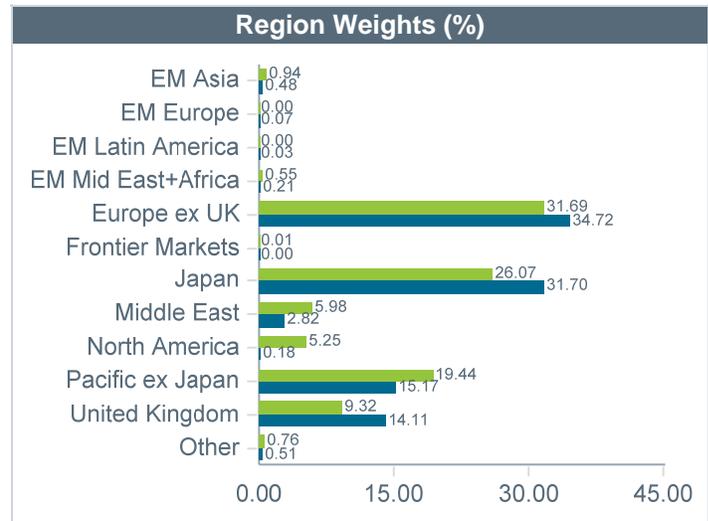
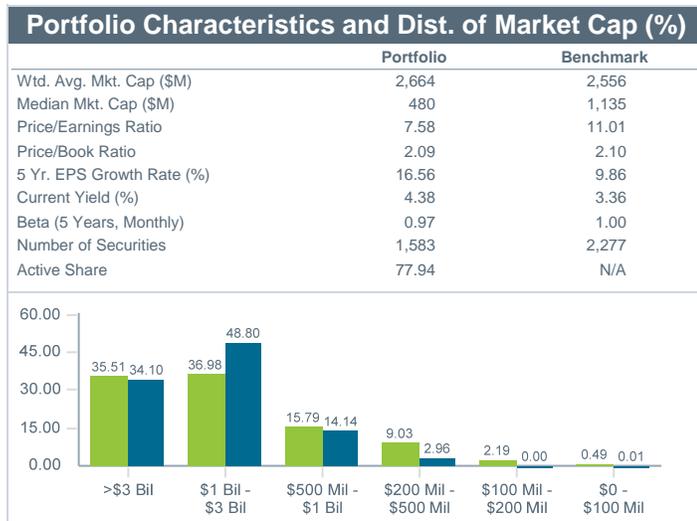
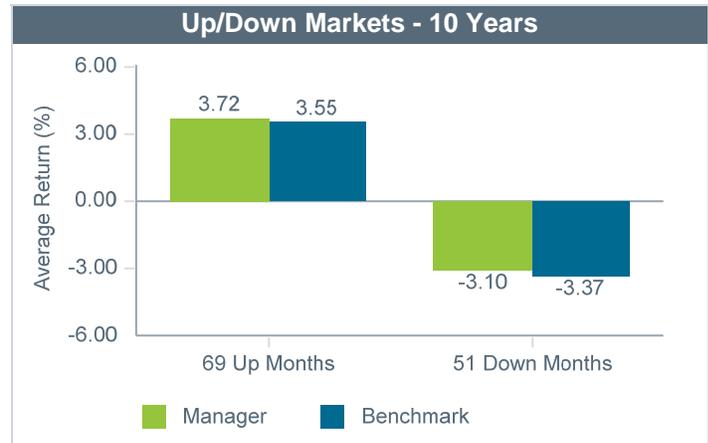
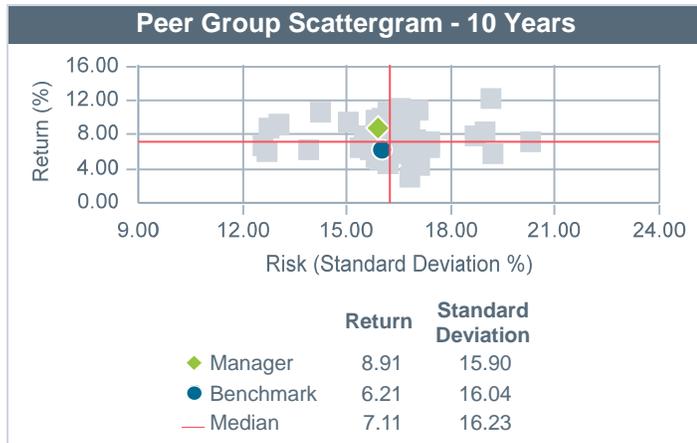
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	16.12	-18.72	-1.39	2.48	4.62	N/A	10.33	6.93	30.66	-9.79	32.63
Benchmark	17.34	-14.45	0.87	1.54	4.53	4.67	11.26	7.82	22.01	-13.79	25.03
Difference	-1.22	-4.27	-2.26	0.94	0.09	N/A	-0.93	-0.89	8.65	4.00	7.60
Peer Group Median	15.02	-20.91	1.98	3.22	6.12	6.05	12.72	19.79	26.97	-14.13	28.71
Rank	30	34	95	76	89	N/A	79	92	19	14	19
Population	29	29	29	29	29	29	36	37	38	40	42



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



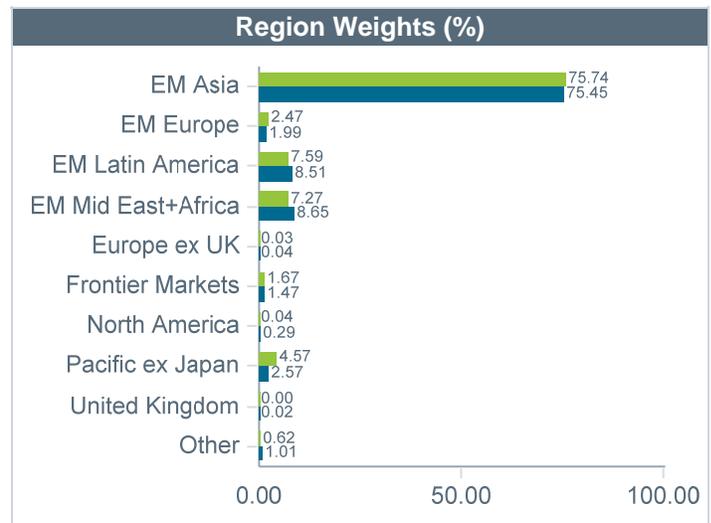
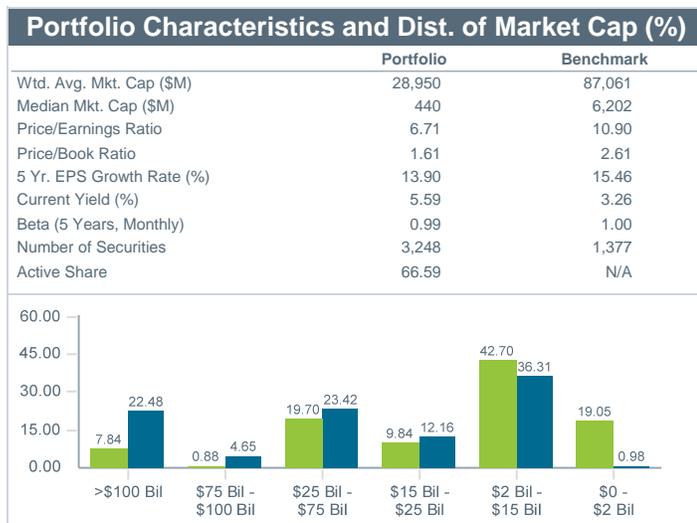
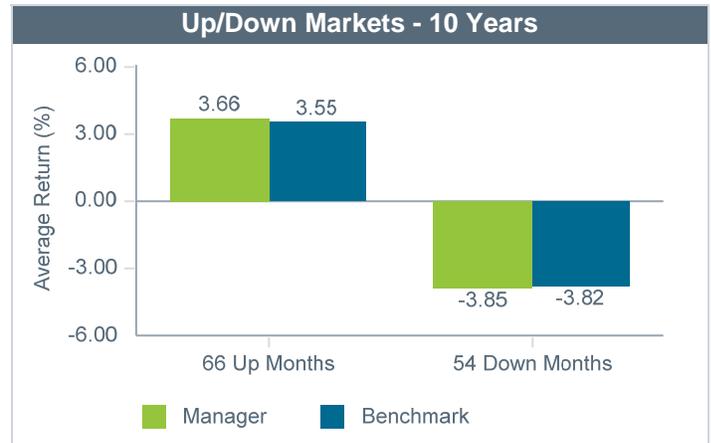
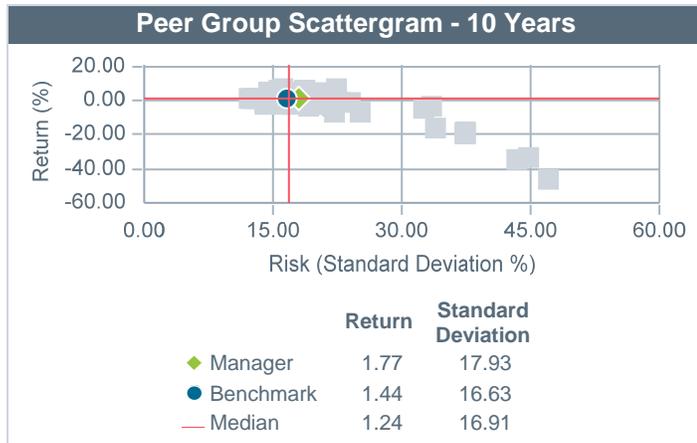
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	15.52	-18.38	4.01	2.54	7.25	8.91	20.63	14.27	23.71	-18.54	38.90
Benchmark	15.79	-21.39	-0.93	-0.05	4.45	6.21	10.10	12.34	24.96	-17.89	33.01
Difference	-0.27	3.01	4.94	2.59	2.80	2.70	10.53	1.93	-1.25	-0.65	5.89
Peer Group Median	16.10	-21.41	0.98	1.44	5.62	7.11	13.74	13.95	24.81	-17.85	35.09
Rank	62	35	18	30	23	21	10	49	57	55	29
Population	114	114	108	99	91	71	115	127	128	134	134



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



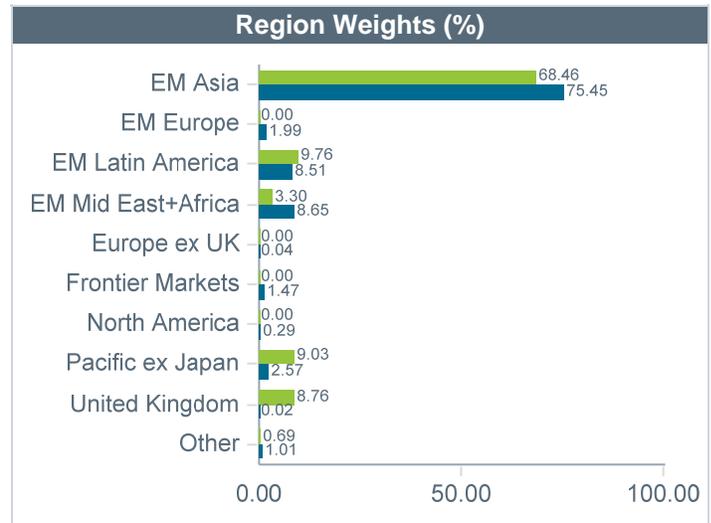
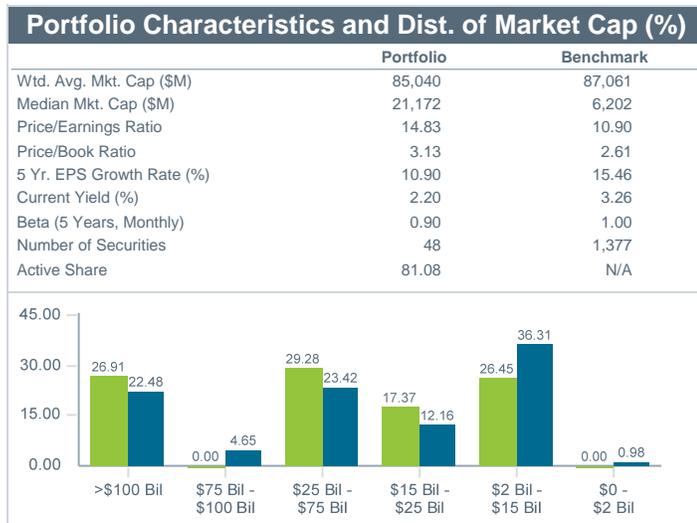
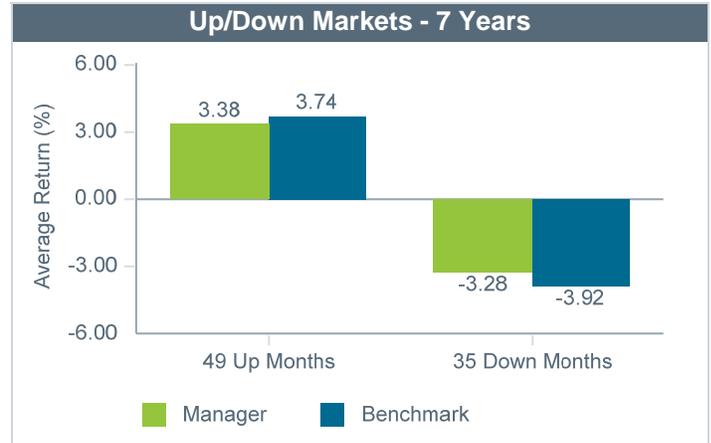
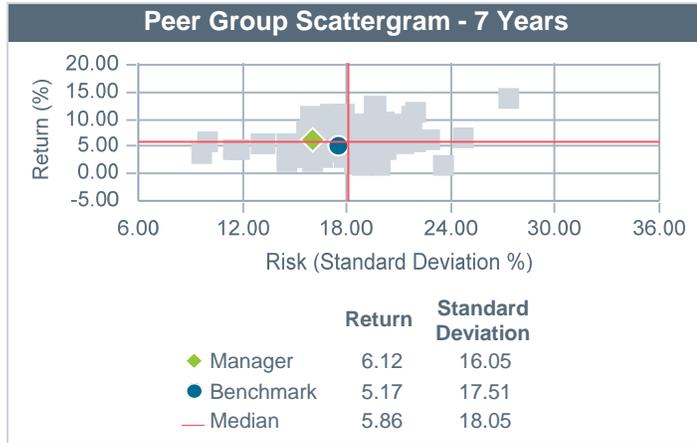
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
<b>Manager</b>	<b>10.27</b>	<b>-10.74</b>	<b>1.02</b>	<b>-0.09</b>	<b>6.90</b>	<b>1.77</b>	<b>12.41</b>	<b>2.73</b>	<b>9.64</b>	<b>-11.93</b>	<b>33.76</b>
Benchmark	9.70	-20.09	-2.69	-1.40	5.17	1.44	-2.54	18.31	18.42	-14.57	37.28
Difference	0.57	9.35	3.71	1.31	1.73	0.33	14.95	-15.58	-8.78	2.64	-3.52
Peer Group Median	9.94	-22.45	-3.16	-1.74	4.53	1.24	-1.62	17.67	20.15	-16.45	35.66
Rank	46	4	13	23	10	35	9	92	91	12	60
Population	821	772	690	609	526	367	765	780	821	818	791



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



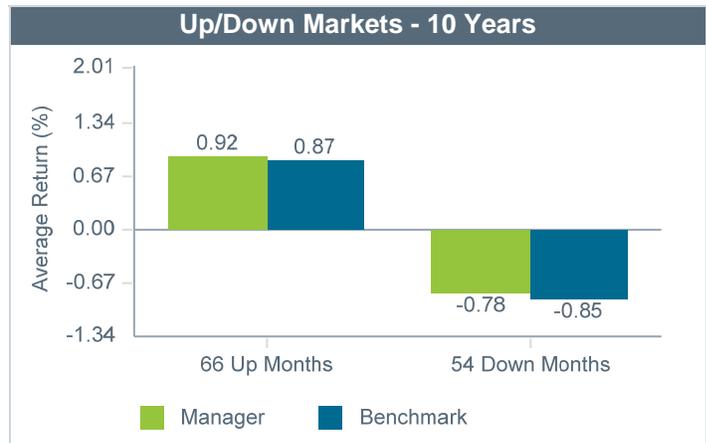
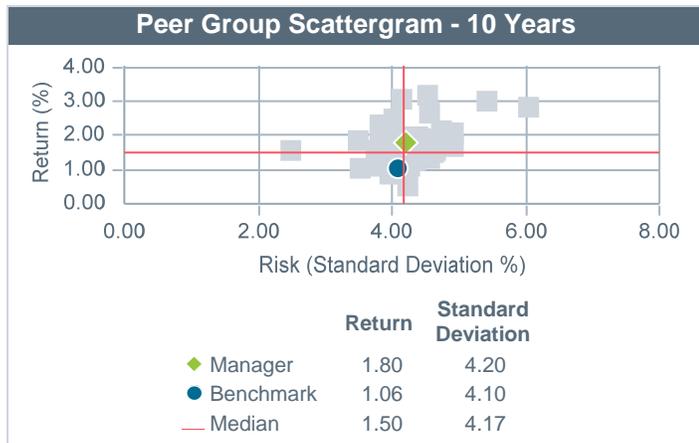
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
<b>Manager</b>	<b>13.76</b>	<b>-13.25</b>	<b>-0.60</b>	<b>1.11</b>	<b>6.12</b>	<b>N/A</b>	<b>-3.56</b>	<b>17.39</b>	<b>18.93</b>	<b>-9.52</b>	<b>35.55</b>
Benchmark	9.70	-20.09	-2.69	-1.40	5.17	1.44	-2.54	18.31	18.42	-14.57	37.28
Difference	4.06	6.84	2.09	2.51	0.95	N/A	-1.02	-0.92	0.51	5.05	-1.73
Peer Group Median	10.59	-19.57	-0.98	-0.12	5.86	2.82	0.78	18.40	20.44	-15.24	36.81
Rank	13	23	46	30	44	N/A	69	57	59	10	59
Population	270	268	252	224	211	171	293	320	346	350	356



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	2021	2020	2019	2018	2017
Manager	2.10	-11.28	-1.96	0.47	1.32	1.80	-2.20	8.59	7.56	1.00	3.83
Benchmark	1.87	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	0.23	1.73	0.75	0.45	0.43	0.74	-0.65	1.08	-1.16	0.99	0.29
Peer Group Median	1.82	-12.95	-2.20	0.45	1.39	1.50	-1.23	8.51	9.19	0.06	4.01
Rank	23	10	32	49	57	21	100	47	95	8	61
Population	132	132	132	129	127	122	146	154	156	163	168



### Portfolio Characteristics

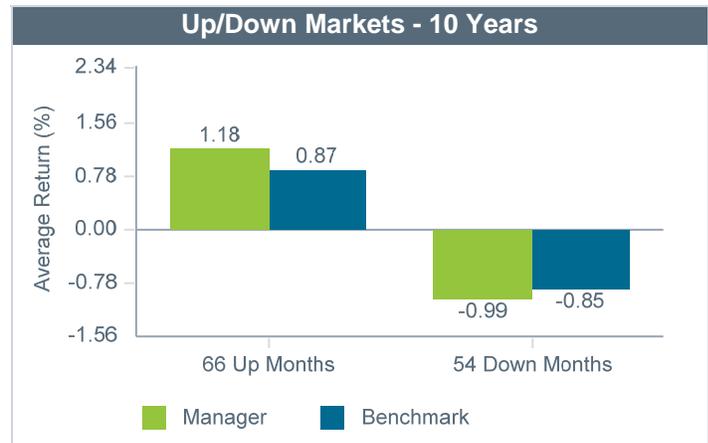
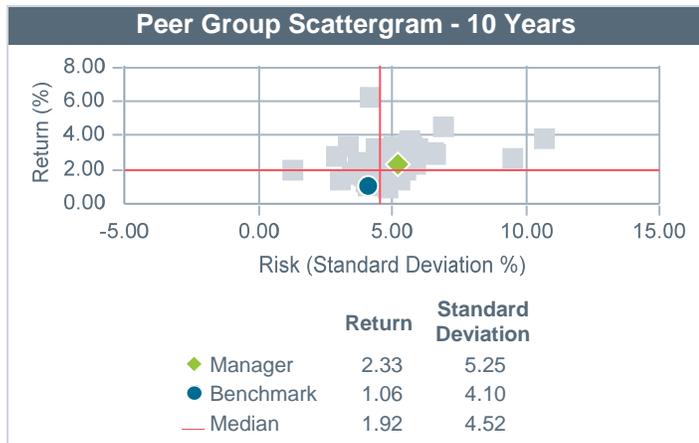
	Portfolio	Benchmark
Effective Duration	6.87	6.17
Spread Duration	3.09	N/A
Avg. Maturity	8.37	8.44
Avg. Quality	Aa1	Aa1/Aa2
Yield To Maturity (%)	4.62	4.68
Coupon Rate (%)	2.88	2.69
Current Yield (%)	3.24	N/A
Holdings Count	37	13,133



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

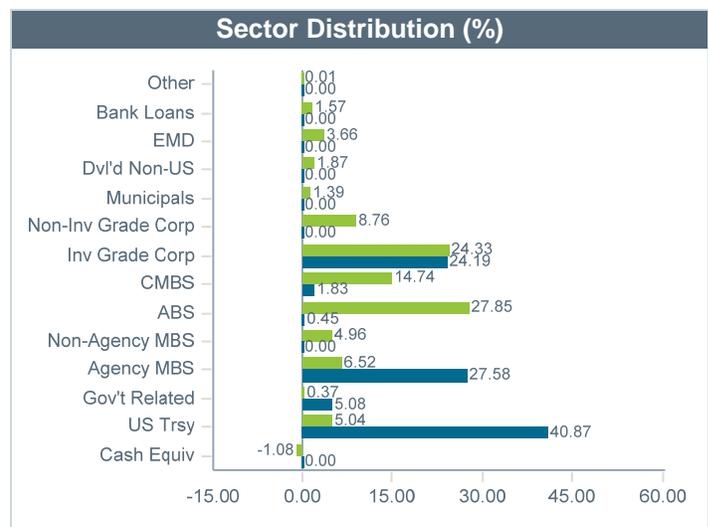


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.40	-14.35	-2.32	0.78	2.38	2.33	-0.61	9.50	11.66	-0.11	6.91
Benchmark	1.87	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	0.53	-1.34	0.39	0.76	1.49	1.27	0.94	1.99	2.94	-0.12	3.37
Peer Group Median	2.14	-12.95	-1.73	0.84	1.93	1.92	-0.25	8.97	9.90	-0.24	4.78
Rank	32	92	80	54	31	24	66	37	15	42	11
Population	143	143	138	134	129	126	155	163	166	173	178



### Portfolio Characteristics

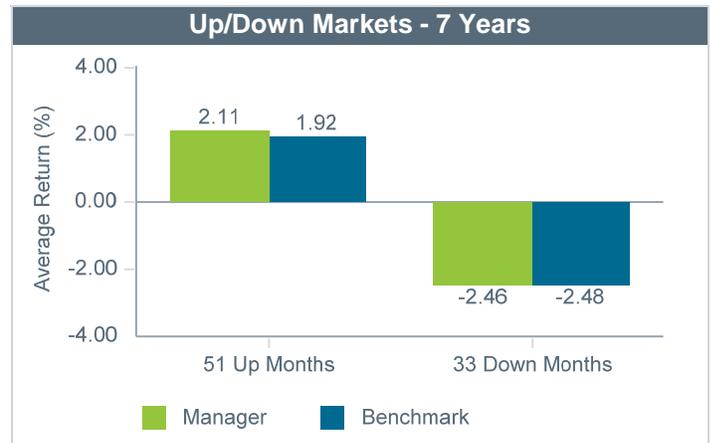
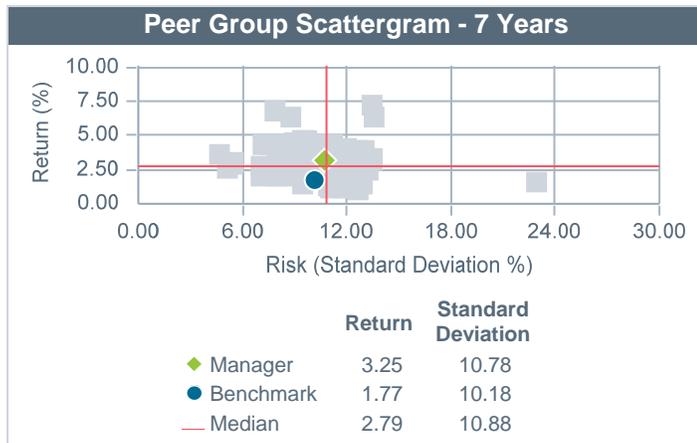
	Portfolio	Benchmark
Effective Duration	6.31	6.17
Spread Duration	3.50	N/A
Avg. Maturity	7.81	8.44
Avg. Quality	A2	Aa1/Aa2
Yield To Maturity (%)	6.56	4.68
Coupon Rate (%)	4.35	2.69
Current Yield (%)	4.85	N/A
Holdings Count	2,280	13,133



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.

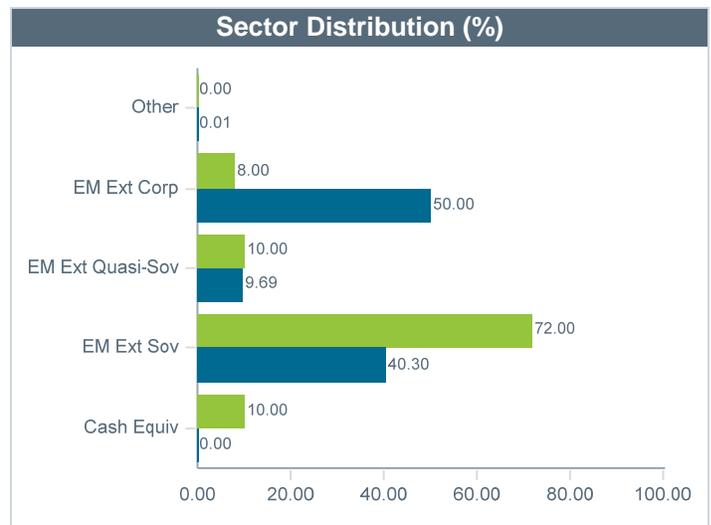


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	8.63	-13.45	-4.33	-0.63	3.25	N/A	-5.10	6.62	17.23	-5.61	14.51
Benchmark	8.29	-14.75	-5.66	-1.86	1.77	-0.18	-5.32	4.02	14.31	-5.15	12.74
Difference	0.34	1.30	1.33	1.23	1.48	N/A	0.22	2.60	2.92	-0.46	1.77
Peer Group Median	8.42	-12.24	-3.53	-0.64	2.79	1.22	-2.13	6.71	14.30	-5.25	12.43
Rank	42	60	68	50	35	N/A	69	52	6	58	30
Population	119	119	118	113	108	80	139	150	160	174	179



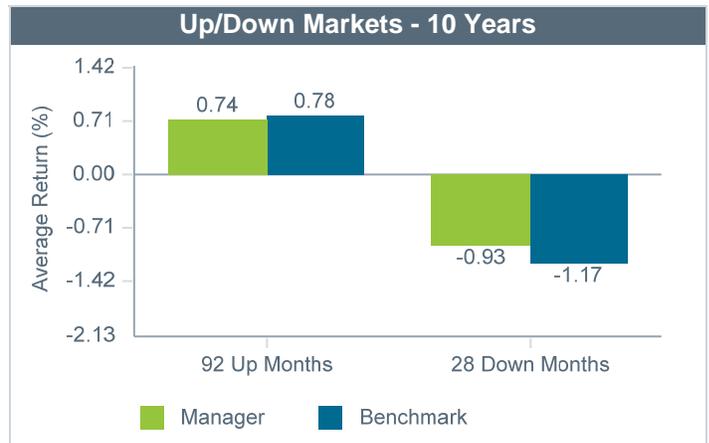
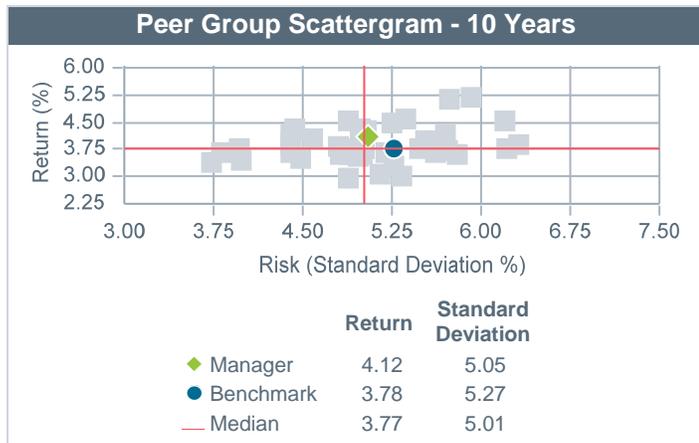
### Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	5.83	5.83
Spread Duration	5.85	3.37
Avg. Maturity	9.21	9.58
Avg. Quality	Baa2	Ba2
Yield To Maturity (%)	7.53	7.49
Coupon Rate (%)	5.09	5.14
Current Yield (%)	6.45	5.72
Holdings Count	150	1,238



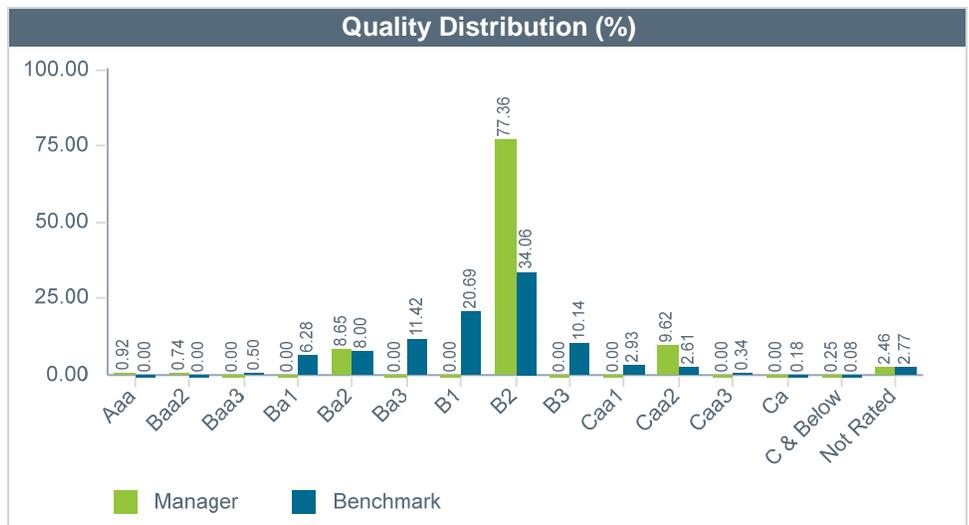
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	3.34	-1.26	2.37	3.36	3.81	4.12	5.11	3.36	9.28	0.64	3.32
Benchmark	2.33	-1.06	2.34	3.24	4.31	3.78	5.40	2.78	8.17	1.14	4.25
Difference	1.01	-0.20	0.03	0.12	-0.50	0.34	-0.29	0.58	1.11	-0.50	-0.93
Peer Group Median	2.90	-0.84	2.40	3.31	4.29	3.77	5.34	2.49	8.71	0.80	4.46
Rank	13	69	51	47	85	32	55	27	34	65	95
Population	50	50	49	48	46	43	54	57	60	67	68



### Portfolio Characteristics

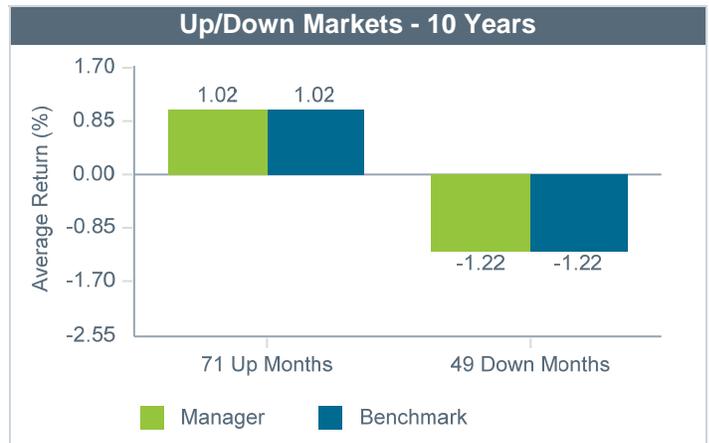
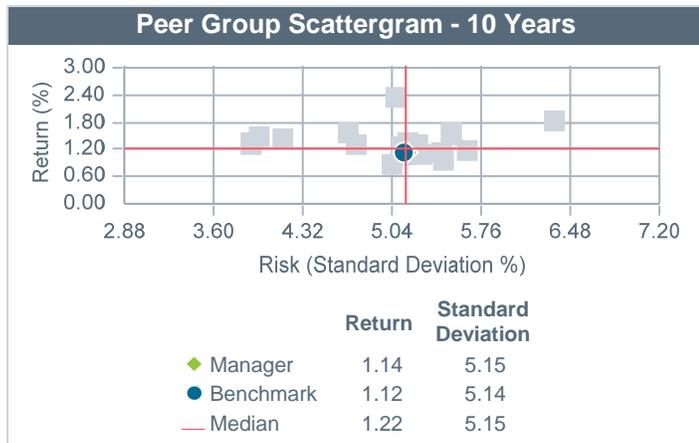
	Portfolio	Benchmark
Effective Duration	N/A	0.25
Spread Duration	N/A	N/A
Avg. Maturity	5.00	4.83
Avg. Quality	B2	Ba2
Yield To Maturity (%)	11.80	6.43
Coupon Rate (%)	6.00	5.51
Current Yield (%)	9.10	5.74
Holdings Count	148	1,688



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

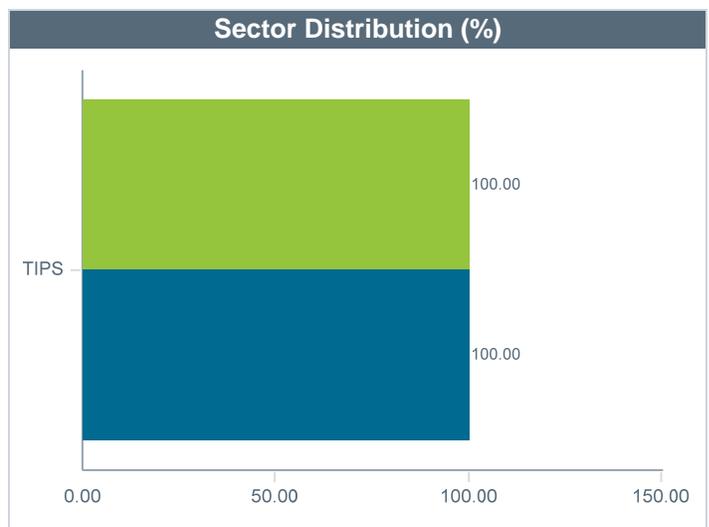


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.04	-11.83	1.27	2.14	2.64	1.14	6.14	10.97	8.43	-1.26	3.09
Benchmark	2.04	-11.85	1.21	2.11	2.60	1.12	5.96	10.99	8.43	-1.26	3.01
Difference	0.00	0.02	0.06	0.03	0.04	0.02	0.18	-0.02	0.00	0.00	0.08
Peer Group Median	2.02	-11.79	1.24	2.15	2.70	1.22	5.92	11.01	8.44	-1.23	3.09
Rank	40	57	44	52	63	72	17	55	55	59	52
Population	29	29	28	28	28	27	31	33	34	38	39



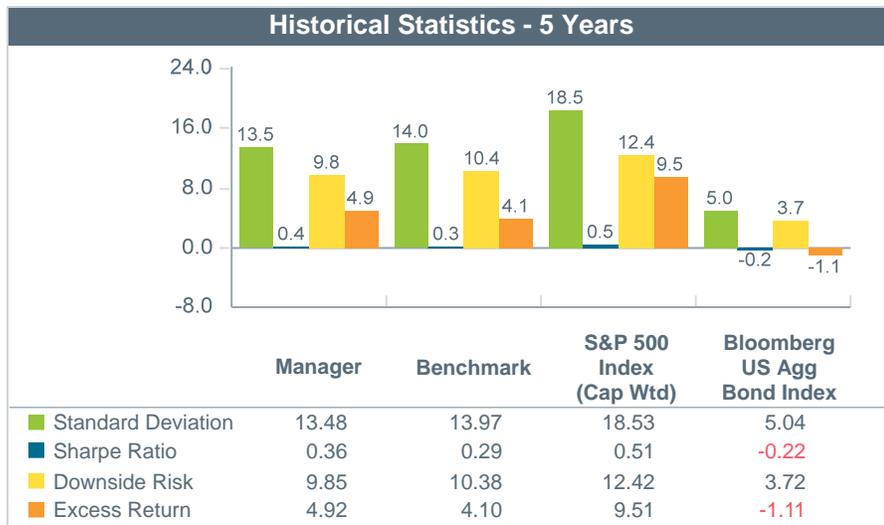
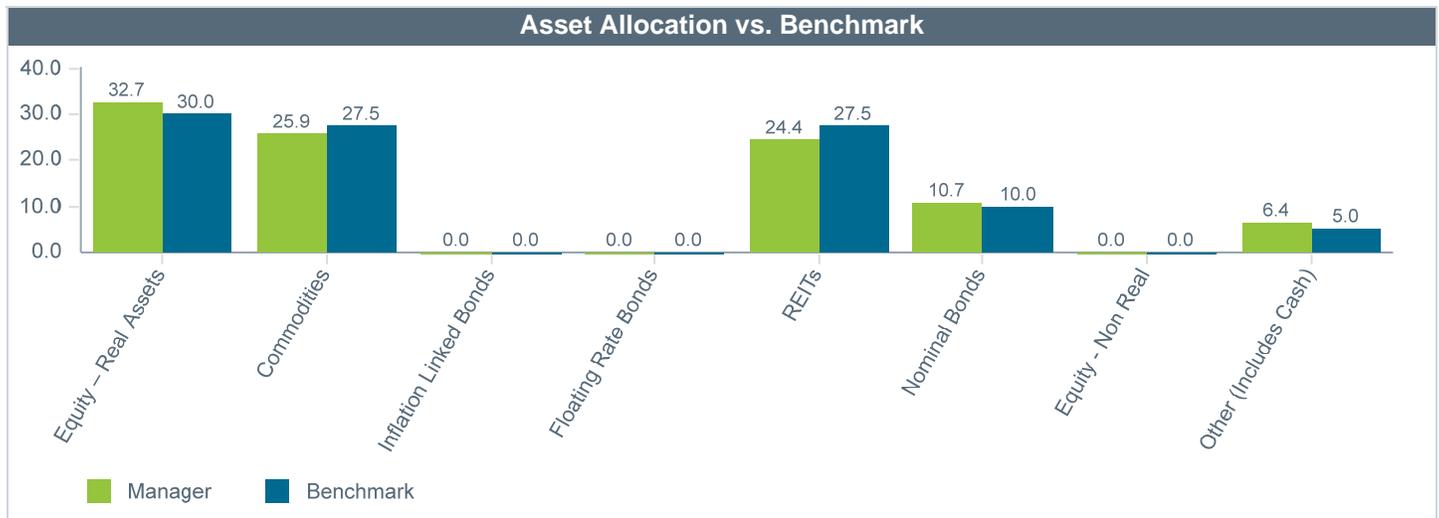
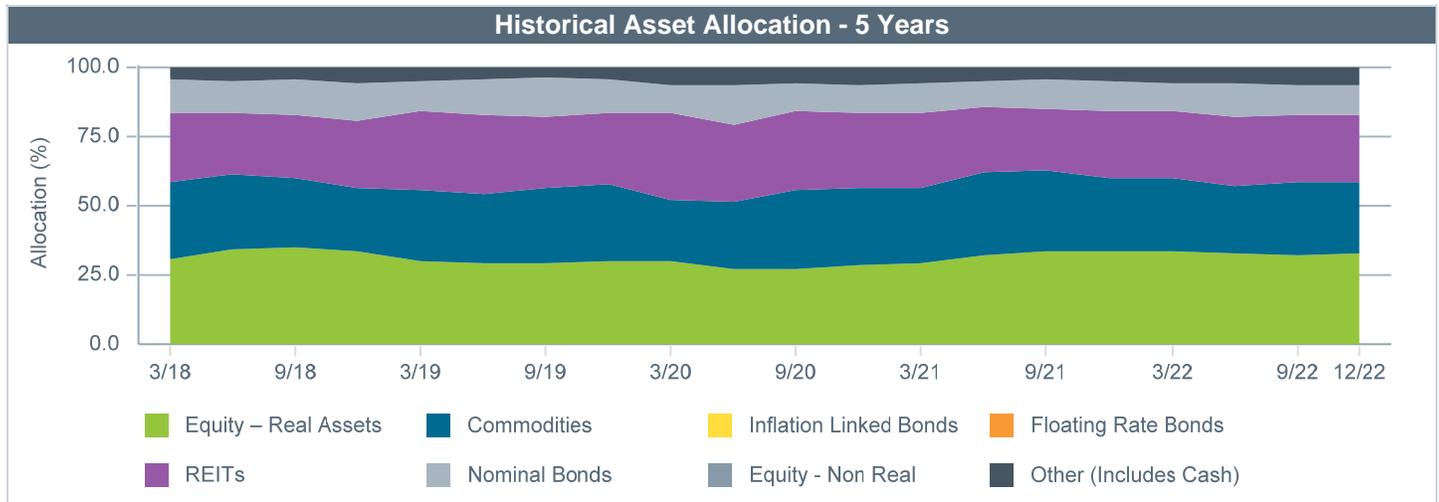
### Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	6.60	5.36
Spread Duration	N/A	5.36
Avg. Maturity	7.09	7.09
Avg. Quality	Aaa/Aaa	Aaa
Yield To Maturity (%)	4.33	4.38
Coupon Rate (%)	0.66	0.66
Current Yield (%)	0.71	N/A
Holdings Count	47	47



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	2021	2020	2019	2018	2017
Manager	6.78	-2.12	6.38	5.37	N/A	N/A	23.63	-0.50	17.57	-8.24	N/A
Benchmark	7.13	-3.02	4.84	4.43	6.23	2.60	21.23	-2.00	16.53	-7.48	9.82
Difference	-0.35	0.90	1.54	0.94	N/A	N/A	2.40	1.50	1.04	-0.76	N/A



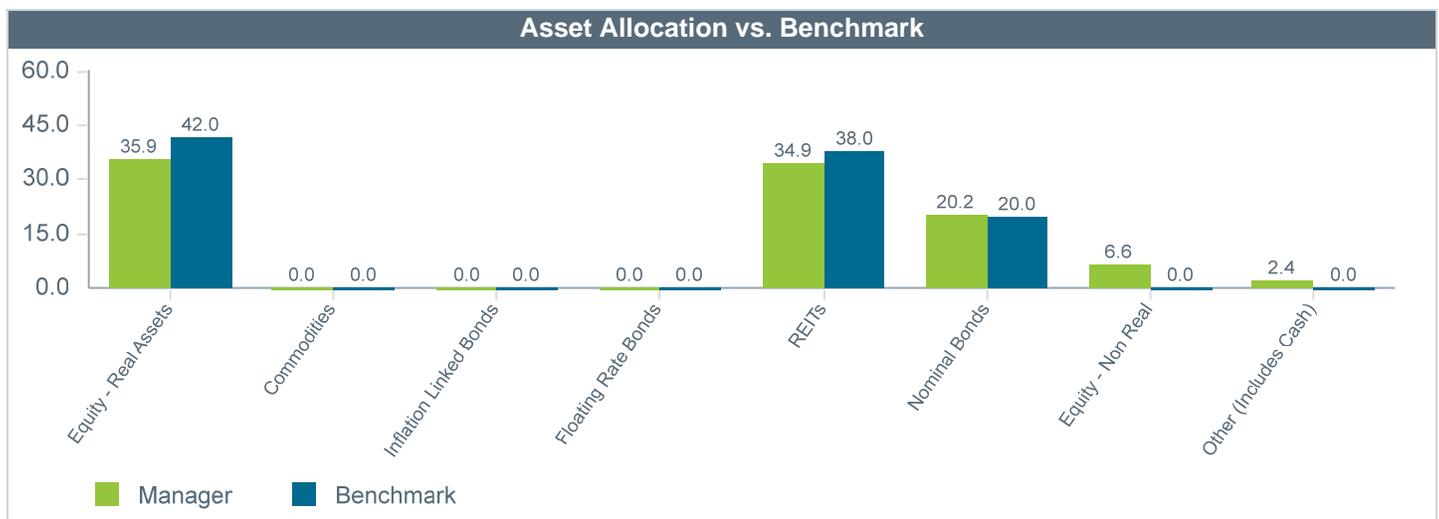
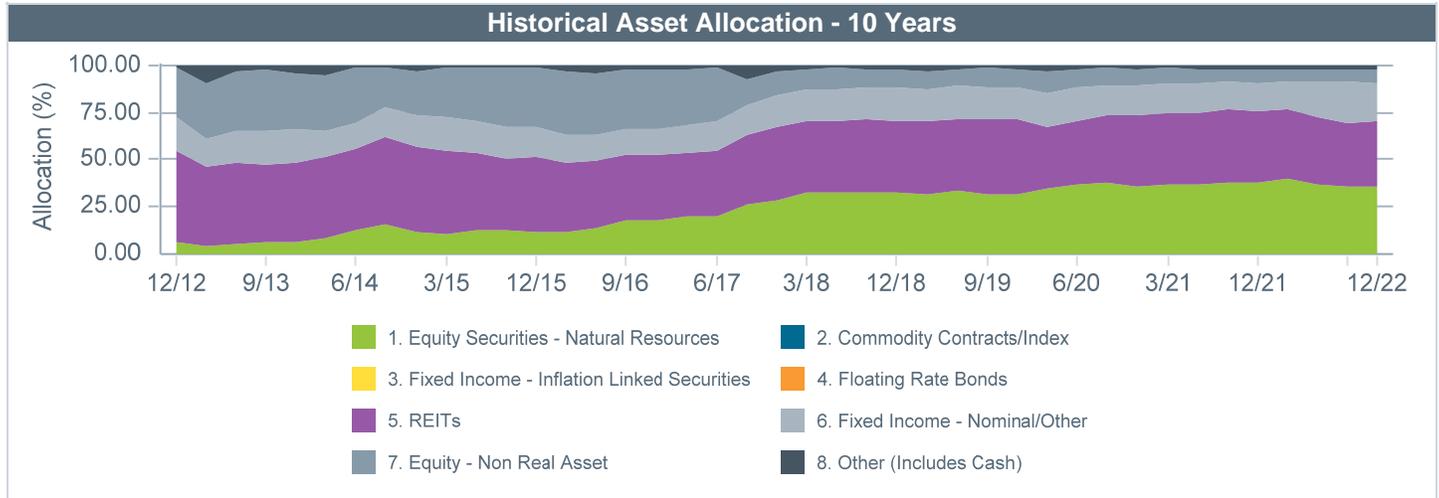
### Actual Correlation - 5 Years

	Actual Correlation
Benchmark	0.99
S&P 500 Index (Cap Wtd)	0.83
Russell 2000 Index	0.80
MSCI EAFE Index (USD) (Net)	0.87
MSCI Emg Mkts Index (USD) (Net)	0.75
Bloomberg US Agg Bond Index	0.26
Bloomberg US Trsy US TIPS Index	0.51
Wilshire US REIT Index	0.83
HFRI FOF Comp Index	0.78
Bloomberg Cmnty Index (TR)	0.84
ICE BofAML 3 Mo US T-Bill Index	-0.32
Cons Price Index (Unadjusted)	0.08

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	2021	2020	2019	2018	2017
Manager	5.05	-11.19	-0.62	2.90	5.44	5.94	13.05	-2.24	24.25	-5.41	13.35
Benchmark	4.74	-14.24	-1.30	1.51	4.08	4.14	11.22	0.81	20.01	-6.59	13.26
Difference	0.31	3.05	0.68	1.39	1.36	1.80	1.83	-3.05	4.24	1.18	0.09



### Historical Statistics - 10 Years

20.0  
15.0  
10.0  
5.0  
0.0

Manager Benchmark S&P 500 Index (Cap Wtd) Bloomberg US Agg Bond Index

Metric	Manager	Benchmark	S&P 500 Index (Cap Wtd)	Bloomberg US Agg Bond Index
Standard Deviation	11.48	10.77	14.71	4.10
Sharpe Ratio	0.50	0.36	0.83	0.09
Downside Risk	8.85	7.97	9.41	2.93
Excess Return	5.72	3.90	12.22	0.37

### Actual Correlation - 10 Years

	Actual Correlation
Benchmark	0.98
S&P 500 Index (Cap Wtd)	0.78
Russell 2000 Index	0.71
MSCI EAFE Index (USD) (Net)	0.79
MSCI Emg Mkts Index (USD) (Net)	0.71
Bloomberg US Agg Bond Index	0.46
Bloomberg US Trsy US TIPS Index	0.59
Wilshire US REIT Index	0.83
HFRI FOF Comp Index	0.76
Bloomberg Cmdb Index (TR)	0.49
ICE BofAML 3 Mo US T-Bill Index	-0.22
Cons Price Index (Unadjusted)	0.00

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.;l (NR1IX). 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 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 Dev'l'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 December 31, 2022**

<b>Fee Schedule</b>	<b>Market Value As of 12/31/2022 (\$)</b>	<b>Estimated Annual Fee (\$)</b>	<b>Estimated Annual Fee (%)</b>	
<b>Total Fund Public Assets</b>	<b>2,361,399,543</b>	<b>7,382,835</b>	<b>0.31</b>	
<b>U.S. Equity Composite</b>				
BNY Mellon HEDI (SA)	0.02 % of Assets	273,574,267	54,715	0.02
BNY Mellon R1000 Index - NL (CF)	0.01 % of Assets	318,138,526	31,814	0.01
Dimensional U.S. Small Cap Value (CF)	0.28 % of Assets	45,013,268	126,037	0.28
RHJ Small Cap Opportunities (SA)	0.80 % of First \$50 M 0.60 % Thereafter	32,601,462	260,812	0.80
<b>Dev'd Mkt. Non-U.S. Equity Composite</b>				
First Eagle International Value Equity (SA)	0.75 % of Assets	103,476,808	776,076	0.75
PanAgora Dynamic International Equity (SA)	0.33 % of First \$100 M 0.30 % of Next \$100 M 0.25 % Thereafter	108,293,570	354,881	0.33
Artisan Non-U.S. Growth (SA)	0.80 % of First \$50 M 0.60 % Thereafter	109,456,598	756,740	0.69
Acadian Non-US Small Cap Equity (CF)	0.75 % of Assets	53,014,154	397,606	0.75
<b>Emerging Mkt. Equity Composite</b>				
DFA Emg Mkts Value;I (DFEVX)	0.45 % of Assets	127,992,978	575,968	0.45
RBC Emerging Markets Equity (CF)	0.50 % of Assets	119,802,754	599,014	0.50
<b>Core Fixed Income Composite</b>				
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	348,417,010	475,917	0.14
PGIM Core Plus Fixed Income (CF)	0.26 % of Assets	239,010,283	621,427	0.26
<b>Non-Core Fixed Income Composite</b>				
Wellington Blended Opportunistic EMD (CF)	0.55 % of Assets	118,060,920	649,335	0.55
Beach Point Leveraged Loan (CF)	0.50 % of Assets	144,960,633	724,803	0.50
<b>Public Real Return Composite</b>				
BNY Mellon TIPS - NL (CF)	0.01 % of Assets	35,024,237	3,502	0.01
Cohen & Steers Real Assets Fund (CIT)	0.65 % of Assets	60,947,662	396,160	0.65
Nuveen Real Asset Income Fund (SA)	0.80 % of First \$50 M 0.75 % of Next \$50 M 0.65 % Thereafter	73,393,855	575,454	0.78

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

**As of December 31, 2022**

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 Wid 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. 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
Q3 Performance Report	November 2022	Completed	
Equity Structure Study	December 2022	Completed	
New Trustee Education	January 2023	Completed	
Q4 Performance Report	February 2023	In Progress	
Capital Market Assumptions	March 2023	In Progress	
Private Credit Pacing Study	April 2023	In Progress	
Asset Allocation	April 2023	In Progress	
Q1 Performance Report	May 2023	In Progress	
Strategic Plan	June 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&amp;P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&amp;P</u>	<u>Moody's</u>	<u>Explanation</u>
<b>Higher Credit Quality – Investment Grade</b>			<b>Lower Credit Quality – Below Investment Grade</b>		
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., 1<sup>st</sup> quartile, 2<sup>nd</sup> quartile, 3<sup>rd</sup> quartile, and 4<sup>th</sup> quartile). The median observation is where the 2<sup>nd</sup> quartile and 3<sup>rd</sup> 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 4<sup>th</sup> 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>
<b><u>Liquid Investments</u></b>		<b><u>Less Liquid Investments</u></b>	
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	<b><u>Not Liquid Investments</u></b>	
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 Funds of Funds	5
US SMid Cap Equity	85		
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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