



# Quarterly Investment Performance Analysis

City of Jacksonville Employees' Retirement System

Period Ended: March 31, 2022



# 2021 Greenwich Quality Leader Award

**RVK is 1 of 3 firms among large US consultants to receive the *Coalition Greenwich Quality Leader* award.<sup>1</sup> We are proud to be the only firm among large consultants to receive this recognition for a 5<sup>th</sup> consecutive year.**



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

## Award Criteria

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

<sup>1</sup>Between July and October 2021, Coalition Greenwich conducted phone interviews with 811 individuals at 661 of the largest tax-exempt funds in the US—including corporate and union funds, public funds, and endowments/foundations with either pension or investment pool assets greater than \$150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset managers and investment consultants, including qualitative assessments of those firms soliciting their business and detailed information on important market trends. RVK is one of three firms recognized in the large investment consultant category. The ratings may not be representative of any one client's experience with RVK; rather they are representative of those clients that chose to participate in the survey. The results are not indicative of RVK's future performance.

# Table of Contents

1	Capital Markets Review	Page 4
2	Total Fund	Page 13
3	Composite Profiles	Page 33
4	Investment Manager Profiles	Page 46
5	Addendum & Glossary	Page 70

# Capital Markets Review



**First Quarter Economic Environment**

During Q1, investors were left with few options for capital preservation as public equity and fixed income markets fell sharply amid increasing volatility, declining global economic growth forecasts, and rising interest rates. Global capital markets faced existing and emerging headwinds, including the Russian invasion of Ukraine, which was met with condemnation from much of the international community. Existing factors—such as persistent inflation, supply chain disruption, and other issues stemming from the ongoing pandemic—were exacerbated by soaring energy costs and commodity shortages caused by the war. US labor market conditions continued to improve as unemployment fell to 3.6% in Q1 from its level above 14% early in the pandemic. Inflationary pressures have led most major central banks to tighten their monetary policies, including action by the Federal Open Market Committee (FOMC), which raised interest rates to a range between 0.25% to 0.50% during its March meeting in addition to its announced tapering of its bond purchasing program. The FOMC also suggested it will raise interest rates 11 times with a forecasted Fed funds rate of 2.75% by 2023. Even as monetary policies shift, there are factors driving inflation higher that are beyond central bank control, which limits their ability to achieve reduced inflation, including component shortages, transportation disruption, and the inflationary pressures stemming from the war in Ukraine.

**Key Economic Indicators**

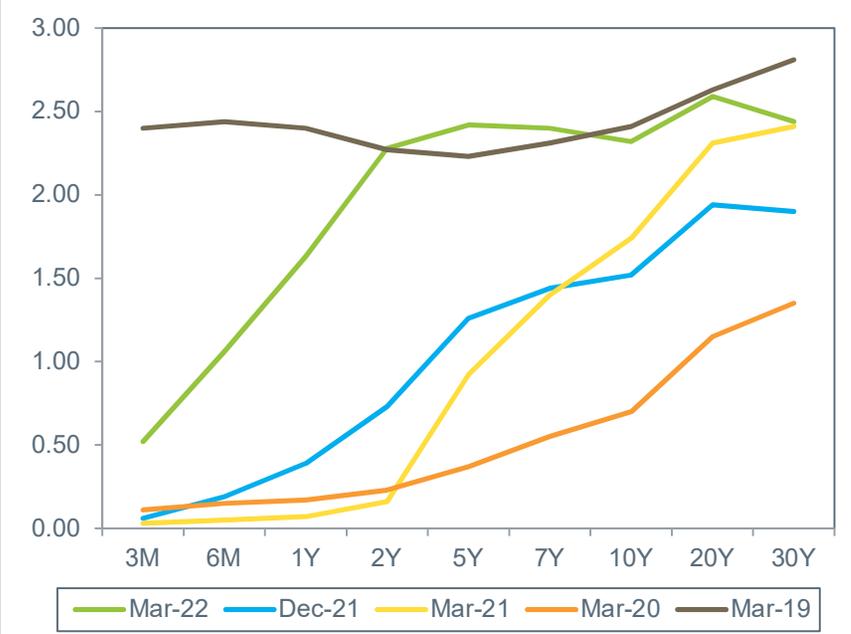


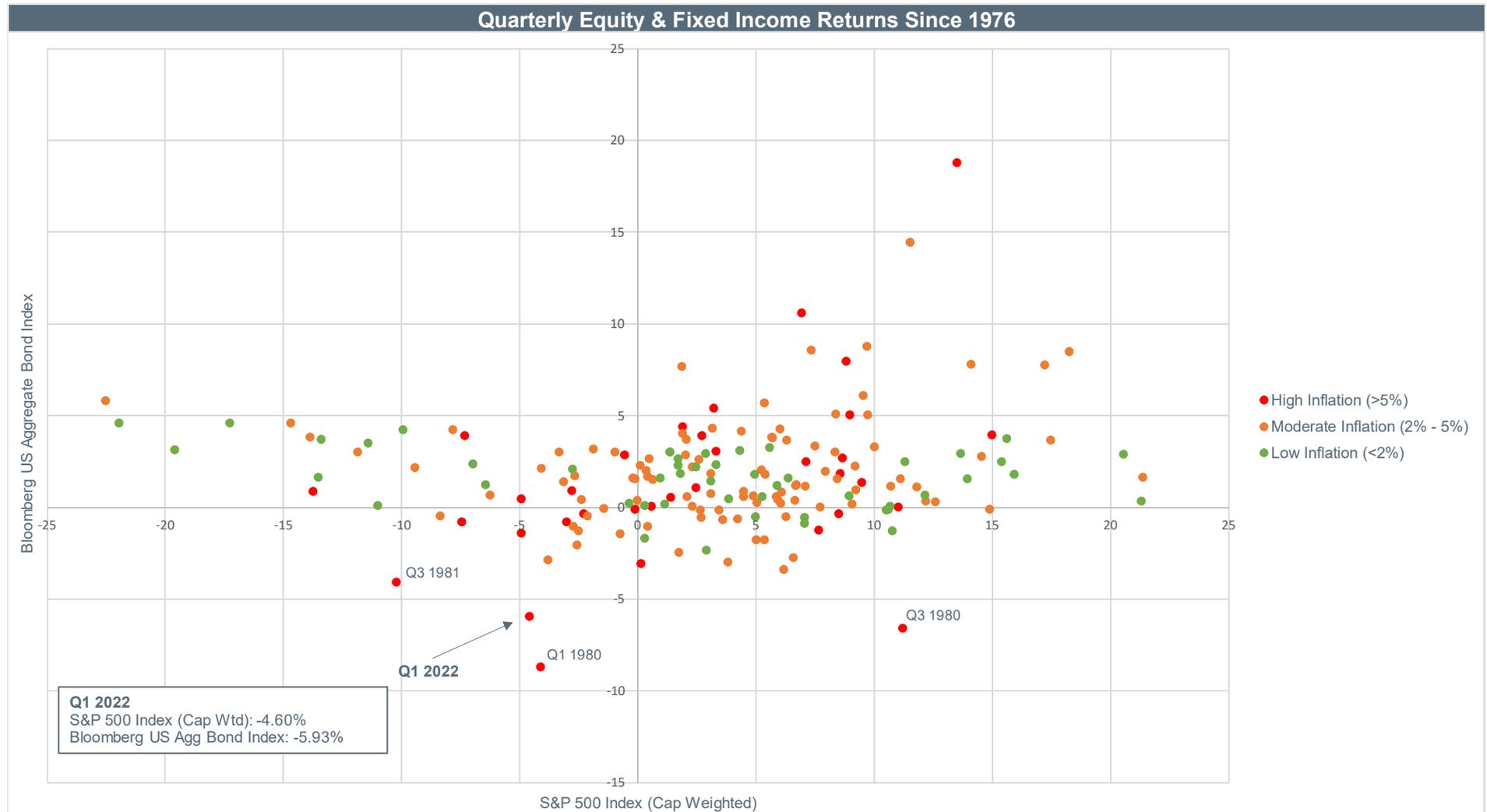
Economic Indicators	Mar-22	Dec-21	Mar-21	Mar-19	20 Yr
Federal Funds Rate (%)	0.33 ▲	0.07	0.06	2.43	1.30
Breakeven Infl. - 5 Yr (%)	3.43 ▲	2.91	2.60	1.79	1.86
Breakeven Infl. - 10 Yr (%)	2.83 ▲	2.59	2.37	1.87	2.04
CPI YoY (Headline) (%)	8.5 ▲	7.0	2.6	1.9	2.2
Unemployment Rate (%)	3.6 ▼	3.9	6.0	3.8	6.1
Real GDP YoY (%)	3.6 ▼	5.5	0.5	2.2	1.9
PMI - Manufacturing	57.1 ▼	58.8	63.7	54.9	53.5
USD Total Wtd Idx	115.35 ▲	115.32	113.86	115.13	103.10
WTI Crude Oil per Barrel (\$)	100.3 ▲	75.2	59.2	60.1	64.4
Gold Spot per Oz (\$)	1,937 ▲	1,829	1,708	1,292	1,086

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	-4.60	-4.60	15.65	15.99	14.64
Russell 2000	-7.53	-7.53	-5.79	9.74	11.04
MSCI EAFE (Net)	-5.91	-5.91	1.16	6.72	6.27
MSCI EAFE SC (Net)	-8.53	-8.53	-3.63	7.42	8.30
MSCI Emg Mkts (Net)	-6.97	-6.97	-11.37	5.98	3.36
Bloomberg US Agg Bond	-5.93	-5.93	-4.15	2.14	2.24
ICE BofAML 3 Mo US T-Bill	0.04	0.04	0.06	1.13	0.63
NCREIF ODCE (Gross)	7.36	7.36	28.45	9.88	10.93
FTSE NAREIT Eq REIT (TR)	-3.89	-3.89	26.45	9.62	9.81
HFRI FOF Comp	-2.72	-2.72	1.24	4.63	3.92
Bloomberg Cmdty (TR)	25.55	25.55	49.25	9.00	-0.70

**Treasury Yield Curve (%)**



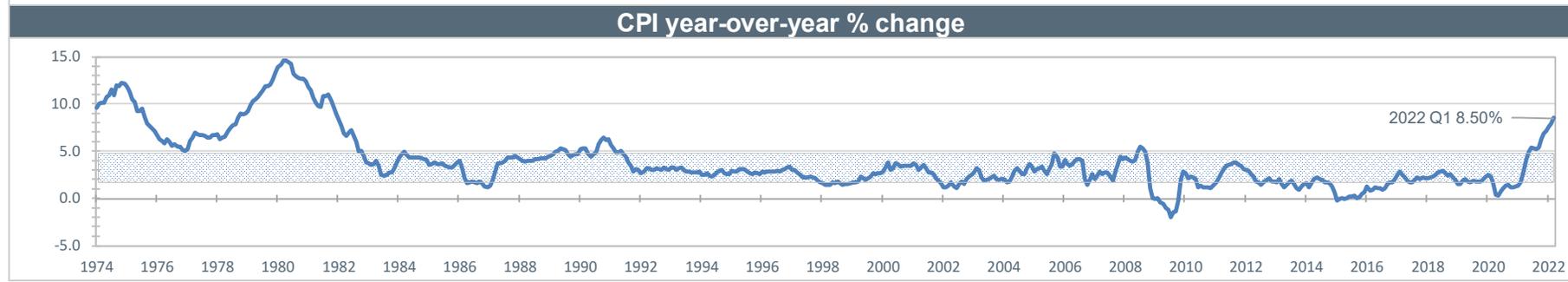
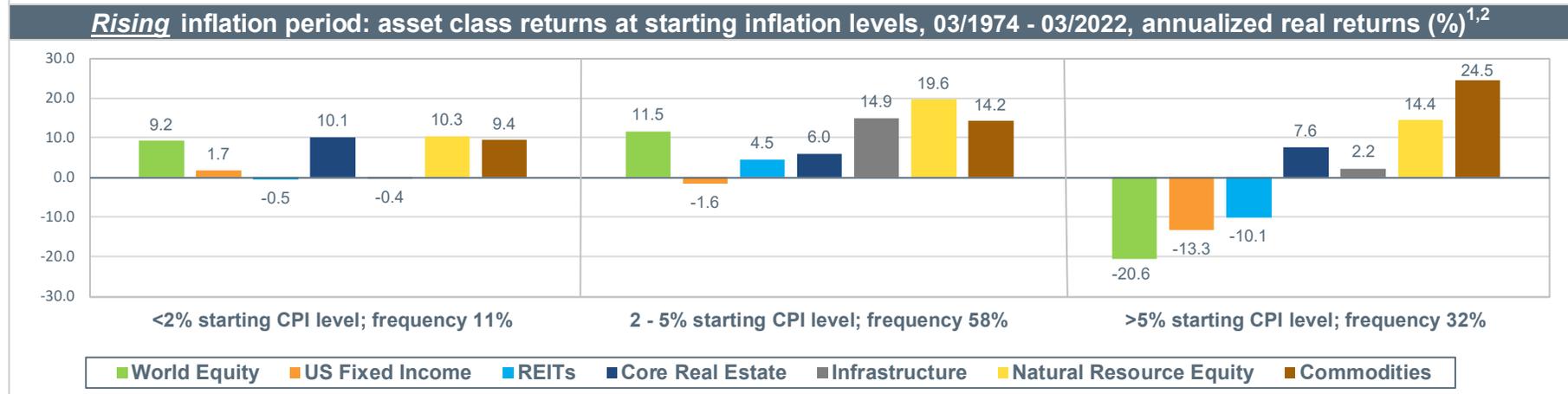
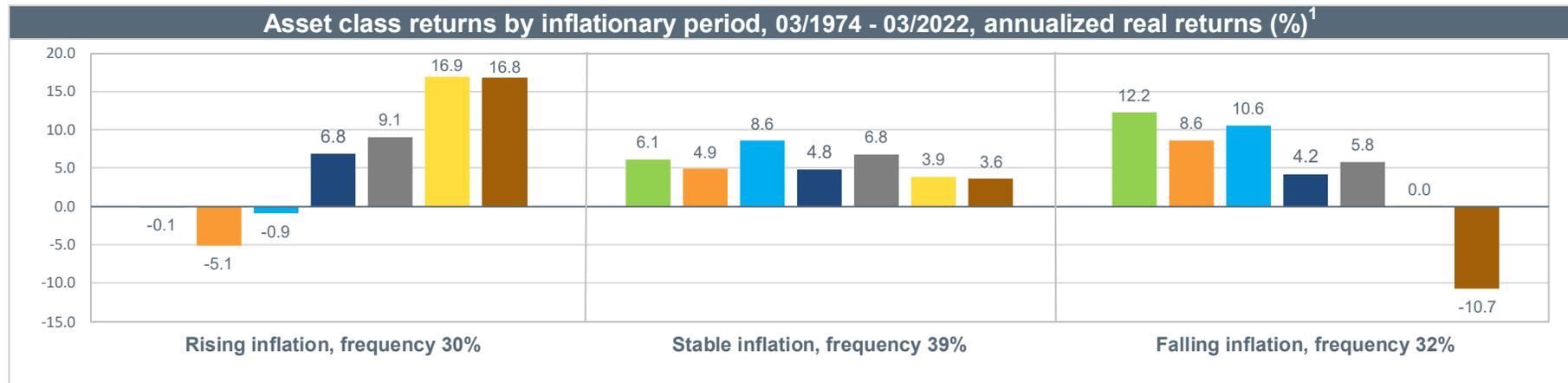


### Bloomberg US Aggregate Bond Index: Worst Quarters and Subsequent Performance

Quarter Ended	Quarter Return	YTW at Quarter End	Subsequent Quarter Return	Subsequent Year Return	Subsequent 3 Year Return Annualized
Mar-1980	-8.71%	14.10	18.79%	13.05%	17.88%
Sep-1980	-6.60%	12.43	1.36%	-2.58%	15.05%
Mar-2022	-5.93%	2.92	?	?	?
Sep-1981	-4.07%	16.50	10.58%	35.22%	19.35%
Mar-2021	-3.38%	1.61	1.83%	-4.15%	?
Dec-1979	-3.08%	11.19	-8.71%	2.67%	13.12%

Inflation data provided by the Federal Reserve Economic Database.  
Yield to Worst data provided by Barclays Live.





<sup>1</sup> Real returns are based on US CPI and are calculated using quarterly periodicity. A rising inflation period is defined as any quarter when Y/Y US CPI rose by 0.3% or more; a falling inflation period when Y/Y CPI fell by -0.3% or more in a quarter; the remaining periods are classified as stable inflation. Starting date for Core Real Estate is March 1978. <sup>2</sup> Starting CPI level is based on Y/Y US CPI in a given quarter; rising inflation period is defined in Footnote 1. Data: World Equity: MSCI World Index (net). US Fixed Income: BB US Gov Bond Index through 12/31/1975, and BB US Agg Index thereafter. Core Real Estate: NCREIF ODCE AWA (gross), 2022Q1 figures are preliminary and subject to change. REIT: FTSE NAREIT Equity REITs Index through 12/31/1995, and MSCI World/Real Estate GR USD Index thereafter. Infrastructure: 50/50 Blend of Datastream World Pipelines and Datastream World Gas, Water & Multi-Utilities through 12/31/2001, and S&P Global Infrastructure thereafter. Natural Resource Equity: 50/50 Datastream World Oil & Gas and Datastream World Basic Materials through 11/30/2002, and S&P Global Natural Resources thereafter. Commodity: S&P GSCI through 12/31/1991, and BB Commodity Index thereafter.



First Quarter Review

**Broad Market**

US equity markets declined in Q1, with each respective market cap and style index generating negative returns. The prospect of entering a rising rate environment for the first time since 2018, with multiple rate hikes expected by the end of the year, caused investors to revisit the elevated valuations within the equity market, especially among higher-growth companies.

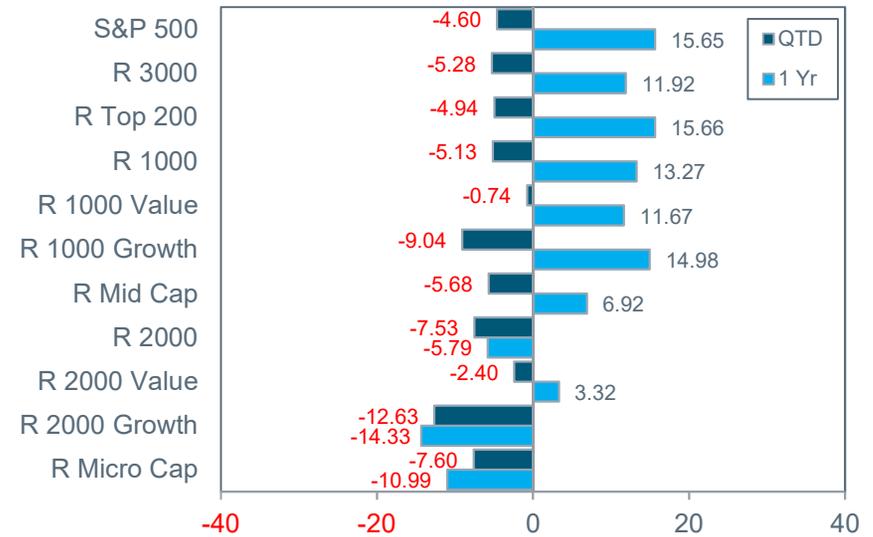
**Market Cap**

The disparity between value and growth was heightened in small- and mid-cap stocks with the Russell 2000 Value and Russell Mid-Cap Value outperforming their growth counterparts by 10.2% and 10.8%, respectively.

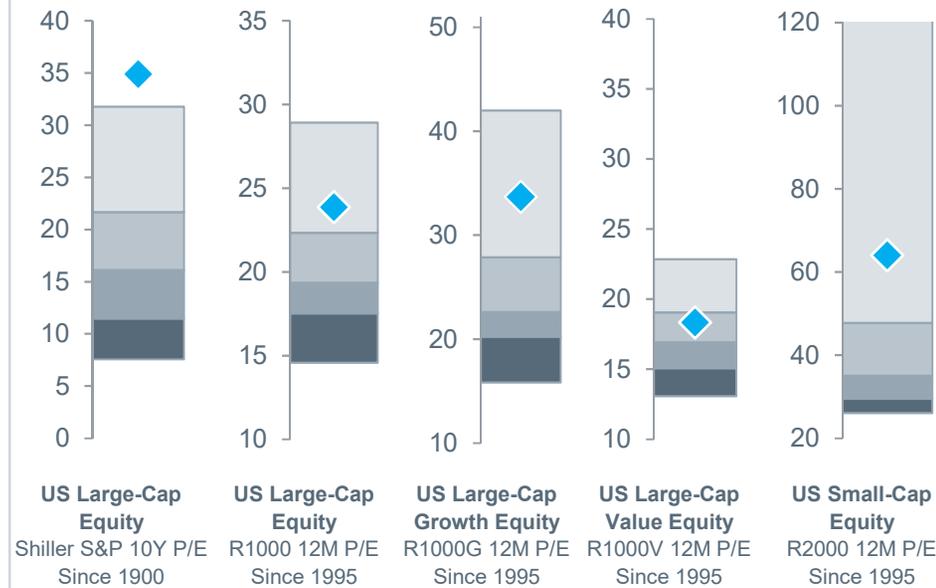
**Style and Sector**

Growth managers struggled with the performance of top performing stocks in previous years reversing sharply during the quarter. While value managers generally performed well, many small-cap value managers underperformed due to missing the rally among commodity-linked and energy companies that benefited from rising prices.

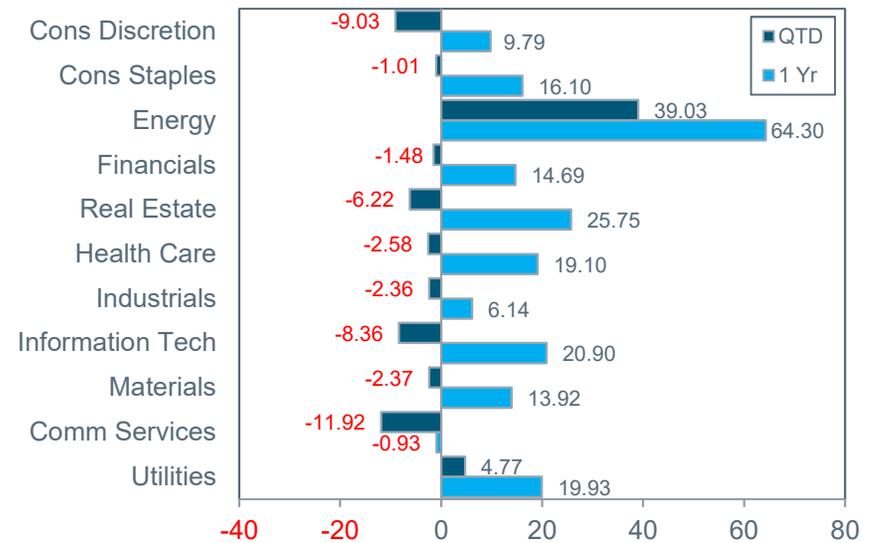
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



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



First Quarter Review

Developed Markets

Developed international markets experienced negative absolute performance for the quarter, relatively in line with domestic markets. Value stocks were slightly positive for the quarter, significantly outperforming growth stocks, which saw double-digit negative returns. Small-cap stocks underperformed large-cap stocks due to the risk-off atmosphere. Given the inflationary environment, cyclical sectors performed best in Q1, with energy, materials, and financials positive and all other sectors negative.

Emerging Markets

Emerging markets underperformed developed markets during the quarter, with the invasion of Ukraine serving as a significant negative catalyst, as investors soured on the highest growth stocks within emerging markets.

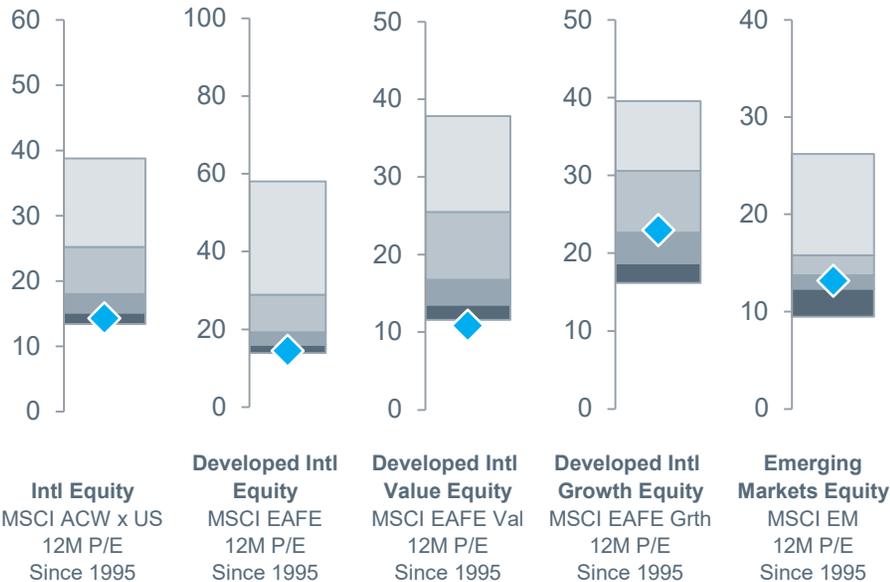
Market Cap & Style

In international markets, value stocks outperformed growth, while large-cap stocks outperformed small-cap. In emerging markets, value stocks outperformed growth, while small-cap stocks outperformed large-cap.

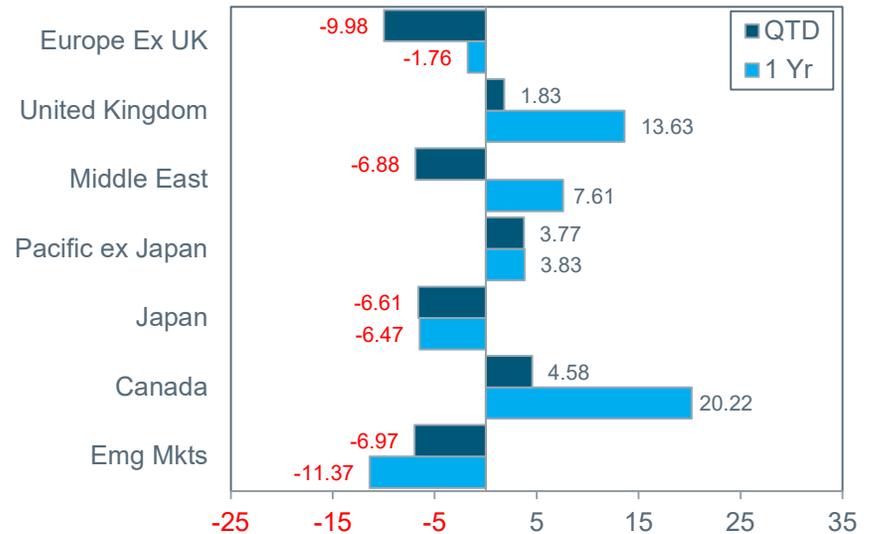
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

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



First Quarter Review

**Broad Market**

During Q1, Treasury yields rose from 1.52% to 2.32% as measured by the 10-year US Treasury yield—an 80-basis point rise over a single quarter. In response to the changing economic conditions, the Federal Reserve increased the Federal Funds Rate by 25 basis points—the first of an anticipated series of rate hikes.

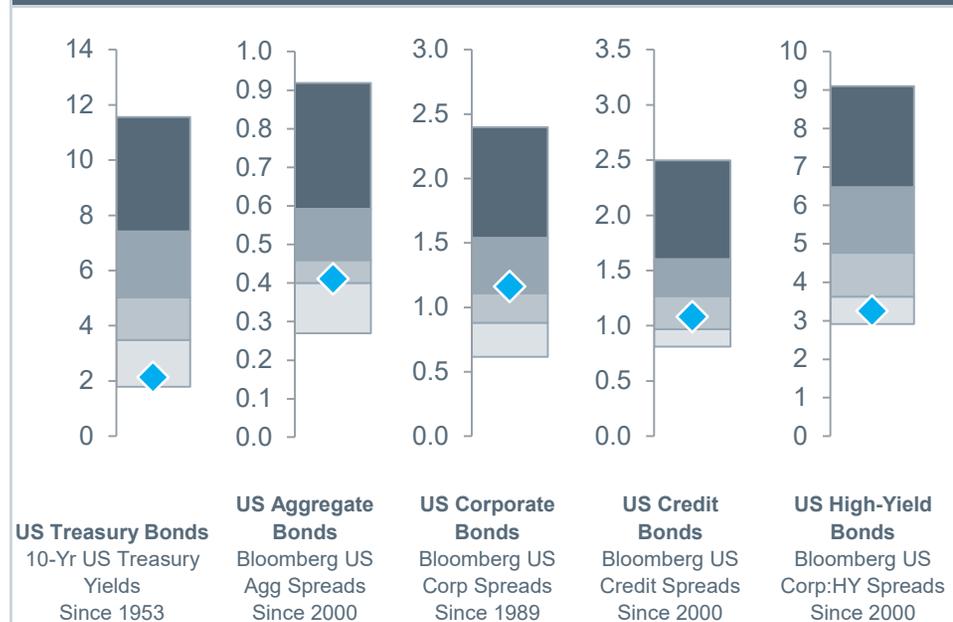
**Credit Market**

The Bloomberg US Aggregate returned -5.9% for the quarter. US Investment Grade Credit declined -7.4% in Q1, while US High Yield lost -4.8%, as measured by the Bloomberg US Credit Index and Bloomberg US High Yield Index, respectively.

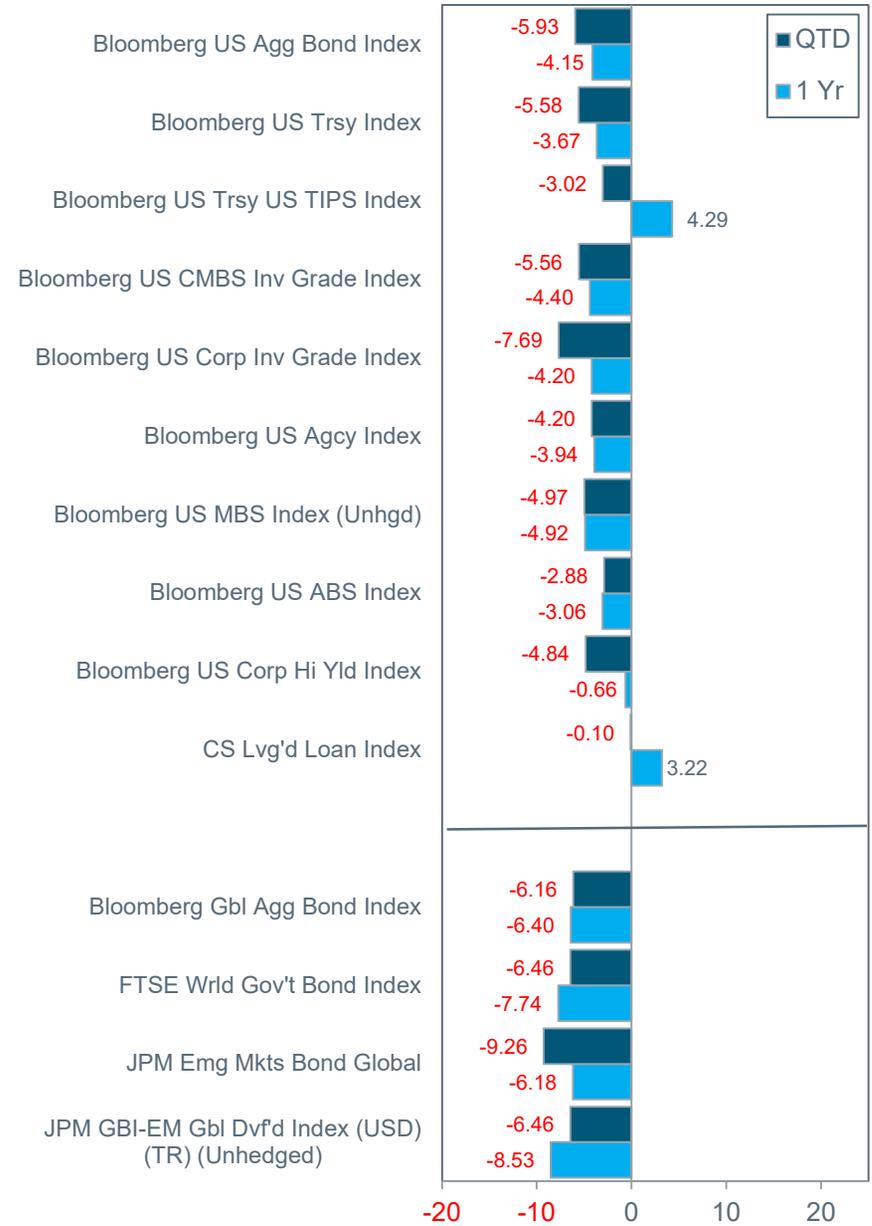
**Emerging Market Debt**

The war in Ukraine and humanitarian crisis prompted a multitude of economic sanctions against Russia, which precipitated an elevated risk-off sentiment among emerging market debt investors. As a result, the JPM EMBI Global Diversified Index declined -10.0% during the quarter.

Valuations



Fixed Income Performance (%)



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



**First Quarter Review - Absolute Return**

**General Market - Hedge Funds**

Hedge fund strategies exhibited significant return dispersion in Q1 depending on a strategy's level of equity beta. Hedged Equity managers produced returns of -4.3% during the quarter, significantly underperforming global equity benchmarks on a beta-adjusted basis. Underperformance generally resulted from long exposures underperforming relative to indexes, particularly within the healthcare, technology, and consumer sectors, while shorts tended to add value. The best-performing firms during Q1 generally had quantitative macro strategies.

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

Global Tactical Asset Allocation strategies that RVK follows closely generated disparate performance in Q1. The top-performing long-biased GTAA strategies tended to emphasize measures of relative undervaluation in their asset allocation processes, while strategies that underperformed peers tended to hold larger allocations to developed market equity, particularly within cyclical sectors, such as technology, and smaller market capitalization equities.

**First Quarter Review - Real Assets**

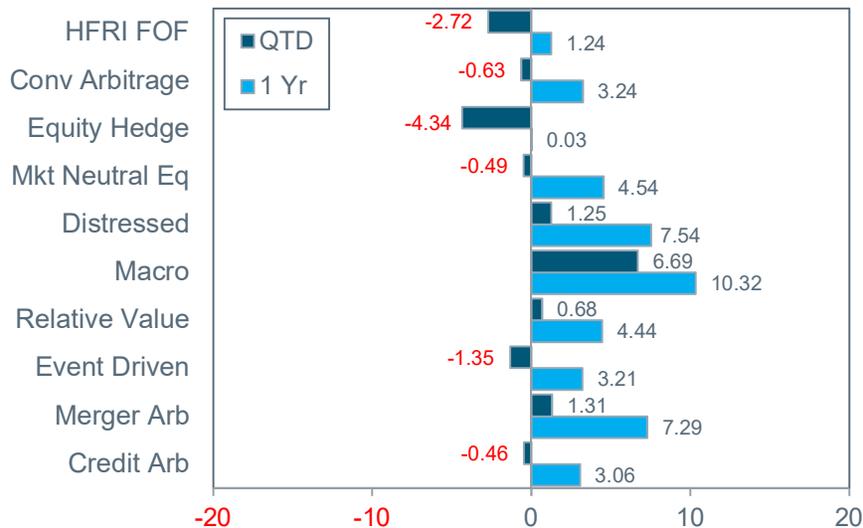
**General Market - Diversified Inflation Strategies (DIS)**

Diversified Inflation Strategies that RVK follows closely responded to high inflation and generated positive absolute performance, ranging from mid-single digits to low double-digits. Managers with larger equity and commodity exposures to natural resources posted the strongest absolute returns during the quarter, while managers with larger exposures to global listed infrastructure, REITs, and TIPS underperformed peers. While headline and core inflation continued to climb, market-based measures of future inflation expectations remain around a more moderate 2.8%.

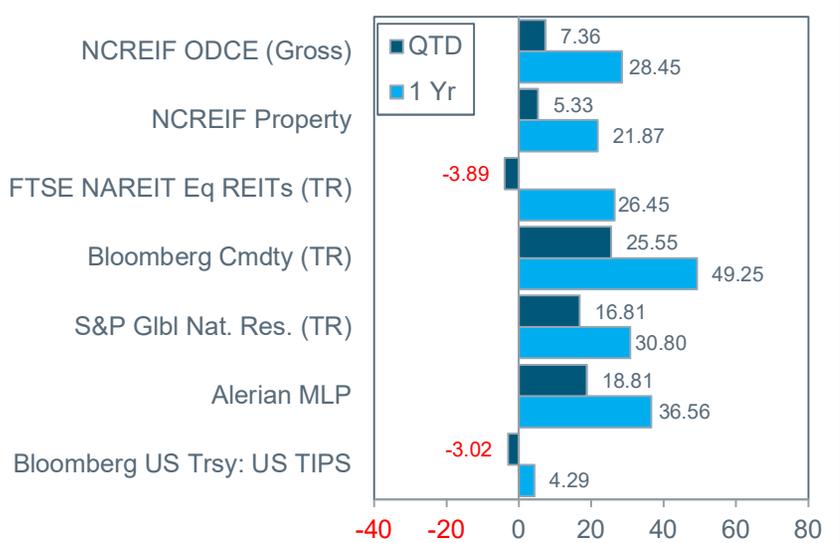
**General Market - Real Estate**

Core private real estate generated a positive 7.4% return in Q1, as reported by the NFI-ODCE Index, with the total return comprising 0.9% income and 6.4% price appreciation. While the income return is trending at the lower end of historical levels, the price appreciation return remains elevated. Investors in publicly traded real estate significantly underperformed their private market counterparts.

**HFRI Hedge Fund Performance (%)**



**Real Asset Performance (%)**



Annual Asset Class Performance

As of March 31, 2022

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
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	25.55
	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	7.36
	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	0.04
	-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	-2.72
	-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	-3.02
	-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	-3.89
	-26.16	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.44	10.88	10.10	-4.60
	-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	-4.84
	-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	-5.31
	-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	-5.93
	-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	-6.97
	-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	-7.53
	-47.01	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.58	5.34	-3.12	-2.52	-8.53
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	-10.95
	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 Comdty (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



Watch List Managers	Date Added to Watch List	Benchmark	Peer Group	Inception Date	Quantitative Factors						Qualitative Factors	Last Meeting w/Staff or RVK	Rationale for Addition to Watch List	
					Rolling 5-Year Return (GoF) for three consecutive quarters vs. Benchmark			Rolling 5-Year Return (GoF) for three consecutive quarters vs. Peer Group universe			Meaningful Updates			
					5-Years Ending Mar-2022	5-Years Ending Dec-2021	5-Years Ending Sept-2021	5-Years Ending Mar-2022	5-Years Ending Dec-2021	5-Years Ending Sept-2021				
<b>US Equity</b>														
Pinnacle US SMID Cap Growth	Oct-20	R2500 Growth	IM US SMID Cap Growth Equity (SA+CF) Median	Mar-10	✓	✓	✓	✓	✓	✓	N/A	Apr-22	Rolling five-year return (gross of fees) has fallen below the rolling five-year benchmark return for three consecutive quarters, and; Rolling five-year return (gross of fees) has ranked in the bottom third of the peer group for three consecutive quarters.	
<b>Fixed Income</b>														
FT Global Multisector Plus	Oct-20	FT Global Multisector Index	IM Global FI (SA+CF) Median	Sep-07	✗	✗	✗	✗	✗	✗	N/A	Apr-22	Rolling five-year return (gross of fees) has fallen below the rolling five-year benchmark return for three consecutive quarters, and; Rolling five-year return (gross of fees) has ranked in the bottom third of the peer group for three consecutive quarters.	

✓ = strategy exceeds the benchmark / peer group over the stated trailing period.  
✗ = strategy does not exceed the benchmark / peer group over the stated trailing period.

**Organization, Team, Process, and AUM Developments**

**Pinnacle US SMID Cap Growth (please refer to page 19 for gross performance)**

Firm and product assets have remained stable. There are no recent personnel changes to report nor indications of a change to the investment process. The strategy protected capital successfully relative to its benchmark during the volatile first quarter of 2022. This positive quarter of excess returns follows strong relative results in calendar year 2021. The high quality bias of the portfolio and avoidance of speculative areas of the market have been tailwinds for the portfolio. RVK rates Pinnacle SMID Cap Growth as neutral and views it as an institutional quality option.

**Recommendation:** RVK recommends Pinnacle US SMID Cap Growth be removed from the Watch List due to improvement in performance relative to its benchmark and rankings amongst peers.

**Franklin Templeton Global Multisector Plus (please refer to page 20 for gross performance)**

The Global MultiSector Plus team has remained stable and continues to follow a top-down research-led process with a multi-year investment horizon. Assets have continued to decline, from a peak of over \$54B in 2013 to \$6.1B in 2022 Q1. RVK continues to monitor the asset levels of the strategy across vehicles. Performance QTD outperformed the benchmark. Long-term trailing absolute and relative returns remain negative, excluding 10 years and since inception. RVK rates the strategy as neutral and views it as an institutional quality option.

**Recommendation:** No recommended action at this time. While continued outflows remain concerning, the team and investment process remain stable. Performance for the strategy continues to trail its benchmark and ranks in the bottom third of its peer group over the last three consecutive rolling five-year periods. As such, RVK recommends they remain on the Watch List.



**City of Jacksonville Employees' Retirement System**  
**Asset Allocation, Performance & Schedule of Investable Assets**

**As of March 31, 2022**

	Allocation		Performance (%)		Allocation		Performance (%)
	Market Value (\$)	%	QTD		Market Value (\$)	%	QTD
<b>US Equity</b>	<b>1,015,541,190</b>	<b>39.90</b>	<b>-7.05</b>	<b>Real Estate</b>	<b>443,917,977</b>	<b>17.44</b>	<b>5.35</b>
Eagle Capital Large Cap Value (SA)	257,493,947	10.12	-8.87	Harrison Street Core Property, LP	121,034,295	4.76	2.55
Mellon Large Cap Core Index (CF)	303,153,090	11.91	-5.13	PGIM Real Estate PRISA II LP (CF)	70,250,623	2.76	6.47
Loomis Sayles Large Cap Growth (CF)	194,821,516	7.65	-7.82	Principal US Property (CF)	164,106,199	6.45	7.33
Pinnacle Associates US SMID Cap Growth (SA)	88,974,856	3.50	-5.69	UBS Trumbull Property (CF)	82,187,852	3.23	5.16
Kayne Anderson US SMID Value (SA)	82,847,245	3.25	N/A	Vanguard RE Idx;ETF (VNQ)	1,446,436	0.06	-6.08
Systematic Financial US SMID Value (SA)	88,250,537	3.47	N/A	H.I.G. Realty Fund IV (CF)	4,892,572	0.19	N/A
<b>International Equity</b>	<b>571,686,598</b>	<b>22.46</b>	<b>-7.89</b>	<b>Diversifying Assets</b>	<b>61,163,100</b>	<b>2.40</b>	<b>9.07</b>
Silchester International Value (CF)	264,118,979	10.38	0.18	Hancock Timberland (SA)	11,678,728	0.46	0.00
Baillie Gifford International Growth (BGEFX)	168,771,745	6.63	-21.73	Adams Street Private Equity (SA)	34,286,180	1.35	16.01
Acadian Emerging Markets (CF)	138,795,874	5.45	-1.81	Hamilton Lane Private Credit (SA)	15,198,191	0.60	0.08
<b>Fixed Income</b>	<b>447,031,506</b>	<b>17.56</b>	<b>-4.46</b>	Dreyfus Gvt Csh Mgt;Inst (DGCXX)	5,864,673	0.23	0.08
Baird Core Fixed Income (SA)	218,468,576	8.58	-6.17	Transition Account	100,377	0.00	N/A
Franklin Templeton Global Multisector Plus (CF)	93,848,660	3.69	1.43				
Loomis Sayles Multisector Full Discretion (CF)	134,714,269	5.29	-5.48				

**Schedule of Investable Assets (Total Assets)**

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	2,664,636,142	608,172	-119,938,894	2,545,305,421	-4.49

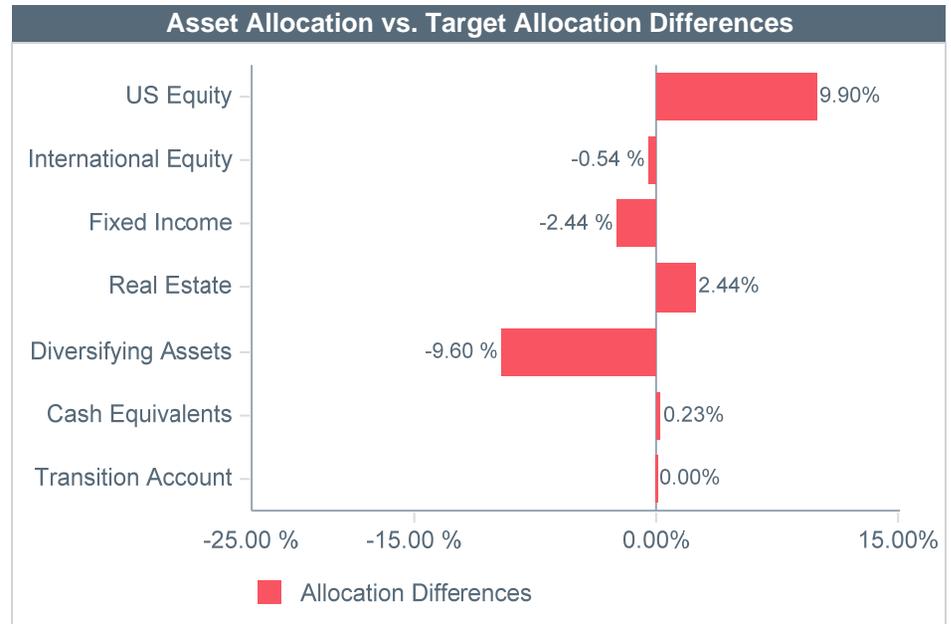
Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. During 01/2022, H.I.G. Realty Fund IV (CF) was funded. Additionally, Mellon Small Cap Value Index (CF) was liquidated. During 02/2022, Kayne Anderson US SMID Value (SA) and Systematic Financial US SMID Value (SA) were funded.



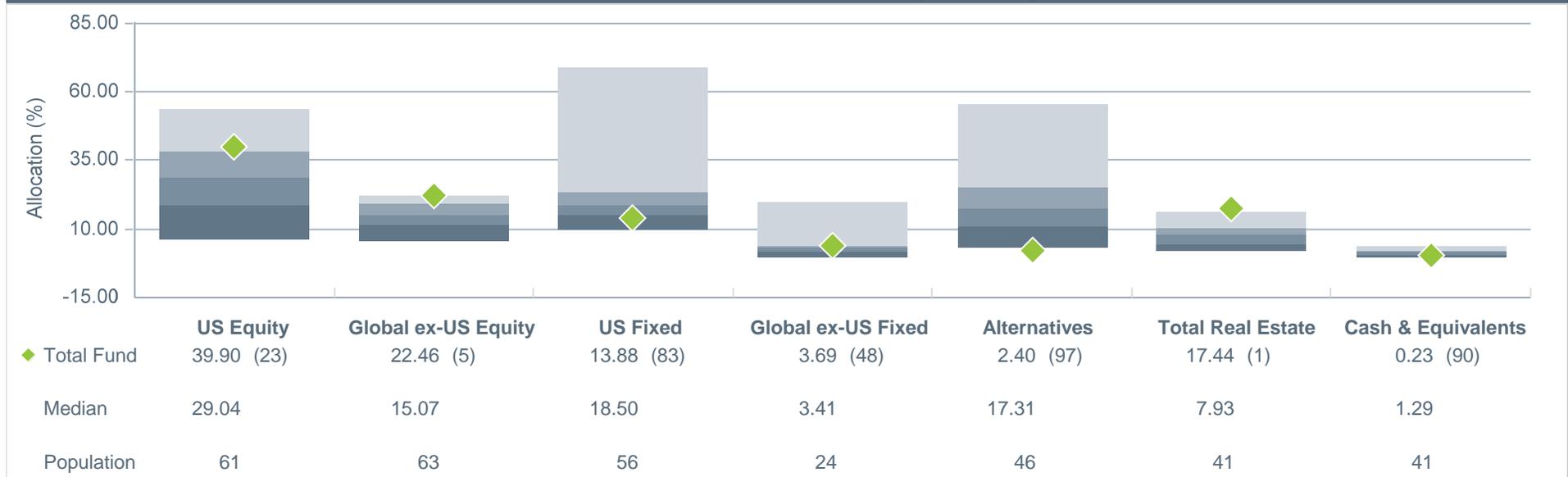
**City of Jacksonville Employees' Retirement System**  
**Total Fund vs. All Public Plans (\$1B to \$5B)**  
**Asset Allocation vs. Target and Plan Sponsor Peer Group**

As of March 31, 2022

Asset Allocation vs. Target Allocation					
	Market Value (\$)	Allocation (%)	Min (%)	Target (%)	Max (%)
<b>Total Fund</b>	<b>2,545,305,421</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>
US Equity	1,015,541,190	39.90	20.00	30.00	40.00
International Equity	571,686,598	22.46	13.00	23.00	25.00
Fixed Income	447,031,506	17.56	10.00	20.00	30.00
Real Estate	443,917,977	17.44	0.00	15.00	20.00
Diversifying Assets	61,163,100	2.40	0.00	12.00	20.00
Cash Equivalents	5,864,673	0.23	0.00	0.00	10.00
Transition Account	100,377	0.00	0.00	0.00	0.00



**Asset Allocation vs. All Public Plans (\$1B to \$5B)**

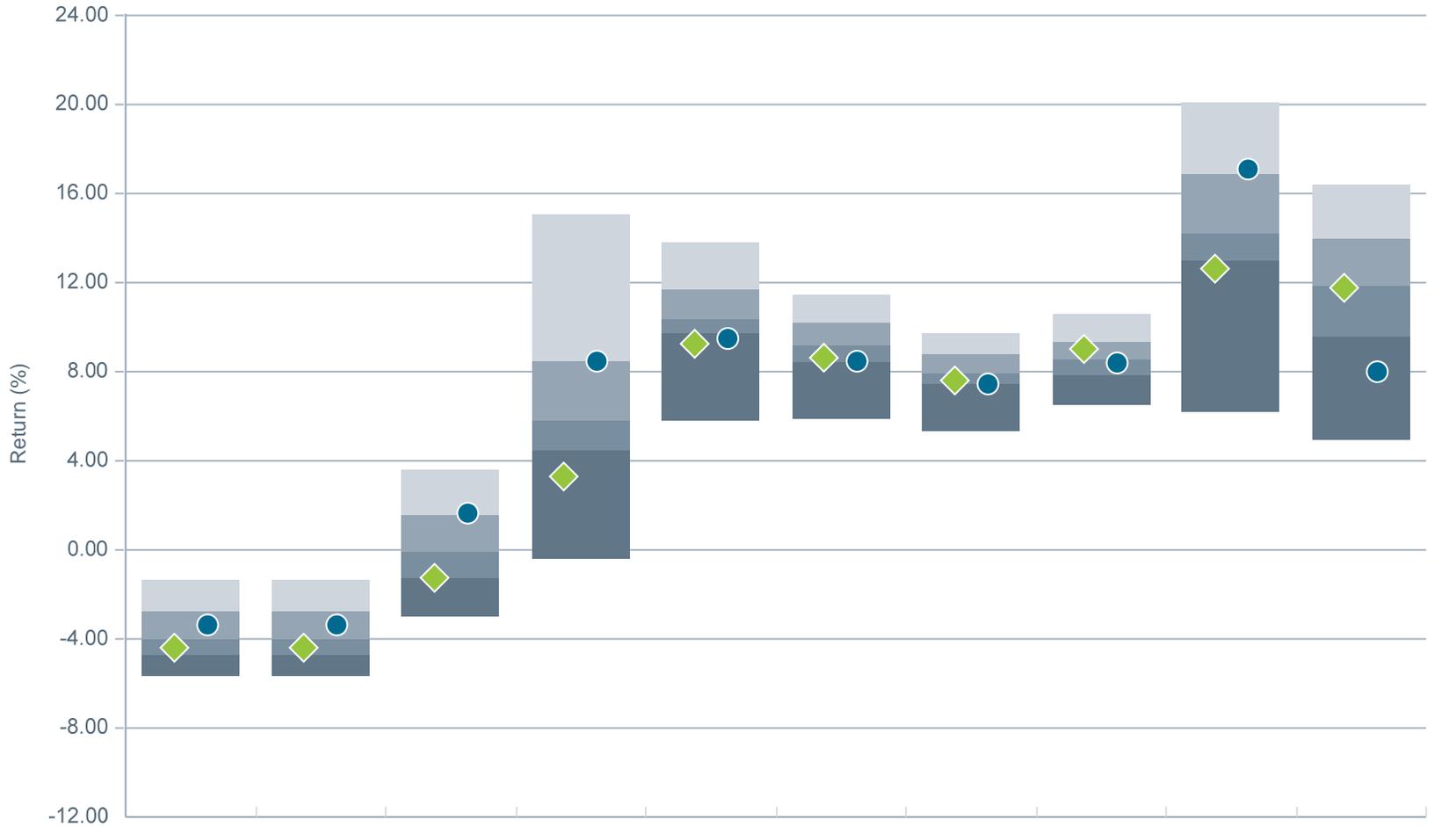


Allocations shown may not sum up to 100% exactly due to rounding. Parentheses contain percentile ranks.



City of Jacksonville Employees' Retirement System  
 Total Fund vs. All Public Plans (\$1B to \$5B)  
 Plan Sponsor Peer Group Analysis

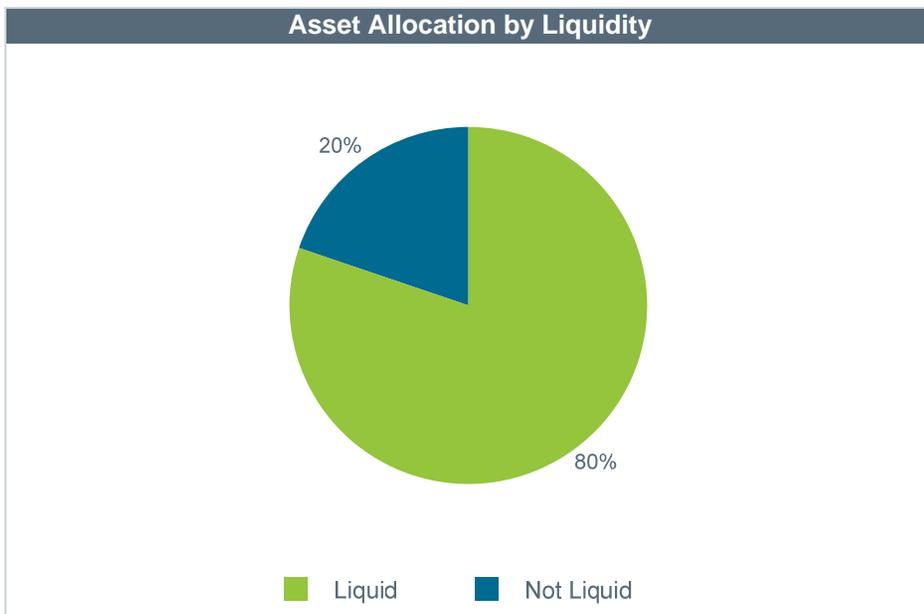
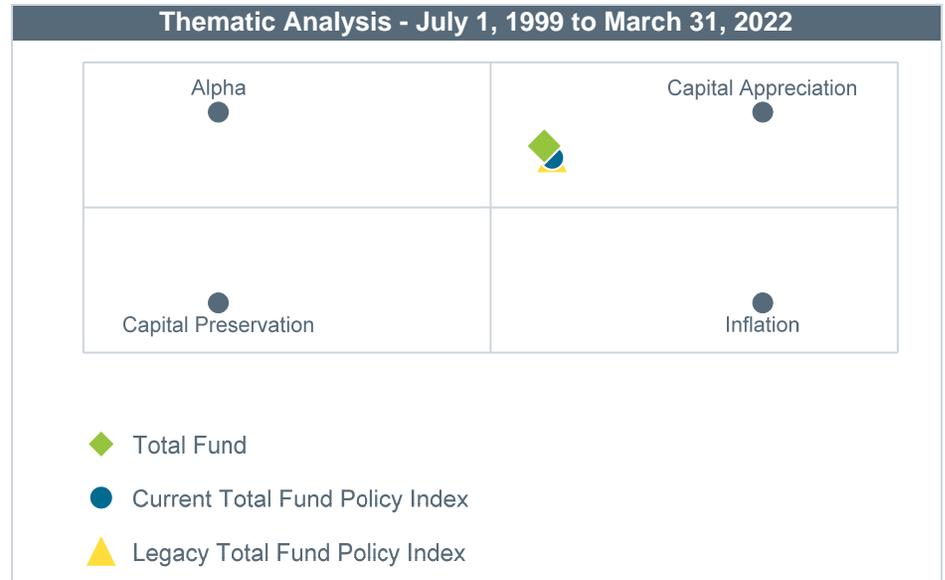
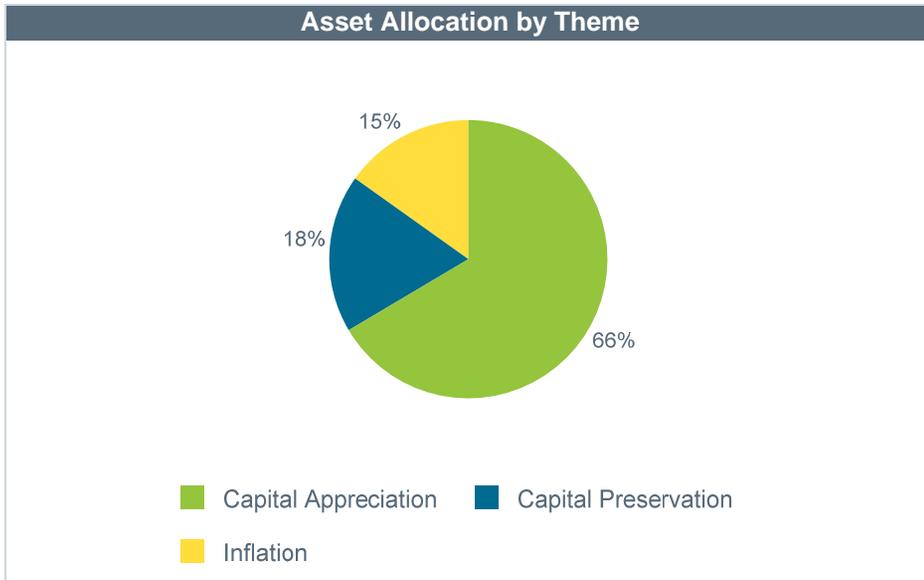
As of March 31, 2022



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020
◆ Total Fund	-4.37 (65)	-4.37 (65)	-1.26 (80)	3.30 (84)	9.29 (87)	8.62 (71)	7.60 (61)	9.00 (33)	12.64 (80)	11.73 (52)
● Current Total Fund Policy Index	-3.35 (33)	-3.35 (33)	1.64 (24)	8.50 (25)	9.52 (83)	8.44 (80)	7.43 (79)	8.36 (54)	17.09 (21)	8.02 (92)
5th Percentile	-1.33	-1.33	3.64	15.07	13.84	11.41	9.75	10.59	20.11	16.39
1st Quartile	-2.77	-2.77	1.56	8.44	11.65	10.17	8.75	9.32	16.90	14.00
Median	-3.98	-3.98	-0.09	5.79	10.35	9.18	7.95	8.52	14.21	11.81
3rd Quartile	-4.69	-4.69	-1.22	4.44	9.74	8.49	7.47	7.86	13.05	9.60
95th Percentile	-5.69	-5.69	-2.98	-0.40	5.82	5.92	5.32	6.55	6.17	4.95

Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.



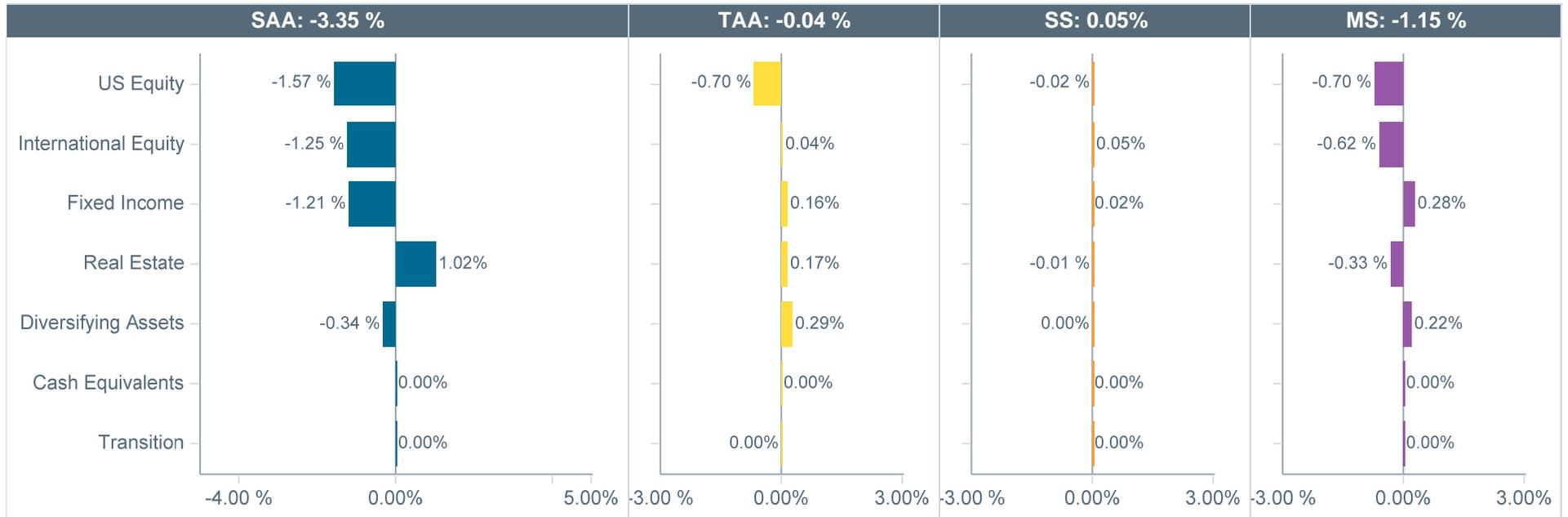
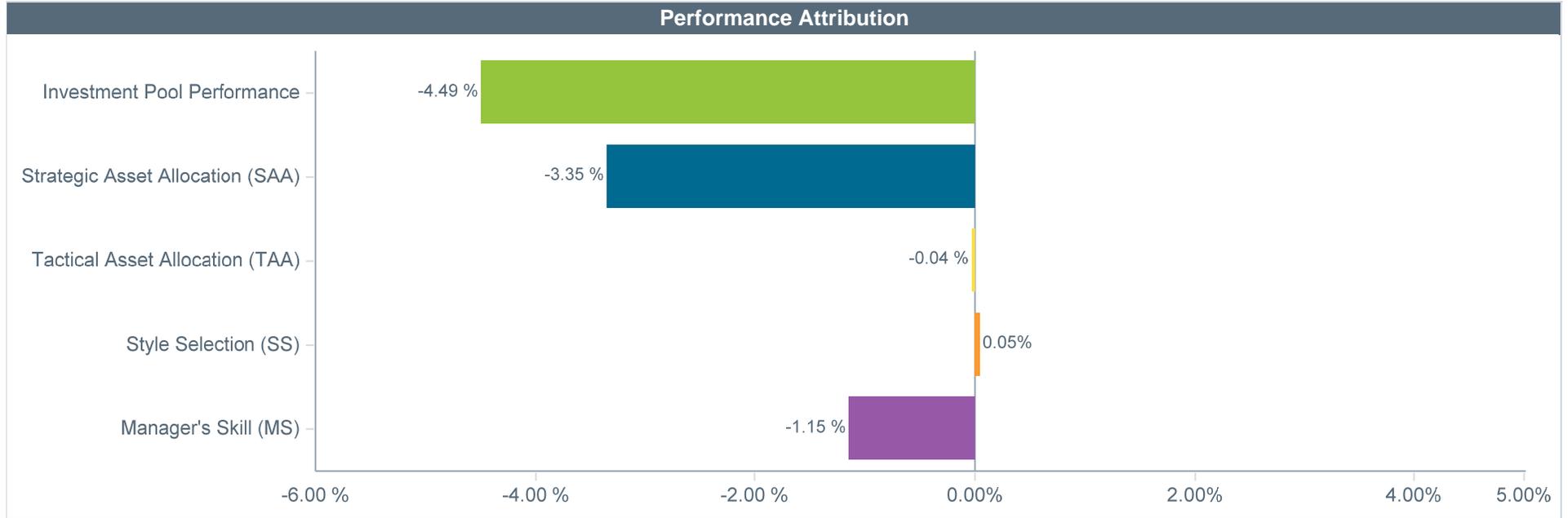


### Correlation Matrix - 10 Years

	A	B	C	D
A	1.00			
B	0.64	1.00		
C	-0.15	-0.27	1.00	
D	0.55	0.75	-0.09	1.00

A = HFRI EH: Equity Market Neutral Index (Alpha)  
 B = MSCI ACW Index (USD) (Gross) (Capital Appreciation)  
 C = Bloomberg US Gov't Bond Index (Capital Preservation)  
 D = Real Return Custom Index (Inflation)

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding liquidity, thematic, and custom index descriptions.

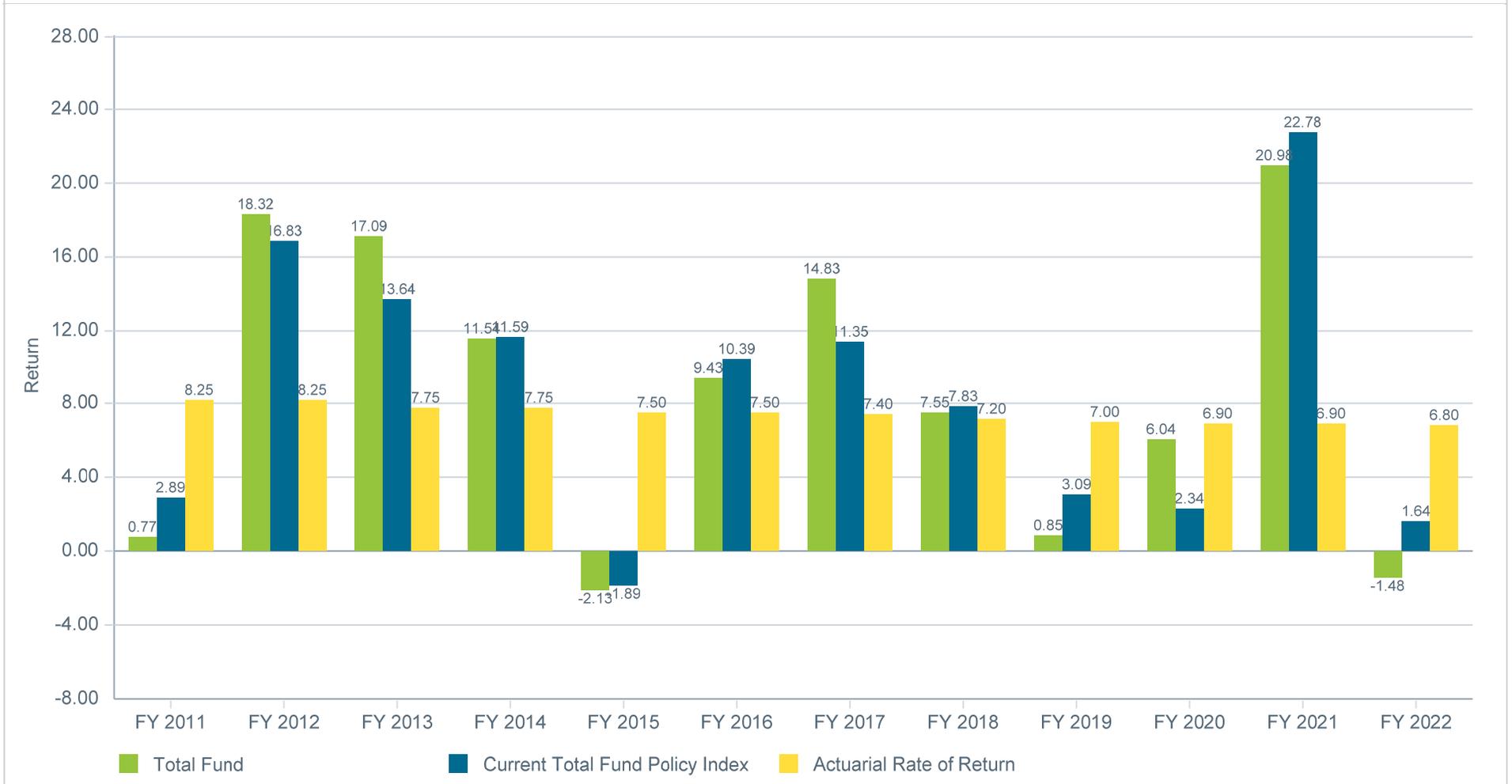


Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.

**City of Jacksonville Employees' Retirement System**  
**Historical Fiscal Year Returns**

As of March 31, 2022

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FYTD
<b>Total Fund</b>	<b>11.31</b>	<b>0.77</b>	<b>18.32</b>	<b>17.09</b>	<b>11.54</b>	<b>-2.13</b>	<b>9.43</b>	<b>14.83</b>	<b>7.55</b>	<b>0.85</b>	<b>6.04</b>	<b>20.98</b>	<b>-1.48</b>
Current Total Fund Policy Index	8.32	2.89	16.83	13.64	11.59	-1.89	10.39	11.35	7.83	3.09	2.34	22.78	1.64
Difference	2.99	-2.12	1.49	3.45	-0.05	-0.24	-0.96	3.48	-0.28	-2.24	3.70	-1.80	-3.12
Actuarial Rate of Return	8.40	8.25	8.25	7.75	7.75	7.50	7.50	7.40	7.20	7.00	6.90	6.90	6.80
Difference	2.91	-7.48	10.07	9.34	3.79	-9.63	1.93	7.43	0.35	-6.15	-0.86	14.08	-8.28



Performance shown is net of fees. Fiscal year for the COJ ends 09/30. The Fiscal Year Actuarial Rate of Return changed from 8.40% to 8.25% effective 10/01/2010, changed to 7.75% effective 10/01/2012, changed to 7.50% effective 10/01/2014, changed to 7.40% effective 10/01/2016, changed to 7.20% effective 10/01/2017, changed to 7.00% effective 10/01/2018, changed to 6.90% effective 10/01/2019, and then changed to 6.80% effective 10/01/2021. Please see the Addendum for custom index definitions.



City of Jacksonville Employees' Retirement System  
 Asset Allocation & Performance (Gross of Fees)

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Total Fund</b>	<b>2,545,305,421</b>	<b>100.00</b>	<b>-4.37</b>	<b>-4.37</b>	<b>-1.26</b>	<b>3.30</b>	<b>9.29</b>	<b>8.62</b>	<b>7.60</b>	<b>9.00</b>	<b>6.86</b>	<b>07/01/1999</b>
Current Total Fund Policy Index			-3.35	-3.35	1.64	8.50	9.52	8.44	7.43	8.36	6.24	
Difference			-1.02	-1.02	-2.90	-5.20	-0.23	0.18	0.17	0.64	0.62	
All Public Plans (\$1B to \$5B) (Custom PG) Median			-3.98	-3.98	-0.09	5.79	10.35	9.18	7.95	8.52	6.51	
Rank			65	65	80	84	87	71	61	33	31	
<b>Total Equity</b>	<b>1,587,227,788</b>	<b>62.36</b>	<b>-7.23</b>	<b>-7.23</b>	<b>-4.28</b>	<b>-0.14</b>	<b>13.53</b>	<b>11.97</b>	<b>10.25</b>	<b>11.54</b>	<b>7.14</b>	<b>07/01/1999</b>
<b>US Equity</b>	<b>1,015,541,190</b>	<b>39.90</b>	<b>-6.93</b>	<b>-6.93</b>	<b>-1.39</b>	<b>5.26</b>	<b>16.84</b>	<b>14.62</b>	<b>12.37</b>	<b>13.70</b>	<b>7.87</b>	<b>07/01/1999</b>
US Equity Index			-5.28	-5.28	3.51	11.92	18.24	15.40	13.38	14.28	7.75	
Difference			-1.65	-1.65	-4.90	-6.66	-1.40	-0.78	-1.01	-0.58	0.12	
IM U.S. Equity (SA+CF) Median			-5.24	-5.24	2.84	8.95	16.23	13.48	11.73	13.38	9.65	
Rank			63	63	70	65	44	43	44	46	84	
<b>International Equity</b>	<b>571,686,598</b>	<b>22.46</b>	<b>-7.76</b>	<b>-7.76</b>	<b>-9.01</b>	<b>-8.45</b>	<b>8.34</b>	<b>7.79</b>	<b>6.76</b>	<b>7.81</b>	<b>6.35</b>	<b>07/01/1999</b>
International Equity Index			-5.44	-5.44	-3.72	-1.48	7.51	6.76	5.19	5.55	4.26	
Difference			-2.32	-2.32	-5.29	-6.97	0.83	1.03	1.57	2.26	2.09	
IM International Equity (SA+CF) Median			-7.25	-7.20	-5.88	-2.12	8.27	7.56	6.32	7.11	7.30	
Rank			54	54	67	74	50	46	43	38	66	
<b>Fixed Income</b>	<b>447,031,506</b>	<b>17.56</b>	<b>-4.38</b>	<b>-4.38</b>	<b>-4.95</b>	<b>-3.05</b>	<b>1.21</b>	<b>1.79</b>	<b>1.93</b>	<b>2.60</b>	<b>4.88</b>	<b>07/01/1999</b>
Fixed Income Index			-6.11	-6.11	-6.14	-4.23	1.85	2.25	1.95	2.30	4.44	
Difference			1.73	1.73	1.19	1.18	-0.64	-0.46	-0.02	0.30	0.44	
IM Global Fixed Income (SA+CF) Median			-4.62	-4.62	-4.63	-3.27	3.45	3.57	3.42	3.28	6.10	
Rank			47	47	54	49	82	87	84	59	66	
<b>Real Estate</b>	<b>443,917,977</b>	<b>17.44</b>	<b>5.49</b>	<b>5.49</b>	<b>12.77</b>	<b>20.03</b>	<b>8.06</b>	<b>8.21</b>	<b>8.57</b>	<b>9.33</b>	<b>6.81</b>	<b>12/01/2005</b>
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	7.99	
Difference			-1.87	-1.87	-3.15	-8.42	-3.23	-1.67	-1.62	-1.60	-1.18	
<b>Diversifying Assets</b>	<b>61,163,100</b>	<b>2.40</b>	<b>9.20</b>	<b>9.20</b>	<b>24.15</b>	<b>44.35</b>	<b>9.35</b>	<b>6.42</b>	<b>3.82</b>	<b>7.37</b>	<b>8.15</b>	<b>03/01/2011</b>
Diversifying Assets Index			-2.81	-2.81	3.71	16.23	1.05	1.07	0.26	3.39	3.58	
Difference			12.01	12.01	20.44	28.12	8.30	5.35	3.56	3.98	4.57	

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City of Jacksonville Employees' Retirement System  
Asset Allocation & Performance (Gross of Fees)

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Equity</b>												
<b>Eagle Capital Large Cap Value (SA)</b>	<b>257,493,947</b>	<b>10.12</b>	<b>-8.69</b>	<b>-8.69</b>	<b>-5.62</b>	<b>5.21</b>	<b>16.46</b>	<b>14.78</b>	<b>13.32</b>	<b>14.94</b>	<b>11.78</b>	<b>02/01/2007</b>
Russell 1000 Val Index			-0.74	-0.74	6.98	11.67	13.02	10.29	9.73	11.70	7.28	
Difference			-7.95	-7.95	-12.60	-6.46	3.44	4.49	3.59	3.24	4.50	
IM U.S. Large Cap Value Equity (SA+CF) Median			-0.37	-0.37	8.21	13.47	15.26	12.18	10.83	12.60	8.79	
Rank			98	98	100	97	33	13	10	7	2	
<b>Mellon Large Cap Core Index (CF)</b>	<b>303,153,090</b>	<b>11.91</b>	<b>-5.13</b>	<b>-5.13</b>	<b>4.15</b>	<b>13.31</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>17.65</b>	<b>05/01/2019</b>
Russell 1000 Index			-5.13	-5.13	4.15	13.27	18.71	15.82	13.72	14.53	17.69	
Difference			0.00	0.00	0.00	0.04	N/A	N/A	N/A	N/A	-0.04	
IM U.S. Large Cap Core Equity (SA+CF) Median			-4.58	-4.58	5.22	13.98	17.92	15.39	13.14	14.30	16.81	
Rank			60	60	63	55	N/A	N/A	N/A	N/A	38	
<b>Loomis Sayles Large Cap Growth (CF)</b>	<b>194,821,516</b>	<b>7.65</b>	<b>-7.65</b>	<b>-7.65</b>	<b>-1.33</b>	<b>6.99</b>	<b>18.73</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>17.51</b>	<b>08/01/2017</b>
Russell 1000 Grth Index			-9.04	-9.04	1.54	14.98	23.60	20.88	17.34	17.04	20.66	
Difference			1.39	1.39	-2.87	-7.99	-4.87	N/A	N/A	N/A	-3.15	
IM U.S. Large Cap Growth Equity (SA+CF) Median			-9.86	-9.86	-1.43	10.61	20.16	18.87	15.57	15.92	18.44	
Rank			26	26	50	73	74	N/A	N/A	N/A	67	
<b>Pinnacle Associates US SMID Cap Growth (SA)</b>	<b>88,974,856</b>	<b>3.50</b>	<b>-5.19</b>	<b>-5.19</b>	<b>-2.00</b>	<b>-4.22</b>	<b>19.29</b>	<b>15.46</b>	<b>12.97</b>	<b>14.50</b>	<b>15.37</b>	<b>03/01/2010</b>
Russell 2500 Grth Index			-12.30	-12.30	-12.13	-10.12	12.99	13.22	10.53	12.69	13.79	
Difference			7.11	7.11	10.13	5.90	6.30	2.24	2.44	1.81	1.58	
IM U.S. SMID Cap Growth Equity (SA+CF) Median			-12.64	-12.64	-8.89	-1.42	16.67	16.41	12.82	13.76	15.40	
Rank			5	5	20	62	26	65	48	39	53	
<b>Kayne Anderson US SMID Value (SA)</b>	<b>82,847,245</b>	<b>3.25</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.36</b>	<b>03/01/2022</b>
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.47	
IM U.S. SMID Cap Value Equity (SA+CF) Median			-2.69	-2.69	4.19	7.70	15.09	10.93	9.77	12.19	0.47	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	74	
<b>Systematic Financial US SMID Value (SA)</b>	<b>88,250,537</b>	<b>3.47</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.37</b>	<b>03/01/2022</b>
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.48	
IM U.S. SMID Cap Value Equity (SA+CF) Median			-2.69	-2.69	4.19	7.70	15.09	10.93	9.77	12.19	0.47	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	74	

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City of Jacksonville Employees' Retirement System  
Asset Allocation & Performance (Gross of Fees)

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>International Equity</b>												
<b>Silchester International Value (CF)</b>	<b>264,118,979</b>	<b>10.38</b>	<b>0.32</b>	<b>0.32</b>	<b>0.42</b>	<b>3.64</b>	<b>7.65</b>	<b>6.46</b>	<b>6.19</b>	<b>8.66</b>	<b>9.72</b>	<b>06/01/2009</b>
MSCI EAFE Val Index (USD) (Net)			0.33	0.33	1.51	3.55	5.24	4.18	3.13	4.87	5.30	
Difference			-0.01	-0.01	-1.09	0.09	2.41	2.28	3.06	3.79	4.42	
IM EAFE Value (SA+CF) Median			-4.79	-4.79	-2.24	1.91	7.05	5.87	5.06	6.45	7.51	
Rank			6	6	19	25	36	32	21	11	12	
<b>Baillie Gifford International Growth (BGEFX)</b>	<b>168,771,745</b>	<b>6.63</b>	<b>-21.63</b>	<b>-21.63</b>	<b>-25.10</b>	<b>-26.74</b>	<b>10.57</b>	<b>11.77</b>	<b>9.18</b>	<b>9.61</b>	<b>10.72</b>	<b>06/01/2009</b>
Baillie Gifford Index			-10.78	-10.78	-8.66	-6.16	9.12	8.28	6.36	7.13	7.97	
Difference			-10.85	-10.85	-16.44	-20.58	1.45	3.49	2.82	2.48	2.75	
Baillie Gifford Spliced Index			-5.44	-5.44	-3.72	-1.48	8.14	6.93	5.26	6.38	6.93	
Difference			-16.19	-16.19	-21.38	-25.26	2.43	4.84	3.92	3.23	3.79	
IM ACWI Ex US Growth (SA+CF) Median			-12.22	-12.22	-10.51	-4.54	10.59	10.05	7.72	8.16	9.31	
Rank			99	99	98	99	51	24	26	17	16	
<b>Acadian Emerging Markets (CF)</b>	<b>138,795,874</b>	<b>5.45</b>	<b>-1.67</b>	<b>-1.67</b>	<b>-0.84</b>	<b>-0.34</b>	<b>9.11</b>	<b>7.05</b>	<b>5.94</b>	<b>4.90</b>	<b>4.41</b>	<b>02/01/2011</b>
MSCI Emg Mkts Index (USD) (Net)			-6.97	-6.97	-8.19	-11.37	4.94	5.98	4.69	3.36	2.59	
Difference			5.30	5.30	7.35	11.03	4.17	1.07	1.25	1.54	1.82	
IM Emerging Markets Equity (SA+CF) Median			-7.04	-7.04	-8.09	-9.13	6.81	6.86	5.94	5.08	4.05	
Rank			19	19	17	24	28	47	51	53	41	
<b>Fixed Income</b>												
<b>Baird Core Fixed Income (SA)</b>	<b>218,468,576</b>	<b>8.58</b>	<b>-6.12</b>	<b>-6.12</b>	<b>-6.29</b>	<b>-4.06</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-4.76</b>	<b>03/01/2021</b>
Bloomberg US Agg Bond Index			-5.93	-5.93	-5.92	-4.15	1.69	2.14	1.87	2.24	-4.95	
Difference			-0.19	-0.19	-0.37	0.09	N/A	N/A	N/A	N/A	0.19	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-5.81	-5.81	-5.87	-3.88	2.24	2.66	2.37	2.75	-4.60	
Rank			84	84	88	69	N/A	N/A	N/A	N/A	64	
<b>Franklin Templeton Global Multisector Plus (CF)</b>	<b>93,848,660</b>	<b>3.69</b>	<b>1.53</b>	<b>1.53</b>	<b>-0.87</b>	<b>-1.26</b>	<b>-3.44</b>	<b>-1.72</b>	<b>-0.36</b>	<b>1.49</b>	<b>5.19</b>	<b>09/01/2007</b>
Frank. Temp. Global Multisector Index			-6.05	-6.05	-6.71	-6.22	0.77	1.78	1.74	1.21	2.90	
Difference			7.58	7.58	5.84	4.96	-4.21	-3.50	-2.10	0.28	2.29	
IM Global Fixed Income (SA+CF) Median			-4.62	-4.62	-4.63	-3.27	3.45	3.57	3.42	3.28	3.99	
Rank			5	5	12	34	100	100	100	77	34	
<b>Loomis Sayles Multisector Full Discretion (CF)</b>	<b>134,714,269</b>	<b>5.29</b>	<b>-5.39</b>	<b>-5.39</b>	<b>-5.46</b>	<b>-2.61</b>	<b>4.93</b>	<b>4.85</b>	<b>4.46</b>	<b>5.66</b>	<b>6.47</b>	<b>10/01/2007</b>
Bloomberg Gbl Agg Bond Index			-6.16	-6.16	-6.79	-6.40	0.69	1.70	1.58	1.04	2.56	
Difference			0.77	0.77	1.33	3.79	4.24	3.15	2.88	4.62	3.91	
IM Global Fixed Income (SA+CF) Median			-4.62	-4.62	-4.63	-3.27	3.45	3.57	3.42	3.28	3.80	
Rank			63	63	59	45	24	23	35	17	8	

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City of Jacksonville Employees' Retirement System  
Asset Allocation & Performance (Gross of Fees)

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Real Estate</b>												
<b>Harrison Street Core Property, LP</b>	<b>121,034,295</b>	<b>4.76</b>	<b>2.55</b>	<b>2.55</b>	<b>5.41</b>	<b>9.95</b>	<b>7.03</b>	<b>8.08</b>	<b>N/A</b>	<b>N/A</b>	<b>7.84</b>	<b>11/01/2015</b>
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	9.90	
Difference			-4.81	-4.81	-10.51	-18.50	-4.26	-1.80	N/A	N/A	-2.06	
<b>PGIM Real Estate PRISA II LP (CF)</b>	<b>70,250,623</b>	<b>2.76</b>	<b>6.63</b>	<b>6.63</b>	<b>14.53</b>	<b>22.63</b>	<b>9.19</b>	<b>9.40</b>	<b>9.86</b>	<b>N/A</b>	<b>10.00</b>	<b>01/01/2015</b>
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	10.33	
Difference			-0.73	-0.73	-1.39	-5.82	-2.10	-0.48	-0.33	N/A	-0.33	
<b>Principal US Property (CF)</b>	<b>164,106,199</b>	<b>6.45</b>	<b>7.54</b>	<b>7.54</b>	<b>18.59</b>	<b>29.65</b>	<b>12.39</b>	<b>11.02</b>	<b>11.23</b>	<b>N/A</b>	<b>11.61</b>	<b>01/01/2014</b>
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	10.59	
Difference			0.18	0.18	2.67	1.20	1.10	1.14	1.04	N/A	1.02	
<b>UBS Trumbull Property (CF)</b>	<b>82,187,852</b>	<b>3.23</b>	<b>5.36</b>	<b>5.36</b>	<b>11.94</b>	<b>16.81</b>	<b>2.91</b>	<b>4.29</b>	<b>5.61</b>	<b>7.12</b>	<b>5.99</b>	<b>12/01/2005</b>
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	7.99	
Difference			-2.00	-2.00	-3.98	-11.64	-8.38	-5.59	-4.58	-3.81	-2.00	
<b>Vanguard RE Idx;ETF (VNQ)</b>	<b>1,446,436</b>	<b>0.06</b>	<b>-6.08</b>	<b>-6.08</b>	<b>8.02</b>	<b>21.28</b>	<b>11.36</b>	<b>9.54</b>	<b>7.78</b>	<b>9.55</b>	<b>13.65</b>	<b>12/01/2008</b>
Custom REITs Index			-5.95	-5.95	8.10	21.58	11.55	10.08	8.19	9.95	14.44	
Difference			-0.13	-0.13	-0.08	-0.30	-0.19	-0.54	-0.41	-0.40	-0.79	
<b>H.I.G. Realty Fund IV (CF)</b>	<b>4,892,572</b>	<b>0.19</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>04/01/2022</b>
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Diversifying Assets</b>												
<b>Hancock Timberland (SA)</b>	<b>11,678,728</b>	<b>0.46</b>	<b>0.00</b>	<b>0.00</b>	<b>3.88</b>	<b>19.14</b>	<b>8.86</b>	<b>9.42</b>	<b>7.28</b>	<b>8.15</b>	<b>4.77</b>	<b>10/01/2006</b>
NCREIF Timberland Index			3.21	3.21	7.91	11.83	4.75	4.08	3.85	5.60	5.55	
Difference			-3.21	-3.21	-4.03	7.31	4.11	5.34	3.43	2.55	-0.78	
<b>Adams Street Private Equity (SA)</b>	<b>34,286,180</b>	<b>1.35</b>	<b>16.01</b>	<b>16.01</b>	<b>43.41</b>	<b>66.71</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>43.44</b>	<b>11/01/2020</b>
S&P 500 Index+3%			-3.89	-3.89	7.50	19.12	22.49	19.47	17.43	18.08	31.58	
Difference			19.90	19.90	35.91	47.59	N/A	N/A	N/A	N/A	11.86	
<b>Hamilton Lane Private Credit (SA)</b>	<b>15,198,191</b>	<b>0.60</b>	<b>0.65</b>	<b>0.65</b>	<b>2.99</b>	<b>4.27</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>4.27</b>	<b>04/01/2021</b>
ICE BofAML Gbl Hi Yld Index +2%			-5.55	-5.55	-5.80	-2.76	5.26	5.96	6.65	7.19	-2.76	
Difference			6.20	6.20	8.79	7.03	N/A	N/A	N/A	N/A	7.03	
<b>Dreyfus Gvt Csh Mgt;Inst (DGCXX)</b>	<b>5,864,673</b>	<b>0.23</b>	<b>0.12</b>	<b>0.12</b>	<b>0.26</b>	<b>0.70</b>	<b>0.97</b>	<b>1.26</b>	<b>0.99</b>	<b>0.72</b>	<b>1.36</b>	<b>04/01/2001</b>
FTSE 3 Mo T-Bill Index			0.03	0.03	0.04	0.06	0.76	1.09	0.84	0.60	1.29	
Difference			0.09	0.09	0.22	0.64	0.21	0.17	0.15	0.12	0.07	

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City of Jacksonville Employees' Retirement System  
 Asset Allocation & Performance (Net of Fees)

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Total Fund</b>	<b>2,545,305,421</b>	<b>100.00</b>	<b>-4.49</b>	<b>-4.49</b>	<b>-1.48</b>	<b>2.83</b>	<b>8.75</b>	<b>8.09</b>	<b>7.07</b>	<b>8.47</b>	<b>6.54</b>	<b>07/01/1999</b>
Current Total Fund Policy Index			-3.35	-3.35	1.64	8.50	9.52	8.44	7.43	8.36	6.24	
Difference			-1.14	-1.14	-3.12	-5.67	-0.77	-0.35	-0.36	0.11	0.30	
<b>Total Equity</b>	<b>1,587,227,788</b>	<b>62.36</b>	<b>-7.36</b>	<b>-7.36</b>	<b>-4.50</b>	<b>-0.59</b>	<b>12.95</b>	<b>11.41</b>	<b>9.68</b>	<b>10.96</b>	<b>6.82</b>	<b>07/01/1999</b>
<b>US Equity</b>	<b>1,015,541,190</b>	<b>39.90</b>	<b>-7.05</b>	<b>-7.05</b>	<b>-1.59</b>	<b>4.82</b>	<b>16.28</b>	<b>14.07</b>	<b>11.81</b>	<b>13.13</b>	<b>7.56</b>	<b>07/01/1999</b>
US Equity Index			-5.28	-5.28	3.51	11.92	18.24	15.40	13.38	14.28	7.75	
Difference			-1.77	-1.77	-5.10	-7.10	-1.96	-1.33	-1.57	-1.15	-0.19	
<b>International Equity</b>	<b>571,686,598</b>	<b>22.46</b>	<b>-7.89</b>	<b>-7.89</b>	<b>-9.26</b>	<b>-8.94</b>	<b>7.76</b>	<b>7.19</b>	<b>6.17</b>	<b>7.21</b>	<b>6.01</b>	<b>07/01/1999</b>
International Equity Index			-5.44	-5.44	-3.72	-1.48	7.51	6.76	5.19	5.55	4.26	
Difference			-2.45	-2.45	-5.54	-7.46	0.25	0.43	0.98	1.66	1.75	
<b>Fixed Income</b>	<b>447,031,506</b>	<b>17.56</b>	<b>-4.46</b>	<b>-4.46</b>	<b>-5.09</b>	<b>-3.31</b>	<b>0.94</b>	<b>1.53</b>	<b>1.70</b>	<b>2.39</b>	<b>4.72</b>	<b>07/01/1999</b>
Fixed Income Index			-6.11	-6.11	-6.14	-4.23	1.85	2.25	1.95	2.30	4.44	
Difference			1.65	1.65	1.05	0.92	-0.91	-0.72	-0.25	0.09	0.28	
<b>Real Estate</b>	<b>443,917,977</b>	<b>17.44</b>	<b>5.35</b>	<b>5.35</b>	<b>12.46</b>	<b>19.38</b>	<b>7.31</b>	<b>7.45</b>	<b>7.80</b>	<b>8.51</b>	<b>6.14</b>	<b>12/01/2005</b>
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	6.99	
Difference			-1.82	-1.82	-2.91	-7.91	-3.00	-1.46	-1.41	-1.41	-0.85	
<b>Diversifying Assets</b>	<b>61,163,100</b>	<b>2.40</b>	<b>9.07</b>	<b>9.07</b>	<b>23.82</b>	<b>43.21</b>	<b>8.70</b>	<b>5.85</b>	<b>3.28</b>	<b>6.82</b>	<b>7.60</b>	<b>03/01/2011</b>
Diversifying Assets Index			-2.81	-2.81	3.71	16.23	1.05	1.07	0.26	3.39	3.58	
Difference			11.88	11.88	20.11	26.98	7.65	4.78	3.02	3.43	4.02	

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City of Jacksonville Employees' Retirement System  
Asset Allocation & Performance (Net of Fees)

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Equity</b>												
<b>Eagle Capital Large Cap Value (SA)</b>	257,493,947	10.12	-8.87	-8.87	-5.97	4.44	15.52	13.93	12.48	14.08	11.07	02/01/2007
Russell 1000 Val Index			-0.74	-0.74	6.98	11.67	13.02	10.29	9.73	11.70	7.28	
Difference			-8.13	-8.13	-12.95	-7.23	2.50	3.64	2.75	2.38	3.79	
<b>Mellon Large Cap Core Index (CF)</b>	303,153,090	11.91	-5.13	-5.13	4.14	13.29	N/A	N/A	N/A	N/A	17.62	05/01/2019
Russell 1000 Index			-5.13	-5.13	4.15	13.27	18.71	15.82	13.72	14.53	17.69	
Difference			0.00	0.00	-0.01	0.02	N/A	N/A	N/A	N/A	-0.07	
<b>Loomis Sayles Large Cap Growth (CF)</b>	194,821,516	7.65	-7.82	-7.82	-1.61	6.33	18.13	N/A	N/A	N/A	16.93	08/01/2017
Russell 1000 Grth Index			-9.04	-9.04	1.54	14.98	23.60	20.88	17.34	17.04	20.66	
Difference			1.22	1.22	-3.15	-8.65	-5.47	N/A	N/A	N/A	-3.73	
<b>Pinnacle Associates US SMID Cap Growth (SA)</b>	88,974,856	3.50	-5.69	-5.69	-2.52	-4.99	18.47	14.77	12.21	13.69	14.59	03/01/2010
Russell 2500 Grth Index			-12.30	-12.30	-12.13	-10.12	12.99	13.22	10.53	12.69	13.79	
Difference			6.61	6.61	9.61	5.13	5.48	1.55	1.68	1.00	0.80	
<b>Kayne Anderson US SMID Value (SA)</b>	82,847,245	3.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.41	03/01/2022
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.52	
<b>Systematic Financial US SMID Value (SA)</b>	88,250,537	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.37	03/01/2022
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.48	
<b>International Equity</b>												
<b>Silchester International Value (CF)</b>	264,118,979	10.38	0.18	0.18	0.14	3.05	7.03	5.85	5.58	8.03	9.08	06/01/2009
MSCI EAFE Val Index (USD) (Net)			0.33	0.33	1.51	3.55	5.24	4.18	3.13	4.87	5.30	
Difference			-0.15	-0.15	-1.37	-0.50	1.79	1.67	2.45	3.16	3.78	
<b>Baillie Gifford International Growth (BGEFX)</b>	168,771,745	6.63	-21.73	-21.73	-25.29	-27.10	10.03	11.21	8.62	9.08	10.30	06/01/2009
Baillie Gifford Index			-10.78	-10.78	-8.66	-6.16	9.12	8.28	6.36	7.13	7.97	
Difference			-10.95	-10.95	-16.63	-20.94	0.91	2.93	2.26	1.95	2.33	
Baillie Gifford Spliced Index			-5.44	-5.44	-3.72	-1.48	8.14	6.93	5.26	6.38	6.93	
Difference			-16.29	-16.29	-21.57	-25.62	1.89	4.28	3.36	2.70	3.37	
<b>Acadian Emerging Markets (CF)</b>	138,795,874	5.45	-1.81	-1.81	-1.12	-0.90	8.49	6.44	5.32	4.27	3.81	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			-6.97	-6.97	-8.19	-11.37	4.94	5.98	4.69	3.36	2.59	
Difference			5.16	5.16	7.07	10.47	3.55	0.46	0.63	0.91	1.22	

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City of Jacksonville Employees' Retirement System  
Asset Allocation & Performance (Net of Fees)

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Fixed Income</b>												
<b>Baird Core Fixed Income (SA)</b>	<b>218,468,576</b>	<b>8.58</b>	<b>-6.17</b>	<b>-6.17</b>	<b>-6.39</b>	<b>-4.23</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-4.92</b>	<b>03/01/2021</b>
Bloomberg US Agg Bond Index			-5.93	-5.93	-5.92	-4.15	1.69	2.14	1.87	2.24	-4.95	
Difference			-0.24	-0.24	-0.47	-0.08	N/A	N/A	N/A	N/A	0.03	
<b>Franklin Templeton Global Multisector Plus (CF)</b>	<b>93,848,660</b>	<b>3.69</b>	<b>1.43</b>	<b>1.43</b>	<b>-1.08</b>	<b>-1.67</b>	<b>-3.87</b>	<b>-2.19</b>	<b>-0.88</b>	<b>0.85</b>	<b>4.47</b>	<b>09/01/2007</b>
Frank. Temp. Global Multisector Index			-6.05	-6.05	-6.71	-6.22	0.77	1.78	1.74	1.21	2.90	
Difference			7.48	7.48	5.63	4.55	-4.64	-3.97	-2.62	-0.36	1.57	
<b>Loomis Sayles Multisector Full Discretion (CF)</b>	<b>134,714,269</b>	<b>5.29</b>	<b>-5.48</b>	<b>-5.48</b>	<b>-5.63</b>	<b>-2.93</b>	<b>4.52</b>	<b>4.46</b>	<b>4.06</b>	<b>5.24</b>	<b>6.11</b>	<b>10/01/2007</b>
Bloomberg Gbl Agg Bond Index			-6.16	-6.16	-6.79	-6.40	0.69	1.70	1.58	1.04	2.56	
Difference			0.68	0.68	1.16	3.47	3.83	2.76	2.48	4.20	3.55	
<b>Real Estate</b>												
<b>Harrison Street Core Property, LP</b>	<b>121,034,295</b>	<b>4.76</b>	<b>2.55</b>	<b>2.55</b>	<b>5.41</b>	<b>9.95</b>	<b>6.50</b>	<b>7.59</b>	<b>N/A</b>	<b>N/A</b>	<b>7.46</b>	<b>11/01/2015</b>
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	8.91	
Difference			-4.62	-4.62	-9.96	-17.34	-3.81	-1.32	N/A	N/A	-1.45	
<b>PGIM Real Estate PRISA II LP (CF)</b>	<b>70,250,623</b>	<b>2.76</b>	<b>6.47</b>	<b>6.47</b>	<b>14.17</b>	<b>21.83</b>	<b>8.33</b>	<b>8.36</b>	<b>8.97</b>	<b>N/A</b>	<b>9.13</b>	<b>01/01/2015</b>
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	9.34	
Difference			-0.70	-0.70	-1.20	-5.46	-1.98	-0.55	-0.24	N/A	-0.21	
<b>Principal US Property (CF)</b>	<b>164,106,199</b>	<b>6.45</b>	<b>7.33</b>	<b>7.33</b>	<b>18.13</b>	<b>28.63</b>	<b>11.50</b>	<b>10.13</b>	<b>10.33</b>	<b>N/A</b>	<b>10.72</b>	<b>01/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	9.60	
Difference			0.16	0.16	2.76	1.34	1.19	1.22	1.12	N/A	1.12	
<b>UBS Trumbull Property (CF)</b>	<b>82,187,852</b>	<b>3.23</b>	<b>5.16</b>	<b>5.16</b>	<b>11.50</b>	<b>15.91</b>	<b>2.17</b>	<b>3.47</b>	<b>4.72</b>	<b>6.16</b>	<b>5.07</b>	<b>12/01/2005</b>
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	6.99	
Difference			-2.01	-2.01	-3.87	-11.38	-8.14	-5.44	-4.49	-3.76	-1.92	
<b>Vanguard RE Idx;ETF (VNQ)</b>	<b>1,446,436</b>	<b>0.06</b>	<b>-6.08</b>	<b>-6.08</b>	<b>8.02</b>	<b>21.28</b>	<b>11.36</b>	<b>9.54</b>	<b>7.78</b>	<b>9.55</b>	<b>13.65</b>	<b>12/01/2008</b>
Custom REITs Index			-5.95	-5.95	8.10	21.58	11.55	10.08	8.19	9.95	14.44	
Difference			-0.13	-0.13	-0.08	-0.30	-0.19	-0.54	-0.41	-0.40	-0.79	
<b>H.I.G. Realty Fund IV (CF)</b>	<b>4,892,572</b>	<b>0.19</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>04/01/2022</b>
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30.



City of Jacksonville Employees' Retirement System  
 Asset Allocation & Performance (Net of Fees)

As of March 31, 2022

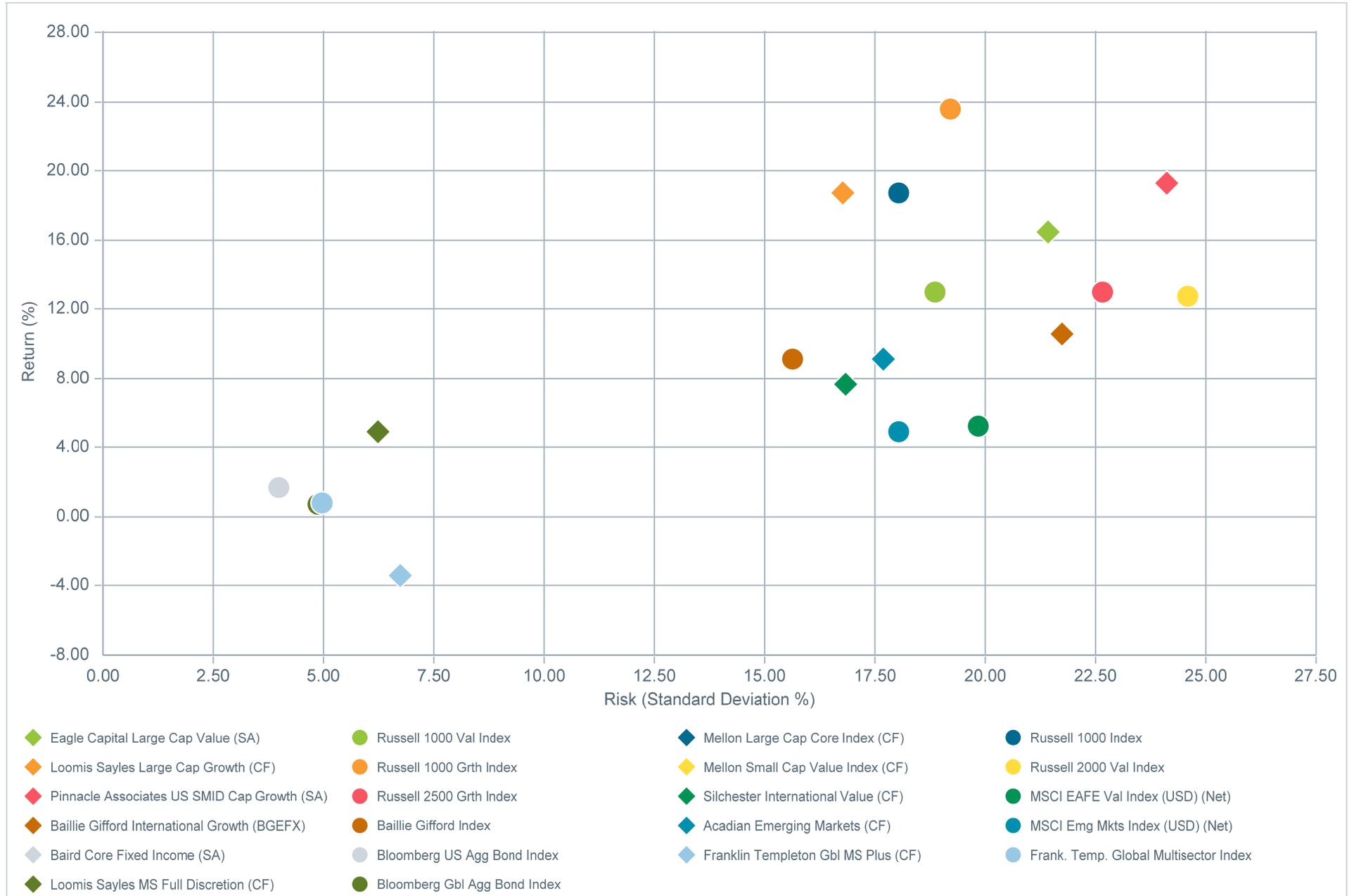
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Diversifying Assets</b>												
<b>Hancock Timberland (SA)</b>	<b>11,678,728</b>	<b>0.46</b>	<b>0.00</b>	<b>0.00</b>	<b>3.88</b>	<b>19.14</b>	<b>8.86</b>	<b>9.42</b>	<b>7.28</b>	<b>8.15</b>	<b>4.77</b>	<b>10/01/2006</b>
NCREIF Timberland Index			3.21	3.21	7.91	11.83	4.75	4.08	3.85	5.60	5.55	
Difference			-3.21	-3.21	-4.03	7.31	4.11	5.34	3.43	2.55	-0.78	
<b>Adams Street Private Equity (SA)</b>	<b>34,286,180</b>	<b>1.35</b>	<b>16.01</b>	<b>16.01</b>	<b>43.41</b>	<b>66.71</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>43.44</b>	<b>11/01/2020</b>
S&P 500 Index+3%			-3.89	-3.89	7.50	19.12	22.49	19.47	17.43	18.08	31.58	
Difference			19.90	19.90	35.91	47.59	N/A	N/A	N/A	N/A	11.86	
<b>Hamilton Lane Private Credit (SA)</b>	<b>15,198,191</b>	<b>0.60</b>	<b>0.08</b>	<b>0.08</b>	<b>1.69</b>	<b>-8.47</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-8.47</b>	<b>04/01/2021</b>
ICE BofAML Gbl Hi Yld Index +2%			-5.55	-5.55	-5.80	-2.76	5.26	5.96	6.65	7.19	-2.76	
Difference			5.63	5.63	7.49	-5.71	N/A	N/A	N/A	N/A	-5.71	
<b>Dreyfus Gvt Csh Mgt;Inst (DGCXX)</b>	<b>5,864,673</b>	<b>0.23</b>	<b>0.08</b>	<b>0.08</b>	<b>0.18</b>	<b>0.55</b>	<b>0.81</b>	<b>1.15</b>	<b>0.90</b>	<b>0.66</b>	<b>1.32</b>	<b>04/01/2001</b>
FTSE 3 Mo T-Bill Index			0.03	0.03	0.04	0.06	0.76	1.09	0.84	0.60	1.29	
Difference			0.05	0.05	0.14	0.49	0.05	0.06	0.06	0.06	0.03	

Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30.



City of Jacksonville Employees' Retirement System  
 Risk and Return  
 Traditional Managers

3 Years Ending March 31, 2022

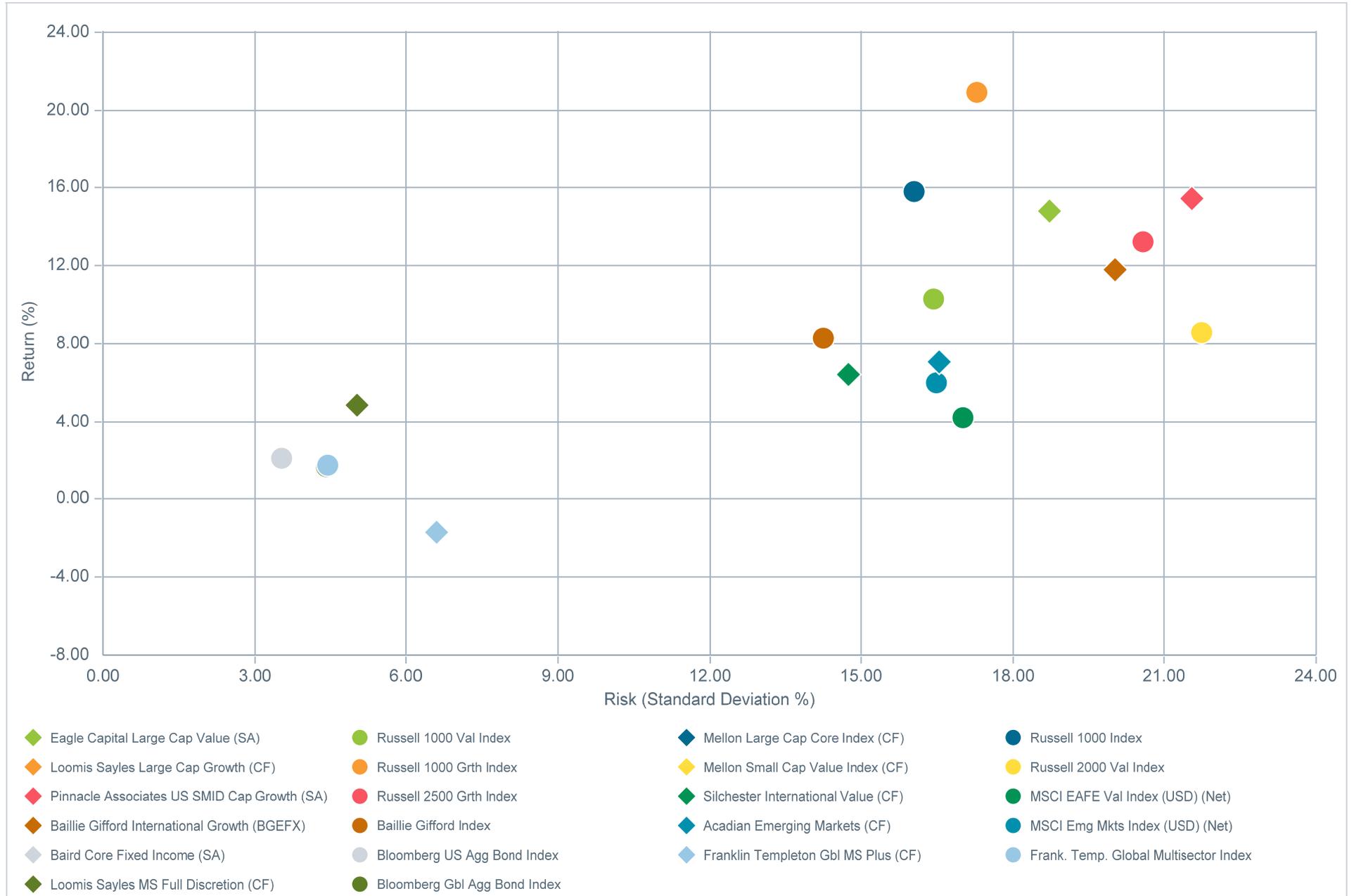


Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Managers with less history than the specified time period will not appear. Please see the Addendum for custom index definitions.



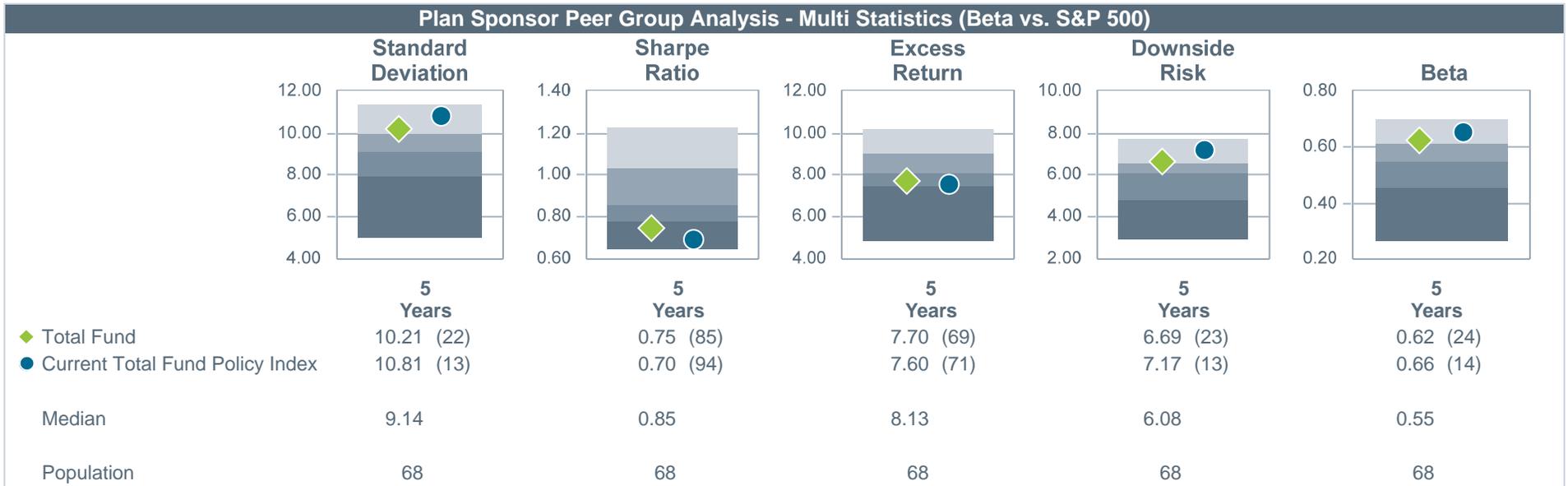
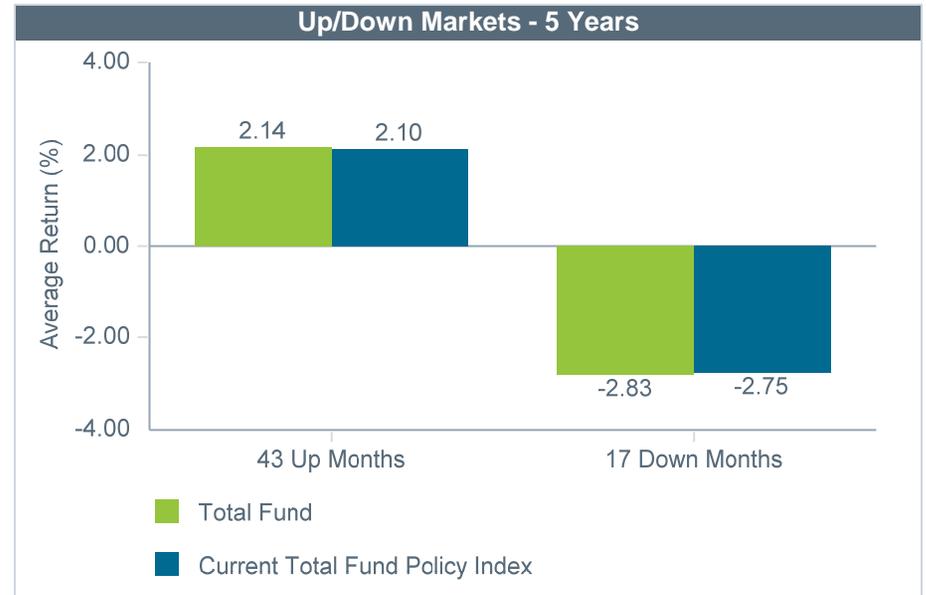
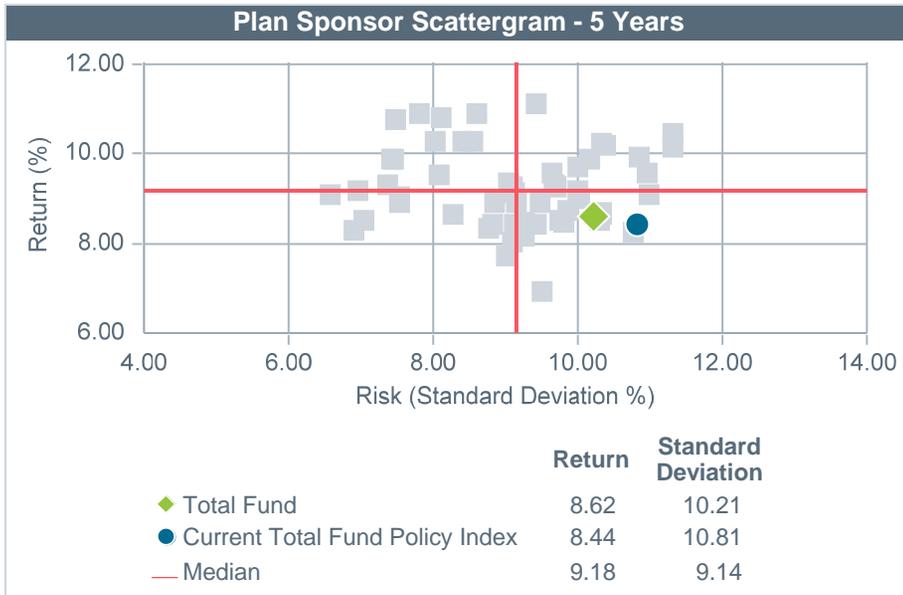
City of Jacksonville Employees' Retirement System  
 Risk and Return  
 Traditional Managers

5 Years Ending March 31, 2022

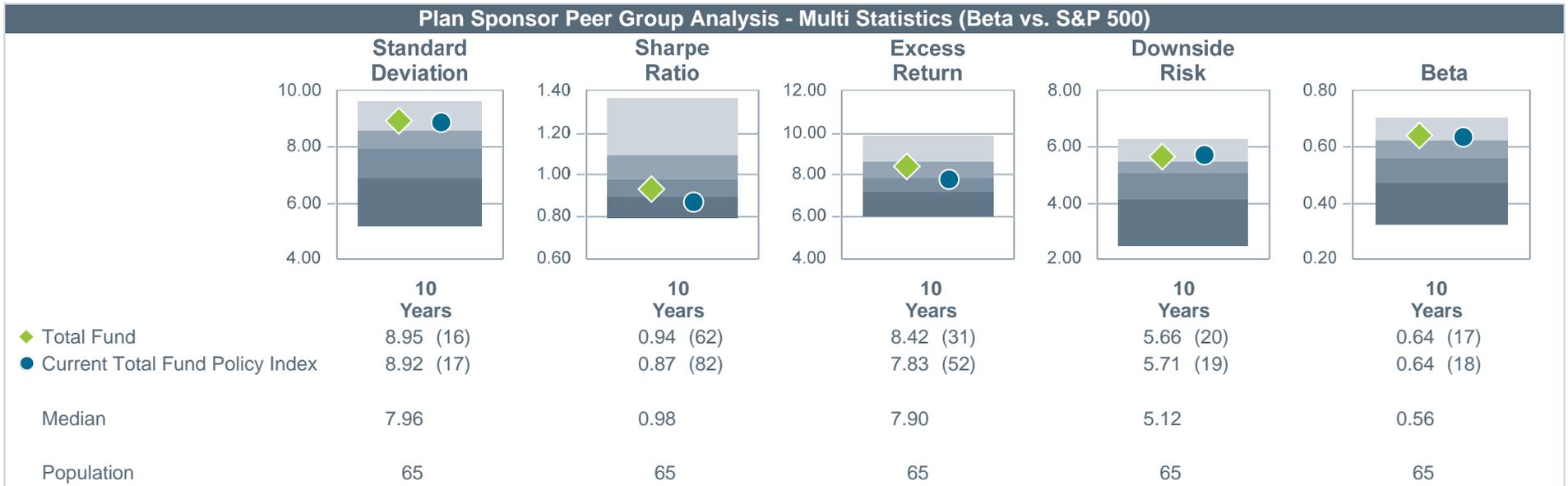
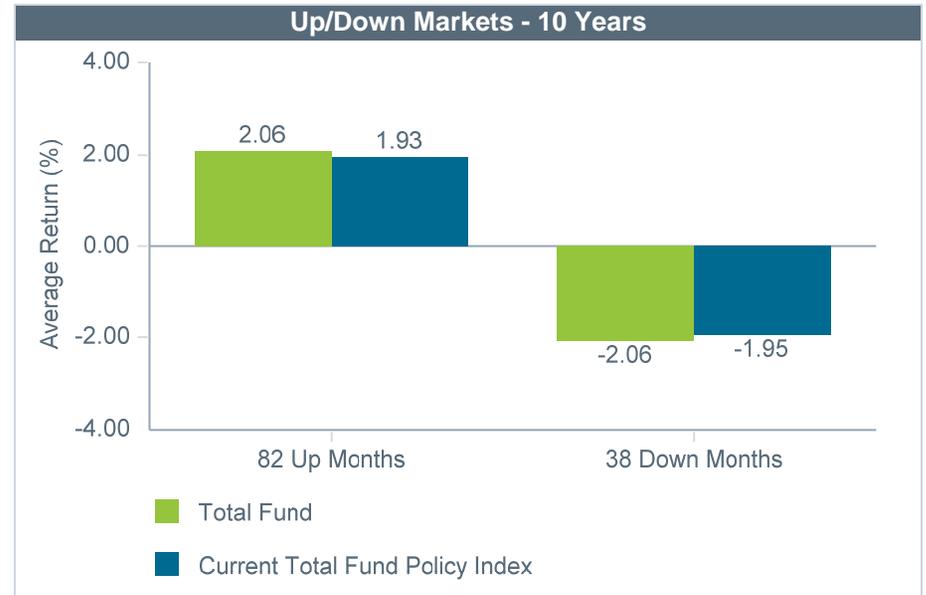
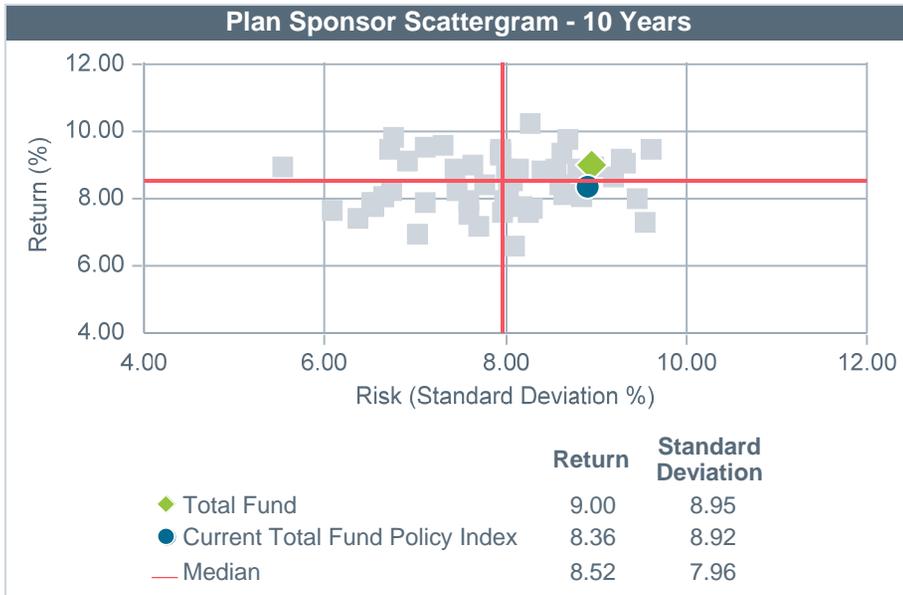


Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Managers with less history than the specified time period will not appear. Please see the Addendum for custom index definitions.





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



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

# Composite Profiles



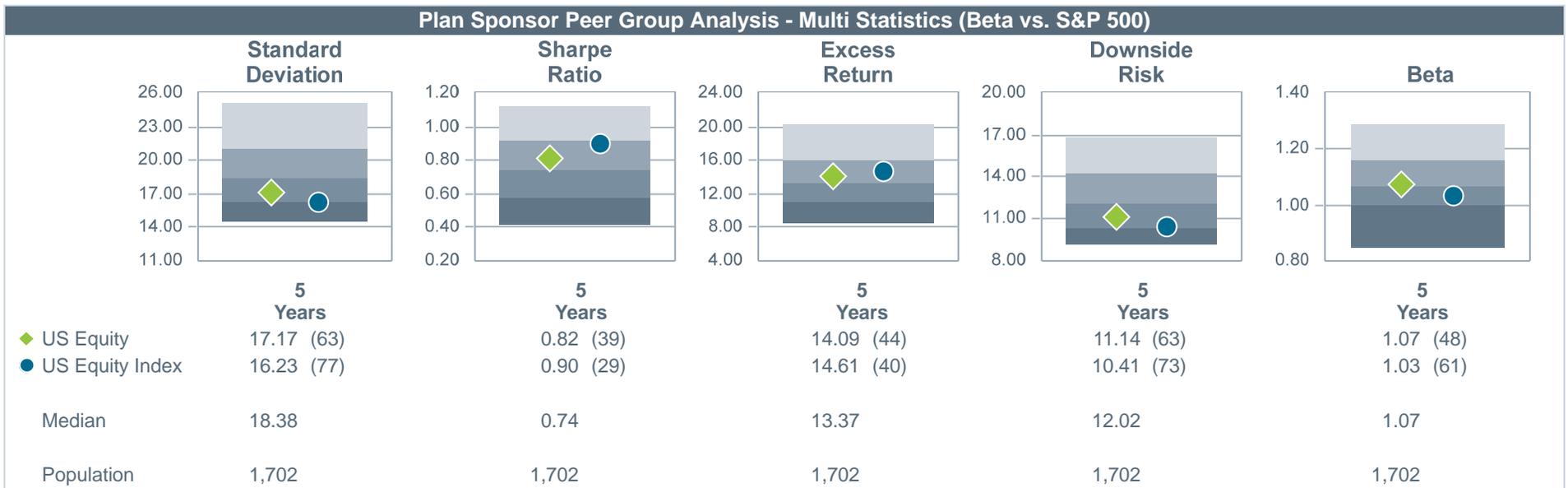
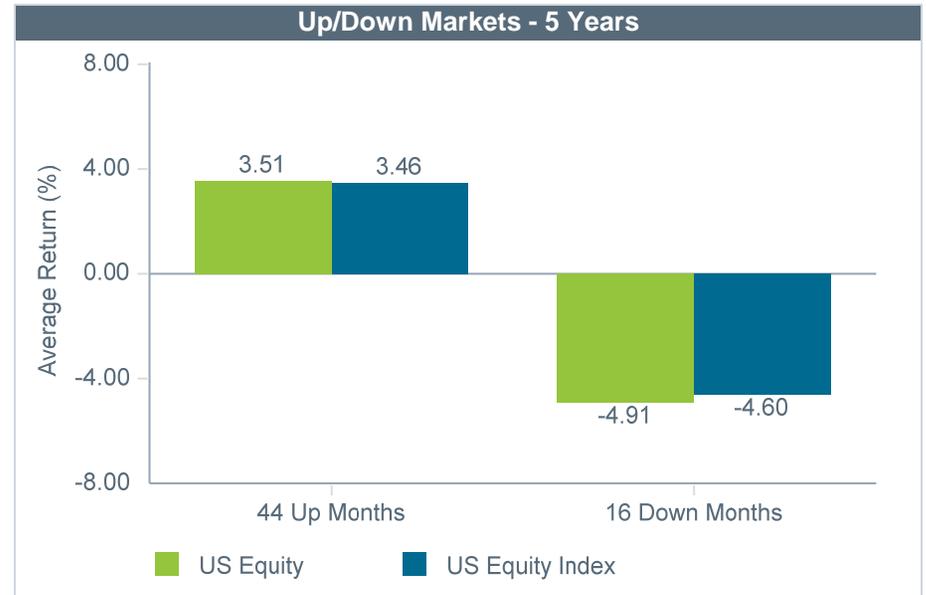
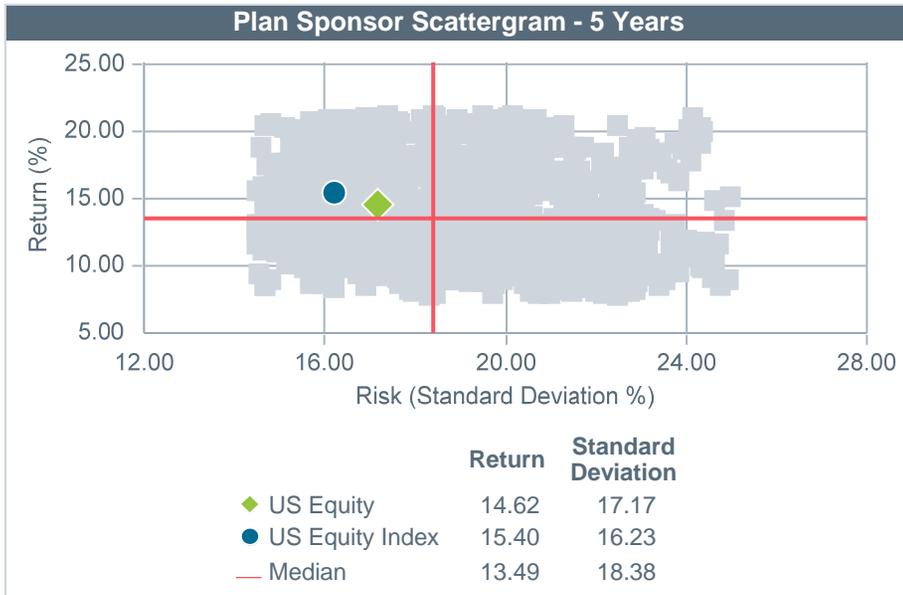
City of Jacksonville Employees' Retirement System  
 US Equity vs. IM U.S. Equity (SA+CF)  
 Peer Group Analysis

As of March 31, 2022



Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.





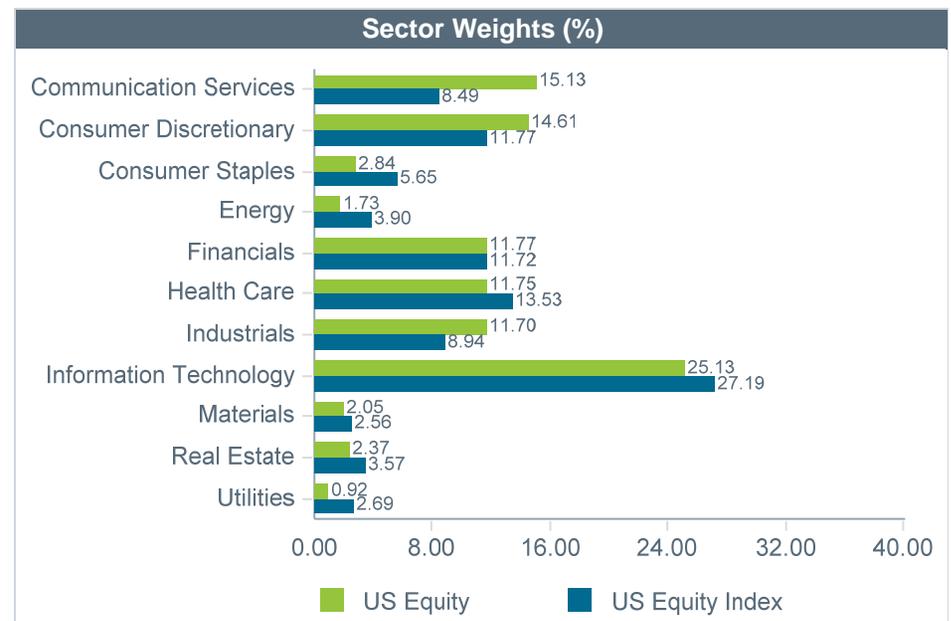
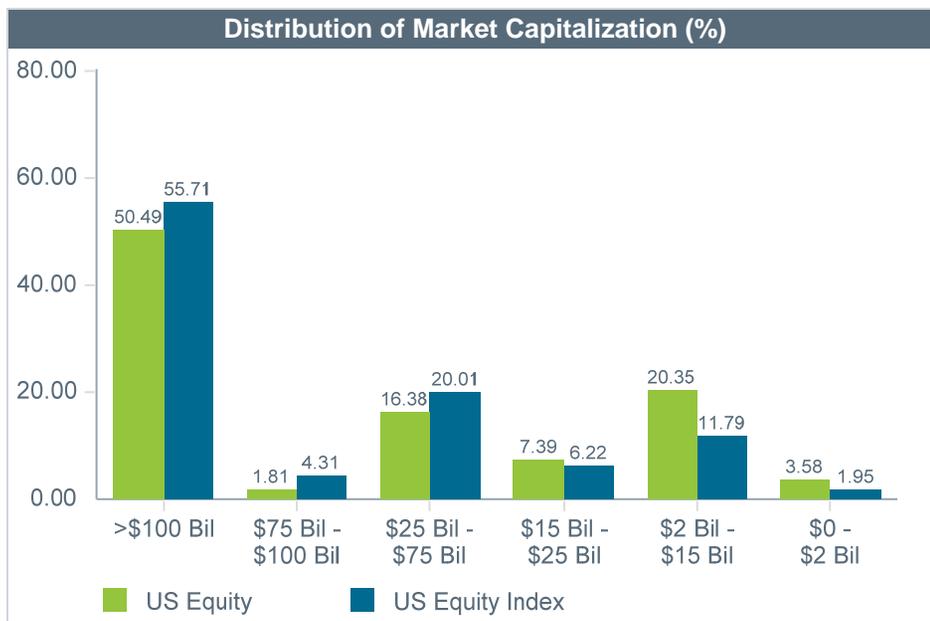
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

City of Jacksonville Employees' Retirement System  
 US Equity vs. US Equity Index  
 Portfolio Characteristics

As of March 31, 2022

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Microsoft Corp	5.06	5.17	-0.11	-8.14
Amazon.com Inc	4.07	3.15	0.92	-2.23
Alphabet Inc	3.70	1.72	1.98	-3.48
Meta Platforms Inc	2.64	1.14	1.50	-33.89
Apple Inc	1.93	5.99	-4.06	-1.54
NVIDIA Corporation	1.79	1.45	0.34	-7.21
Visa Inc	1.70	0.82	0.88	2.50
Unitedhealth Group Inc	1.57	1.07	0.50	1.86
Netflix Inc	1.44	0.36	1.08	-37.82
Alphabet Inc	1.39	1.86	-0.47	-3.99
% of Portfolio	25.29	22.73	2.56	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	444,490	544,408
Median Mkt. Cap (\$M)	11,984	2,224
Price/Earnings Ratio	20.21	21.31
Price/Book Ratio	3.96	4.22
5 Yr. EPS Growth Rate (%)	22.70	20.99
Current Yield (%)	0.97	1.35
Beta (5 Years, Monthly)	1.05	1.00
Number of Securities	1,163	3,039



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



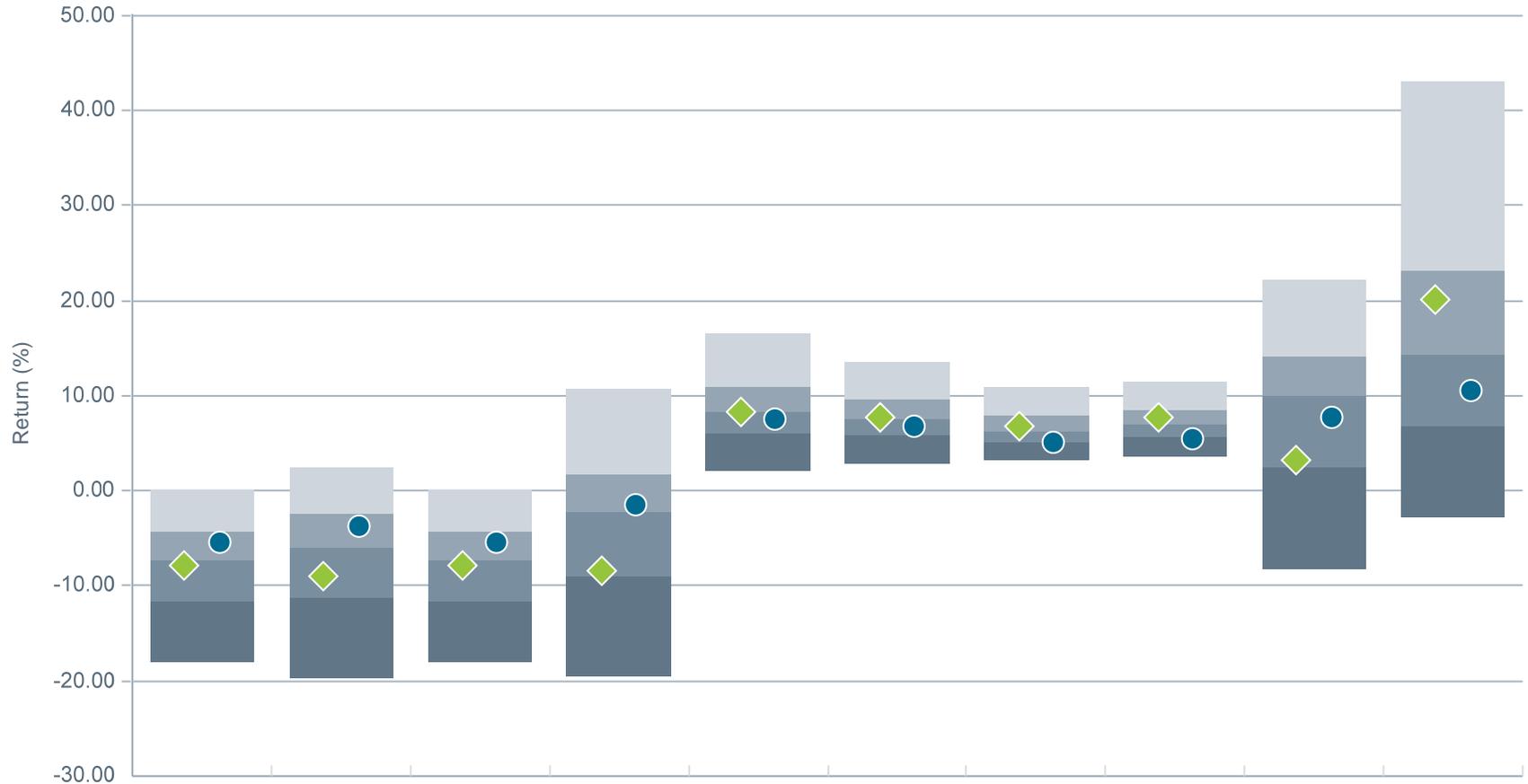
Style Map with History (12 Months)



Calculation is based on monthly periodicity. This is a return based calculation. Performance prior to manager inception date is backfilled with product specific returns.

City of Jacksonville Employees' Retirement System  
 International Equity vs. IM International Equity (SA+CF)  
 Peer Group Analysis

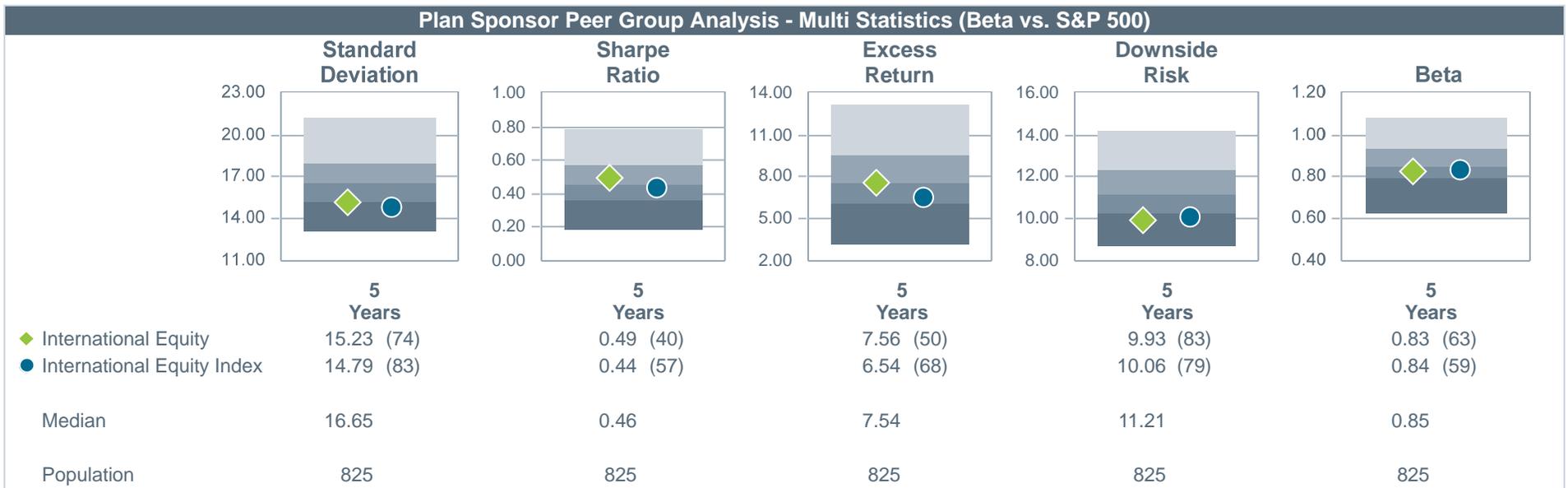
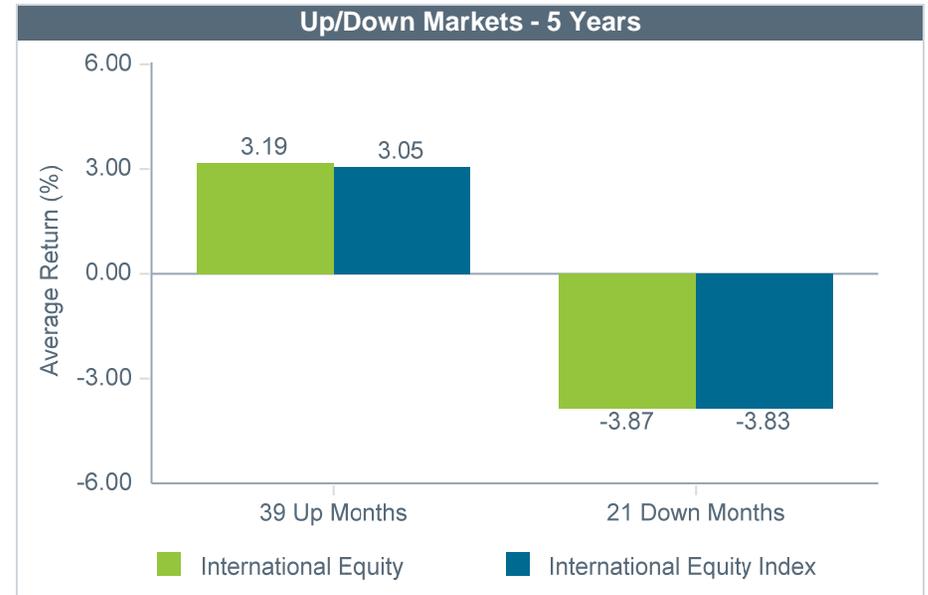
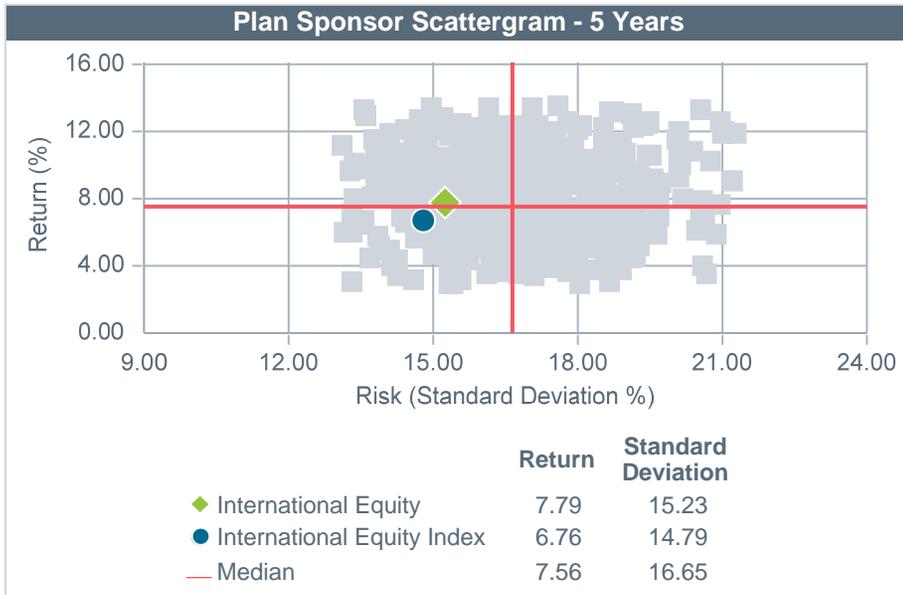
As of March 31, 2022



	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020
◆ International Equity	-7.76 (54)	-9.01 (67)	-7.76 (54)	-8.45 (74)	8.34 (50)	7.79 (46)	6.76 (43)	7.81 (37)	3.25 (74)	20.20 (32)
● International Equity Index	-5.44 (36)	-3.72 (34)	-5.44 (36)	-1.48 (45)	7.51 (61)	6.76 (63)	5.19 (74)	5.55 (78)	7.82 (60)	10.65 (62)
5th Percentile	0.14	2.48	0.14	10.67	16.54	13.49	10.99	11.55	22.29	42.96
1st Quartile	-4.26	-2.32	-4.26	1.74	10.94	9.62	7.92	8.55	14.22	23.23
Median	-7.25	-5.88	-7.25	-2.21	8.27	7.56	6.33	7.07	10.00	14.31
3rd Quartile	-11.52	-11.17	-11.52	-9.04	6.11	5.91	5.10	5.73	2.54	6.79
95th Percentile	-18.02	-19.68	-18.02	-19.48	2.06	2.88	3.17	3.57	-8.26	-2.84
Population	937	934	937	927	881	825	762	642	974	1,083

Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.





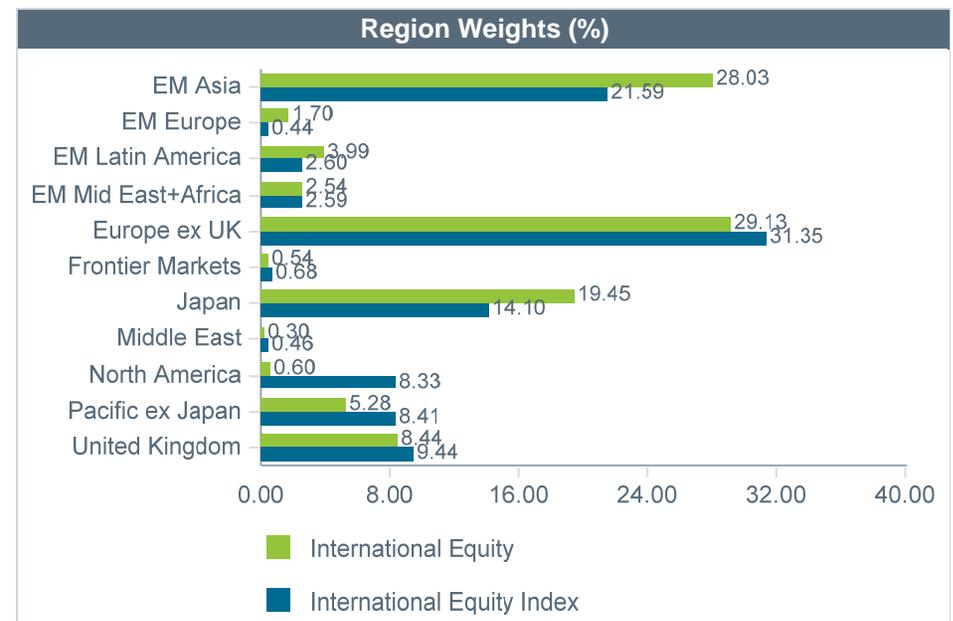
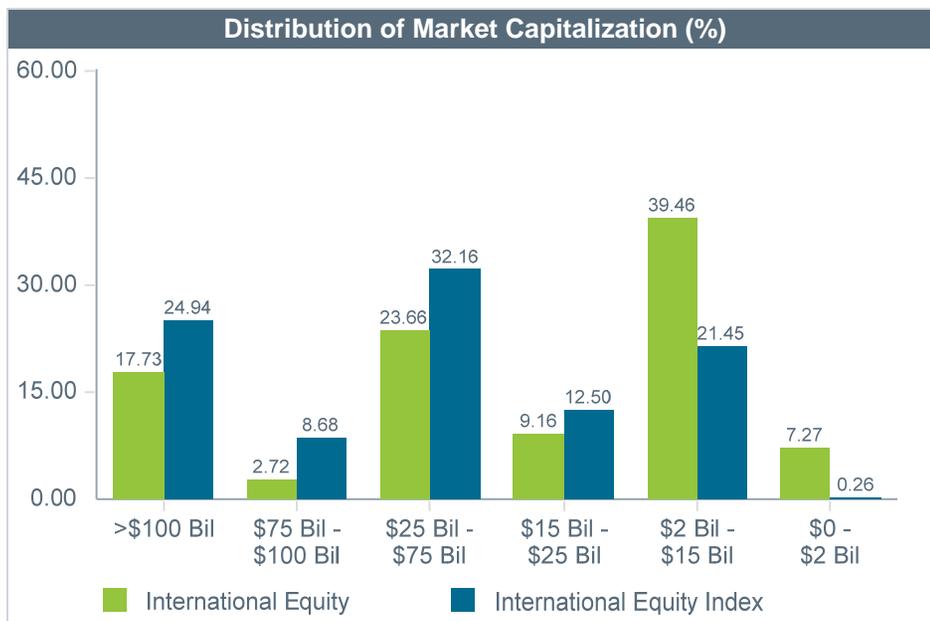
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

City of Jacksonville Employees' Retirement System  
International Equity vs. International Equity Index  
Portfolio Characteristics

As of March 31, 2022

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
ASML Holding NV	2.44	1.10	1.34	-15.69
Taiwan Semiconductor Mfg	2.19	2.01	0.18	-5.63
Tencent Holdings LTD	1.97	1.08	0.89	-16.10
Ferrari NV	1.73	0.11	1.62	-14.69
MercadoLibre Inc	1.68	0.00	1.68	-11.79
Honda Motor Co Ltd	1.61	0.18	1.43	3.96
Sanofi	1.61	0.46	1.15	2.01
Adyen N.V	1.43	0.16	1.27	-23.56
Kering	1.40	0.19	1.21	-20.05
Glaxosmithkline PLC	1.37	0.43	0.94	1.05
% of Portfolio	17.43	5.72	11.71	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	66,155	89,512
Median Mkt. Cap (\$M)	1,431	9,768
Price/Earnings Ratio	10.42	13.68
Price/Book Ratio	2.70	2.51
5 Yr. EPS Growth Rate (%)	16.64	15.41
Current Yield (%)	3.27	2.80
Beta (5 Years, Monthly)	1.00	1.00
Number of Securities	912	2,308



The Top Ten International Equity Holdings included Meituan (1.38%) in Q4 2021 which was replaced by Glaxosmithkline PLC in Q1 2022.



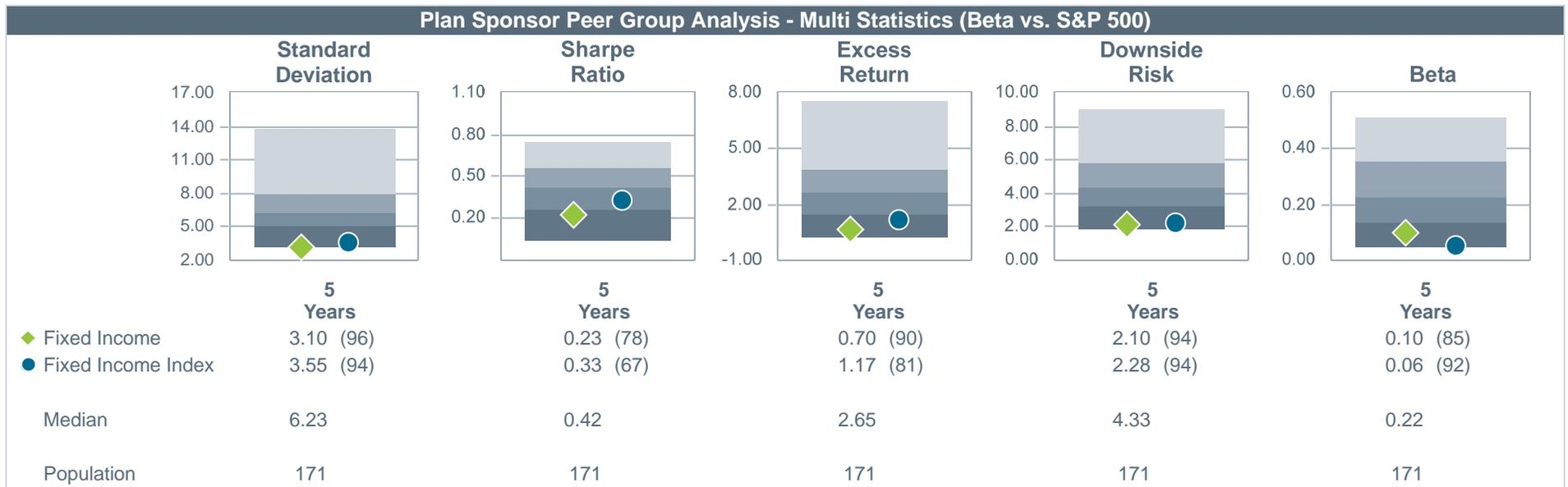
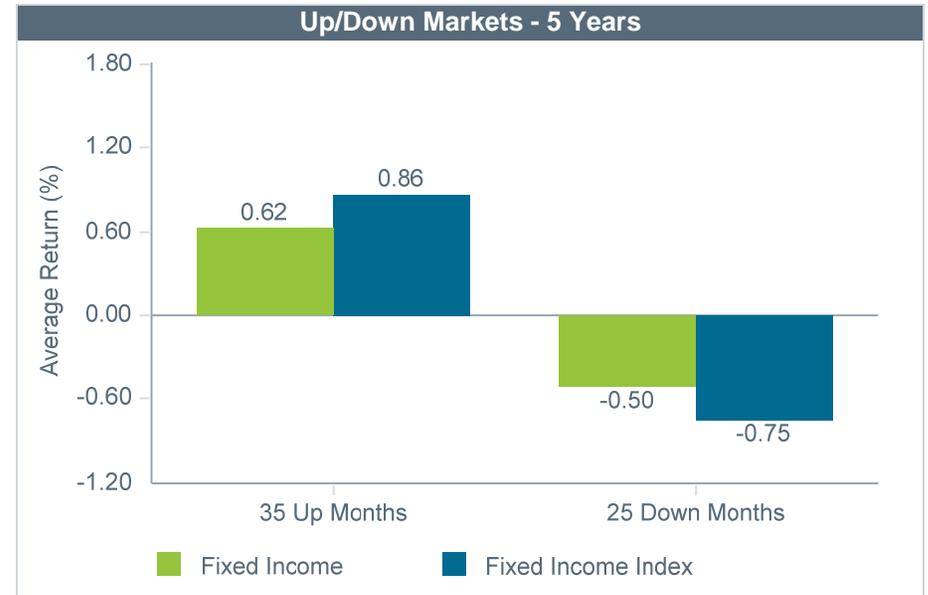
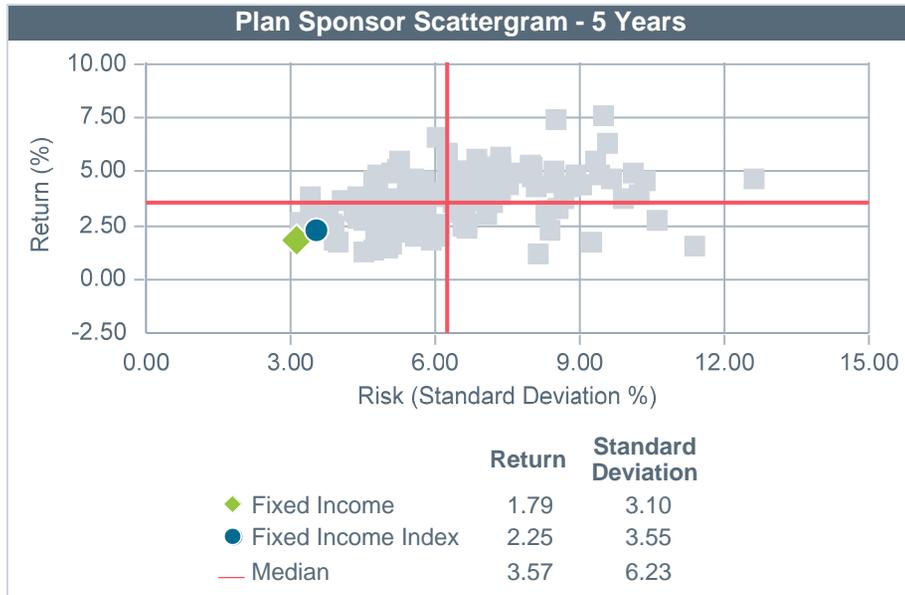
City of Jacksonville Employees' Retirement System  
 Fixed Income vs. IM Global Fixed Income (SA+CF)  
 Peer Group Analysis

As of March 31, 2022



Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.



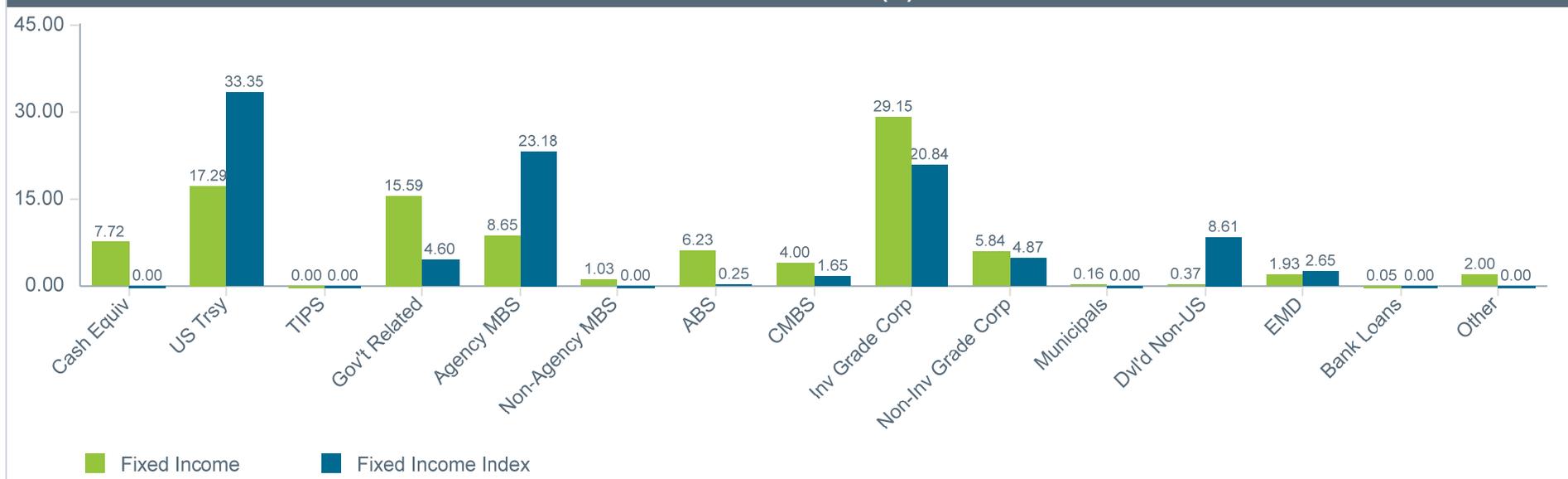


Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	4.94	6.36
Avg. Maturity	6.69	8.61
Avg. Quality	A3	N/A
Yield To Maturity (%)	N/A	3.30
Coupon Rate (%)	3.17	2.75
Current Yield (%)	2.69	N/A

Sector Distribution (%)

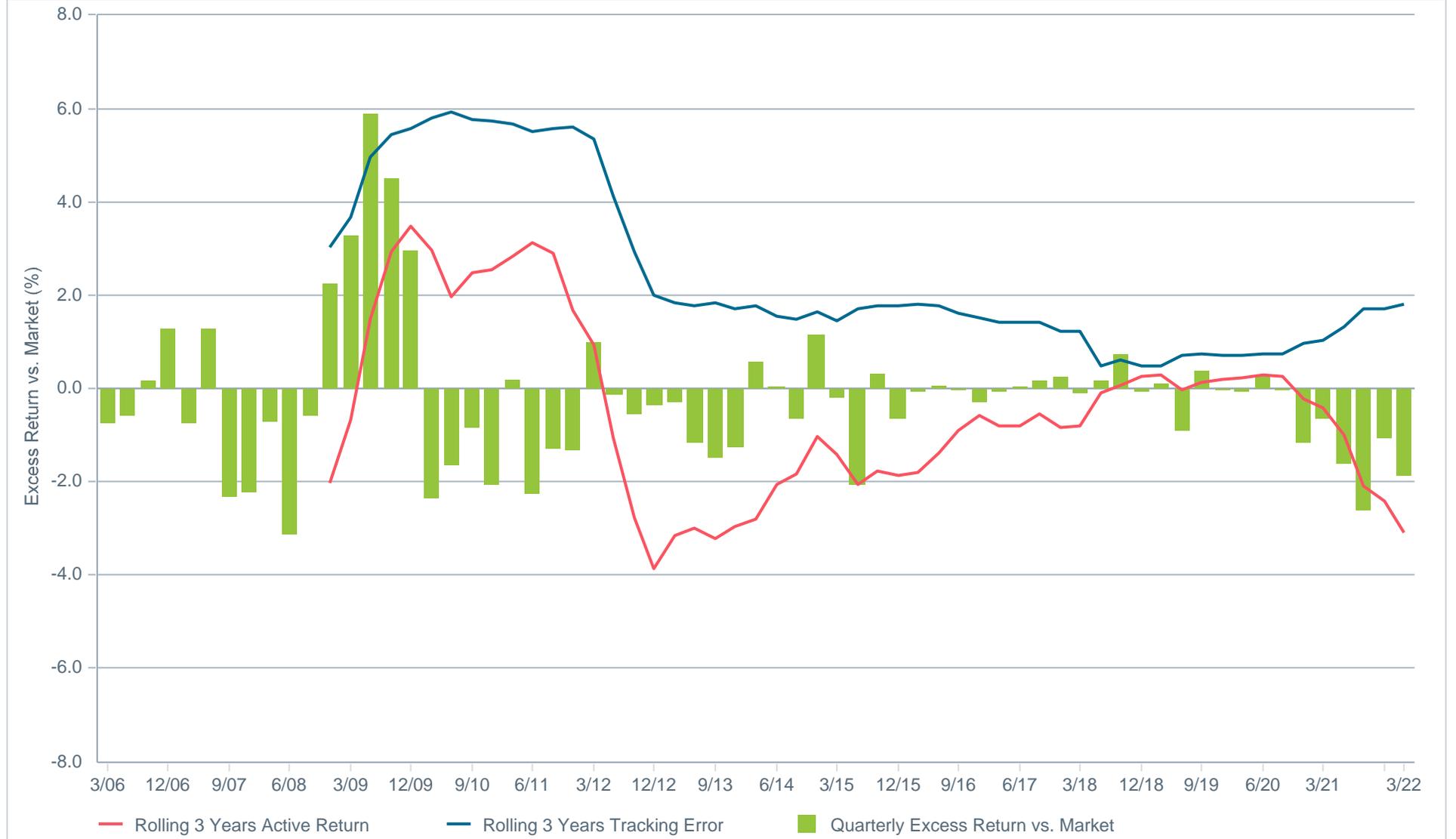


Cash equivalents are defined as any security with duration under one year. Allocation to "Other" consists of derivatives, preferred equity, and convertibles.

City of Jacksonville Employees' Retirement System  
 Real Estate vs. NCREIF ODCE Index (AWA) (Gross)  
 Comparative Performance & Rolling Return

As of March 31, 2022

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	Since Incep.	Inception Date
Real Estate	5.49	5.49	12.77	20.03	8.06	8.21	8.57	9.33	15.43	0.31	4.85	6.81	12/01/2005
NCREIF ODCE Index (AWA) (Gross)	7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	7.99	
Difference	-1.87	-1.87	-3.15	-8.42	-3.23	-1.67	-1.62	-1.60	-6.74	-0.88	-0.49	-1.18	



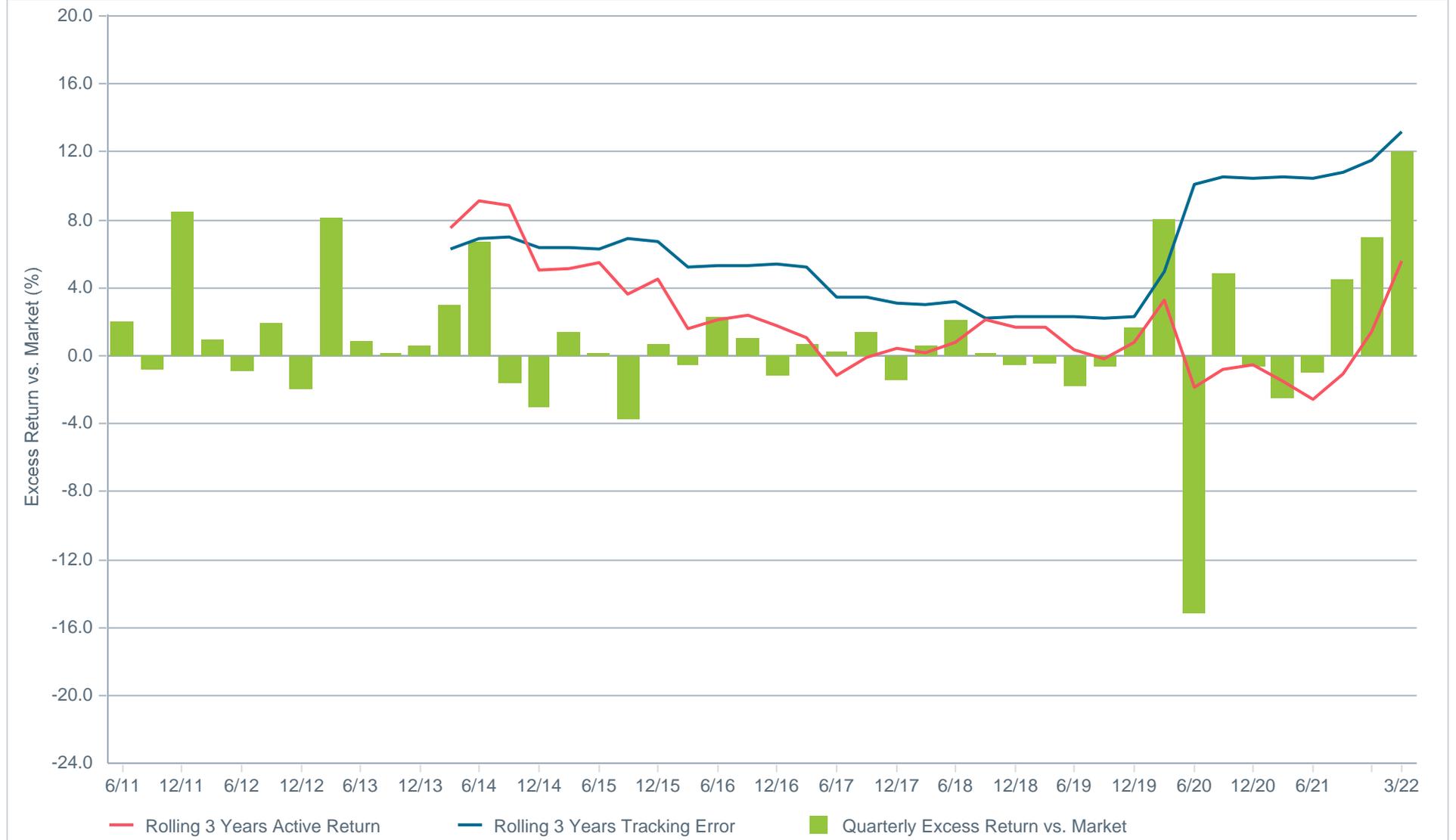
Performance shown is gross of fees. Calculation is based on quarterly periodicity.



**City of Jacksonville Employees' Retirement System**  
**Diversifying Assets vs. Diversifying Assets Index**  
**Comparative Performance & Rolling Return**

As of March 31, 2022

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	Since Incep.	Inception Date
Diversifying Assets	9.20	9.20	24.15	44.35	9.35	6.42	3.82	7.37	47.46	-14.35	6.21	8.15	03/01/2011
Diversifying Assets Index	-2.81	-2.81	3.71	16.23	1.05	1.07	0.26	3.39	36.38	-18.40	7.29	3.58	
Difference	12.01	12.01	20.44	28.12	8.30	5.35	3.56	3.98	11.08	4.05	-1.08	4.57	



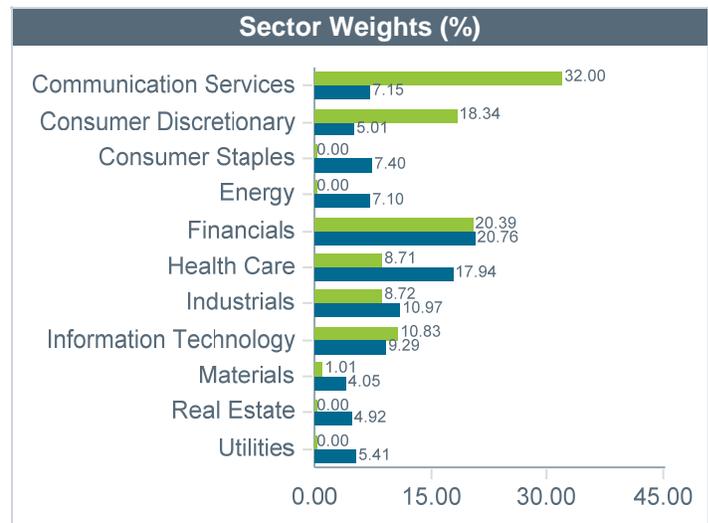
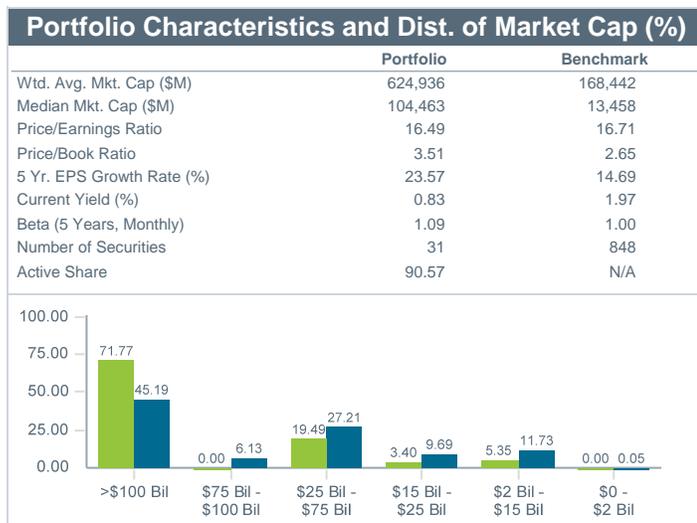
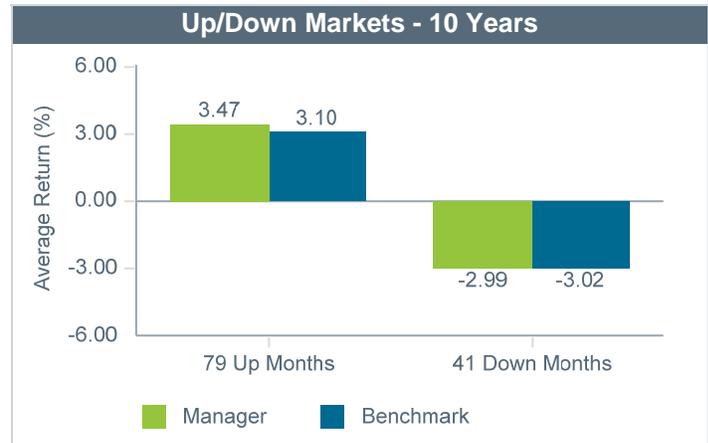
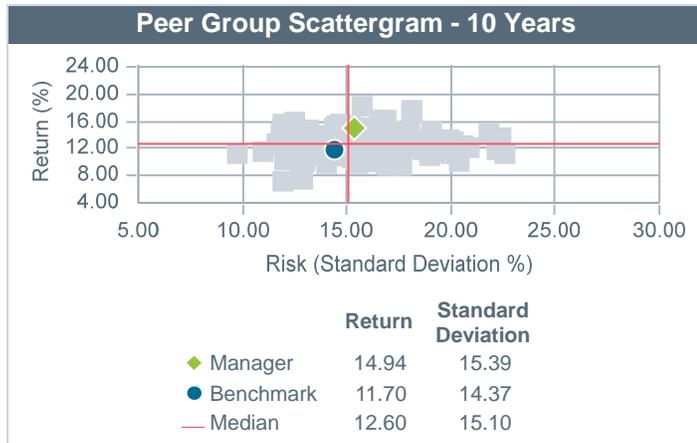
Performance shown is gross of fees. Calculation is based on quarterly periodicity.



# Investment Manager Profiles



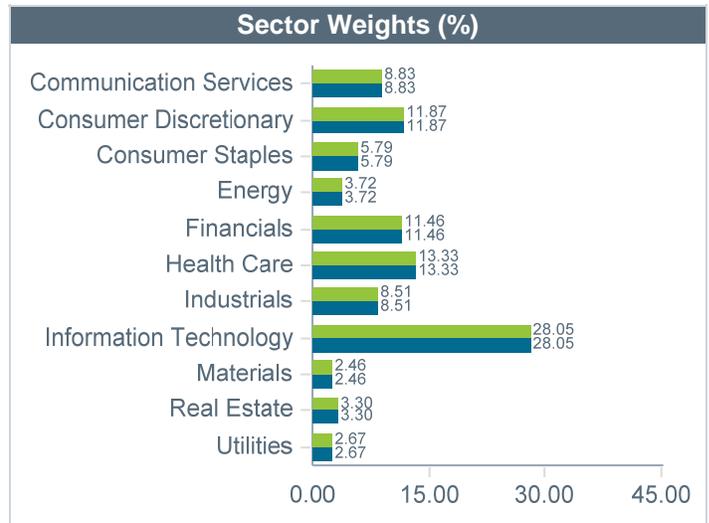
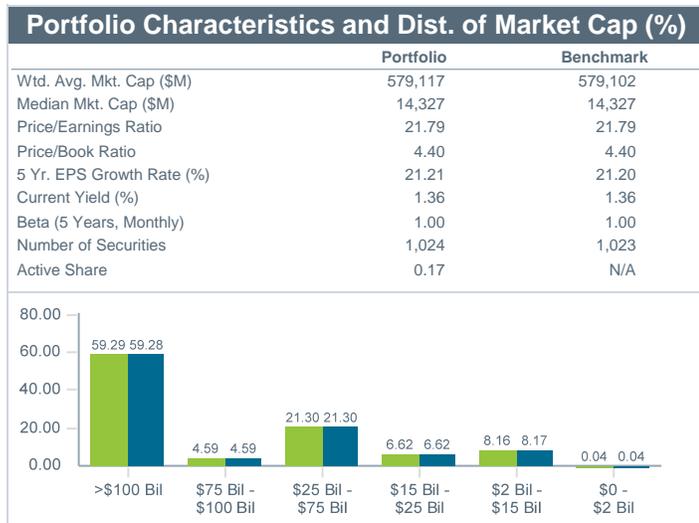
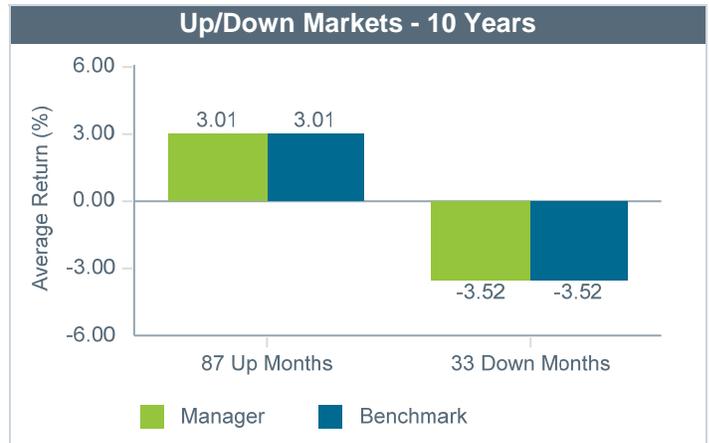
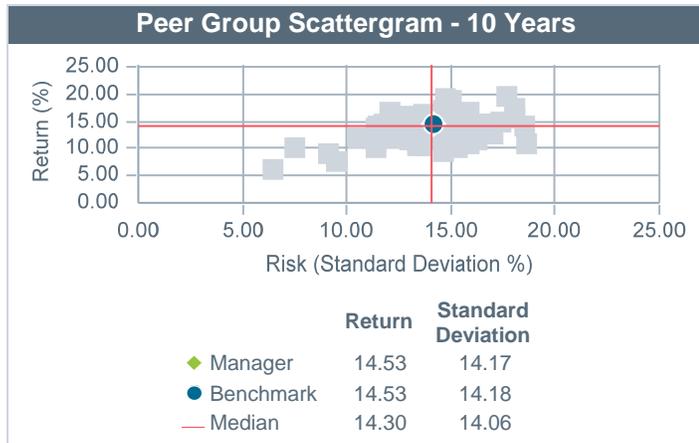
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-8.69	5.21	16.46	14.78	13.32	14.94	28.01	15.54	31.94	-3.90	24.19
Benchmark	-0.74	11.67	13.02	10.29	9.73	11.70	25.16	2.80	26.54	-8.27	13.66
Difference	-7.95	-6.46	3.44	4.49	3.59	3.24	2.85	12.74	5.40	4.37	10.53
Peer Group Median	-0.37	13.47	15.26	12.18	10.83	12.60	27.67	5.75	27.45	-8.31	17.30
Rank	98	97	33	13	10	7	46	14	14	16	8
Population	247	247	241	236	231	218	256	290	319	336	353



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



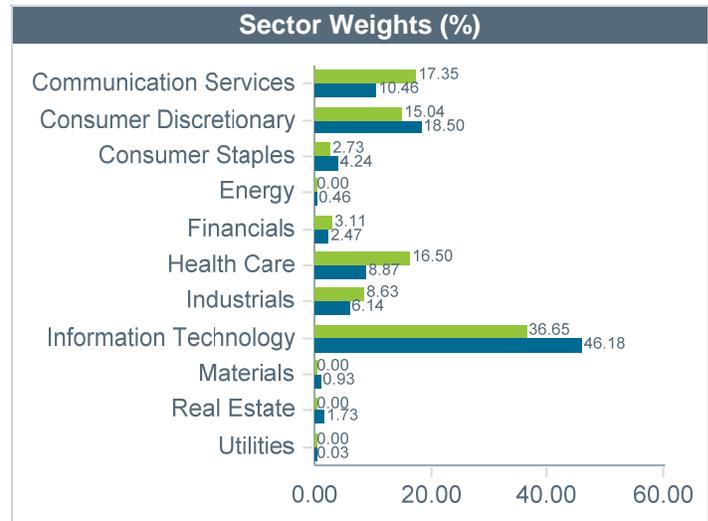
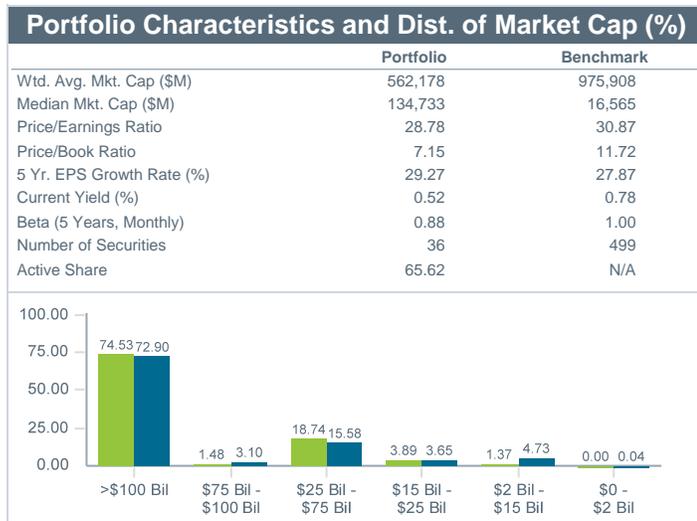
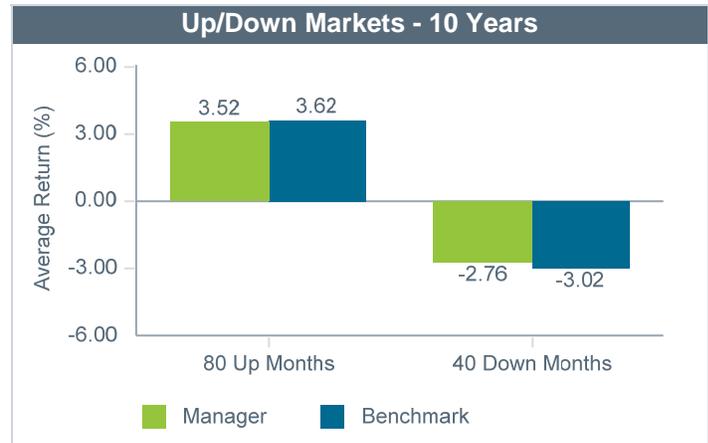
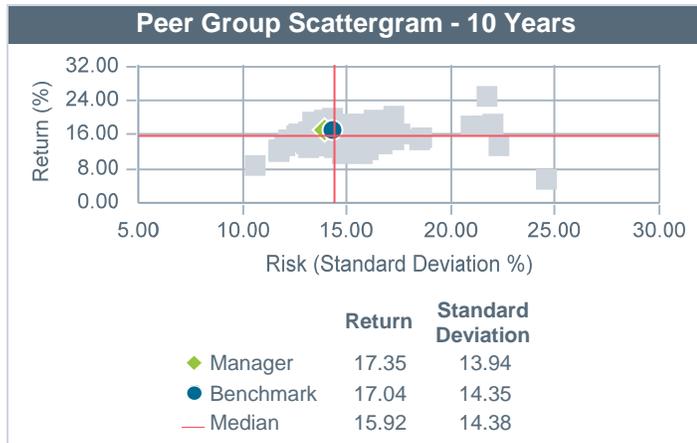
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.13	13.27	18.69	15.81	13.71	14.53	26.46	20.91	31.42	-4.77	21.68
Benchmark	-5.13	13.27	18.71	15.82	13.72	14.53	26.45	20.96	31.43	-4.78	21.69
Difference	0.00	0.00	-0.02	-0.01	-0.01	0.00	0.01	-0.05	-0.01	0.01	-0.01
Peer Group Median	-4.58	13.98	17.92	15.39	13.14	14.30	27.89	17.25	30.03	-5.15	21.85
Rank	60	56	37	39	34	41	59	29	37	43	54
Population	185	185	180	174	167	152	197	225	252	275	298



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



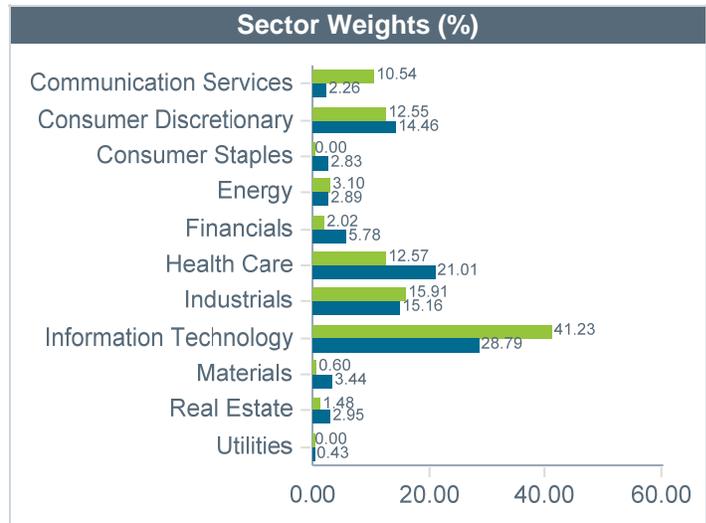
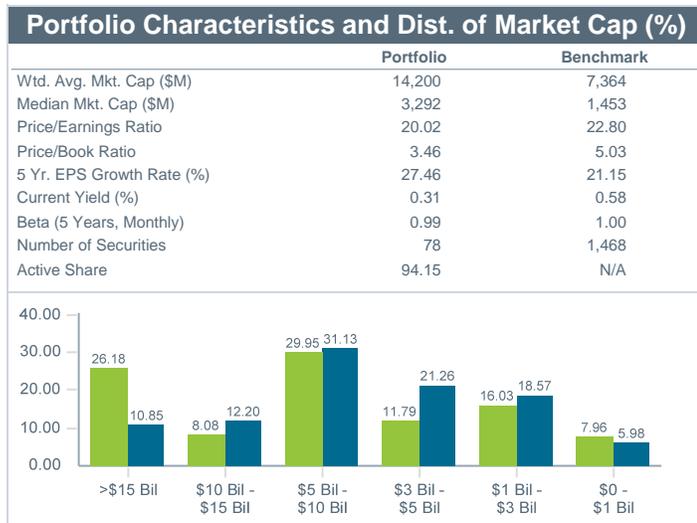
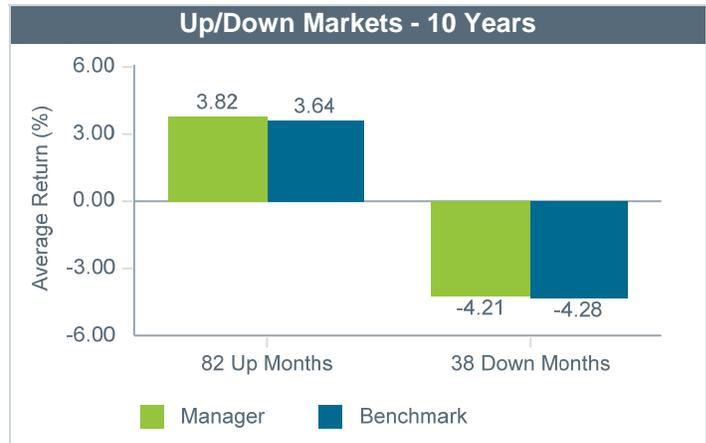
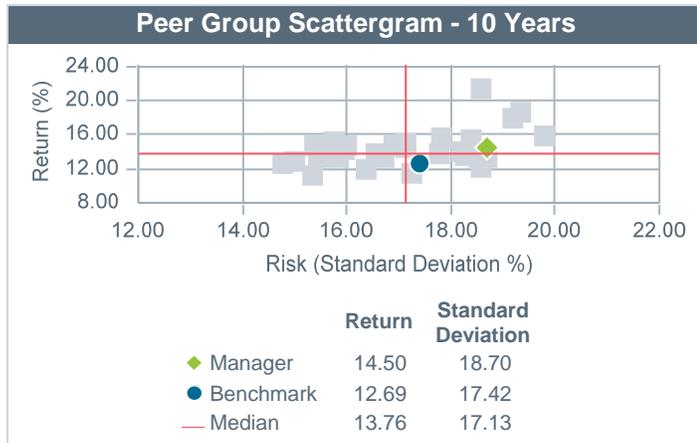
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
<b>Manager</b>	<b>-7.59</b>	<b>6.98</b>	<b>18.79</b>	<b>18.72</b>	<b>16.67</b>	<b>17.35</b>	<b>19.45</b>	<b>32.95</b>	<b>32.71</b>	<b>-1.72</b>	<b>34.03</b>
Benchmark	-9.04	14.98	23.60	20.88	17.34	17.04	27.60	38.49	36.39	-1.51	30.21
Difference	1.45	-8.00	-4.81	-2.16	-0.67	0.31	-8.15	-5.54	-3.68	-0.21	3.82
Peer Group Median	-9.86	10.61	20.16	18.87	15.57	15.92	25.26	34.79	33.81	-1.02	28.21
Rank	25	73	73	54	26	14	82	60	61	56	16
Population	202	202	200	195	188	177	218	245	258	282	291



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



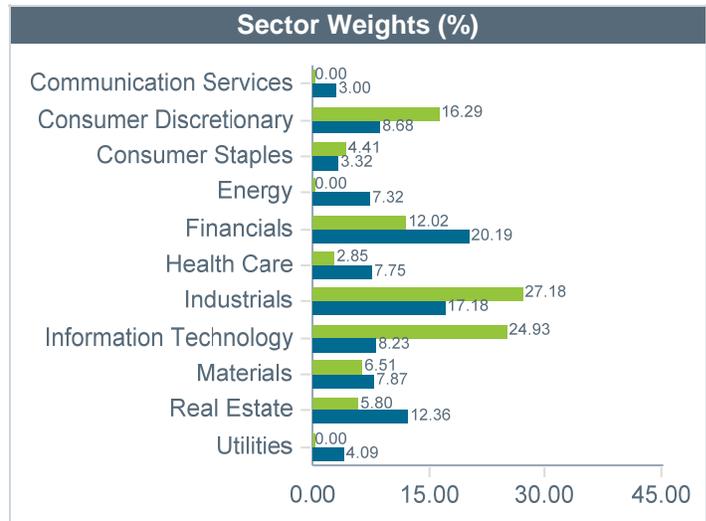
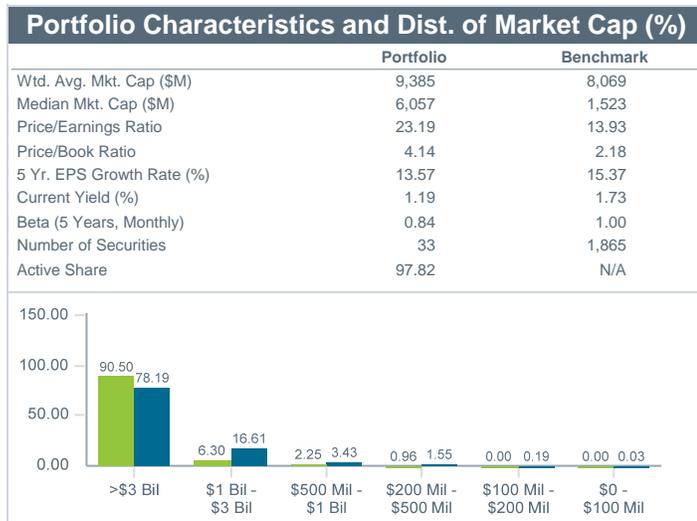
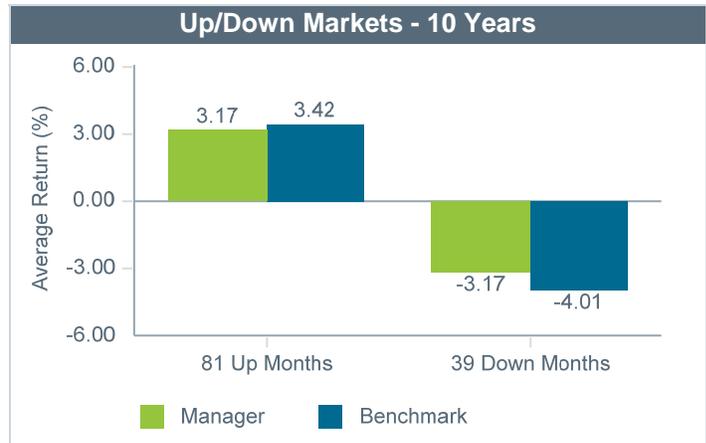
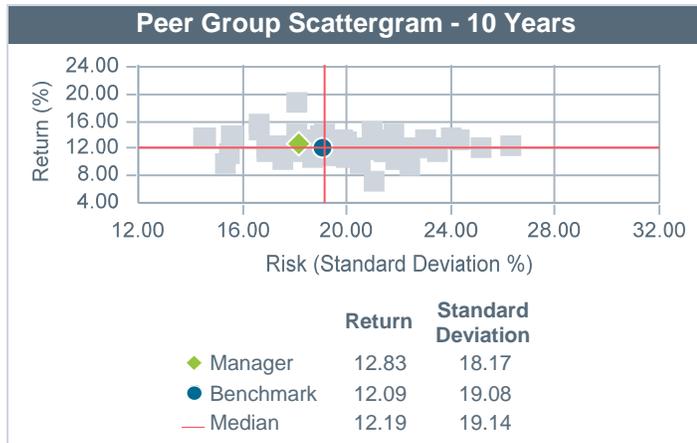
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.19	-4.22	19.29	15.46	12.97	14.50	12.71	33.32	41.57	-10.36	25.99
Benchmark	-12.30	-10.12	12.99	13.22	10.53	12.69	5.04	40.47	32.65	-7.47	24.46
Difference	7.11	5.90	6.30	2.24	2.44	1.81	7.67	-7.15	8.92	-2.89	1.53
Peer Group Median	-12.64	-1.42	16.67	16.41	12.82	13.76	16.65	42.60	31.74	-4.63	24.95
Rank	5	62	26	65	48	39	56	72	3	87	44
Population	56	56	50	46	38	29	58	59	59	64	63



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



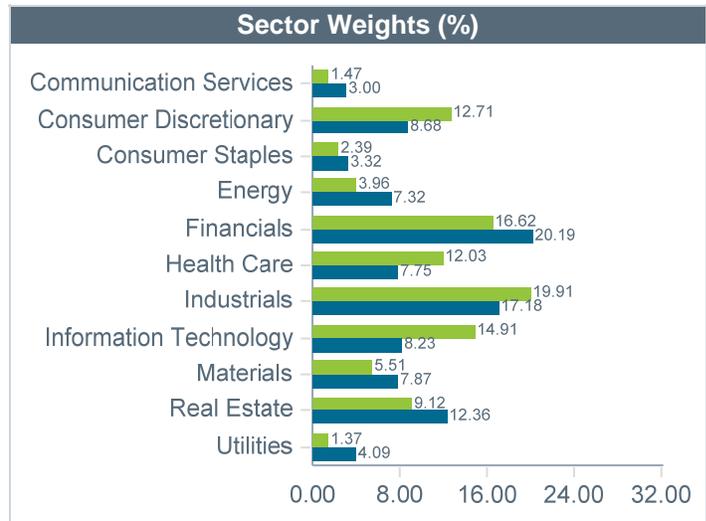
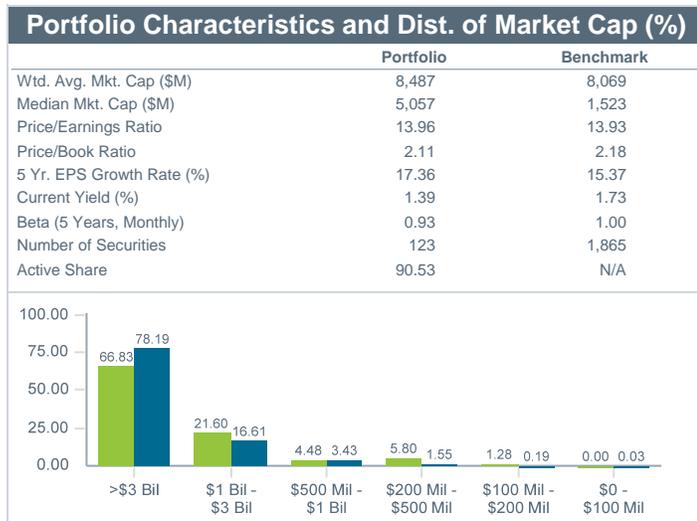
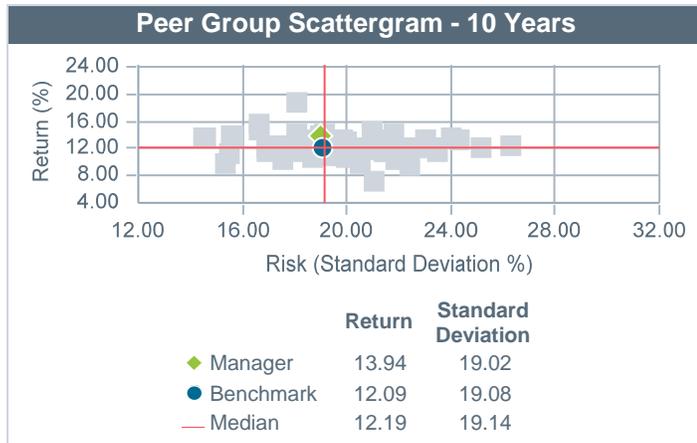
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-11.66	-4.16	16.23	12.16	11.30	12.83	22.19	24.69	33.21	-11.99	18.47
Benchmark	-1.50	7.73	12.98	9.19	8.86	11.04	27.78	4.88	23.56	-12.36	10.36
Difference	-10.16	-11.89	3.25	2.97	2.44	1.79	-5.59	19.81	9.65	0.37	8.11
Peer Group Median	-2.69	7.70	15.09	10.93	9.77	12.19	28.46	7.66	27.58	-12.98	14.78
Rank	99	97	29	27	21	29	89	7	9	38	21
Population	82	82	78	76	71	67	85	100	100	107	112



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



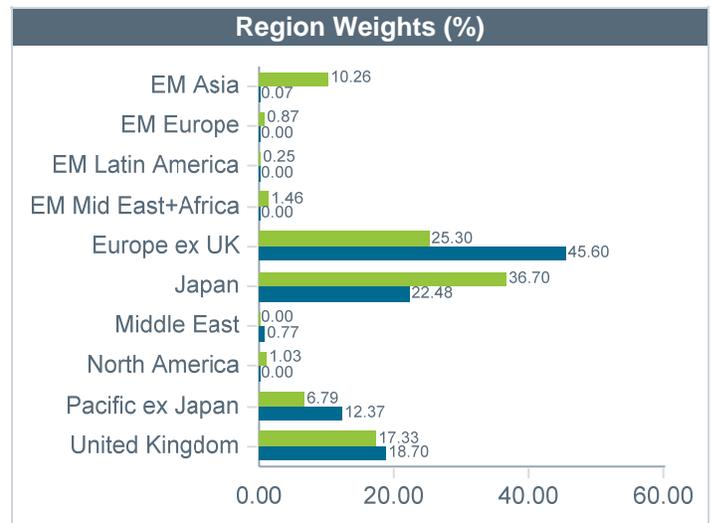
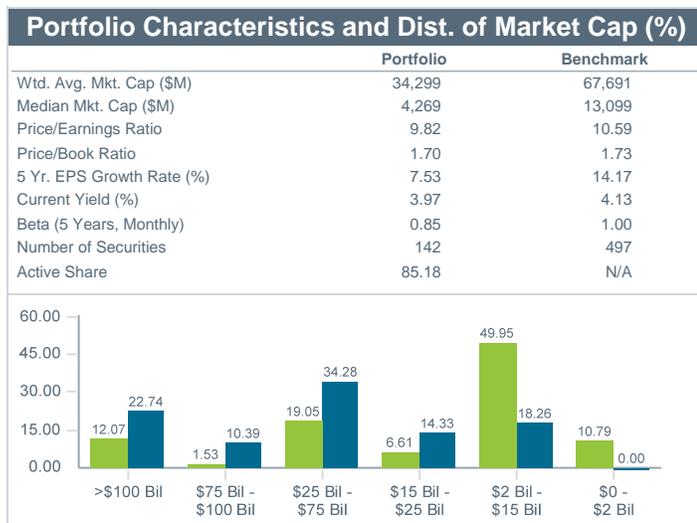
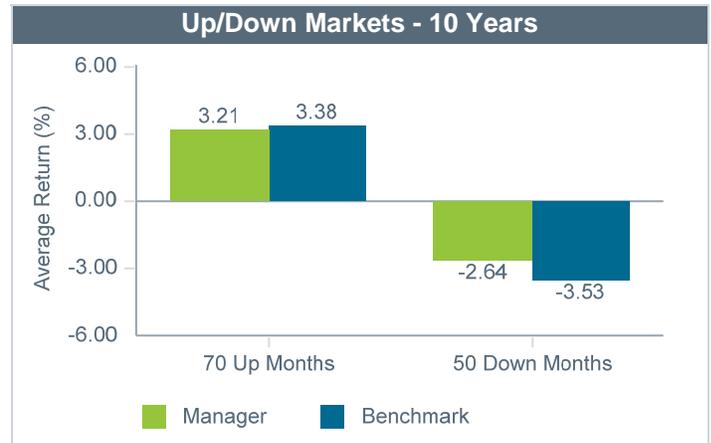
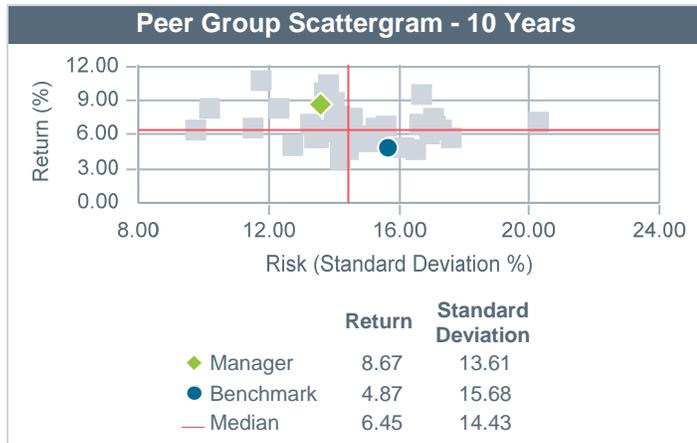
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-1.79	8.57	16.42	12.82	12.63	13.94	31.53	7.55	27.80	-14.17	25.80
Benchmark	-1.50	7.73	12.98	9.19	8.86	11.04	27.78	4.88	23.56	-12.36	10.36
Difference	-0.29	0.84	3.44	3.63	3.77	2.90	3.75	2.67	4.24	-1.81	15.44
Peer Group Median	-2.69	7.70	15.09	10.93	9.77	12.19	28.46	7.66	27.58	-12.98	14.78
Rank	44	41	24	18	11	13	28	51	47	60	3
Population	82	82	78	76	71	67	85	100	100	107	112



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



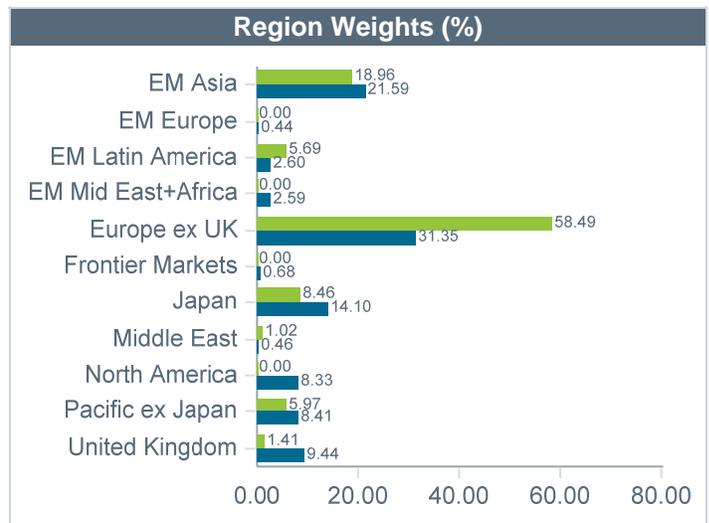
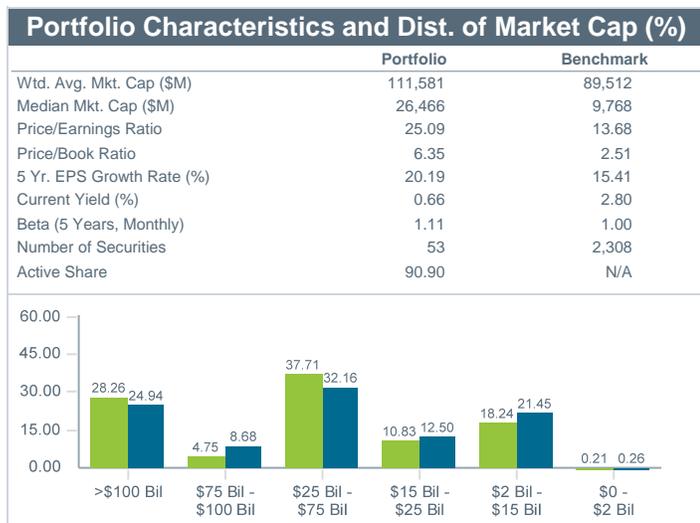
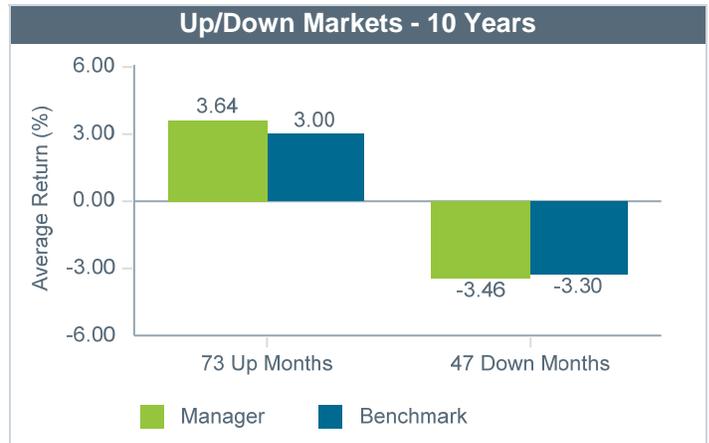
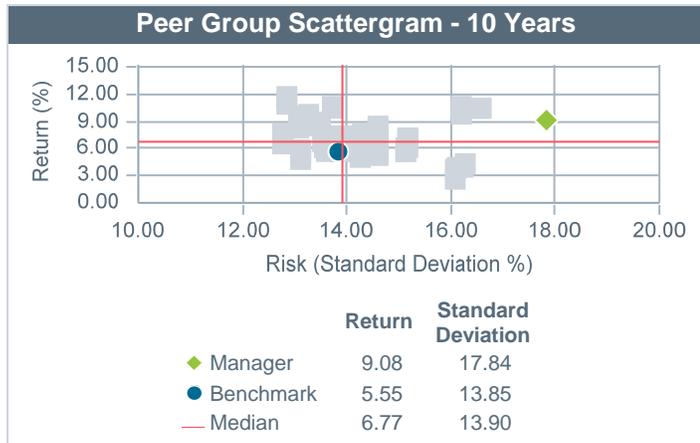
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
<b>Manager</b>	<b>0.32</b>	<b>3.69</b>	<b>7.67</b>	<b>6.47</b>	<b>6.20</b>	<b>8.67</b>	<b>12.58</b>	<b>0.17</b>	<b>18.05</b>	<b>-13.74</b>	<b>28.10</b>
Benchmark	0.33	3.55	5.24	4.18	3.13	4.87	10.89	-2.63	16.09	-14.78	21.44
Difference	-0.01	0.14	2.43	2.29	3.07	3.80	1.69	2.80	1.96	1.04	6.66
Peer Group Median	-4.79	1.91	7.05	5.87	5.06	6.45	11.65	4.45	21.10	-15.76	24.17
Rank	6	24	35	32	21	11	41	81	88	41	26
Population	42	42	42	42	42	42	44	50	56	59	61



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



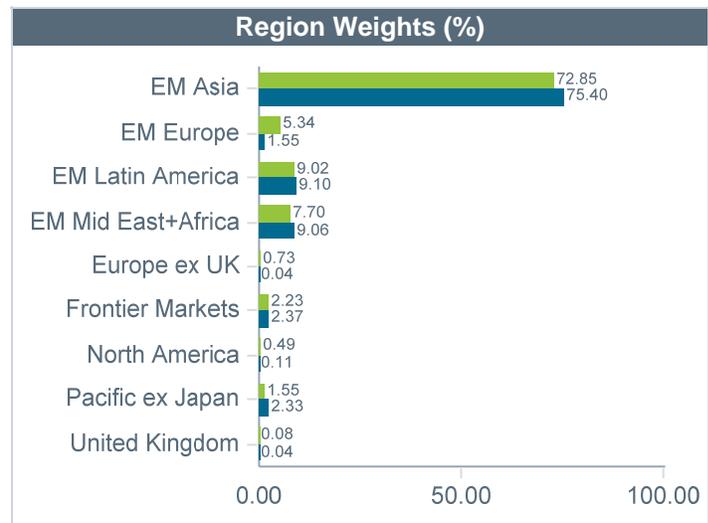
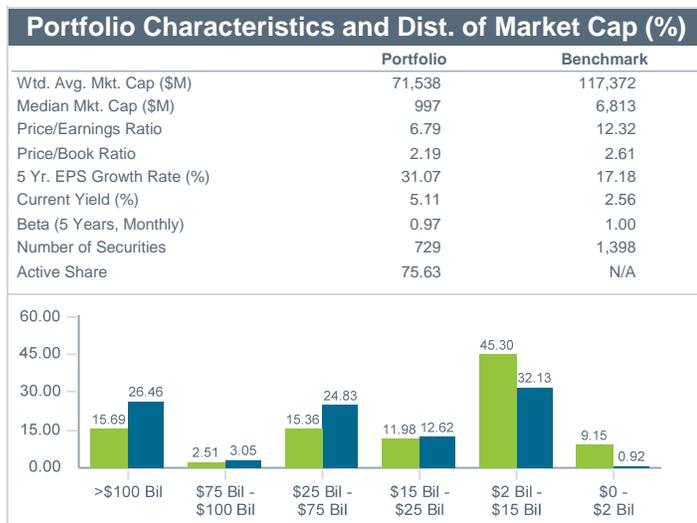
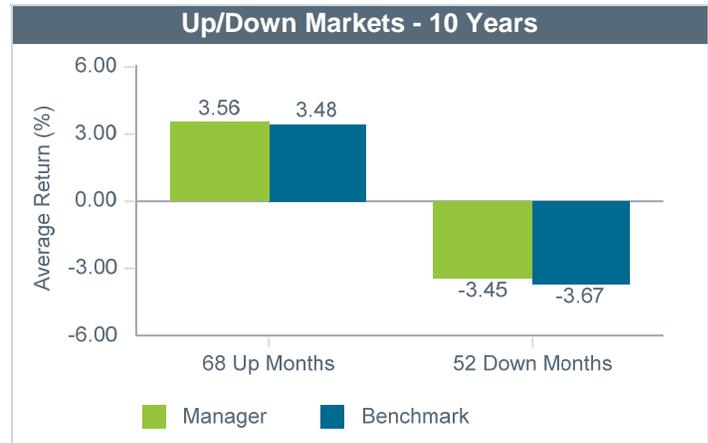
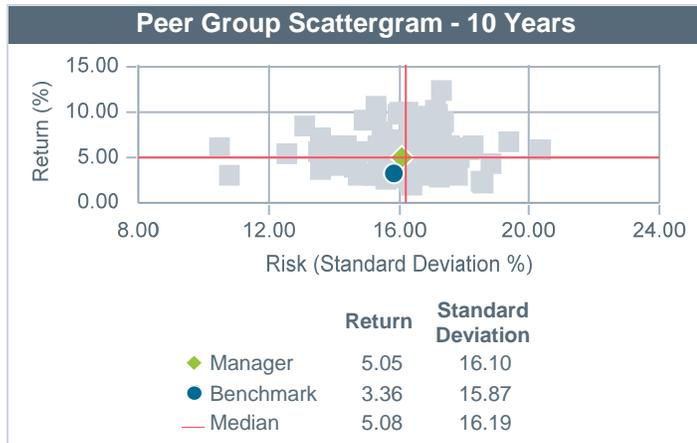
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-21.73	-27.10	10.03	11.21	8.62	9.08	-9.32	63.13	37.48	-17.23	46.37
Benchmark	-5.44	-1.48	7.51	6.76	5.19	5.55	7.82	10.65	21.51	-14.20	27.19
Difference	-16.29	-25.62	2.52	4.45	3.43	3.53	-17.14	52.48	15.97	-3.03	19.18
Peer Group Median	-13.62	-8.06	9.42	8.92	6.21	6.77	7.93	22.75	27.84	-14.32	32.37
Rank	98	95	40	18	16	15	98	1	2	79	5
Population	170	170	170	170	137	110	170	170	172	176	188



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



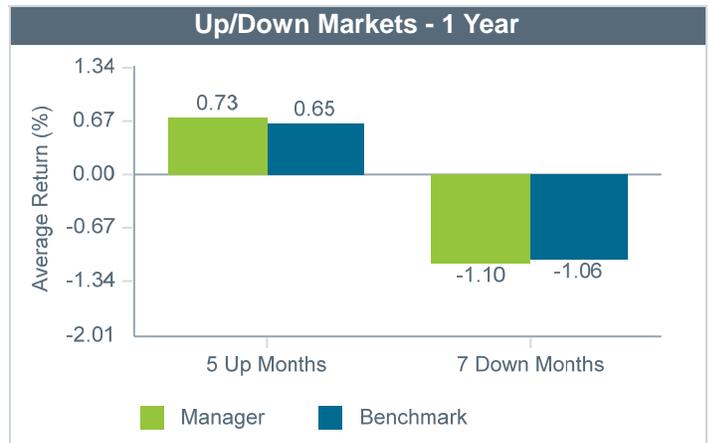
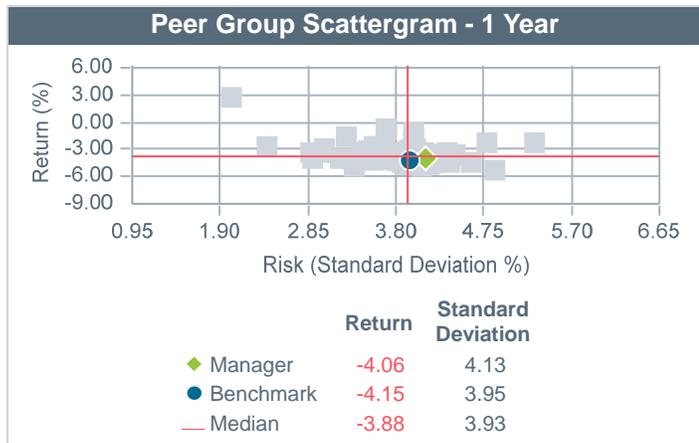
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
<b>Manager</b>	<b>-1.65</b>	<b>-0.17</b>	<b>9.22</b>	<b>7.17</b>	<b>6.07</b>	<b>5.05</b>	<b>8.75</b>	<b>12.55</b>	<b>18.00</b>	<b>-18.30</b>	<b>38.94</b>
Benchmark	-6.97	-11.37	4.94	5.98	4.69	3.36	-2.54	18.31	18.44	-14.58	37.28
Difference	5.32	11.20	4.28	1.19	1.38	1.69	11.29	-5.76	-0.44	-3.72	1.66
Peer Group Median	-7.04	-9.13	6.81	6.86	5.94	5.08	1.16	18.09	19.53	-15.23	36.80
Rank	19	24	27	45	46	51	26	73	64	81	36
Population	266	262	248	226	208	164	270	300	330	333	344



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

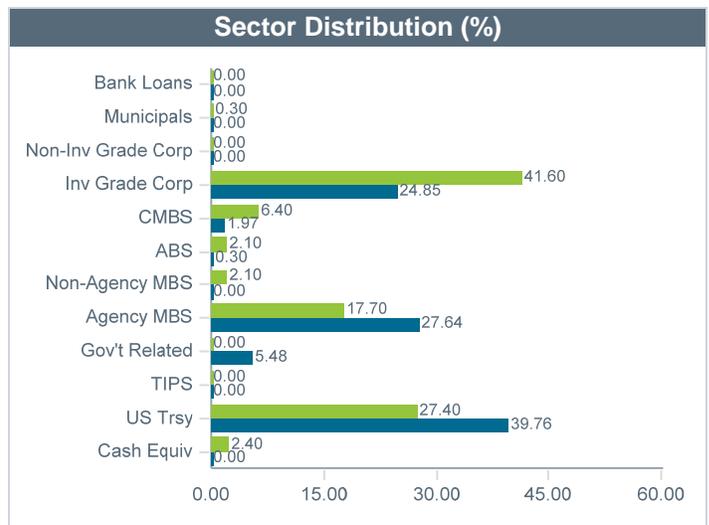


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-6.12	-4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	-5.93	-4.15	1.69	2.14	1.87	2.24	-1.55	7.51	8.72	0.01	3.54
Difference	-0.19	0.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	-5.81	-3.88	2.24	2.66	2.37	2.75	-1.21	8.52	9.19	0.06	4.01
Rank	84	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	133	132	131	128	125	120	140	150	152	158	163



### Portfolio Characteristics

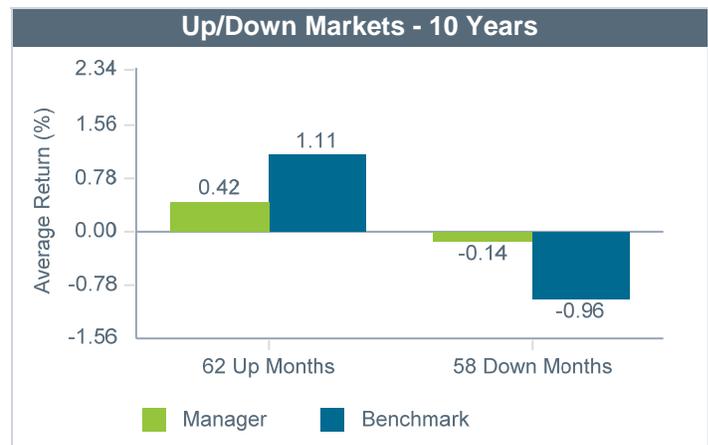
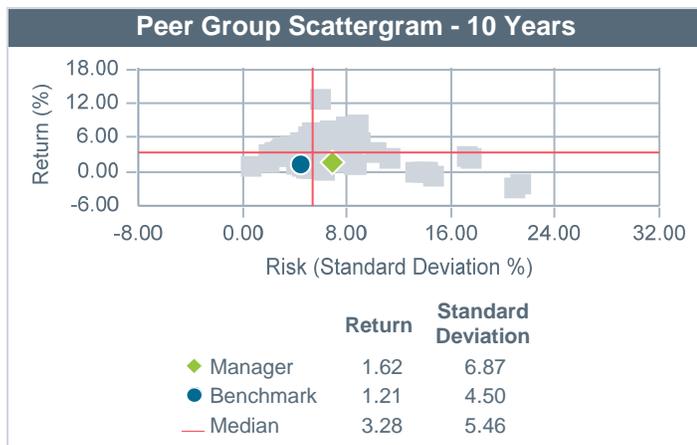
	Portfolio	Benchmark
Effective Duration	6.58	6.58
Spread Duration	3.75	N/A
Avg. Maturity	8.42	8.77
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	N/A	2.92
Coupon Rate (%)	2.80	2.44
Current Yield (%)	N/A	N/A
Holdings Count	237	12,538



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

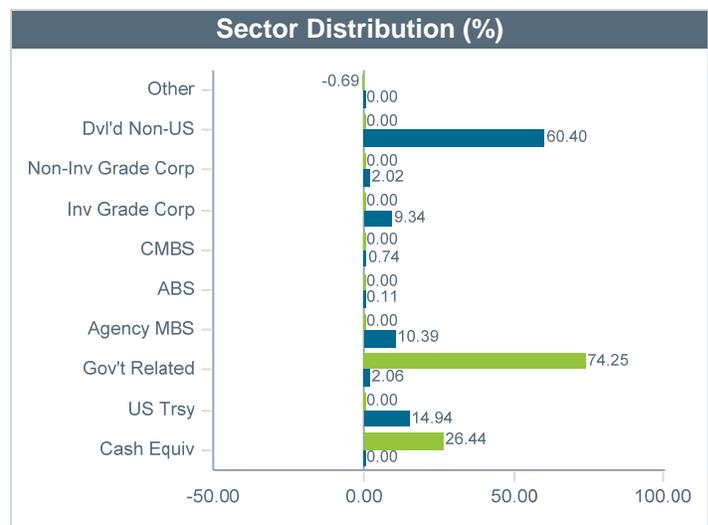


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.50	-1.18	-3.36	-1.66	0.07	1.62	-4.72	-3.81	-0.33	0.52	5.06
Benchmark	-6.05	-6.22	0.77	1.78	1.74	1.21	-4.51	9.02	7.13	-1.36	7.69
Difference	6.55	5.04	-4.13	-3.44	-1.67	0.41	-0.21	-12.83	-7.46	1.88	-2.63
Peer Group Median	-4.62	-3.27	3.45	3.57	3.42	3.28	0.13	8.61	9.48	-1.81	7.67
Rank	8	33	100	100	100	75	80	99	100	19	79
Population	179	179	177	171	166	135	194	224	239	255	263



### Portfolio Characteristics

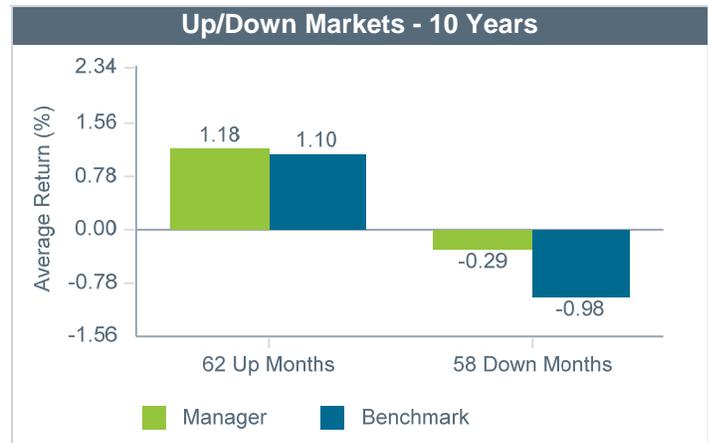
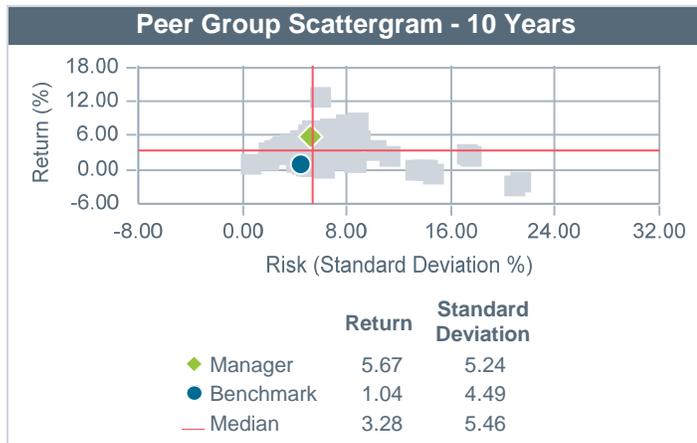
	Portfolio	Benchmark
Effective Duration	1.69	7.14
Spread Duration	1.77	N/A
Avg. Maturity	2.77	8.94
Avg. Quality	N/A	N/A
Yield To Maturity (%)	6.33	2.39
Coupon Rate (%)	3.79	2.35
Current Yield (%)	3.33	N/A
Holdings Count	106	32,106



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

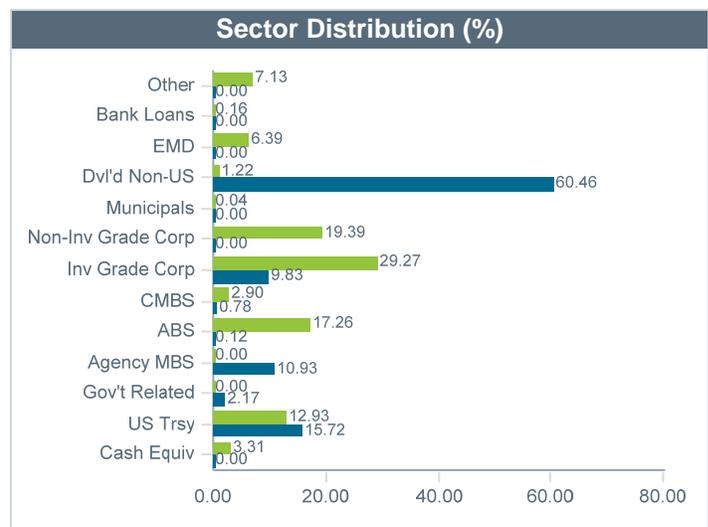


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.39	-2.61	4.97	4.87	4.47	5.67	0.55	15.08	9.80	0.09	8.74
Benchmark	-6.16	-6.40	0.69	1.70	1.58	1.04	-4.71	9.20	6.84	-1.19	7.39
Difference	0.77	3.79	4.28	3.17	2.89	4.63	5.26	5.88	2.96	1.28	1.35
Peer Group Median	-4.62	-3.27	3.45	3.57	3.42	3.28	0.13	8.61	9.48	-1.81	7.67
Rank	63	45	22	22	34	17	44	8	47	23	31
Population	179	179	177	171	166	135	194	224	239	255	263



### Portfolio Characteristics

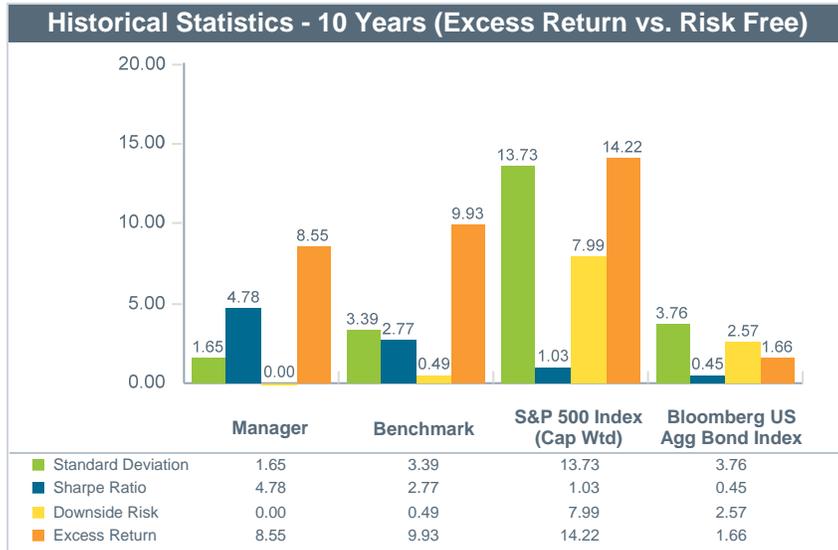
	Portfolio	Benchmark
Effective Duration	4.54	7.28
Spread Duration	4.32	N/A
Avg. Maturity	6.62	9.05
Avg. Quality	Baa2	N/A
Yield To Maturity (%)	4.32	2.15
Coupon Rate (%)	3.35	2.18
Current Yield (%)	3.54	N/A
Holdings Count	930	28,086



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

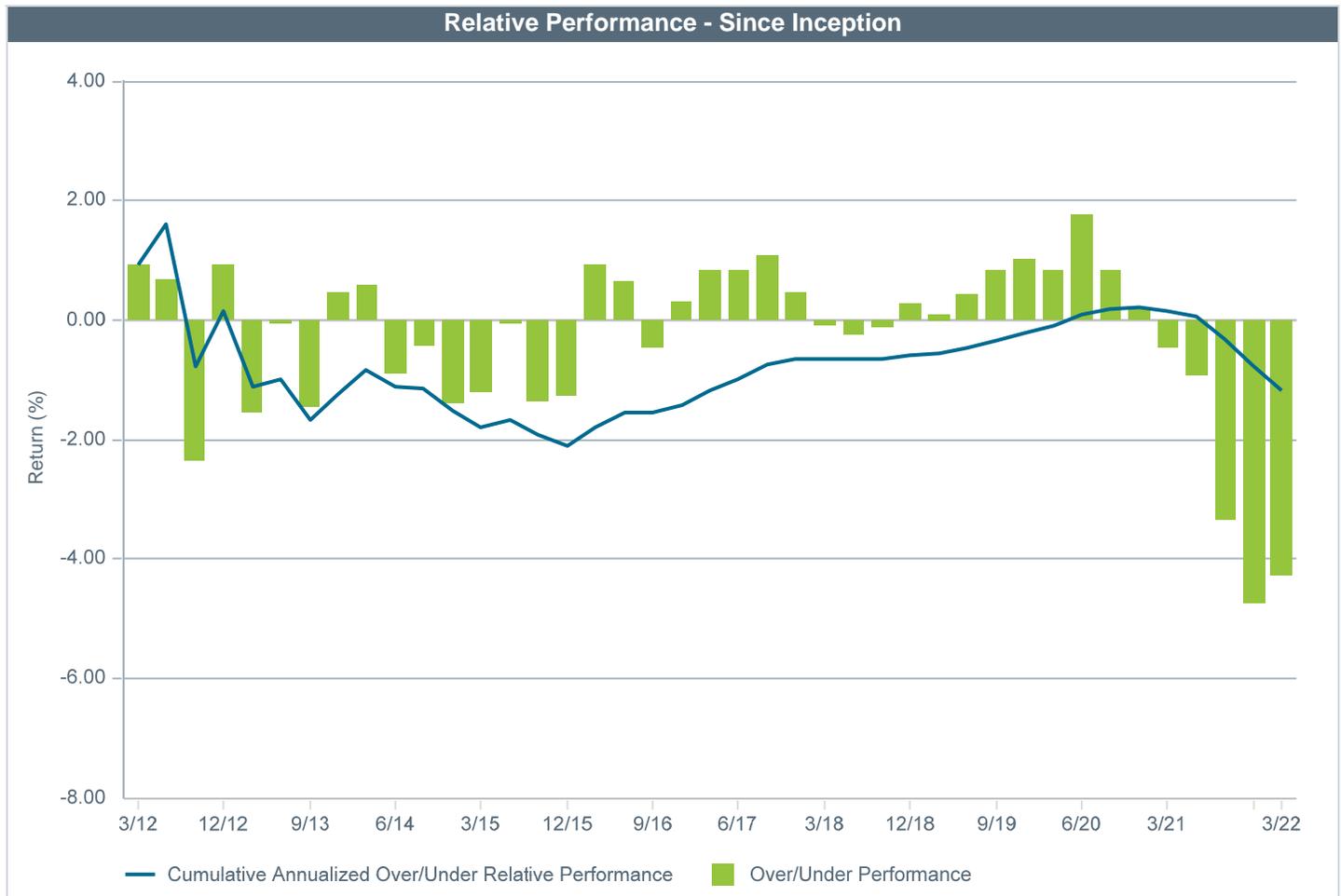


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.77	12.18	8.32	8.61	9.21	9.49	10.94	4.91	7.87	8.18	11.11
Benchmark	7.36	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	8.35	7.62
Difference	-4.59	-16.27	-2.97	-1.27	-0.98	-1.44	-11.23	3.72	2.53	-0.17	3.49



### Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.48
S&P 500 Index (Cap Wtd)	-0.29
Russell 2000 Index	-0.32
MSCI EAFE Index (USD) (Net)	-0.26
MSCI Emg Mkts Index (USD) (Net)	-0.27
Bloomberg US Agg Bond Index	-0.26
Bloomberg US Trsy US TIPS Index	-0.34
Wilshire US REIT Index	-0.16
HFRI FOF Comp Index	-0.32
Bloomberg Cmdty Index (TR)	-0.04
ICE BofAML 3 Mo US T-Bill Index	-0.22
Cons Price Index (Unadjusted)	0.05
NCREIF ODCE Index (AWA) (Gross)	0.48



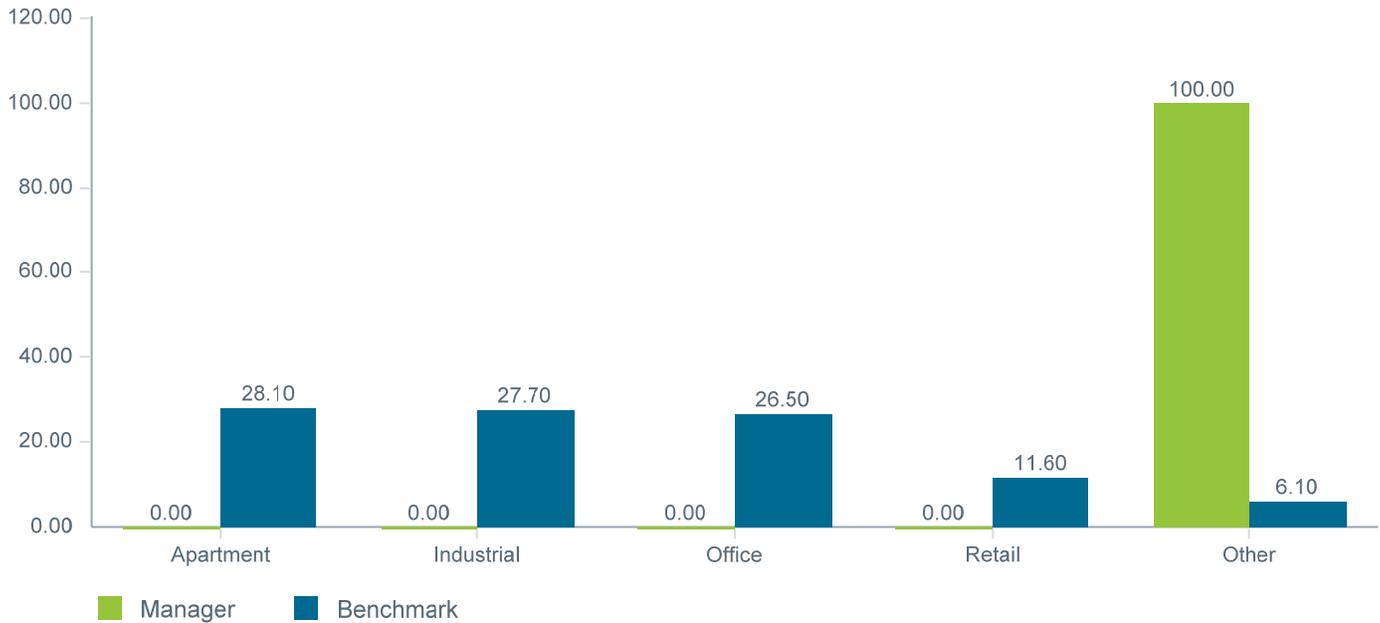
**Investment Strategy**

The Fund's strategy is on primarily stabilized income-producing investments in niche sectors; Education, Health, and Storage. Within these sectors the fund invests in student housing, seniors housing, medical office buildings, life science buildings, and self-storage. The majority of the return from the Fund is expected to be realized from current income, with a modest portion of the return to be derived from asset appreciation. Harrison Street believes that the primary property types it targets will provide better risk/return profiles than properties in traditional core portfolios across all economic cycles.

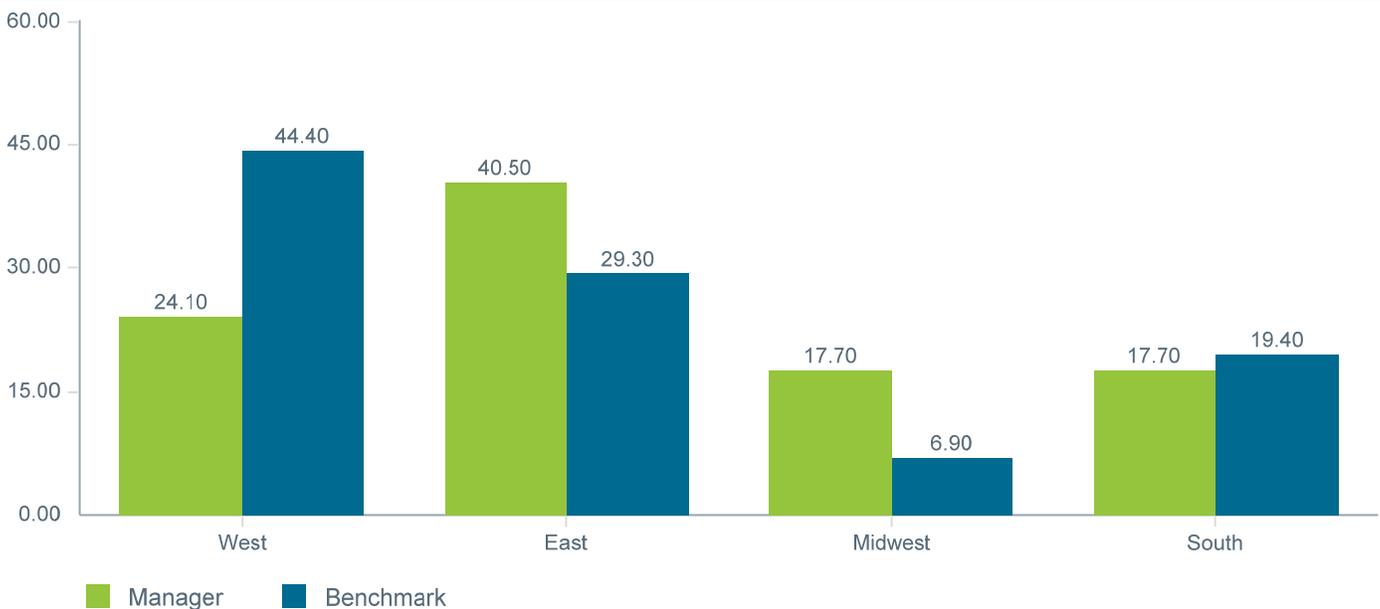
**Investment Profile**

Fund Inception	2011
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	12,276
Fund Leverage %	22.89
Portfolio Occupancy %	89.40
Cash Reserve %	0.60
Number of Investments	382
Number of Limited Partners	229

**Property Type Allocation (%)**



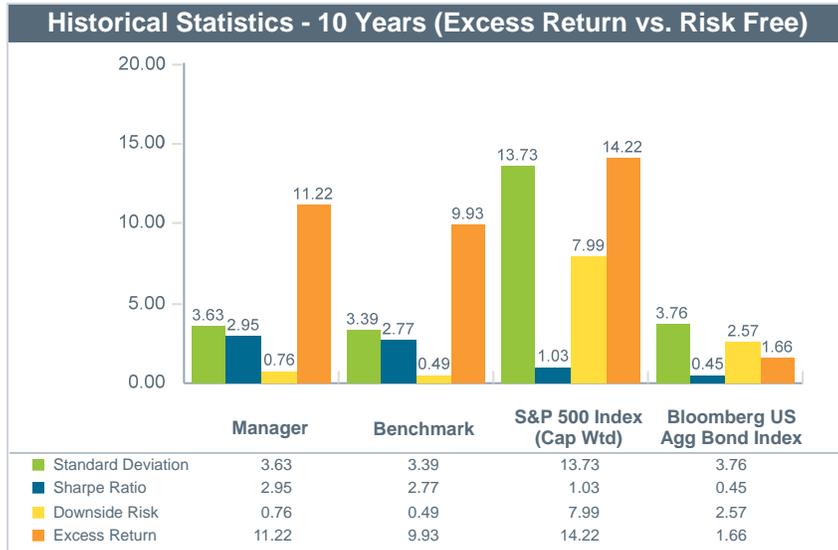
**Geographic Allocation (%)**



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of education, healthcare, senior housing, and storage real estate. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

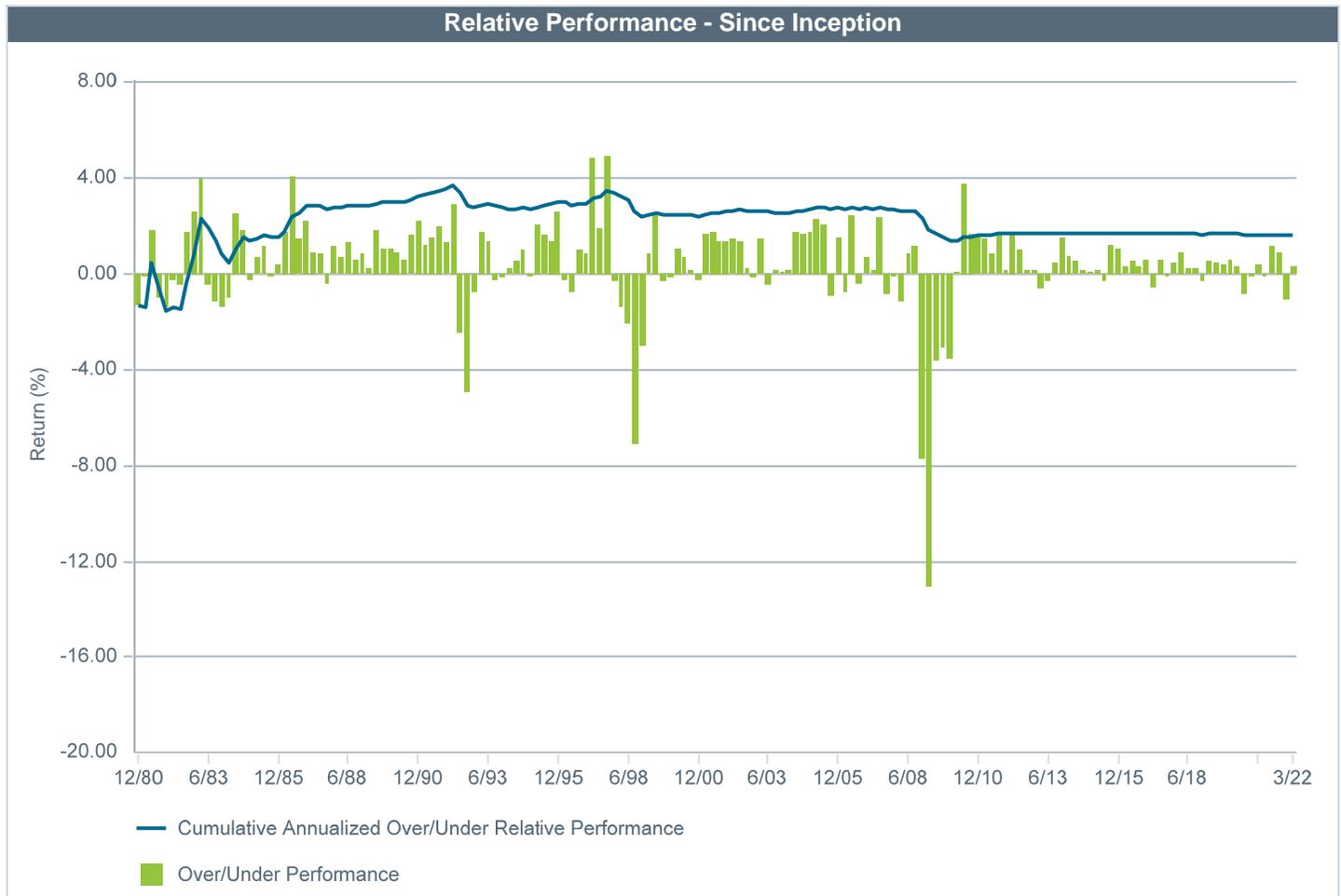


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	7.72	30.11	12.26	11.02	11.52	12.32	23.30	1.03	7.52	9.48	8.06
Benchmark	7.36	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	8.35	7.62
Difference	0.36	1.66	0.97	1.14	1.33	1.39	1.13	-0.16	2.18	1.13	0.44



### Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.95
S&P 500 Index (Cap Wtd)	-0.21
Russell 2000 Index	-0.28
MSCI EAFE Index (USD) (Net)	-0.22
MSCI Emg Mkts Index (USD) (Net)	-0.40
Bloomberg US Agg Bond Index	-0.43
Bloomberg US Trsy US TIPS Index	-0.28
Wilshire US REIT Index	0.05
HFRI FOF Comp Index	-0.28
Bloomberg Cmnty Index (TR)	0.15
ICE BofAML 3 Mo US T-Bill Index	-0.38
Cons Price Index (Unadjusted)	0.31



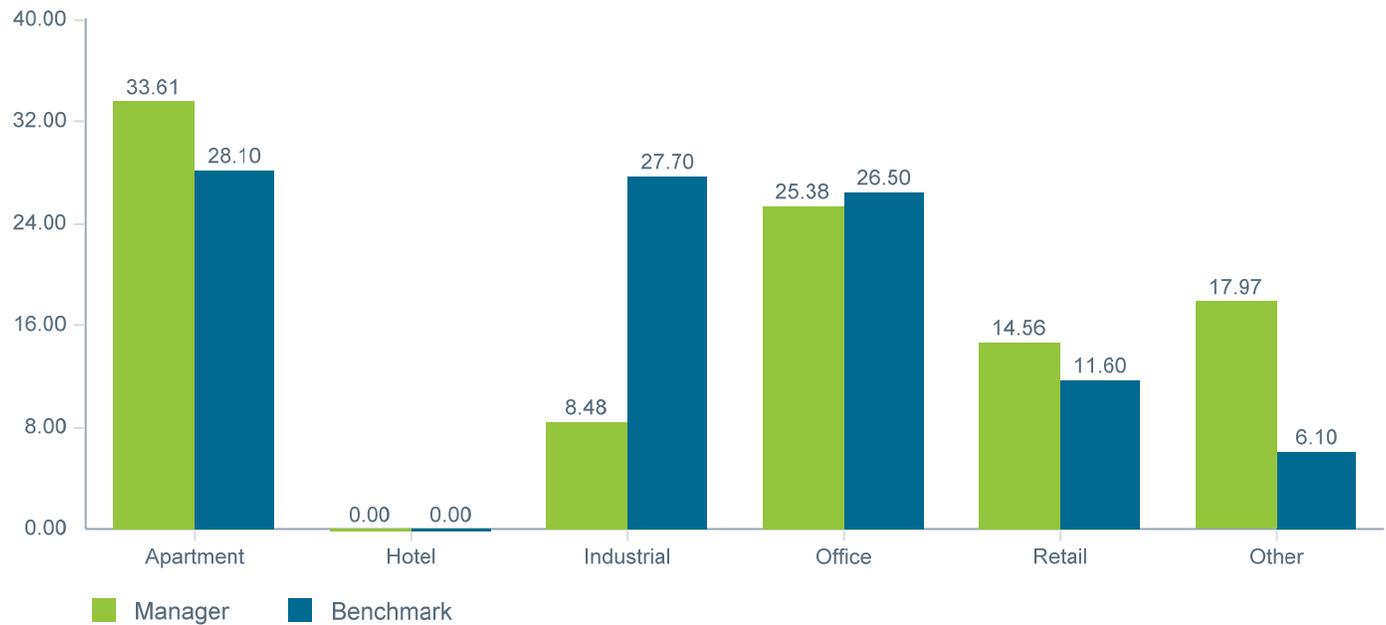
**Investment Strategy**

The Fund pursues a diversified core-plus real estate strategy that seeks to outperform the NCREIF ODCE Index by 100 basis points over a complete market cycle by structuring investments to enhance risk-adjusted returns. Investments may be made through direct property ownership or indirectly through such vehicles as joint ventures, general or limited partnerships, limited liability companies, mortgage loans and other loan types, including mezzanine debt, and debt secured by an interest in the borrowing entity or interests in companies or entities that directly or indirectly hold real estate or real estate interests. It operates with a leverage limit of 40% and may invest up to 35% of its gross assets in higher-risk, non-core real estate investment opportunities.

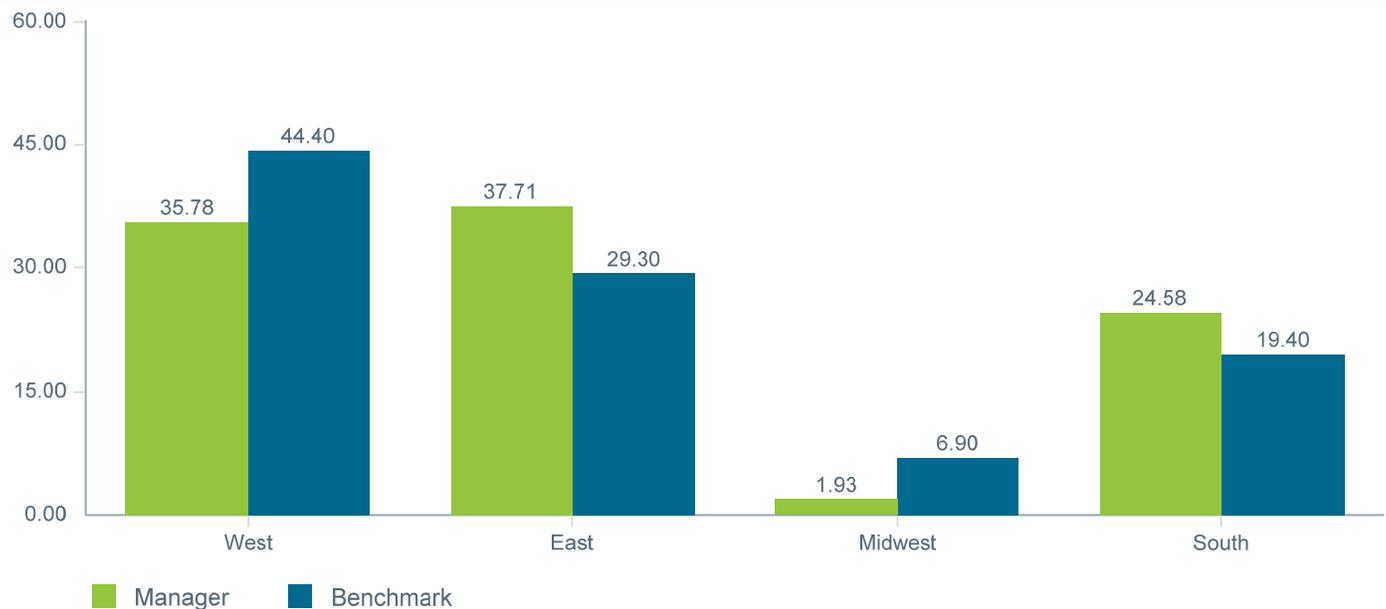
**Investment Profile**

Fund Inception	1980
Legal Structure	REIT
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	16,371
Fund Leverage %	33.65
Portfolio Occupancy %	90.21
Cash Reserve %	2.62
Number of Investments	161
Number of Limited Partners	106

**Property Type Allocation (%)**



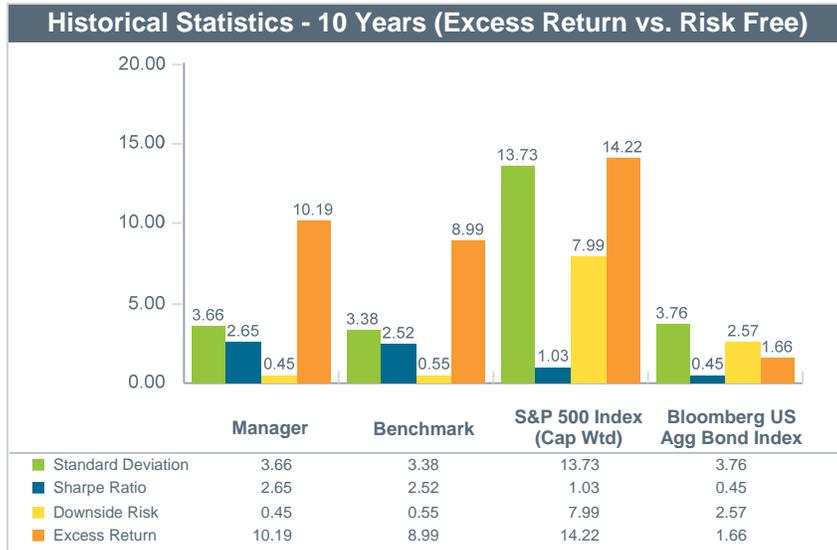
**Geographic Allocation (%)**



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land and life science/lab space. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

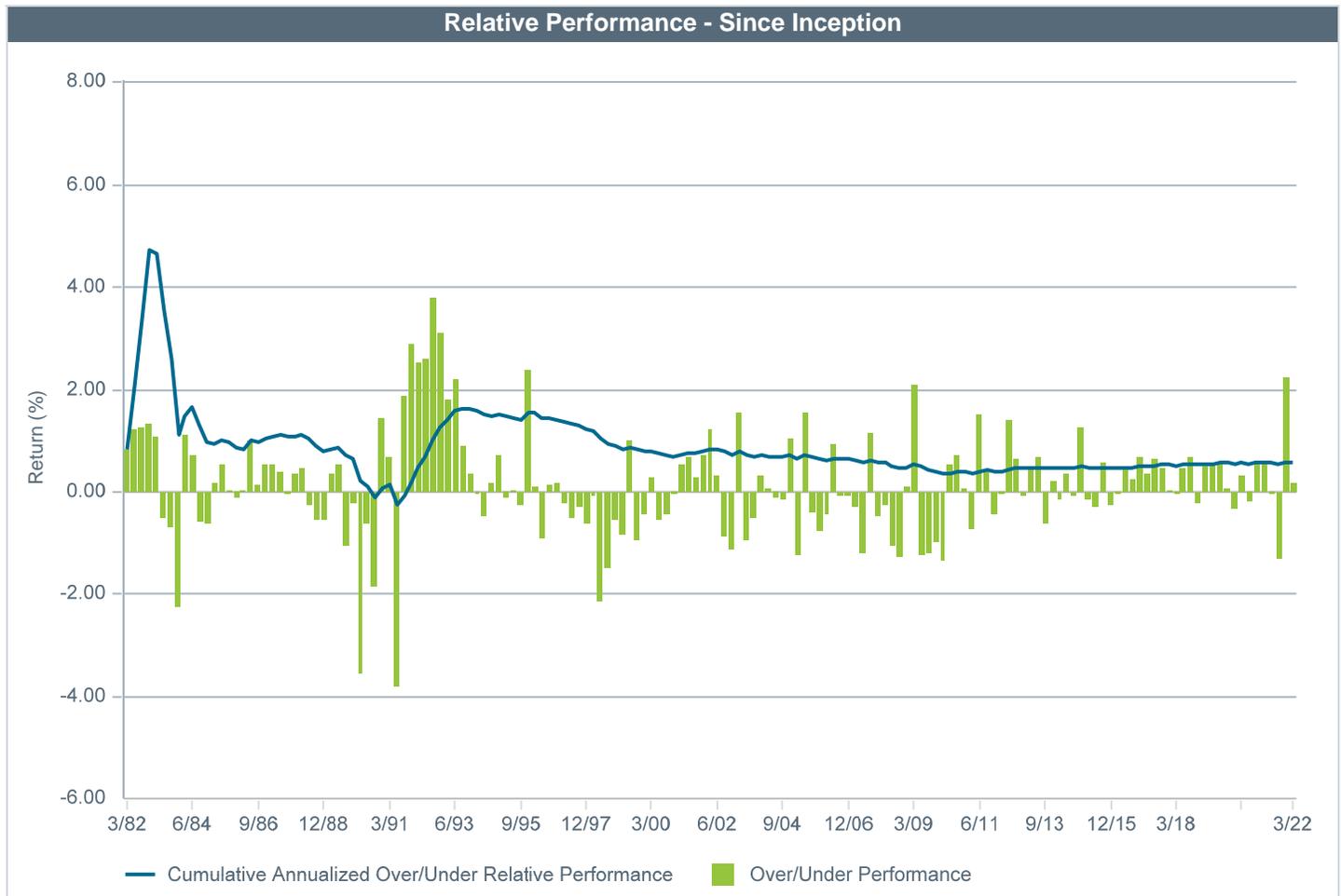


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	7.35	28.69	11.55	10.20	10.40	11.20	22.83	0.81	6.22	8.32	8.29
Benchmark	7.17	27.29	10.31	8.91	9.21	9.92	21.02	0.34	4.39	7.36	6.66
Difference	0.18	1.40	1.24	1.29	1.19	1.28	1.81	0.47	1.83	0.96	1.63



### Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Net)	0.94
S&P 500 Index (Cap Wtd)	-0.06
Russell 2000 Index	-0.15
MSCI EAFE Index (USD) (Net)	-0.17
MSCI Emg Mkts Index (USD) (Net)	-0.34
Bloomberg US Agg Bond Index	-0.43
Bloomberg US Trsy US TIPS Index	-0.28
Wilshire US REIT Index	0.22
HFRI FOF Comp Index	-0.21
Bloomberg Cmdty Index (TR)	0.12
ICE BofAML 3 Mo US T-Bill Index	-0.38
Cons Price Index (Unadjusted)	0.34
NCREIF ODCE Index (AWA) (Gross)	0.95



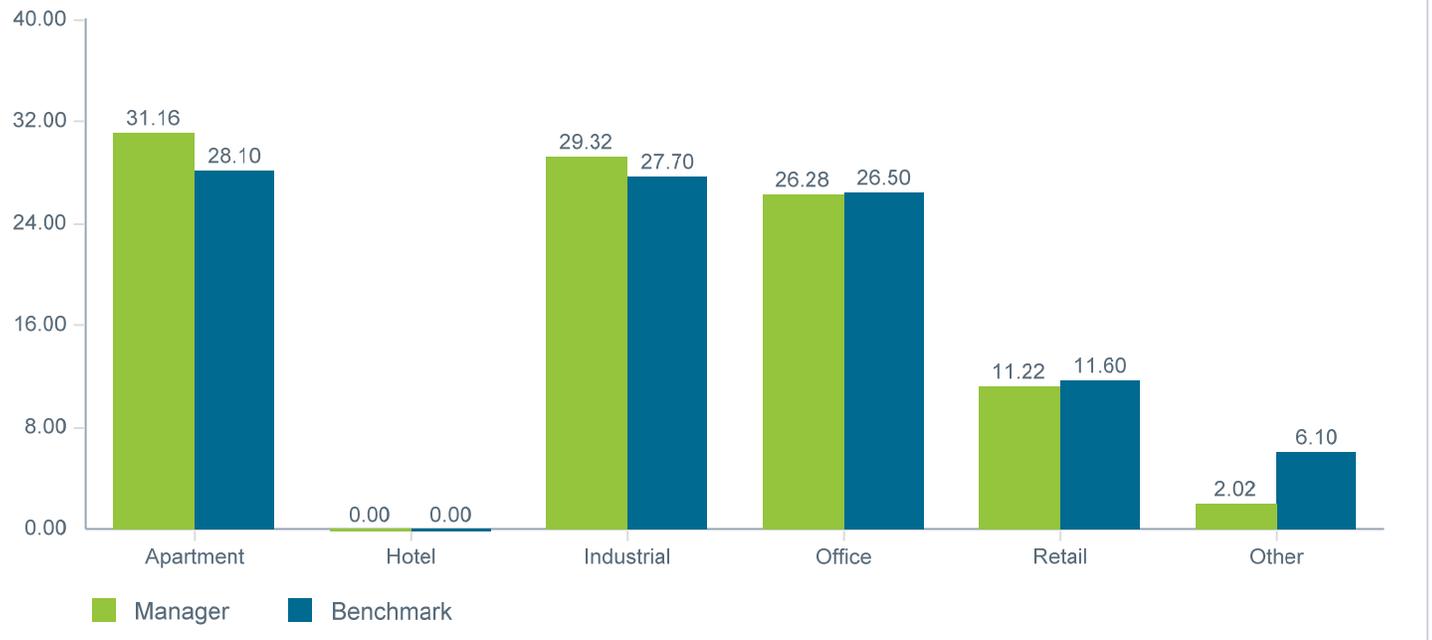
**Investment Strategy**

The Principal U.S. Property Account is a core real estate account designed to have a low to moderate risk profile consistent with other open-end real estate funds comprising the NFI-ODCE. This risk profile has two components: 1) a low to moderate real estate property risk profile; and 2) a low to moderate risk portfolio level operating profile. Low to moderate real estate property risk is accomplished by investing primarily in well-leased properties on an unleveraged basis. Low to moderate portfolio level risk is accomplished by operating with limited portfolio level obligations and a well-diversified portfolio. The Account invests in the traditional real estate property types; multifamily, office, industrial, and retail.

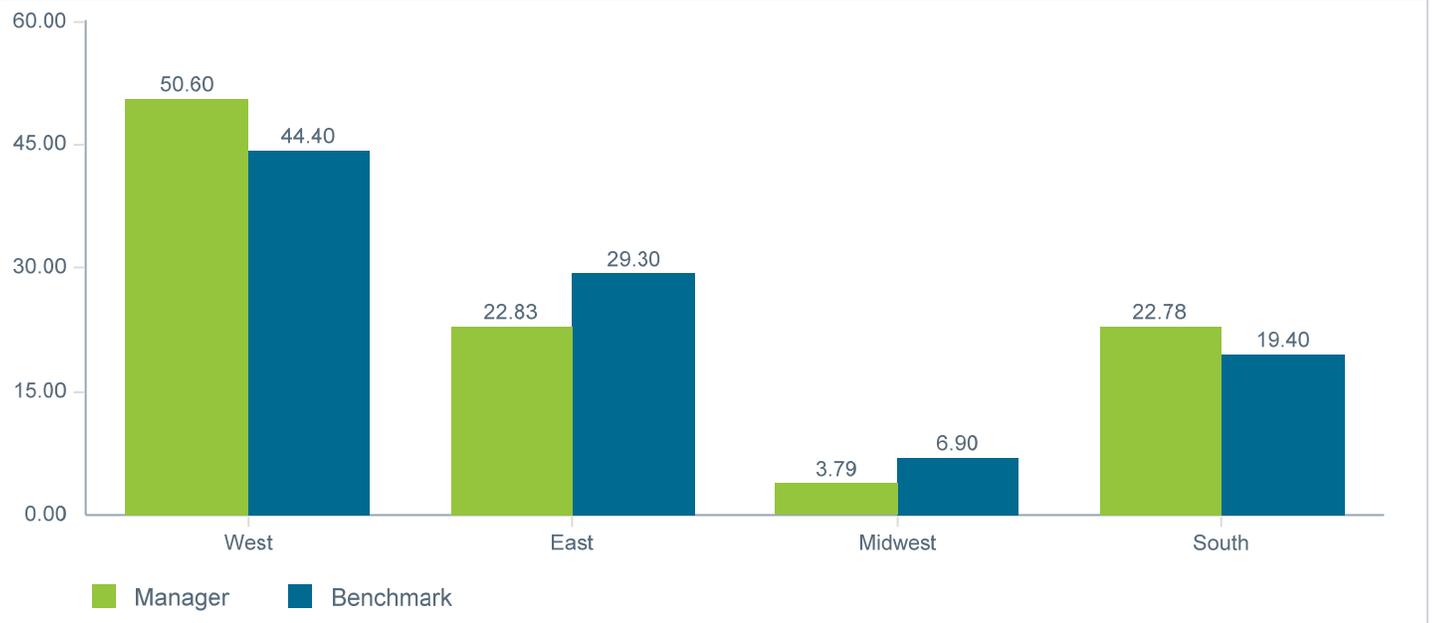
**Investment Profile**

Fund Inception	1982
Legal Structure	Insurance SA
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	12,515
Fund Leverage %	21.73
Portfolio Occupancy %	91.91
Cash Reserve %	3.21
Number of Investments	142
Number of Limited Partners	4,844

**Property Type Allocation (%)**



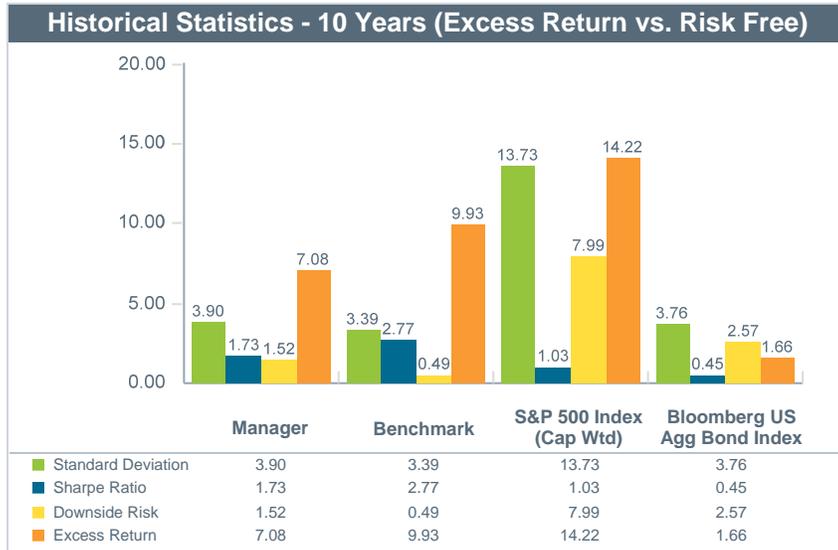
**Geographic Allocation (%)**



Performance shown is net of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land, self storage, and manufactured housing. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

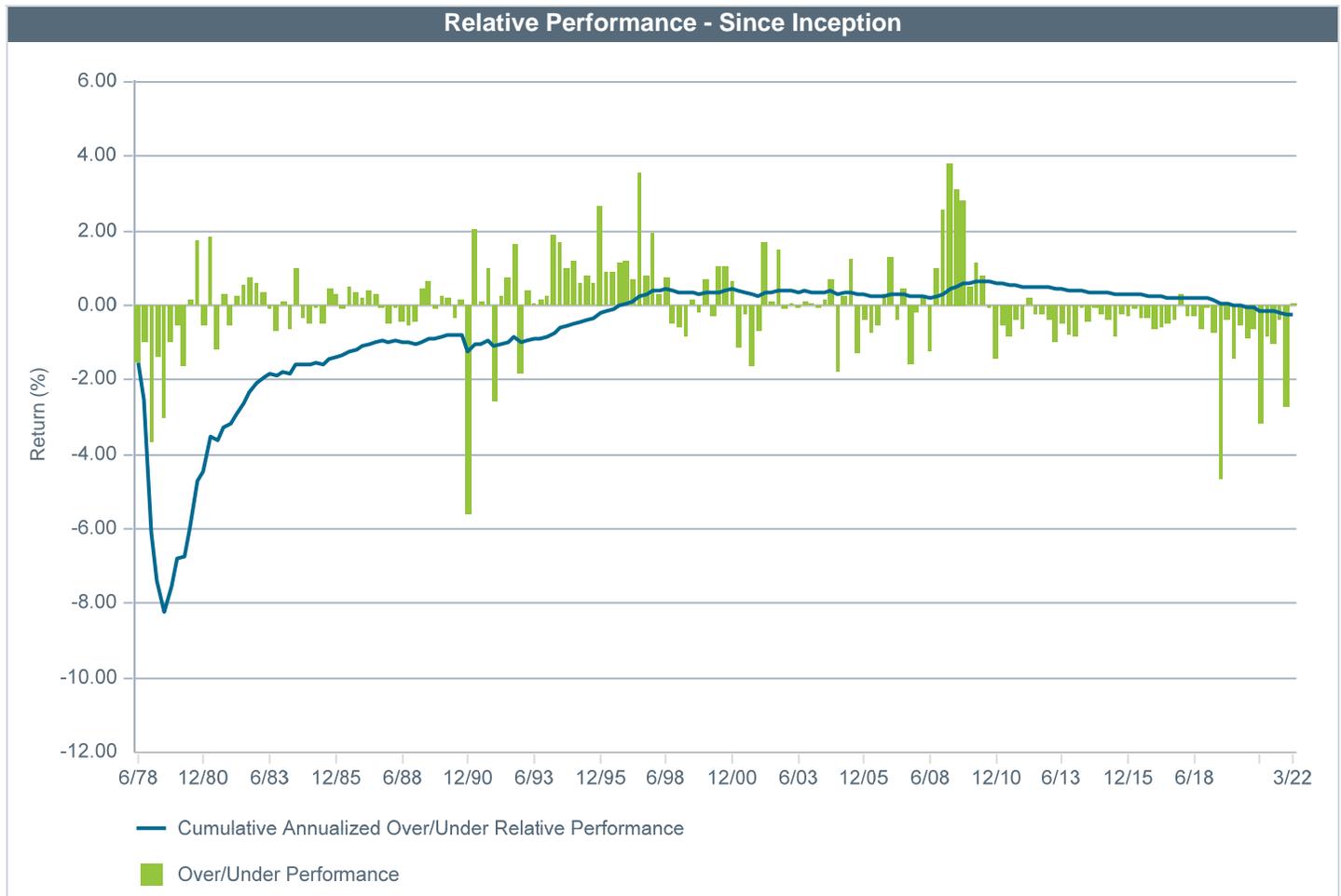


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	7.39	23.27	5.21	5.69	6.64	7.85	16.24	-4.04	-2.10	6.99	6.30
Benchmark	7.36	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	8.35	7.62
Difference	0.03	-5.18	-6.08	-4.19	-3.55	-3.08	-5.93	-5.23	-7.44	-1.36	-1.32



### Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.88
S&P 500 Index (Cap Wtd)	-0.30
Russell 2000 Index	-0.38
MSCI EAFE Index (USD) (Net)	-0.33
MSCI Emg Mkts Index (USD) (Net)	-0.43
Bloomberg US Agg Bond Index	-0.47
Bloomberg US Trsy US TIPS Index	-0.36
Wilshire US REIT Index	-0.03
HFRI FOF Comp Index	-0.38
Bloomberg Cmdty Index (TR)	0.08
ICE BofAML 3 Mo US T-Bill Index	-0.44
Cons Price Index (Unadjusted)	0.27



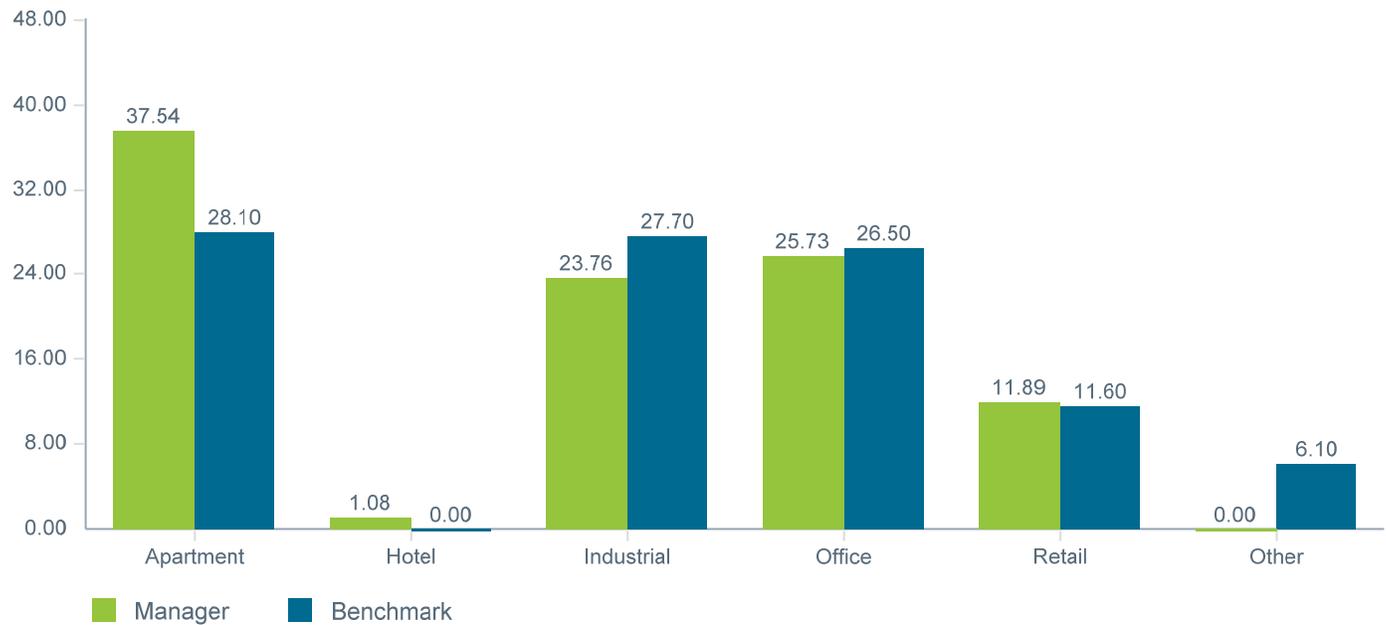
**Investment Strategy**

The Fund pursues a diversified core real estate strategy that seeks to produce attractive risk-adjusted returns by focusing on selective acquisitions, diversification, active portfolio management, and asset management. The Fund invests in well-leased, stabilized assets in major US metropolitan markets and receives the majority of its return from the income component. Diversification for the Fund is consistently pursued on many levels, including geographic region, property type, and economic sector. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in value-added type real estate investment opportunities.

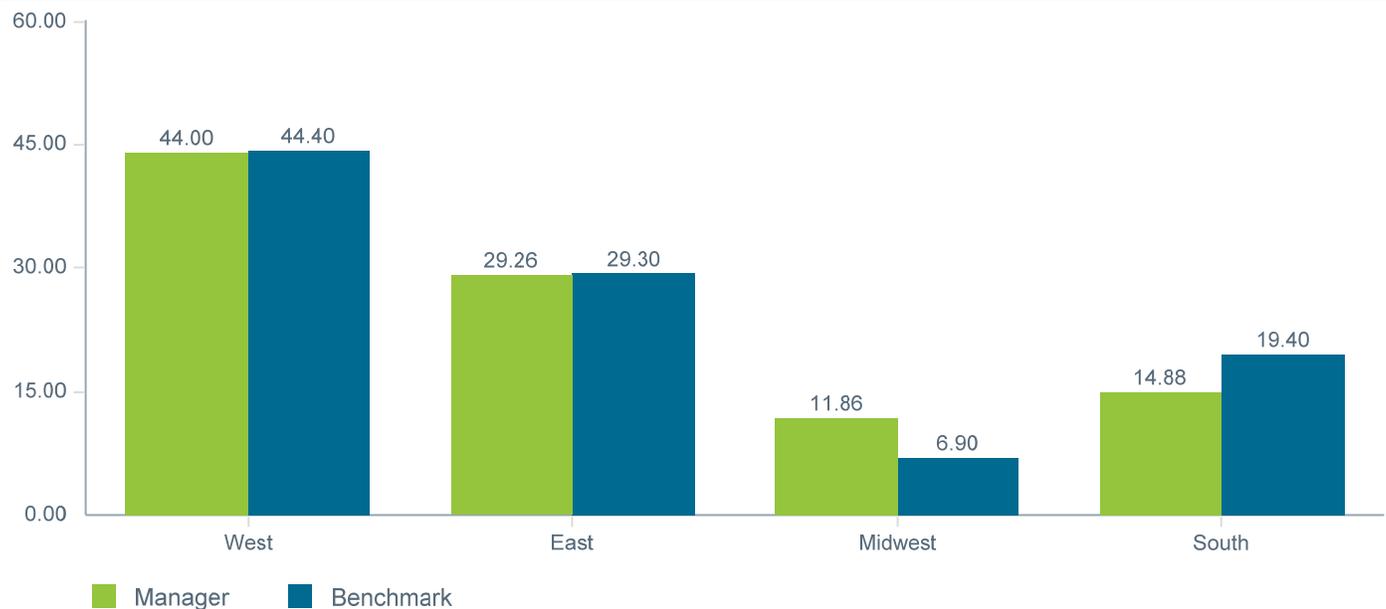
**Investment Profile**

Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	18,103
Fund Leverage %	16.90
Portfolio Occupancy %	92.50
Cash Reserve %	4.20
Number of Investments	158
Number of Limited Partners	443

**Property Type Allocation (%)**



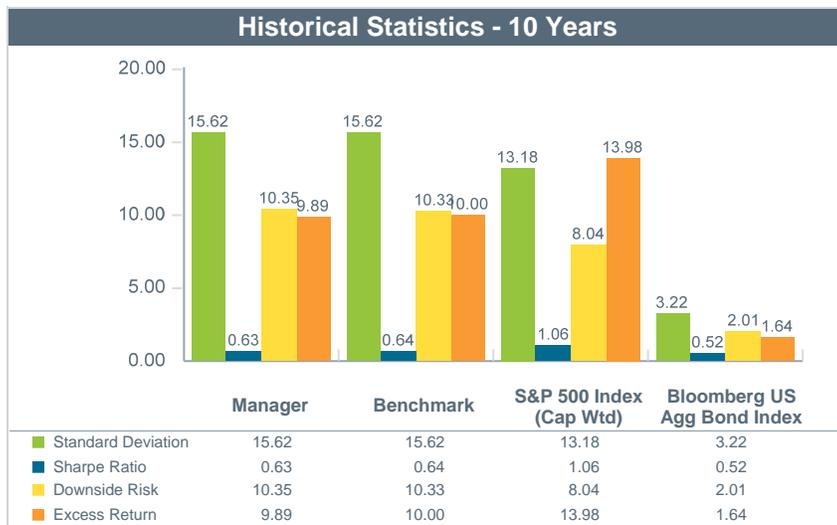
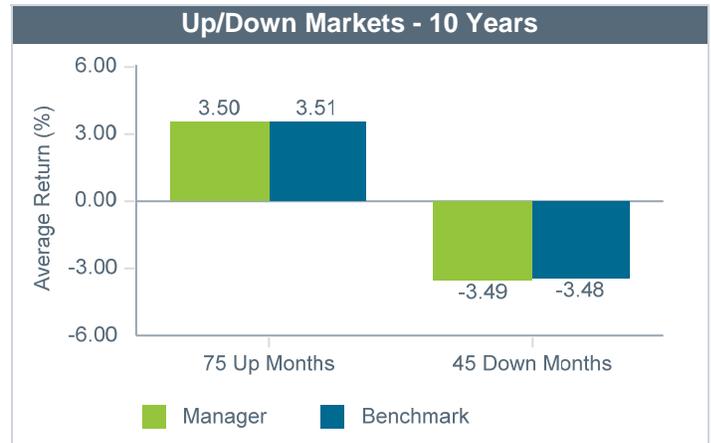
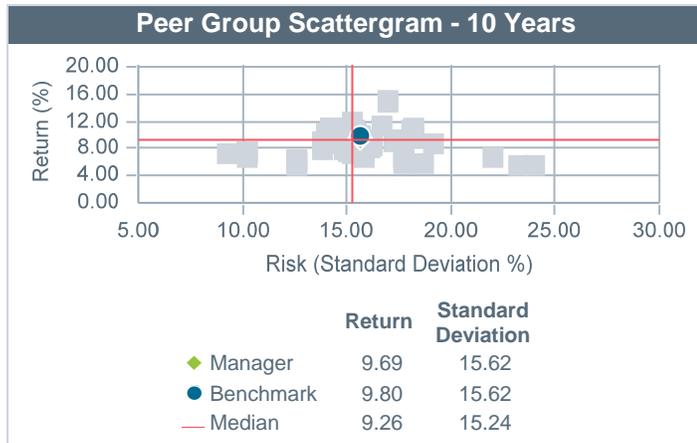
**Geographic Allocation (%)**



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.97	21.45	11.40	9.65	7.85	9.69	40.38	-4.72	28.91	-5.95	4.95
Benchmark	-5.95	21.58	11.55	9.78	7.98	9.80	40.56	-4.55	29.03	-5.86	5.07
Difference	-0.02	-0.13	-0.15	-0.13	-0.13	-0.11	-0.18	-0.17	-0.12	-0.09	-0.12
Peer Group Median	-5.28	23.92	11.80	9.83	7.83	9.26	41.22	-4.21	27.38	-5.75	5.20
Rank	63	75	59	56	49	30	62	57	36	54	56
Population	258	253	236	208	182	152	251	248	256	244	244



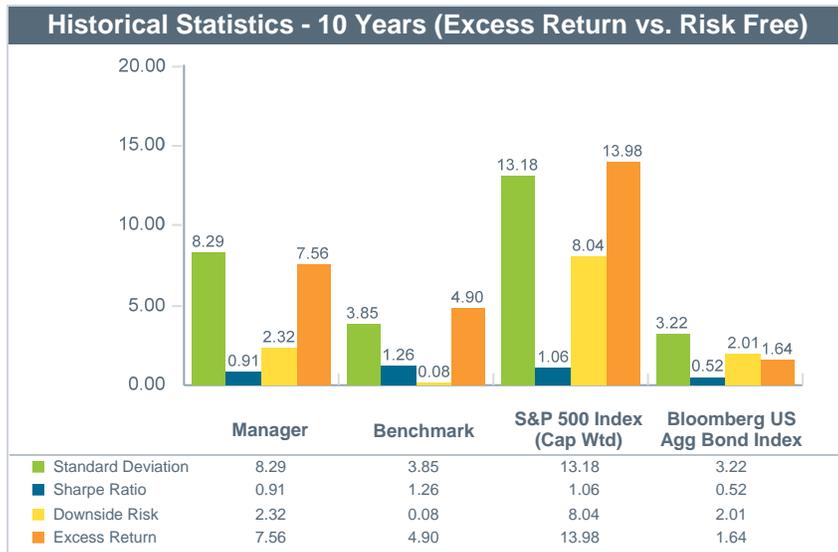
### Actual Correlation - 10 Years

Index	Actual Correlation
Vanguard Spl Real Estate Index	1.00
S&P 500 Index (Cap Wtd)	0.66
Russell 2000 Index	0.60
MSCI EAFE Index (USD) (Net)	0.58
MSCI Emg Mkts Index (USD) (Net)	0.47
Bloomberg US Agg Bond Index	0.38
Bloomberg US Trsy US TIPS Index	0.46
Wilshire US REIT Index	0.99
HFRI FOF Comp Index	0.56
Bloomberg Cmnty Index (TR)	0.25
ICE BofAML 3 Mo US T-Bill Index	-0.14
Cons Price Index (Unadjusted)	0.01

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Performance shown is calculated using Net Asset Values (NAV). Parentheses contain percentile ranks. Benchmark consists of MSCI US REIT Index (USD) (Gross) adjusted to include a 2% cash position (Lipper Money Market Average) through 04/30/09; MSCI US REIT Index (USD) (Gross) through 01/31/18; MSCI US IM Real Estate 25/50 Transition Index through 07/24/18; and MSCI US IM Real Estate 25/50 Index (Gross) thereafter.

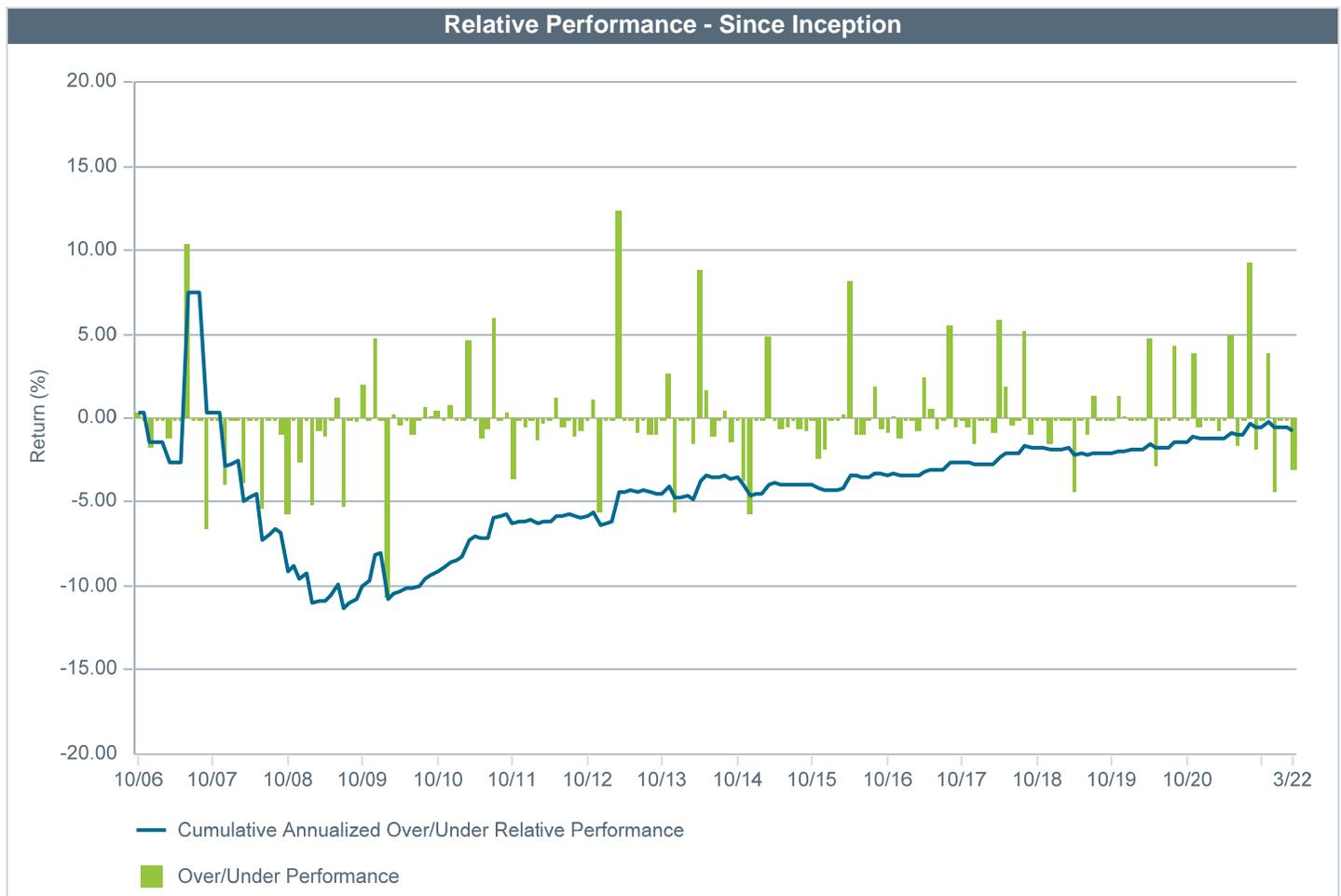


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.00	19.14	8.86	9.42	7.28	8.15	19.14	10.18	-1.69	12.47	8.08
Benchmark	3.21	11.83	4.75	4.08	3.85	5.60	9.17	0.81	1.30	3.21	3.63
Difference	-3.21	7.31	4.11	5.34	3.43	2.55	9.97	9.37	-2.99	9.26	4.45



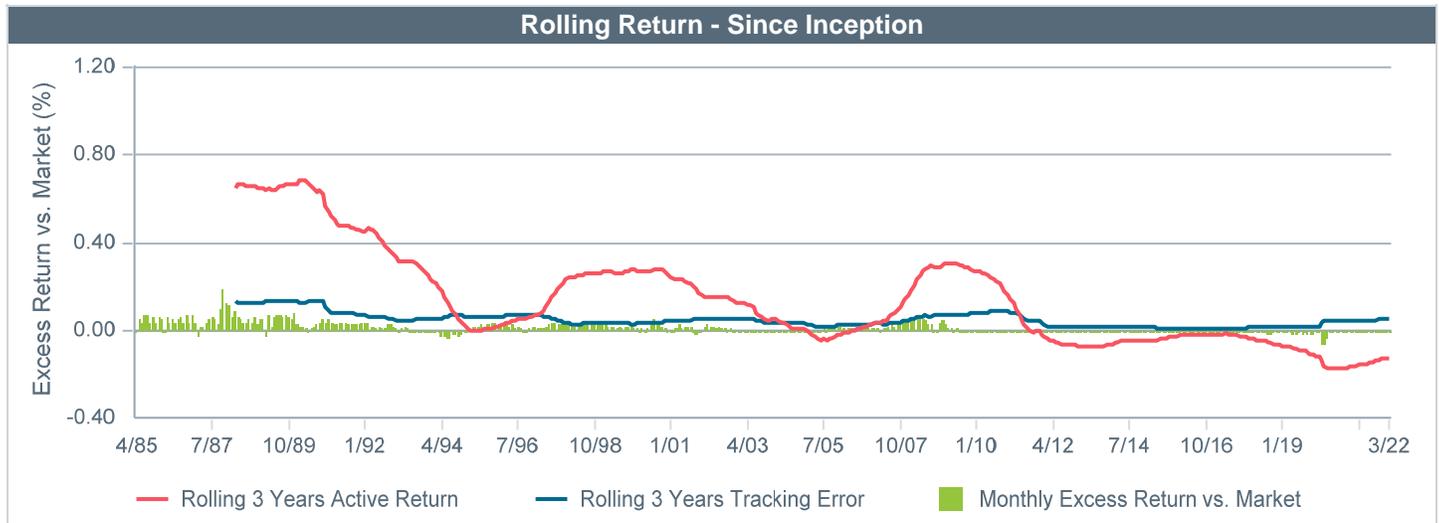
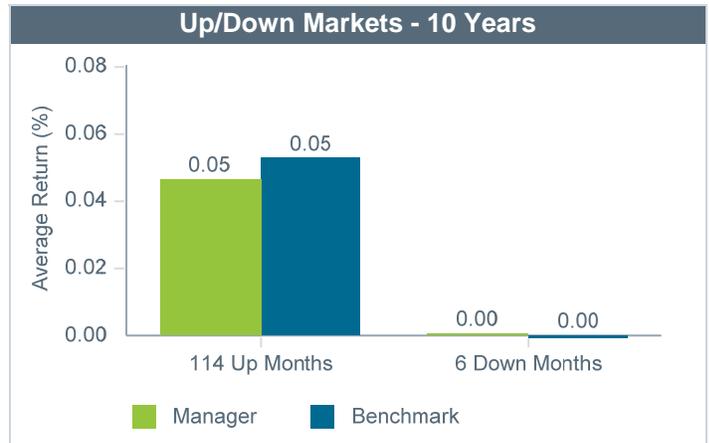
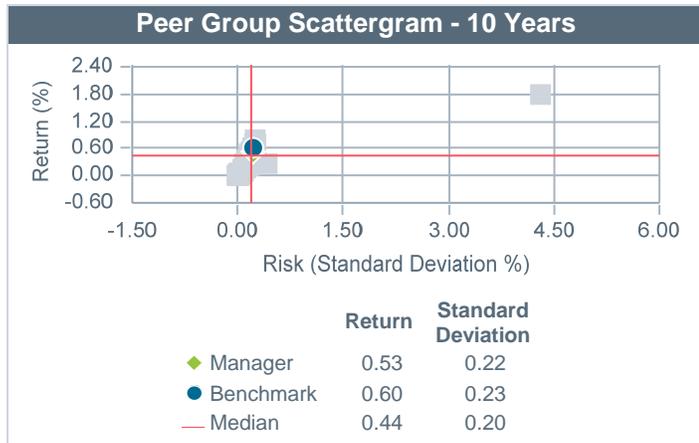
### Actual Correlation - 10 Years

	Actual Correlation
NCREIF Timberland Index	-0.02
S&P 500 Index (Cap Wtd)	0.11
Russell 2000 Index	0.11
MSCI EAFE Index (USD) (Net)	0.09
MSCI Emg Mkts Index (USD) (Net)	0.04
Bloomberg US Agg Bond Index	0.06
Bloomberg US Trsy US TIPS Index	0.12
Wilshire US REIT Index	0.09
HFRI FOF Comp Index	0.09
Bloomberg Comdty Index (TR)	0.08
ICE BofAML 3 Mo US T-Bill Index	-0.07
Cons Price Index (Unadjusted)	0.09



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.01	0.04	0.64	0.98	0.75	0.53	0.03	0.37	2.09	1.73	0.79
Benchmark	0.03	0.06	0.76	1.09	0.84	0.60	0.05	0.58	2.25	1.86	0.84
Difference	-0.02	-0.02	-0.12	-0.11	-0.09	-0.07	-0.02	-0.21	-0.16	-0.13	-0.05
Peer Group Median	0.00	0.01	0.57	0.85	0.63	0.44	0.01	0.30	1.90	1.54	0.55
Rank	10	9	22	20	18	18	12	31	20	22	17
Population	800	768	705	663	555	530	772	792	796	820	834



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



# Addendum & Glossary



## City of Jacksonville Employees' Retirement System Addendum

### Performance Related Comments:

- Performance is annualized for periods greater than one year.
- The inception date shown indicates the first full month of performance following initial funding.
- The market value shown for the Transition Account includes residual assets from terminated managers.
- RVK began monitoring the assets of the City of Jacksonville Retirement System on 01/01/2019. Prior historical data was provided by the custodian and previous consultant.
- Franklin Templeton Global Multisector Plus (CF) performance prior to 03/2016 is represented by Templeton Global Total Return (SICAV).

### Custom Composite Benchmark Comments:

- **Current Total Fund Policy Index:** The passive Current Total Fund Policy Index is calculated monthly and currently consists of 30% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 20% Fixed Income Index, 15% NCREIF ODCE Index (AWA) (Net), and 15% Diversifying Assets Index.
- **US Equity Index:** The passive US Equity Index consists of 100% DJ US TSM Index through 06/2009 and 100% Russell 3000 Index thereafter.
- **International Equity Index:** The passive International Equity Index consists of 100% MSCI EAFE Index (USD) (Gross) through 01/2011 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Fixed Income Index:** The passive Fixed Income Index consists of 100% Bloomberg US Agg Bond Index through 10/2017 and 100% Bloomberg US Universal Bond Index thereafter.
- **Diversifying Assets Index:** The Diversifying Assets Index is calculated monthly and consists of 50% S&P MLP Index (TR)/50% NCREIF Timberland Index through 10/2017, 67% S&P MLP Index (TR)/33% NCREIF Timberland Index through 09/2020, and calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return thereafter.

### Custom Manager Benchmark Comments:

- **Baillie Gifford Index:** The passive Baillie Gifford Index consists of 100% MSCI EAFE Grth Index (USD) (Net) through 10/2017 and 100% MSCI ACW Ex US Grth Index (USD) (Net) thereafter.
- **Baillie Gifford Spliced Index:** The passive Baillie Gifford Spliced Index consists of 100% MSCI EAFE Index (USD) (Net) through 11/2019 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Frank. Temp. Global Multisector Index:** The passive Frank. Temp. Global Multisector Index consists of 100% ICE BofAML Gbl Hi Yld Index through 12/2009 and 100% Bloomberg Multiverse Index thereafter.
- **Custom REITs Index:** The passive Custom REITs Index consists of 100% MSCI US REIT Index (USD) (Gross) through 01/2019 and 100% Vanguard Spl Real Estate Index thereafter.
- **Vanguard Spliced Real Estate Index:** The Vanguard Spl Real Estate Index consists of MSCI US REIT Index (USD) (Gross) adjusted to include a 2% cash position (Lipper Money Market Average) through 04/30/2009, MSCI US REIT Index (USD) (Gross) through 01/31/2018, MSCI US IM Real Estate 25/50 Transition Index through 07/24/2018, and MSCI US IM Real Estate 25/50 Index (Gross) thereafter.
- **Tortoise Spliced Index:** The passive Tortoise Spliced Index consists of 100% S&P MLP Index (TR) through 07/2020 and 100% Alerian Midstream Energy Index thereafter.

## 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	Upper-medium credit quality	BB-	Ba3	Highly speculative
AA-	Aa3				
A+	A1				
A	A2	Lower-medium credit quality	B	B2	Substantial credit/default risk
A-	A3				
BBB+	Baa1				
BBB	Baa2	Extremely speculative	CCC+	Caa1	
BBB-	Baa3				
			CCC-	Caa2	Vulnerable to default
			CC	Ca	
			C	Ca	In default
			D	C	

**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.

**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.

**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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