



City of Milwaukee
Employes' Retirement System

Bernard J. Allen
Executive Director

David M. Silber, CFA, CAIA
Chief Investment Officer

Melody Johnson
Deputy Director

November 3, 2023

Mr. Jim Owczarski
City Clerk
Room 205, City Hall

Dear Mr. Owczarski:

Please be advised that an Investment Committee Meeting of the Annuity and Pension Board has been scheduled for **Thursday, November 9, 2023 at 9:00 a.m.** This meeting will be conducted via teleconference.

Special Notice: Instructions for the public on how to observe the meeting will be available on the ERS's website (www.cmers.com) prior to the meeting.

The agenda is as follows:

Please be advised that the Investment Committee may vote to convene in closed session on the following items (I., II., and III.) as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Investment Committee may then vote to reconvene in open session following the closed session.

- I. Real Estate Manager Due Diligence Report.
- II. Approval of Real Estate Manager Side Letter.
- III. Approval of Recommendation regarding Real Estate Manager.
- IV. Approval of Loomis Sayles Guideline Change.
- V. Callan Upcoming Work Plan.
- VI. 2024 Tentative Due Diligence Schedule.
- VII. CMERS 3rd Quarter 2023 Performance Update.

Sincerely,

A handwritten signature in black ink that reads "Bernard J. Allen".

Bernard J. Allen
Executive Director

BJA:jmw



Guideline Updates

1. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF US TREASURY FUTURES.

- INTEREST RATE FUTURES ARE AN EFFICIENT AND LIQUID TOOL USED TO MANAGE PORTFOLIO DURATION AND YIELD CURVE EXPOSURES. INTEREST RATE FUTURES ALLOWS US TO ADJUST PORTFOLIO DURATION/YIELD CURVE EXPOSURES UP OR DOWN IN AN EFFICIENT MANNER WITHOUT INCURRING TRADING COSTS AND TURNOVER OF INDIVIDUAL CASH BONDS. THIS ALLOWS US THE POTENTIAL TO RETAIN INCOME AND YIELD IN THE PORTFOLIO.

2. THE RATIONALE FROM THE INVESTMENT TEAM FOR THE REQUEST TO INVEST IN INDIVIDUAL BANK LOANS.

- THE TEAM'S PREFERENCE IS TO INVEST IN INDIVIDUAL BANK LOANS GIVEN THE RISKS WE SEE MORE BROADLY IN THE LOAN MARKET AND WE ARE WORKING TO GET ALL OF OUR FD ACCOUNTS SET UP. TODAY, WE ARE STILL <1% IN BANK LOANS ACROSS MSFD ACCOUNTS BUT HAVE ADDED UBER AND CARNIVAL EXPOSURES MORE RECENTLY IN '23.
- WE ARE COMFORTABLE WITH AN AGGREGATE 15% LIMIT ON INDIVIDUAL LOANS/LOAN FUND EXPOSURE.

3. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF CDX.

- CREDIT DEFAULT SWAPS ARE AN EFFICIENT AND LIQUID TOOL USED TO 1) MANAGE DEFAULT RISK OF A BASKET OF ISSUERS AND/OR 2) TO INCREASE/DECREASE EXPOSURE TO CREDIT MARKETS. CDX ALLOWS US TO ADJUST CREDIT EXPOSURE UP OR DOWN IN THE PORTFOLIO IN AN EFFICIENT MANNER WITHOUT INCURRING TRADING COSTS OF INDIVIDUAL CORPORATE CASH BONDS AND WE CAN ALSO USE CDX AS A WAY TO HELP GAIN EXPOSURE WHILE PUTTING PHYSICAL CAPITAL TO WORK.

4. THE RATIONALE FROM THE INVESTMENT TEAM TO ELIMINATE THE 144A PERCENTAGE LIMIT.

- 144A-FOR-LIFE SECURITIES HAVE ENJOYED A GROWING PRESENCE IN THE HIGH YIELD UNIVERSE, POINTING TO BROAD MARKET ACCEPTANCE, ADEQUATE LIQUIDITY AND PUBLIC-MARKET LEVELS OF TRANSPARENCY. 144A-FOR-LIFE SECURITIES CURRENTLY REPRESENT APPROXIMATELY 86% OF NEW US HIGH YIELD DEAL VOLUME.
- THE SIZE AND SCOPE OF THE 144A MARKET HAS REACHED A POINT WHERE NOT INVESTING IN THESE SECURITIES COULD BE COSTLY. WE BELIEVE THAT INVESTORS SHOULD EXAMINE THEIR GUIDELINES IN ORDER TO TAKE ADVANTAGE OF THE POTENTIAL OPPORTUNITIES OFFERED IN THE 144A MARKET.

Guideline Updates Cont.

5. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF CURRENCY FORWARDS (BOTH DELIVERABLE AND NON-DELIVERABLE).

- CURRENCY FORWARDS ARE USED TO MANAGE THE PORTFOLIO'S FOREIGN CURRENCY RISK AND MAY BE UTILIZED FOR BOTH HEDGING AND NON-HEDGING PURPOSES. WE UTILIZE FX FORWARDS TO EXPRESS A STRATEGIC VIEW IN OUR CLIENTS' PORTFOLIOS WHETHER WE ARE HEDGING CURRENCY RISK AWAY OR TO OBTAIN CURRENCY EXPOSURE. IF WE ANTICIPATE CURRENCY WEAKNESS WE WILL USE FX DERIVATIVES TO REDUCE SUCH CURRENCY RISK OR IF WE DO PERCEIVE VALUE IN A CURRENCY WE WILL OVERLAY SUCH DERIVATIVES TO GAIN EXPOSURE TO SUCH A CURRENCY.
- IN ORDER TO COVER ITS DERIVATIVES OBLIGATIONS, THE PORTFOLIO WILL ENSURE IT MAINTAINS LIQUID ASSETS SUFFICIENT TO MEET ITS OBLIGATIONS, CONSISTENT WITH THE LOOMIS SAYLES COVER POLICIES AND PROCEDURES AS TO NOT CREATE LEVERAGE IN THE PORTFOLIO. A SHORT POSITION IN A FORWARD CONTRACT IS CONSIDERED COVERED SO LONG AS THE ACCOUNT OWNS SECURITIES DENOMINATED IN THE SAME CURRENCY AS THE FORWARD CONTRACT IN AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT REQUIRED TO BE DELIVERED UNDER THE FORWARD CONTRACT.

6. THE RATIONALE FROM THE INVESTMENT TEAM TO PURSUE THE USE OF THE SENIOR LOAN FUND.

- WE BELIEVE CREDIT RISKS ARE GREATER IN THE LOAN MARKET TODAY AND IN DETERIORATING CREDIT CONDITIONS, PRICING COULD REFLECT THE POTENTIAL FOR LOWER RECOVERY VALUES -- CREATING POTENTIAL OPPORTUNITY. IN ADDITION, IF A WAVE OF CREDIT DOWNGRADES WERE TO COME IN SINGLE B QUALITY LOANS, CLO'S HAVE LIMITED CAPACITY TO OWN/BUY CCC RATED SECURITIES. A REDUCED BID FROM THE CLO MARKET HAS THE POTENTIAL TO PUT PRESSURE ON BANK LOAN VALUATIONS ACROSS ALL CREDIT QUALITIES, WHICH IN TURN, MAY CREATE OPPORTUNITIES/ENTRY POINTS FOR SPECIFIC IDIOSYNCRATIC RISK/ISSUERS WHERE WE ARE COMFORTABLE WITH THE UNDERLYING CREDIT FUNDAMENTALS. WE'VE JUST BEGUN TO ADD INDIVIDUAL BANK LOANS WHERE PERMISSIBLE, BUT HAVE NOT BEEN ADDING VIA THE LOAN FUND GIVEN THE RISKS WE BELIEVE EXIST MORE BROADLY IN THE LOAN MARKET.
- WE ARE COMFORTABLE WITH AN AGGREGATE 15% LIMIT ON INDIVIDUAL LOANS/LOAN FUND EXPOSURE.

Manager: Loomis, Sayles & Company
Role: Opportunistic Fixed Income

Objectives and Guidelines

Investment Objectives

Time Horizon	Performance Standard	
	Universe	Index
Less than one market cycle (rolling 3-year periods).	Rank in upper 50% of a Peer Group. ¹	
One market cycle (rolling 5-year periods).	Rank in the upper 40% of a Peer Group ¹	Exceed (after fees) the Benchmark Index + 1.0%. ²

Investment Guidelines

- The effective duration of the aggregate portfolio should be no less than 50% and no more than 250% of the Bloomberg Barclays US Aggregate Index.
- Up to 20% of the market value of the portfolio may be issues rated B- by Standard and Poor's and Fitch or B3 by Moody's. If the ratings assigned to an instrument by Standard & Poor's, Moody's, and/or Fitch are not the same, the highest rating of these ratings agencies will be used.
- If an instrument is not rated by Standard & Poor's, Moody's, and Fitch, the equivalent rating determined by the Loomis Sayles Research Department will be used.
- -and-~~A~~n additional 5% may be invested in issues not rated by Standard & Poor's, Moody's, and Fitch.~~non-rated issues~~
- Loomis must notify ERS of the downgrade of corporate, non-corporate and 144(a) securities below B- or B3 by ~~both~~ Standard and Poor's, ~~and~~ Moody's Investors Service and Fitch within three (3) business days. Loomis must provide quarterly credit updates so long as it retains the security(ies). Corporate, non-corporate and 144(a) securities rated below B- and B3 by ~~both~~ Standard and Poor's, ~~and~~ Moody's Investors Service and Fitch may not exceed 3% of the market value of the portfolio.
- Asset-backed securities that are downgraded below BBB- or Baa3 by ~~both~~ Standard and Poor's, ~~and~~ Moody's Investor Services and Fitch must be sold within 90 days following the downgrade. Loomis must notify ERS of the downgrade in writing within 3 business days and provide a written update to ERS on the downgraded security on a weekly basis.
- The average quality of the portfolio must be BBB-/Baa3 or better. Unrated U.S. Treasury and U.S. Federal Government Agency securities are permissible and will be treated as AAA/Aaa rated for purposes of average quality calculations.
- No security, except securities issued or guaranteed by the U.S. Government or its agencies or instrumentalities, or index derivatives will comprise more than 5% of the portfolio, at the time of purchase.

- Up to 20% of the market value of the portfolio may be invested in total equities (common and preferred) as determined at the time of purchase. Common stock shall be limited to 5% of the market value of the portfolio, as determined at the time of purchase.
- Sector limitations (as a percentage of the portfolio's market value) are limited to the following ranges:

Sector	Min	Max
US Treasuries	0%	100%
US Agencies	0%	50%
Corporates	0%	100%
Mortgage-Backed Securities	0%	50%
Asset-Backed Securities, including a 5% sub-limit in Collateralized Loan Obligations	0%	25%
Investment Grade Yankees and Non-Corporates ⁽³⁾	0%	25%
Non-Investment Grade Yankees and Non-Corporates ⁽³⁾	0%	20%
Non-US Dollar / Non-Canadian Dollar	0%	20%
144(a) Securities	0%	<u>50</u> <u>100</u> %
<u>Individual Bank Loans*</u>	<u>0%</u>	<u>15%</u>
Canadian Dollar Issues	0%	20%
<u>Eligible derivatives include currency forwards (deliverable and non-deliverable)⁽⁴⁾ and US Treasury Futures⁽⁵⁾</u>	<u>N/A</u>	<u>N/A</u>
<u>Long-only (sell protection) Index Credit Default Swaps</u>	<u>0%</u>	<u>30%</u> ⁽⁶⁾

- Minimum credit ratings for individual holdings, specific to the sectors, are as follows:

Sector	Minimum Rating
Corporates & Non-Corporates	B-/B3
Asset-Backed Securities	BBB-/Baa3
Collateralized Loan Obligations	BB-/Ba3
144(a) Securities	B-/B3
Cash equivalents, commercial paper and repurchase agreements	A1/P1

¹ As measured by the Callan Core Opportunistic Fixed Income Peer Group

² As measured by the Bloomberg Barclays Capital Aggregate Index

³ Canadian issued bonds do not count towards the Yankee limit.

⁴ Currency forwards may be used for hedging purposes only.

⁵ US Treasury Futures may be used for both hedging and non-hedging purposes. Derivatives used to manage duration, interest rate and yield curve strategies may require notional amounts in excess of the portfolio's market value. US Treasury Futures will be limited by the duration restriction of the portfolio.

⁶ Notional limit of 30%. Index credit default swaps shall not be used to create leverage or for speculative purposes and will be calculated at their notional value for guideline purposes. Liabilities resulting from CDX must be fully collateralized by cash, cash equivalents and U.S Treasuries.

* Investment in individual bank loans will generate a transaction cost associated with both the purchase and sale of these loans. The counterparty on these trades determines how they will settle and most choose ClearPar. ClearPar is the primary platform and supported by most banks. Bank loans that do not settle on this platform are prohibitively labor intensive and it is not likely many trades will occur away from the ClearPar platform.

Portfolios participating in a bank loan trade will be charged by ClearPar a pro-rata share of the trade (a "subtrade"). ClearPar will deliver the invoice to the Loomis and, in turn, Loomis will deliver this invoice to your custodian to pay from the assets of the portfolio. While you may elect to pay the invoice directly, directing the custodian to pay the invoices from the portfolio assets will facilitate proper performance calculations for your portfolio. As of the current date, the subtrade fee structure is as follows:

Subtrades per Master Trade	Subtrade Fee per Subtrade
1-5	\$19
6-21	\$110 divided by number of subtrades
22 or more	\$5

There is also a volume discount schedule that is applied once trades on the platform exceed 5,000.

**EMPLOYEES' RETIREMENT SYSTEM OF
THE CITY OF MILWAUKEE**

LOOMIS, SAYLES & COMPANY, L.P.

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

Callan



**City of Milwaukee Employees'
Retirement System**

2024 Work Plan

John Jackson, CFA
Senior Vice President

Mike Joecken
Senior Vice President

2024 Work Plan

February

- Callan Manager Due Diligence Report
- Education: Public Pension Plan Universe

April

- Capital Market Projections and Asset Allocation Review
- Fixed Income Structure Review – Phase I

June

- Real Estate Performance Review
- Fixed Income Structure Review – Phase II

September

- Private Equity Pacing Review
- Investment Policy Statement Review

November

- Real Estate Performance and Structure Review

December

- Education: Callan Performance Reporting Overview

Memorandum

To: CMERS Investment Committee
From: Erich Sauer, CFA, CAIA
Date: November 9, 2023
Re: 2024 Tentative Due Diligence schedule

As part of ERS policy, investment staff conducts a due diligence meeting with each of its existing investment managers every other year. Please find the due diligence meetings that are scheduled to take place in 2024 in the table below. The meetings are expected to be in person, although certain portions of the meetings, or any necessary follow-up, may be conducted virtually. Board members are encouraged to join ERS staff on these due diligence meetings, as they provide a valuable opportunity to learn more about the Fund's investment managers. Please let me know if you are interested in joining staff on any of the upcoming due diligence meetings.

Tentative Schedule:

Investment Manager(s)	Strategy or Strategies	Location	Likely Staff Lead	Target Date
CastleArk & additional meeting with LaSalle	Active US Public Equity & Real Estate	Chicago, IL	Erich & Tom	January
Aptitude	Hedge Funds	Seattle, WA & New York, NY	David	Q1 or Q2
DFA & Brandes	Active U.S. & Non-U.S. Public Equity	Los Angeles & San Diego, CA	Erich & Tom	Q1 or Q2
AQR & UBS, with additional meeting with Morgan Stanley	Active Emerging Markets Public Equity, Hedge Funds, Real Estate	Greenwich, CT & New York, NY	Erich	Q2 or Q3
UBS, with potential meetings with William Blair, MFS, DFA, BlackRock, Abbott	Hedge Funds, Active International and Global Public Equity, Private Equity	London, UK	Erich	Q2 or Q3
Loomis Sayles & MFS, with additional meeting with Prologis	Active Fixed Income, Global Equity, Real Estate	Boston, MA	Erich & Tom	Q2 or Q3
William Blair & additional meeting with JP Morgan	Active Non-U.S. Public Equity, Real Estate	Chicago, IL	Tom, David	Q3
Mesirow	Private Equity	Chicago, IL	Tom, Erich	Q3 or Q4
Polen & Earnest	Active U.S. Public Equity	Boca Raton, FL & Atlanta, GA	David & Tom	Q4

3rd Quarter 2023 Performance Report

November 9, 2023

Employees' Retirement System

Presentation Agenda

- Fund Overview
- Public Equity
- Fixed Income
- Absolute Return
- Recent Performance Update
- Appendix: Manager Charts & Statistics

Market Environment

Asset Class	Benchmark	Target Weight	Benchmark Return Q3 2023
Public Equity	MSCI ACWI IMI	39%	-3.4%
Fixed Income	Bloomberg U.S. Agg.	29%	-3.2%
Real Assets ⁽¹⁾	Blended Benchmark	13%	-2.9%
Private Equity ⁽¹⁾	Russell 3000 + 2%	12%	8.6%
Absolute Return	90-Day T-Bill + 3%	7%	2.1%

Q3 2023
CMERS Benchmark -1.4%

⁽¹⁾Real Estate and Private Equity benchmark returns are reported on a 1-quarter lag.

Relative Performance Expectations

		Q3 2023		Q3 2023	Q3 2023
Value Equity Bias	Russell 3000 Value	-3.2%	Russell 3000 Growth	-3.3%	≈
Small Cap Equity Bias	Russell 2000	-5.1%	Russell 1000	-3.1%	↓
Fixed Income Credit	Loomis Sayles (net)	-2.2%	Bloomberg US Agg.	-3.2%	↑
Private Equity⁽¹⁾⁽²⁾	CMERS PE (net)	2.4%	PE Benchmark	8.6%	↓↓

Q3 2023

CMERS Total Fund (net) -1.7%

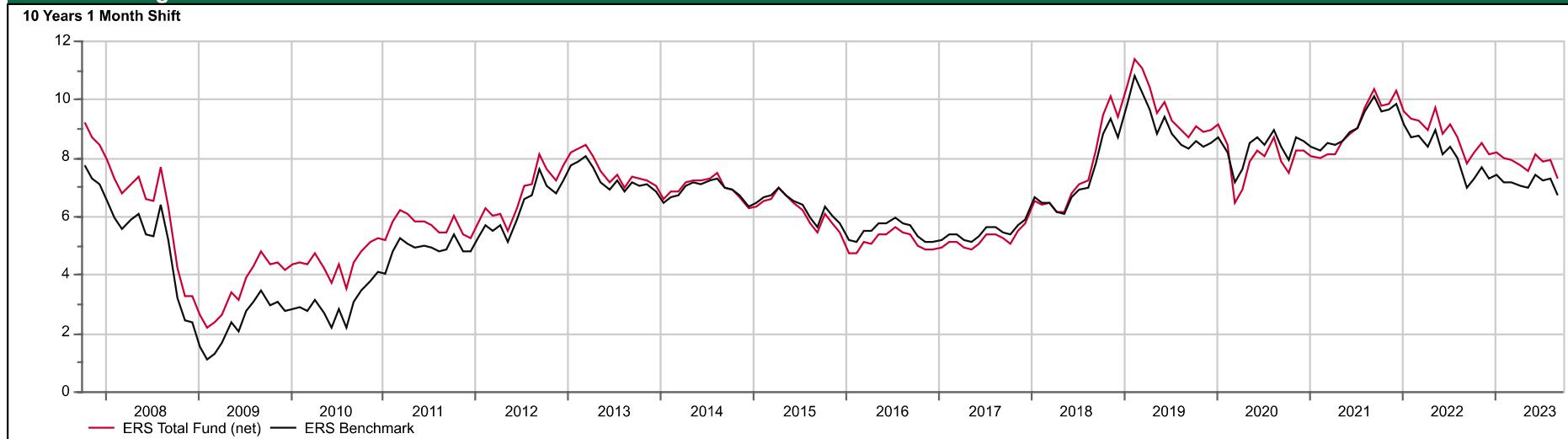
CMERS Benchmark -1.4%

⁽¹⁾Private Equity benchmark return is reported on a 1-quarter lag.

⁽²⁾ All of the Fund's Q2 2023 Private Equity returns are reflected in the July-September time period.

Total Fund Performance

10 Year Rolling Returns – 11/1/1997 to 9/30/2023



Trailing Returns

	QTR	YTD	Annualized Return						
			1 Year	3 Year	5 Year	7 Year	10 Year	15 Year	
ERS Total Fund (net)	-1.7	3.7	9.5	8.6	6.2	7.6	7.2	7.5	
ERS Benchmark	-1.4	5.9	11.0	5.0	5.6	6.7	6.6	7.1	

Investment Growth – 10/1/2008 to 9/30/2023



Rolling Excess Returns – 10/1/2008 to 9/29/2023



ERS Fund Attribution – 3rd Quarter 2023

Asset Class	Benchmark	Average Weight %	Policy Weight %	+/-	Portfolio Return	Benchmark Return	+/-	Attribution Effect(%)			
								Broad Category Group Allocation	Manager Selection	Style Bias	Total Active Return
Public Equity	MSCI ACWI IMI NR USD	39.3	39.0	0.3	-2.8	-3.4	0.6	0.0	0.3	-0.1	0.2
Fixed Income	Bbg US Agg Bond TR USD	27.5	29.0	-1.5	-3.0	-3.2	0.3	0.0	0.0	0.1	0.1
Private Equity⁽²⁾	Russell 3000 (Qtr Lag) + 200bps ⁽¹⁾	13.3	12.0	1.3	2.4	8.6	-6.2	0.1	-0.8	0.0	-0.7
Real Assets⁽²⁾	Real Assets Benchmark ⁽¹⁾	11.9	13.0	-1.1	-2.6	-2.9	0.3	0.0	0.0	0.0	0.0
Absolute Return	90 Day T-Bill +3%	8.0	7.0	1.0	2.0	2.1	0.0	0.0	0.0	0.0	0.0
Total		100.0	100.0	0.0	-1.7	-1.4	-0.3	0.2	-0.5	0.0	-0.3

Main Drivers of Q3 2023 Relative Performance

Impact %

Attribution Category

Private Equity

-0.84%

Manager Selection

Brandes

0.33%

Manager Selection

Overall Allocation

Overweight Private Equity; Change and prompt implementation of new Strategic Asset Allocation Policy effective July 1, 2023.

0.22%

Overall Allocation

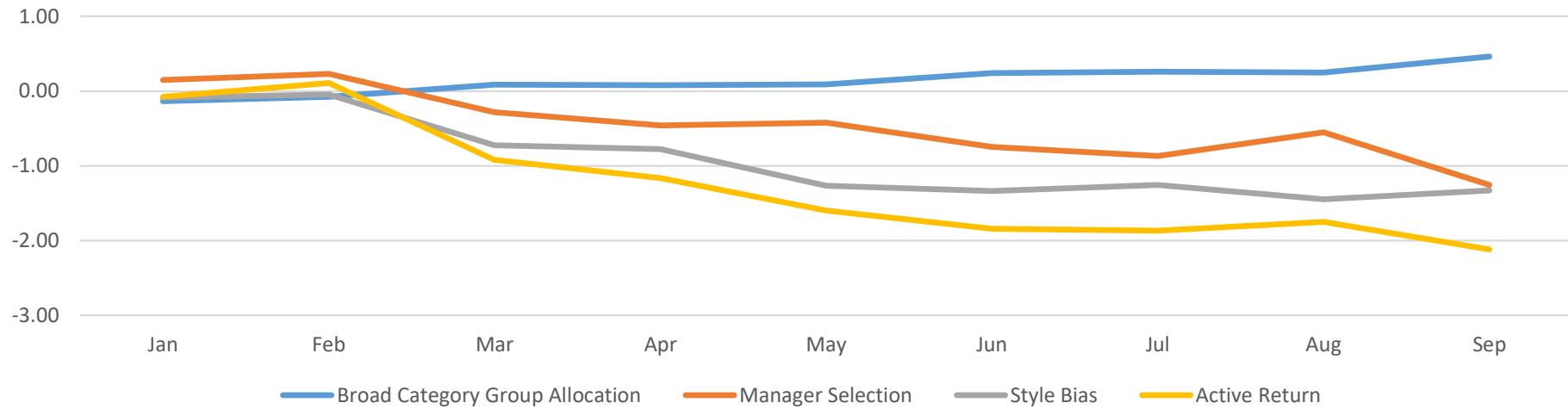
⁽¹⁾Real Estate and Private Equity benchmark returns are reported on a 1-quarter lag.

⁽²⁾ All of the Fund's Q2 2023 Private Equity returns are reflected in the July-September time period. Some Real Estate returns are reported on a 1-quarter lag.

Year-to-Date 2023 Attribution

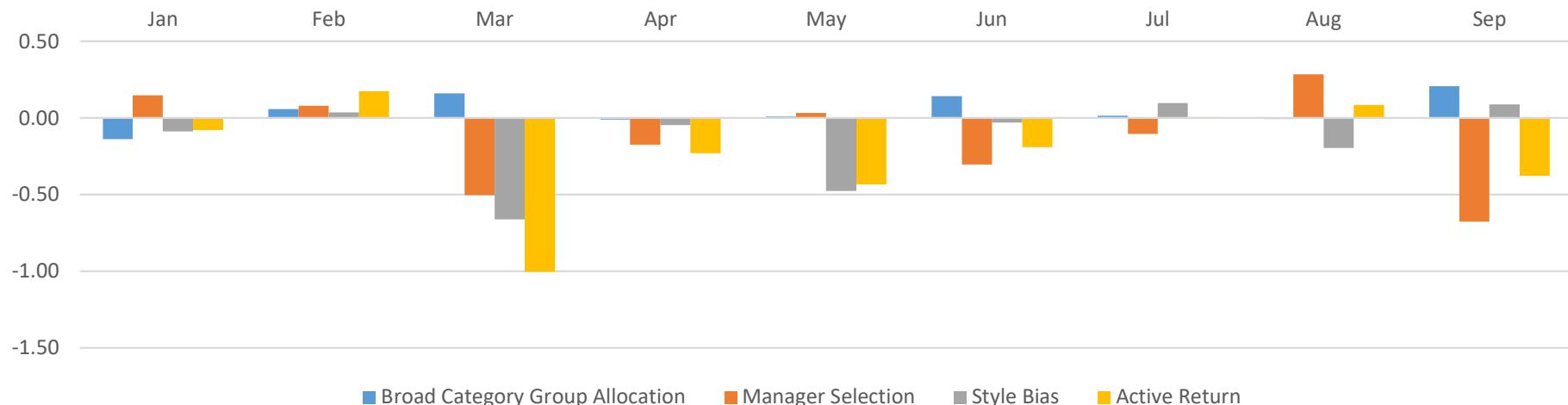
Cumulative Attribution Effects

Cumulative Attribution Effects



Monthly Attribution Effects

Attribution Effects by Month



ERS Fund Attribution – YTD 2023

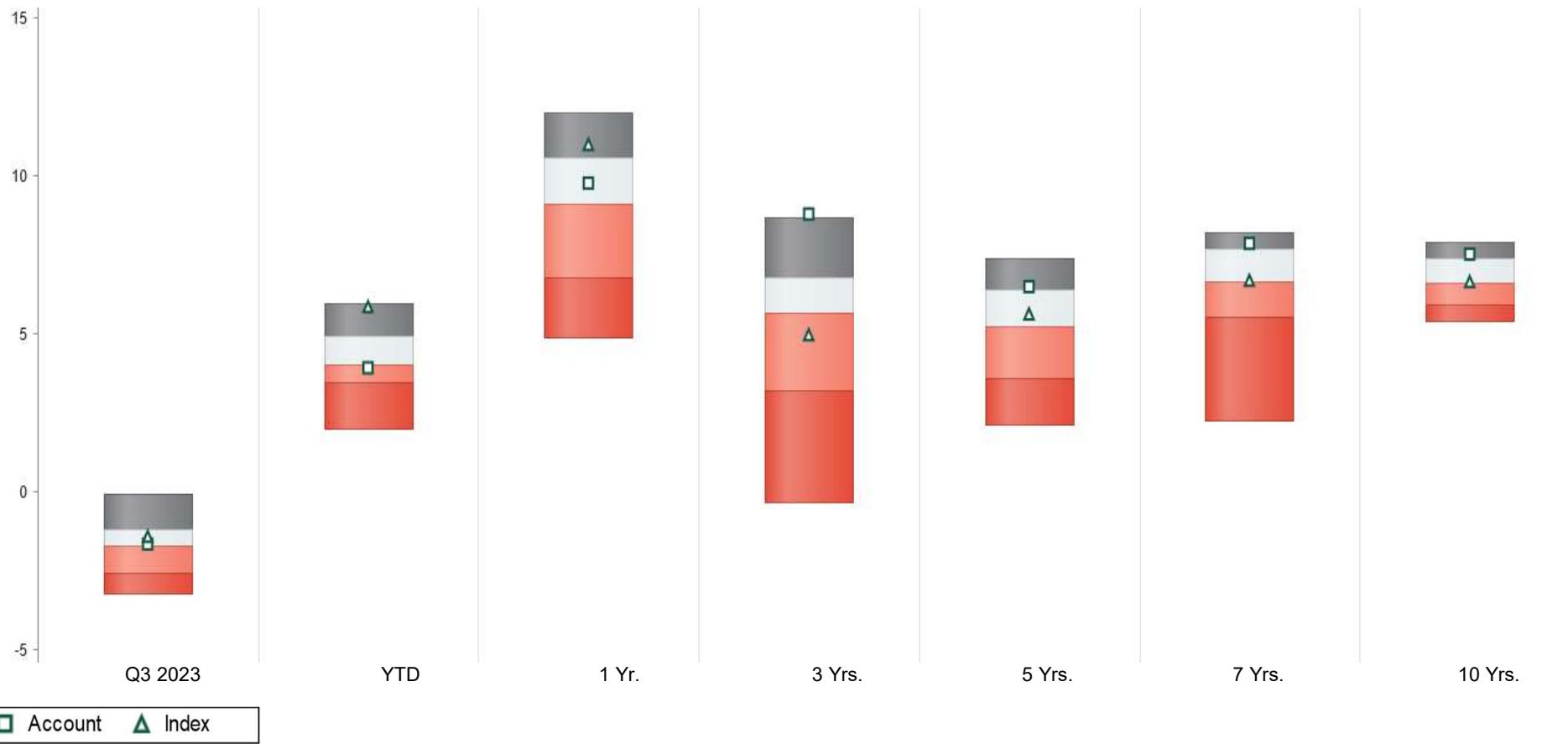
Asset Class	Benchmark	Average Weight %	Policy Weight %	+/-	Portfolio Return	Benchmark Return	+/-	Attribution Effect(%)			
								Broad Category Group Allocation	Manager Selection	Style Bias	Total Active Return
Public Equity	MSCI ACWI IMI NR USD	42.3	42.3	0.0	8.7	9.4	-0.7	-0.1	1.0	-1.4	-0.4
Fixed Income	Bbg US Agg Bond TR USD	23.4	25.0	-1.6	-0.4	-1.2	0.8	0.0	0.2	0.0	0.2
Private Equity⁽²⁾	Russell 3000 (Qtr Lag) + 200bps ⁽¹⁾	12.9	10.7	2.2	5.0	25.9	-20.9	0.4	-2.6	0.0	-2.2
Real Assets⁽²⁾	Real Assets Benchmark ⁽¹⁾	12.2	13.0	-0.8	-6.3	-8.9	2.6	0.1	0.4	0.0	0.4
Absolute Return	90 Day T-Bill +3%	9.1	9.0	0.1	3.8	6.2	-2.3	0.0	-0.3	0.0	-0.2
Total		100.0	100.0	0.0	3.7	5.9	-2.1	0.5	-1.3	-1.3	-2.1

<u>Main Drivers of YTD 2023 Relative Performance</u>	<u>Impact %</u>	<u>Attribution Category</u>
Private Equity	-2.57%	Manager Selection
Public Equity Style Bias	-1.36%	Style Bias
Primarily U.S. Value and Small Cap		
Manager Performance		
Brandes	0.62%	Manager Selection
DFA Strategies	0.38%	Manager Selection
Morgan Stanley	0.23%	Manager Selection
Overweight Private Equity	0.38%	Overall Allocation

⁽¹⁾Real Estate and Private Equity benchmark returns are reported on a 1-quarter lag.

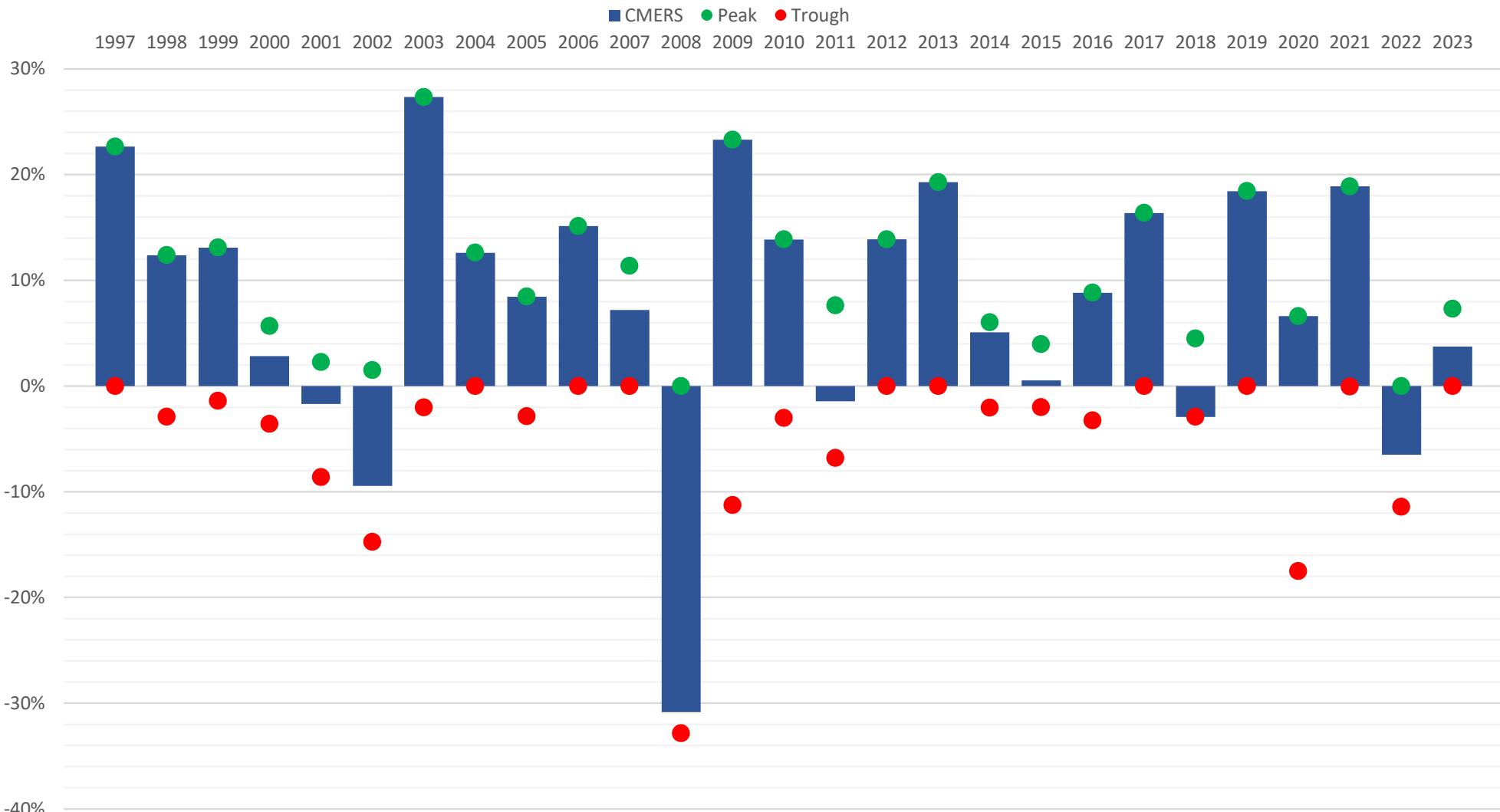
⁽²⁾ All of the Fund's Q2 2023 Private Equity returns are reflected in the July-September time period. Some Real Estate returns are reported on a 1-quarter lag.

Total Fund vs Universe



	Q3 2023	YTD	1 Yr.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.
Account Return	-1.7	3.9	9.8	8.8	6.5	7.9	7.5
Percentile Rank	48	60	44	9	21	17	23
Index Return	-1.4	5.9	11.0	5.0	5.6	6.7	6.6
Percentile Rank	35	12	19	64	42	49	50
1st Quartile	-1.2	4.9	10.6	6.8	6.4	7.7	7.4
Median	-1.7	4.0	9.1	5.6	5.2	6.7	6.6
3rd Quartile	-2.6	3.4	6.8	3.2	3.6	5.5	5.9
Observations	51	49	49	49	45	41	28

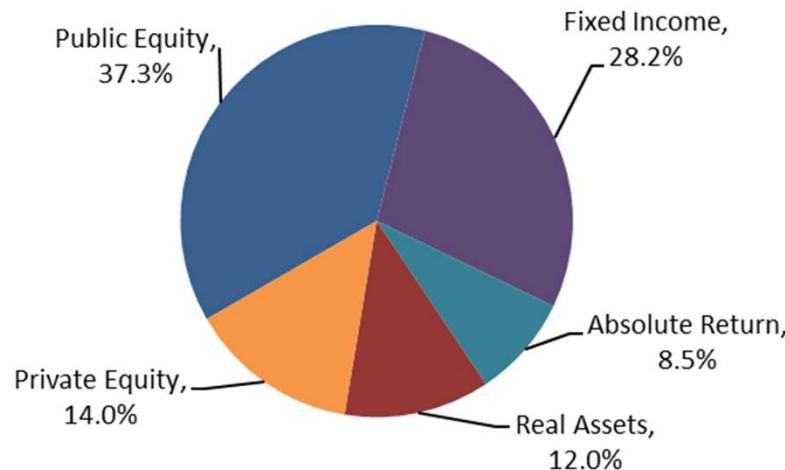
Annual Returns, Peaks, and Troughs



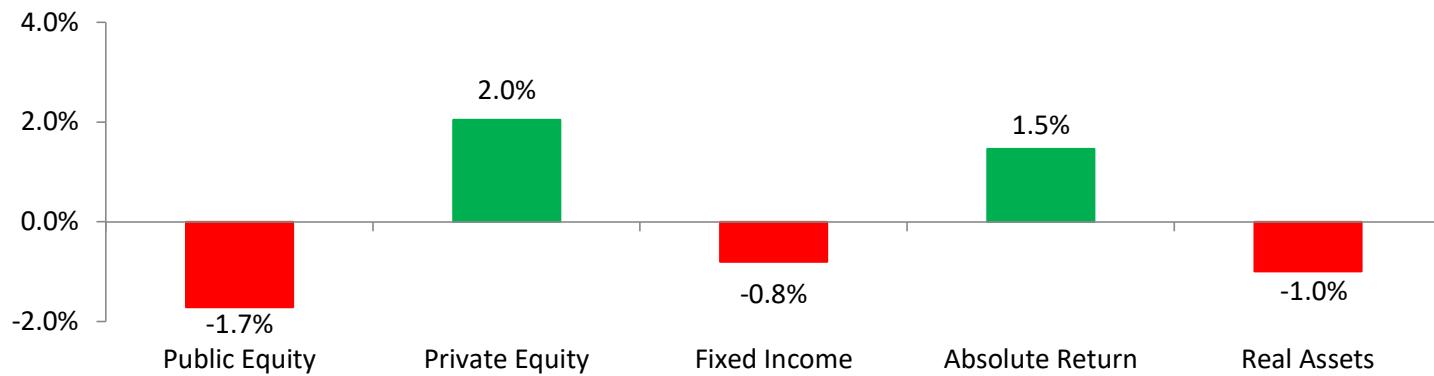
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD 2023
CMERS	22.7%	12.4%	13.1%	2.8%	-1.7%	-9.4%	27.3%	12.6%	8.5%	15.1%	7.2%	-30.8%	23.3%	13.9%	-1.4%	13.9%	19.3%	5.1%	0.5%	8.8%	16.4%	-2.9%	18.4%	6.6%	18.9%	-6.5%	3.7%
Peak	22.7%	12.4%	13.1%	5.7%	2.3%	1.5%	27.3%	12.6%	8.5%	15.1%	11.4%	0.0%	23.3%	13.9%	7.6%	13.9%	19.3%	6.0%	4.0%	8.8%	16.4%	4.5%	18.4%	6.6%	18.9%	0.0%	7.3%
Trough	0.0%	-2.9%	-1.4%	-3.6%	-8.6%	-14.7%	-2.0%	0.0%	-2.9%	0.0%	0.0%	-32.9%	-11.3%	-3.0%	-6.8%	0.0%	0.0%	-2.1%	-2.0%	-3.3%	0.0%	-2.9%	0.0%	-17.5%	0.0%	-11.4%	0.0%

Asset Allocation as of September 30, 2023

Actual Asset Allocation*



Actual Asset Allocation vs. Policy Target



YTD Market Value Change

December 31, 2022 Market Value including City Reserve & PABF Accounts		\$ 5,550,112,010
Monthly Cash Outflows thru	<u>September 30, 2023</u>	
Retiree Payroll Expense		\$ (345,305,183)
PABF Payroll Expense		\$ (22,732)
Expenses Paid		\$ (13,362,055)
GPS Benefit Payments		\$ (6,738,406)
Sub-Total Monthly Cash Outflows		\$ (365,428,376)
Monthly Cash Inflows thru	<u>September 30, 2023</u>	
Contributions		\$ 152,516,513
PABF Contribution		\$ 23,737
Sub-Total Monthly Contributions		\$ 152,540,250
Capital Market Gain/(Loss)		\$ 217,687,673
Value including City Reserve & PABF Accounts as of	<u>September 30, 2023</u>	\$ 5,554,911,556
Less City Reserve Account ¹		\$ 83,121,207
Less PABF Fund ²		\$ 3,011
Net Projected ERS Fund Value as of	<u>September 30, 2023</u>	\$ 5,471,787,338

1 The City Reserve Account balance equals the market value currently held in the Baird account.

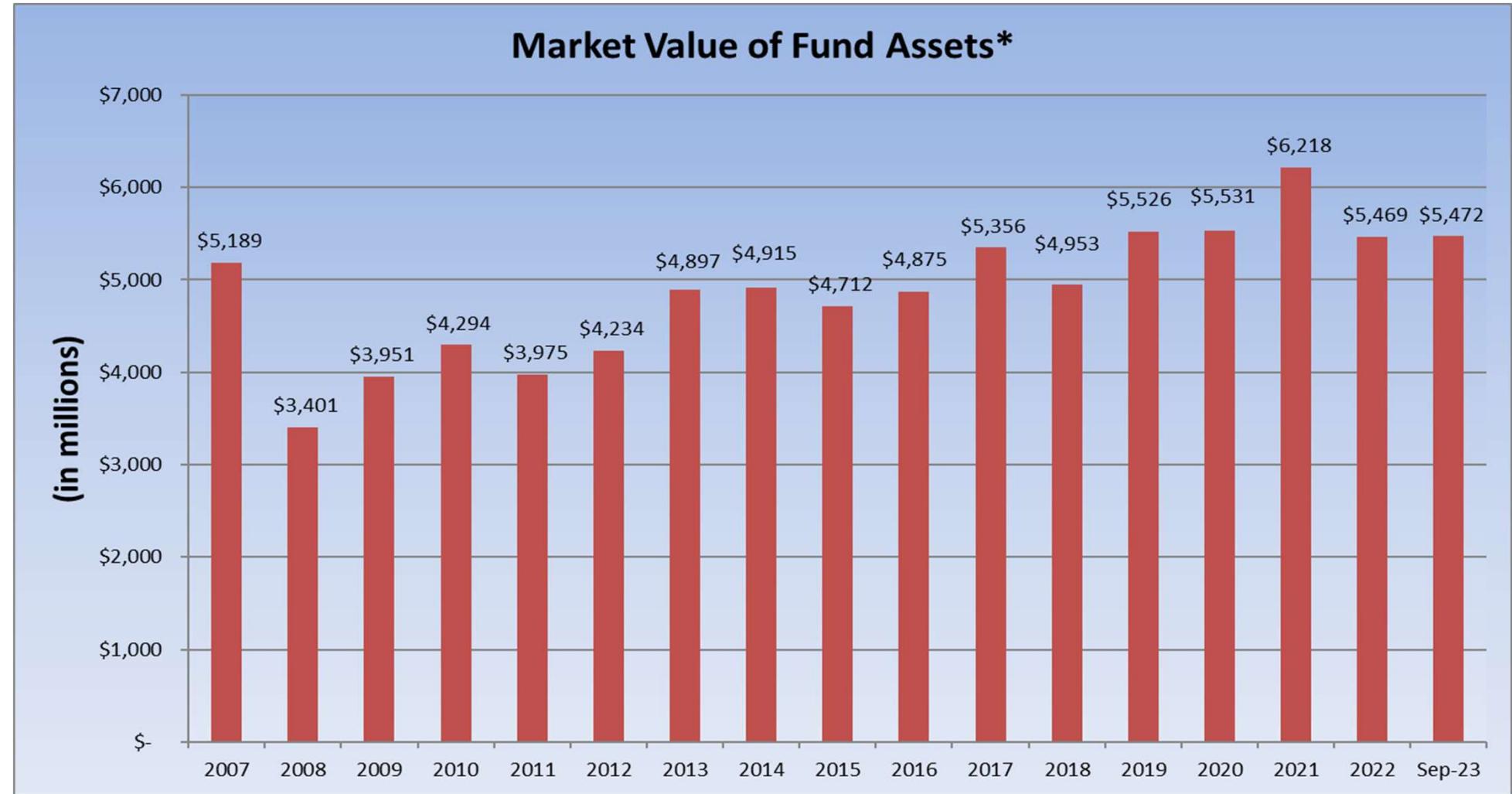
2 PABF Fund balance equals the market value currently held in the PABF account.

Monthly Cash Outflows, Monthly Cash Inflows, and Capital Market Gain/(Loss) amounts are calculated using estimates of cash flows into and out of the Fund. These amounts are not audited and may not tie to CMERS Financial Statements.

Fund Value of Assets: 2007 – September 30, 2023

(Year Ended Dates Reflect 12/31 Fund Values)

Market Value of Fund Assets*



Most recent Actuarial valuation projects benefit payments to total \$5.4 billion in next 10 years.

Benefit Payments	\$5.5 billion
Expenses	\$276 million
Contributions	\$1.6 billion
Investment Gain	\$4.5 billion

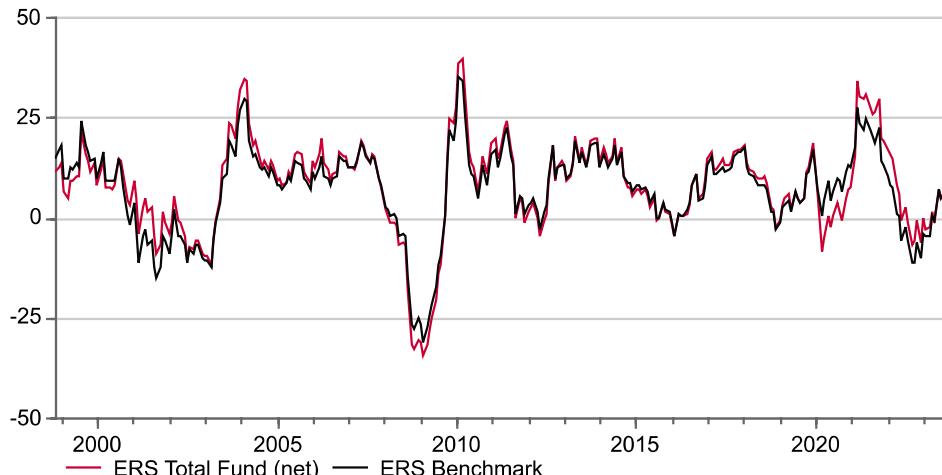
15 3/4 Year Estimates (1/1/2008 - 9/30/2023)

Benefit Payments, Expenses, Contributions, and Investment Gain amounts are calculated using estimates of cash flows into and out of the Fund. These amounts are not audited and may not tie to CMERS Financial Statements.

Total Fund Rolling Returns as of September 30, 2023

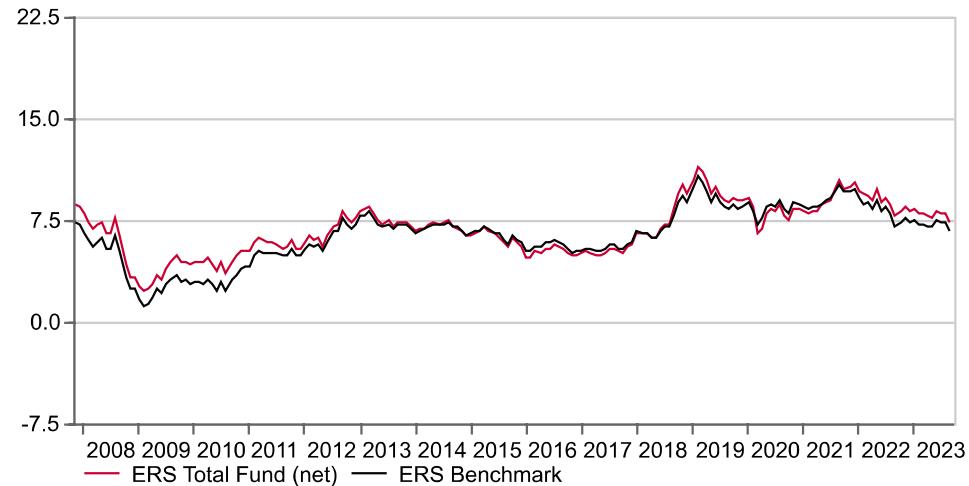
1 Year Rolling Returns – 12/1/1997 to 9/30/2023

1 Year 1 Month Shift



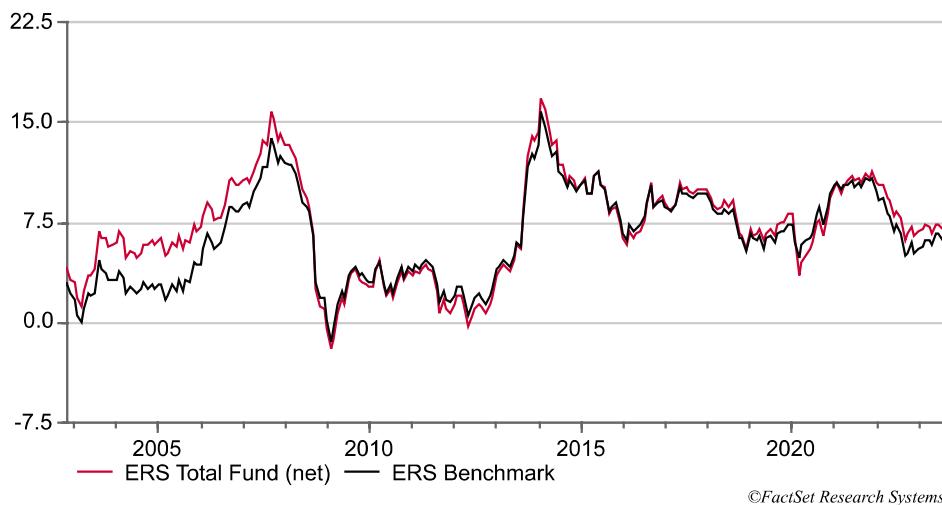
10 Year Rolling Returns – 12/1/1997 to 9/30/2023

10 Years 1 Month Shift



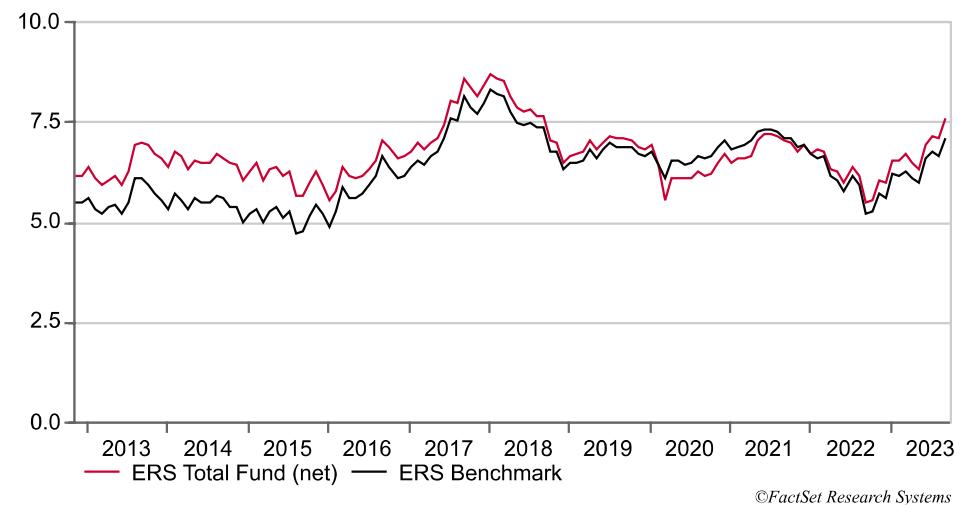
5 Year Rolling Returns – 12/1/1997 to 9/30/2023

5 Years 1 Month Shift



15 Year Rolling Returns – 12/1/1997 to 9/30/2023

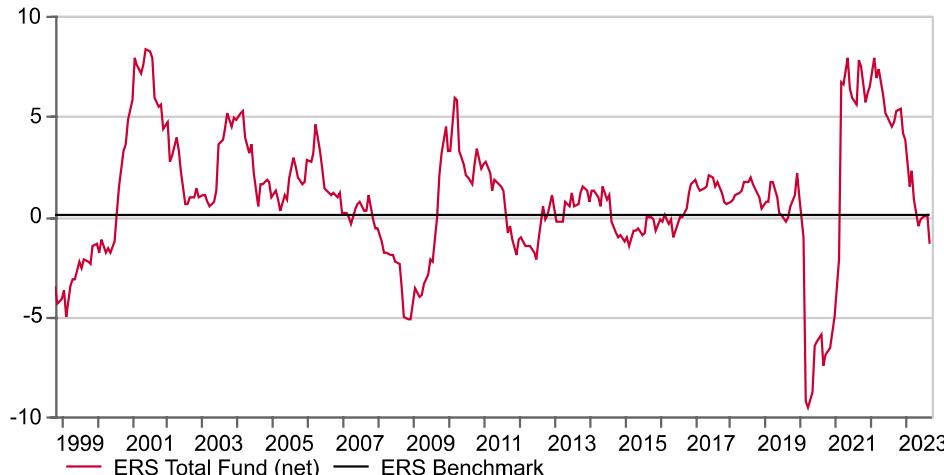
15 Years 1 Month Shift



Total Fund Rolling Excess Returns as of September 30, 2023

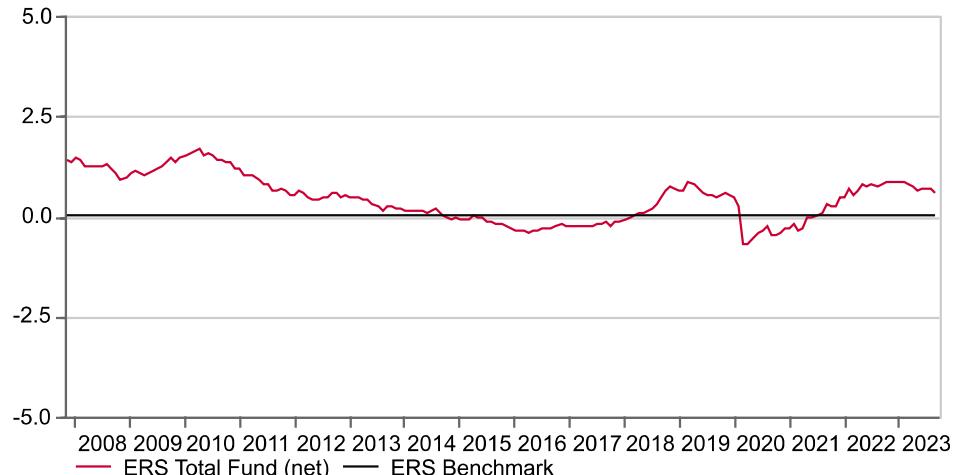
1 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

1 Year 1 Month Shift



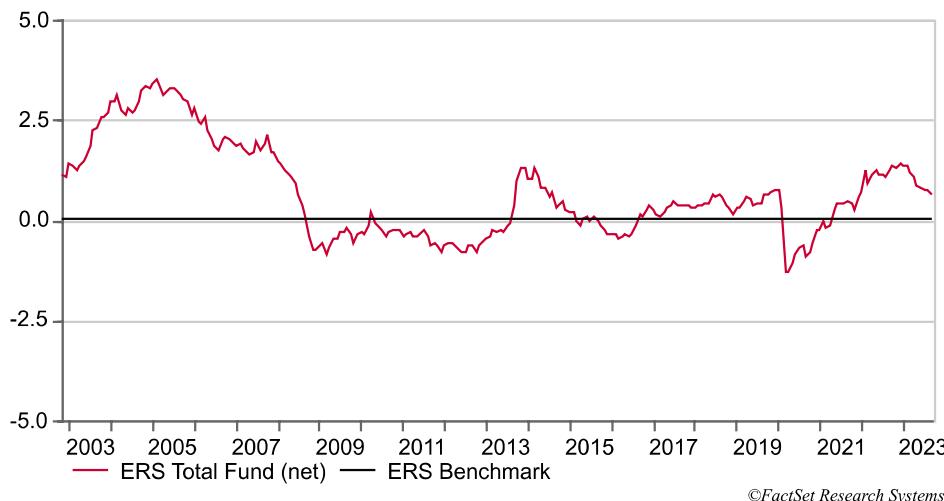
10 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

10 Years 1 Month Shift



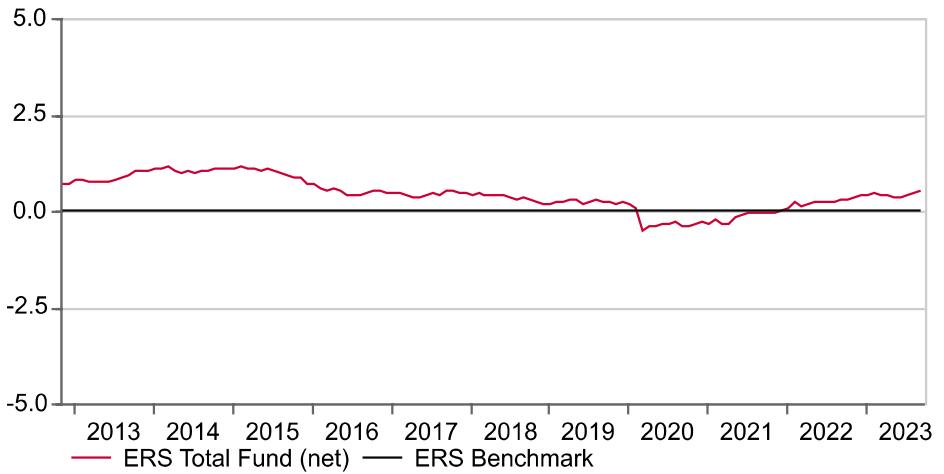
5 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

5 Years 1 Month Shift



15 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

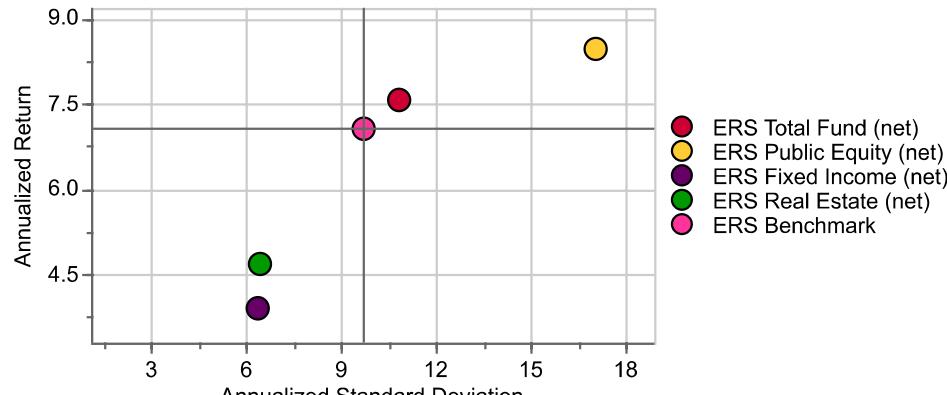
15 Years 1 Month Shift



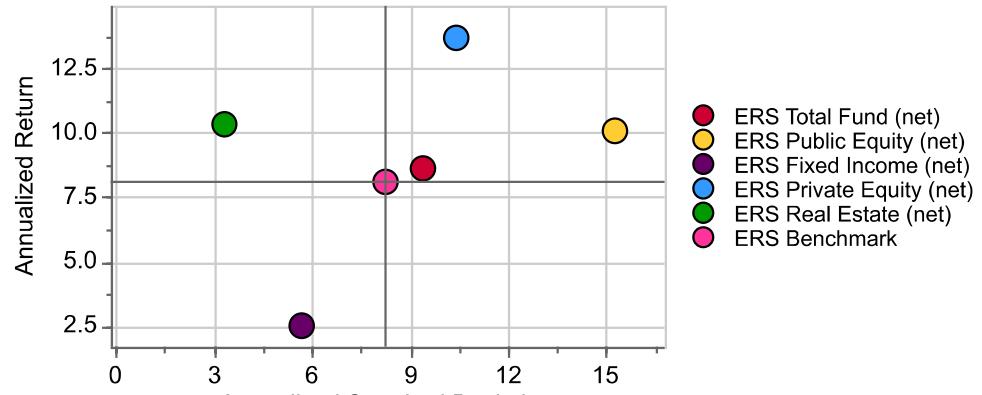
©FactSet Research Systems

Total Fund Statistics

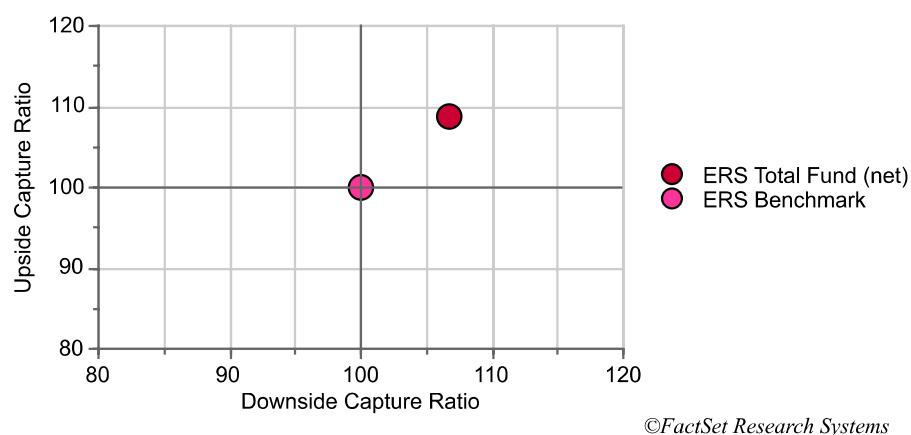
15 Year Risk-Reward – 10/1/2008 to 9/30/2023



Risk-Reward Since Private Equity Inception – 7/1/2010 to 9/30/2023

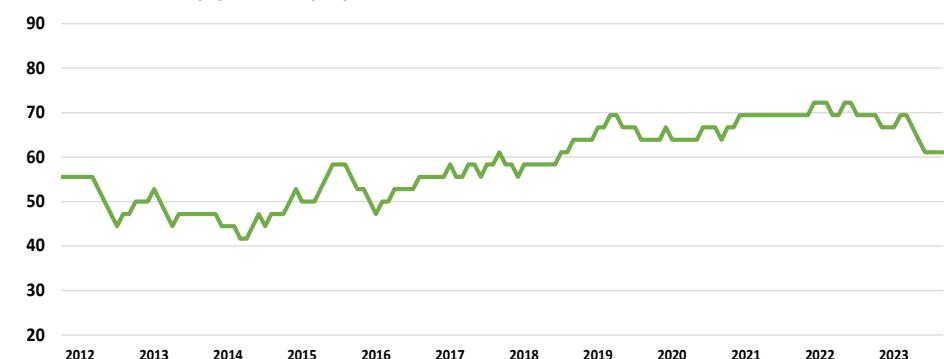


15 Year Upside-Downside – 10/1/2008 to 9/30/2023



Batting Average

Rolling Window: 3 years
Time Period: 10/1/2008 to 9/30/2023



15 Year Risk – 10/1/2008 to 9/30/2023

	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Total Fund (net)	7.5	10.8	0.0	0.6	0.1	2.8 1.1
ERS Benchmark	7.1	9.7	0.0	0.6	--	-- 1.0

Risk – 7/1/2013 to 9/30/2023

	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Total Fund (net)	7.7	8.9	0.0	0.7	0.1	3.0 1.1
ERS Benchmark	7.1	7.8	0.0	0.8	--	-- 1.0

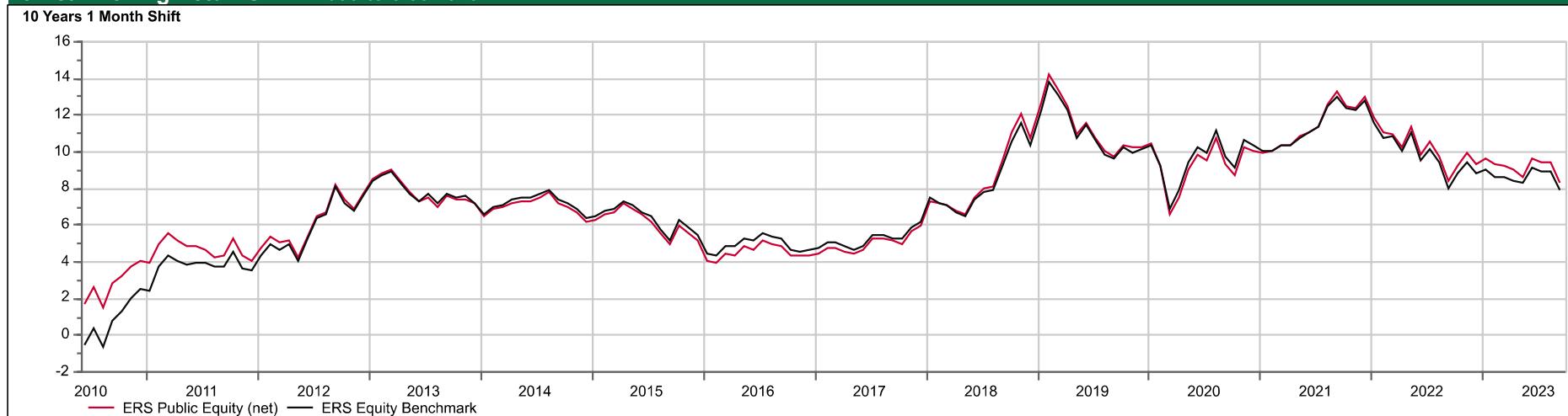
Notable CMERS Manager Events

Manager	Event	Date
Reams	<p>Reams announced several personnel updates in October. Dan Spurgeon, president, departed the firm. His position was eliminated due to the shifting of many non-investment functions to the parent company, Raymond James Investment Management (RJIM). His responsibilities will be assumed by Ed Rick, CFA, the head of investment insights and development at RJIM, and president of Eagle Asset Management and Scout Investments, both also owned by RJIM.</p> <p>Chang Shin, the chief compliance officer of Scout Investments, who also led the compliance function at Reams, departed the firm. Compliance at Reams will now be led by Damian Sousa, the chief compliance officer of RJIM.</p> <p>Bob Crider, who co-founded the firm in 1981, transitioned to the role of senior advisor. He will relinquish his seat on the investment committee, while continuing to advise the committee on macroeconomic data, monetary, and fiscal policy, as well as mentoring younger employees.</p> <p>Dimitri Silva, portfolio manager and head of the global rates and currencies team, was promoted to managing director and added to the investment committee to fill the seat vacated by Mr. Crider.</p> <p>Todd Thompson, who had been a senior leader on the investment team for the past several years, was promoted to the role of deputy chief investment officer. The promotion is a reflection of the role Mr. Thompson had already been filling on the team, and is not expected to result in any changes to the investment strategy. ERS staff is working with Callan to evaluate the impact of the above personnel moves.</p>	October 2023

Public Equity

Public Equity Performance

10 Year Rolling Returns – 7/1/2000 to 9/30/2023



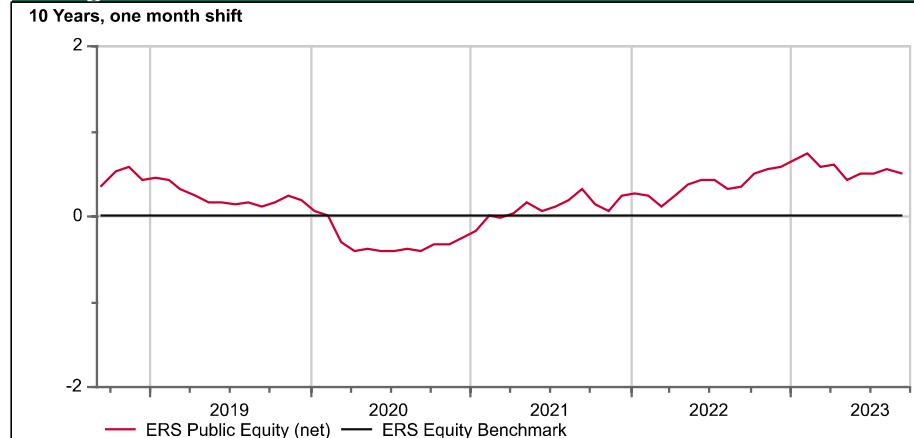
Trailing Returns

	QTR	YTD	Annualized Return					
			1 Year	3 Year	5 Year	7 Year	10 Year	15 Year
ERS Public Equity (Gross)	-2.9	9.0	22.4	9.5	6.8	9.4	8.6	8.8
ERS Public Equity (Net)	-3.0	8.7	22.0	9.2	6.5	9.0	8.3	8.4
ERS Public Equity Benchmark	-3.4	9.4	20.2	6.9	6.1	8.3	7.8	8.1
MSCI AC World IMI	-3.4	9.4	20.2	6.9	6.1	8.3	7.4	7.7

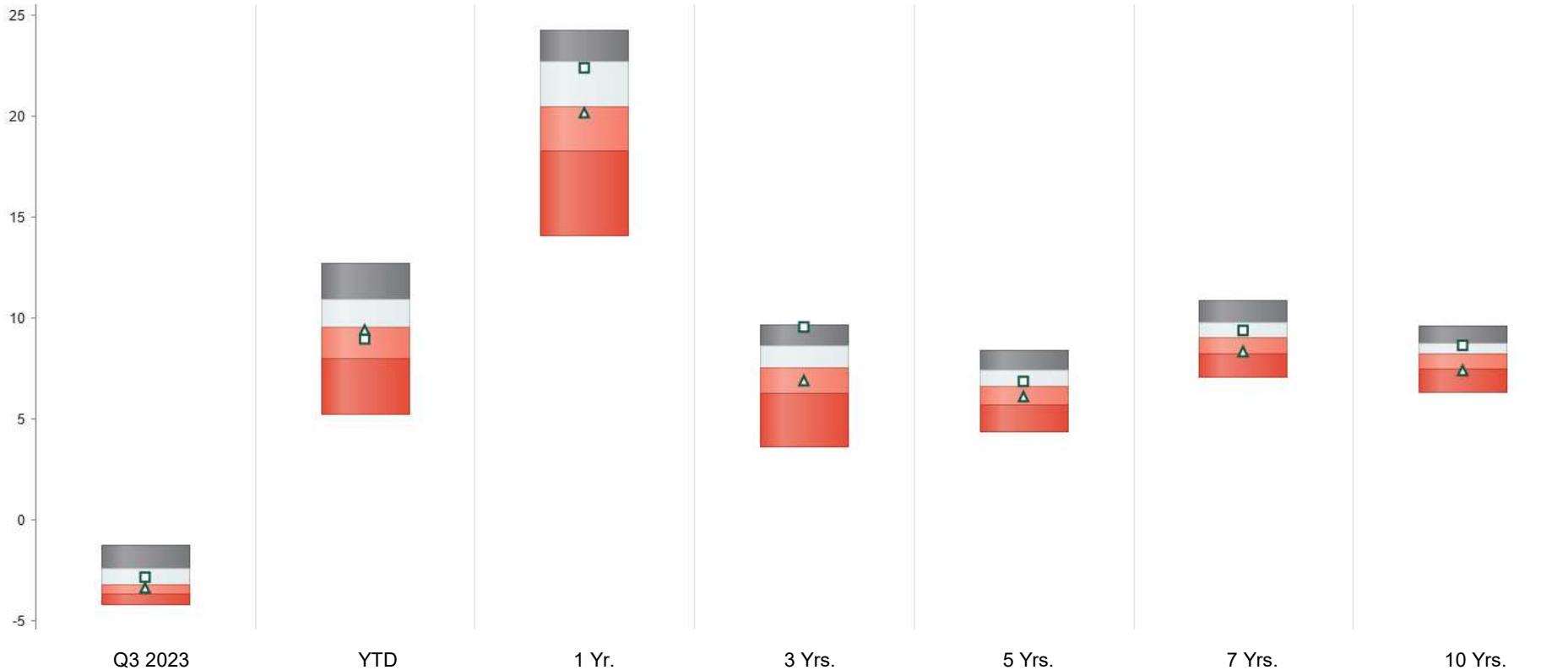
Investment Growth – 10/1/2008 to 9/30/2023



Rolling Excess Returns – 10/1/2008 to 9/30/2023



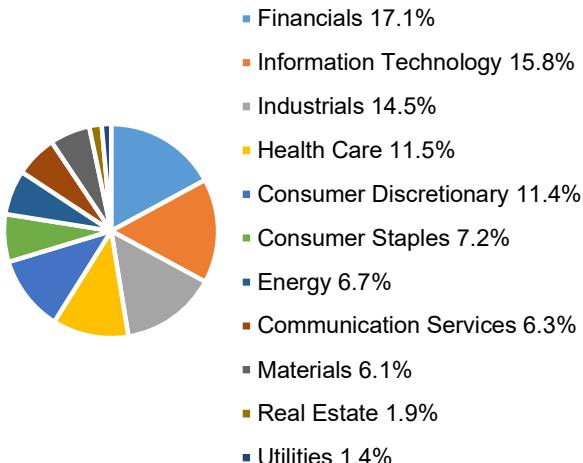
Public Equity vs Universe



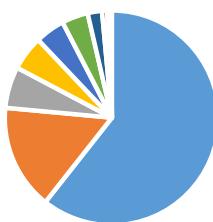
	Q3 2023	YTD	1 Yr.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.
Account Return	-2.9	9.0	22.4	9.5	6.8	9.4	8.6
Percentile Rank	36	63	29	13	40	35	31
Index Return	-3.4	9.4	20.2	6.9	6.1	8.3	7.8
Percentile Rank	61	53	55	66	72	73	3rd Quartile
1st Quartile	-2.4	10.9	22.7	8.6	7.4	9.8	8.8
Median	-3.2	9.6	20.5	7.6	6.6	9.0	8.3
3rd Quartile	-3.7	8.0	18.3	6.3	5.7	8.2	7.5
Observations	129	129	128	130	129	125	112

Public Equity Portfolio Snapshot

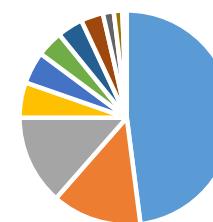
Equity Sector Exposure (GICS)



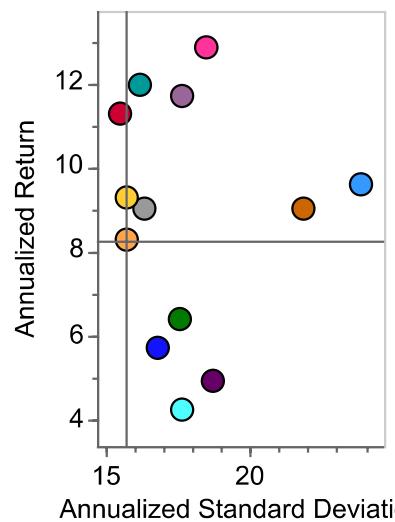
Regional Exposure by Domicile



Regional Exposure by Source of Revenue



Risk – Reward – 8/1/2016 to 9/30/2023



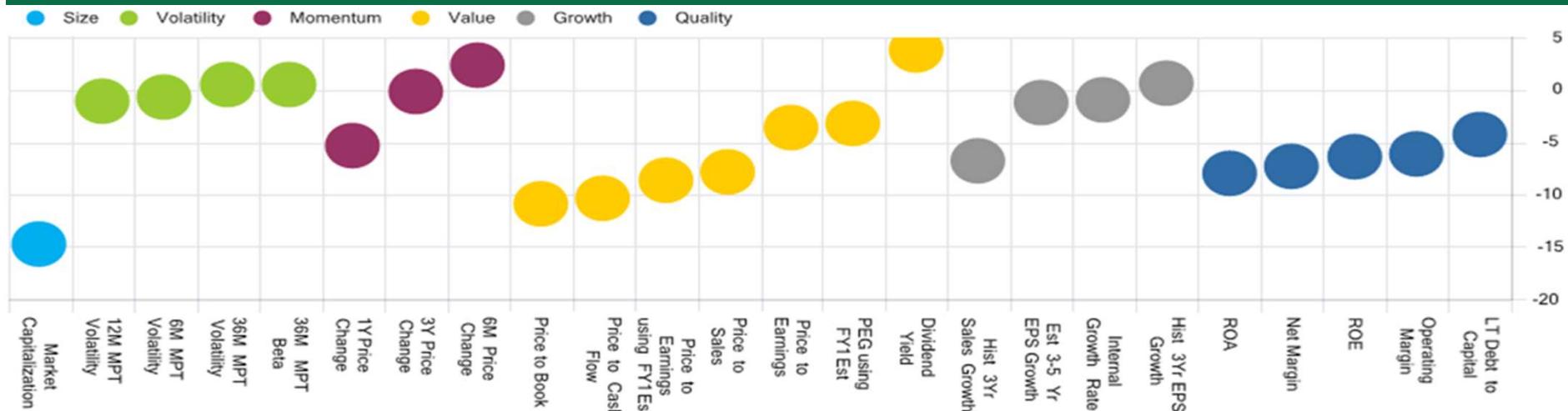
Top 10 Holdings

Portfolio Date 9/30/23	Weight %	Return %	Portfolio Date 9/30/23	Weight %
Microsoft Corporation	2.0	-6.2	Brandes Int'l Value	14.3
Alphabet Inc.	1.4	9.2	BlackRock Global Core	11.0
Apple Inc.	1.2	-11.6	William Blair Int'l Growth	9.7
Amazon.com, Inc.	1.1	-2.5	MFS Global Growth	8.7
Taiwan Semi Mfg. Co.	0.9	-12.9	BlackRock R1000 Value Index	8.6
Exxon Mobil Corporation	0.7	10.8	NTQA S&P 500 Index Core	8.5
Visa Inc.	0.7	-3.0	DFA US Small Cap Value	7.8
Berkshire Hathaway Inc.	0.6	2.7	DFA Int'l Small Cap Value	7.3
Adobe Incorporated	0.6	4.3	DFA US Large Cap Value	6.2
NVIDIA Corporation	0.6	2.8	Polen US Large Cap Growth	5.2

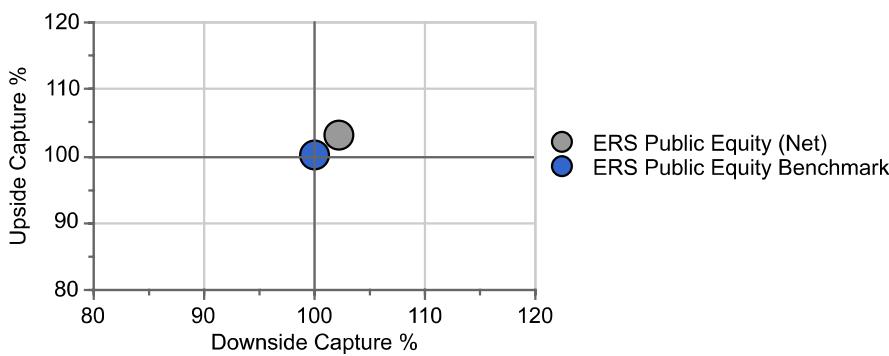
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Public Equity Statistics

Characteristics Tilt vs MSCI ACWI IMI 9/30/2023



15 Year Upside-Downside – 10/1/2008 to 9/30/2023

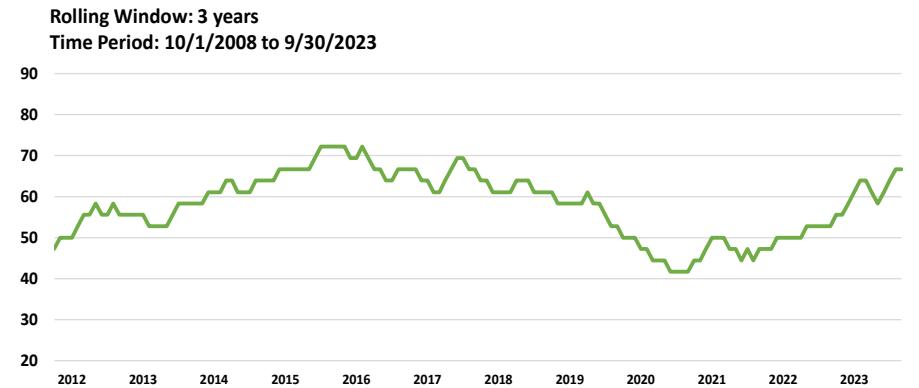


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15 Year Risk – 10/1/2008 to 9/30/2023

	Annualized Return	Standard Deviation	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Public Equity (Net)	8.4	17.0	0.0	0.4	0.1	1.8	1.0
ERS Public Equity Benchmark	8.1	16.4	0.0	0.4	--	--	1.0

Batting Average



Risk – 7/1/2013 to 9/30/2023

	Annualized Return	Standard Deviation	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Public Equity (Net)	9.0	15.1	0.0	0.5	0.1	1.8	1.0
ERS Public Equity Benchmark	8.4	14.6	0.0	0.5	--	--	1.0



**"Price to Earnings," "Price to Earnings using FY1 Est," and "PEG using FY1 Est" values exclude companies with negative earnings from calculations.

Public Equity Valuation Characteristics

As of September 30, 2023

	Price/ Earnings	P/E using FY2 Est	Price/ Book	Price/ CF	Dividend Yield
ERS Public Equity	13.2	12.3	1.6	7.2	2.39
MSCI AC World IMI	16.5	14.5	2.4	9.3	2.18

Domestic Managers	Price/ Earnings	P/E using FY2 Est	Price/ Book	Price/ CF	Dividend Yield	Global & International Managers	Price/ Earnings	P/E using FY2 Est	Price/ Book	Price/ CF	Dividend Yield
BlackRock R1000 Value Index	15.4	13.4	2.1	9.3	2.44	AQR Emerging Markets Core	6.8	7.2	1.0	3.6	6.49
CastleArk Small Growth	23.0	17.9	3.7	13.8	0.36	BlackRock Global Core	15.7	13.7	2.3	9.5	2.01
DFA Large Value	12.7	11.3	1.9	7.5	2.42	Branded Int'l Value	9.2	9.1	1.0	4.2	4.05
DFA Small Value	8.5	9.0	1.0	4.7	1.89	DFA Int'l Small Value	8.9	8.4	0.7	4.3	3.77
Earnest Mid Core	17.1	13.8	2.5	10.0	1.67	MFS Global Growth	25.9	20.3	4.4	17.3	1.15
NT S&P 500 Index	21.4	17.3	3.8	13.6	1.62	William Blair Int'l Growth	21.7	17.7	3.5	16.1	1.74
Polen Large Growth	35.9	24.9	7.9	24.6	0.39						

**Price/Earnings" and "P/E using FY2 Est" values exclude companies with negative earnings from calculations.

P/E Ratio Comparisons in the U.S. Since 1980 - As of September 30, 2023

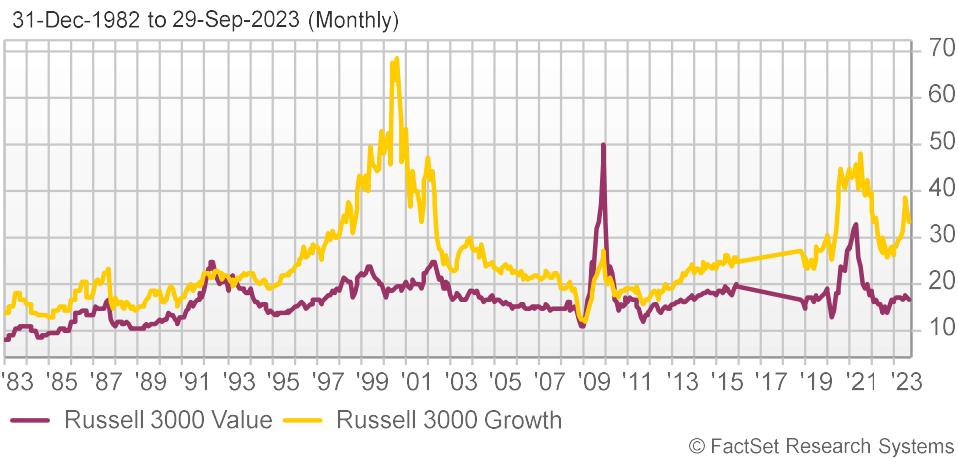
Value vs. Growth



Large vs. Small



Price to Earnings - Russell 3000 Value vs Russell 3000 Growth



Relative Price to Earnings



Price to Earnings ratios for Value vs. Growth charts include companies with negative earnings in calculations.

Price to Earnings ratios for Large vs Small: Top chart includes companies with negative earnings in calculations; bottom chart excludes companies with negative earnings from calculation.

Relative Investment Performance – Active Equity Managers

As of September 30, 2023

Outperforming Equity Managers

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Brandes <i>MSCI EAFE</i>	1.7% 5.8%	18.4% 11.4%	43.4% 17.8%	15.1% 9.3%	4.7% 1.4%	6.2% 0.9%	4.7% 0.9%
DFA International <i>MSCI EAFE Small Cap</i>	0.1% 3.6%	7.5% 5.7%	28.3% 10.4%	10.5% 9.3%	2.4% 1.6%	4.6% 0.6%	4.5% 0.2%
DFA U.S. Small Value <i>Russell 2000 Value</i>	-0.1% 2.8%	5.0% 5.5%	20.1% 12.2%	24.4% 11.1%	7.2% 4.6%	9.4% 3.4%	8.6% 2.4%
AQR <i>MSCI EM</i>	-0.8% 2.2%	7.0% 5.2%	17.0% 5.3%	0.3% 2.1%	1.1% 0.5%	3.8% 0.5%	N/A
DFA U.S. Large Value <i>Russell 1000 Value</i>	-1.5% 1.7%	2.9% 1.1%	17.6% 3.1%	14.0% 2.9%	5.6% 0.7%	N/A	N/A
BlackRock Global Alpha Tilts <i>MSCI ACWI</i>	-3.1% 0.3%	10.4% 0.4%	23.1% 2.3%	7.4% 0.5%	6.5% 0.0%	9.2% 0.6%	N/A
Earnest <i>Russell MidCap</i>	-4.5% 0.2%	3.8% 0.1%	11.7% 1.7%	9.1% 1.1%	8.8% 2.4%	11.7% 3.0%	11.2% 2.2%
ERS Public Equity <i>ERS Equity Benchmark</i>	-3.0% 0.4%	8.7% 0.7%	22.0% 1.8%	9.2% 2.3%	6.5% 0.4%	9.0% 0.7%	8.3% 0.5%

Relative outperformance in blue

Relative underperformance in red

*Returns net of fees

Relative Investment Performance – Active Equity Managers

As of September 30, 2023

Underperforming Equity Managers

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
William Blair <i>MSCI ACWI ex US</i>	-8.3% 4.7%	2.6% 3.3%	14.6% 6.4%	-1.6% 5.9%	3.4% 0.3%	5.6% 0.4%	4.7% 0.9%
MFS <i>MSCI ACWI</i>	-5.5% 2.1%	8.7% 1.4%	20.2% 0.6%	6.1% 0.8%	9.1% 2.7%	11.5% 2.9%	10.1% 2.5%
CastleArk <i>Russell 2000 Growth</i>	-9.0% 1.7%	0.5% 4.8%	4.0% 5.6%	2.0% 0.9%	2.7% 1.2%	8.8% 2.0%	7.5% 0.8%
Polen <i>S&P 500</i>	-3.4% 0.1%	20.9% 7.8%	21.4% 0.2%	1.1% 9.1%	8.8% 1.2%	13.3% 1.0%	13.8% 1.9%
ERS Public Equity <i>ERS Equity Benchmark</i>	-3.0% 0.4%	8.7% 0.7%	22.0% 1.8%	9.2% 2.3%	6.5% 0.4%	9.0% 0.7%	8.3% 0.5%

Relative outperformance in blue

Relative underperformance in red

*Returns net of fees

Relative Investment Performance – Passive Equity Managers & Other

As of September 30, 2023

Passive Equity Managers

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Northern Trust S&P 500 Index <i>S&P 500</i>	-3.3% 0.0%	13.1% 0.0%	21.6% 0.0%	10.1% 0.0%	9.9% 0.0%	12.2% 0.0%	11.9% 0.0%
BlackRock Russell 1000 Value Index <i>Russell 1000 Value</i>	-3.2% 0.0%	1.8% 0.0%	14.5% 0.0%	11.1% 0.0%	6.3% 0.1%	N/A	N/A

Real Assets Manager

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Principal Diversified Real Assets <i>Blended Benchmark</i>	-4.0% 1.1%	-3.5% 0.5%	3.8% 1.1%	5.7% 0.0%	3.2% 0.0%	3.7% 0.2%	N/A

Relative outperformance in blue

Relative underperformance in red

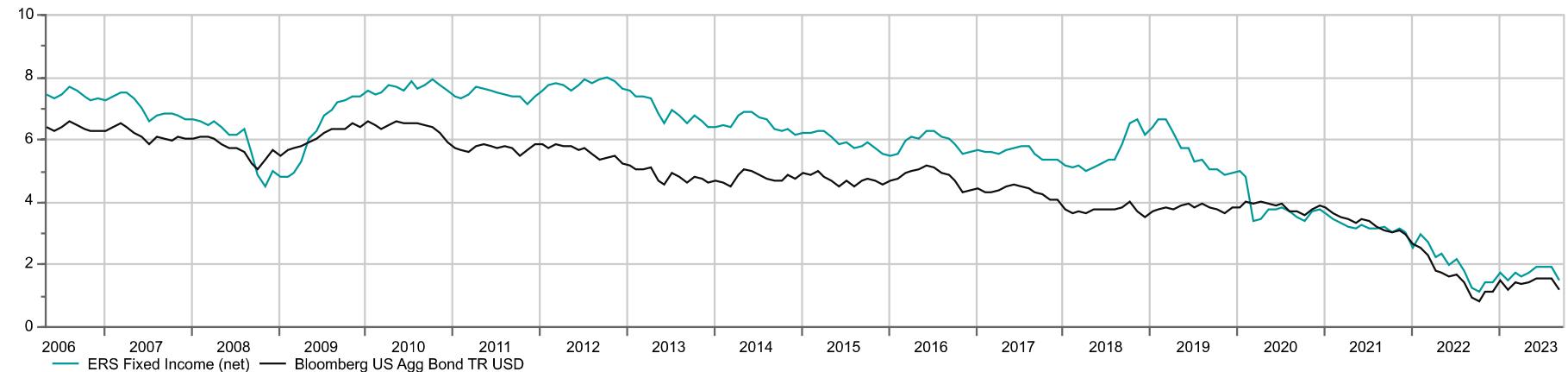
*Returns net of fees

Fixed Income

Fixed Income Performance

10 Year Rolling Returns – 6/1/1996 to 9/30/2023

10 Years 1 Month Shift

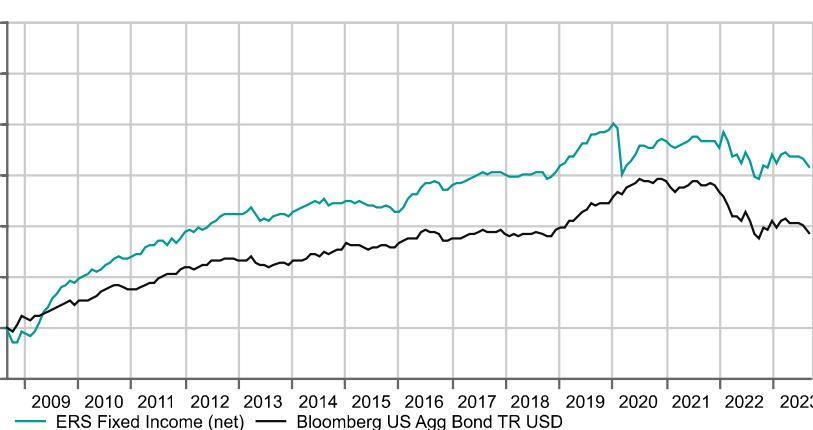


Trailing Returns

Annualized Return

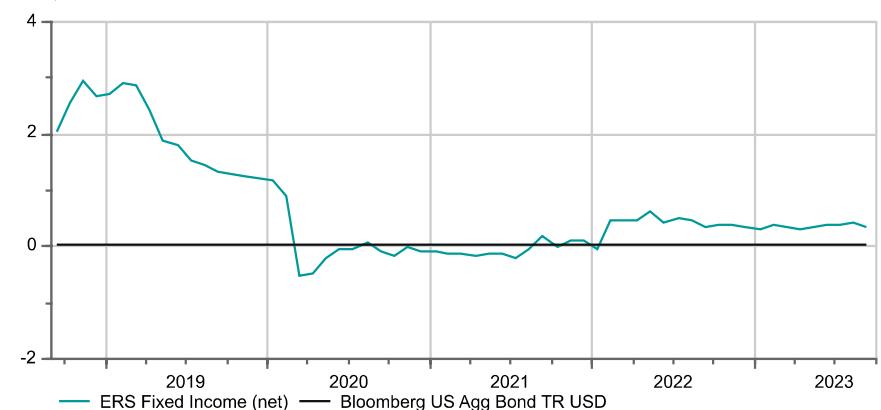
	QTR	YTD	1 Year	3 Year	5 Year	7 Year	10 Year	15 Year
Total Fixed Income (Gross)	-3.0	-0.2	2.4	-1.8	0.3	0.7	1.6	4.0
Total Fixed Income (Net)	-3.1	-0.3	2.3	-1.9	0.2	0.5	1.4	3.9
Bloomberg US Aggregate	-3.2	-1.2	0.6	-5.2	0.1	-0.1	1.1	2.5

Investment Growth – 10/1/2008 to 9/30/2023

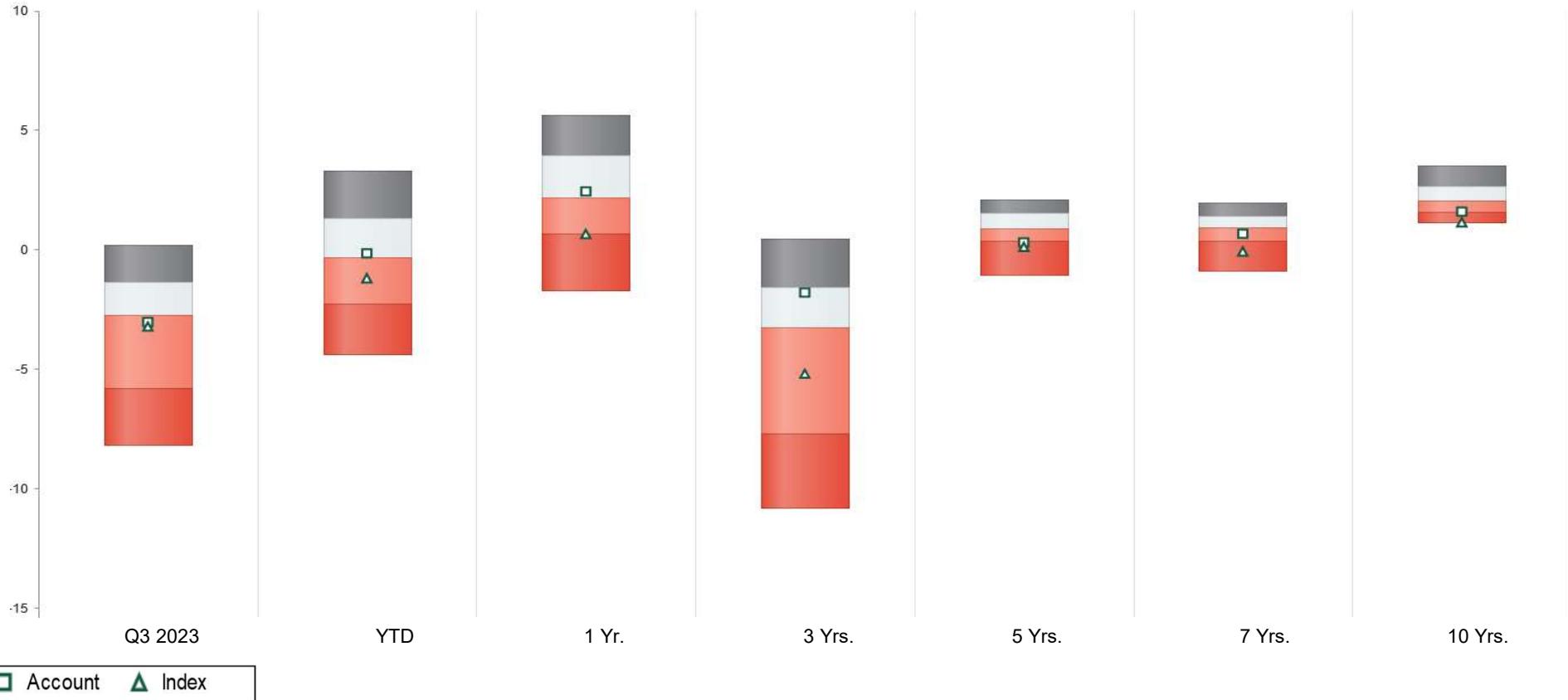


Rolling Excess Return – 10/1/2008 to 9/30/2023

10 Years, One month shift



Fixed Income vs Universe



■ Account ▲ Index

	Q3 2023	YTD	1 Yr.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.
Account Return	-3.0	-0.2	2.4	-1.8	0.3	0.7	1.6
Percentile Rank	55	48	45	31	77	66	71
Index Return	-3.2	-1.2	0.6	-5.2	0.1	-0.1	1.1
Percentile Rank	64	67	76	70	83	84	91
1st Quartile	-1.4	1.3	3.9	-1.6	1.5	1.4	2.7
Median	-2.7	-0.3	2.2	-3.2	0.9	0.9	2.0
3rd Quartile	-5.8	-2.3	0.7	-7.7	0.3	0.4	1.6
Observations	93	93	93	94	94	93	90

Relative Investment Performance – Fixed Income Managers

As of September 30, 2023

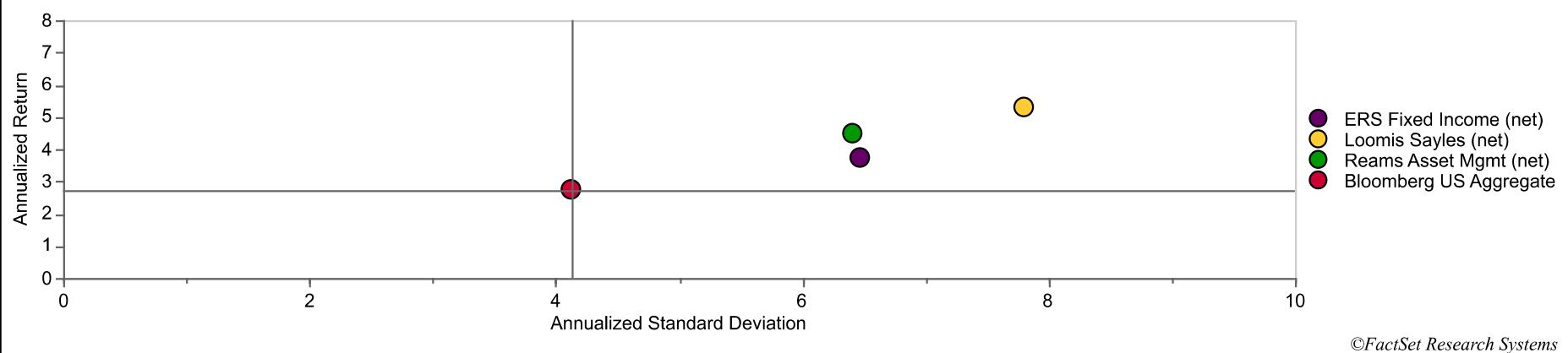
	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Reams	-3.8%	-0.6%	2.8%	-4.1%	2.5%	1.7%	2.3%
<i>Bloomberg U.S. Agg.</i>	0.6%	0.6%	2.1%	1.1%	2.4%	1.8%	1.2%
Loomis Sayles	-2.2%	0.7%	3.4%	-1.9%	1.5%	2.2%	2.9%
<i>Bloomberg U.S. Agg.</i>	1.0%	1.9%	2.8%	3.3%	1.4%	2.2%	1.8%
BlackRock Index	-3.0%	-1.2%	-0.6%	N/A	N/A	N/A	N/A
<i>Bloomberg U.S. Government</i>	0.0%	0.2%	0.1%				
ERS Fixed Income	-3.1%	-0.3%	2.3%	-1.9%	0.2%	0.5%	1.4%
<i>Bloomberg U.S. Agg.</i>	0.2%	1.0%	1.7%	3.3%	0.1%	0.6%	0.3%

Relative outperformance in blue
Relative underperformance in red

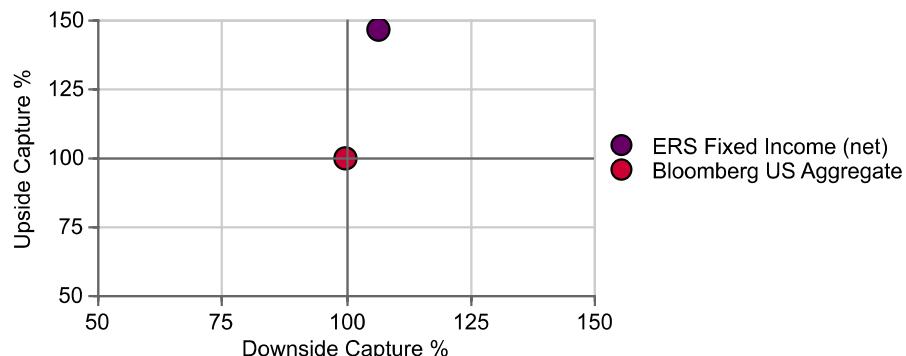
*Returns net of fees

Fixed Income Statistics

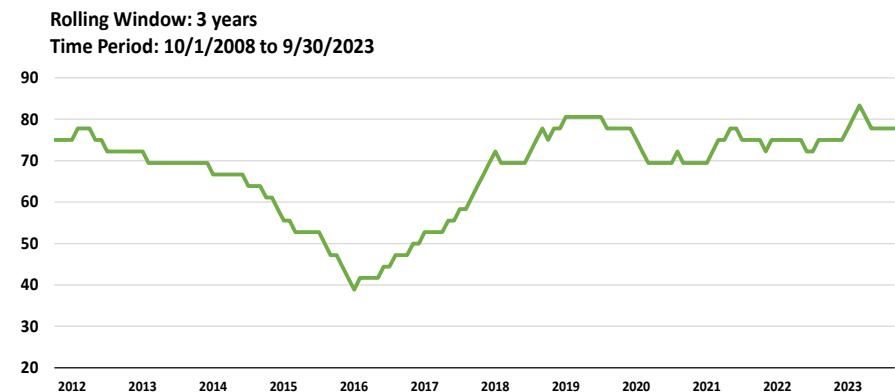
Risk – Reward – 10/1/2008 to 9/30/2023



15 Year Upside-Downside – 10/1/2008 to 9/30/2023



Batting Average



15 Year Risk – 10/1/2008 to 9/30/2023

Risk – 7/1/2013 to 9/30/2023

	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta		Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta	
Total Fixed Income (Net)	3.9	6.4	0.1	0.5	0.1	4.7	1.0	Total Fixed Income (Net)	1.5	6.1	0.0	0.1	0.0	4.4
Bloomberg US Aggregate	2.5	4.2	0.0	0.4	--	--	1.0	Bloomberg US Aggregate	1.2	4.3	0.0	0.0	--	--

Absolute Return

Relative Investment Performance – Absolute Return Managers

As of September 30, 2023

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year
UBS A&Q <i>1 Year Libor / SOFR + 4%</i>	2.2%	4.1%	7.8%	8.6%	8.2%	7.3%
	0.0%	2.5%	0.8%	2.9%	1.9%	1.0%
Aptitude <i>SOFR + 4%</i>	1.8%	3.1%	6.2%	N/A	N/A	N/A
	0.5%	3.5%	2.4%			
ERS Absolute Return <i>3 Month T-Bill + 3%</i>	2.0%	3.8%	7.4%	13.7%	5.5%	5.5%
	0.0%	2.3%	0.7%	8.7%	0.7%	0.8%

Relative outperformance in blue

Relative underperformance in red

Risk Adjusted Returns (6/30/14 - 9/30/23)

	Return	Std Dev	Sharpe Ratio	Max Drawdown
ERS Public Equity (net)	7.3%	15.6%	0.4	-25.3%
ERS Fixed Income (net)	1.0%	6.4%	0.0	-13.6%
ERS Absolute Return (net)	5.5%	9.6%	0.5	-27.1%

*Returns net of fees

Performance Update

Performance Update

Estimated ERS Total Fund Market Value is \$5.45 billion as of November 8, 2023

Period	ERS Fund*	Benchmark
3 rd Quarter YTD	3.7%	5.9%
October (Estimate)	-1.9%	-1.8%
November MTD (Estimate)	2.2%	2.5%
YTD Through November 8, 2023 (Estimate)	4.0%	6.6%

*Returns Net of Fees

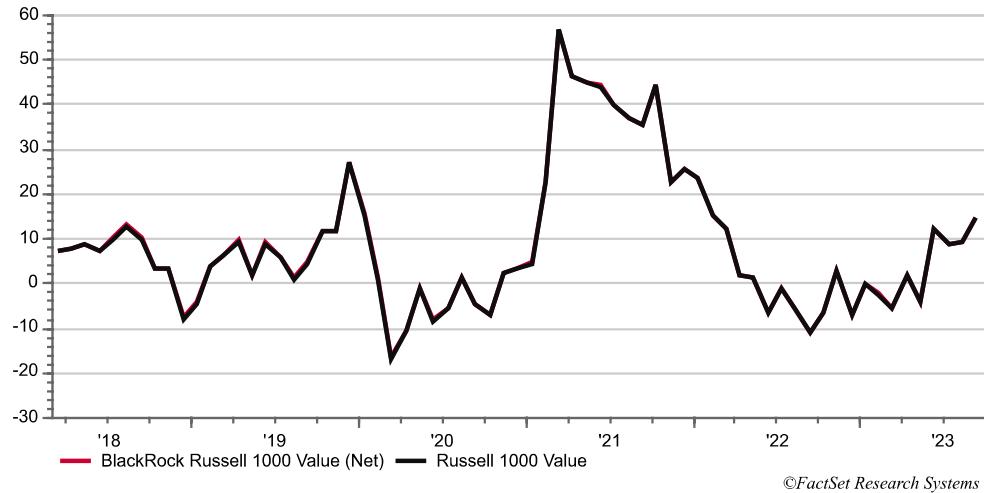
Appendix

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BlackRock Russell 1000 Value Portfolio Snapshot – September 30, 2023

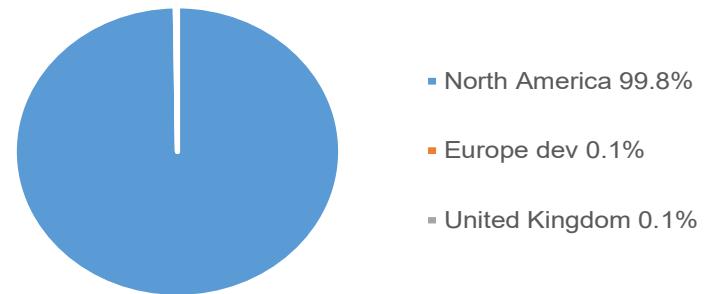
Rolling Returns Since Inception 4/1/2017 (One Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Berkshire Hathaway Inc.	3.44	2.73
Exxon Mobil Corporation	2.52	10.53
JPMorgan Chase & Co.	2.24	0.34
Johnson & Johnson	2.01	-5.21
Chevron Corporation	1.60	8.18
Procter & Gamble Company	1.49	-3.30
Walmart Inc.	1.22	2.11
Cisco Systems, Inc.	1.18	4.68
Merck & Co., Inc.	1.14	-10.15
Bank of America Corporation	1.02	-3.77

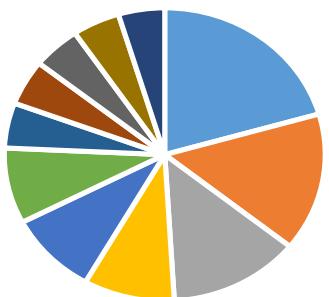
Regional Exposure by Domicile



Trailing Returns

	QTR	YTD	1 Year	3 Year	5 Year	Inception 4/1/2017
BlackRock R1000 Value (Net)	-3.2	1.8	14.5	11.1	6.3	7.0
Russell 1000 Value	-3.2	1.8	14.4	11.1	6.2	6.9

Equity Sector Exposure (GICS)



- Financials 20.5%
- Health Care 15.2%
- Industrials 13.2%
- Information Technology 9.2%
- Energy 9.1%
- Consumer Staples 8.3%
- Communication Services 5.0%
- Consumer Discretionary 5.0%
- Utilities 4.9%
- Materials 4.8%
- Real Estate 4.7%

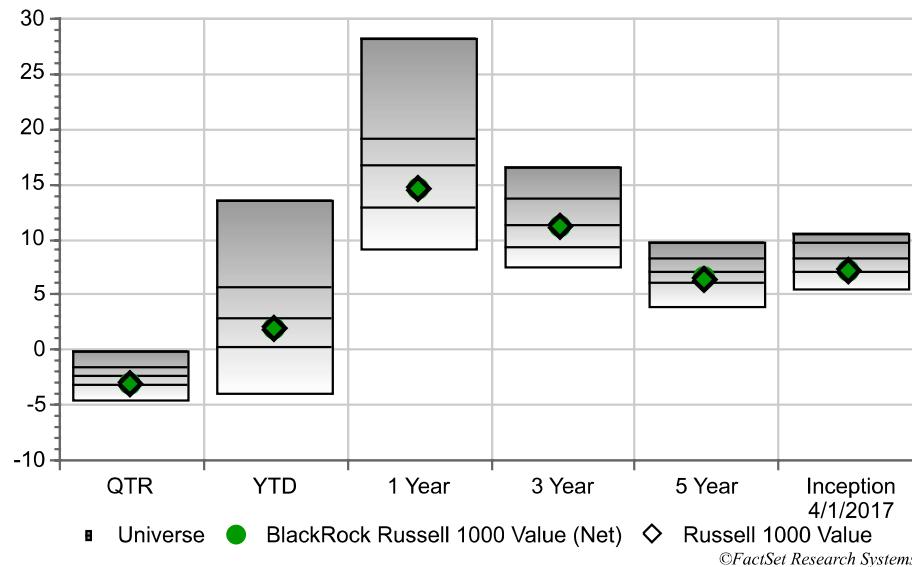
Regional Exposure by Source of Revenue



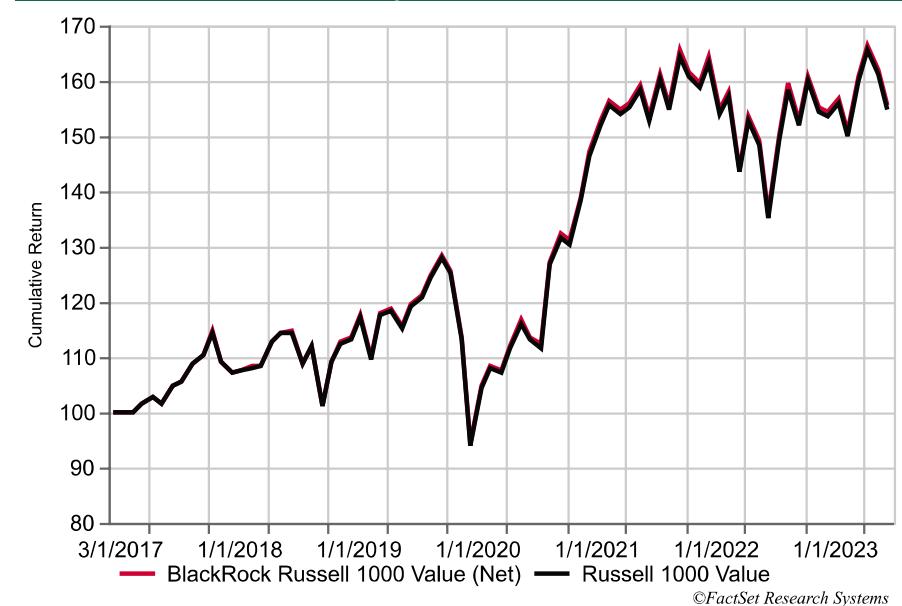
BlackRock Russell 1000 Value vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:Large-Cap Value

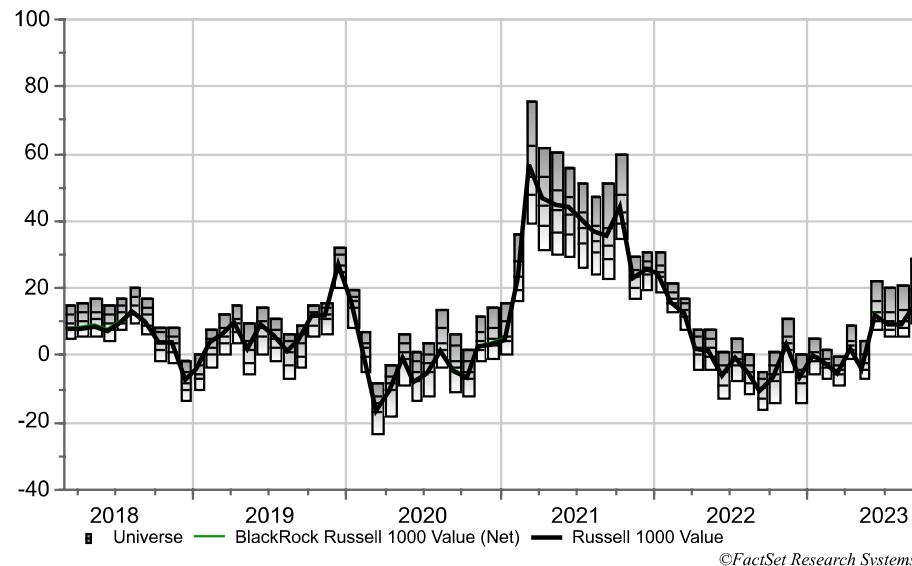


Investment Growth Since Inception 4/1/2017



Rolling Returns 4/1/2017 – 9/30/2023 (1 Year, 1 Month Shift)

Universe: Lipper US:Large-Cap Value

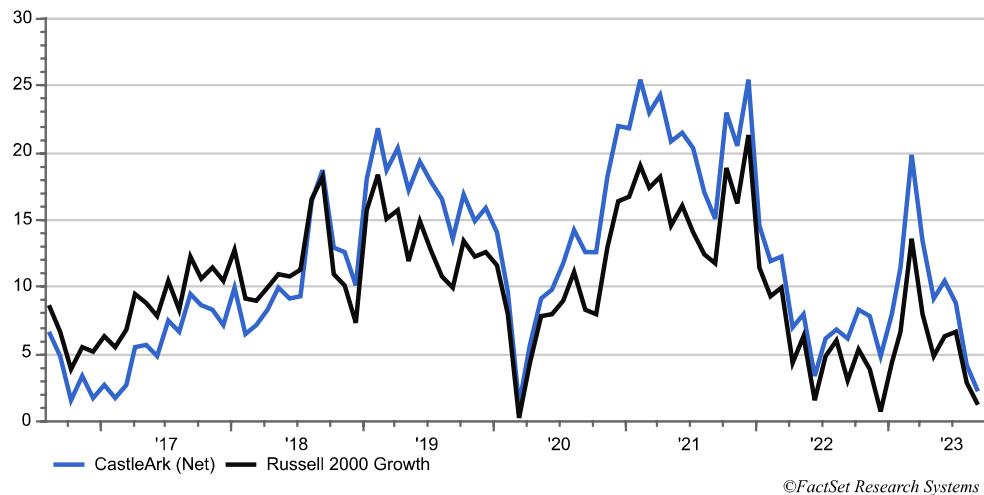


Risk Since Inception 4/1/2017

	Return	Std Dev	Sharpe Ratio	Tracking Error
BlackRock R1000 Value (Net)	7.0	17.1	0.3	0.1
Russell 1000 Value	6.9	17.1	0.3	--

CastleArk Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 9/1/2013 (Three Year, One Month Shift)



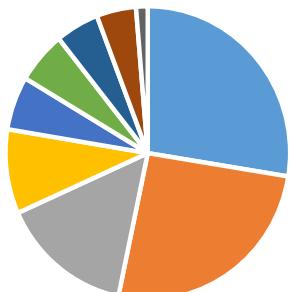
Top 10 Holdings

	Portfolio Weight	Quarterly Return
TechnipFMC plc	1.94	22.70
APi Group Corporation	1.88	-4.88
Rambus Inc.	1.72	-13.06
Manhattan Associates, Inc.	1.69	-1.11
Super Micro Computer, Inc.	1.65	10.02
Celsius Holdings, Inc.	1.60	15.02
Parsons Corporation	1.57	12.90
ATI, Inc.	1.56	-6.96
Pentair plc	1.44	0.55
Brink's Company	1.42	7.41

Trailing Returns

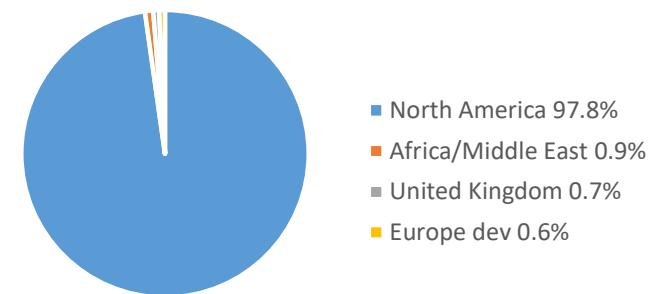
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Inception 9/1/2013
CastleArk (Net)	-9.0	0.5	4.0	2.0	2.7	7.5	8.3
Russell 2000 Growth	-7.3	5.2	9.6	1.1	1.6	6.7	7.4

Equity Sector Exposure (GICS)

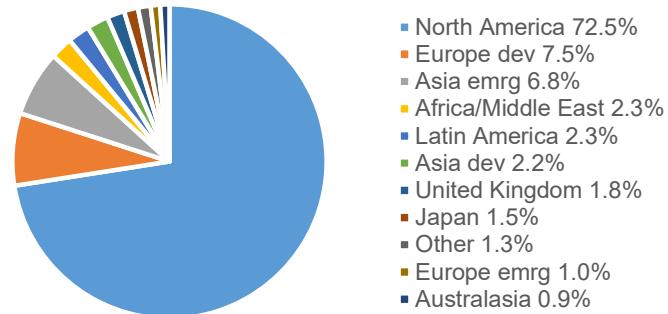


- Industrials 27.3%
- Information Technology 25.6%
- Health Care 14.9%
- Consumer Discretionary 9.2%
- Energy 5.9%
- Financials 5.7%
- Materials 4.9%
- Consumer Staples 4.4%
- Communication Services 1.3%

Regional Exposure by Domicile



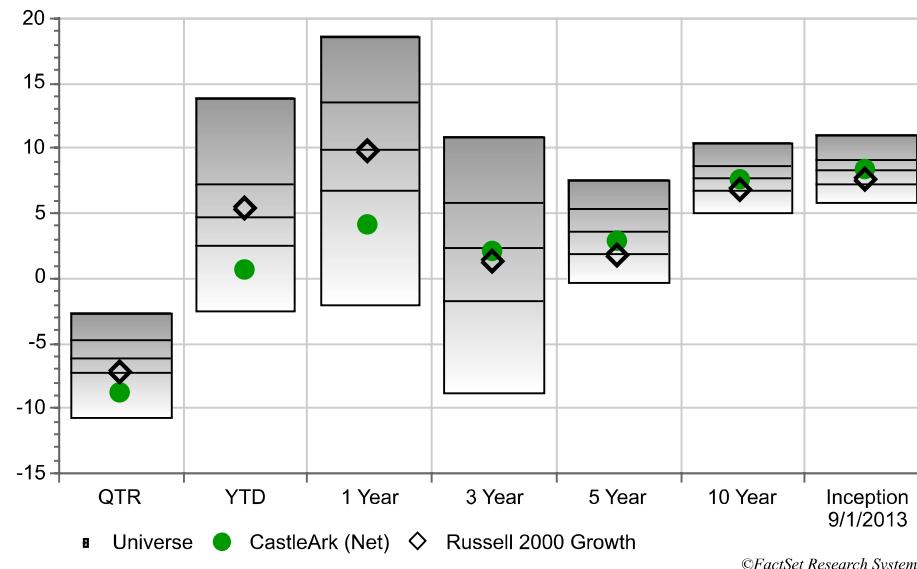
Regional Exposure by Source of Revenue



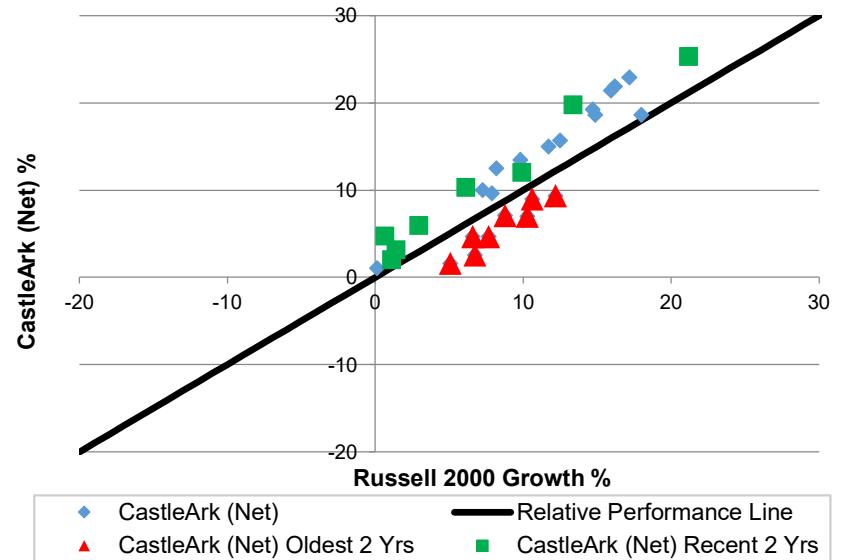
CastleArk vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Small-Cap Growth

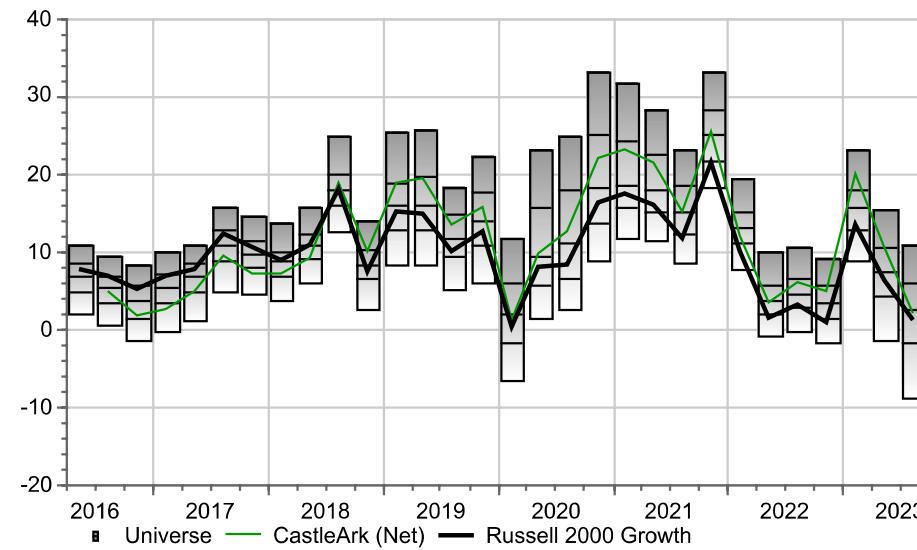


Three-Year Rolling Return Versus Benchmark



Rolling Returns 9/1/2013 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US:Small-Cap Growth



Over/Under Benchmark Analysis

21	Outperform
8	Underperform
29	# Observations
72%	% Outperform

CastleArk Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Celsius Holdings, Inc.	1.96	1.96	0.37
TechnipFMC plc	1.57	1.57	0.31
Sterling Infrastructure, Inc.	1.16	1.02	0.29
XPO Inc.	0.90	0.90	0.19
Huron Consulting Group Inc.	1.01	0.86	0.18
Saia, Inc.	1.09	1.09	0.13
Fabrinet	0.57	0.14	0.11
Ascensus LLC /Private Group 1/	1.15	1.07	0.10
Wix.Com LTD.	0.74	0.74	0.10
Civitas Resources, Inc.	0.60	0.60	0.09

Top 10 Leading Detractors

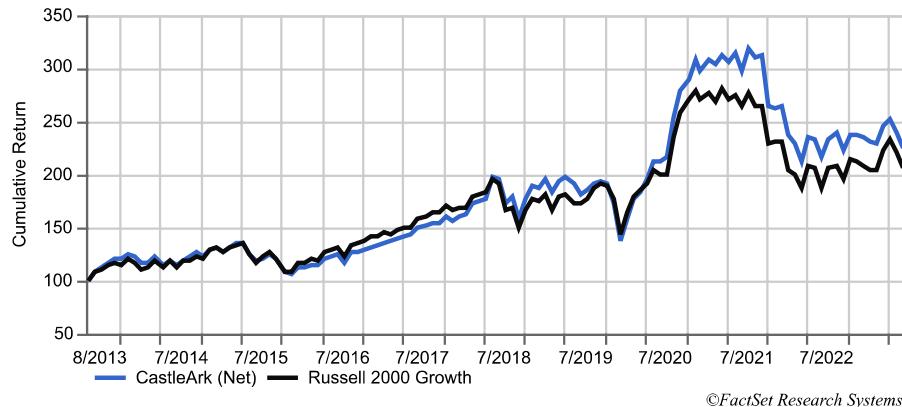
	Avg. Weights	Relative Weights	Active Return
Inspire Medical Systems, Inc.	1.19	1.19	-0.52
Apellis Pharmaceuticals, Inc.	0.21	0.21	-0.40
MasTec, Inc.	1.02	1.02	-0.37
TransMedics Group, Inc.	1.40	1.19	-0.36
Magnite, Inc.	0.68	0.62	-0.35
DoubleVerify Holdings, Inc.	1.29	1.29	-0.33
RH	0.79	0.79	-0.33
Alphatec Holdings, Inc.	1.15	1.11	-0.32
Surgery Partners, Inc.	0.93	0.73	-0.27
Wingstop, Inc.	0.79	0.79	-0.26

Sector Attribution

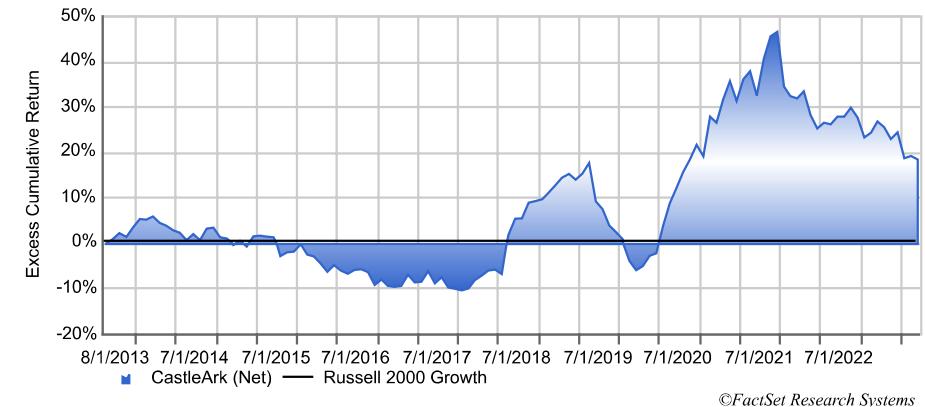
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-0.1	-31.8	-9.4	0.0	-0.5	-0.5
Consumer Discretionary	1.4	-14.9	-6.7	0.0	-1.0	-1.0
Consumer Staples	-0.3	10.8	-3.5	0.0	0.5	0.5
Energy	-0.7	14.0	18.9	-0.2	-0.1	-0.3
Financials	-2.1	1.6	2.8	-0.2	0.1	-0.2
Health Care	-6.6	-26.1	-14.7	0.5	-2.2	-1.7
Industrials	7.1	-2.5	-6.0	0.1	0.9	1.0
Information Technology	1.2	-7.1	-8.4	0.0	0.3	0.2
Materials	1.9	-13.2	-9.5	0.0	-0.2	-0.3
Real Estate	-1.2	-15.2	-9.6	0.0	0.0	0.0
Utilities	-1.6	0.0	-12.0	0.1	0.0	0.1
Cash	0.9	1.3	0.0	0.1	0.0	0.1
Total	0.0	-9.5	-7.3	0.2	-2.4	-2.2

CastleArk Inception Performance & Statistics

Investment Growth Since Inception 9/1/2013



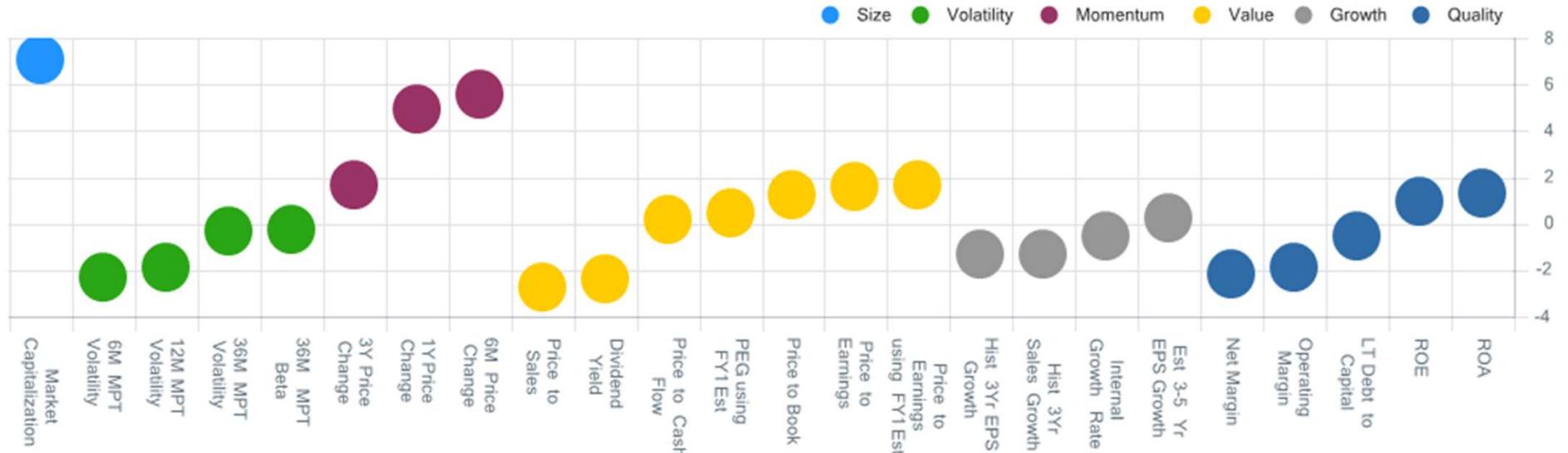
Relative Cumulative Performance Since Inception 9/1/2013



Risk Since Inception 9/1/2013

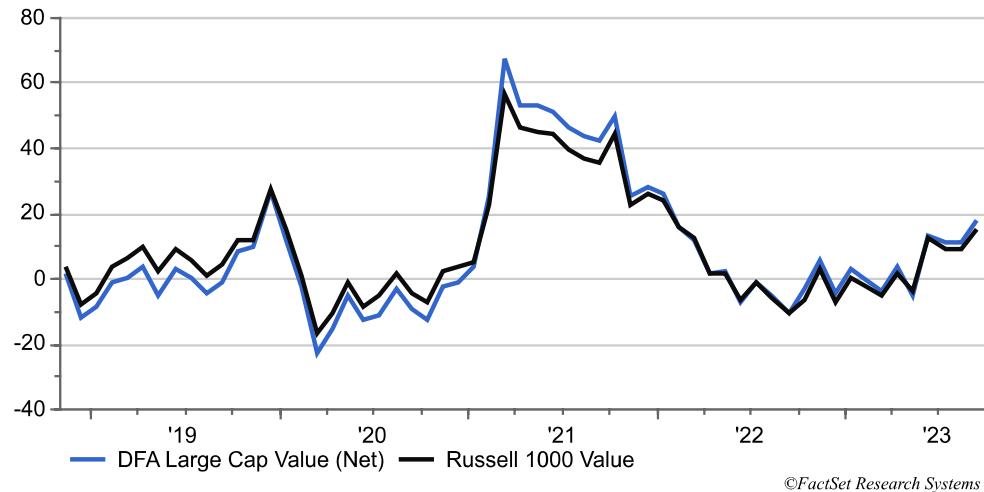
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
CastleArk (Net)	8.3	20.2	1.1	0.4	0.2	5.1	1.0
Russell 2000 Growth	7.4	20.0	--	0.3	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



DFA LCV Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 12/1/2017 (One Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Exxon Mobil Corporation	4.81	10.53
JPMorgan Chase & Co.	4.15	0.34
Chevron Corporation	2.94	8.17
Berkshire Hathaway Inc.	2.48	2.73
Comcast Corporation	2.14	7.40
Pfizer Inc.	1.88	-8.54
Meta Platforms, Inc.	1.86	4.61
ConocoPhillips Company	1.38	16.70
Verizon Communications Inc.	1.34	-11.18
Bank of America Corporation	1.28	-3.77

Trailing Returns

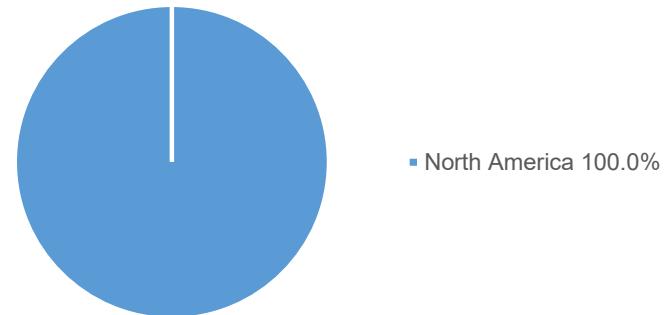
	QTR	YTD	1 Year	3 Year	5 Year	Inception
DFA US Large Value	-1.5	2.9	17.6	14.0	5.6	5.8
Russell 1000 Value	-3.2	1.8	14.4	11.1	6.2	6.3

Equity Sector Exposure (GICS)



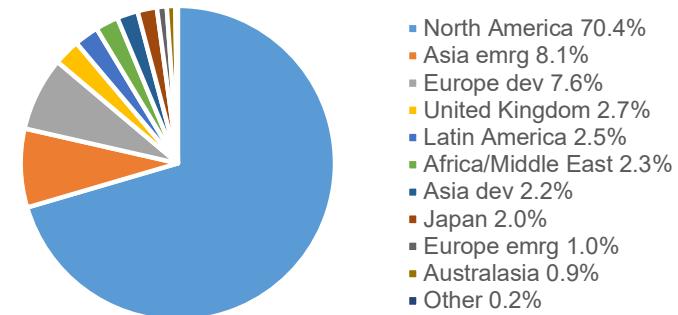
- Financials 21.1%
- Energy 15.0%
- Health Care 14.9%
- Industrials 13.7%
- Communication Services 9.2%
- Materials 8.4%
- Information Technology 6.7%
- Consumer Discretionary 6.1%
- Consumer Staples 4.3%
- Real Estate 0.4%
- Utilities 0.2%

Regional Exposure by Domicile



■ North America 100.0%

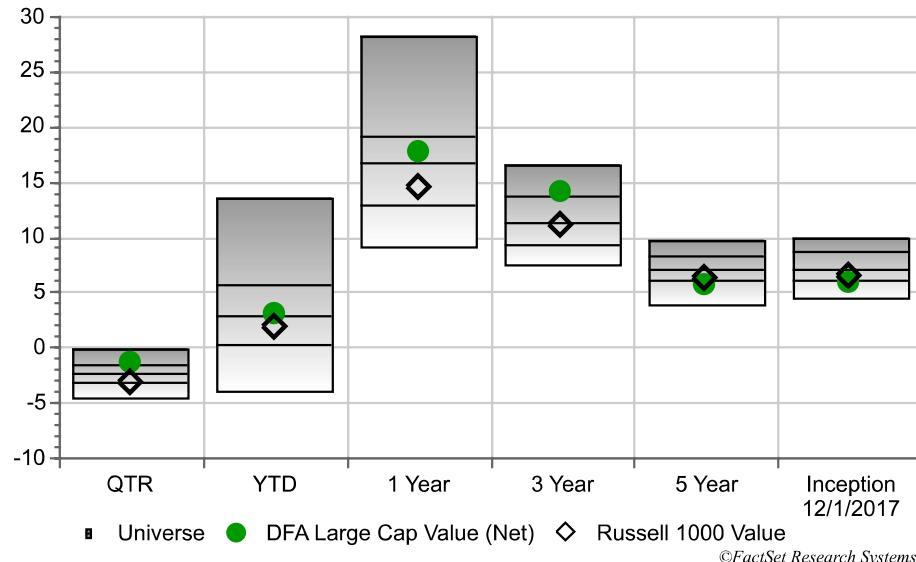
Regional Exposure by Source of Revenue



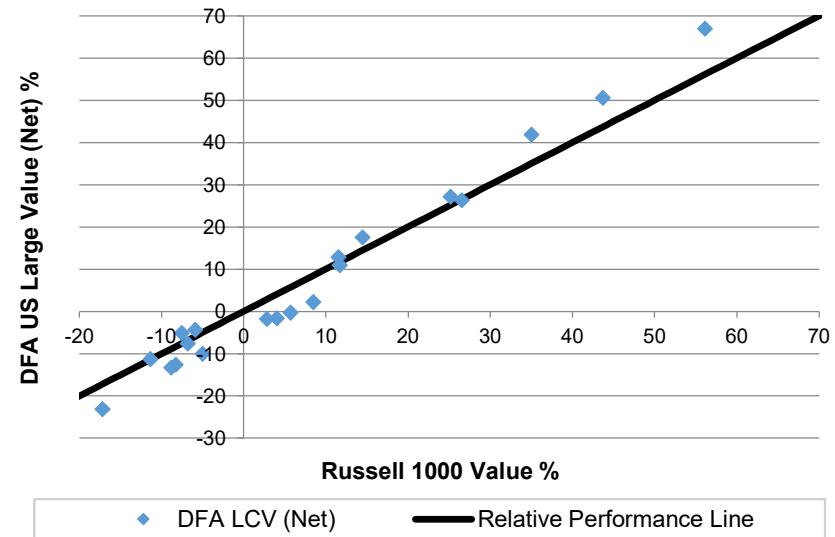
DFA LCV vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Large Cap Value

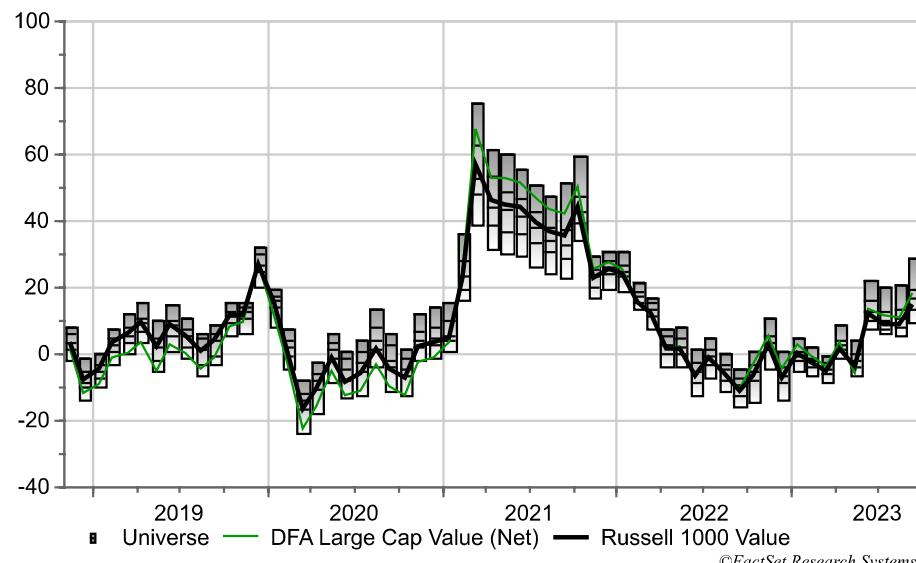


One-Year Rolling Return Versus Benchmark



Rolling Returns 12/1/2017 – 9/30/2023 (1 Year, 1 Month Shift)

Universe: Lipper US Large Cap Value



Over/Under Benchmark Analysis

9	Outperform
11	Underperform
20	# Observations
45%	% Outperform

DFA LCV Attribution Analysis – September 30, 2023

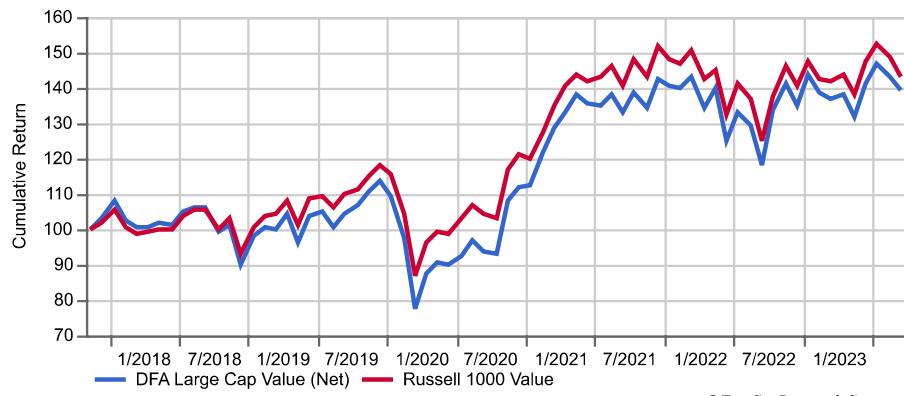
Top 10 Leading Contributors			Top 10 Leading Detractors				
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Exxon Mobil Corporation	4.51	2.26	0.22	D.R. Horton, Inc.	1.17	0.98	-0.12
Meta Platforms, Inc.	2.61	2.61	0.15	Verizon Communications Inc.	1.53	0.77	-0.10
Merck & Co., Inc.	0.04	-1.12	0.11	Pfizer Inc.	2.09	1.05	-0.09
Chevron Corporation	2.91	1.47	0.10	Dollar Tree, Inc.	0.41	0.26	-0.07
Marathon Petroleum Corporation	0.68	0.39	0.10	Republic Services, Inc.	1.01	0.85	-0.06
Abbott Laboratories	0.02	-0.86	0.09	Albemarle Corporation	0.34	0.22	-0.06
S&P Global, Inc.	0.03	-0.56	0.05	General Mills, Inc.	0.55	0.33	-0.05
Comcast Corporation	1.92	0.99	0.05	Corning Incorporated	0.53	0.40	-0.05
Valero Energy Corporation	0.47	0.24	0.04	Lennar Corporation	0.62	0.46	-0.05
Phillips 66	0.40	0.15	0.03	TE Connectivity Ltd.	0.42	0.42	-0.05

Sector Attribution

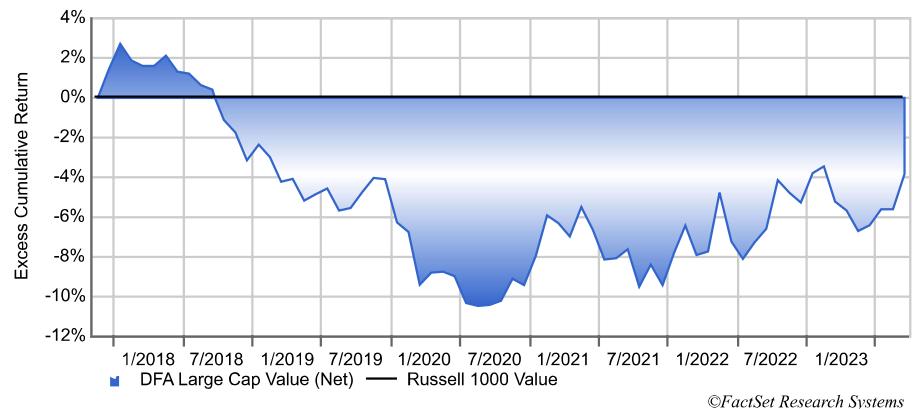
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	5.0	-1.3	-4.2	-0.1	0.3	0.2
Consumer Discretionary	1.3	-10.2	-9.3	-0.1	-0.1	-0.1
Consumer Staples	-3.7	-8.0	-5.3	0.1	-0.1	-0.1
Energy	5.5	11.8	12.0	0.8	0.0	0.8
Financials	-0.5	-0.2	-0.7	0.0	0.1	0.1
Health Care	-0.6	-3.9	-5.4	0.0	0.2	0.2
Industrials	0.7	-4.9	-5.6	0.0	0.1	0.1
Information Technology	-2.5	-3.4	-2.5	0.0	-0.1	-0.1
Materials	3.7	-3.1	-4.5	0.0	0.1	0.1
Real Estate	-4.4	-8.9	-8.5	0.2	0.0	0.2
Utilities	-4.9	17.2	-9.4	0.3	0.0	0.4
Cash	0.3	1.3	0.0	0.0	0.0	0.0
Total	0.0	-1.4	-3.3	1.2	0.7	1.9

DFA LCV Inception Performance & Statistics

Investment Growth Since Inception 12/1/2017



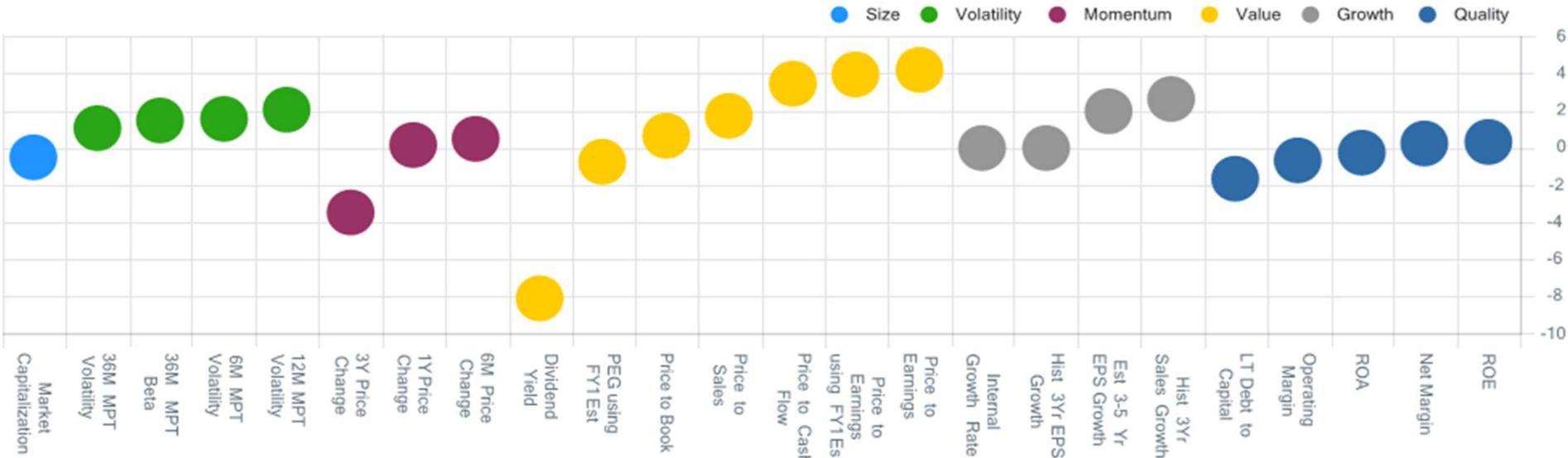
Relative Cumulative Performance Since Inception 12/1/2017



Risk Since Inception 12/1/2017

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
DFA US Large Value	5.8	20.7	-0.8	0.2	-0.1	3.9	1.1
Russell 1000 Value	6.3	18.0	-	0.3	-	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



DFA US SCV Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 10/1/1996 (Ten Year, One Month Shift)



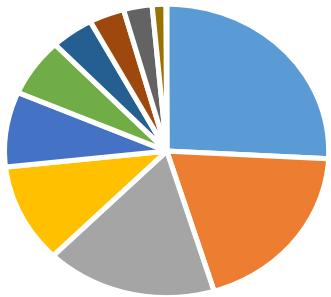
Top 10 Holdings

	Portfolio Weight	Quarterly Return
New York Community Bancorp, Inc.	0.91	2.29
United States Steel Corporation	0.90	30.08
Triton International Ltd.	0.82	-0.35
Taylor Morrison Home Corporation	0.81	-12.63
Transocean Ltd.	0.78	17.12
PBF Energy Inc.	0.76	31.31
Murphy Oil Corporation	0.75	19.12
Commercial Metals Company	0.69	-6.17
Avnet, Inc.	0.66	-3.87
Group 1 Automotive, Inc.	0.66	4.29

Trailing Returns

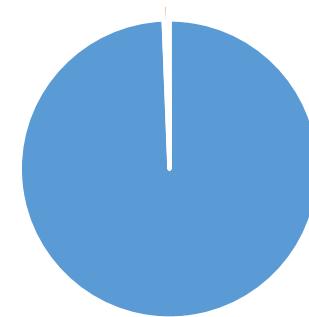
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
DFA Small Cap Value (Net)	-0.1	5.0	20.1	24.4	7.2	8.6	10.2
Russell 2000 Value	-3.0	-0.5	7.8	13.3	2.6	6.2	7.2

Equity Sector Exposure (GICS)



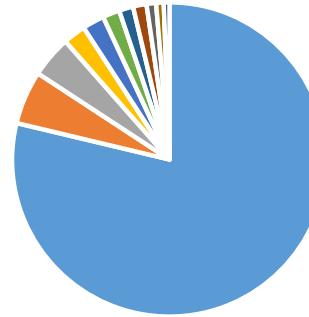
- Financials 25.8%
- Industrials 19.4%
- Consumer Discretionary 17.1%
- Energy 10.9%
- Materials 8.2%
- Information Technology 6.4%
- Consumer Staples 4.3%
- Health Care 3.5%
- Communication Services 2.9%
- Real Estate 1.4%
- Utilities 0.1%

Regional Exposure by Domicile



- North America 99.3%
- Europe emrg 0.5%
- Africa/Middle East 0.1%

Regional Exposure by Source of Revenue

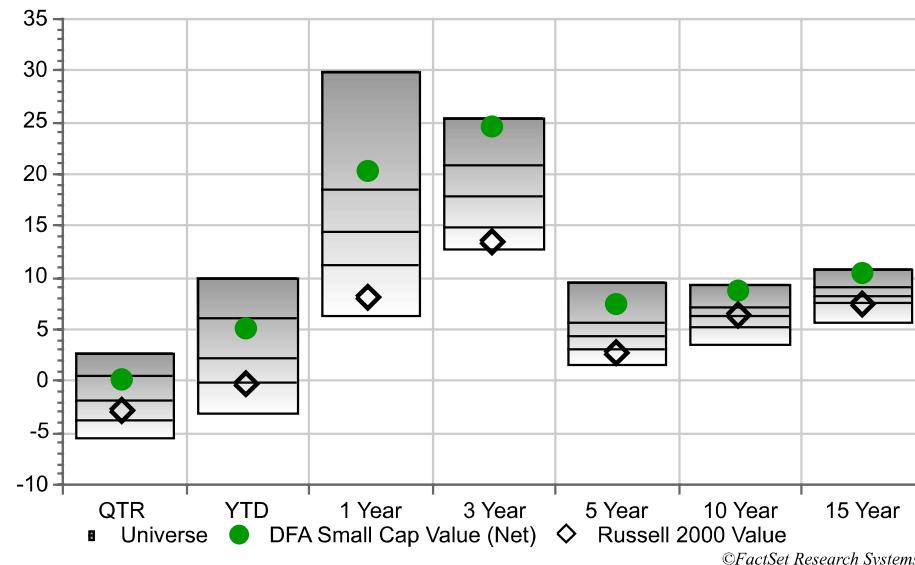


- North America 78.7%
- Europe dev 5.5%
- Asia emrg 4.3%
- Latin America 2.3%
- Other 2.2%
- United Kingdom 1.7%
- Africa/Middle East 1.4%
- Asia dev 1.4%
- Japan 1.0%
- Europe emrg 0.8%
- Australasia 0.6%

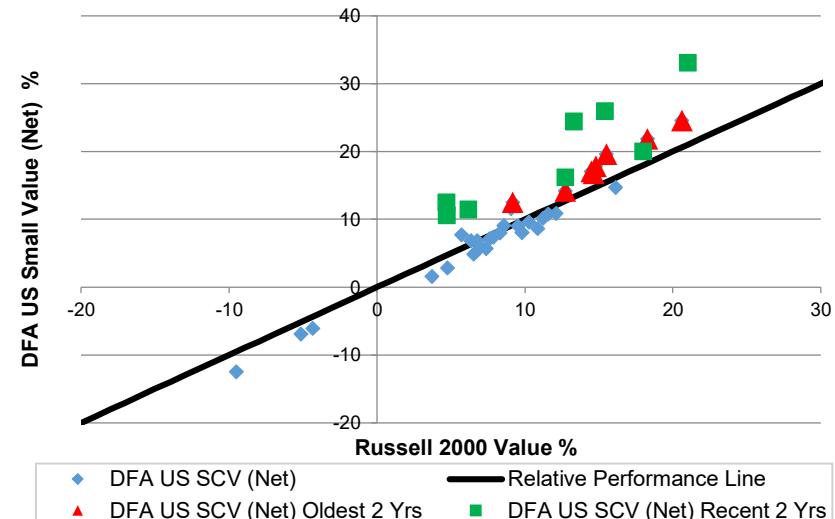
DFA US SCV vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Small Cap Value

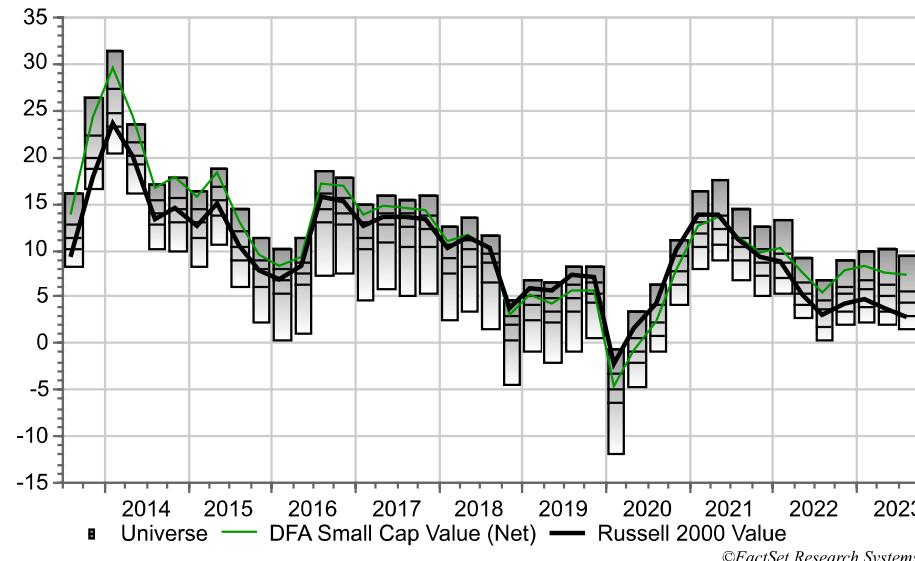


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US Small Cap Value



Over/Under Benchmark Analysis

21	Outperform
19	Underperform
40	# Observations
53%	% Outperform

DFA US SCV Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Telephone and Data Systems, Inc.	0.37	0.27	0.22
United States Steel Corporation	0.72	0.72	0.19
Super Micro Computer, Inc.	0.18	0.18	0.12
Transocean Ltd.	0.75	0.75	0.11
TechnipFMC plc	0.38	0.38	0.08
New York Community Bancorp, Inc.	1.04	1.04	0.07
CNX Resources Corporation	0.55	0.28	0.07
Abercrombie & Fitch Co.	0.24	0.16	0.06
Modine Manufacturing Company	0.25	0.19	0.06
CONSOL Energy Inc.	0.30	0.09	0.04

Top 10 Leading Detractors

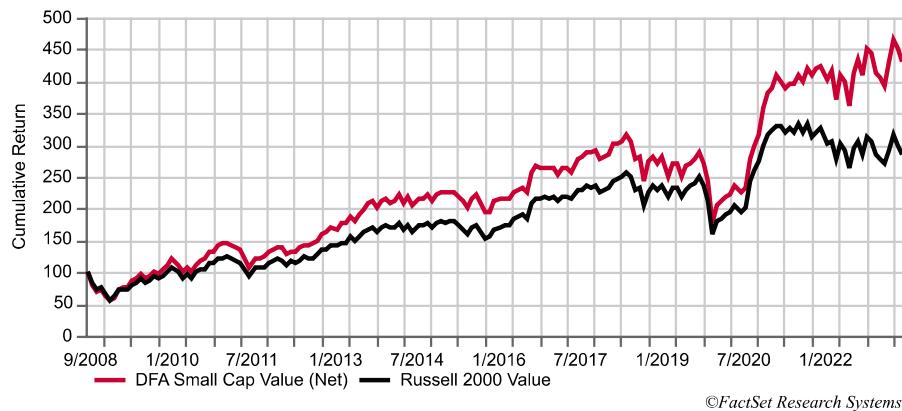
	Avg. Weights	Relative Weights	Active Return
ViaSat, Inc.	0.26	0.26	-0.17
Reata Pharmaceuticals, Inc.	0.00	-0.34	-0.15
Amkor Technology, Inc.	0.78	0.54	-0.13
Alaska Air Group, Inc.	0.28	0.28	-0.09
Macy's, Inc.	0.28	0.28	-0.08
Enovis Corporation	0.42	0.42	-0.07
JetBlue Airways Corporation	0.32	0.12	-0.06
Envista Holdings Corporation	0.36	0.36	-0.06
Carvana Co.	0.00	-0.18	-0.06
PVH Corp.	0.61	0.61	-0.06

Sector Attribution

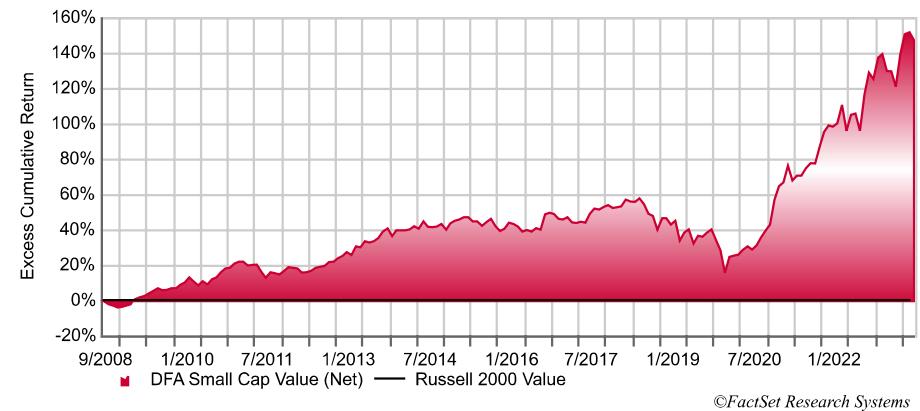
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	0.0	5.4	-6.5	0.0	0.3	0.3
Consumer Discretionary	7.1	-5.1	-5.4	-0.2	0.0	-0.1
Consumer Staples	1.5	0.6	-2.1	0.0	0.1	0.1
Energy	1.2	20.6	18.6	0.2	0.2	0.4
Financials	0.5	1.7	1.0	0.0	0.2	0.2
Health Care	-5.9	-11.8	-15.9	0.8	0.2	1.0
Industrials	4.4	-2.1	-2.5	0.0	0.1	0.1
Information Technology	1.1	-11.0	-11.7	-0.1	0.0	-0.1
Materials	3.5	0.7	-2.6	0.0	0.3	0.3
Real Estate	-9.2	-3.9	-4.7	0.2	0.0	0.2
Utilities	-4.2	-2.3	-11.7	0.4	0.0	0.4
Total	0.0	-0.1	-2.9	1.4	1.4	2.8

DFA US SCV 15 Year Performance & Statistics

Investment Growth – 15 Years



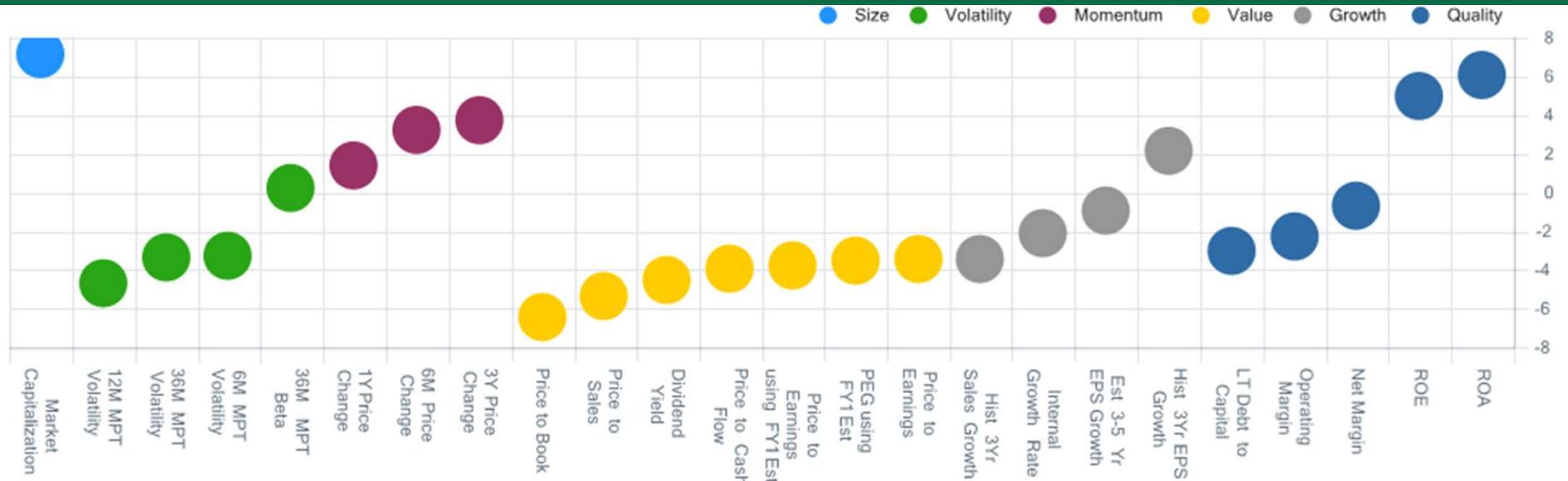
Relative Cumulative Performance – 15 Years



Risk – 15 Years

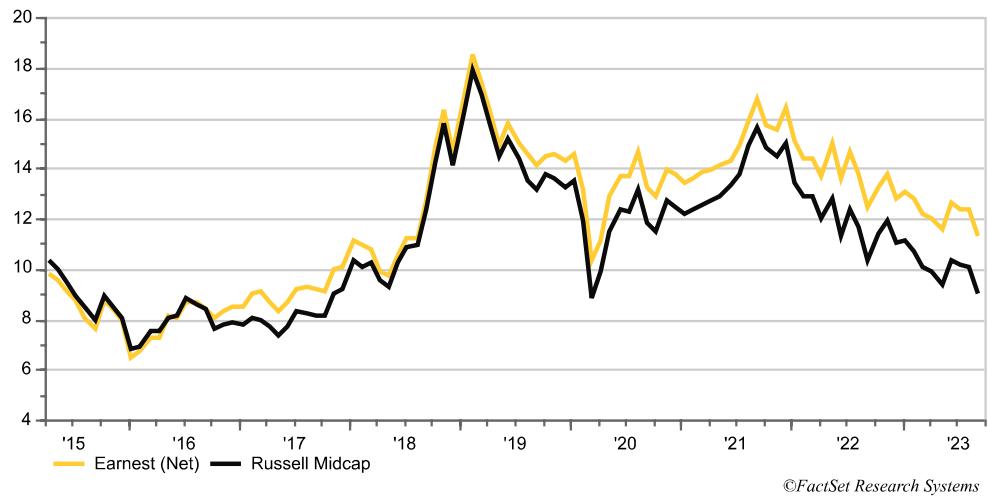
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
DFA Small Cap Value (Net)	10.2	23.6	2.6	0.4	0.8	3.9	1.1
Russell 2000 Value	7.2	21.6	--	0.3	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



Earnest Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 5/1/2005 (Ten Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Republic Services, Inc.	2.90	-6.61
Synopsys, Inc.	2.89	5.41
Akamai Technologies, Inc.	2.40	18.55
Entegris, Inc.	2.28	-15.18
CBRE Group, Inc.	2.24	-8.49
Darden Restaurants, Inc.	2.24	-13.62
Masco Corporation	2.22	-6.40
ANSYS, Inc.	2.12	-9.91
Progressive Corporation	2.12	5.32
Raymond James Financial, Inc.	2.06	-2.81

Trailing Returns

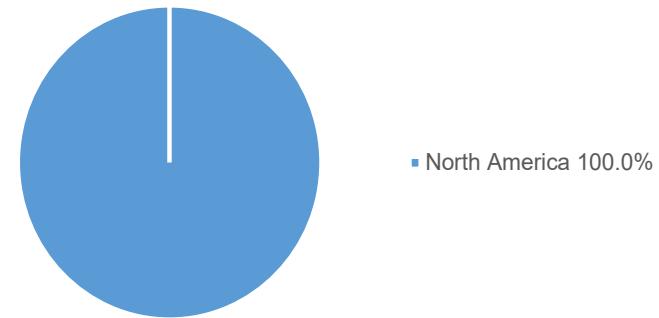
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Earnest (Net)	-4.5	3.8	11.7	9.1	8.8	11.2	11.3
Russell Midcap	-4.7	3.9	13.4	8.1	6.4	9.0	10.3

Equity Sector Exposure (GICS)



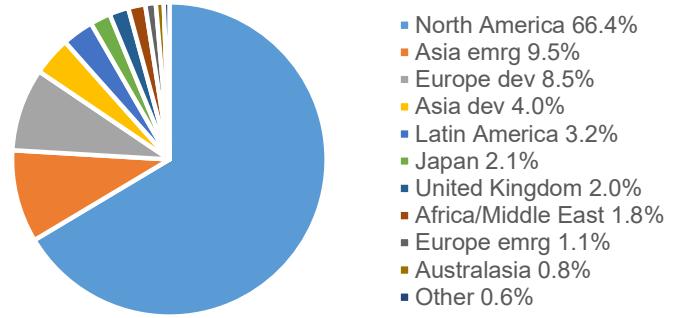
- Industrials 26.0%
- Information Technology 18.3%
- Financials 17.1%
- Health Care 10.0%
- Real Estate 6.9%
- Materials 6.9%
- Consumer Discretionary 5.9%
- Energy 5.9%
- Utilities 1.5%
- Consumer Staples 1.5%

Regional Exposure by Domicile



■ North America 100.0%

Regional Exposure by Source of Revenue



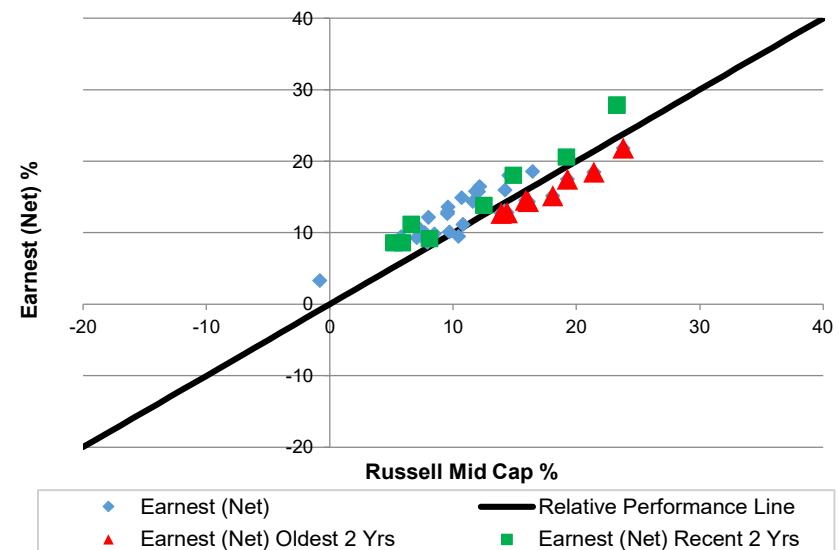
Earnest vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US: Mid Cap Core

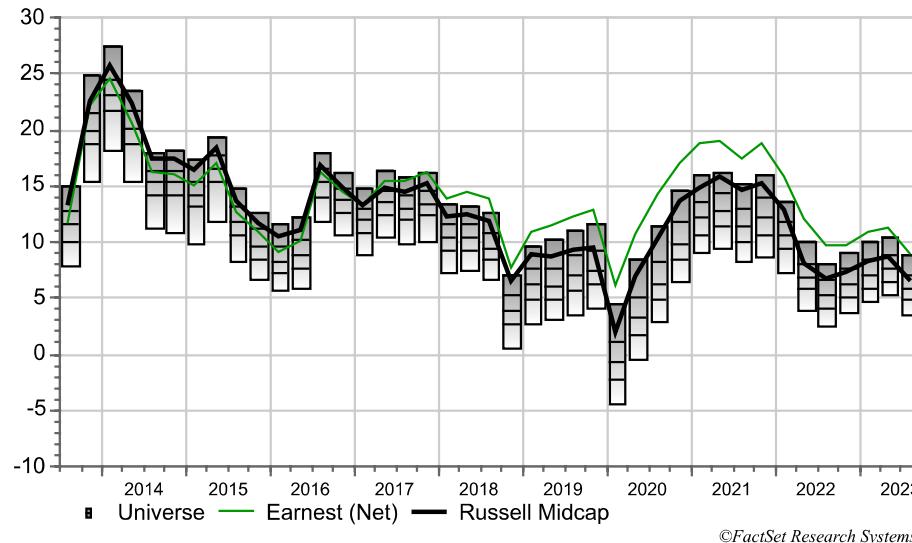


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US: Mid Cap Core



Over/Under Benchmark Analysis

30	Outperform
10	Underperform
40	# Observations
75%	% Outperform

Earnest Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Black Knight, Inc.	1.16	1.05	0.38
Akamai Technologies, Inc.	2.06	1.91	0.31
Helmerich & Payne, Inc.	0.99	0.99	0.17
Global Payments Inc.	1.51	1.22	0.17
Activision Blizzard, Inc.	0.59	0.59	0.16
Murphy Oil Corporation	1.01	1.01	0.16
ChampionX Corporation	1.25	1.25	0.16
Packaging Corporation of America	1.19	1.07	0.16
Houlihan Lokey, Inc.	1.76	1.71	0.15
Synopsys, Inc.	2.67	2.67	0.13

Top 10 Leading Detractors

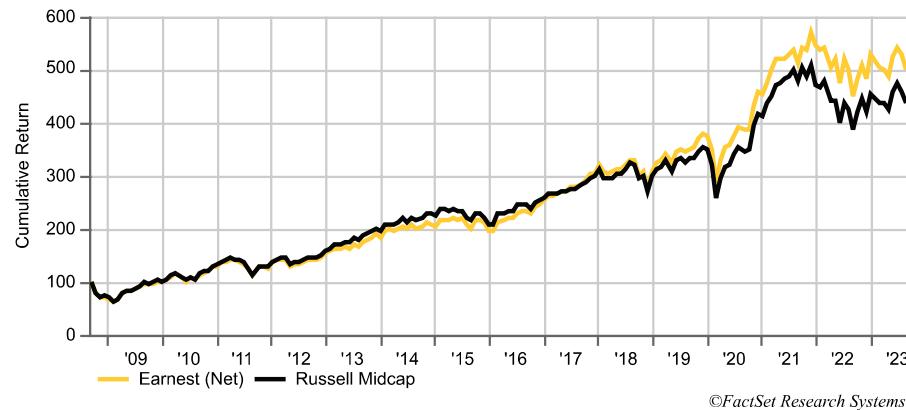
	Avg. Weights	Relative Weights	Active Return
Spirit AeroSystems Holdings, Inc.	1.80	1.77	-0.81
Keysight Technologies, Inc.	2.21	1.94	-0.42
Albemarle Corporation	1.68	1.44	-0.35
Entegris, Inc.	2.46	2.30	-0.35
Darden Restaurants, Inc.	2.41	2.22	-0.30
Lumentum Holdings Inc.	1.17	1.14	-0.26
Sensata Technologies Holding PLC	1.67	1.61	-0.25
Scotts Miracle-Gro Company	1.49	1.47	-0.24
GATX Corporation	1.45	1.45	-0.22
Arrow Electronics, Inc.	1.82	1.74	-0.22

Sector Attribution

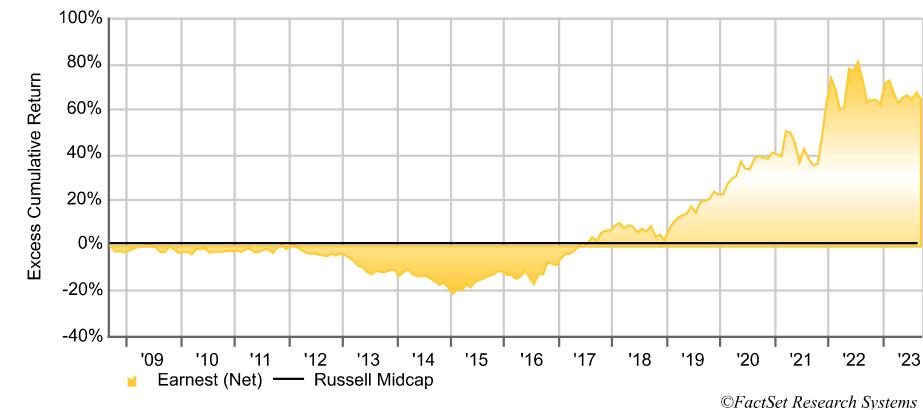
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-2.8	10.0	-9.9	0.2	0.1	0.3
Consumer Discretionary	-4.5	-8.6	-7.0	0.1	-0.1	0.0
Consumer Staples	-2.5	-10.6	-8.7	0.1	0.0	0.1
Energy	0.2	14.2	13.1	0.0	0.0	0.1
Financials	1.0	5.1	1.5	0.1	0.5	0.6
Health Care	-1.9	-5.4	-11.6	0.1	0.6	0.7
Industrials	6.2	-9.2	-4.6	0.0	-1.2	-1.2
Information Technology	5.2	-5.3	-3.9	0.0	-0.2	-0.2
Materials	1.2	-11.6	-4.8	0.0	-0.5	-0.5
Real Estate	-1.0	-6.9	-7.8	0.0	0.1	0.1
Utilities	-4.1	-8.1	-7.3	0.1	0.0	0.1
Cash	2.9	1.3	0.0	0.2	0.0	0.2
Total	0.0	-4.4	-4.7	1.0	-0.7	0.3

Earnest 15 Year Performance & Statistics

Investment Growth – 15 Years



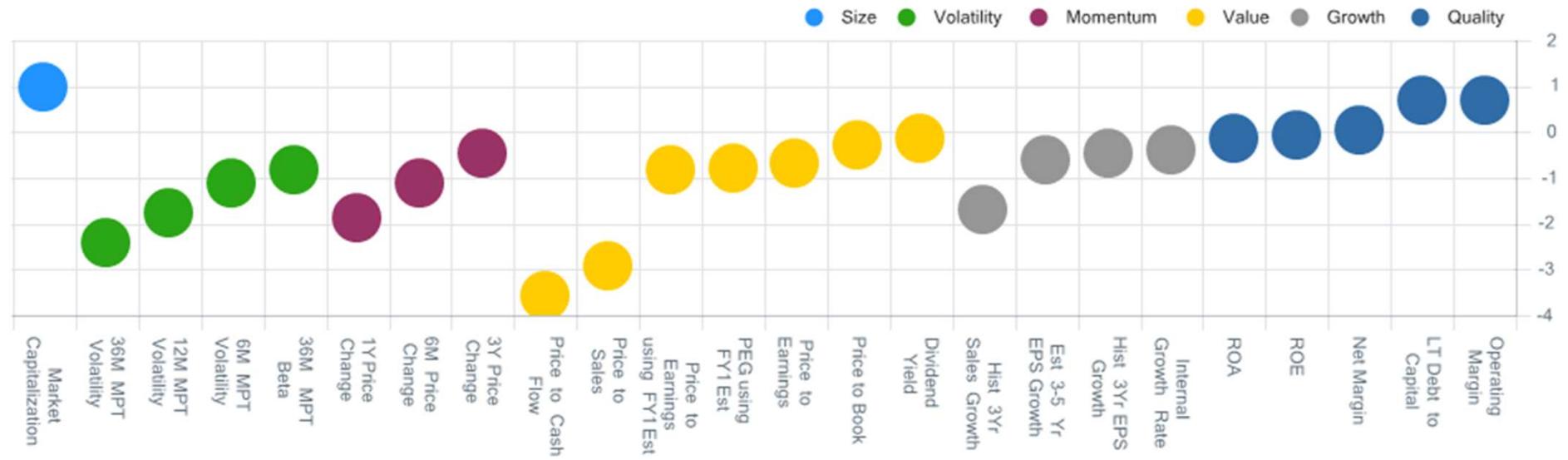
Relative Cumulative Performance – 15 Years



Risk – 15 Years

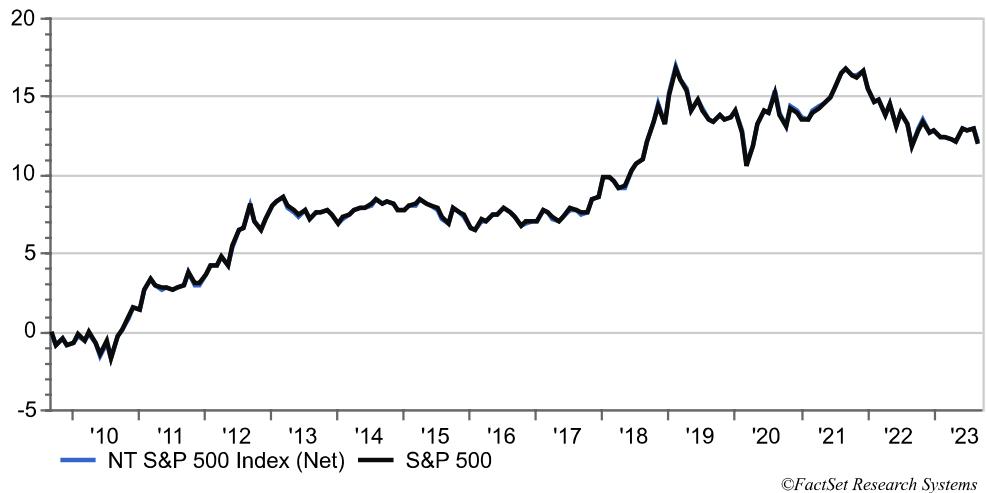
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Earnest (Net)	11.3	18.6	1.1	0.6	0.3	3.6	1.0
Russell Midcap	10.3	18.4	-	0.5	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



Northern Trust S&P 500 Portfolio Snapshot – September 30, 2023

Rolling Returns Since 10/1/1999 (Ten Year, One Month Shift)



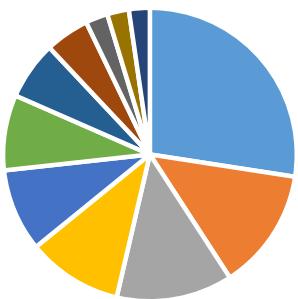
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Apple Inc.	7.04	-11.62
Microsoft Corporation	6.47	-6.64
Alphabet Inc.	4.07	9.17
Amazon.com, Inc.	3.10	-2.49
NVIDIA Corporation	2.98	2.84
Meta Platforms, Inc.	1.86	4.61
Tesla, Inc.	1.85	-4.41
Berkshire Hathaway Inc.	1.73	2.73
Exxon Mobil Corporation	1.33	10.53
UnitedHealth Group Incorporated	1.10	5.29

Trailing Returns

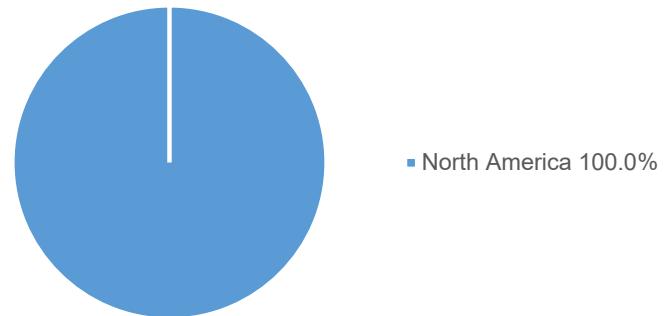
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
NT S&P 500 Index (Net)	-3.3	13.1	21.6	10.1	9.9	11.9	11.3
S&P 500	-3.3	13.1	21.6	10.2	9.9	11.9	11.3

Equity Sector Exposure (GICS)

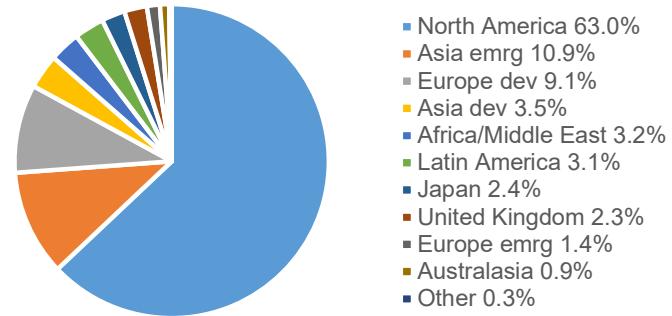


- Information Technology 27.4%
- Health Care 13.4%
- Financials 12.8%
- Consumer Discretionary 10.5%
- Communication Services 9.1%
- Industrials 8.3%
- Consumer Staples 6.4%
- Energy 4.8%
- Materials 2.5%
- Utilities 2.4%
- Real Estate 2.3%

Regional Exposure by Domicile



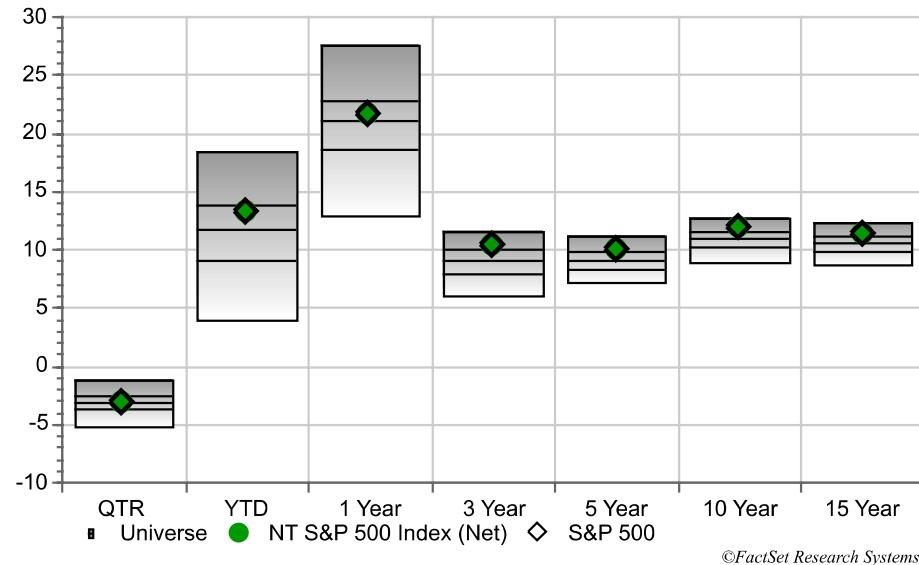
Regional Exposure by Source of Revenue



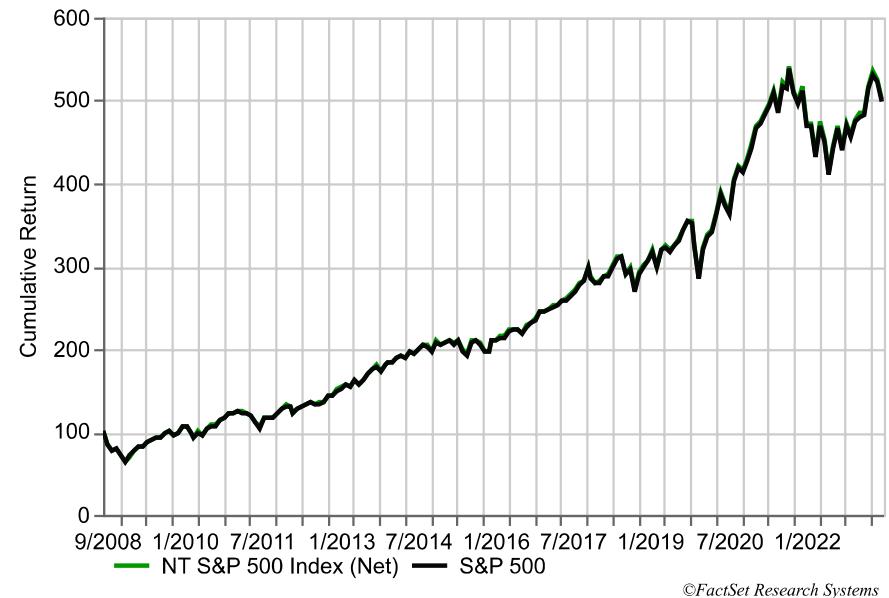
Northern Trust S&P 500 vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US: Large Cap Core

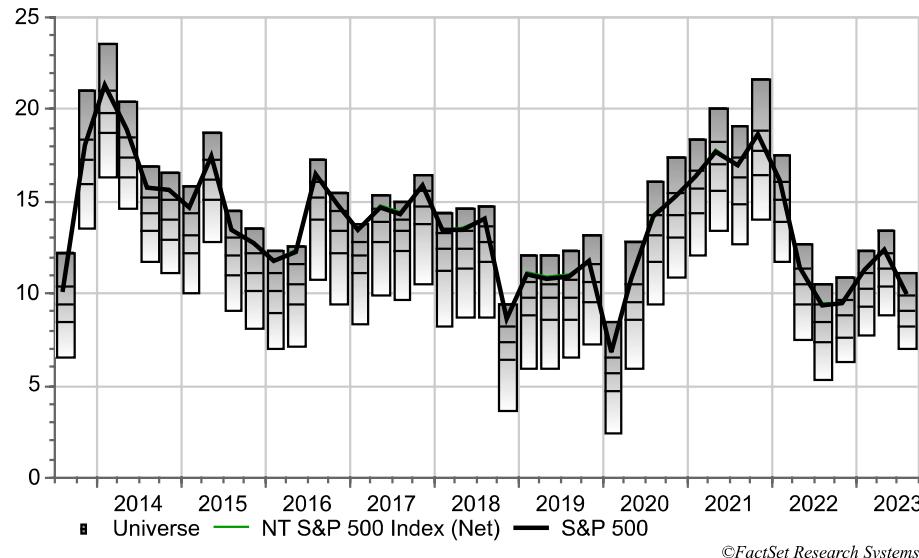


Investment Growth – 15 Years



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US: Large Cap Core

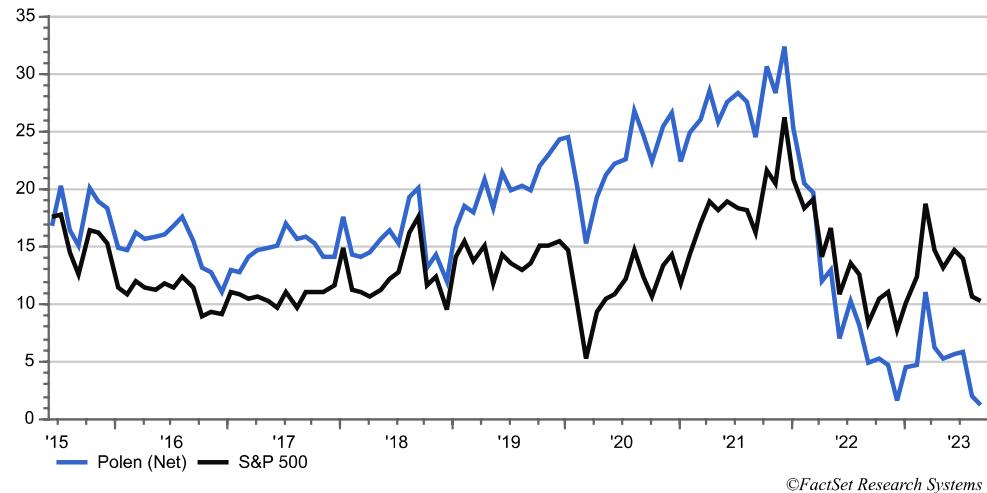


Risk – 15 Years

	Return	Std Dev	Sharpe Ratio	Tracking Error
NT S&P 500 Index (Net)	11.3	16.0	0.7	0.1
S&P 500	11.3	16.0	0.7	--

Polen Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 7/1/2012 (Three Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Amazon.com, Inc.	9.34	-2.49
Alphabet Inc.	7.78	8.99
Netflix, Inc.	7.38	-14.28
ServiceNow, Inc.	6.54	-0.54
Adobe Incorporated	6.21	4.28
Microsoft Corporation	6.07	-7.09
Mastercard Incorporated	5.28	0.81
Visa Inc.	4.78	-2.97
Salesforce, Inc.	4.69	-4.01
Airbnb, Inc.	4.52	7.06

Trailing Returns

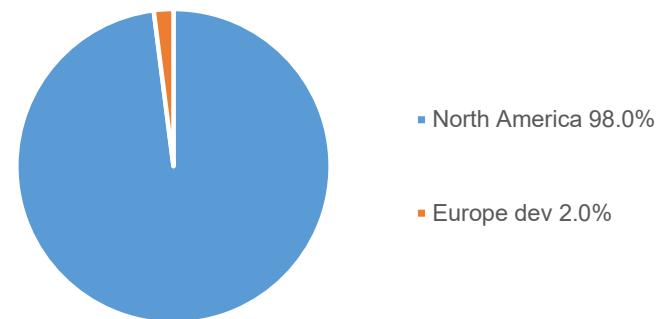
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Inception 7/1/2012
Polen (Net)	-3.4	20.9	21.4	1.1	8.8	13.8	13.6
S&P 500	-3.3	13.1	21.6	10.2	9.9	11.9	12.9
S&P 500 Growth	-2.6	18.1	19.8	6.8	10.4	13.5	14.1

Equity Sector Exposure (GICS)

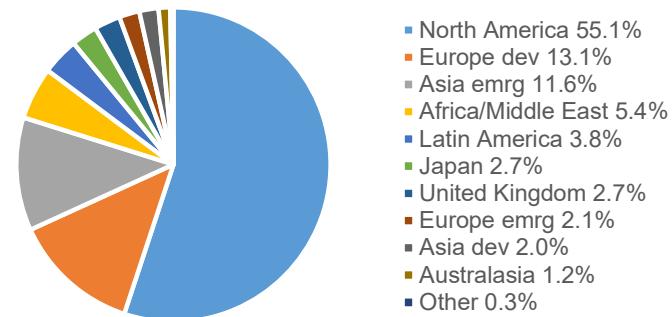


- Information Technology 35.4%
- Health Care 19.3%
- Consumer Discretionary 15.8%
- Communication Services 15.4%
- Financials 14.1%

Regional Exposure by Domicile



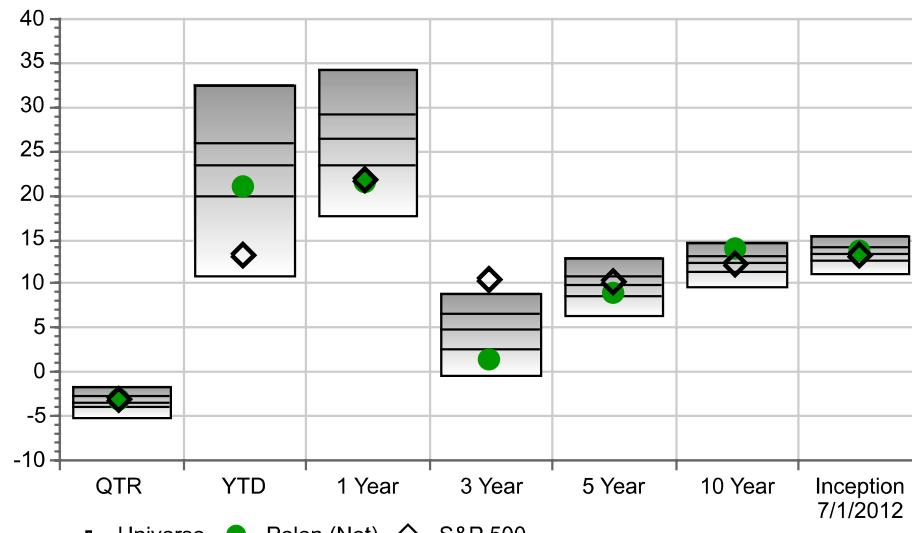
Regional Exposure by Source of Revenue



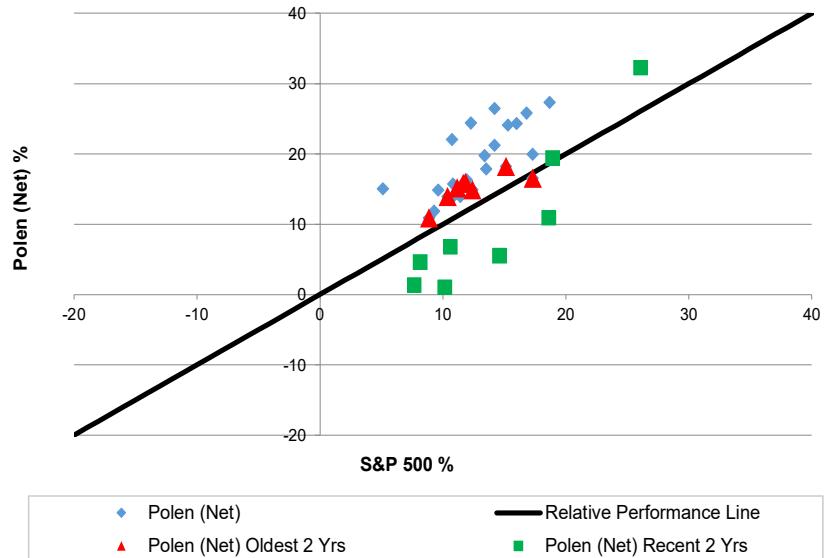
Polen vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Large Cap Growth

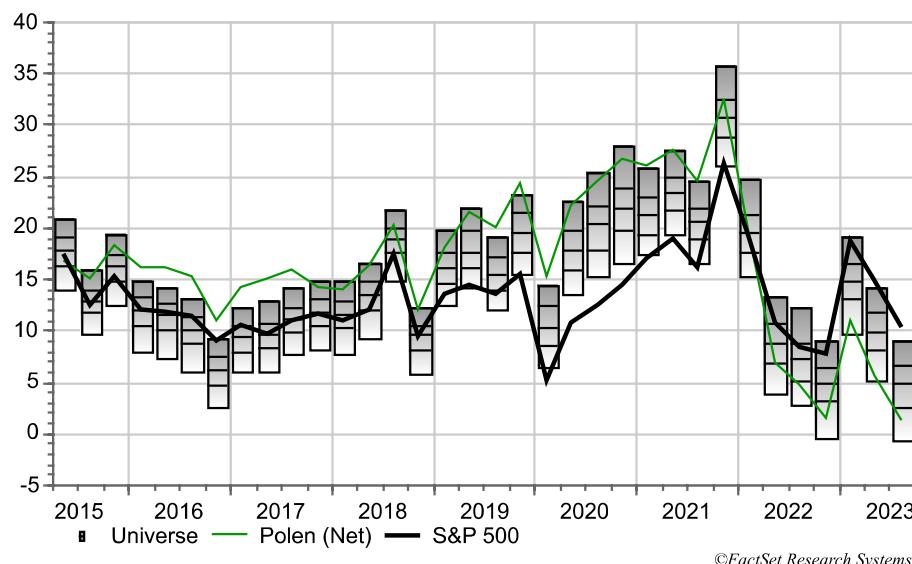


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2012 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Large Cap Growth



Over/Under Benchmark Analysis

27	Outperform
7	Underperform
34	# Observations
79%	% Outperform

Polen Attribution Analysis – September 30, 2023

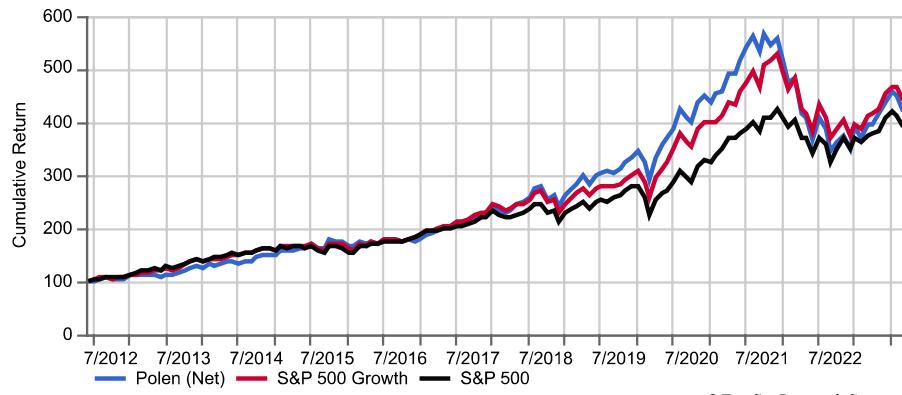
Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Airbnb, Inc.	4.27	4.27	0.31	Netflix, Inc.	8.07	7.55	-1.07
Alphabet Inc.	7.27	3.48	0.26	Illumina, Inc.	2.46	2.38	-0.62
Adobe Incorporated	6.09	5.44	0.19	PayPal Holdings, Inc.	4.19	3.99	-0.48
UnitedHealth Group Incorporated	3.43	2.23	0.12	Abbott Laboratories	3.68	3.18	-0.33
Microsoft Corporation	5.94	-0.64	0.04	Docusign, Inc	1.17	1.17	-0.20
Zoetis Inc.	2.67	2.45	0.02	NIKE, Inc.	1.87	1.52	-0.19
Mastercard Incorporated	5.06	4.17	0.01	Salesforce, Inc.	4.71	4.14	-0.18
Autodesk, Inc.	2.96	2.84	0.01	Align Technology, Inc.	1.34	1.27	-0.17
Accenture plc	3.97	3.44	-0.02	Amazon.com, Inc.	9.62	6.46	-0.15
Gartner, Inc.	1.98	1.90	-0.04	Eli Lilly and Company	0.00	-1.03	-0.13

Sector Attribution

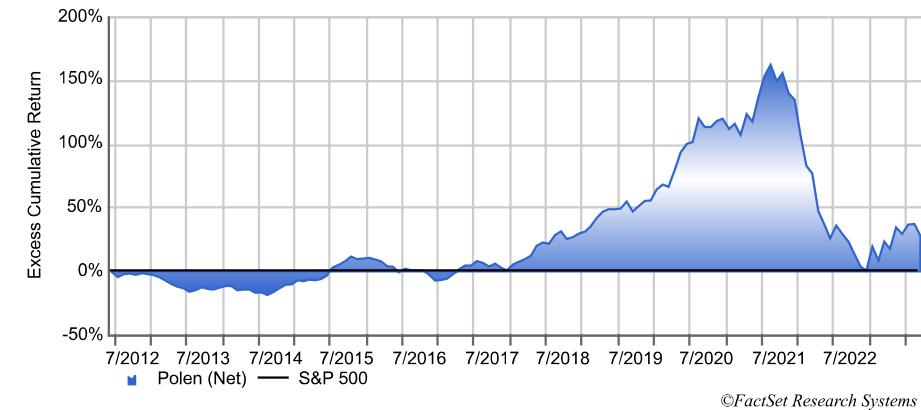
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	6.7	-3.7	3.0	0.4	-1.0	-0.6
Consumer Discretionary	5.2	-1.2	-4.8	-0.1	0.6	0.5
Consumer Staples	-6.6	0.0	-5.9	0.2	0.0	0.2
Energy	-4.3	0.0	12.2	-0.6	0.0	-0.6
Financials	1.6	-4.7	-1.1	0.0	-0.5	-0.5
Health Care	3.4	-7.0	-2.7	0.0	-0.7	-0.7
Industrials	-8.4	0.0	-5.2	0.2	0.0	0.2
Information Technology	7.2	-2.1	-5.6	-0.2	1.3	1.1
Materials	-2.5	0.0	-4.7	0.0	0.0	0.0
Real Estate	-2.5	0.0	-8.9	0.1	0.0	0.1
Utilities	-2.5	0.0	-9.3	0.2	0.0	0.2
Cash	2.7	1.3	1.3	0.1	0.0	0.1
Total	0.0	-3.3	-3.2	0.4	-0.4	0.0

Polen Inception Performance & Statistics

Investment Growth Since Inception 7/1/2012



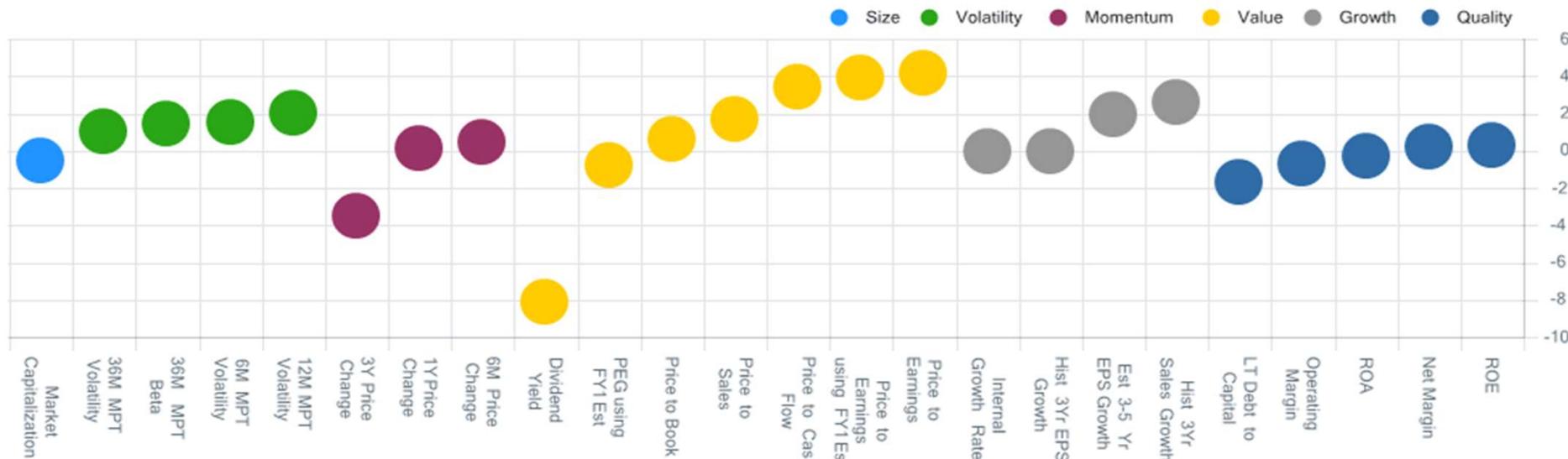
Relative Cumulative Performance Since Inception 7/1/2012



Risk Since Inception 7/1/2012

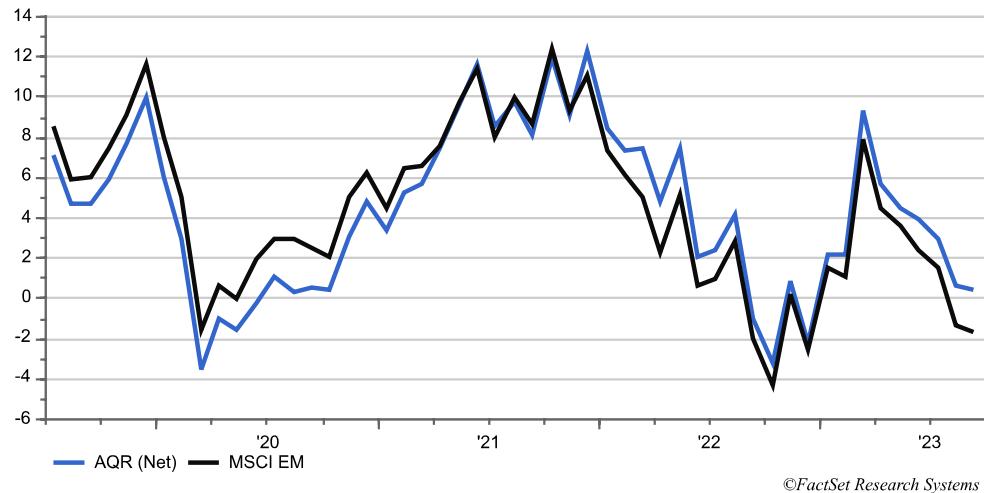
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Polen (Net)	13.6	16.1	0.5	0.8	0.1	6.6	1.0
S&P 500	12.9	14.3	--	0.8	--	--	1.0
S&P 500 Growth	14.1	15.5	--	0.8	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



AQR Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 8/1/2016 (Three Year, One Month Shift)



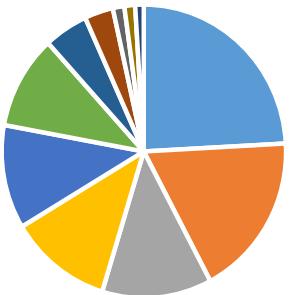
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Taiwan Semi Mfg. Co. Ltd.	5.22	-11.89
Tencent Holdings Ltd.	2.67	-7.60
Samsung Electronics Co., Ltd.	2.64	-7.00
Petroleo Brasileiro S.A	1.86	17.13
Alibaba Group Holding Limited	1.83	5.48
China Construction Bank Corporation	1.78	-4.64
Larsen & Toubro Limited	1.44	22.00
NTPC Limited	1.27	29.99
Saudi Basic Industries Corp.	1.26	-4.31
Meituan	1.26	-6.24

Trailing Returns

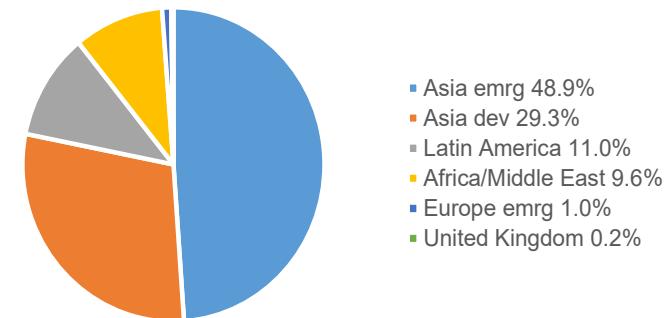
	QTR	YTD	1 Year	3 Year	5 Year	Inception
AQR (Net)	-0.8	7.0	17.0	0.3	1.1	4.3
MSCI EM	-2.9	1.8	11.7	-1.7	0.6	3.7

Equity Sector Exposure (GICS)

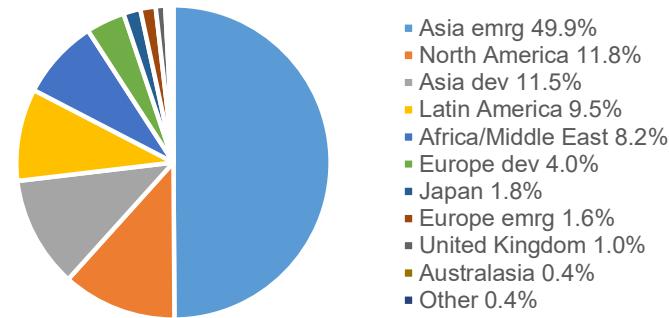


- Financials 24.1%
- Information Technology 18.1%
- Industrials 12.5%
- Energy 11.7%
- Materials 11.5%
- Consumer Discretionary 10.3%
- Communication Services 5.0%
- Utilities 3.2%
- Real Estate 1.3%
- Health Care 1.2%
- Consumer Staples 1.0%

Regional Exposure by Domicile



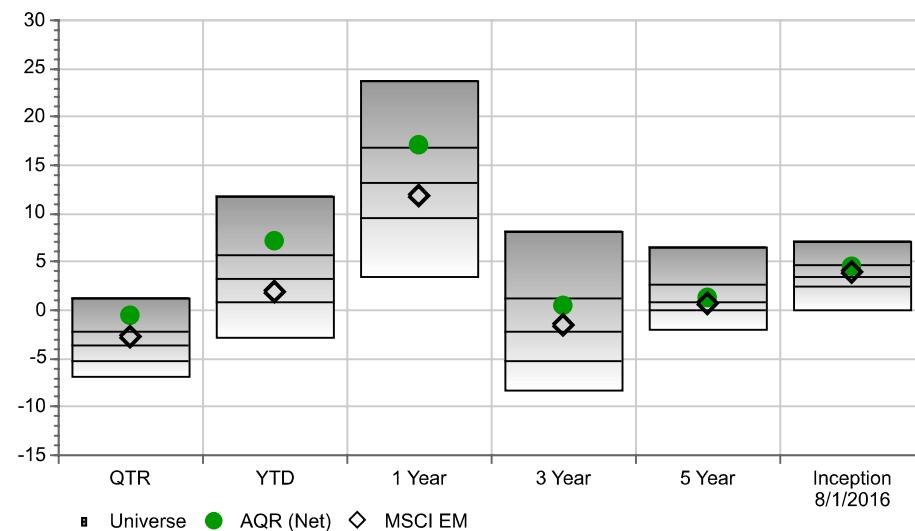
Regional Exposure by Source of Revenue



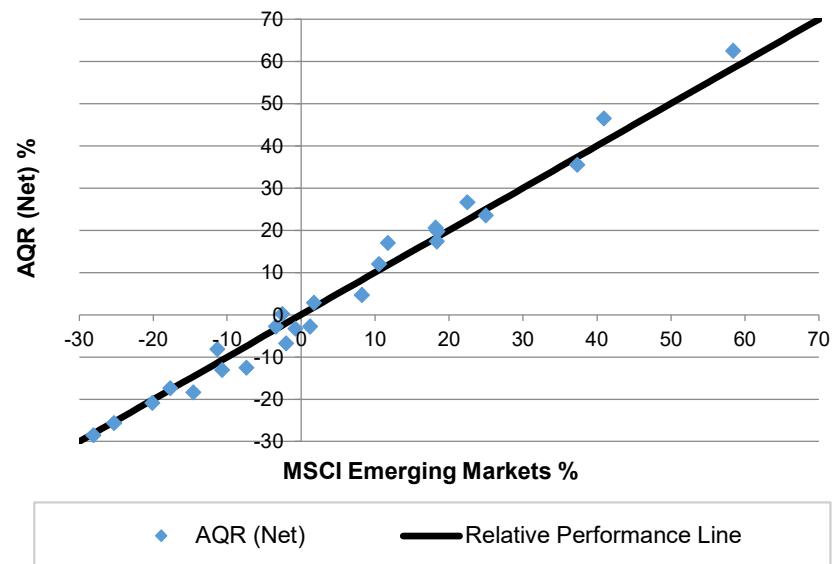
AQR vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Emerging Markets

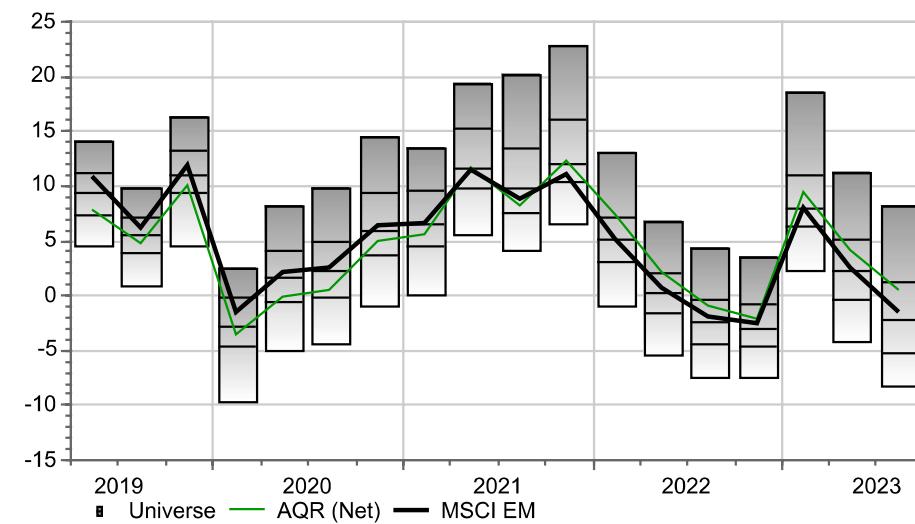


One-Year Rolling Return Versus Benchmark



Rolling Returns 8/1/2016 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Emerging Markets



Over/Under Benchmark Analysis

12	Outperform
13	Underperform
25	# Observations
48%	% Outperform

AQR Attribution Analysis – September 30, 2023

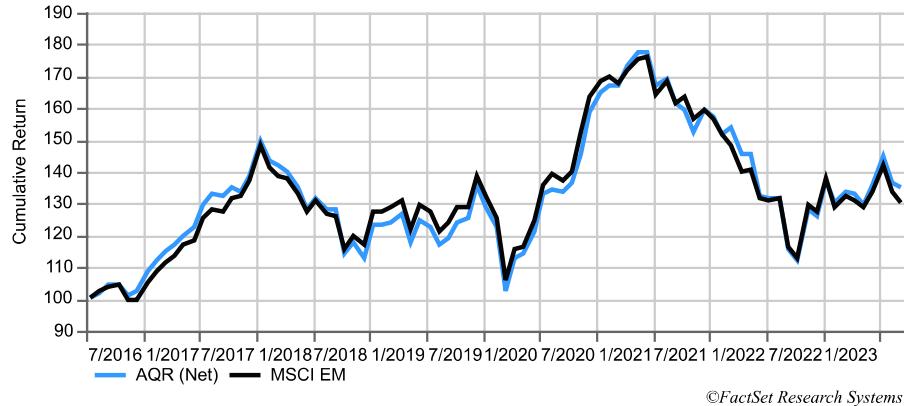
Top 10 Leading Contributors			Top 10 Leading Detractors				
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Coal India Ltd.	1.12	1.05	0.31	Volcan Investments Ltd.	1.04	1.01	-0.22
NTPC Limited	1.25	1.09	0.29	CITIC Limited	0.69	0.59	-0.13
JD.com, Inc.	0.19	-0.58	0.22	Doosan Bobcat, Inc.	0.87	0.83	-0.13
Larsen & Toubro Limited	1.36	0.96	0.21	Kia Corp.	1.26	1.01	-0.10
East Buy Holding Ltd.	0.51	0.49	0.20	Gerdau S/A.	0.38	0.28	-0.09
PT Adaro Energy Indonesia Tbk	0.97	0.93	0.20	Korean Air Lines Co., Ltd.	0.80	0.75	-0.09
Quanta Computer Inc.	0.44	0.17	0.19	POSCO Holdings Inc.	0.00	-0.59	-0.09
Oil & Natural Gas Corp. Ltd.	1.16	1.06	0.18	Indorama Ventures Public Co. Ltd.	0.42	0.39	-0.09
Akbank T.A.S.	0.42	0.37	0.17	Hanwha Aerospace	0.39	0.35	-0.08
Petroleo Brasileiro S.A	1.74	0.91	0.16	GCL Technology Holdings Limited	0.52	0.46	-0.08

Sector Attribution

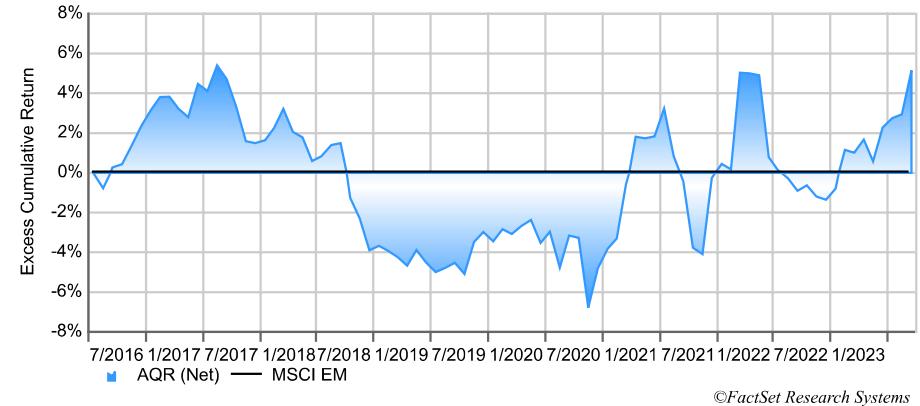
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-4.6	-7.8	-5.9	0.2	-0.1	0.1
Consumer Discretionary	-2.2	3.5	0.7	0.0	0.3	0.3
Consumer Staples	-4.4	-3.9	-4.4	0.1	0.2	0.1
Energy	6.1	15.6	6.1	0.6	1.0	1.6
Financials	-2.6	1.9	-1.9	0.0	0.8	0.7
Health Care	-1.0	-1.1	-0.8	0.0	-0.1	-0.1
Industrials	5.8	-4.5	-3.8	0.0	-0.1	-0.1
Information Technology	-1.1	-2.6	-6.7	0.0	0.9	0.9
Materials	3.8	-2.3	-2.6	0.0	0.0	0.0
Real Estate	-0.4	-5.3	-0.6	0.0	-0.1	-0.1
Utilities	0.7	13.4	-3.0	0.0	0.5	0.5
Total	0.0	1.1	-2.9	0.8	3.3	4.0

AQR Inception Performance & Statistics

Investment Growth Since Inception 8/1/2016



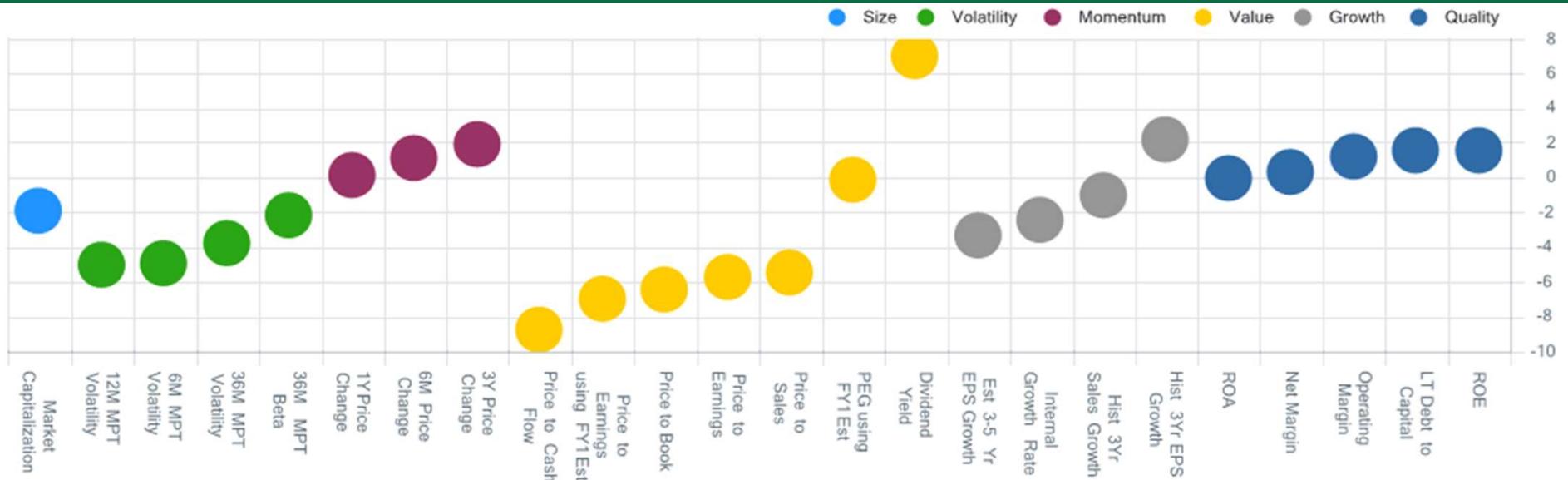
Relative Cumulative Performance Since Inception 8/1/2016



Risk Since Inception 8/1/2016

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
AQR (Net)	4.3	17.6	0.6	0.2	0.2	3.4	1.0
MSCI EM	3.7	17.1	-	0.1	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



Brandes Portfolio Snapshot – September 30, 2023

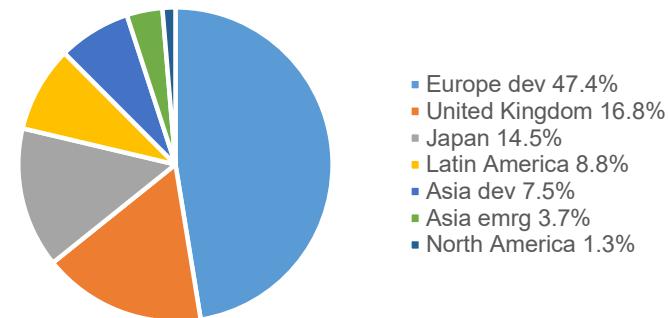
Rolling Returns Since Inception 2/1/1998 (Ten Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Takeda Pharmaceutical Company Limited	3.66	1.31
Rolls-Royce Holdings plc	2.86	40.40
Alibaba Group Holding Limited	2.61	5.48
GSK plc	2.34	4.18
Sanofi	2.31	0.29
SAP SE	2.26	-4.76
Heidelberg Materials AG	2.24	-5.12
UBS Group AG	2.13	22.63
Petroleo Brasileiro S.A.	2.10	17.13
Intesa Sanpaolo S.p.A.	2.03	-1.34

Regional Exposure by Domicile



Trailing Returns

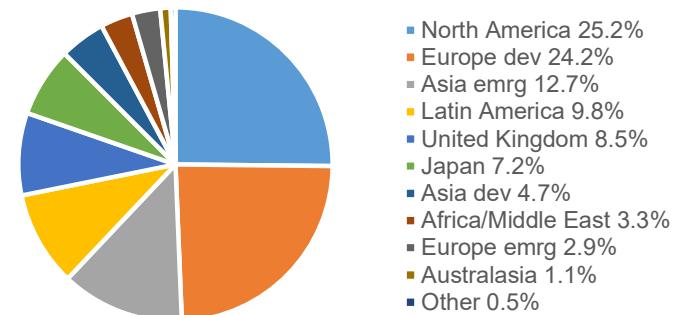
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Brandes (Net)	1.7	18.4	43.4	15.1	4.7	4.7	5.0
MSCI EAFE	-4.1	7.1	25.6	5.8	3.2	3.8	4.7
MSCI EAFE Value	0.6	9.9	31.5	11.1	2.8	3.0	3.9

Equity Sector Exposure (GICS)



- Health Care 17.7%
- Financials 17.5%
- Consumer Staples 16.0%
- Consumer Discretionary 11.5%
- Communication Services 8.7%
- Energy 8.0%
- Industrials 6.7%
- Information Technology 5.6%
- Materials 5.0%
- Utilities 1.6%
- Real Estate 1.6%

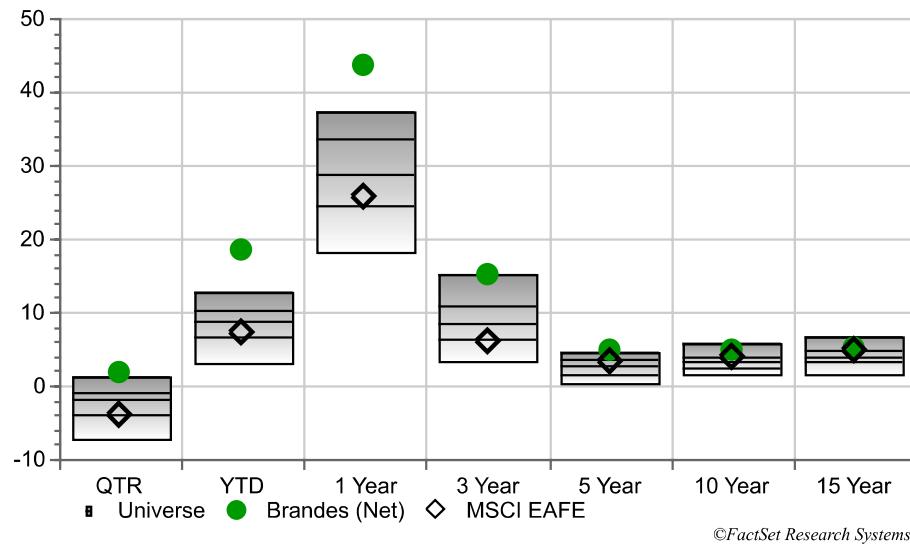
Regional Exposure by Source of Revenue



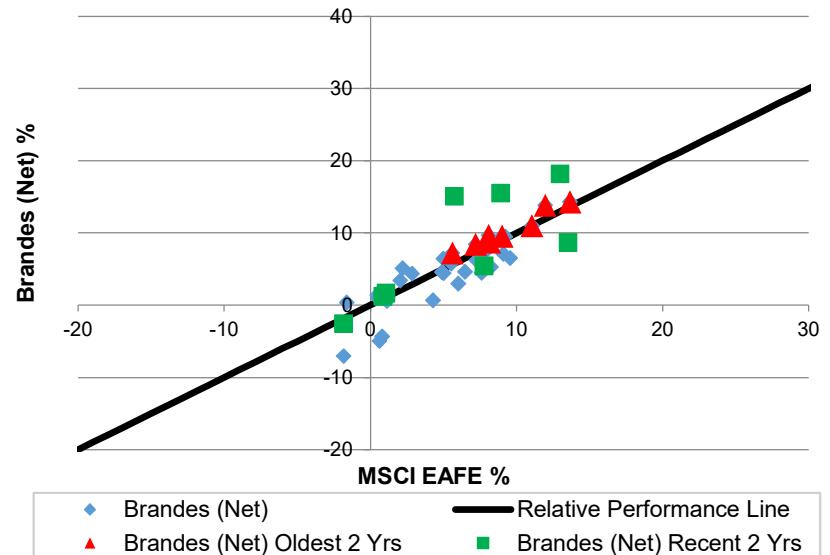
Brandes vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Int'l Multi-Cap Value

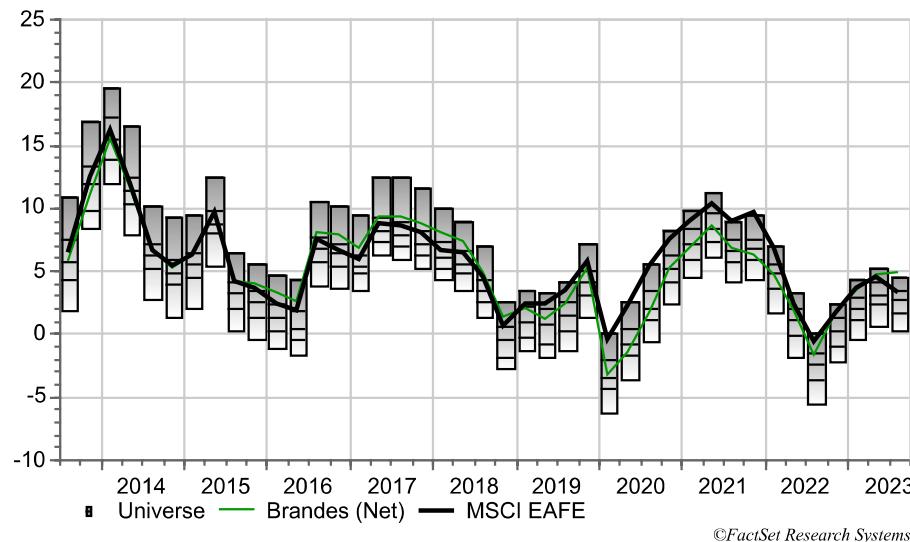


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US Int'l Multi Cap Value



Over/Under Benchmark Analysis

21	Outperform
19	Underperform
40	# Observations
53%	% Outperform

Brandes Attribution Analysis – September 30, 2023

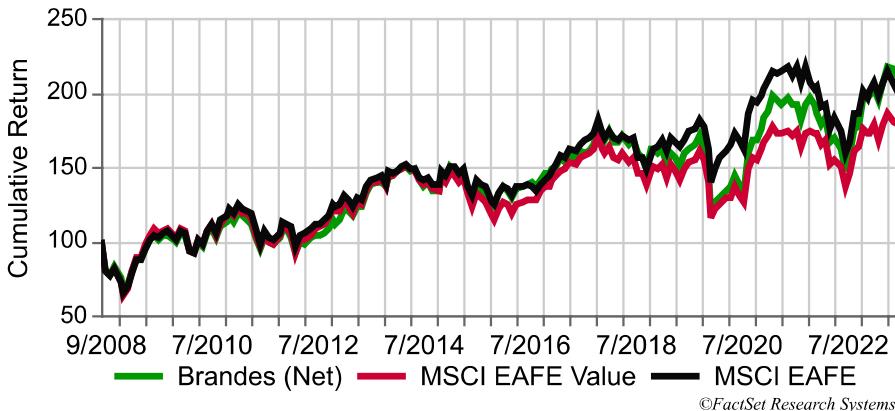
Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Rolls-Royce Holdings plc	2.62	2.49	0.84	WPP plc	2.13	2.06	-0.30
POSCO Holdings Inc.	0.24	0.24	0.50	Anheuser-Busch InBev SA/NV	2.69	2.35	-0.23
UBS Group AG	2.29	1.80	0.36	Taiwan Semi Mfg. Co. Ltd.	1.83	1.83	-0.22
Petroleo Brasileiro S.A	1.92	1.92	0.31	Embraer S.A.	2.14	2.14	-0.22
Fibra Uno Administracion SA de CV	1.61	1.61	0.24	Kering	1.36	1.09	-0.22
Eni SpA	1.84	1.61	0.21	Swatch Group AG	2.07	2.00	-0.20
Mitsubishi UFJ Financial Group, Inc.	1.76	1.19	0.19	Henkel AG & Co. KGaA	1.97	1.84	-0.19
Marks and Spencer Group PLC	1.06	1.06	0.17	Carrefour SA	2.06	1.99	-0.16
Fresenius SE & Co. KGaA	1.65	1.57	0.17	J Sainsbury plc	1.52	1.48	-0.14
Honda Motor Co., Ltd.	1.49	1.18	0.16	Koninklijke Philips N.V.	2.02	1.89	-0.14

Sector Attribution

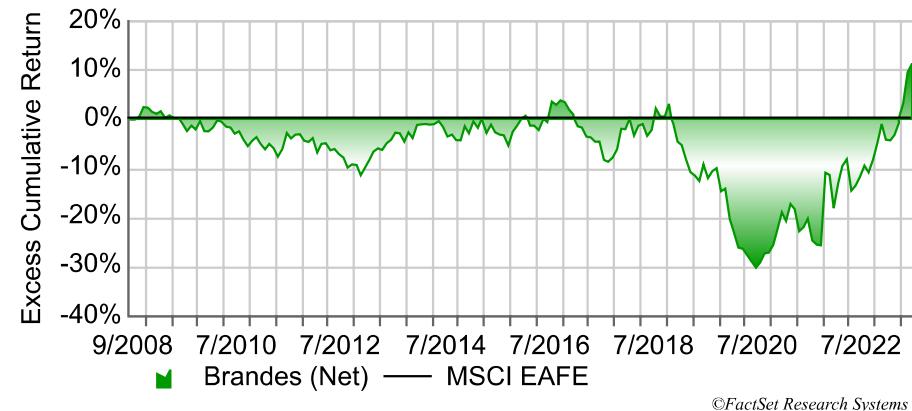
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	4.0	-5.0	-3.5	0.0	-0.1	-0.1
Consumer Discretionary	-1.0	-1.5	-8.3	0.0	0.7	0.8
Consumer Staples	5.0	-4.2	-7.1	-0.2	0.5	0.3
Energy	2.9	13.7	11.6	0.5	0.2	0.6
Financials	-1.3	5.6	0.8	-0.1	0.8	0.7
Health Care	4.0	2.1	-3.1	0.1	0.9	1.0
Industrials	-9.7	11.2	-6.0	0.2	1.1	1.3
Information Technology	-2.2	-7.6	-10.7	0.2	0.2	0.3
Materials	-1.8	5.0	-3.1	0.0	0.5	0.6
Real Estate	-0.7	16.5	-1.1	0.0	0.3	0.2
Utilities	-1.7	-7.4	-8.8	0.1	0.0	0.1
Cash	2.3	1.3	0.0	0.1	0.0	0.1
Total	0.0	1.8	-4.1	0.9	5.1	5.9

Brandes 15 Year Performance & Statistics

Investment Growth – 15 Years



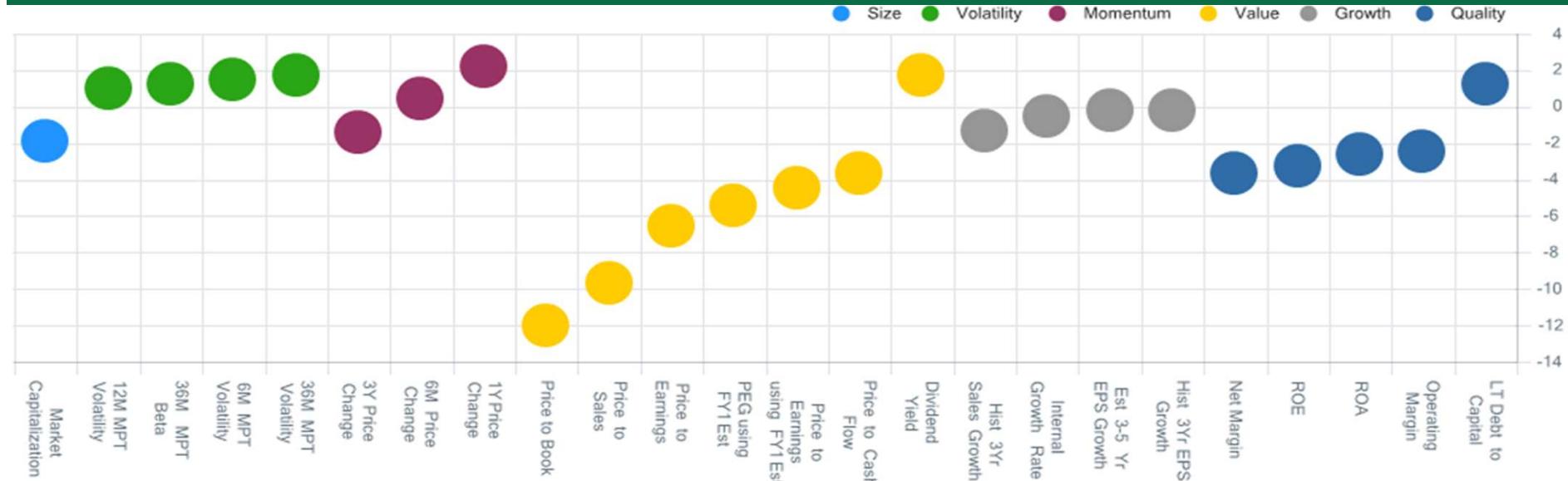
Relative Cumulative Performance – 15 Years



Risk – 15 Years

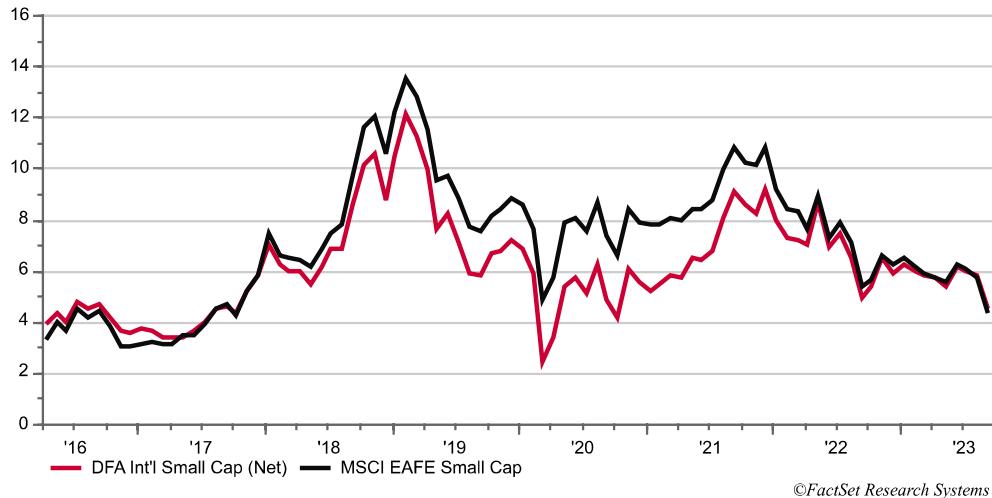
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Brandes (Net)	5.0	18.3	0.5	0.2	0.1	5.3	1.0
MSCI EAFE	4.7	17.5	--	0.2	--	--	1.0
MSCI EAFE Value	3.9	18.9	--	0.2	--	--	1.1

Characteristics Tilt vs Benchmark 9/30/2023



DFA International Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 5/1/2006 (Ten Year, One Month Shift)



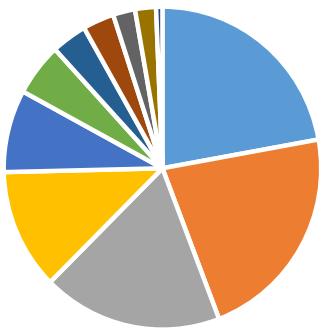
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Banco de Sabadell, S.A.	1.09	0.87
Banco BPM S.p.A.	1.08	2.59
Crescent Point Energy Corp.	0.87	24.73
MEG Energy Corp.	0.87	22.78
Helvetia Holding AG	0.85	3.07
Leonardo SpA	0.82	26.87
Jyske Bank A/S	0.81	-4.11
Alamos Gold Inc	0.80	-5.08
Sydbank A/S	0.68	2.66
Adecco Group AG	0.65	25.40

Trailing Returns

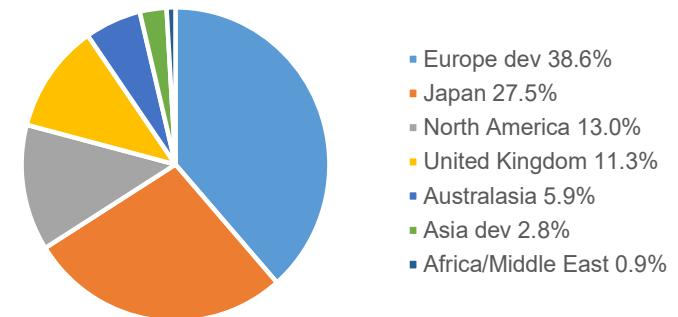
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
DFA Int'l Small Cap (Net)	0.1	7.5	28.3	10.5	2.4	4.5	6.4
MSCI EAFE Small Cap	-3.5	1.8	17.9	1.1	0.8	4.3	6.3
MSCI World ex US Small Cap Value	-1.0	4.2	21.7	6.9	1.7	3.8	6.6

Equity Sector Exposure (GICS)



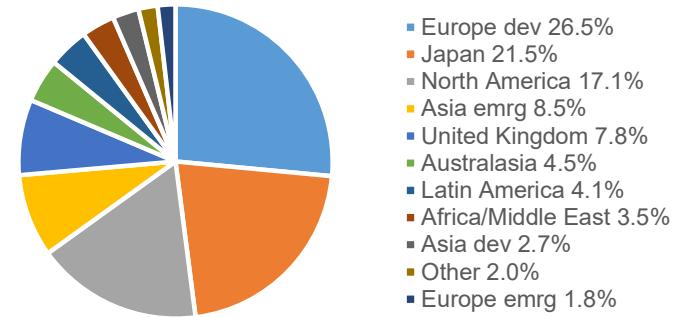
- Industrials 22.2%
- Financials 22.0%
- Materials 18.3%
- Consumer Discretionary 12.1%
- Energy 8.3%
- Consumer Staples 5.3%
- Information Technology 3.6%
- Real Estate 3.2%
- Communication Services 2.2%
- Health Care 2.1%
- Utilities 0.6%

Regional Exposure by Domicile



- Europe dev 38.6%
- Japan 27.5%
- North America 13.0%
- United Kingdom 11.3%
- Australasia 5.9%
- Asia dev 2.8%
- Africa/Middle East 0.9%

Regional Exposure by Source of Revenue

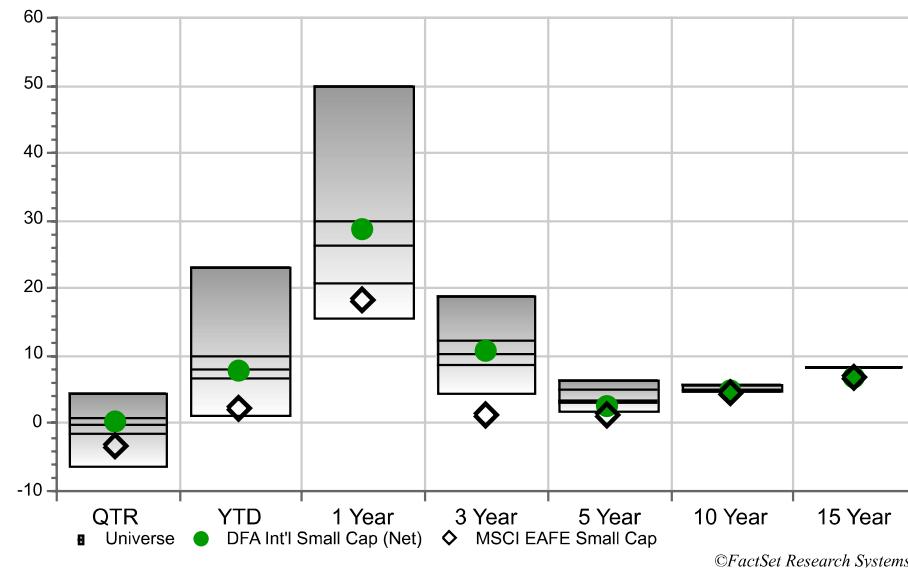


- Europe dev 26.5%
- Japan 21.5%
- North America 17.1%
- Asia emrg 8.5%
- United Kingdom 7.8%
- Australasia 4.5%
- Latin America 4.1%
- Africa/Middle East 3.5%
- Asia dev 2.7%
- Other 2.0%
- Europe emrg 1.8%

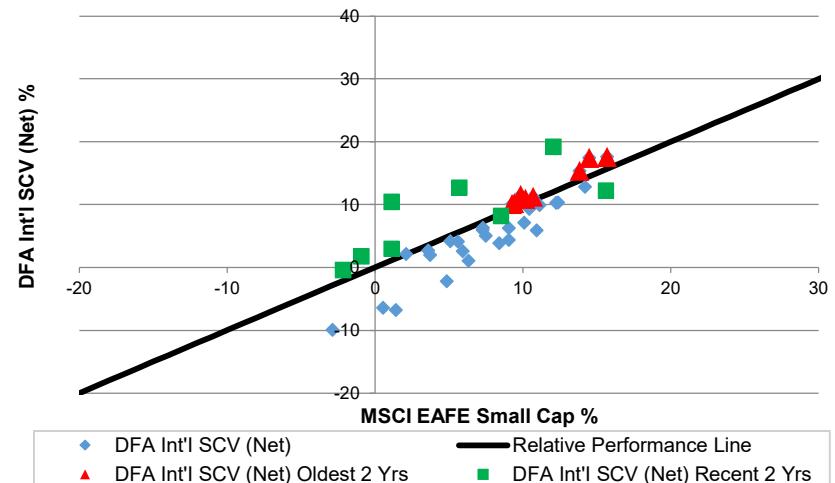
DFA International vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US: Int'l Sm/Mid Cap Value

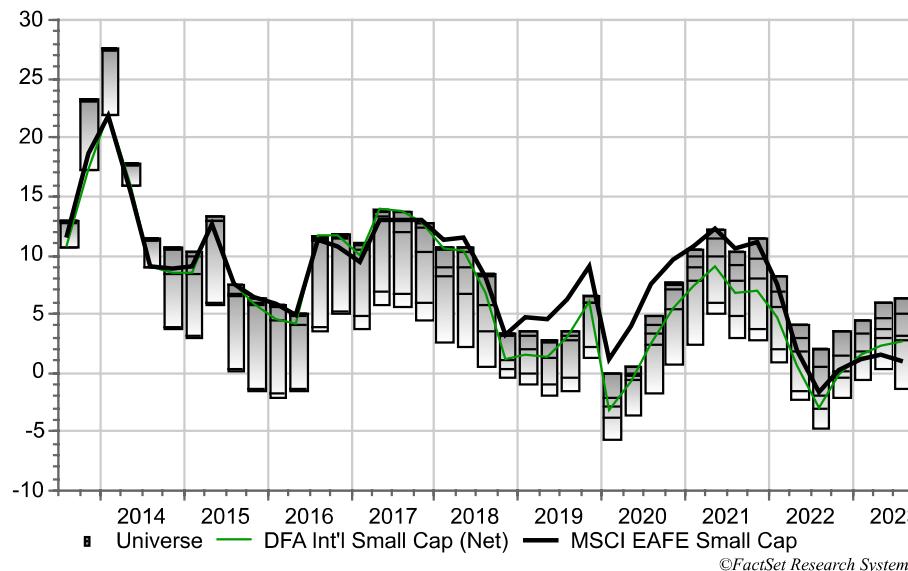


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US: Int'l Sm/Mid Cap Value



Over/Under Benchmark Analysis

15	Outperform
25	Underperform
40	# Observations
38%	% Outperform

DFA International Attribution Analysis – September 30, 2023

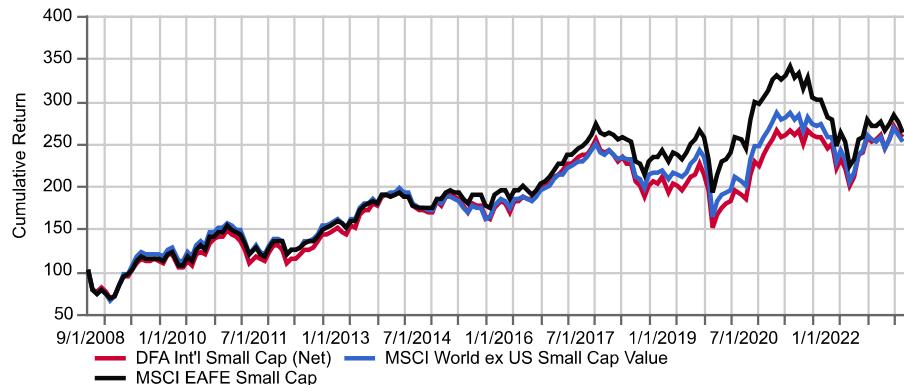
Top 10 Leading Contributors			Top 10 Leading Detractors				
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Celestica Inc.	0.43	0.43	0.21	Cargotec Oyj	0.43	0.35	-0.09
Crescent Point Energy Corp.	0.77	0.77	0.16	B2Gold Corp.	0.46	0.46	-0.09
MEG Energy Corp.	0.73	0.73	0.15	Valeo SE	0.39	0.39	-0.07
Adecco Group AG	0.59	0.59	0.12	Playtech plc	0.30	0.24	-0.07
Leonardo SpA	0.71	0.50	0.11	OSB Group PLC	0.26	0.17	-0.07
Vistry Group plc	0.47	0.34	0.10	voestalpine AG	0.29	0.29	-0.06
Whitecap Resources Inc.	0.33	0.33	0.07	ASR Nederland N.V.	0.66	0.39	-0.06
Banca Popolare di Sondrio SPA	0.37	0.29	0.06	Salzgitter AG	0.22	0.19	-0.05
Marks and Spencer Group PLC	0.53	0.32	0.05	Canfor Corporation	0.16	0.16	-0.05
Peyto Exploration & Development Corp.	0.22	0.22	0.05	Outokumpu Oyj	0.28	0.20	-0.05

Sector Attribution

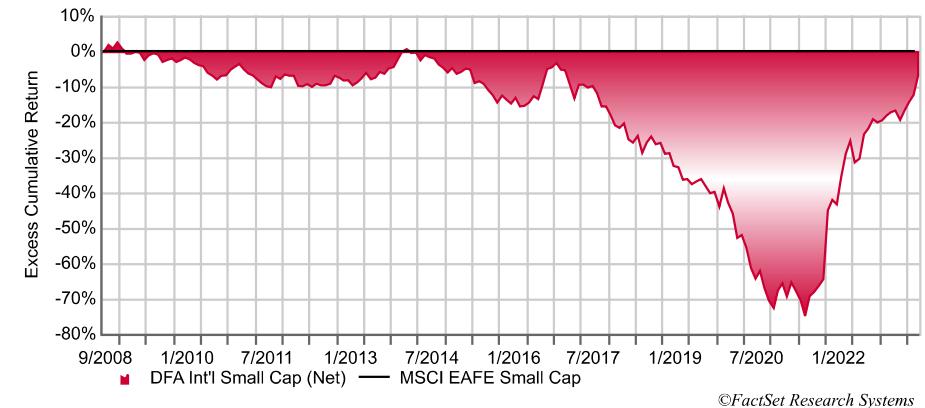
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-2.0	2.8	-1.3	0.0	0.1	0.0
Consumer Discretionary	-0.9	-0.5	-3.4	0.0	0.4	0.4
Consumer Staples	-1.0	1.8	0.4	0.0	0.1	0.0
Energy	4.7	13.4	12.6	0.7	0.0	0.8
Financials	10.3	3.6	0.4	0.4	0.7	1.1
Health Care	-4.5	-2.0	-6.7	0.1	0.1	0.2
Industrials	-1.2	-0.3	-5.3	0.0	1.2	1.1
Information Technology	-6.5	3.1	-8.0	0.3	0.4	0.7
Materials	9.7	-4.0	-4.9	-0.1	0.1	0.0
Real Estate	-6.8	-4.1	-4.0	0.0	0.0	0.0
Utilities	-2.0	-9.2	-6.2	0.1	0.0	0.0
Total	0.0	0.9	-3.6	1.5	2.9	4.5

DFA International Inception Performance & Statistics

Investment Growth – 15 Years



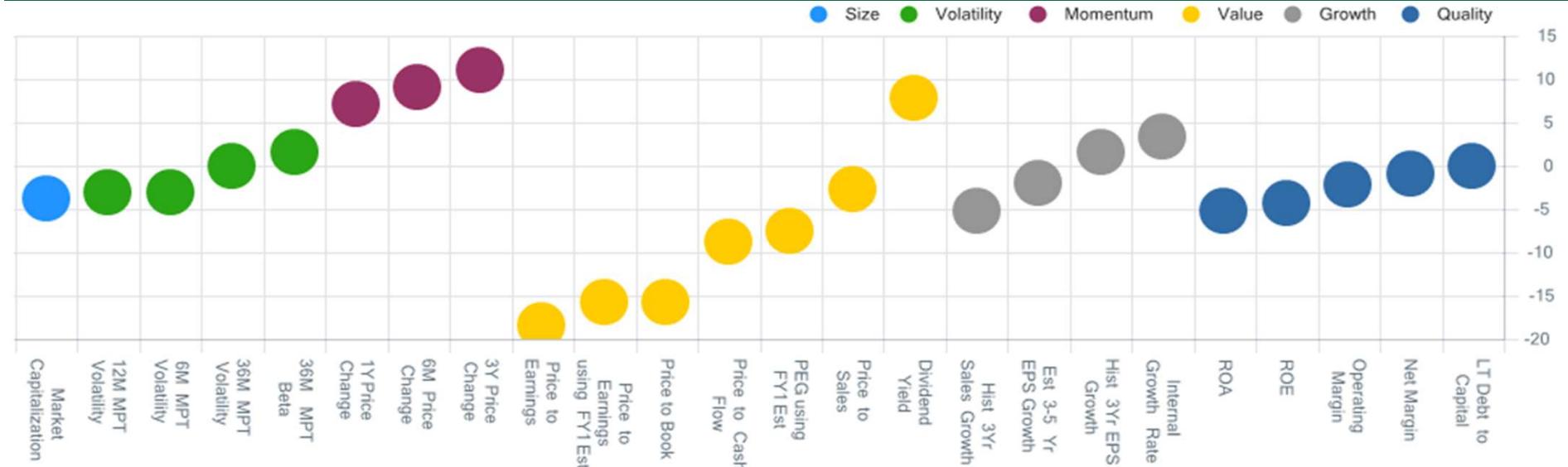
Relative Cumulative Performance – 15 Years



Risk – 15 Years

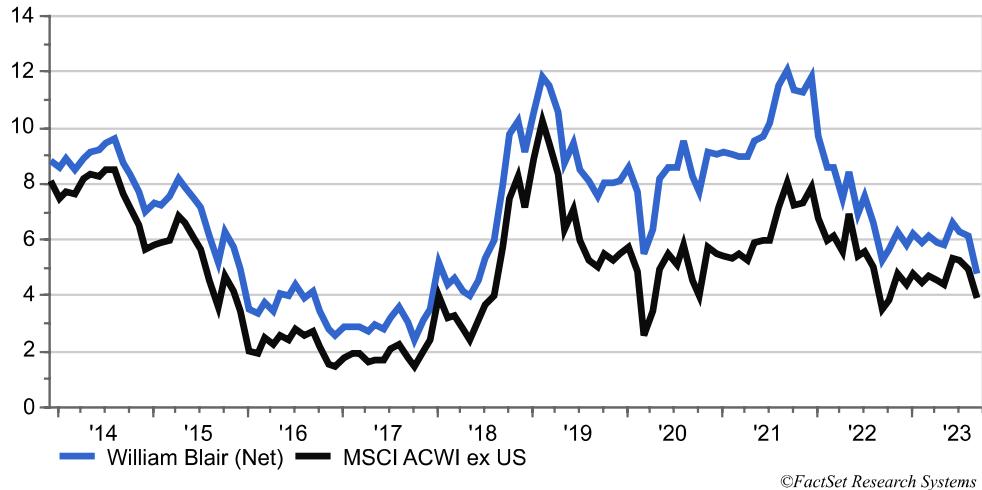
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
DFA Int'l Small Cap (Net)	6.4	20.1	-0.2	0.3	0.0	4.4	1.0
MSCI EAFE Small Cap	6.3	18.7	--	0.3	--	--	1.0
MSCI World ex US Small Cap Value	6.6	19.4	--	0.3	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



William Blair Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 1/1/2004 (Ten Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Novo Nordisk A/S	2.13	14.04
ASML Holding NV	1.75	-17.97
AstraZeneca	1.60	-4.84
Linde Plc	1.59	-1.96
Taiwan Semi Mfg. Co. Ltd.	1.54	-11.89
DSV A/S	1.52	-10.81
Total Energies SE	1.51	16.43
Canadian Pacific Kansas City Limited	1.48	-7.70
London Stock Exchange Group plc	1.44	-5.10
Compass Group PLC	1.42	-12.80

Trailing Returns

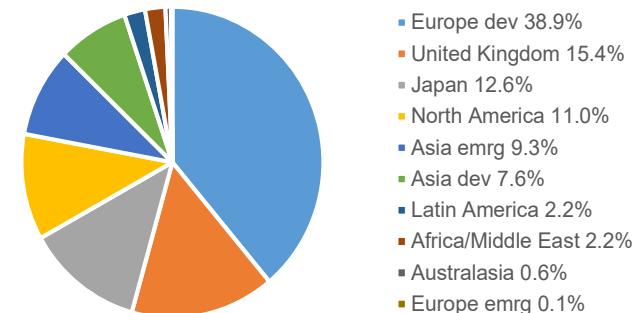
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
William Blair (Net)	-8.3	2.6	14.6	-1.6	3.4	4.7	6.4
MSCI ACWI ex US	-3.7	5.8	21.0	4.2	3.1	3.8	4.8
MSCI ACWI ex US Growth	-7.3	2.9	16.2	-1.6	2.9	4.3	5.1

Equity Sector Exposure (GICS)



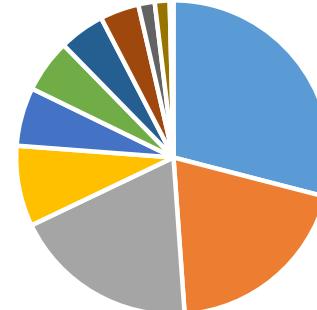
- Industrials 26.4%
- Information Technology 16.7%
- Financials 15.3%
- Consumer Discretionary 12.8%
- Health Care 10.9%
- Consumer Staples 7.2%
- Materials 5.1%
- Energy 2.5%
- Communication Services 1.8%
- Real Estate 1.0%
- Utilities 0.3%

Regional Exposure by Domicile



- Europe dev 38.9%
- United Kingdom 15.4%
- Japan 12.6%
- North America 11.0%
- Asia emrg 9.3%
- Asia dev 7.6%
- Latin America 2.2%
- Africa/Middle East 2.2%
- Australasia 0.6%
- Europe emrg 0.1%

Regional Exposure by Source of Revenue

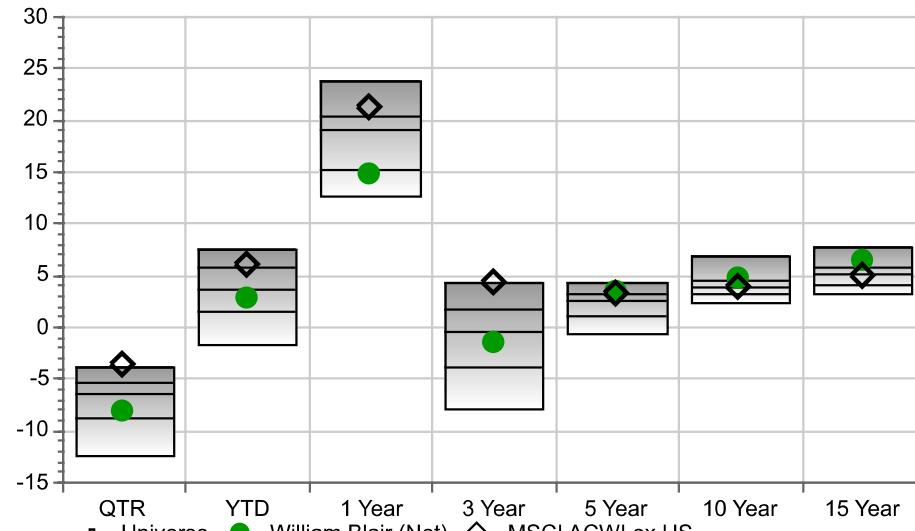


- North America 29.0%
- Asia emrg 19.8%
- Europe dev 19.1%
- Japan 8.3%
- Asia dev 6.0%
- Latin America 5.5%
- United Kingdom 4.7%
- Africa/Middle East 4.0%
- Europe emrg 1.7%
- Australasia 1.5%
- Other 0.4%

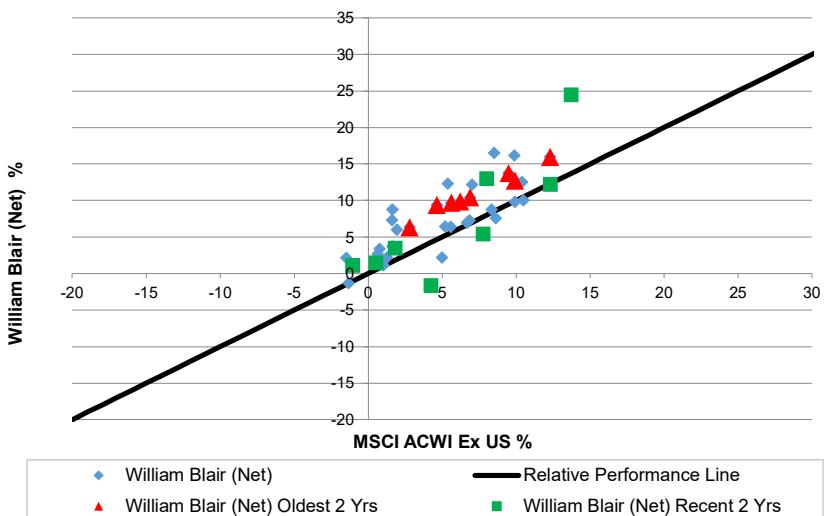
William Blair vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:International Multi-Cap Growth

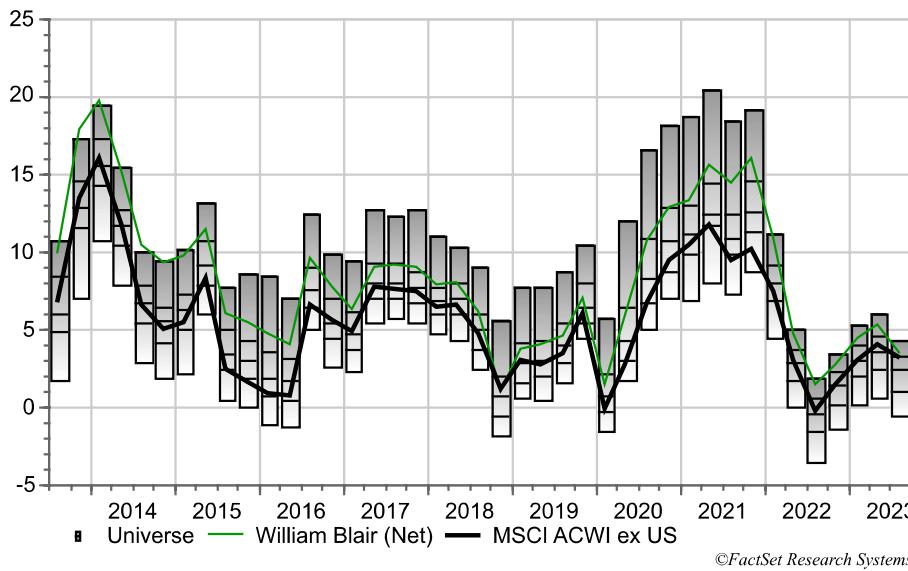


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US:International Multi-Cap Growth



Over/Under Benchmark Analysis

33	Outperform
7	Underperform
40	# Observations
83%	% Outperform

William Blair Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Partners Group Holding AG	0.58	0.48	0.08
Novo Nordisk A/S	1.82	0.67	0.08
Alchip Technologies, Limited	0.18	0.18	0.07
Pro Medicus Limited	0.24	0.24	0.05
DISCO Corporation	0.42	0.35	0.05
Parkland Corporation	0.27	0.25	0.04
Elite Material Co., Ltd.	0.10	0.10	0.04
Taiwan Semi Mfg. Co. Ltd.	1.57	-0.25	0.03
Dollarama Inc.	1.12	1.05	0.03
Polycab India Limited	0.08	0.08	0.03

Top 10 Leading Detractors

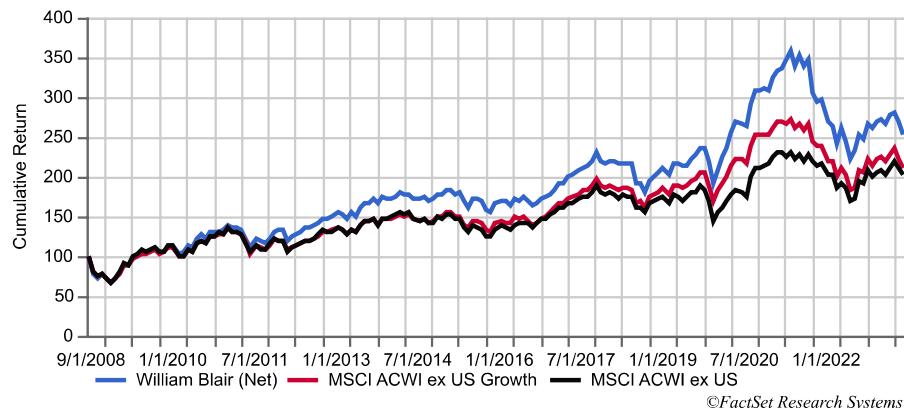
	Avg. Weights	Relative Weights	Active Return
MTU Aero Engines AG	1.27	1.21	-0.38
Hexagon AB	0.82	0.73	-0.24
Keyence Corporation	1.44	1.08	-0.23
Lonza Group AG	1.18	1.00	-0.22
Adyen N.V.	0.48	0.35	-0.22
DAIKIN INDUSTRIES, LTD.	1.18	0.98	-0.22
Amadeus IT Group SA	1.26	1.13	-0.21
AIA Group Limited	1.54	1.07	-0.20
Dassault Systemes S.A.	1.27	1.15	-0.18
Hermes International SCA	1.36	1.08	-0.16

Sector Attribution

	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-3.7	-5.8	-5.0	0.1	0.0	0.0
Consumer Discretionary	0.1	-9.6	-5.6	0.0	-0.5	-0.5
Consumer Staples	-2.2	-7.6	-6.4	0.1	-0.1	0.0
Energy	-4.1	9.8	8.9	-0.5	0.0	-0.5
Financials	-7.3	-6.1	-0.8	-0.2	-0.7	-0.9
Health Care	2.5	-7.0	-2.8	0.0	-0.5	-0.5
Industrials	13.7	-9.0	-5.7	-0.2	-1.0	-1.2
Information Technology	5.3	-11.7	-8.7	-0.2	-0.5	-0.8
Materials	-2.8	-8.2	-3.1	0.0	-0.3	-0.3
Real Estate	-1.0	-1.5	-1.1	0.0	0.0	0.0
Utilities	-2.7	-10.5	-7.9	0.1	0.0	0.1
Cash	2.2	1.3	0.0	0.1	0.0	0.1
Total	0.0	-8.2	-3.8	-0.9	-3.6	-4.4

William Blair 15 Year Performance & Statistics

Investment Growth – 15 Years



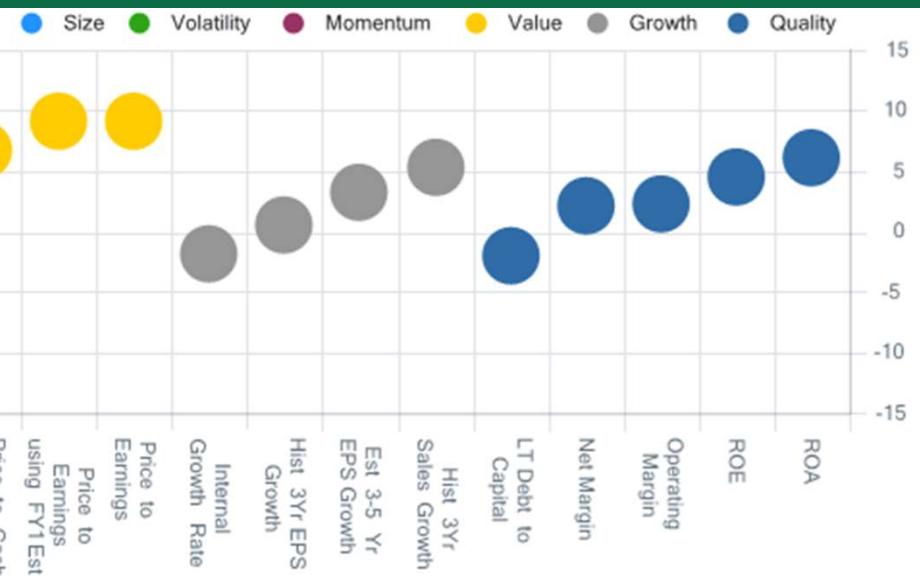
Relative Cumulative Performance – 15 Years



Risk – 15 Years

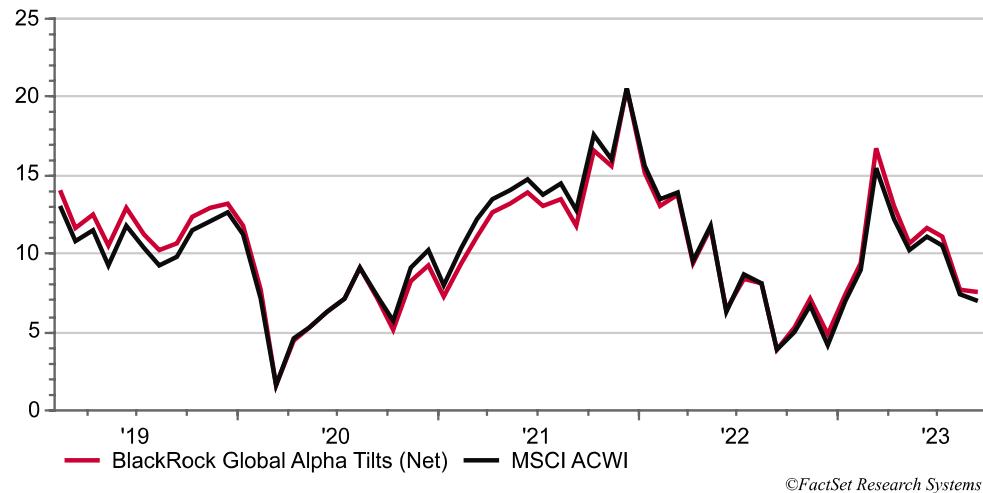
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
William Blair (Net)	6.4	17.6	1.8	0.3	0.3	5.5	1.0
MSCI ACWI ex US	4.8	17.7	--	0.2	--	--	1.0
MSCI ACWI ex US Growth	5.1	17.3	--	0.2	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



BlackRock Global Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 3/1/2016 (Three Year, One Month Shift)



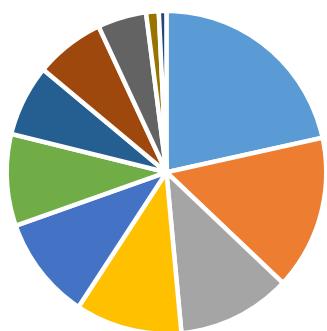
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Microsoft Corporation	4.73	-7.09
Apple Inc.	3.50	-11.62
Amazon.com, Inc.	2.97	-2.49
NVIDIA Corporation	2.90	2.84
Alphabet Inc.	2.54	9.19
Nestle S.A.	1.61	-5.71
Chevron Corporation	1.58	8.17
Walmart Inc.	1.55	2.11
Meta Platforms, Inc.	1.54	4.61
Novartis AG	1.53	2.00

Trailing Returns

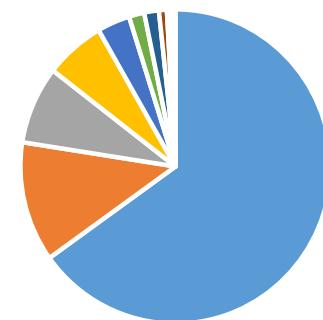
	QTR	YTD	1 Year	3 Year	5 Year	Inception 3/1/2016
BlackRock Global Alpha Tilts (Net)	-3.1	10.4	23.1	7.4	6.5	10.4
MSCI ACWI	-3.4	10.1	20.8	6.9	6.5	9.8

Equity Sector Exposure (GICS)



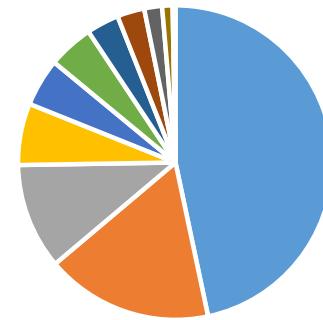
- Information Technology 21.5%
- Consumer Discretionary 15.5%
- Financials 11.5%
- Industrials 10.8%
- Health Care 10.4%
- Consumer Staples 9.2%
- Energy 7.2%
- Communication Services 7.0%
- Materials 5.0%
- Utilities 1.3%
- Real Estate 0.8%

Regional Exposure by Domicile



- North America 65.1%
- Europe dev 12.4%
- Japan 8.0%
- Asia emrg 6.3%
- Asia dev 3.4%
- Latin America 1.6%
- United Kingdom 1.5%
- Africa/Middle East 0.8%
- Australasia 0.5%
- Europe emrg 0.4%

Regional Exposure by Source of Revenue

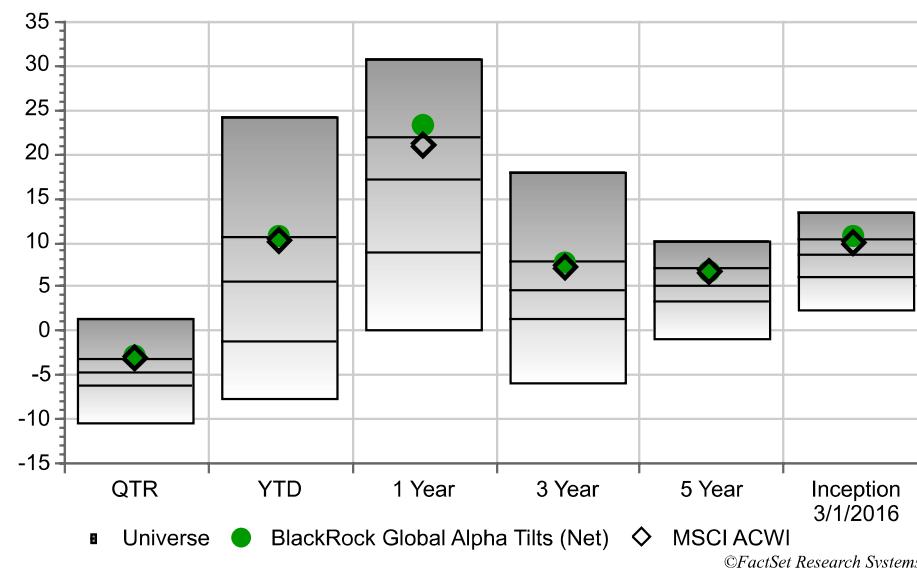


- North America 46.7%
- Asia emrg 17.2%
- Europe dev 10.9%
- Japan 6.3%
- Latin America 4.9%
- Asia dev 4.7%
- Africa/Middle East 3.4%
- United Kingdom 2.8%
- Europe emrg 1.8%
- Australasia 1.1%
- Other 0.3%

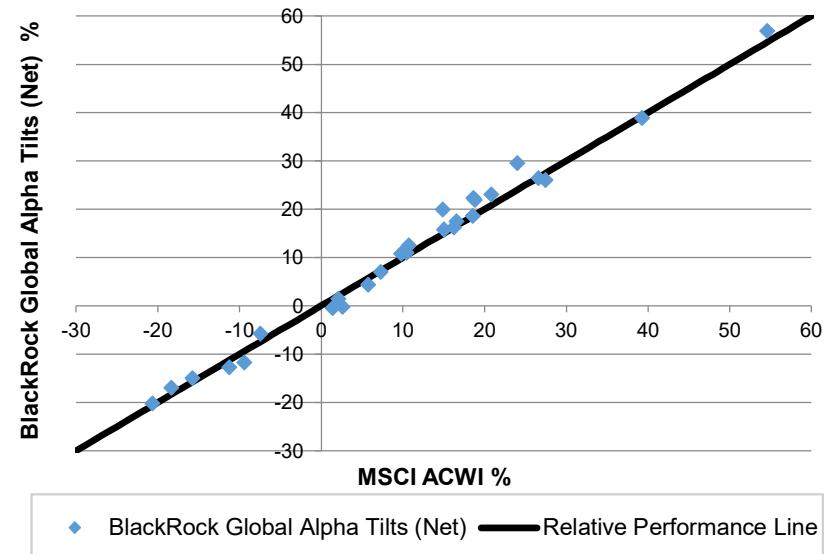
BlackRock Global vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:Global

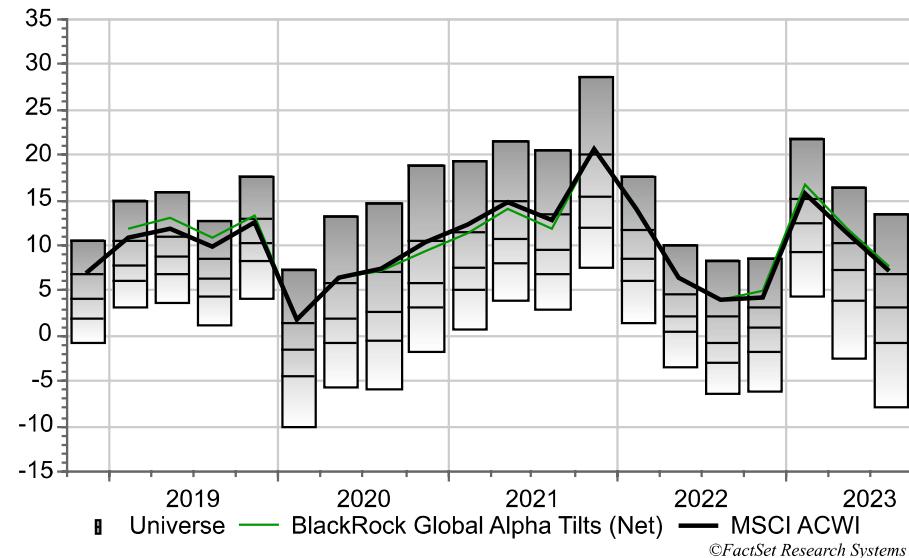


One-Year Rolling Return Versus Benchmark



Rolling Returns 3/1/2016 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Global Equity



Over/Under Benchmark Analysis

17	Outperform
10	Underperform
27	# Observations
63%	% Outperform

BlackRock Global Attribution Analysis – September 30, 2023

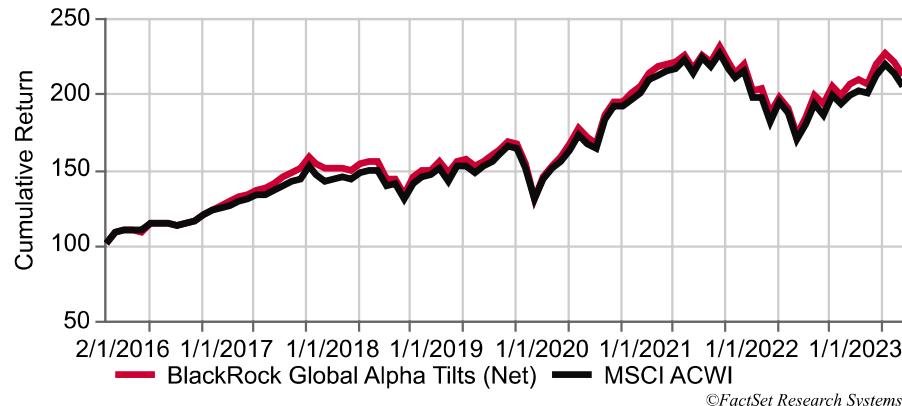
Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Schlumberger N.V.	0.36	0.24	0.07	Etsy, Inc.	0.26	0.24	-0.15
Chevron Corporation	1.35	0.90	0.07	Block, Inc.	0.26	0.20	-0.13
Apple Inc.	4.48	-0.26	0.07	Mercedes-Benz Group AG	0.99	0.89	-0.12
ConocoPhillips Company	0.62	0.41	0.06	United Airlines Holdings, Inc.	0.26	0.26	-0.10
Marathon Petroleum Corporation	0.35	0.26	0.06	General Motors Company	0.63	0.55	-0.10
Canadian Natural Resources Limited	0.43	0.33	0.06	Microsoft Corporation	4.71	0.92	-0.09
Repsol SA	0.38	0.35	0.05	Honeywell International Inc.	0.96	0.76	-0.08
RTX Corp.	0.04	-0.17	0.05	Nestle S.A.	0.97	0.43	-0.07
ASML Holding NV	0.31	-0.13	0.04	Siemens Aktiengesellschaft	0.69	0.47	-0.07
Novo Nordisk A/S	0.76	0.32	0.04	S&P Global, Inc.	0.97	0.77	-0.06

Sector Attribution

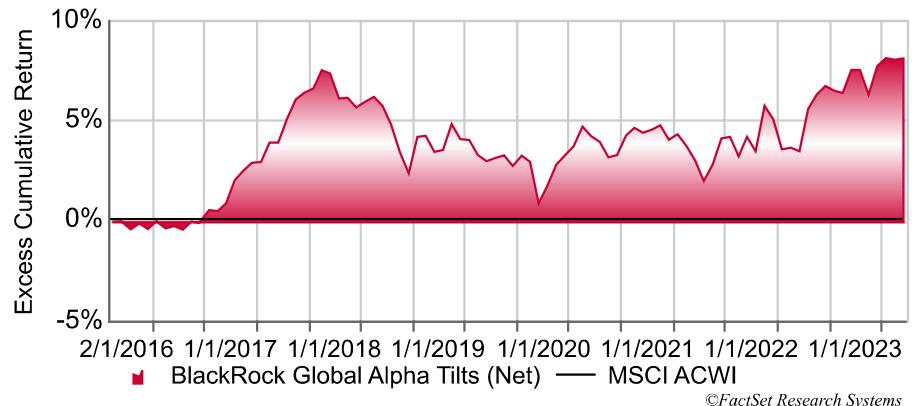
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-1.4	3.9	0.5	-0.1	0.2	0.1
Consumer Discretionary	3.3	-6.8	-4.8	-0.1	-0.3	-0.4
Consumer Staples	1.3	-4.6	-6.1	0.0	0.2	0.1
Energy	1.5	14.7	10.8	0.2	0.2	0.4
Financials	-3.0	-3.8	-0.8	-0.1	-0.4	-0.5
Health Care	-1.6	0.9	-2.6	0.0	0.4	0.3
Industrials	2.4	-7.2	-5.0	0.0	-0.3	-0.3
Information Technology	-0.7	-5.7	-6.1	0.0	0.1	0.1
Materials	1.1	-4.1	-3.6	0.0	0.0	0.0
Real Estate	-1.7	1.3	-6.4	0.1	0.1	0.1
Utilities	-1.2	-6.4	-8.5	0.1	0.0	0.1
Total	0.0	-3.2	-3.3	0.0	0.1	0.1

BlackRock Global Inception Performance & Statistics

Investment Growth Since Inception 3/1/2016



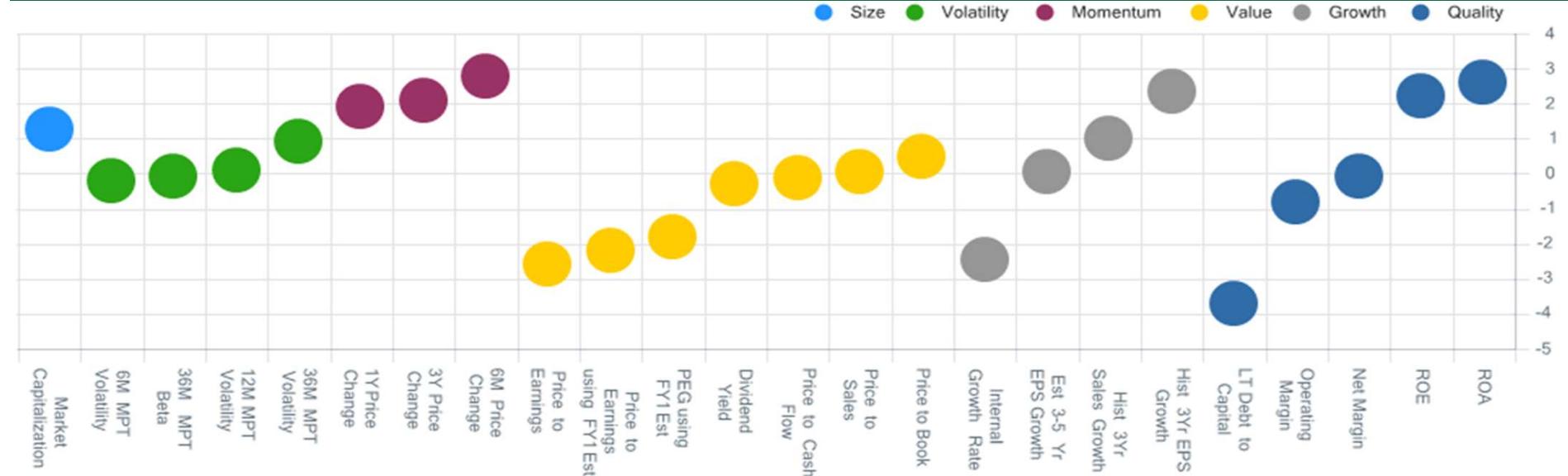
Relative Cumulative Performance Since Inception 3/1/2016



Risk Since Inception 3/1/2016

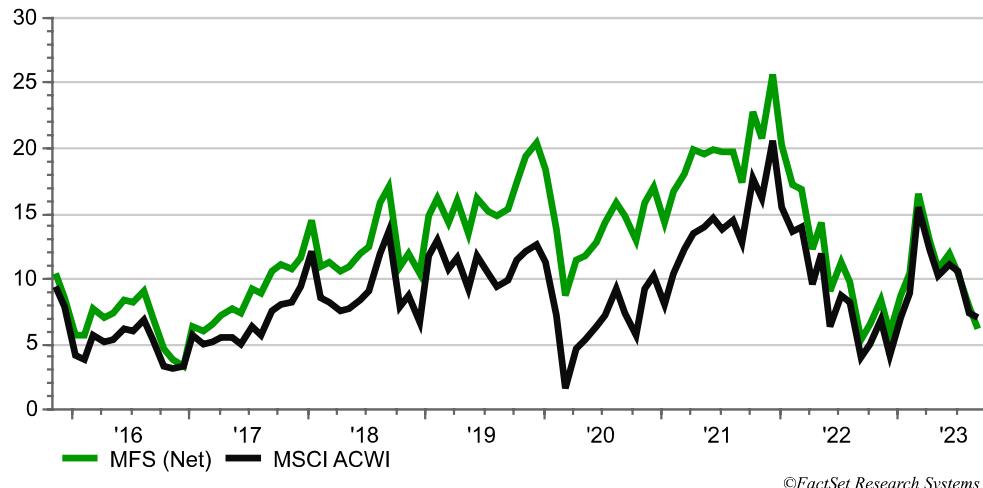
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
BlackRock Global Alpha Tilts (Net)	10.4	15.6	0.4	0.6	0.4	1.6	1.0
MSCI ACWI	9.8	15.3	--	0.5	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



MFS Portfolio Snapshot – September 30, 2023

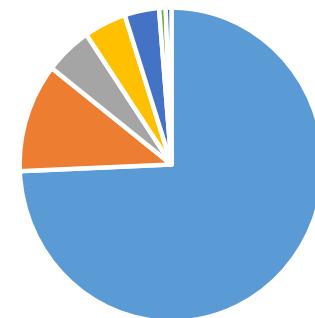
Rolling Returns Since Inception 12/1/2012 (Three Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Microsoft Corporation	6.31	-7.09
Alphabet Inc.	4.74	9.32
Visa Inc.	3.32	-2.97
Accenture plc	3.01	-0.12
Canadian Pacific Kansas City Limited	2.51	-7.70
Apple Inc.	2.41	-11.62
ICON plc	2.31	-1.58
Taiwan Semi Mfg. Co. Ltd.	2.22	-11.89
Tencent Holdings Ltd.	2.11	-7.60
Amphenol Corporation	2.01	-0.88

Regional Exposure by Domicile

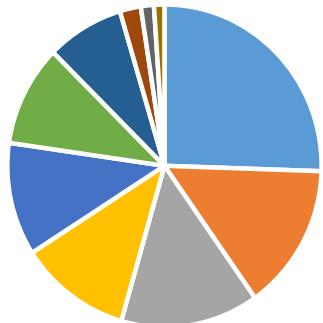


- North America 74.3%
- Europe dev 11.2%
- Asia emrg 5.0%
- Asia dev 4.5%
- United Kingdom 3.7%
- Latin America 0.7%
- Japan 0.6%

Trailing Returns

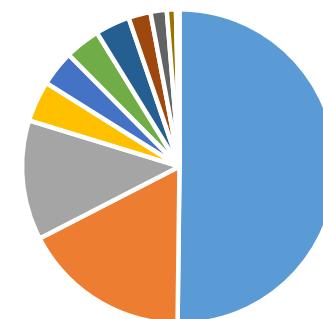
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Inception 12/1/2012
MFS (Net)	-5.5	8.7	20.2	6.1	9.1	10.1	10.9
MSCI ACWI	-3.4	10.1	20.8	6.9	6.5	7.6	8.5
MSCI ACWI Growth	-4.9	18.2	24.4	3.8	8.4	9.5	10.3

Equity Sector Exposure (GICS)



- Information Technology 25.5%
- Industrials 14.7%
- Financials 14.2%
- Consumer Discretionary 11.5%
- Communication Services 11.3%
- Health Care 10.2%
- Consumer Staples 8.0%
- Materials 2.1%
- Real Estate 1.4%
- Utilities 1.1%

Regional Exposure by Source of Revenue

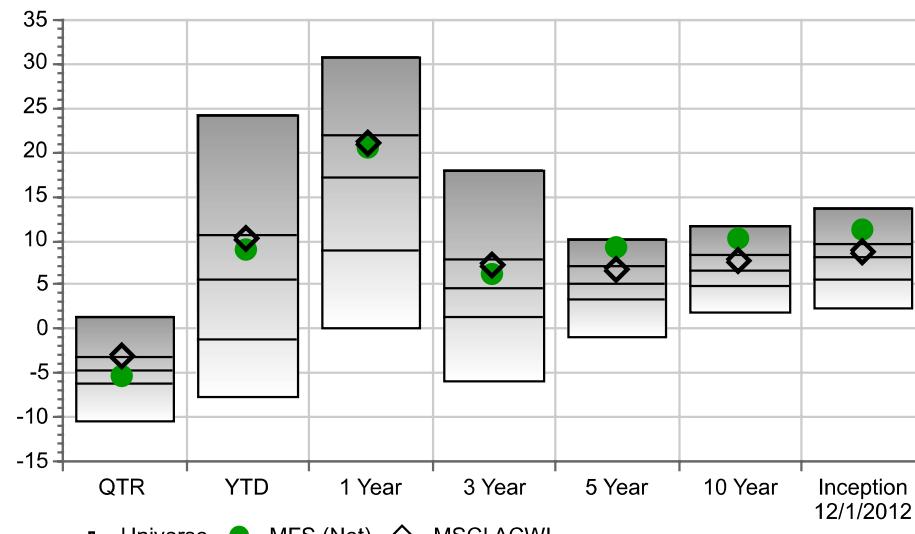


- North America 50.2%
- Asia emrg 17.2%
- Europe dev 12.3%
- Asia dev 4.2%
- United Kingdom 3.7%
- Latin America 3.6%
- Africa/Middle East 3.6%
- Japan 2.3%
- Europe emrg 1.7%
- Australasia 0.9%
- Other 0.4%

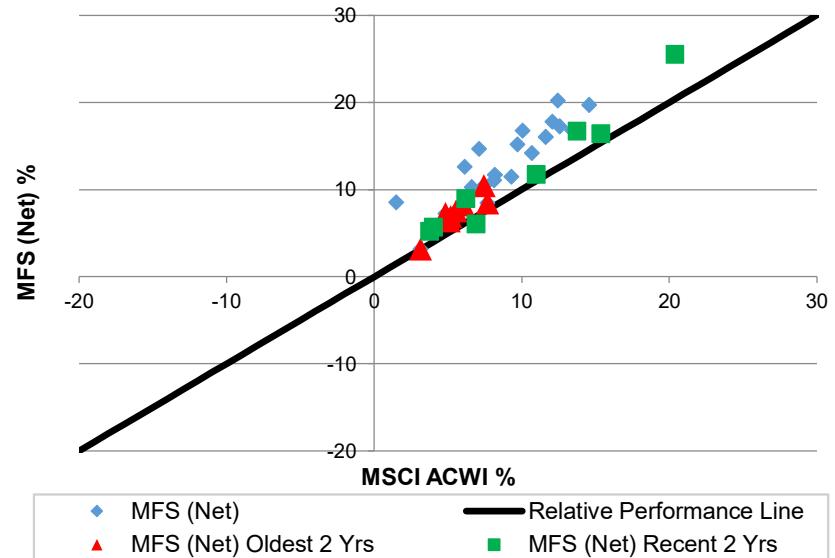
MFS vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:Global

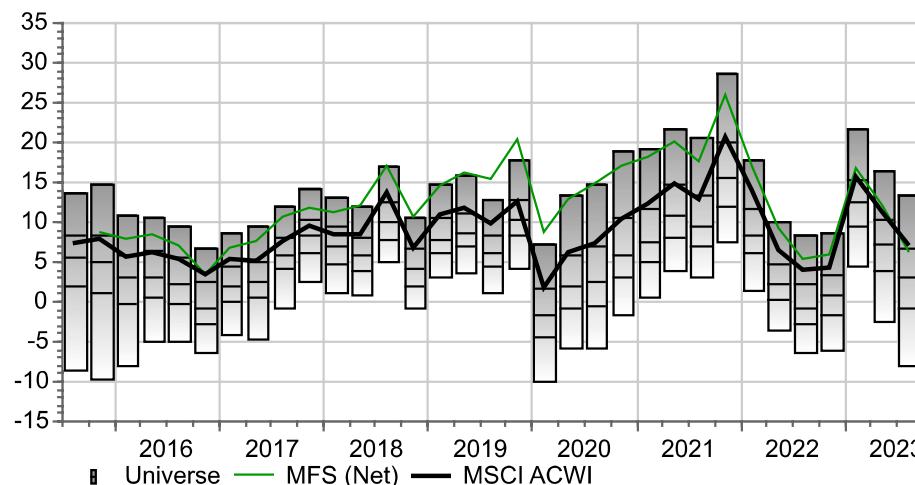


Three-Year Rolling Return Versus Benchmark



Rolling Returns 12/1/2012 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Global Equity



Over/Under Benchmark Analysis

31	Outperform
1	Underperform
32	# Observations
97%	% Outperform

MFS Attribution Analysis – September 30, 2023

Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Intercontinental Exchange, Inc.	0.97	0.85	0.26	Estee Lauder Companies Inc.	1.10	1.04	-0.29
Apple Inc.	2.54	-2.20	0.25	LVMH Moet Hennessy Louis Vuitton SE	1.51	1.12	-0.22
Alphabet Inc.	4.40	2.11	0.16	American Tower Corporation	1.44	1.30	-0.20
NAVER Corp.	1.67	1.63	0.10	Taiwan Semi Mfg. Co. Ltd.	2.34	1.65	-0.20
Adobe Incorporated	1.92	1.55	0.09	Microsoft Corporation	6.27	2.48	-0.19
Keichow Moutai Co. Ltd.	0.98	0.95	0.05	Equifax Inc.	0.92	0.88	-0.19
Eaton Corporation plc	1.33	1.20	0.04	Canadian Pacific Kansas City Limited	2.55	2.44	-0.19
TJX Companies, Inc.	1.08	0.92	0.04	McCormick & Company, Incorporated	1.44	1.41	-0.18
Verisk Analytics, Inc.	0.72	0.67	0.03	HDFC Bank Ltd.	1.58	1.53	-0.17
Danaher Corporation	1.27	0.99	0.02	Church & Dwight Co., Inc.	1.96	1.93	-0.16

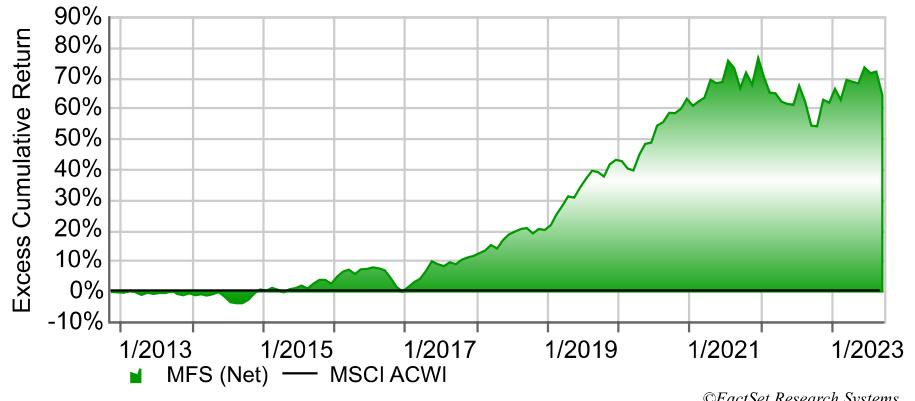
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	3.4	0.6	0.5	0.1	0.0	0.1
Consumer Discretionary	-0.1	-6.4	-4.8	0.0	-0.1	-0.2
Consumer Staples	0.7	-10.4	-6.1	0.0	-0.4	-0.4
Energy	-4.7	0.0	10.8	-0.7	0.0	-0.6
Financials	-2.0	-5.3	-0.8	0.0	-0.7	-0.7
Health Care	-1.3	-4.1	-2.6	0.0	-0.2	-0.2
Industrials	4.0	-6.2	-5.0	-0.1	-0.2	-0.2
Information Technology	3.9	-4.8	-6.1	-0.1	0.3	0.2
Materials	-2.4	-6.5	-3.6	0.0	-0.1	-0.1
Real Estate	-0.9	-15.2	-6.4	0.0	-0.1	-0.1
Utilities	-1.7	-7.4	-8.5	0.1	0.0	0.1
Cash	1.0	1.4	0.0	0.0	0.0	0.0
Total	0.0	-5.2	-3.3	-0.6	-1.6	-1.9

MFS Inception Performance & Statistics

Investment Growth Since Inception 12/1/2012



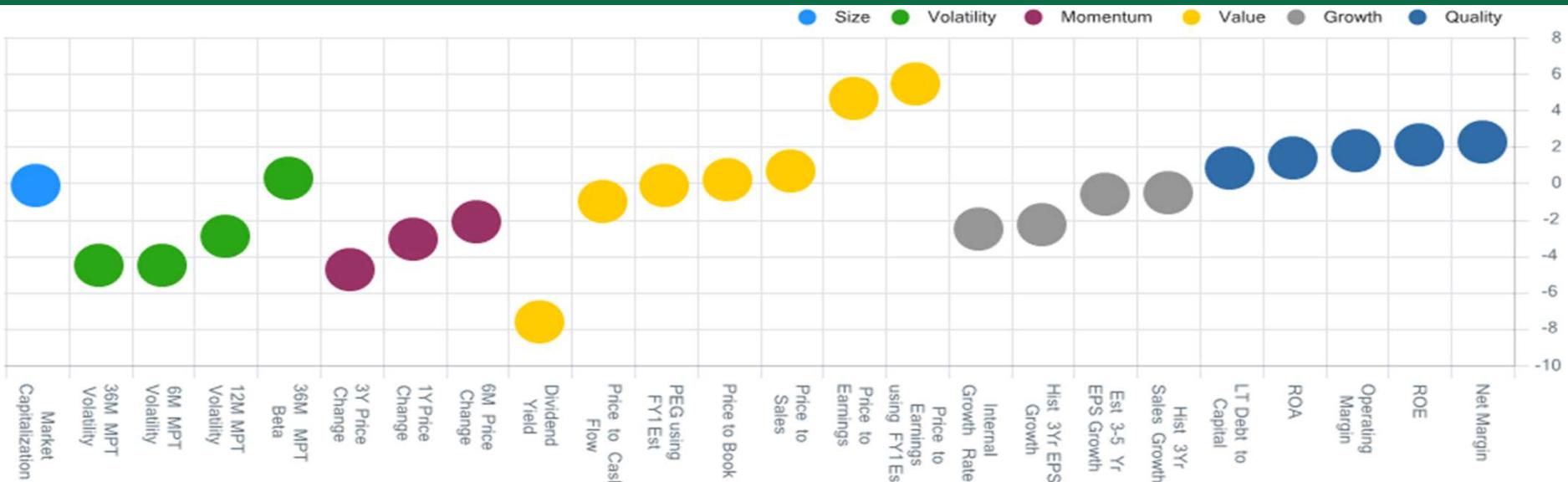
Relative Cumulative Performance Since Inception 12/1/2012



Risk Since Inception 12/1/2012

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
MFS (Net)	10.9	14.3	2.4	0.7	0.7	3.3	1.0
MSCI ACWI	8.5	14.1	--	0.5	--	--	1.0
MSCI ACWI Growth	10.3	15.2	--	0.6	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023

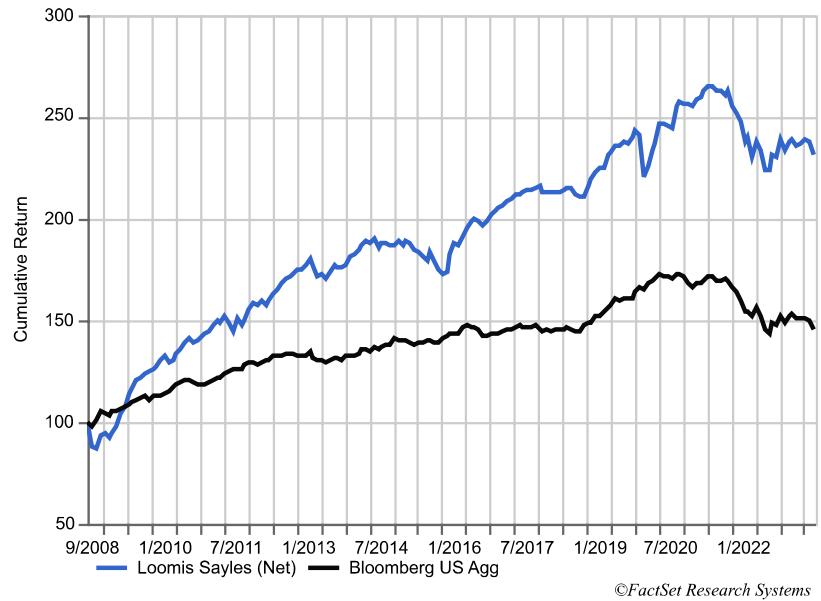


Loomis Sayles Portfolio Snapshot – September 30, 2023

Rolling Returns Since 10/1/1999 (Ten Year, One Month Shift)



Investment Growth – 15 Years



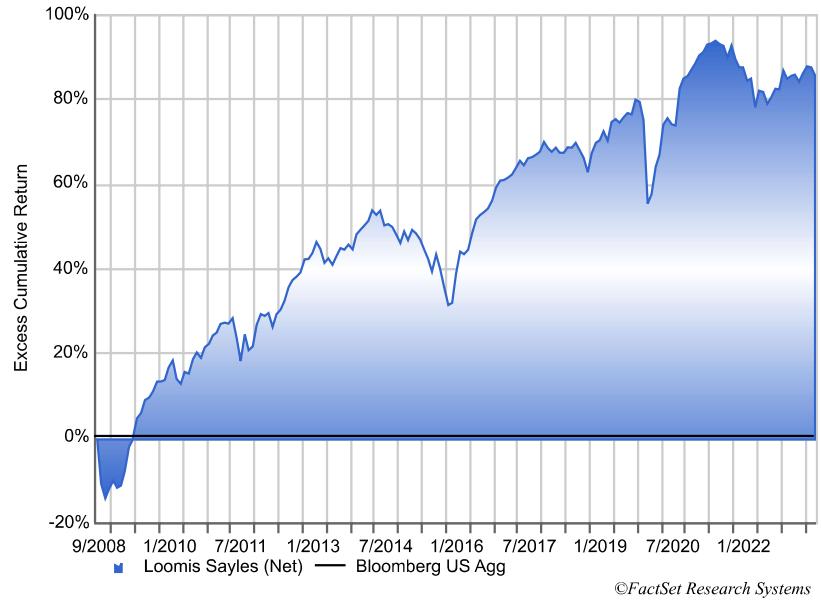
Trailing Returns

	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Loomis Sayles (Net)	-2.2	0.7	3.4	-1.9	1.5	2.9	5.8
Bloomberg US Aggregate	-3.2	-1.2	0.6	-5.2	0.1	1.1	2.5

Risk – 15 Years

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Loomis Sayles (Net)	5.8	7.6	3.2	0.7	0.5	6.2	1.1
Bloomberg US Aggregate	2.5	4.2	--	0.4	--	--	1.0

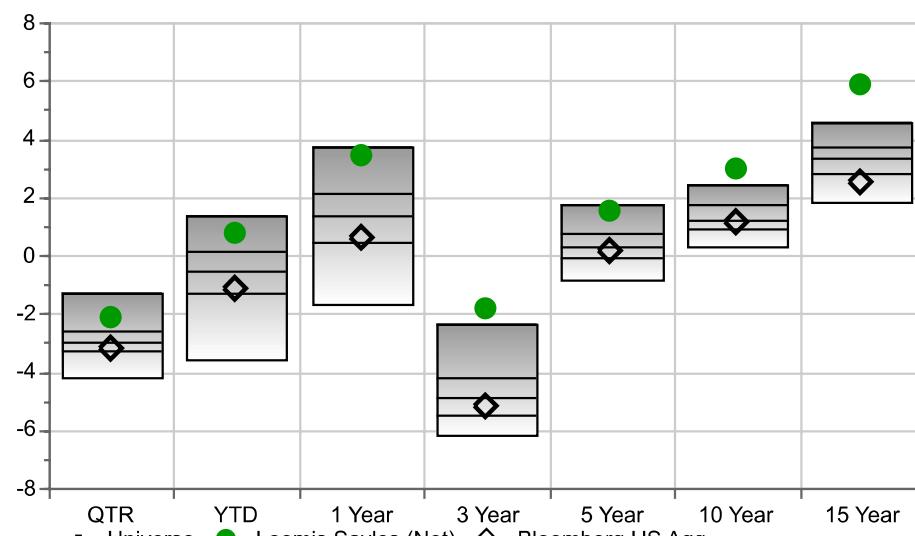
Relative Cumulative Performance – 15 Years



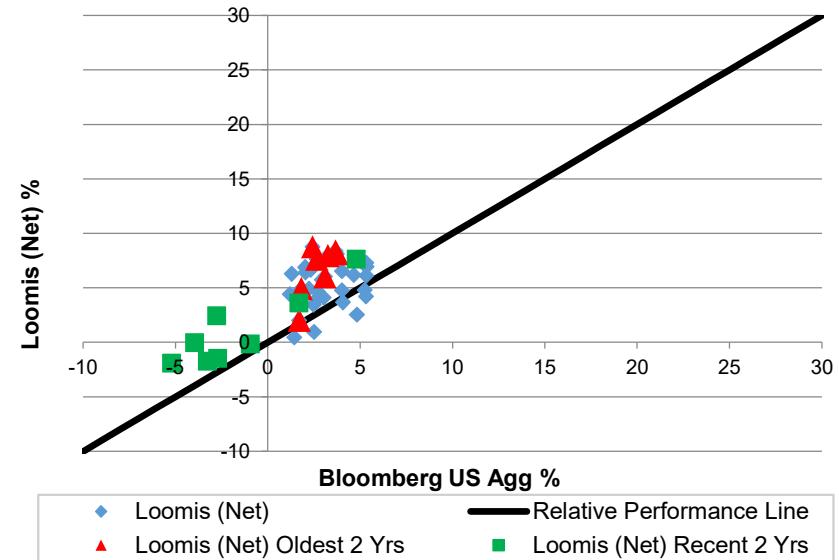
Loomis Sayles vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Core Plus Bond

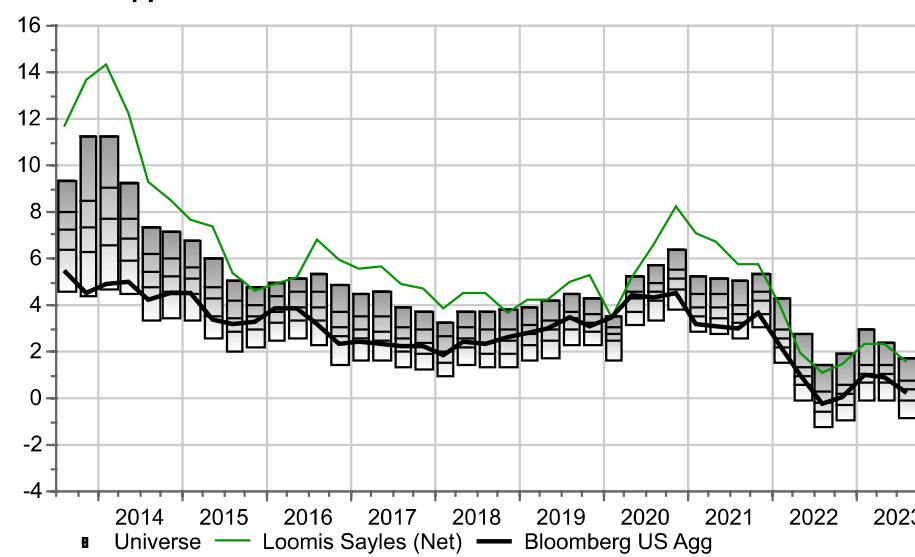


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US:Core Plus Bond

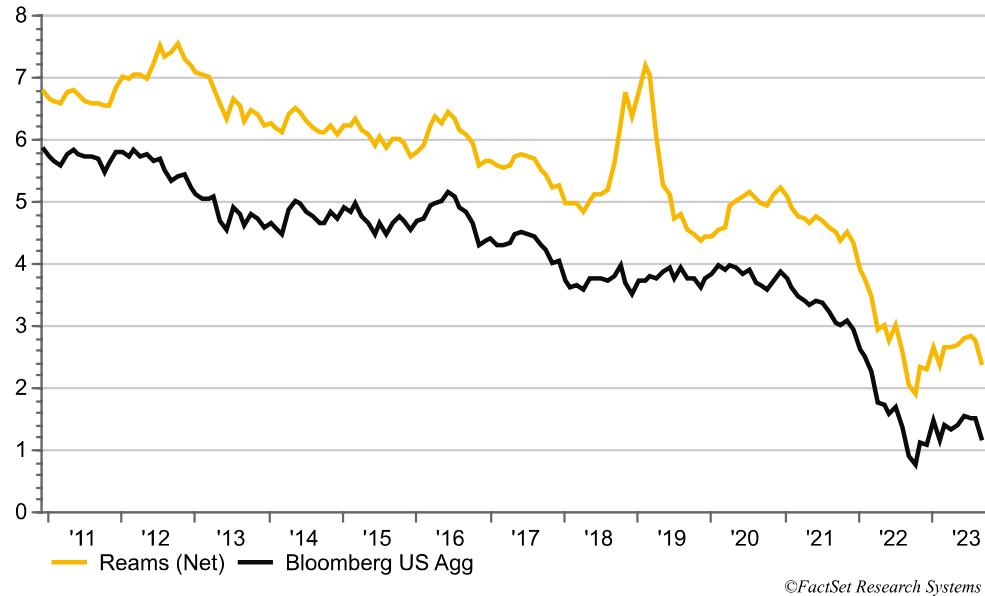


Over/Under Benchmark Analysis

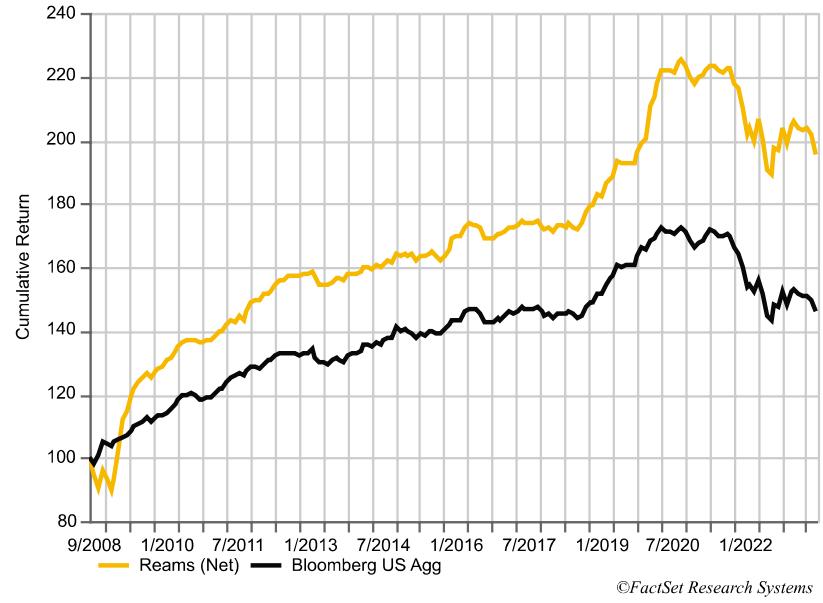
34	Outperform
6	Underperform
40	# Observations
85%	% Outperform

Reams Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 1/1/2001 (Ten Year, One Month Shift)



Investment Growth – 15 Years



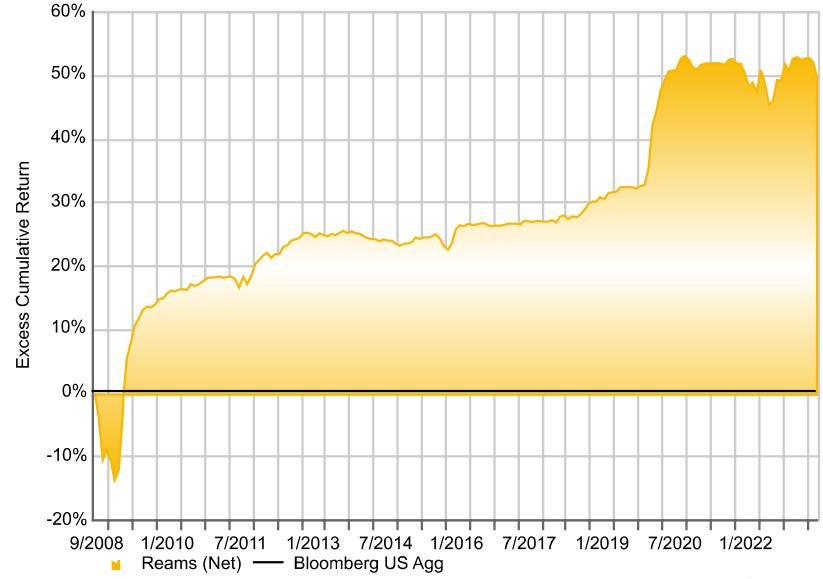
Trailing Returns

	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Reams (Net)	-3.8	-0.6	2.8	-4.1	2.5	2.3	4.6
Bloomberg US Aggregate	-3.2	-1.2	0.6	-5.2	0.1	1.1	2.5

Risk – 15 Years

	Std Return	Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Reams (Net)	4.6	6.3	1.9	0.6	0.5	4.4	1.1
Bloomberg US Aggregate	2.5	4.2	--	0.4	--	--	1.0

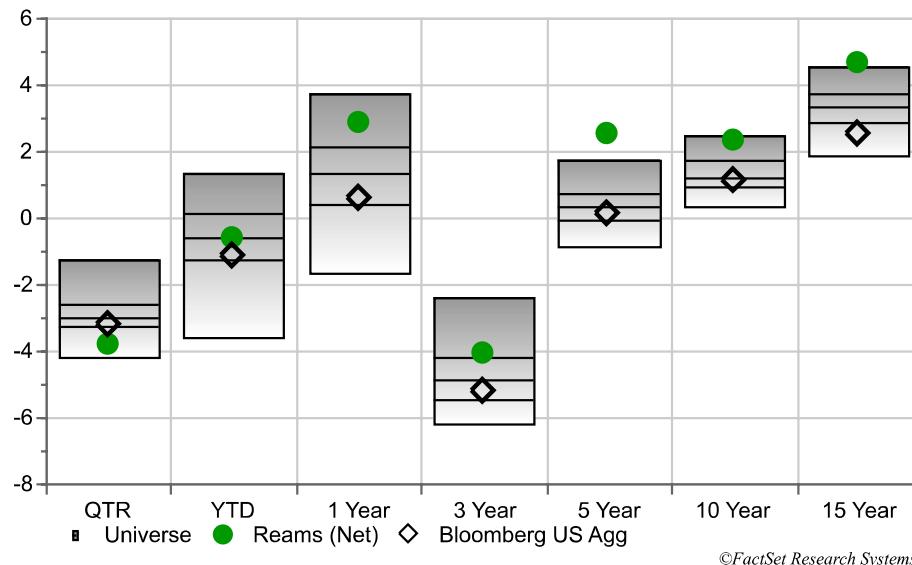
Relative Cumulative Performance – 15 Years



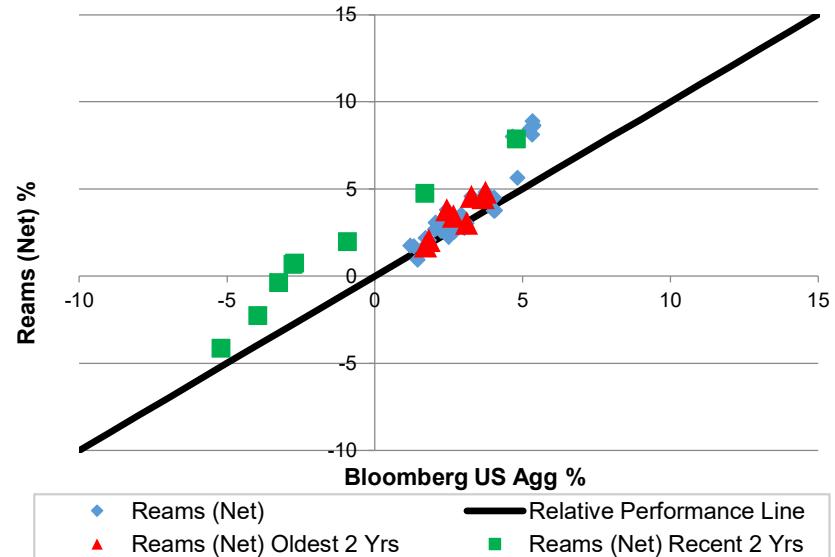
Reams vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Core Plus Bond

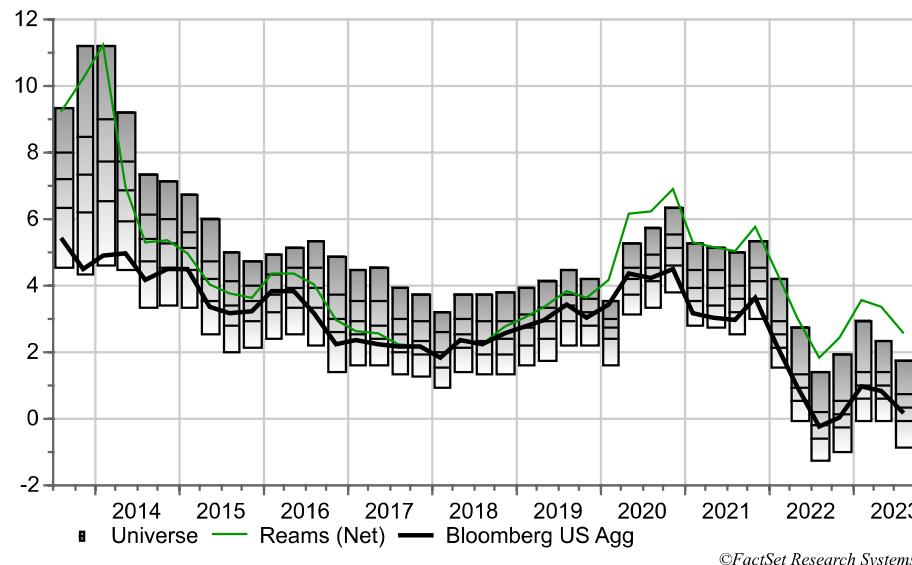


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US Core Plus Bond



Over/Under Benchmark Analysis

33	Outperform
7	Underperform
40	# Observations
83%	% Outperform

3rd Quarter 2023 Performance Report

November 9, 2023

Employees' Retirement System

Presentation Agenda

- Fund Overview
- Public Equity
- Fixed Income
- Absolute Return
- Recent Performance Update
- Appendix: Manager Charts & Statistics

Market Environment

Asset Class	Benchmark	Target Weight	Benchmark Return Q3 2023
Public Equity	MSCI ACWI IMI	39%	-3.4%
Fixed Income	Bloomberg U.S. Agg.	29%	-3.2%
Real Assets ⁽¹⁾	Blended Benchmark	13%	-2.9%
Private Equity ⁽¹⁾	Russell 3000 + 2%	12%	8.6%
Absolute Return	90-Day T-Bill + 3%	7%	2.1%

Q3 2023	
CMERS Benchmark	-1.4%

⁽¹⁾Real Estate and Private Equity benchmark returns are reported on a 1-quarter lag.

Relative Performance Expectations

		Q3 2023		Q3 2023	Q3 2023
Value Equity Bias	Russell 3000 Value	-3.2%	Russell 3000 Growth	-3.3%	≈
Small Cap Equity Bias	Russell 2000	-5.1%	Russell 1000	-3.1%	↓
Fixed Income Credit	Loomis Sayles (net)	-2.2%	Bloomberg US Agg.	-3.2%	↑
Private Equity⁽¹⁾⁽²⁾	CMERS PE (net)	2.4%	PE Benchmark	8.6%	↓↓

Q3 2023

CMERS Total Fund (net) -1.7%

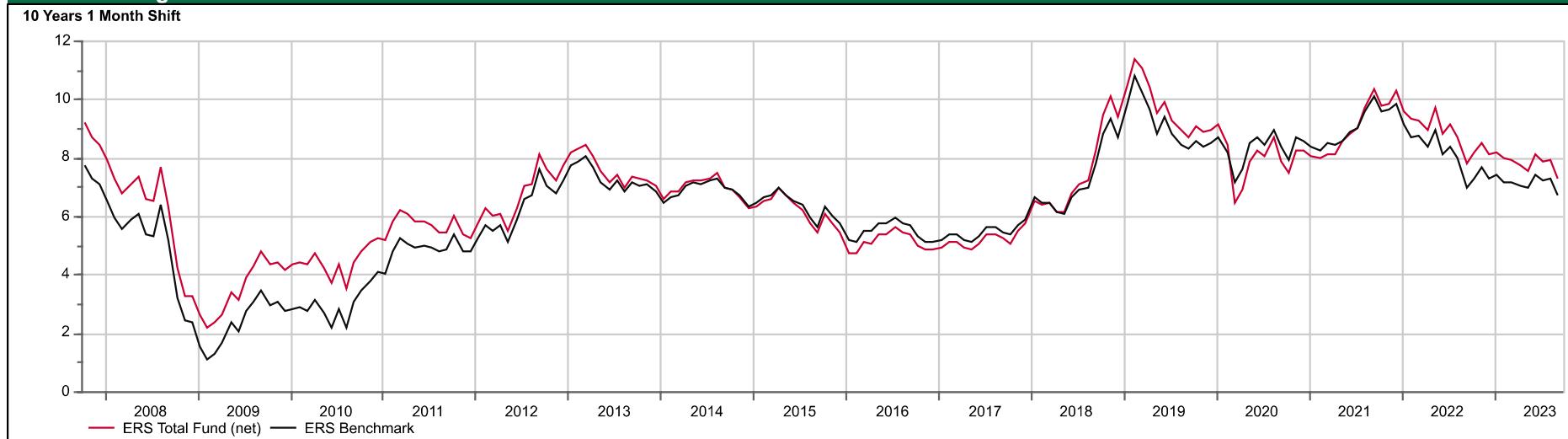
CMERS Benchmark -1.4%

⁽¹⁾Private Equity benchmark return is reported on a 1-quarter lag.

⁽²⁾ All of the Fund's Q2 2023 Private Equity returns are reflected in the July-September time period.

Total Fund Performance

10 Year Rolling Returns – 11/1/1997 to 9/30/2023



Trailing Returns

	QTR	YTD	Annualized Return						
			1 Year	3 Year	5 Year	7 Year	10 Year	15 Year	
ERS Total Fund (net)	-1.7	3.7	9.5	8.6	6.2	7.6	7.2	7.5	
ERS Benchmark	-1.4	5.9	11.0	5.0	5.6	6.7	6.6	7.1	

Investment Growth – 10/1/2008 to 9/30/2023



Rolling Excess Returns – 10/1/2008 to 9/29/2023



ERS Fund Attribution – 3rd Quarter 2023

Asset Class	Benchmark	Average Weight %	Policy Weight %	+/-	Portfolio Return	Benchmark Return	+/-	Attribution Effect(%)			
								Broad Category Group Allocation	Manager Selection	Style Bias	Total Active Return
Public Equity	MSCI ACWI IMI NR USD	39.3	39.0	0.3	-2.8	-3.4	0.6	0.0	0.3	-0.1	0.2
Fixed Income	Bbg US Agg Bond TR USD	27.5	29.0	-1.5	-3.0	-3.2	0.3	0.0	0.0	0.1	0.1
Private Equity⁽²⁾	Russell 3000 (Qtr Lag) + 200bps ⁽¹⁾	13.3	12.0	1.3	2.4	8.6	-6.2	0.1	-0.8	0.0	-0.7
Real Assets⁽²⁾	Real Assets Benchmark ⁽¹⁾	11.9	13.0	-1.1	-2.6	-2.9	0.3	0.0	0.0	0.0	0.0
Absolute Return	90 Day T-Bill +3%	8.0	7.0	1.0	2.0	2.1	0.0	0.0	0.0	0.0	0.0
Total		100.0	100.0	0.0	-1.7	-1.4	-0.3	0.2	-0.5	0.0	-0.3

Main Drivers of Q3 2023 Relative Performance

Impact %

Attribution Category

Private Equity

-0.84%

Manager Selection

Brandes

0.33%

Manager Selection

Overall Allocation

Overweight Private Equity; Change and prompt implementation of new Strategic Asset Allocation Policy effective July 1, 2023.

0.22%

Overall Allocation

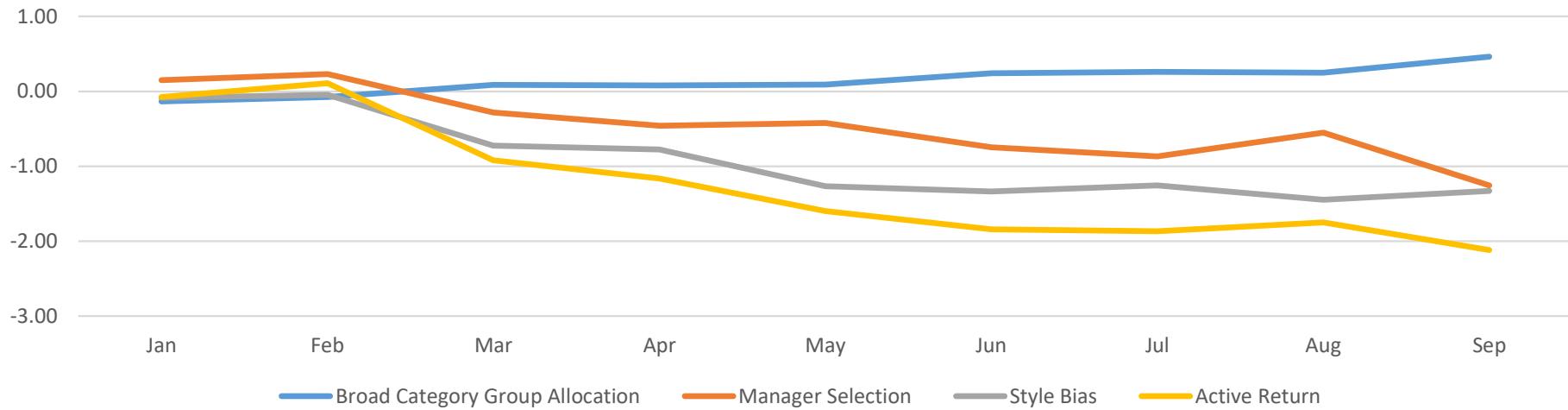
⁽¹⁾Real Estate and Private Equity benchmark returns are reported on a 1-quarter lag.

⁽²⁾ All of the Fund's Q2 2023 Private Equity returns are reflected in the July-September time period. Some Real Estate returns are reported on a 1-quarter lag.

Year-to-Date 2023 Attribution

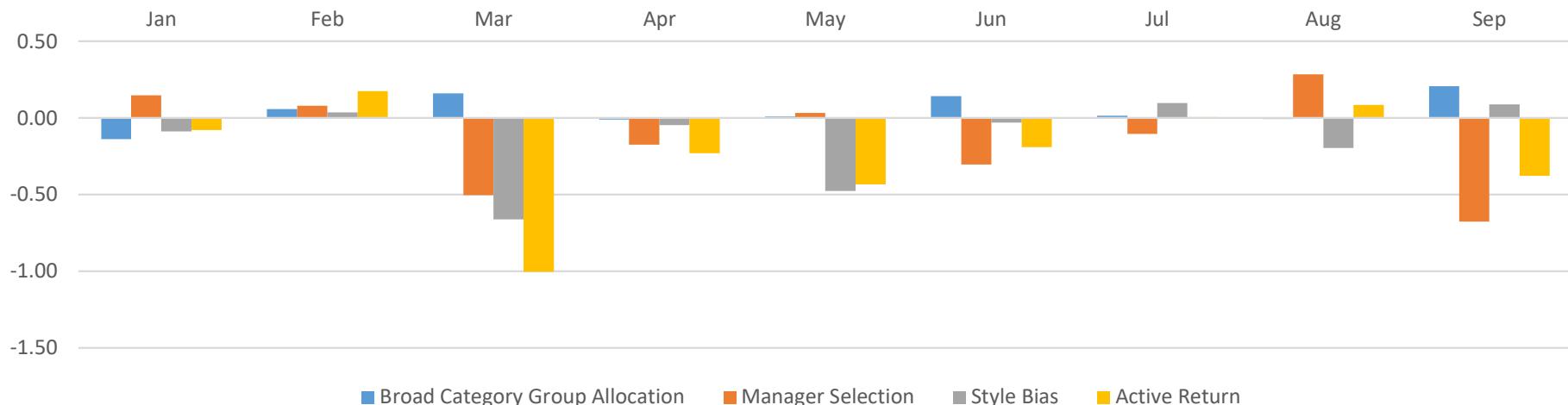
Cumulative Attribution Effects

Cumulative Attribution Effects



Monthly Attribution Effects

Attribution Effects by Month



ERS Fund Attribution – YTD 2023

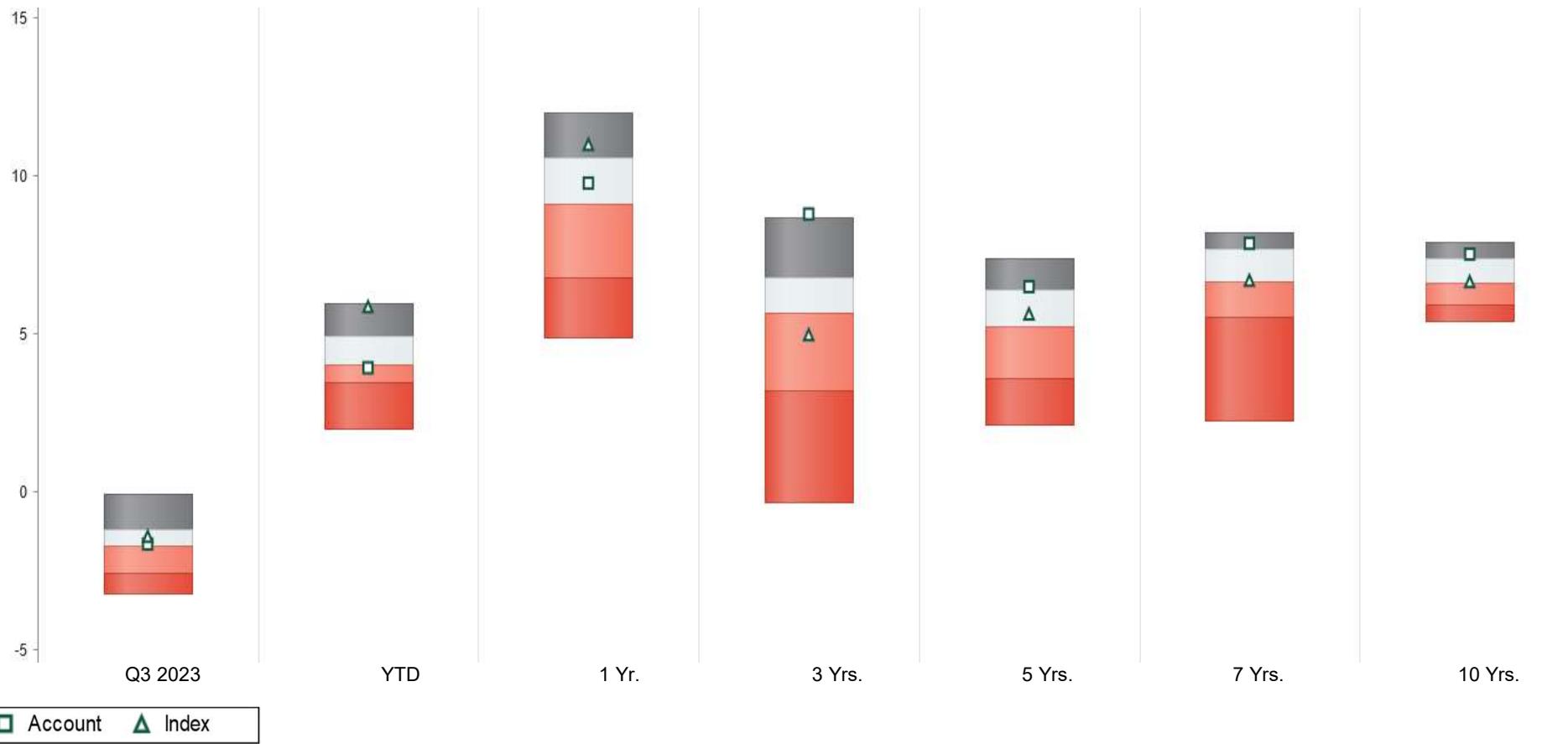
Asset Class	Benchmark	Average Weight %	Policy Weight %	+/-	Portfolio Return	Benchmark Return	+/-	Attribution Effect(%)			
								Broad Category Group Allocation	Manager Selection	Style Bias	Total Active Return
Public Equity	MSCI ACWI IMI NR USD	42.3	42.3	0.0	8.7	9.4	-0.7	-0.1	1.0	-1.4	-0.4
Fixed Income	Bbg US Agg Bond TR USD	23.4	25.0	-1.6	-0.4	-1.2	0.8	0.0	0.2	0.0	0.2
Private Equity⁽²⁾	Russell 3000 (Qtr Lag) + 200bps ⁽¹⁾	12.9	10.7	2.2	5.0	25.9	-20.9	0.4	-2.6	0.0	-2.2
Real Assets⁽²⁾	Real Assets Benchmark ⁽¹⁾	12.2	13.0	-0.8	-6.3	-8.9	2.6	0.1	0.4	0.0	0.4
Absolute Return	90 Day T-Bill +3%	9.1	9.0	0.1	3.8	6.2	-2.3	0.0	-0.3	0.0	-0.2
Total		100.0	100.0	0.0	3.7	5.9	-2.1	0.5	-1.3	-1.3	-2.1

<u>Main Drivers of YTD 2023 Relative Performance</u>	<u>Impact %</u>	<u>Attribution Category</u>
Private Equity	-2.57%	Manager Selection
Public Equity Style Bias	-1.36%	Style Bias
Primarily U.S. Value and Small Cap		
Manager Performance		
Brandes	0.62%	Manager Selection
DFA Strategies	0.38%	Manager Selection
Morgan Stanley	0.23%	Manager Selection
Overweight Private Equity	0.38%	Overall Allocation

⁽¹⁾Real Estate and Private Equity benchmark returns are reported on a 1-quarter lag.

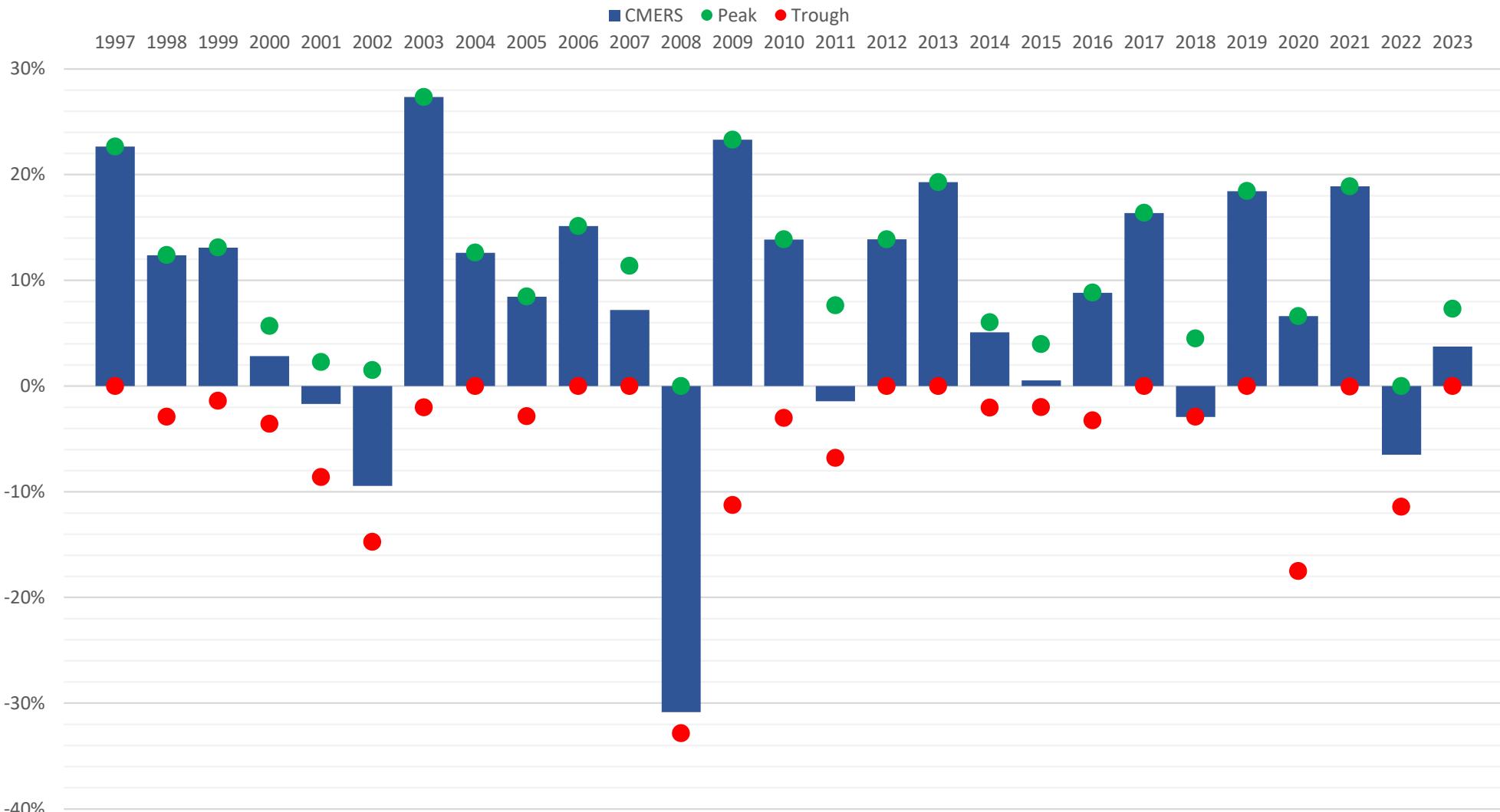
⁽²⁾ All of the Fund's Q2 2023 Private Equity returns are reflected in the July-September time period. Some Real Estate returns are reported on a 1-quarter lag.

Total Fund vs Universe



	Q3 2023	YTD	1 Yr.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.
Account Return	-1.7	3.9	9.8	8.8	6.5	7.9	7.5
Percentile Rank	48	60	44	9	21	17	23
Index Return	-1.4	5.9	11.0	5.0	5.6	6.7	6.6
Percentile Rank	35	12	19	64	42	49	50
1st Quartile	-1.2	4.9	10.6	6.8	6.4	7.7	7.4
Median	-1.7	4.0	9.1	5.6	5.2	6.7	6.6
3rd Quartile	-2.6	3.4	6.8	3.2	3.6	5.5	5.9
Observations	51	49	49	49	45	41	28

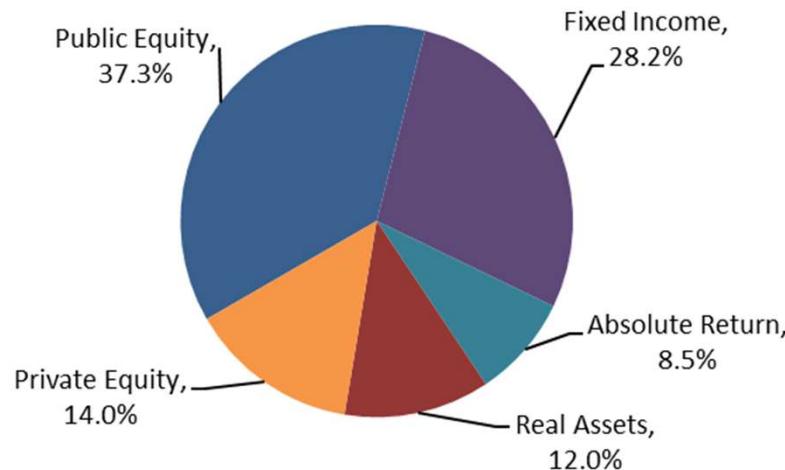
Annual Returns, Peaks, and Troughs



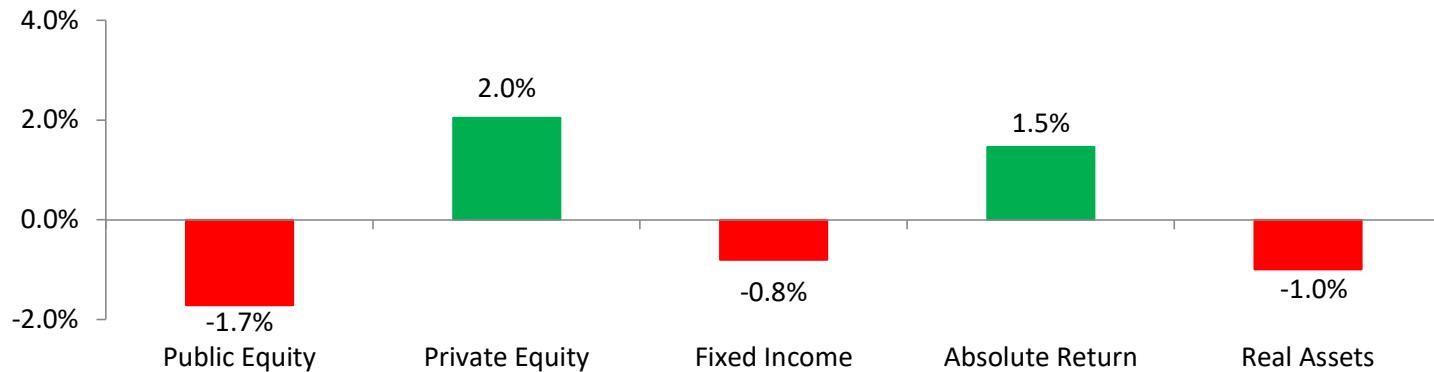
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD 2023
CMERS	22.7%	12.4%	13.1%	2.8%	-1.7%	-9.4%	27.3%	12.6%	8.5%	15.1%	7.2%	-30.8%	23.3%	13.9%	-1.4%	13.9%	19.3%	5.1%	0.5%	8.8%	16.4%	-2.9%	18.4%	6.6%	18.9%	-6.5%	3.7%
Peak	22.7%	12.4%	13.1%	5.7%	2.3%	1.5%	27.3%	12.6%	8.5%	15.1%	11.4%	0.0%	23.3%	13.9%	7.6%	13.9%	19.3%	6.0%	4.0%	8.8%	16.4%	4.5%	18.4%	6.6%	18.9%	0.0%	7.3%
Trough	0.0%	-2.9%	-1.4%	-3.6%	-8.6%	-14.7%	-2.0%	0.0%	-2.9%	0.0%	0.0%	-32.9%	-11.3%	-3.0%	-6.8%	0.0%	0.0%	-2.1%	-2.0%	-3.3%	0.0%	-2.9%	0.0%	-17.5%	0.0%	-11.4%	0.0%

Asset Allocation as of September 30, 2023

Actual Asset Allocation*



Actual Asset Allocation vs. Policy Target



YTD Market Value Change

December 31, 2022 Market Value including City Reserve & PABF Accounts		\$ 5,550,112,010
Monthly Cash Outflows thru	<u>September 30, 2023</u>	
Retiree Payroll Expense		\$ (345,305,183)
PABF Payroll Expense		\$ (22,732)
Expenses Paid		\$ (13,362,055)
GPS Benefit Payments		\$ (6,738,406)
Sub-Total Monthly Cash Outflows		\$ (365,428,376)
Monthly Cash Inflows thru	<u>September 30, 2023</u>	
Contributions		\$ 152,516,513
PABF Contribution		\$ 23,737
Sub-Total Monthly Contributions		\$ 152,540,250
Capital Market Gain/(Loss)		\$ 217,687,673
Value including City Reserve & PABF Accounts as of	<u>September 30, 2023</u>	\$ 5,554,911,556
Less City Reserve Account ¹		\$ 83,121,207
Less PABF Fund ²		\$ 3,011
Net Projected ERS Fund Value as of	<u>September 30, 2023</u>	\$ 5,471,787,338

1 The City Reserve Account balance equals the market value currently held in the Baird account.

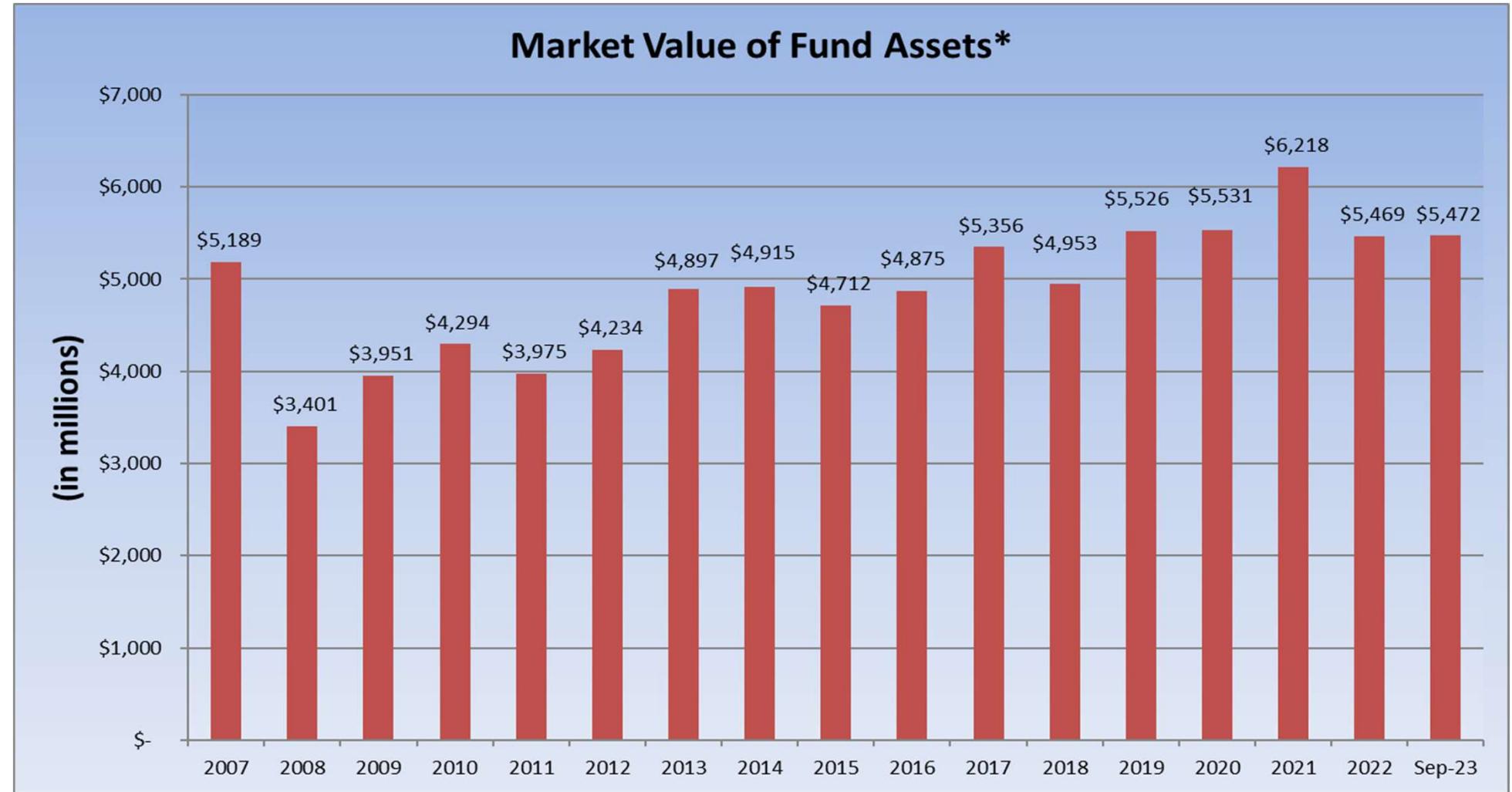
2 PABF Fund balance equals the market value currently held in the PABF account.

Monthly Cash Outflows, Monthly Cash Inflows, and Capital Market Gain/(Loss) amounts are calculated using estimates of cash flows into and out of the Fund. These amounts are not audited and may not tie to CMERS Financial Statements.

Fund Value of Assets: 2007 – September 30, 2023

(Year Ended Dates Reflect 12/31 Fund Values)

Market Value of Fund Assets*



Most recent Actuarial valuation projects benefit payments to total \$5.4 billion in next 10 years.

Benefit Payments	\$5.5 billion
Expenses	\$276 million
Contributions	\$1.6 billion
Investment Gain	\$4.5 billion

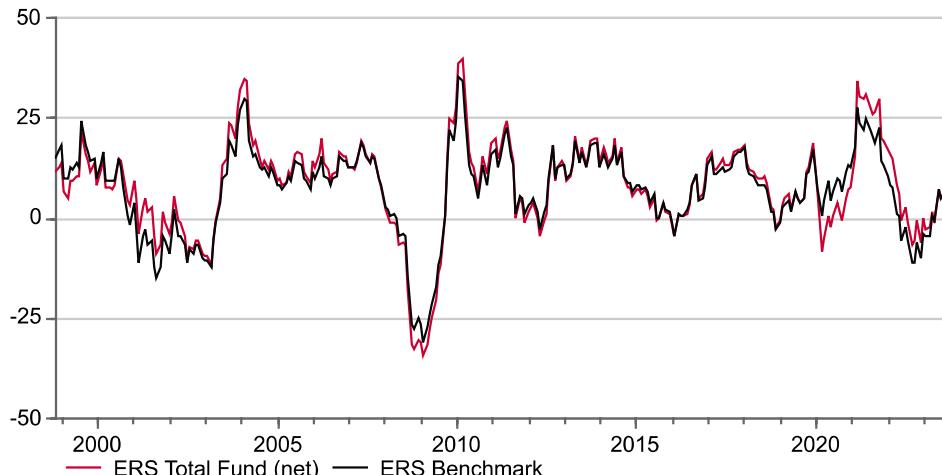
15 3/4 Year Estimates (1/1/2008 - 9/30/2023)

Benefit Payments, Expenses, Contributions, and Investment Gain amounts are calculated using estimates of cash flows into and out of the Fund. These amounts are not audited and may not tie to CMERS Financial Statements.

Total Fund Rolling Returns as of September 30, 2023

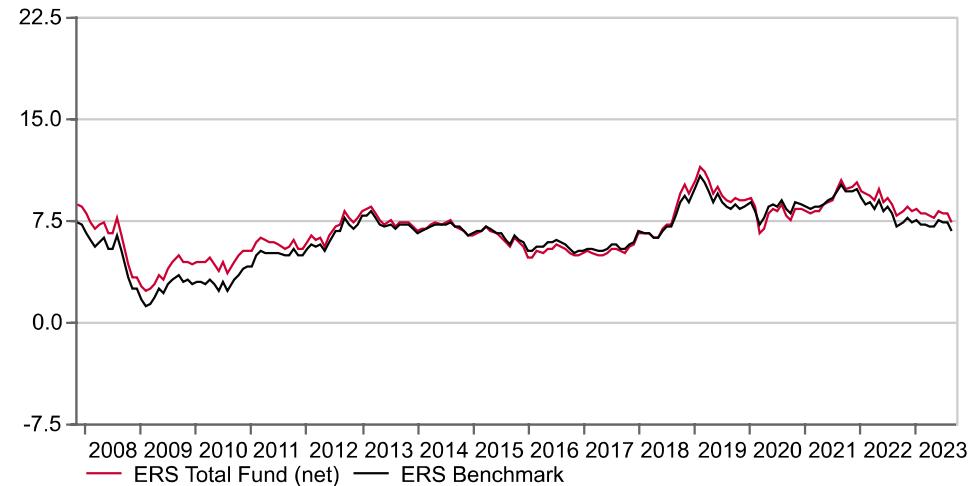
1 Year Rolling Returns – 12/1/1997 to 9/30/2023

1 Year 1 Month Shift



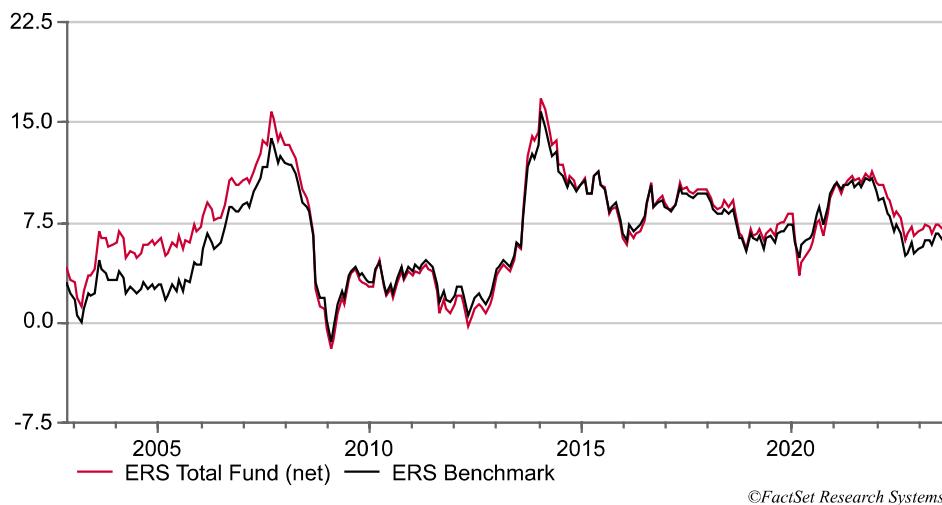
10 Year Rolling Returns – 12/1/1997 to 9/30/2023

10 Years 1 Month Shift



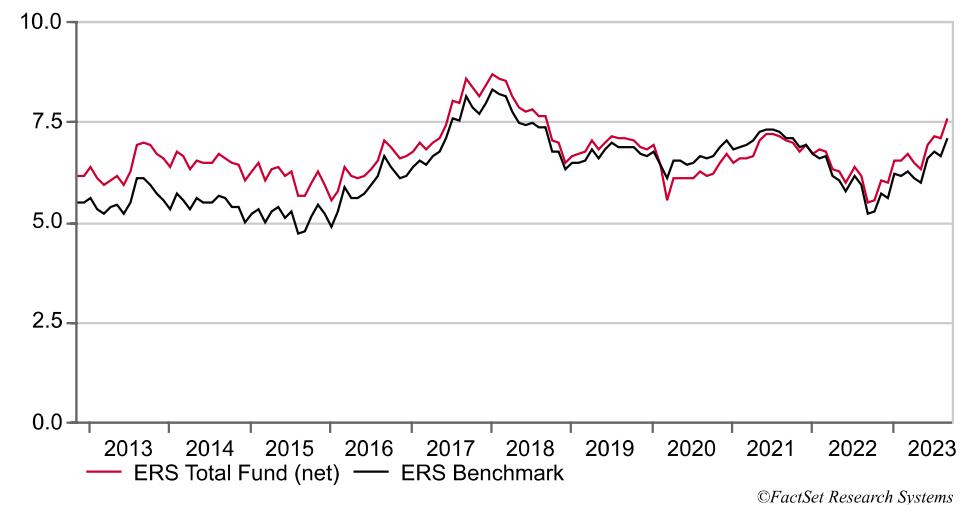
5 Year Rolling Returns – 12/1/1997 to 9/30/2023

5 Years 1 Month Shift



15 Year Rolling Returns – 12/1/1997 to 9/30/2023

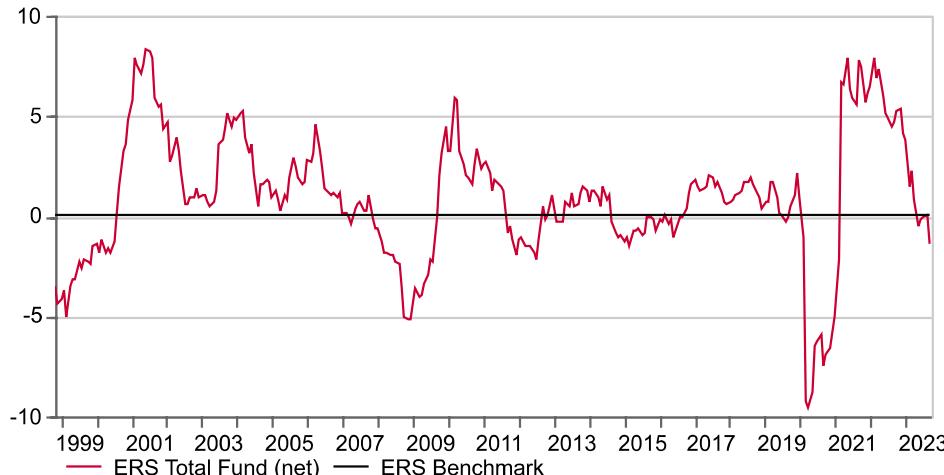
15 Years 1 Month Shift



Total Fund Rolling Excess Returns as of September 30, 2023

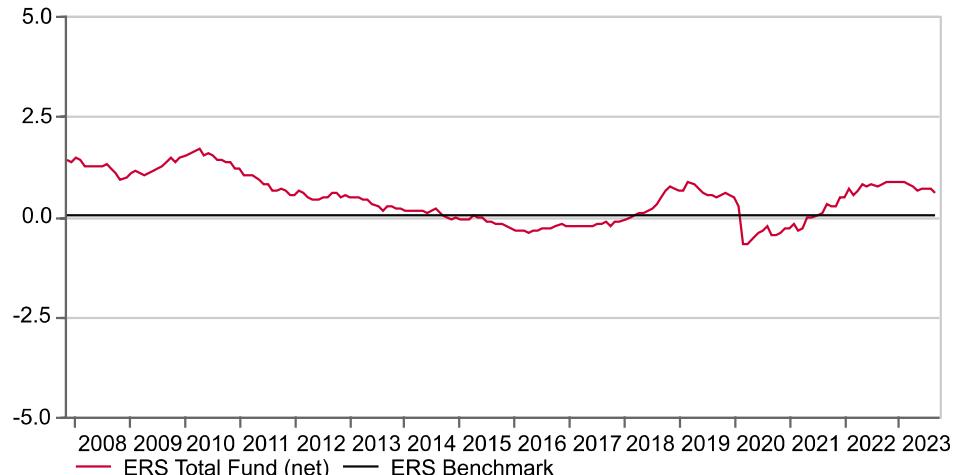
1 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

1 Year 1 Month Shift



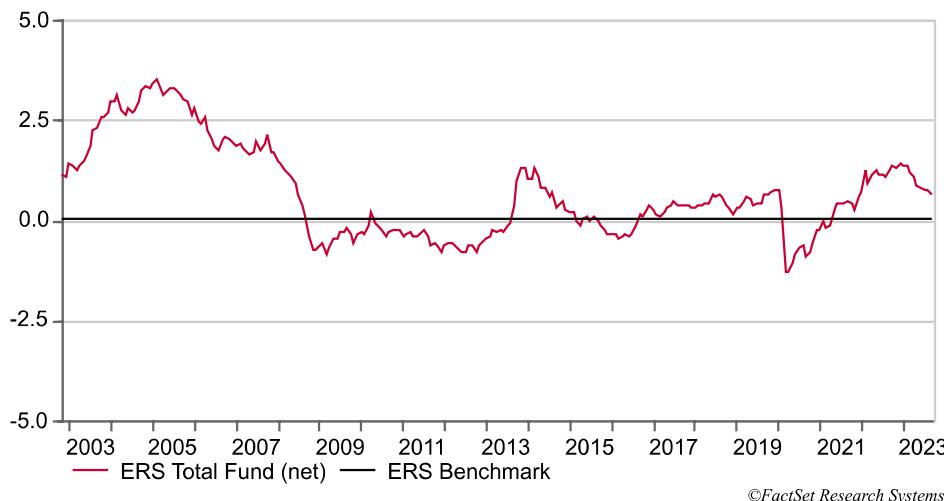
10 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

10 Years 1 Month Shift



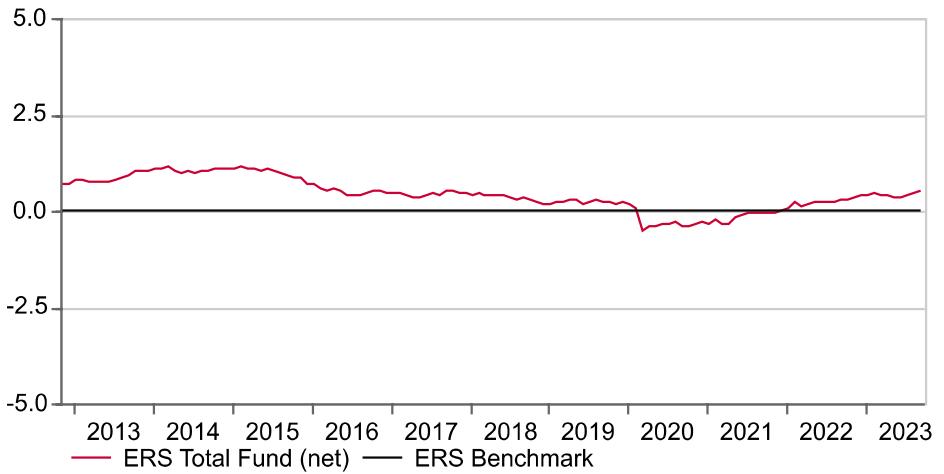
5 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

5 Years 1 Month Shift



15 Year Rolling Excess Returns – 12/1/1997 to 9/30/2023

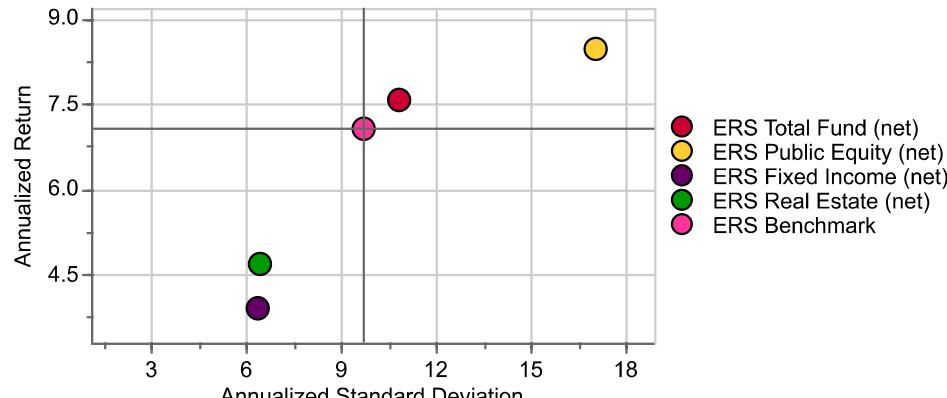
15 Years 1 Month Shift



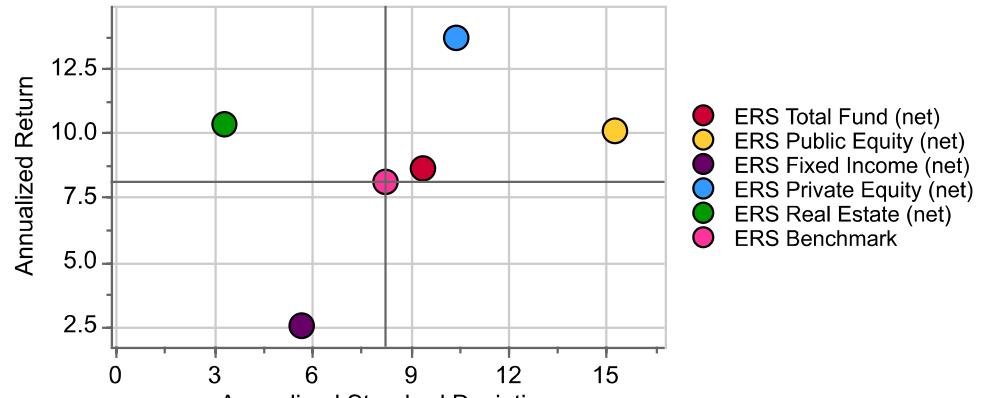
©FactSet Research Systems

Total Fund Statistics

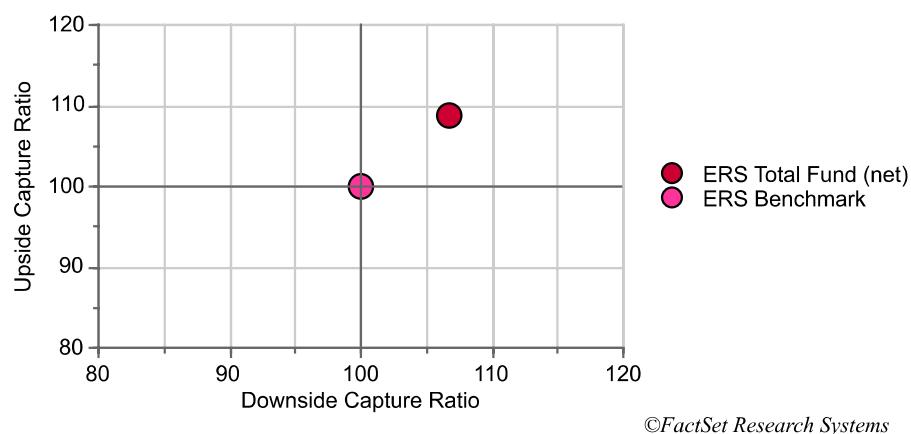
15 Year Risk-Reward – 10/1/2008 to 9/30/2023



Risk-Reward Since Private Equity Inception – 7/1/2010 to 9/30/2023



15 Year Upside-Downside – 10/1/2008 to 9/30/2023



Batting Average

Rolling Window: 3 years
Time Period: 10/1/2008 to 9/30/2023



15 Year Risk – 10/1/2008 to 9/30/2023

	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Total Fund (net)	7.5	10.8	0.0	0.6	0.1	2.8 1.1
ERS Benchmark	7.1	9.7	0.0	0.6	--	-- 1.0

Risk – 7/1/2013 to 9/30/2023

	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Total Fund (net)	7.7	8.9	0.0	0.7	0.1	3.0 1.1
ERS Benchmark	7.1	7.8	0.0	0.8	--	-- 1.0

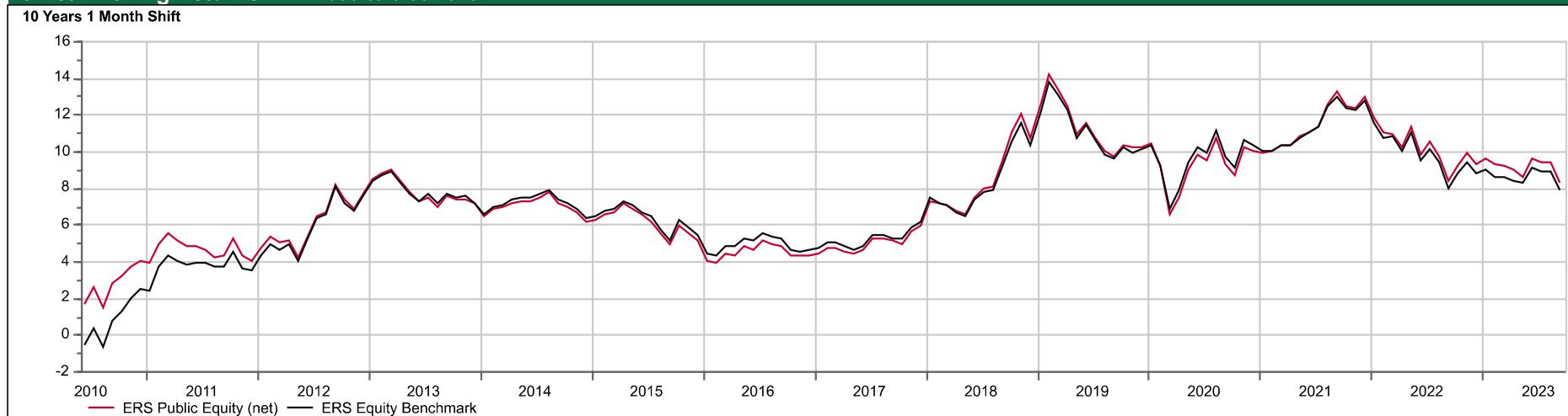
Notable CMERS Manager Events

Manager	Event	Date
Reams	<p>Reams announced several personnel updates in October. Dan Spurgeon, president, departed the firm. His position was eliminated due to the shifting of many non-investment functions to the parent company, Raymond James Investment Management (RJIM). His responsibilities will be assumed by Ed Rick, CFA, the head of investment insights and development at RJIM, and president of Eagle Asset Management and Scout Investments, both also owned by RJIM.</p> <p>Chang Shin, the chief compliance officer of Scout Investments, who also led the compliance function at Reams, departed the firm. Compliance at Reams will now be led by Damian Sousa, the chief compliance officer of RJIM.</p> <p>Bob Crider, who co-founded the firm in 1981, transitioned to the role of senior advisor. He will relinquish his seat on the investment committee, while continuing to advise the committee on macroeconomic data, monetary, and fiscal policy, as well as mentoring younger employees.</p> <p>Dimitri Silva, portfolio manager and head of the global rates and currencies team, was promoted to managing director and added to the investment committee to fill the seat vacated by Mr. Crider.</p> <p>Todd Thompson, who had been a senior leader on the investment team for the past several years, was promoted to the role of deputy chief investment officer. The promotion is a reflection of the role Mr. Thompson had already been filling on the team, and is not expected to result in any changes to the investment strategy. ERS staff is working with Callan to evaluate the impact of the above personnel moves.</p>	October 2023

Public Equity

Public Equity Performance

10 Year Rolling Returns – 7/1/2000 to 9/30/2023



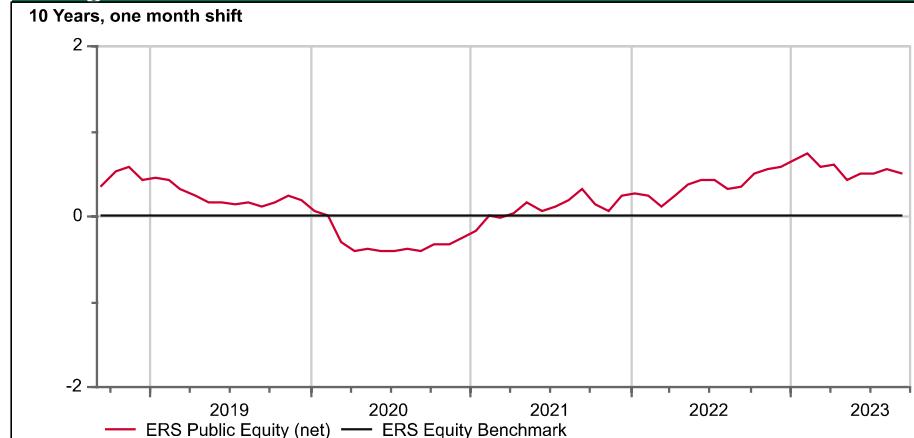
Trailing Returns

	QTR	YTD	Annualized Return					
			1 Year	3 Year	5 Year	7 Year	10 Year	15 Year
ERS Public Equity (Gross)	-2.9	9.0	22.4	9.5	6.8	9.4	8.6	8.8
ERS Public Equity (Net)	-3.0	8.7	22.0	9.2	6.5	9.0	8.3	8.4
ERS Public Equity Benchmark	-3.4	9.4	20.2	6.9	6.1	8.3	7.8	8.1
MSCI AC World IMI	-3.4	9.4	20.2	6.9	6.1	8.3	7.4	7.7

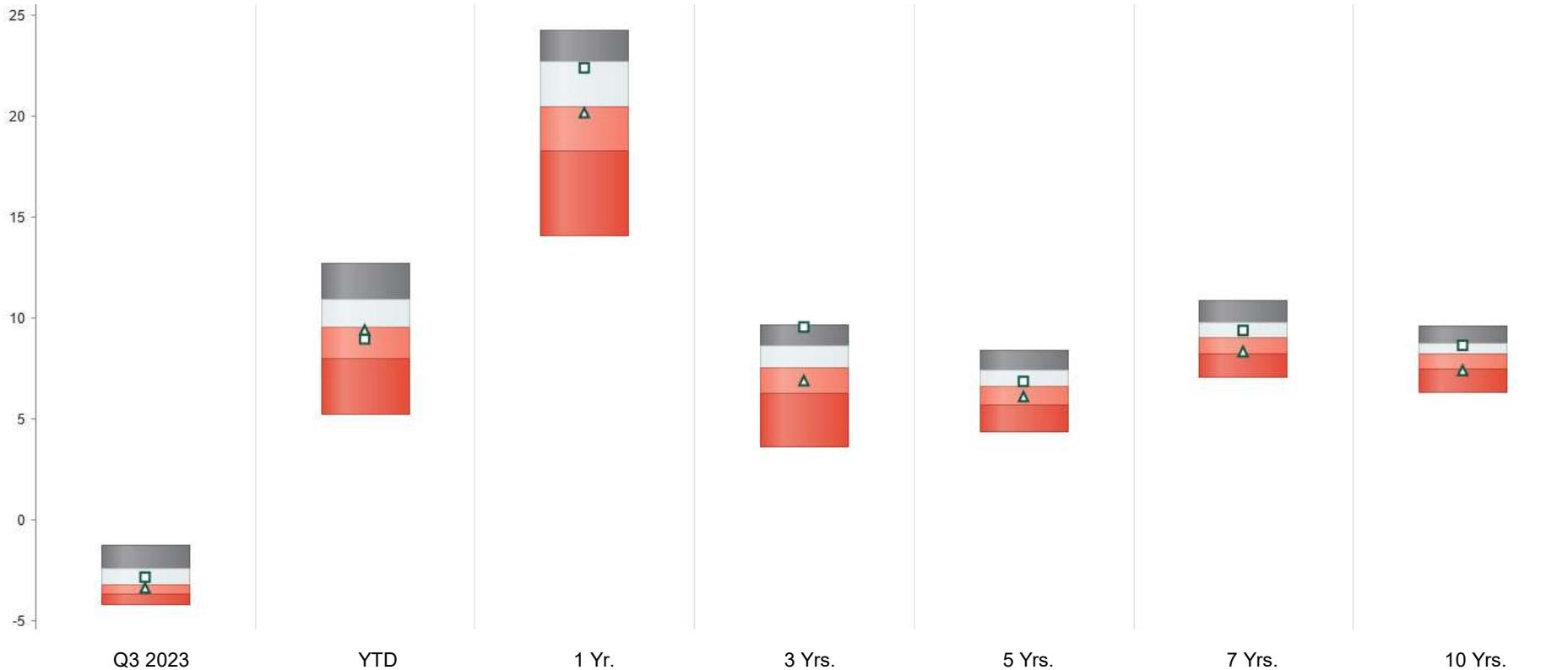
Investment Growth – 10/1/2008 to 9/30/2023



Rolling Excess Returns – 10/1/2008 to 9/30/2023



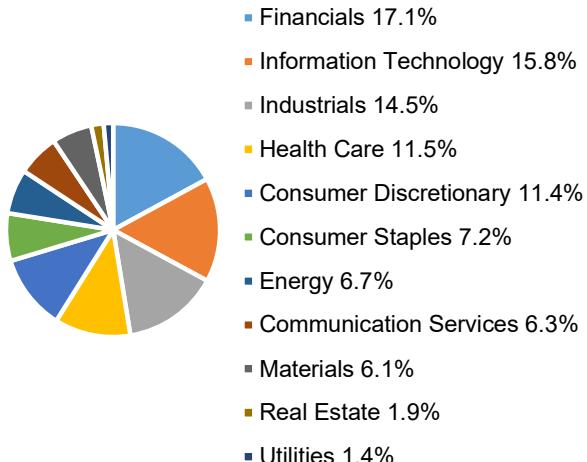
Public Equity vs Universe



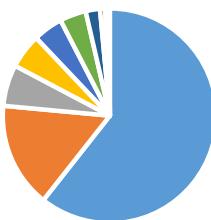
	Q3 2023	YTD	1 Yr.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.
Account Return	-2.9	9.0	22.4	9.5	6.8	9.4	8.6
Percentile Rank	36	63	29	13	40	35	31
Index Return	-3.4	9.4	20.2	6.9	6.1	8.3	7.8
Percentile Rank	61	53	55	66	72	73	3rd Quartile
1st Quartile	-2.4	10.9	22.7	8.6	7.4	9.8	8.8
Median	-3.2	9.6	20.5	7.6	6.6	9.0	8.3
3rd Quartile	-3.7	8.0	18.3	6.3	5.7	8.2	7.5
Observations	129	129	128	130	129	125	112

Public Equity Portfolio Snapshot

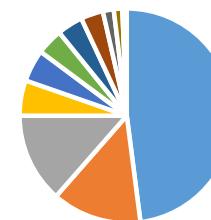
Equity Sector Exposure (GICS)



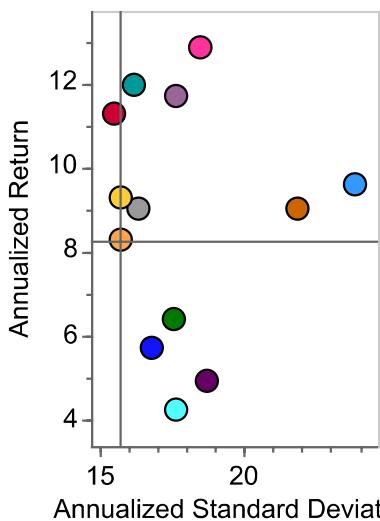
Regional Exposure by Domicile



Regional Exposure by Source of Revenue



Risk – Reward – 8/1/2016 to 9/30/2023



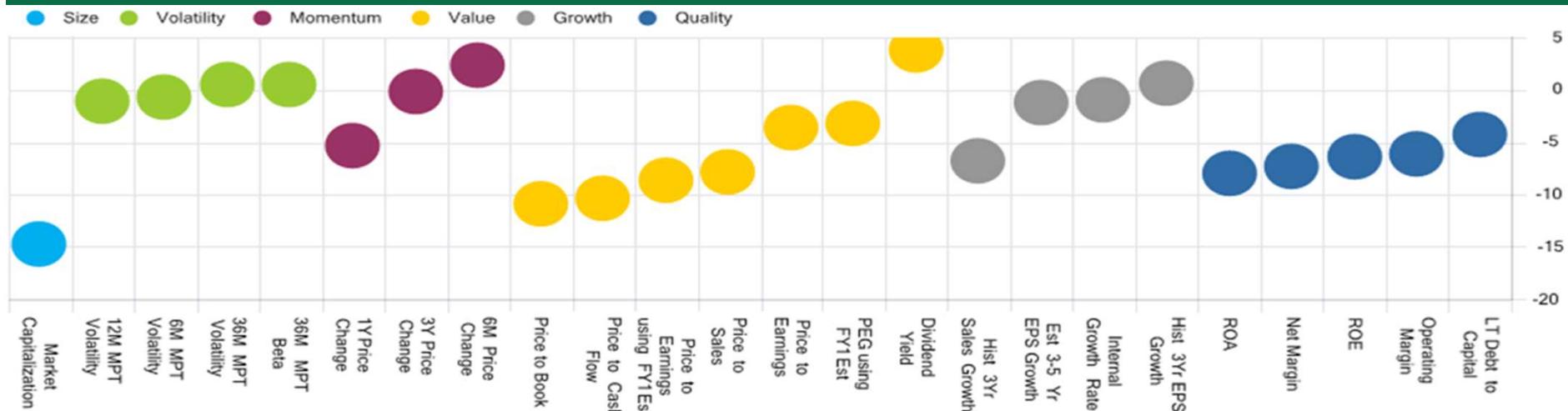
Top 10 Holdings

Portfolio Date 9/30/23	Weight %	Return %	Portfolio Date 9/30/23	Weight %
Microsoft Corporation	2.0	-6.2	Brandes Int'l Value	14.3
Alphabet Inc.	1.4	9.2	BlackRock Global Core	11.0
Apple Inc.	1.2	-11.6	William Blair Int'l Growth	9.7
Amazon.com, Inc.	1.1	-2.5	MFS Global Growth	8.7
Taiwan Semi Mfg. Co.	0.9	-12.9	BlackRock R1000 Value Index	8.6
Exxon Mobil Corporation	0.7	10.8	NTQA S&P 500 Index Core	8.5
Visa Inc.	0.7	-3.0	DFA US Small Cap Value	7.8
Berkshire Hathaway Inc.	0.6	2.7	DFA Int'l Small Cap Value	7.3
Adobe Incorporated	0.6	4.3	DFA US Large Cap Value	6.2
NVIDIA Corporation	0.6	2.8	Polen US Large Cap Growth	5.2

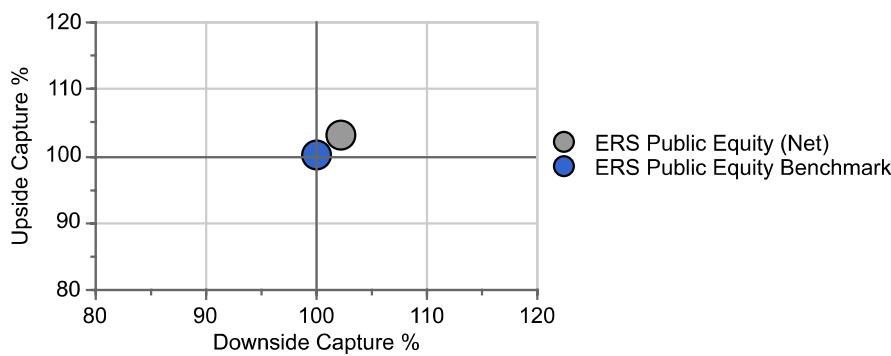
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Public Equity Statistics

Characteristics Tilt vs MSCI ACWI IMI 9/30/2023



15 Year Upside-Downside – 10/1/2008 to 9/30/2023

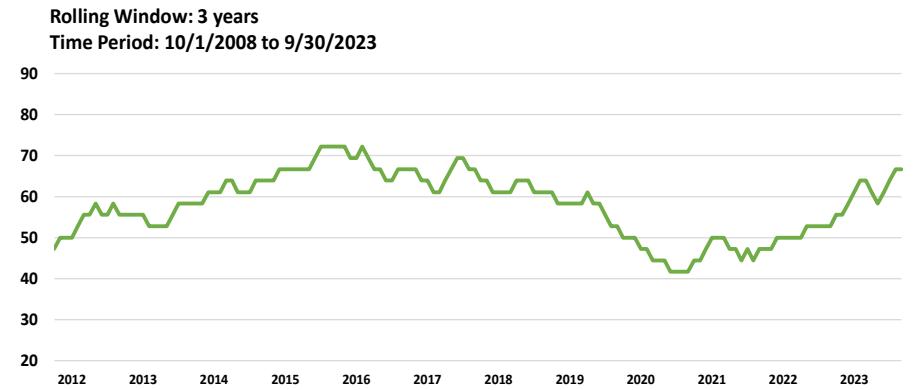


©FactSet Research Systems

15 Year Risk – 10/1/2008 to 9/30/2023

	Annualized Return	Standard Deviation	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Public Equity (Net)	8.4	17.0	0.0	0.4	0.1	1.8	1.0
ERS Public Equity Benchmark	8.1	16.4	0.0	0.4	--	--	1.0

Batting Average



Risk – 7/1/2013 to 9/30/2023

	Annualized Return	Standard Deviation	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
ERS Public Equity (Net)	9.0	15.1	0.0	0.5	0.1	1.8	1.0
ERS Public Equity Benchmark	8.4	14.6	0.0	0.5	--	--	1.0



**"Price to Earnings," "Price to Earnings using FY1 Est," and "PEG using FY1 Est" values exclude companies with negative earnings from calculations.

Public Equity Valuation Characteristics

As of September 30, 2023

	Price/ Earnings	P/E using FY2 Est	Price/ Book	Price/ CF	Dividend Yield
ERS Public Equity	13.2	12.3	1.6	7.2	2.39
MSCI AC World IMI	16.5	14.5	2.4	9.3	2.18

Domestic Managers	Price/ Earnings	P/E using FY2 Est	Price/ Book	Price/ CF	Dividend Yield	Global & International Managers	Price/ Earnings	P/E using FY2 Est	Price/ Book	Price/ CF	Dividend Yield
BlackRock R1000 Value Index	15.4	13.4	2.1	9.3	2.44	AQR Emerging Markets Core	6.8	7.2	1.0	3.6	6.49
CastleArk Small Growth	23.0	17.9	3.7	13.8	0.36	BlackRock Global Core	15.7	13.7	2.3	9.5	2.01
DFA Large Value	12.7	11.3	1.9	7.5	2.42	Brandes Int'l Value	9.2	9.1	1.0	4.2	4.05
DFA Small Value	8.5	9.0	1.0	4.7	1.89	DFA Int'l Small Value	8.9	8.4	0.7	4.3	3.77
Earnest Mid Core	17.1	13.8	2.5	10.0	1.67	MFS Global Growth	25.9	20.3	4.4	17.3	1.15
NT S&P 500 Index	21.4	17.3	3.8	13.6	1.62	William Blair Int'l Growth	21.7	17.7	3.5	16.1	1.74
Polen Large Growth	35.9	24.9	7.9	24.6	0.39						

**Price/Earnings" and "P/E using FY2 Est" values exclude companies with negative earnings from calculations.

P/E Ratio Comparisons in the U.S. Since 1980 - As of September 30, 2023

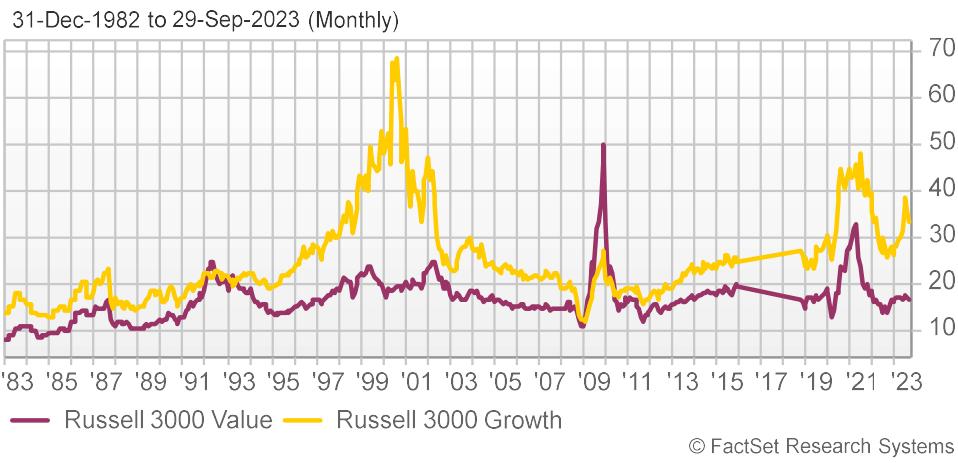
Value vs. Growth



Large vs. Small



Price to Earnings - Russell 3000 Value vs Russell 3000 Growth



Relative Price to Earnings



Price to Earnings ratios for Value vs. Growth charts include companies with negative earnings in calculations.

Price to Earnings ratios for Large vs Small: Top chart includes companies with negative earnings in calculations; bottom chart excludes companies with negative earnings from calculation.

Relative Investment Performance – Active Equity Managers

As of September 30, 2023

Outperforming Equity Managers

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Brandes <i>MSCI EAFE</i>	1.7% 5.8%	18.4% 11.4%	43.4% 17.8%	15.1% 9.3%	4.7% 1.4%	6.2% 0.9%	4.7% 0.9%
DFA International <i>MSCI EAFE Small Cap</i>	0.1% 3.6%	7.5% 5.7%	28.3% 10.4%	10.5% 9.3%	2.4% 1.6%	4.6% 0.6%	4.5% 0.2%
DFA U.S. Small Value <i>Russell 2000 Value</i>	-0.1% 2.8%	5.0% 5.5%	20.1% 12.2%	24.4% 11.1%	7.2% 4.6%	9.4% 3.4%	8.6% 2.4%
AQR <i>MSCI EM</i>	-0.8% 2.2%	7.0% 5.2%	17.0% 5.3%	0.3% 2.1%	1.1% 0.5%	3.8% 0.5%	N/A
DFA U.S. Large Value <i>Russell 1000 Value</i>	-1.5% 1.7%	2.9% 1.1%	17.6% 3.1%	14.0% 2.9%	5.6% 0.7%	N/A	N/A
BlackRock Global Alpha Tilts <i>MSCI ACWI</i>	-3.1% 0.3%	10.4% 0.4%	23.1% 2.3%	7.4% 0.5%	6.5% 0.0%	9.2% 0.6%	N/A
Earnest <i>Russell MidCap</i>	-4.5% 0.2%	3.8% 0.1%	11.7% 1.7%	9.1% 1.1%	8.8% 2.4%	11.7% 3.0%	11.2% 2.2%
ERS Public Equity <i>ERS Equity Benchmark</i>	-3.0% 0.4%	8.7% 0.7%	22.0% 1.8%	9.2% 2.3%	6.5% 0.4%	9.0% 0.7%	8.3% 0.5%

Relative outperformance in blue

Relative underperformance in red

*Returns net of fees

Relative Investment Performance – Active Equity Managers

As of September 30, 2023

Underperforming Equity Managers

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
William Blair <i>MSCI ACWI ex US</i>	-8.3% 4.7%	2.6% 3.3%	14.6% 6.4%	-1.6% 5.9%	3.4% 0.3%	5.6% 0.4%	4.7% 0.9%
MFS <i>MSCI ACWI</i>	-5.5% 2.1%	8.7% 1.4%	20.2% 0.6%	6.1% 0.8%	9.1% 2.7%	11.5% 2.9%	10.1% 2.5%
CastleArk <i>Russell 2000 Growth</i>	-9.0% 1.7%	0.5% 4.8%	4.0% 5.6%	2.0% 0.9%	2.7% 1.2%	8.8% 2.0%	7.5% 0.8%
Polen <i>S&P 500</i>	-3.4% 0.1%	20.9% 7.8%	21.4% 0.2%	1.1% 9.1%	8.8% 1.2%	13.3% 1.0%	13.8% 1.9%
ERS Public Equity <i>ERS Equity Benchmark</i>	-3.0% 0.4%	8.7% 0.7%	22.0% 1.8%	9.2% 2.3%	6.5% 0.4%	9.0% 0.7%	8.3% 0.5%

Relative outperformance in blue

Relative underperformance in red

*Returns net of fees

Relative Investment Performance – Passive Equity Managers & Other

As of September 30, 2023

Passive Equity Managers

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Northern Trust S&P 500 Index <i>S&P 500</i>	-3.3% 0.0%	13.1% 0.0%	21.6% 0.0%	10.1% 0.0%	9.9% 0.0%	12.2% 0.0%	11.9% 0.0%
BlackRock Russell 1000 Value Index <i>Russell 1000 Value</i>	-3.2% 0.0%	1.8% 0.0%	14.5% 0.0%	11.1% 0.0%	6.3% 0.1%	N/A	N/A

Real Assets Manager

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Principal Diversified Real Assets <i>Blended Benchmark</i>	-4.0% 1.1%	-3.5% 0.5%	3.8% 1.1%	5.7% 0.0%	3.2% 0.0%	3.7% 0.2%	N/A

Relative outperformance in blue

Relative underperformance in red

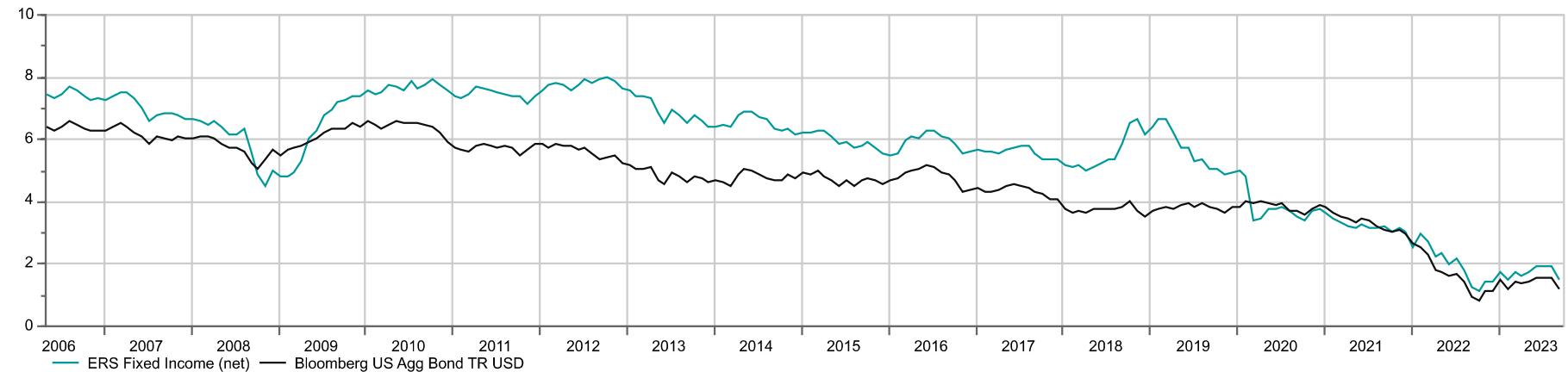
*Returns net of fees

Fixed Income

Fixed Income Performance

10 Year Rolling Returns – 6/1/1996 to 9/30/2023

10 Years 1 Month Shift

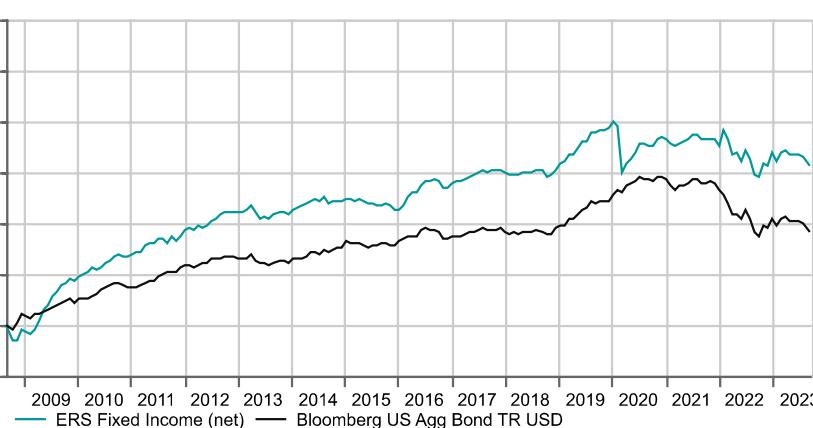


Trailing Returns

Annualized Return

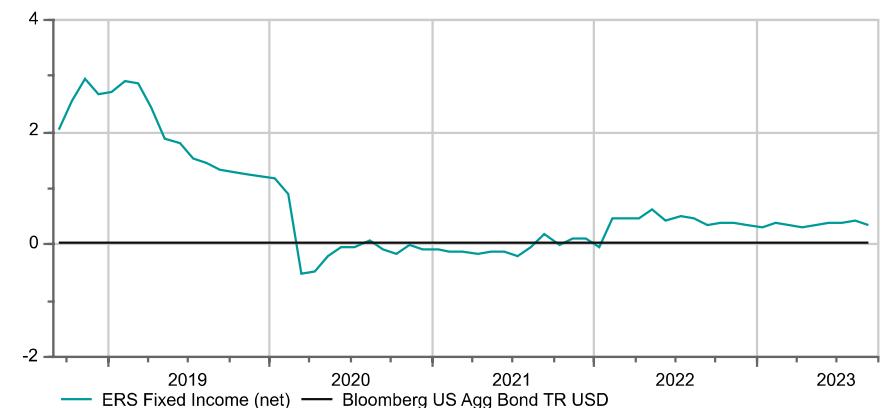
	QTR	YTD	1 Year	3 Year	5 Year	7 Year	10 Year	15 Year
Total Fixed Income (Gross)	-3.0	-0.2	2.4	-1.8	0.3	0.7	1.6	4.0
Total Fixed Income (Net)	-3.1	-0.3	2.3	-1.9	0.2	0.5	1.4	3.9
Bloomberg US Aggregate	-3.2	-1.2	0.6	-5.2	0.1	-0.1	1.1	2.5

Investment Growth – 10/1/2008 to 9/30/2023

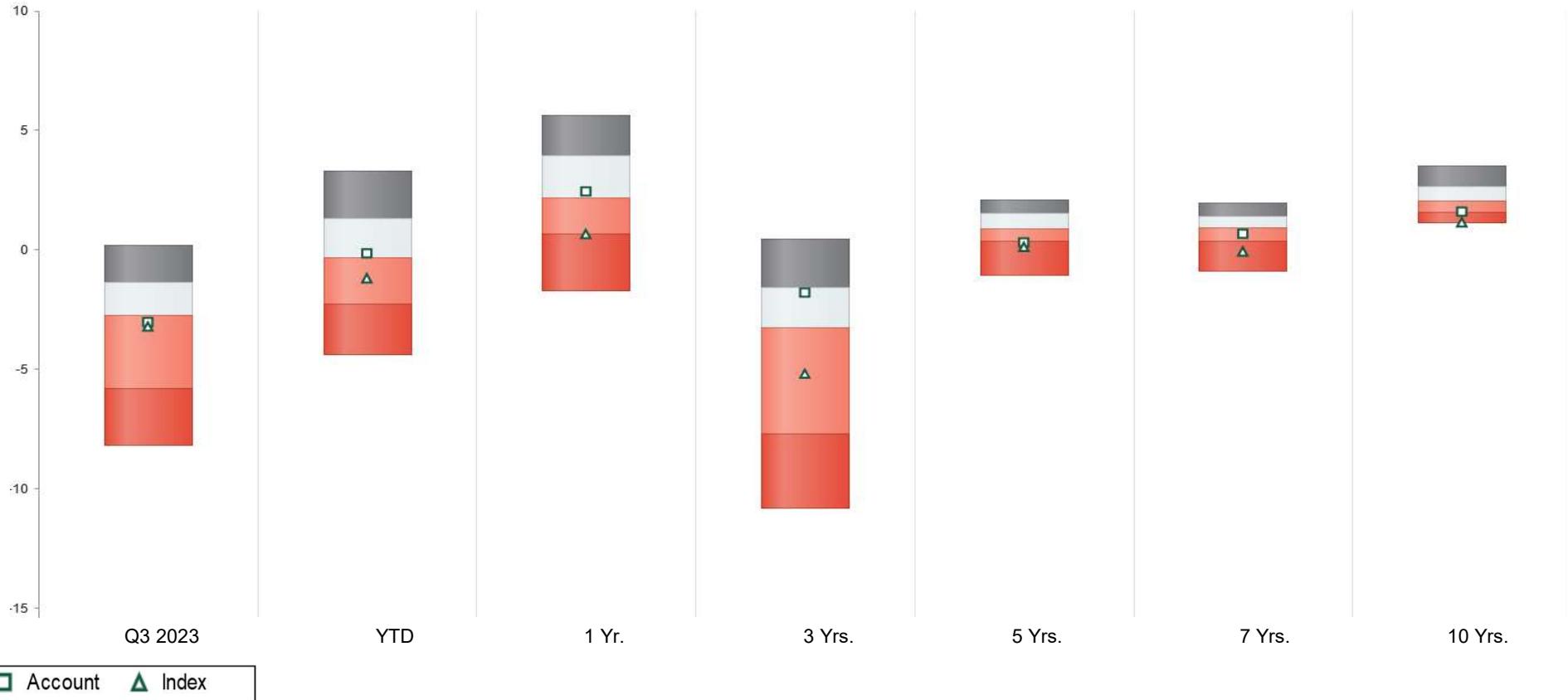


Rolling Excess Return – 10/1/2008 to 9/30/2023

10 Years, One month shift



Fixed Income vs Universe



Account	Index
---------	-------

	Q3 2023	YTD	1 Yr.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.
Account Return	-3.0	-0.2	2.4	-1.8	0.3	0.7	1.6
Percentile Rank	55	48	45	31	77	66	71
Index Return	-3.2	-1.2	0.6	-5.2	0.1	-0.1	1.1
Percentile Rank	64	67	76	70	83	84	91
1st Quartile	-1.4	1.3	3.9	-1.6	1.5	1.4	2.7
Median	-2.7	-0.3	2.2	-3.2	0.9	0.9	2.0
3rd Quartile	-5.8	-2.3	0.7	-7.7	0.3	0.4	1.6
Observations	93	93	93	94	94	93	90

Relative Investment Performance – Fixed Income Managers

As of September 30, 2023

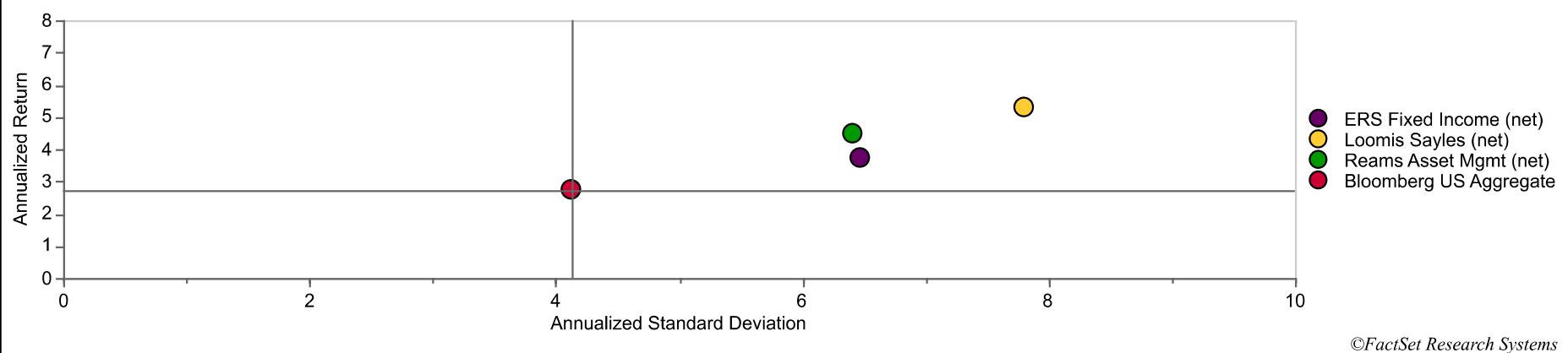
	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Reams	-3.8%	-0.6%	2.8%	-4.1%	2.5%	1.7%	2.3%
<i>Bloomberg U.S. Agg.</i>	0.6%	0.6%	2.1%	1.1%	2.4%	1.8%	1.2%
Loomis Sayles	-2.2%	0.7%	3.4%	-1.9%	1.5%	2.2%	2.9%
<i>Bloomberg U.S. Agg.</i>	1.0%	1.9%	2.8%	3.3%	1.4%	2.2%	1.8%
BlackRock Index	-3.0%	-1.2%	-0.6%	N/A	N/A	N/A	N/A
<i>Bloomberg U.S. Government</i>	0.0%	0.2%	0.1%				
ERS Fixed Income	-3.1%	-0.3%	2.3%	-1.9%	0.2%	0.5%	1.4%
<i>Bloomberg U.S. Agg.</i>	0.2%	1.0%	1.7%	3.3%	0.1%	0.6%	0.3%

Relative outperformance in blue
Relative underperformance in red

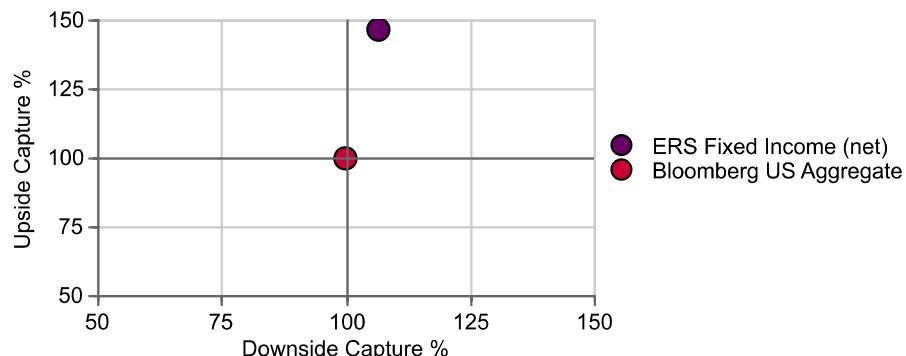
*Returns net of fees

Fixed Income Statistics

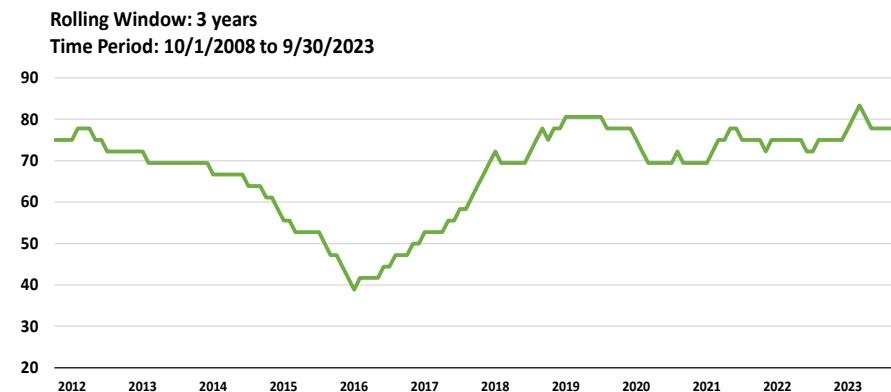
Risk – Reward – 10/1/2008 to 9/30/2023



15 Year Upside-Downside – 10/1/2008 to 9/30/2023



Batting Average



15 Year Risk – 10/1/2008 to 9/30/2023

Risk – 7/1/2013 to 9/30/2023

	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta		Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error	Beta	
Total Fixed Income (Net)	3.9	6.4	0.1	0.5	0.1	4.7	1.0	Total Fixed Income (Net)	1.5	6.1	0.0	0.1	0.0	4.4
Bloomberg US Aggregate	2.5	4.2	0.0	0.4	--	--	1.0	Bloomberg US Aggregate	1.2	4.3	0.0	0.0	--	--

Absolute Return

Relative Investment Performance – Absolute Return Managers

As of September 30, 2023

	3rd Qtr	YTD	1 Year	3 Year	5 Year	7 Year
UBS A&Q <i>1 Year Libor / SOFR + 4%</i>	2.2%	4.1%	7.8%	8.6%	8.2%	7.3%
	0.0%	2.5%	0.8%	2.9%	1.9%	1.0%
Aptitude <i>SOFR + 4%</i>	1.8%	3.1%	6.2%	N/A	N/A	N/A
	0.5%	3.5%	2.4%			
ERS Absolute Return <i>3 Month T-Bill + 3%</i>	2.0%	3.8%	7.4%	13.7%	5.5%	5.5%
	0.0%	2.3%	0.7%	8.7%	0.7%	0.8%

Relative outperformance in blue

Relative underperformance in red

Risk Adjusted Returns (6/30/14 - 9/30/23)

	Return	Std Dev	Sharpe Ratio	Max Drawdown
ERS Public Equity (net)	7.3%	15.6%	0.4	-25.3%
ERS Fixed Income (net)	1.0%	6.4%	0.0	-13.6%
ERS Absolute Return (net)	5.5%	9.6%	0.5	-27.1%

*Returns net of fees

Performance Update

Performance Update

Estimated ERS Total Fund Market Value is \$5.41 billion as of November 2, 2023

Period	ERS Fund*	Benchmark
3 rd Quarter YTD	3.7%	5.9%
October (Estimate)	-1.9%	-1.8%
November MTD (Estimate)	1.6%	1.7%
YTD Through November 2, 2023 (Estimate)	3.4%	5.7%

*Returns Net of Fees

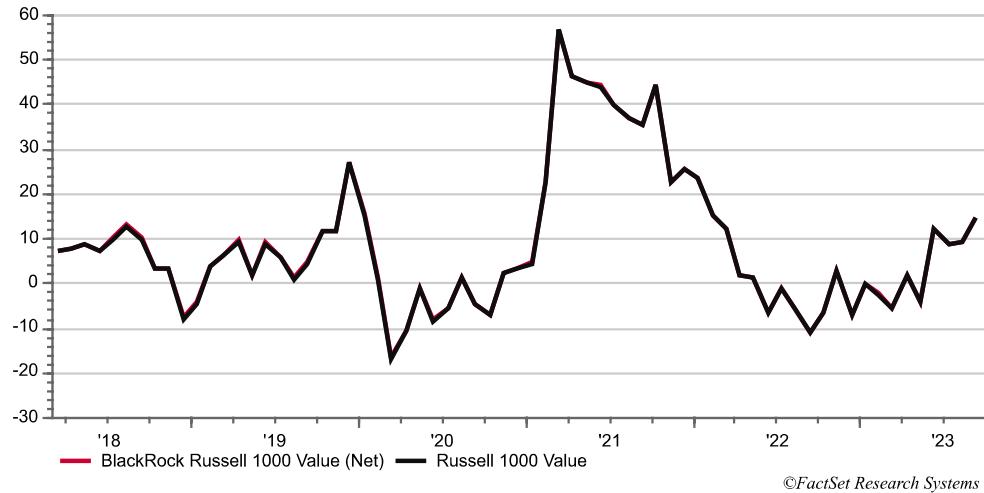
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BlackRock Russell 1000 Value Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 4/1/2017 (One Year, One Month Shift)



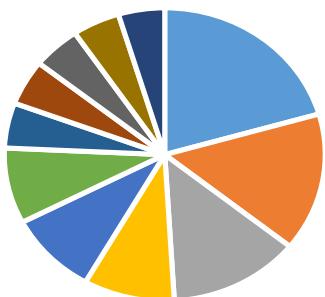
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Berkshire Hathaway Inc.	3.44	2.73
Exxon Mobil Corporation	2.52	10.53
JPMorgan Chase & Co.	2.24	0.34
Johnson & Johnson	2.01	-5.21
Chevron Corporation	1.60	8.18
Procter & Gamble Company	1.49	-3.30
Walmart Inc.	1.22	2.11
Cisco Systems, Inc.	1.18	4.68
Merck & Co., Inc.	1.14	-10.15
Bank of America Corporation	1.02	-3.77

Trailing Returns

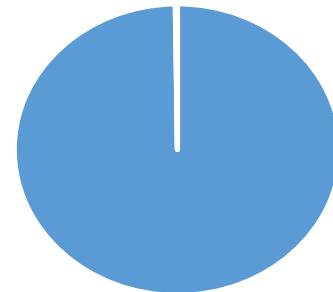
	QTR	YTD	1 Year	3 Year	5 Year	Inception 4/1/2017
BlackRock R1000 Value (Net)	-3.2	1.8	14.5	11.1	6.3	7.0
Russell 1000 Value	-3.2	1.8	14.4	11.1	6.2	6.9

Equity Sector Exposure (GICS)



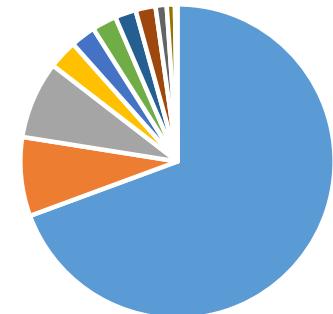
- Financials 20.5%
- Health Care 15.2%
- Industrials 13.2%
- Information Technology 9.2%
- Energy 9.1%
- Consumer Staples 8.3%
- Communication Services 5.0%
- Consumer Discretionary 5.0%
- Utilities 4.9%
- Materials 4.8%
- Real Estate 4.7%

Regional Exposure by Domicile



- North America 99.8%
- Europe dev 0.1%
- United Kingdom 0.1%

Regional Exposure by Source of Revenue

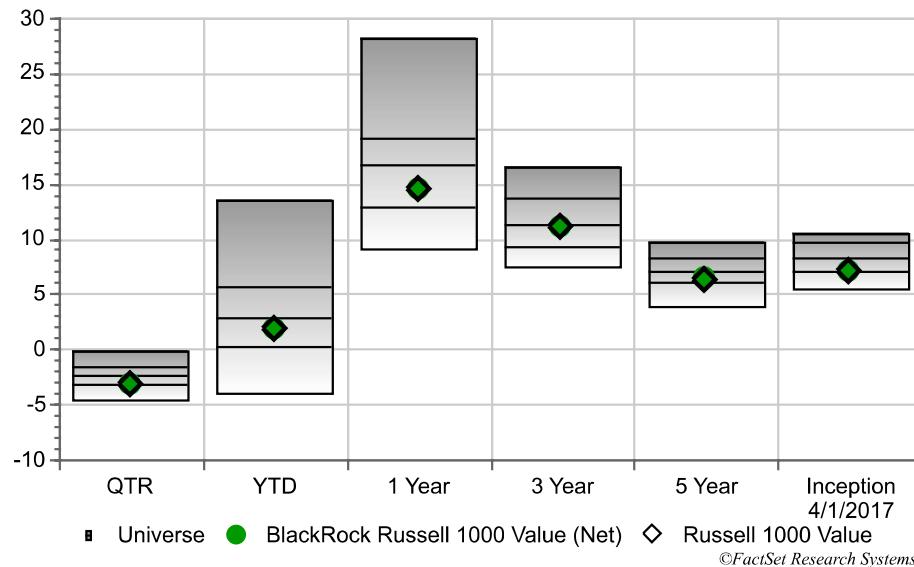


- North America 69.4%
- Asia emrg 8.1%
- Europe dev 8.0%
- Latin America 3.0%
- Africa/Middle East 2.6%
- United Kingdom 2.5%
- Asia dev 2.2%
- Japan 2.1%
- Europe emrg 1.1%
- Australasia 0.8%
- Other 0.3%

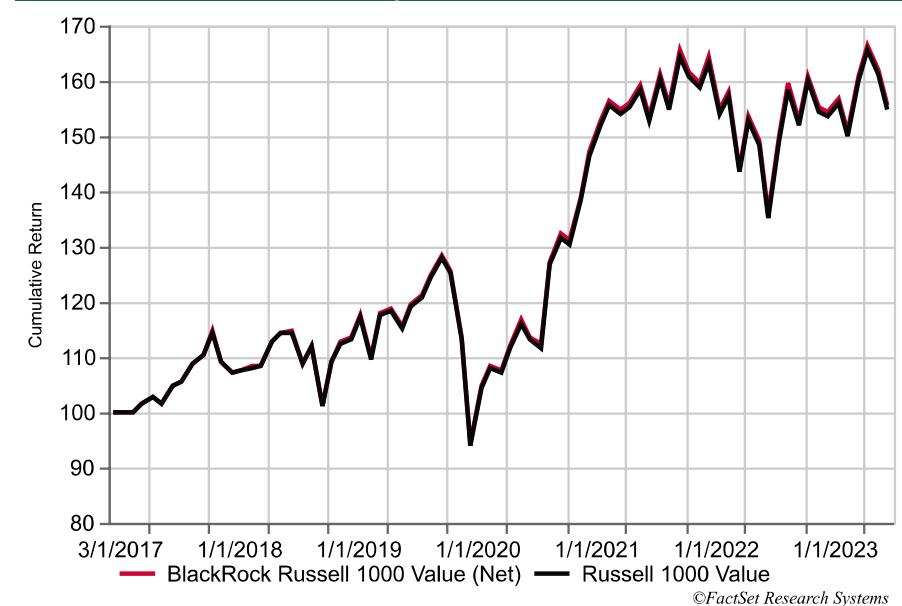
BlackRock Russell 1000 Value vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:Large-Cap Value

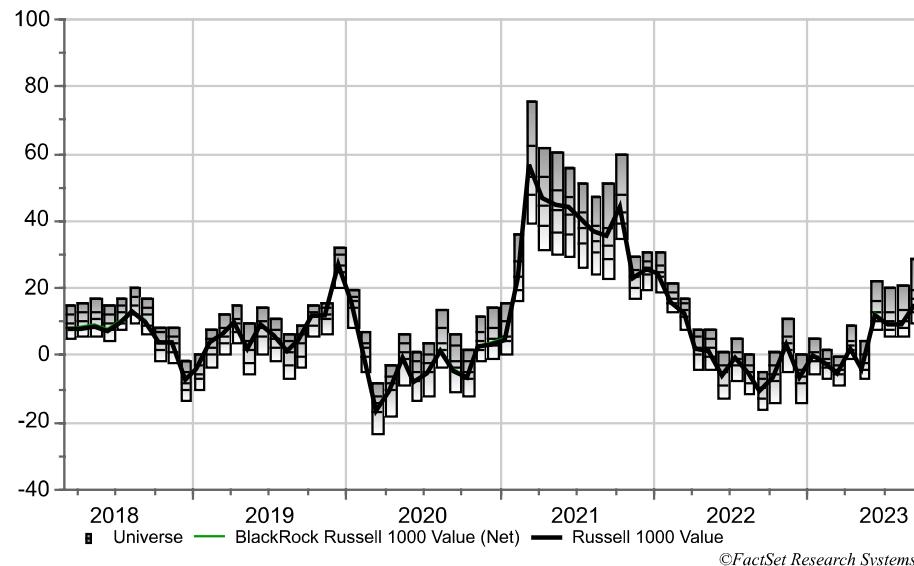


Investment Growth Since Inception 4/1/2017



Rolling Returns 4/1/2017 – 9/30/2023 (1 Year, 1 Month Shift)

Universe: Lipper US:Large-Cap Value

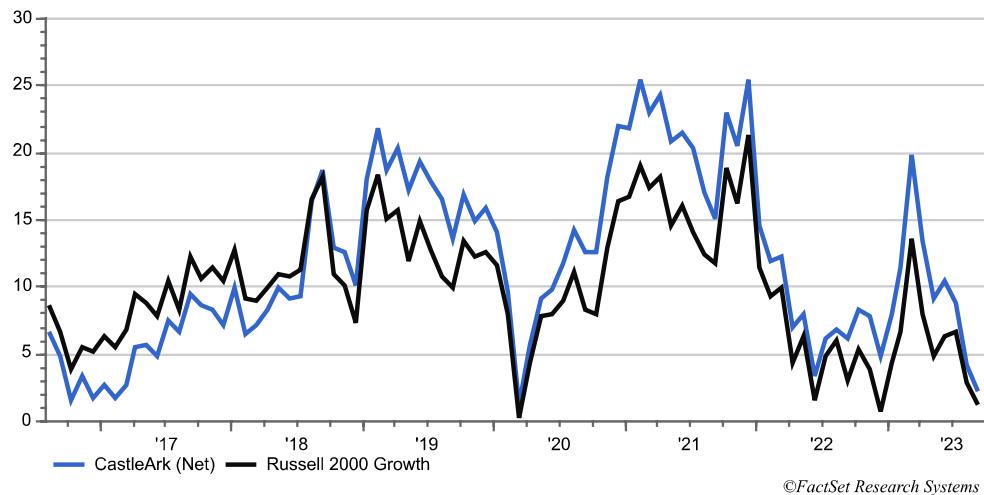


Risk Since Inception 4/1/2017

	Return	Std Dev	Sharpe Ratio	Tracking Error
BlackRock R1000 Value (Net)	7.0	17.1	0.3	0.1
Russell 1000 Value	6.9	17.1	0.3	--

CastleArk Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 9/1/2013 (Three Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
TechnipFMC plc	1.94	22.70
APi Group Corporation	1.88	-4.88
Rambus Inc.	1.72	-13.06
Manhattan Associates, Inc.	1.69	-1.11
Super Micro Computer, Inc.	1.65	10.02
Celsius Holdings, Inc.	1.60	15.02
Parsons Corporation	1.57	12.90
ATI, Inc.	1.56	-6.96
Pentair plc	1.44	0.55
Brink's Company	1.42	7.41

Trailing Returns

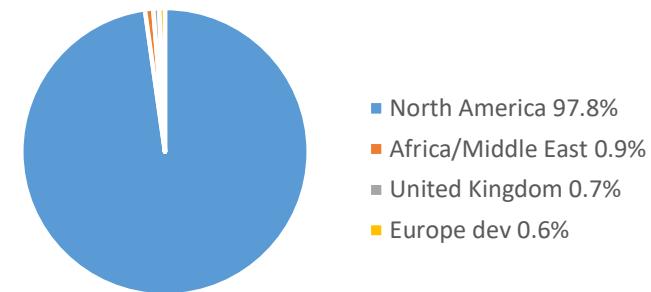
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Inception 9/1/2013
CastleArk (Net)	-9.0	0.5	4.0	2.0	2.7	7.5	8.3
Russell 2000 Growth	-7.3	5.2	9.6	1.1	1.6	6.7	7.4

Equity Sector Exposure (GICS)



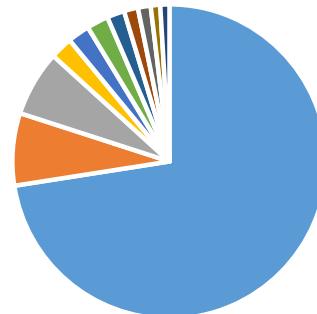
- Industrials 27.3%
- Information Technology 25.6%
- Health Care 14.9%
- Consumer Discretionary 9.2%
- Energy 5.9%
- Financials 5.7%
- Materials 4.9%
- Consumer Staples 4.4%
- Communication Services 1.3%

Regional Exposure by Domicile



- North America 97.8%
- Africa/Middle East 0.9%
- United Kingdom 0.7%
- Europe dev 0.6%

Regional Exposure by Source of Revenue

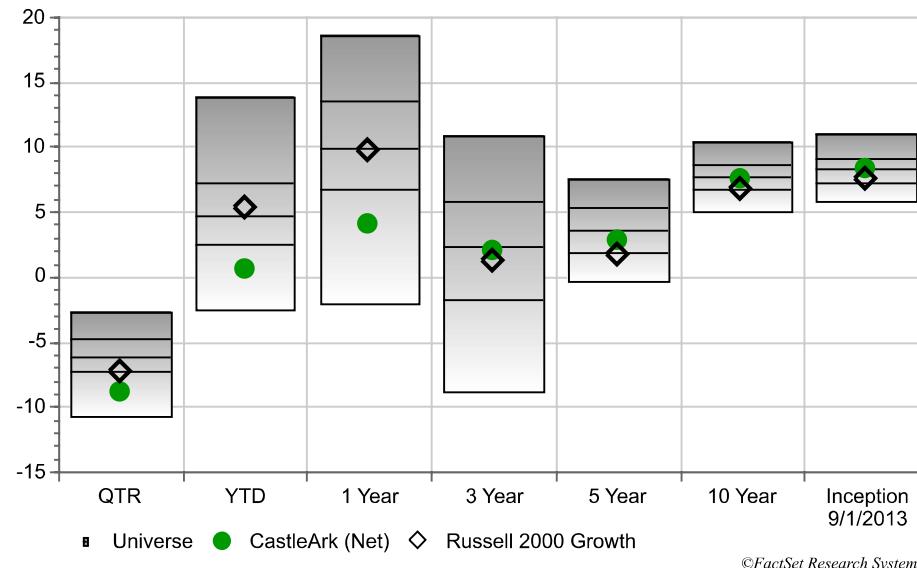


- North America 72.5%
- Europe dev 7.5%
- Asia emrg 6.8%
- Africa/Middle East 2.3%
- Latin America 2.3%
- Asia dev 2.2%
- United Kingdom 1.8%
- Japan 1.5%
- Other 1.3%
- Europe emrg 1.0%
- Australasia 0.9%

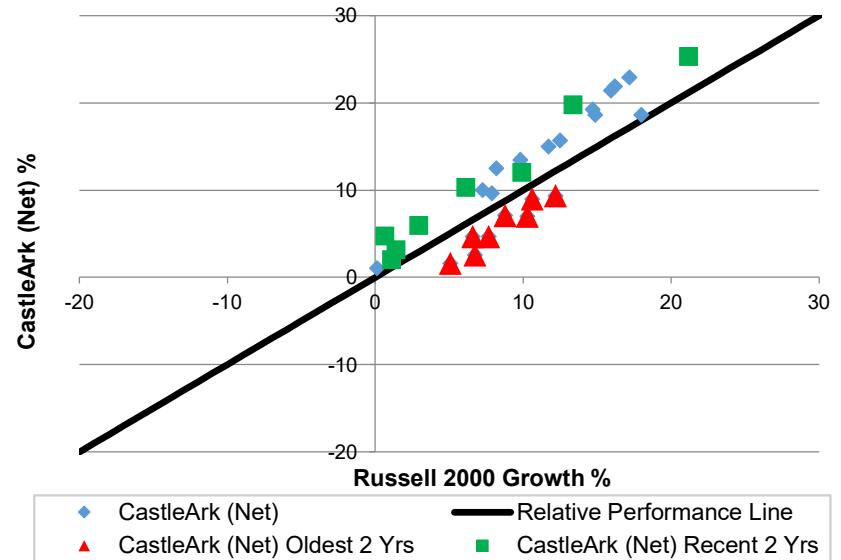
CastleArk vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Small-Cap Growth

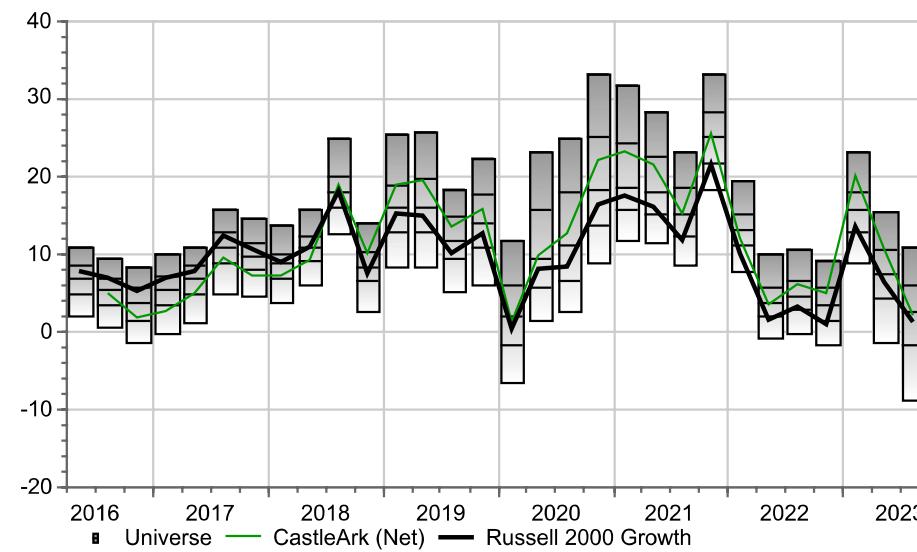


Three-Year Rolling Return Versus Benchmark



Rolling Returns 9/1/2013 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US:Small-Cap Growth



Over/Under Benchmark Analysis

21	Outperform
8	Underperform
29	# Observations
72%	% Outperform

CastleArk Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Celsius Holdings, Inc.	1.96	1.96	0.37
TechnipFMC plc	1.57	1.57	0.31
Sterling Infrastructure, Inc.	1.16	1.02	0.29
XPO Inc.	0.90	0.90	0.19
Huron Consulting Group Inc.	1.01	0.86	0.18
Saia, Inc.	1.09	1.09	0.13
Fabrinet	0.57	0.14	0.11
Ascensus LLC /Private Group 1/	1.15	1.07	0.10
Wix.Com LTD.	0.74	0.74	0.10
Civitas Resources, Inc.	0.60	0.60	0.09

Top 10 Leading Detractors

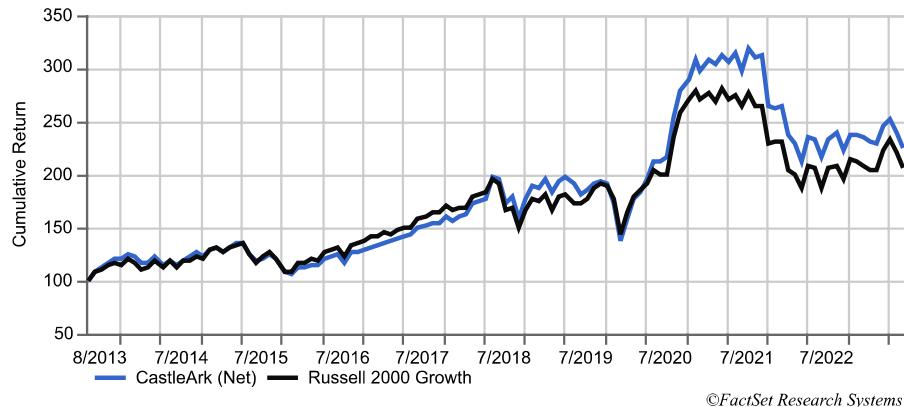
	Avg. Weights	Relative Weights	Active Return
Inspire Medical Systems, Inc.	1.19	1.19	-0.52
Apellis Pharmaceuticals, Inc.	0.21	0.21	-0.40
MasTec, Inc.	1.02	1.02	-0.37
TransMedics Group, Inc.	1.40	1.19	-0.36
Magnite, Inc.	0.68	0.62	-0.35
DoubleVerify Holdings, Inc.	1.29	1.29	-0.33
RH	0.79	0.79	-0.33
Alphatec Holdings, Inc.	1.15	1.11	-0.32
Surgery Partners, Inc.	0.93	0.73	-0.27
Wingstop, Inc.	0.79	0.79	-0.26

Sector Attribution

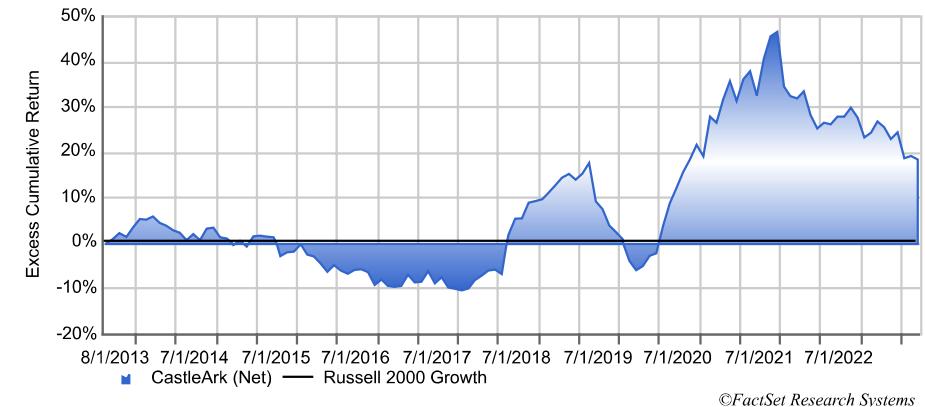
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-0.1	-31.8	-9.4	0.0	-0.5	-0.5
Consumer Discretionary	1.4	-14.9	-6.7	0.0	-1.0	-1.0
Consumer Staples	-0.3	10.8	-3.5	0.0	0.5	0.5
Energy	-0.7	14.0	18.9	-0.2	-0.1	-0.3
Financials	-2.1	1.6	2.8	-0.2	0.1	-0.2
Health Care	-6.6	-26.1	-14.7	0.5	-2.2	-1.7
Industrials	7.1	-2.5	-6.0	0.1	0.9	1.0
Information Technology	1.2	-7.1	-8.4	0.0	0.3	0.2
Materials	1.9	-13.2	-9.5	0.0	-0.2	-0.3
Real Estate	-1.2	-15.2	-9.6	0.0	0.0	0.0
Utilities	-1.6	0.0	-12.0	0.1	0.0	0.1
Cash	0.9	1.3	0.0	0.1	0.0	0.1
Total	0.0	-9.5	-7.3	0.2	-2.4	-2.2

CastleArk Inception Performance & Statistics

Investment Growth Since Inception 9/1/2013



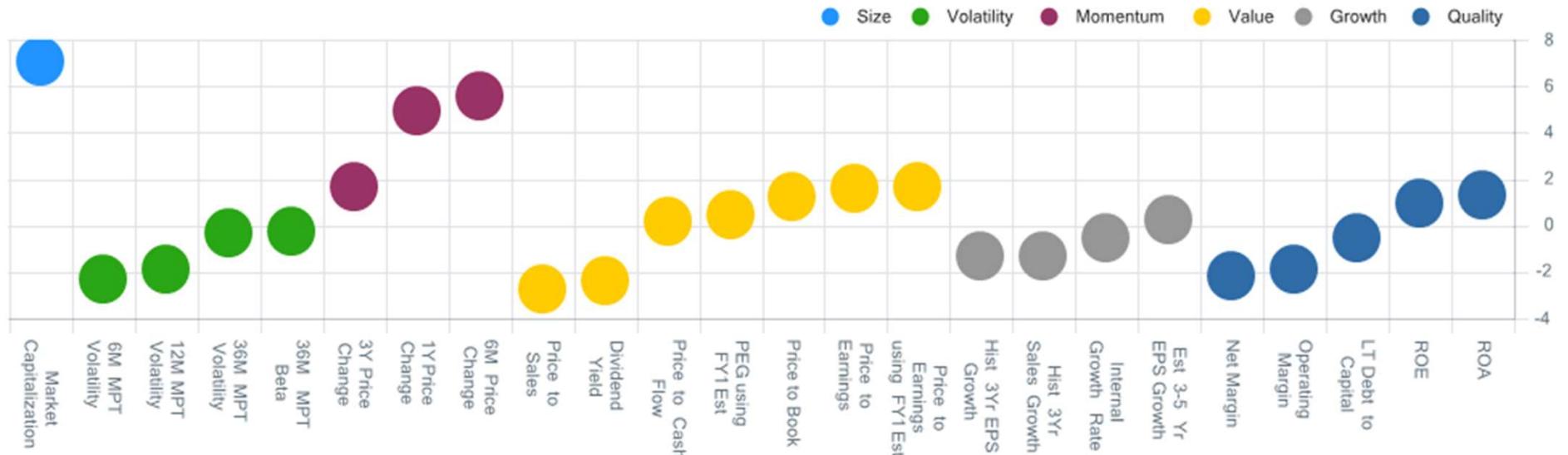
Relative Cumulative Performance Since Inception 9/1/2013



Risk Since Inception 9/1/2013

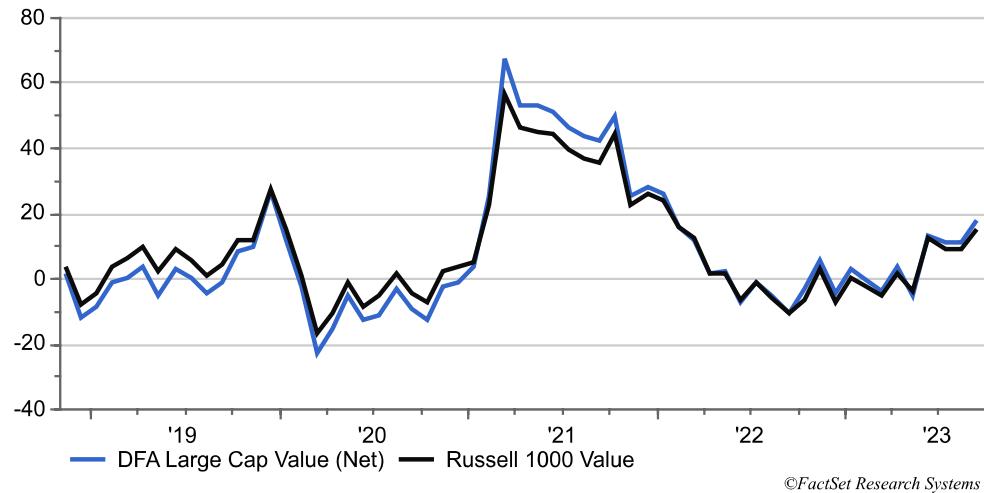
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
CastleArk (Net)	8.3	20.2	1.1	0.4	0.2	5.1	1.0
Russell 2000 Growth	7.4	20.0	--	0.3	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



DFA LCV Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 12/1/2017 (One Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Exxon Mobil Corporation	4.81	10.53
JPMorgan Chase & Co.	4.15	0.34
Chevron Corporation	2.94	8.17
Berkshire Hathaway Inc.	2.48	2.73
Comcast Corporation	2.14	7.40
Pfizer Inc.	1.88	-8.54
Meta Platforms, Inc.	1.86	4.61
ConocoPhillips Company	1.38	16.70
Verizon Communications Inc.	1.34	-11.18
Bank of America Corporation	1.28	-3.77

Trailing Returns

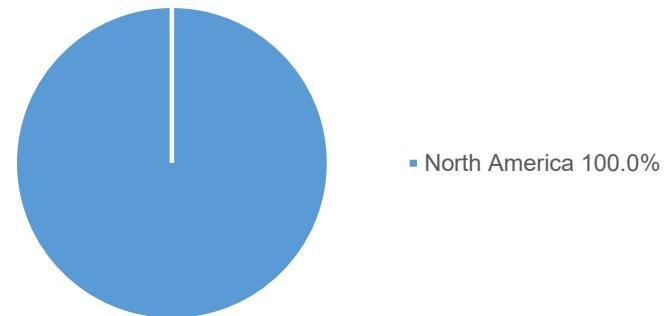
	QTR	YTD	1 Year	3 Year	5 Year	Inception 12/1/2017
DFA US Large Value	-1.5	2.9	17.6	14.0	5.6	5.8
Russell 1000 Value	-3.2	1.8	14.4	11.1	6.2	6.3

Equity Sector Exposure (GICS)

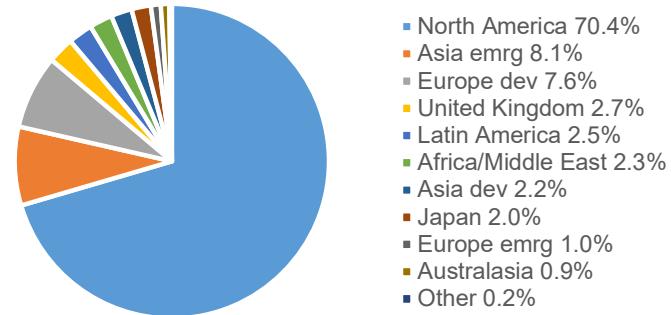


- Financials 21.1%
- Energy 15.0%
- Health Care 14.9%
- Industrials 13.7%
- Communication Services 9.2%
- Materials 8.4%
- Information Technology 6.7%
- Consumer Discretionary 6.1%
- Consumer Staples 4.3%
- Real Estate 0.4%
- Utilities 0.2%

Regional Exposure by Domicile



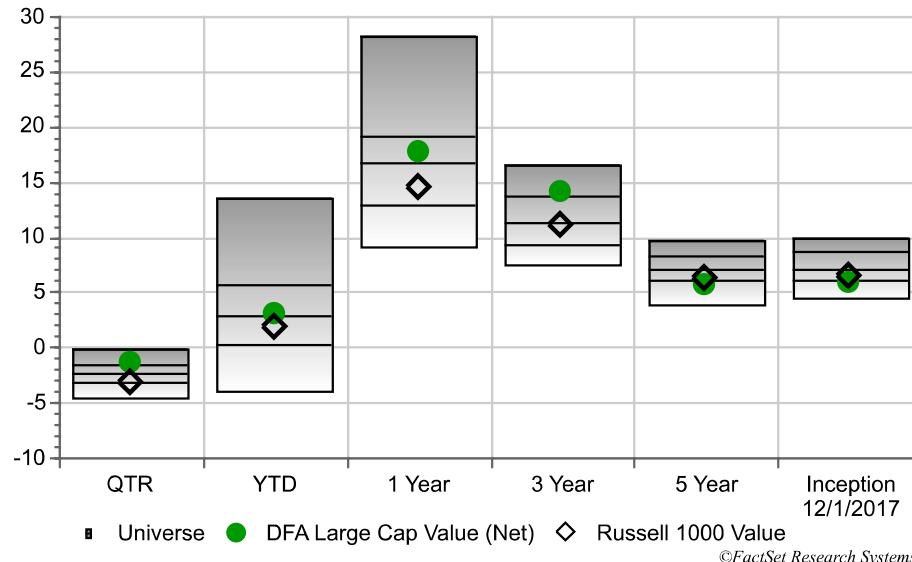
Regional Exposure by Source of Revenue



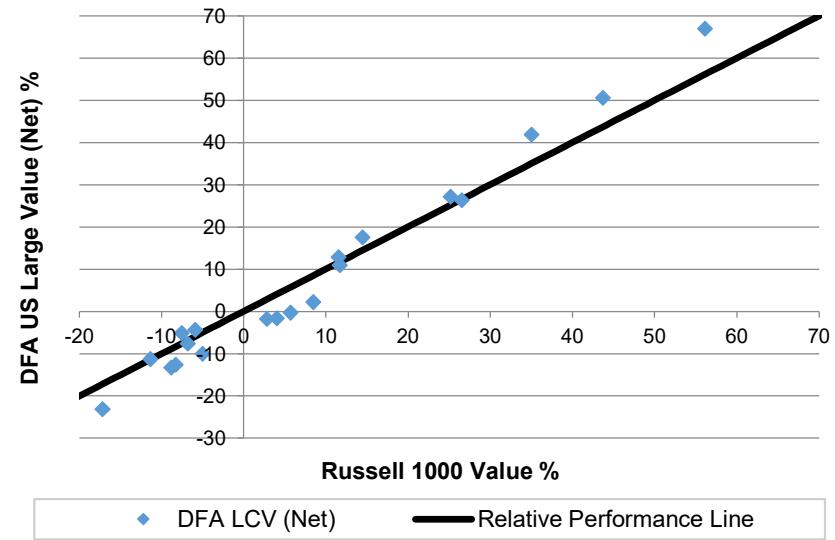
DFA LCV vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Large Cap Value

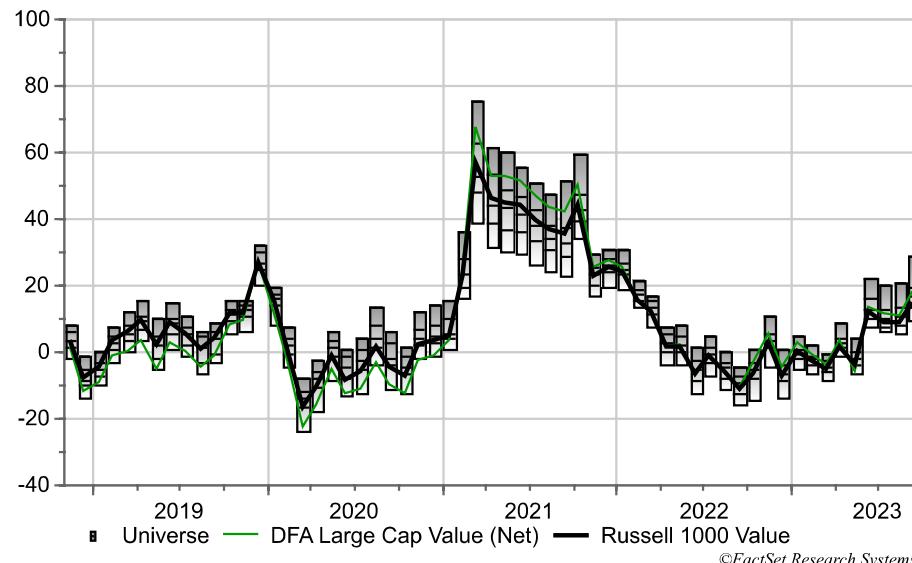


One-Year Rolling Return Versus Benchmark



Rolling Returns 12/1/2017 – 9/30/2023 (1 Year, 1 Month Shift)

Universe: Lipper US Large Cap Value



Over/Under Benchmark Analysis

9	Outperform
11	Underperform
20	# Observations
45%	% Outperform

DFA LCV Attribution Analysis – September 30, 2023

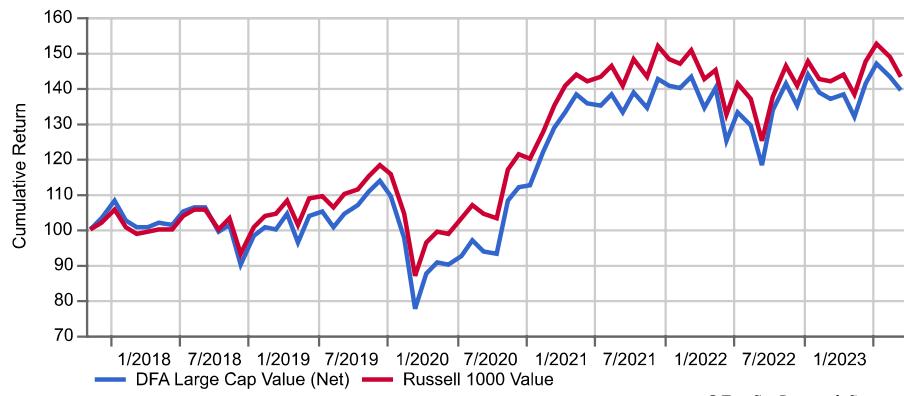
Top 10 Leading Contributors			Top 10 Leading Detractors				
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Exxon Mobil Corporation	4.51	2.26	0.22	D.R. Horton, Inc.	1.17	0.98	-0.12
Meta Platforms, Inc.	2.61	2.61	0.15	Verizon Communications Inc.	1.53	0.77	-0.10
Merck & Co., Inc.	0.04	-1.12	0.11	Pfizer Inc.	2.09	1.05	-0.09
Chevron Corporation	2.91	1.47	0.10	Dollar Tree, Inc.	0.41	0.26	-0.07
Marathon Petroleum Corporation	0.68	0.39	0.10	Republic Services, Inc.	1.01	0.85	-0.06
Abbott Laboratories	0.02	-0.86	0.09	Albemarle Corporation	0.34	0.22	-0.06
S&P Global, Inc.	0.03	-0.56	0.05	General Mills, Inc.	0.55	0.33	-0.05
Comcast Corporation	1.92	0.99	0.05	Corning Incorporated	0.53	0.40	-0.05
Valero Energy Corporation	0.47	0.24	0.04	Lennar Corporation	0.62	0.46	-0.05
Phillips 66	0.40	0.15	0.03	TE Connectivity Ltd.	0.42	0.42	-0.05

Sector Attribution

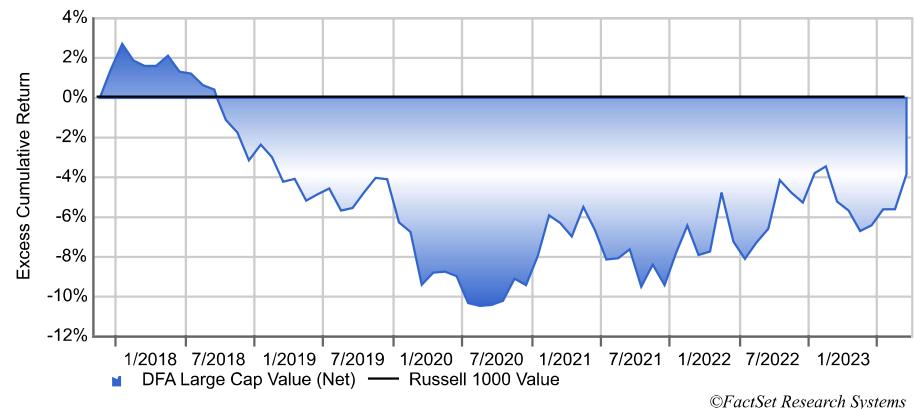
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	5.0	-1.3	-4.2	-0.1	0.3	0.2
Consumer Discretionary	1.3	-10.2	-9.3	-0.1	-0.1	-0.1
Consumer Staples	-3.7	-8.0	-5.3	0.1	-0.1	-0.1
Energy	5.5	11.8	12.0	0.8	0.0	0.8
Financials	-0.5	-0.2	-0.7	0.0	0.1	0.1
Health Care	-0.6	-3.9	-5.4	0.0	0.2	0.2
Industrials	0.7	-4.9	-5.6	0.0	0.1	0.1
Information Technology	-2.5	-3.4	-2.5	0.0	-0.1	-0.1
Materials	3.7	-3.1	-4.5	0.0	0.1	0.1
Real Estate	-4.4	-8.9	-8.5	0.2	0.0	0.2
Utilities	-4.9	17.2	-9.4	0.3	0.0	0.4
Cash	0.3	1.3	0.0	0.0	0.0	0.0
Total	0.0	-1.4	-3.3	1.2	0.7	1.9

DFA LCV Inception Performance & Statistics

Investment Growth Since Inception 12/1/2017



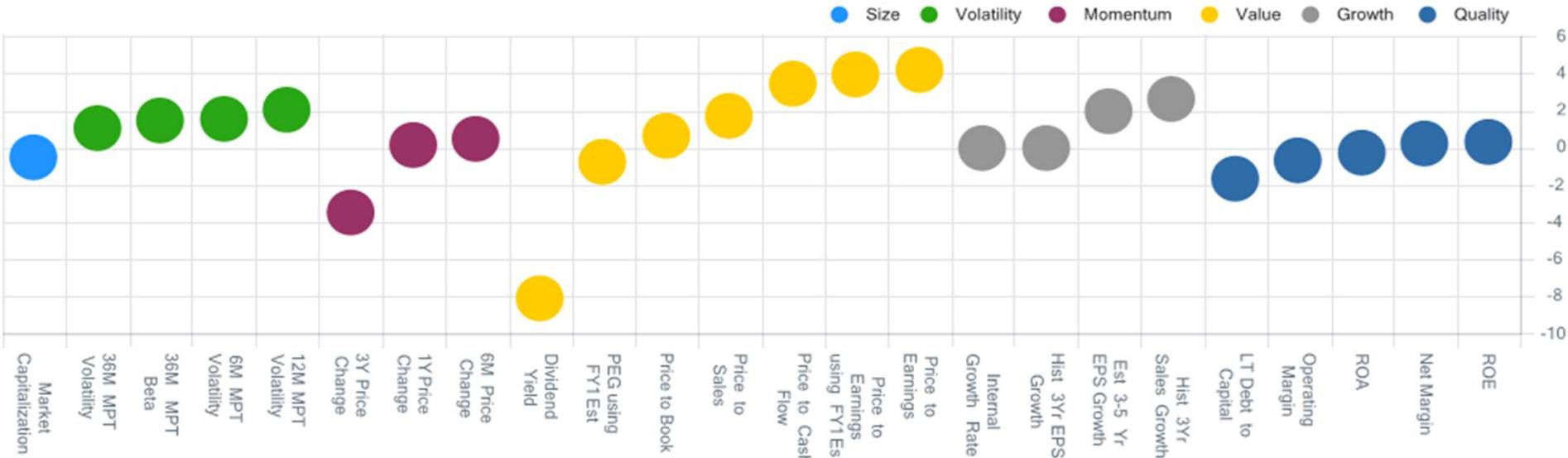
Relative Cumulative Performance Since Inception 12/1/2017



Risk Since Inception 12/1/2017

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
DFA US Large Value	5.8	20.7	-0.8	0.2	-0.1	3.9	1.1
Russell 1000 Value	6.3	18.0	-	0.3	-	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



DFA US SCV Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 10/1/1996 (Ten Year, One Month Shift)



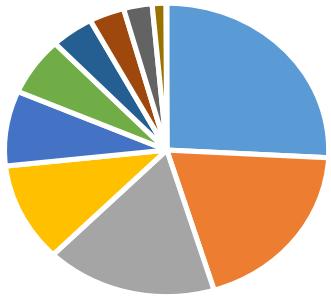
Top 10 Holdings

	Portfolio Weight	Quarterly Return
New York Community Bancorp, Inc.	0.91	2.29
United States Steel Corporation	0.90	30.08
Triton International Ltd.	0.82	-0.35
Taylor Morrison Home Corporation	0.81	-12.63
Transocean Ltd.	0.78	17.12
PBF Energy Inc.	0.76	31.31
Murphy Oil Corporation	0.75	19.12
Commercial Metals Company	0.69	-6.17
Avnet, Inc.	0.66	-3.87
Group 1 Automotive, Inc.	0.66	4.29

Trailing Returns

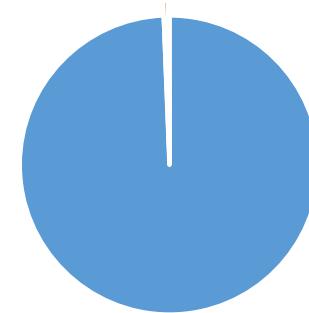
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
DFA Small Cap Value (Net)	-0.1	5.0	20.1	24.4	7.2	8.6	10.2
Russell 2000 Value	-3.0	-0.5	7.8	13.3	2.6	6.2	7.2

Equity Sector Exposure (GICS)



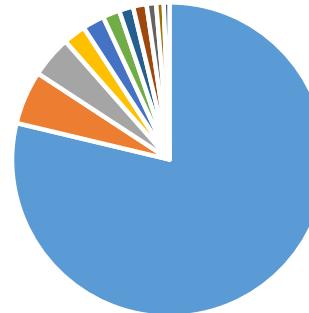
- Financials 25.8%
- Industrials 19.4%
- Consumer Discretionary 17.1%
- Energy 10.9%
- Materials 8.2%
- Information Technology 6.4%
- Consumer Staples 4.3%
- Health Care 3.5%
- Communication Services 2.9%
- Real Estate 1.4%
- Utilities 0.1%

Regional Exposure by Domicile



- North America 99.3%
- Europe emrg 0.5%
- Africa/Middle East 0.1%

Regional Exposure by Source of Revenue

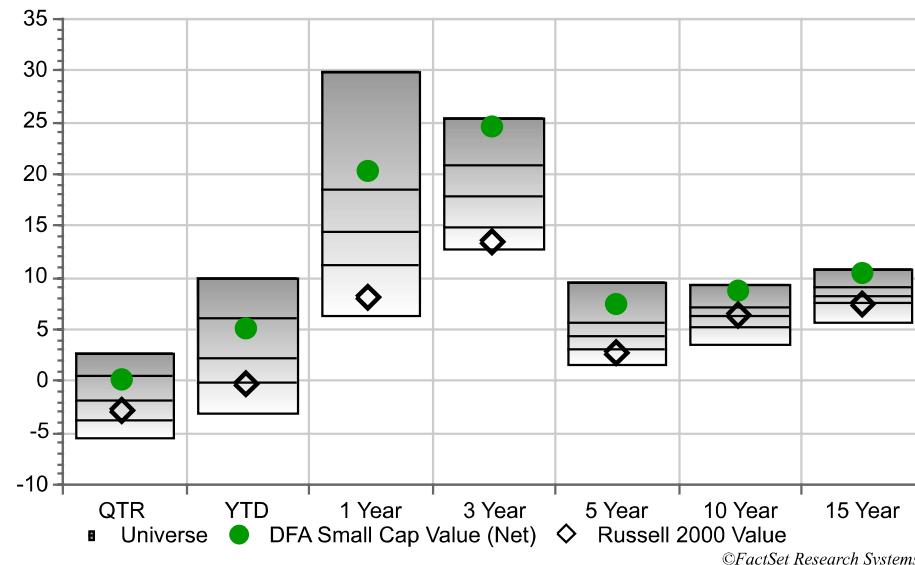


- North America 78.7%
- Europe dev 5.5%
- Asia emrg 4.3%
- Latin America 2.3%
- Other 2.2%
- United Kingdom 1.7%
- Africa/Middle East 1.4%
- Asia dev 1.4%
- Japan 1.0%
- Europe emrg 0.8%
- Australasia 0.6%

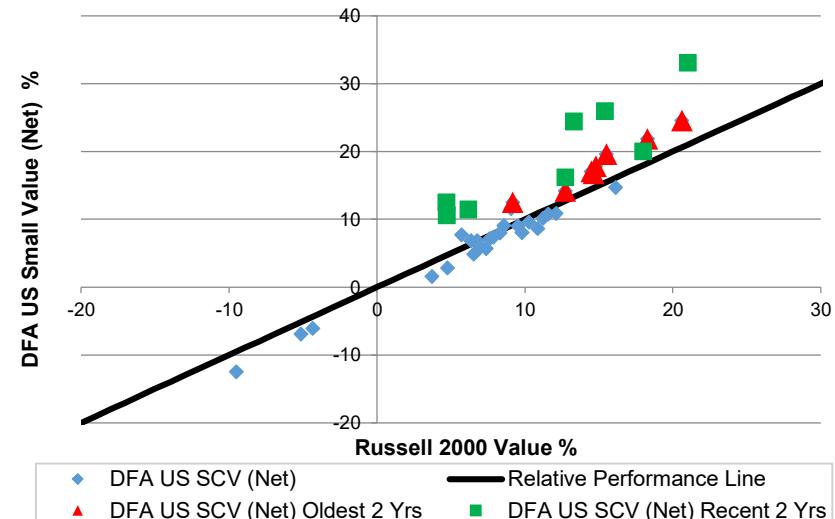
DFA US SCV vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Small Cap Value

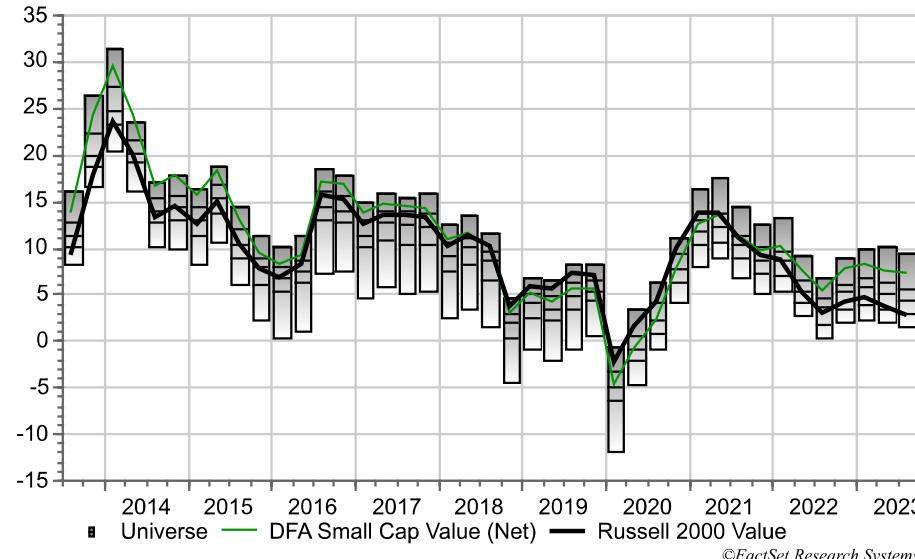


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US Small Cap Value



Over/Under Benchmark Analysis

21	Outperform
19	Underperform
40	# Observations
53%	% Outperform

DFA US SCV Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Telephone and Data Systems, Inc.	0.37	0.27	0.22
United States Steel Corporation	0.72	0.72	0.19
Super Micro Computer, Inc.	0.18	0.18	0.12
Transocean Ltd.	0.75	0.75	0.11
TechnipFMC plc	0.38	0.38	0.08
New York Community Bancorp, Inc.	1.04	1.04	0.07
CNX Resources Corporation	0.55	0.28	0.07
Abercrombie & Fitch Co.	0.24	0.16	0.06
Modine Manufacturing Company	0.25	0.19	0.06
CONSOL Energy Inc.	0.30	0.09	0.04

Top 10 Leading Detractors

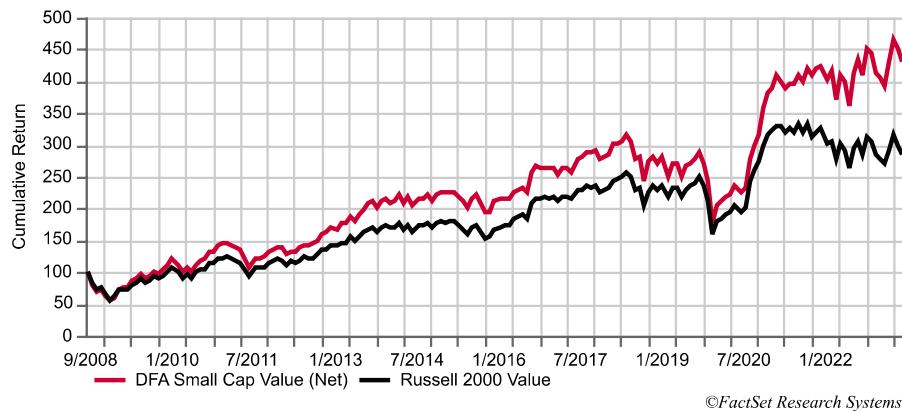
	Avg. Weights	Relative Weights	Active Return
ViaSat, Inc.	0.26	0.26	-0.17
Reata Pharmaceuticals, Inc.	0.00	-0.34	-0.15
Amkor Technology, Inc.	0.78	0.54	-0.13
Alaska Air Group, Inc.	0.28	0.28	-0.09
Macy's, Inc.	0.28	0.28	-0.08
Enovis Corporation	0.42	0.42	-0.07
JetBlue Airways Corporation	0.32	0.12	-0.06
Envista Holdings Corporation	0.36	0.36	-0.06
Carvana Co.	0.00	-0.18	-0.06
PVH Corp.	0.61	0.61	-0.06

Sector Attribution

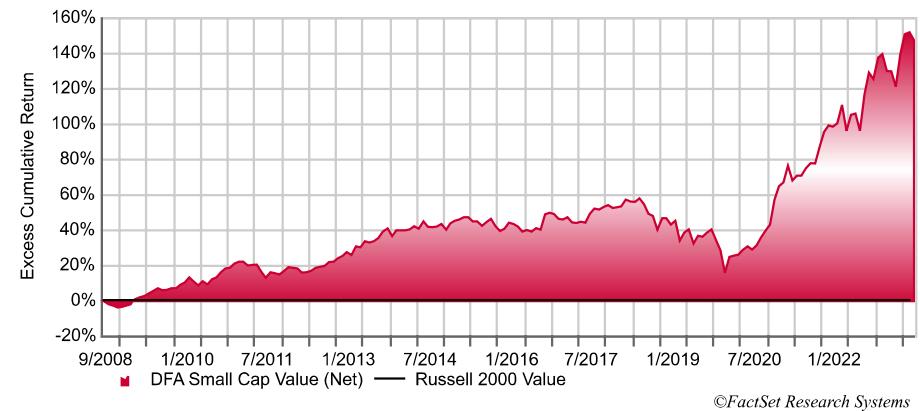
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	0.0	5.4	-6.5	0.0	0.3	0.3
Consumer Discretionary	7.1	-5.1	-5.4	-0.2	0.0	-0.1
Consumer Staples	1.5	0.6	-2.1	0.0	0.1	0.1
Energy	1.2	20.6	18.6	0.2	0.2	0.4
Financials	0.5	1.7	1.0	0.0	0.2	0.2
Health Care	-5.9	-11.8	-15.9	0.8	0.2	1.0
Industrials	4.4	-2.1	-2.5	0.0	0.1	0.1
Information Technology	1.1	-11.0	-11.7	-0.1	0.0	-0.1
Materials	3.5	0.7	-2.6	0.0	0.3	0.3
Real Estate	-9.2	-3.9	-4.7	0.2	0.0	0.2
Utilities	-4.2	-2.3	-11.7	0.4	0.0	0.4
Total	0.0	-0.1	-2.9	1.4	1.4	2.8

DFA US SCV 15 Year Performance & Statistics

Investment Growth – 15 Years



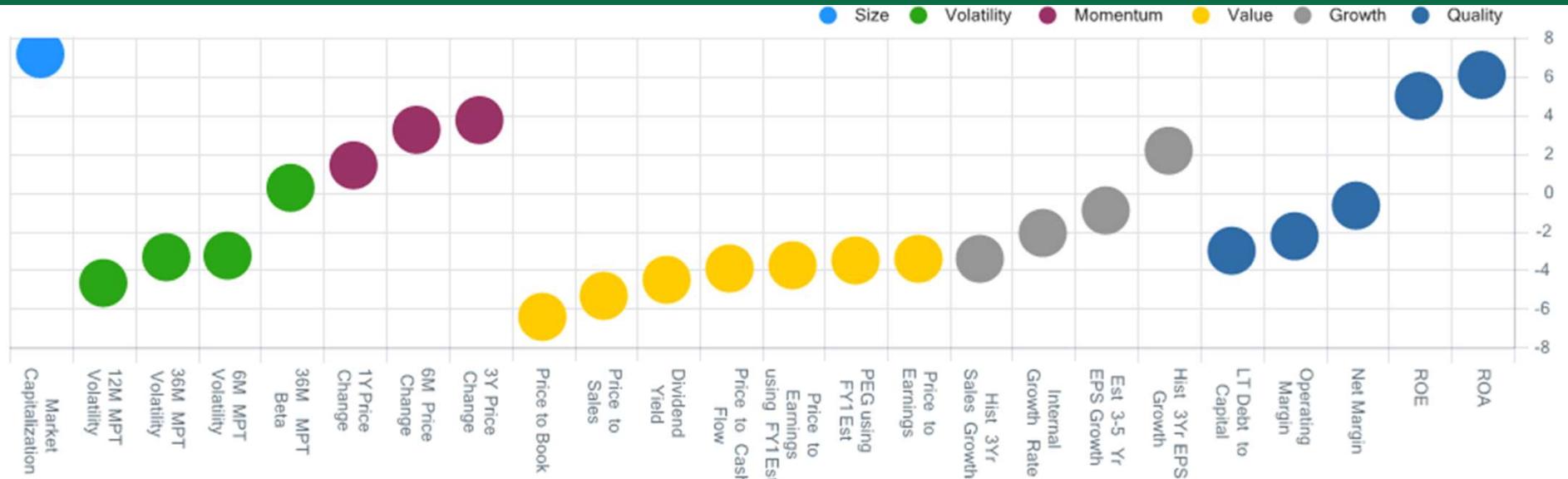
Relative Cumulative Performance – 15 Years



Risk – 15 Years

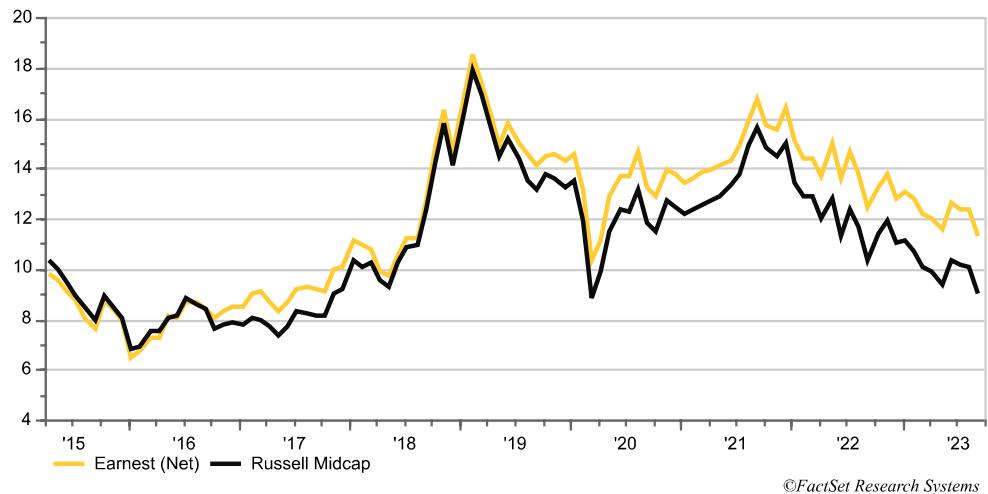
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
DFA Small Cap Value (Net)	10.2	23.6	2.6	0.4	0.8	3.9	1.1
Russell 2000 Value	7.2	21.6	--	0.3	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



Earnest Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 5/1/2005 (Ten Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Republic Services, Inc.	2.90	-6.61
Synopsys, Inc.	2.89	5.41
Akamai Technologies, Inc.	2.40	18.55
Entegris, Inc.	2.28	-15.18
CBRE Group, Inc.	2.24	-8.49
Darden Restaurants, Inc.	2.24	-13.62
Masco Corporation	2.22	-6.40
ANSYS, Inc.	2.12	-9.91
Progressive Corporation	2.12	5.32
Raymond James Financial, Inc.	2.06	-2.81

Trailing Returns

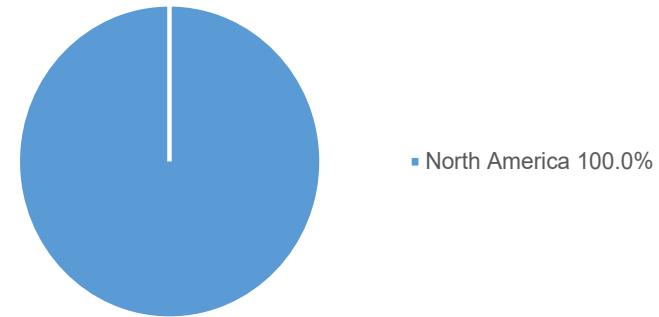
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Earnest (Net)	-4.5	3.8	11.7	9.1	8.8	11.2	11.3
Russell Midcap	-4.7	3.9	13.4	8.1	6.4	9.0	10.3

Equity Sector Exposure (GICS)

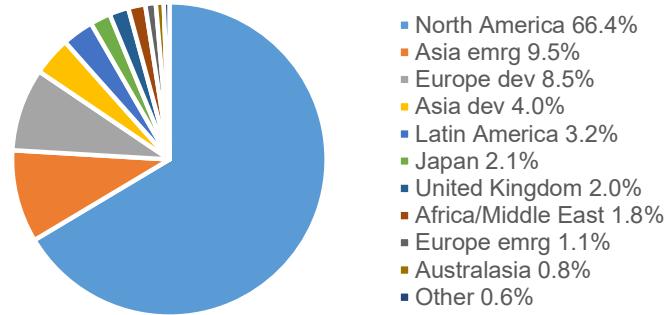


- Industrials 26.0%
- Information Technology 18.3%
- Financials 17.1%
- Health Care 10.0%
- Real Estate 6.9%
- Materials 6.9%
- Consumer Discretionary 5.9%
- Energy 5.9%
- Utilities 1.5%
- Consumer Staples 1.5%

Regional Exposure by Domicile



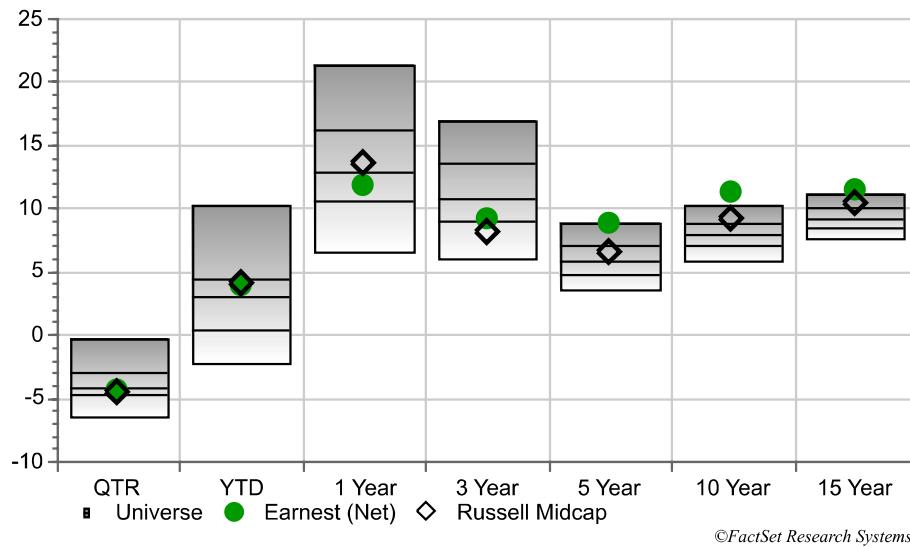
Regional Exposure by Source of Revenue



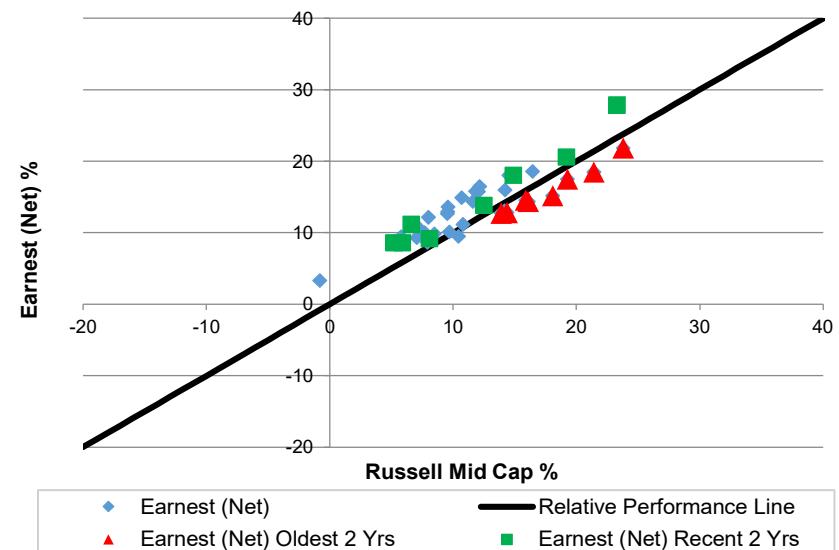
Earnest vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US: Mid Cap Core

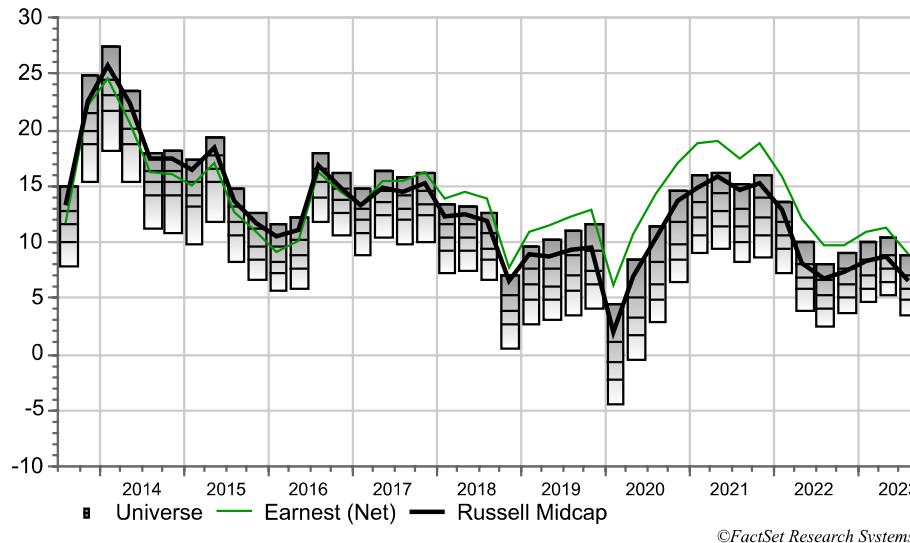


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US: Mid Cap Core



Over/Under Benchmark Analysis

30	Outperform
10	Underperform
40	# Observations
75%	% Outperform

Earnest Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Black Knight, Inc.	1.16	1.05	0.38
Akamai Technologies, Inc.	2.06	1.91	0.31
Helmerich & Payne, Inc.	0.99	0.99	0.17
Global Payments Inc.	1.51	1.22	0.17
Activision Blizzard, Inc.	0.59	0.59	0.16
Murphy Oil Corporation	1.01	1.01	0.16
ChampionX Corporation	1.25	1.25	0.16
Packaging Corporation of America	1.19	1.07	0.16
Houlihan Lokey, Inc.	1.76	1.71	0.15
Synopsys, Inc.	2.67	2.67	0.13

Top 10 Leading Detractors

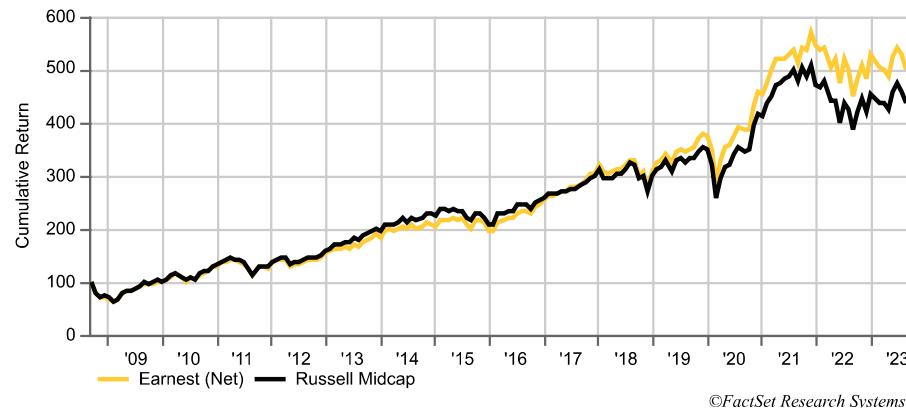
	Avg. Weights	Relative Weights	Active Return
Spirit AeroSystems Holdings, Inc.	1.80	1.77	-0.81
Keysight Technologies, Inc.	2.21	1.94	-0.42
Albemarle Corporation	1.68	1.44	-0.35
Entegris, Inc.	2.46	2.30	-0.35
Darden Restaurants, Inc.	2.41	2.22	-0.30
Lumentum Holdings Inc.	1.17	1.14	-0.26
Sensata Technologies Holding PLC	1.67	1.61	-0.25
Scotts Miracle-Gro Company	1.49	1.47	-0.24
GATX Corporation	1.45	1.45	-0.22
Arrow Electronics, Inc.	1.82	1.74	-0.22

Sector Attribution

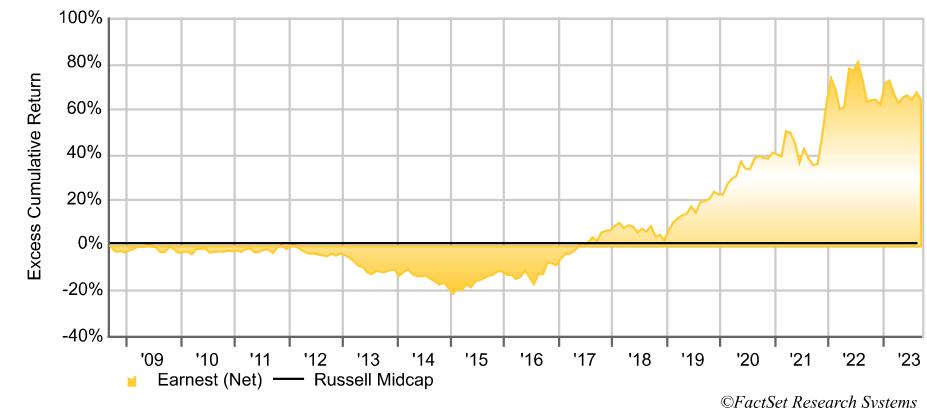
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-2.8	10.0	-9.9	0.2	0.1	0.3
Consumer Discretionary	-4.5	-8.6	-7.0	0.1	-0.1	0.0
Consumer Staples	-2.5	-10.6	-8.7	0.1	0.0	0.1
Energy	0.2	14.2	13.1	0.0	0.0	0.1
Financials	1.0	5.1	1.5	0.1	0.5	0.6
Health Care	-1.9	-5.4	-11.6	0.1	0.6	0.7
Industrials	6.2	-9.2	-4.6	0.0	-1.2	-1.2
Information Technology	5.2	-5.3	-3.9	0.0	-0.2	-0.2
Materials	1.2	-11.6	-4.8	0.0	-0.5	-0.5
Real Estate	-1.0	-6.9	-7.8	0.0	0.1	0.1
Utilities	-4.1	-8.1	-7.3	0.1	0.0	0.1
Cash	2.9	1.3	0.0	0.2	0.0	0.2
Total	0.0	-4.4	-4.7	1.0	-0.7	0.3

Earnest 15 Year Performance & Statistics

Investment Growth – 15 Years



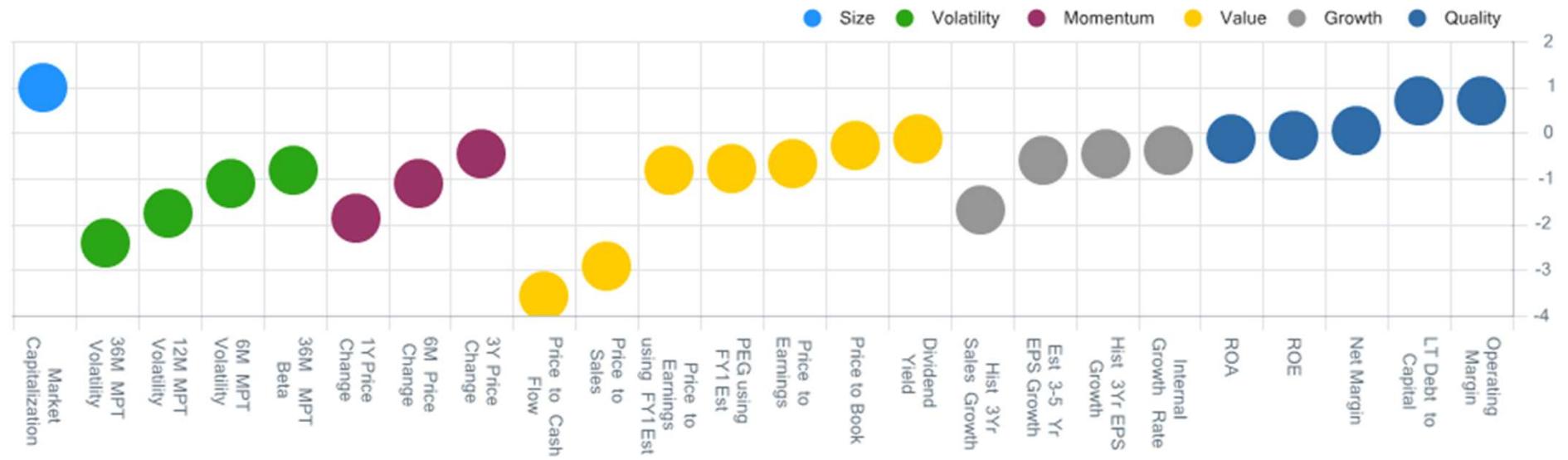
Relative Cumulative Performance – 15 Years



Risk – 15 Years

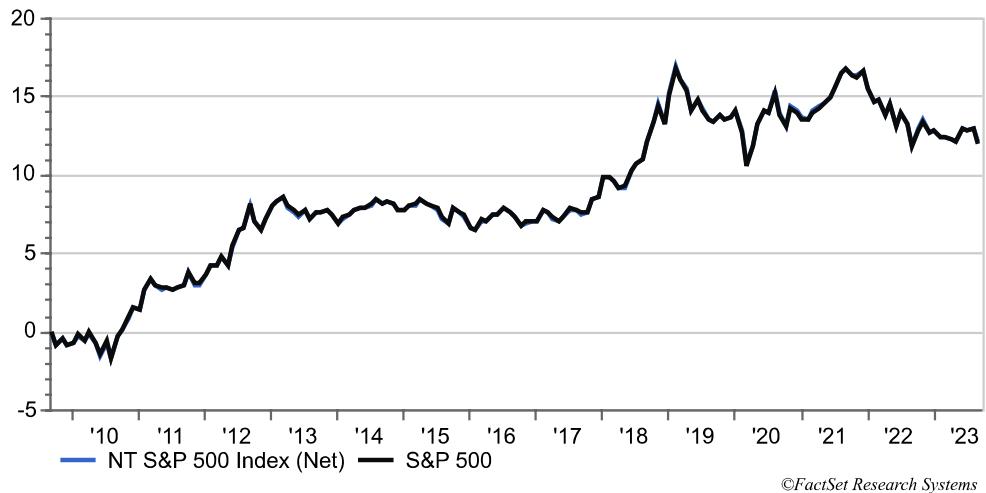
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Earnest (Net)	11.3	18.6	1.1	0.6	0.3	3.6	1.0
Russell Midcap	10.3	18.4	-	0.5	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



Northern Trust S&P 500 Portfolio Snapshot – September 30, 2023

Rolling Returns Since 10/1/1999 (Ten Year, One Month Shift)



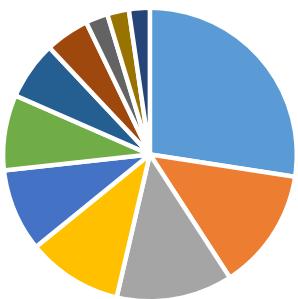
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Apple Inc.	7.04	-11.62
Microsoft Corporation	6.47	-6.64
Alphabet Inc.	4.07	9.17
Amazon.com, Inc.	3.10	-2.49
NVIDIA Corporation	2.98	2.84
Meta Platforms, Inc.	1.86	4.61
Tesla, Inc.	1.85	-4.41
Berkshire Hathaway Inc.	1.73	2.73
Exxon Mobil Corporation	1.33	10.53
UnitedHealth Group Incorporated	1.10	5.29

Trailing Returns

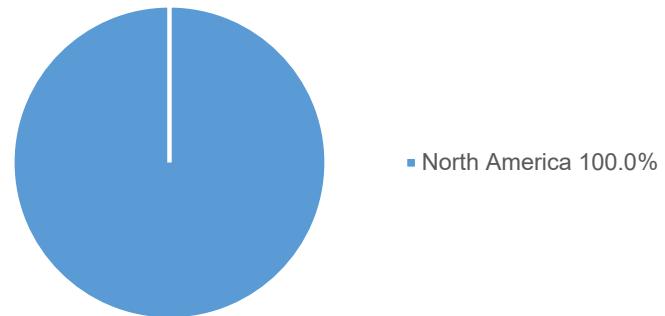
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
NT S&P 500 Index (Net)	-3.3	13.1	21.6	10.1	9.9	11.9	11.3
S&P 500	-3.3	13.1	21.6	10.2	9.9	11.9	11.3

Equity Sector Exposure (GICS)



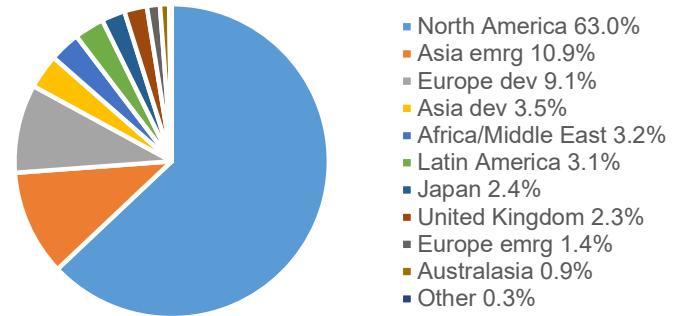
- Information Technology 27.4%
- Health Care 13.4%
- Financials 12.8%
- Consumer Discretionary 10.5%
- Communication Services 9.1%
- Industrials 8.3%
- Consumer Staples 6.4%
- Energy 4.8%
- Materials 2.5%
- Utilities 2.4%
- Real Estate 2.3%

Regional Exposure by Domicile



■ North America 100.0%

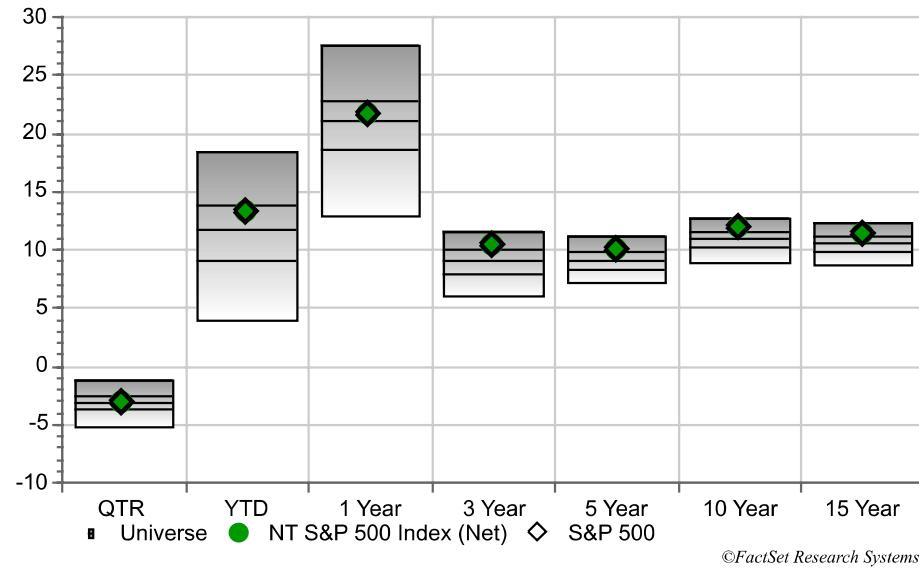
Regional Exposure by Source of Revenue



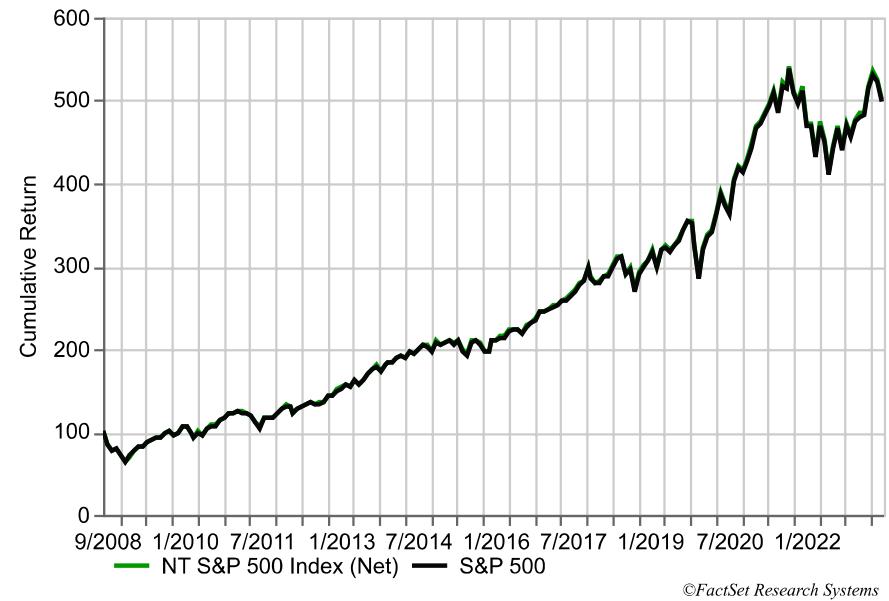
Northern Trust S&P 500 vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US: Large Cap Core

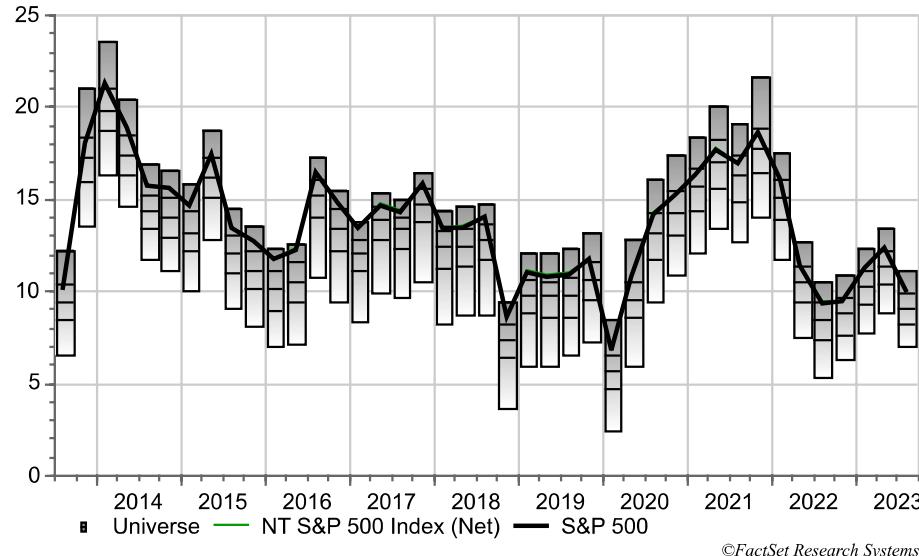


Investment Growth – 15 Years



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US: Large Cap Core

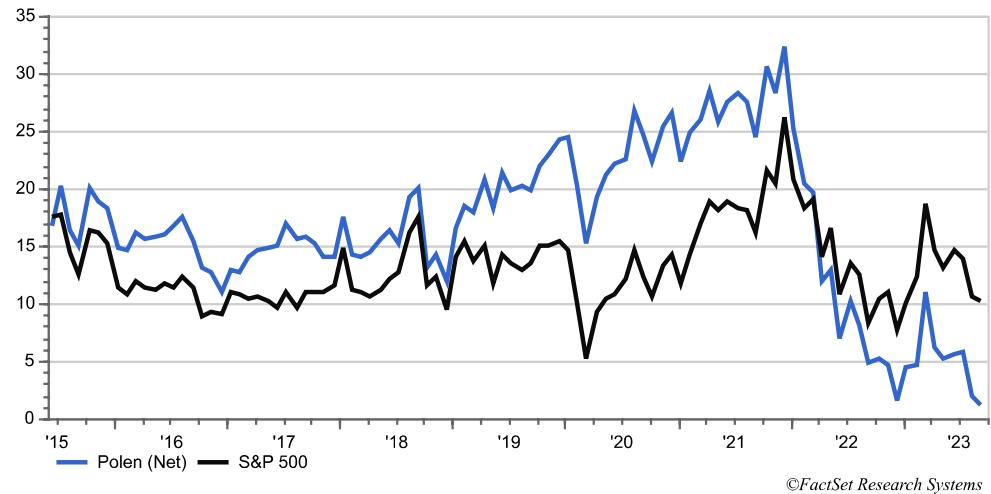


Risk – 15 Years

	Return	Std Dev	Sharpe Ratio	Tracking Error
NT S&P 500 Index (Net)	11.3	16.0	0.7	0.1
S&P 500	11.3	16.0	0.7	--

Polen Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 7/1/2012 (Three Year, One Month Shift)



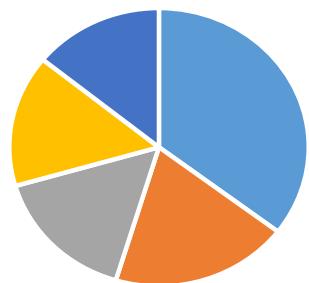
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Amazon.com, Inc.	9.34	-2.49
Alphabet Inc.	7.78	8.99
Netflix, Inc.	7.38	-14.28
ServiceNow, Inc.	6.54	-0.54
Adobe Incorporated	6.21	4.28
Microsoft Corporation	6.07	-7.09
Mastercard Incorporated	5.28	0.81
Visa Inc.	4.78	-2.97
Salesforce, Inc.	4.69	-4.01
Airbnb, Inc.	4.52	7.06

Trailing Returns

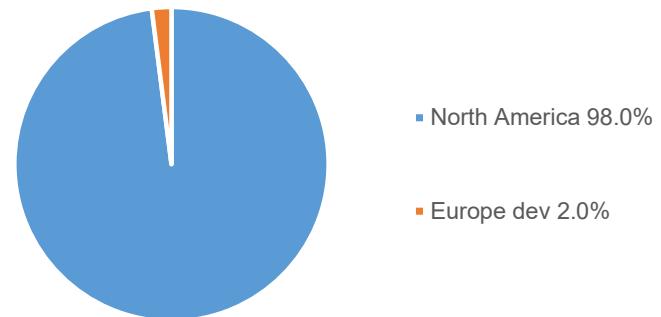
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Inception 7/1/2012
Polen (Net)	-3.4	20.9	21.4	1.1	8.8	13.8	13.6
S&P 500	-3.3	13.1	21.6	10.2	9.9	11.9	12.9
S&P 500 Growth	-2.6	18.1	19.8	6.8	10.4	13.5	14.1

Equity Sector Exposure (GICS)

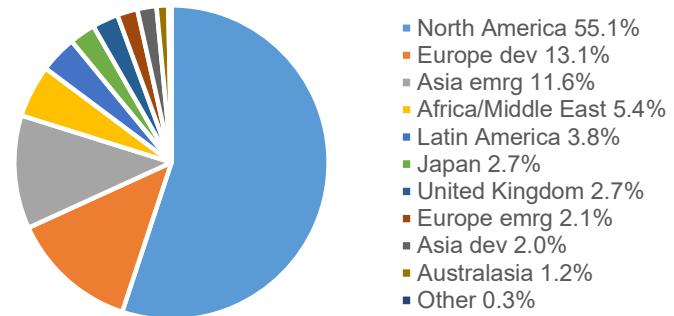


- Information Technology 35.4%
- Health Care 19.3%
- Consumer Discretionary 15.8%
- Communication Services 15.4%
- Financials 14.1%

Regional Exposure by Domicile



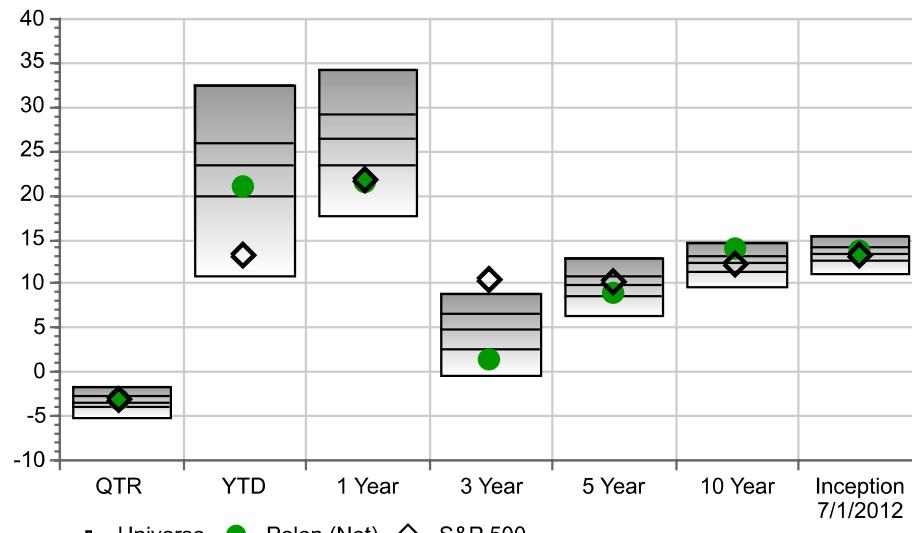
Regional Exposure by Source of Revenue



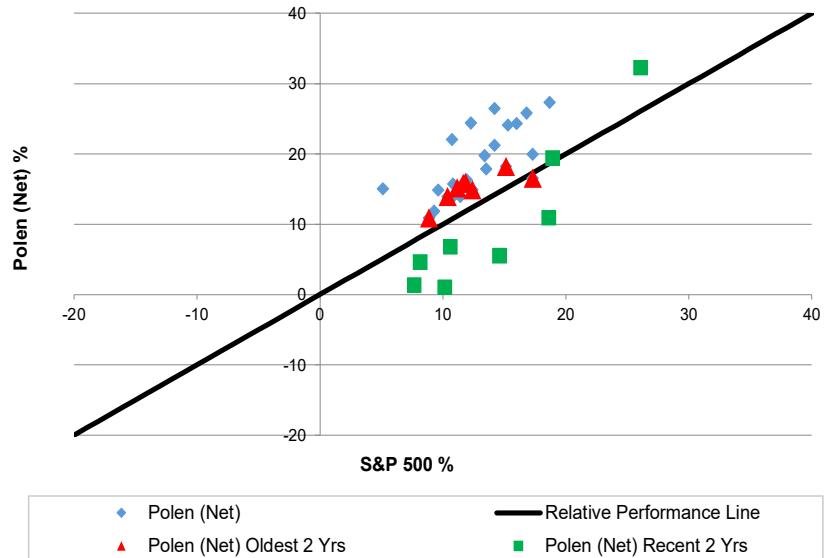
Polen vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Large Cap Growth

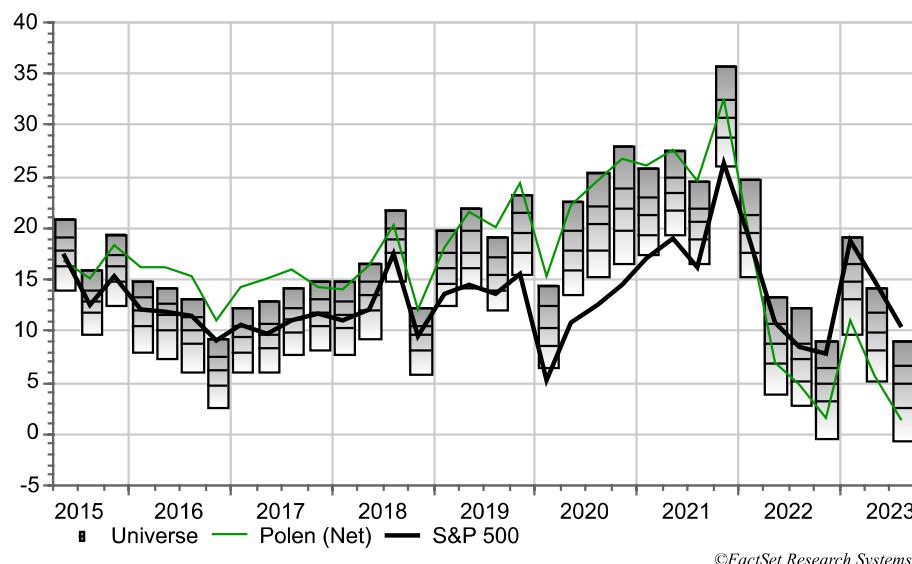


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2012 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Large Cap Growth



Over/Under Benchmark Analysis

27	Outperform
7	Underperform
34	# Observations
79%	% Outperform

Polen Attribution Analysis – September 30, 2023

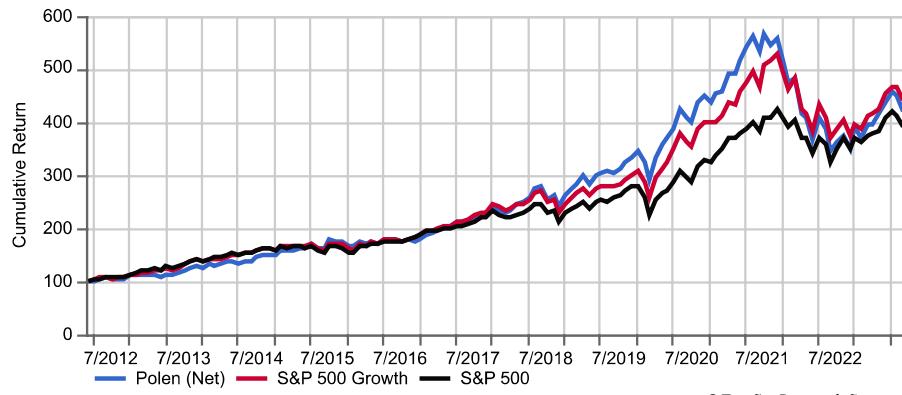
Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Airbnb, Inc.	4.27	4.27	0.31	Netflix, Inc.	8.07	7.55	-1.07
Alphabet Inc.	7.27	3.48	0.26	Illumina, Inc.	2.46	2.38	-0.62
Adobe Incorporated	6.09	5.44	0.19	PayPal Holdings, Inc.	4.19	3.99	-0.48
UnitedHealth Group Incorporated	3.43	2.23	0.12	Abbott Laboratories	3.68	3.18	-0.33
Microsoft Corporation	5.94	-0.64	0.04	Docusign, Inc	1.17	1.17	-0.20
Zoetis Inc.	2.67	2.45	0.02	NIKE, Inc.	1.87	1.52	-0.19
Mastercard Incorporated	5.06	4.17	0.01	Salesforce, Inc.	4.71	4.14	-0.18
Autodesk, Inc.	2.96	2.84	0.01	Align Technology, Inc.	1.34	1.27	-0.17
Accenture plc	3.97	3.44	-0.02	Amazon.com, Inc.	9.62	6.46	-0.15
Gartner, Inc.	1.98	1.90	-0.04	Eli Lilly and Company	0.00	-1.03	-0.13

Sector Attribution

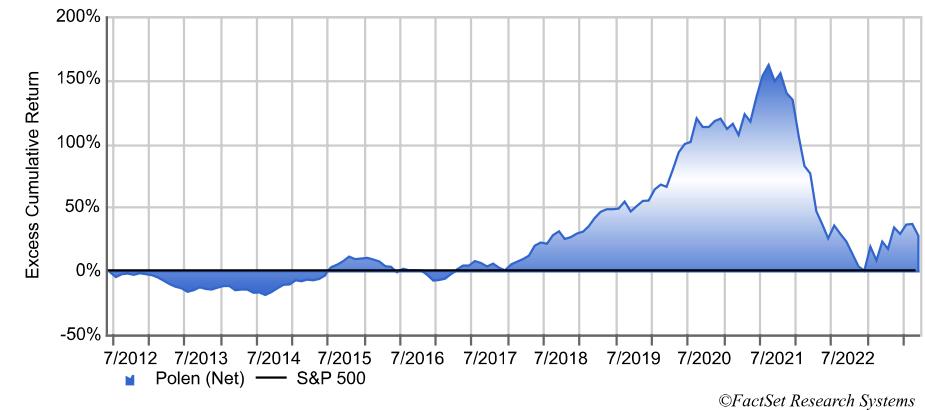
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	6.7	-3.7	3.0	0.4	-1.0	-0.6
Consumer Discretionary	5.2	-1.2	-4.8	-0.1	0.6	0.5
Consumer Staples	-6.6	0.0	-5.9	0.2	0.0	0.2
Energy	-4.3	0.0	12.2	-0.6	0.0	-0.6
Financials	1.6	-4.7	-1.1	0.0	-0.5	-0.5
Health Care	3.4	-7.0	-2.7	0.0	-0.7	-0.7
Industrials	-8.4	0.0	-5.2	0.2	0.0	0.2
Information Technology	7.2	-2.1	-5.6	-0.2	1.3	1.1
Materials	-2.5	0.0	-4.7	0.0	0.0	0.0
Real Estate	-2.5	0.0	-8.9	0.1	0.0	0.1
Utilities	-2.5	0.0	-9.3	0.2	0.0	0.2
Cash	2.7	1.3	1.3	0.1	0.0	0.1
Total	0.0	-3.3	-3.2	0.4	-0.4	0.0

Polen Inception Performance & Statistics

Investment Growth Since Inception 7/1/2012



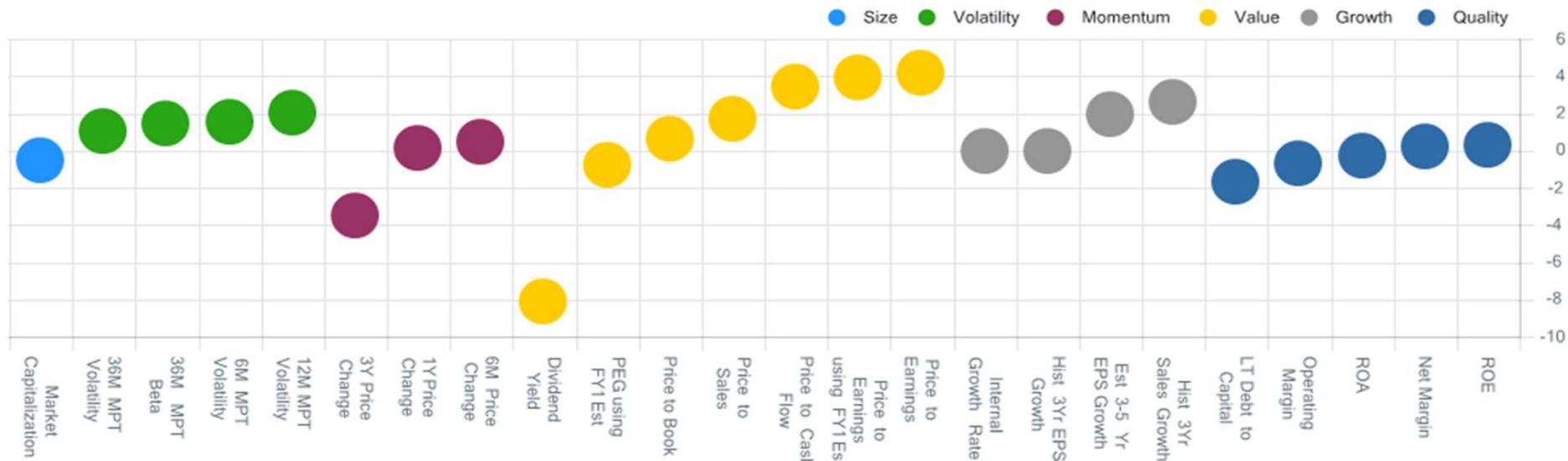
Relative Cumulative Performance Since Inception 7/1/2012



Risk Since Inception 7/1/2012

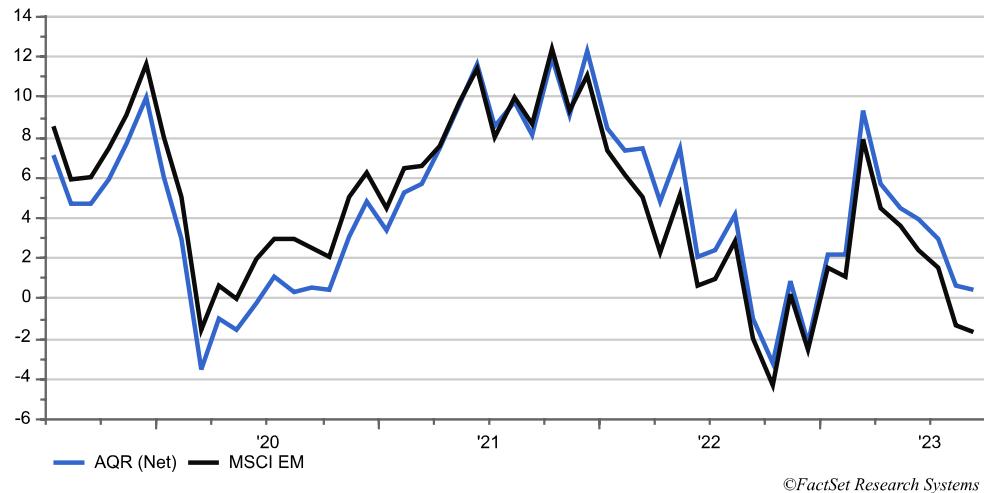
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Polen (Net)	13.6	16.1	0.5	0.8	0.1	6.6	1.0
S&P 500	12.9	14.3	--	0.8	--	--	1.0
S&P 500 Growth	14.1	15.5	--	0.8	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



AQR Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 8/1/2016 (Three Year, One Month Shift)



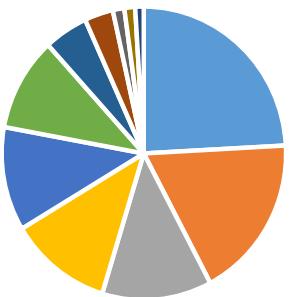
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Taiwan Semi Mfg. Co. Ltd.	5.22	-11.89
Tencent Holdings Ltd.	2.67	-7.60
Samsung Electronics Co., Ltd.	2.64	-7.00
Petroleo Brasileiro S.A	1.86	17.13
Alibaba Group Holding Limited	1.83	5.48
China Construction Bank Corporation	1.78	-4.64
Larsen & Toubro Limited	1.44	22.00
NTPC Limited	1.27	29.99
Saudi Basic Industries Corp.	1.26	-4.31
Meituan	1.26	-6.24

Trailing Returns

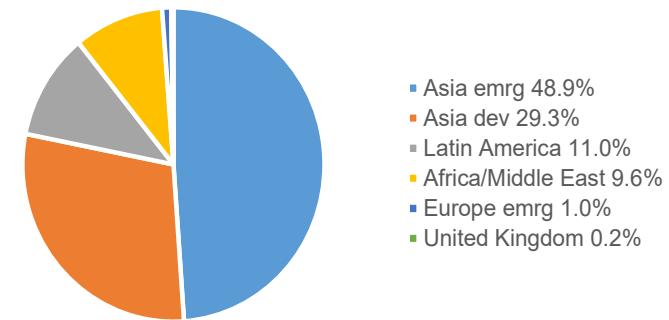
	QTR	YTD	1 Year	3 Year	5 Year	Inception
AQR (Net)	-0.8	7.0	17.0	0.3	1.1	4.3
MSCI EM	-2.9	1.8	11.7	-1.7	0.6	3.7

Equity Sector Exposure (GICS)

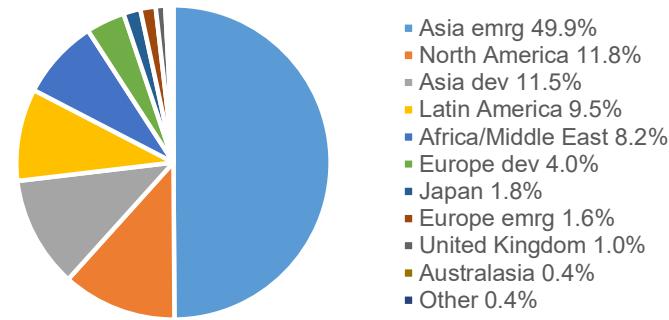


- Financials 24.1%
- Information Technology 18.1%
- Industrials 12.5%
- Energy 11.7%
- Materials 11.5%
- Consumer Discretionary 10.3%
- Communication Services 5.0%
- Utilities 3.2%
- Real Estate 1.3%
- Health Care 1.2%
- Consumer Staples 1.0%

Regional Exposure by Domicile



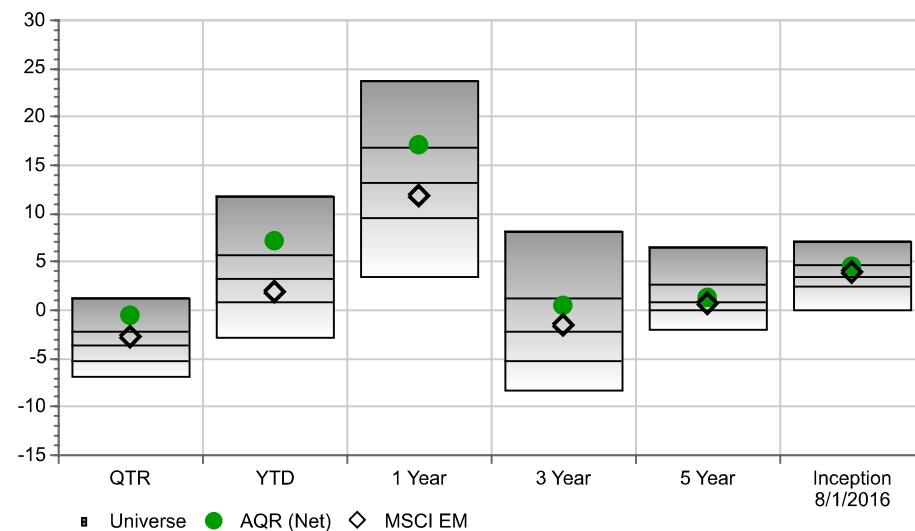
Regional Exposure by Source of Revenue



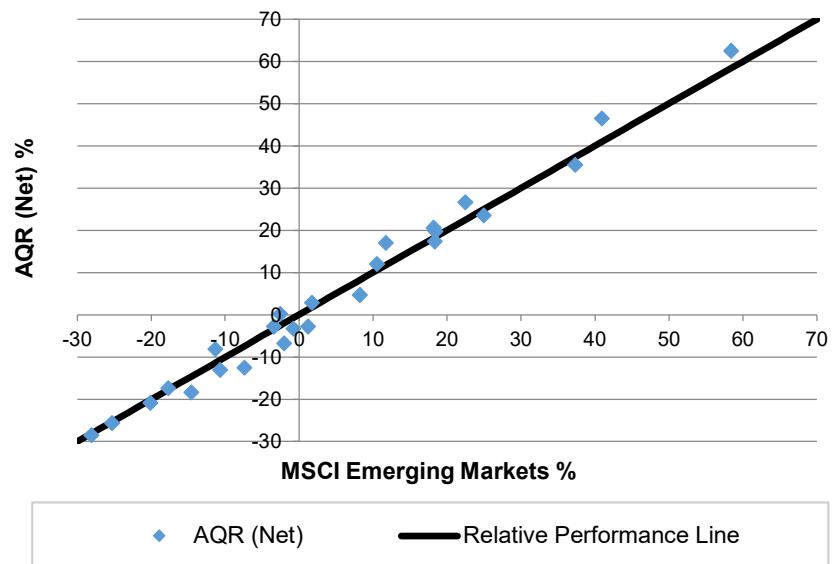
AQR vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Emerging Markets

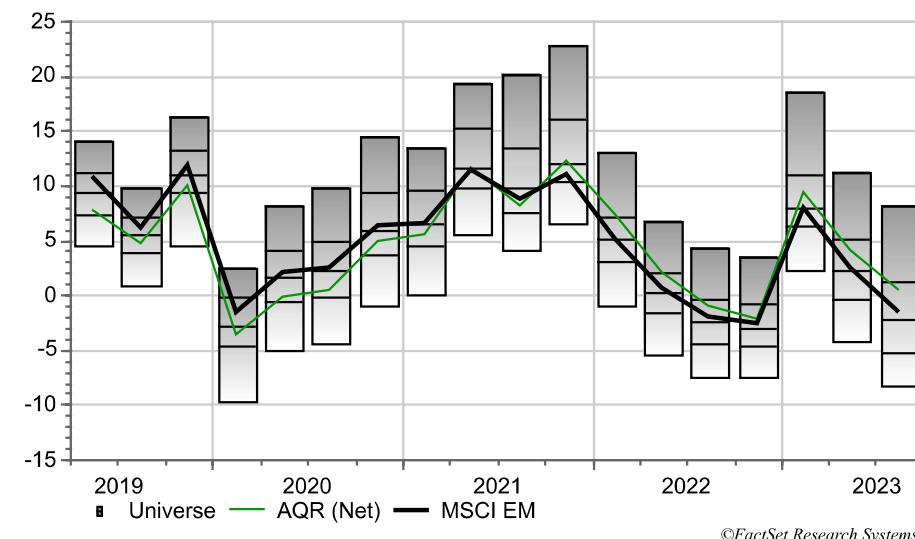


One-Year Rolling Return Versus Benchmark



Rolling Returns 8/1/2016 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Emerging Markets



Over/Under Benchmark Analysis

12	Outperform
13	Underperform
25	# Observations
48%	% Outperform

AQR Attribution Analysis – September 30, 2023

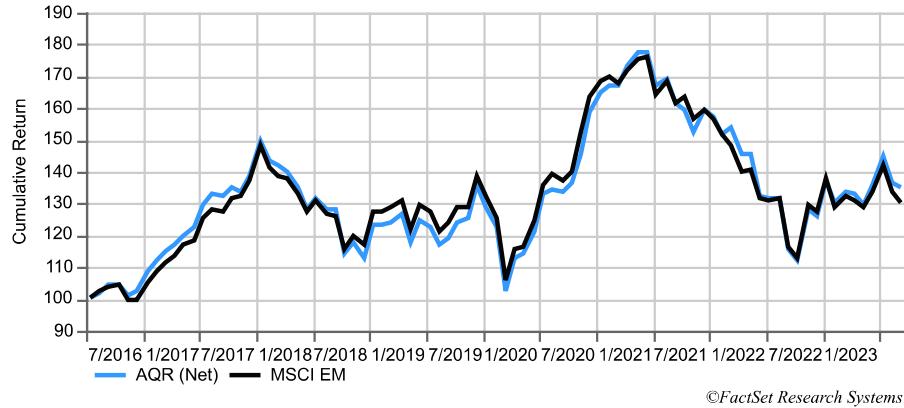
Top 10 Leading Contributors			Top 10 Leading Detractors				
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Coal India Ltd.	1.12	1.05	0.31	Volcan Investments Ltd.	1.04	1.01	-0.22
NTPC Limited	1.25	1.09	0.29	CITIC Limited	0.69	0.59	-0.13
JD.com, Inc.	0.19	-0.58	0.22	Doosan Bobcat, Inc.	0.87	0.83	-0.13
Larsen & Toubro Limited	1.36	0.96	0.21	Kia Corp.	1.26	1.01	-0.10
East Buy Holding Ltd.	0.51	0.49	0.20	Gerdau S/A.	0.38	0.28	-0.09
PT Adaro Energy Indonesia Tbk	0.97	0.93	0.20	Korean Air Lines Co., Ltd.	0.80	0.75	-0.09
Quanta Computer Inc.	0.44	0.17	0.19	POSCO Holdings Inc.	0.00	-0.59	-0.09
Oil & Natural Gas Corp. Ltd.	1.16	1.06	0.18	Indorama Ventures Public Co. Ltd.	0.42	0.39	-0.09
Akbank T.A.S.	0.42	0.37	0.17	Hanwha Aerospace	0.39	0.35	-0.08
Petroleo Brasileiro S.A	1.74	0.91	0.16	GCL Technology Holdings Limited	0.52	0.46	-0.08

Sector Attribution

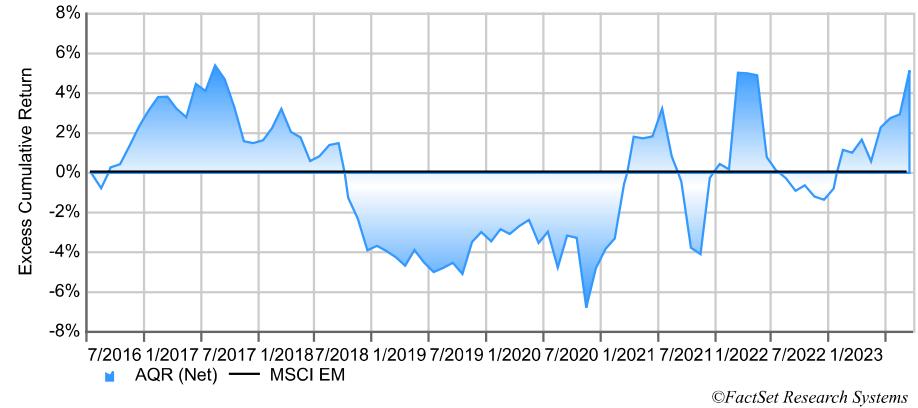
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-4.6	-7.8	-5.9	0.2	-0.1	0.1
Consumer Discretionary	-2.2	3.5	0.7	0.0	0.3	0.3
Consumer Staples	-4.4	-3.9	-4.4	0.1	0.2	0.1
Energy	6.1	15.6	6.1	0.6	1.0	1.6
Financials	-2.6	1.9	-1.9	0.0	0.8	0.7
Health Care	-1.0	-1.1	-0.8	0.0	-0.1	-0.1
Industrials	5.8	-4.5	-3.8	0.0	-0.1	-0.1
Information Technology	-1.1	-2.6	-6.7	0.0	0.9	0.9
Materials	3.8	-2.3	-2.6	0.0	0.0	0.0
Real Estate	-0.4	-5.3	-0.6	0.0	-0.1	-0.1
Utilities	0.7	13.4	-3.0	0.0	0.5	0.5
Total	0.0	1.1	-2.9	0.8	3.3	4.0

AQR Inception Performance & Statistics

Investment Growth Since Inception 8/1/2016



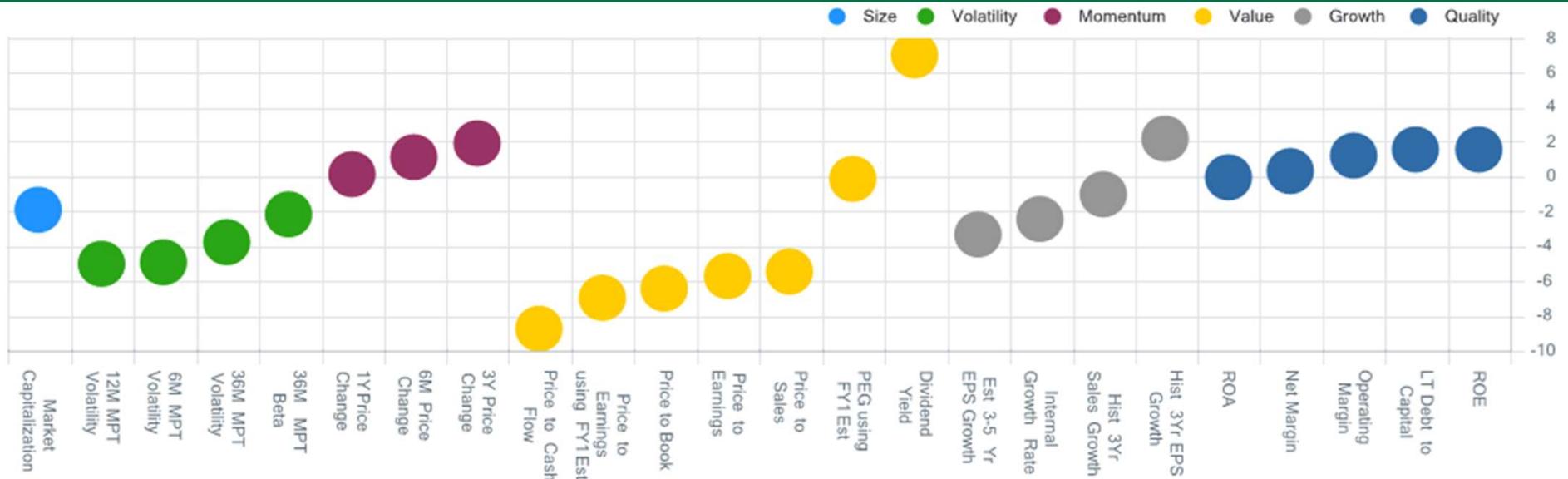
Relative Cumulative Performance Since Inception 8/1/2016



Risk Since Inception 8/1/2016

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
AQR (Net)	4.3	17.6	0.6	0.2	0.2	3.4	1.0
MSCI EM	3.7	17.1	-	0.1	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



Brandes Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 2/1/1998 (Ten Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Takeda Pharmaceutical Company Limited	3.66	1.31
Rolls-Royce Holdings plc	2.86	40.40
Alibaba Group Holding Limited	2.61	5.48
GSK plc	2.34	4.18
Sanofi	2.31	0.29
SAP SE	2.26	-4.76
Heidelberg Materials AG	2.24	-5.12
UBS Group AG	2.13	22.63
Petroleo Brasileiro S.A.	2.10	17.13
Intesa Sanpaolo S.p.A.	2.03	-1.34

Trailing Returns

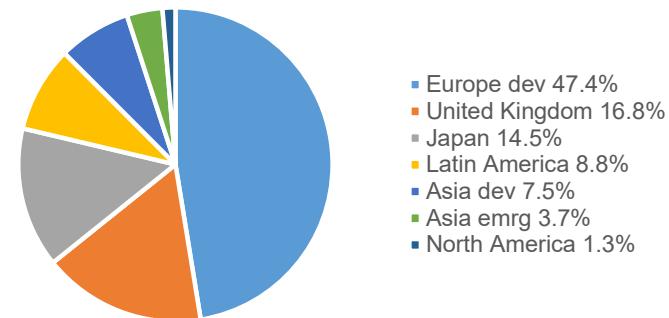
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Brandes (Net)	1.7	18.4	43.4	15.1	4.7	4.7	5.0
MSCI EAFE	-4.1	7.1	25.6	5.8	3.2	3.8	4.7
MSCI EAFE Value	0.6	9.9	31.5	11.1	2.8	3.0	3.9

Equity Sector Exposure (GICS)



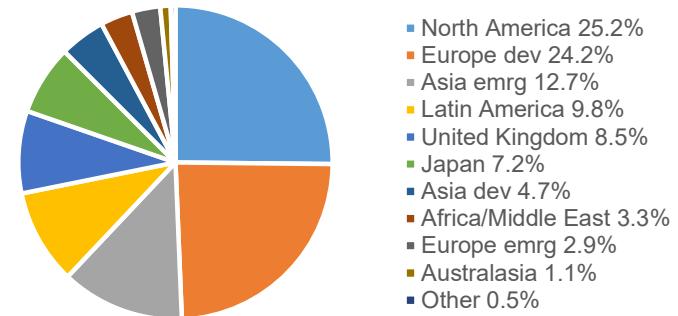
- Health Care 17.7%
- Financials 17.5%
- Consumer Staples 16.0%
- Consumer Discretionary 11.5%
- Communication Services 8.7%
- Energy 8.0%
- Industrials 6.7%
- Information Technology 5.6%
- Materials 5.0%
- Utilities 1.6%
- Real Estate 1.6%

Regional Exposure by Domicile



- Europe dev 47.4%
- United Kingdom 16.8%
- Japan 14.5%
- Latin America 8.8%
- Asia dev 7.5%
- Asia emrg 3.7%
- North America 1.3%

Regional Exposure by Source of Revenue

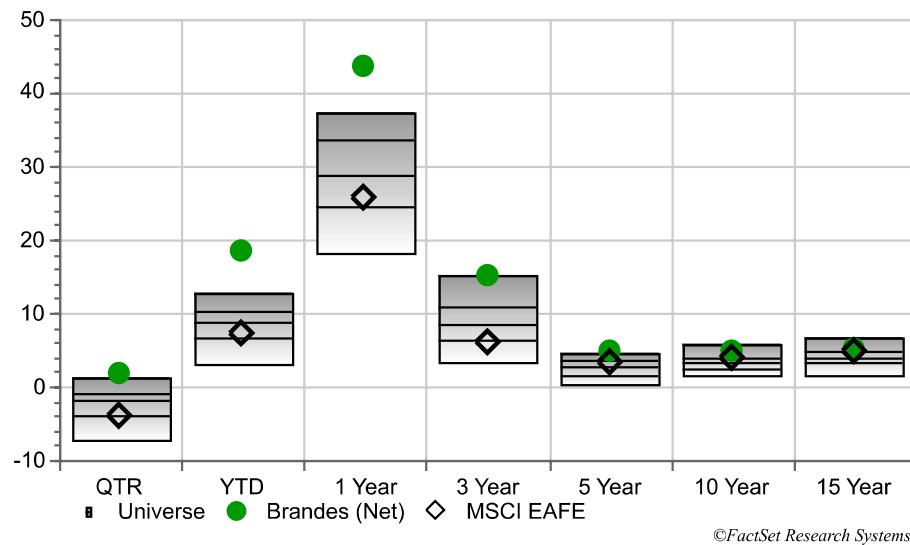


- North America 25.2%
- Europe dev 24.2%
- Asia emrg 12.7%
- Latin America 9.8%
- United Kingdom 8.5%
- Japan 7.2%
- Asia dev 4.7%
- Africa/Middle East 3.3%
- Europe emrg 2.9%
- Australasia 1.1%
- Other 0.5%

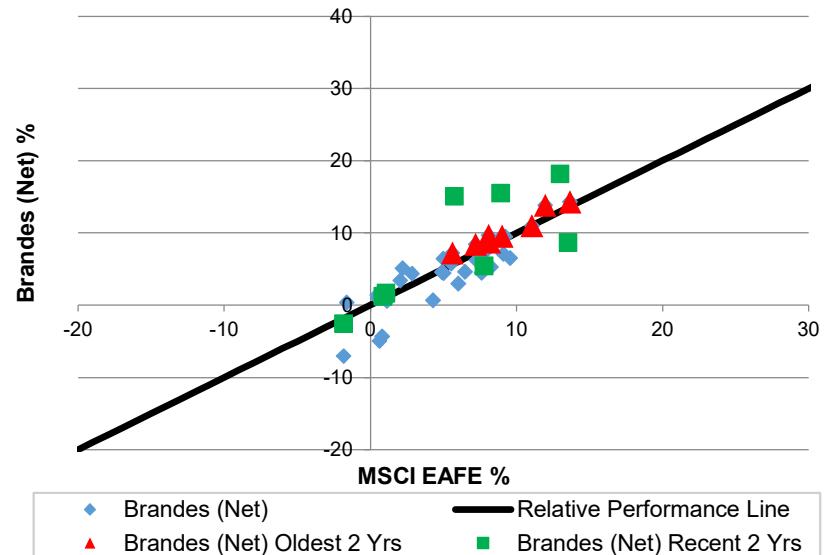
Brandes vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Int'l Multi-Cap Value

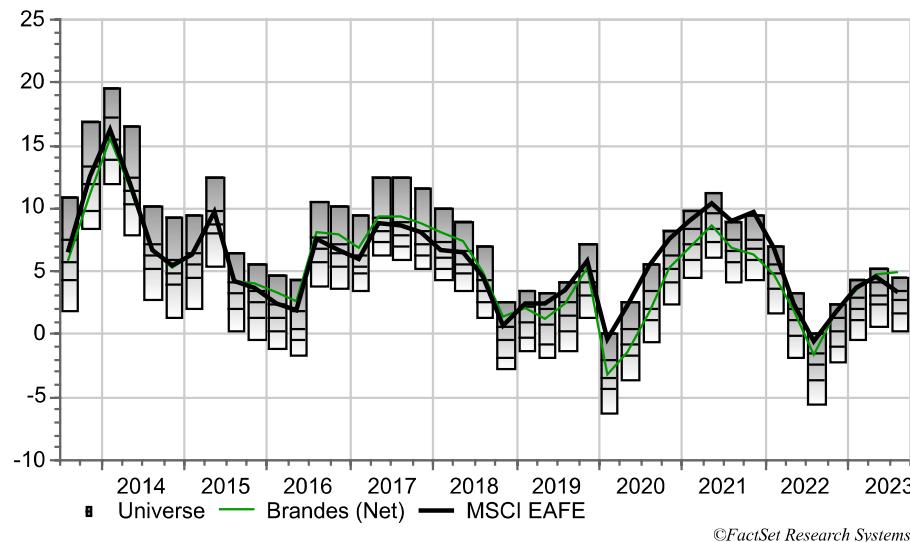


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US Int'l Multi Cap Value



Over/Under Benchmark Analysis

21	Outperform
19	Underperform
40	# Observations
53%	% Outperform

Brandes Attribution Analysis – September 30, 2023

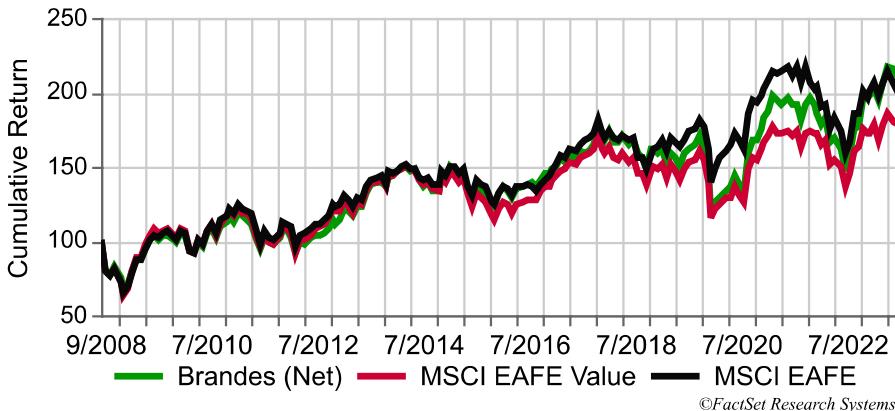
Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Rolls-Royce Holdings plc	2.62	2.49	0.84	WPP plc	2.13	2.06	-0.30
POSCO Holdings Inc.	0.24	0.24	0.50	Anheuser-Busch InBev SA/NV	2.69	2.35	-0.23
UBS Group AG	2.29	1.80	0.36	Taiwan Semi Mfg. Co. Ltd.	1.83	1.83	-0.22
Petroleo Brasileiro S.A	1.92	1.92	0.31	Embraer S.A.	2.14	2.14	-0.22
Fibra Uno Administracion SA de CV	1.61	1.61	0.24	Kering	1.36	1.09	-0.22
Eni SpA	1.84	1.61	0.21	Swatch Group AG	2.07	2.00	-0.20
Mitsubishi UFJ Financial Group, Inc.	1.76	1.19	0.19	Henkel AG & Co. KGaA	1.97	1.84	-0.19
Marks and Spencer Group PLC	1.06	1.06	0.17	Carrefour SA	2.06	1.99	-0.16
Fresenius SE & Co. KGaA	1.65	1.57	0.17	J Sainsbury plc	1.52	1.48	-0.14
Honda Motor Co., Ltd.	1.49	1.18	0.16	Koninklijke Philips N.V.	2.02	1.89	-0.14

Sector Attribution

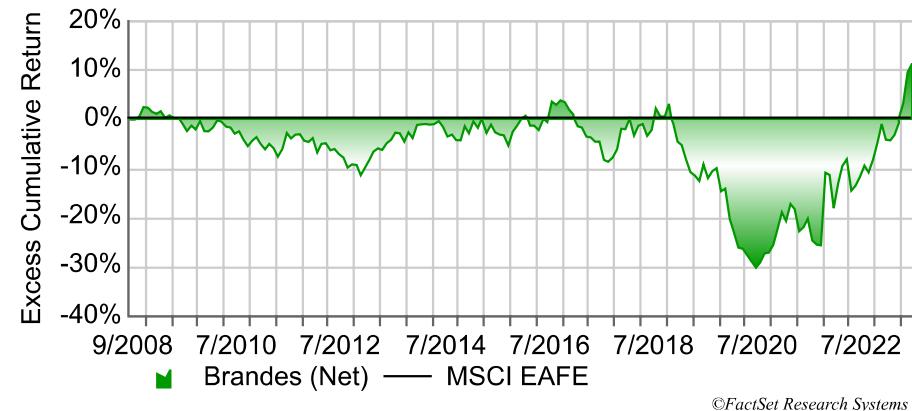
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	4.0	-5.0	-3.5	0.0	-0.1	-0.1
Consumer Discretionary	-1.0	-1.5	-8.3	0.0	0.7	0.8
Consumer Staples	5.0	-4.2	-7.1	-0.2	0.5	0.3
Energy	2.9	13.7	11.6	0.5	0.2	0.6
Financials	-1.3	5.6	0.8	-0.1	0.8	0.7
Health Care	4.0	2.1	-3.1	0.1	0.9	1.0
Industrials	-9.7	11.2	-6.0	0.2	1.1	1.3
Information Technology	-2.2	-7.6	-10.7	0.2	0.2	0.3
Materials	-1.8	5.0	-3.1	0.0	0.5	0.6
Real Estate	-0.7	16.5	-1.1	0.0	0.3	0.2
Utilities	-1.7	-7.4	-8.8	0.1	0.0	0.1
Cash	2.3	1.3	0.0	0.1	0.0	0.1
Total	0.0	1.8	-4.1	0.9	5.1	5.9

Brandes 15 Year Performance & Statistics

Investment Growth – 15 Years



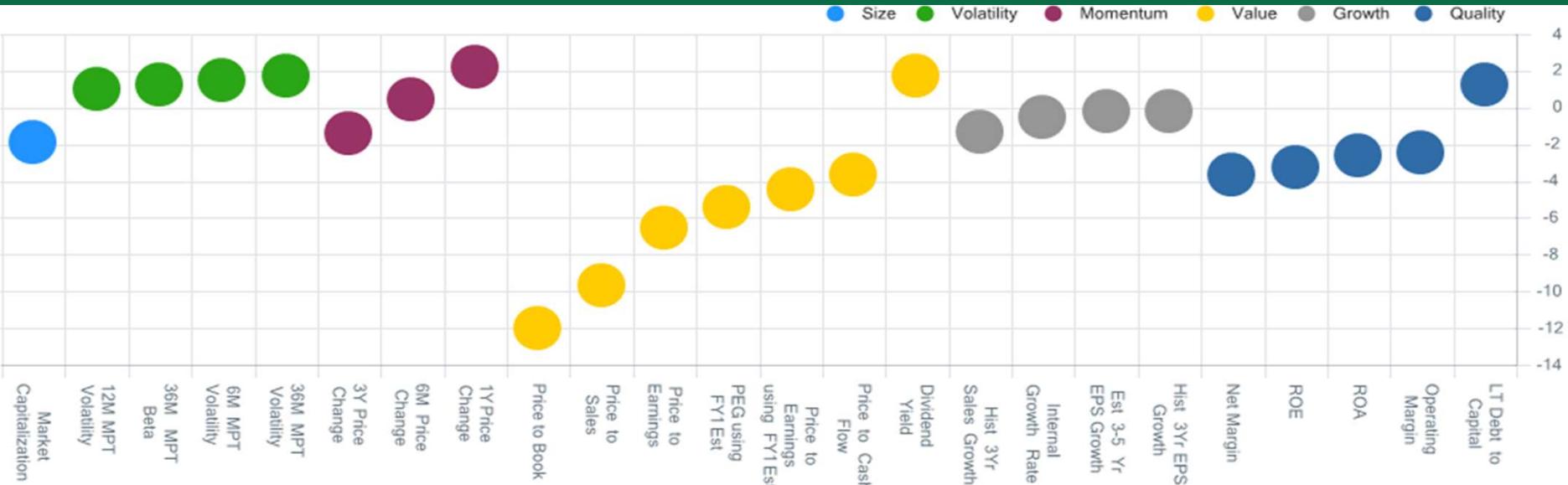
Relative Cumulative Performance – 15 Years



Risk – 15 Years

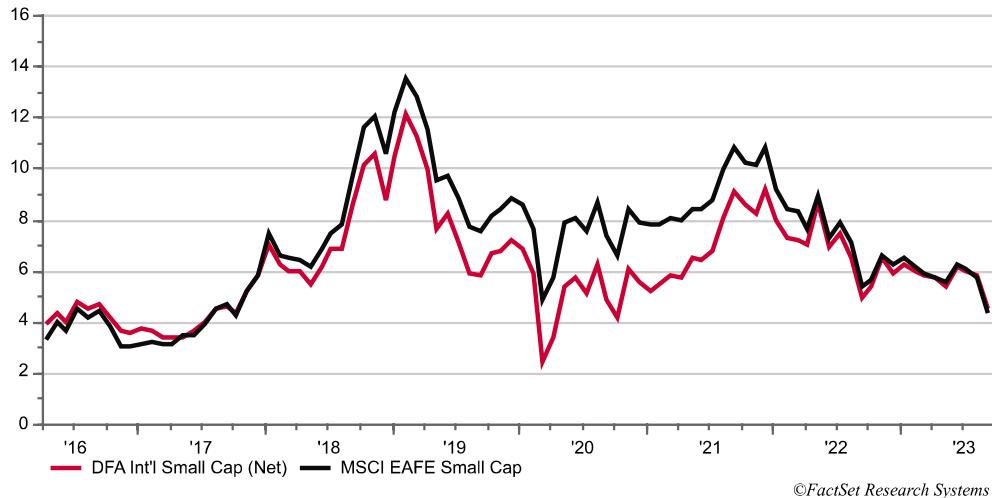
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Brandes (Net)	5.0	18.3	0.5	0.2	0.1	5.3	1.0
MSCI EAFE	4.7	17.5	--	0.2	--	--	1.0
MSCI EAFE Value	3.9	18.9	--	0.2	--	--	1.1

Characteristics Tilt vs Benchmark 9/30/2023



DFA International Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 5/1/2006 (Ten Year, One Month Shift)



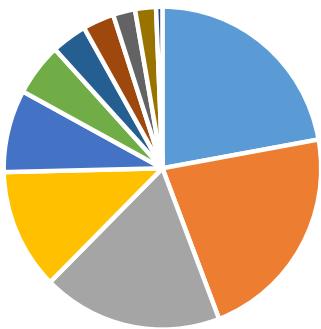
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Banco de Sabadell, S.A.	1.09	0.87
Banco BPM S.p.A.	1.08	2.59
Crescent Point Energy Corp.	0.87	24.73
MEG Energy Corp.	0.87	22.78
Helvetia Holding AG	0.85	3.07
Leonardo SpA	0.82	26.87
Jyske Bank A/S	0.81	-4.11
Alamos Gold Inc	0.80	-5.08
Sydbank A/S	0.68	2.66
Adecco Group AG	0.65	25.40

Trailing Returns

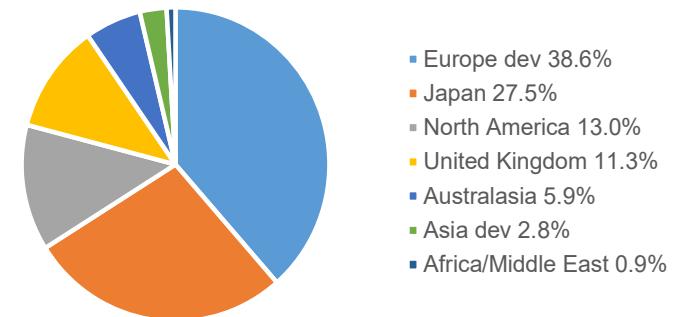
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
DFA Int'l Small Cap (Net)	0.1	7.5	28.3	10.5	2.4	4.5	6.4
MSCI EAFE Small Cap	-3.5	1.8	17.9	1.1	0.8	4.3	6.3
MSCI World ex US Small Cap Value	-1.0	4.2	21.7	6.9	1.7	3.8	6.6

Equity Sector Exposure (GICS)



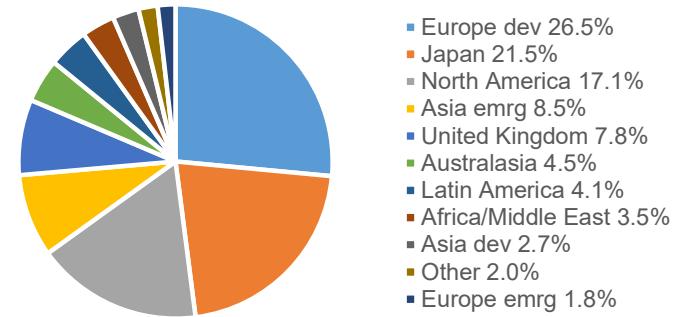
- Industrials 22.2%
- Financials 22.0%
- Materials 18.3%
- Consumer Discretionary 12.1%
- Energy 8.3%
- Consumer Staples 5.3%
- Information Technology 3.6%
- Real Estate 3.2%
- Communication Services 2.2%
- Health Care 2.1%
- Utilities 0.6%

Regional Exposure by Domicile



- Europe dev 38.6%
- Japan 27.5%
- North America 13.0%
- United Kingdom 11.3%
- Australasia 5.9%
- Asia dev 2.8%
- Africa/Middle East 0.9%

Regional Exposure by Source of Revenue

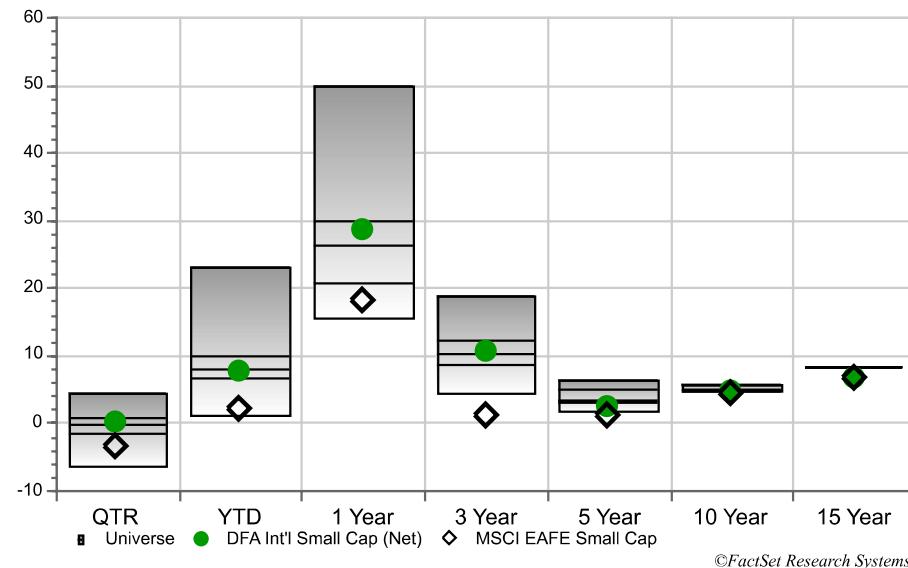


- Europe dev 26.5%
- Japan 21.5%
- North America 17.1%
- Asia emrg 8.5%
- United Kingdom 7.8%
- Australasia 4.5%
- Latin America 4.1%
- Africa/Middle East 3.5%
- Asia dev 2.7%
- Other 2.0%
- Europe emrg 1.8%

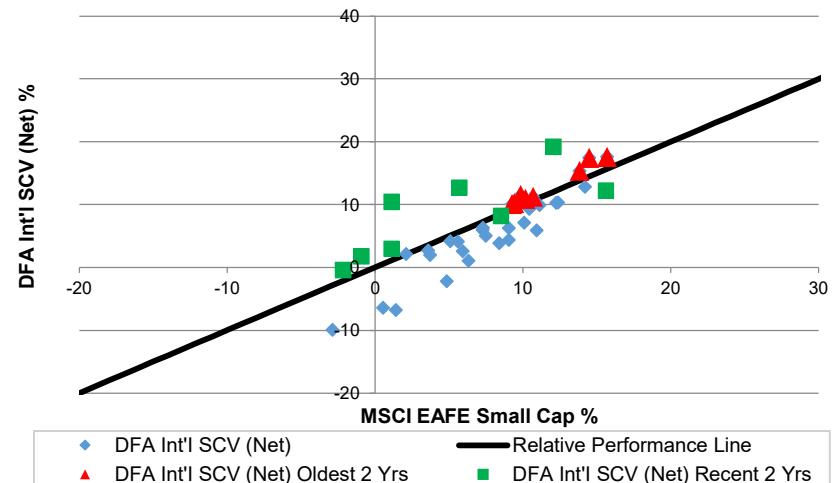
DFA International vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US: Int'l Sm/Mid Cap Value

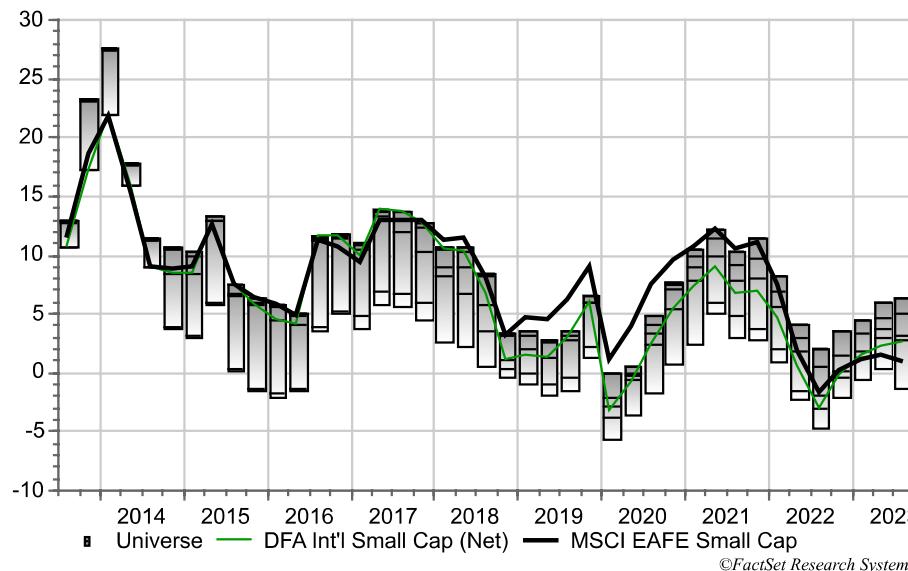


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US: Int'l Sm/Mid Cap Value



Over/Under Benchmark Analysis

15	Outperform
25	Underperform
40	# Observations
38%	% Outperform

DFA International Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Celestica Inc.	0.43	0.43	0.21
Crescent Point Energy Corp.	0.77	0.77	0.16
MEG Energy Corp.	0.73	0.73	0.15
Adecco Group AG	0.59	0.59	0.12
Leonardo SpA	0.71	0.50	0.11
Vistry Group plc	0.47	0.34	0.10
Whitecap Resources Inc.	0.33	0.33	0.07
Banca Popolare di Sondrio SPA	0.37	0.29	0.06
Marks and Spencer Group PLC	0.53	0.32	0.05
Peyto Exploration & Development Corp.	0.22	0.22	0.05

Top 10 Leading Detractors

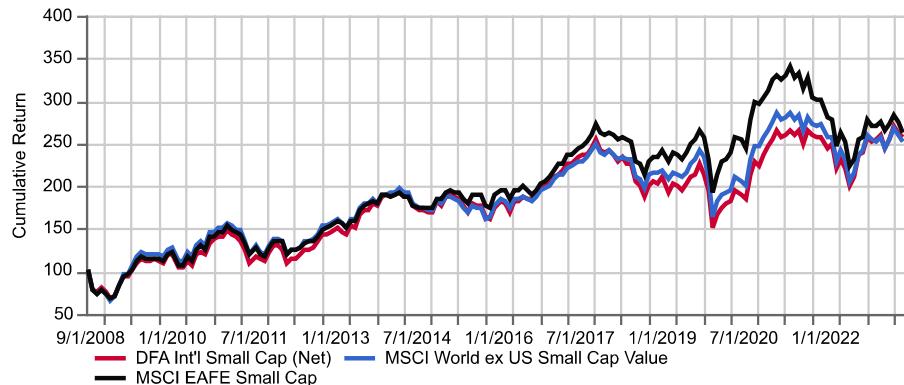
	Avg. Weights	Relative Weights	Active Return
Cargotec Oyj	0.43	0.35	-0.09
B2Gold Corp.	0.46	0.46	-0.09
Valeo SE	0.39	0.39	-0.07
Playtech plc	0.30	0.24	-0.07
OSB Group PLC	0.26	0.17	-0.07
voestalpine AG	0.29	0.29	-0.06
ASR Nederland N.V.	0.66	0.39	-0.06
Salzgitter AG	0.22	0.19	-0.05
Canfor Corporation	0.16	0.16	-0.05
Otakumpu Oyj	0.28	0.20	-0.05

Sector Attribution

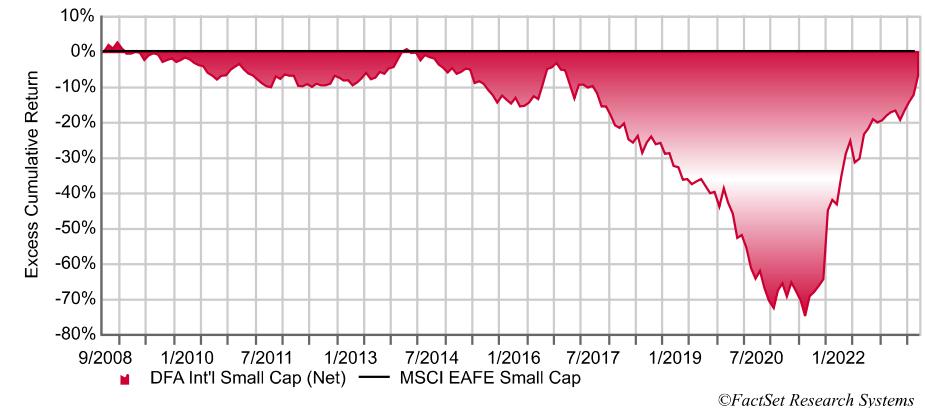
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-2.0	2.8	-1.3	0.0	0.1	0.0
Consumer Discretionary	-0.9	-0.5	-3.4	0.0	0.4	0.4
Consumer Staples	-1.0	1.8	0.4	0.0	0.1	0.0
Energy	4.7	13.4	12.6	0.7	0.0	0.8
Financials	10.3	3.6	0.4	0.4	0.7	1.1
Health Care	-4.5	-2.0	-6.7	0.1	0.1	0.2
Industrials	-1.2	-0.3	-5.3	0.0	1.2	1.1
Information Technology	-6.5	3.1	-8.0	0.3	0.4	0.7
Materials	9.7	-4.0	-4.9	-0.1	0.1	0.0
Real Estate	-6.8	-4.1	-4.0	0.0	0.0	0.0
Utilities	-2.0	-9.2	-6.2	0.1	0.0	0.0
Total	0.0	0.9	-3.6	1.5	2.9	4.5

DFA International Inception Performance & Statistics

Investment Growth – 15 Years



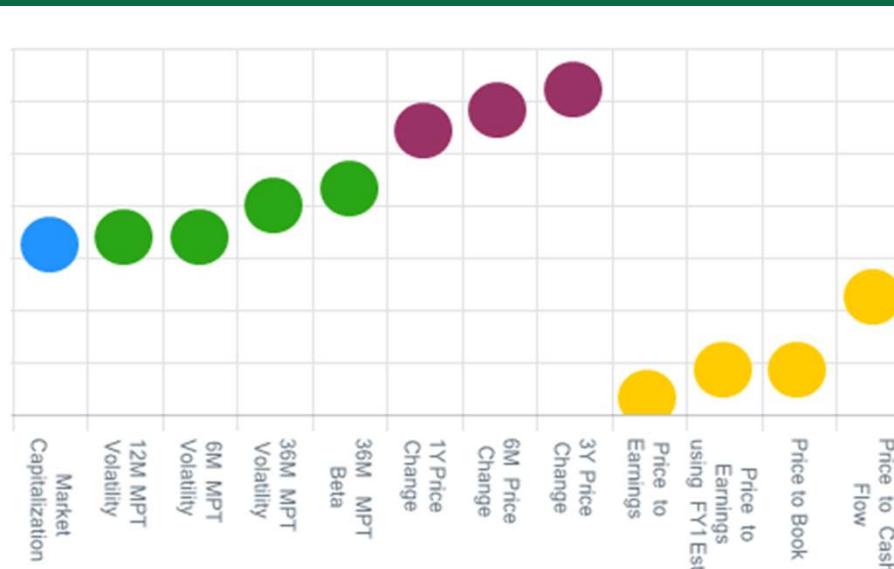
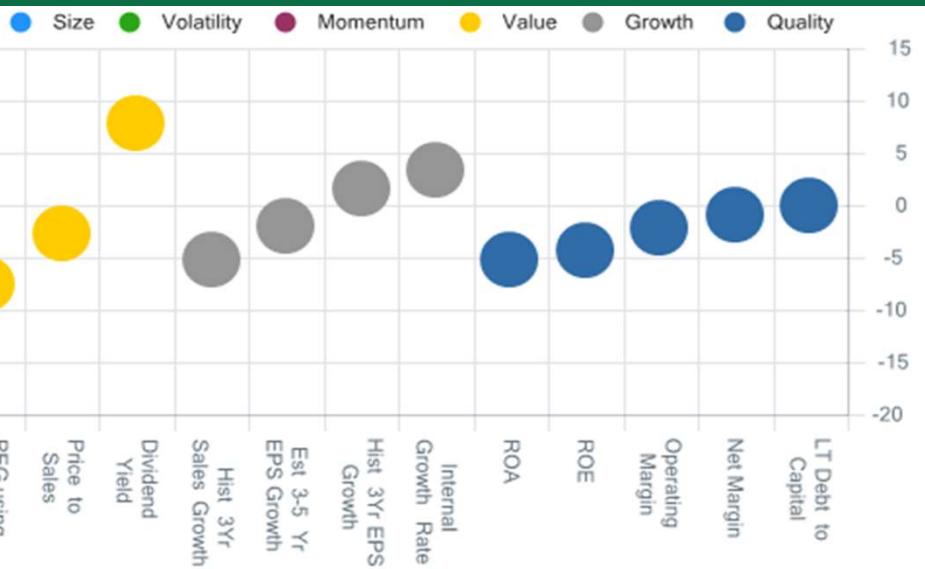
Relative Cumulative Performance – 15 Years



Risk – 15 Years

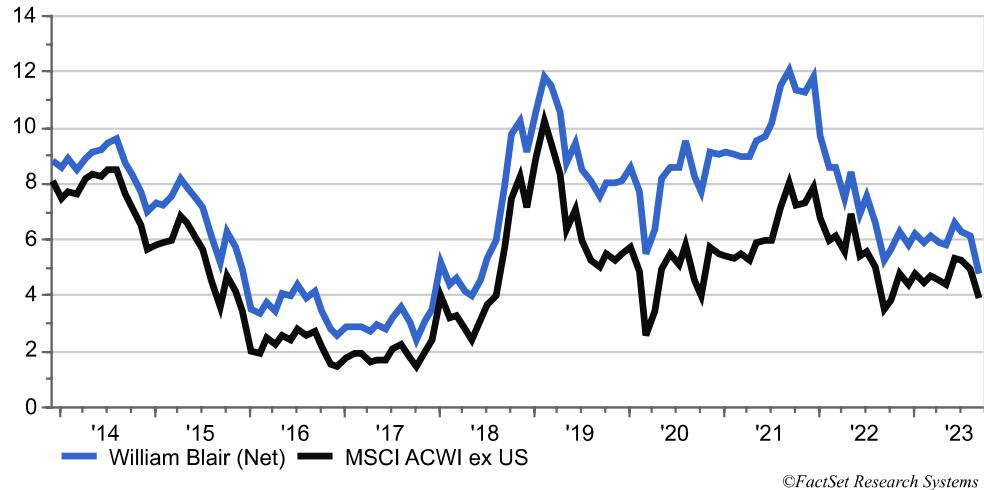
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
DFA Int'l Small Cap (Net)	6.4	20.1	-0.2	0.3	0.0	4.4	1.0
MSCI EAFE Small Cap	6.3	18.7	--	0.3	--	--	1.0
MSCI World ex US Small Cap Value	6.6	19.4	--	0.3	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



William Blair Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 1/1/2004 (Ten Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Novo Nordisk A/S	2.13	14.04
ASML Holding NV	1.75	-17.97
AstraZeneca	1.60	-4.84
Linde Plc	1.59	-1.96
Taiwan Semi Mfg. Co. Ltd.	1.54	-11.89
DSV A/S	1.52	-10.81
Total Energies SE	1.51	16.43
Canadian Pacific Kansas City Limited	1.48	-7.70
London Stock Exchange Group plc	1.44	-5.10
Compass Group PLC	1.42	-12.80

Trailing Returns

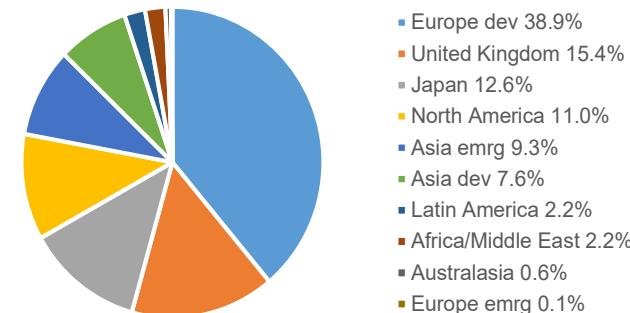
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
William Blair (Net)	-8.3	2.6	14.6	-1.6	3.4	4.7	6.4
MSCI ACWI ex US	-3.7	5.8	21.0	4.2	3.1	3.8	4.8
MSCI ACWI ex US Growth	-7.3	2.9	16.2	-1.6	2.9	4.3	5.1

Equity Sector Exposure (GICS)



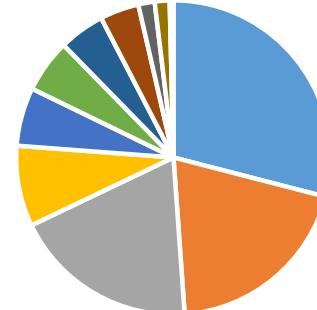
- Industrials 26.4%
- Information Technology 16.7%
- Financials 15.3%
- Consumer Discretionary 12.8%
- Health Care 10.9%
- Consumer Staples 7.2%
- Materials 5.1%
- Energy 2.5%
- Communication Services 1.8%
- Real Estate 1.0%
- Utilities 0.3%

Regional Exposure by Domicile



- Europe dev 38.9%
- United Kingdom 15.4%
- Japan 12.6%
- North America 11.0%
- Asia emrg 9.3%
- Asia dev 7.6%
- Latin America 2.2%
- Africa/Middle East 2.2%
- Australasia 0.6%
- Europe emrg 0.1%

Regional Exposure by Source of Revenue

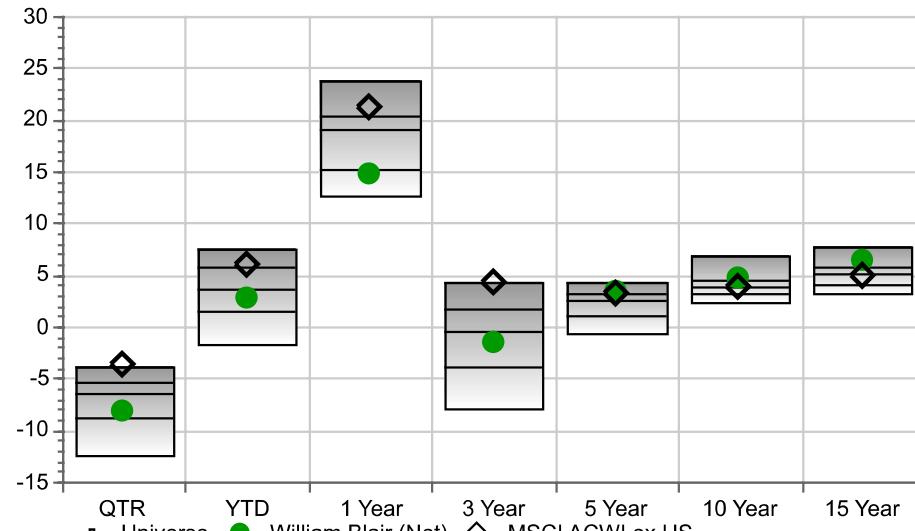


- North America 29.0%
- Asia emrg 19.8%
- Europe dev 19.1%
- Japan 8.3%
- Asia dev 6.0%
- Latin America 5.5%
- United Kingdom 4.7%
- Africa/Middle East 4.0%
- Europe emrg 1.7%
- Australasia 1.5%
- Other 0.4%

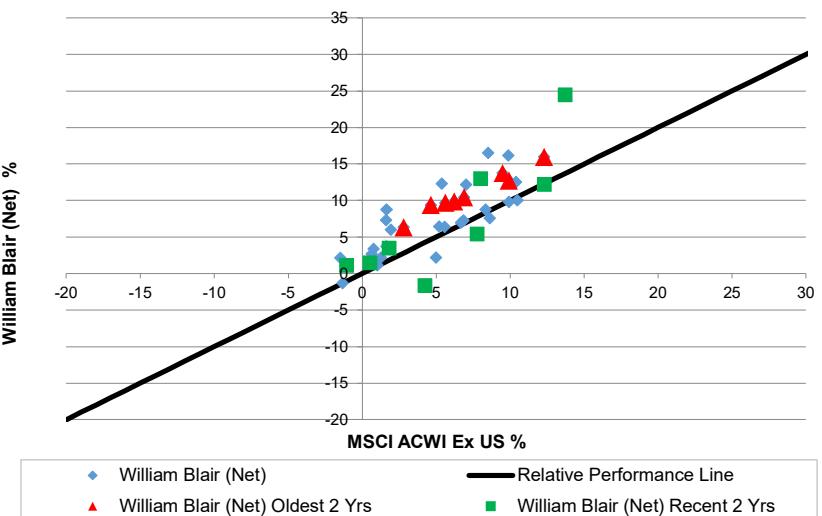
William Blair vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:International Multi-Cap Growth

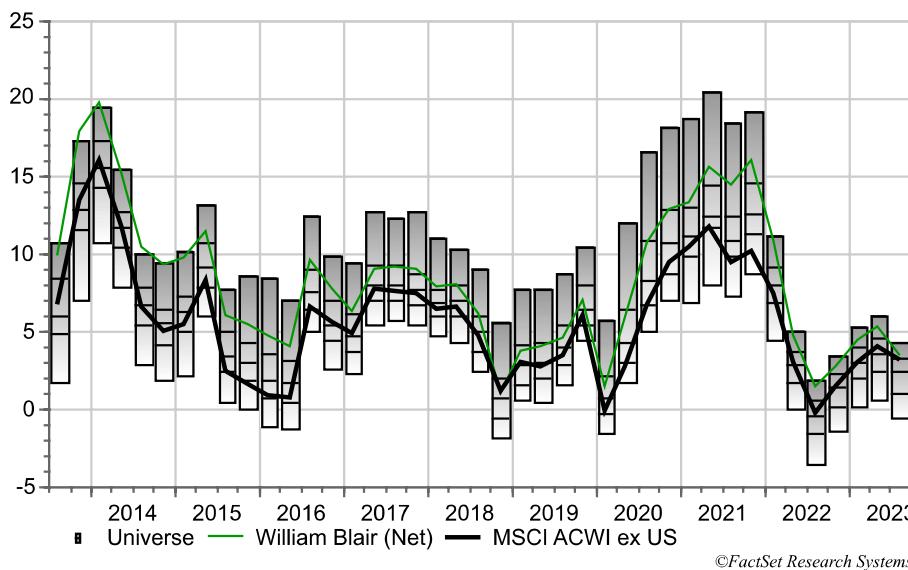


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US:International Multi-Cap Growth



Over/Under Benchmark Analysis

33	Outperform
7	Underperform
40	# Observations
83%	% Outperform

William Blair Attribution Analysis – September 30, 2023

Top 10 Leading Contributors

	Avg. Weights	Relative Weights	Active Return
Partners Group Holding AG	0.58	0.48	0.08
Novo Nordisk A/S	1.82	0.67	0.08
Alchip Technologies, Limited	0.18	0.18	0.07
Pro Medicus Limited	0.24	0.24	0.05
DISCO Corporation	0.42	0.35	0.05
Parkland Corporation	0.27	0.25	0.04
Elite Material Co., Ltd.	0.10	0.10	0.04
Taiwan Semi Mfg. Co. Ltd.	1.57	-0.25	0.03
Dollarama Inc.	1.12	1.05	0.03
Polycab India Limited	0.08	0.08	0.03

Top 10 Leading Detractors

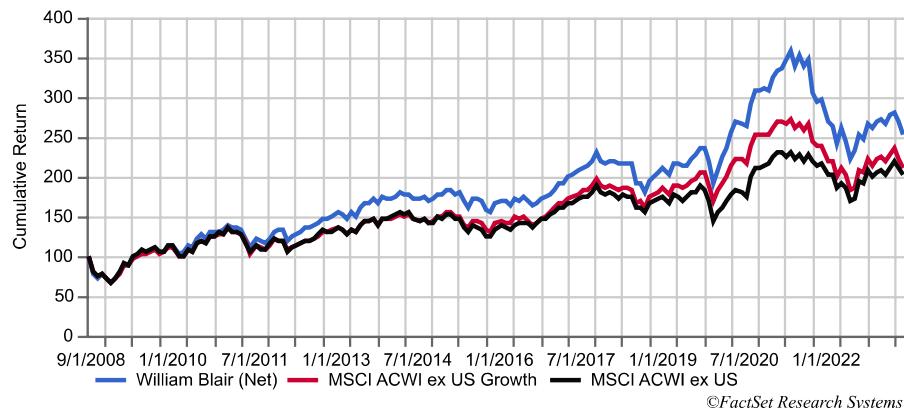
	Avg. Weights	Relative Weights	Active Return
MTU Aero Engines AG	1.27	1.21	-0.38
Hexagon AB	0.82	0.73	-0.24
Keyence Corporation	1.44	1.08	-0.23
Lonza Group AG	1.18	1.00	-0.22
Adyen N.V.	0.48	0.35	-0.22
DAIKIN INDUSTRIES, LTD.	1.18	0.98	-0.22
Amadeus IT Group SA	1.26	1.13	-0.21
AIA Group Limited	1.54	1.07	-0.20
Dassault Systemes S.A.	1.27	1.15	-0.18
Hermes International SCA	1.36	1.08	-0.16

Sector Attribution

	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-3.7	-5.8	-5.0	0.1	0.0	0.0
Consumer Discretionary	0.1	-9.6	-5.6	0.0	-0.5	-0.5
Consumer Staples	-2.2	-7.6	-6.4	0.1	-0.1	0.0
Energy	-4.1	9.8	8.9	-0.5	0.0	-0.5
Financials	-7.3	-6.1	-0.8	-0.2	-0.7	-0.9
Health Care	2.5	-7.0	-2.8	0.0	-0.5	-0.5
Industrials	13.7	-9.0	-5.7	-0.2	-1.0	-1.2
Information Technology	5.3	-11.7	-8.7	-0.2	-0.5	-0.8
Materials	-2.8	-8.2	-3.1	0.0	-0.3	-0.3
Real Estate	-1.0	-1.5	-1.1	0.0	0.0	0.0
Utilities	-2.7	-10.5	-7.9	0.1	0.0	0.1
Cash	2.2	1.3	0.0	0.1	0.0	0.1
Total	0.0	-8.2	-3.8	-0.9	-3.6	-4.4

William Blair 15 Year Performance & Statistics

Investment Growth – 15 Years



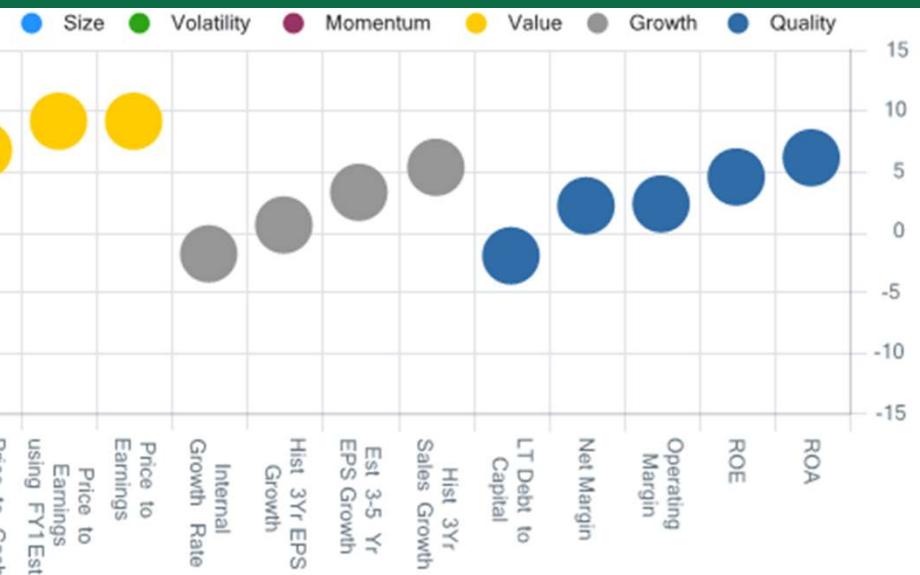
Relative Cumulative Performance – 15 Years



Risk – 15 Years

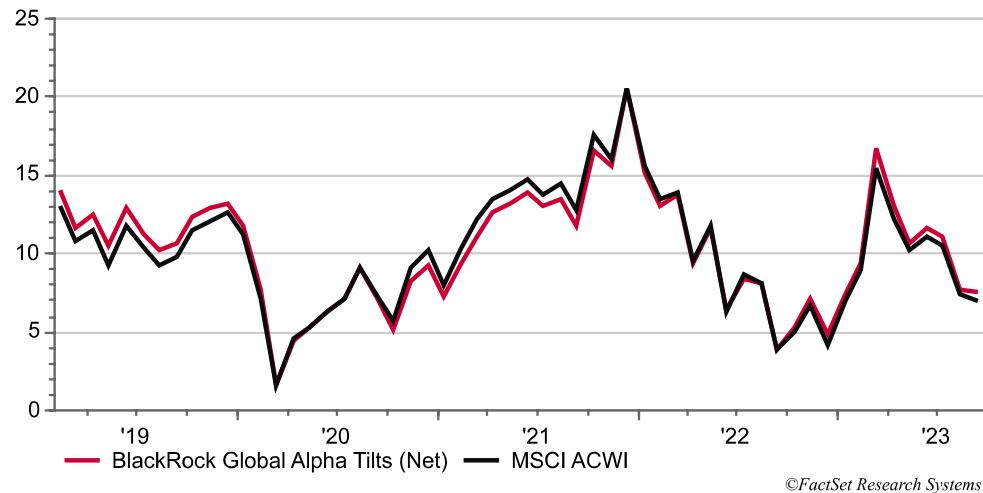
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
William Blair (Net)	6.4	17.6	1.8	0.3	0.3	5.5	1.0
MSCI ACWI ex US	4.8	17.7	--	0.2	--	--	1.0
MSCI ACWI ex US Growth	5.1	17.3	--	0.2	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



BlackRock Global Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 3/1/2016 (Three Year, One Month Shift)



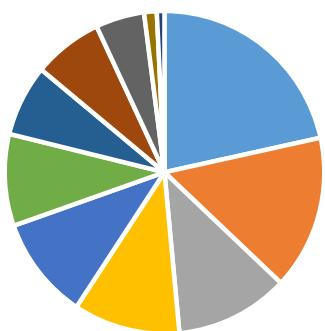
Top 10 Holdings

	Portfolio Weight	Quarterly Return
Microsoft Corporation	4.73	-7.09
Apple Inc.	3.50	-11.62
Amazon.com, Inc.	2.97	-2.49
NVIDIA Corporation	2.90	2.84
Alphabet Inc.	2.54	9.19
Nestle S.A.	1.61	-5.71
Chevron Corporation	1.58	8.17
Walmart Inc.	1.55	2.11
Meta Platforms, Inc.	1.54	4.61
Novartis AG	1.53	2.00

Trailing Returns

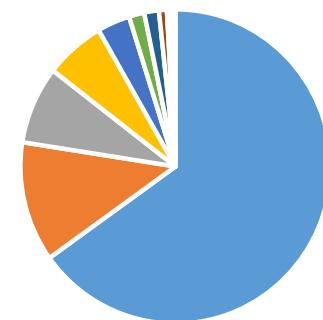
	QTR	YTD	1 Year	3 Year	5 Year	Inception 3/1/2016
BlackRock Global Alpha Tilts (Net)	-3.1	10.4	23.1	7.4	6.5	10.4
MSCI ACWI	-3.4	10.1	20.8	6.9	6.5	9.8

Equity Sector Exposure (GICS)



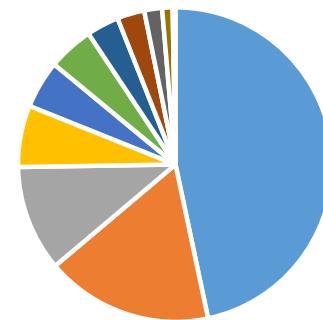
- Information Technology 21.5%
- Consumer Discretionary 15.5%
- Financials 11.5%
- Industrials 10.8%
- Health Care 10.4%
- Consumer Staples 9.2%
- Energy 7.2%
- Communication Services 7.0%
- Materials 5.0%
- Utilities 1.3%
- Real Estate 0.8%

Regional Exposure by Domicile



- North America 65.1%
- Europe dev 12.4%
- Japan 8.0%
- Asia emrg 6.3%
- Asia dev 3.4%
- Latin America 1.6%
- United Kingdom 1.5%
- Africa/Middle East 0.8%
- Australasia 0.5%
- Europe emrg 0.4%

Regional Exposure by Source of Revenue

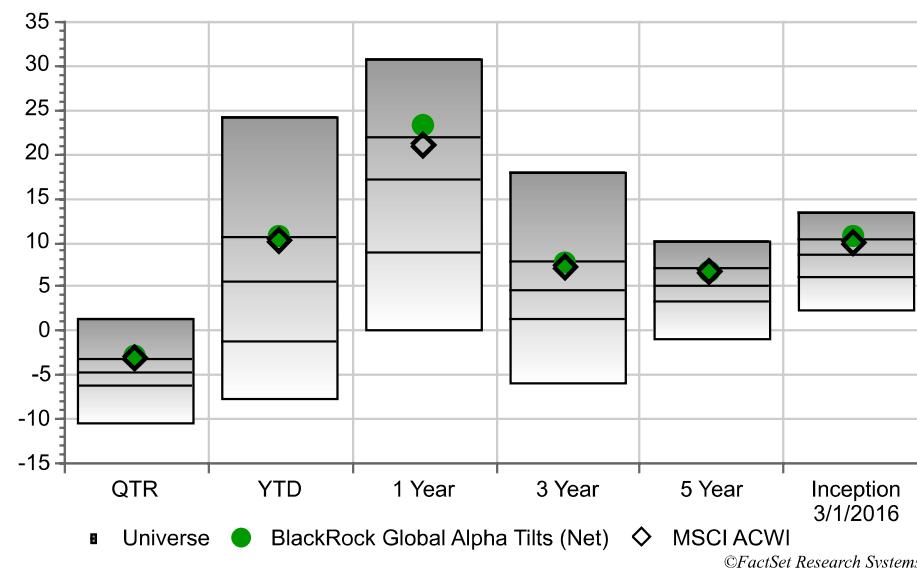


- North America 46.7%
- Asia emrg 17.2%
- Europe dev 10.9%
- Japan 6.3%
- Latin America 4.9%
- Asia dev 4.7%
- Africa/Middle East 3.4%
- United Kingdom 2.8%
- Europe emrg 1.8%
- Australasia 1.1%
- Other 0.3%

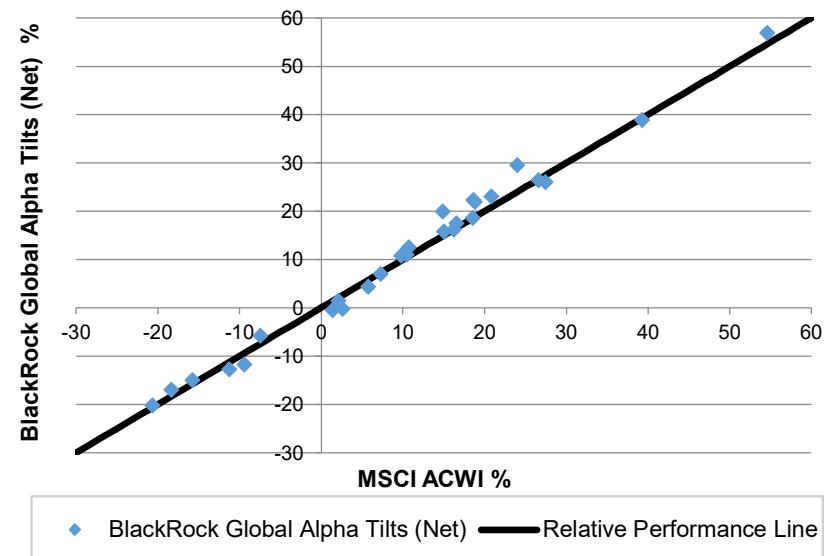
BlackRock Global vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:Global

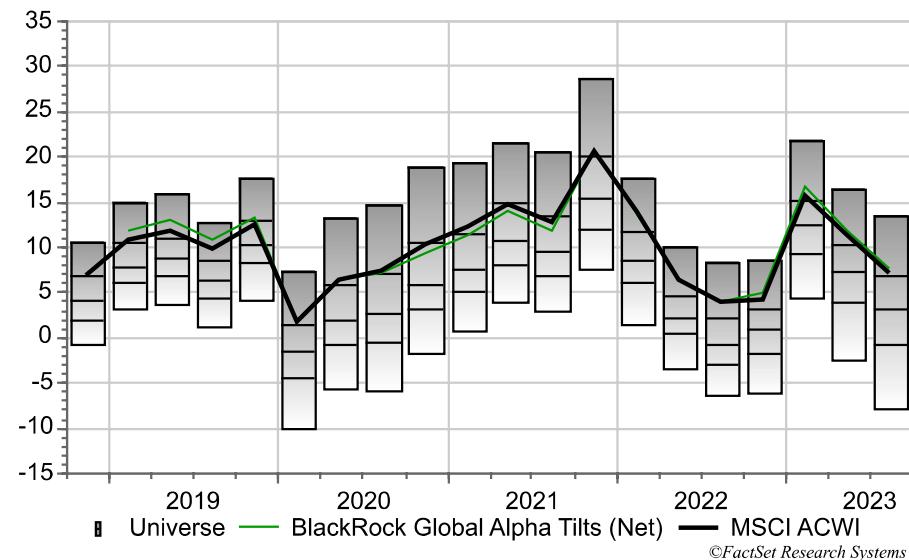


One-Year Rolling Return Versus Benchmark



Rolling Returns 3/1/2016 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Global Equity



Over/Under Benchmark Analysis

17	Outperform
10	Underperform
27	# Observations
63%	% Outperform

BlackRock Global Attribution Analysis – September 30, 2023

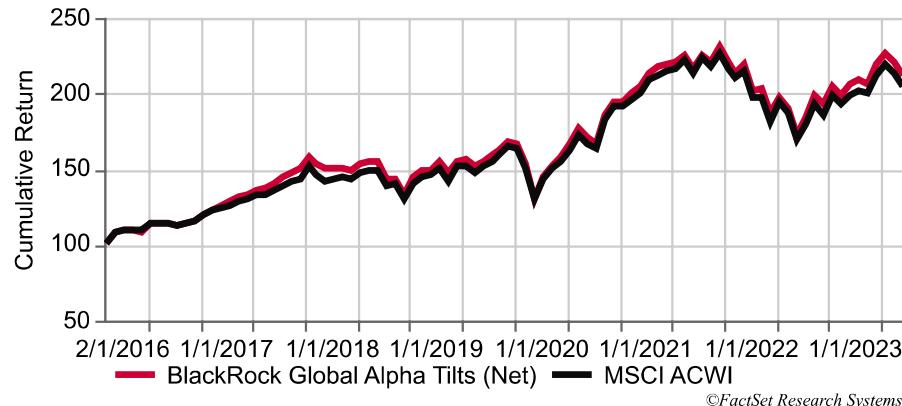
Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Schlumberger N.V.	0.36	0.24	0.07	Etsy, Inc.	0.26	0.24	-0.15
Chevron Corporation	1.35	0.90	0.07	Block, Inc.	0.26	0.20	-0.13
Apple Inc.	4.48	-0.26	0.07	Mercedes-Benz Group AG	0.99	0.89	-0.12
ConocoPhillips Company	0.62	0.41	0.06	United Airlines Holdings, Inc.	0.26	0.26	-0.10
Marathon Petroleum Corporation	0.35	0.26	0.06	General Motors Company	0.63	0.55	-0.10
Canadian Natural Resources Limited	0.43	0.33	0.06	Microsoft Corporation	4.71	0.92	-0.09
Repsol SA	0.38	0.35	0.05	Honeywell International Inc.	0.96	0.76	-0.08
RTX Corp.	0.04	-0.17	0.05	Nestle S.A.	0.97	0.43	-0.07
ASML Holding NV	0.31	-0.13	0.04	Siemens Aktiengesellschaft	0.69	0.47	-0.07
Novo Nordisk A/S	0.76	0.32	0.04	S&P Global, Inc.	0.97	0.77	-0.06

Sector Attribution

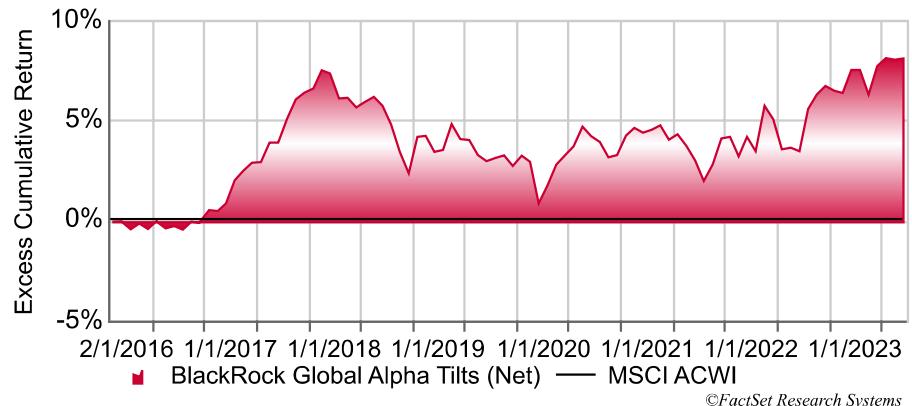
	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	-1.4	3.9	0.5	-0.1	0.2	0.1
Consumer Discretionary	3.3	-6.8	-4.8	-0.1	-0.3	-0.4
Consumer Staples	1.3	-4.6	-6.1	0.0	0.2	0.1
Energy	1.5	14.7	10.8	0.2	0.2	0.4
Financials	-3.0	-3.8	-0.8	-0.1	-0.4	-0.5
Health Care	-1.6	0.9	-2.6	0.0	0.4	0.3
Industrials	2.4	-7.2	-5.0	0.0	-0.3	-0.3
Information Technology	-0.7	-5.7	-6.1	0.0	0.1	0.1
Materials	1.1	-4.1	-3.6	0.0	0.0	0.0
Real Estate	-1.7	1.3	-6.4	0.1	0.1	0.1
Utilities	-1.2	-6.4	-8.5	0.1	0.0	0.1
Total	0.0	-3.2	-3.3	0.0	0.1	0.1

BlackRock Global Inception Performance & Statistics

Investment Growth Since Inception 3/1/2016



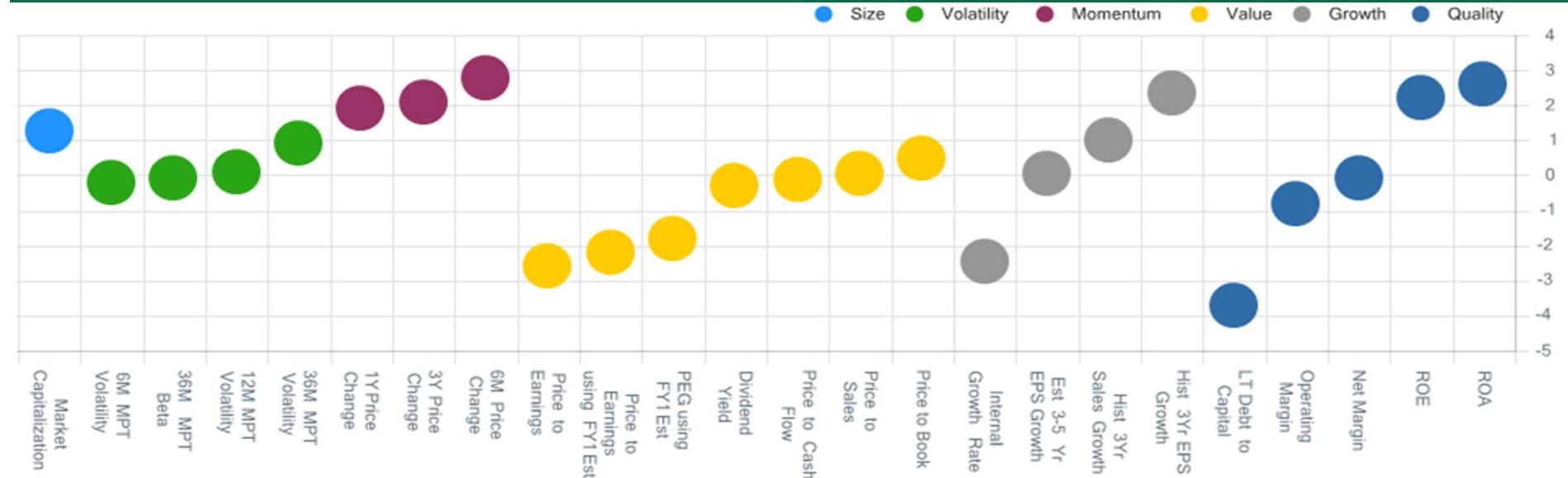
Relative Cumulative Performance Since Inception 3/1/2016



Risk Since Inception 3/1/2016

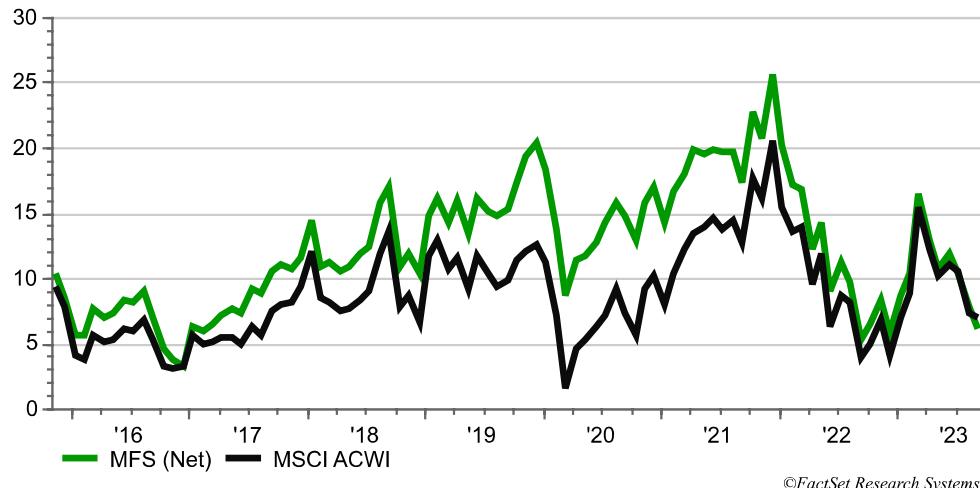
	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
BlackRock Global Alpha Tilts (Net)	10.4	15.6	0.4	0.6	0.4	1.6	1.0
MSCI ACWI	9.8	15.3	--	0.5	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023



MFS Portfolio Snapshot – September 30, 2023

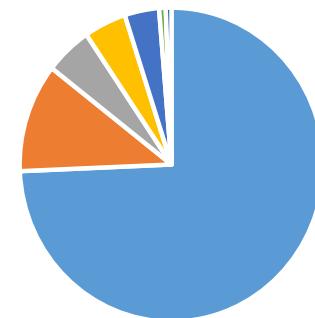
Rolling Returns Since Inception 12/1/2012 (Three Year, One Month Shift)



Top 10 Holdings

	Portfolio Weight	Quarterly Return
Microsoft Corporation	6.31	-7.09
Alphabet Inc.	4.74	9.32
Visa Inc.	3.32	-2.97
Accenture plc	3.01	-0.12
Canadian Pacific Kansas City Limited	2.51	-7.70
Apple Inc.	2.41	-11.62
ICON plc	2.31	-1.58
Taiwan Semi Mfg. Co. Ltd.	2.22	-11.89
Tencent Holdings Ltd.	2.11	-7.60
Amphenol Corporation	2.01	-0.88

Regional Exposure by Domicile

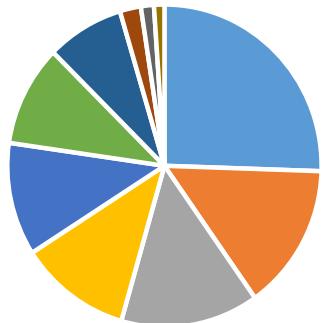


- North America 74.3%
- Europe dev 11.2%
- Asia emrg 5.0%
- Asia dev 4.5%
- United Kingdom 3.7%
- Latin America 0.7%
- Japan 0.6%

Trailing Returns

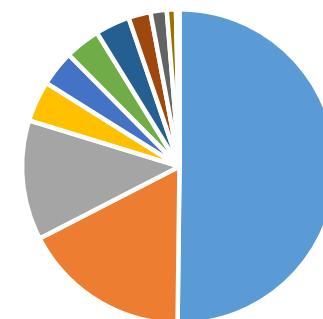
	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Inception 12/1/2012
MFS (Net)	-5.5	8.7	20.2	6.1	9.1	10.1	10.9
MSCI ACWI	-3.4	10.1	20.8	6.9	6.5	7.6	8.5
MSCI ACWI Growth	-4.9	18.2	24.4	3.8	8.4	9.5	10.3

Equity Sector Exposure (GICS)



- Information Technology 25.5%
- Industrials 14.7%
- Financials 14.2%
- Consumer Discretionary 11.5%
- Communication Services 11.3%
- Health Care 10.2%
- Consumer Staples 8.0%
- Materials 2.1%
- Real Estate 1.4%
- Utilities 1.1%

Regional Exposure by Source of Revenue

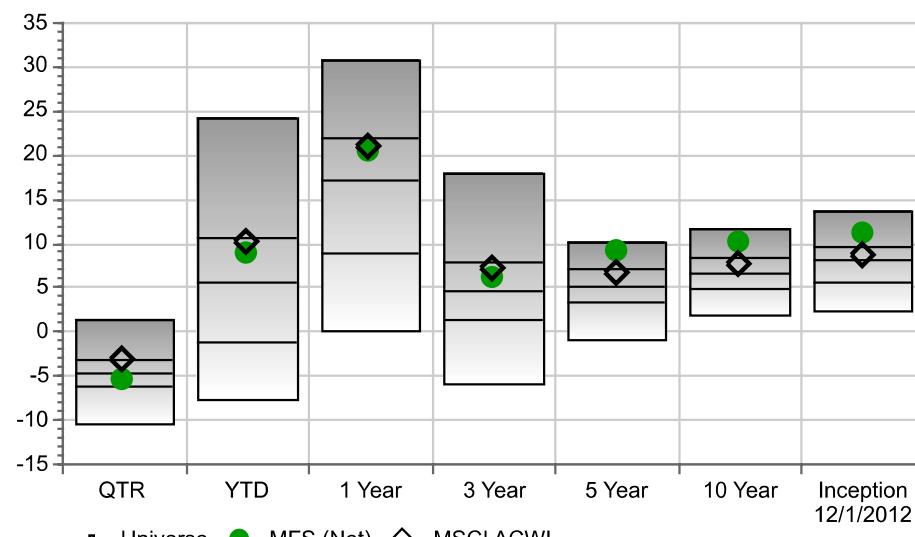


- North America 50.2%
- Asia emrg 17.2%
- Europe dev 12.3%
- Asia dev 4.2%
- United Kingdom 3.7%
- Latin America 3.6%
- Africa/Middle East 3.6%
- Japan 2.3%
- Europe emrg 1.7%
- Australasia 0.9%
- Other 0.4%

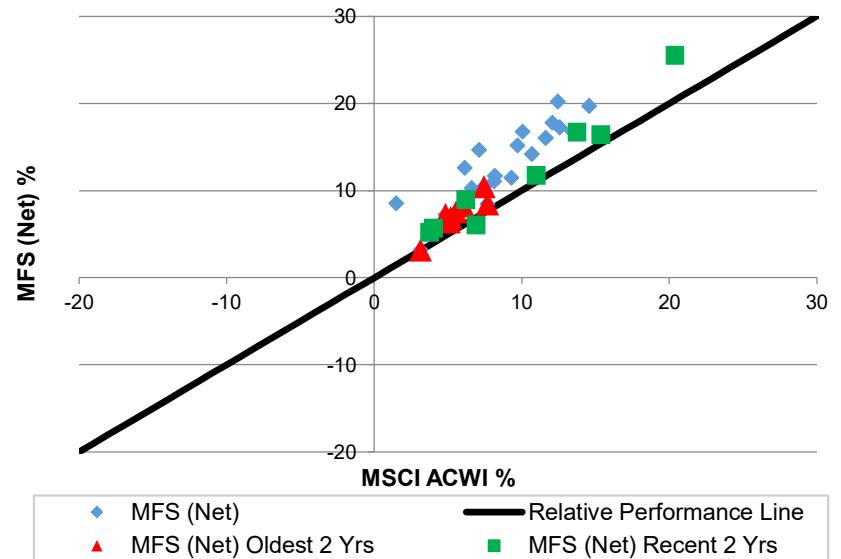
MFS vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US:Global

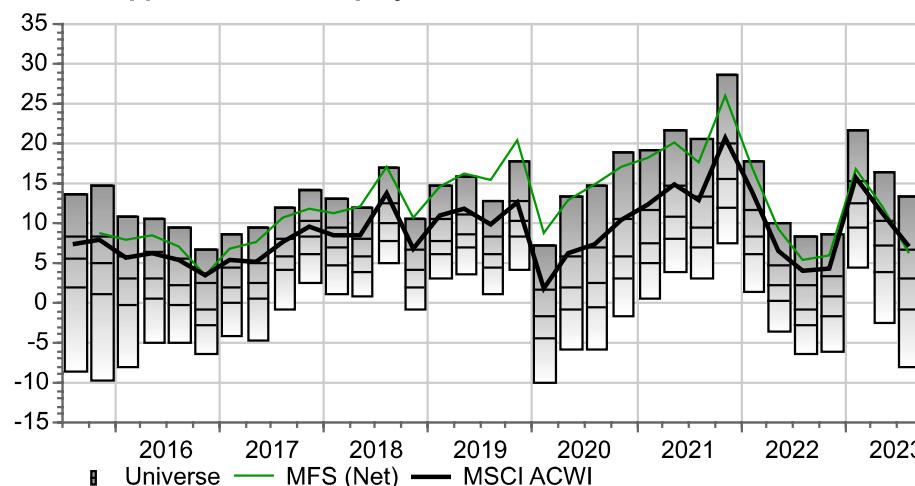


Three-Year Rolling Return Versus Benchmark



Rolling Returns 12/1/2012 – 9/30/2023 (3 Year, 3 Month Shift)

Universe: Lipper US Global Equity



Over/Under Benchmark Analysis

31	Outperform
1	Underperform
32	# Observations
97%	% Outperform

MFS Attribution Analysis – September 30, 2023

Top 10 Leading Contributors				Top 10 Leading Detractors			
	Avg. Weights	Relative Weights	Active Return		Avg. Weights	Relative Weights	Active Return
Intercontinental Exchange, Inc.	0.97	0.85	0.26	Estee Lauder Companies Inc.	1.10	1.04	-0.29
Apple Inc.	2.54	-2.20	0.25	LVMH Moet Hennessy Louis Vuitton SE	1.51	1.12	-0.22
Alphabet Inc.	4.40	2.11	0.16	American Tower Corporation	1.44	1.30	-0.20
NAVER Corp.	1.67	1.63	0.10	Taiwan Semi Mfg. Co. Ltd.	2.34	1.65	-0.20
Adobe Incorporated	1.92	1.55	0.09	Microsoft Corporation	6.27	2.48	-0.19
Keichow Moutai Co. Ltd.	0.98	0.95	0.05	Equifax Inc.	0.92	0.88	-0.19
Eaton Corporation plc	1.33	1.20	0.04	Canadian Pacific Kansas City Limited	2.55	2.44	-0.19
TJX Companies, Inc.	1.08	0.92	0.04	McCormick & Company, Incorporated	1.44	1.41	-0.18
Verisk Analytics, Inc.	0.72	0.67	0.03	HDFC Bank Ltd.	1.58	1.53	-0.17
Danaher Corporation	1.27	0.99	0.02	Church & Dwight Co., Inc.	1.96	1.93	-0.16

	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation (%)	Stock selection (%)	Relative contribution (%)
Communication Services	3.4	0.6	0.5	0.1	0.0	0.1
Consumer Discretionary	-0.1	-6.4	-4.8	0.0	-0.1	-0.2
Consumer Staples	0.7	-10.4	-6.1	0.0	-0.4	-0.4
Energy	-4.7	0.0	10.8	-0.7	0.0	-0.6
Financials	-2.0	-5.3	-0.8	0.0	-0.7	-0.7
Health Care	-1.3	-4.1	-2.6	0.0	-0.2	-0.2
Industrials	4.0	-6.2	-5.0	-0.1	-0.2	-0.2
Information Technology	3.9	-4.8	-6.1	-0.1	0.3	0.2
Materials	-2.4	-6.5	-3.6	0.0	-0.1	-0.1
Real Estate	-0.9	-15.2	-6.4	0.0	-0.1	-0.1
Utilities	-1.7	-7.4	-8.5	0.1	0.0	0.1
Cash	1.0	1.4	0.0	0.0	0.0	0.0
Total	0.0	-5.2	-3.3	-0.6	-1.6	-1.9

MFS Inception Performance & Statistics

Investment Growth Since Inception 12/1/2012



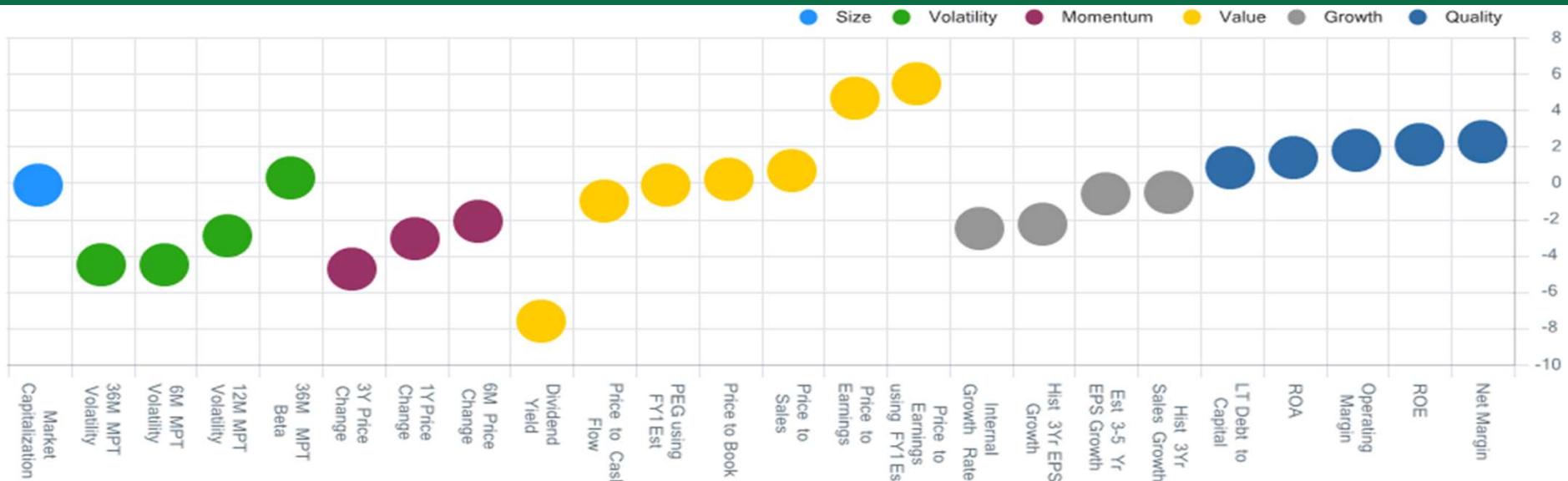
Relative Cumulative Performance Since Inception 12/1/2012



Risk Since Inception 12/1/2012

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
MFS (Net)	10.9	14.3	2.4	0.7	0.7	3.3	1.0
MSCI ACWI	8.5	14.1	--	0.5	--	--	1.0
MSCI ACWI Growth	10.3	15.2	--	0.6	--	--	1.0

Characteristics Tilt vs Benchmark 9/30/2023

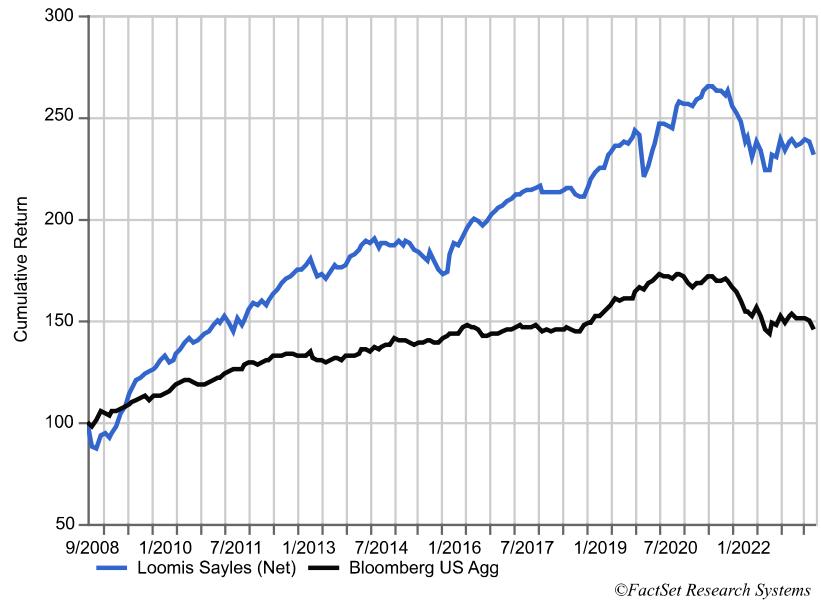


Loomis Sayles Portfolio Snapshot – September 30, 2023

Rolling Returns Since 10/1/1999 (Ten Year, One Month Shift)



Investment Growth – 15 Years



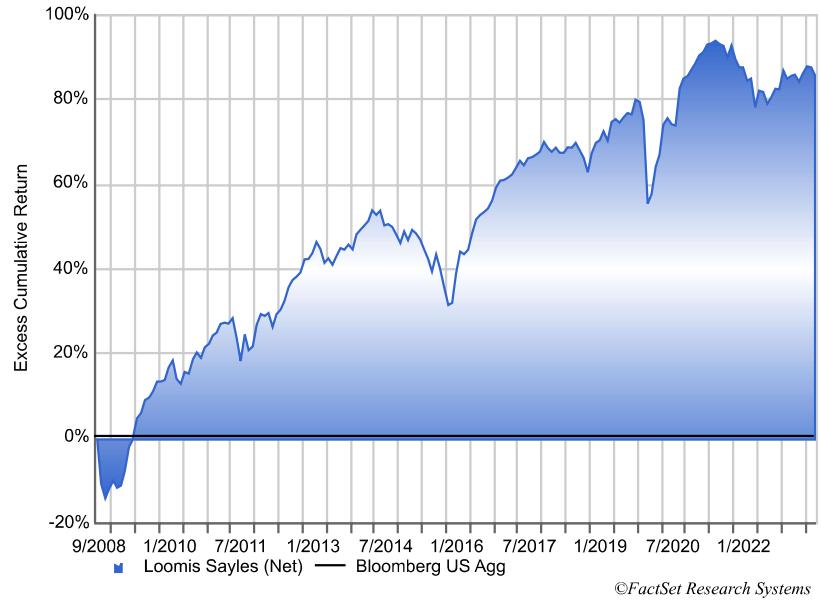
Trailing Returns

	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Loomis Sayles (Net)	-2.2	0.7	3.4	-1.9	1.5	2.9	5.8
Bloomberg US Aggregate	-3.2	-1.2	0.6	-5.2	0.1	1.1	2.5

Risk – 15 Years

	Return	Std Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Loomis Sayles (Net)	5.8	7.6	3.2	0.7	0.5	6.2	1.1
Bloomberg US Aggregate	2.5	4.2	--	0.4	--	--	1.0

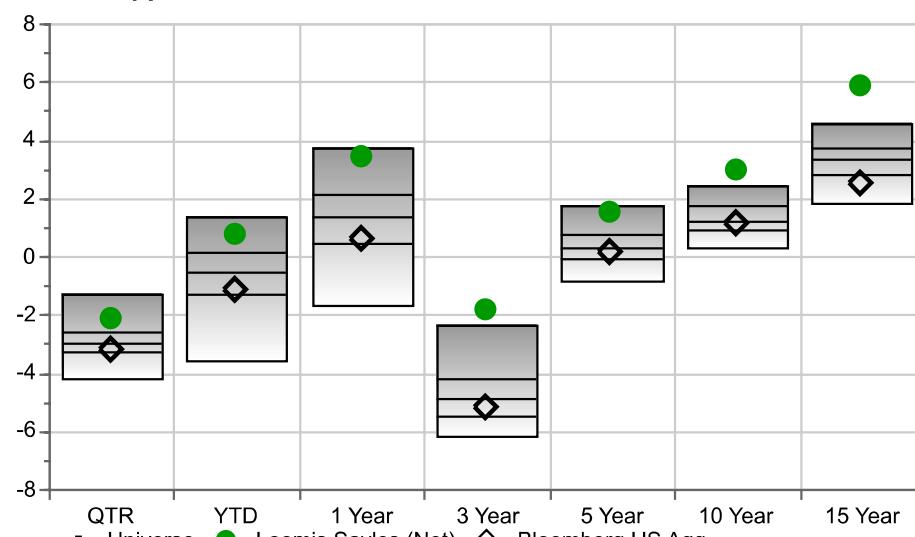
Relative Cumulative Performance – 15 Years



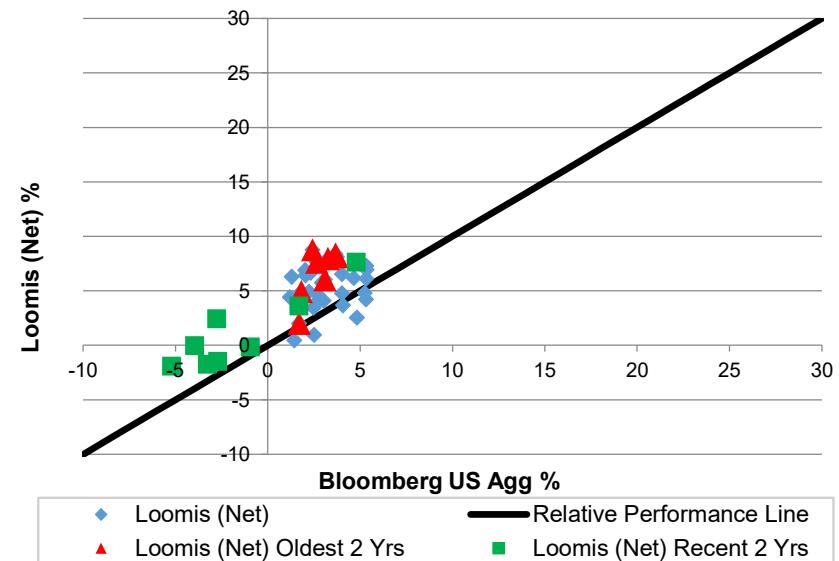
Loomis Sayles vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Core Plus Bond

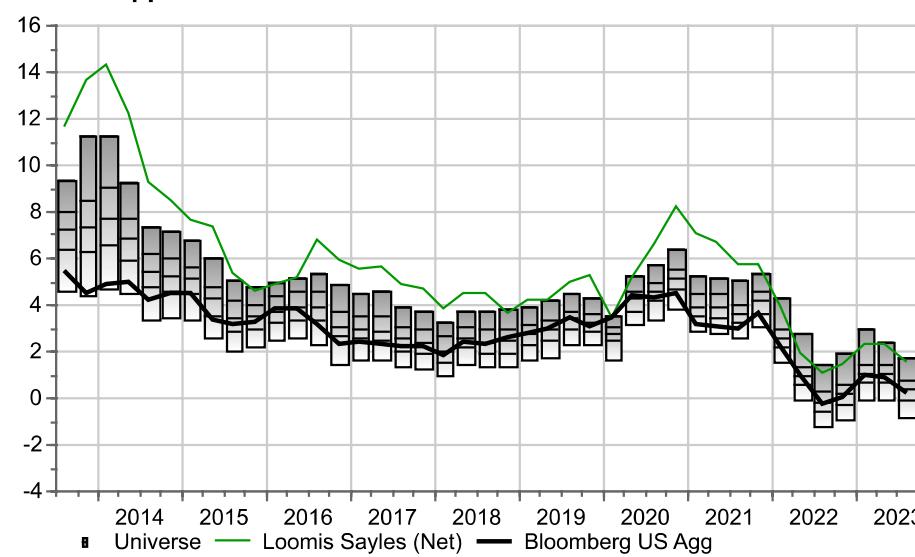


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US:Core Plus Bond

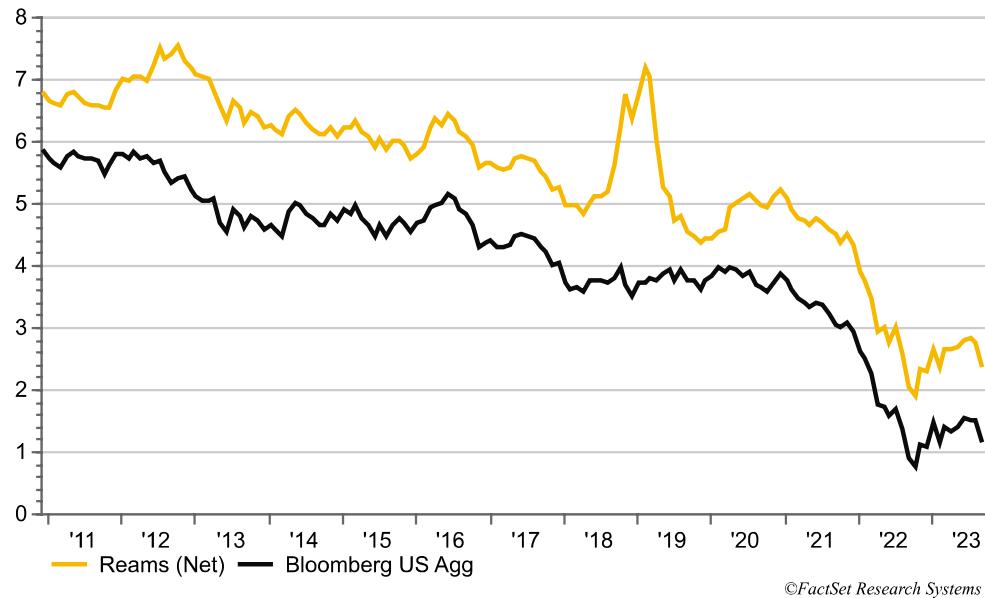


Over/Under Benchmark Analysis

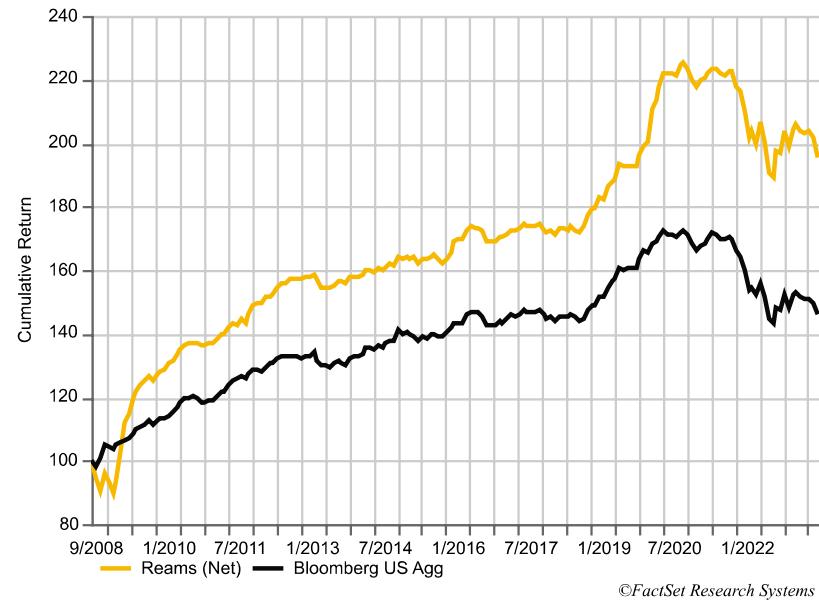
34	Outperform
6	Underperform
40	# Observations
85%	% Outperform

Reams Portfolio Snapshot – September 30, 2023

Rolling Returns Since Inception 1/1/2001 (Ten Year, One Month Shift)



Investment Growth – 15 Years



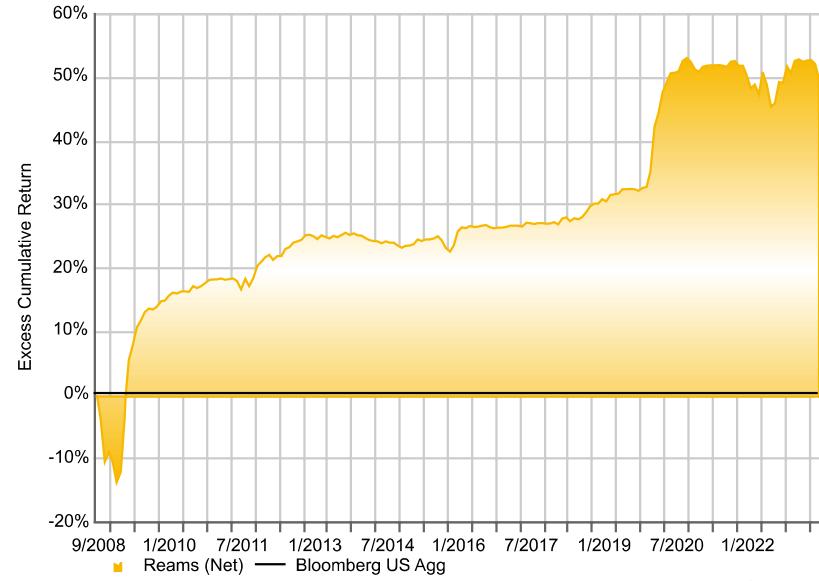
Trailing Returns

	QTR	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Reams (Net)	-3.8	-0.6	2.8	-4.1	2.5	2.3	4.6
Bloomberg US Aggregate	-3.2	-1.2	0.6	-5.2	0.1	1.1	2.5

Risk – 15 Years

	Std Return	Dev	Alpha	Sharpe Ratio	Information Ratio	Tracking Error	Beta
Reams (Net)	4.6	6.3	1.9	0.6	0.5	4.4	1.1
Bloomberg US Aggregate	2.5	4.2	--	0.4	--	--	1.0

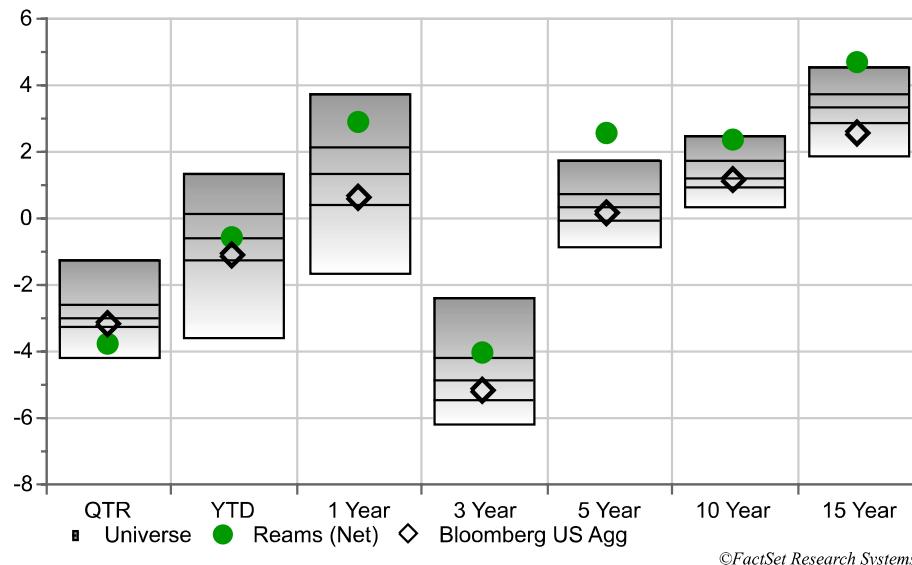
Relative Cumulative Performance – 15 Years



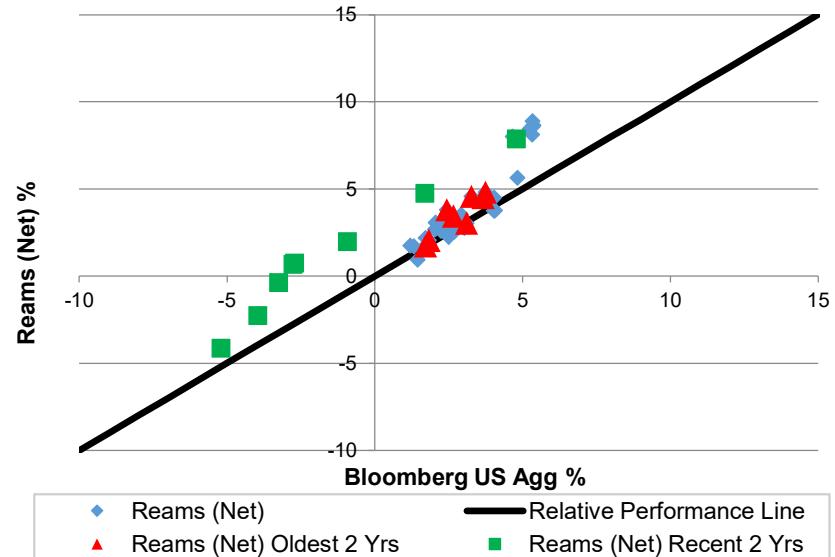
Reams vs Universe & Benchmark

Performance Relative to Peer Group as of 9/30/2023

Universe: Lipper US Core Plus Bond

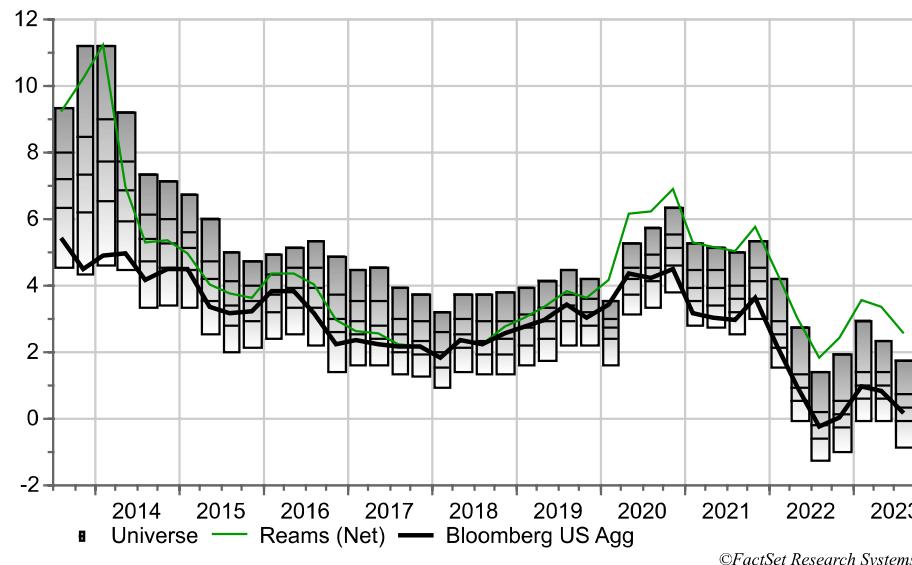


Three-Year Rolling Return Versus Benchmark



Rolling Returns 7/1/2008 – 9/30/2023 (5 Year, 3 Month Shift)

Universe: Lipper US Core Plus Bond



Over/Under Benchmark Analysis

33	Outperform
7	Underperform
40	# Observations
83%	% Outperform