Fresno County Employees' Retirement Association

Investment Performance Review Period Ending: March 31, 2017



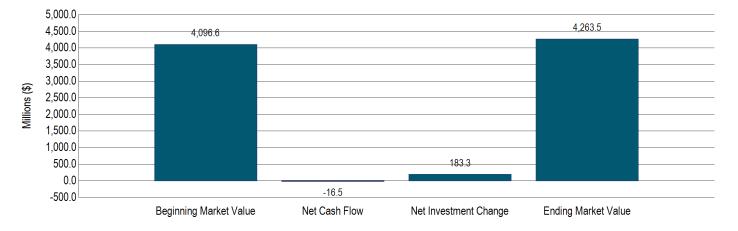
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SEATTLE 206-622-3700 LOS ANGELES 310-297-1777 SAN FRANCISCO 415-362-3484

Portfolio Reconciliation

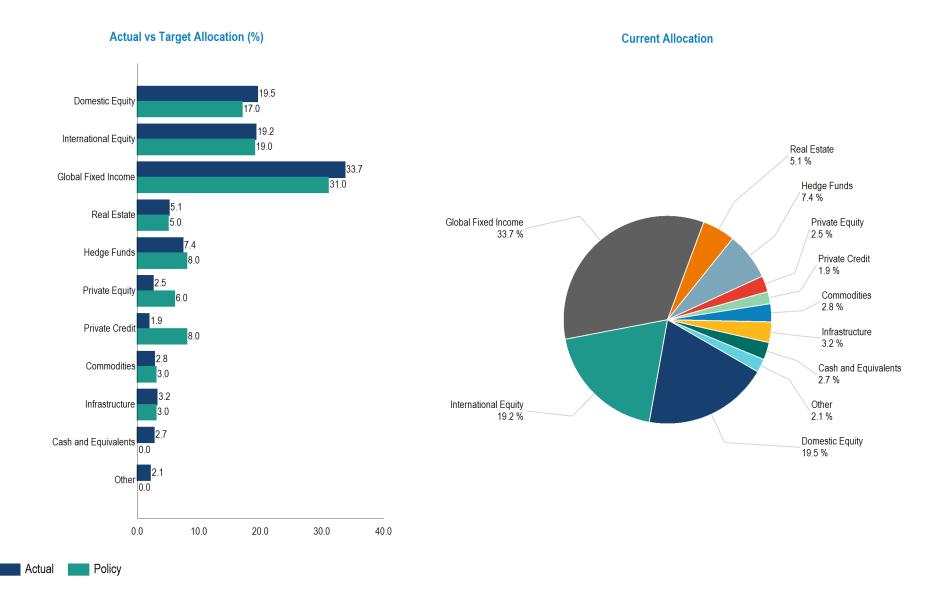
	Last Three Months	Year-To-Date
Beginning Market Value	\$4,096,637,337	\$4,096,637,337
Net Cash Flow	-\$16,508,573	-\$16,508,573
Net Investment Change	\$183,349,499	\$183,349,499
Ending Market Value	\$4,263,478,263	\$4,263,478,263

Change in Market Value Last Three Months



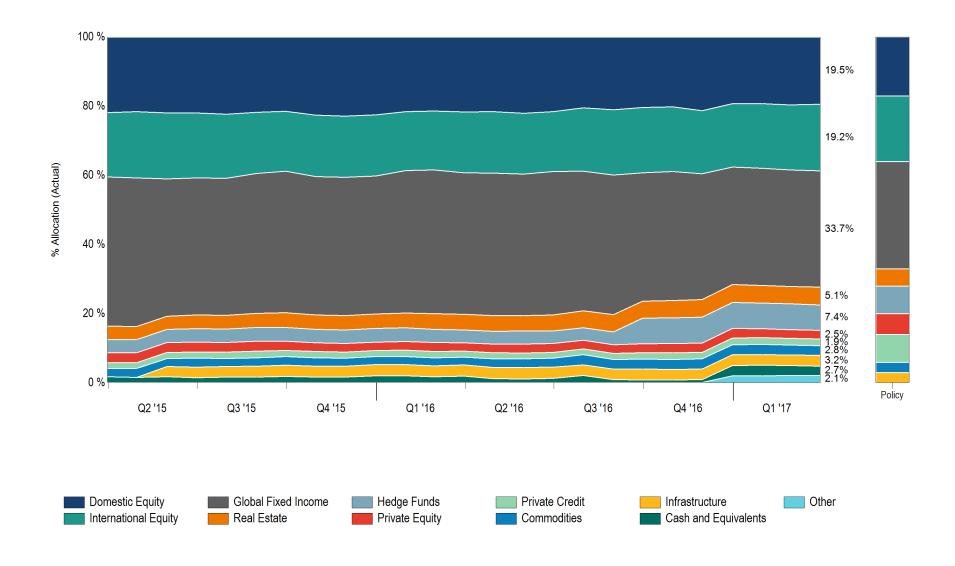
Contributions and withdrawals may include intra-account transfers between managers/funds.





Other consists of cash held for the overlay program.

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Total Fund Executive Summary (Net of Fees)

Period Ending: March 31, 2017

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012
Total Fund	4,263,478,263	100.0	4.4	7.4	9.3	3.4	6.4	5.1	6.7	-2.5	3.5	16.3	13.1
Policy Index			3.8	5.0	7.5	3.1	6.1	4.3	6.5	-1.7	2.6	15.6	12.3
Total Domestic Equity	830,221,434	19.5	5.2	15.6	16.3	8.1	12.1		8.9	1.5	9.8	36.8	15.8
Russell 3000			5.7	15.0	18.1	9.8	13.2		12.7	0.5	12.6	33.6	16.4
Total International Equity	820,360,817	19.2	9.2	10.9	10.6	0.2	5.1		3.0	-7.5	-2.5	18.7	19.0
MSCI ACWI ex USA Gross			8.0	14.2	13.7	1.0	4.8		5.0	-5.3	-3.4	15.8	17.4
Total Fixed Income	1,435,326,833	33.7	3.0	2.2	4.9	2.4	3.1		6.7	-4.5	5.0	-1.1	9.6
BBgBarc Global Aggregate*			1.8	-4.7	-1.9	-0.4	0.5		2.1	-3.2	0.0	-2.0	4.2
Total Real Estate	218,506,470	5.1	2.1	6.3	9.6	11.6	10.8		8.5	13.9	12.1	11.8	8.0
NCREIF-ODCE			1.8	6.1	8.3	11.8	12.0		8.8	15.0	12.5	13.9	10.9
Total Infrastructure	135,644,748	3.2	5.8	7.3	9.2				6.1				
NCREIF-ODCE			1.8	6.1	8.3				8.8				
Total Hedge Funds	314,222,350	7.4	1.6	7.4	9.0	2.1	3.3	1.9	3.0	0.0	3.1	7.8	2.2
HFRI Fund of Funds Composite Index			2.4	5.6	6.2	1.8	3.2	1.2	0.5	-0.3	3.4	9.0	4.8
Total Commodities	118,040,819	2.8	-0.3	-2.7	11.2	-8.4	-6.1		13.8	-12.8	-16.9	-9.4	-0.9
Bloomberg Commodity Index TR USD			-2.3	-3.6	8.7	-13.9	-9.5		11.8	-24.7	-17.0	-9.5	-1.1
Total Private Equity	107,346,992	2.5	2.7	9.4	9.5	6.0			9.6	3.8	4.8		
Russell 3000 + 2.5%			6.4	17.2	21.0	12.5			15.5	3.0	15.3		
Total Private Credit	80,266,186	1.9	1.4	5.8	7.8	3.1			7.4	-2.5	6.8		
BBgBarc US Aggregate Index + 250 bps			1.4	0.1	3.0	5.2			5.2	3.1	8.6		
Total Cash	114,291,089	2.7	0.1	0.2	0.2	0.2	0.2		0.2	0.1	0.1	0.4	0.1
91 Day T-Bills			0.1	0.3	0.4	0.2	0.1		0.3	0.0	0.0	0.0	0.1

Policy Index (effective 3/19/2014 Q2 floating policy until rebalance is complete, weights shown are as of 3/31/2017. See Data Sources and Methodology for monthly policy breakout): 20.6% Russell 3000 Index, 37.5% BBgBarc Global Aggregate Index, 19% MSCI ACWI ex US, 2.5% Russell 3000 Index + 250 BP, 1.9% BBgBarc Agg + 250 BP, 7.5% HFRI FoF Composite, 8% NCREIF ODCE, & 3% Bloomberg Commodity Index. Composite total market values reflect manager exposures and any underlying cash balances. De-risking of the Plan commenced on April 30, 2014. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. *Prior to 3/31/2014 BBgBarc U.S. Aggregate Index and as of 4/1/2014 BBgBarc Global Aggregate Index.

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Total Fund Executive Summary (Gross of Fees)

Period Ending: March 31, 2017

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012
Total Fund	4,263,478,263	100.0	4.5	7.6	9.7	3.7	6.8	5.4	7.2	-2.1	3.8	16.6	13.5
Policy Index			3.8	5.0	7.5	3.1	6.1	4.3	6.5	-1.7	2.6	15.6	12.3
Total Domestic Equity	830,221,434	19.5	5.2	15.7	16.5	8.3	12.4	7.5	9.1	1.8	10.1	37.2	16.1
Russell 3000			5.7	15.0	18.1	9.8	13.2	7.5	12.7	0.5	12.6	33.6	16.4
Total International Equity	820,360,817	19.2	9.3	11.3	11.1	0.6	5.6	3.0	3.5	-7.1	-2.1	19.3	19.5
MSCI ACWI ex USA Gross			8.0	14.2	13.7	1.0	4.8	1.8	5.0	-5.3	-3.4	15.8	17.4
Total Fixed Income	1,435,326,833	33.7	3.1	2.5	5.2	2.7	3.3		7.0	-4.2	5.1	-0.9	9.9
BBgBarc Global Aggregate*			1.8	-4.7	-1.9	-0.4	0.5		2.1	-3.2	0.0	-2.0	4.2
Total Real Estate	218,506,470	5.1	2.1	6.8	10.4	12.6	11.6	5.1	9.9	14.8	12.9	12.4	8.5
NCREIF-ODCE			1.8	6.1	8.3	11.8	12.0	5.6	8.8	15.0	12.5	13.9	10.9
Total Infrastructure	135,644,748	3.2	5.8	7.8	10.0				7.2				
NCREIF-ODCE			1.8	6.1	8.3				8.8				
Total Hedge Funds	314,222,350	7.4	1.6	7.7	9.6	2.8	4.2		3.8	0.9	4.2	9.0	3.5
HFRI Fund of Funds Composite Index			2.4	5.6	6.2	1.8	3.2		0.5	-0.3	3.4	9.0	4.8
Total Commodities	118,040,819	2.8	-0.3	-2.6	11.6	-8.0	-5.7		14.4	-12.3	-16.7	-9.0	-0.6
Bloomberg Commodity Index TR USD			-2.3	-3.6	8.7	-13.9	-9.5		11.8	-24.7	-17.0	-9.5	-1.1
Total Private Equity	107,346,992	2.5	2.7	10.2	10.6	6.4			10.7	3.9	4.8		
Russell 3000 + 2.5%			6.4	17.2	21.0	12.5			15.5	3.0	15.3		
Total Private Credit	80,266,186	1.9	1.4	6.6	8.8	3.9			8.8	-1.4	7.1		
BBgBarc US Aggregate Index + 250 bps			1.4	0.1	3.0	5.2			5.2	3.1	8.6		
Total Cash	114,291,089	2.7	0.1	0.2	0.2	0.2	0.2	1.1	0.2	0.1	0.1	0.4	0.1
91 Day T-Bills			0.1	0.3	0.4	0.2	0.1	0.5	0.3	0.0	0.0	0.0	0.1

Policy Index (effective 3/19/2014 Q2 floating policy until rebalance is complete, weights shown are as of 3/31/2017. See Data Sources and Methodology for monthly policy breakout): 20.6% Russell 3000 Index, 37.5% BBgBarc Global Aggregate Index, 19% MSCI ACWI ex US, 2.5% Russell 3000 Index + 250 BP, 1.9% BBgBarc Agg + 250 BP, 7.5% HFRI FoF Composite, 8% NCREIF ODCE, & 3% Bloomberg Commodity Index. Composite total market values reflect manager exposures and any underlying cash balances. De-risking of the Plan commenced on April 30, 2014. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation.

*Prior to 3/31/2014 BBgBarc U.S. Aggregate Index and as of 4/1/2014 BBgBarc Global Aggregate Index.

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Total Fund Total Domestic Equity Total International Equity **Total Fixed Income** Total Real Estate Total Infrastructure **Total Hedge Funds Total Commodities** Total Private Equity **Total Private Credit** Total Cash 0.40 % 0.00 % 0.20 % 0.60 % 0.80 % -0.20 % Allocation Effect Selection Effect Interaction Effects Total Effect

Attribution Effects Ending March 31, 2017

Performance Attribution

	Quarter	1 Yr
Wtd. Actual Return	4.28%	9.12%
Wtd. Index Return *	3.84%	7.61%
Excess Return	0.44%	1.51%
Selection Effect	0.63%	2.04%
Allocation Effect	-0.02%	-0.24%
Interaction Effect	-0.04%	-0.13%

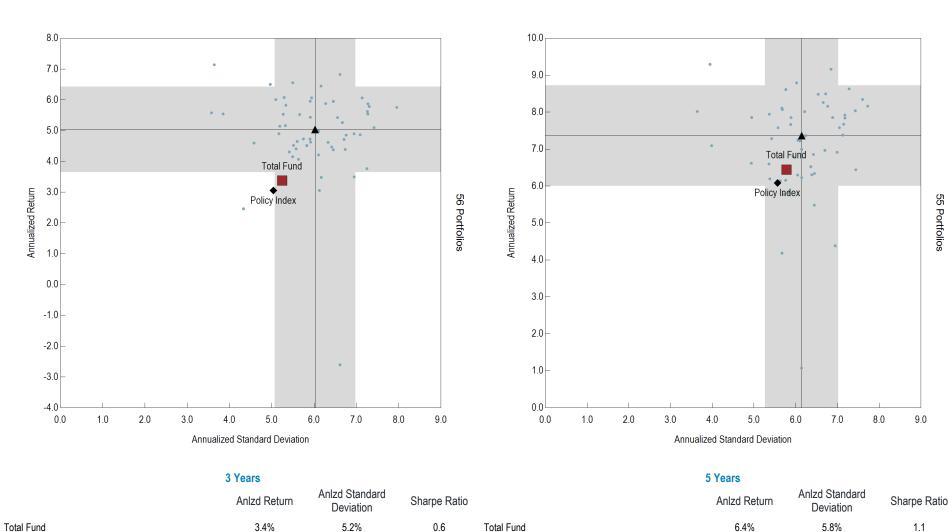
*Calculated from benchmark returns and weightings of each component.

Attribution Summary Last Three Months

		Luotin					
	Wtd. Actual	Wtd. Index	Excess	Selection	Allocation	Interaction	Total
	Return	Return	Return	Effect	Effect	Effects	Effects
Total Domestic Equity	5.16%	5.74%	-0.58%	-0.12%	-0.01%	0.00%	-0.13%
Total International Equity	9.18%	7.98%	1.20%	0.22%	0.00%	0.00%	0.22%
Total Fixed Income	3.00%	1.76%	1.24%	0.47%	0.06%	-0.04%	0.49%
Total Real Estate	2.07%	1.77%	0.30%	0.02%	0.06%	-0.01%	0.07%
Total Infrastructure	5.76%	1.77%	3.99%	0.13%	0.00%	0.00%	0.13%
Total Hedge Funds	1.57%	2.38%	-0.81%	-0.06%	0.00%	0.00%	-0.06%
Total Commodities	-0.28%	-2.33%	2.04%	0.07%	0.00%	0.00%	0.07%
Total Private Equity	2.73%	6.39%	-3.66%	-0.10%	0.00%	0.00%	-0.10%
Total Private Credit	1.42%	1.44%	-0.02%	0.00%	0.00%	0.00%	0.00%
Total Cash	0.09%	0.14%	-0.06%	0.00%	-0.12%	0.00%	-0.12%
Total	4.28%	3.84%	0.44%	0.63%	-0.02%	-0.04%	0.56%

Total Fund attribution return is calculated based on the underlying composite returns and beginning of period portfolio weights, the effects of transactions during the period are not reflected in the return. The Total Fund attribution portfolio return will vary from the actual Total Fund return. The Policy Index attribution return is calculated based on the primary benchmarks for the underlying composites used in the attribution analysis and their respective beginning of month target weights. Weighted index returns shown in attribution analysis may differ from actual returns.





3 Years

3.1%

5.0%

5.0%

6.0%

0.6

0.8

Policy Index

InvestorForce Public DB > \$1B Net Median

5 Years

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InvestorForce Public DB > \$1B Net Median

Policy Index

5.6%

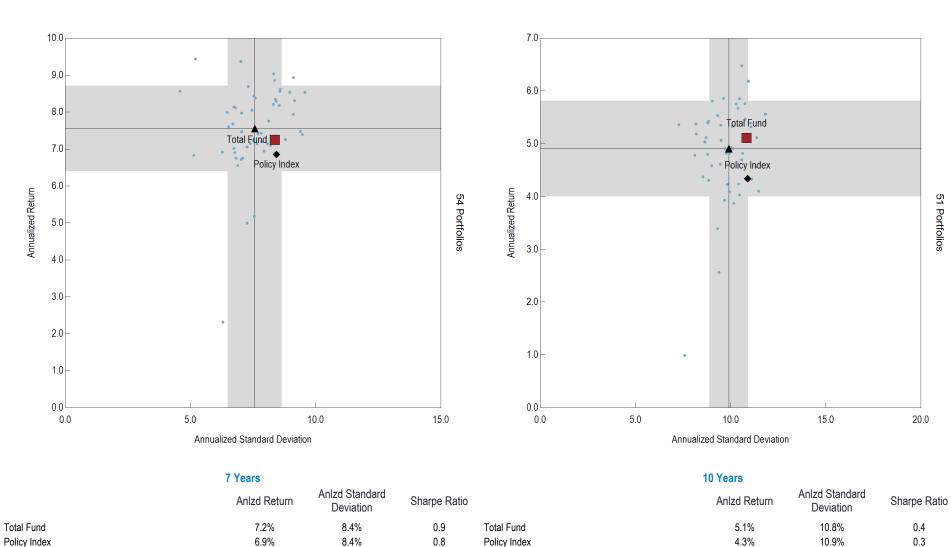
6.1%

1.1

1.1

6.1%

7.4%



7 Years

7.6%

7.6%

1.0

InvestorForce Public DB > \$1B Net Median

10 Years

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InvestorForce Public DB > \$1B Net Median

9.9%

0.4

4.9%

5 16015													
	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio			
Total Fund	5.25%	0.36%	0.99	0.90	98.65%	86.87%	0.19	1.68%	0.62	0.63			
Total Domestic Equity	8.01%	-1.98%	1.03	0.93	86.34%	104.94%	-0.79	2.10%	0.99	1.06			
Total International Equity	11.63%	-0.86%	1.00	0.94	89.54%	100.25%	-0.32	2.73%	0.00	0.02			
Total Domestic Fixed Income	3.33%	1.56%	0.75	0.62	102.95%	58.06%	0.40	2.23%	1.03	4.43			
Total Real Estate	2.04%	1.40%	0.95	0.45	108.67%		0.55	1.52%	5.62				
Total Hedge Funds	4.04%	0.39%	0.93	0.80	104.30%	96.09%	0.14	1.81%	0.47	0.54			
Total Alternative Illiquids	3.80%	0.94%	0.31	0.39	36.98%	51.24%	-1.28	5.94%	1.24	1.35			

5 Years													
	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio			
Total Fund	5.78%	0.31%	1.01	0.94	102.46%	92.62%	0.26	1.39%	1.10	1.48			
Total Domestic Equity	9.38%	-2.09%	1.08	0.95	95.59%	120.00%	-0.48	2.17%	1.28	1.88			
Total International Equity	11.66%	0.26%	1.01	0.96	100.07%	96.60%	0.13	2.33%	0.43	0.59			
Total Domestic Fixed Income	3.41%	1.72%	0.90	0.69	124.24%	63.19%	0.77	1.93%	1.09	2.21			
Total Real Estate	1.89%	1.53%	0.85	0.33	98.22%	-	-0.10	1.56%	5.63	-			
Total Hedge Funds	3.66%	0.66%	0.81	0.74	92.43%	79.85%	0.02	1.99%	0.86	0.96			
Total Alternative Illiquids	5.30%	2.54%	0.40	0.41	44.33%	33.87%	-1.08	6.55%	1.66	2.46			



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1 16015													
	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio			
Total Fund	8.36%	0.54%	0.98	0.97	101.14%	93.69%	0.29	1.35%	0.85	1.05			
Total Domestic Equity	14.34%	-0.87%	1.05	0.98	101.59%	104.67%	-0.09	2.14%	0.88	1.06			
Total International Equity	14.81%	1.18%	0.94	0.97	97.74%	92.04%	0.37	2.53%	0.35	0.45			
Total Domestic Fixed Income	3.35%	2.51%	0.74	0.54	124.71%	56.76%	0.66	2.43%	1.49	2.94			
Total Real Estate	2.50%	4.13%	0.56	0.17	85.97%		-0.54	2.42%	4.40				
Total Hedge Funds	3.24%	1.34%	0.52	0.54	72.01%	49.81%	0.04	3.11%	0.78	0.99			
Total Alternative Illiquids	5.79%	4.38%	0.28	0.42	32.24%	28.15%	-0.65	10.70%	1.49	1.90			

	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
Total Fund	10.84%	0.83%	0.99	0.98	105.43%	95.80%	0.53	1.47%	0.41	0.63
Total Domestic Equity										
Total International Equity									-	
Total Domestic Fixed Income										
Total Real Estate										
Total Hedge Funds	6.00%	0.92%	0.81	0.84	86.97%	76.17%	0.25	2.70%	0.22	0.28
Total Alternative Illiquids	9.66%	2.21%	0.44	0.61	33.11%	56.04%	-0.31	11.23%	0.63	0.69



Total Fund vs. InvestorForce Public DB > \$1B Net Universe



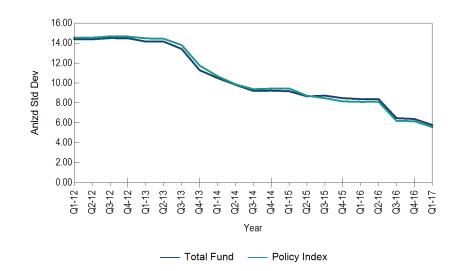
Total Fund vs. InvestorForce Public DB > \$1B Net Universe



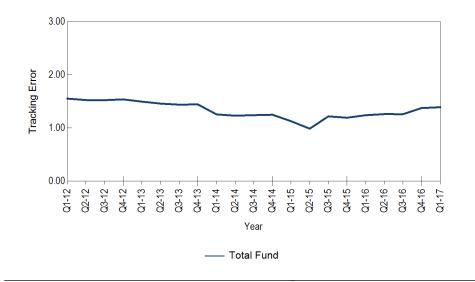
Total Fund <u>Risk Analysis - 5 Years (Net of Fees)</u>



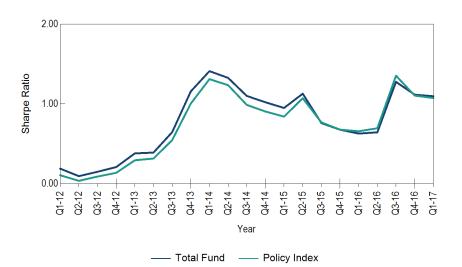
Rolling 5 Year Sharpe Ratio



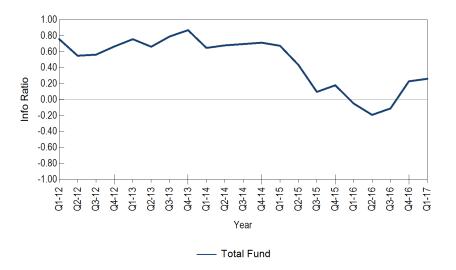
Rolling 5 Year Tracking Error



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Rolling 5 Year Information Ratio



Total Fund Performance Summary (Net of Fees)

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return	Since
Total Fund	4,263,478,263	100.0	4.4	7.4	9.3	3.4	6.4	5.1	6.7	-2.5	3.5	16.3	13.1		
Policy Index			3.8	5.0	7.5	3.1	6.1	4.3	6.5	-1.7	2.6	15.6	12.3		
Total Fund Ex Parametric	4,174,227,737	97.9	4.3												
Policy Index			3.8												
Total Domestic Equity	830,221,434	19.5	5.2	15.6	16.3	8.1	12.1		8.9	1.5	9.8	36.8	15.8		
Russell 3000			5.7	15.0	18.1	9.8	13.2		12.7	0.5	12.6	33.6	16.4		
SSgA S&P 500 Flagship Fund	246,793,196	5.8	6.1	14.4	17.2	10.4	13.3	7.5	12.0	1.4	13.7	32.4	16.0	8.1	Mar-04
S&P 500			6.1	14.4	17.2	10.4	13.3	7.5	12.0	1.4	13.7	32.4	16.0	8.1	Mar-04
lvy	220,616,277	5.2	9.0	14.8	14.4	9.9	12.4		1.4	6.7	12.7	36.6	12.3	12.6	Dec-10
Russell 1000 Growth			8.9	15.0	15.8	11.3	13.3		7.1	5.7	13.0	33.5	15.3	13.5	Dec-10
Aronson Johnson Ortiz	225,059,857	5.3	2.1	16.7	15.4	6.2	11.9	5.9	9.5	-0.1	9.6	38.0	17.0	10.4	Dec-95
Russell 1000 Value			3.3	14.0	19.2	8.7	13.1	5.9	17.3	-3.8	13.5	32.5	17.5	9.0	Dec-95
Systematic Small/Mid Cap Value	68,656,366	1.6	0.5	21.2	22.5	7.2	12.4		22.0	-1.1	4.0	37.2	17.6	12.6	Oct-10
Russell 2500 Value			1.6	18.0	23.1	7.6	12.9		25.2	-5.5	7.1	33.3	19.2	13.1	Oct-10
Kalmar Investments Management	69,095,737	1.6	5.1	13.5	17.8	2.3	8.5	8.0	11.5	-6.6	-5.3	43.9	13.9	8.0	Nov-04
Russell 2000 Growth			5.3	19.2	23.0	6.7	12.1	8.1	11.3	-1.4	5.6	43.3	14.6	8.4	Nov-04
Total International Equity	820,360,817	19.2	9.2	10.9	10.6	0.2	5.1		3.0	-7.5	-2.5	18.7	19.0		
MSCI ACWI ex USA Gross			8.0	14.2	13.7	1.0	4.8		5.0	-5.3	-3.4	15.8	17.4		
Artisan International Growth	179,519,481	4.2	9.1	4.5	3.1	-0.6			-9.0	-2.2	-0.1			3.7	Apr-13
MSCI EAFE			7.2	13.3	11.7	0.5			1.0	-0.8	-4.9			4.5	Apr-13
Research Affiliates International Equity	203,086,634	4.8	6.1	17.5	16.8	0.1	7.4		9.3	-5.9	-5.8	28.9	18.5	3.8	Apr-11
MSCI EAFE			7.2	13.3	11.7	0.5	5.8		1.0	-0.8	-4.9	22.8	17.3	2.8	Apr-11
Mondrian International Small Cap	127,428,586	3.0	9.6	9.9	7.1	1.6	6.6		0.1	2.7	-4.9	17.3	24.7	9.5	Nov-09
S&P Developed Ex-U.S. SmallCap			7.8	12.7	11.3	3.3	8.5		3.8	5.9	-3.4	26.1	18.6	8.5	Nov-09
Mondrian Emerging Markets	310,326,116	7.3	11.1	11.4	13.4	0.0	0.1	3.3	9.0	-16.3	0.0	-7.1	22.3	5.7	Nov-05
MSCI Emerging Markets			11.4	16.4	17.2	1.2	0.8	2.7	11.2	-14.9	-2.2	-2.6	18.2	5.7	Nov-05
Total Fixed Income	1,435,326,833	33.7	3.0	2.2	4.9	2.4	3.1		6.7	-4.5	5.0	-1.1	9.6		
BBgBarc Global Aggregate*			1.8	-4.7	-1.9	-0.4	0.5		2.1	-3.2	0.0	-2.0	4.2		
Western Asset Investment Grade Credit	202,486,634	4.7	1.6	0.8	4.7				7.0	-0.5				3.9	Oct-14
BBgBarc US Credit TR			1.3	-0.5	3.0				5.6	-0.8				3.1	Oct-14
Loomis Sayles High Yield	217,656,170	5.1	2.9	9.2	14.8				14.4	-5.2				4.4	Oct-14
BBgBarc US High Yield TR			2.7	10.3	16.4				17.1	-4.5				5.3	Oct-14
Eaton Vance Senior Loan Fund	189,938,023	4.5	1.2	6.4	9.1				9.9	-0.8				3.9	Oct-14
S&P/LSTA Leveraged Loan Index			1.1	6.6	9.7				10.2	-0.7				3.9	Oct-14

*Prior to 3/31/2014 BBgBarc U.S. Aggregate Index and as of 4/1/2014 BBgBarc Global Aggregate Index. Kalmar Investment Management was terminated in April 2017.



Total Fund Performance Summary (Net of Fees)

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return	Since
Eaton Vance Institutional Senior Loan Plus Fund	20,117,707	0.5												0.6	Jan-17
S&P/LSTA Leveraged Loan Index														0.7	Jan-17
SSgA TIPS	160,413,478	3.8	1.2	-0.3	1.4	2.0	0.9		4.6	-1.5	3.6	-8.6	6.9	4.4	Feb-09
BBgBarc US TIPS TR			1.3	-0.2	1.5	2.0	1.0		4.7	-1.4	3.6	-8.6	7.0	4.5	Feb-09
Barclays U.S. Aggregate Index Fund	148,852,091	3.5	0.8	-1.8	0.4	2.4			2.6	0.6				2.5	Apr-14
BBgBarc US Aggregate TR			0.8	-1.7	0.4	2.7			2.6	0.6				2.5	Apr-14
Brandywine Global Sovereign	283,893,786	6.7	5.0	-0.4	0.4				3.8	-9.8				-1.0	Jan-15
Citi WGBI			1.6	-6.8	-3.7				1.6	-3.6				-0.1	Jan-15
PIMCO Emerging Local Bond Ins	211,968,944	5.0	6.9	3.6	6.6	-2.8			10.7	-16.3	-5.4			-2.3	Jul-13
JP Morgan GBI EM Global Diversified TR USD			6.5	2.7	5.5	-2.7			9.9	-14.9	-5.7			-2.1	Jul-13
Total Real Estate	218,506,470	5.1	2.1	6.3	9.6	11.6	10.8		8.5	13.9	12.1	11.8	8.0		
NCREIF-ODCE			1.8	6.1	8.3	11.8	12.0		8.8	15.0	12.5	13.9	10.9		
Invesco Core Real Estate	162,911,800	3.8	2.3	5.8	9.4	11.4	11.0		8.3	13.7	11.4	13.4	7.7		Oct-07
NCREIF-ODCE			1.8	6.1	8.3	11.8	12.0		8.8	15.0	12.5	13.9	10.9	4.9	Oct-07
Total Infrastructure	135,644,748	3.2	5.8	7.3	9.2				6.1						
NCREIF-ODCE			1.8	6.1	8.3				8.8						
IFM Infrastructure	135,644,748	3.2	5.8	7.3	9.2				6.1						May-15
NCREIF-ODCE	-		1.8	6.1	8.3				8.8					11.5	May-15
Total Hedge Funds	314,222,350	7.4	1.6	7.4	9.0	2.1	3.3	1.9	3.0	0.0	3.1	7.8	2.2		
HFRI Fund of Funds Composite Index			2.4	5.6	6.2	1.8	3.2	1.2	0.5	-0.3	3.4	9.0	4.8		
Grosvenor	157,303,451	3.7	1.8	7.2	8.8	2.1	5.3		2.6	0.0	3.5	15.2	8.6	4.8	
HFRI Fund of Funds Composite Index			2.4	5.6	6.2	1.8	3.2		0.5	-0.3	3.4	9.0	4.8	2.8	Oct-09
GCM Better Futures Fund	156,918,899	3.7	1.4												Sep-16
HFRI Fund of Funds Composite Index			2.4											3.3	Sep-16
Total Commodities	118,040,819	2.8	-0.3	-2.7	11.2	-8.4	-6.1		13.8	-12.8	-16.9	-9.4	-0.9		
Bloomberg Commodity Index TR USD			-2.3	-3.6	8.7	-13.9	-9.5		11.8	-24.7	-17.0	-9.5	-1.1		
Invesco Commodities	118,040,819	2.8	-0.3	-2.7	11.2				13.8						May-15
Bloomberg Commodity Index TR USD			-2.3	-3.6	8.7				11.8					-8.5	May-15
Total Parametric Overlay	89,250,526	2.1													

Closed end Real Estate funds not shown on this page.

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Real	Estat	ρ.(Closed	End	Funds
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Inception Date	Manager Name/Fund Name	% of Portfolio	Total Commitment	Contributions	Distributions	Estimated Market Value	One Quarter Return	One Year Return	Three Years Return	Five Years Return	(IRR) Since Inception
2016	Kennedy Wilson Real Estate Fund V	0.5%	\$30,000,000	\$21,900,000	\$1,296,000	\$23,032,299	4.5%	14.2%	N/A	N/A	13.2%
2016	Gerding Edlen Green Cities III	0.3%	\$20,000,000	\$11,719,570	\$102,508	\$12,906,769	-1.5%	15.0%	N/A	N/A	14.6%
2009	TA Realty IX	0.5%	\$30,000,000	\$30,000,000	\$27,591,277	\$19,655,602	-0.3%	4.0%	11.1%	10.8%	10.6%

% of Total Fund (Market Value)

1.3%



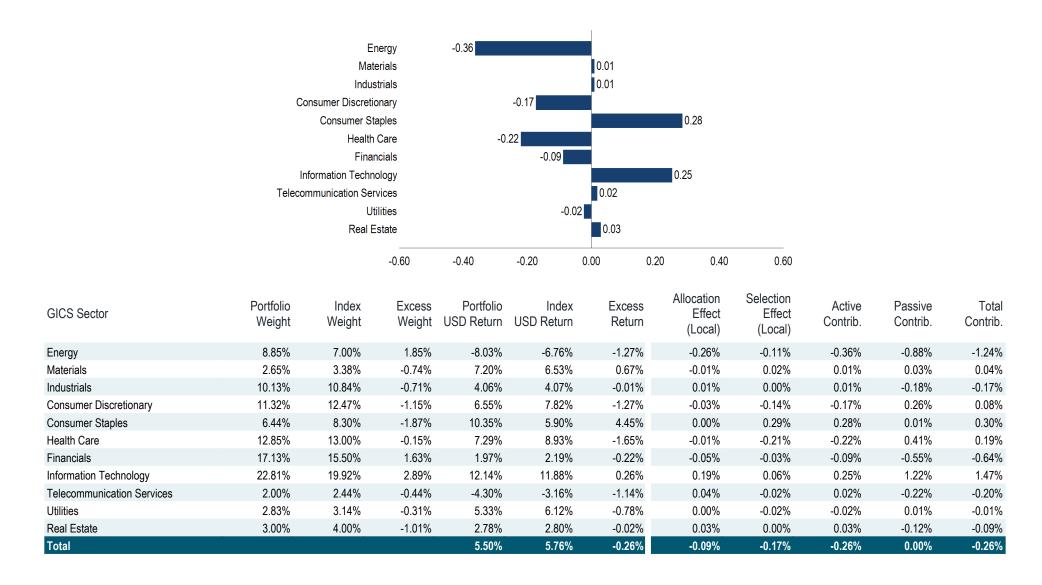
Total Alternative Illiquids Non Marketable Securities Overview

Period Ending: March 31, 2017

			Verus internal Analysis							Manager Reported				
Vintage Year	Manager Name/Fund Name	Estimated Market Value as of 3/31/17 ³	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Distrib./ Paid-In (DPI) ¹	Tot. Value/ Paid-In (TVPI) ²	Market Value as of IRR Date	Net IRR Since Inception ⁶	IRR Date		
rivate E	quity													
2016	Horsley Bridge XI Growth Buyout L.P.	\$1,117,689	\$30,000,000	\$1,437,000	5%	\$28,563,000	\$0	0.0%	77.8%	N/A	N/A	N/A ⁴		
2016	Hamilton Lane IX L.P.	\$24,919,130	\$100,000,000	\$23,630,000	24%	\$76,370,000	\$2,004,483	8.5%	113.9%	\$24,919,130	16.2%	03/31/17		
2015	Warburg Pincus XII	\$7,803,601	\$34,000,000	\$8,126,000	24%	\$25,874,000	\$0	0.0%	96.0%	\$7,803,601	-8.7%	03/31/17		
2008	Landmark Equity XIV, L.P.	\$11,901,463	\$30,000,000	\$28,219,695	94%	\$1,780,305	\$24,844,605	88.0%	130.2%	\$12,833,659	11.2%	09/30/16		
2007 2007	New Mountain Partners III Hamilton Lane VI	\$10,580,224 \$31,303,508	\$15,000,000 \$70,000,000	\$15,270,869 \$62,607,682	102% 89%	\$1,121,057 ⁷ \$7,392,318	\$16,702,370 \$66,018,050	109.4% 105.4%	178.7% 155.4%	\$10,580,224 \$36,839,845	12.9% 9.3%	03/31/17 09/30/16		
2007	WP Private Equity X, L.P.	\$13,166,843	\$25,000,000	\$25,000,000	100%	\$7,552,510	\$24,173,388	96.7%	149.4%	\$13,166,843	3.3 <i>%</i> 8.0%	03/31/17		
2002	Blackstone IV	\$2,906,402	\$20,000,000	\$22,354,099	112%	\$0 8	\$50,121,651	224.2%	237.2%	\$2,906,402	29.6%	03/31/17		
2001	WP Private Equity VIII, L.P.	\$3,569,939	\$25,000,000	\$25,000,000	100%	\$0	\$55,106,463	220.4%	234.7%	\$3,569,939	14.7%	03/31/17		
1998	WP Equity Partners, L.P. ⁹	\$78,193	\$20,000,000	\$20,000,000	100%	\$0	\$32,982,907	164.9%	165.3%	\$78,193	10.3%	12/31/16		
	Total Private Equity	\$107,346,992	\$369,000,000	\$231,645,344	63%	\$141,100,680	\$271,953,917	117.4%	163.7%					
	% of Portfolio (Market Value)	2.5%												
rivate Ci	redit													
2017	EQT European Special Situations Debt	N/A	\$40,000,000	\$0	0%	\$40,000,000	\$0	N/A	N/A	N/A	N/A	N/A		
2016	OHA Strategic Credit Fund II, L.P.	N/A	\$40,000,000	\$0	0%	\$40,000,000	\$0	N/A	N/A	N/A	N/A	N/A		
2016	TSSP Adjacent Opportunities Partners	\$7,115,613	\$30,000,000	\$8,674,617	29%	\$21,325,383	\$1,961,242 ¹³	22.6%	104.6%	\$6,991,974	9.0%	12/31/16		
2015	GSO European Senior Debt	\$4,712,421	\$30,000,000	\$4,912,227	16%	\$25,087,773	\$47,782	1.0%	96.9%	\$4,712,421	-3.6%	03/31/17		
2015	CVI Credit Value Fund III	\$17,591,709	\$30,000,000	\$15,000,000	50%	\$15,000,000 \$4,762,633 ¹⁰	\$0	0.0% 32.9%	117.3%	\$17,591,709	14.5%	03/31/17		
2014 2012	Colony Distressed Credit III, L.P. Oaktree Opportunities IX, L.P.	\$15,403,132 \$14,353,619	\$20,000,000 \$15,000,000	\$19,911,030 \$15,000,000	100% 100%	\$4,702,033	\$6,543,365 \$1,195,174	32.9% 8.0%	110.2% 103.7%	\$15,669,800 \$14,353,619	10.0% 1.3%	12/31/16 03/31/17		
2010	KKR Mezzanine Partners	\$12,717,748	\$30,000,000	\$33,168,708	111%	\$3,164,154 ¹¹	\$29,242,843	88.2%	126.5%	\$12,717,748	8.0%	03/31/17		
2010	Angelo Gordon VII	\$3,481,849	\$30,000,000	\$30,000,000	100%	\$0	\$33,253,950	110.8%	122.5%	\$3,481,849	5.0%	03/31/17		
2009	Colony Distressed Credit I, L.P. ¹²	\$4,734,584	\$40,000,000	\$42,267,900	106%	\$0	\$60,304,994	142.7%	153.9%	\$5,911,900	13.0%	09/30/16		
2002	Lone Star Fund IV	\$120,239	\$20,000,000	\$19,045,199	95%	\$954,801	\$43,786,403	229.9%	230.5%	\$120,239	30.7%	03/31/17		
1998	TCW Shop III	\$35,273	\$15,000,000	\$15,000,000	100%	\$0	\$18,664,813	124.4%	124.7%	\$437,407	3.4%	12/31/15		
	Total Private Credit	\$80,266,186	\$340,000,000	\$202,979,681	60%	\$150,294,744	\$195,000,566	96.1%	135.6%					
	% of Portfolio (Market Value)	1.9%												
	¹ (DPI) is equal to (capital returned / capital cal ² (TVPI) is equal to (market value + capital retu ³ Last known market value + capital calls - dist ⁴ IRR currently unavailable for these funds. ⁵ Investment period ended, no further capital to ⁶ Gross IRR is calculated on the cash flows of all ⁷ \$1,366,953 capital returned but subject to rec ⁸ \$2,996,127 capital returned but subject to rec ⁹ On June 11,2012 \$1,029,076 was transferred ¹⁰ \$4,673,663 capital returned but subject to rec ¹¹ \$5,277,489 capital returned but subject to rec ¹² \$Colony Capital reflects a FCERA-specific IRI	Irribed) / capital called irributions o be called. the underlying investme the limited partners of call call if from the Partnership t ecall and \$1,055,373 ret	the fund and is net o a Liquidation Trus	of all fees. Each IR st.										

Total Domestic Equity Performance Attribution by Sector (Net of Fees)

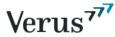
Total Domestic Equity vs. Russell 3000 Current Quarter



Verus⁷⁷

Portfolio: Total Domestic Equity Benchmark: Russell 3000	
Portfolio Total Return	5.16%
Portfolio Benchmark Return From Active Mgmt	Equity Only 5.50% <u>5.76%</u> -0.26%
Local Returns Portfolio Benchmark Active Equity Return	5.50% <u>5.76%</u> -0.26%
Country Selection Stock Selection	-0.04% -0.22%
Currency Contributions Portfolio Benchmark Active Currency Contributions	0.00% <u>0.00%</u> 0.00%

Chart uses return-based methodology



Total International Equity Performance Attribution by Country (Net of Fees)

Total International Equity vs. MSCI ACWI ex USA

Current Quarter

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Active Return	Allocation Effect (Local)	Selection Effect (Local)	Currency Effect
AUSTRALIA	3.56%	5.24%	-1.68%	11.39%	10.98%	0.41%	-0.08%	0.00%	0.02%	-0.09%
AUSTRIA	0.20%	0.14%	0.06%	11.76%	9.07%	2.68%	0.01%	0.00%	0.01%	0.00%
BELGIUM	0.40%	0.83%	-0.43%	5.17%	5.17%	0.00%	0.00%	0.01%	0.00%	-0.01%
BRAZIL	2.35%	1.76%	0.59%	5.91%	10.33%	-4.42%	-0.09%	0.00%	-0.08%	-0.01%
CANADA	5.08%	7.11%	-2.03%	2.91%	2.75%	0.16%	0.06%	0.06%	0.02%	-0.03%
CHILE	0.23%	0.27%	-0.05%	14.68%	16.10%	-1.43%	-0.01%	-0.01%	0.00%	0.00%
CHINA	2.33%	6.00%	-3.67%	12.52%	12.97%	-0.45%	-0.30%	-0.29%	-0.01%	0.01%
COLOMBIA	0.00%	0.10%	-0.10%		5.70%	-5.70%	0.00%	0.00%	0.00%	0.00%
CZECH REPUBLIC	0.00%	0.04%	-0.04%		5.63%	-5.63%	0.00%	0.00%	0.00%	0.00%
DENMARK	0.63%	1.16%	-0.53%	12.82%	6.59%	6.23%	0.03%	0.00%	0.04%	-0.01%
EGYPT	0.00%	0.03%	-0.03%		1.00%	-1.00%	0.00%	0.00%	0.00%	0.00%
FINLAND	0.17%	0.68%	-0.51%	4.25%	7.75%	-3.51%	-0.02%	-0.01%	-0.01%	-0.01%
FRANCE	5.34%	7.11%	-1.77%	8.54%	7.35%	1.19%	0.03%	-0.01%	0.06%	-0.02%
GERMANY	8.57%	6.51%	2.06%	10.69%	8.53%	2.17%	0.26%	0.04%	0.19%	0.03%
GREECE	0.00%	0.08%	-0.08%		-3.33%	3.33%	0.01%	0.01%	0.00%	0.00%
HONG KONG	7.40%	2.27%	5.13%	11.31%	13.18%	-1.87%	0.27%	0.42%	-0.14%	-0.01%
HUNGARY	0.00%	0.07%	-0.07%		-0.10%	0.10%	0.00%	0.00%	0.00%	0.00%
INDIA	4.81%	1.87%	2.94%	23.25%	17.17%	6.08%	0.66%	0.21%	0.29%	0.16%
INDONESIA	0.90%	0.60%	0.31%	11.58%	7.09%	4.49%	0.05%	0.00%	0.04%	0.00%
IRELAND	0.32%	0.33%	-0.01%	16.44%	3.88%	12.56%	0.04%	0.00%	0.04%	0.00%
ISRAEL	0.17%	0.48%	-0.31%	-2.12%	5.72%	-7.83%	-0.01%	0.01%	-0.02%	0.00%
ITALY	1.94%	1.46%	0.49%	7.53%	6.45%	1.08%	0.02%	0.00%	0.02%	0.00%
JAPAN	9.67%	17.06%	-7.39%	4.38%	4.48%	-0.10%	0.02%	0.39%	-0.01%	-0.36%
KAZAKHSTAN	0.15%	0.00%	0.15%	30.04%	27.85%	2.19%	0.04%	0.03%	0.00%	0.00%
KOREA	3.62%	3.29%	0.33%	14.64%	16.70%	-2.06%	0.00%	0.02%	-0.07%	0.05%
LUXEMBOURG	0.25%	0.00%	0.25%	0.31%	7.94%	-7.64%	-0.01%	0.00%	-0.01%	0.00%

Total International Equity Performance Attribution by Country (Net of Fees)

Period Ending: March 31, 2017

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Active Return	Allocation Effect (Local)	Selection Effect (Local)	Currency Effect
MALAYSIA	1.88%	0.57%	1.31%	9.87%	8.29%	1.59%	0.07%	0.02%	0.03%	0.02%
MEXICO	1.91%	0.81%	1.10%	16.58%	16.03%	0.55%	0.12%	0.01%	0.03%	0.08%
NETHERLANDS	2.84%	2.32%	0.52%	8.25%	11.34%	-3.09%	-0.06%	0.03%	-0.09%	0.01%
NEW ZEALAND	0.96%	0.13%	0.84%	9.26%	2.42%	6.84%	0.04%	-0.03%	0.07%	0.00%
NORWAY	0.36%	0.47%	-0.11%	-1.74%	1.49%	-3.23%	-0.01%	0.01%	-0.01%	0.00%
PERU	0.55%	0.09%	0.46%	3.45%	5.67%	-2.23%	-0.01%	0.00%	-0.01%	0.00%
PHILIPPINES	0.56%	0.28%	0.28%	18.88%	6.27%	12.62%	0.07%	0.01%	0.07%	0.00%
POLAND	0.00%	0.26%	-0.26%		17.75%	-17.75%	-0.03%	-0.02%	0.00%	-0.02%
PORTUGAL	0.04%	0.11%	-0.06%	10.60%	8.19%	2.41%	0.00%	0.00%	0.00%	0.00%
QATAR	1.09%	0.20%	0.88%	-0.47%	1.38%	-1.85%	-0.05%	-0.03%	-0.02%	0.00%
ROMANIA	0.13%	0.00%	0.13%	23.63%	14.25%	9.38%	0.02%	0.01%	0.01%	0.00%
RUSSIA	1.56%	1.02%	0.53%	-8.93%	-4.75%	-4.18%	-0.12%	-0.09%	0.03%	-0.07%
SINGAPORE	1.65%	0.87%	0.77%	11.14%	13.50%	-2.36%	0.03%	0.04%	-0.04%	0.03%
SOUTH AFRICA	2.24%	1.63%	0.61%	1.25%	4.58%	-3.33%	-0.08%	-0.02%	-0.07%	0.01%
SPAIN	1.34%	2.20%	-0.86%	17.21%	14.74%	2.47%	-0.04%	-0.06%	0.03%	-0.02%
SWEDEN	1.55%	2.00%	-0.45%	6.57%	10.01%	-3.44%	-0.08%	-0.01%	-0.05%	-0.01%
SWITZERLAND	3.31%	6.09%	-2.78%	9.77%	8.83%	0.95%	-0.07%	-0.06%	0.04%	-0.05%
TAIWAN	5.55%	2.74%	2.80%	12.51%	11.78%	0.73%	0.22%	0.00%	0.04%	0.18%
THAILAND	0.99%	0.53%	0.47%	8.09%	8.71%	-0.61%	0.01%	0.00%	-0.01%	0.02%
TURKEY	0.61%	0.24%	0.37%	13.91%	10.86%	3.05%	0.04%	0.03%	0.02%	-0.02%
UNITED ARAB EMIRATES	0.74%	0.20%	0.54%	8.35%	1.65%	6.70%	0.03%	-0.02%	0.05%	0.00%
UNITED KINGDOM	8.22%	12.77%	-4.55%	7.74%	5.08%	2.66%	0.22%	0.07%	0.20%	-0.05%
UNITED STATES	3.84%	0.00%	3.84%	13.94%	6.08%	7.86%	0.33%	0.04%	0.29%	0.00%
	100.00%	100.00%	0.00%	9.58%	7.94%	1.63%	1.63%	0.80%	0.99%	-0.16%



Total International Equity Performance Attribution by Currency (Net of Fees)

Total International Equity vs. MSCI ACWI ex USA

		Curren	t Quarter					
Currency Name	Portfolio Weight	Index Weight	Excess Weight	Currency Return	Portfolio Contrib.	Index Contrib.	Active Contrib.	Currency Effect
Australian Dollar	3.56%	5.24%	-1.68%	5.35%	5.66%	5.64%	0.02%	-0.09%
Baht	0.99%	0.53%	0.47%	4.21%	4.37%	4.40%	-0.02%	0.02%
Canadian Dollar	5.08%	7.11%	-2.03%	0.55%	0.34%	0.57%	-0.23%	-0.03%
Chilean Peso	0.23%	0.27%	-0.05%	1.16%	0.00%	1.33%	-1.33%	0.00%
Colombian Peso	0.00%	0.10%	-0.10%	3.74%	0.00%	3.81%	-3.81%	0.00%
Cruzeiro Real	2.35%	1.76%	0.59%	2.51%	2.16%	2.73%	-0.57%	-0.01%
Czech Koruna	0.00%	0.04%	-0.04%	1.39%	0.00%	1.45%	-1.45%	0.00%
Danish Krone	0.63%	1.16%	-0.53%	1.39%	1.55%	1.46%	0.09%	-0.01%
Egytian Pound	0.00%	0.03%	-0.03%	0.44%	0.00%	0.45%	-0.45%	0.00%
Emirati dirham	0.74%	0.20%	0.54%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro	21.43%	21.76%	-0.34%	1.40%	1.46%	1.48%	-0.02%	-0.01%
Forint	0.00%	0.07%	-0.07%	1.42%	0.00%	1.40%	-1.40%	0.00%
Hong Kong Dollar	7.40%	2.27%	5.13%	-0.24%	-0.26%	-0.25%	-0.01%	-0.01%
Indian Rupee	4.81%	1.87%	2.94%	4.52%	5.33%	5.07%	0.26%	0.16%
Mexican New Peso	1.91%	0.81%	1.10%	9.38%	8.69%	9.95%	-1.27%	0.08%
New Sol	0.55%	0.09%	0.46%	3.15%	0.00%	0.00%	0.00%	0.00%
New Taiwan Dollar	5.55%	2.74%	2.80%	6.22%	6.59%	6.54%	0.04%	0.18%
New Zealand Dollar	0.96%	0.13%	0.84%	0.25%	0.27%	0.26%	0.02%	0.00%
New Zloty	0.00%	0.26%	-0.26%	5.36%	0.00%	5.99%	-5.99%	-0.02%
Norwegian Krone	0.36%	0.47%	-0.11%	0.22%	0.21%	0.22%	-0.01%	0.00%
Philippines Peso	0.56%	0.28%	0.28%	-0.92%	0.00%	-0.99%	0.99%	0.00%
Pound Sterling	8.22%	12.77%	-4.55%	1.20%	1.28%	1.24%	0.03%	-0.05%
Qatari rial	1.09%	0.20%	0.88%	0.01%	0.01%	0.01%	0.00%	0.00%
Rand	2.24%	1.63%	0.61%	1.99%	1.97%	2.04%	-0.06%	0.01%
Ringgit (Malaysian Dollar)	1.88%	0.57%	1.31%	1.37%	1.48%	1.46%	0.02%	0.02%

Total International Equity Performance Attribution by Currency (Net of Fees)

Period Ending: March 31, 2017

Currency Name	Portfolio Weight	Index Weight	Excess Weight	Currency Return	Portfolio Contrib.	Index Contrib.	Active Contrib.	Currency Effect
Romanian New Leu	0.13%	0.00%	0.13%	1.18%	0.00%	2.63%	-2.63%	0.00%
Rupiah	0.90%	0.60%	0.31%	1.10%	1.22%	1.17%	0.05%	0.00%
Russian Federation Rouble	1.56%	1.02%	0.53%	8.35%	0.00%	6.02%	-6.02%	-0.07%
Shekel	0.17%	0.48%	-0.31%	6.01%	3.77%	2.23%	1.54%	0.00%
Singapore Dollar	1.65%	0.87%	0.77%	3.39%	3.60%	3.67%	-0.07%	0.03%
South Korean Won	3.62%	3.29%	0.33%	8.00%	8.49%	8.65%	-0.15%	0.05%
Swedish Krona	1.55%	2.00%	-0.45%	1.75%	1.83%	1.89%	-0.06%	-0.01%
Swiss Franc	3.31%	6.09%	-2.78%	1.54%	1.55%	1.65%	-0.10%	-0.05%
Tenge	0.15%	0.00%	0.15%	6.37%	0.00%	2.63%	-2.63%	0.00%
Turkish Lira	0.61%	0.24%	0.37%	-3.41%	-4.02%	-3.91%	-0.11%	-0.02%
US Dollar	3.84%	0.00%	3.84%	0.00%	0.00%	2.63%	-2.63%	0.00%
Yen	9.67%	17.06%	-7.39%	4.67%	4.66%	4.66%	0.00%	-0.36%
Yuan Renminbi	2.33%	6.00%	-3.67%	0.84%	-0.19%	-0.21%	0.02%	0.01%
	100.00%	100.00%	0.00%		2.47%	2.63%	-0.16%	-0.16%



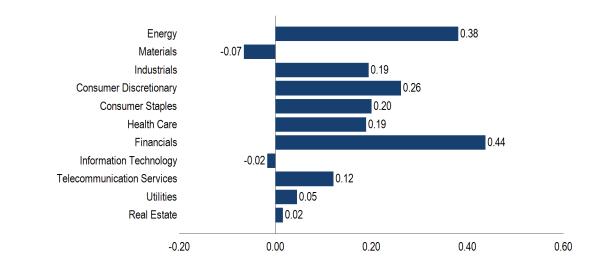
Total International Equity Performance Attribution by Region (Net of Fees)

Total International Equity vs. MSCI ACWI ex USA Current Quarter

Region	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
North America ex U.S.	5.08%	7.11%	-2.03%	2.91%	2.75%	0.16%	0.06%	-0.01%	0.06%	-0.37%	-0.31%
United States	3.84%	0.00%	3.84%	13.94%			0.00%	0.33%	0.33%	0.00%	0.33%
Europe Ex U.K.	27.27%	31.48%	-4.20%	9.54%	8.61%	0.93%	-0.08%	0.19%	0.11%	0.21%	0.32%
United Kingdom	8.22%	12.77%	-4.55%	7.74%	5.08%	2.66%	0.07%	0.16%	0.22%	-0.37%	-0.14%
Pacific Basin Ex Japan	13.57%	8.51%	5.06%	11.08%	11.70%	-0.62%	0.13%	0.12%	0.25%	0.32%	0.57%
Japan	9.67%	17.06%	-7.39%	4.38%	4.48%	-0.10%	0.39%	-0.37%	0.02%	-0.59%	-0.57%
Emerging Markets	30.81%	22.39%	8.42%	11.78%	11.58%	0.20%	0.22%	0.43%	0.64%	0.82%	1.46%
Other	1.53%	0.68%	0.85%	4.32%	4.41%	-0.10%	-0.02%	0.01%	-0.01%	-0.02%	-0.03%
Total				9.58%	7.94%	1.63%	0.77%	0.86%	1.63%	0.00%	1.63%

Region	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
EM Asia	20.63%	15.87%	4.76%	15.08%	13.37%	1.71%	0.22%	0.57%	0.79%	0.86%	1.65%
EM Latin America	5.04%	3.04%	2.00%	9.42%	12.13%	-2.70%	0.05%	-0.03%	0.02%	0.13%	0.14%
EM Europe & Middle East	2.16%	1.63%	0.53%	-2.42%	1.48%	-3.91%	-0.05%	-0.06%	-0.11%	-0.11%	-0.22%
EM Africa	2.24%	1.66%	0.58%	1.25%	4.51%	-3.27%	-0.02%	-0.06%	-0.08%	-0.06%	-0.13%
Other	69.93%	77.80%	-7.87%	8.51%	6.88%	1.63%	0.06%	0.96%	1.02%	-0.83%	0.19%
Total				9.58%	7.94%	1.63%	0.26%	1.38%	1.63%	0.00%	1.63%

Total International Equity vs. MSCI ACWI ex USA **Current Quarter**



GICS Sector	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Energy	6.57%	7.26%	-0.69%	3.91%	-0.76%	4.67%	0.05%	0.30%	0.35%	-0.63%	-0.29%
Materials	6.80%	7.99%	-1.20%	6.37%	8.42%	-2.05%	0.03%	-0.19%	-0.16%	0.04%	-0.12%
Industrials	14.16%	11.67%	2.49%	9.75%	9.56%	0.20%	0.04%	0.10%	0.14%	0.19%	0.33%
Consumer Discretionary	11.00%	11.48%	-0.48%	9.13%	6.87%	2.26%	0.01%	0.23%	0.24%	-0.12%	0.12%
Consumer Staples	10.24%	9.77%	0.47%	10.47%	8.63%	1.84%	0.00%	0.19%	0.19%	0.07%	0.26%
Health Care	4.42%	8.07%	-3.64%	12.63%	8.32%	4.31%	-0.03%	0.10%	0.07%	0.03%	0.10%
Financials	22.00%	23.39%	-1.38%	9.37%	7.64%	1.73%	0.00%	0.38%	0.38%	-0.07%	0.31%
Information Technology	9.59%	9.30%	0.29%	15.16%	14.60%	0.55%	0.02%	0.06%	0.08%	0.62%	0.70%
Telecommunication Services	7.41%	4.66%	2.76%	8.80%	5.95%	2.86%	-0.05%	0.28%	0.22%	-0.09%	0.13%
Utilities	4.49%	3.16%	1.33%	8.12%	8.34%	-0.21%	0.01%	0.02%	0.03%	0.01%	0.04%
Real Estate	3.32%	3.25%	0.06%	9.94%	6.84%	3.10%	0.00%	0.10%	0.10%	-0.04%	0.07%
Total				9.58%	7.95%	1.63%	0.07%	1.57%	1.63%	0.00%	1.63%

Verus⁷⁷

Portfolio: Total International Equity Benchmark: MSCI ACWI ex USA	
Portfolio Total Return	9.18%
Portfolio Benchmark Return From Active Mgmt	Equity Only 9.58% <u>7.94%</u> 1.63%
Local Returns Portfolio Benchmark Active Equity Return	7.06% <u>5.29%</u> 1.77%
Country Selection Stock Selection	0.80% 0.99%
Currency Contributions Portfolio Benchmark Active Currency Contributions	2.47% <u>2.63%</u> -0.16%

Chart uses return-based methodology



Name	Allocation Group	Status	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6
lvy	Domestic Equity Large Cap Growth	Watch	R	R	R	\checkmark	\checkmark	R
Aronson Johnson Ortiz	Domestic Equity Large Cap Value	No Issues	\checkmark	R	\checkmark	\checkmark	R	\checkmark
Systematic Small/Mid Cap Value	Domestic Equity Small/Mid Cap Value	No Issues	\checkmark	R	\checkmark	\checkmark	\checkmark	\checkmark
Kalmar Investments Management	Domestic Equity Small/Mid Cap Growth	Terminate	R	R	R	R	R	B
Artisan International Growth	International Equity	No Issues	\checkmark	R	R	R	R	B
Research Affiliates International Equity	International Equity	No Issues	\checkmark	R	R	\checkmark	\checkmark	R
Mondrian International Small Cap	International Equity Small Cap	No Issues	R	R	R	R	R	\checkmark
Mondrian Emerging Markets	Emerging Markets Equity	No Issues	\checkmark	R	R	R	R	\checkmark

Rule 1 - Manager has underperformed the benchmark index more than half the time over the last 20 quarters

Rule 2 - Equity manager has returned less than 110% of the benchmark index for the three year period.

Rule 3 - Manager has underperformed the 50th percentile in the appropriate style universe in more than two of the last five years of consecutive returns.

Rule 4 - Manager's Sharpe Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ([five year return minus five year risk free rate]/[standard deviation]).

Rule 5 - Manager's Information Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ([excess return over benchmark]/[tracking error]).

Rule 6 - Fund experiences non-performance related issues including personnel turnover, changes in investment philosophy or drift, excessive asset growth, change in ownership and any other reason that raises concern.

Watch List standards are run against historical composite returns prior to manager since inception.

Name	Allocation Group		Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6
Brandywine Global Sovereign	Global Fixed Income	No Issues	\checkmark	\checkmark	R	R	R	R
Western Asset Investment Grade Credit	Domestic Fixed Income	No Issues	\checkmark	\checkmark	\checkmark	B	\checkmark	\checkmark
Loomis Sayles High Yield	Domestic Fixed Income High Yield	No Issues	\checkmark	R	\checkmark	R	\checkmark	\checkmark
Eaton Vance Senior Loan Fund	Domestic Fixed Income Bank Loans	No Issues	R	R	B	B	R	B
PIMCO Emerging Local Bond Ins	Emerging Markets Fixed Income		\checkmark	R	R	R	R	\checkmark
Invesco Core Real Estate	Real Estate	No Issues	R	R	R			\checkmark
Grosvenor	Hedge Funds	No Issues	\checkmark	\checkmark	R			\checkmark
Invesco Commodities	Commodities	No Issues	\checkmark	\checkmark	R			\checkmark

Rule 1 - Manager has underperformed the benchmark index more than half the time over the last 20 quarters

Rule 2 - Fixed Income manager has returned less than 105% of the benchmark index for the three year period.

Rule 3 - Manager has underperformed the 50th percentile in the appropriate style universe in more than two of the last five years of consecutive returns.

Rule 4 - Manager's Sharpe Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ([five year return minus five year risk free rate]/[standard deviation]).

Rule 5 - Manager's Information Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ([excess return over benchmark]/[tracking error]).

Rule 6 - Fund experiences non-performance related issues including personnel turnover, changes in investment philosophy or drift, excessive asset growth, change in ownership and any other reason that raises concern.

Watch List standards are run against historical composite returns prior to manager since inception.

Total Fund Investment Fund Fee Analysis

Account	Fee Schedule	Market Value As of 3/31/2017	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
SSgA S&P 500 Flagship Fund	0.03% of First \$150.0 Mil, 0.02% Thereafter	\$246,793,196	\$62,423	0.03%
lvy	0.25% of Assets	\$220,616,277	\$551,541	0.25%
Aronson Johnson Ortiz	0.30% of First \$250.0 Mil, 0.20% of Next \$250.0 Mil, 0.15% of Next \$500.0 Mil, 0.13% Thereafter	\$225,059,857	\$675,180	0.30%
Systematic Small/Mid Cap Value	0.35% of Assets	\$68,656,366	\$240,297	0.35%
Kalmar Investments Management	1.00% of First \$10.0 Mil, 0.88% of Next \$10.0 Mil, 0.75% Thereafter	\$69,095,737	\$555,718	0.80%
Artisan International Growth	0.30% of Assets	\$179,519,481	\$538,558	0.30%
Research Affiliates International Equity	0.12% of Assets	\$203,086,634	\$243,704	0.12%
Mondrian International Small Cap	0.85% of First \$25.0 Mil, 0.65% of Next \$50.0 Mil, 0.63% of Next \$50.0 Mil, 0.60% Thereafter	\$127,428,586	\$864,572	0.68%
Mondrian Emerging Markets	1.00% of First \$25.0 Mil, 0.75% of Next \$50.0 Mil, 0.60% Thereafter	\$310,326,116	\$2,036,957	0.66%
Western Asset Investment Grade Credit	0.30% of First \$100.0 Mil, 0.15% Thereafter	\$202,486,634	\$453,730	0.22%
Loomis Sayles High Yield	0.50% of Assets	\$217,656,170	\$1,088,281	0.50%
Eaton Vance Senior Loan Fund	0.55% of First \$50.0 Mil, 0.50% of Next \$50.0 Mil, 0.40% Thereafter	\$189,938,023	\$884,752	0.47%
Eaton Vance Institutional Senior Loan Plus Fund	0.40% of Assets	\$20,117,707	\$80,471	0.40%

This fee analysis only reflects base fees for investment management, does not incorporate performance-based fees, and excludes fees paid to real estate managers, private equity managers and GCM Better Futures Fund. Real estate and private equity fees have other components which cannot be easily captured in this simplified format.

* Managers with incentive fee include: Waddell, Systematic, Research Affiliates, Western Asset, Artisan, Brandywine, and Invesco Commodities. Performance based fees are not included in the fee analysis. AJO has performance based fees.



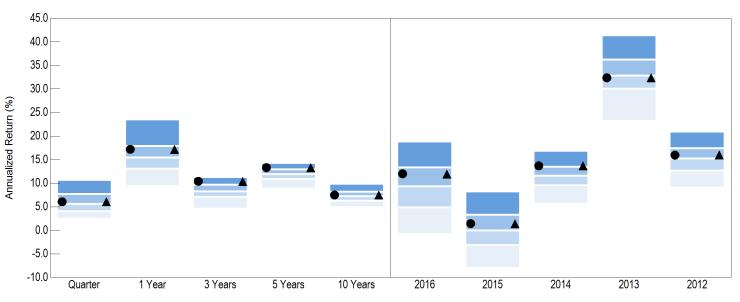
Account	Fee Schedule	Market Value As of 3/31/2017	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
SSgA TIPS	0.04% of Assets	\$160,413,478	\$64,165	0.04%
Barclays U.S. Aggregate Index Fund	0.02% of Assets	\$148,852,091	\$29,770	0.02%
Brandywine Global Sovereign	0.36% of Assets	\$283,893,786	\$1,022,018	0.36%
PIMCO Emerging Local Bond Ins	0.50% of First \$100.0 Mil, 0.45% Thereafter	\$211,968,944	\$1,003,860	0.47%
IFM Infrastructure	0.97% of Assets	\$135,644,748	\$1,315,754	0.97%
Grosvenor	1.15% of First \$25.0 Mil, 1.00% of Next \$25.0 Mil, 0.80% of Next \$50.0 Mil, 0.60% Thereafter	\$157,303,451	\$1,281,321	0.81%
Invesco Commodities	0.30% of Assets	\$118,040,819	\$354,122	0.30%
Parametric Overlay	0.15% of First \$25.0 Mil, 0.10% of Next \$75.0 Mil, 0.04% Thereafter	\$89,250,526	\$101,751	0.11%
Investment Management Fee		\$3,586,148,627	\$13,448,944	0.38%

This fee analysis only reflects base fees for investment management, does not incorporate performance-based fees, and excludes fees paid to real estate managers, private equity managers and GCM Better Futures Fund. Real estate and private equity fees have other components which cannot be easily captured in this simplified format.

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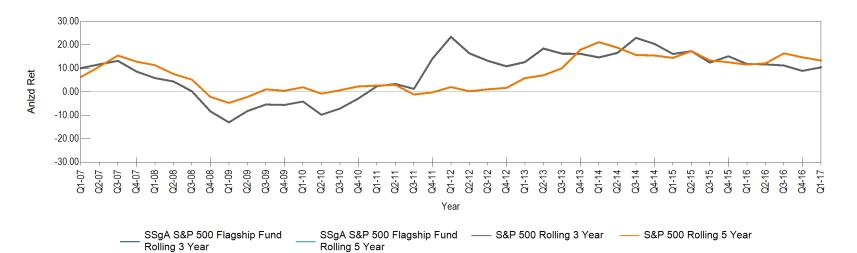
Domestic Equity Managers



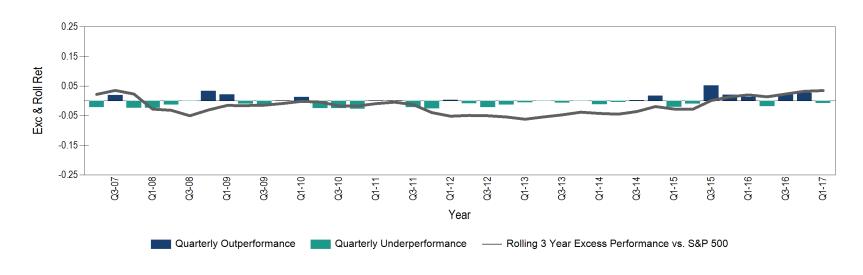
SSgA S&P 500 Flagship Fund vs. eA US Large Cap Equity Net Universe

	Return (Ran	k)								
5th Percentile	10.7	23.5	11.3	14.3	9.8	18.8	8.3	16.8	41.4	20.9
25th Percentile	7.7	18.0	9.7	13.0	8.2	13.4	3.4	13.5	36.3	17.5
Median	5.6	15.5	8.3	11.9	7.3	9.4	0.0	11.6	32.9	15.3
75th Percentile	4.1	13.1	7.1	10.9	6.4	4.9	-3.1	9.6	30.1	12.7
95th Percentile	2.5	9.4	4.6	8.9	5.0	-0.8	-7.9	5.7	23.2	9.1
# of Portfolios	592	590	564	506	405	584	511	518	467	415
 SSgA S&P 500 Flagship Fund 	6.1 (44) 17.2 (33	3) 10.4 (14)	13.3 (18)	7.5 (44)	12.0 (32)	1.4 (40)	13.7 (24)	32.4 (57)	16.0 (42)
▲ S&P 500	6.1 (44) 17.2 (34) 10.4 (14)	13.3 (18)	7.5 (44)	12.0 (33)	1.4 (40)	13.7 (24)	32.4 (56)	16.0 (41)





Rolling Annualized Excess Performance









3 Years

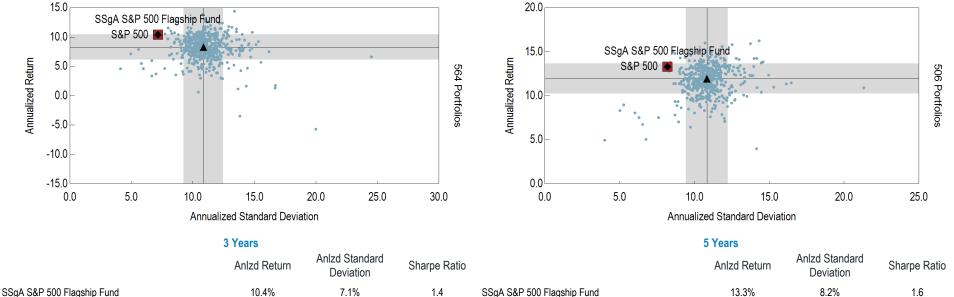
10.4%

8.3%

7.2%

10.9%

5 Years



S&P 500

eA US Large Cap Equity Net Median

1.4

0.8

SSgA S&P 500 Flagship Fund	
S&P 500	
eA US Large Cap Equity Net Median	

8.2%

10.8%

1.6

1.1

13.3%

11.9%

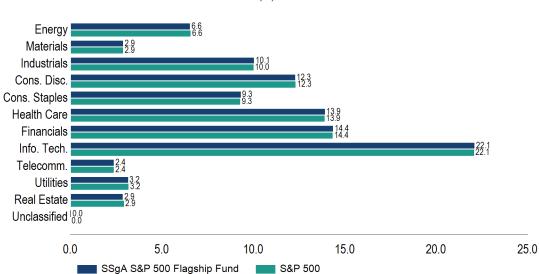
SSgA S&P 500 Flagship Fund Manager Portfolio Overview (Net of Fees)

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Characteristics

	Portfolio	S&P 500
Number of Holdings	506	505
Weighted Avg. Market Cap. (\$B)	151.82	151.40
Median Market Cap. (\$B)	19.87	19.87
Price To Earnings	24.60	23.73
Price To Book	4.90	4.42
Price To Sales	3.58	3.31
Return on Equity (%)	21.03	18.81
Yield (%)	2.02	2.02
Beta	1.00	1.00

Largest Holdings



Sector Allocation (%) vs S&P 500

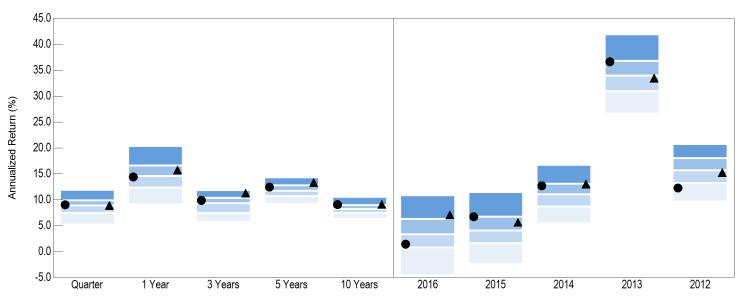
	•	1.11		
10	p Co	ntrik	outo	rs

D 11 1	A 1 1 1	 4.1
Bottom	Contri	nutors
Dottom		NULUIU

Luigest Holdings							Bottom Contributors					
		End Weight	Return		Avg Wgt	Return	Contribution	n	Avg Wgt	Return	Contribution	
APPLE		3.73	24.57	APPLE	3.37	24.57	0.83	EXXON MOBIL	1.80	-8.30	-0.15	
MICRO	SOFT	2.51	6.63	FACEBOOK CLASS A	1.50	23.47	0.35	CHEVRON	1.09	-7.90	-0.09	
AMAZO	N.COM	1.73	18.23	AMAZON.COM	1.61	18.23	0.29	VERIZON	1.05	-7.68	-0.08	
EXXON	MOBIL	1.69	-8.30	PHILIP MORRIS INTL.	0.78	24.53	0.19	COMMUNICATIONS				
JOHNS	ON & JOHNSON	1.67	8.81	MICROSOFT	2.51	6.63	0.17	GENERAL ELECTRIC	1.36	-4.94	-0.07	
FACEB	OOK CLASS A	1.65	23.47	JOHNSON & JOHNSON	1.61	8.81	0.14	QUALCOMM	0.44	-11.23	-0.05	
BERKS	HIRE HATHAWAY 'B'	1.56	2.27	VISA 'A'	0.79	14.12	0.11	TARGET	0.19	-22.88	-0.04	
JP MOF	RGAN CHASE & CO.	1.55	2.36	CISCO SYSTEMS	0.81	12.81	0.10	SCHLUMBERGER	0.58	-6.40	-0.04	
GENER	AL ELECTRIC	1.29	-4.94	ORACLE	0.61	16.47	0.10	BRISTOL MYERS SQUIBB	0.46	-6.33	-0.03	
AT&T		1.26	-1.15	AVAGO TECHNOLOGIES	0.39	24.44	0.10	OCCIDENTAL PTL.	0.26	-9.96	-0.03	
								KROGER	0.16	-14.24	-0.02	

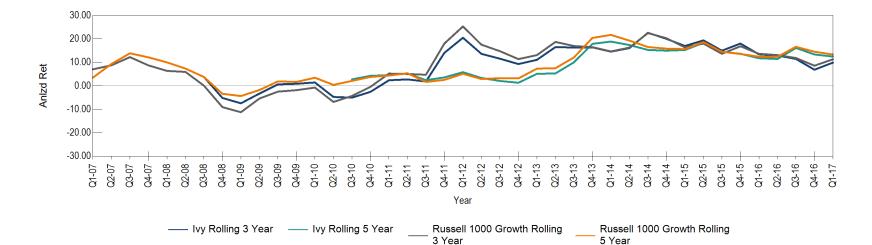
Unclassified sector allocation includes cash allocations.

Ivy Manager Performance Comparisons (Net of Fees)



Ivy vs. eA US Large Cap Growth Equity Net Universe

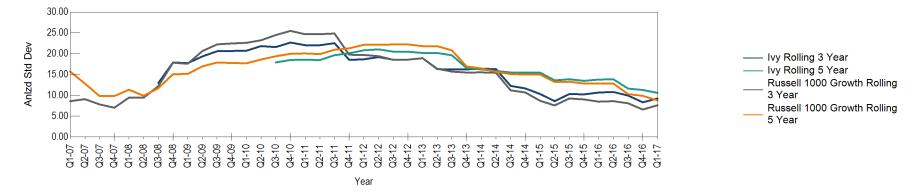
	Return (Rank)								
5th Percentile	11.9	20.3	11.8	14.3	10.5	10.8	11.4	16.7	41.9	20.7
25th Percentile	9.9	16.6	10.4	12.8	9.0	6.3	6.8	13.1	36.8	18.1
Median	8.9	14.6	9.4	11.8	8.2	3.4	4.1	11.1	34.0	15.7
75th Percentile	7.5	12.4	7.5	10.7	7.5	0.8	1.6	8.7	30.9	13.2
95th Percentile	5.2	9.1	5.7	9.3	6.3	-4.5	-2.3	5.5	26.6	9.7
# of Portfolios	182	181	173	157	128	182	175	180	158	140
• Ivy	9.0 (44)	14.4 (54) 9.9 (39)	12.4 (34)	9.1 (24)	1.4 (71)	6.7 (26)	12.7 (31)	36.6 (28) 12.3 (80)
Russell 1000 Growth	8.9 (50)	15.8 (37	ý 11.3 (13)	13.3 (15)	9.1 (22)	7.1 (20)	5.7 (35)	13.0 (28)	33.5 (54) 15.3 (58)











3 Years

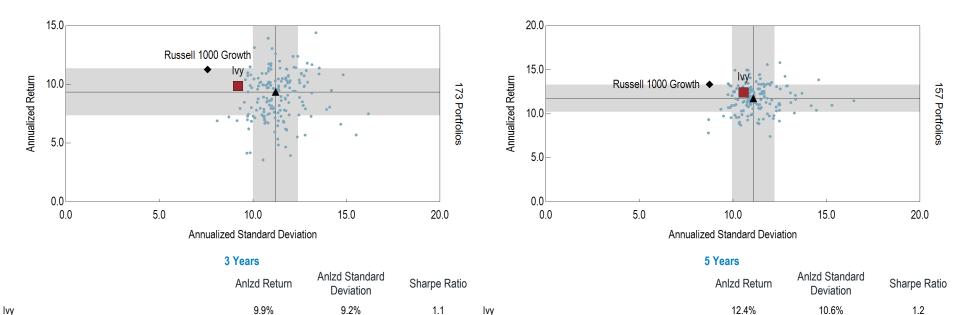
11.3%

9.4%

7.6%

11.2%





Russell 1000 Growth

eA US Large Cap Growth Equity Net Median

1.5

0.8

Russell 1000 Growth eA US Large Cap Growth Equity Net Median

Returns prior to inception date are composite returns.

8.7%

11.1%

1.5

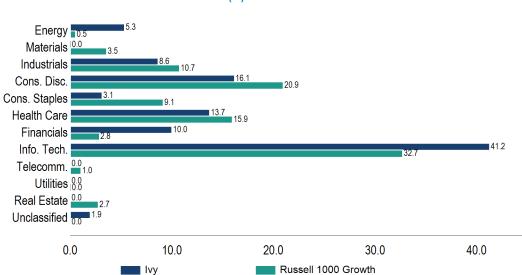
1.1

13.3%

11.8%

Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	52	609
Weighted Avg. Market Cap. (\$B)	149.30	159.72
Median Market Cap. (\$B)	54.55	9.27
Price To Earnings	28.45	26.16
Price To Book	7.08	7.12
Price To Sales	5.57	4.01
Return on Equity (%)	22.26	28.54
Yield (%)	1.07	1.51
Beta	1.15	1.00



Sector Allocation (%) vs Russell 1000 Growth

	Contributoro	
op	Contributors	

Bettern Centributers

	Largest Holdings			Top Contributo	rs		Bott	om Contribu	tors	
	End Weight	Return		Avg Wgt	Return	Contribution	n	Avg Wgt	Return	Contribution
MASTERCARD	4.29	9.15	LAM RESEARCH	4.11	21.87	0.90	HALLIBURTON	2.65	-8.71	-0.23
MICROSOFT	4.23	6.63	FACEBOOK CLASS A	3.65	23.47	0.86	GOLDMAN SACHS GP.	4.37	-3.81	-0.17
LAM RESEARCH	4.19	21.87	PHILIP MORRIS INTL.	2.93	24.53	0.72	AUTOZONE	1.29	-8.45	-0.11
FACEBOOK CLASS A	3.89	23.47	ADOBE SYSTEMS	2.61	26.40	0.69	EOG RES.	2.95	-3.36	-0.10
HOME DEPOT	3.86	10.18	APPLE	2.68	24.57	0.66	WEX	1.00	-7.26	-0.07
GOLDMAN SACHS GF	P. 3.72	-3.81	AMAZON.COM	3.10	18.23	0.57	MGM RESORTS INTL.	1.27	-4.55	-0.06
APPLE	3.65	24.57	MICROCHIP TECH.	3.53	15.59	0.55	BRISTOL MYERS SQUIBB	0.85	-6.33	-0.05
CELGENE	3.63	7.50	VISA 'A'	3.03	14.12	0.43	O REILLY AUTOMOTIVE	1.66	-3.08	-0.05
MICROCHIP TECH.	3.58	15.59	DEXCOM	0.99	41.93	0.42	L BRANDS	0.16	-27.73	-0.04
AMAZON.COM	3.25	18.23	MASTERCARD	4.27	9.15	0.39	SCHLUMBERGER	0.46	-6.40	-0.03

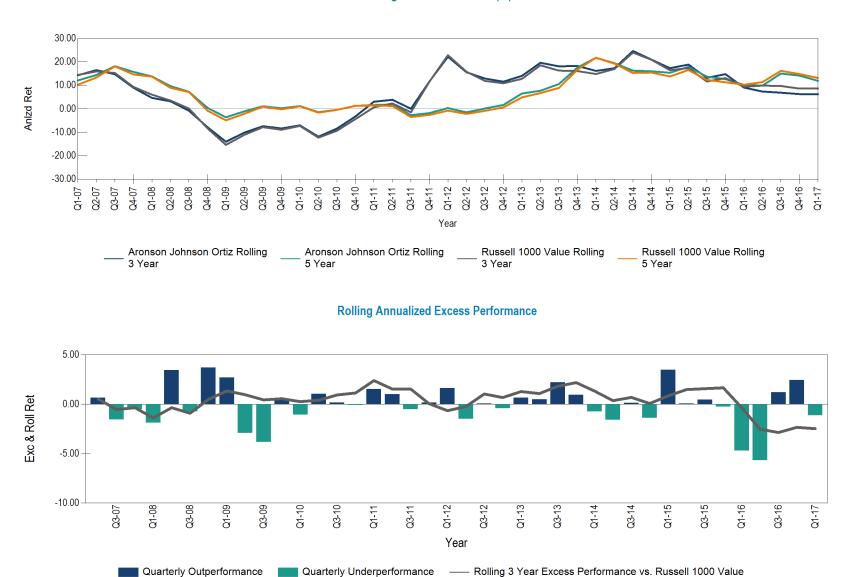
Unclassified sector allocation includes cash allocations.

Aronson Johnson Ortiz Manager Performance Comparisons (Net of Fees)



Aronson Johnson Ortiz vs. eA US Large Cap Value Equity Net Universe

	Return (Rank)									
5th Percentile	6.6	24.5	10.4	14.3	9.1	21.8	2.2	16.6	42.8	22.0
25th Percentile	4.8	19.7	8.8	13.1	7.3	16.3	-0.8	13.3	37.3	17.5
Median	3.9	17.0	7.8	12.2	6.4	13.8	-3.1	11.3	33.1	15.3
75th Percentile	2.9	14.1	6.7	11.0	5.7	10.4	-5.7	9.7	30.0	12.3
95th Percentile	1.9	11.0	3.6	8.7	4.3	5.6	-9.4	5.0	23.2	8.2
# of Portfolios	226	226	215	195	152	225	195	197	184	164
 Aronson Johnson Ortiz 	2.1 (93)	15.4 (66)	6.2 (81)) 11.9 (55)	5.9 (66)	9.5 (83)	-0.1 (16)	9.6 (78)	38.0 (21)	17.0 (29)
Russell 1000 Value	3.3 (68)	19.2 (28)	8.7 (28)) 13.1 (25)	5.9 (66)	17.3 (19)	-3.8 (59)	13.5 (24)	32.5 (54)	17.5 (25)



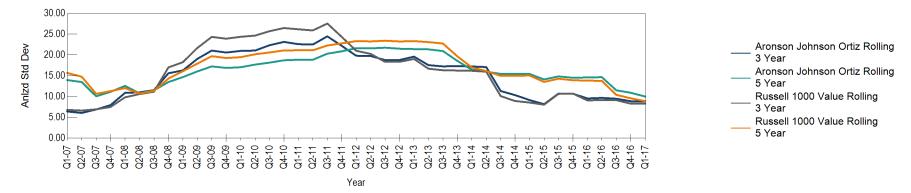


Russell 1000 Value

10.0

195 Portfolios

25.0

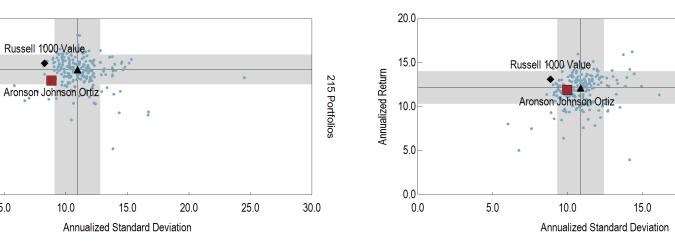


Rolling Annualized Standard Deviation

3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Aronson Johnson Ortiz	6.2%	8.8%	0.7	Aronson Johnson Ortiz	11.9%	10.0%	1.2
Russell 1000 Value	8.7%	8.3%	1.0	Russell 1000 Value	13.1%	8.9%	1.5
eA US Large Cap Value Equity Net Median	7.8%	10.9%	0.7	eA US Large Cap Value Equity Net Median	12.2%	10.9%	1.1



15.0

10.0

5.0

0.0

-5.0

-10.0

0.0

5.0

Annualized Return

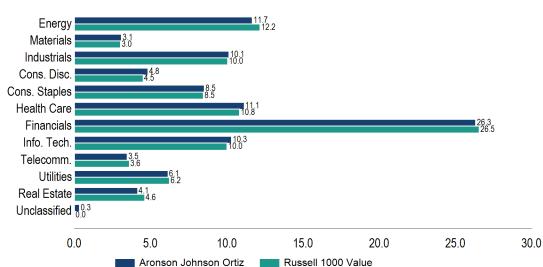
20.0

Aronson Johnson Ortiz Manager Portfolio Overview (Net of Fees)

Duesell

Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	118	692
Weighted Avg. Market Cap. (\$B)	95.76	115.38
Median Market Cap. (\$B)	9.51	8.32
Price To Earnings	18.26	21.14
Price To Book	2.60	2.49
Price To Sales	2.24	2.89
Return on Equity (%)	18.96	11.22
Yield (%)	2.25	2.43
Beta	0.87	1.00



Sector Allocation (%) vs Russell 1000 Value

Russell 1000 Value

Largest	Holdings	
	End Weight	Return
JP MORGAN CHASE & CO.	4.09	2.36
JOHNSON & JOHNSON	3.79	8.81
BANK OF AMERICA	3.36	7.06
PFIZER	2.82	6.39
CITIGROUP	2.74	0.94
EXXON MOBIL	2.36	-8.30
WAL MART STORES	1.94	5.04
VERIZON COMMUNICATIONS	1.90	-7.68
PHILIP MORRIS INTL.	1.65	24.53
ALLSTATE	1.56	10.45

Top Contributors Avg Wgt

1.45

3.62

1.27

3.48

0.85

1.21

2.73

1.25

1.52

0.87

6.39

13.07

10.45

17.25

0.17

0.16

0.16

0.15

PHILIP MORRIS INTL.

OWENS CORNING

BANK OF AMERICA

APPLIED MATS.

VERISIGN

ALLSTATE

CITRIX SYS.

PFIZER

EBAY

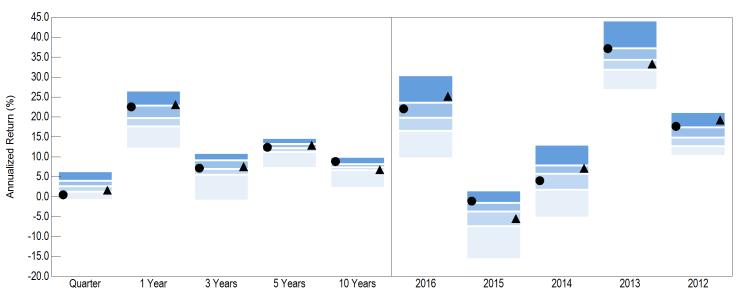
JOHNSON & JOHNSON

S		Bo	ttom Contribu	tors	
Return	Contribution		Avg Wgt	Return	Contribution
24.53	0.36	EXXON MOBIL	2.48	-8.30	-0.21
8.81	0.32	HAWAIIAN HOLDINGS	0.94	-18.51	-0.17
19.42	0.25	ROWAN COMPANIES	0.89	-17.52	-0.16
7.06	0.25	CL.A	0.05	-17.52	-0.10
20.88	0.18	VERIZON	1.99	-7.68	-0.15
14.51	0.18	COMMUNICATIONS	0 70	40.05	0.45

CL.A	0.89	-17.52	-0.16
VERIZON COMMUNICATIONS	1.99	-7.68	-0.15
NABORS INDUSTRIES	0.76	-19.95	-0.15
PATTERSON UTI ENERGY	1.00	-9.78	-0.10
MICHAEL KORS HOLDINGS	0.72	-11.33	-0.08
CHEVRON	1.01	-7.90	-0.08
TESORO	1.16	-6.73	-0.08
UNITED THERAPEUTICS	1.32	-5.61	-0.07

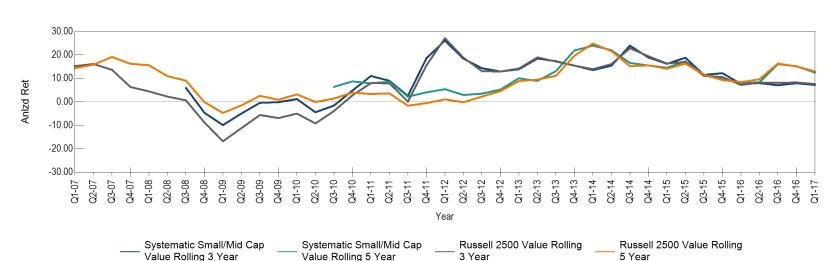
Unclassified sector allocation includes cash allocations.



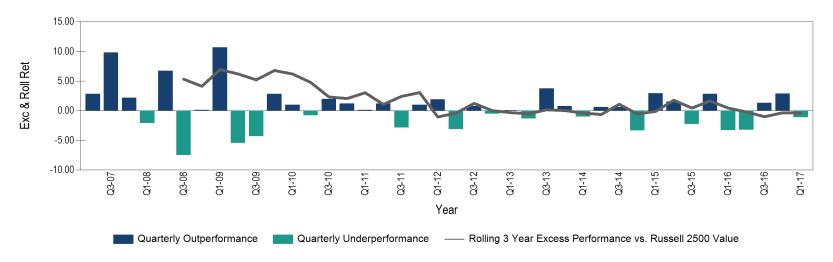


Systematic Small/Mid Cap Value vs. eA US Small-Mid Cap Value Equity Net Universe

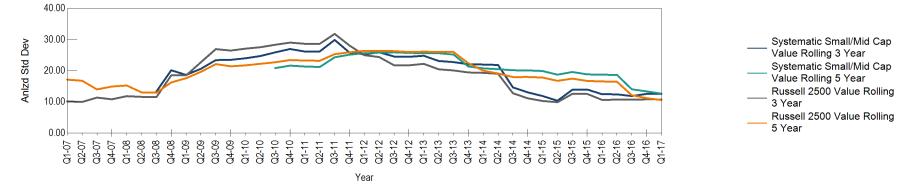
	Return (Ranl	()								
5th Percentile	6.4	26.6	11.0	14.7	10.0	30.5	1.5	13.0	44.2	21.2
25th Percentile	4.0	22.9	9.2	13.2	8.2	23.6	-1.5	7.9	37.3	17.4
Median	2.7	19.7	7.0	12.2	7.4	19.9	-3.7	5.8	34.4	14.9
75th Percentile	1.3	17.7	5.5	11.3	6.7	16.5	-7.4	1.8	31.9	12.7
95th Percentile	-0.8	12.2	-0.9	7.3	2.3	9.7	-15.7	-5.2	26.8	10.3
# of Portfolios	61	60	58	57	37	64	58	57	45	49
 Systematic Small/Mid Cap Value 	0.5 (89) 22.5 (28	3) 7.2 (46	5) 12.4 (43)	8.8 (15) 22.0 (32	2) -1.1 (22)	4.0 (68)	37.2 (27	7) 17.6 (20)
Russell 2500 Value	1.6 (71) 23.1 (25	5) 7.6 (38	3) 12.9 (32)	6.8 (73) 25.2 (17	7) -5.5 (62)	7.1 (34)	33.3 (65	5) 19.2 (13)



Rolling Annualized Excess Performance



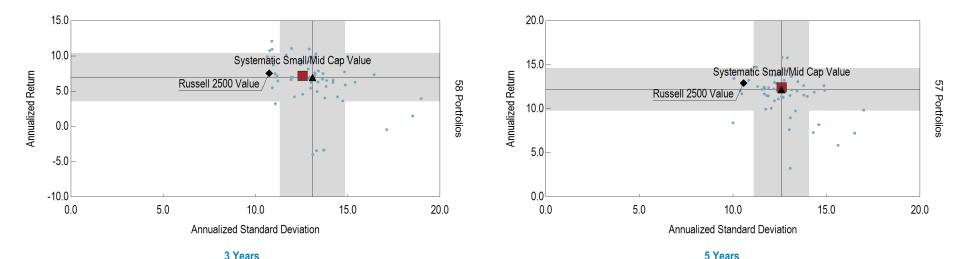




Rolling Annualized Standard Deviation



5 Years



	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Systematic Small/Mid Cap Value	7.2%	12.6%	0.6	Systematic Small/Mid Cap Value	12.4%	12.6%	1.0
Russell 2500 Value	7.6%	10.7%	0.7	Russell 2500 Value	12.9%	10.6%	1.2
eA US Small-Mid Cap Value Equity Net Median	7.0%	13.1%	0.5	eA US Small-Mid Cap Value Equity Net Median	12.2%	12.6%	1.0

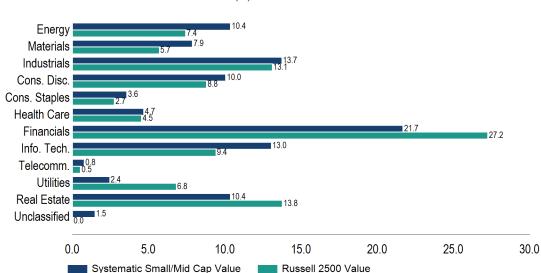
Systematic Small/Mid Cap Value Manager Portfolio Overview (Net of Fees)

Duccoll

-0.11

Characteristics

	Portfolio	Russell 2500 Value
Number of Holdings	82	1,704
Weighted Avg. Market Cap. (\$B)	6.05	4.41
Median Market Cap. (\$B)	4.78	0.98
Price To Earnings	22.89	20.85
Price To Book	2.68	2.00
Price To Sales	2.52	2.97
Return on Equity (%)	10.78	8.42
Yield (%)	1.44	1.84
Beta	1.08	1.00



MICROSEMI

Sector Allocation (%) vs Russell 2500 Value

Largest	1		
	End Weight	Return	
FNB	2.57	-6.52	VISTEON
PINNACLE FOODS	2.32	8.83	PVH
MICROSEMI	2.30	-4.52	LAZARD 'A'
PVH	2.29	14.71	CBRE GROUP CLASS A
PRECISION DRILLING (NYS)	2.27	-13.39	SEAGATE TECH.
ZIONS BANCORP.	2.26	-2.24	PINNACLE FOODS
SL GREEN REALTY	2.24	-0.13	TTM TECHNOLOGIES
UNUM GROUP	2.22	7.20	KB HOME
ALCOA ORD WI	2.08	22.51	TRINSEO
KBR	2.08	-9.45	MANPOWERGROUP

Top Contributors Avg Wgt

1.42

2.04

1.58

2.29

1.06

2.54

1.17

0.76

1.41

1.18

Return

21.92

14.71

16.04

10.48

21.98

8.83

18.34

25.94

13.72

15.42

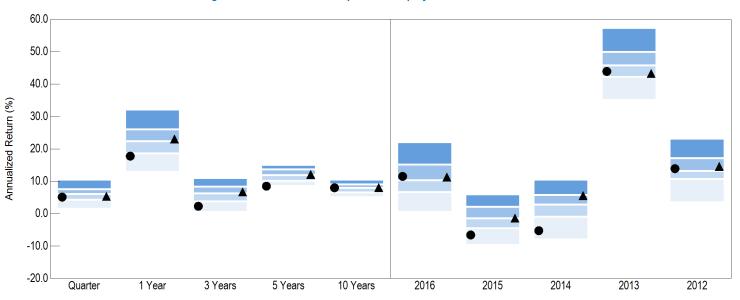
	Bottom Contributors										
Contribution		Avg Wgt	Return	Contribution							
0.31	SM ENERGY	1.16	-30.34	-0.35							
0.30 0.25	PRECISION DRILLING (NYS)	2.22	-13.39	-0.30							
0.24	PENNEY JC	0.91	-25.87	-0.24							
0.23	KBR	2.24	-9.45	-0.21							
0.22	SIGNET JEWELERS	0.70	-26.28	-0.19							
0.21	FNB	2.69	-6.52	-0.18							
0.20	PDC ENERGY	1.07	-14.09	-0.15							
0.19 0.18	UNITED COMMUNITY BANKS	2.14	-6.23	-0.13							
0.10	ENDO INTERNATIONAL	0.37	-32.24	-0.12							

Unclassified sector allocation includes cash allocations.



2.36

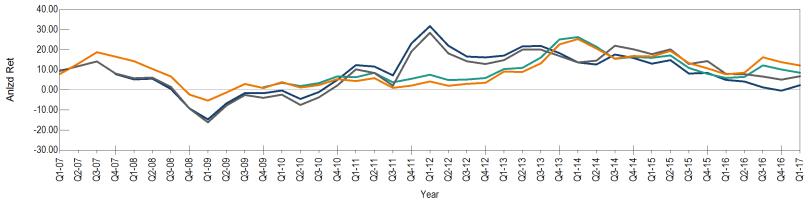
-4.52



Kalmar Investments Management vs. eA US Small Cap Growth Equity Net Universe

	Return (Ran	k)								
5th Percentile	10.4	32.1	11.0	15.0	10.5	22.0	5.9	10.5	57.3	23.1
25th Percentile	7.6	26.1	8.4	13.7	9.1	15.2	2.2	5.8	49.9	17.2
Median	6.1	22.4	6.3	11.9	7.9	10.4	-1.4	2.8	45.8	13.2
75th Percentile	4.3	18.6	3.9	10.2	6.7	6.7	-4.5	-0.9	42.3	10.7
95th Percentile	1.6	13.0	0.6	8.6	5.1	0.6	-9.6	-7.9	35.1	3.6
# of Portfolios	123	123	113	104	84	124	103	103	94	92
• Kalmar Investments Management	5.1 (64) 17.8 (79	9) 2.3 (89) 8.5 (96)) 8.0 (48) 11.5 (43) -6.6 (85)	-5.3 (89)	43.9 (59)	13.9 (42)
Russell 2000 Growth	5.3 (58) 23.0 (49	9) 6.7 (44) 12.1 (46	8.1 (46) 11.3 (44) -1.4 (50)	5.6 (29)	43.3 (66)	14.6 (39)



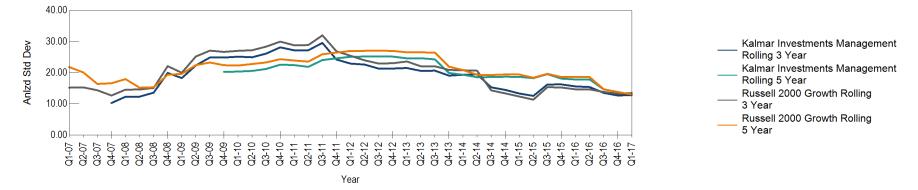


Kalmar Investments Management Kalmar Investments Management Russell 2000 Growth Rolling Russell 2000 Growth Rolling Stear

Rolling Annualized Excess Performance

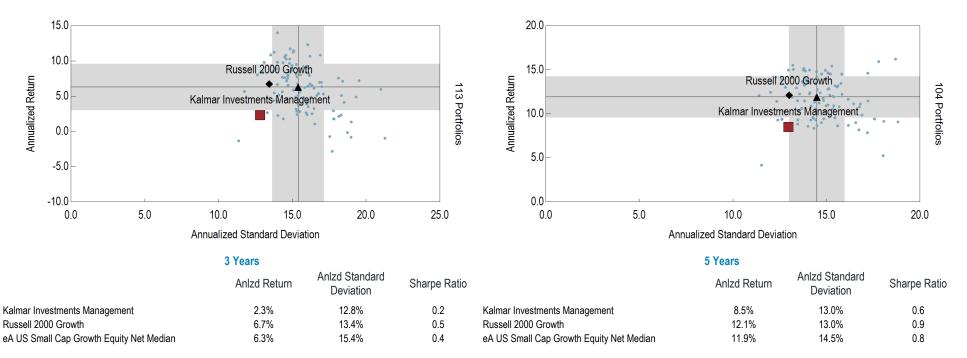










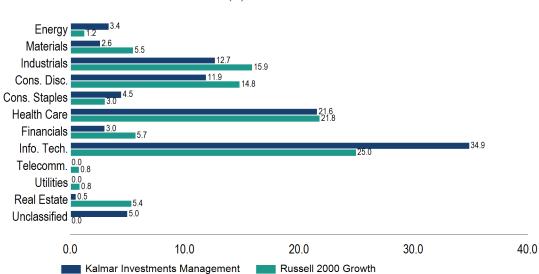




Kalmar Investments Management Manager Portfolio Overview (Net of Fees)

Characteristics

	Portfolio	Russell 2000 Growth
Number of Holdings	84	1,157
Weighted Avg. Market Cap. (\$B)	3.00	2.39
Median Market Cap. (\$B)	1.92	0.90
Price To Earnings	35.84	29.86
Price To Book	4.83	4.78
Price To Sales	3.38	3.45
Return on Equity (%)	12.59	14.68
Yield (%)	0.29	0.67
Beta	0.90	1.00



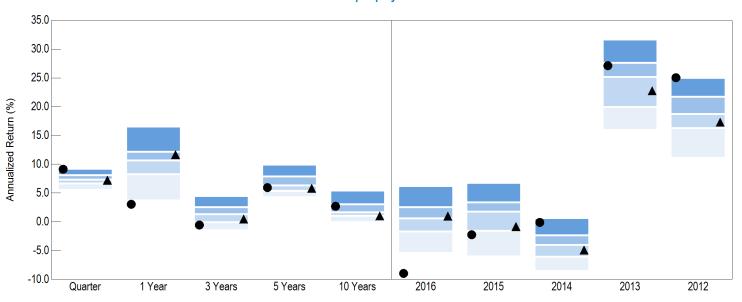
Sector Allocation (%) vs Russell 2000 Growth

Largest Holdings							
	End Weight	Return					
COOPER COS.	2.61	14.29					
REPLIGEN	2.50	14.21					
ACXIOM	2.44	6.23					
CALLIDUS SOFTWARE	2.33	27.08					
MAXLINEAR 'A'	2.09	28.67					
WEST PHARM.SVS.	2.05	-3.65					
PERFORMANCE FOOD	GROUP 1.98	-0.83					
WNS HDG.ADR 1:1	1.97	3.85					
BELDEN	1.97	-7.40					
GTT COMMUNICATION	S 1.77	-15.30					

		Top Contributo	rs	Bottom Contributors					
Return		Avg Wgt	Return	Contribution		Avg Wgt	Return	Contribution	
14.29	MAXLINEAR 'A'	1.88	28.67	0.54	GTT COMMUNICATIONS	2.12	-15.30	-0.33	
14.21	CALLIDUS SOFTWARE	1.90	27.08	0.51	PDC ENERGY	1.90	-14.09	-0.27	
6.23	CEB	1.42	30.38	0.43	SMART & FINAL STORES	1.24	-14.18	-0.18	
27.08	SITEONE LANDSCAPE	1.03	39.39	0.41	INC RESEARCH	1.31	-12.83	-0.17	
28.67	SUPPLY ORD SHS				HOLDINGS CL.A				
-3.65	BIOTELEMETRY	1.10	29.53	0.33	BELDEN	2.17	-7.40	-0.16	
-0.83	COOPER COS.	2.26	14.29	0.32	ZUMIEZ	0.81	-16.25	-0.13	
3.85	REPLIGEN	2.08	14.21	0.30	AMPHASTAR PHARMS.	0.62	-21.28	-0.13	
-7.40	POPEYES LOUISIANA	0.91	30.64	0.28	MATADOR RESOURCES	1.60	-7.65	-0.12	
-15.30	KTCN.	0.01	00.04	0.20	TEXAS ROADHOUSE	1.65	-7.21	-0.12	
10.00	TREEHOUSE FOODS	1.38	17.27	0.24	SPS COMMERCE	0.70	-16.31	-0.11	
	PEGASYSTEMS	1.08	21.89	0.24					

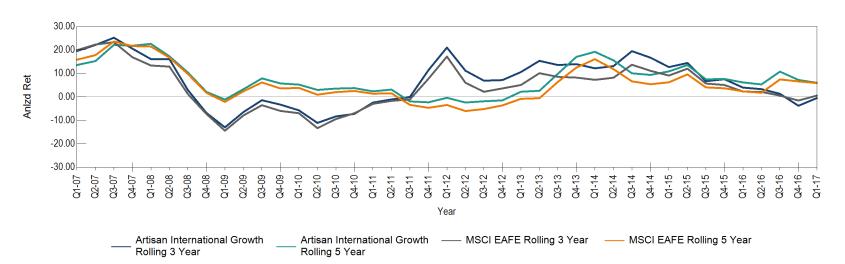
Unclassified sector allocation include cash allocations.

International Equity Managers

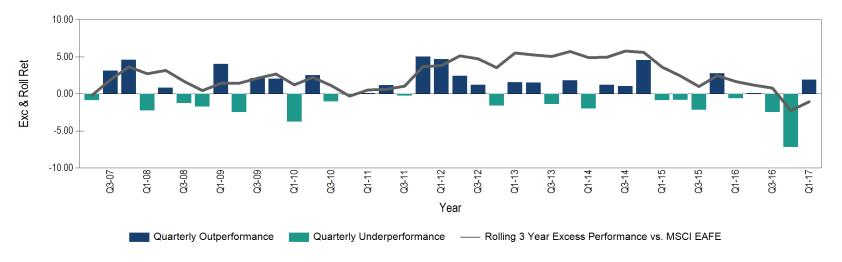


Artisan International Growth vs. eA EAFE All Cap Equity Net Universe

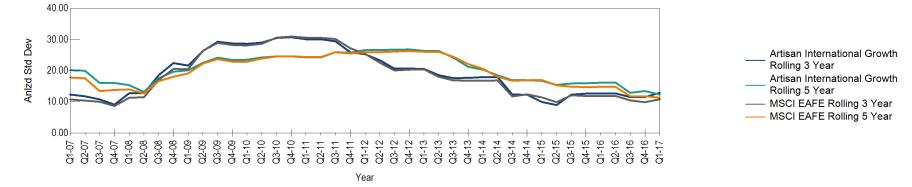
	Return (R	ank)								
5th Percentile	9.2	16.5	4.5	9.9	5.4	6.2	6.8	0.6	31.6	25.0
25th Percentile	8.1	12.2	2.6	7.9	3.1	2.6	3.4	-2.3	27.7	21.7
Median	7.3	10.7	1.4	6.4	1.7	0.6	1.8	-4.0	25.2	18.7
75th Percentile	6.7	8.3	0.0	5.4	1.1	-1.7	-1.5	-6.0	20.0	16.3
95th Percentile	5.6	3.7	-1.4	4.3	0.0	-5.4	-6.0	-8.5	16.0	11.1
# of Portfolios	69	69	62	53	39	64	58	51	47	49
 Artisan International Growth 	9.1	(6) 3.1	(96) -0.6 (79	9) 5.9 (63)	2.7 (33)	-9.0 (99)	-2.2 (80)	-0.1 (10)) 27.1 (32	2) 25.0 (5)
MSCI EAFE	7.2	(54) 11.7	(41) 0.5 (70	5.8 (66)	1.1 (77)	1.0 (46)	-0.8 (71)	-4.9 (62)) 22.8 (67	7) 17.3 (62)



Rolling Annualized Excess Performance





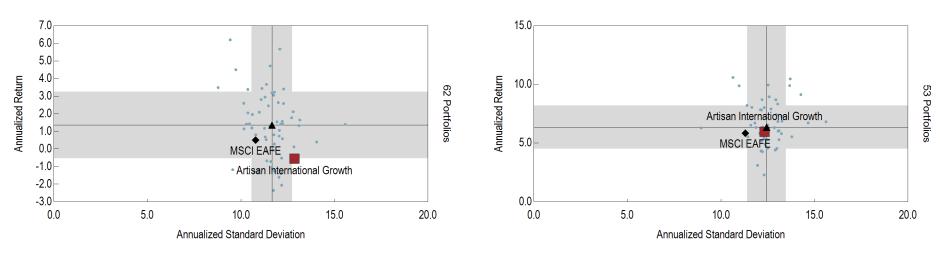


Rolling Annualized Standard Deviation



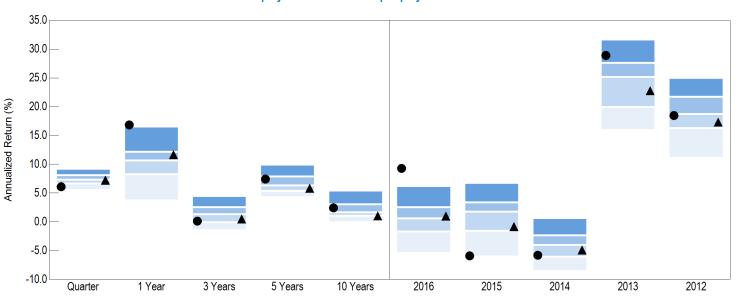


5 Years



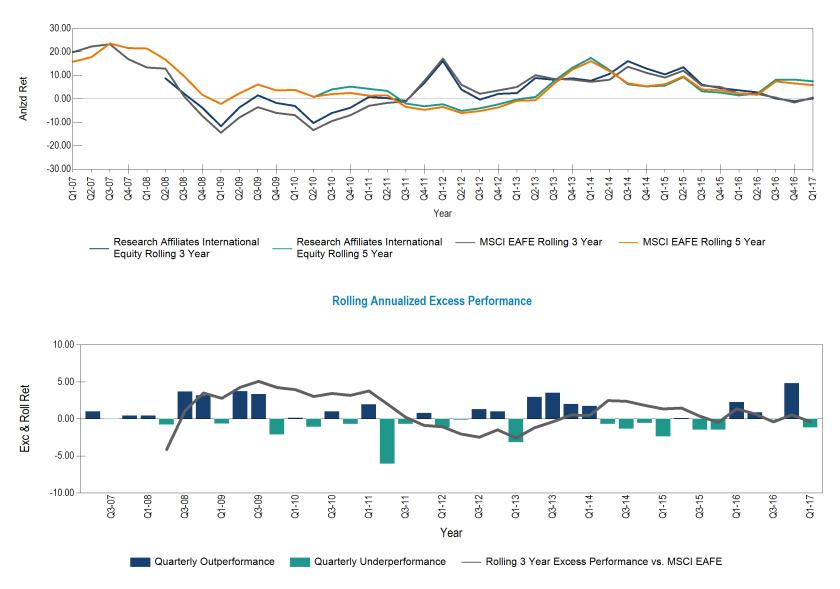
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Artisan International Growth	-0.6%	12.9%	-0.1	Artisan International Growth	5.9%	12.3%	0.5
MSCI EAFE	0.5%	10.8%	0.0	MSCI EAFE	5.8%	11.3%	0.5
eA EAFE All Cap Equity Net Median	1.4%	11.7%	0.1	eA EAFE All Cap Equity Net Median	6.4%	12.4%	0.5

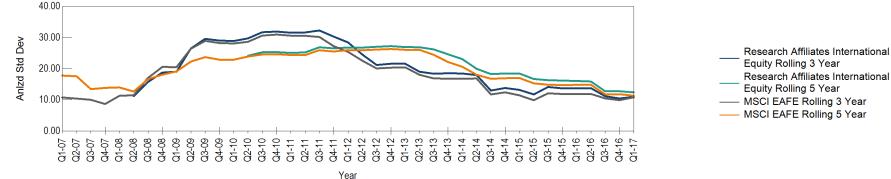


Research Affiliates International Equity vs. eA EAFE All Cap Equity Net Universe

	Return (Ran	k)								
5th Percentile	9.2	16.5	4.5	9.9	5.4	6.2	6.8	0.6	31.6	25.0
25th Percentile	8.1	12.2	2.6	7.9	3.1	2.6	3.4	-2.3	27.7	21.7
Median	7.3	10.7	1.4	6.4	1.7	0.6	1.8	-4.0	25.2	18.7
75th Percentile	6.7	8.3	0.0	5.4	1.1	-1.7	-1.5	-6.0	20.0	16.3
95th Percentile	5.6	3.7	-1.4	4.3	0.0	-5.4	-6.0	-8.5	16.0	11.1
# of Portfolios	69	69	62	53	39	64	58	51	47	49
Research Affiliates International Equity	6.1 (89	9) 16.8 (5	0.1 (74)	7.4 (31)	2.4 (37)	9.3 (1)	-5.9 (95)	-5.8 (75)	28.9 (11) 18.5 (51)
MSCI EAFE	7.2 (54	4) 11.7 (41) 0.5 (70)	5.8 (66)	1.1 (77)	1.0 (46)	-0.8 (71)	-4.9 (62)	22.8 (67) 17.3 (62)



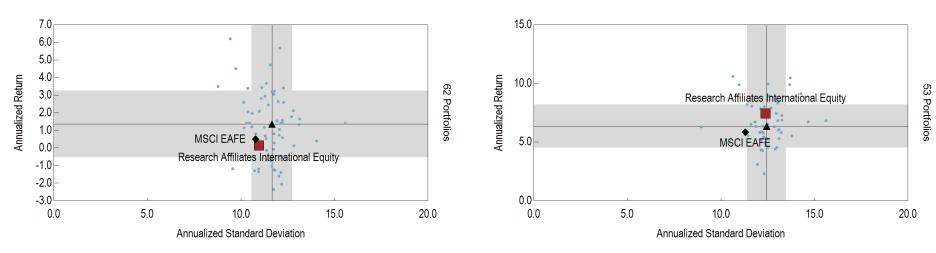




3 Years

5 Years

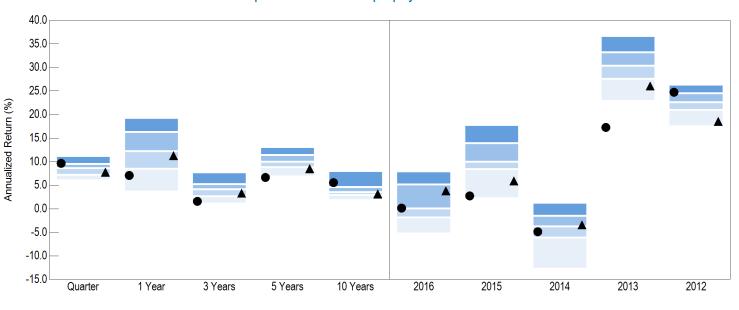
5 Years



3 Years

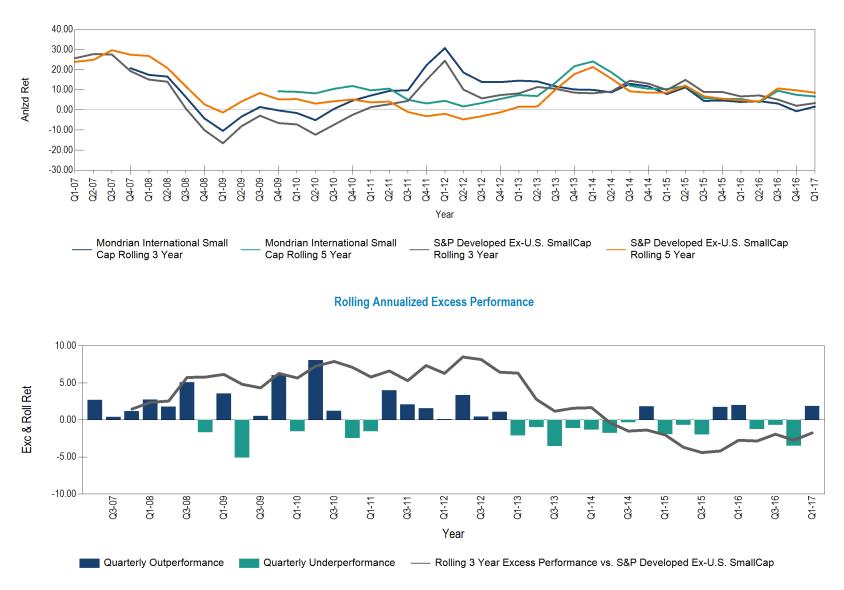
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Research Affiliates International Equity	0.1%	11.0%	0.0	Research Affiliates International Equity	7.4%	12.4%	0.6
MSCI EAFE	0.5%	10.8%	0.0	MSCI EAFE	5.8%	11.3%	0.5
eA EAFE All Cap Equity Net Median	1.4%	11.7%	0.1	eA EAFE All Cap Equity Net Median	6.4%	12.4%	0.5





Mondrian International Small Cap vs. eA EAFE Small Cap Equity Net Universe

	Return (R	ank)								
5th Percentile	11.1	19.2	7.7	13.1	8.0	7.9	17.8	1.2	36.7	26.3
25th Percentile	9.5	16.3	5.3	11.4	4.6	5.2	14.0	-1.5	33.3	24.6
Median	8.6	12.3	4.2	10.0	3.6	0.1	10.1	-3.7	30.4	22.6
75th Percentile	7.2	8.6	2.7	8.8	2.9	-1.8	8.5	-6.1	27.6	21.1
95th Percentile	6.1	3.7	1.1	6.9	1.9	-5.2	2.3	-12.7	22.9	17.6
# of Portfolios	49	49	42	33	19	41	31	32	30	26
 Mondrian International Small Cap 	9.6	(21) 7.1 (85) 1.6	(91) 6.6	(99) 5.5	(16) 0.1	(50) 2.7	(94) -4.9	(67) 17.3	(99) 24.7 (22)
S&P Developed Ex-U.S. SmallCap	7.8	(73) 11.3 (58) 3.3	(61) 8.5	(83) 3.1	(70) 3.8	(29) 5.9	(84) -3.4	(48) 26.1	(84) 18.6 (93)

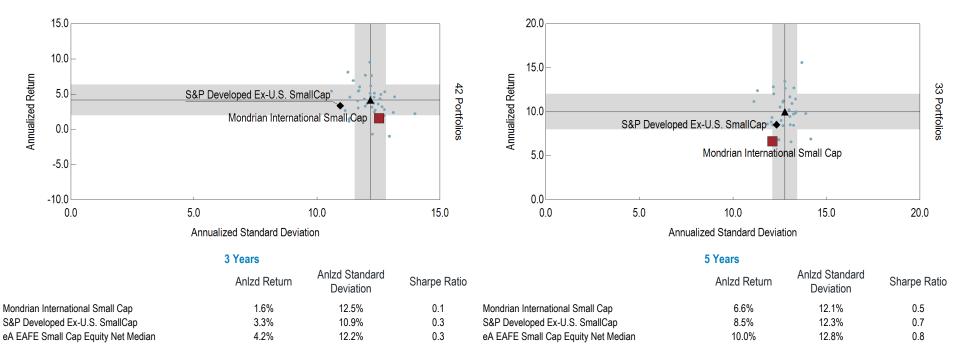


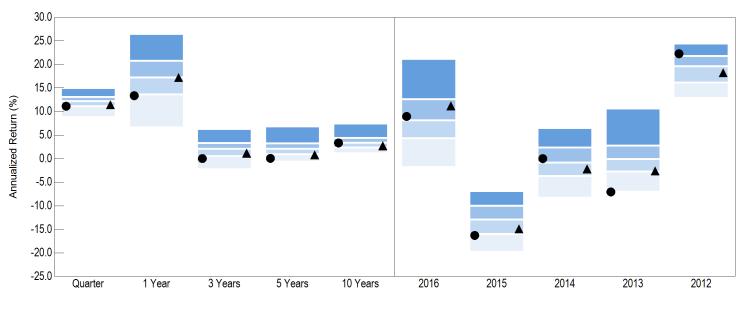




3 Years

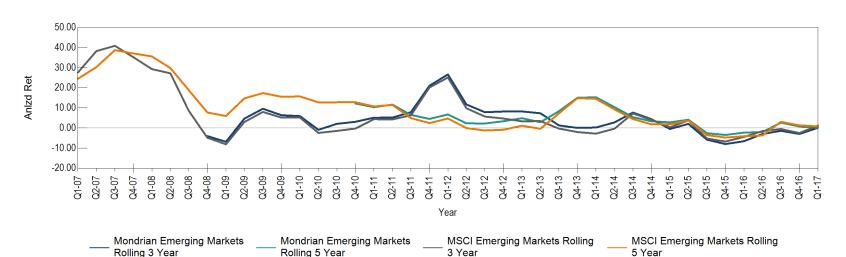




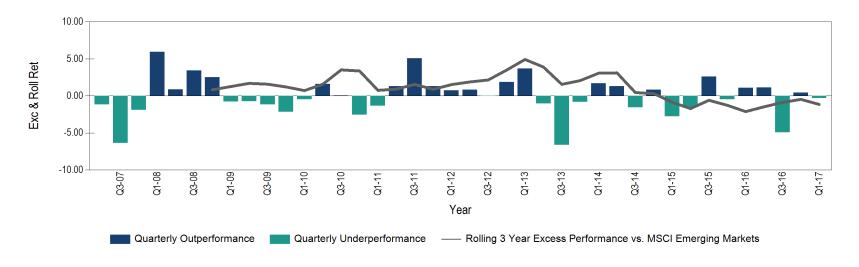


Mondrian Emerging Markets vs. eA Emg Mkts Equity Net Universe

	Return (Rank									
5th Percentile	15.0	26.4	6.2	6.8	7.4	21.1	-6.9	6.5	10.6	24.4
25th Percentile	13.1	20.8	3.3	3.3	4.5	12.7	-10.0	2.4	2.8	21.8
Median	12.2	17.2	2.1	2.1	3.4	8.2	-12.9	-0.8	-0.1	19.6
75th Percentile	11.1	13.7	0.6	1.0	2.4	4.4	-15.9	-3.6	-2.7	16.2
95th Percentile	8.8	6.7	-2.3	-0.6	1.2	-1.7	-19.7	-8.3	-6.9	12.9
# of Portfolios	187	187	166	130	54	181	143	126	105	75
 Mondrian Emerging Markets MSCI Emerging Markets 	11.1 (75) 11.4 (68)	13.4 (77) 17.2 (51)	0.0 (83) 1.2 (65)	0.1 (90) 0.8 (80)	3.3 (51) 2.7 (67)	9.0 (44) 11.2 (34)	-16.3 (80) -14.9 (68)	0.0 (42) -2.2 (62)	-7.1 (96) -2.6 (74)	22.3 (22) 18.2 (66)



Rolling Annualized Excess Performance

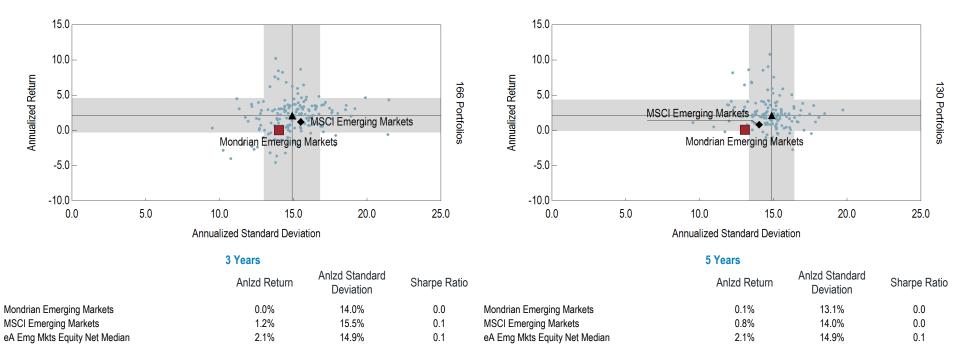






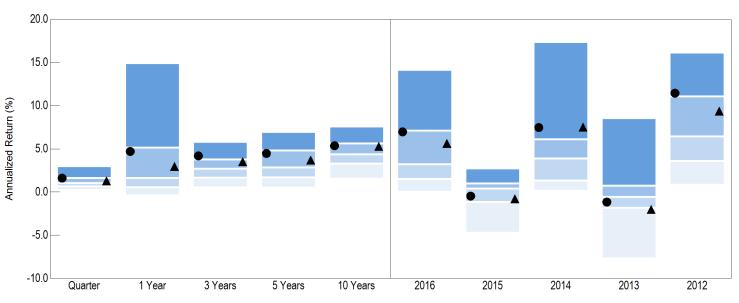
3 Years





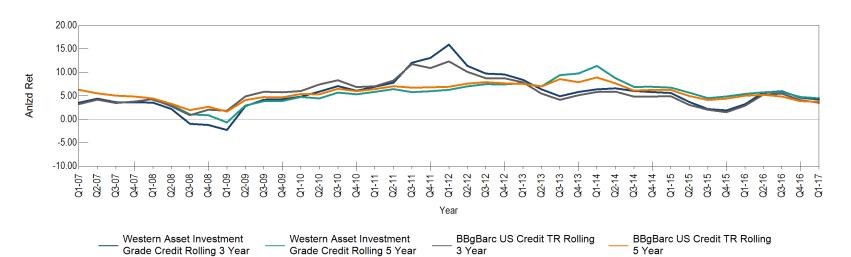


Fixed Income Managers

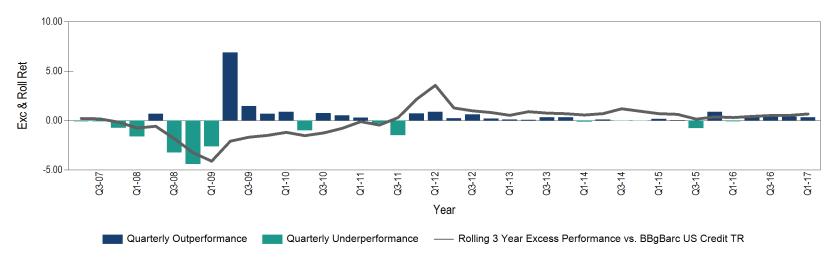


Western Asset Investment Grade Credit vs. eA All US Fixed Inc Net Universe

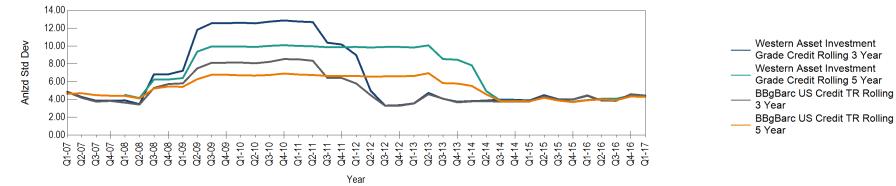
	Return (F	Rank)																	
5th Percentile	3.0	1	1.9	5.8		6.9		7.6		14.1		2.7		17.4		8.5		16.1	
25th Percentile	1.6		5.2	3.8		4.8		5.6		7.1		1.0		6.1		0.8		11.1	
Median	1.1		1.7	2.7		2.9		4.4		3.3		0.4		3.9		-0.5		6.5	
75th Percentile	0.7).6	1.7		1.7		3.3		1.6		-1.1		1.4		-1.8		3.6	
95th Percentile	0.3	-).4	0.6		0.5		1.6		0.0		-4.7		0.2		-7.6		0.9	
# of Portfolios	1,034	1,0	25	963		883		620		1,033		827		758		662		555	
Western Asset Investment Grade Credit	1.6	(27)	4.7 (28)	4.2	(20)	4.5	(29)	5.4	(28)	7.0	(26)	-0.5	(70)	7.5	(15)	-1.2	(63)	11.4	(24)
BBgBarc US Credit TR	1.3	(40)	3.0 (37)	3.5	(31)	3.7	(39)	5.3	(30)	5.6	(33)	-0.8	(74)	7.5	(15)	-2.0	(80)	9.4	(33)





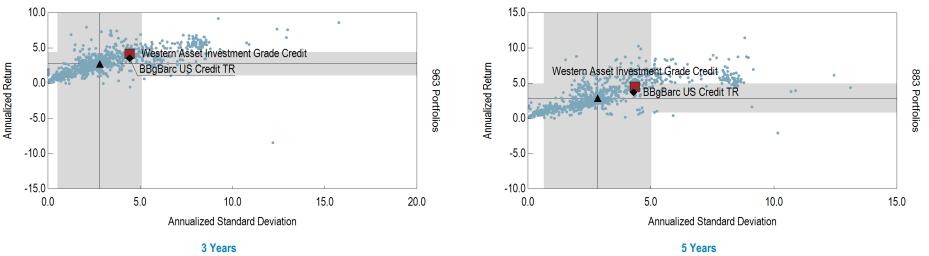






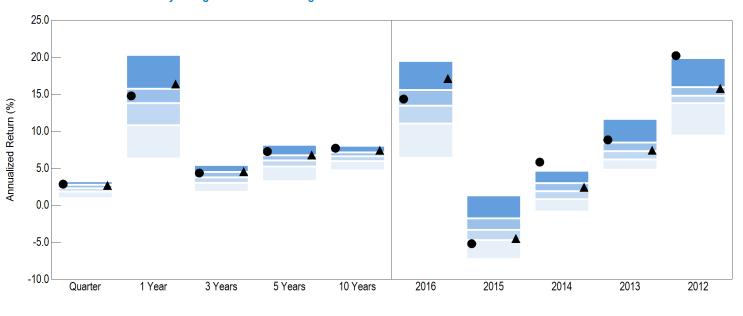
3 Years

5 Years



	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Western Asset Investment Grade Credit	4.2%	4.4%	0.9	Western Asset Investment Grade Credit	4.5%	4.3%	1.0
BBgBarc US Credit TR	3.5%	4.4%	0.8	BBgBarc US Credit TR	3.7%	4.3%	0.8
eA All US Fixed Inc Net Median	2.7%	2.8%	0.9	eA All US Fixed Inc Net Median	2.9%	2.8%	1.0

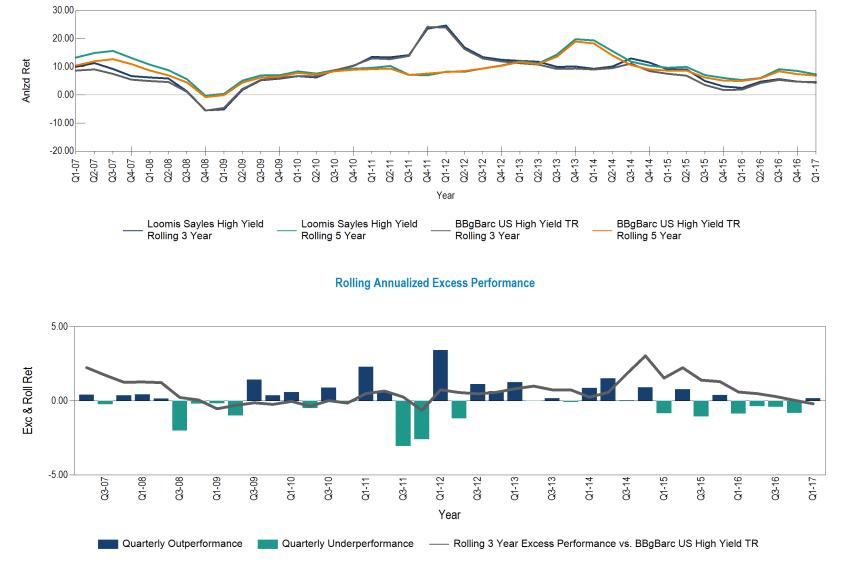
Loomis Sayles High Yield Manager Performance Comparisons (Net of Fees)



Loomis Sayles High Yield vs. eA US High Yield Fixed Inc Net Universe

	Return (Rank	.)								
5th Percentile	3.3	20.3	5.5	8.2	8.0	19.5	1.4	4.7	11.7	19.9
25th Percentile	2.8	15.8	4.5	6.8	7.2	15.6	-1.7	3.0	8.5	16.0
Median	2.3	13.8	3.8	6.1	6.7	13.5	-3.3	1.9	7.3	14.8
75th Percentile	1.9	10.8	3.1	5.3	6.0	11.1	-4.7	0.9	6.2	13.8
95th Percentile	1.0	6.4	1.9	3.3	4.8	6.4	-7.2	-0.8	4.9	9.4
# of Portfolios	119	117	103	95	62	114	88	77	67	65
Loomis Sayles High Yield	2.9 (23	14.8 (38)	4.4 (29)	7.3 (13)	7.7 (12)	14.4 (42)	-5.2 (79)	5.8 (1)	8.9 (20)) 20.2 (5)
BBgBarc US High Yield TR	2.7 (32)	16.4 (21)	4.6 (25)	6.8 (24)	7.5 (17)	17.1 (12)	-4.5 (73)	2.5 (40)	7.4 (47) 15.8 (29)

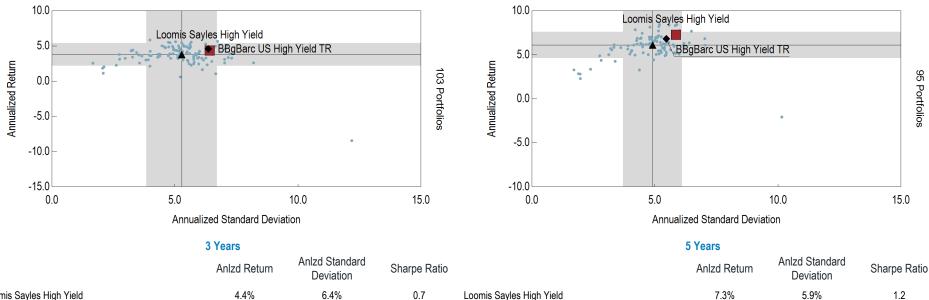








3 Years



BBgBarc US High Yield TR

eA US High Yield Fixed Inc Net Median

 Loomis Sayles High Yield
 4.4%
 6.4%
 0.7

 BBgBarc US High Yield TR
 4.6%
 6.4%
 0.7

 eA US High Yield Fixed Inc Net Median
 3.8%
 5.3%
 0.7

Returns prior to inception date are composite returns.



5.5%

4.9%

1.2

1.3

6.8%

6.1%

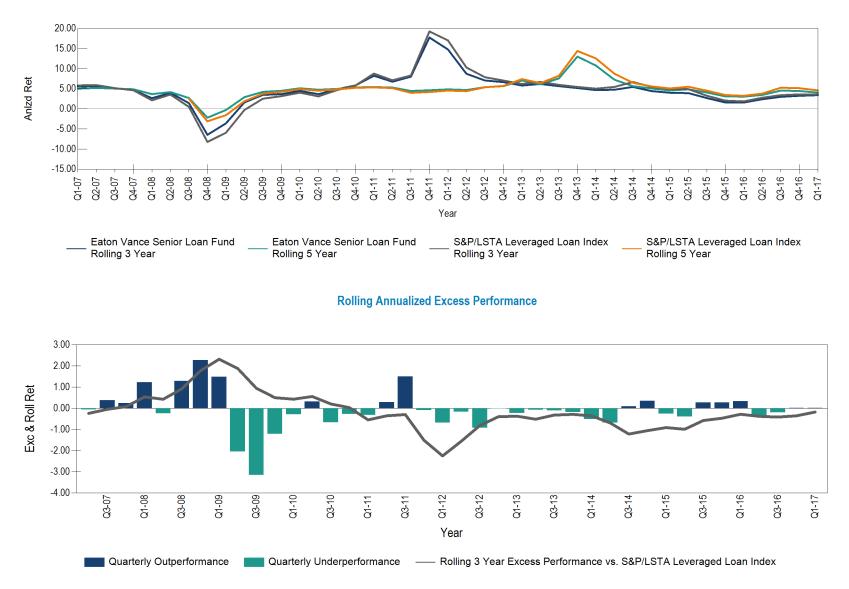
5 Years



Eaton Vance Senior Loan Fund vs. eA Float-Rate Bank Loan Net Universe

	Return (Rank))								
5th Percentile	1.8	13.7	5.1	5.8	4.9	13.3	2.0	2.6	7.8	13.0
25th Percentile	1.1	10.3	4.0	4.8	4.5	10.1	0.9	1.7	6.0	10.3
Median	0.9	8.0	3.3	4.4	4.2	8.8	0.2	1.4	5.6	9.8
75th Percentile	0.8	7.3	3.0	4.0	3.8	8.0	-0.6	0.9	4.6	7.8
95th Percentile	0.7	6.3	1.8	3.2	3.3	6.3	-3.0	0.6	3.4	6.7
# of Portfolios	45	45	43	35	15	45	30	26	22	17
 Eaton Vance Senior Loan Fund 	1.2 (23)	9.1 (33)	3.4 (49)	4.0 (77)	4.4 (28)	9.9 (33)	-0.8 (85)	0.8 (78)	4.7 (74)	7.8 (77)
S&P/LSTA Leveraged Loan Index	1.1 (23)	9.7 (27)	3.6 (45)	4.6 (38)	4.6 (22)	10.2 (25)	-0.7 (81)	1.6 (31)	5.3 (58)	9.7 (51)

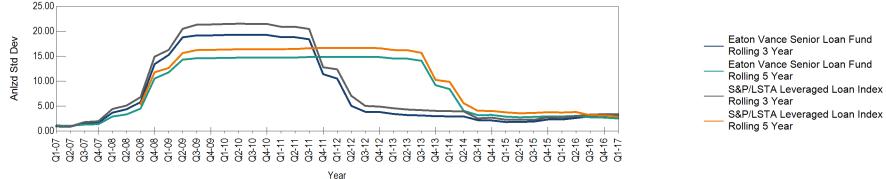
Returns prior to inception date are composite returns.



Rolling Annualized Return (%)

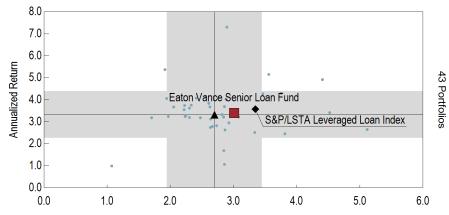
Returns prior to inception date are composite returns.





Rolling Annualized Standard Deviation

3 Years



Annualized Standard Deviation

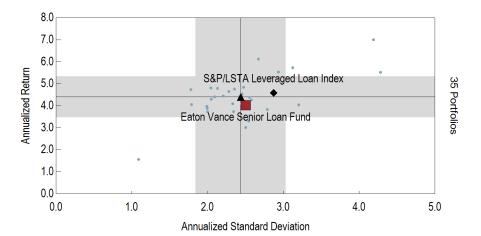
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Eaton Vance Senior Loan Fund	3.4%	3.0%	1.1	Eaton Vance Senior Loan Fund	4.0%	2.5%	1.6
S&P/LSTA Leveraged Loan Index	3.6%	3.3%	1.0	S&P/LSTA Leveraged Loan Index	4.6%	2.9%	1.6
eA Float-Rate Bank Loan Net Median	3.3%	2.7%	1.2	eA Float-Rate Bank Loan Net Median	4.4%	2.4%	1.8

Returns prior to inception date are composite returns.

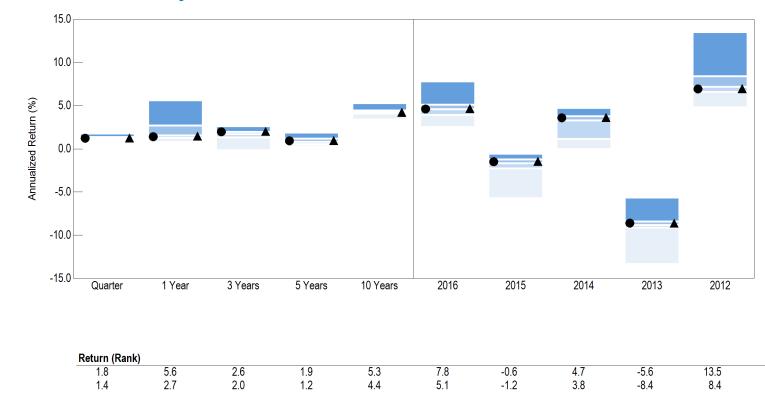


5 Years



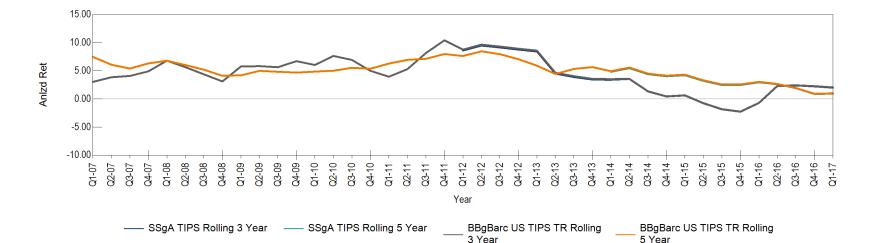
5 Years

SSgA TIPS Manager Performance Comparisons (Net of Fees)



SSgA TIPS vs. eA TIPS / Infl Indexed Fixed Inc Net Universe

	Return (Rank)									
5th Percentile	1.8	5.6	2.6	1.9	5.3	7.8	-0.6	4.7	-5.6	13.5
25th Percentile	1.4	2.7	2.0	1.2	4.4	5.1	-1.2	3.8	-8.4	8.4
Median	1.2	1.6	1.7	0.8	4.3	4.6	-1.6	3.3	-8.8	7.2
75th Percentile	1.1	1.3	1.4	0.6	4.1	3.9	-2.2	1.2	-9.1	6.6
95th Percentile	0.8	0.8	-0.1	0.3	3.4	2.5	-5.7	0.0	-13.3	4.8
# of Portfolios	21	21	19	17	10	22	22	24	19	17
SSgA TIPS	1.2 (50)	1.4 (66)	2.0 (26)	0.9 (40)	()	4.6 (50)	-1.5 (36)	3.6 (38)	-8.6 (44)	6.9 (64)
BBgBarc US TIPS TR	1.3 (49)	1.5 (56)	2.0 (22)	1.0 (36)	4.2 (63)	4.7 (49)	-1.4 (33)	3.6 (37)	-8.6 (44)	7.0 (62)



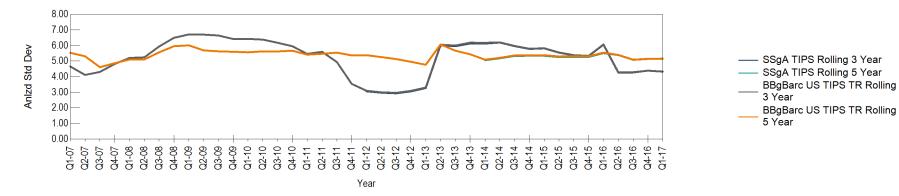
Rolling Annualized Return (%)

Rolling Annualized Excess Performance



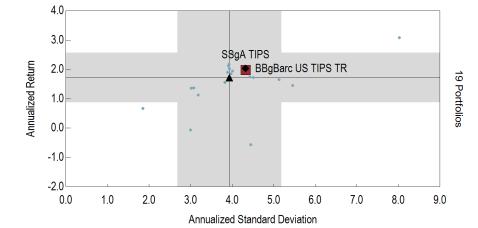


SSgA TIPS Risk vs. Return 3 & 5 Year (Net of Fees)



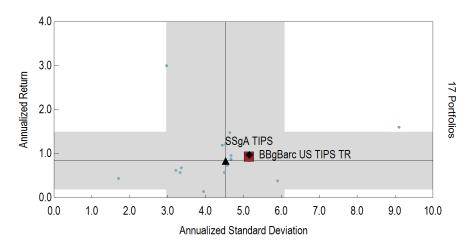


3 Years



3 Years

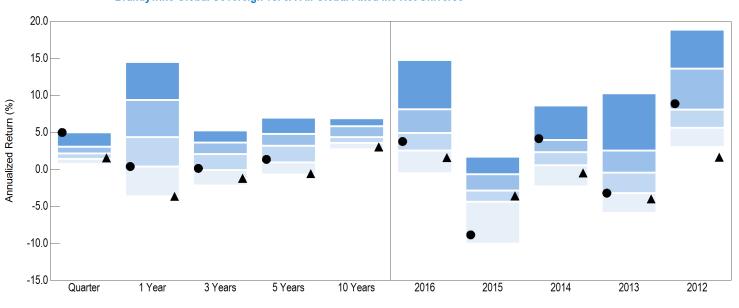
5 Years



5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
SSgA TIPS	2.0%	4.3%	0.4	SSgA TIPS	0.9%	5.1%	0.2
BBgBarc US TIPS TR	2.0%	4.3%	0.4	BBgBarc US TIPS TR	1.0%	5.2%	0.2
eA TIPS / Infl Indexed Fixed Inc Net Median	1.7%	3.9%	0.4	eA TIPS / Infl Indexed Fixed Inc Net Median	0.8%	4.5%	0.2

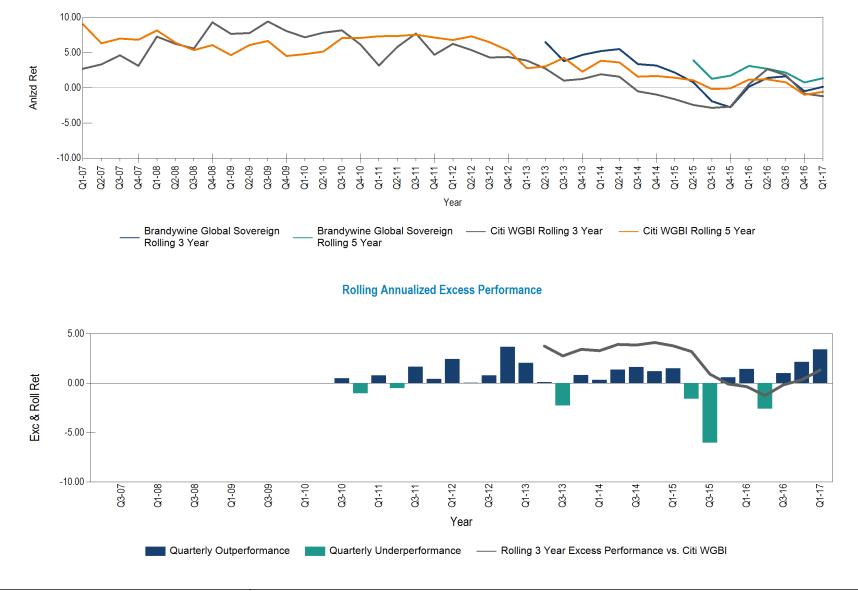




Brandywine Global Sovereign vs. eA All Global Fixed Inc Net Universe

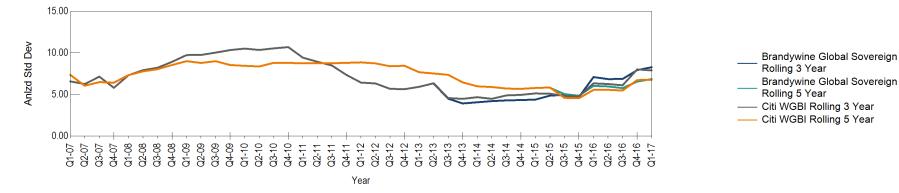
	Return (Rank))								
5th Percentile	5.0	14.5	5.2	7.0	6.9	14.7	1.7	8.6	10.2	18.8
25th Percentile	3.1	9.4	3.7	4.8	5.8	8.1	-0.6	4.0	2.5	13.6
Median	2.2	4.4	2.1	3.2	4.4	5.0	-2.9	2.3	-0.4	8. <mark>1</mark>
75th Percentile	1.5	0.4	-0.1	1.0	3.6	2.6	-4.4	0.6	-3.2	5.6
95th Percentile	0.8	-3.6	-2.1	-0.7	2.7	-0.5	-10.0	-2.3	-5.9	3.0
# of Portfolios	217	211	189	163	91	209	175	136	102	81
 Brandywine Global Sovereign 	5.0 (5)	0.4 (76	0.1 (72)	1.4 (69)	()	3.8 (63)	-8.8 (93)	4.2 (24)	-3.2 (76)	8.9 (47)
Citi WGBI	1.6 (73)	-3.7 (96	-1.2 (92)	-0.6 (95)	3.0 (92)	1.6 (81)	-3.6 (63)	-0.5 (85)	-4.0 (86)	1.6 (99)





163 Portfolios

15.0



15.0

10.0

5.0

0.0

-5.0

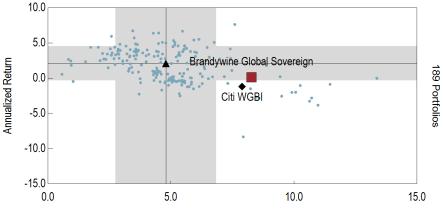
-10.0

0.0

Annualized Return

Rolling Annualized Standard Deviation





Annualized Standard Deviation

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		AnIzd Return	Anlzd Standard Deviation	Sharpe Ratio
Brandywine Global Sovereign	0.1%	8.3%	0.0	Brandywine Global Sovereign	1.4%	6.8%	0.2
Citi WGBI	-1.2%	7.9%	-0.2	Citi WGBI	-0.6%	6.8%	-0.1
eA All Global Fixed Inc Net Median	2.1%	4.8%	0.4	eA All Global Fixed Inc Net Median	3.2%	4.7%	0.7

Returns prior to inception date are composite returns.



10.0

۰.

4

5 Years

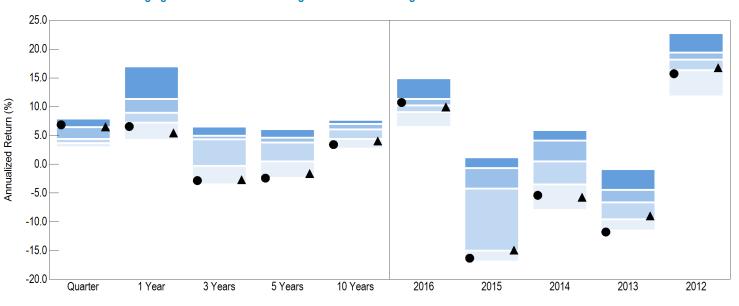
Citi WGBI

Annualized Standard Deviation

5 Years

Brandywine Global Sovereign

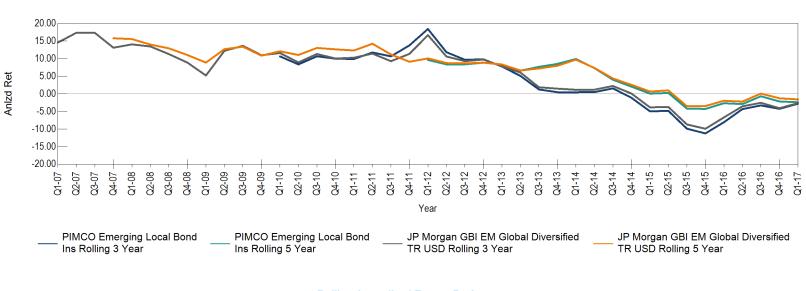
5.0



PIMCO Emerging Local Bond Ins vs. eA Emg Mkt Fixed Inc Unhedged Net Universe

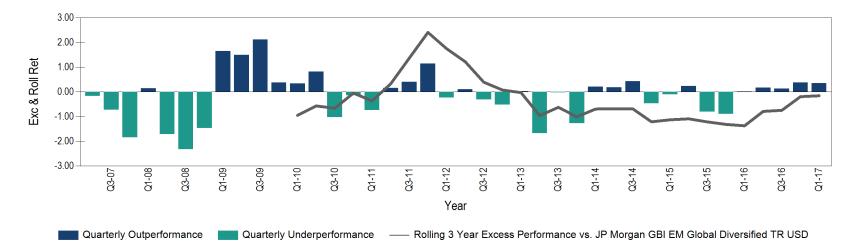
	Re	turn (Ra	nk)																		
5th Percentile		7.9	17.0)	6.5		6.1		7.7		14.9		1.2		5.9		-0.9		22.7		
25th Percentile		6.5	11.4	Ļ	5.0		4.6		7.0		11.4		-0.6		4.2		-4.4		19.4		
Median		4.4	9.0)	4.4		3.8		6.1		10.2		-4.2		0.6		-6.6		18.2		
75th Percentile		3.7	7.2	2	-0.3		0.5		4.4		9.1		-15.0		-3.5		-9.5		16.4		
95th Percentile		3.0	4.2		-3.5		-2.3		2.8		6.5		-16.9		-7.9		-11.5		11.8		
# of Portfolios		63	62	2	56		41		20		58		40		39		36		27		
PIMCO Emerging Local Bond Ins			23) 6.6	· · ·	-2.8	(89)	-2.4	(96)	3.4	(86)	10.7	(46)	-16.3	(89)	-5.4	(83)	-11.8	(96)	15.7	(85)	
JP Morgan GBI EM Global Diversifi	ed TR USD	6.5 (25) 5.5	(89)	-2.7	(87)	-1.6	(80)	4.1	(78)	9.9	(57)	-14.9	(75)	-5.7	(87)	-9.0	(65)	16.8	(67)	

Returns prior to inception date are composite returns.



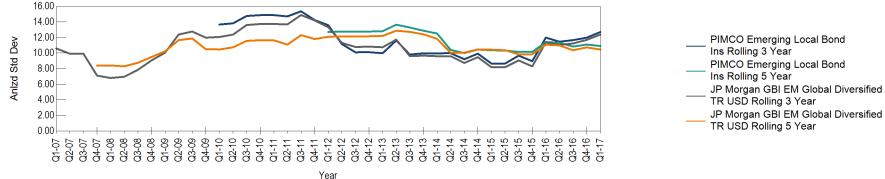
Rolling Annualized Return (%)

Rolling Annualized Excess Performance



Returns prior to inception date are composite returns.

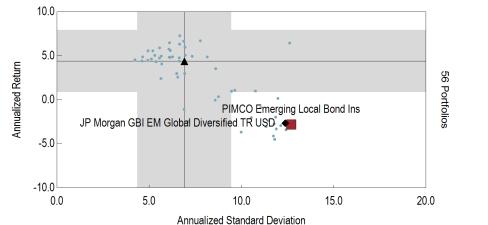
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Rolling Annualized Standard Deviation



5 Years



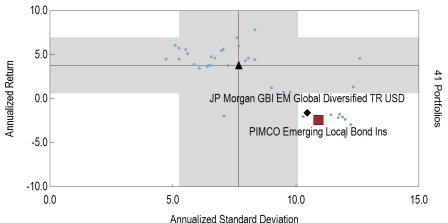
3 Years

	0 10013				0 TCurs		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
PIMCO Emerging Local Bond Ins	-2.8%	12.7%	-0.2	PIMCO Emerging Local Bond Ins	-2.4%	10.9%	-0.2
JP Morgan GBI EM Global Diversified TR USD	-2.7%	12.4%	-0.2	JP Morgan GBI EM Global Diversified TR USD	-1.6%	10.5%	-0.2
eA Emg Mkt Fixed Inc Hedged Net Median	1.9%	8.1%	0.2	eA Emg Mkt Fixed Inc Unhedged Net Median	3.8%	7.7%	0.5

Returns prior to inception date are composite returns.







5 Years

Performance Return Calculations

Performance is calculated using Modified Dietz and for time periods with large cash flow (generally greater than 10% of portfolio value), Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are geometrically linked and annualized for periods longer than one year.

Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

Illiquid Alternatives

Closed end funds including but not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit may lag performance and market value data due to delayed reporting. Verus will show market values for closed end funds as of the most recent reported performance adjusted for capital calls and distributions. Closed end fund managers report performance using an internal rate of return (IRR), which differs from the TWRR calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Manager Line Up Manager Fund Incepted Data Source Fund Incepted **Data Source** Manager Benefits Payment Cash N/A Northern Trust **RAFI International Equity** 04/30/2011 Northern Trust Custodied N/A Northern Trust Oaktree Opportunities Fund IX 2012 Oaktree Artisan International Growth Internal N/A FCERA 04/01/2013 Northern Trust Transition N/A Northern Trust PIMCO Emerging Local Bond Northern Trust 07/31/2013 Aronson Johnson Ortiz 12/04/1995 Northern Trust Barclays U.S. Aggregate Bond 04/30/2014 Northern Trust Warburg Pincus 1998 Warburg Pincus WAMCO Credit Index 10/01/2014 Northern Trust Northern Trust TCW Shop III 1998 TCW Loomis Sayles High Yield 10/01/2014 2001 Warburg Pincus 10/01/2014 Warburg Pincus VIII Eaton Vance Senior Loan Eaton Vance Blackstone IV 2002 Blackstone Colony Distressed Credit III 2014 Colony Lonestar IV 2002 Lonestar Brandywine Global Sovereign 01/31/2015 Northern Trust TCW Shop IV 2002 TCW IFM Global Infrastructure 05/13/2015 IFM 04/01/2004 05/27/2015 SSgA S&P 500 Flagship Fund State Street Invesco Commodities Invesco 2015 GSO Kalmar Investments 11/18/2004 Northern Trust **GSO European Senior Debt** Mondrian Emerging Markets 11/17/2005 Mondrian CVI Credit Value Fund III 2015 CarVal Invesco Core Real Estate 10/01/2007 Invesco Warburg Pincus XII 2015 Warburg Pincus New Mountain III 2007 New Mountain Gerding Edlen Green Cities III 2016 Gerding Edlen Hamilton Lane VI 2007 Hamilton Lane Hamilton Lane PE Fund IX 2016 Hamilton Lane Warburg Pincus X 2007 Warburg Pincus Kennedy Wilson Real Estate V 2016 Kennedy Wilson Landmark Equity Partners XIV 2008 Landmark **TSSP** Adjacent Opportunities 2016 TSSP SSgA TIPS 02/27/2009 State Street OHA Strategic Credit Fund II, L.P. 2016 OHA Grosvenor 10/31/2009 Grosvenor Horslev Bridge XI GBO 2016 Horsley Bridge Mondrian Int'l Small Cap 11/02/2009 Mondrian GCM Better Futures Fund 09/28/2016 Grosvenor Colony Distressed Credit I 2009 Colony Parametric Overlay 12/27/2016 Northern Trust TA Associates Realty 9 2009 TA Associates EQT European S. Situations Debt 2017 EQT 10/08/2010 Northern Trust Eaton Vance Ins. Sr Loan Plus Systematic Small/Mid Value 01/25/2017 Eaton Vance lvv 12/20/2010 Northern Trust KKR Mezzanine Partners I 2010 KKR Angelo Gordon Cap. Recov. VII 2010 Angel Gordon



Policy & Custom Index Composition

Floating Policy Index (1/1/2017-1/31/2017)	20.3% Russell 3000 Index, 37.4% BBgBarc Global Aggregate Index, 19.0% MSCI ACWI ex U.S., 2.7% Russell 3000 Index + 250 bps, 2% BBgBarc Aggregate Index + 250 bps, 7.6% HFRI Fund of Funds Composite, 8.0% NCREIF ODCE, 3.0% Bloomberg Commodity Index.
(2/1/2017-2/28/2017)	20.5% Russell 3000 Index, 37.5% BBgBarc Global Aggregate Index, 19.0% MSCI ACWI ex U.S., 2.6% Russell 3000 Index + 250 bps, 1.9% BBgBarc Aggregate Index + 250 bps, 7.5% HFRI Fund of Funds Composite, 8.0% NCREIF ODCE, 3.0% Bloomberg Commodity Index.
(3/1/2017-3/31/2017)	20.6% Russell 3000 Index, 37.5% BBgBarc Global Aggregate Index, 19.0% MSCI ACWI ex U.S., 2.5% Russell 3000 Index + 250 bps, 1.9% BBgBarc Aggregate Index + 250 bps, 7.5% HFRI Fund of Funds Composite, 8.0% NCREIF ODCE, 3.0% Bloomberg Commodity Index.
BBgBarc Global Aggregate*	Prior to 3/31/2014 BBgBarc U.S. Aggregate Index and as of 4/1/2014 BBgBarc Global Aggregate Index.

Other Disclosures

A non-cash contribution was made matching the investment manager fee for Invesco Real Estate and non-cash contributions were made estimating the investment manager fee for Invesco Commodities.

Fresno Country Employees' Retirement Association fiscal year end is June 30.



Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - Risk-free Rate)].

Benchmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager. Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book-to-Market: The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios. Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price-to-Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

R-Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio Standard Deviation.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

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Verus receives universe data from InvestorForce, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.

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