

Hoffman Estates Fire Pension Fund

Quarterly Performance Report

December 31, 2019

Hoffman Estates Fire Pension Fund

Asset Allocation Compliance

As of December 31, 2019

	Target Allocation (%)	Asset Allocation (%)	Differences (%)	Asset Allocation (\$)	Target Rebalance (\$)
Cash & Cash Equivalents	2.00	1.49	-0.51	1,394,697.41	473,368.68
Fixed Income	33.00	33.84	0.84	31,605,136.98	-782,046.58
Equity	65.00	64.67	-0.33	60,403,469.86	308,677.90
Hoffman Estates Fire Pension	100.00	100.00	0.00	93,403,304.25	-

	Target Allocation (%)	Asset Allocation (%)	Differences (%)	Asset Allocation (\$)	Target Rebalance (\$)
Cash & Cash Equivalents	2.00	1.49	-0.51	1,394,697.41	473,368.68
Real Estate	3.00	1.63	-1.37	1,525,083.42	1,277,015.71
Emerging Market	3.00	1.35	-1.65	1,264,224.16	1,537,874.97
Mid Cap	4.00	3.62	-0.38	3,381,577.32	354,554.85
Small Cap	4.00	0.00	-4.00	-	3,736,132.17
International Equity	16.00	13.43	-2.57	12,544,759.83	2,399,768.85
Fixed Income	33.00	33.84	0.84	31,605,136.98	-782,046.58
Large Cap	35.00	44.63	9.63	41,687,825.13	-8,996,668.64
Hoffman Estates Fire Pension	100.00	100.00	0.00	93,403,304.25	-

Hoffman Estates Fire Pension Fund

Allocation by Asset Class

As of December 31, 2019

	Total Fund		Domestic Equity		International Equity		Domestic Fixed Income		Alternative Investment		Cash Equivalent	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Hoffman Estates Fire Pension	93,403,304	100.00	43,033,351	46.07	14,641,628	15.68	30,864,674	33.04	2,053,585	2.20	2,810,066	3.01
Large Cap	41,687,825	44.63	39,349,266	94.39	832,644	2.00	-	-	528,501	1.27	977,413	2.34
Aristotle -Value Equity 092934	13,419,237	14.37	11,654,124	86.85	832,644	6.20	-	-	403,622	3.01	528,846	3.94
Madison - LCC 092935	7,228,105	7.74	6,721,796	93.00	-	-	-	-	124,879	1.73	381,430	5.28
T.Rowe Health & Sciences Fund (Schwab)	2,059,175	2.20	2,059,116	100.00	-	-	-	-	-	-	59	0.00
T.Rowe New American Growth- 093992	4,636,490	4.96	4,636,490	100.00	-	-	-	-	-	-	-	-
iShares Russell 3000 ETF- 093991	14,344,819	15.36	14,277,741	99.53	-	-	-	-	-	-	67,078	0.47
Mid Cap	3,381,577	3.62	3,381,577	100.00	-	-	-	-	-	-	-	-
Champlain Mid Cap 092700	3,381,577	3.62	3,381,577	100.00	-	-	-	-	-	-	-	-
Real Estate	1,525,083	1.63	-	-	-	-	-	-	1,525,083	100.00	-	-
Cohen & Steers REIT 091685	1,525,083	1.63	-	-	-	-	-	-	1,525,083	100.00	-	-
International Equity	12,544,760	13.43	-	-	12,544,760	100.00	-	-	-	-	-	-
Invesco Intl SMID-093040	4,129,912	4.42	-	-	4,129,912	100.00	-	-	-	-	-	-
Clearbridge Intl Growth- 093041	4,161,116	4.45	-	-	4,161,116	100.00	-	-	-	-	-	-
Oakmark International-093994	2,587,944	2.77	-	-	2,587,944	100.00	-	-	-	-	-	-
Tweedy Browne Global Value- 093042	1,665,788	1.78	-	-	1,665,788	100.00	-	-	-	-	-	-
Emerging Market	1,264,224	1.35	-	-	1,264,224	100.00	-	-	-	-	-	-
Invesco Opp. DM -093993	1,264,224	1.35	-	-	1,264,224	100.00	-	-	-	-	-	-
Fixed Income	31,605,137	33.84	-	-	-	-	30,864,674	97.66	-	-	740,463	2.34
Garcia Hamilton - Gov/Cred- 093043	15,651,642	16.76	-	-	-	-	15,276,243	97.60	-	-	375,399	2.40
Weaver- Intermediate 092404	15,953,495	17.08	-	-	-	-	15,588,431	97.71	-	-	365,064	2.29
Cash & Cash Equivalents	1,394,697	1.49	302,507	21.69	-	-	-	-	-	-	1,092,190	78.31
Cash Management Account 092408	66,569	0.07	-	-	-	-	-	-	-	-	66,569	100.00
Mutual Fund Account 091521	1,025,621	1.10	-	-	-	-	-	-	-	-	1,025,621	100.00
IL Funds	302,507	0.32	302,507	100.00	-	-	-	-	-	-	-	-

Hoffman Estates Fire Pension Fund

As of December 31, 2019

	1 Month	Quarter To Date	Since Inception	Inception Date
Hoffman Estates Fire Pension	1.69	5.78	8.22	08/01/2019
Custom Benchmark	2.09	5.53	6.17	
Difference	-0.40	0.25	2.05	
Madison - LCC 092935	1.51	8.72	8.72	10/01/2019
S&P 500 Total Return	3.02	9.07	9.07	
Difference	-1.51	-0.35	-0.35	
Aristotle -Value Equity 092934	3.29	9.30	9.30	10/01/2019
Russell 1000 VL	2.75	7.41	7.41	
Difference	0.54	1.89	1.89	
T.Rowe New American Growth- 093992	2.91	-	2.91	12/01/2019
Russell 1000 Gr	3.02	-	3.02	
Difference	-0.11	-	-0.11	
iShares Russell 3000 ETF- 093991	2.79	-	2.79	12/01/2019
Russell 3000	2.89	-	2.89	
Difference	-0.10	-	-0.10	
Champlain Mid Cap 092700	0.27	6.51	8.00	09/06/2019
Russell Midcap	2.29	7.06	7.43	
Difference	-2.02	-0.55	0.57	
T.Rowe Health & Sciences Fund (Schwab)	2.86	15.39	12.33	09/01/2019
S&P 500	3.02	9.76	11.00	
Difference	-0.16	5.63	1.33	
Cohen & Steers REIT 091685	0.76	1.15	2.23	09/01/2019
FTSE NAREIT All Equity REITS	0.61	0.13	2.01	
Difference	0.15	1.02	0.22	
Oakmark International-093994	3.64	-	3.64	12/01/2019
S&P 500 Total Return	3.02	-	3.02	
Difference	0.62	-	0.62	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.

Hoffman Estates Fire Pension Fund

As of December 31, 2019

	1 Month	Quarter To Date	Since Inception	Inception Date
Invesco Intl SMID-093040	1.31	-	5.04	11/01/2019
MSCI ACWI x USA SMID Net	4.36	-	5.96	
Difference	-3.05	-	-0.92	
Clearbridge Intl Growth- 093041	3.96	-	5.73	11/01/2019
MSCI EAFE	3.27	-	4.45	
Difference	0.69	-	1.28	
Tweedy Browne Global Value- 093042	1.35	-	2.48	11/01/2019
MSCI EAFE	3.27	-	4.45	
Difference	-1.92	-	-1.97	
Invesco Opp. DM -093993	5.67	-	5.67	12/01/2019
MSCI EM Net	7.46	-	7.46	
Difference	-1.79	-	-1.79	
Garcia Hamilton - Gov/Cred- 093043	-0.41	-	-0.41	12/01/2019
Barclays Govt/Credit Bond	-0.20	-	-0.20	
Difference	-0.21	-	-0.21	
Weaver- Intermediate 092404	0.12	0.39	-0.12	09/01/2019
BC Gov/Cr Intm	0.13	0.37	0.01	
Difference	-0.01	0.02	-0.13	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.

As of December 31, 2019

	Dec-2019	Nov-2019	Oct-2019	Sep-2019
Hoffman Estates Fire Pension				
Beginning Market Value	92,255,422	90,731,634	89,567,865	80,262,509
Net Contributions	-407,945	-453,390	-491,553	8,448,080
Income	1,057,396	166,118	96,996	225,913
Gain/Loss	498,432	1,811,060	1,558,326	631,363
Ending Market Value	93,403,304	92,255,422	90,731,634	89,567,865
Aristotle - Value Equity 092934				
Beginning Market Value	12,991,455	12,497,712	12,286,365	12,301,684
Net Contributions	-	-8,917	-	-
Income	29,025	11,993	7,945	13,477
Gain/Loss	398,757	490,668	203,402	-28,796
Ending Market Value	13,419,237	12,991,455	12,497,712	12,286,365
Madison - LCC 092935				
Beginning Market Value	7,120,694	6,904,994	6,655,024	6,617,789
Net Contributions	-	-	-6,655	-
Income	9,739	4,486	1,350	-
Gain/Loss	97,672	211,214	255,274	37,235
Ending Market Value	7,228,105	7,120,694	6,904,994	6,655,024
T.Rowe New American Growth- 093992				
Beginning Market Value	4,505,380	4,488,808	-	-
Net Contributions	-	-	-	-
Income	308,566	-	-	-
Gain/Loss	-177,457	16,573	-	-
Ending Market Value	4,636,490	4,505,380	-	-
iShares Russell 3000 ETF- 093991				
Beginning Market Value	13,955,054	13,911,120	-	-
Net Contributions	-	-	-	-
Income	67,078	-	-	-
Gain/Loss	322,686	43,934	-	-
Ending Market Value	14,344,819	13,955,054	-	-

As of December 31, 2019

	Dec-2019	Nov-2019	Oct-2019	Sep-2019
Rothschild LCV 091687				
Beginning Market Value	1	6,915	291	8,934,377
Net Contributions	-1	-6,915	-	-9,236,343
Income	-	1	6,624	24,181
Gain/Loss	-	-	-	278,077
Ending Market Value	-	1	6,915	291
Champlain Mid Cap 092700				
Beginning Market Value	3,372,490	3,212,799	3,174,853	3,131,437
Net Contributions	-	-	-	-260
Income	130,261	-	-	-
Gain/Loss	-121,174	159,691	37,946	43,676
Ending Market Value	3,381,577	3,372,490	3,212,799	3,174,853
Mutual Fund Account 091521				
Beginning Market Value	1,024,538	21,385,562	30,053,748	42,230,680
Net Contributions	-	-21,106,450	-9,154,504	-12,814,911
Income	1,083	397	369	76,580
Gain/Loss	-	745,030	485,949	561,399
Ending Market Value	1,025,621	1,024,538	21,385,562	30,053,748
T.Rowe Health & Sciences Fund (Schwab)				
Beginning Market Value	2,001,962	2,849,159	2,720,987	2,794,877
Net Contributions	-	-1,023,654	-	-
Income	121,781	25	-	-
Gain/Loss	-64,568	176,431	128,172	-73,890
Ending Market Value	2,059,175	2,001,962	2,849,159	2,720,987
Cohen & Steers REIT 091685				
Beginning Market Value	1,513,631	1,534,614	1,508,501	1,492,572
Net Contributions	-1	-757	-	-
Income	9,471	32,430	1	9,768
Gain/Loss	1,982	-52,655	26,112	6,161
Ending Market Value	1,525,083	1,513,631	1,534,614	1,508,501

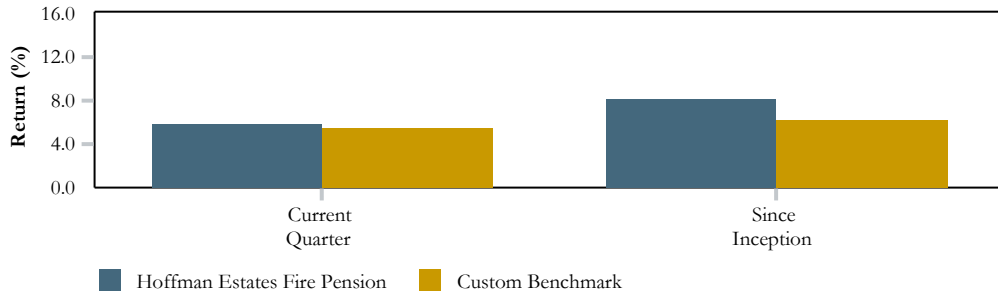
As of December 31, 2019

	Dec-2019	Nov-2019	Oct-2019	Sep-2019
Tweedy Browne Global Value- 093042				
Beginning Market Value	1,643,565	1,625,477	1,589,816	-
Net Contributions	-	-18	-447	-
Income	30,664	-	18	-
Gain/Loss	-8,440	18,106	36,090	-
Ending Market Value	1,665,788	1,643,565	1,625,477	-
Oakmark International-093994				
Beginning Market Value	2,497,122	2,526,632	-	-
Net Contributions	-	-	-	-
Income	50,919	-	-	-
Gain/Loss	39,903	-29,510	-	-
Ending Market Value	2,587,944	2,497,122	-	-
Clearbridge Intl Growth- 093041				
Beginning Market Value	4,002,501	3,935,545	3,795,404	-
Net Contributions	-	-19	-1,070	-
Income	13,065	-	19	-
Gain/Loss	145,550	66,975	141,192	-
Ending Market Value	4,161,116	4,002,501	3,935,545	-
Invesco Intl SMID-093040				
Beginning Market Value	4,076,550	3,931,758	3,771,785	-
Net Contributions	-	-123	-1,051	-
Income	195,800	-	123	-
Gain/Loss	-142,438	144,915	160,901	-
Ending Market Value	4,129,912	4,076,550	3,931,758	-
Invesco Opp. DM -093993				
Beginning Market Value	1,196,359	1,203,663	-	-
Net Contributions	-	-	-	-
Income	30,028	-	-	-
Gain/Loss	37,838	-7,305	-	-
Ending Market Value	1,264,224	1,196,359	-	-

As of December 31, 2019

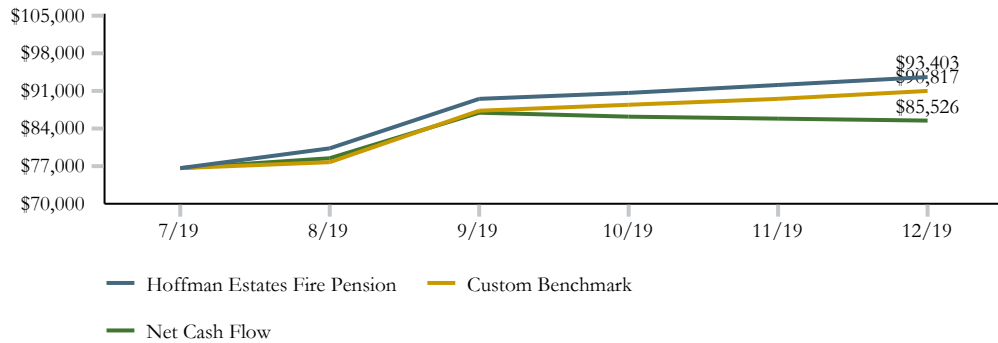
	Dec-2019	Nov-2019	Oct-2019	Sep-2019
Weaver- Intermediate 092404				
Beginning Market Value	15,934,350	31,707,972	31,621,069	31,744,403
Net Contributions	-	-15,773,388	-5,411	37,989
Income	34,295	104,604	78,408	98,819
Gain/Loss	-15,150	-104,838	13,905	-260,142
Ending Market Value	15,953,495	15,934,350	31,707,972	31,621,069
Garcia Hamilton - Gov/Cred- 093043				
Beginning Market Value	15,716,028	15,773,388	-	-
Net Contributions	10	-	-	-
Income	24,803	10,809	-	-
Gain/Loss	-89,199	-68,169	-	-
Ending Market Value	15,651,642	15,716,028	-	-
William Blair-091520				
Beginning Market Value	-	-	5	37,830
Net Contributions	-	-	-5	-37,830
Income	-	-	-	5
Gain/Loss	-	-	-	-
Ending Market Value	-	-	-	5
Cash Management Account 092408				
Beginning Market Value	69,905	63,863	89,782	90,146
Net Contributions	-3,407	5,972	-26,013	-485
Income	71	70	93	122
Gain/Loss	-	-	-	-
Ending Market Value	66,569	69,905	63,863	89,782
IL Funds				
Beginning Market Value	633,837	1,075,265	1,457,239	1,872,002
Net Contributions	-404,547	-442,731	-453,401	-485,367
Income	747	1,303	2,046	2,961
Gain/Loss	72,469	-	69,382	67,643
Ending Market Value	302,507	633,837	1,075,265	1,457,239

Portfolio Performance (%)



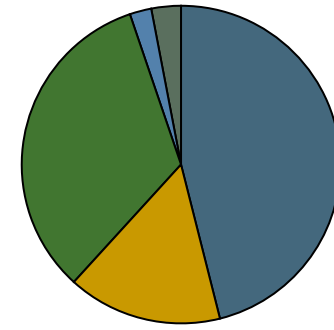
	Current Quarter	Since Inception	Inception Date
Hoffman Estates Fire Pension	5.78	8.22	08/01/2019
Custom Benchmark	5.53	6.17	08/01/2019

	Current Quarter	Since Inception	Inception Date
Hoffman Estates Fire Pension			08/01/2019
Beginning Market Value	89,568	76,473	
Net Contributions	-1,300	9,053	
Fees/Expenses	-53	-63	
Income	1,321	1,603	
Gain/Loss	3,868	6,338	
Ending Market Value	93,403	93,403	



Asset Allocation (\$000)

December 31, 2019 : \$93,403

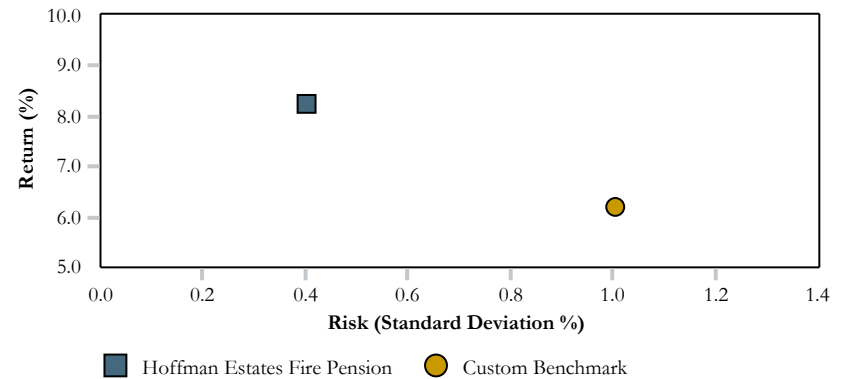


Segments	Market Value (\$000)	Allocation (%)
Domestic Equity	43,033.35	46.07
International Equity	14,641.63	15.68
Domestic Fixed Income	30,864.67	33.04
Alternative Investment	2,053.58	2.20
Cash Equivalent	2,810.07	3.01

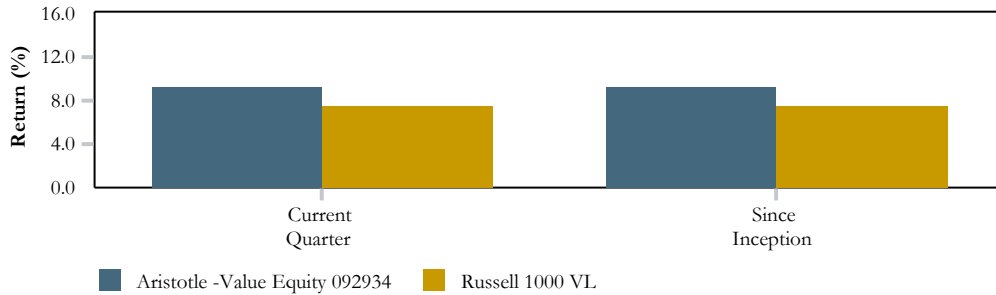
Portfolio Characteristics vs. Custom Benchmark Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Hoffman Estates Fire Pension	0.18	1.37	0.21	3.44	08/01/2019

Risk/Return Analysis Since 08/19

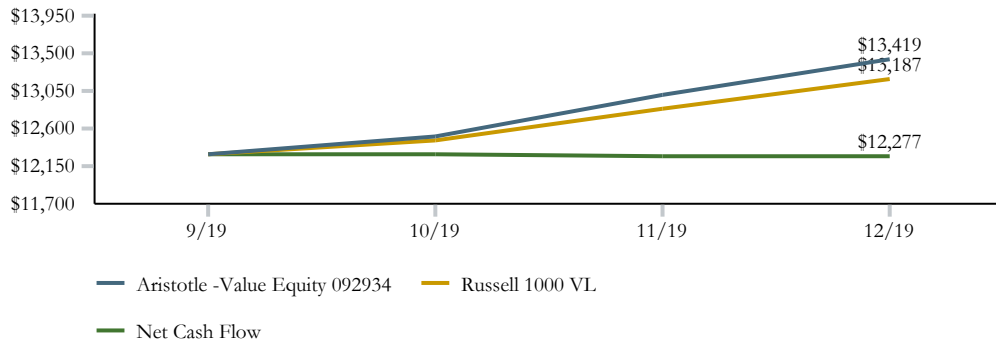


Portfolio Performance (%)



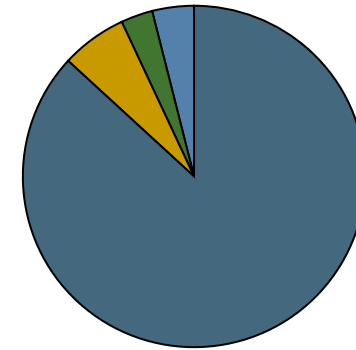
	Current Quarter	Since Inception	Inception Date
Aristotle -Value Equity 092934	9.30	9.30	10/01/2019
Russell 1000 VL	7.41	7.41	10/01/2019

	Current Quarter	Since Inception	Inception Date
Aristotle -Value Equity 092934			10/01/2019
Beginning Market Value	12,286	12,286	
Net Contributions	11	11	
Fees/Expenses	-20	-20	
Income	49	49	
Gain/Loss	1,093	1,093	
Ending Market Value	13,419	13,419	



Asset Allocation (\$000)

December 31, 2019 : \$13,419

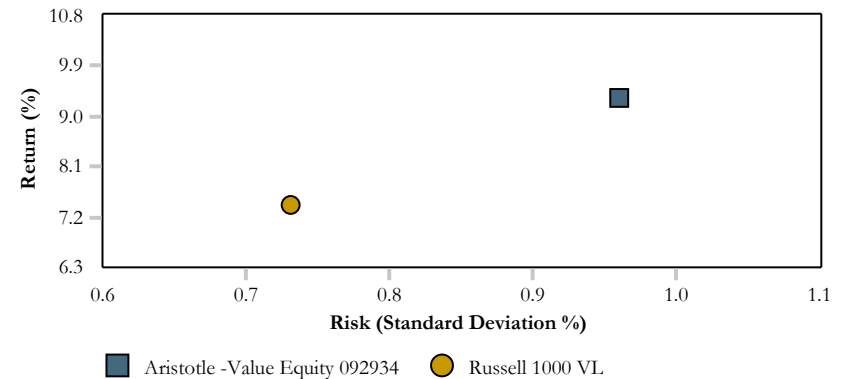


Segments	Market Value (\$000)	Allocation (%)
Domestic Equity	11,654.12	86.85
International Equity	832.64	6.20
Alternative Investment	403.62	3.01
Cash Equivalent	528.85	3.94

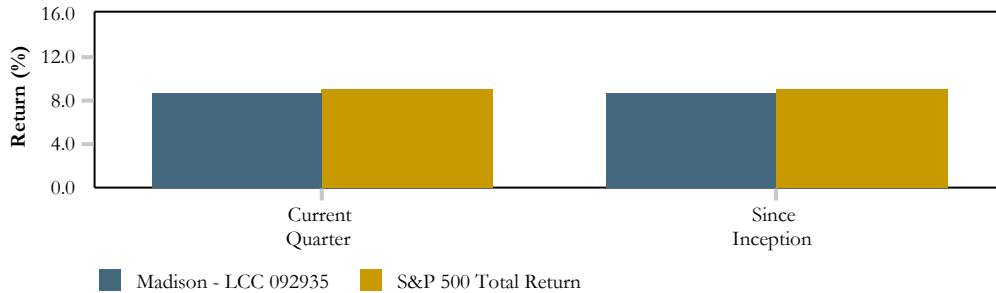
Portfolio Characteristics vs. Russell 1000 VL Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Aristotle -Value Equity 092934	1.30	-0.13	0.98	2.95	10/01/2019

Risk/Return Analysis Since 10/19

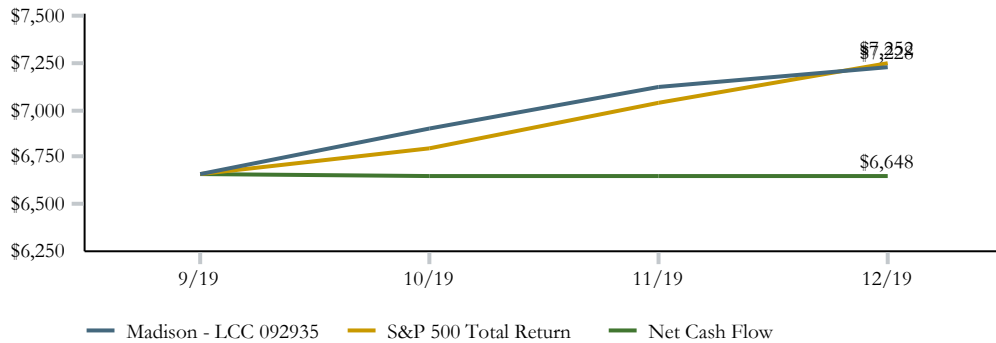


Portfolio Performance (%)



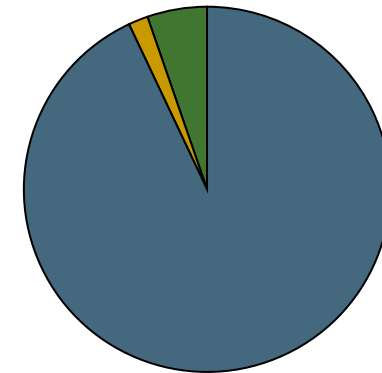
	Current Quarter	Since Inception	Inception Date
Madison - LCC 092935	8.72	8.72	10/01/2019
S&P 500 Total Return	9.07	9.07	10/01/2019

	Current Quarter	Since Inception	Inception Date
Madison - LCC 092935			10/01/2019
Beginning Market Value	6,655	6,655	
Net Contributions	2	2	
Fees/Expenses	-9	-9	
Income	16	16	
Gain/Loss	564	564	
Ending Market Value	7,228	7,228	



Asset Allocation (\$000)

December 31, 2019 : \$7,228

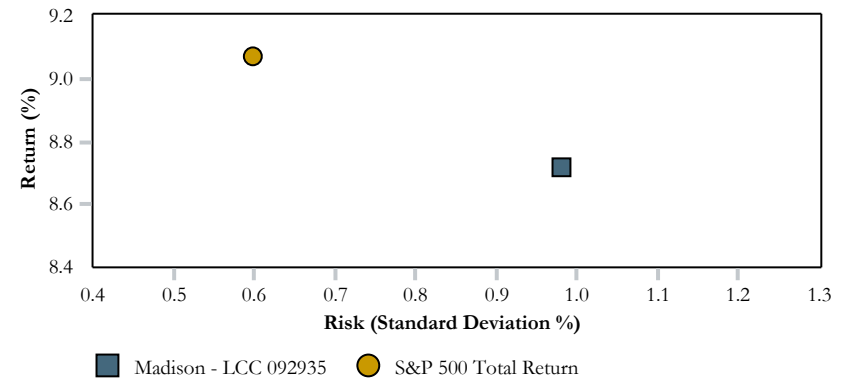


Segments	Market Value (\$000)	Allocation (%)
Domestic Equity	6,721.80	93.00
Alternative Investment	124.88	1.73
Cash Equivalent	381.43	5.28

Portfolio Characteristics vs. S&P 500 Total Return Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Madison - LCC 092935	-0.64	4.72	0.15	2.76	10/01/2019

Risk/Return Analysis Since 10/19

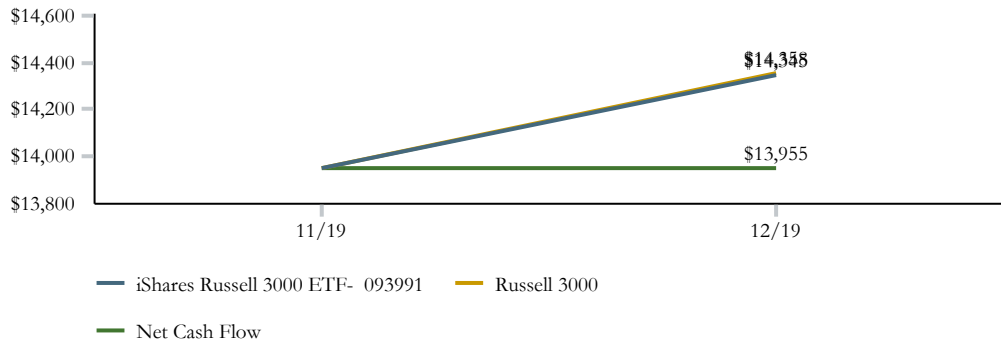


Portfolio Performance (%)



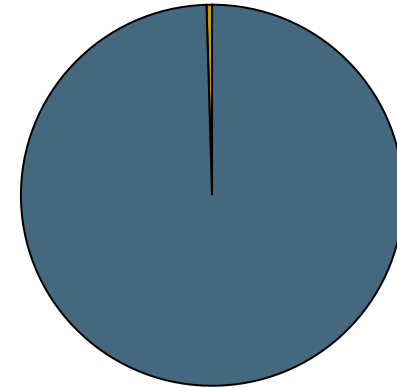
	Since Inception	Inception Date
iShares Russell 3000 ETF- 093991	2.79	12/01/2019
Russell 3000	2.89	12/01/2019

	Since Inception	Inception Date
iShares Russell 3000 ETF- 093991		12/01/2019
Beginning Market Value	13,955	
Net Contributions	2	
Fees/Expenses	-2	
Income	67	
Gain/Loss	323	
Ending Market Value	14,345	



Asset Allocation (\$000)

December 31, 2019 : \$14,345

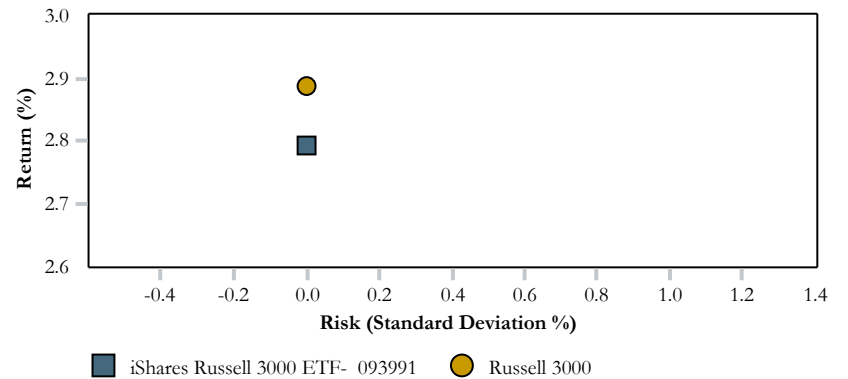


Segments	Market Value (\$000)	Allocation (%)
Domestic Equity	14,277.74	99.53
Cash Equivalent	67.08	0.47

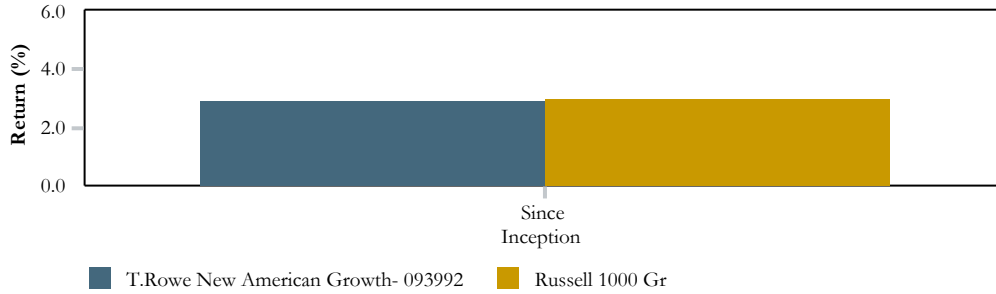
Portfolio Characteristics vs. Russell 3000 Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
iShares Russell 3000 ETF- 093991	N/A	N/A	N/A	N/A	12/01/2019

Risk/Return Analysis Since 12/19

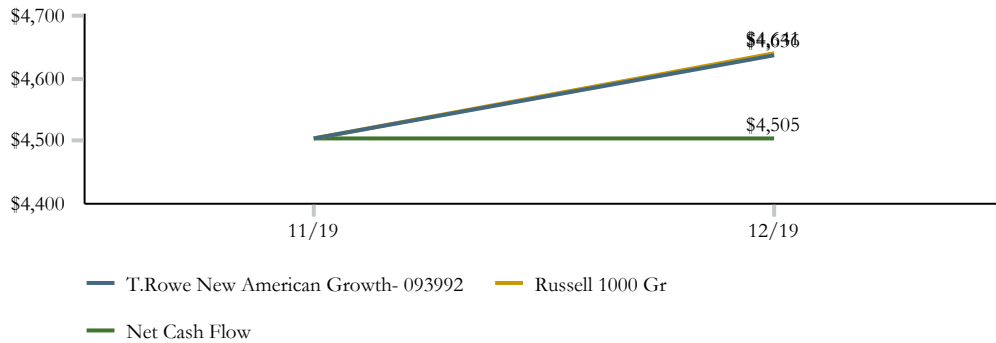


Portfolio Performance (%)



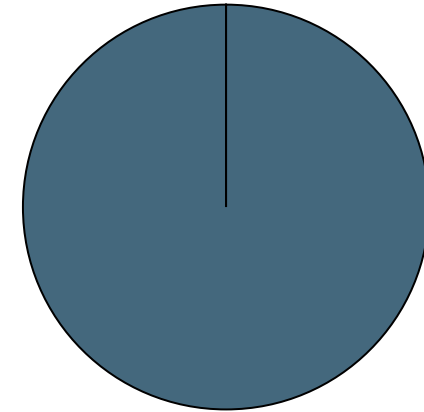
	Since Inception	Inception Date
T.Rowe New American Growth- 093992	2.91	12/01/2019
Russell 1000 Gr	3.02	12/01/2019

	Since Inception	Inception Date
T.Rowe New American Growth- 093992		12/01/2019
Beginning Market Value	4,505	
Net Contributions	-	
Fees/Expenses	-	
Income	309	
Gain/Loss	-177	
Ending Market Value	4,636	



Asset Allocation (\$000)

December 31, 2019 : \$4,636

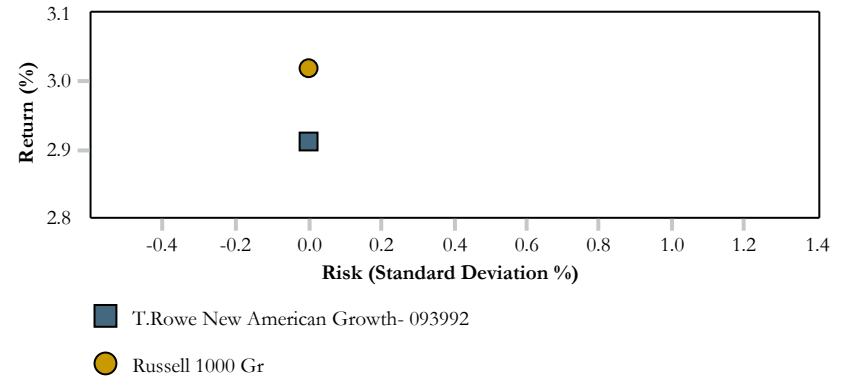


Segments	Market Value (\$000)	Allocation (%)
Domestic Equity	4,636.49	100.00

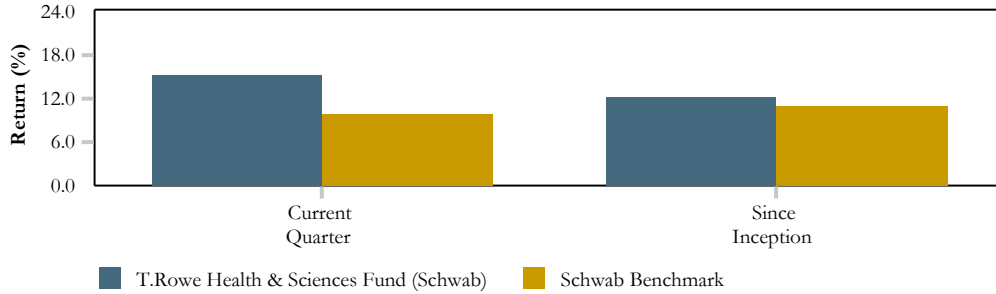
Portfolio Characteristics vs. Russell 1000 Gr Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
T.Rowe New American Growth- 093992	N/A	N/A	N/A	N/A	12/01/2019

Risk/Return Analysis Since 12/19

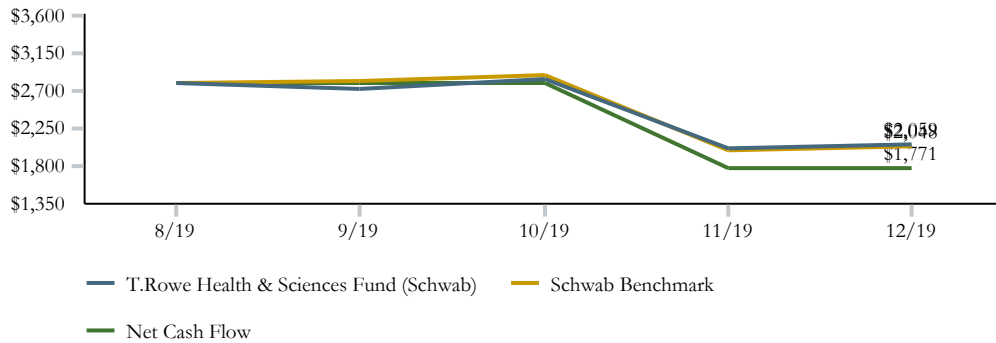


Portfolio Performance (%)



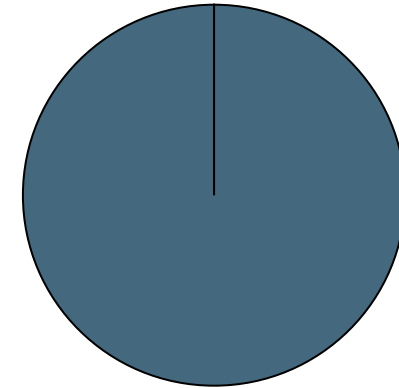
	Current Quarter	Since Inception	Inception Date
T.Rowe Health & Sciences Fund (Schwab)	15.39	12.33	09/01/2019
Schwab Benchmark	9.76	11.00	09/01/2019

	Current Quarter	Since Inception	Inception Date
T.Rowe Health & Sciences Fund (Schwab)			09/01/2019
Beginning Market Value	2,721	2,795	
Net Contributions	-1,024	-1,024	
Fees/Expenses	-	-	
Income	122	122	
Gain/Loss	240	166	
Ending Market Value	2,059	2,059	



Asset Allocation (\$000)

December 31, 2019 : \$2,059

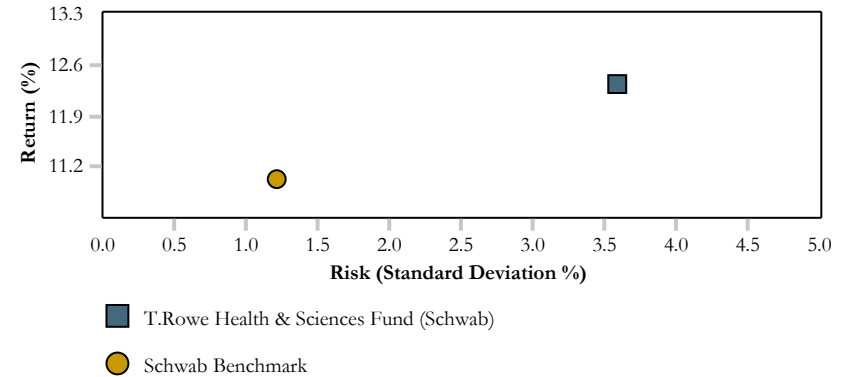


Segments	Market Value (\$000)	Allocation (%)
Domestic Equity	2,059.12	100.00
Cash Equivalent	0.06	0.00

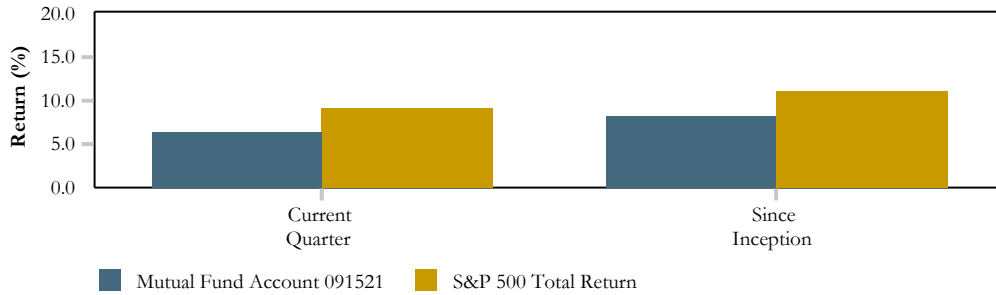
Portfolio Characteristics vs. Schwab Benchmark Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
T.Rowe Health & Sciences Fund (Schwab)	2.49	-3.60	0.71	0.79	09/01/2019

Risk/Return Analysis Since 09/19

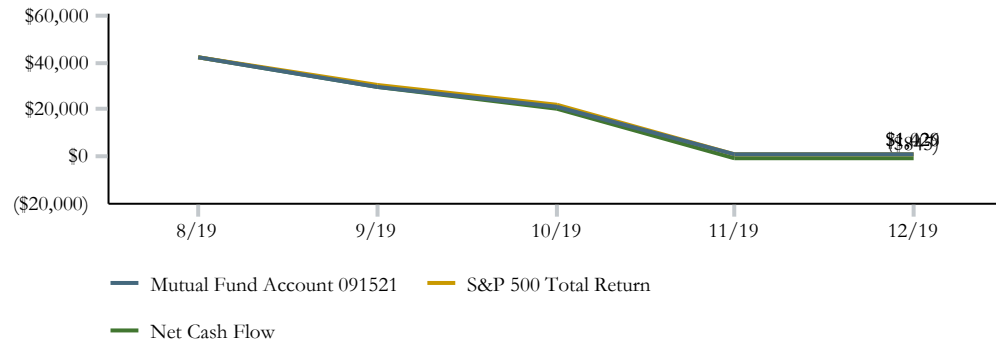


Portfolio Performance (%)



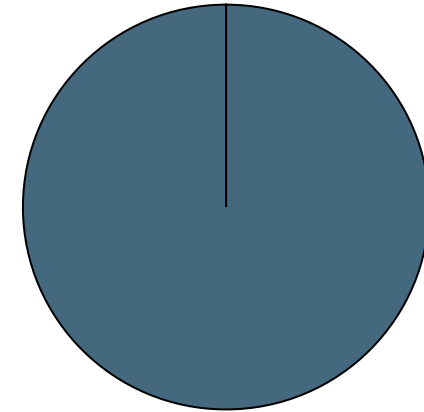
	Current Quarter	Since Inception	Inception Date
Mutual Fund Account 091521	6.47	8.09	09/01/2019
S&P 500 Total Return	9.07	11.11	09/01/2019

	Current Quarter	Since Inception	Inception Date
Mutual Fund Account 091521			09/01/2019
Beginning Market Value	30,054	42,231	
Net Contributions	-30,257	-43,072	
Fees/Expenses	-4	-4	
Income	2	78	
Gain/Loss	1,231	1,792	
Ending Market Value	1,026	1,026	



Asset Allocation (\$000)

December 31, 2019 : \$1,026

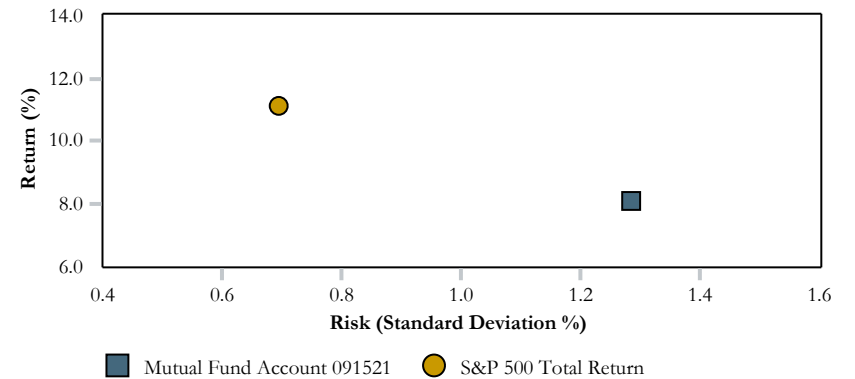


Segments	Market Value (\$000)	Allocation (%)
Cash Equivalent	1,025.62	100.00

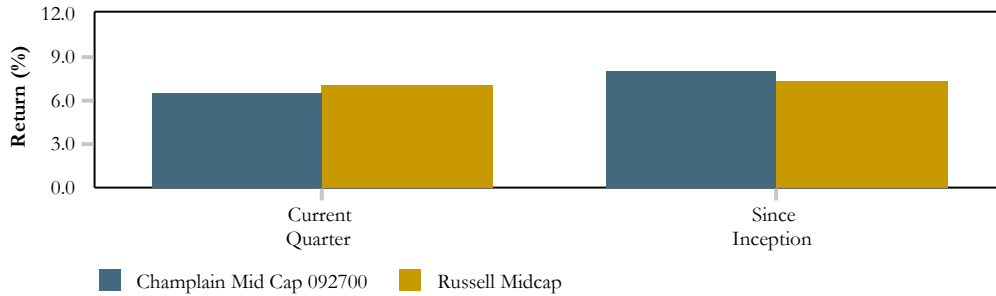
Portfolio Characteristics vs. S&P 500 Total Return Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Mutual Fund Account 091521	0.40	0.90	0.05	1.41	09/01/2019

Risk/Return Analysis Since 09/19

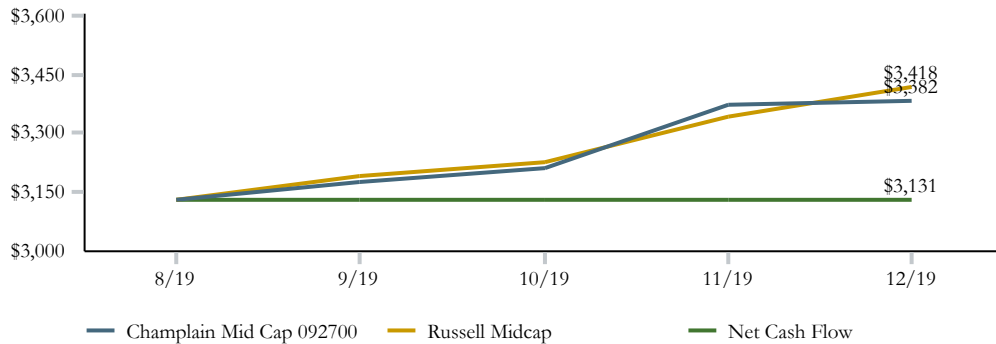


Portfolio Performance (%)



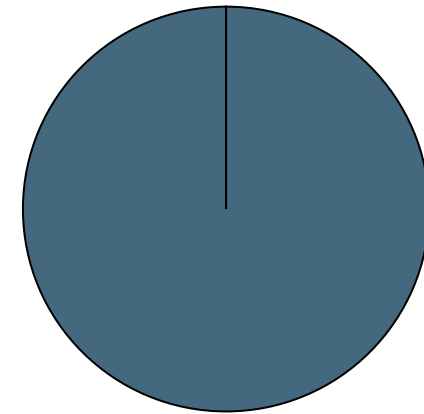
	Current Quarter	Since Inception	Inception Date
Champlain Mid Cap 092700	6.51	8.00	09/06/2019
Russell Midcap	7.06	7.43	09/06/2019

	Current Quarter	Since Inception	Inception Date
Champlain Mid Cap 092700			09/06/2019
Beginning Market Value	3,175	3,131	
Net Contributions	1	1	
Fees/Expenses	-1	-1	
Income	130	130	
Gain/Loss	76	120	
Ending Market Value	3,382	3,382	



Asset Allocation (\$000)

December 31, 2019 : \$3,382

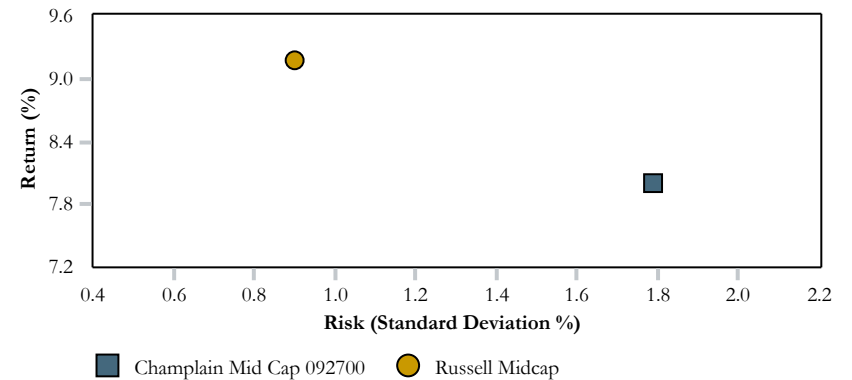


Segments	Market Value (\$000)	Allocation (%)
Domestic Equity	3,381.58	100.00

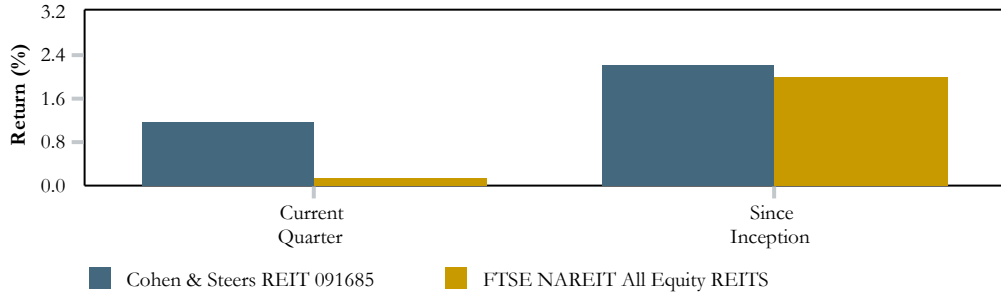
Portfolio Characteristics vs. Russell Midcap Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Champlain Mid Cap 092700	1.53	-1.44	0.59	1.00	09/06/2019

Risk/Return Analysis Since 09/19

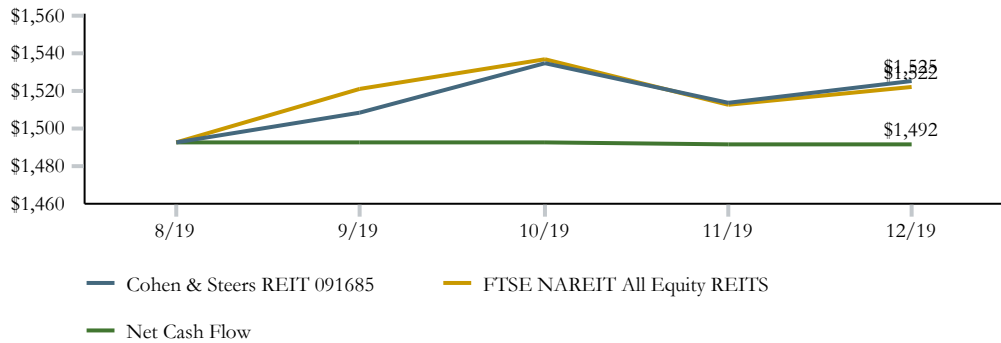


Portfolio Performance (%)



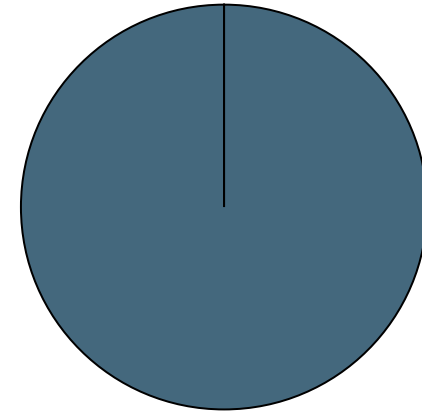
	Current Quarter	Since Inception	Inception Date
Cohen & Steers REIT 091685	1.15	2.23	09/01/2019
FTSE NAREIT All Equity REITS	0.13	2.01	09/01/2019

	Current Quarter	Since Inception	Inception Date
Cohen & Steers REIT 091685			09/01/2019
Beginning Market Value	1,509	1,493	
Net Contributions	-	-	
Fees/Expenses	-	-	
Income	42	52	
Gain/Loss	-25	-18	
Ending Market Value	1,525	1,525	



Asset Allocation (\$000)

December 31, 2019 : \$1,525

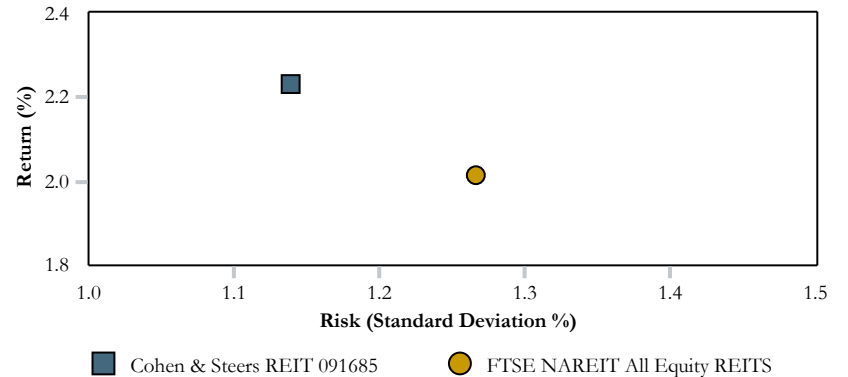


Segments	Market Value (\$000)	Allocation (%)
Alternative Investment	1,525.08	100.00

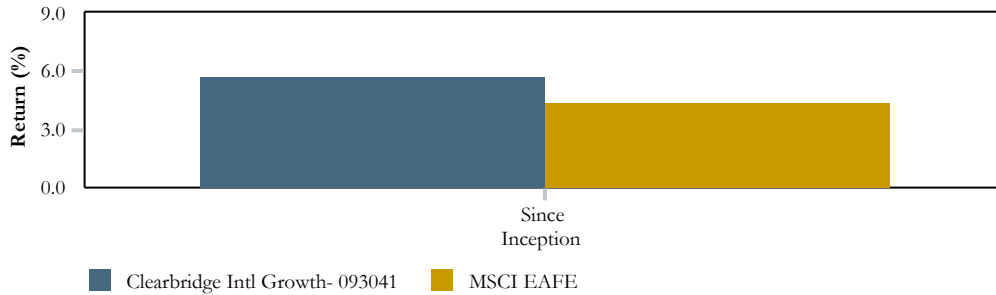
Portfolio Characteristics vs. FTSE NAREIT All Equity REITS

	Beta	Alpha	R-Squared	Sharpe Ratio	Incept Date
Cohen & Steers REIT 091685	0.82	0.15	0.82	0.35	09/01/2019

Risk/Return Analysis Since 09/19

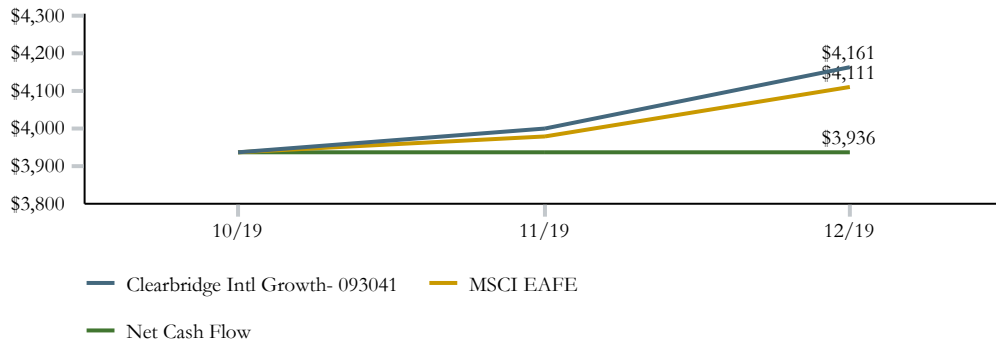


Portfolio Performance (%)



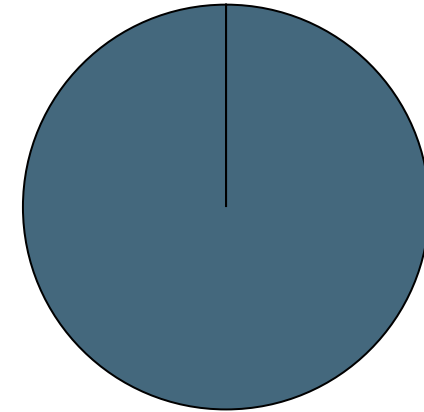
	Since Inception	Inception Date
Clearbridge Intl Growth- 093041	5.73	11/01/2019
MSCI EAFE	4.45	11/01/2019

	Since Inception	Inception Date
Clearbridge Intl Growth- 093041		11/01/2019
Beginning Market Value	3,936	
Net Contributions	-	
Fees/Expenses	-	
Income	13	
Gain/Loss	213	
Ending Market Value	4,161	



Asset Allocation (\$000)

December 31, 2019 : \$4,161

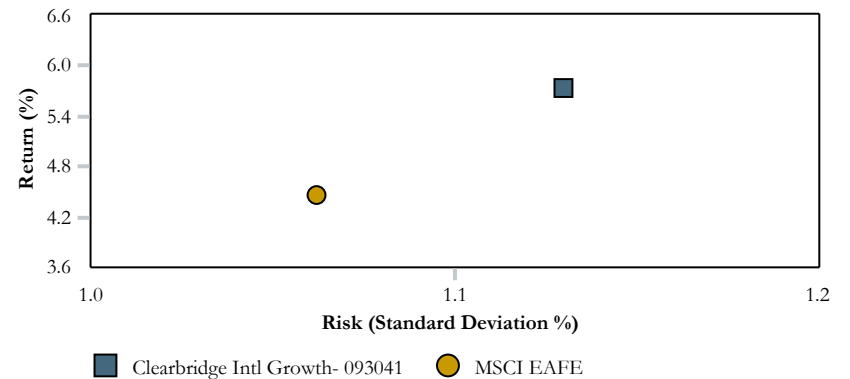


Segments	Market Value (\$000)	Allocation (%)
International Equity	4,161.12	100.00

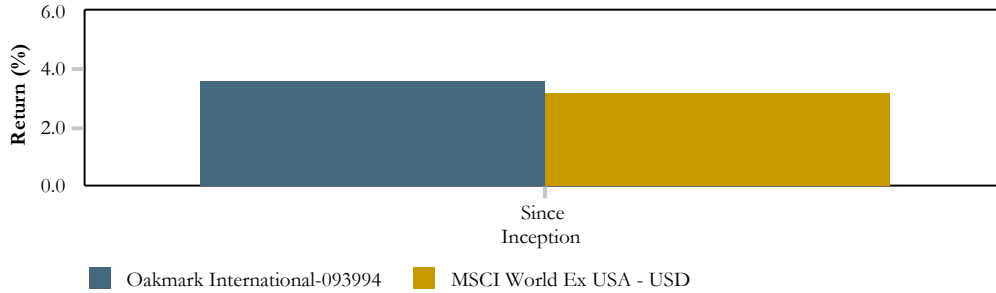
Portfolio Characteristics vs. MSCI EAFE Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Clearbridge Intl Growth- 093041	1.06	0.49	1.00	2.37	11/01/2019

Risk/Return Analysis Since 11/19

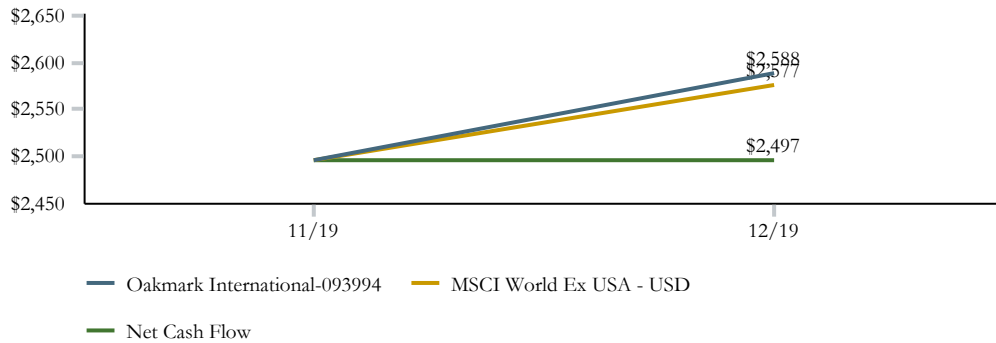


Portfolio Performance (%)



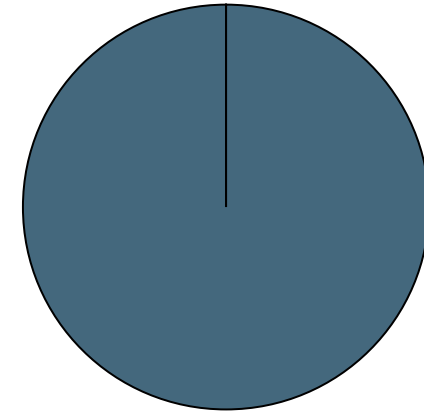
	Since Inception	Inception Date
Oakmark International-093994	3.64	12/01/2019
MSCI World Ex USA - USD	3.21	12/01/2019

	Since Inception	Inception Date
Oakmark International-093994		12/01/2019
Beginning Market Value	2,497	
Net Contributions	-	
Fees/Expenses	-	
Income	51	
Gain/Loss	40	
Ending Market Value	2,588	



Asset Allocation (\$000)

December 31, 2019 : \$2,588

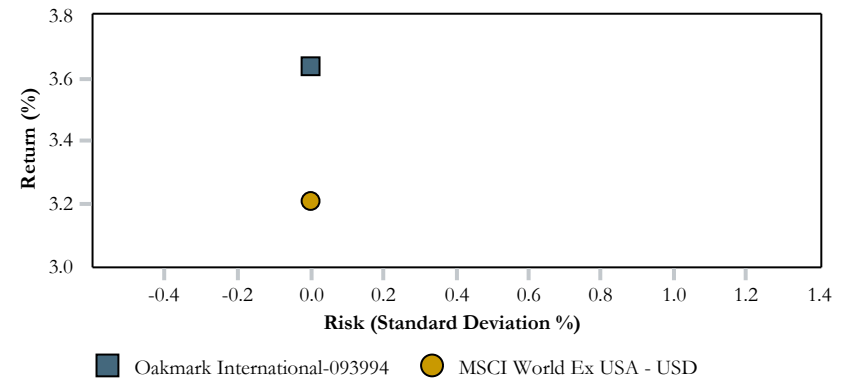


Segments	Market Value (\$000)	Allocation (%)
International Equity	2,587.94	100.00

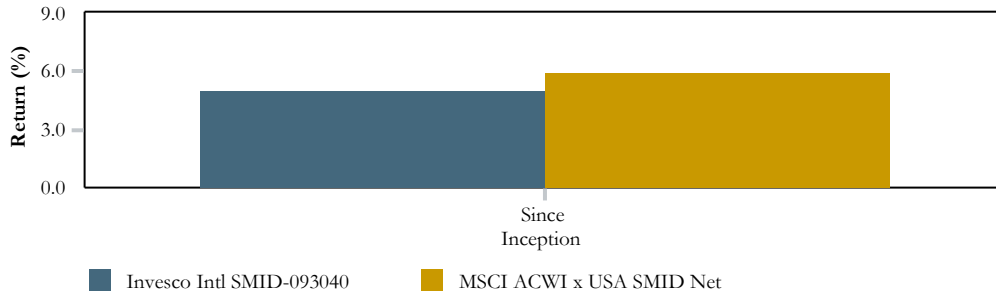
Portfolio Characteristics vs. MSCI World Ex USA - USD Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Oakmark International-093994	N/A	N/A	N/A	N/A	12/01/2019

Risk/Return Analysis Since 12/19

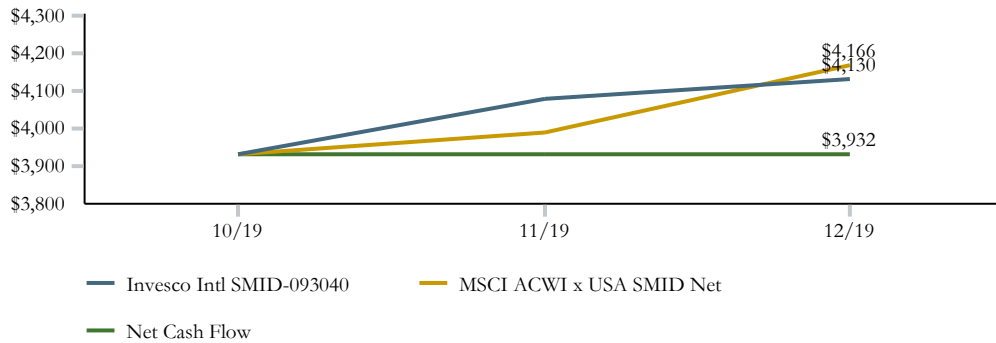


Portfolio Performance (%)



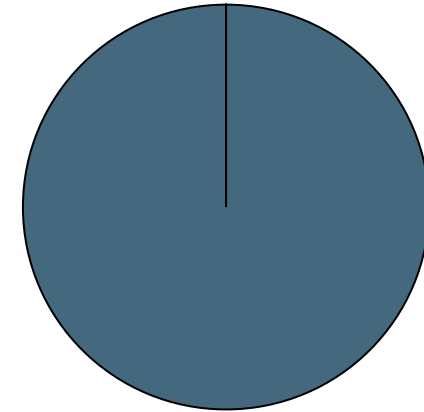
	Since Inception	Inception Date
Invesco Intl SMID-093040	5.04	11/01/2019
MSCI ACWI x USA SMID Net	5.96	11/01/2019

	Since Inception	Inception Date
Invesco Intl SMID-093040		11/01/2019
Beginning Market Value	3,932	
Net Contributions	-	
Fees/Expenses	-	
Income	196	
Gain/Loss	2	
Ending Market Value	4,130	



Asset Allocation (\$000)

December 31, 2019 : \$4,130

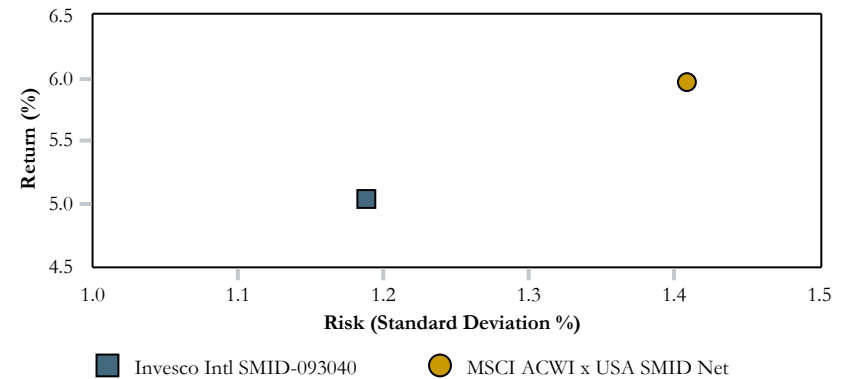


Segments	Market Value (\$000)	Allocation (%)
International Equity	4,129.91	100.00

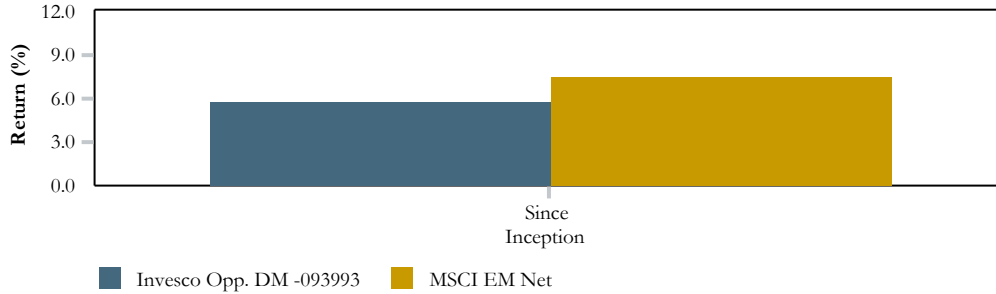
Portfolio Characteristics vs. MSCI ACWI x USA SMID Net Since

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Invesco Intl SMID-093040	-0.84	4.98	1.00	1.98	11/01/2019

Risk/Return Analysis Since 11/19

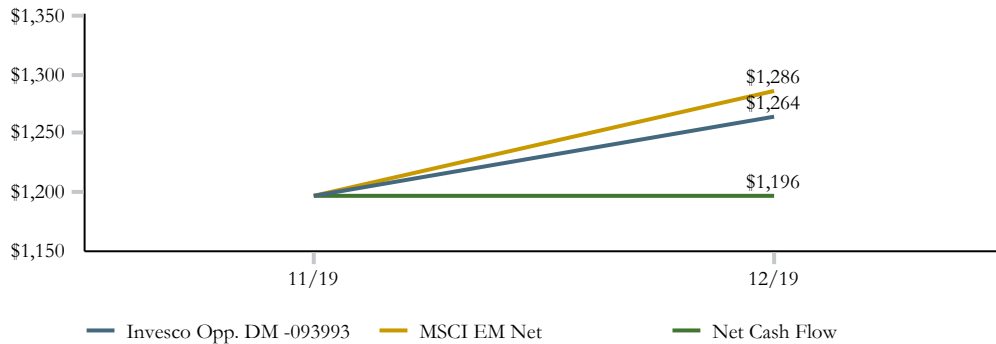


Portfolio Performance (%)



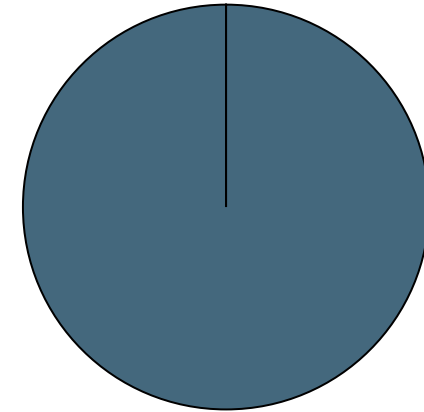
	Since Inception	Inception Date
Invesco Opp. DM -093993	5.67	12/01/2019
MSCI EM Net	7.46	12/01/2019

	Since Inception	Inception Date
Invesco Opp. DM -093993		12/01/2019
Beginning Market Value	1,196	
Net Contributions	-	
Fees/Expenses	-	
Income	30	
Gain/Loss	38	
Ending Market Value	1,264	



Asset Allocation (\$000)

December 31, 2019 : \$1,264

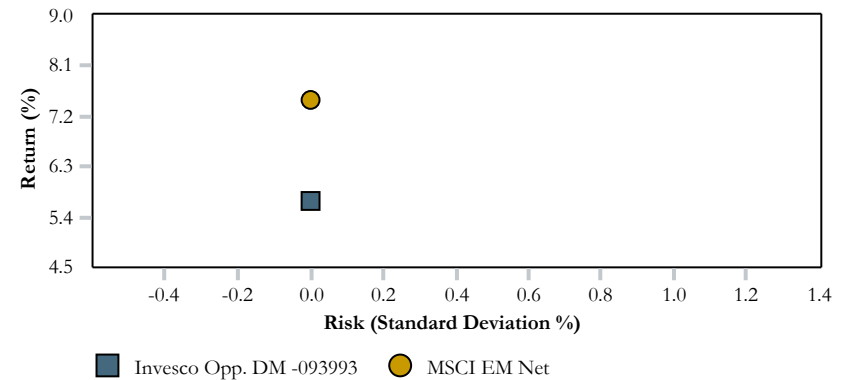


Segments	Market Value (\$000)	Allocation (%)
International Equity	1,264.22	100.00

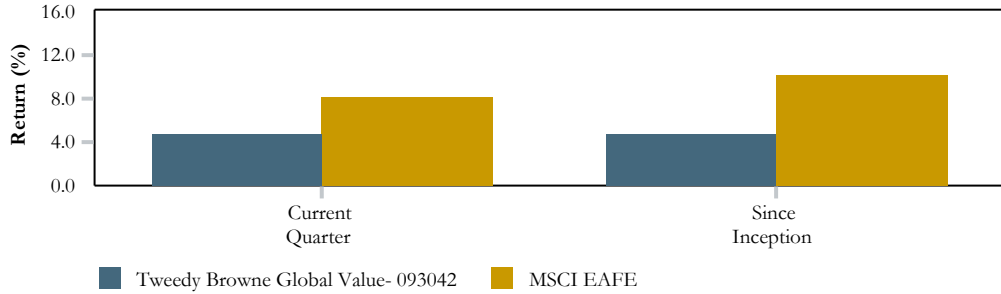
Portfolio Characteristics vs. MSCI EM Net Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Invesco Opp. DM -093993	N/A	N/A	N/A	N/A	12/01/2019

Risk/Return Analysis Since 12/19

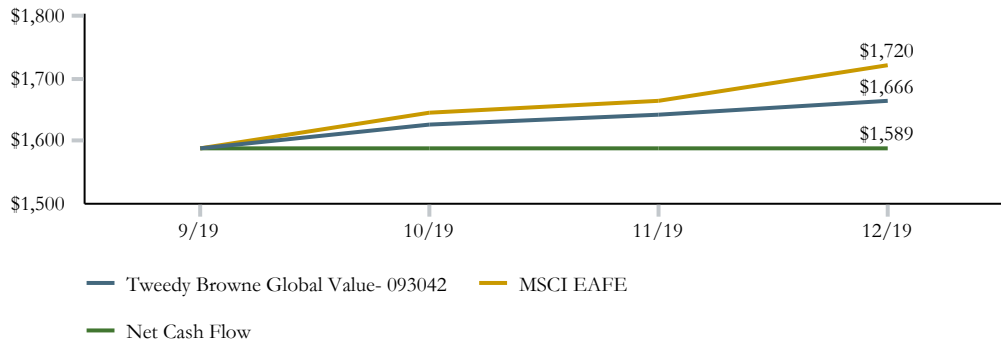


Portfolio Performance (%)



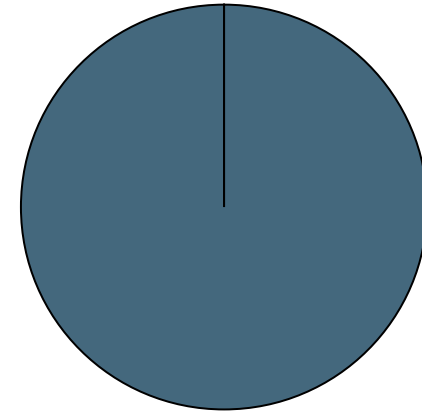
	Current Quarter	Since Inception	Inception Date
Tweedy Browne Global Value- 093042	4.79	4.79	10/07/2019
MSCI EAFE	8.21	10.23	10/07/2019

	Current Quarter	Since Inception	Inception Date
Tweedy Browne Global Value- 093042			10/07/2019
Beginning Market Value	1,590	1,590	
Net Contributions	-	-	
Fees/Expenses	-	-	
Income	31	31	
Gain/Loss	46	46	
Ending Market Value	1,666	1,666	



Asset Allocation (\$000)

December 31, 2019 : \$1,666

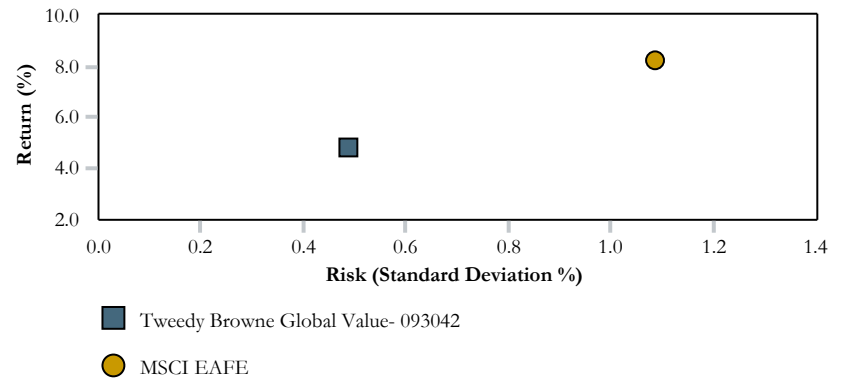


Segments	Market Value (\$000)	Allocation (%)
International Equity	1,665.79	100.00

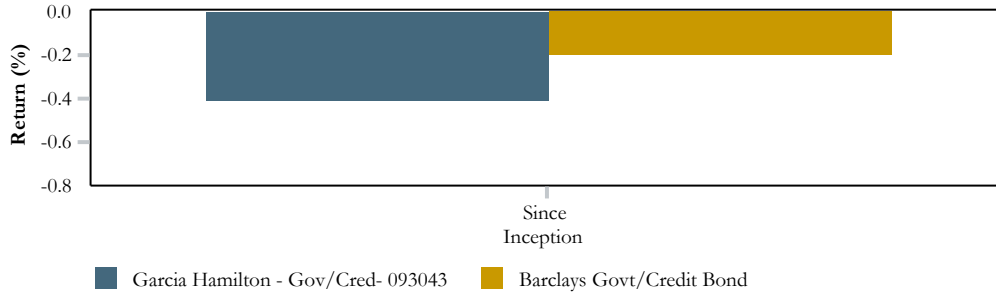
Portfolio Characteristics vs. MSCI EAFE Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Tweedy Browne Global Value- 093042	0.34	0.67	0.56	2.95	10/07/2019

Risk/Return Analysis Since 10/19

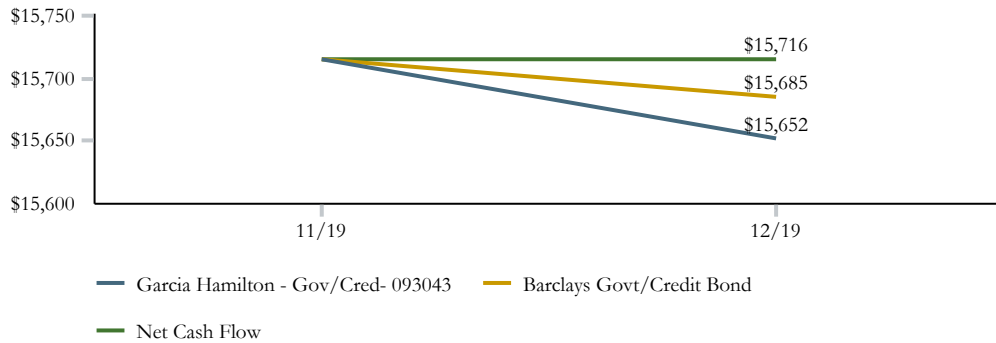


Portfolio Performance (%)



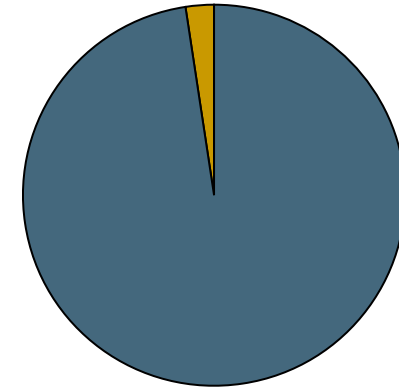
	Since Inception	Inception Date
Garcia Hamilton - Gov/Cred- 093043	-0.41	12/01/2019
Barclays Govt/Credit Bond	-0.20	12/01/2019

	Since Inception	Inception Date
Garcia Hamilton - Gov/Cred- 093043		12/01/2019
Beginning Market Value	15,716	
Net Contributions	2	
Fees/Expenses	-2	
Income	25	
Gain/Loss	-89	
Ending Market Value	15,652	



Asset Allocation (\$000)

December 31, 2019 : \$15,652

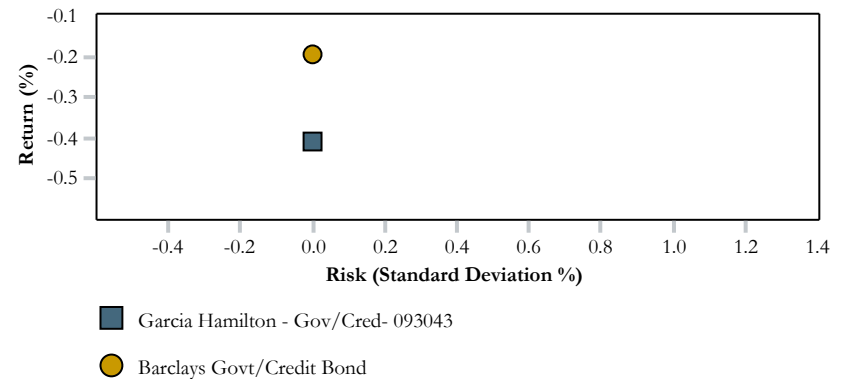


Segments	Market Value (\$000)	Allocation (%)
Domestic Fixed Income	15,276.24	97.60
Cash Equivalent	375.40	2.40

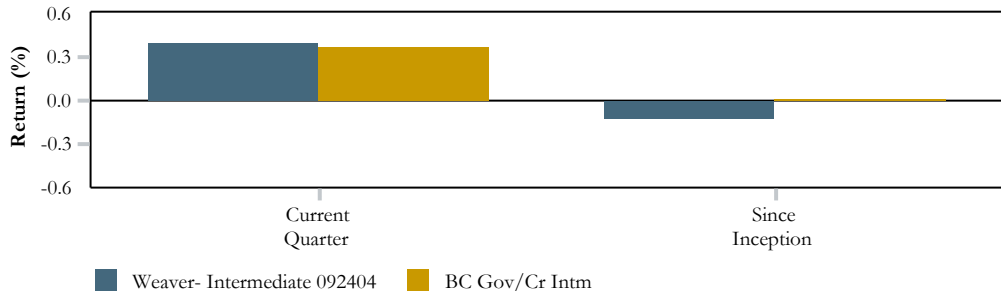
Portfolio Characteristics vs. Barclays Govt/Credit Bond Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Garcia Hamilton - Gov/Cred- 093043	N/A	N/A	N/A	N/A	12/01/2019

Risk/Return Analysis Since 12/19

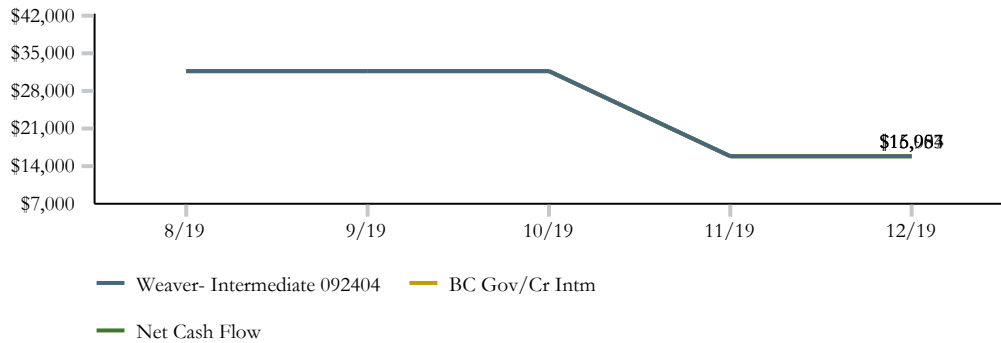


Portfolio Performance (%)



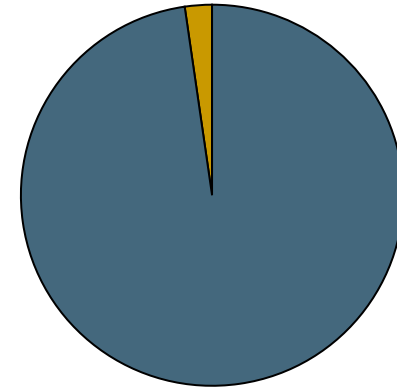
	Current Quarter	Since Inception	Inception Date
Weaver- Intermediate 092404	0.39	-0.12	09/01/2019
BC Gov/Cr Intm	0.37	0.01	09/01/2019

	Current Quarter	Since Inception	Inception Date
Weaver- Intermediate 092404			09/01/2019
Beginning Market Value	31,621	31,744	
Net Contributions	-15,766	-15,728	
Fees/Expenses	-13	-13	
Income	217	316	
Gain/Loss	-106	-366	
Ending Market Value	15,953	15,953	



Asset Allocation (\$000)

December 31, 2019 : \$15,953

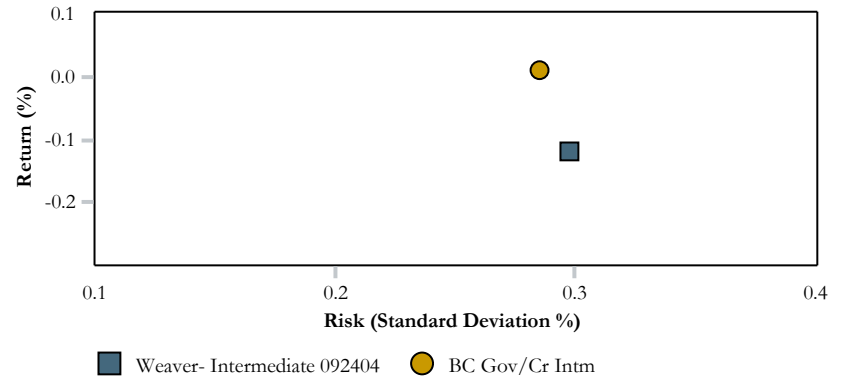


Segments	Market Value (\$000)	Allocation (%)
Domestic Fixed Income	15,588.43	97.71
Cash Equivalent	365.06	2.29

Portfolio Characteristics vs. BC Gov/Cr Intm Since Inception

	Beta	Alpha	R-Squared	Sharpe Ratio	Inception Date
Weaver- Intermediate 092404	0.98	-0.03	0.88	-0.62	09/01/2019

Risk/Return Analysis Since 09/19



As of December 31, 2019

Passive Portfolios	Weight (%)	Passive Portfolios	Weight (%)
Custom Benchmark : Aug-2019		Schwab Benchmark : Sep-2019	
S&P 500	35.00	S&P 500	65.00
S&P 400 MidCap Net	4.00	MSCI US Small Growth	35.00
S&P 600 SC	4.00		
FTSE NAREIT All Equity REITS	3.00	Schwab Benchmark : Dec-2019	
MSCI EAFE	16.00	S&P 500	100.00
MSCI EM Net	3.00	MSCI US Small Growth	0.00
BC Gov/Cr Intm	33.00		
90 Day T-Bill	2.00		

Performance Appendix

Performance Data below is net of fees. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

Account Name	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Aristotle -Value Equity 092934	9.13	--	--	--	--	--	9.13	10/01/2019
Cash Management Account 092408	0.35	--	--	--	--	--	0.55	08/01/2019
Champlain Mid Cap 092700	6.48	--	--	--	--	--	7.96	09/06/2019
Clearbridge Intl Growth- 093041	--	--	--	--	--	--	5.73	11/01/2019
Cohen & Steers REIT 091685	1.12	--	--	--	--	--	2.20	09/01/2019
Garcia Hamilton - Gov/Cred- 093043	--	--	--	--	--	--	-0.42	12/01/2019
IL Funds	24.26	--	--	--	--	--	38.54	07/01/2019
Invesco Intl SMID-093040	--	--	--	--	--	--	5.04	11/01/2019
Invesco Opp. DM -093993	--	--	--	--	--	--	5.66	12/01/2019
Madison - LCC 092935	8.58	--	--	--	--	--	8.58	10/01/2019
Mutual Fund Account 091521	6.71	--	--	--	--	--	8.58	08/01/2019
Oakmark International-093994	--	--	--	--	--	--	3.64	12/01/2019
Rothschild LCV 091687	--	--	--	--	--	--	--	09/01/2019
T.Rowe Health & Sciences Fund (Schwab)	15.39	--	--	--	--	--	12.33	09/01/2019
T.Rowe New American Growth- 093992	--	--	--	--	--	--	2.91	12/01/2019
Tweedy Browne Global Value- 093042	--	--	--	--	--	--	2.48	11/01/2019
Weaver- Intermediate 092404	0.35	--	--	--	--	--	-0.16	09/01/2019
iShares Russell 3000 ETF- 093991	--	--	--	--	--	--	2.78	12/01/2019

All performance above are Time Weighted(TWR) performance

Glossary of Terms

Active Contribution Return: The gain or loss percentage of an investment relative to the performance of the investment benchmark.

Active Exposure: The percentage difference in weight of the portfolio compared to its policy benchmark.

Active Return: Arithmetic difference between the manager's return and the benchmark's return over a specified time period.

Actual Correlation: A measure of the correlation (linear dependence) between two variables X and Y, with a value between +1 and -1 inclusive. This is also referred to as coefficient of correlation.

Alpha: A measure of a portfolio's time weighted return in excess of the market's return, both adjusted for risk. A positive alpha indicates that the portfolio outperformed the market on a risk-adjusted basis, and a

negative alpha indicates the portfolio did worse than the market.

Best Quarter: The highest quarterly return for a certain time period.

Beta: A measure of the sensitivity of a portfolio's time weighted return (net of fees) against that of the market. A beta greater than 1.00 indicates volatility greater than the market.

Consistency: The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

Core: Refers to an investment strategy mandate that is blend of growth and value styles without a pronounced tilt toward either style.

Cumulative Selection Return (Cumulative Return): Cumulative investment performance over a specified

period of time.

Distribution Rate: The most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains, and/or return of capital.

Down Market Capture: The ratio of average portfolio returns over the benchmark during periods of negative benchmark return. Lower values indicate better product performance.

Downside Risk: A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the value, the more risk the product has.

Downside Semi Deviation: A statistical calculation that measures the volatility of returns below a minimum acceptable return. This return measure isolates the negative portion of volatility: the larger the number, the greater the volatility.

Drawdown: A drawdown is the peak-to-trough decline during a specific period of an investment, fund or commodity.

Excess over Benchmark: The percentage gain or loss of an investment relative to the investment's benchmark.

Excess Return: Arithmetic difference between the manager's return and the risk-free return over a specified time period.

Growth: A diversified investment strategy which includes investment selections that have capital appreciation as the primary goal, with little or no dividend payouts. These strategies can include reinvestment in expansion, acquisitions, and/or research and development opportunities.

Growth of Dollar: The aggregate amount an investment has gained or lost over a certain time period, also referred to as Cumulative Return, stated in terms of the amount to which an initial dollar investment would have grown over the given time period.

Investment Decision Process (IDP): A model for structuring the investment process and implementing the correct attribution methodologies. The IDP includes every decision made concerning the division of the assets under management over the various asset categories. To analyze each decision's contribution to the total return, a modeling approach must measure the marginal value of every individual decision. In this respect, the hierarchy of the decisions becomes very important. We therefore use the IDP model, which serves as a proper foundation for registering the decisions and relating them to each other.

Information Ratio: Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.

Jensen's Alpha: The Jensen's alpha measure is a risk-adjusted performance measure that represents the average return on a portfolio or investment above or below that predicted by the capital asset pricing model (CAPM) given the portfolio's or investment's beta and the average market return. This metric is also commonly referred to as alpha..

Kurtosis: A statistical measure that is used to describe the distribution, or skewness, of observed data

around the mean, sometimes referred to as the volatility of volatility.

Maximum Drawdown: The drawdown is defined as the percent retrenchment from a fund's peak to the fund's trough value. It is in effect from the time the fund's retrenchment begins until a new fund high is reached. The maximum drawdown encompasses both the period from the fund's peak to the fund's valley (length), and the time from the fund's valley to a new fund high (recovery). It measures the largest percentage drawdown that has occurred in any fund's data record.

Modern Portfolio Theory (MPT): An investment analysis theory on how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward.

Mutual Fund (MF): An investment program funded by shareholders that trade in diversified holdings and is professionally managed.

Peer Group: A combination of funds that share the same investment style combined as a group for comparison purposes.

Peer/ Plan Sponsor Universe: A combination of asset pools of total plan investments by specific sponsor and plan types for comparison purposes.

Performance Ineligible Assets: Performance returns are not calculated for certain assets because accurate valuations and transaction data for these assets are not processed or maintained by us. Common examples of these include life insurance, some annuities and some assets held externally.

Performance Statistics: A generic term for various measures of investment performance measurement terms.

Portfolio Characteristics: A generic term for various measures of investment portfolio characteristics.

Preferred Return: A term used in the private equity (PE) world, and also referred to as a "Hurdle Rate." It refers to the threshold return that the limited partners of a private equity fund must receive, prior to the PE firm receiving its carried interest or "carry."

Ratio of Cumulative Wealth: A defined ratio of the Cumulative Return of the portfolio divided by the Cumulative Return of the benchmark for a certain time period.

Regression Based Analysis: A statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables

Residual Correlation: Within returns-based style analysis, residual correlation refers to the portion of a strategy's return pattern that cannot be explained by its correlation to the asset-class benchmarks to which it is being compared.

Return: A rate of investment performance for the specified period.

Rolling Percentile Ranking: A measure of an investment portfolio's ranking versus a peer group for a specific rolling time period (i.e. Last 3 Years, Last 5 years, etc.).

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

SA/CF (Separate Account/Comingled Fund): Represents an acronym for Separate Account and Comingled Fund investment vehicles.

Sector Benchmark: A market index that serves as a proxy for a sector within an asset class.

Sharpe Ratio: Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance results in.

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

Total Fund Benchmark: The policy benchmark for a complete asset pool that could consist of multiple investment mandates.

Total Fund Composite: The aggregate of multiple portfolios within an asset pool or household.

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

Treynor Ratio: A ratio that divides the excess return (above the risk free rate) by the portfolio's beta to arrive at a unified measure of risk adjusted return. It is generally used to rank portfolios, funds and benchmarks. A higher ratio is indicative of higher returns per unit of market risk. This measurement can help determine if the portfolio is reaching its goal of increasing returns while managing market risk.

Up Market Capture: The ratio of average portfolio returns over the benchmark during periods of positive benchmark return. Higher values indicate better product performance.

Upside Semi Deviation: A statistical calculation that measures the volatility of returns above an acceptable return. This return measure isolates the positive portion of volatility: the larger the number, the greater the volatility.

Value: A diversified investment strategy that includes investment selections which tend to trade at a lower price relative to its dividends, earnings, and sales. Common attributes are stocks that include high dividend, low price-to-book ratio, and/or low price-to-earnings ratio.

Worst Quarter: The lowest rolling quarterly return for a certain time period.

Information Disclosures

Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

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Investors should carefully consider the fund's investment objectives, risks, charges and expenses before investing. The prospectus and, if available the summary prospectus, contains this and other information that should be read carefully before investing. Investors should review the information in the prospectus carefully. To obtain a prospectus, please contact your Financial Advisor or visit the funds' company website.

Past performance is no guarantee of future results.

Investing involves market risk, including possible loss of principal. **Growth investing** does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. **Value investing** involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. **Small and mid-capitalization companies** may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than those of larger, more established companies. **Bond funds** and bond holdings have the same interest rate, inflation and credit risks that are associated with the underlying bonds owned by the funds. The return of principal in bond funds, and in funds with significant bond holdings, is not guaranteed. **International securities'** prices may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in emerging markets. **Alternative investments**, including private equity funds, real estate funds, hedge funds, managed futures funds, and funds of hedge funds, private equity, and managed futures funds, are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor. **Master Limited Partnerships** (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk; and MLP interests in the real estate sector are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. Because of their narrow focus, MLPs maintain exposure to price volatility of commodities and/or underlying assets and tend to be more volatile than investments that diversify across many sectors and companies. MLPs are also subject to additional risks including: investors having limited control and rights to vote on matters affecting the MLP, limited access to capital, cash flow risk, lack of liquidity, dilution risk, conflict of interests, and limited call rights related to acquisitions.

Mortgage backed securities also involve prepayment risk, in that faster or slower prepayments than expected on underlying mortgage loans can dramatically alter the yield-to-maturity of a mortgage-backed security and prepayment risk includes the possibility that a fund may invest the proceeds at generally lower

interest rates.

Tax managed funds may not meet their objective of being tax-efficient.

Real estate investments are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. **High yield** fixed income securities, also known as “junk bonds”, are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

Credit quality is a measure of a bond issuer’s creditworthiness, or ability to repay interest and principal to bondholders in a timely manner. The credit ratings shown are based on security rating as provided by Standard & Poor’s, Moody’s and/or Fitch, as applicable. Credit ratings are issued by the rating agencies for the underlying securities in the fund and not the fund itself, and the credit quality of the securities in the fund does not represent the stability or safety of the fund. Credit ratings shown range from AAA, being the highest, to D, being the lowest based on S&P and Fitch’s classification (the equivalent of Aaa and C, respectively, by Moody(s)). Ratings of BBB or higher by S&P and Fitch (Baa or higher by Moody’s) are considered to be investment grade-quality securities. If two or more of the agencies have assigned different ratings to a security, the highest rating is applied. Securities that are not rated by all three agencies are listed as “NR”.

“**Alpha tilt strategies** comprise a core holding of stocks that mimic a benchmark type index such as the S&P 500 to which additional securities are added to help tilt the fund toward potentially outperforming the market in an effort to enhance overall investment returns. Tilt strategies are subject to significant timing risk and could potentially expose investors to extended periods of underperformance.”

Custom Account Index: The Custom Account Index is an investment benchmark based on your historical target allocations and/or manager selection that you may use to evaluate the performance of your account. The Custom Account index does take into consideration certain changes that may have occurred in your portfolio since the inception of your account, i.e., asset class and/or manager changes. However, in some circumstances, it may not be an appropriate benchmark for use with your specific account composition. For detailed report of the historical composition of this blend please contact your Financial Advisor.

Peer Groups

Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client’s investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

All Peer Group data are provided by Investment Metrics, LLC.

The URL below provides all the definitions and methodology about the various Peer Groups

<https://www.invmetrics.com/style-peer-groups>

Peer Group Ranking Methodology

A percentile rank denotes the value of a product in which a certain percent of observations fall within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value.

The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Alternatives

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techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives, and options, which can increase volatility and the risk of investment loss. Characteristics such as correlation to traditional markets, investment strategy, and market sector exposure can play a role in the classification of a traditional security being classified as alternative.

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As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of \$100,000 and a 2.5% annual fee, if the gross performance is 5% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 2.40% per year over a three year period, and the total value of the client's portfolio at the end of the three year period would be approximately \$115,762.50 without the fees and \$107,372.63 with the fees. Please see the

applicable Morgan Stanley Smith Barney LLC Form ADV Part 2A for more information including a description of the fee schedule. It is available at www.morganstanley.com/ADV <<http://www.morganstanley.com/ADV>> or from your Financial Advisor/Private Wealth Advisor.

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