

FUND EVALUATION REPORT

City of Marlborough Contributory Retirement System

Meeting Materials
April 30, 2019



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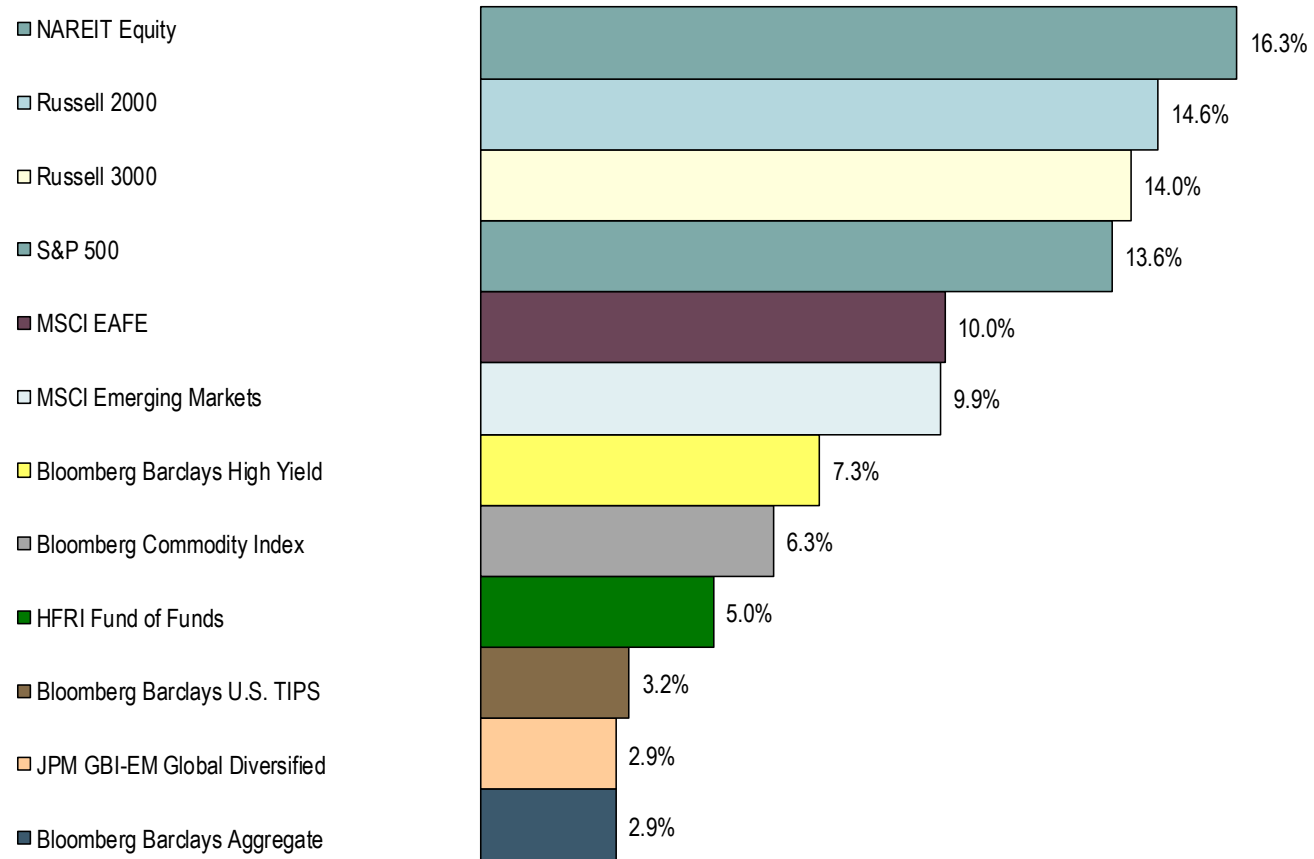
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The World Markets First Quarter of 2019

The World Markets¹ First Quarter of 2019



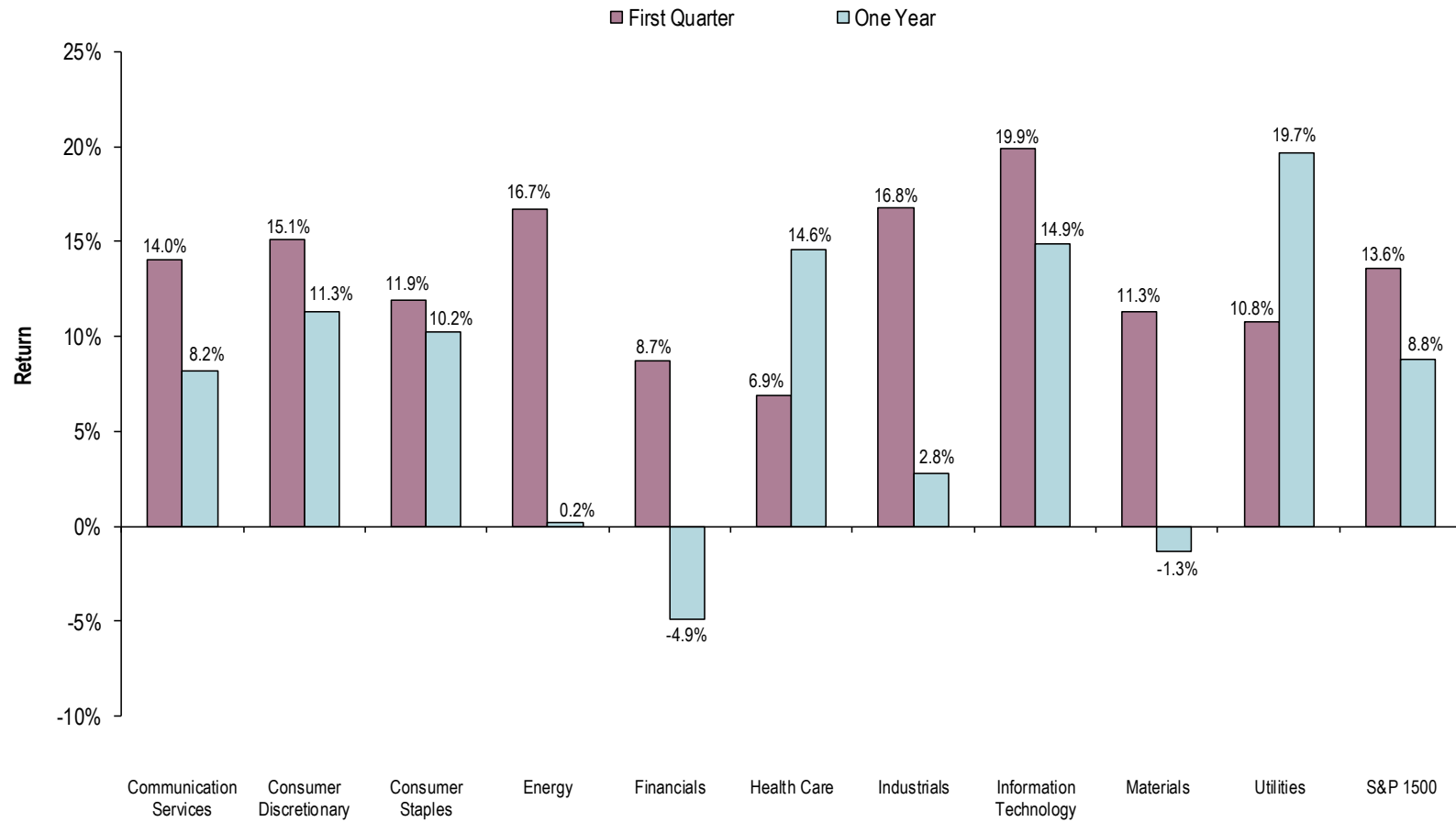
¹ Source: InvestorForce.

Index Returns¹

	1Q19 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity					
S&P 500	13.6	9.5	13.5	10.9	15.9
Russell 3000	14.0	8.8	13.5	10.4	16.0
Russell 1000	14.0	9.3	13.5	10.6	16.0
Russell 1000 Growth	16.1	12.7	16.5	13.5	17.5
Russell 1000 Value	11.9	5.7	10.5	7.7	14.5
Russell MidCap	16.5	6.5	11.8	8.8	16.9
Russell MidCap Growth	19.6	11.5	15.1	10.9	17.6
Russell MidCap Value	14.4	2.9	9.5	7.2	16.4
Russell 2000	14.6	2.0	12.9	7.1	15.4
Russell 2000 Growth	17.1	3.9	14.9	8.4	16.5
Russell 2000 Value	11.9	0.2	10.9	5.6	14.1
Foreign Equity					
MSCI ACWI (ex. U.S.)	10.3	-4.2	8.1	2.6	8.8
MSCI EAFE	10.0	-3.7	7.3	2.3	9.0
MSCI EAFE (Local Currency)	10.6	2.8	8.5	6.0	9.8
MSCI EAFE Small Cap	10.7	-9.4	7.5	4.5	12.8
MSCI Emerging Markets	9.9	-7.4	10.7	3.7	8.9
MSCI Emerging Markets (Local Currency)	10.1	-1.7	11.3	7.2	10.2
Fixed Income					
Bloomberg Barclays Universal	3.3	4.5	2.6	3.0	4.4
Bloomberg Barclays Aggregate	2.9	4.5	2.0	2.7	3.8
Bloomberg Barclays U.S. TIPS	3.2	2.7	1.7	1.9	3.4
Bloomberg Barclays High Yield	7.3	5.9	8.6	4.7	11.3
JPM GBI-EM Global Diversified	2.9	-7.6	3.3	-0.8	4.3
Other					
NAREIT Equity	16.3	20.3	6.0	9.0	18.2
Bloomberg Commodity Index	6.3	-5.3	2.2	-8.9	-2.6
HFRI Fund of Funds	5.0	0.5	4.1	2.3	3.6

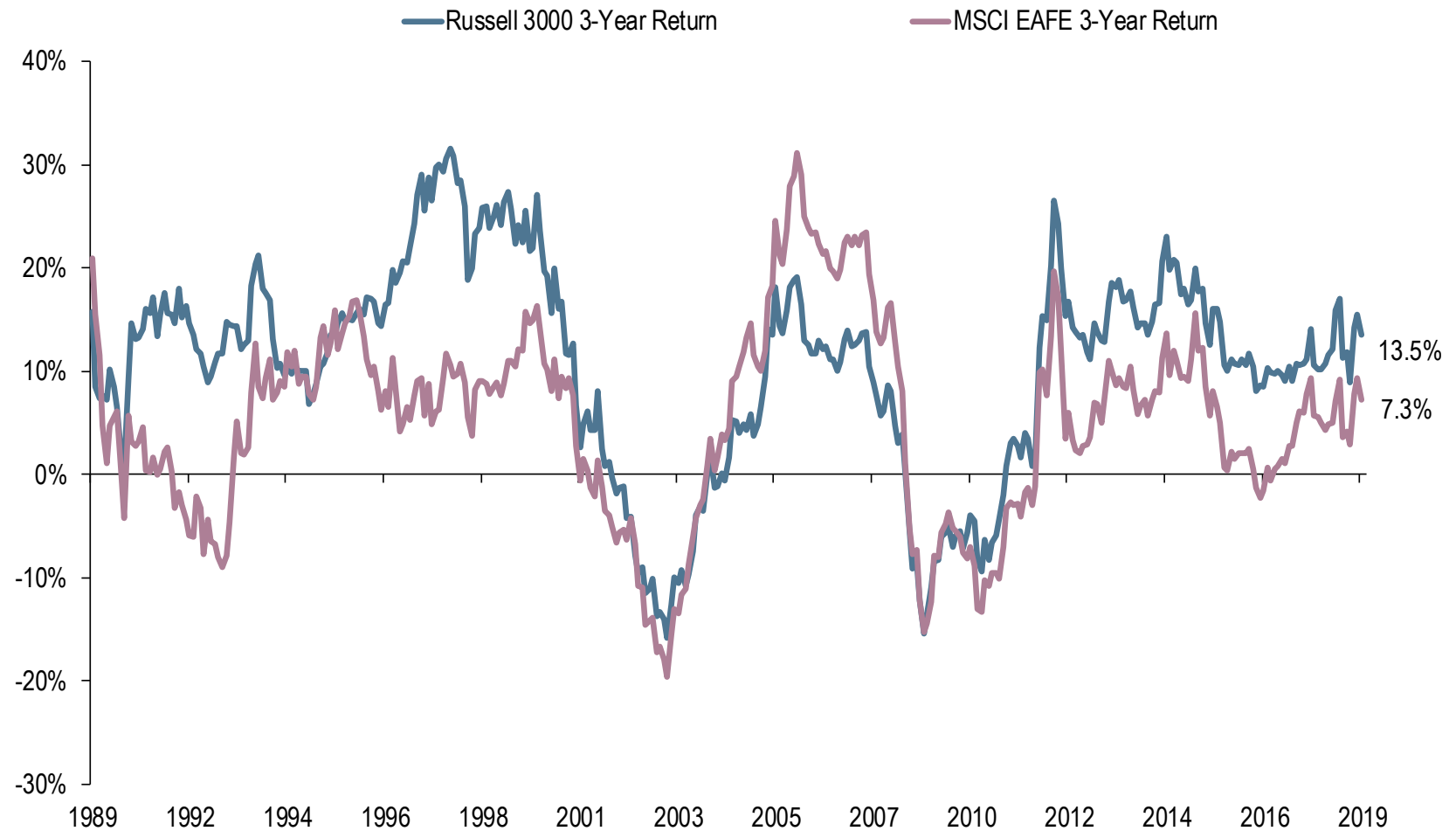
¹ Source: InvestorForce.

S&P Sector Returns¹



¹ Source: InvestorForce. Represents S&P 1500 (All Cap) data.

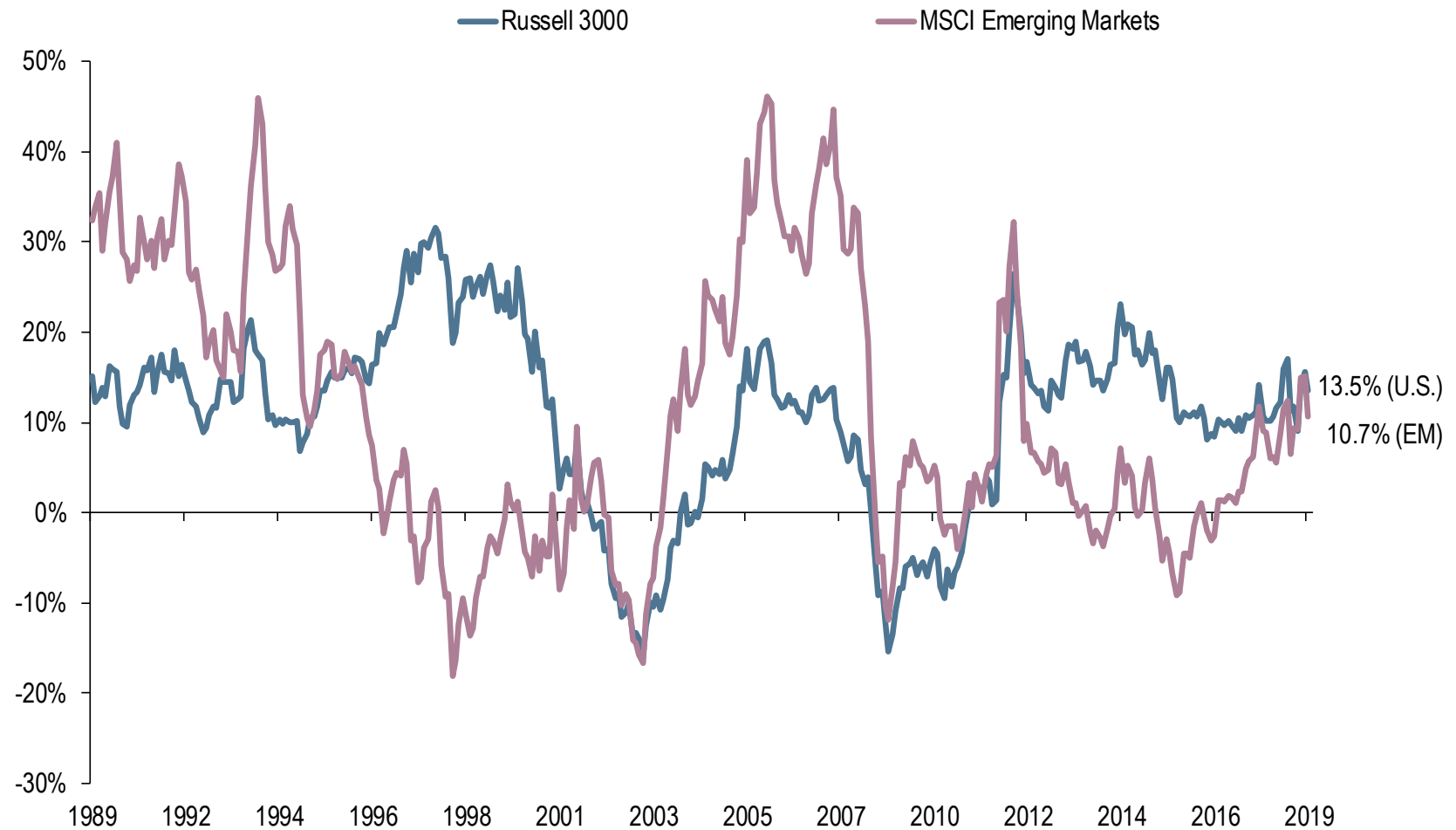
U.S. and Developed Market Foreign Equity Rolling Three-Year Returns¹



¹ Source: InvestorForce.

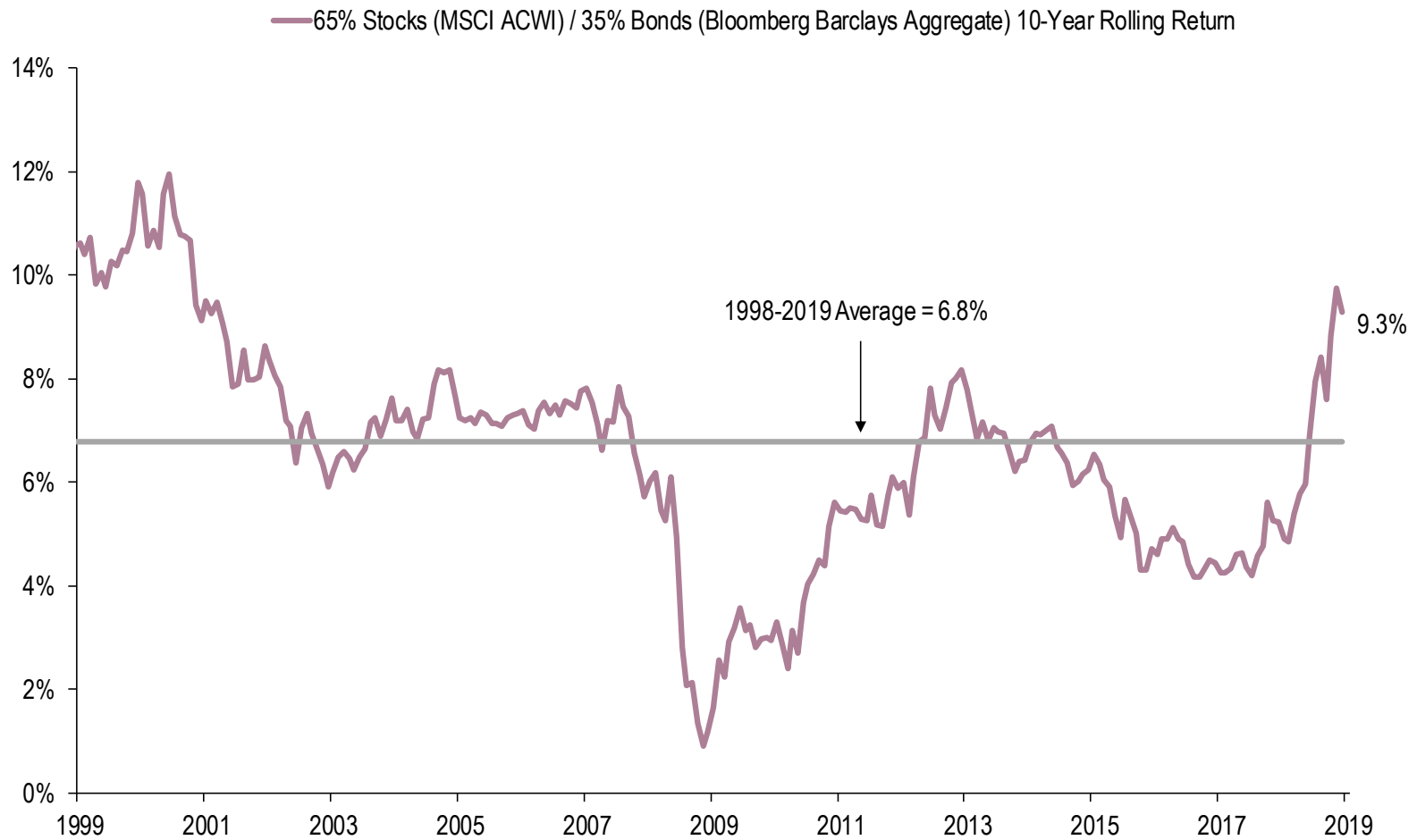


U.S. and Emerging Market Equity Rolling Three-Year Returns¹



¹ Source: InvestorForce.

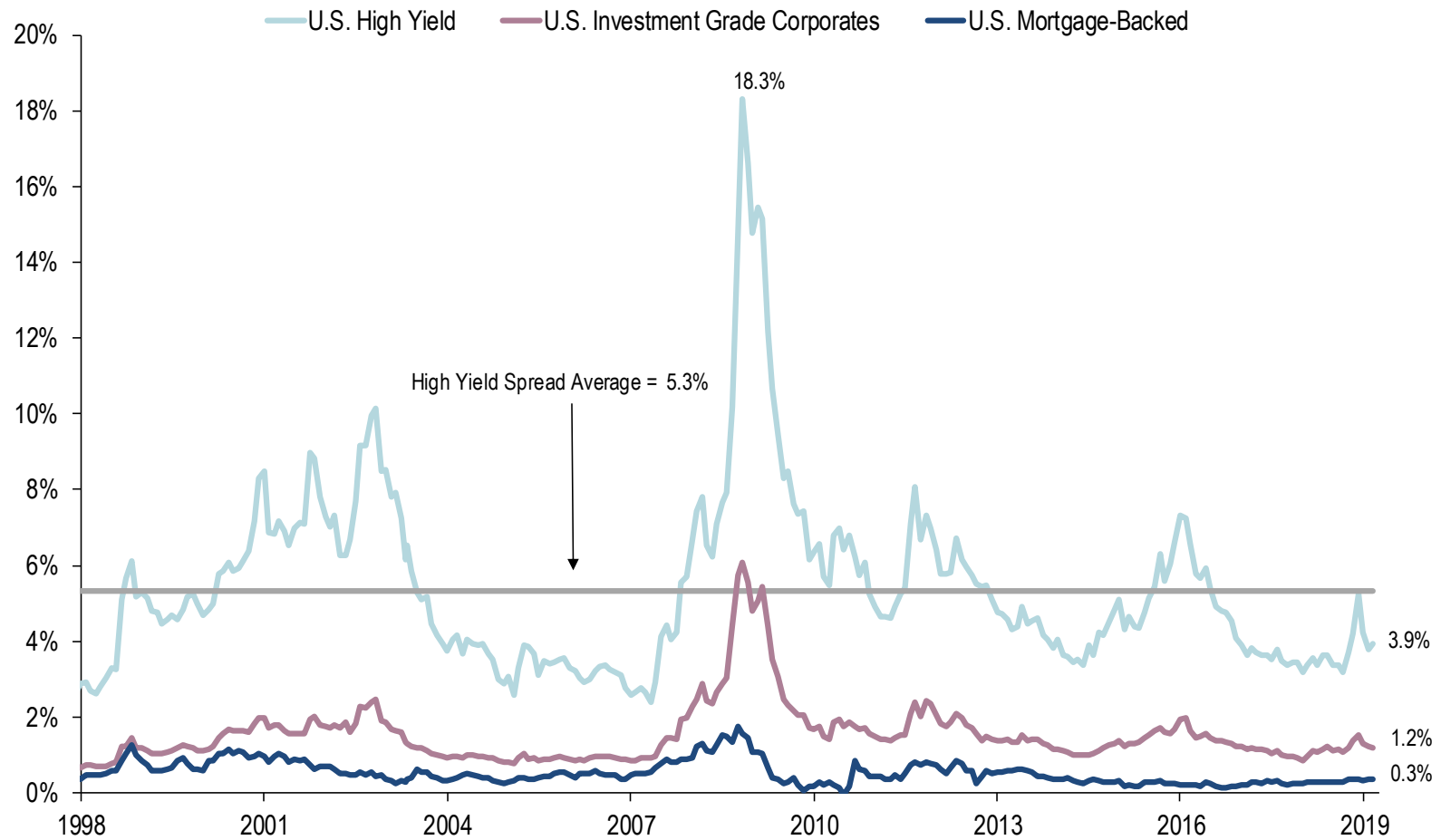
Rolling Ten-Year Returns: 65% Stocks and 35% Bonds¹



¹ Source: InvestorForce.



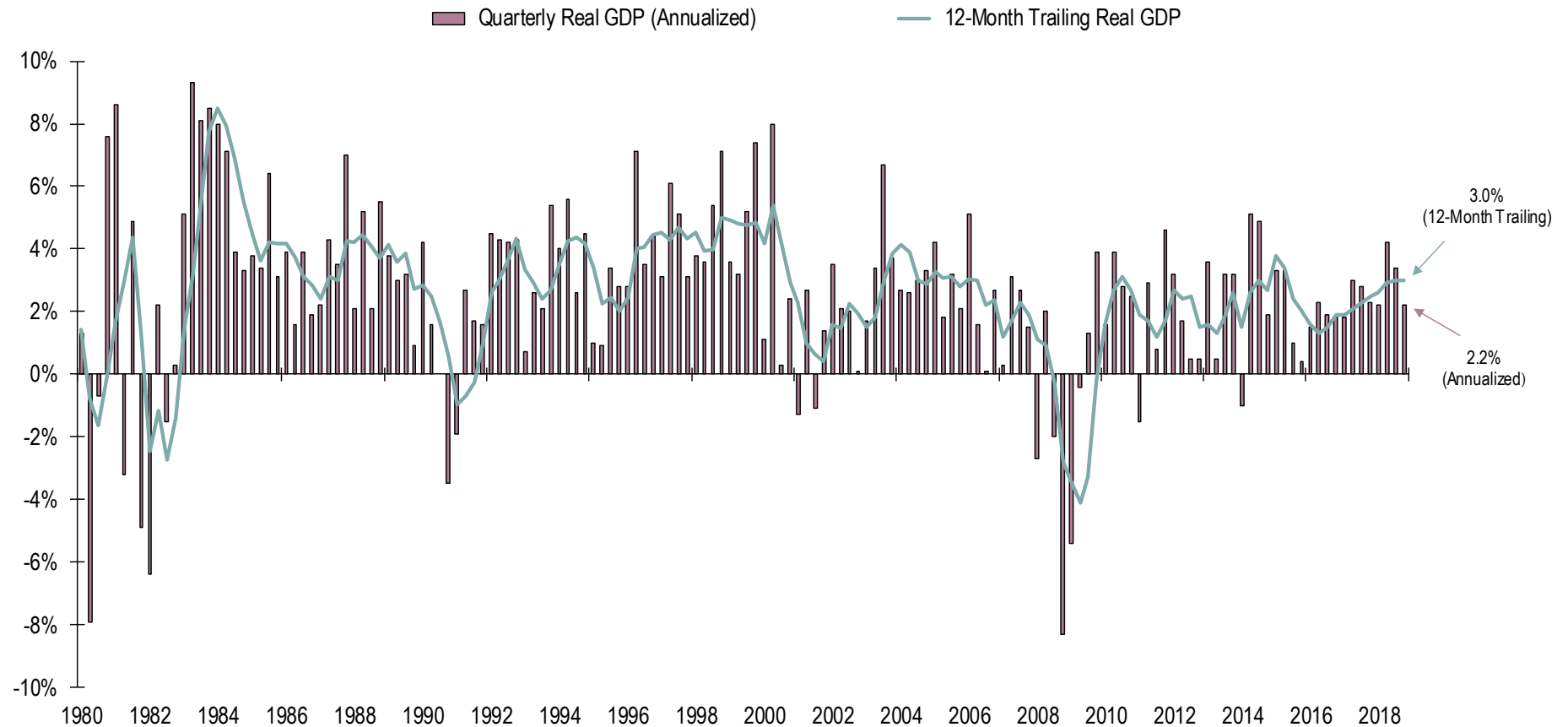
Credit Spreads vs. U.S. Treasury Bonds^{1,2}



¹ Source: Barclays Live.

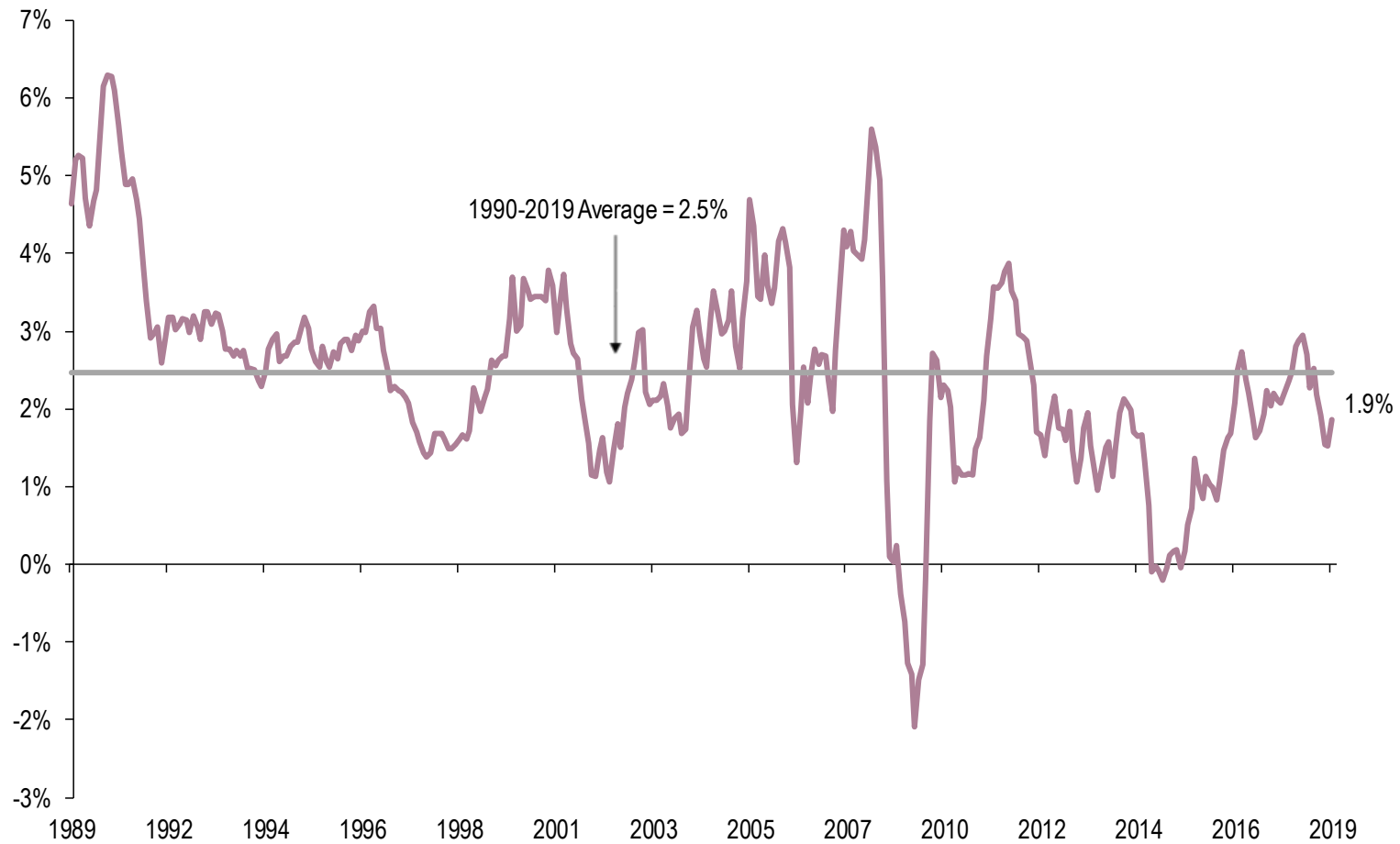
² The median high yield spread was 4.8% from 1997-2019.

U.S. Real Gross Domestic Product (GDP) Growth¹



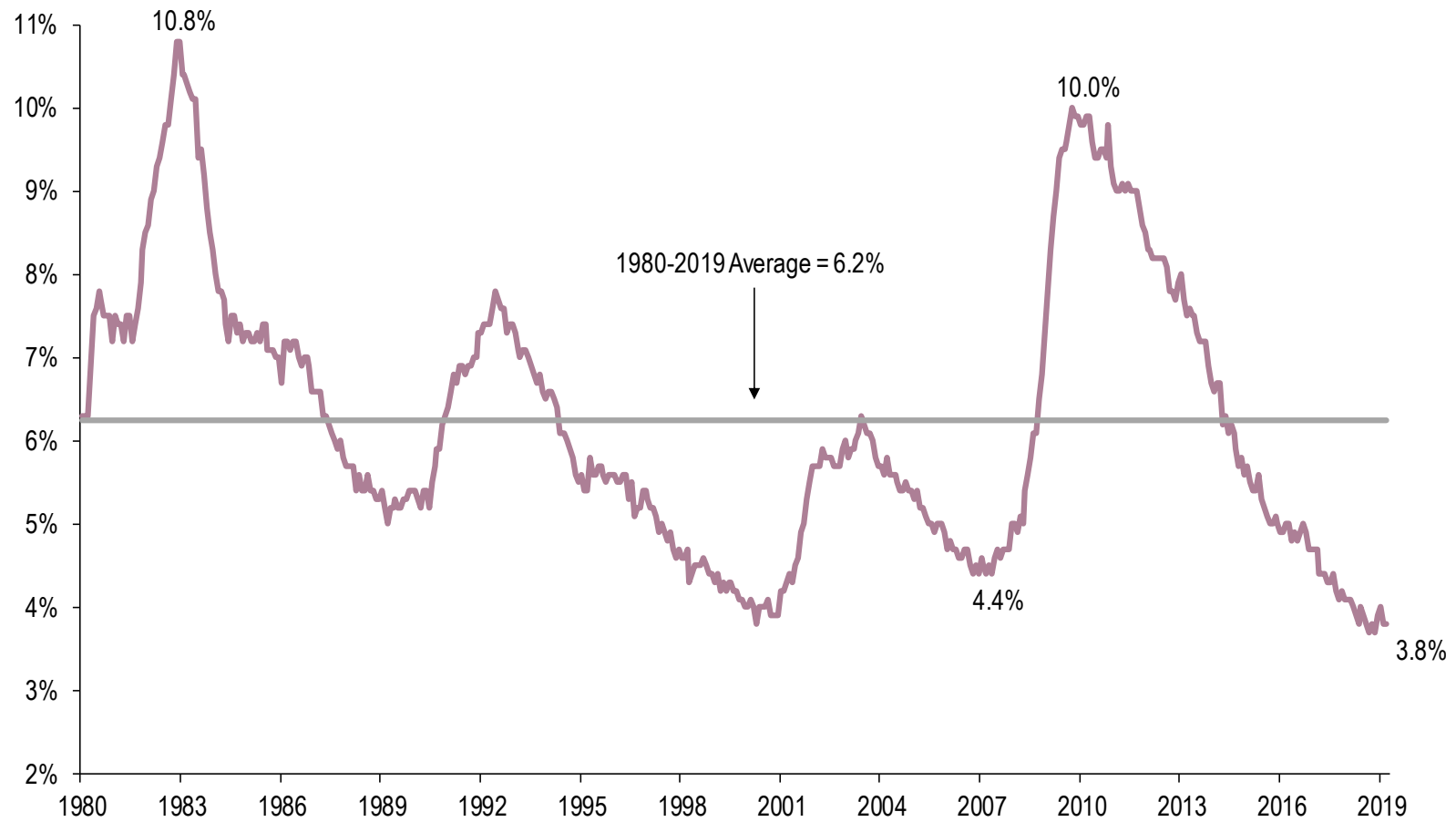
¹ Source: Bureau of Economic Analysis. Data is as of Q4 2018 and represents the third estimate.

U.S. Inflation (CPI) Trailing Twelve Months¹



¹ Source: Bureau of Labor Statistics. Data is non-seasonally adjusted CPI, which may be volatile in the short-term. Data is as of March 31, 2019.

U.S. Unemployment¹



¹ Source: Bureau of Labor Statistics. Data is as of March 31, 2019.








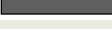


Retirement System First Quarter Review

Retirement System Summary

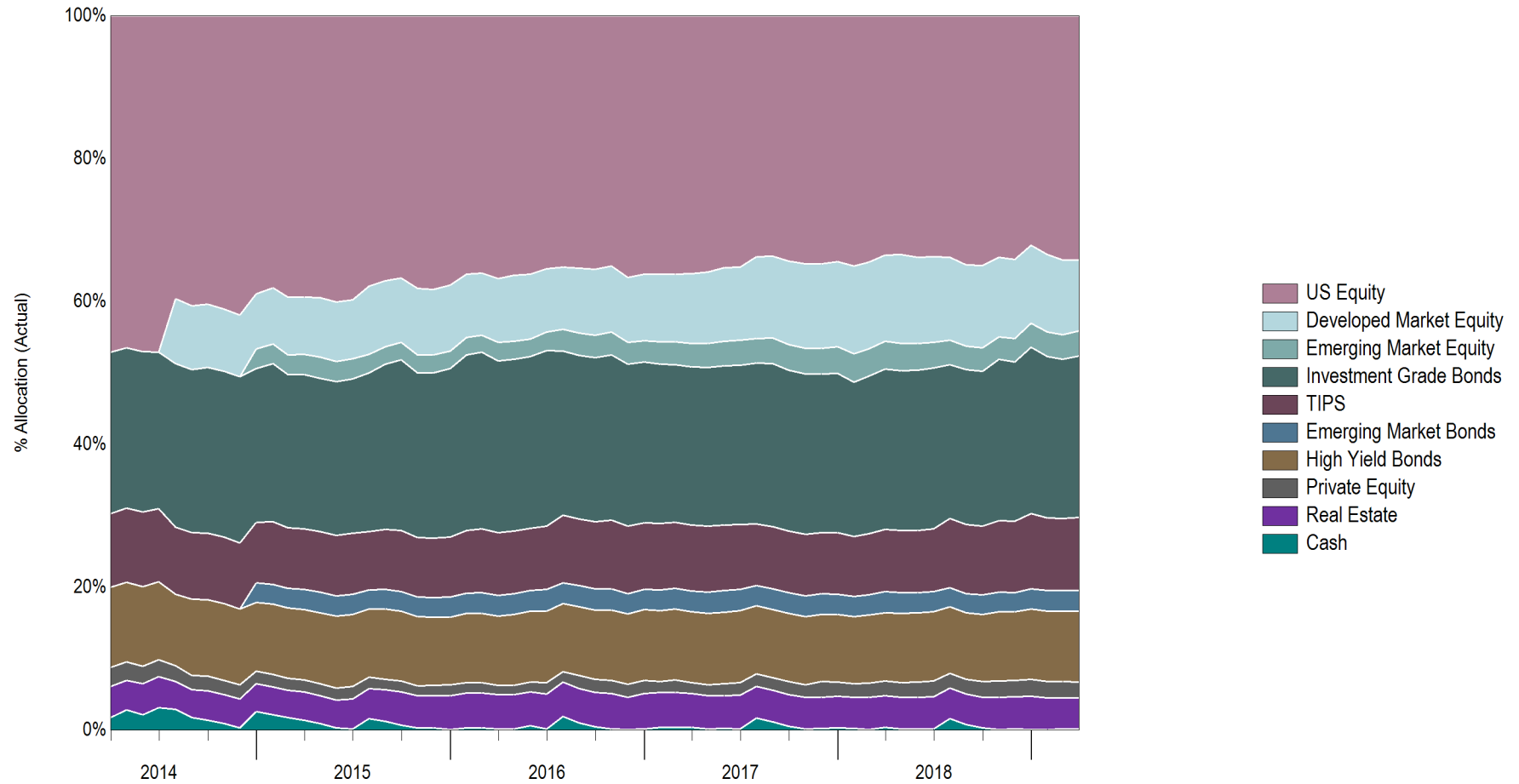
Total Retirement System

As of March 31, 2019

Allocation vs. Targets and Policy

	Current Balance	Current Allocation	Policy	Policy Range
 US Equity	\$58,724,573	34%	33%	28% - 38%
 Developed Market Equity	\$17,134,011	10%	9%	5% - 13%
 Emerging Market Equity	\$5,972,189	3%	3%	1% - 5%
 Investment Grade Bonds	\$38,869,397	23%	22%	17% - 27%
 TIPS	\$17,535,450	10%	10%	7% - 13%
 Emerging Market Bonds	\$4,992,264	3%	3%	1% - 5%
 High Yield Bonds	\$17,023,710	10%	10%	7% - 13%
 Private Equity	\$3,849,662	2%	5%	3% - 7%
 Real Estate	\$7,539,034	4%	5%	2% - 8%
 Cash	\$240,364	0%	0%	0% - 5%
Total	\$171,880,655	100%	100%	

Asset Allocation History
5 Years Ending March 31, 2019



Total Retirement System

As of March 31, 2019

	Actual Asset Allocation (%)	Target Allocation (%)	Target Range (%)	PRIT Asset Allocation ¹ (%)
Total Retirement System	NA	NA	NA	NA
<i>Equity Assets</i>	48	45	37-53	39
Domestic Equity Assets	34	33	28-38	22
International Equity Assets	13	12	9-15	16
<i>Fixed Income Assets</i>	46	45	32-53	22
Domestic Investment Grade Assets	23	22	17-27	12
High Yield Bond Assets	10	10	7-13	10
TIPS	10	10	7-13	-
Emerging Market Debt	3	3	1-5	-
<i>Portfolio Completion Strategies</i>	NA	NA	NA	13
<i>Real Estate Assets</i>	4	5	3-7	10
<i>Private Equity</i>	2	5	3-7	12
<i>Timber/Natural Resources</i>	NA	NA	NA	4
<i>Cash</i>	< 1	< 5	< 5	< 1

¹ PRIT asset allocation as of March 31, 2019. TIPS and Emerging Market Debt are reflected in PRIT's Core and Value-Added Fixed Income Sleeves, respectively.

Total Retirement System

As of March 31, 2019

Asset Class Performance Summary

	Market Value (\$)	% of Portfolio	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Total Retirement System	171,880,655	100.0	7.6	3.7	7.4	5.6	9.2	6.2	7.6	Jul-88
55% MSCI World & 45% Barclays Aggregate			8.2	4.5	6.9	5.1	8.7	5.1	6.9	Jul-88
Consumer Price Index			1.2	1.9	2.2	1.5	1.8	2.2	2.5	Jul-88
PRIT Core Fund			6.4	3.8	9.2	7.2	10.8	7.1	8.8	Jul-88
InvestorForce Public DB Net Median			8.6	4.0	8.1	5.8	9.6	5.6	8.0	Jul-88
InvestorForce Public DB Net Rank			80	59	81	57	62	16	91	Jul-88
Domestic Equity Assets	58,724,573	34.2	12.9	6.8	12.4	9.5	15.7	5.8	8.0	Oct-06
Russell 3000			14.0	8.8	13.5	10.4	16.0	6.5	8.5	Oct-06
PRIT Domestic Equity			14.0	8.6	13.5	10.2	15.8	6.5	7.5	Oct-06
International Developed Markets Equity Assets	17,134,011	10.0	10.2	-3.2	7.5	1.6	8.2	--	2.4	Oct-06
MSCI EAFE			10.0	-3.7	7.3	2.3	9.0	3.9	2.8	Oct-06
International Emerging Markets Equity Assets	5,972,189	3.5	9.7	-9.1	10.6	--	--	--	5.1	Jan-15
MSCI Emerging Markets			9.9	-7.4	10.7	3.7	8.9	8.4	4.8	Jan-15
Investment Grade Bonds Assets	38,869,397	22.6	2.9	4.5	2.1	2.8	3.8	4.7	6.1	Jul-88
BBgBarc US Aggregate TR			2.9	4.5	2.0	2.7	3.8	4.7	6.1	Jul-88
PRIT Core Fixed Income			3.8	4.5	2.1	4.6	5.5	5.4	6.9	Jul-88
High Yield Bond Assets	17,023,710	9.9	6.9	6.2	7.4	4.4	8.5	--	6.8	Sep-03
BBgBarc US High Yield TR			7.3	5.9	8.6	4.7	11.3	6.8	7.8	Sep-03
PRIT Public Value-Added Fixed Income			5.2	2.0	6.1	3.2	7.8	--	6.7	Sep-03
TIPS Assets	17,535,450	10.2	3.2	2.6	1.7	1.9	3.4	--	3.6	Oct-05
BBgBarc US TIPS TR			3.2	2.7	1.7	1.9	3.4	5.3	3.6	Oct-05
Emerging Market Debt Assets	4,992,264	2.9	8.2	1.7	6.3	--	--	--	5.3	Jan-15
JP Morgan EMBI Global Diversified			7.0	4.2	5.8	5.4	8.5	9.2	5.6	Jan-15
Open-Ended Real Estate	5,676,597	3.3	2.0	8.0	8.1	10.9	8.5	7.5	8.2	Oct-95
NCREIF ODCE			1.4	7.5	8.0	10.2	8.7	8.5	9.2	Oct-95

Total Retirement System

As of March 31, 2019

	Market Value (\$)	% of Portfolio	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Total Closed End Real Estate	1,862,437	1.1	0.0	-3.1	6.7	11.7	--	--	12.3	Jan-13
<i>NCREIF ODCE</i>			<i>1.4</i>	<i>7.5</i>	<i>8.0</i>	<i>10.2</i>	<i>8.7</i>	<i>8.5</i>	<i>10.8</i>	<i>Jan-13</i>
Private Equity Assets	3,849,662	2.2								
Cash	240,364	0.1								

Total Retirement System

As of March 31, 2019

Trailing Performance

	Market Value (\$)	% of Portfolio	% of Sector	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Total Retirement System	171,880,655	100.0	--	7.6	3.7	7.4	5.6	9.2	6.2	7.6	Jul-88
55% MSCI World & 45% Barclays Aggregate				8.2	4.5	6.9	5.1	8.7	5.1	6.9	Jul-88
Consumer Price Index				1.2	1.9	2.2	1.5	1.8	2.2	2.5	Jul-88
PRIT Core Fund				6.4	3.8	9.2	7.2	10.8	7.1	8.8	Jul-88
Domestic Equity Assets	58,724,573	34.2	34.2	12.9	6.8	12.4	9.5	15.7	5.8	8.0	Oct-06
Russell 3000				14.0	8.8	13.5	10.4	16.0	6.5	8.5	Oct-06
PRIT Domestic Equity				14.0	8.6	13.5	10.2	15.8	6.5	7.5	Oct-06
RhumbLine S&P 500 Index	18,536,977	10.8	31.6	13.6	9.4	13.5	10.9	15.9	6.1	6.3	Mar-99
S&P 500				13.6	9.5	13.5	10.9	15.9	6.0	6.2	Mar-99
Fiduciary Large Cap Equity	23,254,602	13.5	39.6	10.7	7.8	11.8	9.1	--	--	12.1	Sep-12
Russell 3000				14.0	8.8	13.5	10.4	16.0	6.5	13.4	Sep-12
Frontier Capital Appreciation	16,932,994	9.9	28.8	15.3	2.7	12.4	7.5	--	--	11.8	Feb-13
Russell 2500 Growth				19.0	7.5	15.6	9.7	17.5	8.5	12.9	Feb-13
International Developed Markets Equity Assets	17,134,011	10.0	10.0	10.2	-3.2	7.5	1.6	8.2	--	2.4	Oct-06
MSCI EAFE				10.0	-3.7	7.3	2.3	9.0	3.9	2.8	Oct-06
Rhumblin MSCI EAFE Index	17,134,011	10.0	100.0	10.2	-3.2	7.5	--	--	--	2.2	Aug-14
MSCI EAFE				10.0	-3.7	7.3	2.3	9.0	3.9	2.1	Aug-14
International Emerging Markets Equity Assets	5,972,189	3.5	3.5	9.7	-9.1	10.6	--	--	--	5.1	Jan-15
MSCI Emerging Markets				9.9	-7.4	10.7	3.7	8.9	8.4	4.8	Jan-15
DFA Emerging Markets	2,909,478	1.7	48.7	8.6	-9.5	9.6	--	--	--	4.4	Jan-15
MSCI Emerging Markets				9.9	-7.4	10.7	3.7	8.9	8.4	4.8	Jan-15

Total Retirement System

As of March 31, 2019

	Market Value (\$)	% of Portfolio	% of Sector	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Driehaus Emerging Market Equity	3,062,711	1.8	51.3	10.8	-8.7	11.5	--	--	--	5.8	Jan-15
MSCI Emerging Markets				9.9	-7.4	10.7	3.7	8.9	8.4	4.8	Jan-15
Investment Grade Bonds Assets	38,869,397	22.6	22.6	2.9	4.5	2.1	2.8	3.8	4.7	6.1	Jul-88
BBgBarc US Aggregate TR				2.9	4.5	2.0	2.7	3.8	4.7	6.1	Jul-88
PRIT Core Fixed Income				3.8	4.5	2.1	4.6	5.5	5.4	6.9	Jul-88
SSgA U.S. Aggregate Bond Index	38,869,397	22.6	100.0	2.9	4.5	2.1	2.8	3.8	--	4.5	May-01
BBgBarc US Aggregate TR				2.9	4.5	2.0	2.7	3.8	4.7	4.5	May-01
High Yield Bond Assets	17,023,710	9.9	9.9	6.9	6.2	7.4	4.4	8.5	--	6.8	Sep-03
BBgBarc US High Yield TR				7.3	5.9	8.6	4.7	11.3	6.8	7.8	Sep-03
PRIT Public Value-Added Fixed Income				5.2	2.0	6.1	3.2	7.8	--	6.7	Sep-03
Shenkman Capital	17,023,710	9.9	100.0	6.9	6.2	7.4	4.4	8.5	--	6.8	Apr-06
BBgBarc US High Yield TR				7.3	5.9	8.6	4.7	11.3	6.8	7.4	Apr-06
TIPS Assets	17,535,450	10.2	10.2	3.2	2.6	1.7	1.9	3.4	--	3.6	Oct-05
BBgBarc US TIPS TR				3.2	2.7	1.7	1.9	3.4	5.3	3.6	Oct-05
SSgA TIPS Index-NL	17,535,450	10.2	100.0	3.2	2.6	1.7	1.9	3.4	--	3.6	Oct-05
BBgBarc US TIPS TR				3.2	2.7	1.7	1.9	3.4	5.3	3.6	Oct-05
Emerging Market Debt Assets	4,992,264	2.9	2.9	8.2	1.7	6.3	--	--	--	5.3	Jan-15
JP Morgan EMBI Global Diversified				7.0	4.2	5.8	5.4	8.5	9.2	5.6	Jan-15
Payden Emerging Market Bond	4,992,264	2.9	100.0	8.2	1.7	6.3	--	--	--	5.3	Jan-15
JP Morgan EMBI Global Diversified				7.0	4.2	5.8	5.4	8.5	9.2	5.6	Jan-15

City of Marlborough Contributory Retirement System

As of March 31, 2019

	Market Value (\$)	% of Portfolio	% of Sector	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Open-Ended Real Estate	5,676,597	3.3	3.3	2.0	8.0	8.1	10.9	8.5	7.5	8.2	Oct-95
<i>NCREIF ODCE</i>				1.4	7.5	8.0	10.2	8.7	8.5	9.2	Oct-95
Clarion Partners	5,676,597	3.3	100.0	2.0	8.0	8.1	10.9	8.5	--	7.4	Oct-02
<i>NCREIF ODCE</i>				1.4	7.5	8.0	10.2	8.7	8.5	8.3	Oct-02
Total Closed End Real Estate	1,862,437	1.1	1.1	0.0	-3.1	6.7	11.7	--	--	12.3	Jan-13
<i>NCREIF ODCE</i>				1.4	7.5	8.0	10.2	8.7	8.5	10.8	Jan-13
Colony Realty Partners IV	1,862,437	1.1	100.0	0.0	-3.1	6.7	11.7	--	--	--	Jan-13
<i>NCREIF ODCE</i>				1.4	7.5	8.0	10.2	8.7	8.5	10.8	Jan-13
Private Equity Assets	3,849,662	2.2	2.2								
North American Strategic Partners 2006	738,532	0.4	19.2								
Ironsides Partnership Fund IV	878,495	0.5	22.8								
Ironsides Direct Investment Fund IV	2,232,635	1.3	58.0								
Cash	240,364	0.1	0.1								

Ironsides Partnership Fund IV NAV is as of 9/30/2018 adjusted for cash flows through 3/31/2019.

Ironsides Direct Investment Fund IV NAV is as of 12/31/2018 adjusted for cash flows through 3/31/2019.

Colony Realty Partners IV NAV is as of 12/31/2018 adjusted for cash flows through 3/31/2019.

Total Retirement System

As of March 31, 2019

Calendar Year Performance

	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Total Retirement System	-4.4	13.1	8.7	-0.2	6.3	14.0	10.9	2.4	12.3	16.8
55% MSCI World & 45% Barclays Aggregate	-4.6	13.6	5.5	0.0	5.5	13.0	10.7	0.7	10.0	19.2
Consumer Price Index	1.9	2.1	2.1	0.7	0.8	1.5	1.7	3.0	1.5	2.7
PRIT Core Fund	-1.8	17.7	8.0	1.1	8.1	15.2	13.9	0.1	13.6	17.7
Domestic Equity Assets	-6.7	20.3	14.6	-1.6	13.1	33.1	15.3	0.0	18.8	29.8
Russell 3000	-5.2	21.1	12.7	0.5	12.6	33.6	16.4	1.0	16.9	28.3
PRIT Domestic Equity	-5.1	20.8	12.9	0.3	11.7	33.7	16.9	1.1	16.8	25.4
RhumbLine S&P 500 Index	-4.4	21.8	11.9	1.4	13.6	32.2	16.0	2.1	15.0	26.6
S&P 500	-4.4	21.8	12.0	1.4	13.7	32.4	16.0	2.1	15.1	26.5
Fiduciary Large Cap Equity (net)	-3.7	19.2	13.8	-2.4	12.4	30.5	--	--	--	--
Russell 3000	-5.2	21.1	12.7	0.5	12.6	33.6	16.4	1.0	16.9	28.3
Frontier Capital Appreciation (net)	-13.9	19.1	20.5	-6.5	12.4	--	--	--	--	--
Russell 2500 Growth	-7.5	24.5	9.7	-0.2	7.1	40.6	16.1	-1.6	28.9	41.7
International Developed Markets Equity Assets	-13.5	24.9	1.4	-0.8	-8.7	21.2	15.0	-14.1	10.6	34.1
MSCI EAFE	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8
Rhumblin MSCI EAFE Index (net)	-13.5	24.9	1.4	-0.8	--	--	--	--	--	--
MSCI EAFE	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8
International Emerging Markets Equity Assets	-15.4	39.7	9.4	-12.7	--	--	--	--	--	--
MSCI Emerging Markets	-14.6	37.3	11.2	-14.9	-2.2	-2.6	18.2	-18.4	18.9	78.5
DFA Emerging Markets (net)	-15.2	36.6	12.4	-14.9	--	--	--	--	--	--
MSCI Emerging Markets	-14.6	37.3	11.2	-14.9	-2.2	-2.6	18.2	-18.4	18.9	78.5

Total Retirement System

As of March 31, 2019

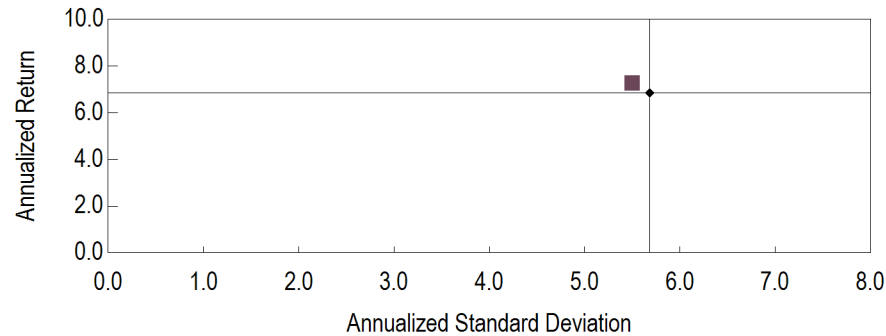
	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Driehaus Emerging Market Equity (net)	-15.6	43.0	6.5	-10.6	--	--	--	--	--	--
<i>MSCI Emerging Markets</i>	-14.6	37.3	11.2	-14.9	-2.2	-2.6	18.2	-18.4	18.9	78.5
Investment Grade Bonds Assets	0.0	3.6	2.6	0.6	6.0	-2.0	4.3	7.8	6.6	6.0
<i>BBgBarc US Aggregate TR</i>	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9
<i>PRIT Core Fixed Income</i>	-0.8	5.4	4.0	-2.0	15.2	-2.8	6.4	8.1	7.5	11.9
SSgA U.S. Aggregate Bond Index	0.0	3.6	2.6	0.6	6.0	-2.0	4.3	7.8	6.6	6.0
<i>BBgBarc US Aggregate TR</i>	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9
High Yield Bond Assets	-1.3	7.0	12.7	-2.3	2.9	6.4	12.4	6.0	12.8	34.3
<i>BBgBarc US High Yield TR</i>	-2.1	7.5	17.1	-4.5	2.5	7.4	15.8	5.0	15.1	58.2
<i>PRIT Public Value-Added Fixed Income</i>	-2.1	9.0	11.7	-4.7	-0.2	-1.5	14.7	5.3	13.6	39.7
Shenkman Capital	-1.3	7.2	12.7	-2.3	2.9	6.4	12.4	6.0	12.8	34.3
<i>BBgBarc US High Yield TR</i>	-2.1	7.5	17.1	-4.5	2.5	7.4	15.8	5.0	15.1	58.2
TIPS Assets	-1.3	3.0	4.7	-1.4	3.6	-8.6	6.9	13.5	6.3	11.3
<i>BBgBarc US TIPS TR</i>	-1.3	3.0	4.7	-1.4	3.6	-8.6	7.0	13.6	6.3	11.4
SSgA TIPS Index-NL	-1.3	3.0	4.7	-1.4	3.6	-8.6	6.9	13.5	6.3	11.3
<i>BBgBarc US TIPS TR</i>	-1.3	3.0	4.7	-1.4	3.6	-8.6	7.0	13.6	6.3	11.4
Emerging Market Debt Assets	-7.0	12.0	11.5	-0.8	--	--	--	--	--	--
<i>JP Morgan EMBI Global Diversified</i>	-4.3	10.3	10.2	1.2	7.4	-5.3	17.4	7.3	12.2	29.8
Payden Emerging Market Bond (net)	-7.0	12.0	11.5	-0.8	--	--	--	--	--	--
<i>JP Morgan EMBI Global Diversified</i>	-4.3	10.3	10.2	1.2	7.4	-5.3	17.4	7.3	12.2	29.8

Total Retirement System

As of March 31, 2019

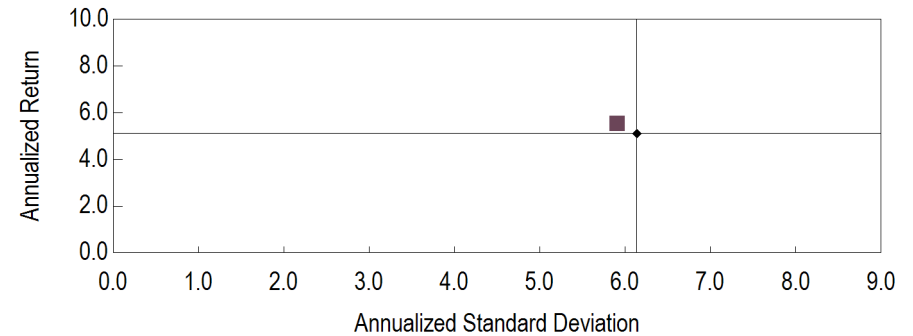
	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Open-Ended Real Estate	8.6	7.9	9.1	15.7	13.2	12.8	10.9	18.7	19.2	-38.6
NCREIF ODCE	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8
Clarion Partners	8.6	7.9	9.1	15.7	13.2	12.8	10.9	18.7	19.2	-38.6
NCREIF ODCE	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8
Total Closed End Real Estate	-1.8	15.1	9.5	23.8	13.3	18.8	--	--	--	--
NCREIF ODCE	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8
Colony Realty Partners IV	-1.8	15.1	9.5	23.8	13.3	--	--	--	--	--
NCREIF ODCE	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8
Private Equity Assets										
North American Strategic Partners 2006 (net)										
Ironsides Partnership Fund IV (net)										
Ironsides Direct Investment Fund IV (net)										
Cash										

Annualized Return vs. Annualized Standard Deviation
3 Years Ending March 31, 2019



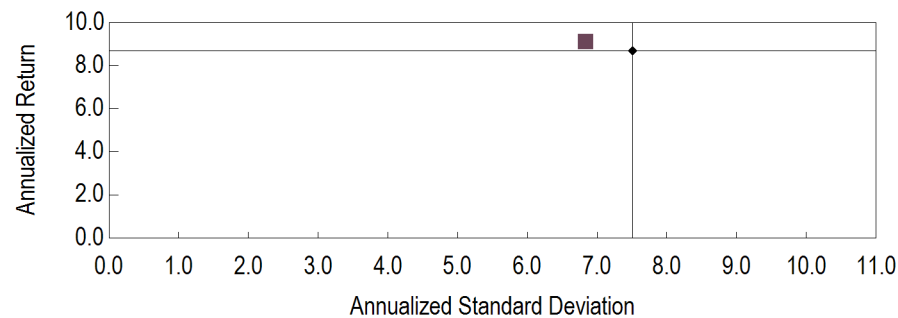
- Total Retirement System
- ◆ 55% MSCI World & 45% Barclays Aggregate

Annualized Return vs. Annualized Standard Deviation
5 Years Ending March 31, 2019



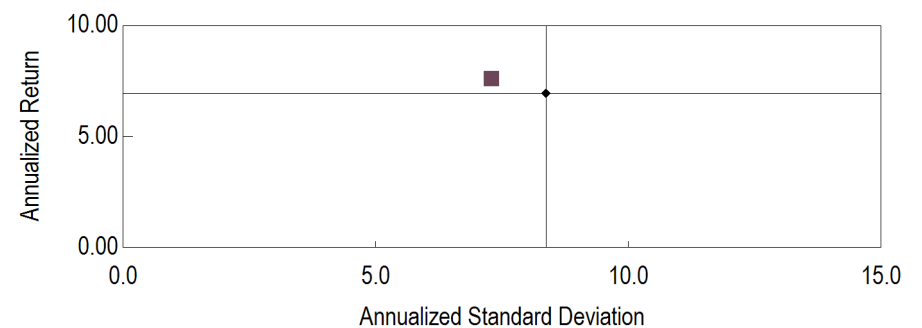
- Total Retirement System
- ◆ 55% MSCI World & 45% Barclays Aggregate

Annualized Return vs. Annualized Standard Deviation
10 Years Ending March 31, 2019



- Total Retirement System
- ◆ 55% MSCI World & 45% Barclays Aggregate

Annualized Return vs. Annualized Standard Deviation
Since Inception



- Total Retirement System
- ◆ 55% MSCI World & 45% Barclays Aggregate

As of March 31, 2019

Statistics Summary
5 Years Ending March 31, 2019

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Retirement System	5.5%	5.9%	0.4	0.9	0.8	1.2%
55% MSCI World & 45% Barclays Aggregate	5.1%	6.1%	--	1.0	0.7	0.0%
Equity Assets	7.3%	10.9%	-1.3	0.9	0.6	2.4%
Russell 3000	10.4%	11.5%	--	1.0	0.8	0.0%
Domestic Equity Assets	9.4%	11.5%	-0.6	1.0	0.7	1.7%
Russell 3000	10.4%	11.5%	--	1.0	0.8	0.0%
RhumbLine S&P 500 Index	10.9%	11.2%	-0.6	1.0	0.9	0.0%
S&P 500	10.9%	11.2%	--	1.0	0.9	0.0%
Fiduciary Large Cap Equity	9.1%	10.2%	-0.3	0.8	0.8	3.6%
Russell 3000	10.4%	11.5%	--	1.0	0.8	0.0%
Frontier Capital Appreciation	7.2%	16.0%	-0.5	1.0	0.4	4.8%
Russell 2500 Growth	9.7%	15.6%	--	1.0	0.6	0.0%
International Developed Markets Equity Assets	1.6%	11.8%	-0.8	1.0	0.1	0.9%
MSCI EAFE	2.3%	11.8%	--	1.0	0.1	0.0%
Rhumblne MSCI EAFE Index	--	--	--	--	--	--
MSCI EAFE	2.3%	11.8%	--	1.0	0.1	0.0%
International Emerging Markets Equity Assets	--	--	--	--	--	--
MSCI Emerging Markets	3.7%	15.3%	--	1.0	0.2	0.0%
DFA Emerging Markets	--	--	--	--	--	--
MSCI Emerging Markets	3.7%	15.3%	--	1.0	0.2	0.0%

Total Retirement System

As of March 31, 2019

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Driehaus Emerging Market Equity	--	--	--	--	--	--
MSCI Emerging Markets	3.7%	15.3%	--	1.0	0.2	0.0%
Investment Grade Bonds Assets	2.8%	2.9%	1.0	1.0	0.7	0.0%
BBgBarc US Aggregate TR	2.7%	2.9%	--	1.0	0.7	0.0%
SSgA U.S. Aggregate Bond Index	2.8%	2.9%	1.0	1.0	0.7	0.0%
BBgBarc US Aggregate TR	2.7%	2.9%	--	1.0	0.7	0.0%
High Yield Bond Assets	4.2%	4.9%	-0.5	0.9	0.7	1.0%
BBgBarc US High Yield TR	4.7%	5.4%	--	1.0	0.7	0.0%
Shenkman Capital	4.1%	4.9%	-0.5	0.9	0.7	1.0%
BBgBarc US High Yield TR	4.7%	5.4%	--	1.0	0.7	0.0%
TIPS Assets	1.9%	3.6%	-0.4	1.0	0.3	0.0%
BBgBarc US TIPS TR	1.9%	3.6%	--	1.0	0.3	0.0%
SSgA TIPS Index-NL	1.9%	3.6%	-0.4	1.0	0.3	0.1%
BBgBarc US TIPS TR	1.9%	3.6%	--	1.0	0.3	0.0%
Emerging Market Debt Assets	--	--	--	--	--	--
JP Morgan EMBI Global Diversified	5.4%	5.5%	--	1.0	0.8	0.0%
Payden Emerging Market Bond	--	--	--	--	--	--
JP Morgan EMBI Global Diversified	5.4%	5.5%	--	1.0	0.8	0.0%
Open-Ended Real Estate	10.9%	4.7%	0.7	1.1	2.1	1.0%
NCREIF ODCE	10.2%	4.3%	--	1.0	2.2	0.0%
Clarion Partners	10.9%	4.7%	0.7	1.1	2.1	1.0%
NCREIF ODCE	10.2%	4.3%	--	1.0	2.2	0.0%

Total Retirement System

As of March 31, 2019

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Closed End Real Estate	11.7%	7.2%	0.3	1.3	1.5	4.7%
NCREIF ODCE	10.2%	4.3%	--	1.0	2.2	0.0%
Colony Realty Partners IV	11.7%	7.2%	0.3	1.3	1.5	4.7%
NCREIF ODCE	10.2%	4.3%	--	1.0	2.2	0.0%
Comerica Short Term Fund	0.1%	0.1%	-2.1	-0.2	-4.6	0.3%
91 Day T-Bills	0.8%	0.2%	--	1.0	0.0	0.0%

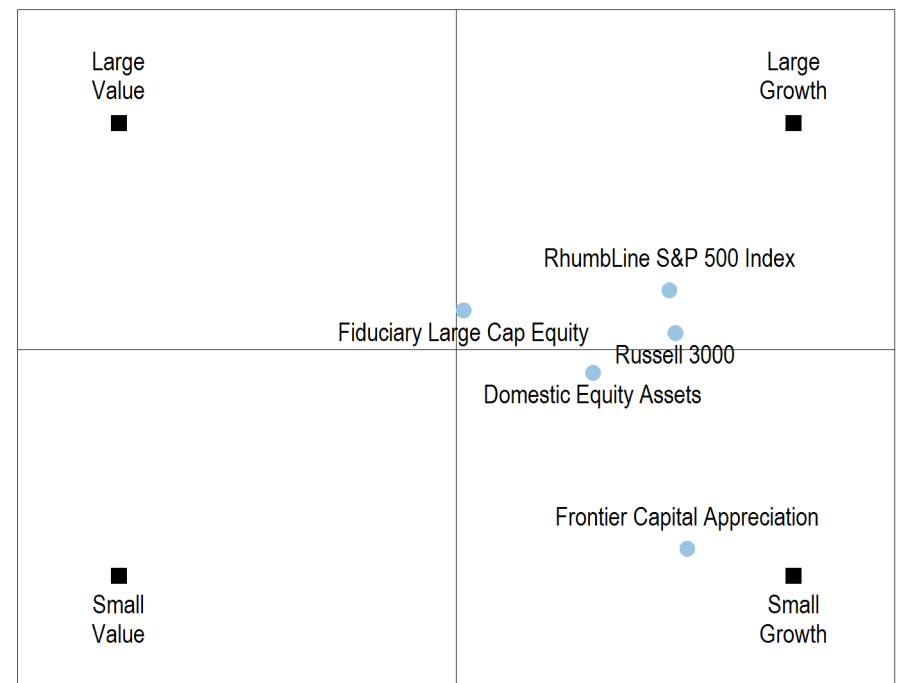
Retirement System Detail

Domestic Equity Assets

As of March 31, 2019

Asset Allocation on March 31, 2019

	Actual	Actual
Fiduciary Large Cap Equity	\$23,254,602	39.6%
Frontier Capital Appreciation	\$16,932,994	28.8%
RhumbLine S&P 500 Index	\$18,536,977	31.6%
Total	\$58,724,573	100.0%

Domestic Equity Assets Style Map
3 Years Ending March 31, 2019

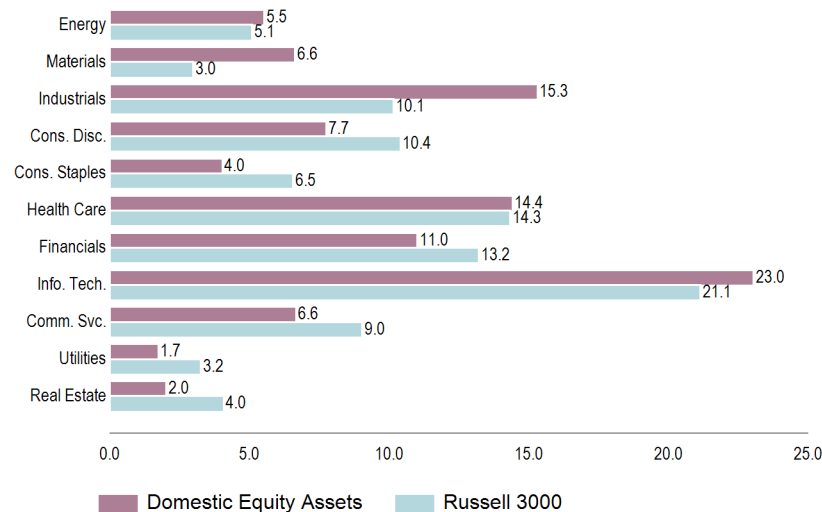
Domestic Equity Assets

As of March 31, 2019

Domestic Equity Assets Characteristics

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Market Value			
Market Value (\$M)	58.7	--	52.0
Number Of Holdings	632	2977	630
Characteristics			
Weighted Avg. Market Cap. (\$B)	116.1	178.6	98.4
Median Market Cap (\$B)	15.5	1.6	13.9
P/E Ratio	19.8	20.2	20.0
Yield	1.5	1.9	1.7
EPS Growth - 5 Yrs.	10.8	12.5	8.9
Price to Book	3.1	3.3	4.9
Beta (holdings; domestic)	1.1	1.0	1.2

Sector Allocation (%) vs Russell 3000



Top 10 Holdings

CASH - USD	2.2%
MICROSOFT	2.0%
APPLE	1.9%
AMAZON.COM	1.6%
UNITED CONTINENTAL HOLDINGS	1.4%
INSULET	1.1%
TUTOR PERINI	1.1%
ALLEGHENY TECHS.	1.0%
COOPER COS.	1.0%
TANDEM DIABETES CARE	0.9%
Total	14.2%

International Equity Assets

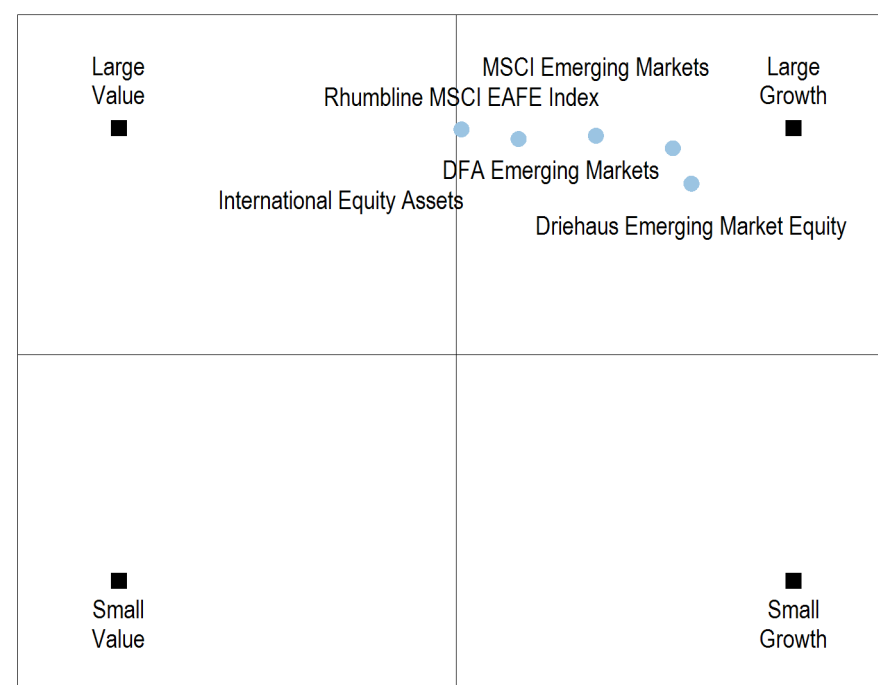
As of March 31, 2019

Asset Allocation on March 31, 2019

	Actual	Actual
DFA Emerging Markets	\$2,909,478	12.6%
Driehaus Emerging Market Equity	\$3,062,711	13.3%
Rhumblin MSCI EAFE Index	\$17,134,011	74.2%
Total	\$23,106,200	100.0%

International Equity Assets Style Map

3 Years Ending March 31, 2019



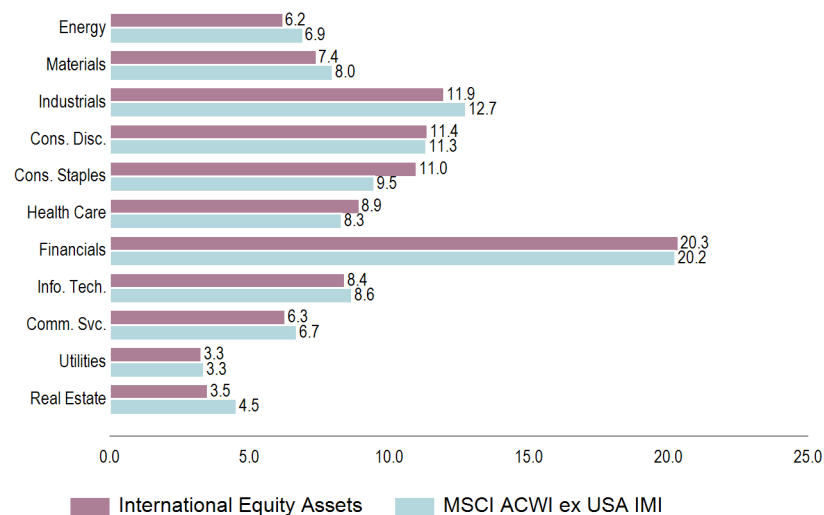
International Equity Assets

As of March 31, 2019

International Equity Characteristics

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Market Value			
Market Value (\$M)	23.1	--	23.2
Number Of Holdings	5902	6248	5925
Characteristics			
Weighted Avg. Market Cap. (\$B)	62.9	56.1	54.8
Median Market Cap (\$B)	0.6	1.6	0.6
P/E Ratio	14.7	14.5	17.7
Yield	3.2	3.2	3.4
EPS Growth - 5 Yrs.	10.4	11.1	8.3
Price to Book	2.3	2.2	2.9
Beta (holdings; domestic)	1.0	1.0	1.0

Sector Allocation (%) vs MSCI ACWI ex USA IMI



Top 10 Holdings

NESTLE 'R'	1.6%
NOVARTIS 'R'	1.1%
TENCENT HOLDINGS	1.1%
ROCHE HOLDING	1.0%
SAMSUNG ELECTRONICS	0.9%
AIA GROUP	0.9%
HSBC HOLDINGS	0.9%
BP	0.8%
ROYAL DUTCH SHELL A(LON)	0.8%
ALIBABA GROUP HLDG.SPN. ADR 1:1	0.7%
Total	9.8%

As of March 31, 2019

Country Allocation Report

As of 3/31/2019

Region	% of Total	% of Bench	% Diff
North America ex U.S.	0.0%	6.8%	-6.8%
United States	1.5%	0.0%	1.5%
Europe Ex U.K.	34.2%	30.2%	4.0%
United Kingdom	12.2%	11.8%	0.4%
Pacific Basin Ex Japan	12.6%	8.5%	4.1%
Japan	17.6%	17.0%	0.7%
Emerging Markets	21.4%	24.9%	-3.5%
Other	0.5%	0.7%	-0.2%
Total	100.0%	100.0%	0.0%

International Equity Assets

As of March 31, 2019

International Equity Country Allocation

vs MSCI ACWI ex USA IMI

Country	% of Total	% of Bench	% Diff
ARGENTINA	0.1%	0.0%	0.1%
AUSTRALIA	5.1%	4.8%	0.3%
AUSTRIA	0.2%	0.2%	-0.1%
BAHRAIN	0.0%	0.0%	0.0%
BANGLADESH	0.0%	0.0%	0.0%
BELGIUM	0.7%	0.8%	0.0%
BRAZIL	2.5%	1.8%	0.7%
BULGARIA	0.0%	0.0%	0.0%
CANADA	0.0%	6.8%	-6.8%
CHILE	0.2%	0.3%	-0.1%
CHINA	3.0%	7.7%	-4.7%
COLOMBIA	0.1%	0.1%	-0.1%
CROATIA	0.0%	0.0%	0.0%
CZECH REPUBLIC	0.0%	0.0%	0.0%
DENMARK	1.3%	1.2%	0.1%
EGYPT	0.0%	0.0%	0.0%
ESTONIA	0.0%	0.0%	0.0%
FINLAND	0.7%	0.7%	0.0%
FRANCE	8.3%	6.9%	1.4%
GERMANY	6.3%	5.5%	0.7%
GREECE	0.0%	0.1%	-0.1%
HONG KONG	6.2%	2.6%	3.6%
HUNGARY	0.1%	0.1%	0.0%
INDIA	3.3%	2.5%	0.8%

International Equity Assets

As of March 31, 2019

Country	% of Total	% of Bench	% Diff
INDONESIA	0.9%	0.6%	0.4%
IRELAND	0.3%	0.4%	-0.1%
ISRAEL	0.3%	0.5%	-0.1%
ITALY	1.7%	1.7%	0.0%
JAPAN	17.6%	17.0%	0.7%
JORDAN	0.0%	0.0%	0.0%
KAZAKHSTAN	0.0%	0.0%	0.0%
KENYA	0.0%	0.0%	0.0%
KOREA	3.1%	3.4%	-0.3%
KUWAIT	0.0%	0.0%	0.0%
LEBANON	0.0%	0.0%	0.0%
LITHUANIA	0.0%	0.0%	0.0%
LUXEMBOURG	0.1%	0.0%	0.1%
MALAYSIA	0.4%	0.6%	-0.2%
MAURITIUS	0.0%	0.0%	0.0%
MEXICO	0.7%	0.7%	0.1%
MOROCCO	0.0%	0.0%	0.0%
NETHERLANDS	3.3%	2.3%	1.0%
NEW ZEALAND	0.2%	0.2%	-0.1%
NIGERIA	0.0%	0.0%	0.0%
NORWAY	0.5%	0.6%	-0.1%
OMAN	0.0%	0.0%	0.0%
OTHER	0.1%	0.0%	0.1%
PAKISTAN	0.0%	0.0%	0.0%
PERU	0.2%	0.1%	0.1%
PHILIPPINES	0.4%	0.3%	0.1%
POLAND	0.3%	0.3%	0.0%

International Equity Assets

As of March 31, 2019

Country	% of Total	% of Bench	% Diff
PORTUGAL	0.1%	0.1%	0.0%
QATAR	0.0%	0.2%	-0.2%
ROMANIA	0.0%	0.0%	0.0%
RUSSIA	0.9%	0.9%	0.1%
SERBIA	0.0%	0.0%	0.0%
SINGAPORE	1.2%	0.9%	0.2%
SLOVENIA	0.0%	0.0%	0.0%
SOUTH AFRICA	1.3%	1.4%	-0.1%
SPAIN	2.2%	2.0%	0.2%
SRI LANKA	0.0%	0.0%	0.0%
SWEDEN	1.9%	2.1%	-0.2%
SWITZERLAND	6.6%	5.6%	1.0%
TAIWAN	2.6%	3.1%	-0.5%
THAILAND	0.9%	0.6%	0.3%
TUNISIA	0.0%	0.0%	0.0%
TURKEY	0.2%	0.2%	0.1%
UKRAINE	0.0%	0.0%	0.0%
UNITED ARAB EMIRATES	0.0%	0.2%	-0.2%
UNITED KINGDOM	12.2%	11.8%	0.4%
UNITED STATES	1.5%	0.0%	1.5%
VIETNAM	0.0%	0.0%	0.0%
Total	100.0%	100.0%	0.0%

Fixed Income Assets

As of March 31, 2019

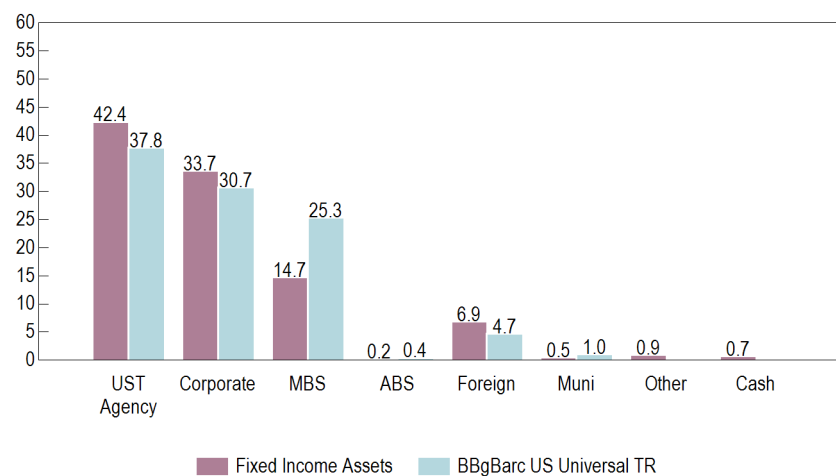
Asset Allocation on March 31, 2019

	Actual	Actual
Payden Emerging Market Bond	\$4,992,264	6.4%
Shenkman Capital	\$17,023,710	21.7%
SSgA TIPS Index-NL	\$17,535,450	22.4%
SSgA U.S. Aggregate Bond Index	\$38,869,397	49.6%
Total	\$78,420,821	100.0%

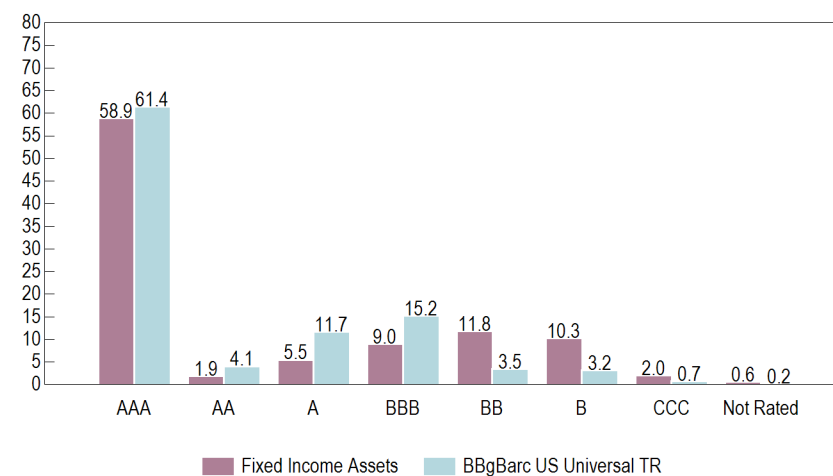
Fixed Income Characteristics
vs. BBgBarc US Universal TR

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Fixed Income Characteristics			
Yield to Maturity	3.8	7.8	4.3
Average Duration	5.1	5.6	5.3
Average Quality	A	AA	A
Weighted Average Maturity	7.7	8.0	7.7

Sector Allocation



Credit Quality Allocation



Portfolio Reviews

RhumbLine S&P 500 Index

As of March 31, 2019

Account Information

Account Name	RhumbLine S&P 500 Index
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	3/01/99
Account Type	US Equity
Benchmark	S&P 500
Universe	eV US Passive S&P 500 Equity Net

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
RhumbLine S&P 500 Index	13.6	13.6	9.4	13.5	10.9	15.9	6.3	Mar-99
S&P 500	13.6	13.6	9.5	13.5	10.9	15.9	6.2	Mar-99

Top 10 Holdings

MICROSOFT	3.8%
APPLE	3.6%
AMAZON.COM	3.1%
FACEBOOK CLASS A	1.7%
BERKSHIRE HATHAWAY 'B'	1.6%
JOHNSON & JOHNSON	1.6%
ALPHABET 'C'	1.5%
ALPHABET A	1.5%
EXXON MOBIL	1.4%
JP MORGAN CHASE & CO.	1.4%
Total	21.3%

RhumbLine S&P 500 Index Characteristics

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Market Value			
Market Value (\$M)	18.5	--	16.3
Number Of Holdings	507	505	508
Characteristics			
Weighted Avg. Market Cap. (\$B)	211.8	211.5	183.1
Median Market Cap (\$B)	21.2	21.2	18.4
P/E Ratio	20.2	20.2	23.4
Yield	2.0	2.0	2.2
EPS Growth - 5 Yrs.	12.3	12.3	8.3
Price to Book	3.5	3.5	5.9
Beta (holdings; domestic)	1.0	1.0	1.0

Sector Distribution

Energy	5.4	5.4	5.3
Materials	2.6	2.6	2.7
Industrials	9.4	9.5	9.1
Consumer Discretionary	10.1	10.2	9.8
Consumer Staples	7.2	7.3	7.3
Health Care	14.5	14.6	15.4
Financials	13.2	12.7	14.1
Information Technology	21.1	21.2	19.9
Communication Services	10.0	10.0	10.0
Utilities	3.3	3.3	3.3
Real Estate	3.0	3.1	2.9

Fiduciary Large Cap Equity

As of March 31, 2019

Account Information

Account Name	Fiduciary Large Cap Equity
Account Structure	Mutual Fund
Investment Style	Active
Inception Date	9/01/12
Account Type	US Equity
Benchmark	Russell 3000
Universe	eV US Large Cap Equity Net

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Fiduciary Large Cap Equity	10.7	10.7	7.8	11.8	9.1	--	12.1	Sep-12
Russell 3000	14.0	14.0	8.8	13.5	10.4	16.0	13.4	Sep-12

Top Holdings as of December 31, 2018

BERKSHIRE HATHAWAY INC B	5.70%
DOLLAR GENERAL CORP	5.63%
TWENTY-FIRST CENTURY FOX INC CLASS B	5.57%
UNITEDHEALTH GROUP INC	4.93%
HONEYWELL INTERNATIONAL INC	4.29%
JPMORGAN CHASE & CO	3.98%
PEPSICO INC	3.54%
ACCENTURE PLC A	3.38%
NESTLE SA ADR	3.33%
QUEST DIAGNOSTICS INC	3.26%

Fund Characteristics as of December 31, 2018

Versus Russell 3000

Sharpe Ratio (3 Year)	0.82
Average Market Cap (\$mm)	54,758.75
Price/Earnings	15.48
Price/Book	2.71
Price/Sales	1.72
Price/Cash Flow	10.98
Dividend Yield	2.04
Number of Equity Holdings	30
R-Squared (3 Year)	0.87
Alpha (3 Year)	0.15%

Sector Allocation as of December 31, 2018

BASIC MATERIALS	8.04%
COMMUNICATION SERVICES	2.29%
CONSUMER CYCLICAL	15.39%
CONSUMER DEFENSIVE	19.02%
ENERGY	2.46%
FINANCIAL SERVICES	17.35%
HEALTHCARE	11.51%
INDUSTRIALS	12.77%
REAL ESTATE	0.00%
TECHNOLOGY	11.16%
UTILITIES	0.00%

Frontier Capital Appreciation

As of March 31, 2019

Account Information

Account Name	Frontier Capital Appreciation
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	2/01/13
Account Type	US Equity
Benchmark	Russell 2500 Growth
Universe	eV US Small-Mid Cap Growth Equity Net

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Frontier Capital Appreciation	15.1	15.1	1.9	11.9	7.2	--	11.6	Feb-13
Russell 2500 Growth	19.0	19.0	7.5	15.6	9.7	17.5	12.9	Feb-13

Top 10 Holdings

CASH - USD	4.4%
UNITED CONTINENTAL HOLDINGS	2.9%
INSULET	2.3%
TUTOR PERINI	2.3%
ALLEGHENY TECHS.	2.1%
COOPER COS.	2.0%
TANDEM DIABETES CARE	1.9%
MONOLITHIC PWR.SYS.	1.6%
COGENT COMMS.HOLDINGS	1.6%
ROGERS	1.5%
Total	22.7%

Frontier Capital Appreciation Characteristics

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Market Value			
Market Value (\$M)	16.9	--	14.7
Number Of Holdings	144	1488	140

Characteristics

Weighted Avg. Market Cap. (\$B)	5.6	5.7	5.1
Median Market Cap (\$B)	2.6	1.1	2.2
P/E Ratio	19.2	24.0	16.2
Yield	0.9	0.8	1.2
EPS Growth - 5 Yrs.	7.0	16.7	13.0
Price to Book	2.6	4.8	3.8
Beta (holdings; domestic)	1.3	1.3	1.4

Sector Distribution

Energy	5.6	1.2	5.7
Materials	11.0	4.5	12.5
Industrials	21.7	16.3	22.7
Consumer Discretionary	5.1	14.5	5.2
Consumer Staples	0.4	2.0	0.5
Health Care	14.3	22.1	15.2
Financials	8.6	6.7	9.2
Information Technology	25.1	26.4	25.1
Communication Services	2.9	3.3	3.1
Utilities	0.0	0.3	0.0
Real Estate	0.9	2.9	0.8

Rhumbline MSCI EAFE Index

As of March 31, 2019

Account Information

Account Name	Rhumbline MSCI EAFE Index
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	8/01/14
Account Type	Non-US Stock Developed
Benchmark	MSCI EAFE
Universe	eV EAFE All Cap Equity Net

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Rhumbline MSCI EAFE Index	10.2	10.2	-3.2	7.5	--	--	2.2	Aug-14
MSCI EAFE	10.0	10.0	-3.7	7.3	2.3	9.0	2.1	Aug-14

Top 10 Holdings

NESTLE 'R'	2.1%
NOVARTIS 'R'	1.5%
ROCHE HOLDING	1.4%
HSBC HOLDINGS	1.2%
BP	1.1%
ROYAL DUTCH SHELL A(LON)	1.0%
TOYOTA MOTOR	1.0%
TOTAL	1.0%
AIA GROUP	0.9%
ROYAL DUTCH SHELL B	0.9%
Total	11.9%

Rhumbline MSCI EAFE Index Characteristics

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Market Value			
Market Value (\$M)	17.1	--	17.8
Number Of Holdings	934	920	924
Characteristics			
Weighted Avg. Market Cap. (\$B)	59.0	58.8	53.0
Median Market Cap (\$B)	10.1	10.1	9.1
P/E Ratio	15.1	15.1	17.0
Yield	3.4	3.4	3.6
EPS Growth - 5 Yrs.	9.3	9.3	7.2
Price to Book	2.2	2.2	2.7
Beta (holdings; domestic)	1.0	1.0	1.0

Sector Distribution

Energy	5.7	5.8	5.7
Materials	7.4	7.4	7.4
Industrials	14.1	14.3	13.9
Consumer Discretionary	10.8	10.9	11.0
Consumer Staples	11.6	11.9	11.3
Health Care	11.1	11.3	11.2
Financials	18.6	18.9	19.1
Information Technology	6.2	6.3	5.8
Communication Services	5.3	5.4	5.4
Utilities	3.6	3.8	3.7
Real Estate	3.7	3.8	3.6

DFA Emerging Markets

As of March 31, 2019

Account Information

Account Name	DFA Emerging Markets
Account Structure	Mutual Fund
Investment Style	Active
Inception Date	1/01/15
Account Type	Non-US Stock Emerging
Benchmark	MSCI Emerging Markets
Universe	eV Emg Mkt Equity Hedged Net

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
DFA Emerging Markets	8.6	8.6	-9.5	9.6	--	--	4.4	Jan-15
MSCI Emerging Markets	9.9	9.9	-7.4	10.7	3.7	8.9	4.8	Jan-15

Top 10 Holdings

SAMSUNG ELECTRONICS	3.8%
TENCENT HOLDINGS	1.8%
TAIWAN SEMICON.SPN.ADR 1:5	1.6%
TAIWAN SEMICON.MNFG.	1.2%
ALIBABA GROUP HLDG.SPN. ADR 1:1	1.0%
VALE ON	0.9%
SK HYNIX	0.8%
PING AN INSURANCE (GROUP) OF CHINA 'H'	0.7%
RELIANCE INDUSTRIES	0.7%
CHINA CON.BANK 'H'	0.7%
Total	13.1%

DFA Emerging Markets Characteristics

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Market Value			
Market Value (\$M)	2.9	--	2.7
Number Of Holdings	4951	1133	4985
Characteristics			
Weighted Avg. Market Cap. (\$B)	44.2	84.9	37.4
Median Market Cap (\$B)	0.4	5.8	0.4
P/E Ratio	12.6	13.3	16.4
Yield	2.9	2.7	3.2
EPS Growth - 5 Yrs.	11.5	14.3	10.6
Price to Book	2.2	2.4	2.8
Beta (holdings; domestic)	1.1	1.1	1.1

Sector Distribution

Energy	6.8	8.1	6.3
Materials	11.2	7.4	11.4
Industrials	9.0	5.5	9.3
Consumer Discretionary	10.8	13.3	10.3
Consumer Staples	7.2	6.4	7.6
Health Care	3.2	2.6	3.3
Financials	18.5	24.3	18.8
Information Technology	18.0	14.6	17.3
Communication Services	7.6	12.1	8.2
Utilities	3.4	2.6	3.5
Real Estate	4.1	3.1	3.8

Driehaus Emerging Market Equity

As of March 31, 2019

Account Information

Account Name	Driehaus Emerging Market Equity
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	1/01/15
Account Type	Non-US Stock Emerging
Benchmark	MSCI Emerging Markets
Universe	eV Emg Mkt Equity Hedged Net

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Driehaus Emerging Market Equity	10.8	10.8	-8.7	11.5	--	--	5.8	Jan-15
MSCI Emerging Markets	9.9	9.9	-7.4	10.7	3.7	8.9	4.8	Jan-15

Top 10 Holdings

TENCENT HOLDINGS	6.5%
ALIBABA GROUP HLDG.SPN. ADR 1:1	4.6%
SAMSUNG ELECTRONICS	3.5%
TAIWAN SEMICON.SPN.ADR 1:5	3.3%
HDFC BANK ADR 1:3	3.0%
PING AN INSURANCE (GROUP) OF CHINA 'H'	2.9%
AIA GROUP	2.2%
ICICI BK.ADR 1:2	2.1%
BANK CENTRAL ASIA	2.0%
CP ALL NVDR	2.0%
Total	31.9%

Driehaus Emerging Market Equity Characteristics

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Market Value			
Market Value (\$M)	3.1	--	2.8
Number Of Holdings	97	1133	95

Characteristics

Weighted Avg. Market Cap. (\$B)	102.7	84.9	87.4
Median Market Cap (\$B)	18.3	5.8	14.8
P/E Ratio	16.1	13.3	24.1
Yield	2.0	2.7	2.3
EPS Growth - 5 Yrs.	15.3	14.3	13.5
Price to Book	3.4	2.4	4.4
Beta (holdings; domestic)	1.0	1.1	1.0

Sector Distribution

Energy	8.1	8.1	9.4
Materials	3.6	7.4	4.6
Industrials	2.8	5.5	2.6
Consumer Discretionary	15.1	13.3	13.8
Consumer Staples	10.9	6.4	8.6
Health Care	2.3	2.6	3.2
Financials	31.6	24.3	31.6
Information Technology	11.8	14.6	12.7
Communication Services	10.4	12.1	9.7
Utilities	1.0	2.6	1.3
Real Estate	1.5	3.1	1.6

SSgA U.S. Aggregate Bond Index

As of March 31, 2019

Account Information

Account Name	SSgA U.S. Aggregate Bond Index
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	5/01/01
Account Type	US Fixed Income Investment Grade
Benchmark	BBgBarc US Aggregate TR
Universe	eV US Core Fixed Inc Net

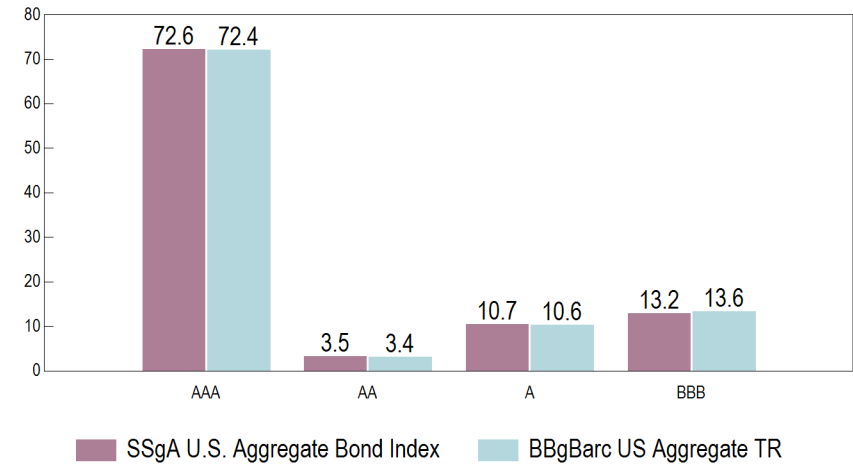
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
SSgA U.S. Aggregate Bond Index	2.9	2.9	4.5	2.0	2.8	3.8	4.5	May-01
BBgBarc US Aggregate TR	2.9	2.9	4.5	2.0	2.7	3.8	4.5	May-01

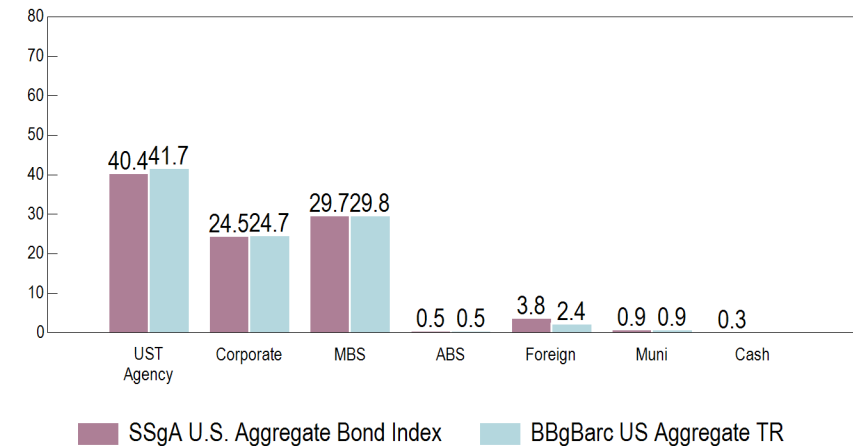
SSgA U.S. Aggregate Bond Index Characteristics
vs. BBgBarc US Aggregate TR

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Fixed Income Characteristics			
Yield to Maturity	2.9	2.9	3.3
Average Duration	5.8	5.8	5.9
Average Quality	AA	AA	AA
Weighted Average Maturity	8.1	8.0	8.2

Credit Quality Allocation



Sector Allocation



As of March 31, 2019

Account Information

Account Name	Shenkman Capital
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	4/01/06
Account Type	US Fixed Income High Yield
Benchmark	BBgBarc US High Yield TR
Universe	eV US High Yield Fixed Inc Net

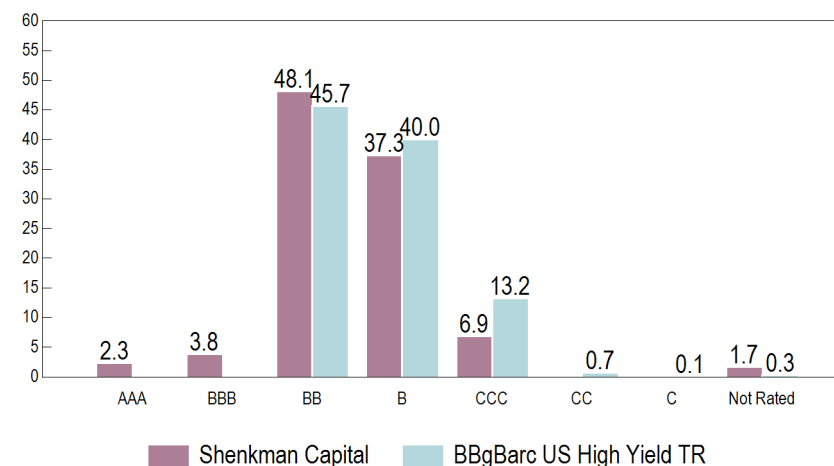
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Shenkman Capital	6.8	6.8	5.7	7.0	4.1	8.4	6.7	Apr-06
BBgBarc US High Yield TR	7.3	7.3	5.9	8.6	4.7	11.3	7.4	Apr-06

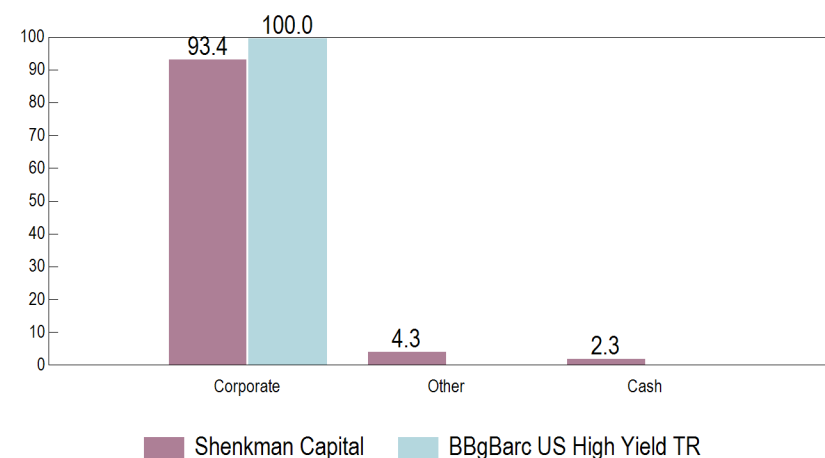
Shenkman Capital Characteristics
vs. BBgBarc US High Yield TR

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Fixed Income Characteristics			
Yield to Maturity	6.0	5.6	7.2
Average Duration	3.0	3.4	3.8
Average Quality	BB	B	B
Weighted Average Maturity	5.5	5.8	5.4

Credit Quality Allocation



Sector Allocation



SSgA TIPS Index-NL

As of March 31, 2019

Account Information

Account Name	SSgA TIPS Index-NL
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	10/01/05
Account Type	US Inflation Protected Fixed
Benchmark	BBgBarc US TIPS TR
Universe	eV US TIPS / Inflation Fixed Inc Net

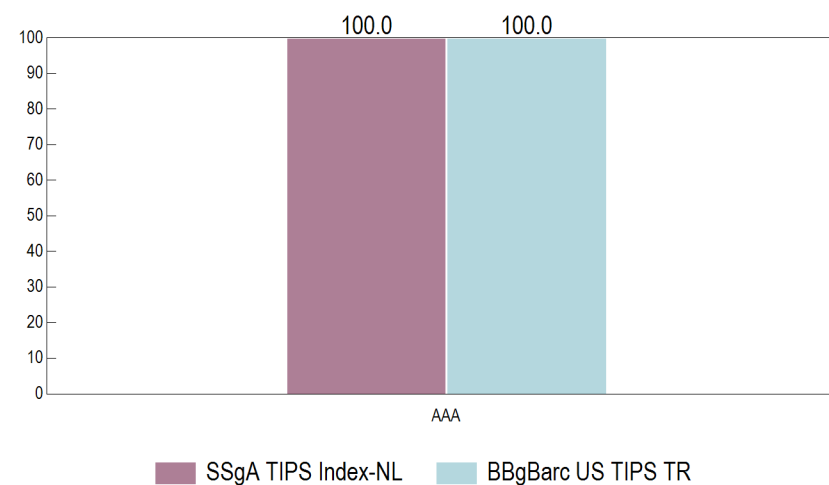
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
SSgA TIPS Index-NL	3.2	3.2	2.6	1.7	1.9	3.4	3.6	Oct-05
BBgBarc US TIPS TR	3.2	3.2	2.7	1.7	1.9	3.4	3.6	Oct-05

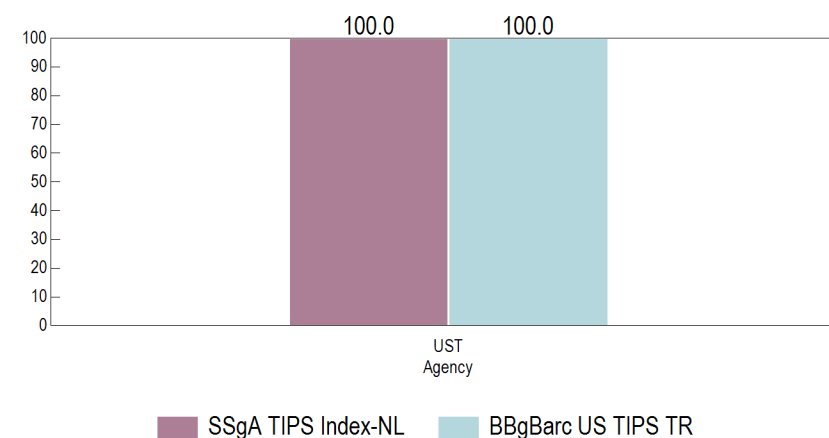
SSgA TIPS Index-NL Characteristics
vs. BBgBarc US TIPS TR

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Fixed Income Characteristics			
Yield to Maturity	2.6	2.5	2.5
Average Duration	5.2	5.2	5.3
Average Quality	AAA	AAA	AAA
Weighted Average Maturity	8.1	8.1	7.9

Credit Quality Allocation



Sector Allocation



Payden Emerging Market Bond

As of March 31, 2019

Account Information

Account Name	Payden Emerging Market Bond
Account Structure	Mutual Fund
Investment Style	Active
Inception Date	1/01/15
Account Type	International Emerging Market Debt
Benchmark	JP Morgan EMBI Global Diversified
Universe	eV Emg Mkt Fixed Inc Hedged Net

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Payden Emerging Market Bond	8.2	8.2	1.7	6.3	--	--	5.3	Jan-15
JP Morgan EMBI Global Diversified	7.0	7.0	4.2	5.8	5.4	8.5	5.6	Jan-15

Fund Characteristics as of February 28, 2019

Versus JP Morgan EMBI Global Diversified

Sharpe Ratio (3 Year)	0.84
Average Duration	6.69
Average Coupon	6.82%
Average Effective Maturity	10.89
R-Squared (3 Year)	0.96
Alpha (3 Year)	-0.02%
Beta (3 Year)	1.13

Payden Emerging Market Bond Characteristics

vs. JP Morgan EMBI Global TR

	Portfolio Q1-19	Index Q1-19	Portfolio Q4-18
Fixed Income Characteristics			
Yield to Maturity	7.1	6.1	8.5
Average Duration	6.7	7.1	6.4
Average Quality	B	BB	BB
Weighted Average Maturity	10.9	11.4	11.2

Fixed Income Sectors as of February 28, 2019

GOVERNMENT	70.78%
MUNICIPAL	0.00%
CORPORATE	19.43%
SECURITIZED	0.00%
CASH & EQUIVALENTS	1.19%
DERIVATIVE	8.60%

Credit Quality as of March 31, 2019

AAA	1.00%
AA	2.00%
A	4.00%
BBB	25.00%
BB	22.00%
B	35.00%
Below B	8.00%
Not Rated	3.00%

As of March 31, 2019

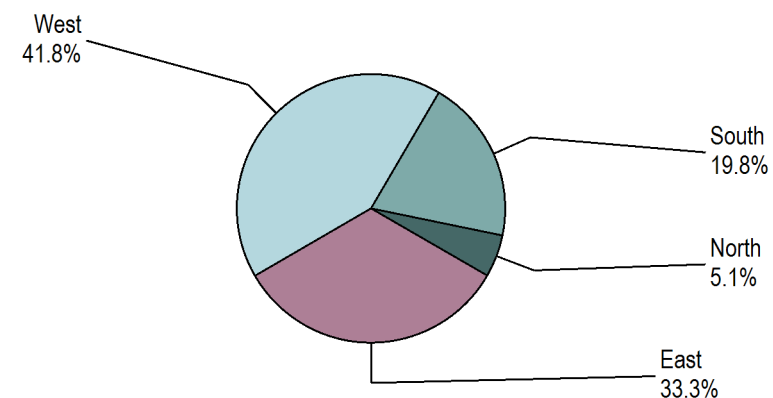
Account Information

Account Name	Clarion Partners
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	10/01/02
Account Type	Real Estate
Benchmark	NCREIF ODCE
Universe	US Real Estate Equity

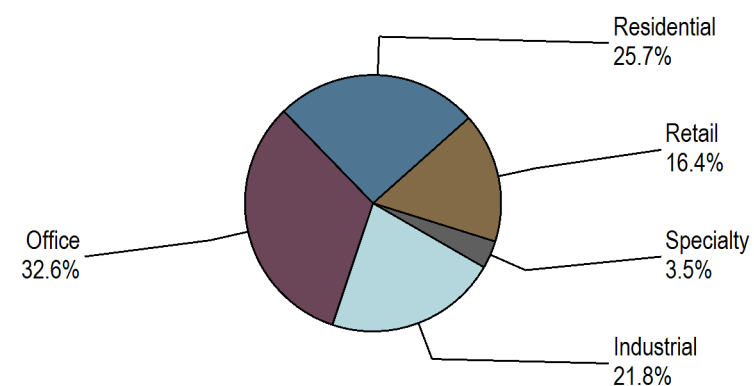
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Clarion Partners	2.0	2.0	8.0	8.1	10.9	8.5	7.4	Oct-02
NCREIF ODCE	1.4	1.4	7.5	8.0	10.2	8.7	8.3	Oct-02

Geographic Diversification



Property Type Allocation



Colony Realty Partners IV

As of March 31, 2019

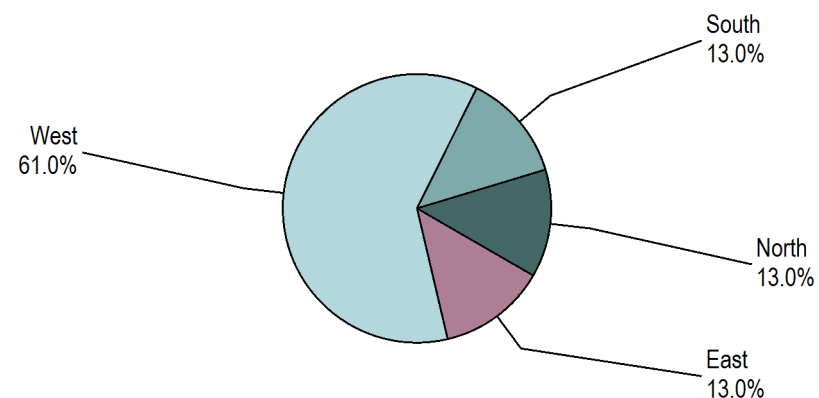
Account Information

Account Name	Colony Realty Partners IV
Account Structure	Other
Investment Style	Active
Inception Date	1/01/13
Account Type	Real Estate
Benchmark	NCREIF ODCE
Universe	US Real Estate Equity

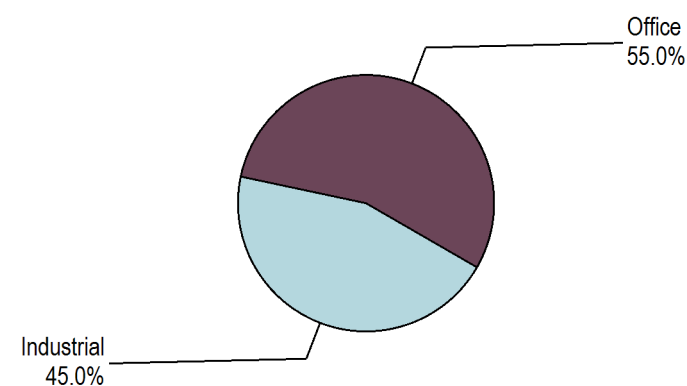
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Colony Realty Partners IV	0.0	0.0	-3.1	6.7	11.7	--	--	Jan-13
NCREIF ODCE	1.4	1.4	7.5	8.0	10.2	8.7	10.8	Jan-13

Geographic Diversification



Property Type Allocation



Data for Colony Realty Partners IV is as of 12/31/2018

As of March 31, 2019

Annual Investment Expense Analysis
As Of March 31, 2019

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Equity Assets		\$81,830,774		
Domestic Equity Assets		\$58,724,573		
RhumbLine S&P 500 Index	0.07% of First 25.0 Mil, 0.05% of Next 25.0 Mil, 0.04% Thereafter	\$18,536,977	\$12,976	0.07%
Fiduciary Large Cap Equity	0.66% of Assets	\$23,254,602	\$153,480	0.66%
Frontier Capital Appreciation	0.79% of Assets	\$16,932,994	\$133,771	0.79%
International Equity Assets		\$23,106,200		
International Developed Markets Equity Assets		\$17,134,011		
Rhumblin MSCI EAFE Index	0.08% of First 25.0 Mil, 0.07% of Next 25.0 Mil, 0.05% Thereafter	\$17,134,011	\$13,707	0.08%
International Emerging Markets Equity Assets		\$5,972,189		
DFA Emerging Markets	0.52% of Assets	\$2,909,478	\$15,129	0.52%
Driehaus Emerging Market Equity	0.90% of Assets	\$3,062,711	\$27,564	0.90%
Fixed Income Assets		\$78,420,821		
Investment Grade Bonds Assets		\$38,869,397		
SSgA U.S. Aggregate Bond Index	0.04% of Assets	\$38,869,397	\$15,548	0.04%
High Yield Bond Assets		\$17,023,710		
Shenkman Capital	0.45% of Assets	\$17,023,710	\$76,607	0.45%
TIPS Assets		\$17,535,450		
SSgA TIPS Index-NL	0.04% of Assets	\$17,535,450	\$7,014	0.04%
Emerging Market Debt Assets		\$4,992,264		
Payden Emerging Market Bond	0.69% of Assets	\$4,992,264	\$34,447	0.69%

Total Retirement System

As of March 31, 2019

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Real Estate Assets		\$7,539,034		
Open-Ended Real Estate		\$5,676,597		
Clarion Partners	1.10% of Assets	\$5,676,597	\$62,443	1.10%
Total Closed End Real Estate		\$1,862,437		
Colony Realty Partners IV	1.5% management fee based on committed equity during the investment period and invested equity thereafter	\$1,862,437		
Private Equity Assets		\$3,849,662		
North American Strategic Partners 2006	0.8% on drawn and undrawn capital less investments sold or written off 5% carried interest, 8% preferred return	\$738,532		
Ironsides Partnership Fund IV	0% Management fee, 8% Preferred Return, 5% Carried Interest	\$878,495		
Ironsides Direct Investment Fund IV	0.5% Management fee, 8% Preferred Return, 15% Carried Interest	\$2,232,635		
Cash		\$240,364		
Comerica Short Term Fund		\$240,364		
Total		\$171,880,655	\$552,686	0.32%

Non-Core Real Estate Finalist Overviews

Rockwood Real Estate Partners XI Firm Overview

Rockwood Capital	
Firm Locations	New York (HQ) Los Angeles San Francisco
Firm Inception	1995
Ownership Structure	100% Employee-owned
Firm Employees / Number of Investment Professionals	73/40

- Rockwood Capital was founded in 1995 by key executives of Sullivan, Smith & Kavounas and Rockefeller and Associates Realty, including current senior managing partner Walter Schmidt, partner Bob Gray, and senior advisors Neil Smith and Peter Falco.
- The firm is headquartered in New York and has additional offices in Los Angeles and San Francisco.
- The team consists of 76 professionals, including 40 investment professionals.
- Rockwood has \$7.1 billion in gross AUM across its value-add fund series and several core/core-plus separate accounts. Since inception, the firm has raised \$5.9 billion in commitments across its ten prior value-added funds.
- Rockwood Real Estate Partners Fund XI is targeting \$1.25 billion in committed capital.

Rockwood Real Estate Partners XI

Investment Team

- Rockwood employs 73 professionals and has offices in White Plains, NY, San Francisco, CA, and Los Angeles, CA. Today, the firm is owned by eight active Principals and four inactive/retired Principals.
- Tyson Skillings, an owner and partner of the Firm, will serve as Portfolio Manager for the life of Fund XI.
- Rockwood's nine-person Investment Committee consists of the firm's senior partners. The Investment Committee requires a super majority, although any two of the five managing partners can veto any action.
- Carried interest is allocated 54.75% to the eight current Principals. 3% is allocated to Neil Smith, one of the inactive Partners and 3% allocated to Pete Falco, an active Partner. The remainder of carried interest is shared with 24 other employees of Rockwood.
- The firm has experienced some turnover recently with seven senior-level departures, including two Partners, three Managing Directors, and two Directors, occurring in the last five years.

Rockwood Real Estate Partners XI Investment Terms

Partnership Type	Limited Partnership
Investment Strategy/Focus	Value-Added Real Estate
Geographic Focus	United States
Target Size	\$1.25 billion
Final Closing	May 2019 First Close (expected)
Investment Period	3 years
Total Term	9 Years, with two one-year extension options
General Partner Commitment	1.5% or up to \$16 million
Target Return	12% to 14% net IRR
Maximum Leverage	65% at fund level
Fees/Expenses:	
Management Fee	1.4% of committed capital during the investment period; 1.4% on invested equity thereafter. Investors in the first closing will not pay management fees until 2-month anniversary of first investment and will receive 5 basis point reduction in fees for life of fund.
Preferred Return	9%
Carried Interest	20%
Catch-up Provision	50%
Fee Income	100% Offset
Organizational Expenses	\$2.0 million cap

Rockwood Real Estate Partners XI

Investment Strategy

- The fund is expected to primarily focus on mixed-use properties that offer “live, work, play” atmospheres. The fund will target office, multifamily, retail, and hospitality properties and will seek to acquire a diversified portfolio of assets in urban and “suburban core” markets nationwide, with a focus on the top fourteen U.S. markets.
- Rockwood’s investment thesis is centered on the following opportunities: i) invest in “Next Neighborhoods” by identifying emerging submarkets in major cities (e.g., Brooklyn, Jersey City, Long Island City / Astoria) that will benefit from future appreciation; ii) Product sharpshooting: opportunities where Rockwood believes it has superior knowledge of the local market/property types, allowing the fund to invest in an asset where there is repurposing potential, a threshold market change, or a particular demand shift to be captured; iii) Value creation opportunities: increasing value through aggressive asset management, control of operating expenses, implementation of capital expenditures (capex) programs, re-leasing vacant space or other revenue enhancement initiatives; and iv) Change of use: converting a property to a different and higher use asset, or increasing the properties’ densification.
- Rockwood maintains and expects to continue to build relationships with local operating partners, who bring operational expertise in a particular property type or access to proprietary deal flow, but Rockwood also invests directly without operating partners and engages third-party property managers that do not have a promoted interest.
- Fund XI will target a net IRR of 12% to 14%, with two-thirds of total return expected to be generated from capital appreciation over an average holding period of three to five years. Fund XI will use leverage generally in the 55% to 60% range with maximum portfolio-wide leverage capped at 65%.

Rockwood Real Estate Partners XI
Historical Performance¹
As of September 30, 2018

Fund	Vintage Year	Invested Capital (\$ mm)	Realized Proceeds (\$ mm)	Total Value (\$ mm)	Investment Multiple (net) (x)	Gross IRR (%)	Net IRR (%)	Index Quartile Rank ²
Fund I	1991	266.1	460.6	460.6	1.7	20.7	19.6	NA
Fund II	1995	82.6	185.6	185.6	2.2	34.1	30.7	NA
Fund III	1998	203.8	470.1	470.1	2.1	17.3	14.7	NA
Fund IV	2000	340.2	632.0	632.0	1.8	27.0	24.2	1st
Fund V	2003	468.8	682.6	682.6	1.4	17.2	12.1	3rd
Fund VI	2005	672.1	727.0	727.0	1.1	4.1	1.3	2nd
Fund VII	2006	1,094.0	583.9	785.8	0.7	-1.4	-3.5	3rd
Fund VIII	2008	882.0	1,592.9	1,592.9	1.6	25.9	19.1	1st
Fund IX	2012	619.8	599.2	935.7	1.4	18.5	14.1	3rd
Fund X	2015	498.8	16.5	539.9	1.1	12.9	6.7	4th

¹ Performance reflects actual cash flow to investors as of September 30, 2018 with unsold assets assumed to have been liquidated as of September 30, 2018 net asset values.

² Benchmark is Cambridge Associates All Value-Added Real Estate Funds as of September 30, 2018.

Rockpoint Real Estate Fund VI Firm Overview

Rockpoint Group	
Firm Locations	Boston, MA (HQ) Dallas, TX San Francisco, CA
Firm Inception	2003
Ownership Structure	Privately-owned; majority employee-owned
Firm Employees / Dedicated Investment Professionals	75/29

- Rockpoint Group is a Boston-based private real estate investment management firm established in 2003. Managing Members include: Bill Walton (co-founder), Keith B. Gelb (co-founder), Paisley Boney, Thomas F. Gilbane and Aric M. Shalev.
- Since its formation in 2003, Rockpoint has raised over \$14 billion of equity capital. Of that amount: (i) over \$11 billion of equity capital has been raised through five opportunistic investment vehicles and related co-investment vehicles; and the remainder across two core-plus funds and one real estate debt fund. As of September 30, 2018, Rockpoint has invested or committed to invest almost \$10 billion of Peak Invested Equity through these vehicles across 265 transactions.
- Rockpoint is seeking to raise \$3.5 billion with Rockpoint Real Estate Fund VI.
- In March 2018, Blackstone Strategic Capital Holdings made a minority, passive and non-voting investment in Rockpoint. Prior to the transaction, Rockpoint was owned by its five Managing Members with no one majority stakeholder (although Bill Walton and Keith Gelb collectively hold a majority interest).

Rockpoint Real Estate Fund VI

Investment Team

- Rockpoint Group is led by the firm's five managing members and has a deep team of 24 additional investment professionals focused on opportunistic strategies. In addition, the firm has 37 employees in Finance and Operations, IT, and Investor Relations.
- Rockpoint is headquartered in Boston, MA (41 employees) and also maintains a Dallas, TX office (20 employees) and a San Francisco, CA office (14 professionals). The Partnership is considering opening a London office primarily to manage limited partner relationships as about 30% of the capital they raise originates from foreign limited partners.
- Over the past five years, Rockpoint has had nine senior professional departures. Five of the departures were a result of Rockpoint's termination of non-US investment activity, two were due to a reduced focus on pure asset management role, and the remaining two were due to performance.

Rockpoint Real Estate Fund VI Investment Terms

Partnership Type	Limited Partnership
Investment Strategy/Focus	Opportunistic Real Estate
Geographic Focus	United States
Target Size	\$3.5 billion
Final Closing	December 2019 (expected). First close occurred December 2018.
Investment Period	4 years
Total Term	8 years, with two one-year extension options
General Partner Commitment	1.5%
Target Return	13% to 15% net IRR
Maximum Leverage	75% loan-to-value
Fees/Expenses:	
Management Fee	During the first year of the Investment Period, first close investors will receive a fee break that lowers fee to 1.125%. ¹ Thereafter, 1.5% on committed capital during the Investment Period; 1.5% on net invested capital.
Preferred Return	9%
Carried Interest	20%
Catch-up Provision	60%
Fee Income	100% offset
Organizational Expenses	\$1.75 million

¹ Investors who participate in the first close, or commit within 90 days of the first close, will receive a 25% fee break on management fees during the first year of the investment period.

Rockpoint Real Estate Fund VI

Investment Strategy

- Rockpoint Real Estate Fund VI will execute an opportunistic strategy focused on acquiring and renovating a portfolio of office, apartment, and hotel properties primarily in North America. There are no major changes in strategy from Fund V.
- Historic allocations to property types have been 12.7% to suburban office, 21.8% to CBD office, 32.9% to apartments, and 24.2% to hotels, but the fund expects to take a more conservative approach to new hotel investments.
- Rockpoint expects to continue to make the majority of its investments in their primary target markets of Boston, New York, D.C., San Francisco, and Southern California.
- Rockpoint's major competitive advantage is its experience in executing a focused strategy regarding markets, product types, and capital structures. Rockpoint believes that a narrow investment focus enables its investment team to develop a more informed understanding of the fundamentals and key drivers within its targeted markets and product types and to maximize risk-adjusted returns at the portfolio level.
- During ownership of a property, Rockpoint engages either its dedicated strategic property management platform, Rockhill, or other third parties, to execute the business plan for each investment and to deliver property-level services. Rockpoint formed Rockhill Management, in July 2015, to provide property management and related services for office investments.

Rockpoint Real Estate Fund VI
Historical Track Record¹
As of September 30, 2018

Fund	Vintage Year	Invested Capital (\$ mm)	Realized Proceeds (\$ mm)	Total Value (\$ mm)	Investment Multiple (net) (x)	Gross IRR (%)	Net IRR (%)	IRR Quartile Rank ²
Fund I	2004	875.8	1,246.1	1,246.1	1.2	26.3	11.5	2nd
Fund II	2005	1,660.7	1,576.1	1,619.3	0.9	-0.5	-2.6	3rd
Fund III	2007	2,335.9	3,610.8	3,764.7	1.4	22.3	13.9	1st
Fund IV	2011	1,889.5	2,056.0	2,898.7	1.3	27.5	17.4	2nd
Fund V	2015	1,585.1	301.7	2,100.8	1.2	25.3	13.8	2nd

¹ Performance reflects actual cash flow to investors as of September 30, 2018 with unsold assets assumed to have been liquidated as of September 30, 2018 net asset values.

² Benchmark is Cambridge Associates All Opportunistic Real Estate Funds as of September 30, 2018.

Relative Strengths and Potential Weaknesses

	Relative Strengths	Potential Weaknesses
Rockwood Real Estate Partners Fund XI	<ul style="list-style-type: none"> Independent and employee-owned firm. Established platform with long and consistent track record across multiple market cycles. 	<ul style="list-style-type: none"> Quartile ranking of prior funds is mixed; however “GFC” fund is ranked top quartile. Some senior team turnover/succession.
Rockpoint Real Estate Fund VI	<ul style="list-style-type: none"> Experienced and established platform, stable team with long and consistent track record, particularly in the U.S. 	<ul style="list-style-type: none"> Recent transaction resulting in minority stake from Blackstone Strategic Capital Holdings. Quartile ranking is mixed.

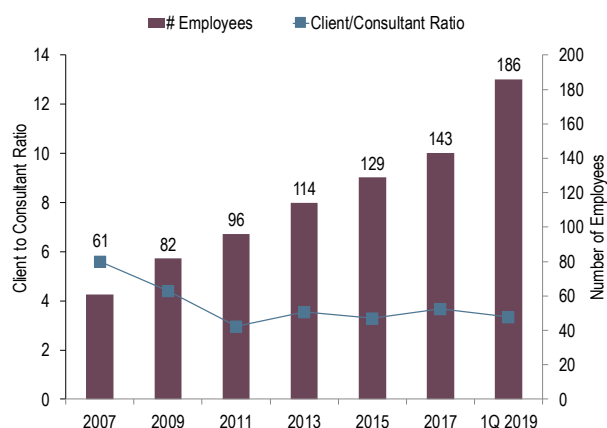
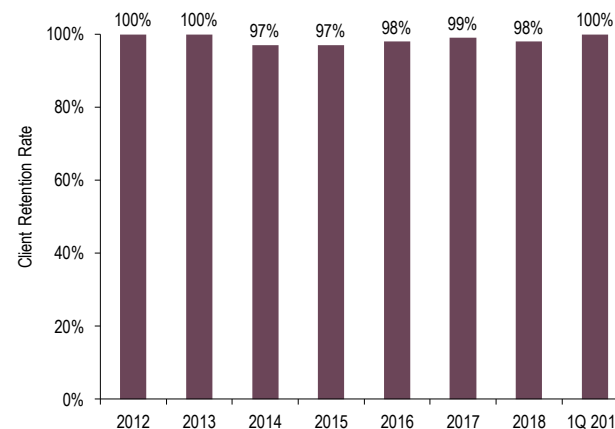
Summary of Terms

	Rockwood Real Estate Partners XI	Rockpoint Real Estate Fund VI
Partnership Type	Limited Partnership	Limited Partnership
Investment Strategy/Focus	Value-Added Real Estate	Opportunistic Real Estate
Geographic Focus	United States	United States
Target Size	\$1.25 billion	\$3.5 billion
Final Closing	May 2019 First close (expected)	December 2019 (expected). First close occurred December 2018.
Investment Period	3 yrs	4 yrs
Total Term	9 yrs, with two one-year extension options	8 yrs, with two one-year extension options
General Partner Commitment	1.5% or up to \$16 million	1.5%
Target Return	12% to 14% net IRR	13% to 15% net IRR
Maximum Leverage	65% at fund level	75% loan-to-value
Fees/Expenses:		
Management Fee	1.4% of committed capital during investment period; 1.4% on invested equity thereafter. Investors in the first closing will not pay management fees until 2-month anniversary of first investment and will receive 5 basis point reduction in fees for life of fund.	1.5% on committed capital during the Investment Period; 1.5% on net invested capital.
Preferred Return	9%	9%
Carried Interest	20%	20%
Catch-up Provision	50%	60%
Fee Income	100% Offset	100% Offset
Organizational Expenses	\$2.0 million cap	\$1.75 million cap

Appendices

Meketa Investment Group Corporate Update

- Staff of 185, including 127 investment professionals and 39 CFA Charterholders
- 210 clients, with over 300 funds throughout the United States
- Significant investment in staff and resources
- Offices in Boston, Chicago, Miami, New York, Portland (OR), San Diego, and London
- We advise on \$1.4 trillion in client assets
 - Over \$100 billion in assets committed to alternative investments
 - Private Equity ▪ Infrastructure ▪ Natural Resources
 - Real Estate ▪ Hedge Funds ▪ Commodities

Client to Consultant Ratio¹**Client Retention Rate²**

Meketa Investment Group is proud to work for over 5 million American families everyday.

¹ On March 15, 2019, 31 employees joined the firm as part of the merger of Meketa Investment Group and Pension Consulting Alliance.

² Client Retention Rate is one minus the number of clients lost divided by the number of clients at prior year-end.



Asset Classes Followed Intensively by Meketa Investment Group

Domestic Equities	International Equities	Private Equity	Real Assets	Fixed Income	Hedge Funds
<ul style="list-style-type: none"> - Passive - Enhanced Index - Large Cap - Midcap - Small Cap - Microcap - 130/30 	<ul style="list-style-type: none"> - Large Cap Developed - Small Cap Developed - Emerging Markets - Frontier Markets 	<ul style="list-style-type: none"> - Buyouts - Venture Capital - Private Debt - Special Situations - Secondaries - Fund of Funds 	<ul style="list-style-type: none"> - Public REITs - Core Real Estate - Value Added Real Estate - Opportunistic Real Estate - Infrastructure - Timber - Natural Resources - Commodities 	<ul style="list-style-type: none"> - Short-Term - Core - Core Plus - TIPS - High Yield - Bank Loans - Distressed - Global - Emerging Markets 	<ul style="list-style-type: none"> - Long/Short Equity - Event Driven - Relative Value - Fixed Income Arbitrage - Multi Strategy - Market Neutral - Global Macro - Fund of Funds - Portable Alpha

Disclaimer, Glossary, and Notes

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INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- $[\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$.

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991.

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.