FUND EVALUATION REPORT

Plymouth County Retirement Association

Investment Review November 26, 2019



M E K E T A I N V E S T M E N T G R O U P

1. Current Issues

- Index Manager Search: Finalist Review
- Active & Passive Investment Management
- Securities Lending Detail
- 2. Estimated Retirement Association Performance
- 3. Third Quarter Investment Review
- 4. Appendices
 - Private Markets Program As of March 31, 2019
 - Disclaimer, Glossary, and Notes

Current Issues

Index Manager Search: Finalist Review

Background

Mandates	Benchmark	Potential Value
Large Cap US Equity (Growth)	Russell 1000 Growth	\$35 million
Large Cap US Equity (Value)	Russell 1000 Value	\$35 million
International Developed Equity	MSCI EAFE	\$5 million
US Investment Grade Bonds	Bberg US Aggregate	\$5 million
Inflation-Protected Bonds	Bberg US TIPS	\$5 million
REITS	MSCI US REIT (Flexible)	\$5 million

- The Association could potentially index almost \$100 million of its assets, spread across a number of different strategies and asset classes.
 - In addition to providing ongoing exposure, passive portfolios can help maintain portfolio exposures during active manager transitions and manage liquidity.

Investment Manager Overview

	Rhumbline	SSGA
Firm Location	Boston, MA	Boston, MA
Firm Inception	1992	1978
Ownership Structure	Privately-Held, Minority- / Women-Owned (53%)	Publicly-Owned Company (STT)
Assets Managed	\$60.5 billion	\$2.9 trillion

- Rhumbline is a boutique index investment firm, focusing solely on passively managing portfolios to institutional clients. Although smaller than many of its indexing competitors, the firm touts its singular focus as a means of avoiding the potential conflicts of interest involved in cross selling other products (e.g., custody, securities lending, transition management) along with asset management services. Rhumbline's product set tilts toward equities, though fixed income strategies are also available.
- SSGA is the asset management division of State Street Bank, a large, publicly-traded custody bank. Of the \$2.9 trillion the firm manages, over \$2.0 trillion consists of indexed assets. It is the third largest index asset manager in the world. SSGA primarily serves the institutional market with a wide variety of index strategies in addition to a more limited selection of active strategies.
- Both firms have a long history in passive management, with large experienced teams and well-developed investment processes.



Benchmark & Vehicle Availability Overview

Manager	RhumbLine	SSGA
Large Cap US Equity Growth	Commingled (Non-Lending)	Commingled (Lending & Non-Lending)
Large Cap US Equity Value	Commingled (Non-Lending)	Commingled (Lending & Non-Lending)
International Developed Equity	Commingled (Non-Lending)	Commingled (Lending & Non-Lending)
US Investment Grade Bonds	Commingled (Non-Lending)	Commingled (Lending & Non-Lending)
US TIPS	Commingled (Non-Lending)	Commingled (Lending & Non-Lending)
REITS	Commingled (Non-Lending) Benchmark: FTSE NAREIT All Eq. REIT	Commingled (Non-Lending) Benchmark: DJ US Select REIT

- While both managers have the capability to manage separate accounts on behalf of the Association, the
 costs and regulatory complexity of running separate accounts make commingled funds a more suitable
 option.
- All options offer daily liquidity.

Large Cap US Growth Equity Historical Performance (gross of fees)

	Rhumbline (%)	SSGA (%)	Russell 1000 Growth (%)
Trailing Period Returns:			
YTD	23.3	23.3	23.3
1 year	3.7	3.7	3.7
3 year	16.9	16.9	16.9
5 year	13.4	13.4	13.4
7 year	15.0	15.0	15.0
10 year	14.9	15.0	14.9
Calendar Year Returns:			
2018	-1.5	-1.5	-1.5
2017	30.1	30.1	30.2
2016	7.0	7.2	7.1
2015	5.7	5.6	5.7
2014	13.1	13.1	13.1
2013	33.4	33.5	33.5
2012	15.1	15.4	15.3
2011	2.7	2.7	2.6
2010	16.7	16.7	16.7
Tracking Error			
5-Year	0.04	0.03	

Large Cap US Value Equity Historical Performance (gross of fees)

	Rhumbline (%)	SSGA (%)	Russell 1000 Value (%)
Trailing Period Returns:			
YTD	17.8	17.8	17.8
1 year	4.0	4.0	4.0
3 year	9.4	9.5	9.4
5 year	7.8	7.9	7.8
7 year	11.3	11.4	11.3
10 year	11.4	11.5	11.5
Calendar Year Returns:			
2018	-8.2	-8.2	-8.3
2017	13.6	13.8	13.7
2016	17.3	17.3	17.3
2015	-3.8	-3.7	-3.8
2014	13.4	13.5	13.5
2013	32.4	32.5	32.5
2012	17.5	17.5	17.5
2011	0.5	0.4	0.4
2010	15.5	15.6	15.5
Tracking Error			
5-Year	0.06	0.05	

International Developed Equity Historical Performance (gross of fees)

	Rhumbline (%)	SSGA (%)	MSCI EAFE (%)
Trailing Period Returns:			
YTD	12.8	13.1	12.8
1 year	-1.3	-1.1	-1.3
3 year	6.6	6.8	6.5
5 year	3.5	3.5	3.3
7 year	NA	6.4	6.1
10 year	NA	5.2	4.9
Calendar Year Returns:			
2018	-13.5	-13.6	-13.8
2017	25.2	25.4	25.0
2016	1.2	1.3	1.0
2015	-0.7	-0.6	-0.8
2014	NA	-4.7	-4.9
2013	NA	23.0	22.8
2012	NA	17.6	17.3
2011	NA	-11.9	-12.1
2010	NA	8.0	7.8
Tracking Error			
5-Year	0.20	0.10	

US Investment Grade Bonds Historical Performance (gross of fees)

	Rhumbline (%)	SSGA (%)	BBerg BC Aggregate (%)
Trailing Period Returns:			
YTD	8.7	8.6	8.5
1 year	10.7	10.4	10.3
3 year	3.0	2.9	2.9
5 year	3.5	3.4	3.4
7 year	2.8	2.7	2.7
10 year	3.8	3.8	3.8
Calendar Year Returns:			
2018	0.4	0.0	0.0
2017	3.4	3.5	3.5
2016	2.5	2.7	2.7
2015	0.6	0.6	0.6
2014	6.1	6.0	6.0
2013	-2.1	-2.0	-2.0
2012	3.9	4.3	4.2
2011	7.7	7.8	7.8
2010	6.9	6.5	6.5
Tracking Error			
5-Year	0.24	0.02	

US TIPS Bonds Historical Performance (gross of fees)

	Rhumbline (%)	SSGA (%)	BBerg BC TIPS (%)
Trailing Period Returns:			
YTD	7.7	7.6	7.6
1 year	7.2	7.2	7.1
3 year	2.3	2.2	2.2
5 year	2.5	2.5	2.5
7 year	NA	1.1	1.1
10 year	NA	3.5	3.5
Calendar Year Returns:			
2018	-1.3	-1.3	-1.3
2017	3.1	3.0	3.0
2016	4.9	4.7	4.7
2015	-1.7	-1.4	-1.4
2014	3.6	3.6	3.6
2013	-8.6	-8.6	-8.6
2012	NA	7.0	7.0
2011	NA	13.6	13.6
2010	NA	6.3	6.3
Tracking Error			
5-Year	0.19	0.02	



US REITS Historical Performance (gross of fees)

	Rhumbline (%)	FTSE NAREIT All Equity (%)	SSGA (%)	DJ US Select REIT (%)
Trailing Period Returns:				
YTD	28.5	28.5	24.6	24.6
1 year	20.8	21.1	16.4	16.4
3 year	9.1	9.0	6.5	6.5
5 year	11.1	11.1	9.7	9.7
7 year	NA	10.7	9.5	9.5
10 year	NA	13.6	12.7	12.7
Calendar Year Returns:				
2018	-4.0	-4.0	-4.1	-4.2
2017	8.6	8.7	3.8	3.8
2016	8.8	8.6	6.6	6.7
2015	2.8	2.8	4.4	4.5
2014	28.1	28.0	32.0	32.0
2013	2.1	2.9	1.2	1.2
2012	15.1	19.7	17.0	17.1
2011	NA	8.3	9.5	9.4
2010	NA	28.0	27.9	28.1
Tracking Error				
5-Year	0.24		0.06	

Securities Lending Background

- Securities lending programs generate additional income for investor portfolios by lending securities owned by the investor to other capital markets participants. Several factors can impact the amount of income generated:
 - Stock Loan Fee: Fee paid by the security (it does not need to actually be a stock) borrower to the security lender. This fee rises and falls with supply and demand for the security desired.
 - Collateral Yield: Borrowers are required to post collateral (often cash in the US) for their loan position to lower risk for the lender. During the duration of the loan, the lender can invest the collateral at prevailing market rates.
 - Loans are often over-collateralized, varying from 102% to 105% depending on the market.
 Often times, collateral is marked-to-market daily to maintain these ratios.
 - Rebate Rate: Fee paid to the borrower for the use of their collateral. While this rate is often based the overnight rate, it can fluctuate based on demand and can drop below zero (i.e., make money for the lender) for particularly highly demanded securities.
 - In-Lieu Payments: Rights of ownership, including distributions/dividends, generally pass to the borrower during the loan. However, the borrower must often make corresponding cash payments to the lender to compensate for the "missed" payments.



Securities Lending for Index Funds

- Securities lending programs have the ability to generate modest incremental revenue for investors. During
 most periods, risk of loss is minimal. However, during periods of market disruption, the potential for significant
 loss exists. Investors may find that controlled exposure to securities lending can provide added income with
 an acceptable risk level. The amount of income, and risk, in any securities lending program is determined
 largely by how the borrowing collateral is invested.
- In recent years, the market environment surrounding securities lending programs has improved greatly.
 - Prior to the GFC, collateral pool investment guidelines were loose and managers had the ability to take on more risk to seek out higher yields in less liquid and longer duration assets.
 - Since the GFC, new regulations have put limits on riskier collateral reinvestments and collateral pools are now mostly government bonds and cash equivalents, reducing risks (and potential return) to the lender.



Management Fee Schedules

	Rhumbline	SSGA
Large Cap US Equity (Growth)	NA	0.04% flat
Large Cap US Equity (Value)	NA	0.04% flat
International Developed Equity	NA	0.06% flat
US Investment Grade Bonds	NA	0.04% flat
Inflation-Protected Bonds	NA	0.04% flat
REITS	NA	0.08% flat
Relationship Fee	0.04% on first \$50mm relationship assets; 0.03% thereafter	NA

Effective Fee Schedules

	Rhumbline	SSGA
Current Mandates	0.037%	0.040%
All RFP Mandates	0.036%	0.043%



Relative Strengths & Weaknesses

	Relative Strengths	Relative Weaknesses
Rhumbline	 Lower fees that become more advantageous as assets rise and mandates are added Strong tracking within equities, acceptable tracking for fixed income and REITS Direct experience with the Association's and other Chapter 32 systems Straightforward organizational structure (one line of business, no cross selling) 	 Somewhat higher tracking error for fixed income and REITS mandates No securities lending available in commingled funds
SSGA	 Exceedingly low tracking error for fixed income and REITS Long experience working with Chapter 32 retirement systems Has securities lending options 	Modestly more expensive and most fees are flat



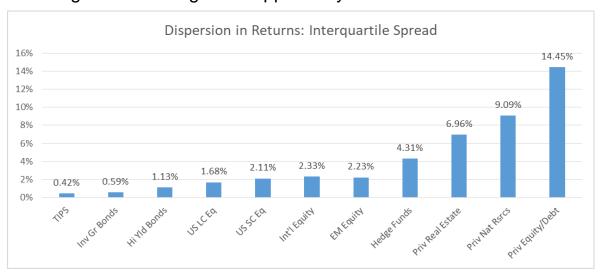
Active & Passive Investment Management

What is Active Investment? Why Invest Actively?

Active investment managers seek to provide exposure to an asset class <u>and</u> to outperform its benchmark. Doing so requires more work than passive investment, and active managers therefore charge higher fees.

Investors should consider utilizing active investments if:

- The asset class does not have a passive investment option (e.g., private markets), OR
- The investors and their advisers have the ability to identify active managers that can consistently add value, net of fees, AND
- The asset class is one in which active managers have a good possibility of adding value, net of fees.
 - Those asset classes with wide dispersion in manager returns* may indicate "inefficient markets" in which active management has a greater opportunity to add value.



^{*}Interquartile spread measures the difference between the performances of the 25th percentile and 75th percentile managers. Source: Meketa Investment Group Alpha Estimates Template, 2018.



Active & Passive Investment Management

- The goal of active management is to add value through enhanced returns or reduced risk relative to a
 particular market sector or combination of market sectors. Generally, active managers seek to outperform
 by creating portfolios that differ from their benchmarks through investing in specific securities, strategies, or
 sectors.
- Firms that manage assets actively may take on large risks unintentionally, encounter significant personnel
 problems, and attract too many assets to manage effectively, or accept large risks to compensate for lagging
 performance. A sound investment strategy acknowledges the risks associated with active management.



Manager Alpha

- The table below shows the median manager outperformance by broad asset class before fees. The comparison period goes as far back as each benchmark and asset class can.
 - Outperformance is defined as the geometric mean of the manager performance minus the preferred benchmark performance over a rolling 12-month period.

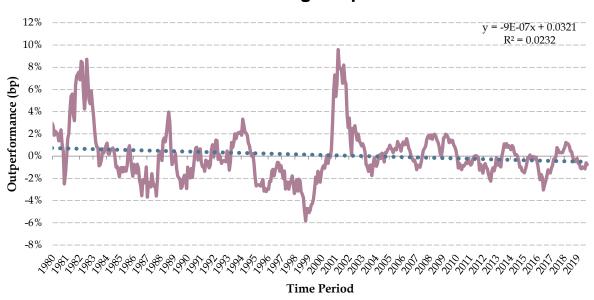
Median Outperformance, Gross of Fees (From Inception through September 2019)

Asset Class	Median Outperformance (Annualized)	Inception
US Core Bonds	18 bp	Jan. 1976
US High Yield Bonds	5 bp	Sep. 1986
US Large Cap	-40 bp	Jan. 1979
US Small Cap	49 bp	Jan. 1979
Foreign Large Cap	-11 bp	Jan. 2001
Emerging Markets	24 bp	Jan. 1999



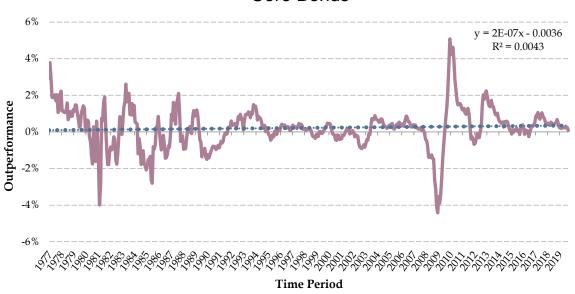
Rolling Median Outperformance, Gross of Fees

US Large Cap



- Relative performance trends over rolling periods can provide information on the direction of market efficiency.
- If the overall median performance is trending down, it has been more difficult for the median manager to
 execute a strategy to produce excess returns.

Rolling Median Outperformance, Gross of Fees Core Bonds



• The best fit line denotes the trend in manager alpha. In this case, manager alpha tends to stay flat and close to zero over time, implying a sense of market efficiency in the core bonds space.

Management Fees

• Fees are a necessary part of evaluating the value of investing in an active manager. The following table displays the median fees for \$10 million and \$100 million mandates. Depending on the situation and size of the mandate, the investor can often negotiate a lower fee than those listed below.

Median Fund Fee

Asset Class	Median Fee on \$10 mm	Median Fee on \$100 mm
Core Bonds	30 bp	26 bp
High Yield	50 bp	48 bp
US Large Cap	60 bp	50 bp
US Small Cap	90 bp	79 bp
Foreign Large Cap	70 bp	65 bp
Emerging Markets	90 bp	85 bp
Global Equities	70 bp	65 bp

¹ Data pulled from eVestment Alliance as of September 2019.



Conclusions

- Our analysis demonstrates that it difficult is for active managers to consistently add value.
- Skilled (or lucky) active management can add more value in certain asset classes than others. These tend to be more volatile asset classes, such as equities.
- Outperformance has also been cyclical, exhibiting long periods of median positive and negative relative performance.



Securities Lending Detail

Securities Lending Yearly Summary

Cal Year	Average Lendable Amount (\$)	Average Market Value on Loan (\$)	Utilization (%)	Sum of PCRA Earnings (\$)
2015	312,190,807	69,698,774	22.3	148,851
2016	280,081,634	60,333,667	21.5	174,024
2017	291,026,071	53,415,309	18.4	237,545
2018	256,316,887	51,890,670	20.2	183,972
2019	238,567,697	54,756,009	23.0	92,176
Grand Total	275,636,619	58,018,886	21.0	836,568



Securities Lending Account Detail

Calendar Year	Fund Name	Average Lendable Amount (\$)	Average Market Value on Loan (\$)	Utilization (%)	Sum of PCRA Earnings (\$)
2015	Plymouth County Retirement Association (Other)	4,546.08	4,445.39	97.8	7.08
2015	LMCG Small Cap Value	39,886.64	14,612,052.22	25.9	33,818.46
2015	Income Research & Mgmt.	45,370,183.46	10,473,648.25	23.1	10,068.27
2015	Eaton Vance Management	30,565,066.91	5,390,486.82	17.6	12,290.84
2015	Fisher Investments	50,409,974.55	8,300,152.59	16.5	12,213.20
2015	Boston Company Asset Mgmt.	62,088,846.46	21,498,801.42	34.6	66,928.02
2015	Geneva Capital Management	44,725,310.52	9,390,210.23	21.0	13,149.25
2015	McDonnell Investment Management	22,586,992.24	28,977.48	0.1	376.28
2015 Total		312,190,806.86	69,698,774.41	22.3	148,851.40
2016	Plymouth County Retirement Association (Other)	3,670.66	2,544.72	69.3	8.40
2016	LMCG Small Cap Value	60,301,418.02	14,602,474.02	24.2	42,067.35
2016	Income Research & Mgmt.	50,494,781.72	12,539,506.69	24.8	21,201.58
2016	Eaton Vance Management	31,643,324.37	3,681,621.56	11.6	17,190.56
2016	Fisher Investments	41,043,233.17	8,168,134.85	19.9	21,727.23
2016	Boston Company Asset Mgmt.	39,843,939.73	13,067,370.11	32.8	48,224.82
2016	Geneva Capital Management	34,869,672.50	8,264,900.21	23.7	23,586.31
2016	McDonnell Investment Management	21,870,270.16		0.0	
2016	Geneva Capital Management	11,323.17	7,114.98	62.8	17.51
2016 Total		280,081,633.51	60,333,667.14	21.5	174,023.76



Securities Lending Account Detail (Cont.)

Calendar Year	Fund Name	Average Lendable Amount (\$)	Average Market Value on Loan (\$)	Utilization (%)	Sum of PCRA Earnings (\$)
2017	Plymouth County Retirement Association(Other)	5,603.84	1,580.46	28.2	5.18
2017	LMCG Small Cap Value	67,929,202.36	13,191,779.35	19.4	41,924.20
2017	Income Research & Mgmt.	54,616,669.59	14,213,558.70	26.0	24,753.31
2017	Eaton Vance Management	34,802,322.19	5,594,220.97	16.1	22,064.25
2017	Fisher Investments	49,872,605.80	2,499,810.16	5.0	5,598.80
2017	Boston Company Asset Mgmt.	48,121,105.56	13,812,306.69	28.7	134,037.73
2017	Geneva Capital Management	35,678,561.56	4,102,052.82	11.5	9,161.64
2017 Total		291,026,070.91	53,415,309.16	18.4	237,545.11
2018	Plymouth County Retirement Association(Other)	3,634.21	766.76	21.1	2.08
2018	LMCG Small Cap Value	70,714,270.86	12,667,869.12	17.9	53,331.13
2018	Income Research & Mgmt.	56,918,770.58	14,441,888.49	25.4	25,004.69
2018	Eaton Vance Management	34,590,069.01	8,109,573.67	23.4	33,028.58
2018	Fisher Investments	45,417,288.75	2,639,862.32	5.8	8,460.75
2018	Boston Company Asset Mgmt.	48,467,057.96	4,011,855.30	28.9	64,107.81
2018	Geneva Capital Management	205,795.78	18,854.36	9.2	36.64
2018 Total		256,316,887.15	51,890,670.02	20.2	183,971.68



Securities Lending Account Detail (Cont.)

Calendar Year	Fund Name	Average Lendable Amount (\$)	Average Market Value on Loan (\$)	Utilization (%)	Sum of PCRA Earnings (\$)
2019	LMCG Small Cap Value	65,676,541.72	15,561,157.54	23.7	21,564.50
2019	Income Research & Mgmt.	42,806,675.69	9,065,962.48	21.2	8,598.83
2019	Eaton Vance Management	13,172,264.56	2,975,472.12	22.6	7,758.77
2019	Fisher Investments	42,802,209.26	3,653,926.50	8.5	4,320.71
2019	Boston Company Asset Mgmt.	49,446,940.47	21,028,011.78	42.5	36,957.48
2019	LMCG Investments, LLC	24,663,065.10	2,471,478.88	10.0	2,975.90
2019 Total		238,567,696.80	54,756,009.30	23.0	92,176.19
Grand Total		275,636,619	58,018,886	21.0	836,568.14



Estimated Retirement Association Performance

Estimated Aggregate Performance¹

	October ² (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Total Retirement Association	1.6	12.8	8.5	7.8	5.5	8.0
60% MSCI ACWI/40% Barclays Global Aggregate	1.9	14.5	11.7	8.0	5.2	6.4
Policy Benchmark	1.5	12.3	8.8	8.7	6.2	8.5

Benchmark Returns

	October (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Russell 3000	2.1	22.7	13.5	14.5	10.3	13.6
MSCI EAFE	3.6	16.9	11.0	8.5	4.3	5.4
MSCI Emerging Markets	4.2	10.3	11.9	7.4	2.9	3.8
Barclays Aggregate	0.3	8.8	11.5	3.3	3.2	3.7
Barclays TIPS	0.3	7.8	9.0	2.4	2.3	3.4
Barclays High Yield	0.3	11.7	8.4	6.0	5.2	7.8
JPM GBI-EM Global Diversified	2.9	11.0	15.6	4.3	0.8	2.7
S&P Global Natural Resources	1.8	8.9	-0.3	7.6	2.1	1.6

Estimated Total Fund Assets

	September Estimate
Total Retirement Association	\$1,075,331,932

¹ The October performance estimates are calculated using index returns as of October 31, 2019 for each asset class. No performance estimate was included for private equity, real estate, infrastructure, and private natural resources asset classes. ² As of October 31, 2019



Third Quarter Investment Review

Total Retirement Association

As of September 30, 2019

	Asset Cla	ıss Net Peı	formand	e Summ	nary							
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
Total Retirement Association	1,040,256,821	100.0	1.1	-0.3	10.9	1.0	6.6	5.6	7.7	6.3	7.7	Nov-89
60% MSCI ACWI / 40% Barclays Global Aggregate			0.9	0.3	12.4	4.2	6.6	4.9	6.1	5.9	6.6	Nov-89
Custom Benchmark - Policy Benchmark (Net)			1.3	0.5	10.7	2.4	7.5	6.2	8.1	7.1		Nov-89
Domestic Equity Assets	229,250,611	22.0	0.5	-1.5	19.3	-2.3	11.9				11.9	Jan-16
Russell 3000			1.8	1.2	20.1	2.9	12.8	10.4	13.1	9.1	12.5	Jan-16
International Developed Market Equity Assets	114,001,502	11.0	3.1	-1.7	10.2	-4.9	4.6				4.5	Jan-16
MSCI EAFE			2.9	-1.1	12.8	-1.3	6.5	3.3	4.9	5.3	5.6	Jan-16
International Emerging Market Equity Assets	109,758,727	10.6	1.2	-4.0	5.9	-4.0	4.8				7.1	Jan-16
MSCI Emerging Markets			1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	7.8	9.0	Jan-16
Global Equity Assets	102,767,712	9.9	0.6	-0.4	15.8	4.1					0.9	Feb-18
MSCI ACWI			2.1	0.0	16.2	1.4	9.7	6.7	8.3	7.1	-0.2	Feb-18
Core Fixed Income	89,384,212	8.6	-0.4	1.6	7.8	8.9	2.9				3.9	Jan-16
75% Bbg Barclays Aggregate/25% Bbg Barclays US TIPs 1-10 year			-0.6	1.9	7.8	9.1	2.7	3.0	3.5		3.7	Jan-16
Value Added Fixed Income	119,346,289	11.5	0.3	0.7	7.9	5.5	5.0				7.0	Jan-16
Custom Benchmark (1)			-0.2	1.4	10.4	7.2	5.2				7.4	Jan-16
Hedge Funds (2)	62,864,044	6.0	0.2	0.3	11.4	0.1	5.4	3.7			4.5	Feb-10
HFRI Fund of Funds Composite Index			-0.4	-0.9	5.2	0.0	3.2	1.9	2.7	2.9	2.7	Feb-10
Real Estate (3)	90,582,657	8.7	3.0	3.1	8.7	9.6	5.9				5.8	Jan-16
80% NCREIF ODCE / 20% Wilshire REIT			1.6	2.6	8.2	8.3	7.4				7.9	Jan-16
Private Equity (4)	58,593,595	5.6	2.2	2.2	3.6	1.0	7.3				4.1	Jan-16
Cambridge Associates Fund of Funds Composite 1-Quarter Lag			4.1	4.1	7.1	11.1	13.3	10.8	12.5	11.6	11.0	Jan-16
Real Assets (5)	51,608,316	5.0	1.6	1.4	3.6	3.4	1.3				-1.1	Jan-16
CPI + 3%			0.3	1.1	3.7	4.7	5.1	4.5	4.7	5.0	5.0	Jan-16
Cash and Cash Equivalent	12,099,158	1.2										

⁽¹⁾ The custom benchmark is comprised of 25% BBgBarc US High Yield/ 25% Credit Suisse Leveraged Loans/ 25% JP Morgan EMBI Global diversified/ 25% BBgBarc Multiverse TR

⁽⁵⁾ The market value and performance is one quarter lagged.



⁽²⁾ The data for EntrustPermal Special Opportunities Evergreen Fund and Entrust Special Opportunities Fund III are based on June 30, 2019 market value, adjusted for subsequent cash flows.

⁽³⁾ The market value and performance is one quarter lagged.

⁽⁴⁾ The market value and performance is one quarter lagged.

Total Retirement Association

As of September 30, 2019

		Trailing No	et Perforr	mance								
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Retirement Association	1,040,256,821	100.0		1.1	-0.3	10.9	1.0	6.6	5.6	7.7	7.7	Nov-89
60% MSCI ACWI / 40% Barclays Global Aggregate				0.9	0.3	12.4	4.2	6.6	4.9	6.1	6.6	Nov-89
Custom Benchmark - Policy Benchmark (Net)				1.3	0.5	10.7	2.4	7.5	6.2	8.1		Nov-89
InvMetrics Public DB > \$1B Net Median				1.1	0.5	10.8	3.6	7.7	6.1	8.0	7.8	Nov-89
InvMetrics Public DB > \$1B Net Rank				52	98	46	99	96	76	65	58	Nov-89
Domestic Equity Assets	229,250,611	22.0	22.0	0.5	-1.5	19.3	-2.3	11.9		-	11.9	Jan-16
Russell 3000				1.8	1.2	20.1	2.9	12.8	10.4	13.1	12.5	Jan-16
Rhumbline Russell 1000 Value	36,131,611	3.5	15.8	3.6	1.4	17.8	4.0	9.3	7.7		9.7	Apr-13
Russell 1000 Value				3.6	1.4	17.8	4.0	9.4	7.8	11.5	9.9	Apr-13
eV US Large Cap Value Equity Net Median				3.3	1.5	17.1	1.7	9.8	7.5	11.2	9.8	Apr-13
eV US Large Cap Value Equity Net Rank				44	55	45	32	59	45		52	Apr-13
Rhumbline Russell 1000 Growth	35,092,144	3.4	15.3	0.0	1.5	23.3	3.7	16.8	13.3	14.8	15.3	Jul-09
Russell 1000 Growth				0.0	1.5	23.3	3.7	16.9	13.4	14.9	15.4	Jul-09
eV US Large Cap Growth Equity Net Median				-0.4	0.2	21.7	2.9	15.7	12.1	13.7	14.2	Jul-09
eV US Large Cap Growth Equity Net Rank				36	23	33	44	32	25	21	21	<i>Jul-</i> 09
Fisher Midcap Value	43,539,526	4.2	19.0	1.7	-1.5	20.3	-2.1	11.6	9.0	12.2	7.4	Apr-07
Russell MidCap Value				4.1	1.2	19.5	1.6	7.8	7.6	12.3	6.9	Apr-07
eV US Mid Cap Value Equity Net Median				4.0	1.5	19.5	-0.4	8.3	7.4	11.5	7.0	Apr-07
eV US Mid Cap Value Equity Net Rank				98	93	35	65	6	18	26	39	Apr-07
Boston Company Small Cap Growth	47,316,466	4.5	20.6	-6.3	-7.7	20.8	-5.9	15.1	13.2	13.5	14.1	Aug-09
Russell 2000 Growth				-0.8	-4.2	15.3	-9.6	9.8	9.1	12.2	12.9	Aug-09
eV US Small Cap Growth Equity Net Median				-1.8	-4.6	18.1	-7.2	12.6	10.5	13.3	13.9	Aug-09
eV US Small Cap Growth Equity Net Rank				91	85	34	44	34	20	42	46	Aug-09



Total Retirement Association

As of September 30, 2019

										AS	or Septembe	r 30, 2019
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
LMCG Small Cap Value	67,148,279	6.5	29.3	3.6	0.2	16.1	-6.1	6.0	7.6		7.6	Mar-11
Russell 2000 Value				5.1	-0.6	12.8	-8.2	6.5	7.2	10.1	7.8	Mar-11
eV US Small Cap Value Equity Net Median				4.3	-0.3	14.9	-6.8	6.2	6.4	10.7	8.1	Mar-11
eV US Small Cap Value Equity Net Rank				75	39	38	43	55	30		63	Mar-11
International Developed Market Equity Assets	114,001,502	11.0	11.0	3.1	-1.7	10.2	-4.9	4.6			4.5	Jan-16
MSCI EAFE				2.9	-1.1	12.8	-1.3	6.5	3.3	4.9	5.6	Jan-16
KBI Master Account	49,413,739	4.8	43.3	3.6	-1.4	7.0	-6.4	2.9	0.3	3.4	3.2	Jul-05
MSCI EAFE				2.9	-1.1	12.8	-1.3	6.5	3.3	4.9	4.4	Jul-05
eV EAFE Core Equity Net Median				2.6	-1.4	12.0	-4.5	5.7	3.9	6.5	5.2	Jul-05
eV EAFE Core Equity Net Rank				11	49	95	71	92	99	99	98	Jul-05
HGK TS International Equity	30,139,132	2.9	26.4	4.8	0.3	13.5	0.4	8.5	4.6		5.9	Feb-11
MSCI EAFE				2.9	-1.1	12.8	-1.3	6.5	3.3	4.9	3.9	Feb-11
eV EAFE All Cap Equity Net Median				2.5	-1.5	12.6	-2.9	5.9	4.2	6.1	5.0	Feb-11
eV EAFE All Cap Equity Net Rank				4	14	42	22	17	38		33	Feb-11
Copper Rock International Small Cap	34,448,630	3.3	30.2	1.1	-3.8	12.5	-8.2				-6.6	Nov-17
MSCI EAFE Small Cap				2.8	-0.4	12.1	-5.9	5.9	6.0	7.5	-3.1	Nov-17
eV EAFE Small Cap Equity Net Median				2.3	-1.8	10.9	-7.9	5.5	5.7	8.4	-5.1	Nov-17
eV EAFE Small Cap Equity Net Rank				93	93	35	57				67	Nov-17
International Emerging Market Equity Assets	109,758,727	10.6	10.6	1.2	-4.0	5.9	-4.0	4.8		-	7.1	Jan-16
MSCI Emerging Markets				1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	9.0	Jan-16
LMCG Emerging Markets	46,946,006	4.5	42.8	1.3	-5.2	2.3	-7.8	3.4	0.0		0.4	Sep-13
MSCI Emerging Markets				1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	2.7	Sep-13
eV Emg Mkts Equity Net Median				1.8	-3.8	7.7	-0.6	5.7	2.5	4.0	3.0	Sep-13
eV Emg Mkts Equity Net Rank				69	82	93	99	84	95	-	96	Sep-13



ABS Emerging Markets MSCI Emerging Markets eV Emg Mkts Equity Net Median eV Emg Mkts Equity Net Rank	Market Value (\$) 26,847,999	% of Portfolio	% of Sector 24.5	1 Mo (%)	QTD (%)	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception
MSCI Emerging Markets eV Emg Mkts Equity Net Median eV Emg Mkts Equity Net Rank	26,847,999	2.6	24.5		(70)	(%)	(%)	(%)	(%)	(%)	(%)	Date
eV Emg Mkts Equity Net Median eV Emg Mkts Equity Net Rank				2.1	-2.8	9.0					9.0	Dec-18
eV Emg Mkts Equity Net Rank				1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	3.1	Dec-18
				1.8	-3.8	7.7	-0.6	5.7	2.5	4.0	4.7	Dec-18
O D E M O O				34	27	41					18	Dec-18
Copper Rock Emerging Markets Small Cap	10,220,674	1.0	9.3	0.2	-5.6	2.6					2.6	Dec-18
MSCI Emerging Markets Small Cap				2.0	-4.6	1.8	-5.5	1.3	-0.1	3.2	0.2	Dec-18
eV Emg Mkts Small Cap Equity Net Median				1.4	-3.7	6.8	-2.8	3.2	1.5	6.5	4.2	Dec-18
eV Emg Mkts Small Cap Equity Net Rank				95	78	82					59	Dec-18
Driehaus Emerging Markets Growth	25,744,048	2.5	23.5	0.7	-2.2						2.6	Mar-19
MSCI Emerging Markets				1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	-2.9	Mar-19
eV Emg Mkts Equity Net Median				1.8	-3.8	7.7	-0.6	5.7	2.5	4.0	-1.3	<i>Mar-19</i>
eV Emg Mkts Equity Net Rank				87	18						13	<i>Mar-19</i>
Global Equity Assets	102,767,712	9.9	9.9	0.6	-0.4	15.8	4.1				0.9	Feb-18
MSCI ACWI				2.1	0.0	16.2	1.4	9.7	6.7	8.3	-0.2	Feb-18
First Eagle Global Value Fund	20,212,722	1.9	19.7	1.8	0.8	14.4	4.8				0.6	Feb-18
MSCI ACWI				2.1	0.0	16.2	1.4	9.7	6.7	8.3	-0.2	Feb-18
eV All Global Equity Net Median				1.8	-0.2	16.5	0.8	8.9	6.9	9.0	0.3	Feb-18
eV All Global Equity Net Rank				49	29	65	28				49	Feb-18
Kopernik Global All Cap Fund	18,034,862	1.7	17.5	-1.7	-5.2	4.4	2.7				-6.0	Feb-18
MSCIACWI				2.1	0.0	16.2	1.4	9.7	6.7	8.3	-0.2	Feb-18
eV All Global Equity Net Median				1.8	-0.2	16.5	0.8	8.9	6.9	9.0	0.3	Feb-18
eV All Global Equity Net Rank				95	96	98	37			-	87	Feb-18
Lee Munder Global Multi-Cap Strategy	28,663,847	2.8	27.9	2.7	-1.0	13.5	-2.7				0.2	Mar-18
MSCIACWI				2.1	0.0	16.2	1.4	9.7	6.7	8.3	2.5	Mar-18
eV All Global Equity Net Median				1.8	-0.2	16.5	0.8	8.9	6.9	9.0	3.0	Mar-18
eV All Global Equity Net Rank				27	66	69	70				69	Mar-18



										۸٥	or Septembe	1 30, 2013
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Wellington Durable Enterprises, L.P.	35,856,280	3.4	34.9	-0.5	2.0	25.7	10.7				11.9	Mar-18
MSCIACWI				2.1	0.0	16.2	1.4	9.7	6.7	8.3	2.5	Mar-18
eV Global All Cap Equity Net Median				1.8	-0.8	15.1	-0.5	8.6	6.3	8.6	2.0	Mar-18
eV Global All Cap Equity Net Rank				89	4	5	4				3	Mar-18
Core Fixed Income	89,384,212	8.6	8.6	-0.4	1.6	7.8	8.9	2.9			3.9	Jan-16
75% Bbg Barclays Aggregate/25% Bbg Barclays US TIPs 1-10 year				-0.6	1.9	7.8	9.1	2.7	3.0	3.5	3.7	Jan-16
IR&M Core Bonds	59,088,354	5.7	66.1	-0.7	1.9	8.1	9.2	2.9	3.1	3.9	4.3	Nov-04
75% Bbg Barclays Aggregate/25% Bbg Barclays US TIPs 1- 10 year				-0.6	1.9	7.8	9.1	2.7	3.0	3.5	4.0	Nov-04
eV US Core Fixed Inc Net Median				-0.6	2.3	8.9	10.3	3.1	3.5	4.0	4.5	Nov-04
eV US Core Fixed Inc Net Rank				81	92	83	91	74	86	64	65	Nov-04
Lord Abbett Short Duration Credit Trust II	30,295,858	2.9	33.9	0.1							0.7	Aug-19
BBgBarc US Credit 1-3 Yr TR				0.1	0.9	4.2	5.1	2.4	2.1	2.4	0.9	Aug-19
eV US Short Duration Fixed Inc Net Median				0.0	0.8	3.8	4.6	2.0	1.8	2.0	0.7	Aug-19
eV US Short Duration Fixed Inc Net Rank				16							82	Aug-19
Value Added Fixed Income	119,346,289	11.5	11.5	0.3	0.7	7.9	5.5	5.0		-	7.0	Jan-16
Custom Benchmark				-0.2	1.4	10.4	7.2	5.2		-	7.4	Jan-16
Eaton Vance High Yield	21,935,544	2.1	18.4	0.6	1.7	11.4	6.9	5.5	5.4	7.8	7.0	Apr-06
ICE BofAML US High Yield TR				0.3	1.3	11.5	6.4	6.1	5.4	7.9	7.3	Apr-06
eV US High Yield Fixed Inc Net Median				0.4	1.3	11.0	6.0	5.6	4.7	7.4	6.7	Apr-06
eV US High Yield Fixed Inc Net Rank				23	26	38	29	55	21	27	38	Apr-06
THL Bank Loan Select Fund	36,480,063	3.5	30.6	0.3	0.6	5.6	2.4	4.1	4.3		5.3	Sep-10
Credit Suisse Leveraged Loans				0.4	0.9	6.4	3.1	4.7	4.1	5.4	4.8	Sep-10
Bank Loan MStar MF Median				0.4	1.0	6.3	2.6	4.0	3.6	5.0	4.3	Sep-10
Bank Loan MStar MF Rank				84	81	70	55	37	5		1	Sep-10



As of September 30, 2019

										AS	or gebreume	1 30, 2019
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Franklin Templeton Emerging Market Bonds	20,416,412	2.0	17.1	0.3	-1.7	5.6	5.6	4.9	4.1	6.1	6.7	May-06
JP Morgan EMBI Global Diversified				-0.5	1.5	13.0	11.6	4.6	5.7	6.9	7.3	May-06
eV Emg Mkt Fixed Inc Unhedged Net Median				0.8	0.0	10.0	9.6	3.8	3.5	5.4	6.5	May-06
eV Emg Mkt Fixed Inc Unhedged Net Rank				74	85	90	90	26	42	29	35	<i>May-06</i>
Manulife Strategic Fixed Income	30,374,269	2.9	25.5	-0.1							1.1	Jul-19
BBgBarc Multiverse TR				-0.9	0.6	6.5	7.5	1.8	2.1	2.5	0.6	Jul-19
Multisector Bond MStar MF Median				0.1	1.3	9.1	6.8	4.3	4.0	5.9	1.3	Jul-19
Multisector Bond MStar MF Rank				73							65	Jul-19
Mesirow High Yield	10,140,000	1.0	8.5	0.7							1.4	Aug-19
BBgBarc US Corporate High Yield TR				0.4	1.3	11.4	6.4	6.1	5.4	7.9	0.8	Aug-19
eV US High Yield Fixed Inc Net Median				0.4	1.3	11.0	6.0	5.6	4.7	7.4	0.8	Aug-19
eV US High Yield Fixed Inc Net Rank				13						-	12	Aug-19
Hedge Funds	62,864,044	6.0	6.0	0.2	0.3	11.4	0.1	5.4	3.7		4.5	Feb-10
HFRI Fund of Funds Composite Index				-0.4	-0.9	5.2	0.0	3.2	1.9	2.7	2.7	Feb-10
ABS Offshore SPC - Global Segregated Portfolio	21,763,695	2.1	34.6	0.6	1.2	9.1	0.3	4.9	3.5		5.1	Aug-10
HFRI Fund of Funds Composite Index				-0.4	-0.9	5.2	0.0	3.2	1.9	2.7	2.8	Aug-10
Entrust Special Opportunities Fund III, Ltd.	27,352,278	2.6	43.5	0.0	0.0	13.4	-1.0	11.8			11.8	Oct-16
HFRI Fund of Funds Composite Index				-0.4	-0.9	5.2	0.0	3.2	1.9	2.7	3.2	Oct-16
Old Farm Partners Master Fund, L.P.	4,926,707	0.5	7.8	-0.4	-0.9	5.0	-1.5				-1.5	Oct-18
HFRI Fund of Funds Composite Index				-0.4	-0.9	5.2	0.0	3.2	1.9	2.7	0.0	Oct-18
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.	8,821,364	0.8	14.0	0.0	0.0	15.3					15.3	Jan-19
HFRI Fund of Funds Composite Index				-0.4	-0.9	5.2	0.0	3.2	1.9	2.7	5.2	Jan-19

Note: The data for EntrustPermal Special Opportunities Evergreen Fund and Entrust Special Opportunities Fund III are based on June 30, 2019 market value, adjusted for subsequent cash flows.



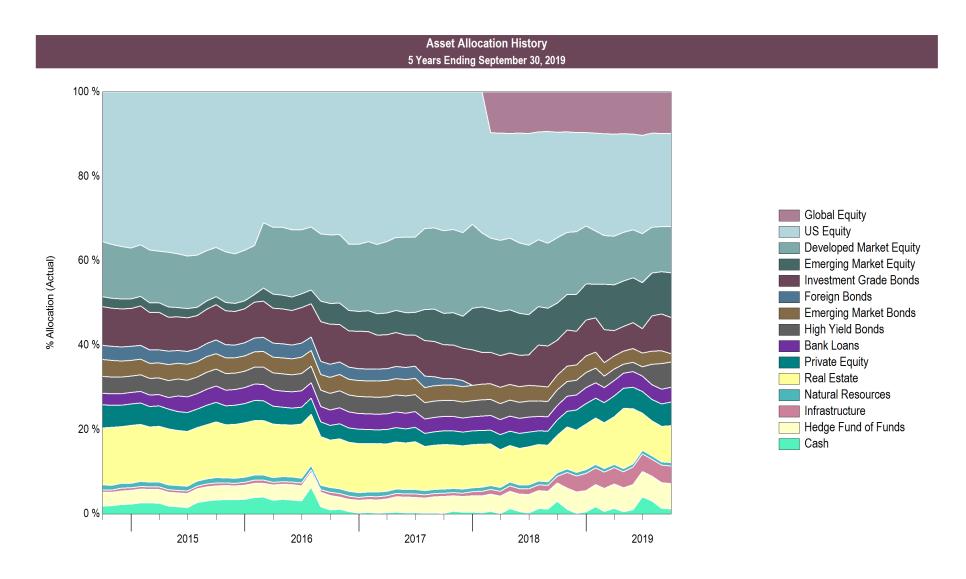
										As	of Septembe	r 30, 2019
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Estate	90,582,657	8.7	8.7	3.0	3.1	8.7	9.6	5.9			5.8	Jan-16
80% NCREIF ODCE / 20% Wilshire REIT				1.6	2.6	8.2	8.3	7.4			7.9	Jan-16
Core Real Estate	56,252,335	5.4	62.1	1.6	1.7	7.5	7.6	6.5	-		7.4	Jan-16
NCREIF-ODCE				1.3	1.3	3.8	5.6	7.3	9.3	10.9	7.6	Jan-16
Invesco Equity Real Estate Securities Trust	826,789	0.1	1.5	1.3	7.3	28.3	20.3	8.5	10.1	12.4	11.6	Dec-02
Wilshire REIT				2.8	7.9	27.2	18.4	7.2	10.2	13.1	10.9	Dec-02
TA Realty Core Property Fund, L.P.	28,006,971	2.7	49.8	3.1	3.1	7.2	8.8				11.7	Apr-18
NCREIF ODCE				1.3	1.3	3.8	5.6	7.3	9.3	10.9	6.6	Apr-18
JPMorgan Strategic Property	27,418,574	2.6	48.7	0.0	0.2						0.8	Apr-19
NCREIF-ODCE				1.3	1.3	3.8	5.6	7.3	9.3	10.9	2.3	Apr-19
Non-Core Real Estate	34,330,322	3.3	37.9	5.5	5.5	10.5	14.4	3.4			0.3	Jan-16
Private Equity	58,593,595	5.6	5.6	2.2	2.2	3.6	1.0	7.3			4.1	Jan-16
Cambridge Associates Fund of Funds Composite 1-Quarter Lag				4.1	4.1	7.1	11.1	13.3	10.8	12.5	11.0	Jan-16
Private Equity	51,337,428	4.9	87.6	1.8	1.8	4.4	0.5	5.6			2.5	Jan-16
Venture Capital	7,256,167	0.7	12.4	4.4	4.4	0.2	3.5	11.2			9.2	Jan-16
Real Assets	51,608,316	5.0	5.0	1.6	1.4	3.6	3.4	1.3	-		-1.1	Jan-16
CPI + 3%				0.3	1.1	3.7	4.7	5.1	4.5	4.7	5.0	Jan-16
IFM Global Infrastructure	22,275,500	2.1	43.2	2.7	2.2	8.9	12.0				12.0	Oct-18
CPI+5% (1q Lagged)				2.0	2.0	5.2	6.7				6.7	Oct-18
Cash and Cash Equivalent	12,099,158	1.2	1.2									
Cash	12,099,158	1.2	100.0									



Allocation vs. Target											
	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?						
Domestic Equity	\$229,250,611	22%	26%	21% - 36%	Yes						
International Developed Market Equity	\$114,001,502	11%	6%	1% - 16%	Yes						
International Emerging Market Equity	\$109,758,727	11%	10%	5% - 20%	Yes						
Global Equity	\$102,767,712	10%	10%	5% - 20%	Yes						
Core Bonds	\$89,384,212	9%	9%	4% - 14%	Yes						
Value-Added Fixed Income	\$119,346,289	11%	6%	2% - 12%	Yes						
Private Equity	\$58,593,595	6%	13%	4% - 18%	Yes						
Real Estate	\$90,582,657	9%	10%	5% - 15%	Yes						
Real Assets	\$51,608,316	5%	6%	2% - 10%	Yes						
Hedge Fund of Funds	\$62,864,044	6%	4%	2% - 8%	Yes						
Cash	\$12,099,158	1%	0%	0% - 3%	Yes						
Total	\$1,040,256,821	100%	100%								

	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?
Total Equity	\$677,236,190	65%	69%	60% - 80%	Yes
Total Fixed Income	\$208,730,500	20%	15%	5% - 25%	Yes
Total Real Assets and Real Estate	\$142,190,973	14%	16%	13% - 19%	Yes
Cash	\$12,099,158	1%	0%	0% - 3%	Yes







		Statistics Sum	ımary						
5 Years Ending September 30, 2019									
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error			
otal Retirement Association	5.6%	7.1%	0.2	0.9	0.7	2.9%			
60% MSCI ACWI / 40% Barclays Global Aggregate	4.9%	7.5%		1.0	0.5	0.0%			
Oomestic Equity Assets									
Russell 3000	10.4%	12.2%		1.0	0.8	0.0%			
thumbline Russell 1000 Value	7.7%	11.9%	-1.2	1.0	0.6	0.1%			
Russell 1000 Value	7.8%	11.9%		1.0	0.6	0.0%			
Rhumbline Russell 1000 Growth	13.3%	12.9%	-1.5	1.0	1.0	0.1%			
Russell 1000 Growth	13.4%	12.9%		1.0	1.0	0.0%			
isher Midcap Value	9.0%	14.7%	0.3	1.1	0.5	4.4%			
Russell MidCap Value	7.6%	12.6%		1.0	0.5	0.0%			
oston Company Small Cap Growth	13.2%	17.9%	0.7	1.0	0.7	5.6%			
Russell 2000 Growth	9.1%	16.9%		1.0	0.5	0.0%			
MCG Small Cap Value	7.6%	15.3%	0.1	0.9	0.4	3.2%			
Russell 2000 Value	7.2%	16.1%		1.0	0.4	0.0%			
nternational Equity									
International Equity Custom Benchmark	3.7%	12.4%		1.0	0.2	0.0%			
nternational Developed Market Equity Assets									
MSCI EAFE	3.3%	12.2%		1.0	0.2	0.0%			
BI Master Account	0.3%	12.0%	-1.3	1.0	-0.1	2.2%			
MSCI EAFE	3.3%	12.2%		1.0	0.2	0.0%			
IGK TS International Equity	4.6%	13.7%	0.3	1.1	0.3	4.7%			
MSCI EAFE	3.3%	12.2%		1.0	0.2	0.0%			



	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Copper Rock International Small Cap						
MSCI EAFE Small Cap	6.0%	12.4%		1.0	0.4	0.0%
International Emerging Market Equity Assets				-		
MSCI Emerging Markets	2.3%	15.6%		1.0	0.1	0.0%
LMCG Emerging Markets	0.0%	14.7%	-0.8	0.9	-0.1	2.8%
MSCI Emerging Markets	2.3%	15.6%		1.0	0.1	0.0%
ABS Emerging Markets				-		
MSCI Emerging Markets	2.3%	15.6%		1.0	0.1	0.0%
Copper Rock Emerging Markets Small Cap						
MSCI Emerging Markets Small Cap	-0.1%	14.4%		1.0	-0.1	0.0%
Driehaus Emerging Markets Growth						
MSCI Emerging Markets	2.3%	15.6%		1.0	0.1	0.0%
Global Equity Assets				-		
MSCI ACWI	6.7%	11.7%		1.0	0.5	0.0%
First Eagle Global Value Fund				-		
MSCI ACWI	6.7%	11.7%		1.0	0.5	0.0%
Kopernik Global All Cap Fund				-		
MSCI ACWI	6.7%	11.7%		1.0	0.5	0.0%
Lee Munder Global Multi-Cap Strategy				-		
MSCI ACWI	6.7%	11.7%		1.0	0.5	0.0%
Wellington Durable Enterprises, L.P.				-		
MSCI ACWI	6.7%	11.7%		1.0	0.5	0.0%
Fixed Income Assets	3.7%	2.8%	0.0	0.6	1.0	2.4%
BBgBarc US Universal TR	3.6%	2.9%		1.0	0.9	0.0%
Core Fixed Income						
75% Bbg Barclays Aggregate/25% Bbg Barclays US TIPs 1- 10 year	3.0%	2.9%		1.0	0.7	0.0%



	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
IR&M Core Bonds	3.1%	2.8%	0.1	1.0	0.8	0.3%
75% Bbg Barclays Aggregate/25% Bbg Barclays US TIPs 1-10 year	3.0%	2.9%		1.0	0.7	0.0%
Lord Abbett Short Duration Credit Trust II						
BBgBarc US Credit 1-3 Yr TR	2.1%	0.9%		1.0	1.2	0.0%
Value Added Fixed Income				-		
Custom Benchmark						
Eaton Vance High Yield	5.4%	4.5%	0.0	0.8	1.0	1.5%
ICE BofAML US High Yield TR	5.4%	5.4%		1.0	0.8	0.0%
THL Bank Loan Select Fund	4.3%	2.7%	0.2	0.9	1.2	0.7%
Credit Suisse Leveraged Loans	4.1%	2.9%		1.0	1.1	0.0%
Franklin Templeton Emerging Market Bonds	4.1%	6.4%	-0.4	0.9	0.5	4.1%
JP Morgan EMBI Global Diversified	5.7%	5.5%		1.0	0.9	0.0%
Manulife Strategic Fixed Income						
BBgBarc Multiverse TR	2.1%	4.4%		1.0	0.3	0.0%
Mesirow High Yield						
BBgBarc US Corporate High Yield TR	5.4%	5.3%		1.0	0.8	0.0%
Hedge Funds	3.7%	6.0%	0.4	1.2	0.5	4.0%
HFRI Fund of Funds Composite Index	1.9%	3.7%		1.0	0.3	0.0%
ABS Offshore SPC - Global Segregated Portfolio	3.5%	6.3%	0.5	1.5	0.4	3.3%
HFRI Fund of Funds Composite Index	1.9%	3.7%		1.0	0.3	0.0%
Entrust Special Opportunities Fund III, Ltd.						
HFRI Fund of Funds Composite Index	1.9%	3.7%		1.0	0.3	0.0%
Old Farm Partners Master Fund, L.P.						
HFRI Fund of Funds Composite Index	1.9%	3.7%		1.0	0.3	0.0%



	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.						
HFRI Fund of Funds Composite Index	1.9%	3.7%		1.0	0.3	0.0%
Real Estate						
80% NCREIF ODCE / 20% Wilshire REIT						
Core Real Estate						
NCREIF-ODCE	9.3%	4.0%		1.0	2.1	0.0%
Invesco Equity Real Estate Securities Trust	10.1%	13.2%	0.0	0.9	0.7	2.6%
Wilshire REIT	10.2%	14.4%		1.0	0.6	0.0%
TA Realty Core Property Fund, L.P.						
NCREIF ODCE	9.3%	4.0%		1.0	2.1	0.0%
JPMorgan Strategic Property						
NCREIF-ODCE	9.3%	4.0%		1.0	2.1	0.0%
Private Equity						
Cambridge Associates Fund of Funds Composite 1-Quarter Lag	10.8%	5.5%	-	1.0	1.8	0.0%
Real Assets						
CPI + 3%	4.5%	0.7%		1.0	5.3	0.0%
IFM Global Infrastructure						
CPI+5% (1q Lagged)						

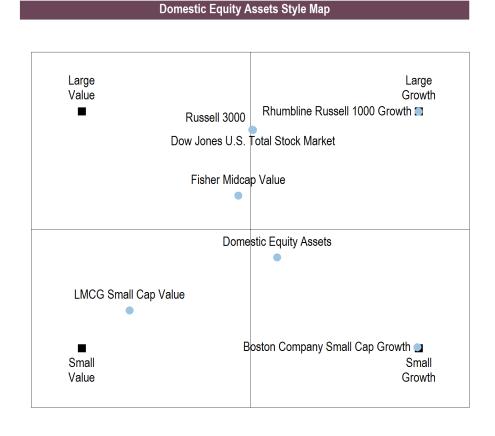


Domestic Equity Assets

As of September 30, 2019

Asset Allocation on September 30, 2019									
	Actual	Actual							
Boston Company Small Cap Growth	\$47,316,466	20.6%							
Fisher Midcap Value	\$43,539,526	19.0%							
LMCG Small Cap Value	\$67,148,279	29.3%							
Misc Domestic Equity Assets	\$22,585	0.0%							
Rhumbline Russell 1000 Growth	\$35,092,144	15.3%							
Rhumbline Russell 1000 Value	\$36,131,611	15.8%							
Total	\$229,250,611	100.0%							

Return Summary Ending September 30, 2019 20.0 15.0 12.8 11.9 10.4 Rate of Return % 10.0 5.0 2.9 1.2 0.0 -1.5 -2.3 -5.0 -10.0 Q3-19 1 Year 3 Years 5 Years Domestic Equity Assets Russell 3000

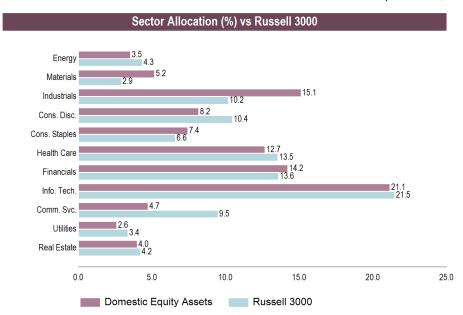


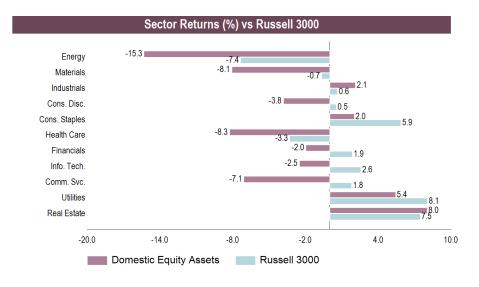


Domestic Equity Assets

Domestic Equity Assets Equity Characteristics								
	Portfolio	Index						
	Q3-19	Q3-19						
Market Value								
Market Value (\$M)	229.25							
Number Of Holdings	1126	2988						
Characteristics								
Weighted Avg. Market Cap. (\$B)	69.62	195.28						
Median Market Cap (\$B)	8.67	1.58						
P/E Ratio	20.45	20.51						
Yield	1.35	1.88						
EPS Growth - 5 Yrs.	13.06	13.53						
Price to Book	2.89	3.48						
Beta (holdings; domestic)	1.11	1.02						

Top 10 Holdings	
MICROSOFT	1.2%
APPLE	1.1%
CACI INTERNATIONAL 'A'	1.1%
BANDWIDTH A	0.8%
AMAZON.COM	0.8%
GLOBAL PAYMENTS	0.8%
MACOM TECH.SLTN.HDG.	0.7%
STERLING BANCORP	0.7%
TREEHOUSE FOODS	0.7%
MURPHY USA	0.7%
Total	8.6%



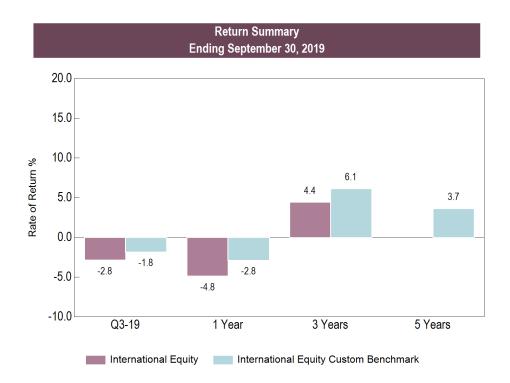




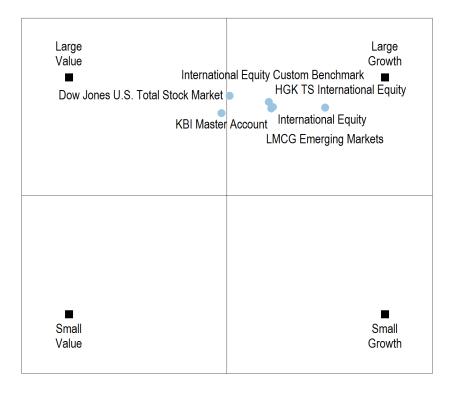
International Equity

As of September 30, 2019

Asset Allocation on September 30, 2019				
	Actual	Actual		
ABS Emerging Markets	\$26,847,999	12.0%		
Copper Rock Emerging Markets Small Cap	\$10,220,674	4.6%		
Copper Rock International Small Cap	\$34,448,630	15.4%		
Driehaus Emerging Markets Growth	\$25,744,048	11.5%		
HGK TS International Equity	\$30,139,132	13.5%		
KBI Master Account	\$49,413,739	22.1%		
LMCG Emerging Markets	\$46,946,006	21.0%		
Total	\$223,760,229	100.0%		



International Equity Style Map

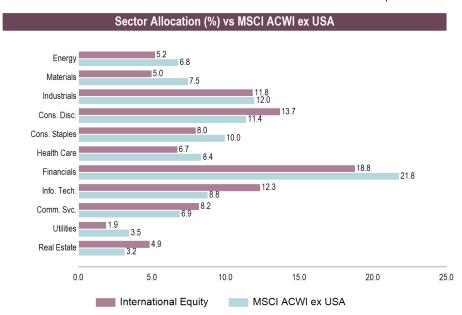


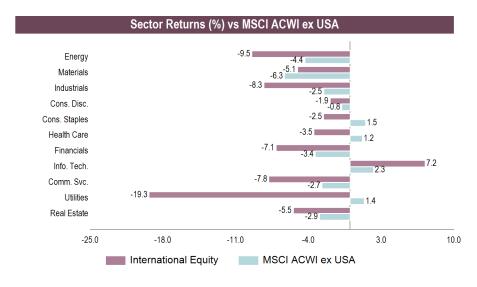


International Equity

International E	quity Equity Characteristics	
	Portfolio	Index
	Q3-19	Q3-19
Market Value		
Market Value (\$M)	223.76	
Number Of Holdings	550	2206
Characteristics		
Weighted Avg. Market Cap. (\$B)	45.57	64.02
Median Market Cap (\$B)	6.61	7.29
P/E Ratio	13.70	14.97
Yield	3.14	3.26
EPS Growth - 5 Yrs.	13.77	8.95
Price to Book	2.52	2.31
Beta (holdings; domestic)	0.97	1.04

Top 10 Holdings	
TENCENT HOLDINGS	1.8%
SAMSUNG ELECTRONICS	1.8%
TAIWAN SEMICON.MNFG.	1.6%
ROCHE HOLDING	1.3%
ALIBABA GROUP HOLDING ADR 1:8	1.0%
ISHARES MSCI EMERGING MARKETS ETF	0.9%
IRB BRASIL RESSEGUROS ON	0.9%
RHEINMETALL	0.7%
FERROVIAL	0.7%
NOVO NORDISK 'B'	0.7%
Total	11.4%

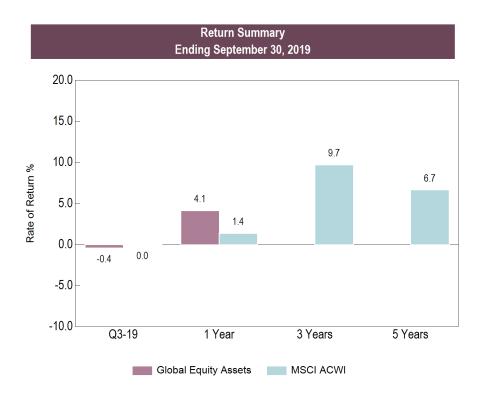


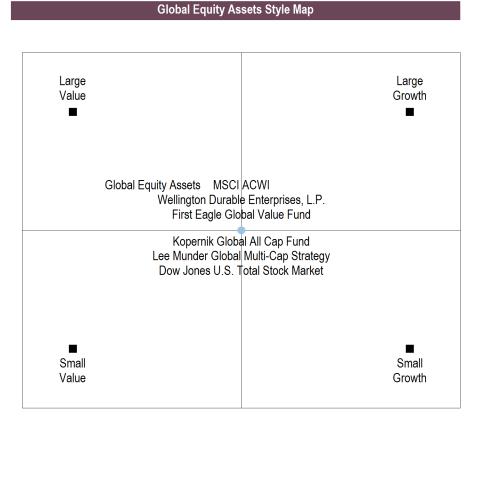




Global Equity Assets

Asset Allocation on September 30, 2019				
	Actual	Actual		
First Eagle Global Value Fund	\$20,212,722	19.7%		
Kopernik Global All Cap Fund	\$18,034,862	17.5%		
Lee Munder Global Multi-Cap Strategy	\$28,663,847	27.9%		
Wellington Durable Enterprises, L.P.	\$35,856,280	34.9%		
Total	\$102,767,712	100.0%		





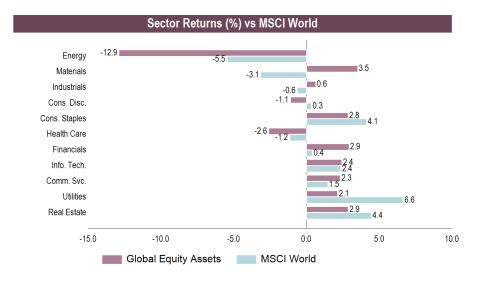


Global Equity Assets

Global Equity As	ssets Equity Characteristics	
	Portfolio	Index
	Q3-19	Q3-19
Market Value		
Market Value (\$M)	102.77	
Number Of Holdings	317	1649
Characteristics		
Weighted Avg. Market Cap. (\$B)	88.23	159.80
Median Market Cap (\$B)	16.43	12.54
P/E Ratio	15.48	18.45
Yield	2.41	2.44
EPS Growth - 5 Yrs.	6.61	10.81
Price to Book	2.45	3.03
Beta (holdings; domestic)	1.00	1.01

Top 10 Holdings	
ISHARES CORE MSCI EMERGING MARKETS ETF	3.4%
CAMECO (NYS)	1.5%
COMCAST A	1.4%
KT	1.3%
NEWCREST MINING	1.2%
MICROSOFT	1.2%
GAZPROM ORD	1.1%
APPLE	1.1%
ISHARES MSCI CHINA	1.0%
ALPHABET A	1.0%
Total	14.4%



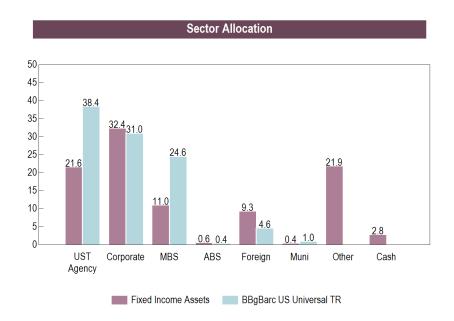


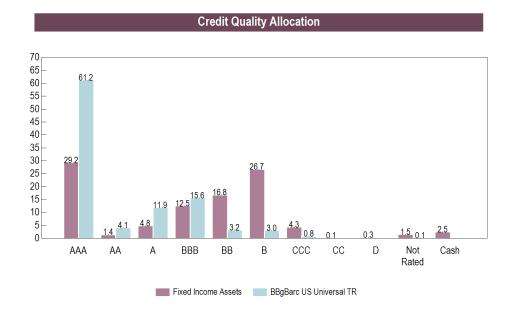


Fixed Income Assets

Asset Allocation on September 30, 2019				
	Actual	Actual		
Eaton Vance High Yield	\$21,935,544	10.5%		
Franklin Templeton Emerging Market Bonds	\$20,416,412	9.8%		
IR&M Core Bonds	\$59,088,354	28.3%		
Lord Abbett Short Duration Credit Trust II	\$30,295,858	14.5%		
Manulife Strategic Fixed Income	\$30,374,269	14.6%		
Mesirow High Yield	\$10,140,000	4.9%		
THL Bank Loan Select Fund	\$36,480,063	17.5%		
Total	\$208,730,500	100.0%		

Fixed Income Assets Characteristics vs. BBgBarc US Universal TR			
VS. DDyDai			
	Portfolio	Index	Portfolio
	Q3-19	Q2-19	
Fixed Income Characteristics			
Yield to Maturity	4.6	2.7	5.8
Average Duration	3.4	6.1	3.3
Average Quality	BBB	AA	BBB
Weighted Average Maturity	6.0	12.2	6.3







Rhumbline Russell 1000 Value

Acco	unt Information
Account Name	Rhumbline Russell 1000 Value
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	4/30/13
Account Type	US Equity
Benchmark	Russell 1000 Value
Universe	eV US Large Cap Value Equity Net

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Rhumbline Russell 1000 Value	1.4	4.0	9.3	7.7		9.7	Apr-13
Russell 1000 Value	1.4	4.0	9.4	7.8	11.5	9.9	Apr-13
eV US Large Cap Value Equity Net Median	1.5	1.7	9.8	7.5	11.2	9.8	Apr-13
eV US Large Cap Value Equity Net Rank	55	32	59	45		52	Apr-13

Top 10 Holdings	
BERKSHIRE HATHAWAY 'B'	3.0%
JP MORGAN CHASE & CO.	2.8%
EXXON MOBIL	2.2%
JOHNSON & JOHNSON	2.2%
PROCTER & GAMBLE	2.1%
AT&T	2.0%
VERIZON COMMUNICATIONS	1.8%
BANK OF AMERICA	1.8%
INTEL	1.7%
WALT DISNEY	1.7%
Total	21.3%

Rhumbline	Russell 1000 Val	ue Characteristics	
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	36.1	-	35.6
Number Of Holdings	759	760	763
Characteristics			
Weighted Avg. Market Cap. (\$B)	114.0	114.2	113.3
Median Market Cap (\$B)	9.1	9.0	9.0
P/E Ratio	16.8	16.7	16.8
Yield	2.6	2.6	2.6
EPS Growth - 5 Yrs.	7.4	7.0	6.7
Price to Book	2.3	2.2	2.2
Beta (holdings; domestic)	1.0	1.0	1.0
Sector Distribution			
Energy	8.3	8.6	9.2
Materials	4.3	4.3	4.4
Industrials	9.4	9.5	9.7
Consumer Discretionary	6.6	6.0	5.9
Consumer Staples	9.1	8.9	8.7
Health Care	13.1	12.5	12.9
Financials	21.4	23.7	23.4
Information Technology	6.4	6.1	5.9
Communication Services	8.1	8.2	8.0
Utilities	6.8	6.7	6.5
Real Estate	5.7	5.4	5.1



Rhumbline Russell 1000 Growth

Account Information				
Account Name	Rhumbline Russell 1000 Growth			
Account Structure	Commingled Fund			
Investment Style	Passive			
Inception Date	7/31/09			
Account Type	US Equity			
Benchmark	Russell 1000 Growth			
Universe	eV US Large Cap Growth Equity Net			

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Rhumbline Russell 1000 Growth	1.5	3.7	16.8	13.3	14.8	15.3	Jul-09
Russell 1000 Growth	1.5	3.7	16.9	13.4	14.9	15.4	Jul-09
eV US Large Cap Growth Equity Net Median	0.2	2.9	15.7	12.1	13.7	14.2	Jul-09
eV US Large Cap Growth Equity Net Rank	23	44	32	25	21	21	Jul-09

Top 10 Holdings	
MICROSOFT	7.5%
APPLE	7.3%
AMAZON.COM	5.1%
FACEBOOK CLASS A	3.0%
ALPHABET 'C'	2.7%
ALPHABET A	2.6%
VISA 'A'	2.1%
MASTERCARD	1.7%
CISCO SYSTEMS	1.5%
MERCK & COMPANY	1.5%
Total	35.1%

Rhumbline R	Russell 1000 Gre	owth Characteristic	S
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	35.1		34.6
Number Of Holdings	527	526	532
Characteristics			
Weighted Avg. Market Cap. (\$B)	301.4	300.6	287.5
Median Market Cap (\$B)	12.2	12.2	12.6
P/E Ratio	26.7	26.7	26.9
Yield	1.2	1.2	1.2
EPS Growth - 5 Yrs.	21.4	21.6	20.2
Price to Book	8.1	8.0	8.1
Beta (holdings; domestic)	1.0	1.1	1.1
Sector Distribution			
Energy	0.3	0.3	0.4
Materials	1.4	1.4	1.4
Industrials	9.9	9.9	9.7
Consumer Discretionary	14.4	14.6	14.5
Consumer Staples	4.9	4.8	4.7
Health Care	14.2	14.2	14.6
Financials	3.1	3.2	3.2
Information Technology	37.4	37.4	37.0
Communication Services	11.4	11.6	11.3
Utilities	0.0	0.0	0.0
Real Estate	2.6	2.5	2.4



Fisher Midcap Value

Account Information				
Account Name	Fisher Midcap Value			
Account Structure	Separate Account			
Investment Style	Active			
Inception Date	4/30/07			
Account Type	US Equity			
Benchmark	Russell MidCap Value			
Universe	eV US Mid Cap Value Equity Net			

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Fisher Midcap Value	-1.5	-2.1	11.6	9.0	12.2	7.4	Apr-07
Russell MidCap Value	1.2	1.6	7.8	7.6	12.3	6.9	Apr-07
eV US Mid Cap Value Equity Net Median	1.5	-0.4	8.3	7.4	11.5	7.0	Apr-07
eV US Mid Cap Value Equity Net Rank	93	65	6	18	26	39	Apr-07

Top 10 Holdings	
GLOBAL PAYMENTS	3.8%
AUTODESK	3.3%
SYNOPSYS	3.2%
ASPEN TECHNOLOGY	3.1%
ANSYS	2.7%
FIDELITY NAT.INFO.SVS.	2.7%
RAYMOND JAMES FINL.	2.5%
PERKINELMER	2.5%
KANSAS CITY SOUTHERN	2.4%
PROGRESSIVE OHIO	2.4%
Total	28.6%

Fisher	Midcap Value C	haracteristics	
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	43.5		44.1
Number Of Holdings	76	627	76
Characteristics			
Weighted Avg. Market Cap. (\$B)	18.0	15.0	16.2
Median Market Cap (\$B)	9.3	7.4	9.8
P/E Ratio	21.1	17.7	20.7
Yield	1.1	2.4	1.1
EPS Growth - 5 Yrs.	13.5	9.6	13.9
Price to Book	2.9	2.2	2.8
Beta (holdings; domestic)	1.2	1.0	1.2
Sector Distribution			
Energy	6.5	5.8	7.4
Materials	4.0	6.6	4.6
Industrials	14.8	11.5	14.5
Consumer Discretionary	6.1	8.9	5.1
Consumer Staples	2.3	4.5	2.2
Health Care	15.4	6.8	15.9
Financials	16.4	19.0	16.4
Information Technology	26.4	7.3	25.6
Communication Services	1.4	3.8	1.5
Utilities	0.0	11.4	0.0
Real Estate	6.2	14.3	5.7



Boston Company Small Cap Growth

Account Information					
Account Name	Boston Company Small Cap Growth				
Account Structure	Separate Account				
Investment Style	Active				
Inception Date	8/31/09				
Account Type	US Equity				
Benchmark	Russell 2000 Growth				
Universe	eV US Small Cap Growth Equity Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Boston Company Small Cap Growth	-7.7	-5.9	15.1	13.2	13.5	14.1	Aug-09
Russell 2000 Growth	-4.2	-9.6	9.8	9.1	12.2	12.9	Aug-09
eV US Small Cap Growth Equity Net Median	-4.6	-7.2	12.6	10.5	13.3	13.9	Aug-09
eV US Small Cap Growth Equity Net Rank	85	44	34	20	42	46	Aug-09

Top 10 Holdings	
BANDWIDTH A	3.9%
HUBSPOT	3.4%
FRESHPET	3.2%
SHOPIFY 'A' (NYS)	3.2%
MERCURY SYSTEMS	2.8%
TWILIO 'A'	2.8%
PLANET FITNESS CL.A	2.8%
TELADOC HEALTH	2.8%
RAPID7	2.6%
CACI INTERNATIONAL 'A'	2.3%
Total	30.0%

Boston Compa		owth Characterist	
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	47.3		51.2
Number Of Holdings	86	1144	86
Characteristics			
Weighted Avg. Market Cap. (\$B)	4.0	2.4	4.4
Median Market Cap (\$B)	2.0	0.8	2.1
P/E Ratio	37.8	25.6	36.5
Yield	0.2	0.8	0.2
EPS Growth - 5 Yrs.	23.4	11.6	23.7
Price to Book	4.5	4.0	4.7
Beta (holdings; domestic)	1.1	1.2	1.3
Sector Distribution			
Energy	1.4	0.7	1.6
Materials	2.0	3.2	2.0
Industrials	13.8	19.4	13.6
Consumer Discretionary	9.0	12.4	10.2
Consumer Staples	7.3	3.4	5.7
Health Care	23.0	27.9	23.1
Financials	6.1	5.9	5.9
Information Technology	28.9	18.2	30.8
Communication Services	3.9	2.5	4.2
Utilities	0.0	1.7	0.0
Real Estate	1.4	4.7	1.7



LMCG Small Cap Value

Acco	Account Information					
Account Name	LMCG Small Cap Value					
Account Structure	Separate Account					
Investment Style	Active					
Inception Date	3/31/11					
Account Type	US Equity					
Benchmark	Russell 2000 Value					
Universe	eV US Small Cap Value Equity Net					

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
LMCG Small Cap Value	0.2	-6.1	6.0	7.6		7.6	Mar-11
Russell 2000 Value	-0.6	-8.2	6.5	7.2	10.1	7.8	Mar-11
eV US Small Cap Value Equity Net Median	-0.3	-6.8	6.2	6.4	10.7	8.1	Mar-11
eV US Small Cap Value Equity Net Rank	39	43	55	30		63	Mar-11

Top 10 Holdings	
MACOM TECH.SLTN.HDG.	2.5%
MURPHY USA	2.4%
STERLING BANCORP	2.4%
TREEHOUSE FOODS	2.4%
CACI INTERNATIONAL 'A'	2.1%
FNB	2.1%
BLACKSTONE MGE.TST.CL.A	2.0%
PORTLAND GEN.ELEC.	2.0%
DARLING INGREDIENTS	1.9%
IBERIABANK	1.9%
Total	21.9%

LMCG S	mall Cap Value	Characteristics	
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	67.1		66.9
Number Of Holdings	92	1387	92
Characteristics			
Weighted Avg. Market Cap. (\$B)	3.1	2.0	3.2
Median Market Cap (\$B)	2.5	0.6	2.7
P/E Ratio	16.4	14.9	16.7
Yield	1.7	2.2	1.6
EPS Growth - 5 Yrs.	5.6	7.9	7.4
Price to Book	1.9	1.6	1.9
Beta (holdings; domestic)	1.2	1.2	1.2
Sector Distribution			
Energy	2.2	6.4	2.2
Materials	10.5	4.6	11.6
Industrials	22.0	12.7	21.8
Consumer Discretionary	6.5	9.8	6.3
Consumer Staples	11.1	2.5	11.4
Health Care	2.6	5.0	3.5
Financials	20.4	30.2	19.0
Information Technology	11.7	8.9	10.9
Communication Services	2.2	2.5	3.2
Utilities	5.2	6.2	4.8
Real Estate	4.2	11.3	4.1



KBI Master Account

Account Information					
Account Name	KBI Master Account				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	7/31/05				
Account Type	Non-US Stock Developed				
Benchmark	MSCI EAFE				
Universe	eV EAFE Core Equity Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
KBI Master Account	-1.4	-6.4	2.9	0.3	3.4	3.2	Jul-05
MSCI EAFE	-1.1	-1.3	6.5	3.3	4.9	4.4	Jul-05
eV EAFE Core Equity Net Median	-1.4	-4.5	5.7	3.9	6.5	5.2	Jul-05
eV EAFE Core Equity Net Rank	49	71	92	99	99	98	Jul-05

Top 10 Holdings	
NOVO NORDISK 'B'	2.5%
ASSICURAZIONI GENERALI	2.0%
ROCHE HOLDING	2.0%
REPSOL YPF	1.9%
IBERDROLA	1.9%
KBC GROUP	1.9%
TAIWAN SEMICON.MNFG.	1.8%
SIEMENS	1.8%
RIO TINTO	1.8%
ROYAL DUTCH SHELL B	1.8%
Total	19.6%

	aster Account Charac Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value	Q0 10	Q0 10	QZ 10
Market Value (\$M)	49.4		50.1
Number Of Holdings	232	922	238
Characteristics			
Weighted Avg. Market Cap. (\$B)	45.3	59.7	46.5
Median Market Cap (\$B)	12.8	9.9	12.7
P/E Ratio	11.7	15.8	11.1
Yield	4.5	3.3	4.6
EPS Growth - 5 Yrs.	13.6	7.0	14.1
Price to Book	2.1	2.3	2.0
Beta (holdings; domestic)	1.1	1.0	1.0
Sector Distribution			
Energy	7.1	5.1	7.1
Materials	8.0	7.2	8.4
Industrials	11.5	14.8	12.1
Consumer Discretionary	9.3	11.4	10.4
Consumer Staples	8.1	11.8	7.4
Health Care	9.7	11.3	8.0
Financials	20.8	18.8	21.4
Information Technology	8.2	6.8	8.4
Communication Services	7.6	5.4	7.0
Utilities	3.2	3.7	3.5
Real Estate	4.4	3.5	4.4



HGK TS International Equity

Account Information				
Account Name	HGK TS International Equity			
Account Structure	Commingled Fund			
Investment Style	Active			
Inception Date	2/28/11			
Account Type	Non-US Stock Developed			
Benchmark	MSCI EAFE			
Universe	eV EAFE All Cap Equity Net			

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
HGK TS International Equity	0.3	0.4	8.5	4.6		5.9	Feb-11
MSCI EAFE	-1.1	-1.3	6.5	3.3	4.9	3.9	Feb-11
eV EAFE All Cap Equity Net Median	-1.5	-2.9	5.9	4.2	6.1	5.0	Feb-11
eV EAFE All Cap Equity Net Rank	14	22	17	38		33	Feb-11

Top 10 Holdings	
ROCHE HOLDING	6.1%
FERROVIAL	6.1%
MOWI	5.5%
NEXT	5.5%
HENDERSON LD.DEV.	5.4%
SHIMANO	5.1%
MURATA MANUFACTURING	4.9%
NEXON	4.9%
SUBSEA 7	4.8%
DEUTSCHE POST	4.8%
Total	53.2%

	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	30.1		30.0
Number Of Holdings	25	922	25
Characteristics			
Weighted Avg. Market Cap. (\$B)	61.4	59.7	61.0
Median Market Cap (\$B)	17.2	9.9	19.0
P/E Ratio	15.7	15.8	14.8
Yield	2.6	3.3	2.6
EPS Growth - 5 Yrs.	9.7	7.0	10.7
Price to Book	2.3	2.3	2.6
Beta (holdings; domestic)	1.0	1.0	1.0
Sector Distribution			
Energy	4.6	5.1	4.6
Materials	0.0	7.2	0.0
Industrials	22.1	14.8	22.1
Consumer Discretionary	36.8	11.4	36.8
Consumer Staples	5.3	11.8	5.3
Health Care	5.8	11.3	5.8
Financials	4.0	18.8	4.0
Information Technology	8.8	6.8	8.8
Communication Services	7.5	5.4	7.5
Utilities	0.0	3.7	0.0
Real Estate	5.2	3.5	5.2



Copper Rock International Small Cap

Account Information					
Account Name	Copper Rock International Small Cap				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	11/30/17				
Account Type	Non-US Stock Developed				
Benchmark	MSCI EAFE Small Cap				
Universe	eV EAFE Small Cap Equity Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Copper Rock International Small Cap	-3.8	-8.2				-6.6	Nov-17
MSCI EAFE Small Cap	-0.4	-5.9	5.9	6.0	7.5	-3.1	Nov-17
eV EAFE Small Cap Equity Net Median	-1.8	-7.9	5.5	5.7	8.4	-5.1	Nov-17
eV EAFE Small Cap Equity Net Rank	93	57				67	Nov-17

Top 10 Holdings	
ISHARES MSCI EAFE SMCP.	3.0%
NIHON UNISYS	1.7%
ARUHI	1.7%
CHARTER HALL GROUP STAPLED UNITS	1.6%
BUZZI UNICEM	1.6%
GREENCORE GROUP	1.6%
KORIAN	1.6%
BRITVIC	1.6%
EUROMONEY INSTL.INVESTOR	1.6%
LOOMIS 'B'	1.5%
Total	17.6%

Copper Rock Ir	nternational Small	Cap Characteristic	S
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	34.4	-	35.8
Number Of Holdings	79	2334	84
Characteristics			
Weighted Avg. Market Cap. (\$B)	3.3	2.5	3.5
Median Market Cap (\$B)	3.1	1.0	3.4
P/E Ratio	16.4	15.6	17.0
Yield	2.2	2.9	2.3
EPS Growth - 5 Yrs.	17.3	11.2	16.3
Price to Book	2.6	2.1	2.6
Beta (holdings; domestic)	0.9	0.9	0.9
Sector Distribution			
Energy	2.1	2.7	2.6
Materials	3.8	8.1	5.1
Industrials	20.5	21.3	18.9
Consumer Discretionary	5.5	12.7	9.2
Consumer Staples	9.8	6.4	9.4
Health Care	10.0	7.4	12.7
Financials	11.0	10.5	10.0
Information Technology	15.2	9.7	15.9
Communication Services	5.0	5.2	5.6
Utilities	4.3	2.4	2.8
Real Estate	9.7	13.5	5.3



LMCG Emerging Markets

Account Information				
Account Name	LMCG Emerging Markets			
Account Structure	Commingled Fund			
Investment Style	Active			
Inception Date	9/30/13			
Account Type	Non-US Stock Emerging			
Benchmark	MSCI Emerging Markets			
Universe	eV Emg Mkts Equity Net			

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
LMCG Emerging Markets	-5.2	-7.8	3.4	0.0		0.4	Sep-13
MSCI Emerging Markets	-4.2	-2.0	6.0	2.3	3.4	2.7	Sep-13
eV Emg Mkts Equity Net Median	-3.8	-0.6	5.7	2.5	4.0	3.0	Sep-13
eV Emg Mkts Equity Net Rank	82	99	84	95	-	96	Sep-13

Top 10 Holdings					
TENCENT HOLDINGS	5.6%				
TAIWAN SEMICON.MNFG.	4.8%				
ISHARES MSCI EMERGING MARKETS ETF	4.2%				
IRB BRASIL RESSEGUROS ON	4.2%				
SAMSUNG ELECTRONICS	4.0%				
ANTA SPORTS PRODUCTS	1.6%				
CHINA CON.BANK 'H'	1.5%				
HINDUSTAN UNILEVER	1.4%				
IMPALA PLATINUM	1.4%				
LUKOIL OAO SPN.ADR 1:1	1.4%				
Total	30.0%				

LMCG En	nerging Markets	s Characteristics	
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	46.9		49.5
Number Of Holdings	94	1194	125
Characteristics			
Weighted Avg. Market Cap. (\$B)	60.8	80.2	52.8
Median Market Cap (\$B)	6.3	5.3	4.7
P/E Ratio	11.2	13.6	11.2
Yield	3.5	3.1	3.6
EPS Growth - 5 Yrs.	13.0	12.9	13.6
Price to Book	2.8	2.4	2.3
Beta (holdings; domestic)	1.0	1.1	1.0
Sector Distribution			
Energy	6.9	7.7	6.4
Materials	6.6	7.4	6.9
Industrials	4.2	5.4	7.7
Consumer Discretionary	12.0	13.3	11.0
Consumer Staples	5.8	6.6	7.3
Health Care	3.1	2.7	2.4
Financials	26.6	24.9	18.8
Information Technology	15.0	14.7	15.5
Communication Services	11.1	11.6	12.6
Utilities	0.0	2.8	1.3
Real Estate	3.2	2.9	6.0



Copper Rock Emerging Markets Small Cap

Account Information					
Account Name	Copper Rock Emerging Markets Small Cap				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	12/01/18				
Account Type	Non-US Stock Emerging				
Benchmark	MSCI Emerging Markets Small Cap				
Universe	eV Emg Mkts Small Cap Equity Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Copper Rock Emerging Markets Small Cap	-5.6					2.6	Dec-18
MSCI Emerging Markets Small Cap	-4.6	-5.5	1.3	-0.1	3.2	0.2	Dec-18
eV Emg Mkts Small Cap Equity Net Median	-3.7	-2.8	3.2	1.5	6.5	4.2	Dec-18
eV Emg Mkts Small Cap Equity Net Rank	78					59	Dec-18

Top 10 Holdings	
RADIANT OPTO-ELECTRONICS	2.0%
BK.TBPNSU.NASL. SYARIAH	1.9%
DINO POLSKA SA	1.9%
CHAILEASE HOLDING	1.9%
NODM.INTMDCA.PARTP. ON	1.9%
ASIA CEMENT	1.8%
ELITE MATERIAL	1.8%
CYRELA BRAZIL REALTY ON	1.7%
KRUNGTHAI CARD FB	1.7%
BATA INDIA	1.7%
Total	18.4%

-	Portfolio	Cap Characteristic	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	10.2		10.8
Number Of Holdings	82	1194	80
Characteristics			
Weighted Avg. Market Cap. (\$B)	2.3	80.2	2.2
Median Market Cap (\$B)	2.0	5.3	2.0
P/E Ratio	15.4	13.6	15.3
Yield	2.6	3.1	2.7
EPS Growth - 5 Yrs.	14.9	12.9	15.6
Price to Book	2.8	2.4	2.6
Beta (holdings; domestic)	0.8	1.1	1.0
Sector Distribution			
Energy	0.8	7.7	1.0
Materials	6.1	7.4	6.5
Industrials	12.6	5.4	12.6
Consumer Discretionary	17.6	13.3	19.2
Consumer Staples	6.1	6.6	7.3
Health Care	8.1	2.7	8.0
Financials	14.6	24.9	15.5
Information Technology	18.0	14.7	16.0
Communication Services	6.3	11.6	5.0
Utilities	2.4	2.8	2.0
Real Estate	5.4	2.9	5.5



Driehaus Emerging Markets Growth

Account Info	rmation
Account Name	Driehaus Emerging Markets Growth
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	3/01/19
Account Type	Non-US Stock Emerging
Benchmark	MSCI Emerging Markets
Universe	eV Emg Mkts Equity Net

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Driehaus Emerging Markets Growth	-2.2	-		-		2.6	Mar-19
MSCI Emerging Markets	-4.2	-2.0	6.0	2.3	3.4	-2.9	Mar-19
eV Emg Mkts Equity Net Median	-3.8	-0.6	5.7	2.5	4.0	-1.3	Mar-19
eV Emg Mkts Equity Net Rank	18					13	Mar-19

Top 10 Holdings	
TAIWAN SEMICON.SPN.ADR 1:5	4.8%
TENCENT HOLDINGS	4.5%
ALIBABA GROUP HOLDING ADR 1:8	4.0%
SAMSUNG ELECTRONICS	3.5%
PING AN INSURANCE (GROUP) OF CHINA 'H'	2.8%
ICICI BK.ADR 1:2	2.3%
HDFC BANK ADR 1:3	2.1%
CP ALL NVDR	2.0%
WALMART DE MEXICO 'V'	1.9%
BANK CENTRAL ASIA	1.9%
Total	29.7%

Driehaus Eme	rging Markets G	rowth Characterist	ics
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	25.7		26.3
Number Of Holdings	100	1194	97
Characteristics			
Weighted Avg. Market Cap. (\$B)	88.5	80.2	88.7
Median Market Cap (\$B)	14.9	5.3	15.3
P/E Ratio	21.0	13.6	21.2
Yield	1.9	3.1	2.0
EPS Growth - 5 Yrs.	13.1	12.9	14.6
Price to Book	3.6	2.4	3.8
Beta (holdings; domestic)	1.0	1.1	1.0
Sector Distribution			
Energy	5.6	7.7	4.9
Materials	1.9	7.4	2.8
Industrials	3.5	5.4	3.8
Consumer Discretionary	15.0	13.3	18.3
Consumer Staples	11.5	6.6	12.1
Health Care	2.3	2.7	2.7
Financials	27.5	24.9	30.6
Information Technology	13.2	14.7	13.0
Communication Services	10.7	11.6	10.2
Utilities	0.4	2.8	0.5
Real Estate	1.1	2.9	1.0



First Eagle Global Value Fund

Accou	nt Information
Account Name	First Eagle Global Value Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	2/01/18
Account Type	Equity
Benchmark	MSCI ACWI
Universe	eV All Global Equity Net

F	Portfolio Perfor	mance	Summa	ary			
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
First Eagle Global Value Fund	0.8	4.8	-	-		0.6	Feb-18
MSCI ACWI	0.0	1.4	9.7	6.7	8.3	-0.2	Feb-18
eV All Global Equity Net Median	-0.2	0.8	8.9	6.9	9.0	0.3	Feb-18
eV All Global Equity Net Rank	29	28				49	Feb-18

Top 10 Ho	dings
ORACLE	3.1%
COMCAST A	2.8%
EXXON MOBIL	2.5%
FANUC	2.3%
WEYERHAEUSER	2.1%
KDDI	2.0%
DANONE	2.0%
BRITISH AMERICAN TOBACCO	1.9%
SCHLUMBERGER	1.9%
SOMPO HOLDINGS	1.9%
Total	22.5%

Portfolio Index Portfolio Q3-19 Q3-19	78.3 18.4 17.4
Market Value Market Value (\$M) 20.2 Number Of Holdings 145 2843 Characteristics Weighted Avg. Market Cap. 80.9 150.5 (\$B) 80.9 150.5 Median Market Cap (\$B) 20.4 9.0 P/E Ratio 17.0 17.6 Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	20.0 150 78.3 18.4 17.4
Market Value (\$M) 20.2 Number Of Holdings 145 2843 Characteristics Weighted Avg. Market Cap. (\$B) 80.9 150.5 Median Market Cap (\$B) 20.4 9.0 P/E Ratio 17.0 17.6 Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	78.3 18.4 17.4
Number Of Holdings 145 2843 Characteristics Weighted Avg. Market Cap. (\$B) 80.9 150.5 Median Market Cap (\$B) 20.4 9.0 P/E Ratio 17.0 17.6 Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	78.3 18.4 17.4
Characteristics Weighted Avg. Market Cap. (\$B) 80.9 150.5 Median Market Cap (\$B) 20.4 9.0 P/E Ratio 17.0 17.6 Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	78.3 18.4 17.4
Weighted Avg. Market Cap. 80.9 150.5 (\$B) 20.4 9.0 Median Market Cap (\$B) 20.4 9.0 P/E Ratio 17.0 17.6 Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	18.4 17.4
(\$B) 80.9 150.5 Median Market Cap (\$B) 20.4 9.0 P/E Ratio 17.0 17.6 Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	18.4 17.4
P/E Ratio 17.0 17.6 Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	17.4
Yield 2.6 2.5 EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	
EPS Growth - 5 Yrs. 5.1 11.4 Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	
Price to Book 2.3 2.9 Beta (holdings; domestic) 1.0 1.0 Sector Distribution Energy 6.3 5.6	2.6
Beta (holdings; domestic) 1.0 Sector Distribution Energy 6.3 5.6	5.1
Sector Distribution Energy 6.3 5.6	2.4
Energy 6.3 5.6	1.0
- 37	
Materials 8.1 4.8	6.2
***************************************	7.8
Industrials 12.6 10.5	12.5
Consumer Discretionary 5.0 10.9	5.3
Consumer Staples 9.1 8.4	8.4
Health Care 4.5 11.2	4.2
Financials 15.5 16.8	14.5
Information Technology 8.1 16.2	7.8
Communication Services 7.5 8.9	7.0
Utilities 0.3 3.4	0.2
Real Estate 4.0 3.3	3.6



Kopernik Global All Cap Fund

Accou	ınt Information
Account Name	Kopernik Global All Cap Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	2/01/18
Account Type	Equity
Benchmark	MSCI ACWI
Universe	eV All Global Equity Net

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Kopernik Global All Cap Fund	-5.2	2.7	-	-		-6.0	Feb-18
MSCI ACWI	0.0	1.4	9.7	6.7	8.3	-0.2	Feb-18
eV All Global Equity Net Median	-0.2	0.8	8.9	6.9	9.0	0.3	Feb-18
eV All Global Equity Net Rank	96	37				87	Feb-18

Top 10 Holdings	
CAMECO (NYS)	5.5%
KT	4.8%
GAZPROM ORD	4.0%
NEWCREST MINING	3.8%
RUSGIDRO ORD	3.5%
MEG ENERGY	3.4%
EDF	3.2%
MITSUI	3.2%
CENTERRA GOLD	3.1%
FSK EES ORD	3.0%
Total	37.4%

Kopernik G	lobal All Cap Fun	d Characteristics	
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	18.0		19.0
Number Of Holdings	73	2843	72
Characteristics			
Weighted Avg. Market Cap. (\$B)	9.6	150.5	9.4
Median Market Cap (\$B)	1.0	9.0	1.1
P/E Ratio	10.2	17.6	11.2
Yield	1.8	2.5	1.7
EPS Growth - 5 Yrs.	-2.7	11.4	-4.1
Price to Book	1.7	2.9	1.8
Beta (holdings; domestic)	0.9	1.0	0.9
Sector Distribution			
Energy	20.1	5.6	18.2
Materials	23.8	4.8	25.5
Industrials	12.9	10.5	10.2
Consumer Discretionary	2.3	10.9	2.4
Consumer Staples	7.6	8.4	6.9
Health Care	0.7	11.2	0.8
Financials	7.3	16.8	6.4
Information Technology	1.2	16.2	0.9
Communication Services	6.7	8.9	5.5
Utilities	12.4	3.4	11.9
Real Estate	2.1	3.3	1.9



Lee Munder Global Multi-Cap Strategy

Account Information				
Account Name	Lee Munder Global Multi-Cap Strategy			
Account Structure	Separate Account			
Investment Style	Active			
Inception Date	3/01/18			
Account Type	Equity			
Benchmark	MSCI ACWI			
Universe	eV All Global Equity Net			

	Portfolio Perfo	rmance	Summa	ary			
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Lee Munder Global Multi-Cap Strategy	-1.0	-2.7				0.2	Mar-18
MSCI ACWI	0.0	1.4	9.7	6.7	8.3	2.5	Mar-18
eV All Global Equity Net Median	-0.2	0.8	8.9	6.9	9.0	3.0	Mar-18
eV All Global Equity Net Rank	66	70				69	Mar-18

Top 10 Holdings	
ISHARES CORE MSCI EMERGING MARKETS ETF	7.4%
APPLE	2.4%
ISHARES MSCI CHINA	2.2%
ALPHABET A	1.9%
MICROSOFT	1.9%
AMAZON.COM	1.9%
ISHARES MSCI TAIWAN ETF	1.6%
ISHARES MSCI SOUTH KOREA ETF	1.6%
JP MORGAN CHASE & CO.	1.6%
CAPITAL ONE FINL.	1.5%
Total	24.0%

Lee Munder Glo	obal Multi-Cap Stra	ategy Characteris	tics
	Portfolio	Index	Portfolio
	Q3-19	Q3-19	Q2-19
Market Value			
Market Value (\$M)	28.7	-	28.9
Number Of Holdings	112	2843	112
Characteristics			
Weighted Avg. Market Cap. (\$B)	134.0	150.5	130.5
Median Market Cap (\$B)	41.7	9.0	42.6
P/E Ratio	15.6	17.6	15.7
Yield	2.6	2.5	2.6
EPS Growth - 5 Yrs.	11.9	11.4	11.7
Price to Book	2.9	2.9	2.9
Beta (holdings; domestic)	1.1	1.0	1.1
Sector Distribution			
Energy	4.5	5.6	4.5
Materials	3.6	4.8	3.6
Industrials	7.3	10.5	7.3
Consumer Discretionary	9.0	10.9	9.0
Consumer Staples	7.2	8.4	7.2
Health Care	11.8	11.2	11.8
Financials	15.7	16.8	15.7
Information Technology	13.6	16.2	13.6
Communication Services	7.2	8.9	7.2
Utilities	1.8	3.4	1.8
Real Estate	1.9	3.3	1.9

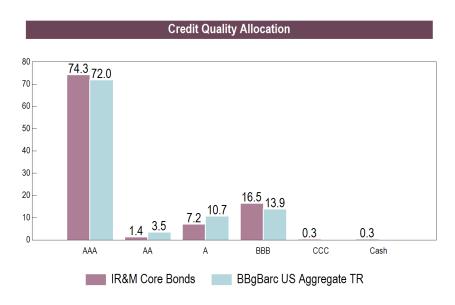


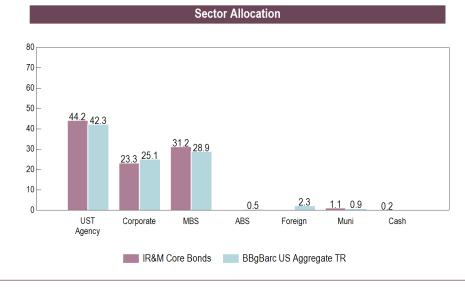
IR&M Core Bonds

Account Information				
Account Name	IR&M Core Bonds			
Account Structure	Separate Account			
Investment Style	Passive			
Inception Date	11/30/04			
Account Type	US Fixed Income Investment Grade			
Benchmark	75% Bbg Barclays Aggregate/25% Bbg Barclays US TIPs 1-10 year			
Universe	eV US Core Fixed Inc Net			

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
IR&M Core Bonds	1.9	9.2	2.9	3.1	3.9	4.3	Nov-04
75% Bbg Barclays Aggregate/25% Bbg Barclays US TIPs 1-10 year	1.9	9.1	2.7	3.0	3.5	4.0	Nov-04
eV US Core Fixed Inc Net Median	2.3	10.3	3.1	3.5	4.0	4.5	Nov-04
eV US Core Fixed Inc Net Rank	92	91	74	86	64	65	Nov-04

IR&M Core Bonds Characteristics vs. BBgBarc US Aggregate TR					
	Portfolio	Index	Portfolio		
	Q3-19	Q3-19	Q2-19		
Fixed Income Characteristics					
Yield to Maturity	1.9	2.3	2.8		
Average Duration	5.6	6.3	5.6		
Average Quality	AA	AA	AA		
Weighted Average Maturity	7.3	8.4	8.3		





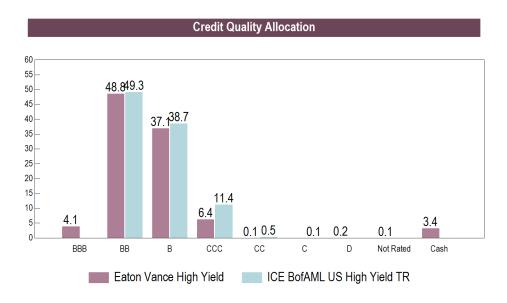


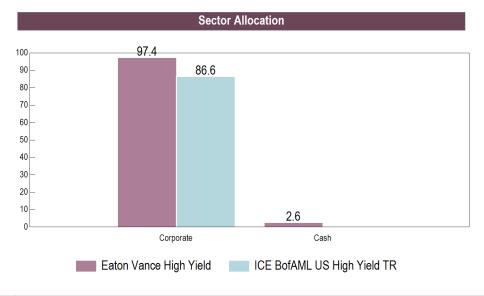
Eaton Vance High Yield

Account Information					
Account Name	Eaton Vance High Yield				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	4/30/06				
Account Type	US Fixed Income High Yield				
Benchmark	ICE BofAML US High Yield TR				
Universe	eV US High Yield Fixed Inc Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Eaton Vance High Yield	1.7	6.9	5.5	5.4	7.8	7.0	Apr-06
ICE BofAML US High Yield TR	1.3	6.4	6.1	5.4	7.9	7.3	Apr-06
eV US High Yield Fixed Inc Net Median	1.3	6.0	5.6	4.7	7.4	6.7	Apr-06
eV US High Yield Fixed Inc Net Rank	26	29	55	21	27	38	Apr-06

Eaton Vance High Yield Characteristics vs. ICE BofAML US High Yield TR					
	Portfolio	Index	Portfolio		
	Q3-19	Q3-19	Q2-19		
Fixed Income Characteristics					
Yield to Maturity	5.5	6.5	5.9		
Average Duration	2.6	4.5	2.8		
Average Quality	BB	В	BB		
Weighted Average Maturity	5.8	5.9	5.4		





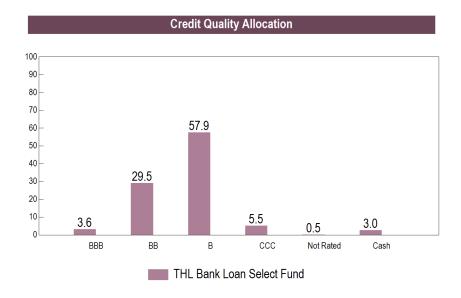


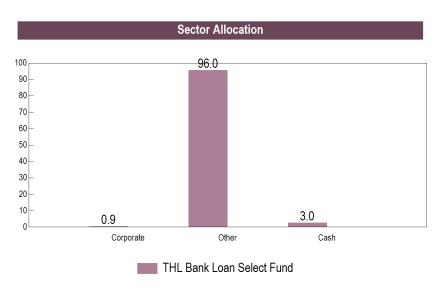
THL Bank Loan Select Fund

Account Information					
Account Name	THL Bank Loan Select Fund				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	9/30/10				
Account Type	US Fixed Income High Yield				
Benchmark	Credit Suisse Leveraged Loans				
Universe	Bank Loan MStar MF				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
THL Bank Loan Select Fund	0.6	2.4	4.1	4.3		5.3	Sep-10
Credit Suisse Leveraged Loans	0.9	3.1	4.7	4.1	5.4	4.8	Sep-10
Bank Loan MStar MF Median	1.0	2.6	4.0	3.6	5.0	4.3	Sep-10
Bank Loan MStar MF Rank	81	55	37	5		1	Sep-10

THL Bank Loan Select Fund Characteristics						
Portfolio Portfo						
	Q3-19	Q2-19				
Fixed Income Characteristics						
Yield to Maturity	6.6	6.5				
Average Duration	0.2	0.1				
Average Quality	В	В				
Weighted Average Maturity	5.1	5.0				





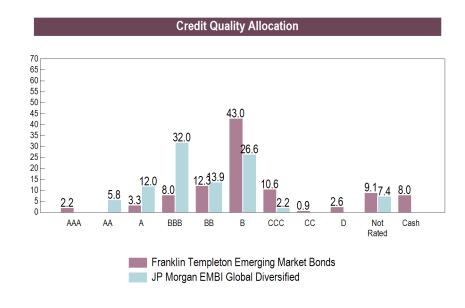


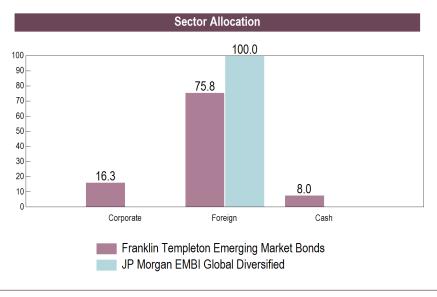
Franklin Templeton Emerging Market Bonds

Account Information				
Account Name	Franklin Templeton Emerging Market Bonds			
Account Structure	Commingled Fund			
Investment Style	Active			
Inception Date	5/31/06			
Account Type	Non-US Fixed Income			
Benchmark	JP Morgan EMBI Global Diversified			
Universe	eV Emg Mkt Fixed Inc Unhedged Net			

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Franklin Templeton Emerging Market Bonds	-1.7	5.6	4.9	4.1	6.1	6.7	May-06
JP Morgan EMBI Global Diversified	1.5	11.6	4.6	5.7	6.9	7.3	May-06
eV Emg Mkt Fixed Inc Unhedged Net Median	0.0	9.6	3.8	3.5	5.4	6.5	May-06
eV Emg Mkt Fixed Inc Unhedged Net Rank	85	90	26	42	29	35	May-06

Franklin Templeton Emerging Market Bonds Characteristics vs. JP Morgan EMBI Global Diversified							
	Portfolio	Index	Portfolio				
	Q3-19	Q3-19	Q2-19				
Fixed Income Characteristics							
Yield to Maturity	8.8	5.2	10.3				
Average Duration	3.2	7.4	3.2				
Average Quality	BB	BB	BB				
Weighted Average Maturity	4.6	11.9	4.9				





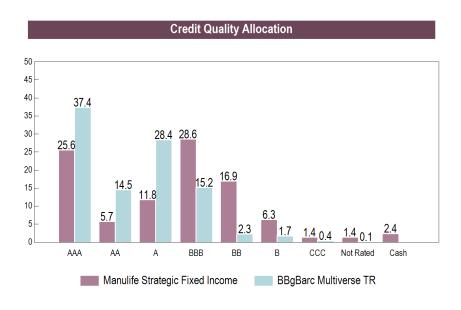


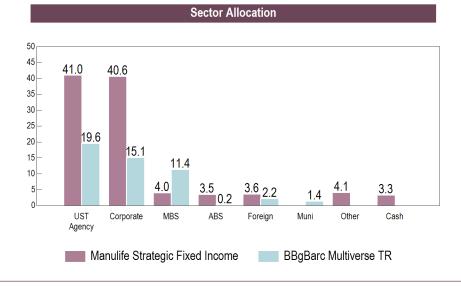
Manulife Strategic Fixed Income

Account Information					
Account Name	Manulife Strategic Fixed Income				
Account Structure	Commingled Fund				
Investment Style	Passive				
Inception Date	7/17/19				
Account Type	US Fixed Income High Yield				
Benchmark	BBgBarc Multiverse TR				
Universe	Multisector Bond MStar MF				

Portfolio Performance Summary								
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date	
Manulife Strategic Fixed Income						1.1	Jul-19	
BBgBarc Multiverse TR	0.6	7.5	1.8	2.1	2.5	0.6	Jul-19	
Multisector Bond MStar MF Median	1.3	6.8	4.3	4.0	5.9	1.3	Jul-19	
Multisector Bond MStar MF Rank						65	Jul-19	

Manulife Strategic Fixed Income Characteristics vs. BBgBarc Multiverse TR							
	Portfolio	Index					
	Q3-19	Q3-19					
Fixed Income Characteristics							
Yield to Maturity	3.1	1.6					
Average Duration	4.1	7.2					
Average Quality	BBB	AA					
Weighted Average Maturity	6.0	10.9					





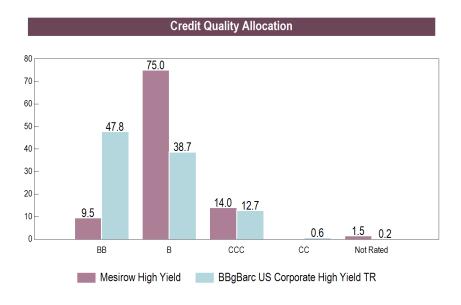


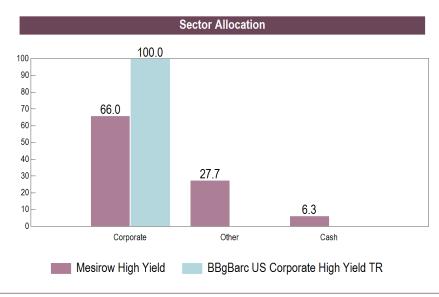
Mesirow High Yield

Account Information					
Account Name	Mesirow High Yield				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	8/01/19				
Account Type	US Fixed Income High Yield				
Benchmark	BBgBarc US Corporate High Yield TR				
Universe	eV US High Yield Fixed Inc Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Mesirow High Yield			-			1.4	Aug-19
BBgBarc US Corporate High Yield TR	1.3	6.4	6.1	5.4	7.9	0.8	Aug-19
eV US High Yield Fixed Inc Net Median	1.3	6.0	5.6	4.7	7.4	0.8	Aug-19
eV US High Yield Fixed Inc Net Rank						12	Aug-19

Mesirow High Yield Characteristics vs. BBgBarc US Corporate High Yield TR					
	Portfolio	Index			
	Q3-19	Q3-19			
Fixed Income Characteristics					
Yield to Maturity	7.7	6.3			
Average Duration	3.1	4.5			
Average Quality	В	В			
Weighted Average Maturity	5.1	5.8			







EnTrustPermal Special Opportunities Evergreen Fund, Ltd.

As of September 30, 2019

Account Information

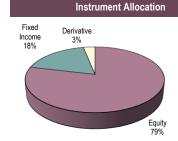
Mandate: Hedge Fund, Fund of Funds Market Value: \$8.8 M Portfolio Manager: Team Location: New York, NY 1/1/2019 Inception Date:

Account Type: Limited Partnership # of Investments: Not Provided

Fee Schedule: 1.25% management fee; 10% performance fee

Liquidity Constraints: Distributions from monetized

investments will be recycled into the Fund, unless otherwise noted by the investor. Investors who opt out of the Fund (in part or in whole) following expiration of the 3 year Commitment Period, and any applicable successive renewals, will receive their pro rata distributions of underlying investments in the Fund, net of fees and expenses, as they



are realized by the Investment

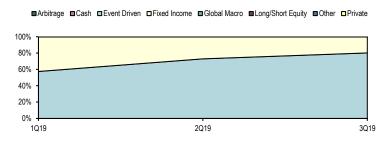
Manager

Strategy:

EnTrustPermal's Special Opportunities Funds focus on thematic high conviction ideas that arise due to market dislocations or event driven investments. They structure the funds as committed capital and drawdown vehicles in order to quickly take advantage of co-investment opportunities. Fund III takes advantage of a similar portion of the liquidity spectrum as the previous funds. The strategy targets investments with 2 to 5 year investment horizons, seeking to exploit the period that is generally too short for private market investments, but too long for most hedge fund structures.

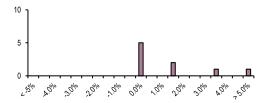
Portfolio Performance Summary					
	3Q19 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 1/2019 (%)
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.	0.0	NA	NA	NA	15.3
HFRI Fund of Funds Composite Index	-0.8	0.1	3.2	2.0	5.3

Historical Strategy Allocations



Geographic Exposure Allocation(%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Developed Asia	9	2	3	NA
Developed Europe	23	33	27	NA
North America	64	58	60	NA
Emerging Markets	3	7	11	NA
Exposure Report (%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Exposure Report (%) Total Gross Exposure	9/30/2019 94	6/30/2019 97	3/31/2019 94	12/31/2018 NA
, ,				
Total Gross Exposure	94	97	94	NA

Return Distribution





Old Farm Partners Master Fund, L.P.

As of September 30, 2019

Account Information

Mandate: Hedge Fund, Fund of Funds

Market Value: \$5 M

Portfolio Manager: Team

Location: New York, NY
Inception Date: 10/1/2018

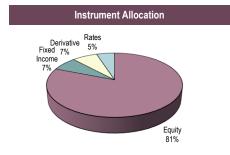
Account Type: Limited Partnership

of Investments: 32
Fee Schedule: 0.5% management fee;

5% performance fee

Liquidity Constraints: Quarterly with 65 days'

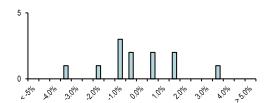
notice



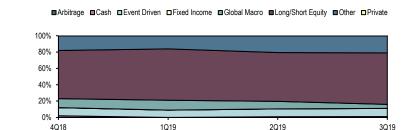
Strategy: Old Farm Partners invests primarily in long/short equity, global macro, and event-driven hedge fund strategies. The fund also allocates modestly to co-investments with the goal of enhancing returns with lower relative fees. Manager selection focuses on achieving absolute return through different market environments and the attempt to limit over-correlation to other managers in the portfolio.

Portfolio Performance Summary					
	1 YR (%)	3 YR (%)	5 YR (%)	Since 10/2018 (%)	
Old Farm Partners Master Fund, L.P.	-1.5	NA	NA	-1.5	
HFRI Fund of Funds Composite Index	0.1	3.2	2.0	0.1	

Return Distribution



Historical Strategy Allocations



Geographic Exposure Allocation(%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Developed Asia	3	3	4	5
Developed Europe	18	19	20	23
North America	72	69	68	67
Emerging Markets	7	9	8	5

Exposure Report (%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Total Gross Exposure	127	133	139	121
Gross Long Exposure	79	87	85	74
Gross Short Exposure	-48	-47	-55	-47
Net Exposure	31	40	30	27

Str

ABS Offshore SPC - Global Segregated Portfolio

As of September 30, 2019

Account Information

Mandate: Hedge Fund, Fund of

Funds

Market Value: \$21.8 M
Portfolio Manager: Team

Location: Greenwich, CT **Inception Date:** 8/31/2010

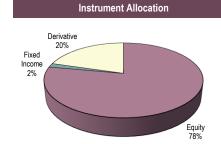
Account Type: Limited Partnership # of Investments: 28

Fee Schedule: 1.00% management fee;

5.0% performance fee

Liquidity Constraints: Quarterly with 45 days'

notice



Strategy:

ABS uses a qualitative, bottom-up process to select and invest with managers, and relies upon research performed in house. ABS believes that equity long/short strategies' combination of net long exposure to the equity markets (market beta), active exposure management (flexible beta), and stock selection (alpha), provide an attractive risk/reward opportunity over a full market cycle.

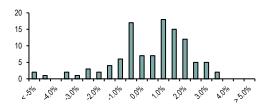
Portfolio Performance Summary					
	3Q19 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 8/2010 (%)
ABS Offshore SPC - Global Segregated Portfolio	1.2	0.3	4.9	3.5	5.1
HFRI Fund of Funds Composite Index	-0.8	0.1	3.2	2.0	2.8

	Standard Deviation (%)	Max Drawdown (%)	Max Drawdown Length	Kurtosis	Skew
ABS Offshore SPC - Global Segregated Portfolio	6.5	-8.3	27	1.7	-1.0
HFRI Fund of Funds Composite	3.8	-5.3	9	1.0	-0.7

Historical Strategy Allocations Cash Clong/Short Equity 100% 80% 40% 40% 40% 4018 1019 2019 3019

Geographic Exposure Allocation (%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
North America	61	62	61	58
Developed Europe	23	22	23	24
Emerging Markets	10	10	8	9
Developed Asia	6	6	8	9
Exposure Report (%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Exposure Report (%) Total Gross Exposure	9/30/2019 150	6/30/2019 159	3/31/2019 156	12/31/2018 150
Total Gross Exposure	150	159	156	150

Return Distribution





EnTrust Special Opportunities Fund III, Ltd.

As of September 30, 2019

Account Information

Hedge Fund, Fund of Funds

Market Value: \$27.4 M Portfolio Manager: Team Location:

Inception Date: 10/1/2016

Account Type: Limited Partnership # of Investments: Not Provided

Fee Schedule: 1.25% management fee: 10% performance fee;

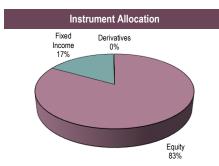
7.5% hurdle

New York, NY

Liquidity Constraints: 3 Year Lockup (4 years

max) then quarterly with

95 days' notice



Strategy:

Mandate:

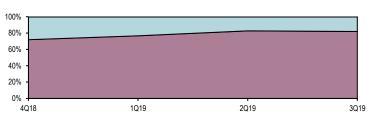
EnTrustPermal's Special Opportunities Funds focus on thematic high conviction ideas that arise due to market dislocations or event driven investments. They structure the funds as committed capital and drawdown vehicles in order to quickly take advantage of co-investment opportunities. Fund III takes advantage of a similar portion of the liquidity spectrum as the previous funds. The strategy targets investments with 2 to 5 year investment horizons, seeking to exploit the period that is generally too short for private market investments, but too long for most hedge fund structures.

Portfolio Performance Summary						
	3Q19 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 10/2016 (%)	
EnTrust Special Opportunities Fund III, Ltd.	0.0	-1.0	11.8	NA	11.8	
HFRI Fund of Funds Composite Index	-0.8	0.1	3.2	2.0	3.2	
Risk						

	Standard Deviation (%)	Max Drawdown (%)	Max Drawdown Length	Kurtosis	Skew
EnTrust Special Opportunities Fund III, Ltd.	16.6	-28.2	24	6.2	0.7
HERI Fund of Funds Composite	3.8	-5.3	q	10	-0.7

Historical Strategy Allocations

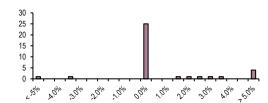
□Arbitrage □Cash □Event Driven □Fixed Income □Global Macro □Long/Short Equity □Other □Private



Geographic Exposure Allocation(%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
North America	63	58	56	44
Developed Europe	26	31	29	38
Developed Asia	6	3	4	4
Emerging Markets	5	8	11	14
Exposure Peport (%)	0/30/2010	6/30/2010	3/31/2010	12/31/2018

Exposure Report (%)	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Total Gross Exposure	100	97	97	101
Gross Long Exposure	98	97	96	101
Gross Short Exposure	2	<1	<1	1
Net Exposure	96	96	96	100

Return Distribution





	Annual Investment Expense Ar	nalvsis					
As Of September 30, 2019							
Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee			
Domestic Equity Assets		\$229,250,611					
Rhumbline Russell 1000 Value	0.05% of First 25.0 Mil, 0.04% of Next 25.0 Mil, 0.03% Thereafter	\$36,131,611	\$16,953	0.05%			
Rhumbline Russell 1000 Growth	0.05% of First 25.0 Mil, 0.04% of Next 25.0 Mil, 0.03% Thereafter	\$35,092,144	\$16,537	0.05%			
Fisher Midcap Value	0.80% of First 25.0 Mil, 0.75% of Next 25.0 Mil, 0.67% Thereafter	\$43,539,526	\$339,046	0.78%			
Boston Company Small Cap Growth	0.45% of Assets	\$47,316,466	\$212,924	0.45%			
LMCG Small Cap Value	0.90% of Assets	\$67,148,279	\$604,335	0.90%			
International Developed Market Equity Assets		\$114,001,502					
KBI Master Account	0.65% of Assets	\$49,413,739	\$321,189	0.65%			
HGK TS International Equity	1.00% of Assets	\$30,139,132	\$301,391	1.00%			
Copper Rock International Small Cap	0.85% of Assets	\$34,448,630	\$292,813	0.85%			
International Emerging Market Equity Assets		\$109,758,727					
LMCG Emerging Markets	0.64% of Assets	\$46,946,006	\$300,454	0.64%			
ABS Emerging Markets	0.35% Management Fee and 10% Performance/Incentive Fee.	\$26,847,999					
Copper Rock Emerging Markets Small Cap	0.85% of Assets	\$10,220,674	\$86,876	0.85%			
Driehaus Emerging Markets Growth	0.55% of Assets	\$25,744,048	\$141,592	0.55%			
Global Equity Assets		\$102,767,712					
First Eagle Global Value Fund	0.75% of Assets	\$20,212,722	\$151,595	0.75%			
Kopernik Global All Cap Fund	0.80% of First 50.0 Mil, 0.75% of Next 150.0 Mil, 0.70% of Next 250.0 Mil, 0.65% of Next 350.0 Mil	\$18,034,862	\$144,279	0.80%			
Lee Munder Global Multi-Cap Strategy	0.45% of Assets	\$28,663,847	\$128,987	0.45%			
Wellington Durable Enterprises, L.P.	0.60% of Assets	\$35,856,280	\$215,138	0.60%			



Plymouth County Retirement Association

Total Retirement Association

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Core Fixed Income		\$89,384,212		
IR&M Core Bonds	0.25% of First 50.0 Mil, 0.20% of Next 50.0 Mil, 0.15% Thereafter	\$59,088,354	\$143,177	0.24%
Lord Abbett Short Duration Credit Trust II	0.19% of Assets	\$30,295,858	\$57,562	0.19%
Value Added Fixed Income		\$119,346,289		
Eaton Vance High Yield	0.42% of Assets	\$21,935,544	\$92,129	0.42%
THL Bank Loan Select Fund	0.40% of Assets	\$36,480,063	\$145,920	0.40%
Franklin Templeton Emerging Market Bonds	0.99% of Assets	\$20,416,412	\$202,122	0.99%
Manulife Strategic Fixed Income	0.40% of Assets	\$30,374,269	\$121,497	0.40%
Mesirow High Yield	0.40% of Assets	\$10,140,000	\$40,560	0.40%



As of September 30, 2019

Note: The value is based on June 30, 2019 FMV.

Private Equity	Commitment	Total Contributions	Total Distributions	Adjusted Value
Ascend Ventures II, L.P.	2,500,000	2,324,355	925,962	58,680
Ascent Venture Partners IV, L.P.	2,500,000	2,502,219	388,970	39,975
Ascent Venture Partners V, L.P.	5,000,000	5,104,731	3,432,862	4,273,395
Audax Mezzanine Fund IV, L.P.	10,000,000	4,175,783	1,328,097	3,216,997
Charles River Partnership XI, L.P.	1,839,000	1,820,323	1,996,788	145,112
Charlesbank Technology Opportunities Fund, L.P.	12,000,000	0	0	0
DN Partners II, L.P.	5,000,000	2,362,034	0	1,622,921
Euro Choice V, L.P.	5,048,004	5,688,459	2,345,992	5,173,768
FS Equity Partners VIII, L.P.	12,000,000	0	0	0
Globespan Capital Partners V, L.P.	5,000,000	4,852,500	8,008,564	2,884,117
HarbourVest Partners Co-Investment Fund V, L.P.	12,000,000	1,200,000	0	1,011,070
Ironsides Direct Investment Fund V, L.P.	12,000,000	8,155,144	871,982	7,877,735
Landmark Equity Partners XIV, L.P.	6,000,000	6,288,437	6,612,813	1,031,434
Leeds Equity Partners IV, L.P.	5,185,562	5,089,327	6,224,435	10,390
Leeds Equity Partners V, L.P.	2,500,000	3,573,083	3,980,028	1,608,898
Lexington Capital Partners VII, L.P.	10,000,000	10,556,021	12,912,250	2,639,958
LLR Equity Partners V, L.P.	12,000,000	4,800,000	433,003	4,631,740
Mesirow Financial Capital Partners IX, L.P.	4,000,000	3,840,731	1,897,056	223,461
Ridgemont Equity Partners III, L.P.	12,000,000	0	0	0
Rimco Production Company, Inc	2,000,000	2,000,000	7,486,401	1
Searchlight Capital III, L.P.	12,000,000	0	0	0
Siguler Guff Distressed Opportunities Fund III, L.P.	6,000,000	5,820,000	8,197,030	939,347
Summit Partners Growth Equity Fund IX, L.P.	10,000,000	7,685,000	997,650	8,721,039
TRG Growth Partnership II, L.P.	7,500,000	7,450,399	7,463,445	1,141,155
Trilantic Capital Partners VI (North America), L.P.	12,000,000	2,545,979	0	2,351,079
Wellspring Capital Partners VI, L.P.	12,000,000	3,402,317	0	3,101,445
Total Plymouth County - PE	198,072,566	101,236,843	75,503,329	52,703,717



As of September 30, 2019

Note: The value is based on June 30, 2019 FMV.

Real Assets	Commitment	Total Contributions	Total Distributions	Adjusted Value
Basalt Infrastructure Partners II	10,000,000	5,610,581	49,561	5,686,569
BTG Pactual Global Timberland Resources Fund, LLC	4,343,599	5,043,536	229,998	3,089,992
Global Infrastructure Partners III, L.P.	10,000,000	8,196,596	788,954	8,229,194
Global Infrastructure Partners IV, L.P.	10,000,000	0	0	0
IFM Global Infrastructure (U.S.), L.P.	35,000,000	20,000,000	119,615	21,795,049
JPMorgan Global Maritime Investment	10,000,000	9,186,014	938,504	6,243,947
Domain Timbervest Partners III, L.P.	5,000,000	5,000,000	1,179,000	5,254,225
Total Plymouth County - RA	84,343,599	53,036,727	3,305,633	50,298,975

Real Estate	Commitment	Total Contributions	Total Distributions	Adjusted Value
1921 Realty, Inc.	5,000,000	5,378,194	0	765,556
AEW Partners Real Estate Fund VIII, L.P.	25,000,000	13,152,392	2,840,603	11,428,958
Berkshire Value Fund V, L.P.	9,000,000	0	0	0
Carlyle Realty Partners VIII, L.P.	18,000,000	1,911,908	1,650	2,367,090
DSF Capital Partners IV, L.P.	5,000,000	5,000,000	5,997,885	9,053
DSF Multi-Family Real Estate Fund III, L.P.	15,000,000	15,499,746	1,055,730	15,993,849
Invesco Equity Real Estate Securities Trust	22,000,000	23,908,825	27,000,000	826,789
JPMorgan Strategic Property	27,000,000	27,000,000	0	27,296,193
New Boston Institutional Fund VII, L.P.	5,000,000	3,012,998	3,893,905	130,573
Real Estate International Partnership Fund I, L.P.	15,000,000	12,674,617	10,772,161	2,178,911
Rockpoint Real Estate Fund VI, L.P.	9,000,000	0	0	0
TA Realty Core Property Fund, L.P.	25,000,000	25,000,000	322,844	28,006,971
Total Plymouth County - RE	180,000,000	132,538,681	51,884,778	89,003,944

Note: The value for Invesco Equity Real Estate Securities Trust, IFM Global Infrastructure, TA Realty Core Property Fund, and JPMorgan Strategic Property is as of September 30, 2019.



Cash Flow Summary					
	Quarter Ending Septon Beginning	ember 30, 2019			Ending
	Market Value	Contributions	Withdrawals	Net Cash Flow	Market Value
1921 Realty, Inc	\$765,556	\$0	\$0	\$0	\$765,556
ABS Emerging Markets	\$22,422,766	\$5,000,000	\$0	\$5,000,000	\$26,847,999
ABS Offshore SPC - Global Segregated Portfolio	\$21,514,775	\$0	-\$54,354	-\$54,354	\$21,763,695
AEW Partners Real Estate VIII	\$11,012,598	\$1,423,111	-\$569,883	\$853,228	\$12,282,186
Ascend Ventures II	\$61,532	\$0	\$0	\$0	\$58,680
Ascent Ventures IV	\$40,167	\$0	\$0	\$0	\$39,975
Ascent Ventures V	\$4,255,389	\$0	\$0	\$0	\$4,273,395
Audax Mezzanine Debt IV	\$3,103,932	\$440,639	-\$579,919	-\$139,281	\$3,077,716
Basalt Infrastructure Partners II	\$5,469,850	\$890,297	\$0	\$890,297	\$6,576,866
Boston Company Small Cap Growth	\$51,214,556	\$0	-\$56,259	-\$56,259	\$47,316,466
BTG Pactual Global Timberland Resources	\$3,043,232	\$0	\$0	\$0	\$3,089,992
Carlyle Realty Partners VIII	\$1,465,438	\$845,255	-\$1,007	\$844,248	\$3,211,338
Cash	\$40,405,258	\$0	-\$28,306,100	-\$28,306,100	\$12,099,158
Charles River Partnership XI	\$145,052	\$0	\$0	\$0	\$145,112
Copper Rock Emerging Markets Small Cap	\$10,832,352	\$0	-\$37,243	-\$37,243	\$10,220,674
Copper Rock International Small Cap	\$35,792,398	\$0	-\$104,466	-\$104,466	\$34,448,630
DN Partners II, LP	\$1,627,979	\$13,807	\$0	\$13,807	\$1,636,728
Driehaus Emerging Markets Growth	\$26,275,510	\$0	-\$35,525	-\$35,525	\$25,744,048
DSF Capital Partners IV	\$16,359	\$0	\$0	\$0	\$9,053
DSF Multi-Family Real Estate Fund III	\$15,518,437	\$0	-\$173,611	-\$173,611	\$15,820,238
Eaton Vance High Yield	\$21,563,131	\$0	-\$182,650	-\$182,650	\$21,935,544
Entrust Special Opportunities Fund III, Ltd.	\$27,352,278	\$0	\$0	\$0	\$27,352,278
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.	\$6,456,658	\$2,364,706	\$0	\$2,364,706	\$8,821,364
Euro Choice V Programme	\$5,000,943	\$0	\$0	\$0	\$5,173,768
First Eagle Global Value Fund	\$20,044,401	\$0	-\$37,584	-\$37,584	\$20,212,722
Fisher Midcap Value	\$44,076,162	\$0	-\$84,874	-\$84,874	\$43,539,526



	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Ending Market Value
Franklin Templeton Emerging Market Bonds	\$32,440,950	\$0	-\$11,570,255	-\$11,570,255	\$20,416,412
FS Equity Partners VIII, L.P.		\$965,354	\$0	\$965,354	\$965,354
Global Infrastructure Partners III	\$8,260,304	\$266,973	-\$119,902	\$147,071	\$8,376,265
Global Infrastructure Partners IV, L.P.		\$43,750	\$0	\$43,750	\$43,750
Globespan Capital V	\$2,593,945	\$0	\$0	\$0	\$2,884,117
HarbourVest Partners Co-Investment V	\$1,200,000	\$0	\$0	\$0	\$1,011,070
HGK TS International Equity	\$30,036,727	\$0	-\$109,203	-\$109,203	\$30,139,132
IFM Global Infrastructure	\$21,795,049	\$0	\$0	\$0	\$22,275,500
Invesco Equity Real Estate Securities Trust	\$770,593	\$0	-\$1,515	-\$1,515	\$826,789
IR&M Core Bonds	\$57,979,181	\$0	-\$35,701	-\$35,701	\$59,088,354
Ironsides Direct Investment Fund V, L.P.	\$7,437,168	\$4,057,696	-\$22,351	\$4,035,345	\$11,913,080
JP Morgan Global Maritime Investment	\$6,344,048	\$0	\$0	\$0	\$6,243,947
JPMorgan Strategic Property	\$27,296,193	\$0	-\$68,452	-\$68,452	\$27,418,574
KBI Master Account	\$50,117,909	\$0	-\$79,303	-\$79,303	\$49,413,739
Kopernik Global All Cap Fund	\$19,022,074	\$0	-\$36,892	-\$36,892	\$18,034,862
Landmark Equity Partners XIV	\$1,028,077	\$0	-\$56,845	-\$56,845	\$974,589
Lee Munder Global Multi-Cap Strategy	\$28,938,564	\$0	-\$32,008	-\$32,008	\$28,663,847
Leeds Equity Partners IV	\$10,302	\$0	\$0	\$0	\$10,390
Leeds Equity Partners V	\$2,139,649	\$0	\$0	\$0	\$1,608,898
Lexington Capital Partners VII	\$2,605,676	\$0	-\$210,332	-\$210,332	\$2,429,626
LLR Equity Partners V, LP.	\$4,543,057	\$1,440,000	\$0	\$1,440,000	\$6,071,740
LMCG Emerging Markets	\$49,501,232	\$0	-\$75,648	-\$75,648	\$46,946,006
LMCG Small Cap Value	\$66,855,958	\$0	-\$149,650	-\$149,650	\$67,148,279
Lord Abbett Short Duration Credit Trust II	\$0	\$30,000,000	-\$9,589	\$29,990,411	\$30,295,858
Manulife Strategic Fixed Income	\$0	\$30,000,000	-\$20,260	\$29,979,740	\$30,374,269
Mesirow Financial Capital Partners IX, LP	\$223,454	\$0	\$0	\$0	\$223,461
Mesirow Financial International Real Estate Fund I	\$2,189,009	\$0	\$0	\$0	\$2,178,911
Mesirow High Yield		\$10,000,000	-\$6,737	\$9,993,263	\$10,140,000



	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Ending Market Value
New Boston Institutional Fund, LP VII	\$124,296	\$0	-\$67,533	-\$67,533	\$63,040
Old Farm Partners Master Fund, L.P.	\$4,971,102	\$0	\$0	\$0	\$4,926,707
PRISA I	\$1,751,815	\$0	-\$2,187,349	-\$2,187,349	
Rhumbline Russell 1000 Growth	\$34,576,782	\$0	-\$4,143	-\$4,143	\$35,092,144
Rhumbline Russell 1000 Value	\$35,648,319	\$0	-\$4,190	-\$4,190	\$36,131,611
RIMCO Royalty Partners, LP	\$1	\$0	\$0	\$0	\$1
Siguler Guff Distressed Opportunities Fund III, LP	\$922,575	\$0	-\$15,224	-\$15,224	\$924,123
Summit Partners Growth Equity Fund IX	\$7,835,948	\$720,000	-\$1,224,096	-\$504,096	\$8,216,943
TA Realty Core Property Fund, L.P.	\$27,153,280	\$0	\$0	\$0	\$28,006,971
THL Bank Loan Select Fund	\$36,273,500	\$0	-\$36,455	-\$36,455	\$36,480,063
Timbervest Partners III, LP	\$5,147,941	\$0	-\$252,229	-\$252,229	\$5,001,996
TRG Growth Partnership II	\$1,181,037	\$0	\$0	\$0	\$1,141,155
Trilantic Capital Partners VI, L.P.	\$2,404,343	\$361,150	\$0	\$361,150	\$2,712,229
Wellington Durable Enterprises, L.P.	\$35,151,979	\$0	-\$53,886	-\$53,886	\$35,856,280
Wellspring Capital Partners VI	\$3,169,101	\$0	\$0	\$0	\$3,101,445
Total	\$999,117,848	\$88,832,738	-\$46,673,223	\$42,159,515	\$1,040,256,821



Appendices

Private Markets Program As of March 31, 2019

INTERIM REPORT

Plymouth County Retirement Association



Private Markets Program March 31, 2019

Page 87 of 149

Table of Contents

Private Equity Program
Real Assets Program
Real Estate Program
Appendices



The purpose of this document is to offer a review of the Retirement Association's aggregate private market investments.

As of March 31, 2019, the Retirement Association had committed \$449.5 million to 49 partnerships. The reported fair value of those 49 partnerships, in aggregate, was \$201.5 million at the end of the first quarter.

Aggregate Private Equity Program ¹ Aggregate Re		Aggregate Real Asse	ets Program¹	Aggregate Real Esta	ate Program¹
Number of Partnerships	27	Number of Partnerships	6	Number of Partnerships	16
Committed Capital ²	\$179.1 million	Committed Capital ²	\$60.4 million	Committed Capital	\$210.0 million
Capital Called	\$114.8 million	Capital Called	\$50.1 million	Capital Called	\$149.6 million
Distributions	\$89.3 million	Distributions	\$3.1 million	Distributions	\$102.9 million
Reported Value	\$48.6 million	Reported Value	\$46.6 million	Reported Value	\$106.3 million
Total Value Multiple	1.2x	Total Value Multiple	1.0x	Total Value Multiple	1.4x
Net IRR	4.4%	Net IRR	-0.5%	Net IRR	5.2%
Q1 2019 IRR ³	4.4%	Q1 2019 IRR ³	-3.0%	Q1 2019 IRR ³	5.5%
Trailing Year IRR ³	5.4%	Trailing Year IRR ³	5.4%	Trailing Year IRR ³	1.5%

³ IRR is net of Meketa Investment Group fees, but gross of prior advisory fees.



Prepared by Meketa Investment Group

¹ Throughout this report, numbers may not sum due to rounding.

² Some partnership commitments were made in foreign currency. This total reflects committed capital in U.S. dollars, adjusted for foreign currency exchange rates, as of the report date.

The Retirement Association made no new commitments during the first quarter.

In aggregate, approximately \$4.4 million was called by the underlying managers from the Retirement Association during the first quarter:

- LLR Equity Partners V called \$1.4 million to reduce the amount outstanding on the Fund's bank line, which was used to fund new investments. The Retirement Association's commitment is now 40% called as of the end of the first quarter.
- Ironsides Direct Investment Fund V called \$0.9 million to fund new investments in Knowlton Development Corporation, North America's largest custom manufacturer of beauty, personal care, and household products; Artisan Design Group, a distributor of flooring products; Not Your Mother's, a developer and marketer of premium haircare products; as well as quarterly management fees and partnership expenses. The Retirement Association's commitment is now 61% called as of the end of the first quarter.
- Wellspring Capital Partners VI called \$0.9 million to fund new investments in Lucky Strike, an operator of upscale entertainment venues, as well as the Center for Diagnostic Imaging, a national provider of highquality advanced diagnostic imaging and interventional radiology services. The Retirement Association's commitment is now 12% called as of the end of the first quarter.



Distributions received by the Retirement Association from the underlying partnerships during the first quarter totaled approximately \$2.2 million:

- Ironsides Direct Investment Fund distributed \$0.9 million from subsequent close interest related to amounts receivable by previous investors as a result of the Fund's closing on February 15, 2019, in addition to a return of already contributed capital. The Fund has generated a 0.1x DPI¹ and 1.0x TVPI² as of the end of the first quarter.
- Euro Choice Fund V distributed \$0.5 million from the sale of fund investments. The Fund has generated a 0.4x DPI and 1.3x TVPI as of the end of the first quarter.
- Globespan Capital Partners Fund V distributed \$0.4 million from the sale of Perfecto Mobile Ltd., the sale of shares of Perforce Software, Inc., and from the Fund's disposition of its holdings in publicly traded Redfin (NASDAQ: RDFN) and Roku (NASDAQ: ROKU). The Fund has generated a 1.6x DPI and 2.2x TVPI as of the end of the first quarter.

² TVPI multiple represents the total value of portfolio investments (aggregate realized value of investments plus aggregate unrealized value of investments) divided by the total amount of dollars invested by the fund



¹ DPI multiple represents the total dollar amount distributed to investors divided by the total amount of dollars invested by the fund

During the first quarter of 2019, the Retirement Association did not make any new commitments. In aggregate, \$0.5 million was called by the underlying managers from the Retirement Association during the first quarter:

• Global Infrastructure Partners Fund III called \$0.5 million to fund new investments. The Retirement Association's commitment is now 77% called as of the end of the first quarter.

Distributions received by the Retirement Association from the underlying partnerships during the first quarter totaled \$0.5 million:

- Global Infrastructure Partners Fund III distributed \$0.3 million, primarily driven by the return of capital from Naturgy Energy Group, S.A., in addition to dividend proceeds from Naturgy, Clearway Energy Group, and EnLink Midstream. The Fund has generated a 0.1x DPI¹ and 1.1x TVPI² as of the end of the first quarter.
- IFM Global Infrastructure (U.S.) distributed \$0.1 million of proceeds received from the fund's underlying portfolio investments from October 1, 2018 to December 31, 2018. The Fund has generated a 0.0x DPI and 10.5x TVPI as of the end of the first quarter

² TVPI multiple represents the total value of portfolio investments (aggregate realized value of investments plus aggregate unrealized value of investments) divided by the total amount of dollars invested by the fund



¹ DPI multiple represents the total dollar amount distributed to investors divided by the total amount of dollars invested by the fund

During the first quarter of 2019, the Retirement Association did not make any new commitments. In aggregate, \$7.7 million was called by the underlying managers from the Retirement Association during the first quarter:

- TA Realty Core Property Fund called \$5.8 million to fund new investments. The Retirement Association's commitment is now 100% called as of the end of the first quarter
- AEW Partners Real Estate Fund VIII called \$1.2 million to fund the acquisitions of Foundry Industrial, which includes a 164,500 square foot warehouse in McDonough, GA, and a 106,407 square foot light manufacturing building in Fort Hill, SC; The Quay on 17th Street, a 73,000 square foot mixed use/creative office center and six marina slips on the intercoastal highway in Fort Lauderdale, FL; Houston Industrial, a land acquisition to develop two Class A industrial buildings in Houston, TX; and The Core Natomas, a land acquisition to develop a 300 unit, Class A apartment complex in Sacramento, CA. The Retirement Association's commitment is now 39% called as of the end of the first quarter
- Carlyle Realty Partners VIII called \$0.6 million to fund investments in 35 properties, in addition to cover expenses and fees. The Retirement Association's commitment is now 11% called as of the end of the first quarter

Distributions received by the Retirement Association from the underlying partnerships during the first quarter totaled \$0.1 million:

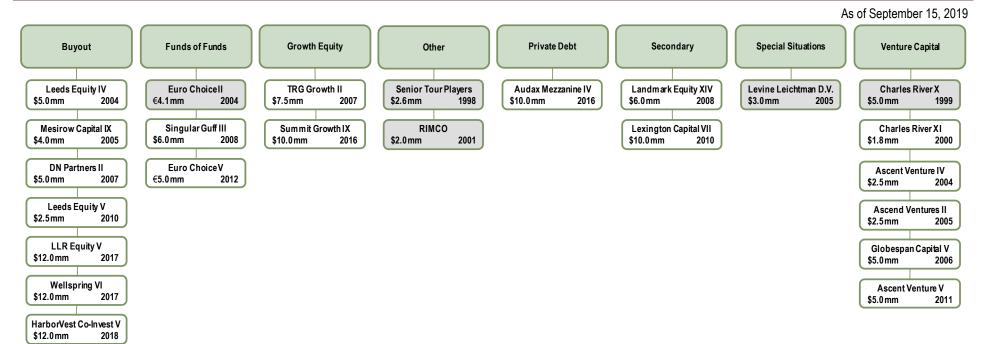
• DSF Multi-Family Real Estate Fund III distributed \$0.1 million in proceeds from operating income earned. The Fund has generated a 0.1x DPI¹ and 1.1x TVPI² as of the end of the first quarter.

² TVPI multiple represents the total value of portfolio investments (aggregate realized value of investments plus aggregate unrealized value of investments) divided by the total amount of dollars invested by the fund



¹ DPI multiple represents the total dollar amount distributed to investors divided by the total amount of dollars invested by the fund

Investment Roadmap



• White box: Current investment.

Ironsides Direct V

Ridgemont III

Trilantic VI

2018

2018

2018

\$12.0 mm

\$12.0 mm

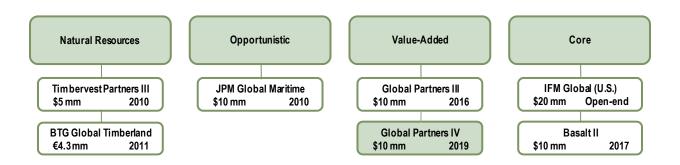
\$12.0 mm

Gray box: Liquidated Investment.



Investment Roadmap

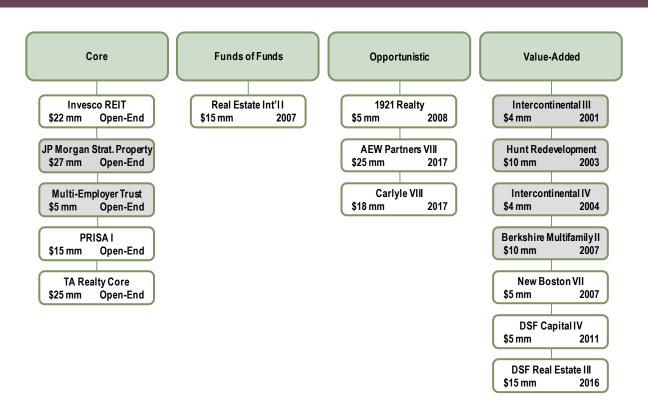
As of September 15, 2019



- White box: Current investment.
- Green box: Investment made subsequent to quarter end and, as such, is not included in any other section of this report.

Investment Roadmap

As of September 15, 2019



White box: Current Investment.

• Gray box: Liquidated Investment.



Aggregate Private Equity Program Partnership Roster

	Vintage Year	Commitment (\$ mm)	Committed (%)	Reported Fair Value (\$ mm)	Reported Fair Value (%)
Total Program		179.1	100	48.6	100
Fund of Funds		17.6	10	6.0	12
Euro Choice II, L.P. ¹	2004	5.5	3	0.0	0
Siguler Guff Distressed Opportunities Fund III, L.P.	2008	6.0	3	1.0	2
Euro Choice V, L.P. ²	2012	6.1	3	5.0	10
Secondary		16.0	9	3.9	8
Landmark Equity Partners XIV, L.P.	2008	6.0	3	1.1	2
Lexington Capital Partners VII, L.P.	2009	10.0	6	2.8	6
Buyout		88.5	49	19.5	40
Leeds Equity Partners IV, L.P.	2004	5.0	3	0.0	<1
Mesirow Financial Capital Partners IX, L.P.	2005	4.0	2	0.2	< 1
DN Partners II, L.P.	2007	5.0	3	1.6	3
Leeds Equity Partners V, L.P.	2010	2.5	1	2.6	5
LLR Equity Partners V, L.P.	2017	12.0	7	4.5	9
Wellspring Capital Partners VI, L.P.	2017	12.0	7	1.2	3
HarbourVest Partners Co-Investment Fund V, L.P.	2018	12.0	7	-0.2	0
Ironsides Direct Investment Fund V, L.P.	2018	12.0	7	7.4	15
Ridgemont Equity Partners III, L.P.	2018	12.0	7	-0.1	0
Trilantic Capital Partners VI (North America), L.P.	2018	12.0	7	2.1	4
Special Situations		3.0	2	0.0	0
Levine Leichtman Capital Partners Deep Value Fund, L.P.	2005	3.0	2	0.0	0
Private Debt		10.0	6	3.3	7
Audax Mezzanine Fund IV, L.P.	2016	10.0	6	3.3	7

¹ In 2004, €4.1 million was committed to the Partnership. The <Insert Commitment Amount; \$x.x million> is an estimated amount based on the contributed capital and unfunded commitment as of <Insert Report as of Date; x/xx/xx>.

² In 2013, €5.0 million was committed to the Partnership. The <Insert Commitment Amount; \$x.x million> is an estimated amount based on the contributed capital and unfunded commitment as of <Insert Report as of Date; x/xx/xx>.



Aggregate Private Equity Program Partnership Roster

	Vintage Year	Commitment (\$ mm)	Committed (%)	Reported Fair Value (\$ mm)	Reported Fair Value (%)
Venture Capital		21.8	12	7.5	15
Charles River Partnership X, L.P.	1999	5.0	3	0.0	0
Charles River Partnership XI, L.P.	2000	1.8	1	0.1	< 1
Ascent Venture Partners IV, L.P.	2004	2.5	1	0.0	< 1
Ascend Ventures II, L.P.	2005	2.5	1	0.1	< 1
Globespan Capital Partners V, L.P.	2006	5.0	3	3.1	6
Ascent Venture Partners V, L.P.	2011	5.0	3	4.2	9
Growth Equity		17.5	10	8.4	17
TRG Growth Partnership II, L.P.	2007	7.5	4	1.2	2
Summit Partners Growth Equity Fund IX, L.P.	2016	10.0	6	7.3	15
Other		4.6	3	0.0	0
Senior Tour Players, L.P.	1998	2.6	1	0.0	0
Rimco Production Company, Inc	2001	2.0	1	0.0	0



Aggregate Real Assets Program Partnership Roster

	Vintage Year	Commitment (\$ mm)	Committed (%)	Reported Fair Value (\$ mm)	Reported Fair Value (%)
Total Program		60.4	100	46.6	100
Core		30.0	50	24.0	52
IFM Global Infrastructure (U.S.), L.P.	2009	20.0	33	21.0	45
Basalt Infrastructure Partners II	2017	10.0	17	3.0	6
Natural Resources		10.4	17	8.3	18
Domain Timbervest Partners III, L.P.	2010	5.0	8	5.3	11
BTG Pactual Global Timberland Resources Fund, LLC1	2011	5.4	9	3.0	7
Opportunistic		10.0	17	6.3	14
JPMorgan Global Maritime Investment	2010	10.0	17	6.3	14
Value-Added		10.0	17	7.9	17
Global Infrastructure Partners III, L.P.	2016	10.0	17	7.9	17

¹ In 2010, €4.3 million was committed to the Partnership. The <Insert Commitment Amount; \$x.x million> is an estimated amount based on the contributed capital and unfunded commitment as of March 31, 2019.



Aggregate Real Estate Program Partnership Roster

	Vintage Year	Commitment (\$ mm)	Committed (%)	Reported Fair Value (\$ mm)	Reported Fair Value (%)
Total Program		210.0	100	106.3	100
Fund of Funds		15.0	7	2.7	3
Real Estate International Partnership Fund I, L.P.	2007	15.0	7	2.7	3
Core		94.0	45	80.5	76
PRISA I	1970	15.0	7	35.0	33
Multi-Employer Property Trust	1982	5.0	2	0.0	0
JPMorgan Strategic Property	1998	27.0	13	0.0	0
Invesco Equity Real Estate Securities Trust	2005	22.0	10	18.0	17
TA Realty Core Property Fund, L.P.	2018	25.0	12	27.5	26
Opportunistic		48.0	23	11.2	11
1921 Realty, Inc.	2008	5.0	2	0.8	1
AEW Partners Real Estate Fund VIII, L.P.	2017	25.0	12	9.0	8
Carlyle Realty Partners VIII, L.P.	2017	18.0	9	1.5	1
Value-Added		53.0	25	11.9	11
Intercontinental Real Estate Investment Fund III, LLC	2001	4.0	2	0.0	0
Hunt Redevelopment and Renovation Fund, LLC	2003	10.0	5	0.0	0
Intercontinental Real Estate Investment Fund IV, LLC	2004	4.0	2	0.0	0
Berkshire Multifamily Value Fund II, L.P.	2007	10.0	5	0.0	0
New Boston Institutional Fund VII, L.P.	2007	5.0	2	0.3	< 1
DSF Capital Partners IV, L.P.	2011	5.0	2	0.0	< 1
DSF Multi-Family Real Estate Fund III, L.P.	2016	15.0	7	11.6	11



	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date ¹ (\$ mm)	Unfunded Commitment ² (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)	Net IRR ³ (%)	Inv. Multiple ⁴ (x)
Total Program		179.1	114.8	70.0	89.3	48.6	137.9	4.4	1.2
Vintage Year 1998		2.6	2.7	0.0	0.1	0.0	0.1	-25.5	0.0
Senior Tour Players, L.P.	Other	2.6	2.7	0.0	0.1	0.0	0.1	-25.5	0.0
Vintage Year 1999		5.0	4.4	0.6	2.2	0.0	2.2	-14.9	0.5
Charles River Partnership X, L.P.	Venture Capital	5.0	4.4	0.6	2.2	0.0	2.2	-14.9	0.5
Vintage Year 2000		1.8	1.8	0.0	2.0	0.1	2.1	3.5	1.2
Charles River Partnership XI, L.P.	Venture Capital	1.8	1.8	0.0	2.0	0.1	2.1	3.5	1.2
Vintage Year 2001		2.0	2.0	0.0	7.5	0.0	7.5	29.1	3.7
Rimco Production Company, Inc	Other	2.0	2.0	0.0	7.5	0.0	7.5	29.1	3.7
Vintage Year 2004		13.0	13.3	0.4	14.7	0.1	14.7	2.0	1.1
Ascent Venture Partners IV, L.P.	Venture Capital	2.5	2.5	0.0	0.4	0.0	0.4	-31.4	0.2
Euro Choice II, L.P. ⁵	Fund of Funds	5.5	5.5	0.4	8.0	0.0	8.0	7.0	1.5
Leeds Equity Partners IV, L.P.	Buyout	5.0	5.3	0.0	6.2	0.0	6.2	3.2	1.2
Vintage Year 2005		9.5	11.0	0.3	7.9	0.3	8.2	-5.3	0.7
Ascend Ventures II, L.P.	Venture Capital	2.5	2.3	0.2	0.9	0.1	1.0	-8.8	0.4
Levine Leichtman Capital Partners Deep Value Fund, L.P.	Special Situations	3.0	4.9	0.0	5.1	0.0	5.1	1.3	1.0
Mesirow Financial Capital Partners IX, L.P.	Buyout	4.0	3.8	0.2	1.9	0.2	2.1	-7.1	0.6

⁵ In 2004, €4.1 million was committed to the Partnership. The \$5.5 million is an estimated amount based on the contributed capital and unfunded commitment as of 3/31/2019



¹ In certain instances, Total Contributions Paid to Date may exceed Capital Committed as certain partnerships may call fees outside of commitment and most partnerships reserve a limited right to recycle capital and/or recall distributions.

² Unfunded Commitment amounts are an approximation due to the inclusion of recallable distributions.

³ The Net IRR calculations were performed by Meketa Investment Group. Total Program IRR is net of fees, expenses, and carried interest for each partnership and net of Meketa Investment Group fees. Partnership and Vintage Year IRRs are net of partnership fees but gross of Meketa Investment Group fees.

⁴ The Inv. Multiple calculations were performed by Meketa Investment Group. Total Program Inv. Multiple is net of fees, expenses, and carried interest for each partnership and net of Meketa Investment Group fees. Partnership and Vintage Year Inv. Multiples are net of partnership fees but gross of Meketa Investment Group fees.

	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date ¹ (\$ mm)	Unfunded Commitment ² (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)	Net IRR ³ (%)	Inv. Multiple ⁴ (x)
Vintage Year 2006	-	5.0	4.9	0.1	7.5	3.1	10.6	12.9	2.2
Globespan Capital Partners V, L.P.	Venture Capital	5.0	4.9	0.1	7.5	3.1	10.6	12.9	2.2
Vintage Year 2007		12.5	9.8	2.7	7.5	2.8	10.3	0.9	1.0
DN Partners II, L.P.	Buyout	5.0	2.4	2.6	0.0	1.6	1.6	-4.4	0.7
TRG Growth Partnership II, L.P.	Growth Equity	7.5	7.5	0.1	7.5	1.2	8.6	3.2	1.2
Vintage Year 2008		12.0	12.1	0.2	14.7	2.1	16.8	8.8	1.4
Landmark Equity Partners XIV, L.P.	Secondary	6.0	6.3	0.0	6.6	1.1	7.6	6.5	1.2
Siguler Guff Distressed Opportunities Fund III, L.P.	Fund of Funds	6.0	5.8	0.2	8.1	1.0	9.1	10.1	1.6
Vintage Year 2009		10.0	10.6	0.0	12.6	2.8	15.5	14.3	1.5
Lexington Capital Partners VII, L.P.	Secondary	10.0	10.6	0.0	12.6	2.8	15.5	14.3	1.5
Vintage Year 2010		2.5	3.6	0.0	3.5	2.6	6.1	15.2	1.7
Leeds Equity Partners V, L.P.	Buyout	2.5	3.6	0.0	3.5	2.6	6.1	15.2	1.7
Vintage Year 2011		5.0	5.0	0.2	3.4	4.2	7.6	8.8	1.5
Ascent Venture Partners V, L.P.	Venture Capital	5.0	5.0	0.2	3.4	4.2	7.6	8.8	1.5
Vintage Year 2012		6.1	5.7	0.9	2.3	5.0	7.3	8.5	1.3
Euro Choice V, L.P. ⁶	Fund of Funds	6.1	5.7	0.9	2.3	5.0	7.3	8.5	1.3
Vintage Year 2016		20.0	11.3	8.7	2.1	10.6	12.7	15.7	1.1
Audax Mezzanine Fund IV, L.P.	Private Debt	10.0	4.2	5.8	1.1	3.3	4.4	6.8	1.1
Summit Partners Growth Equity Fund IX, L.P.	Growth Equity	10.0	7.1	2.9	1.0	7.3	8.3	22.6	1.2
Vintage Year 2017		24.0	6.3	18.1	0.4	5.8	6.2	-2.1	1.0
LLR Equity Partners V, L.P.	Buyout	12.0	4.8	7.6	0.4	4.5	5.0	8.3	1.0

⁶ In 2013, €5.0 million was committed to the Partnership. The \$6.1 million is an estimated amount based on the contributed capital and unfunded commitment as of 3/31/2019



	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date ¹ (\$ mm)	Unfunded Commitment ² (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)	Net IRR³ (%)	Inv. Multiple ⁴ (x)
Wellspring Capital Partners VI, L.P.	Buyout	12.0	1.5	10.5	0.0	1.2	1.2	-39.1	0.8
Vintage Year 2018		48.0	10.4	37.6	0.9	9.2	10.1	-6.3	1.0
HarbourVest Partners Co-Investment Fund V, L.P.	Buyout	12.0	0.0	12.0	0.0	-0.2	-0.2		0.0
Ironsides Direct Investment Fund V, L.P.	Buyout	12.0	8.2	3.8	0.9	7.4	8.3	5.5	1.0
Ridgemont Equity Partners III, L.P.	Buyout	12.0	0.0	12.0	0.0	-0.1	-0.1		0.0
Trilantic Capital Partners VI (North America), L.P.	Buyout	12.0	2.2	9.8	0.0	2.1	2.1	-8.5	0.9



	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date ¹ (\$ mm)	Unfunded Commitment ² (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)	Net IRR ³ (%)	Inv. Multiple ⁴ (x)
Total Program		60.4	50.1	10.7	3.1	46.6	49.6	-0.5	1.0
Vintage Year 2009		20.0	20.0	0.0	0.1	21.0	21.1	11.5	1.1
IFM Global Infrastructure (U.S.), L.P.	Core	20.0	20.0	0.0	0.1	21.0	21.1	11.5	1.1
Vintage Year 2010		15.0	14.2	1.1	2.0	11.6	13.6	-0.9	1.0
Domain Timbervest Partners III, L.P.	Natural Resources	5.0	5.0	0.0	1.0	5.3	6.3	3.9	1.3
JPMorgan Global Maritime Investment	Opportunistic	10.0	9.2	1.1	0.9	6.3	7.3	-5.5	0.8
Vintage Year 2011		5.4	5.0	0.4	0.2	3.0	3.3	-7.3	0.6
BTG Pactual Global Timberland Resources Fund, LLC5	Natural Resources	5.4	5.0	0.4	0.2	3.0	3.3	-7.3	0.6
Vintage Year 2016		10.0	7.7	2.4	0.7	7.9	8.6	8.7	1.1
Global Infrastructure Partners III, L.P.	Value-Added	10.0	7.7	2.4	0.7	7.9	8.6	8.7	1.1
Vintage Year 2017		10.0	3.1	6.9	0.0	3.0	3.0	-3.9	1.0
Basalt Infrastructure Partners II	Core	10.0	3.1	6.9	0.0	3.0	3.0	-3.9	1.0

⁵ In 2010, €4.3 million was committed to the Partnership. The \$5.4 million is an estimated amount based on the contributed capital and unfunded commitment as of 3/31/2019



¹ In certain instances, Total Contributions Paid to Date may exceed Capital Committed as certain partnerships may call fees outside of commitment and most partnerships reserve a limited right to recycle capital and/or recall distributions.

² Unfunded Commitment amounts are an approximation due to the inclusion of recallable distributions.

³ The Net IRR calculations were performed by Meketa Investment Group. Total Program IRR is net of fees, expenses, and carried interest for each partnership and net of Meketa Investment Group fees. Partnership and Vintage Year IRRs are net of partnership fees but gross of Meketa Investment Group fees.

⁴ The Inv. Multiple calculations were performed by Meketa Investment Group. Total Program Inv. Multiple is net of fees, expenses, and carried interest for each partnership and net of Meketa Investment Group fees. Partnership and Vintage Year Inv. Multiples are net of partnership fees but gross of Meketa Investment Group fees.

	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date ¹ (\$ mm)	Unfunded Commitment ² (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)	Net IRR ³ (%)	Inv. Multiple ⁴ (x)
Total Program		210.0	149.6	68.6	102.9	106.3	209.2	5.2	1.4
Vintage Year 1970		15.0	17.2	0.0	0.0	35.0	35.0	5.3	2.0
PRISA I	Core	15.0	17.2	0.0	0.0	35.0	35.0	5.3	2.0
Vintage Year 1982		5.0	5.0	0.0	15.9	0.0	15.9	6.5	3.2
Multi-Employer Property Trust	Core	5.0	5.0	0.0	15.9	0.0	15.9	6.5	3.2
Vintage Year 1998		27.0	0.0	27.0	0.0	0.0	0.0		0.0
JPMorgan Strategic Property	Core	27.0	0.0	27.0	0.0	0.0	0.0		0.0
Vintage Year 2001		4.0	4.6	0.0	5.7	0.0	5.7	2.4	1.2
Intercontinental Real Estate Investment Fund III, LLC	Value-Added	4.0	4.6	0.0	5.7	0.0	5.7	2.4	1.2
Vintage Year 2003		10.0	9.0	1.9	11.7	0.0	11.7	5.1	1.3
Hunt Redevelopment and Renovation Fund, LLC	Value-Added	10.0	9.0	1.9	11.7	0.0	11.7	5.1	1.3
Vintage Year 2004		4.0	4.6	0.0	2.4	0.0	2.4	-8.0	0.5
Intercontinental Real Estate Investment Fund IV, LLC	Value-Added	4.0	4.6	0.0	2.4	0.0	2.4	-8.0	0.5
Vintage Year 2005		22.0	23.9	0.0	27.0	18.0	45.0	8.4	1.9
Invesco Equity Real Estate Securities Trust	Core	22.0	23.9	0.0	27.0	18.0	45.0	8.4	1.9
Vintage Year 2007		30.0	26.9	4.3	31.9	3.0	34.9	5.3	1.3
Berkshire Multifamily Value Fund II, L.P.	Value-Added	10.0	11.3	0.0	17.9	0.0	17.9	11.0	1.6
New Boston Institutional Fund VII, L.P.	Value-Added	5.0	3.0	2.0	3.7	0.3	4.0	5.7	1.3

¹ In certain instances, Total Contributions Paid to Date may exceed Capital Committed as certain partnerships may call fees outside of commitment and most partnerships reserve a limited right to recycle capital and/or recall distributions.

⁴ The Inv. Multiple calculations were performed by Meketa Investment Group. Total Program Inv. Multiple is net of fees, expenses, and carried interest for each partnership and net of Meketa Investment Group fees. Partnership and Vintage Year Inv. Multiples are net of partnership fees but gross of Meketa Investment Group fees.



² Unfunded Commitment amounts are an approximation due to the inclusion of recallable distributions.

³ The Net IRR calculations were performed by Meketa Investment Group. Total Program IRR is net of fees, expenses, and carried interest for each partnership and net of Meketa Investment Group fees. Partnership and Vintage Year IRRs are net of partnership fees but gross of Meketa Investment Group fees.

	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date ¹ (\$ mm)	Unfunded Commitment ² (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)	Net IRR³ (%)	Inv. Multiple ⁴ (x)
Real Estate International Partnership Fund I, L.P.	Fund of Funds	15.0	12.7	2.3	10.2	2.7	13.0	0.4	1.0
Vintage Year 2008		5.0	5.4	0.0	0.0	0.8	0.8	-16.6	0.1
1921 Realty, Inc.	Opportunistic	5.0	5.4	0.0	0.0	0.8	0.8	-16.6	0.1
Vintage Year 2011		5.0	5.0	0.0	6.0	0.0	6.0	4.8	1.2
DSF Capital Partners IV, L.P.	Value-Added	5.0	5.0	0.0	6.0	0.0	6.0	4.8	1.2
Vintage Year 2016		15.0	11.4	4.0	0.9	11.6	12.5	6.5	1.1
DSF Multi-Family Real Estate Fund III, L.P.	Value-Added	15.0	11.4	4.0	0.9	11.6	12.5	6.5	1.1
Vintage Year 2017		43.0	11.6	31.4	1.4	10.5	11.9	2.9	1.0
AEW Partners Real Estate Fund VIII, L.P.	Opportunistic	25.0	9.7	15.3	1.4	9.0	10.4	9.1	1.1
Carlyle Realty Partners VIII, L.P.	Opportunistic	18.0	1.9	16.1	0.0	1.5	1.5	-39.7	0.8
Vintage Year 2018		25.0	25.0	0.0	0.0	27.5	27.5	13.8	1.1
TA Realty Core Property Fund, L.P.	Core	25.0	25.0	0.0	0.0	27.5	27.5	13.8	1.1



Open-end Real Estate Time-Weighted Performance

	1Q19 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since Inception (%)	Inception Date
Real Estate	-4.7	1.1	4.0	7.3	6.5	12/30/1999
Invesco Equity Real Estate Securities Trust	9.8	17.8	6.5	8.5	9.8	11/20/2002
Wilshire REIT	16.0	19.3	5.5	9.0	NA	
PRISA I	-14.9	-10.3	1.1	5.8	5.6	6/30/2004
NCREIF ODCE	1.5	7.4	7.3	9.4	7.5	
TA Realty Core Property Fund, L.P.	2.0	9.1	NA	NA	61.4	3/21/2018
NCREIF ODCE	1.4	7.5	8.0	10.2	9.1	



Aggregate Program Performance Summary Commentary

The IRR (internal rate of return) and investment multiple are the most meaningful measures of performance for a private equity fund. IRR measures how assets are performing in relation to time. Investment multiple shows the cash on cash return generated on the invested capital by the underlying assets.

As of March 31, 2019, the Retirement Association's Private Equity program generated a 4.4% net IRR and a 1.2x net TVM. After adjusting for capital calls and distributions that occurred during the quarter, the reported fair value of the program increased by \$1.5 million, or 3.3%. The increase was primarily driven by increases in the valuations of DN Partners Fund II (\$0.7 million, or 80.6%) and Globespan Capital Partners Fund V (\$0.3 million, or 11.2%), and partially offset by a decrease in valuation of Ascent Venture Partners V (\$0.2 million, or -3.7%).

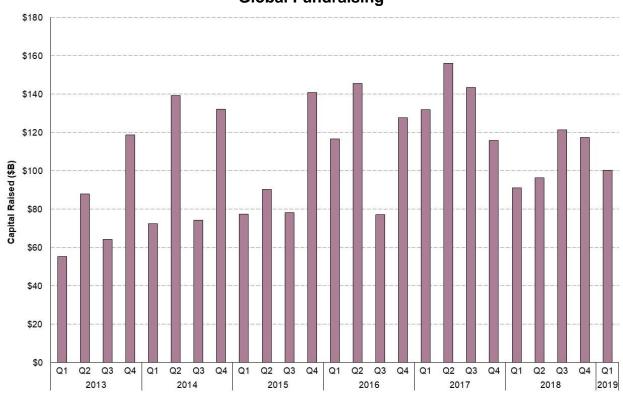
As of March 31, 2019, the Retirement Association's Real Assets program generated a -0.5% net IRR and a 1.0x net TVM. After adjusting for capital calls and distributions that occurred during the quarter, the reported fair value of the program increased by \$0.9 million, or 2.0%. The increase was primarily driven by increases in the valuations of Global Infrastructure Partners Fund III (\$0.7 million, or 10.5%) and IFM Global Infrastructure (U.S.) (\$0.5 million, or 2.6%), and partially offset by a decrease in the valuation of JPMorgan Global Maritime Investment (\$0.4 million, or -5.5%).

As of March 31, 2019, the Retirement Association's Real Estate Program generated a 5.2% net IRR and a 1.4x net TVM. After adjusting for capital calls and distributions that occurred during the quarter, the reported fair value of the program decreased by \$4.6 million or -4.3%. The decrease was primarily driven by decreases in the valuations of PRISA I (\$6.1 million, or -14.9%) Carlyle Realty Partners VIII (\$0.6 million, or -34.2%) and Real Estate International Partnership Fund I (\$0.5 million, or -14.5%). The decrease was partially offset by increases in the valuations of Invesco Equity Real Estate Securities Trust (\$1.6 million, or 9.8%) and TA Realty Core Property Fund (\$0.5 million, or 2.3%).



Appendices

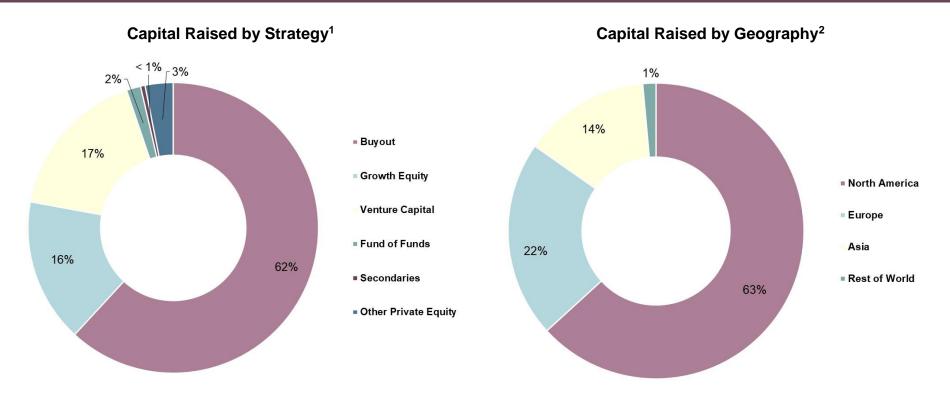




Fundraising activity for private equity funds in the first quarter of 2019 was below that of the prior quarter, at \$100 billion raised. In general, fundraising is typically slower during the first quarter of the year, with the amount raised in line with the first quarter of 2018. Appetite for the asset class remains strong despite concerns about a potential macro-economic market downturn. The trend of capital concentration continues with 219 funds fundraising in the first quarter of 2019 compared to 340 funds in the prior year. This suggests that funds are growing significantly in size, with an average fund size of over \$450 million in 2019 compared to \$280 million in 2018. With larger target sizes, funds are staying in market longer, often holding interim closes while simultaneously beginning to make deals.







Buyout funds continued to be the most popular private equity strategy with \$62 billion or 62% of all private equity capital raised dedicated to Buyout funds in the first quarter of 2019. Despite remaining the dominant private equity strategy, and raising a similar number of funds compared to Q1 2018, Buyout funds raised approximately 22% less capital in 2019 than in 2018. Venture Capital raised more capital than in 2018, with aggregate deal value in line with that of Q1 2018, suggesting that the deal market has not lost momentum. Fund of Funds and Secondaries fundraising drastically decreased since Q1 2018, with a concentration in the traditional strategies of Buyout, Venture, and Growth Equity. North American focused vehicles represented a majority of all funds raised in Q1 2019 at \$63 billion, representing nearly double the amount year-over-year and a 24% increase in allocation. Europe focused funds also saw a drastic decrease of 50% of capital and a 32% decrease in allocation, while Asian funds increased allocation by 8%.

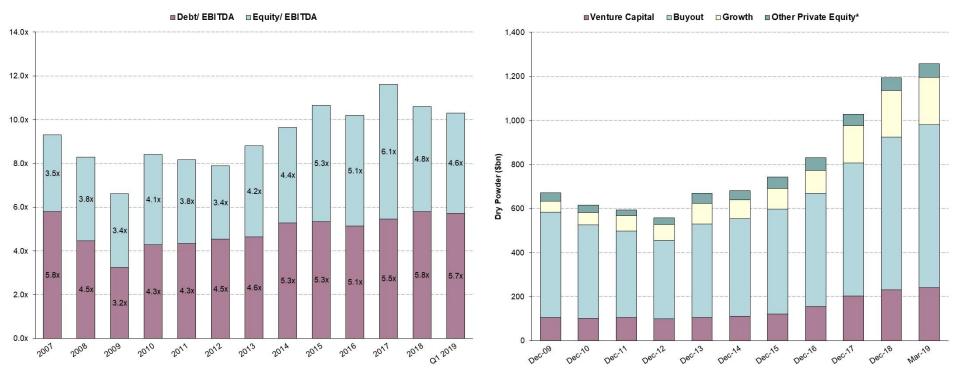
² Pregin



¹ Preqin

Purchase Price Breakdown, All LBOs¹

Dry Powder by Fund Type²



Private Equity purchase price multiples in 2019 were in line with levels seen in 2018, remaining near all-time highs. Notably, equity contribution (relative to total purchase price) continued to stay relatively low, but remained only slightly below the 10-year average. Support for elevated prices from the record level of dry powder, which increased by 5% from last year to a record high of \$1.26 trillion. Dry powder levels are expected to continue to increase as long as more capital is being raised than is being deployed, and investors should expect to continue to see high purchase prices as a result of the high levels of capital competing for deals. Capital concentration along with larger sized funds should be expected to contribute to increasing levels of dry powder as well, with larger funds taking longer to deploy all capital. TMT (27%), Services and Leasing (20%), and Healthcare (7%) were the three largest sectors targeted for LBOs, collectively making up over half of all LBO deals.³

³ S&P



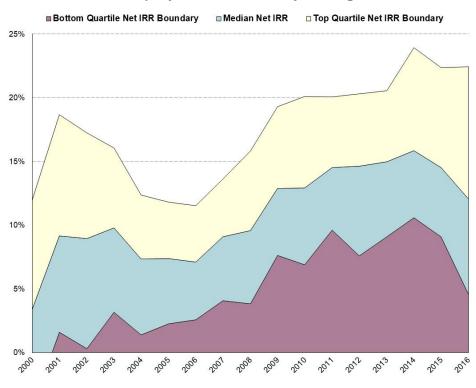
¹ S&P

² Pregin

Private Equity Performance by Horizon¹

Horizon	Private Equity	Buyout	Venture Capital	Fund of Funds
1 Year to Mar-19	19.5%	16.3%	24.0%	15.2%
3 Years to Mar-19	18.7	22.0	19.7	13.9
5 Years to Mar-19	17.8	19.6	19.3	12.9
10 Years to Mar-19	19.3	22.4	19.7	14.6

Private Equity Performance by Vintage Year²

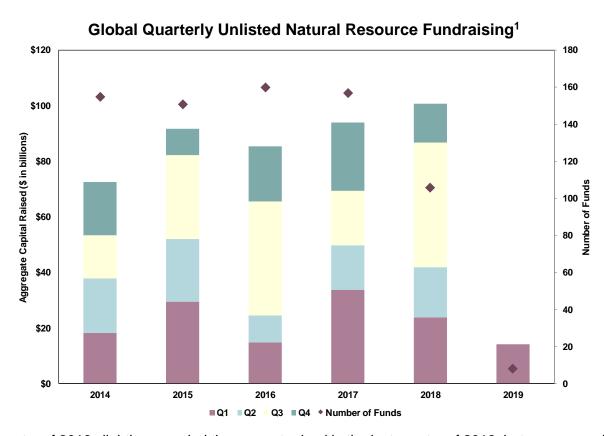


Recent aggregate private equity returns remained strong at 19.5% over the prior year, 18.7% over the prior three years, and 17.8% over the prior five years. In general, performance has been strong in each vintage year since the Global Financial Crisis. Buyout and Venture funds have both performed well over the four time horizons on an absolute basis, with Buyout funds outperforming Venture funds over the 3-year horizon. The gap between top and bottom performers in private equity has grown consistently since the Global Financial Crisis; 2007 vintage funds reported a 10% spread while 2016 vintage funds reported an 18% spread.

² Cambridge Associates Global Top Quartile Pooled Returns



¹ Cambridge Associates Global Top Quartile Pooled Returns



Capital raised in the first quarter of 2019 slightly exceeded the amount raised in the last quarter of 2018, but was approximately 60% from one year prior. The number of funds raised was down during 1Q with just eight funds reaching final close after averaging 27 funds per quarter in 2018. This quarter, the average fund size raised was \$1.8 billion, far surpassing the 2018 average of \$0.8 billion. As of March 31, 2019, Preqin reported a total of 313 unlisted natural resource funds with a combined fundraising target of approximately \$210 billion.

The majority of natural resources fundraising during the first quarter was focused on European developed markets, accounting for nearly 83%, or \$12 billion of capital raised. There were two North American funds that raised a total of \$500 million and three funds outside of North America and Europe comprising \$2.0 billion of aggregate capital raised.

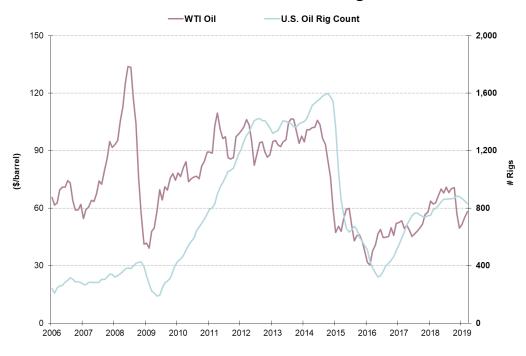
¹ Source: Preqin Private Capital Fundraising Update, Q1 2019.



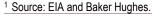
Prepared by Meketa Investment Group

Extracted Resources

Oil Price vs. Active U.S. Rigs¹



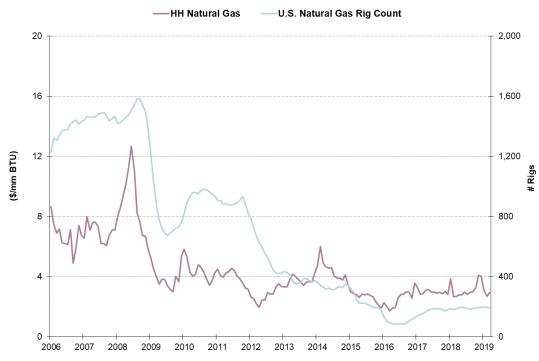
West Texas Intermediate ("WTI") oil prices increased by 17% to \$58 per barrel during the first quarter on the heels of an agreement reached in December between OPEC and Russia to help support prices with production cuts. Similarly in European markets, Brent oil prices increased by 15% to \$66 per barrel. There were 830 oil rigs in operation in the U.S. at quarter end, representing a decrease of 50 from the prior quarter. U.S. oil production remained strong during the first quarter, averaging almost 11.8 million barrels of oil equivalent per day ("boepd"). U.S. gasoline prices for regular blend increased by 4% to \$2.67 from the previous quarter representing a 5% decrease from one year prior.





Extracted Resources





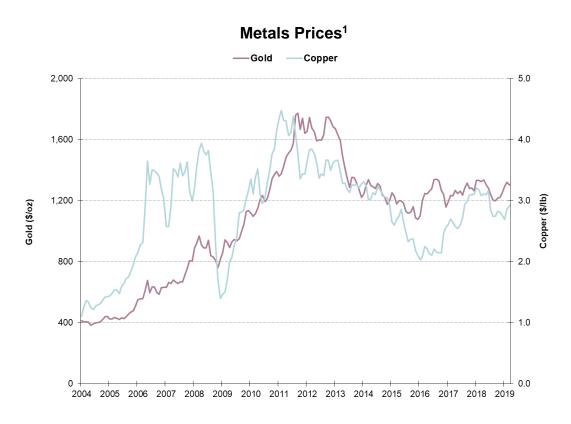
Henry Hub natural gas spot prices ended the quarter at approximately \$2.95/MM BTU representing a 27% decrease from the prior quarter. The decrease follows a cold fourth quarter where strong demand helped drive natural gas prices to \$4.04 at year end. Relative to one year prior, natural gas prices were up by 10%. The natural gas rig count in the U.S. ended the quarter at 193, a decrease of 5 from the prior quarter. The U.S. continues to realize operational efficiencies and increase production as a result of the shale revolution. Daily production in March 2019 averaged over 100 billion cubic feet ("bcf") of natural gas production per day. Demand from the downstream segments of the energy value chain (e.g., refiners, petrochemical, power generation) remain robust as these industries leverage the relatively cheap and abundant natural gas supplies in the U.S. In 2018, natural gas consumption reached record levels driven by the power generation industry.

¹ Source: EIA and Baker Hughes.



Prepared by Meketa Investment Group

Extracted Resources



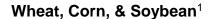
Following the late 2018 market correction and U.S. government shut-down, gold prices increased. The pause on increasing interest rates by the Federal Reserve and inflation concerns benefited gold prices early in 2019. Later in the quarter, the price decreased on concerns of trade and tariff wars between the U.S. and China. During the quarter, the price of gold increased to \$1,300 per ounce representing an increase of 4% from the prior quarter. Relative to one year prior, gold prices were down by approximately 2%.

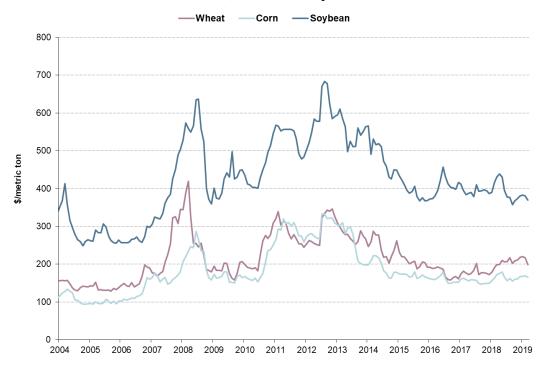
Base metals have remained challenged in part due to concerns of trade and tariff wars between the U.S. and China and a slower growing China economy. While copper prices increased by 6% in the first quarter, they were down by approximately 5% relative to one year prior.





Harvested Resources





Trade war concerns with China and significantly lower demand for U.S. agricultural products continue to weigh on the industry. During the quarter, wheat, corn, and soybean prices fell by 9%, 1%, and 3%, respectively. Relative to one year prior, wheat prices were flat while corn and soybeans were down by 4% and 14%, respectively.

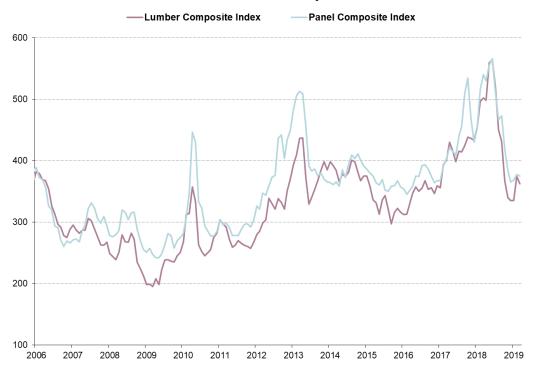
The NCREIF Farmland index experienced a 0.7% increase during the quarter with income accounting for 0.5% and appreciation generating 0.2%. Annual cropland returns of 1.4% were driven by 0.8% income and 0.5% appreciation. Permanent cropland returns of -0.4% were attributed to depreciation during the quarter.





Harvested Resources

Lumber & Panel Composites¹

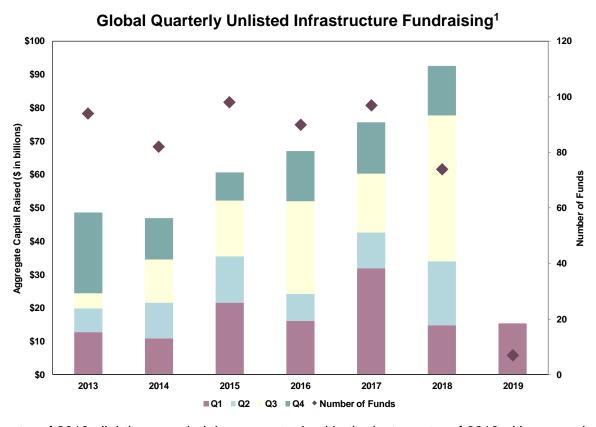


Prices for U.S. timber products, such as lumber and panel, increased during the quarter by 8% and 3%, respectively. Relative to one year prior, prices were down by 28% and 31%, respectively.

The NCREIF Timberland index increased 0.1% during the quarter primarily as a result of income gains of 0.7%. For the trailing one-year period, the index generated 2.4% largely from an income return of 3.1%. Quarterly returns for the South region were flat, the Pacific-Northwest increased by 0.3%, and the Northeast decreased by 0.4%







Capital raised in the first quarter of 2019 slightly exceeded the amount raised in the last quarter of 2018. However, the market continues to trend toward fewer funds at higher target sizes. This quarter, the average fund size raised has exceeded \$2 billion, far surpassing the 2018 average of \$1.3 billion. As of March 31, 2019, a total of 210 unlisted infrastructure funds were in market, according to Preqin, with a combined fundraising target of approximately \$190 billion.

The majority of infrastructure capital focused on the developed market in Europe, accounting for nearly 83% of the capital raised so far in 2019 and 3 of the 7 funds closed this so far this year. There were two funds consisting of \$0.7 billion holding final closes in North America and two funds consisting of \$2.0 billion outside of North America and Europe. Notable final closes held in 1Q 2019 included EQT Infrastructure IV (€9.0 billion), Quinbrook Low Carbon Power Fund (\$1.6 billion), and Mirova Core Infrastructure Fund II (€1.2 billion).

¹ Source: Preqin Private Capital Fundraising Update, Q1 2019.



Prepared by Meketa Investment Group

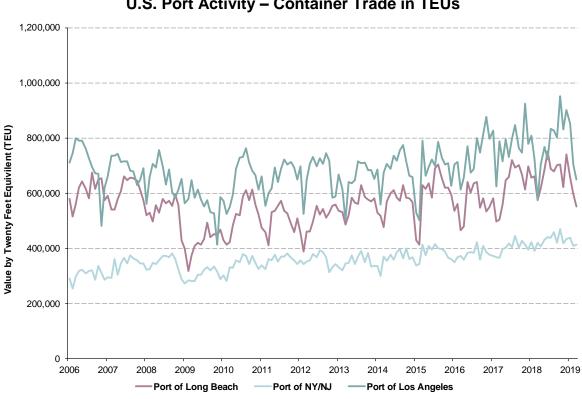


Moving 12-month Total on All U.S. Roads¹

During the first quarter of 2019, travel on U.S. roads totaled approximately 746 billion miles. This represented an increase of 0.7% over the same period in 2018. Year to Date, Federal Highway Administration data showed vehicle miles traveled increased by 91 million miles, up only a marginal 0.01% over 1Q 2018.

In 1Q 2019, the average U.S. price of a gallon of gas came down to a monthly average of \$2.44 per gallon, with a peak of \$2.59. This compares to \$2.82 and \$2.99 seen in 2018. According to INRIX, Boston, Washington, D.C., and Chicago rank as the top three cities in the U.S. in which drivers spend the most hours in traffic.

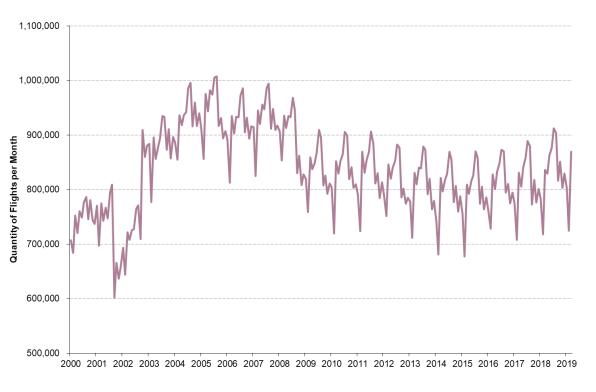
¹ Source: U.S. Department of Transportation, Federal Highway Administration: Office of Highway Policy Information.



U.S. Port Activity - Container Trade in TEUs

The chart represents the top three U.S. ports by container volume, as measured by twenty-foot equivalent units (TEU). Activity at the three ports provides a high-level representation of the volume of imports received into the U.S. more broadly.

During the first quarter of 2019, volumes at the three ports increased by approximately 36,199 TEU, or 0.7% over same period in 2018. On a yearover-year basis, the combined port volumes increased by 730,946 TEU, or 3.3%, over the prior 12 month period. All three ports saw an increase in year-over-year activity. The Port of Long Beach recorded an increase of 1.9% (150,000 TEU), the Port of NY/NJ reported an increase of 4.9% (240,000 TEU) and the Port of Los Angeles recorded an increase of 3.7% (342,000 TEU) from the prior 12 months.



Total U.S. Domestic and International Flights¹

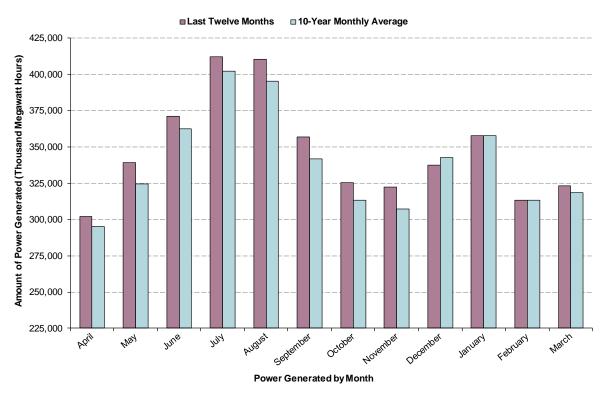
The chart above represents all U.S. domestic and international flights, excluding foreign point-to-point flights by month. Air traffic is cyclical with peaks in the summer months and declines in the winter months.

There were over 58,600 more flights during the first quarter of 2019, representing a 2.5% increase compared to the same period in 2018. Air traffic activity also increased by 3.1% for the 12 months ending March 31, 2019 over the previous period. In addition to the number of flights during the first quarter increasing year-over-year, the total number of passengers travelling on U.S. and international airlines increased by 4.6% from 2018 to 2019, which indicates higher capacity factors among airlines compared to the prior period.

¹ Source: Bureau of Transportation Statistics: Flights, All U.S., and Foreign Carriers.

 $[\]mathbf{M}$



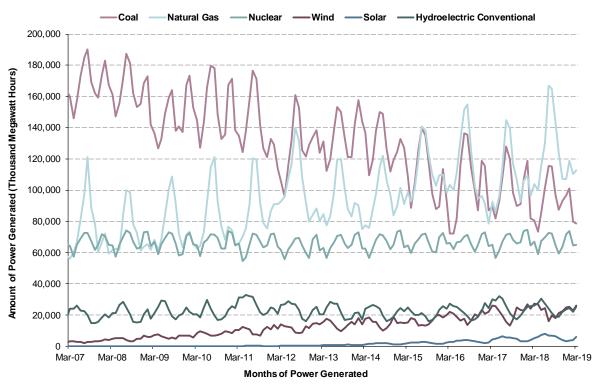


The graph above represents the total net generation for the past 12 months compared to the 10-year average for each month. Over the past year, power generation exceeded the 10-year average in 11 out of the 12 months. Net energy generation in the U.S. decreased by 0.5% during the first quarter, compared to the same period in 2018. For the 12 months ended March 31, 2019, net energy generation increased by 2.7% over the previous 12 months.

¹ Source: U.S. Energy Information Administration: Electric Power Monthly, March 2019.





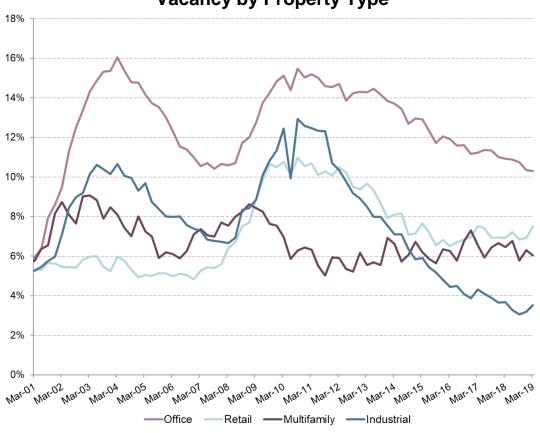


When comparing individual generation sources in the U.S., natural gas and solar increased 10.4% and 9.6% respectively in the first quarter of 2019 as compared to the same period in the previous year, while generation from coal, nuclear, wind and hydroelectric conventional dropped by 7.8%, 1.4%, 4.9%, and 6.4% respectively, during the same period. Wind and utility scale solar continue to make up a small portion of total net energy generation in the U.S., accounting for only 7.5% and 1.4% of energy generation in the first quarter, while coal, natural gas, and nuclear accounted for 26.1%, 34.4%, and 20.5%, respectively. However, the growth of wind and solar as sources of energy generation continues to increase at a faster rate than coal and natural gas, especially over the last couple of years.

Source: U.S. Energy Information Administration: Electric Power Monthly, March 2019.



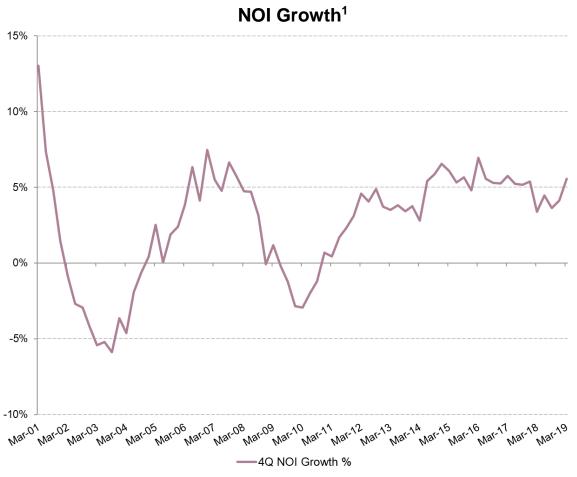
Real Estate Fundamentals Vacancy by Property Type¹



In the first quarter of 2019, vacancy rates increased for industrial and retail, while vacancy decreased in office and multifamily properties. Multifamily vacancies have been irregular, but in a slight upward trend since 2011. Retail vacancies flattened over the last three years, and office vacancies continue a downward trend. Industrial hit a low at 3.0% in Q3 2018. Compared to one year ago, vacancy rates in multifamily decreased 41 basis points, office decreased 61 basis points, industrial increased 15 basis points, and retail increased 59 basis points. Overall, the vacancy rate across all properties decreased 32 basis points from Q1 2018.



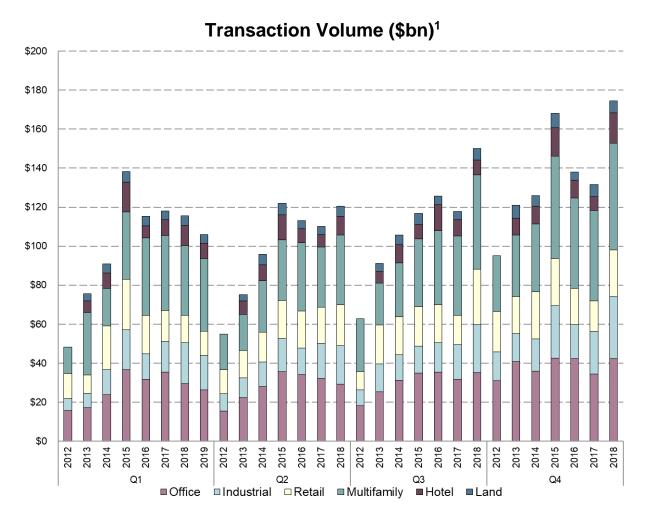




The trailing twelve month rate of NOI increased above 5.5% in the first quarter of 2019. Continued growth of the U.S. economy coupled with only moderate new construction has allowed property owners to increase rents and lease vacant space. The strongest NOI growth continues to be within the industrial sector, despite retracting slightly from 9.6% in the previous quarter to 8.6% in Q1 2019. Office NOI saw a huge jump from 2.2% in the previous quarter to 7.0% in Q1 2019, while apartment increased to 7.5%. Retail NOI trended negative year-over-year, currently at -0.2%.





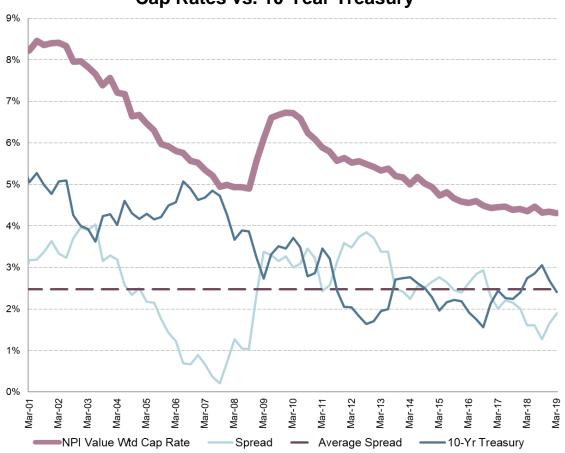


Private real estate transaction volume for properties valued over \$2.5 million was lower at \$106 million for Q1 2019, after hitting the highest level in any quarter since 2012 in Q4 2018, at over \$170 million. All property types experienced a decrease in transaction volumes, with hotel, retail, and industrial down 50%, 49%, and 44%, respectively. Multifamily and office properties made up the largest percentages of total transaction volume during the quarter, at 25% and 18%, respectively.





Real Estate Capital Markets Cap Rates vs. 10-Year Treasury¹



The NPI Value Weighted Cap Rate continues to hover around 4.3%. The 10-year Treasury yield peaked above 3.0% in Q3 2018, but has continued to trend back down, landing at 2.4% in Q1 2019. The spread between cap rates and treasury yields increased to 190 basis points, which is 57 basis points below the long term average spread.

¹ Source: NCREIF and U.S. Department of the Treasury



Trailing Period Returns¹

As of March 31, 2019	1 Year	3 Years	5 Years	10 Years
NFI-ODCE (EW, net)	6.8%	7.3%	9.4%	7.5%
NFI-ODCE (VW, net)	6.6	7.0	9.2	7.7
NCREIF Property Index	6.8	7.1	9.1	8.5
NAREIT Equity REIT Index	20.0	7.7	9.9	18.8

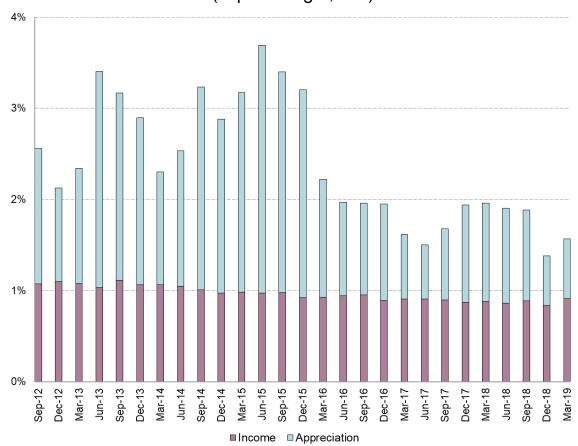
Private real estate indices have continued to post positive returns, driven by strong property-level fundamentals and a low interest rate environment. Recent public real estate performance has experienced significant volatility with negative returns in Q4 2018 but strong positive returns of 17.2% in Q1 2019.





ODCE Return Components¹

(Equal Weight, Net)



The NFI-ODCE Equal Weight return for Q1 2019 was up slightly to 1.5%, about 10 basis points higher than the previous quarter low of 1.4%. The income component of the quarterly return was above 0.92%, an increase compared to all of 2018 when it averaged 0.87%. Appreciation has moderated, adding 65 basis points to Q1 2019's return.





Confidentiality & Disclaimer

The material contained in this report is confidential and may not be reproduced, disclosed, or distributed, in whole or in part, to any person or entity other than the intended recipient. The data are provided for informational purposes only, may not be complete, and cannot be relied upon for any purpose other than for discussion.

Meketa Investment Group has prepared this report on the basis of sources believed to be reliable. The data are based on matters as they are known as of the date of preparation of the report, and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available.

If we manage your assets on a discretionary basis, please contact us if there are any changes in your financial situation or investment objectives, or if you want to impose any reasonable restrictions on our management of your account or reasonably modify existing restrictions.

In general, the valuation numbers presented in this report are prepared by the custodian bank for listed securities, and by the fund manager or appropriate General Partner in the case of unlisted securities. The data used in the market comparison sections of this report are sourced from various databases. These data are continuously updated and are subject to change.

This report does not contain all the information necessary to fully evaluate the potential risks of any of the investments described herein. Because of inherent uncertainties involved in the valuations of investments that are not publicly traded, any estimated fair values shown in this report may differ significantly from the values that would have been used had a ready market for the underlying securities existed, and the differences could be material. Note that for unlisted securities the valuations may be lagged by one or more calendar quarters, or may reflect original cost.

This document may contain certain forward-looking statements, forecasts, estimates, projections, and opinions ("Forward Statements"). No representation is made or will be made that any Forward Statements will be achieved or will prove to be correct. A number of factors, in addition to any risk factors stated in this material, could cause actual future results to vary materially from the Forward Statements. No representation is given that the assumptions disclosed in this document upon which Forward Statements may be based are reasonable. There can be no assurance that the investment strategy or objective of any fund or investment will be achieved, or that the client will receive a return of the amount invested.

In some cases Meketa Investment Group assists the client in handling capital calls or asset transfers among investment managers. In these cases we do not make any representations as to the managers' use of the funds, but do confirm that the capital called or transferred is within the amounts authorized by the client.



Valuation Policies

The values of companies and partnerships in this review are based on unaudited reports for March 31, 2019, provided by the General Partners, unless otherwise noted.

Because there is no readily accessible market for private markets assets (companies and partnerships), the values placed on private markets assets are calculated by General Partners using conservative and industry standard pricing procedures. Annually, an independent auditor reviews the pricing procedures employed by the General Partner of each partnership.

While all private markets partnerships are audited by an independent entity, there is some discretion as to the method employed to price private companies and, therefore, private markets partnerships. At all times, Meketa Investment Group expects General Partners to utilize conservative and industry standard pricing procedures, and requires the General Partners to disclose those procedures in their reports. However, because of the inherent uncertainty of valuation, these estimated values may differ from the values that would be used if a ready market for the investments existed, and the differences could be significant.



Private markets investors have developed a number of unique terms to describe their investment work. The following glossary of private markets terms is intended to help make sense of these terms. Where the term "private equity" is used, the definition will generally also apply to private debt funds that are structured in similar manner.

Absorption: The amount of inventory or units of a specific commercial property type that become occupied during a specified time period (usually a year) in a given market, typically reported as the absorption rate.

Advisory Board: Partnerships often establish an advisory board comprised of representatives of the Limited Partners to oversee the on-going work of the General Partners. Advisory boards typically meet once each year to review the partnership's investments. It is important to note that unlike the Board of Directors of a public company, the advisory board has very little power to control the activities of the General Partners.

Angel Investor: Angel investors are individuals who invest their own capital directly in small, early stage companies. Angels are an alternative source of funding for entrepreneurs. Such investments are characterized by high levels of risk and potentially a large return on investment.

Appraisal: An estimate of a property's fair market value that is typically based on replacement cost, discounted cash flow analysis and/or comparable sales price.

Appreciation: An increase in the value or price of a real estate asset.

Appreciation Return: The portion of the total return generated by the change in the value of the real estate assets during the current quarter, as measured by both appraisals and sales of assets.

Asset Management: The various disciplines involved with managing real property assets from the time of investment through the time of disposition, including acquisition, management, leasing, operational/financial reporting, appraisals, audits, market review and asset disposition plans.

Asset Management Fee: A fee charged to investors based on the amount invested into real estate assets for the fund or account.

Barrel: 42 U.S. gallons of oil.

Base Metals: Non-precious, non-ferrous metals that include copper, aluminum, lead, nickel, tin, and zinc.

Base Rent: A set amount used as a minimum rent with provisions for increasing the rent over the term of the lease.

Biofuels: Biofuels are combustible fuels, such as bio-ethanol, that are made and processed from vegetation sources such as corn, sugar cane, barley, or wheat.

Blind Pool: Most Limited Partnerships are organized as blind pools, meaning that Limited Partners commit capital to the partnership before any actual investments are made. At the point of commitment, the Limited Partners do not know specifically how their money will be used (hence the term blind pool), and must therefore rely entirely upon the track record and experience of the General Partner.

BOE/day: A daily production metric equivalent to the energy content of a barrel of oil equivalent often related to natural gas, natural liquids, and condensates.

Broker: A person who acts as an intermediary between two or more parties in connection with a transaction.

Brownfield: A project with an operating history. The initial outlay is entirely to the public entity. Brownfield can be considered an easier starting point for investors, given the shorter J-curve and lower level of risk. Meketa Investment Group categorizes a Fund as brownfield if the Fund's investment strategy calls for over 65% of its underlying investments to be in brownfield (operating) assets.



Buyout Fund: A buyout partnership uses the partners' capital to purchase existing, established businesses. The acquired firms may be family owned prior to purchase, or may be operating divisions of larger companies seeking to restructure their businesses. In a few cases, the buyout partners may purchase all of the outstanding shares of a publicly traded company, effectively taking it private. Buyout funds are not involved in venture capital or startups.

Buyout partnerships own the acquired companies outright, or in combination with other buyout partnerships. In some cases the buyout partners will replace the existing management with a new team, or the acquired firm will be left autonomous. The buyout partners frequently take one or more board seats in order to ensure control of the business.

Capital Appreciation: The change in market value of a property or portfolio adjusted for capital improvements and partial sales.

Capital Call (Contribution): Once a partnership has declared its first close, the General Partners will begin to make portfolio investments. As each investment is made, the capital necessary to fund the investment is "called" from the Limited Partners.

Capitalization Rate: A percentage that relates the value of an income-producing property to its future income, expressed as net operating income divided by purchase price. This is also referred to as cap rate.

Carried Interest: The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund. The industry norm is 20%. The fund manager will normally therefore receive 20% of the profits generated by the fund and distribute the remaining 80% of the profits to investors.

Carrying Value: The General Partner must list on the partnership's balance sheet a value for every investment held. These valuations are called carrying values, and in most cases are simply the original cost of the investment. Note that carrying values in most cases are not audited and do not represent actual market values.

Cash Flow Positive: When a company generates more free cash than it consumes in normal operations, it is deemed to be cash flow positive. Such companies may not need extra financing or debt in order to grow.

Cash Leasing Farmland: A low risk/return strategy that shifts the operational risk of farming to a local operator. Farmland investors receive stable lease payments from the local operators who are allowed to farm the land. Cash leasing is typically used for row croplands.

Cash on Cash Return: The simple gross total return earned by the Limited Partners, calculated as the total distributions received divided by the total contributions made. Thus, if an investor supplied a total of \$100 in cash calls and contributions, and received over the life of the partnership \$200 in distributions, the cash on cash return would be 100%. The cash on cash return is typically reported as a multiple. In the example above, the investment returned 2x (two times).

Chip-N-Saw: Produced from mid-sized trees that are cut and chipped to pulpwood chips or small dimension lumber. Chip-N-Saw is typically derived from trees measuring 10-13" DBH.

Claw-Back Provision: A claw-back provision ensures that a General Partner does not receive more than its agreed percentage of carried interest over the life of the fund. So, for example, if a General Partner receives 21% of the partnership's profits instead of the agreed 20%, Limited Partners can claw back the extra one percent.

Cleantech: A broad term used to classify products or services that improve energy productivity, performance, or efficiency while reducing input costs, consumption, waste, or pollution. Common products associated with cleantech are wind farms, photovoltaics, fuel cells, biofuels, and smart grid technologies.

Closed-end Fund: A commingled fund that has a targeted range of investor capital and a finite life.

Closings and Closing Dates: Every partnership must specify the date upon which the General Partners will cease fundraising and begin making actual investments with the Limited Partners' committed capital. That date is called the closing date, and defines the vintage year of the partnership. Most partnerships, however, have several closing dates, and all partnerships must eventually have a final closing. In most cases, the final closing lags six to nine months after the first closing. If a majority of the original Limited Partners consent, a partnership can remain open to new investors after the final closing and while early investments are being made, in order to have time to attract additional investors.



Co-Investment: In some cases, Limited Partners want the right to make additional direct investments in one or more of the underlying companies purchased by the General Partner. If the partnership agreement gives co-investment rights to specific Limited Partners, then they may elect to invest additional monies "along side" the General Partner in various deals. In these cases, the co-investing Limited Partners would have two investments in an underlying property: their share of the partnership's investment, and their direct additional co-investment on the side. Note that co-investment rights may be available only to the largest Limited Partners.

Co-investment rights are often negotiated by very large Limited Partners when they have strong convictions about the deal finding skills of the General Partners, because co-investment rights permit them to make even larger investments in the underlying properties than would otherwise be possible, without paying carried interest.

Committed Capital: When a Limited Partnership is formed, each Limited Partner agrees to contribute a specific amount of capital to be invested over the life of the partnership. Once the agreement is signed, the Limited Partners are legally bound and committed to supply the agreed upon capital when it is called for by the General Partner.

Concession: A business operated under a contract or license associated with a degree of exclusivity. In the case of a public service concession, a private company (the concessionaire) enters into an agreement with the government to have the exclusive right to operate, maintain and carry out investment in a public asset (such as a utility) for a given number of years.

Concessions: Cash or cash equivalents expended by the landlord in the form of rental abatement, additional tenant finish allowance, moving expenses or other monies expended to influence or persuade a tenant to sign a lease.

Consolidation (Roll Up): Many industries in America are highly fragmented, as the market space is serviced by a large number of locally owned businesses. By consolidating fragmented industries (i.e., purchasing many local businesses), firms can create a single larger company with greater market control, more attractive financial characteristics, and potentially, better pricing flexibility and lower costs.

Construction Loan: Interim financing during the developmental phase of a property.

Convertible Bonds: Some private equity partnerships, generally those that provide mezzanine financing, may take convertible bonds as part of their compensation for providing investment capital. The convertible bond pays interest like other bonds, but can be exchanged for shares of the company stock at a favorable price if certain conditions are met, hence the term convertible.

Core Properties: The major property types - specifically office, retail, industrial and multifamily. Core assets tend to be built within the past five years or recently renovated. They are substantially leased (90% or better) with higher-credit tenants and well-structured long-term leases with the majority fairly early in the term of the lease. Core assets generate good, stable income that, together with potential appreciation, is expected to generate total returns in the 10% to 12% range.

Crude Oil: An unpurified mixture of liquid hydrocarbons derived from rock formations, containing different levels or impurities such as water or sulfur.

DBH: DBH (Diameter at Breast Height) is the most common measure made by a forester to determine the growth, volume, yield, and potential of a tree. DBH is defined as 4.5 ft. above the ground on the uphill side of a tree.

Development Well: A well drilled in a proven area of an oil or gas reservoir to a depth known to be productive.

Direct Investment: Partnerships that invest in companies are said to make direct investments. The alternative is a partnership that invests in other partnerships, a fund of funds.

Direct Operation Farmland: A strategy typically employed with permanent crops to retain complete control over the assets. Farmland investors use farmland management firms to operate the farm and add value through increased quality and output. The primary risks associated with direct operation are operating, weather, and marketing risks.

Diversification: The process of consummating individual investments in a manner that insulates a portfolio against the risk of reduced yield or capital loss, accomplished by allocating individual investments among a variety of asset types, each with different characteristics.

Downstream: Portion of the energy chain that includes oil refineries, petrochemical plants, power generation, and distribution outlets.



Dry Hole: An oil well that fails to find or produce any oil or gas.

Due Diligence: The process of examining a property, related documents, and procedures conducted by or for the potential lender or purchaser to reduce risk. Applying a consistent standard of inspection and investigation one can determine if the actual conditions do or do not reflect the information as represented.

E&P: Acronym for "Exploration and Production" that relates to the exploration, development, and production of crude oil or natural gas reserves. E&P is also referred to as the upstream sector.

EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization): The "top line" profits of a private company are the monies earned before paying interest and taxes, and adding back depreciation and amortization. Unlike public companies, which are valued as the multiple of bottom line earnings to the stock price (P/E or price to earnings), private companies are valued as the multiple of EBITDA to the price of the stock.

There is no simple conversion factor that will convert an EBITDA multiple to a P/E for all companies, but in general, a factor of 2 is appropriate. Thus, a private company selling for an EBITDA multiple of 6 is priced about as richly as a public company with a P/E of 12.

EBITDA Multiples: The ratio of a private company's top line earnings to the price of its shares. See EBITDA above.

Enterprise Value: A measure of a company's value, often used as an alternative to straightforward market capitalization. Enterprise Value is calculated as market cap plus debt, minority interest and preferred shares, minus total cash and cash equivalents.

Exploratory Well: A well drilled to find and produce oil or gas in an unproven area or expand production of a previously known reservoir.

Fee Income: The General Partners in a private markets partnership generally receive two types of compensation: fee income as payment for their portfolio management services, and a share of any profits (carried interest) as incentive compensation.

Fuel Cell: A device that captures the electricity generated from a chemical reaction between a fuel and an oxidant. An example is a hydrogen fuel cell, which uses hydrogen as the fuel and oxygen as the oxidant to produce electricity and water.

Fund of Funds: A private markets partnership that consists primarily of investments in other partnerships, as opposed to direct investments in individual companies and deals. The General Partners of a fund of funds thus act as a manager of managers to create a diversified portfolio of partnerships, each of which in turn consists of a portfolio of direct investment deals.

Although a fund of funds is a collection of partnerships, the fund of funds itself is a partnership, and therefore has a vintage year, a commitment period, a distribution phase, and a final end. Thus, fund of funds have finite lifetimes, just like their underlying partnerships.

The advantages of a fund of funds are high diversification and "one stop shopping," i.e., the client has a single relationship with the fund of funds manager.

The disadvantages of fund of funds are higher costs (another entire layer of management fees and carried interest), an additional loss of liquidity, and an additional loss of control by the Limited Partners. Just as with direct private markets funds, a fund of funds is organized as a blind pool. That is, when a new fund of funds is announced, and a subscription target set, early investors do not know what specific sub-funds will be selected by the manager. Generally, the Private Placement Memorandum gives the General Partner almost unlimited latitude in making subsequent investments.

General Partner: The control partner in private equity partnerships, analogous to the portfolio manager in a public stock portfolio. Under the IRS code, the General Partner must commit some personal capital to the partnership (a minimum of 1% of the partnership's committed capital), and unlike the Limited Partners, is liable for leverage and other losses generated by the partnership.

Geothermal Energy: Energy extracted from the earth's interior to produce heat and electricity. Applications of geothermal energy include conventional geothermal (use of steam to drive turbines), geothermal heat pumps (pipes sunk beneath the earth's surface to act as a heat exchanger during the warmer and colder seasons), and direct heat (hot water pumped from the earth for use as a heat source).



Greenfield: A project without an operating history. Some of the initial outlay may be to the public entity, but the majority is used for construction. Greenfield opportunities may take an exceptionally long time to come to fruition. Meketa Investment Group categorizes a Fund as Greenfield if the Fund's investment strategy calls for over 65% of its underlying investments to be in greenfield assets.

Growth (Expansion Capital): A strategy that entails providing capital to a private company with the intention that the capital be used to expand operations. Generally, expansion capital strategies result in minority equity positions in companies, but with some degree of control over how the expansion capital is spent.

Hedging: Strategy used to limit or offset exposure to pricing risk of an underlying commodity. A common way to execute this strategy is through the use of futures contracts, a financial derivative that allows for the sale of a commodity at a pre-specified price in the future, whether or not the market price increases or decreases at the time. Counterparties to the futures contracts are speculators who are willing to accept the risk of price fluctuations in exchange for the potential upside.

High-rise: In the central business district, this could mean a building higher than 25 stories above ground level, but in suburban markets, it generally refers to buildings higher than seven or eight stories.

Hurdle Rate: The minimum rate of return that the Limited Partners must receive before the General Partners have a right to a share of any additional profits (carried interest) produced by the partnership's investments. For example, the partnership may specify that once the Limited Partners have received distributions representing an 8% total return on their commitment (the hurdle rate), the General Partner will share in all future distributions until they have been allocated 80% to the Limited Partners, and 20% to the General Partners (their carried interest).

Hydro Energy: Energy derived from the natural movement of falling or flowing water. The most common form of hydro energy comes from dammed water driving a turbine and generator to produce electricity. Once a hydroelectric complex is built, no direct waste is produced.

Hydrocarbon: A hydrogen and carbon compound created from the decomposition of organic material over time. Most hydrocarbons are found naturally in fossil fuels such as crude oil, natural gas, and coal.

Improvements: In the context of leasing, the term typically refers to the improvements made to or inside a building but may include any permanent structure or other development, such as a street, sidewalk, utilities, etc.

Independent Oil Company: A company involved in the exploration, production, and development of oil and natural gas that is not a Major Oil Company.

In-Kind Distribution: Most distributions from private equity partnerships are in cash. However, in some cases, a private deal will be taken public through an initial public offering (IPO), or through a trade sale for stock to a public company. In these cases, the Limited Partners will receive their distributions in the form of publicly traded common stocks and/or rights and warrants.

Investment Period: The period of time after the first closing during which the General Partner will call capital from the Limited Partners and make partnership investments. Legally, the investment period is usually six years. Practically, it is three to four years. Not to be confused with the term of the partnership, generally ten to twelve years.

IPO (Initial Public Offering): When a private company issues publicly traded stock, it becomes known as a public company. The initial sale of publicly available stock is called the initial public offering, or IPO.

IRR (Internal Rate of Return): The annualized rate of return on capital that is generated or capable of being generated within an investment or portfolio over a period of time, assuming all cash flows can be reinvested at the same rate. Mathematically, the IRR of an investment is the discount rate applied to that investment such that the net present value of the investment is zero. IRR is commonly used to measure profitability by applying the calculation to the after-tax cash flows to arrive at an after-tax equity yield rate.

J-Curve: Many private markets partnerships have small negative returns in their first years of operation as capital is invested. The negative returns result because the partnership's investments have not matured and turned a profit, but the partnership has nevertheless experienced various operating costs. When early deals begin to mature and are liquidated at a profit, the partnership's returns should become positive. Thus, the graph of the partnership's returns versus time can resemble the capital letter "J."



Landfill Methane: Landfill methane is generated from the decomposition of waste in landfills. Bacteria break down the organic matter, releasing a gas that is rich in methane. By capturing the methane, greenhouse gases released into the atmosphere are reduced, and the gases can be used as an energy source.

Later Stage Fund: A venture capital partnership that specializes in investing in startup companies that have already achieved at least some actual revenues, or a venture fund that provides subsequent rounds of venture financing after all of the capital provided in the first rounds has been consumed.

Lead Investor: Describes a General Partner who is the "lead" investor in a deal, as opposed to co-investors or follow-on investors. The term implies that the lead investor has taken the lead in sourcing, evaluating, and executing the deal.

Lease: An agreement whereby the owner of real property gives the right of possession to another for a specified period of time and for a specified consideration.

Lease Rate: The period rental payment to a lessor for the use of assets. It may also be considered as the implicit interest rate in minimum lease payments.

Leverage: Many General Partners use both equity capital provided by the Limited Partners and money borrowed from banks or other lenders to finance their investments. Any borrowed money is called leverage. If a deal is successful, leverage can often enhance the returns of the Limited Partners substantially. On the other hand, too much leverage can cripple an investment with interest and financing costs. It is important to note that the Limited Partners are not responsible for the repayment of any borrowed money.

Leveraged Buyouts: The purchase of a private or public company wherein the bulk of the purchase price is paid using borrowed money.

Lifecycle: The various developmental stages of a property: pre-development, development, leasing, operating and redevelopment (or rehab).

Limited Partner: All investors in a Limited Partnership other than the named General Partner are defined under the IRS code as Limited Partners. Limited Partners have only the control rights defined for them in the Private Placement Memorandum, and are generally passive investors in the partnership's deals.

A very important point is that Limited Partner's total liability for all deals made by the partnership are limited strictly by law to the Limited Partner's committed capital. Thus, even if the General Partners borrow a great deal of money (leverage), and lose it all, the lenders have no recourse to the assets of the Limited Partners. In effect, a Limited Partner can lose no more than the amount of money invested.

Look-Back Provision: See Claw-Back Provision above.

Low-rise: A building with fewer than four stories above ground level.

Major Oil Company: One of the original "Seven Sisters" consisting initially of Exxon, British Petroleum, Chevron, Gulf, Mobil, Texaco, and Royal Dutch Shell.

Market Strategy: A course of action defined with respect to a particular real estate market phase. For example, consider the market strategy of avoiding real estate transactions when there is an oversupply of space available in the market.

Market Value: The most probable price that a property would bring in a competitive and open market under fair sale conditions. Market value also refers to an estimate of this price.

Mezzanine Financing: An additional level of financing provided to a private company to expand sales, market share, or develop new products. Most mezzanine financing is structured as a package of high coupon bonds with equity "kickers," i.e., rights to acquire the company's stock at a favorable price at a future point. Companies seeking mezzanine financing often have substantial revenues, and if not actual profits, the expectation of imminent profitability.

Midstream: Portion of the energy chain that transports and stores commodities such as oil and natural gas.

MMCF: One million cubic feet.



Multiples and Multiple Expansion: Managers purchasing public common stocks often buy companies with low price to earnings multiples when they believe some factor will induce other investors to bid up the price of the stock without an increase in actual earnings, thus causing the price multiple to expand. In the same fashion, a General Partner may purchase a private company with a low EBITDA multiple, expecting to profit through an expansion of that multiple. A typical example of a multiple expansion plan is consolidation. Many small companies, operating independently, may each be priced at relatively low multiples. But if purchased and combined into a larger, cohesive entity, investors might be willing to pay a higher multiple for the aggregate than for any individual component.

Natural Gas: A gaseous fossil fuel consisting primarily of methane and other heavier hydrocarbons. Natural gas burns cleaner than oil and coal and is a major source of electricity generation through the use of gas and steam turbines.

Net Metering: An arrangement that allows a facility to sell any excess energy it generates back to the electrical grid to offset its consumption.

Net Operating Income (NOI): The potential rental income plus other income, less vacancy, credit losses, and operating expenses.

Oil Sands: Naturally occurring mixtures of a very dense, tar-like form of petroleum called bitumen and sand or clay. Because of the high production and refining costs associated with oil sands, economic feasibility only occurs with high oil prices.

OPEC: OPEC (Organization of Petroleum Exporting Countries) is an oil cartel comprising twelve countries around the world.

Open-end Fund: A commingled fund that does not have a finite life, it continually accepts new investor capital and makes new property investments.

Operator: The party responsible for managing the asset; may be (and usually is) different than the owner/lessee of the asset.

Opportunistic: A phrase generally used by advisers and managers to describe investments in underperforming and/or undermanaged assets that hold the expectation of near-term increases in cash flow and value. Total return objectives for opportunistic strategies tend to be 20% or higher. Opportunistic investments typically involve a high degree of leverage - typically 60% to 100% on an asset basis and 60% to 80% on a portfolio basis.

Permanent Crops: Permanent crops include those grown on a tree or vine such as almonds, wine grapes, apples, and oranges. They are usually directly operated to produce higher income returns from crop sales but can carry a higher level or risk.

PFI: The Private Finance Initiative specifies a method, developed initially by the U.K. government, to provide financial support for Public-Private Partnerships. This has since been adopted as part of a wider reform program for the delivery of public services which is driven by the WTO, IMF & World Bank as a part of their "deregulation" and privatization drive. In return for their services, the private sector receives payment linked to its performance.

Pipeline: A system made of steel piping used to transport oil, gas, and other liquids from one location to another.

Placement Agent: Unlike public stock management companies, most of whom utilize an in-house sales force to market their services, private equity partnerships are generally marketed by third-party placement agents. These outside marketing firms and individuals are paid a commission by the General Partner.

Platform Company: Some private equity buyout funds attempt to add value by merging companies into larger, more cost efficient enterprises. This strategy generally begins with the acquisition of a platform company, often a market leader, to which other companies are added.

Possible Reserves: Reserves of oil or natural gas that have a less likely chance of being recovered than probable reserves. These reserves are often claimed as having a 10% certainty of being produced and are also known as P10 or 3P.



PPM (Private Placement Memorandum): Because Limited Partnership interests are not registered with the SEC, private equity managers must distribute a comprehensive document to prospective investors that describes the broad investment thesis of the partnership, and highlights any risks involved in the partnership. This document is called a Private Placement Memorandum.

PPP: A Public Private Partnership (or P3) is a system in which a government service or private business venture is funded and operated through a partnership of government and one or more private sector companies. Also referred to as Collective Development Agreements or Alternative Finance Procurement.

Precious Metals: Precious metals include gold, silver, palladium, and platinum. These metals have wide industrial uses but are better known for their usage in jewelry, art, and store of value.

Pre-merch (merchantable): Logs that do not meet the minimum size, quality, or usable volume required for the commercial sale of timber.

Privatization: The transfer of property or control of assets used to provide public services from the public sector to the private sector.

Probable Reserves: Probable reserves are those reserves based on median estimates and claim a 50% confidence of recoverability. These reserves are also known as P50 or 2P.

Producing Well: A well the produces oil and gas in sufficient quantities such that the revenue generated exceeds the associated production costs and taxes.

Property Type: The classification of commercial real estate based on its primary use. The four primary property types are: retail, industrial, office, and multi-family residential.

Proved Reserves: Reserves of oil or natural gas that are claimed to have a 90% certainty of being recovered using existing technology. The SEC only allows oil companies to report proved reserves to investors. Proved reserves are also known as P90 or 1P.

Public to Private: If a private partnership (or group of private partnerships) purchases all of the outstanding shares of a publicly traded company, the company's shares may be de-listed from the stock exchange. The company is then said to have been "taken private." For example, in June 1989, the private partnership Wings Holdings acquired the public stock of Northwest Airlines in a \$3.65 billion-dollar leveraged buyout. Following this acquisition, Northwest became a privately held corporation for the first time since 1941.

Pulpwood: Wood cut and chipped for the manufacturing of paper and paper related products. Pulpwood is typically too small or of insufficient quality for sawtimber and is classified as 6-9" DBH.

Real Estate Cycles (phases): The regularly repeating sequence of economic downturns and upturns and associated changes in real estate market transactions tied to market dynamics and changing macroeconomic conditions, whose phases include (in order) recession, recovery, expansion, and oversupply.

Real Estate Investment Trust (REIT): An investment vehicle in which investors purchase certificates of ownership in the trust, which in turn invests the money in real property and then distributes any profits to the investors. The trust is not subject to corporate income tax as long as it complies with the tax requirements for a REIT.

Shareholders must include their share of the REIT's income in their personal tax returns. (Barron's Dictionary of Real Estate Terms and Encyclopedia of Real Estate Terms 2nd Edition, Damien Abbott)

Real Estate Trends: Long-term movements or tendencies in the demand for commercial real estate (which can typically last for years or decades), usually tied to macro-economic or business cycles.

Renewable Energy: Energy derived from natural resources such as solar, wind, geothermal, or biofuels. Unlike oil, natural gas, or coal, these sources of energy are naturally replenished, providing a potential source of cleaner and more sustainable energy.

Row Crops: Row crops are those that are planted and harvested annually from the soil, as opposed to trees or vines, and include corn, cotton, rice, soybeans, and vegetables. Row crops are often eligible to receive federal subsidies.

Sawtimber: Timber of sufficient size and quality to be cut and harvested for lumber or other solid wood products. Sawtimber is usually derived from trees measuring 14" + DBH.



Secondary Fund: Occasionally, a Limited Partner will wish to sell his interest in a partnership before the term of the partnership is completed. Any such sale is termed a secondary market sale. A secondary fund creates a portfolio of partnership interests from earlier partnerships purchased in the secondary market. The advantage of a secondary fund is that it gives investors an opportunity to invest in seasoned partnerships from closed funds of prior vintage years.

Shadow Tolls: Payments made by government to the private sector operator of a road based, at least in part, on the number of vehicles using the road. They are currently in operation on some roads in the U.K., and they have also been adopted in other countries.

Solar Energy: Source of energy derived from the sun's light and heat. Common solar technologies include photovoltaics (PV) and solar thermal.

Sponsor: Every private equity opportunity that Meketa Investment Group evaluates is assigned to a sponsor. This individual, who is a member of Meketa Investment Group's Private Equity Investment Committee, is responsible for the collection of information and the evaluation of the opportunity.

Submarket: A segment or portion of a larger geographic market defined and identified on the basis of one or more attributes that distinguish it from other submarkets or locations.

Take Down/Draw Down: A take down or a draw down is the same as a capital call.

Term: The term of a private partnership is its expected lifetime, and is specified in the Private Placement Memorandum. Most partnerships have a term of ten years, with the option to extend the term once or twice by an additional year if the Limited Partners approve.

The term of a partnership consists of several phases. After the final closing, no new commitments are accepted and the partnership enters the commitment phase or investment phase, legally lasting up to six years, but generally lasting three to four years, during which the individual investments are made. A distribution phase follows, during which mature investments are realized and profits distributed to the partners. The final phase is the liquidation phase, during which all remaining properties and assets are sold in order to terminate the partnership.

Trade Sale: The most prevalent exit strategy for many private equity managers involves selling a company in the private markets, usually through an auction process, to other private equity investors or to larger companies. This type of exit is termed a trade sale.

Turnaround: A turnaround strategy involves buying a troubled company, usually for a relatively low price, and making significant managerial or organizational changes to better the company's operations and enhance profitability.

Upstream: Portion of the energy industry engaged in the exploration, production, and development of crude oil and natural gas reserves.

Vacancy: The number of units or space (of a specific commercial type) that are vacant and available for occupancy at a particular point in time within a given market (usually expressed as a vacancy rate).

Vacancy Rate: The percentage of the total supply of units or space of a specific commercial type that is vacant and available for occupancy at a particular point in time within a given market.

Value-added: A phrase generally used by advisers and managers to describe investments in underperforming and/or undermanaged assets. The objective is to generate 13 % to 18% returns.

VCOC (Venture Capital Operating Company): The IRS code defines one category of private partnerships to be venture capital operating companies for tax purposes. The General Partners of VCOCs are not required to register with the SEC as investment advisors. The name venture capital operating company relates only to the partnership's legal and tax structure, and does not imply that the partnership will invest in venture capital deals. For example, a middle market buyout fund, which invests only in mature companies with enterprise values of between \$200 million and \$1 billion, may be structured as a venture capital operating company.

Veneer: Continuous sheets of thin wood cut from trees measuring at least 16" + DBH. Veneer is commonly used in the manufacture of furniture and plywood.



Venture Capital: Money supplied to entrepreneurs to create new businesses is called venture capital. It is the first stage of financing for any new venture.

Traditionally, the recipient of the venture capital was a small group of entrepreneurs with an idea and a business plan, but no management team, corporate structure, revenues or profits. In the 1990s, however, venture capital was often used to seed established teams of entrepreneurs with well-defined products and in-place corporate structures. Thus, there is great variability in the meaning of venture capital and in the types of deals financed with venture capital money.

Vintage Year: The calendar year in which the first cash flow to a partnership occurred. This cash flow can be intended for management fees or investment capital. Vintage year can be used to differentiate the partnerships established over time by a General Partner, to track portfolio commitment pacing, and to benchmark portfolio performance.

Warrants: Just like publicly traded companies, private companies may issue warrants to their shareholders or to other groups providing some form of financing. A warrant is the right to purchase shares of the company's stock at a future date at a predetermined price, called the exercise price. Warrants become valuable if the exercise price is below the market price of the stock.

Wind Energy: Source of energy derived from wind motion that can be converted to electricity by turning a turbine and generator.



Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

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- [Risk Free Rate+Beta*(market return-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 is 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%.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991.

The Russell Indices®, TM, SM are trademarks/service marks of the Frank Russell Company.

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.

