

# Fresno County Employees' Retirement Association

Investment Performance Review

Period Ending: June 30, 2015



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SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

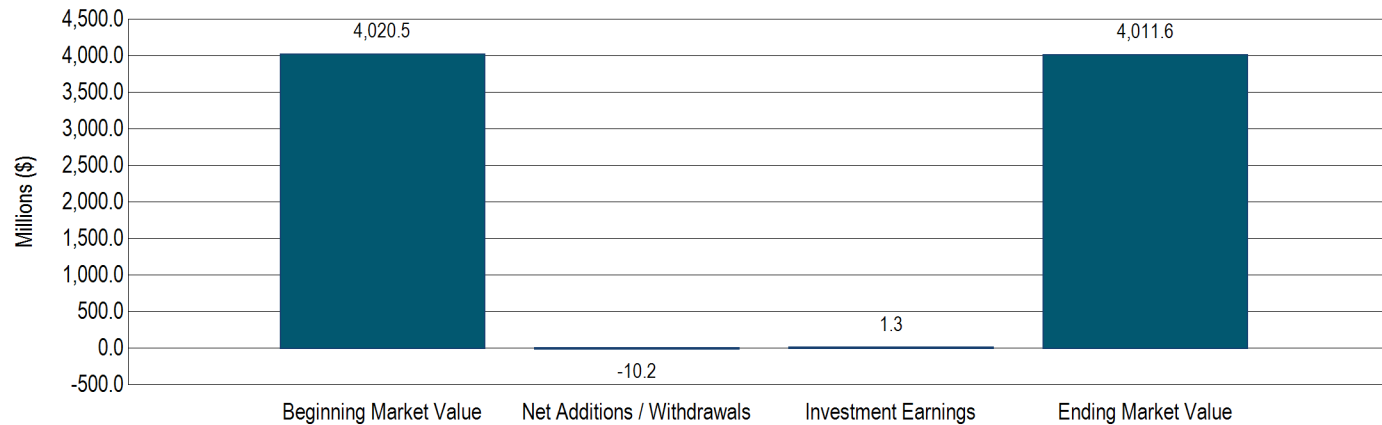
Total Fund  
Portfolio Reconciliation

Period Ending: June 30, 2015

Portfolio Reconciliation

Sources of Portfolio Growth	Last Three Months	Year-To-Date
Beginning Market Value	\$4,020,527,342	\$3,973,404,368
Net Additions/Withdrawals	-\$10,221,890	-\$17,231,406
Investment Earnings	\$1,337,334	\$55,469,824
Ending Market Value	\$4,011,642,786	\$4,011,642,786

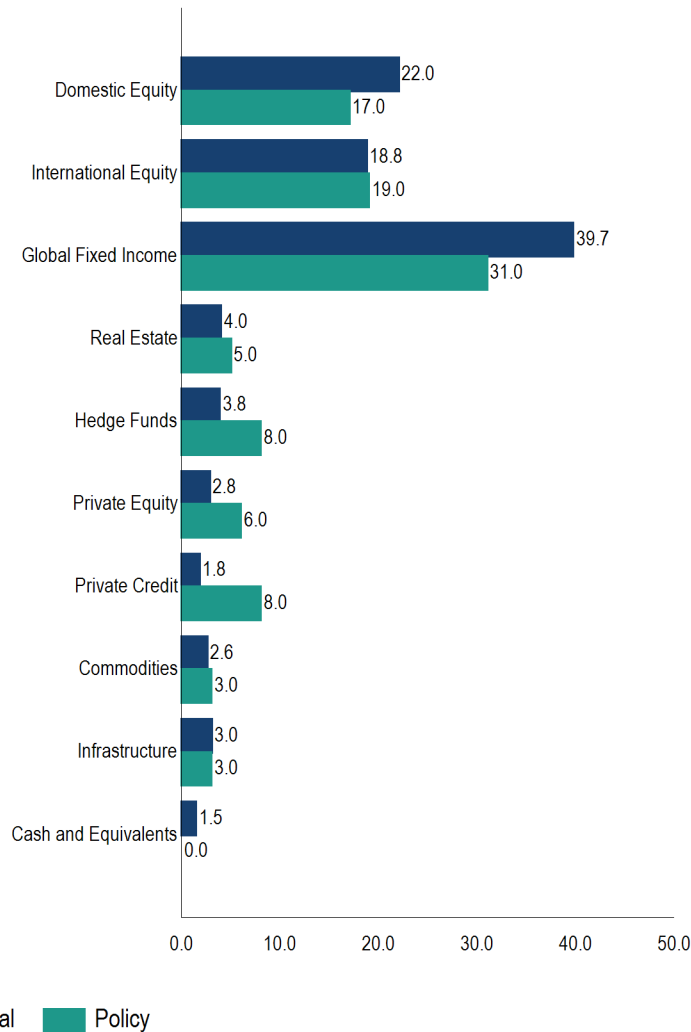
Change in Market Value  
Last Three Months



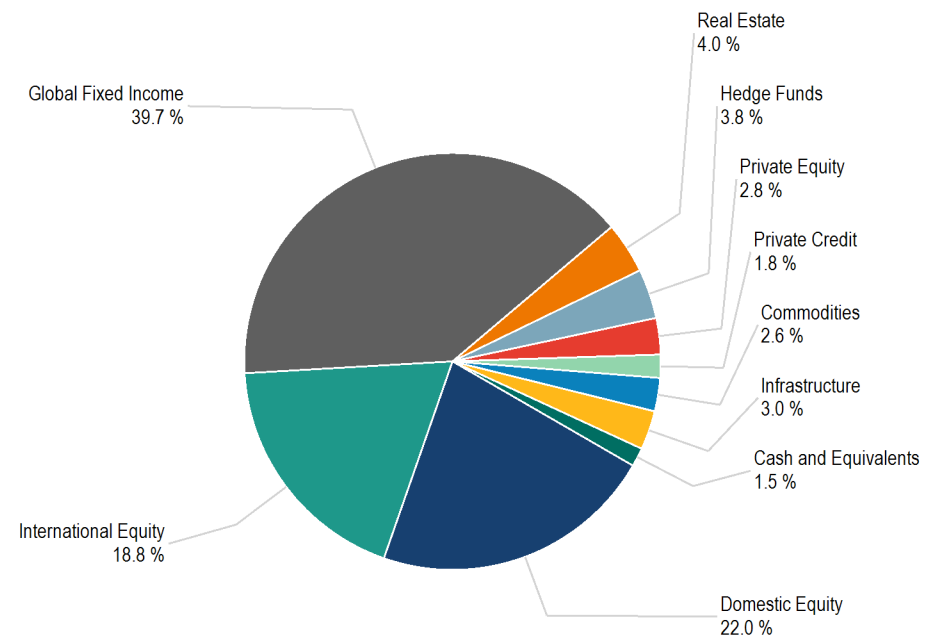
# Total Fund Asset Allocation

Period Ending: June 30, 2015

Actual vs Target Allocation (%)



Current Allocation



# Total Fund Manager Allocation

Period Ending: June 30, 2015

	Market Value	% of Portfolio
<b>Total Fund</b>	<b>4,011,642,786</b>	<b>100.0</b>
<b>Domestic Equity</b>	<b>882,929,577</b>	<b>22.0</b>
SSgA S&P 500 Flagship Fund	235,863,934	5.9
Waddell & Reed	255,014,720	6.4
Aronson Johnson Ortiz	249,200,322	6.2
Systematic Small/Mid Cap Value	73,285,202	1.8
Kalmar Investments Management	69,565,399	1.7
<b>International Equity</b>	<b>752,312,288</b>	<b>18.8</b>
Artisan International Growth	185,216,766	4.6
Research Affiliates International Equity	168,510,510	4.2
Mondrian International Small Cap	125,824,561	3.1
Mondrian Emerging Markets	272,760,450	6.8
<b>Global Fixed Income</b>	<b>1,593,972,372</b>	<b>39.7</b>
Brandywine Global Sovereign	283,676,930	7.1
Western Asset Investment Grade Credit	201,343,472	5.0
Loomis Sayles High Yield	209,854,012	5.2
Eaton Vance Senior Loan Fund	203,968,762	5.1
SSgA TIPS	156,032,421	3.9
Barclays U.S. Aggregate Index Fund	368,647,490	9.2
PIMCO Emerging Local Bond Ins	170,449,285	4.2
<b>Real Estate</b>	<b>159,532,803</b>	<b>4.0</b>
Invesco Core Real Estate	133,046,163	3.3
TA Realty IX	26,486,640	0.7
<b>Hedge Funds</b>	<b>154,312,475</b>	<b>3.8</b>
Grosvenor	154,312,475	3.8
<b>Private Equity</b>	<b>113,291,859</b>	<b>2.8</b>
Landmark Equity XIV, L.P.	17,208,351	0.4
New Mountain Partners III	13,200,846	0.3
Hamilton Lane VI	45,956,850	1.1
WP Private Equity X, L.P.	19,123,988	0.5
Blackstone IV	6,126,673	0.2
WP Private Equity VIII, L.P.	9,139,949	0.2

	Market Value	% of Portfolio
Landmark Equity X, L.P.	1,158,099	0.0
New Mountain Partners, L.P.	481,720	0.0
WP Equity Partners, L.P.	895,383	0.0
<b>Private Credit</b>	<b>71,903,437</b>	<b>1.8</b>
GSO European Senior Debt	171,973	0.0
CVI Credit Value Fund III	3,000,000	0.1
Colony Distressed Credit III, L.P.	7,441,199	0.2
Oaktree Opportunities IX, L.P.	14,170,191	0.4
KKR Mezzanine Partners	21,887,104	0.5
Angelo Gordon VII	10,751,968	0.3
Colony Distressed Credit I, L.P.	13,709,700	0.3
Lone Star Fund IV	196,712	0.0
TCW Shop IV	9,450	0.0
TCW Shop III	565,140	0.0
<b>Commodities</b>	<b>103,657,307</b>	<b>2.6</b>
Invesco Commodities	103,657,307	2.6
<b>Infrastructure</b>	<b>121,432,652</b>	<b>3.0</b>
IFM Infrastructure	121,432,652	3.0
<b>Cash and Equivalents</b>	<b>58,298,017</b>	<b>1.5</b>
Benefits Payment Cash	163,359	0.0
Custodied	7,708,386	0.2
Internal	50,201,765	1.3
Transition	224,507	0.0

# Total Fund Executive Summary (Gross of Fees)

Period Ending: June 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Fund</b>	<b>4,011,642,786</b>	<b>100.0</b>	<b>0.1</b>	<b>1.4</b>	<b>0.1</b>	<b>9.8</b>	<b>10.1</b>	<b>7.1</b>	<b>3.8</b>	<b>16.6</b>	<b>13.5</b>	<b>0.1</b>	<b>16.3</b>
Policy Index			0.2	0.6	-2.1	8.4	9.4	5.7	2.6	15.6	12.3	0.1	13.2
InvestorForce Public DB > \$1B Gross Rank			68	95	97	73	71	25	93	29	42	76	2
<b>Total Domestic Equity</b>	<b>882,929,577</b>	<b>22.0</b>	<b>0.3</b>	<b>3.4</b>	<b>8.0</b>	<b>18.6</b>	<b>18.3</b>	<b>8.3</b>	<b>10.1</b>	<b>37.2</b>	<b>16.1</b>	<b>0.9</b>	<b>20.9</b>
Russell 3000			0.1	1.9	7.3	17.7	17.5	8.2	12.6	33.6	16.4	1.0	16.9
eA US All Cap Equity Gross Rank			48	46	40	44	36	75	50	34	40	37	32
<b>Total International Equity</b>	<b>752,312,288</b>	<b>18.8</b>	<b>0.6</b>	<b>2.5</b>	<b>-5.5</b>	<b>11.3</b>	<b>9.5</b>	<b>7.3</b>	<b>-2.1</b>	<b>19.3</b>	<b>19.5</b>	<b>-11.3</b>	<b>14.9</b>
MSCI ACWI ex USA Gross			0.7	4.3	-4.8	9.9	8.2	6.0	-3.4	15.8	17.4	-13.3	11.6
eA ACWI ex-US All Cap Equity Gross Rank			74	93	87	66	82	51	51	51	53	48	52
<b>Total Fixed Income</b>	<b>1,593,972,372</b>	<b>39.7</b>	<b>-1.4</b>	<b>-0.8</b>	<b>-1.2</b>	<b>2.7</b>	<b>4.8</b>	<b>5.7</b>	<b>5.1</b>	<b>-0.9</b>	<b>9.9</b>	<b>6.9</b>	<b>11.4</b>
Barclays Aggregate*			-1.2	-3.1	-7.1	-1.1	1.5	3.5	0.0	-2.0	4.2	7.8	6.5
eA Global Fixed Inc Unhedged Gross Rank			68	53	35	49	40	33	15	55	47	25	22
<b>Total Real Estate</b>	<b>280,965,455</b>	<b>7.0</b>	<b>3.4</b>	<b>6.8</b>	<b>14.2</b>	<b>12.1</b>	<b>11.8</b>	<b>8.1</b>	<b>12.9</b>	<b>12.4</b>	<b>8.5</b>	<b>11.1</b>	<b>14.0</b>
NCREIF-ODCE			3.8	7.3	14.4	13.1	14.4	6.8	12.5	13.9	10.9	16.0	16.4
<b>Total Hedge Funds</b>	<b>154,312,475</b>	<b>3.8</b>	<b>0.9</b>	<b>2.9</b>	<b>3.6</b>	<b>6.1</b>	<b>4.6</b>	<b>--</b>	<b>4.2</b>	<b>9.0</b>	<b>3.5</b>	<b>1.8</b>	<b>2.8</b>
HFRI Fund of Funds Composite Index			0.2	2.7	3.9	6.3	4.1	--	3.4	9.0	4.8	-5.7	5.7
<b>Total Commodities</b>	<b>103,657,307</b>	<b>2.6</b>	<b>7.3</b>	<b>1.1</b>	<b>-21.5</b>	<b>-7.6</b>	<b>-3.1</b>	<b>--</b>	<b>-16.7</b>	<b>-9.0</b>	<b>-0.6</b>	<b>-13.2</b>	<b>--</b>
Bloomberg Commodity Index TR USD			4.7	-1.6	-23.7	-8.8	-3.9	--	-17.0	-9.5	-1.1	-13.3	--
<b>Total Alternative Illiquids</b>	<b>185,195,296</b>	<b>4.6</b>	<b>0.3</b>	<b>0.8</b>	<b>0.2</b>	<b>11.0</b>	<b>10.3</b>	<b>9.8</b>	<b>5.6</b>	<b>19.8</b>	<b>13.2</b>	<b>5.7</b>	<b>11.7</b>
Russell 3000 + 2.5%			0.8	3.2	10.0	20.6	20.4	10.8	15.3	36.8	19.3	3.6	19.8
<b>Total Cash</b>	<b>58,298,017</b>	<b>1.5</b>	<b>-0.3</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>1.8</b>	<b>0.1</b>	<b>0.4</b>	<b>0.1</b>	<b>0.4</b>	<b>2.1</b>
91 Day T-Bills			0.0	0.0	0.0	0.0	0.1	1.3	0.0	0.0	0.1	0.0	0.1

Policy Index (effective 3/19/2014 Q2 floating policy until rebalance is complete, weights shown are as of 6/30/2015. See explanatory notes for monthly policy breakout): 21.0% Russell 3000 Index, 41.6% BC Global Aggregate Index, 19% MSCI ACWI ex US, 2.8% Russell 3000 Index + 250 BP, 1.7% BC Global Agg + 250 BP, 3.8% HFRI FoF Composite, 8% NFI ODCE, & 3% Bloomberg Commodity Index. Composite total market values reflect manager exposures and any underlying cash balances. De-risking of the Plan commenced on April 30, 2014.

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

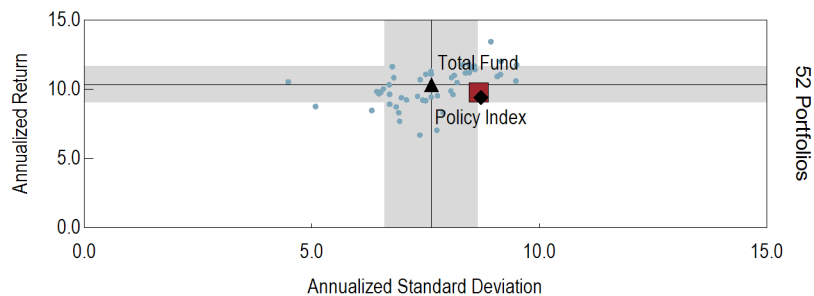
# Total Fund

## Executive Summary (Net of Fees)

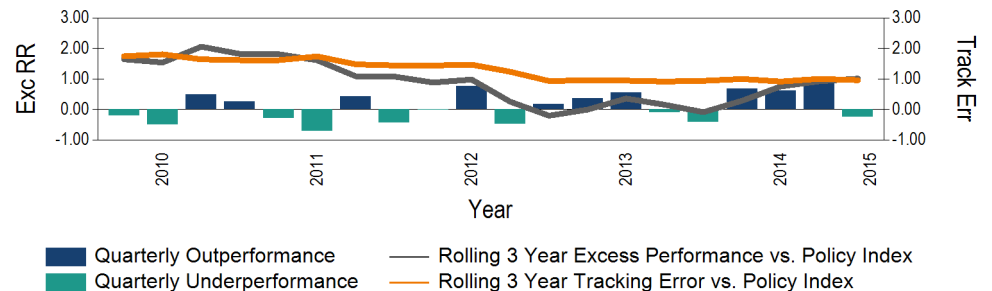
Period Ending: June 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Fund</b>	<b>4,011,642,786</b>	<b>100.0</b>	<b>0.0</b>	<b>1.3</b>	<b>-0.2</b>	<b>9.4</b>	<b>9.8</b>	<b>6.8</b>	<b>3.5</b>	<b>16.3</b>	<b>13.1</b>	<b>-0.2</b>	<b>15.9</b>
<i>Policy Index</i>			0.2	0.6	-2.1	8.4	9.4	5.7	2.6	15.6	12.3	0.1	13.2
<b>Total Domestic Equity</b>	<b>882,929,577</b>	<b>22.0</b>	<b>0.2</b>	<b>3.2</b>	<b>7.7</b>	<b>18.3</b>	<b>18.0</b>	<b>--</b>	<b>9.8</b>	<b>36.8</b>	<b>15.8</b>	<b>0.6</b>	<b>20.5</b>
<i>Russell 3000</i>			0.1	1.9	7.3	17.7	17.5	--	12.6	33.6	16.4	1.0	16.9
<b>Total International Equity</b>	<b>752,312,288</b>	<b>18.8</b>	<b>0.4</b>	<b>2.2</b>	<b>-5.9</b>	<b>10.9</b>	<b>9.0</b>	<b>--</b>	<b>-2.5</b>	<b>18.7</b>	<b>19.0</b>	<b>-11.7</b>	<b>14.2</b>
<i>MSCI ACWI ex USA Gross</i>			0.7	4.3	-4.8	9.9	8.2	--	-3.4	15.8	17.4	-13.3	11.6
<b>Total Fixed Income</b>	<b>1,593,972,372</b>	<b>39.7</b>	<b>-1.5</b>	<b>-0.9</b>	<b>-1.4</b>	<b>2.5</b>	<b>4.6</b>	<b>--</b>	<b>5.0</b>	<b>-1.1</b>	<b>9.6</b>	<b>6.6</b>	<b>11.1</b>
<i>Barclays Aggregate*</i>			-1.2	-3.1	-7.1	-1.1	1.5	--	0.0	-2.0	4.2	7.8	6.5
<b>Total Real Estate</b>	<b>280,965,455</b>	<b>7.0</b>	<b>3.2</b>	<b>6.4</b>	<b>13.3</b>	<b>11.4</b>	<b>11.1</b>	<b>--</b>	<b>12.1</b>	<b>11.8</b>	<b>8.0</b>	<b>10.7</b>	<b>13.5</b>
<i>NCREIF-ODCE</i>			3.8	7.3	14.4	13.1	14.4	--	12.5	13.9	10.9	16.0	16.4
<b>Total Hedge Funds</b>	<b>154,312,475</b>	<b>3.8</b>	<b>0.7</b>	<b>2.4</b>	<b>2.8</b>	<b>5.0</b>	<b>3.5</b>	<b>3.8</b>	<b>3.1</b>	<b>7.8</b>	<b>2.2</b>	<b>0.4</b>	<b>1.5</b>
<i>HFRI Fund of Funds Composite Index</i>			0.2	2.7	3.9	6.3	4.1	3.2	3.4	9.0	4.8	-5.7	5.7
<b>Total Commodities</b>	<b>103,657,307</b>	<b>2.6</b>	<b>7.2</b>	<b>0.9</b>	<b>-21.8</b>	<b>-7.9</b>	<b>-3.3</b>	<b>--</b>	<b>-16.9</b>	<b>-9.4</b>	<b>-0.9</b>	<b>-13.2</b>	<b>--</b>
<i>Bloomberg Commodity Index TR USD</i>			4.7	-1.6	-23.7	-8.8	-3.9	--	-17.0	-9.5	-1.1	-13.3	--
<b>Total Alternative Illiquids</b>	<b>185,195,296</b>	<b>4.6</b>	<b>0.3</b>	<b>0.6</b>	<b>0.0</b>	<b>10.8</b>	<b>10.0</b>	<b>9.5</b>	<b>5.5</b>	<b>19.6</b>	<b>13.0</b>	<b>5.4</b>	<b>11.4</b>
<i>Russell 3000 + 2.5%</i>			0.8	3.2	10.0	20.6	20.4	10.8	15.3	36.8	19.3	3.6	19.8
<b>Total Cash</b>	<b>58,298,017</b>	<b>1.5</b>	<b>-0.3</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>--</b>	<b>0.1</b>	<b>0.4</b>	<b>0.1</b>	<b>0.4</b>	<b>2.1</b>
<i>91 Day T-Bills</i>			0.0	0.0	0.0	0.0	0.1	--	0.0	0.0	0.1	0.0	0.1

Annualized Return vs. Annualized Standard Deviation  
Total Fund vs. InvestorForce Public DB > \$1B Net Universe



Annualized Excess Performance and Tracking Error



Policy Index (effective 3/19/2014 Q2 floating policy until rebalance is complete, weights shown are as of 6/30/2015. See explanatory notes for monthly policy breakout): 21.0% Russell 3000 Index, 41.6% BC Global Aggregate Index, 19% MSCI ACWI ex US, 2.8% Russell 3000 Index + 250 BP, 1.7% BC Global Agg + 250 BP, 3.8% HFRI FoF Composite, 8% NFI ODCE, & 3% Bloomberg Commodity Index. Composite total market values reflect manager exposures and any underlying cash balances. De-risking of the Plan commenced on April 30, 2014.

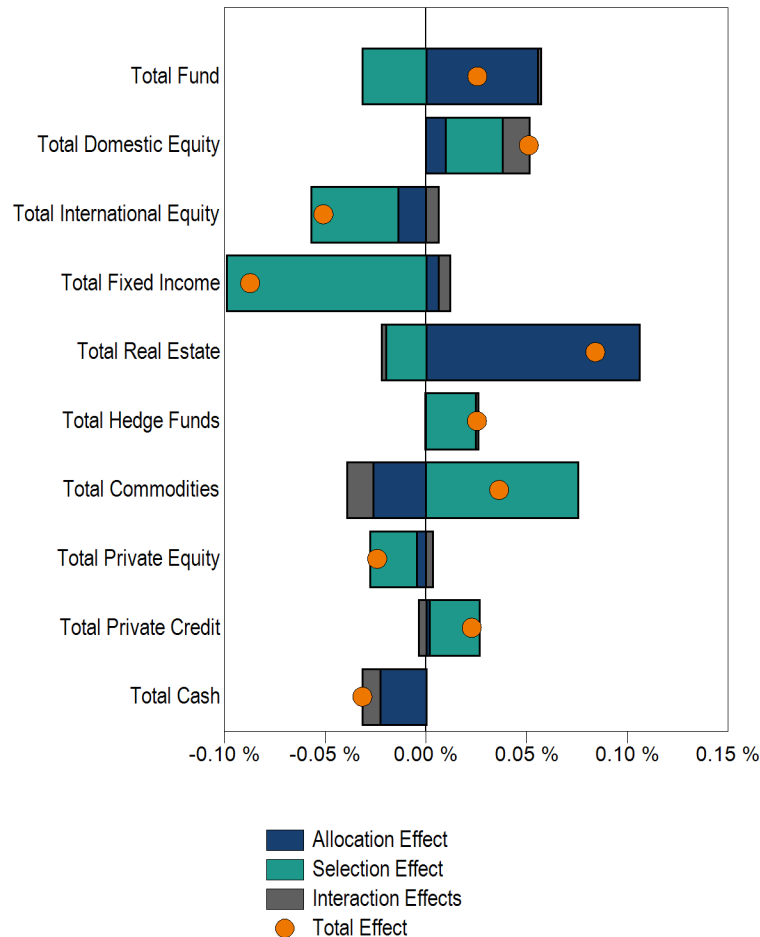
\*Prior to 3/31/2014 Barclays U.S. Aggregate Index and as of 4/1/2014 Barclays Global Aggregate Index.

# Total Fund

## Attribution Analysis - Asset Class Level (Gross of Fees)

Period Ending: June 30, 2015

Attribution Effects  
Last Three Months



Performance Attribution

	Quarter	YTD
Wtd. Actual Return	0.06%	1.44%
Wtd. Index Return *	0.03%	0.45%
<b>Excess Return</b>	<b>0.03%</b>	<b>0.99%</b>
Selection Effect	-0.03%	0.97%
Allocation Effect	0.06%	0.03%
Interaction Effect	0.00%	0.00%

\*Calculated from benchmark returns and weightings of each component.

Attribution Summary  
Last Three Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Domestic Equity	0.26%	0.14%	0.12%	0.03%	0.01%	0.01%	0.05%
Total International Equity	0.55%	0.72%	-0.17%	-0.04%	-0.01%	0.01%	-0.05%
Total Fixed Income	-1.41%	-1.18%	-0.23%	-0.10%	0.01%	0.01%	-0.09%
Total Real Estate	3.41%	3.82%	-0.41%	-0.02%	0.11%	0.00%	0.08%
Total Hedge Funds	0.86%	0.18%	0.68%	0.02%	0.00%	0.00%	0.03%
Total Commodities	7.34%	4.66%	2.68%	0.08%	-0.03%	-0.01%	0.04%
Total Private Equity	0.12%	0.76%	-0.64%	-0.02%	0.00%	0.00%	-0.02%
Total Private Credit	0.64%	-0.56%	1.21%	0.02%	0.00%	0.00%	0.02%
Total Cash	-0.31%	0.00%	-0.31%	0.00%	-0.02%	-0.01%	-0.03%
<b>Total</b>	<b>0.06%</b>	<b>0.03%</b>	<b>0.03%</b>	<b>-0.03%</b>	<b>0.06%</b>	<b>0.00%</b>	<b>0.03%</b>

Weighted returns shown in attribution analysis may differ from actual returns.

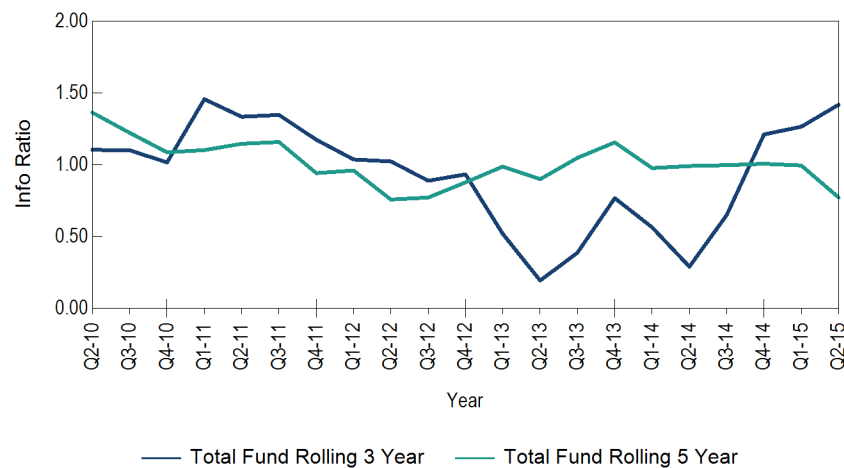
# Total Fund

## Risk Analysis - 5 Years (Gross of Fees)

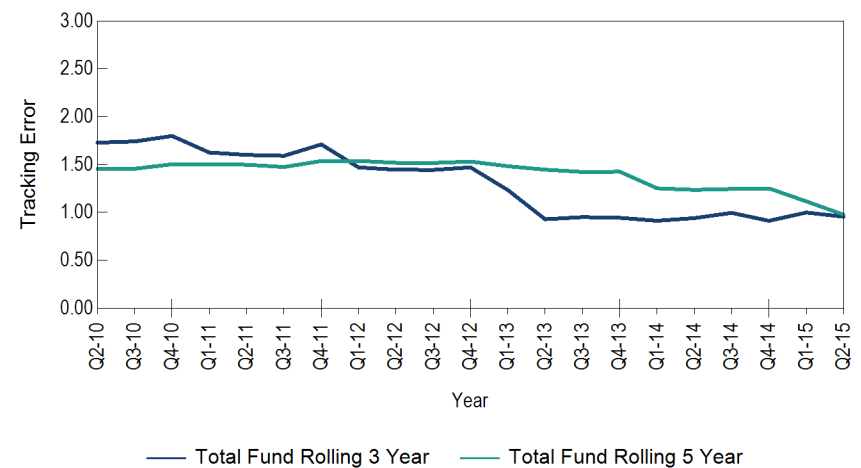
Period Ending: June 30, 2015

	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
Total Fund	8.67%	0.86%	0.99	0.99	105.17%	93.48%	0.77	0.97%	1.16	1.19
Total Domestic Equity	14.61%	-0.69%	1.08	0.99	109.85%	113.43%	0.37	1.96%	1.25	1.09
Total International Equity	14.89%	1.65%	0.95	0.99	100.92%	89.61%	0.67	1.86%	0.63	0.72
Total Domestic Fixed Income	3.29%	2.83%	0.78	0.52	138.59%	53.61%	0.88	2.38%	1.63	2.23
Total Real Estate	2.54%	5.02%	0.47	0.10	77.57%	--	-1.02	2.58%	4.60	--
Total Hedge Funds	2.28%	3.24%	0.34	0.43	75.47%	1.58%	0.16	3.37%	2.00	14.54
Total Alternative Illiquids	6.27%	4.28%	0.29	0.40	34.79%	28.86%	-0.95	10.71%	1.63	1.79

Rolling Information Ratio



Rolling Tracking Error



# Total Fund (Historical)

## Risk Analysis by Manager - 5 Years (Gross of Fees)

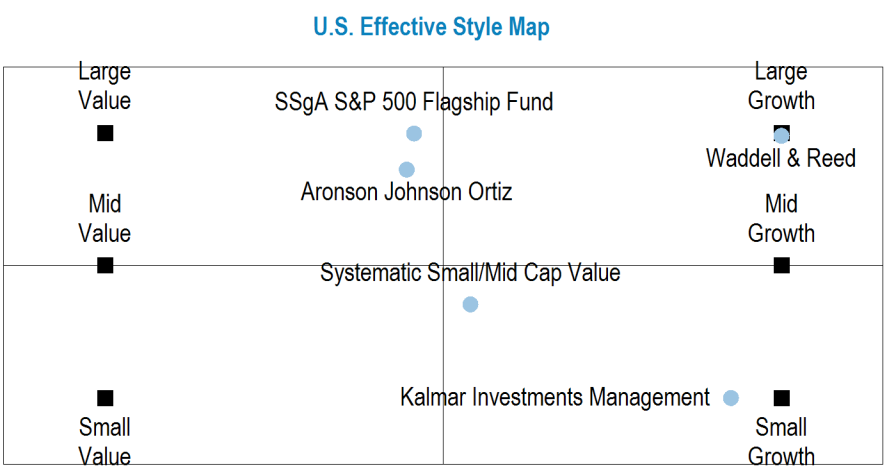
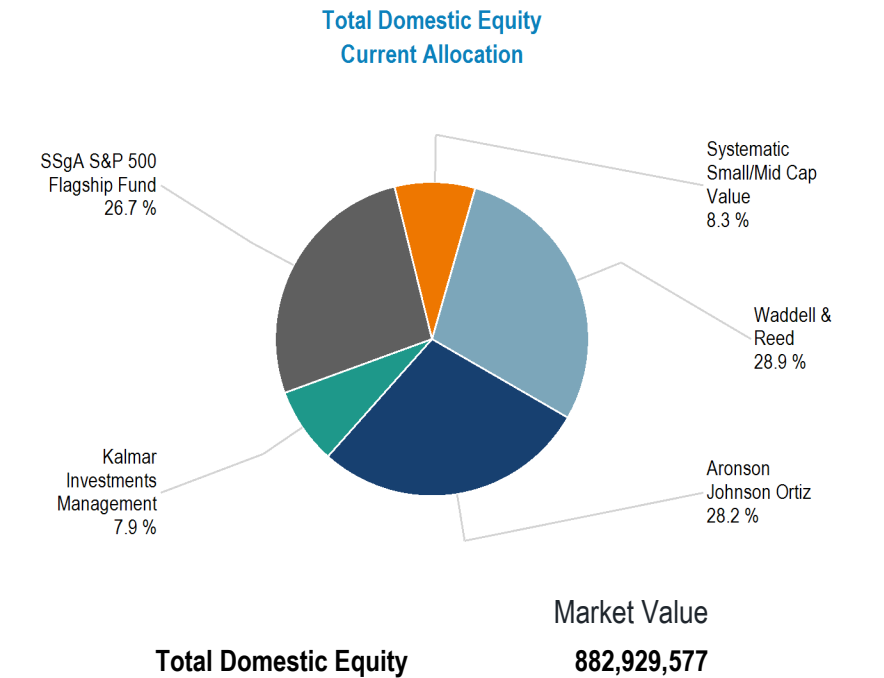
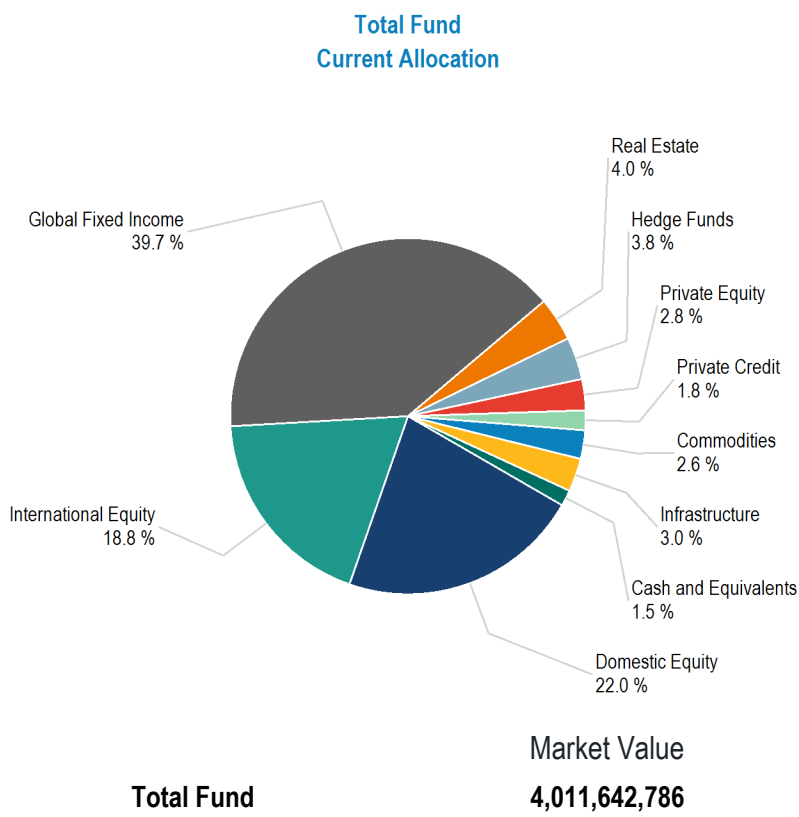
Period Ending: June 30, 2015

	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
SSgA S&P 500 Flagship Fund	12.72%	0.03%	1.00	1.00	100.16%	99.91%	1.27	0.02%	1.36	1.20
Waddell & Reed	13.56%	-0.27%	1.01	0.97	101.94%	105.75%	0.00	2.34%	1.37	1.51
Aronson Johnson Ortiz	14.09%	1.24%	1.03	0.97	107.36%	87.95%	0.68	2.53%	1.29	0.99
Systematic Small/Mid Cap Value	18.71%	-0.20%	1.10	0.97	114.24%	106.90%	0.37	3.81%	0.94	0.86
Kalmar Investments Management	18.24%	-0.70%	0.97	0.95	89.59%	94.73%	-0.32	4.06%	0.99	1.25
Artisan International Growth	15.43%	5.10%	0.97	0.93	120.31%	76.68%	1.15	4.21%	0.93	0.94
Research Affiliates International Equity	16.37%	0.72%	1.05	0.96	109.36%	99.62%	0.35	3.42%	0.65	0.77
Mondrian International Small Cap	15.88%	1.85%	0.89	0.95	92.14%	85.91%	0.14	4.02%	0.79	0.95
Mondrian Emerging Markets	16.22%	1.23%	0.89	0.92	83.44%	80.78%	0.16	5.02%	0.29	0.42
Brandywine Global Sovereign	5.80%	3.42%	0.88	0.79	115.99%	41.60%	1.19	2.78%	0.74	1.78
Western Asset Investment Grade Credit	4.28%	1.03%	1.00	0.95	113.76%	87.54%	1.03	0.99%	1.38	2.85
Loomis Sayles High Yield	7.74%	0.16%	1.19	0.87	126.11%	117.03%	0.60	2.97%	1.34	1.20
Eaton Vance Senior Loan Fund	2.73%	1.20%	0.75	0.96	88.85%	52.44%	-0.14	1.02%	1.93	2.20
SSgA TIPS	5.29%	-0.02%	1.00	1.00	99.65%	100.16%	-0.88	0.03%	0.61	0.68
PIMCO Emerging Local Bond Ins	10.38%	0.01%	0.99	0.98	102.27%	101.65%	0.00	1.29%	0.09	0.15
Invesco Core Real Estate	3.21%	-8.63%	1.63	0.72	103.36%	--	0.19	1.99%	4.59	--
Grosvenor	4.65%	3.20%	0.98	0.86	147.37%	63.13%	1.78	1.76%	1.54	1.26

Manager risk analysis statistics are run against historical composite returns prior to manager since inception.

# Total Domestic Equity Performance Summary

Period Ending: June 30, 2015



Style map is based on gross of fee returns.

# Total Domestic Equity Performance Summary (Gross of Fees)

Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Domestic Equity</b>	<b>882,929,577</b>											
SSgA S&P 500 Flagship Fund	235,863,934	0.3	1.2	7.4	17.3	17.4	7.9	13.7	32.4	16.0	2.1	15.1
S&P 500		0.3	1.2	7.4	17.3	17.3	7.9	13.7	32.4	16.0	2.1	15.1
eA US Large Cap Equity Gross Rank		53	63	53	61	52	75	35	61	44	33	46
Waddell & Reed	255,014,720	-0.2	4.9	12.2	19.6	--	--	12.9	36.9	12.5	3.0	--
Russell 1000 Growth		0.1	4.0	10.6	18.0	--	--	13.0	33.5	15.3	2.6	--
eA US Large Cap Growth Equity Gross Rank		76	44	40	30	--	--	39	28	84	20	--
Aronson Johnson Ortiz	249,200,322	0.3	3.1	6.9	19.2	18.2	8.1	10.0	38.4	17.4	2.7	16.1
Russell 1000 Value		0.1	-0.6	4.1	17.3	16.5	7.0	13.5	32.5	17.5	0.4	15.5
eA US Large Cap Value Equity Gross Rank		52	10	26	30	20	55	81	17	32	30	27
Systematic Small/Mid Cap Value	73,285,202	0.3	6.4	3.2	19.2	--	--	4.4	37.6	18.1	-4.4	--
Russell 2500 Value		-1.3	1.7	1.0	17.0	--	--	7.1	33.3	19.2	-3.4	--
eA US Small-Mid Cap Value Equity Gross Rank		39	17	61	41	--	--	69	37	35	70	--
Kalmar Investments Management	69,565,399	-0.2	5.1	4.5	15.6	18.0	10.1	-4.5	44.9	14.8	1.7	37.3
Russell 2000 Growth		2.0	8.7	12.3	20.1	19.3	9.9	5.6	43.3	14.6	-2.9	29.1
eA US Small Cap Growth Equity Gross Rank		91	89	92	91	79	62	89	56	44	32	10

Winslow Capital Management and Wellington Management Large Cap Value were liquidated in Q2 2015.

# Total Domestic Equity Performance Summary (Net of Fees)

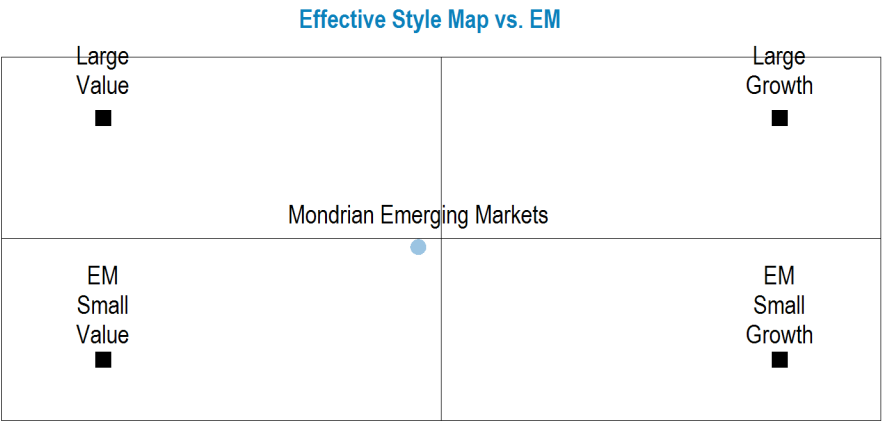
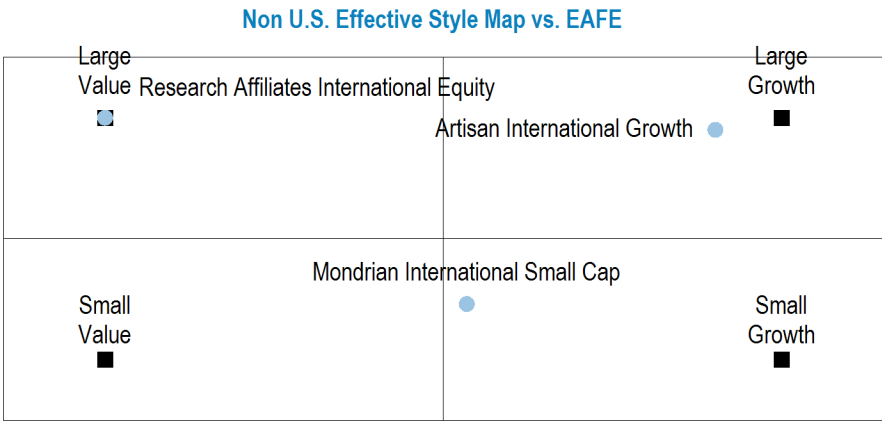
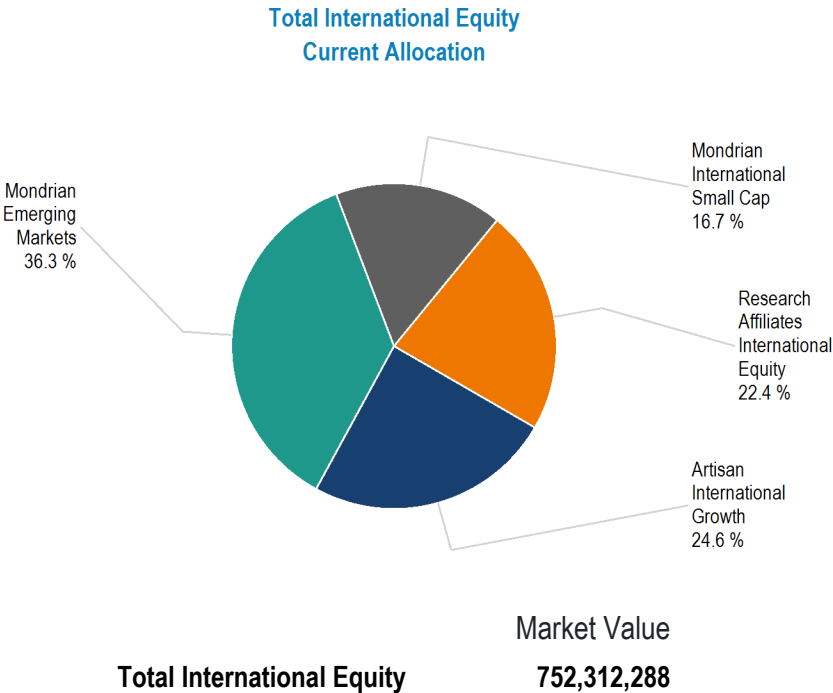
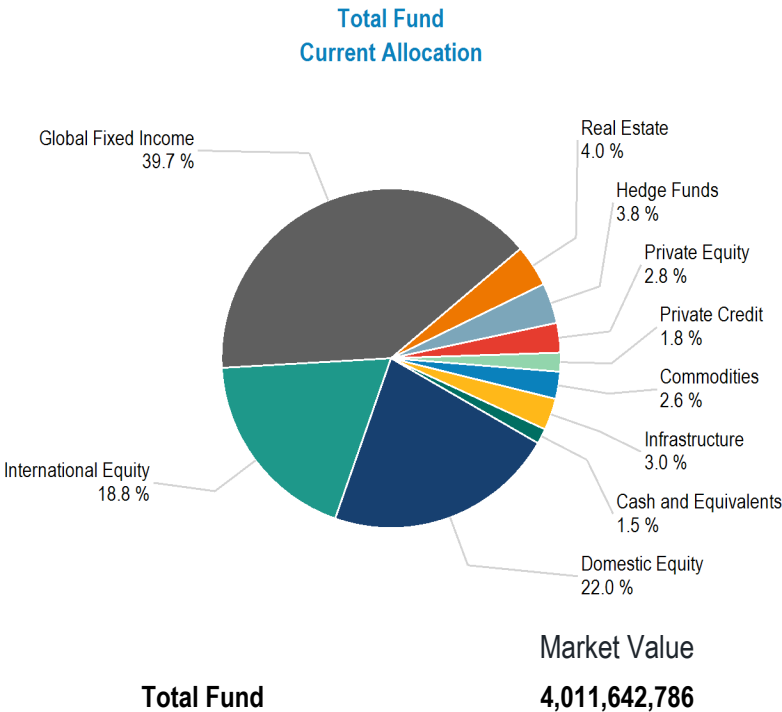
Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Domestic Equity</b>	<b>882,929,577</b>													
SSgA S&P 500 Flagship Fund	235,863,934	0.3	1.2	7.4	17.3	17.3	7.9	13.7	32.4	16.0	2.1	15.0	7.7	Mar-04
<i>S&amp;P 500</i>		0.3	1.2	7.4	17.3	17.3	7.9	13.7	32.4	16.0	2.1	15.1	7.7	Mar-04
Waddell & Reed	255,014,720	-0.3	4.7	11.9	19.3	--	--	12.7	36.6	12.3	2.7	--	14.8	Dec-10
<i>Russell 1000 Growth</i>		0.1	4.0	10.6	18.0	--	--	13.0	33.5	15.3	2.6	--	14.8	Dec-10
Aronson Johnson Ortiz	249,200,322	0.2	3.0	6.6	18.8	17.8	7.8	9.6	38.0	17.0	2.4	15.8	10.9	Dec-95
<i>Russell 1000 Value</i>		0.1	-0.6	4.1	17.3	16.5	7.0	13.5	32.5	17.5	0.4	15.5	8.9	Dec-95
Systematic Small/Mid Cap Value	73,285,202	0.3	6.2	2.8	18.8	--	--	4.0	37.2	17.6	-4.7	--	14.5	Oct-10
<i>Russell 2500 Value</i>		-1.3	1.7	1.0	17.0	--	--	7.1	33.3	19.2	-3.4	--	14.3	Oct-10
Kalmar Investments Management	69,565,399	-0.4	4.7	3.7	14.7	17.1	9.2	-5.3	43.9	13.9	0.9	36.3	9.0	Nov-04
<i>Russell 2000 Growth</i>		2.0	8.7	12.3	20.1	19.3	9.9	5.6	43.3	14.6	-2.9	29.1	9.4	Nov-04

Winslow Capital Management and Wellington Management Large Cap Value were liquidated in Q2 2015.

# Total International Equity Performance Summary

Period Ending: June 30, 2015



Style maps are based on gross of fee returns.

Total International Equity  
Performance Summary (Gross of Fees)

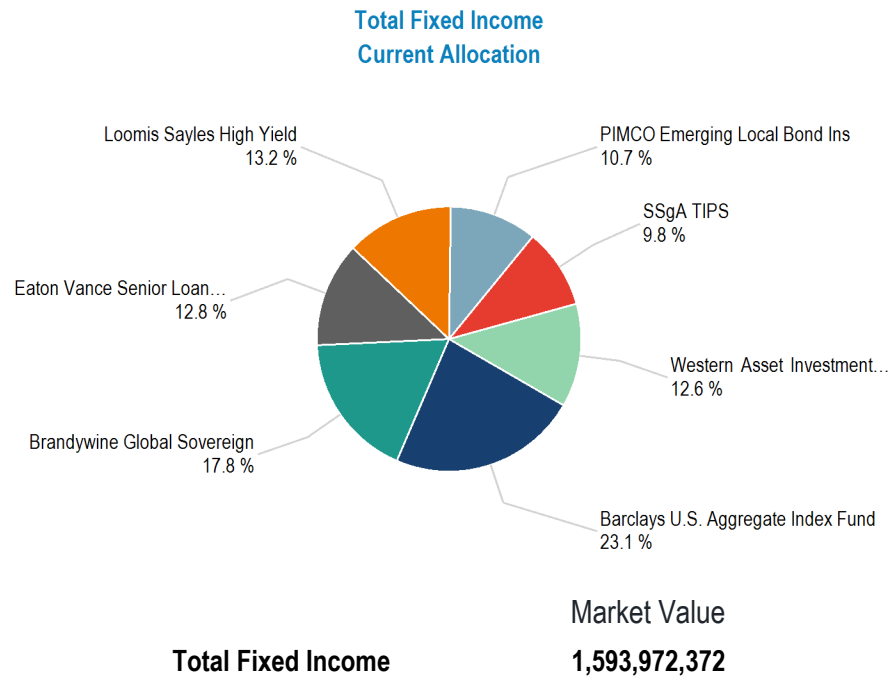
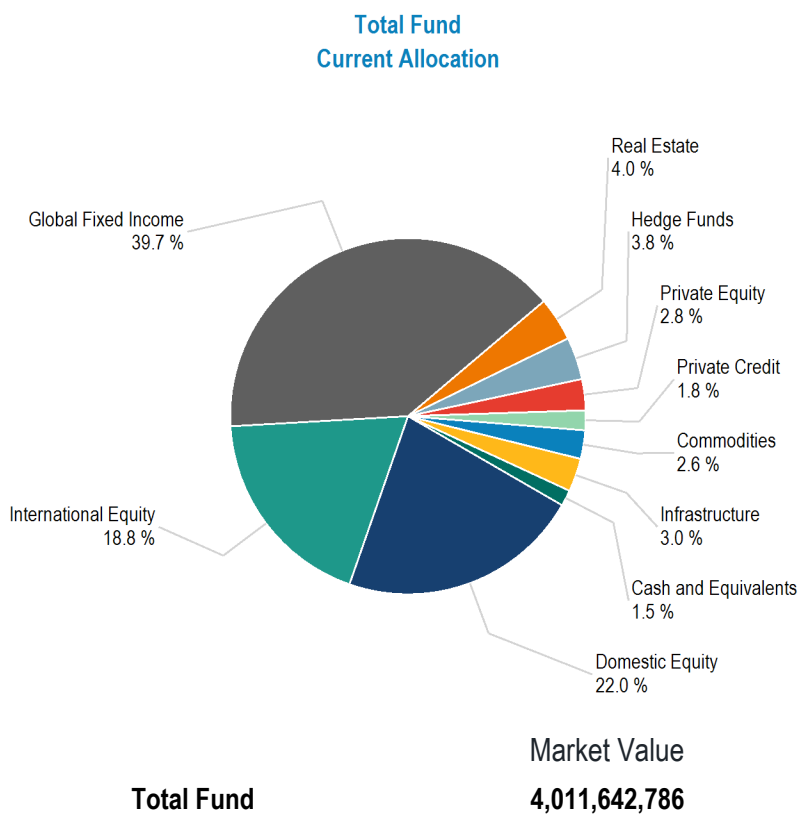
Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>International Equity</b>	<b>752,312,288</b>											
Artisan International Growth	185,216,766	-0.1	4.2	0.6	--	--	--	0.6	--	--	--	--
MSCI EAFE		0.6	5.5	-4.2	--	--	--	-4.9	--	--	--	--
eA EAFE All Cap Equity Gross Rank		96	87	23	--	--	--	12	--	--	--	--
Research Affiliates International Equity	168,510,510	0.7	3.3	-7.9	13.7	--	--	-5.5	29.2	18.7	--	--
MSCI EAFE		0.6	5.5	-4.2	12.0	--	--	-4.9	22.8	17.3	--	--
eA EAFE All Cap Equity Gross Rank		83	94	97	50	--	--	74	13	63	--	--
Mondrian International Small Cap	125,824,561	4.1	6.9	-2.0	11.9	12.6	--	-4.2	18.1	25.5	-8.1	30.3
S&P Developed Ex-U.S. SmallCap		4.6	9.2	-1.6	14.9	12.0	--	-3.4	26.1	18.6	-14.5	22.0
eA EAFE All Cap Equity Gross Rank		6	54	60	83	22	--	63	93	9	19	1
Mondrian Emerging Markets	272,760,450	-0.7	-1.1	-9.2	2.7	4.8	--	0.7	-6.4	23.1	-11.2	18.4
MSCI Emerging Markets		0.7	2.9	-5.1	3.7	3.7	--	-2.2	-2.6	18.2	-18.4	18.9
eA Emg Mkts Equity Gross Rank		84	92	89	86	57	--	41	96	24	6	70

# Total International Equity Performance Summary (Net of Fees)

Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>International Equity</b>	<b>752,312,288</b>													
Artisan International Growth	185,216,766	-0.2	3.8	-0.2	--	--	--	-0.1	--	--	--	--	9.9	Apr-13
MSCI EAFE		0.6	5.5	-4.2	--	--	--	-4.9	--	--	--	--	7.3	Apr-13
Research Affiliates International Equity	168,510,510	0.7	3.2	-8.1	13.4	--	--	-5.8	28.9	18.5	--	--	4.1	Apr-11
MSCI EAFE		0.6	5.5	-4.2	12.0	--	--	-4.9	22.8	17.3	--	--	3.6	Apr-11
Mondrian International Small Cap	125,824,561	3.9	6.5	-2.6	11.2	11.8	--	-4.9	17.3	24.7	-8.8	29.4	11.5	Nov-09
S&P Developed Ex-U.S. SmallCap		4.6	9.2	-1.6	14.9	12.0	--	-3.4	26.1	18.6	-14.5	22.0	9.7	Nov-09
Mondrian Emerging Markets	272,760,450	-0.8	-1.4	-9.8	2.0	4.1	--	0.0	-7.1	22.3	-12.0	17.6	6.5	Nov-05
MSCI Emerging Markets		0.7	2.9	-5.1	3.7	3.7	--	-2.2	-2.6	18.2	-18.4	18.9	6.5	Nov-05



# Total Fixed Income Performance Summary (Gross of Fees)

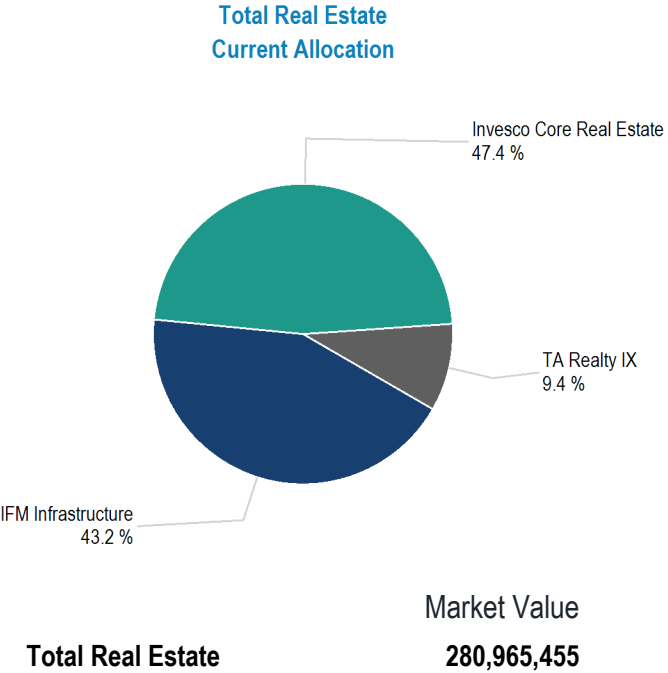
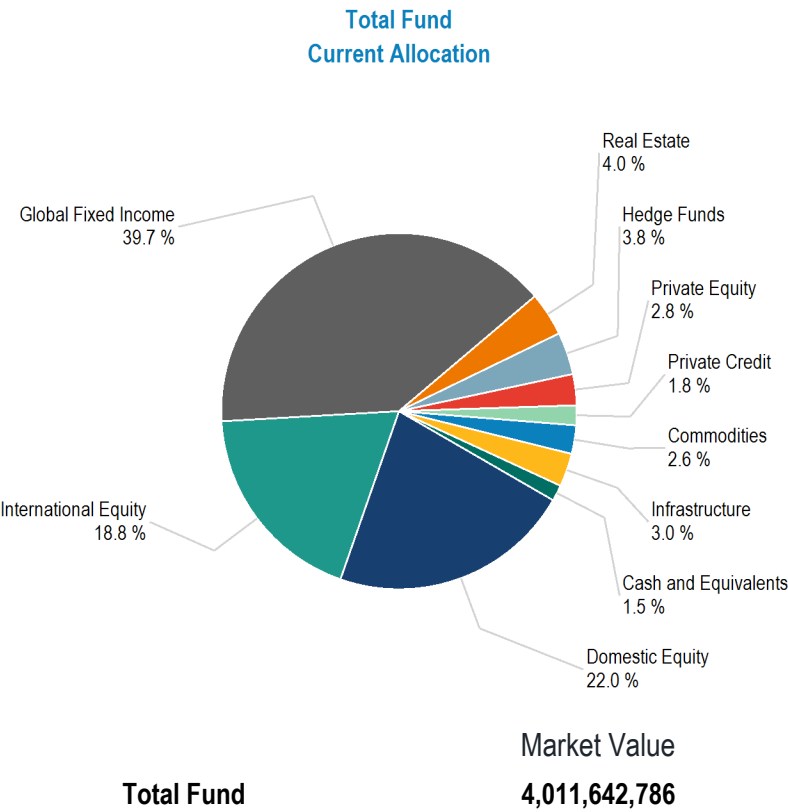
Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Domestic Fixed Income</b>	<b>726,023,383</b>											
Western Asset Investment Grade Credit	201,343,472	-2.8	-0.4	--	--	--	--	--	--	--	--	--
<i>Barclays Credit</i>		-2.9	-0.8	--	--	--	--	--	--	--	--	--
<i>eA All US Fixed Inc Gross Rank</i>		90	90	--	--	--	--	--	--	--	--	--
SSgA TIPS	156,032,421	-1.1	0.3	-1.7	-0.8	3.3	--	3.6	-8.6	6.9	13.5	6.3
<i>Barclays US TIPS</i>		-1.1	0.3	-1.7	-0.8	3.3	--	3.6	-8.6	7.0	13.6	6.3
<i>eA TIPS / Infl Indexed Fixed Inc Gross Rank</i>		58	62	42	79	62	--	44	77	67	51	63
Barclays U.S. Aggregate Index Fund	368,647,490	-1.6	0.0	2.0	--	--	--	--	--	--	--	--
<i>Barclays Aggregate</i>		-1.7	-0.1	1.9	--	--	--	--	--	--	--	--
<i>eA US Passive Fixed Inc Gross Rank</i>		58	54	24	--	--	--	--	--	--	--	--
<b>Domestic Fixed Income High Yield</b>	<b>209,854,012</b>											
Loomis Sayles High Yield	209,854,012	0.9	2.7	--	--	--	--	--	--	--	--	--
<i>Barclays High Yield</i>		0.0	2.5	--	--	--	--	--	--	--	--	--
<i>eA US High Yield Fixed Inc Gross Rank</i>		20	63	--	--	--	--	--	--	--	--	--
<b>Domestic Fixed Income Bank Loans</b>	<b>203,968,762</b>											
Eaton Vance Senior Loan Fund	203,968,762	0.4	2.4	--	--	--	--	--	--	--	--	--
<i>S&amp;P/LSTA Leveraged Loan Index</i>		0.7	2.8	--	--	--	--	--	--	--	--	--
<i>eA Float-Rate Bank Loan Gross Rank</i>		91	94	--	--	--	--	--	--	--	--	--
<b>International Fixed Income</b>	<b>170,449,285</b>											
PIMCO Emerging Local Bond Ins	170,449,285	-0.6	-4.5	-14.9	--	--	--	-5.0	--	--	--	--
<i>JP Morgan GBI EM Diversified</i>		-1.0	-4.9	-15.4	--	--	--	-5.7	--	--	--	--
<i>eA Emg Mkt Fixed Inc Unhedged Gross Rank</i>		75	87	86	--	--	--	82	--	--	--	--
<b>Global Fixed Income</b>	<b>283,676,930</b>											
Brandywine Global Sovereign	283,676,930	-3.0	-5.0	--	--	--	--	--	--	--	--	--
<i>Citi WGBI</i>		-1.5	-4.0	--	--	--	--	--	--	--	--	--
<i>eA All Global Fixed Inc Gross Rank</i>		98	93	--	--	--	--	--	--	--	--	--

Total Fixed Income  
Performance Summary (Net of Fees)

Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Domestic Fixed Income</b>	<b>726,023,383</b>													
Western Asset Investment Grade Credit	201,343,472	-2.8	-0.6	--	--	--	--	--	--	--	--	--	1.2	Oct-14
Barclays Credit		-2.9	-0.8	--	--	--	--	--	--	--	--	--	1.0	Oct-14
SSgA TIPS	156,032,421	-1.1	0.3	-1.8	-0.8	3.2	--	3.6	-8.6	6.9	13.2	6.2	5.1	Feb-09
Barclays US TIPS		-1.1	0.3	-1.7	-0.8	3.3	--	3.6	-8.6	7.0	13.6	6.3	5.1	Feb-09
Barclays U.S. Aggregate Index Fund	368,647,490	-1.6	0.0	2.0	--	--	--	--	--	--	--	--	2.7	Apr-14
Barclays Aggregate		-1.7	-0.1	1.9	--	--	--	--	--	--	--	--	2.6	Apr-14
<b>Domestic Fixed Income High Yield</b>	<b>209,854,012</b>													
Loomis Sayles High Yield	209,854,012	0.8	2.5	--	--	--	--	--	--	--	--	--	2.4	Oct-14
Barclays High Yield		0.0	2.5	--	--	--	--	--	--	--	--	--	1.5	Oct-14
<b>Domestic Fixed Income Bank Loans</b>	<b>203,968,762</b>													
Eaton Vance Senior Loan Fund	203,968,762	0.3	2.2	--	--	--	--	--	--	--	--	--	2.0	Oct-14
S&P/LSTA Leveraged Loan Index		0.7	2.8	--	--	--	--	--	--	--	--	--	2.3	Oct-14
<b>International Fixed Income</b>	<b>170,449,285</b>													
PIMCO Emerging Local Bond Ins	170,449,285	-0.7	-4.8	-15.3	--	--	--	-5.4	--	--	--	--	-6.2	Jul-13
JP Morgan GBI EM Diversified		-1.0	-4.9	-15.4	--	--	--	-5.7	--	--	--	--	-6.2	Jul-13
<b>Global Fixed Income</b>	<b>283,676,930</b>													
Brandywine Global Sovereign	283,676,930	-3.1	-5.1	--	--	--	--	--	--	--	--	--	-5.5	Jan-15
Citi WGBI		-1.5	-4.0	--	--	--	--	--	--	--	--	--	-3.7	Jan-15



# Total Real Estate Performance Summary (Gross of Fees)

Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Real Estate</b>	<b>159,532,803</b>													
Invesco Core Real Estate	133,046,163	5.3	8.7	16.4	13.6	14.8	--	12.4	14.2	8.7	16.9	16.7	4.1	Oct-07
NCREIF-ODCE		3.8	7.3	14.4	13.1	14.4	--	12.5	13.9	10.9	16.0	16.4	3.7	Oct-07
<b>Infrastructure</b>	<b>121,432,652</b>													
IFM Infrastructure	121,432,652	--	--	--	--	--	--	--	--	--	--	--	1.4	May-15
CPI + 5%		--	--	--	--	--	--	--	--	--	--	--	1.7	May-15

## Real Estate - Closed End Funds

Inception Date	Manager Name/Fund Name	Total Commitment	Contributions	Distributions	Market Value	One Quarter Return	One Year Return	Three Years Return	Five Years Return	(IRR) Since Inception
2009	TA Realty IX*	\$30,000,000	\$30,000,000	\$17,657,987	\$26,486,640	4.6%	14.9%	12.9%	13.7%	23.0%

% of Total Fund (Market Value)

0.7%

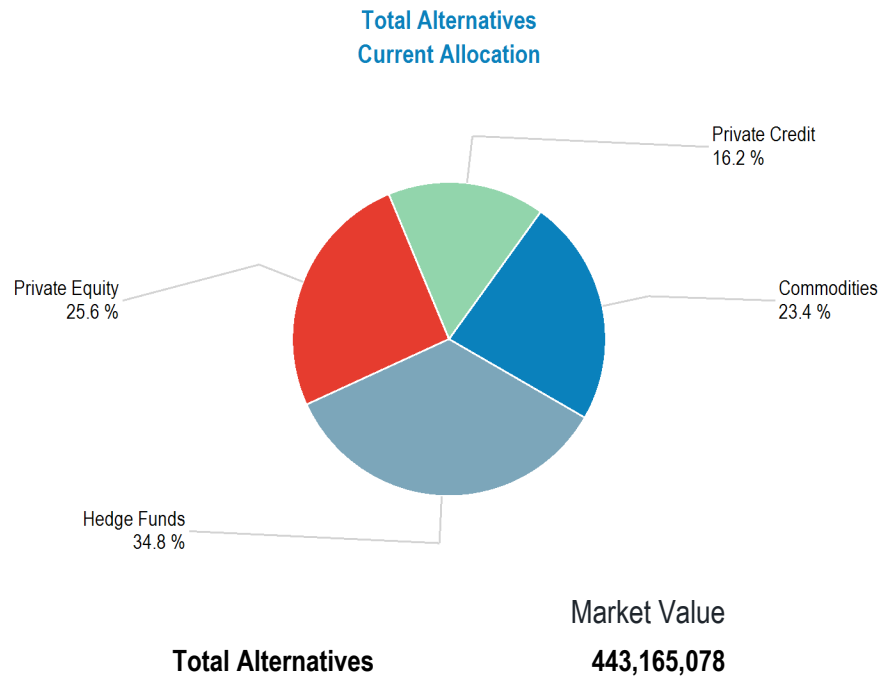
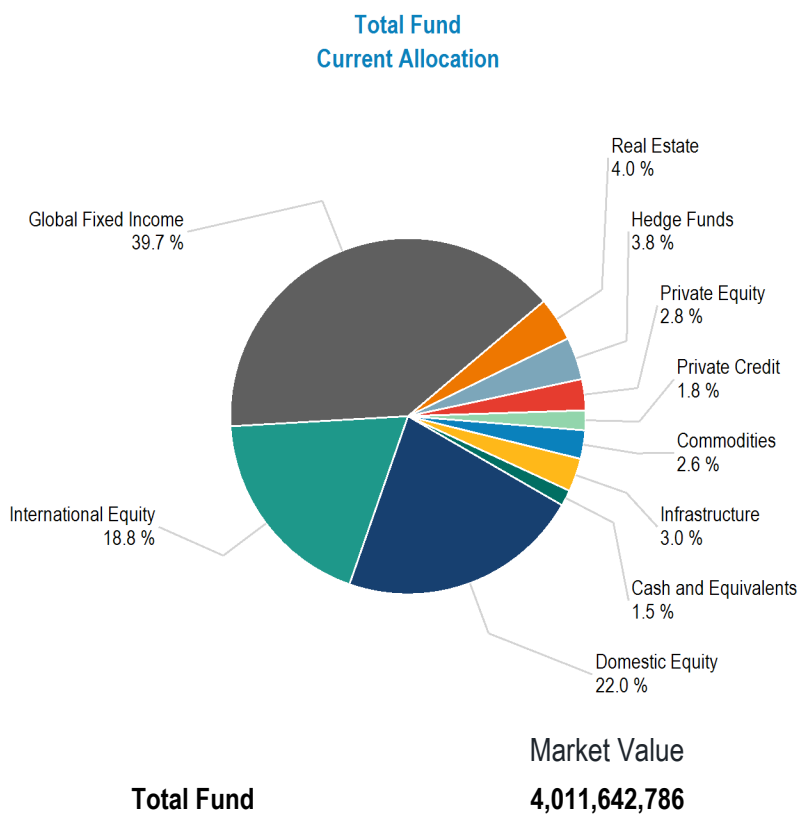
\*Balance, performance, and IRR as of 6/30/2015. IFM Infrastructure was funded in May 2015.

# Total Real Estate Performance Summary (Net of Fees)

Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Real Estate</b>	<b>159,532,803</b>													
Invesco Core Real Estate	133,046,163	5.0	8.2	15.3	12.6	13.8	--	11.4	13.4	7.7	15.9	15.7	3.2	Oct-07
NCREIF-ODCE		3.8	7.3	14.4	13.1	14.4	--	12.5	13.9	10.9	16.0	16.4	3.7	Oct-07
<b>Infrastructure</b>	<b>121,432,652</b>													
IFM Infrastructure	121,432,652	--	--	--	--	--	--	--	--	--	--	--	1.2	May-15
CPI + 5%		--	--	--	--	--	--	--	--	--	--	--	1.7	May-15

\*Balance, performance, and IRR as of 6/30/2015. IFM Infrastructure was funded in May 2015.



# Total Liquid Alternatives Performance Summary (Gross of Fees)

Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Hedge Funds</b>	<b>154,312,475</b>											
Grosvenor	154,312,475	0.9	2.9	3.8	9.7	7.2	--	4.3	16.3	9.7	-2.6	7.6
HFRI Fund of Funds Composite Index		0.2	2.7	3.9	6.3	4.1	--	3.4	9.0	4.8	-5.7	5.7
<b>Commodities</b>	<b>103,657,307</b>											
Invesco Commodities	103,657,307	--	--	--	--	--	--	--	--	--	--	--
Bloomberg Commodity Index TR USD		--	--	--	--	--	--	--	--	--	--	--

Common Sense fully liquidated on 12/31/2014. Invesco Commodities was funded in May 2015.

# Total Liquid Alternatives Performance Summary (Net of Fees)

Period Ending: June 30, 2015

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Hedge Funds</b>	<b>154,312,475</b>													
Grosvenor	154,312,475	0.7	2.4	3.0	8.7	6.2	--	3.5	15.2	8.6	-3.7	6.7	6.0	Oct-09
HFRI Fund of Funds Composite Index		0.2	2.7	3.9	6.3	4.1	--	3.4	9.0	4.8	-5.7	5.7	3.7	Oct-09
<b>Commodities</b>	<b>103,657,307</b>													
Invesco Commodities	103,657,307	--	--	--	--	--	--	--	--	--	--	--	1.4	Jun-15
Bloomberg Commodity Index TR USD		--	--	--	--	--	--	--	--	--	--	--	1.7	Jun-15

Common Sense fully liquidated on 12/31/2014. Invesco Commodities was funded in May 2015.

# Total Alternative Illiquids Non Marketable Securities Overview

Period Ending: June 30, 2015

Verus Internal Analysis										Manager Reported		
Vintage Year	Manager Name/Fund Name	Estimated Market Value as of 6/30/15 <sup>3</sup>	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Distrib./ Paid-In (DPI) <sup>1</sup>	Tot. Value/ Paid-In (TVPI) <sup>2</sup>	Market Value as of IRR Date	Net IRR Since Inception <sup>6</sup>	IRR Date
<b>Private Equity</b>												
2008	Landmark Equity XIV, L.P.	\$17,208,351	\$30,000,000	\$27,111,834	90%	\$2,888,166	\$19,512,173	72.0%	135.4%	\$18,572,751	16.1%	03/31/15
2007	New Mountain Partners III	\$13,439,492	\$15,000,000	\$14,693,039	98%	\$306,961 <sup>7</sup>	\$6,221,184	42.3%	133.8%	\$13,626,514	8.1%	03/31/15
2007	Hamilton Lane VI	\$45,956,850	\$70,000,000	\$60,965,305	87%	\$9,034,695	\$45,367,730	74.4%	149.8%	\$45,956,850	9.6%	06/30/15
2007	WP Private Equity X, L.P.	\$19,123,988	\$25,000,000	\$25,000,000	100%	\$0	\$17,545,477	70.2%	146.7%	\$19,123,988	8.8%	06/30/15
2002	Blackstone IV	\$6,126,673	\$20,000,000	\$22,327,765	112%	\$0 <sup>8</sup>	\$46,393,482	207.8%	235.2%	\$6,126,673	29.9%	06/30/15
2001	WP Private Equity VIII, L.P.	\$9,139,949	\$25,000,000	\$25,000,000	100%	\$0	\$49,916,250	199.7%	236.2%	\$9,139,949	15.1%	06/30/15
2000	Landmark Equity X, L.P.	\$1,158,099	\$20,000,000	\$19,009,543	95%	\$990,457	\$21,826,016	114.8%	120.9%	\$1,510,716	4.2%	03/31/15
1999	New Mountain Partners, L.P.	\$481,720	\$20,000,000	\$19,543,507	98%	\$456,493 <sup>9</sup>	\$26,966,378	138.0%	140.4%	\$481,720	12.3%	03/31/15
1998	WP Equity Partners, L.P. <sup>10</sup>	\$895,383	\$20,000,000	\$20,000,000	100%	\$0	\$32,056,827	160.3%	164.8%	\$895,383	10.2%	06/30/15
<b>Private Credit</b>												
2015	GSO European Senior Debt	\$171,973 <sup>*</sup>	\$30,000,000	\$0	0%	\$30,000,000	\$0	N/A	N/A	N/A	N/A	N/A
2015	CVI Credit Value Fund III	\$3,198,962	\$30,000,000	\$3,000,000	10%	\$27,000,000	\$0	0.0%	106.6%	N/A	N/A	N/A
2014	Colony Distressed Credit III, L.P.	\$5,633,974	\$20,000,000	\$8,453,756	42%	\$11,546,244	\$1,338,882	15.8%	82.5%	\$5,756,200	9.0%	03/31/15
2012	Oaktree Opportunities IX, L.P.	\$14,170,191	\$15,000,000	\$14,250,000	95%	\$750,000	\$0	0.0%	99.4%	\$14,170,191	-0.5%	06/30/15
2010	KKR Mezzanine Partners	\$21,887,104	\$30,000,000	\$30,709,437	102%	\$0 <sup>11</sup>	\$15,858,003	51.6%	122.9%	\$21,122,309	10.2%	12/31/14
2010	Angelo Gordon VII	\$10,751,968	\$30,000,000	\$30,000,000	100%	\$0	\$27,603,070	92.0%	127.9%	\$12,011,968	6.6%	03/31/15
2009	Colony Distressed Credit I, L.P. <sup>12</sup>	\$13,709,700	\$40,000,000	\$44,487,400	111%	\$0	\$51,612,762	116.0%	146.8%	\$13,709,700	19.6%	03/31/15
2002	Lone Star Fund IV	\$196,712	\$20,000,000	\$19,045,199	95%	\$954,801	\$43,786,403	229.9%	230.9%	\$356,814	30.7%	06/30/15
2002	TCW Shop IV	\$9,450	\$15,000,000	\$22,661,307	151%	\$0	\$27,613,153	121.9%	121.9%	\$9,450	6.0%	12/31/14
1998	TCW Shop III	\$565,140	\$15,000,000	\$15,000,000	100%	\$0	\$17,925,302	119.5%	123.3%	\$565,140	3.4%	12/31/13

<b>Total Alternative Illiquids</b>	<b>\$183,825,678</b>	\$490,000,000	\$421,258,091	86%	\$83,927,817	\$451,543,091	107.2%	150.8%
<b>% of Portfolio (Market Value)</b>	<b>4.6%</b>							

<sup>1</sup>(DPI) is equal to (capital returned / capital called)

<sup>2</sup>(TVPI) is equal to (market value + capital returned) / capital called

<sup>3</sup>Last known market value + capital calls - distributions

<sup>4</sup>IRR currently unavailable for these funds.

<sup>5</sup>Investment period ended, no further capital to be called.

<sup>6</sup>Gross IRR is calculated on the cash flows of the underlying investments of the fund and is net of the underlying fund fees and carried interest.

<sup>7</sup>Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR figure is provided by its respective manager.

<sup>8</sup>\$1,366,953 capital returned but subject to recall

<sup>9</sup>\$2,996,127 capital returned but subject to recall

<sup>10</sup>\$2,338,987 capital returned but subject to recall

<sup>11</sup>On June 11, 2012 \$1,029,076 was transferred from the Partnership to a Liquidation Trust.

<sup>12</sup>\$4,649,882 capital returned but subject to recall and \$879,385 return of unused capital subject to recall

<sup>13</sup>Balance, performance, and IRR as of 6/30/2014. Colony Capital reflects a FCERA-specific IRR.

<sup>14</sup>GSO market value represents income to the fund. No capital calls have occurred.

BCI Growth V, L.P. was fully liquidated on 12/31/2013.

# Total Fund Investment Fund Fee Analysis

Period Ending: June 30, 2015

Account	Fee Schedule	Market Value As of 6/30/2015	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
SSgA S&P 500 Flagship Fund	0.03% of First \$150.0 Mil, 0.02% Thereafter	\$235,863,934	\$60,456	0.03%
Waddell & Reed	0.25% of Assets	\$255,014,720	\$637,537	0.25%
Aronson Johnson Ortiz	0.30% of Assets	\$249,200,322	\$747,601	0.30%
Systematic Small/Mid Cap Value	0.35% of Assets	\$73,285,202	\$256,498	0.35%
Kalmar Investments Management	1.00% of First \$10.0 Mil, 0.88% of Next \$10.0 Mil, 0.75% Thereafter	\$69,565,399	\$559,240	0.80%
Artisan International Growth	0.30% of Assets	\$185,216,766	\$555,650	0.30%
Research Affiliates International Equity	0.12% of Assets	\$168,510,510	\$202,213	0.12%
Mondrian International Small Cap	0.85% of First \$25.0 Mil, 0.65% of Next \$50.0 Mil, 0.63% of Next \$50.0 Mil, 0.60% Thereafter	\$125,824,561	\$854,947	0.68%
Mondrian Emerging Markets	1.00% of First \$25.0 Mil, 0.75% of Next \$50.0 Mil, 0.60% Thereafter	\$272,760,450	\$1,811,563	0.66%
Brandywine Global Sovereign	0.36% of Assets	\$283,676,930	\$1,021,237	0.36%
Western Asset Investment Grade Credit	0.30% of First \$100.0 Mil, 0.15% Thereafter	\$201,343,472	\$452,015	0.22%
Loomis Sayles High Yield	0.50% of Assets	\$209,854,012	\$1,049,270	0.50%
Eaton Vance Senior Loan Fund	0.55% of First \$50.0 Mil, 0.50% of Next \$50.0 Mil, 0.40% Thereafter	\$203,968,762	\$940,875	0.46%
SSgA TIPS	0.04% of Assets	\$156,032,421	\$62,413	0.04%

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

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

# Total Fund Investment Fund Fee Analysis

Period Ending: June 30, 2015

Account	Fee Schedule	Market Value As of 6/30/2015	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Barclays U.S. Aggregate Index Fund	0.02% of Assets	\$368,647,490	\$73,729	0.02%
PIMCO Emerging Local Bond Ins	0.50% of First \$100.0 Mil, 0.45% Thereafter	\$170,449,285	\$817,022	0.48%
IFM Infrastructure	0.97% of Assets	\$121,432,652	\$1,177,897	0.97%
Grosvenor	1.15% of First \$25.0 Mil, 1.00% of Next \$25.0 Mil, 0.80% of Next \$50.0 Mil, 0.60% Thereafter	\$154,312,475	\$1,263,375	0.82%
Invesco Commodities	0.70% of First \$100.0 Mil, 0.55% Thereafter	\$103,657,307	\$720,115	0.69%
<b>Investment Management Fee</b>		<b>\$3,608,616,671</b>	<b>\$13,263,653</b>	<b>0.37%</b>

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

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

# Total Fund Watch List (Gross of Fees)

Period Ending: June 30, 2015

Name	Allocation Group	Status	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6
Waddell & Reed	Domestic Equity Large Cap Growth	No Issues	⌂	⌂	⌂	⌂	✓	✓
Aronson Johnson Ortiz	Domestic Equity Large Cap Value	No Issues	✓	✓	✓	⌂	✓	✓
Systematic Small/Mid Cap Value	Domestic Equity Small/Mid Cap Value	No Issues	✓	✓	⌂	⌂	✓	✓
Kalmar Investments Management	Domestic Equity Small/Mid Cap Growth	No Issues	✓	⌂	⌂	⌂	⌂	✓
Artisan International Growth	International Equity	No Issues	✓	✓	✓	✓	✓	✓
Research Affiliates International Equity	International Equity	No Issues	✓	✓	✓	⌂	⌂	⌂
Mondrian International Small Cap	International Equity Small Cap	No Issues	⌂	⌂	⌂	✓	✓	✓
Mondrian Emerging Markets	Emerging Markets Equity	No Issues	✓	⌂	⌂	⌂	⌂	✓

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

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

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

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

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

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

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

## Total Fund Watch List (Gross of Fees)

Period Ending: June 30, 2015

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

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

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

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

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

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

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

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

# Total Fund Explanatory Notes

Period Ending: June 30, 2015

## Performance Return Calculations

Returns calculated in the performance summary tables are time-weighted rates of return (TWRR). TWRR are calculated from changes in monthly market values, adjusted for weighted cash flows between months. Our performance methodology assumes that cash flows occur at the end of day for modified dietz calculations. Returns are linked geometrically and annualized for periods longer than one year.

## Data Source

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

## Illiquid Alternatives

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

## Manager Line Up

<u>Manager</u>	<u>Fund Incepted</u>	<u>Data Source</u>	<u>Manager</u>	<u>Fund Incepted</u>	<u>Data Source</u>
SSgA S&P 500 Flagship Fund	04/01/2004	Northern Trust	Hamilton Lane VI	2007	Hamilton Lane
Waddell & Reed	12/20/2010	Northern Trust	Warburg Pincus X	2007	Warburg Pincus
Aronson Johnson Ortiz	12/04/1995	Northern Trust	Blackstone IV	2002	Blackstone
Systematic Small/Mid Value	10/08/2010	Northern Trust	Warburg Pincus VIII	2001	Warburg Pincus
Kalmar Investments	11/18/2004	Northern Trust	Landmark Equity Partners X	2000	Landmark
Artisan International Growth	04/01/2013	Northern Trust	New Mountain	1999	New Mountain
RAFI International Equity	04/30/2011	Northern Trust	Warburg Pincus	1998	Warburg Pincus
Mondrian Int'l Small Cap	11/02/2009	Northern Trust	GSO European Senior Debt	2015	GSO
Mondrian Emerging Markets	11/17/2005	Northern Trust	CVI Credit Value Fund III	2015	CarVal
Brandywine Global Sovereign	01/31/2015	Northern Trust	Colony Distressed Credit III	2014	Colony
WAMCO Credit Index	10/01/2014	Northern Trust	Oaktree Opportunities Fund IX	2012	Oaktree
Loomis Sayles High Yield	10/01/2014	Northern Trust	KKR Mezzanine Partners I	2010	KKR
Eaton Vance Senior Loan	10/01/2014	Northern Trust	Angelo Gordon Cap. Recov. VII	2010	Angel Gordon
SSgA TIPS	02/27/2009	Northern Trust	Colony Distressed Credit I	2009	Colony
Barclays U.S. Aggregate Bond	04/30/2014	Northern Trust	Lonestar IV	2002	Lonestar
PIMCO Emerging Local Bond	07/31/2013	Northern Trust	TCW Shop IV	2002	TCW
Invesco Core Real Estate	10/01/2007	Invesco	TCW Shop III	1998	TCW
TA Associates Realty 9	2009	TA Associates	Invesco Commodities	05/27/2015	Invesco
IFM Global Infrastructure	05/13/2015	IFM	Benefits Payment Cash	N/A	Northern Trust
Grosvenor	10/31/2009	Grosvenor	Custodied	N/A	Northern Trust
Landmark Equity Partners XIV	2008	Landmark	Internal	N/A	FCERA
New Mountain III	2007	New Mountain	Transition	N/A	Northern Trust

#### Policy & Custom Index Composition

Floating Policy Index (6/1/2015-6/30/2015)	21.1% Russell 3000 Index, 40.6% Barclays Global Aggregate Index, 19.0% MSCI ACWI ex U.S., 2.8% Russell 3000 Index + 250 bps, 1.7% Barclays Global Aggregate Index + 250 bps, 3.8% HFRI Fund of Funds Composite, 8.0% NFI ODCE, 3.0% Bloomberg Commodity Index.
(5/1/2015-5/31/2015)	21.0% Russell 3000 Index, 40.7% Barclays Global Aggregate Index, 19.0% MSCI ACWI ex U.S., 2.8% Russell 3000 Index + 250 bps, 1.7% Barclays Global Aggregate Index + 250 bps, 3.8% HFRI Fund of Funds Composite, 8.0% NFI ODCE, 3.0% Bloomberg Commodity Index.
(4/1/2015-4/30/2015)	21.1% Russell 3000 Index, 43.6% Barclays Global Aggregate Index, 19.0% MSCI ACWI ex U.S., 2.8% Russell 3000 Index + 250 bps, 1.7% Barclays Global Aggregate Index + 250 bps, 3.8% HFRI Fund of Funds Composite, 5.0% NFI ODCE, 3.0% Bloomberg Commodity Index.
Barclays Aggregate*	Prior to 3/31/2014 Barclays U.S. Aggregate Index and as of 4/1/2014 Barclays Global Aggregate Index.

#### Other Disclosures

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

# Glossary

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

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

**Benchmark R-squared:** Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

**Beta:** A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

**Book-to-Market:** The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

**Capture Ratio:** A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

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

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

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

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

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

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

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

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

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

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

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

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

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

## Disclaimer

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