

**TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA  
Investment Committee Meeting  
Tuesday, August 26, 2014 – 3:00 PM  
TRS Administration Board Room  
2500 N. Lincoln Blvd., 5<sup>th</sup> Floor, Oklahoma City, OK**

**AGENDA**

- 1. CALL TO ORDER**
- 2. DISCUSSION AND POSSIBLE ACTION ON INVESTMENT CONSULTANT MONTHLY REPORT**
- 3. DISCUSSION AND POSSIBLE ACTION ON INVESTMENT CONSULTANT QUARTERLY REPORT**
- 4. DISCUSSION AND POSSIBLE ACTION ON MANAGER STATUS REPORT**
- 5. DISCUSSION AND POSSIBLE ACTION ON FRANKLIN PARK PACING/COMMITMENT LETTER**
- 6. DISCUSSION AND POSSIBLE ACTION ON LORD ABBETT EXCEPTION REQUESTS**
- 7. DISCUSSION AND POSSIBLE ACTION ON REAL ESTATE SEARCH**
- 8. DISCUSSION AND POSSIBLE ACTION REGARDING THORNBURG PERSONNEL CHANGES**
- 9. QUESTIONS AND COMMENTS FROM TRUSTEES**
- 10. ADJOURNMENT**

***ALL BOARD MEMBERS ARE ENCOURAGED TO ATTEND INVESTMENT COMMITTEE MEETINGS***

**INVESTMENT COMMITTEE:**

*Chair: Vernon Florence*

*Members: James Dickson, Roger Gaddis, Jill Geiger, Gary Trennepohl*

# July 2014 - Market Performance Update

Risk Markets Sell Off

## Equity Total Returns

Index	Last Month	Last Year	Last 3 Years	Last 5 Years
Dow Jones Industrial Average	-1.4	9.4	13.8	15.5
NASDAQ (prc chg only)	-0.9	20.5	16.6	17.2
S&P 500 cap weighted	-1.4	16.9	16.8	16.8
S&P 500 equal weighted	-2.3	18.0	17.7	19.7
S&P Mid Cap	-4.3	12.9	15.0	18.6
S&P Small Cap	-5.5	11.0	15.9	18.3
S&P REIT	0.0	12.1	11.2	21.3
Alerian MLP	-3.6	17.8	18.3	22.4
Russell 1000 Growth	-1.5	18.7	16.1	17.3
Russell 1000 Value	-1.7	15.5	17.6	17.0
Russell Mid Cap Growth	-3.0	15.1	14.8	18.6
Russell Mid Cap Value	-2.9	17.8	17.8	20.0
Russell 2000 Growth	-6.1	8.9	13.6	17.2
Russell 2000 Value	-6.1	8.2	13.6	15.8
Russell Top 200	-1.0	17.4	17.1	16.3
Russell 1000	-1.6	17.1	16.8	17.1
Russell Mid Cap	-3.0	16.4	16.4	19.3
Russell 2500	-4.9	12.1	15.1	18.4
Russell 2000	-6.1	8.6	13.6	16.6
MSCI World Ex US	-1.8	15.5	7.5	9.3
MSCI World Ex US Growth	-2.2	12.9	6.4	9.5
MSCI World Ex US Value	-1.4	18.1	8.7	9.1
MSCI EAFE	-2.0	15.1	8.0	9.4
MSCI Emerging Markets	1.9	15.3	0.4	7.3

Equity prices declined during July as a host of concerns overshadowed investor enthusiasm. Domestic equities and developed foreign equities both suffered losses. Emerging markets posted a gain during July.

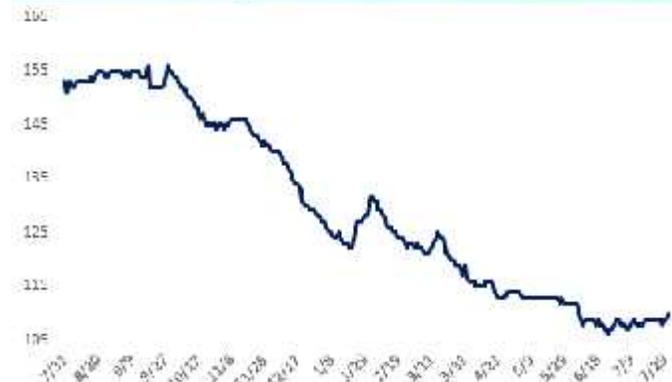
All major domestic equity index returns were negative during July. Small caps suffered the steepest declines. Growth and value suffered similar declines.

The aggregate bond market suffered a marginal loss during the month. Long Treasury bonds posted a modest gain while Treasury bills were flat for the month.

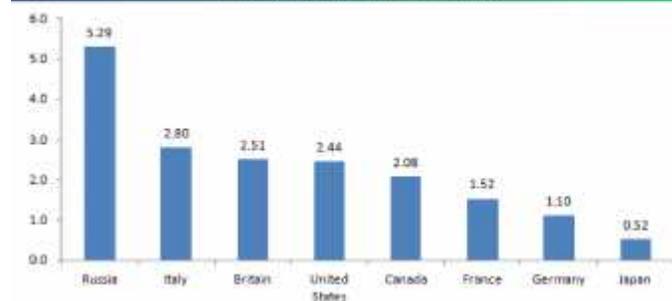
## Bond Total Returns

Index	Last Month	Last Year	Last 3 Years	Last 5 Years
BC T-Bills	0.0	0.0	0.1	0.1
BC Long Treasury	0.6	8.9	7.5	7.4
BC US Agg	-0.3	4.0	3.0	4.5

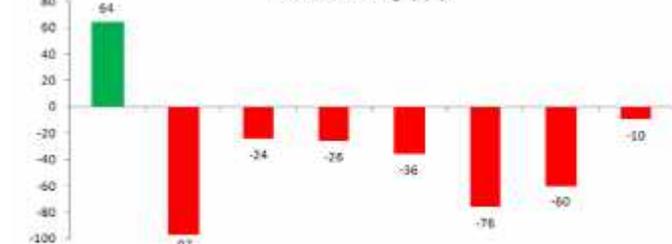
### Investment Grade Spread To Treasuries: Last 12 Months (bps)



### G8 10-Year Sovereign Yields (%)



### One Month Change (bps)



# Manager Profile - L&B Realty Advisors, LLC



Asset Class:	Core Real Estate & Non Core Real Estate
Status:	In Compliance
Core Portfolio Size:	\$186,245,204
Core Inception Date:	4/1/2011
Core Allocation:	1.3%
Annual Management Fee:	0.45%
Golden Driller Called Capital:	\$600,000
Golden Driller Inception Date:	7/1/2014
Location:	Dallas, Texas
Structure:	Employee Owned
Portfolio Management Team:	Christian Metten Mark Gerigk

## Notes:

The fund invests in traditional core property types, including multifamily, retail, office and industrial properties. The primary investment objective will be to protect equity and limit downside risk while assembling a diversified portfolio of appropriately priced, institutional quality, income-producing assets. The manager uses a core strategy that prudently uses leverage with a focus on the distribution of cash flow from operations. The manager will seek owners motivated to sell quality assets at prices expected to provide a desired rate of return with quantifiable downside risk. Manager will seek properties in markets affording long-term sustainable growth and avoid markets prone to excessive volatility and select assets with superior location using first hand experience and a network of strategic partners.

Represented by:	G. Andrews Smith, Executive Chief Officer Mark R. Gerigk, Executive Vice President Christian Metten, Director
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Founded: 1965
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Return Profile	Q2 2014	Q1 2014	CY 2013	CY 2012	CY 2011*
L&B Core	0.9	1.0	4.0	3.3	1.0
NCREIF - OEDCE	-	-	-	-	-

Risk Characteristics	Number of Properties	Total Return	% Leverage (fund level)	% Leverage (property level)
L&B Core	9	11.7%	35% of GAV	50% of LTV

Note: All portfolio statistics as of 6/30/14

\*Three quarter period.

# Manager Profile - AJO Partners, Mid Cap Core/Value



Asset Class:	Mid Cap Domestic Equity
Status:	In Compliance
Portfolio Size:	\$522,731,005
Inception Date:	8/1/1998
Actual Allocation:	3.8%
Annual Management Fee:	0.55%
Location:	Philadelphia, Pennsylvania
Structure:	Employee owned
Portfolio Management Team:	Ted Aronson Martha Ortiz Gina Moore
Represented by:	Ted Aronson

## Notes:

Rigorous bottom-up process that blends quantitative investment techniques, fundamental security analysis, and thorough attention to trading.

Founded: 1984

Note: Started managing international equity portfolios in 2012 and a hedge fund in 2013.

Firm AUM: \$24 Billion

Mid Cap AUM: \$0.5 Billion

Return Profile	Since Inception	Last 10 Years	Last 5 Years	Last 3 Years	Last Year	Last Quarter	Last Month
AJO Partners	11.3	11.2	20.8	18.1	19.3	2.9	-2.3
Russell Mid Cap	9.4	10.6	19.3	16.4	16.4	2.5	-3.0

Risk Characteristics	Number of Holdings	Average Mkt Cap	Dividend Yield	P/E Ratio	P/B Ratio
AJO Partners	102	\$10,300	1.4%	16.5	2.3
Russell Mid Cap	-	\$9,837	1.4%	20.6	2.5

# Monthly Asset Allocation Review



Asset Class	Total Market Value	Current Percentage	New Target Percentage	Difference	Notes
All Cap/Large Cap	2,898,918,095	20.9%	17.0%	3.9%	Excess allocation bound for Private Equity and Real Estate
Mid Cap	1,979,221,842	14.3%	13.0%	1.3%	
Small Cap	1,384,306,936	10.0%	10.0%	0.0%	
<b>Total Domestic Equity</b>	<b>6,262,446,873</b>	<b>45.2%</b>	<b>40.0%</b>	<b>5.2%</b>	
Large Cap International Equity	1,458,575,477	10.5%	11.5%	-1.0%	
Small Cap International Equity	841,226,430	6.1%	6.0%	0.1%	
<b>Total International Equity</b>	<b>2,299,801,907</b>	<b>16.6%</b>	<b>17.5%</b>	<b>-0.9%</b>	
<b>Core Fixed Income</b>	<b>2,108,604,399</b>	<b>15.2%</b>	<b>17.5%</b>	<b>-2.3%</b>	
High Yield Bonds	775,517,198	5.6%	6.0%	-0.4%	Two searches underway
MLPs	1,145,607,898	8.3%	7.0%	1.3%	
Private Equity	390,565,886	2.8%	5.0%	-2.2%	
Real Estate	607,459,693	4.4%	7.0%	-2.6%	
Opportunistic Assets	179,526,475	1.3%	0.0%	1.3%	
<b>Total Non-Core Assets</b>	<b>3,098,677,150</b>	<b>22.4%</b>	<b>25.0%</b>	<b>-2.6%</b>	
<b>Cash</b>	<b>92,023,256</b>	<b>0.7%</b>	<b>0.0%</b>	<b>0.7%</b>	
<b>Composite</b>	<b>13,861,618,364</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>	

# Total Fund + Class Composite Summary

As of July 31, 2014

	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month
<b>Total Fund (Gross of Fees)</b>	<b>13,861,618,364</b>	<b>12/1/1991</b>	<b>22.7</b>	<b>9.8</b>	<b>9.1</b>	<b>14.3</b>	<b>13.2</b>	<b>14.9</b>	<b>-2.1</b>	<b>2.2</b>	<b>-2.1</b>
<b>Total Fund (Net of Fees)</b>				<b>9.4</b>	<b>8.7</b>	<b>13.9</b>	<b>12.8</b>	<b>14.5</b>	<b>-2.5</b>	<b>2.1</b>	<b>-2.2</b>
<i>Allocation Index</i>				9.5	7.8	12.7	11.2	12.2	-1.8	2.0	-1.8
<i>Actuarial Assumption</i>				8.0	8.0	8.0	8.0	8.0	6.6	1.9	0.6
Total Domestic Equity	6,262,446,873	4/1/1990	24.3	11.0	9.3	17.7	16.5	16.0	-3.3	1.7	-3.3
<i>S&amp;P 500</i>	45.2%			9.7	8.0	16.8	16.8	16.9	-1.4	3.0	-1.4
Total All Cap Equity	913,038,535	9/1/2006	7.9	7.4	-	16.6	14.9	14.7	-1.9	2.9	-1.9
<i>Russell 3000</i>	6.6%			7.6	-	17.1	16.6	16.4	-2.0	2.7	-2.0
Total Large Cap Active Equity	1,096,002,584	1/1/1995	19.6	10.6	8.2	17.4	18.9	17.4	-1.7	1.7	-1.7
<i>S&amp;P 500</i>	7.9%			9.7	8.0	16.8	16.8	16.9	-1.4	3.0	-1.4
Total Mid Cap Equity	1,979,221,842	11/1/1998	15.8	10.5	11.6	20.0	17.5	16.7	-3.6	1.7	-3.6
<i>Russell Mid Cap</i>	14.3%			9.8	10.6	19.3	16.4	16.4	-3.0	2.5	-3.0
Total Small Cap Equity	1,384,306,936	2/1/1998	16.5	9.5	9.8	16.6	13.6	14.0	-6.1	0.2	-6.1
<i>Russell 2000</i>	10.0%			7.4	8.8	16.6	13.6	8.6	-6.1	-0.3	-6.1
Total International Equity	2,299,801,907	2/1/1998	16.5	9.2	7.8	9.9	8.3	12.1	-2.4	0.5	-2.4
<i>MSCI ACWI ex-US</i>	16.6%			-	8.0	8.8	5.9	15.5	-1.0	2.6	-1.0
Core Fixed Income (ex- High Yield)	2,108,604,399	4/1/1990	24.3	7.3	6.7	7.5	6.3	7.6	-0.2	1.7	-0.2
<i>Barclays Aggregate</i>	15.2%			-	4.8	4.5	3.0	4.0	-0.3	0.9	-0.3
Master Limited Partnerships	1,145,607,898	2/28/2011	3.4	23.1	-	-	26.7	33.2	-5.4	9.1	-5.4
<i>Alerian MLP Index</i>	8.3%			15.5	-	-	18.3	17.8	-3.5	5.6	-3.5
High Yield Bonds	775,517,198	2/1/2009	5.5	15.5	-	12.2	8.8	9.4	-1.2	1.1	-1.2
<i>ML High Yield II</i>	5.6%			16.6	-	12.3	8.3	8.3	-1.3	0.5	-1.3
Core Real Estate	607,459,693	4/1/2011	3.3	-	-	-	-	-	-	-	-
<i>NCREIF</i>	4.4%			-	-	-	-	-	-	-	-
Cash	92,023,256	4/1/1990	24.3	-	-	-	-	-	-	-	-
<i>91 Day T-bill</i>	0.7%			-	1.6	0.1	0.1	0.0	0.0	0.0	0.0



# Equity Portfolios Summary

As of July 31, 2014



	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month	
<b>All Cap / Large Cap Domestic</b>												
Hotchkis & Wiley Large Cap	574,724,995	4/1/1990	24.3	11.2	7.7	19.3	20.2	17.6	-2.3	0.8	-2.3	
Russell 1000 Value	4.1%			10.3	8.0	17.0	17.6	15.5	-1.7	2.3	-1.7	
Sawgrass	521,277,589	7/1/2006	8.1	8.7	-	17.3	17.8	17.3	-1.0	2.6	-1.0	
Russell 1000 Growth	3.8%			9.0	-	17.3	16.1	18.7	-1.5	3.5	-1.5	
ARI All Cap	452,506,357	9/1/2006	7.9	6.5	-	16.3	14.2	12.8	-3.1	1.8	-3.1	
Russell 3000	3.3%			7.6	-	17.1	16.6	16.4	-2.0	2.7	-2.0	
EPOCH All Cap	460,532,177	9/1/2006	7.9	8.2	-	16.9	15.6	16.7	-0.7	4.0	-0.7	
Russell 3000	3.3%			7.6	-	17.1	16.6	16.4	-2.0	2.7	-2.0	
<b>Passive Domestic Equity</b>												
NT Cap Weighted Passive	442,103,288	4/1/2012	2.3	17.3	-	-	-	16.6	-1.4	3.0	-1.4	
S&P 500 Cap Weighted	3.2%			17.0	8.0	16.8	16.8	16.9	-1.4	3.0	-1.4	
SSGA Eq Weighted Passive	447,773,689	4/1/2012	2.3	19.9	-	-	-	17.7	-2.3	2.6	-2.3	
S&P 500 Equal Weighted	3.2%			-	10.3	19.7	17.7	18.0	-2.3	2.8	-2.3	
<b>Mid Cap Domestic Equity</b>												
Frontier Capital	502,039,261	6/1/2002	12.2	10.5	12.2	17.5	15.7	16.0	-4.0	2.1	-4.0	
Russell Mid Cap Growth	3.6%			9.5	10.2	18.6	14.8	15.1	-3.0	2.8	-3.0	
Wellington Management	448,294,573	9/1/1998	15.9	10.7	10.5	17.1	12.2	16.5	-4.3	-0.5	-4.3	
Russell Mid Cap Growth	3.2%			9.0	10.2	18.6	14.8	15.1	-3.0	2.8	-3.0	
AJO Partners	522,731,005	8/1/1998	16.0	11.3	11.2	20.8	18.1	19.3	-2.3	2.9	-2.3	
Russell MidCap	3.8%			9.4	10.6	19.3	16.4	16.4	-3.0	2.5	-3.0	
Hotchkis & Wiley Mid Cap	506,157,003	8/1/2002	12.0	14.7	12.2	24.5	23.9	15.3	-3.9	2.3	-3.9	
Russell MidCap Value	3.7%			11.9	10.6	20.0	17.8	17.8	-2.9	2.1	-2.9	
<b>Small Cap Domestic Equity</b>												
Shapiro Capital Management	658,682,914	2/1/1998	16.5	10.9	12.9	20.7	17.7	21.7	-7.3	0.9	-7.3	
Russell 2000	4.8%			7.4	8.8	16.6	13.6	8.6	-6.1	-0.3	-6.1	
Geneva Capital	178,201,055	6/1/2013	1.2	9.4	-	-	-	4.7	-4.7	-2.0	-4.7	
Russell 2000 Growth	1.3%			13.9	9.4	17.2	13.6	8.9	-6.1	0.7	-6.1	
Wasatch Advisors	176,871,089	6/1/2013	1.2	7.5	-	-	-	5.2	-4.2	-0.8	-4.2	
Russell 2000 Growth	1.3%			13.9	9.4	17.2	13.6	8.9	-6.1	0.7	-6.1	
Cove Street Capital	104,660,464	6/1/2013	1.2	12.2	-	-	-	9.2	-5.2	2.4	-5.2	
Russell 2000 Value	0.8%			12.4	8.1	15.8	13.6	8.2	-6.1	-1.3	-6.1	
Frontier Capital	155,182,083	6/1/2013	1.2	12.7	-	-	-	12.2	-6.6	-1.2	-6.6	
Russell 2000 Value	1.1%			12.4	8.1	15.8	13.6	8.2	-6.1	-1.3	-6.1	
Neumeier Poma	110,709,331	6/1/2013	1.2	16.7	-	-	-	10.8	-4.5	1.5	-4.5	
Russell 2000 Value	0.8%			12.4	8.1	15.8	13.6	8.2	-6.1	-1.3	-6.1	
<b>International Large Cap Equity</b>												
Causeway Capital	546,058,120	5/1/2003	11.3	10.9	8.1	11.7	8.5	13.1	-2.0	0.1	-2.0	
MSCI ACWI Ex US	3.9%			10.3	8.0	8.8	5.9	15.5	-1.0	2.6	-1.0	
Northern Trust Passive	438,653,212	9/1/2013	0.9	9.5	-	-	-	-	-2.0	0.7	-2.0	
MSCI EAFE	3.2%			16.6	7.1	9.4	8.0	15.1	-2.0	0.6	-2.0	
Thornburg	473,861,602	1/1/2006	8.6	6.6	-	8.2	3.6	5.4	-2.3	0.3	-2.3	
MSCI ACWI Ex US	3.4%			5.1	8.0	8.8	5.9	15.5	-1.0	2.6	-1.0	
<b>International Small Cap Equity</b>												
ARI Small Cap International	219,830,420	12/1/2011	2.7	20.0	-	-	-	22.0	-2.4	2.9	-2.4	
MSCI EAFE Small Cap	1.6%			18.4	9.0	13.0	9.4	18.8	-2.4	0.5	-2.4	
Epoch Small Cap International	208,174,750	12/1/2011	2.7	17.0	-	-	-	15.3	-4.2	-2.7	-4.2	
MSCI EAFE Small Cap	1.5%			18.4	9.0	13.0	9.4	18.8	-2.4	0.5	-2.4	
Wasatch Small Cap International	198,292,945	12/1/2011	2.7	21.8	-	-	-	8.4	-1.5	1.3	-1.5	
MSCI EAFE Small Cap	1.4%			18.4	9.0	13.0	9.4	18.8	-2.4	0.5	-2.4	
Wellington Small Cap International	214,928,316	12/1/2011	2.7	23.4	-	-	-	19.3	-2.8	1.9	-2.8	
MSCI EAFE Small Cap	1.6%			18.4	9.0	13.0	9.4	18.8	-2.4	0.5	-2.4	

# Fixed Income Portfolios Summary

As of July 31, 2014

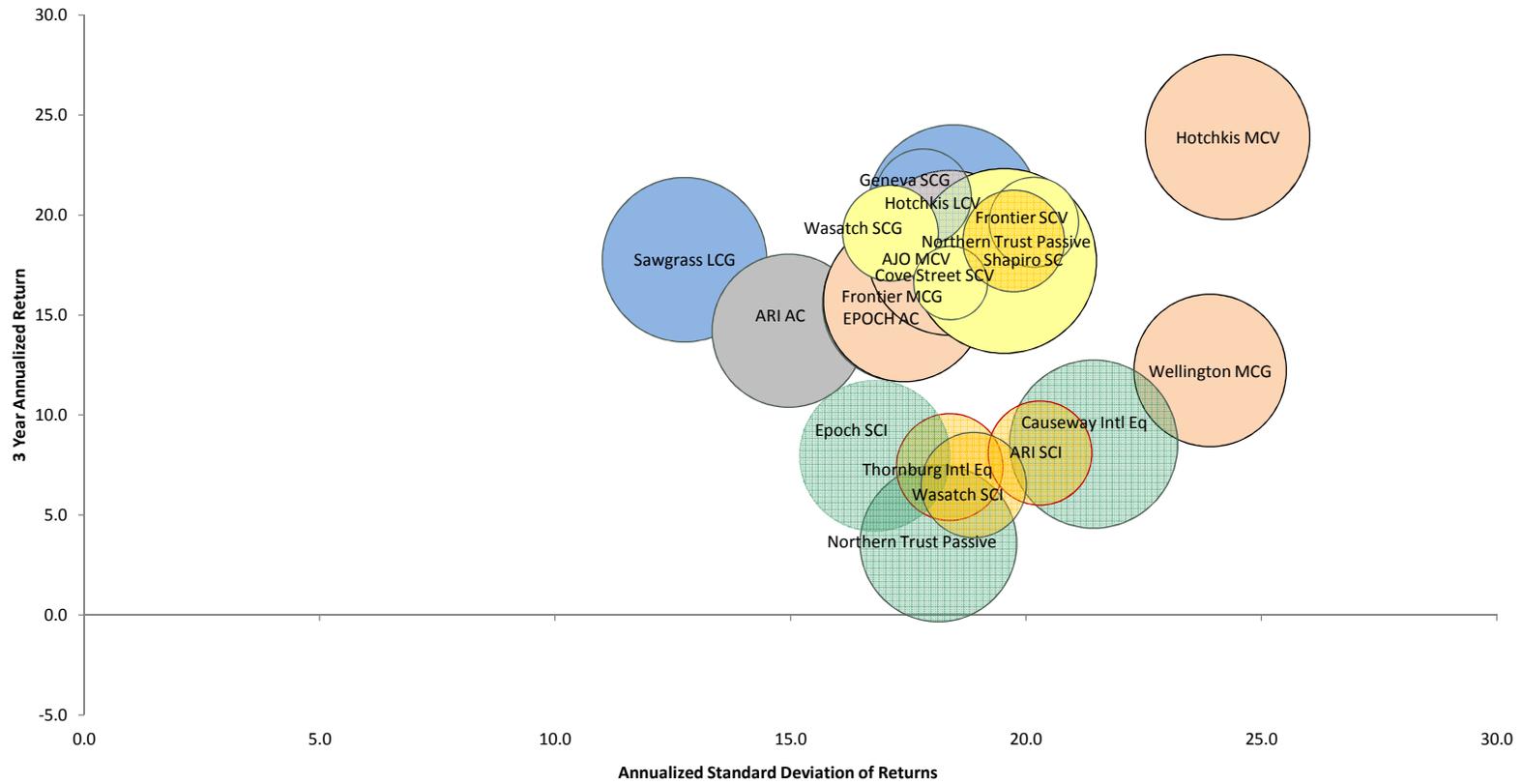
	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month	
<b>Core Fixed Income</b>												
Loomis Sayles	613,389,073	8/1/1999	15.0	7.2	7.9	8.7	6.6	8.5	-0.4	1.6	-0.4	
<i>Barclays Aggregate</i>	4.4%			5.6	4.8	4.5	3.0	4.0	-0.3	0.9	-0.3	
Lord Abbett	602,869,128	11/1/2004	9.8	6.2	-	6.7	5.2	6.2	-0.1	1.5	-0.1	
<i>Barclays Aggregate</i>	4.3%			4.6	-	4.5	3.0	4.0	-0.3	0.9	-0.3	
Mackay Shields	605,593,085	11/1/2004	9.8	6.4	-	7.5	5.8	5.7	-0.5	0.8	-0.5	
<i>Barclays Aggregate</i>	4.4%			4.6	-	4.5	3.0	4.0	-0.3	0.9	-0.3	
<b>Active Duration Fixed Income</b>												
Hoisington	286,753,113	11/1/2004	9.8	8.0	-	8.6	10.1	11.7	0.9	4.3	0.9	
<i>Barclays Aggregate</i>	2.1%			4.6	-	4.5	3.0	4.0	-0.3	0.9	-0.3	
<b>High Yield Fixed Income</b>												
Loomis Sayles High Yield	258,106,648	2/1/2009	5.5	15.5	-	11.9	7.8	9.9	-1.5	1.2	-1.5	
<i>Merrill Lynch High Yield II</i>	1.9%			16.6	-	12.3	8.3	8.3	-1.3	0.5	-1.3	
Lord Abbett High Yield	259,737,020	2/1/2009	5.5	16.5	-	13.5	10.1	10.5	-1.2	1.3	-1.2	
<i>Merrill Lynch High Yield II</i>	1.9%			16.6	-	12.3	8.3	8.3	-1.3	0.5	-1.3	
MacKay Shields High Yield	257,673,531	2/1/2009	5.5	14.4	-	11.2	8.5	7.9	-1.0	0.6	-1.0	
<i>Merrill Lynch High Yield II</i>	1.9%			16.6	-	12.3	8.3	8.3	-1.3	0.5	-1.3	

# Non-Traditional Portfolios Summary

As of July 31, 2014

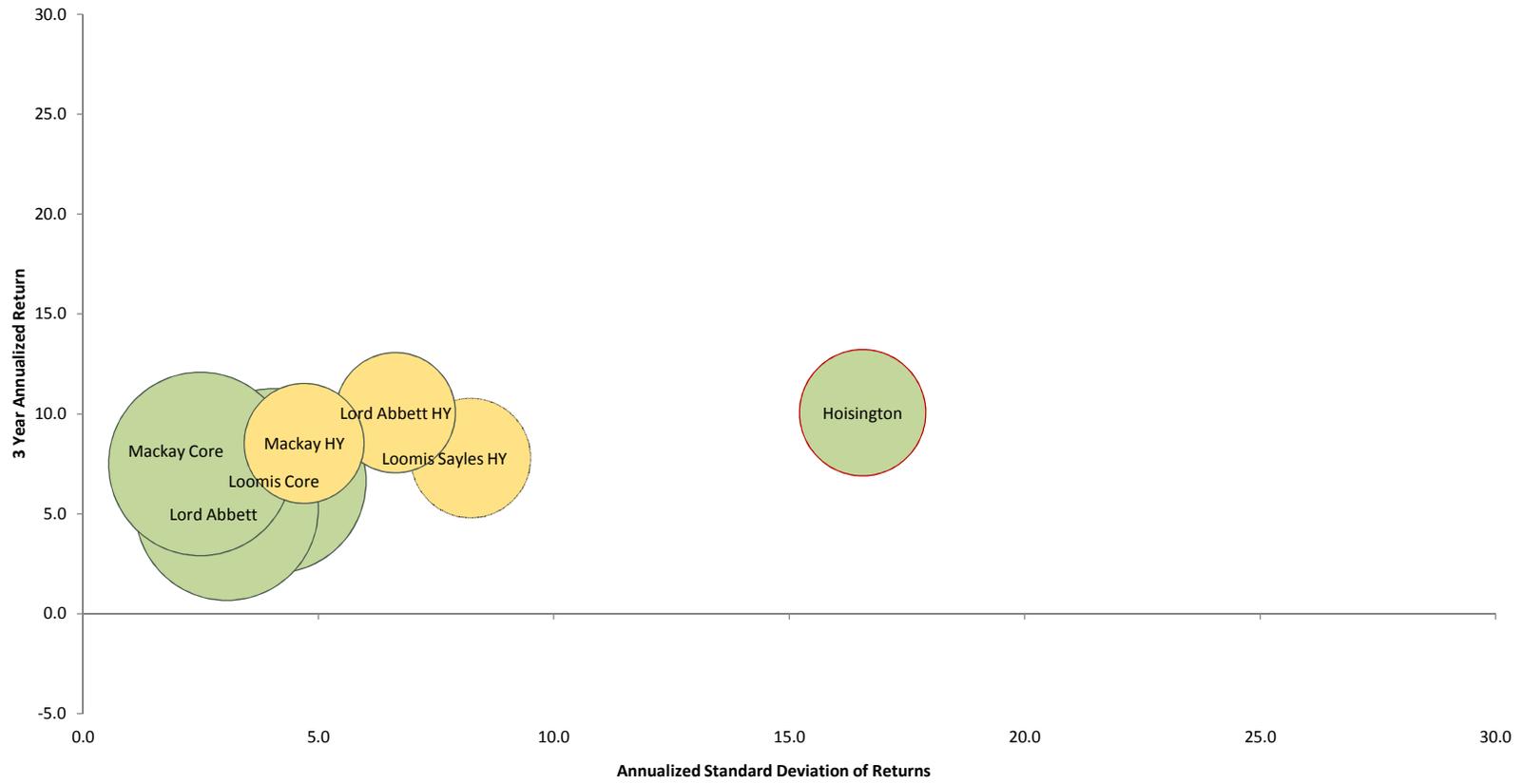
	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month
<b>Master Limited Partnerships</b>											
Chickasaw Capital MLP	402,504,359	2/28/2011	3.4	30.9	-	-	35.0	44.6	-6.2	9.6	-6.2
<i>Alerian MLP Index</i>	2.9%			15.5	-	-	18.3	17.8	-3.5	5.6	-3.5
Cushing MLP Management	393,873,343	2/28/2011	3.4	24.2	-	-	28.2	38.2	-5.3	9.1	-5.3
<i>Alerian MLP Index</i>	2.8%			15.5	-	-	18.3	17.8	-3.5	5.6	-3.5
FAMCO MLP	349,230,195	2/28/2011	3.4	17.2	-	-	20.6	21.8	-4.7	8.5	-4.7
<i>Alerian MLP Index</i>	2.5%			15.5	-	-	18.3	17.8	-3.5	5.6	-3.5
<b>Private Equity</b>											
Legacy Private Equity Portfolio	68,330,123	10/1/2008	5.8	-	-	-	-	-	-	-	-
Franklin Park Private Equity	322,235,763	4/1/2010	4.3	-	-	-	-	-	-	-	-
	2.8%			-	-	-	-	-	-	-	-
<b>Real Estate</b>											
AEW Real Estate	211,466,008	5/1/2011	3.3	-	-	-	-	-	-	-	-
<i>NCREIF - OEDCE</i>	1.5%			-	-	-	-	-	-	-	-
Heitman Real Estate	209,148,481	5/1/2011	3.3	-	-	-	-	-	-	-	-
<i>NCREIF - OEDCE</i>	1.5%			-	-	-	-	-	-	-	-
L&B Real Estate	186,245,204	4/1/2011	3.3	-	-	-	-	-	-	-	-
<i>NCREIF - OEDCE</i>	1.3%			-	-	-	-	-	-	-	-
L&B Golder Driller	600,000	7/1/2014	0.1	-	-	-	-	-	-	-	-
<i>NCREIF - OEDCE</i>	0.0%			-	-	-	-	-	-	-	-
<b>Opportunistic Fixed Income</b>											
PIMCO BRAVO	141,364,106	3/31/2011	3.3	-	-	-	-	-	-	-	-
<i>Barclays Aggregate</i>	1.0%			-	-	-	-	-	-	-	-
PIMCO BRAVO II	38,162,369	3/31/2013	1.3	-	-	-	-	-	-	-	-
<i>Barclays Aggregate</i>	0.3%			-	-	-	-	-	-	-	-

# Three Year Risk/Return Review - Equity Portfolios



<sup>1</sup>Actual OTRS results used when available, composite when necessary.

# Three Year Risk/Return Review - Fixed Income Portfolios



<sup>1</sup>Actual OTRS results used when available, composite when necessary.



# OKLAHOMA TEACHERS RETIREMENT SYSTEM

**executive summary report  
second quarter, 2014**



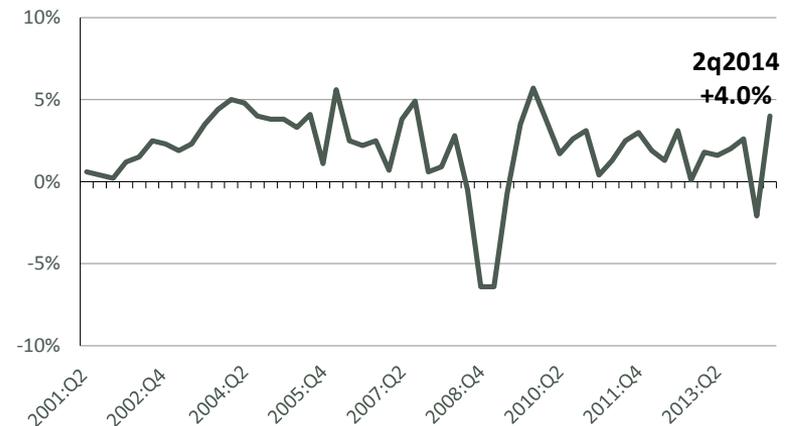
# Market Environment – Second Quarter, 2014

- Strong market returns during first half of 2014 caught most investors off guard. Equity and bond investors both profited during the second quarter. Domestic and non-US investments both posted large gains.
- Domestic real GDP suffered an unexpectedly severe decline of -2.9% during the first quarter. Second quarter growth is likely to be below long-term goals.
- The U.S. unemployment rate improved from 6.7% to 6.1% during the quarter.
- The U.S. consumer price index rose 2.1% over the year ended June 30, 2014.
- Earlier this year the Federal Reserve began tapering its bond buying program (Quantitative Easing). At its peak, the program was buying \$85 billion in bonds per month. It has been tapering \$10 billion per month and it now stands at \$35 billion per month.
- Short term interest rates remain pegged at 0.0%, They have been fixed at this level for six years and will likely remain here until after 2015.
- Despite several macro-level events during 2014, market volatility has been low – roughly half of its historical levels.

Labor Force Participation Rate



US Real GDP Growth - Annualized



# Equity Markets – Second Quarter, 2014

- The U.S. equity market posted strong positive returns during the second quarter (Russell 1000 +5.1%). Trailing year returns were extremely rewarding (+25.4%).
- Information Technology (+10.6% return), Energy (+10.5%), and Utilities (7.9%) were the best performing sectors. All sectors posted positive second quarter returns.
- The market's top contributing performers were Apple (+21.9%), Schlumberger (+21.4%), and Intel (+20.7%). The bottom three contributors were Bank of America (-10.6%), Pfizer (-6.8%), and JP Morgan (-4.5%).
- Valuations appear normal. The broad market forward P/E ratio was 15.6x at quarter end vs. 15.8x for its fifteen year average. The market's dividend yield was 1.9% vs. 1.7% for its long term average. The broad market is 45% higher than its previous high (October 2007) and 224% above the low set in March of 2009.
- Foreign equity markets also posted gains during the quarter. The MSCI All Country World index gained 5.2% during the quarter (\$USD). Emerging markets (+6.7% return) outperformed developed markets (4.3%) for the quarter.
- The top performing sectors in the MSCI ACWI ex-US index were Energy (+11.6%) Utilities (+7.7%) and Information Technology (+6.4%). All sectors posted second quarter gains.
- Top performance contributors were Royal Dutch Shell (14.6% return), BP (11.3%), and Shire (59.2%). Top detractors were all banks: Deutsche Bank (-14.9%), BNP Paribas (-9.5%), and UBS (-10.0%).
- Developed non-US equity valuations are above average. The forward P/E ratio for the EAFE index ended the quarter at 14.2x vs. 12.6x for its ten year average. Emerging markets valuations are slightly below average: the MSCI EM index forward P/E ratio was 10.9x vs. 11.1 for its ten year average.
- Equity returns have been very strong over the past three years. Volatility is currently low and valuations remain reasonable.

Current P/E Ratio as Percentage of Long Term Average

	Value	Blend	Growth
Large	107.4%	96.6%	87.1%
Mid	120.1%	111.7%	90.7%
Small	116.1%	107.6%	96.5%

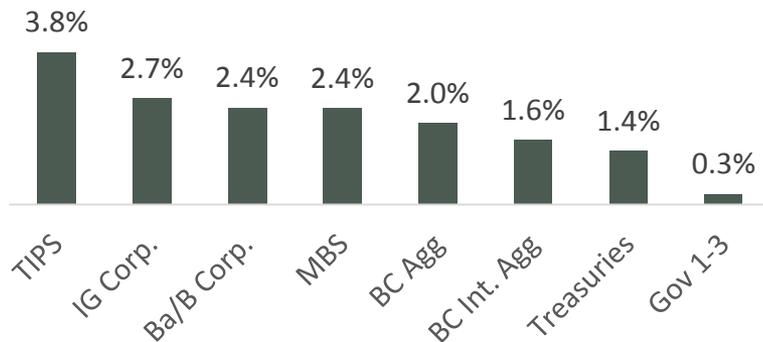
Russell 1000 Sector Analytics	Ending Weight	2q 2014 Return	Contribution
Consumer Discretionary	6.3%	<b>6.0%</b>	<b>0.4%</b>
Consumer Staples	6.9%	<b>1.7%</b>	<b>0.1%</b>
Energy	13.9%	<b>10.5%</b>	<b>1.6%</b>
Financials	28.5%	<b>1.9%</b>	<b>0.5%</b>
Health Care	13.1%	<b>3.4%</b>	<b>0.4%</b>
Industrials	10.5%	<b>4.1%</b>	<b>0.4%</b>
Information Technology	8.9%	<b>10.6%</b>	<b>0.9%</b>
Materials	3.4%	<b>5.8%</b>	<b>0.2%</b>
Telecommunications	2.3%	<b>2.9%</b>	<b>0.1%</b>
Utilities	6.3%	<b>7.9%</b>	<b>0.5%</b>
Total	100.0%	<b>5.1%</b>	<b>5.1%</b>

# Fixed Income – Second Quarter, 2014

- Fixed income markets posted surprisingly high second quarter results. The rally in long bonds all year caught many off guard. After starting the year at 3.9%, the long Treasury bond yielded 3.4% by mid-year. Shorter-dated yields have been more stable, with five year notes trading in a range between 1.8% and 1.5% all year.
- The dollar index is relatively unchanged during 2014 after a rally to start the year followed by a reversal. The British Pound and the Euro moved gradually higher, while the Japanese Yen also strengthened.
- Investment Grade and High Yield bond spreads further declined during the quarter as the market scrambled for yield. Yield spreads are at their lowest since the pre-financial crisis environment of 2007, causing some concern among investors. The market is expensive but corporate balance sheets are the strongest on record which gives us comfort that a bond market crash similar to 2008 is unlikely. Defaults in high yield bonds remained low (2.1% vs. 4.0% historical rate).

Risk Level	Interest Rate Forecast	Time Horizon			
		1 Year		3 Years	
		Terminal Yield	Total Return	Terminal Yield	Total Return
Low Risk 2 Year Treasury	Pessimistic Most Likely	2.5% 1.3%	-3.5% -1.1%	4.0% 3.0%	-1.8% -1.2%
Present YTM: 0.46%	Optimistic	0.5%	0.4%	2.0%	-0.5%
Medium Risk 10 Year Treasury	Pessimistic Most Likely	4.5% 3.8%	-13.2% -7.5%	5.5% 4.5%	-5.2% -2.7%
Present YTM: 2.53%	Optimistic	2.5%	2.8%	3.5%	-0.1%
High Risk 30 Year Treasury	Pessimistic Most Likely	5.5% 4.5%	-27.9% -15.3%	6.0% 5.0%	-9.6% -5.2%
Present YTM: 3.36%	Optimistic	3.0%	10.5%	4.0%	-0.2%

Barclays Index Returns – 2q2014

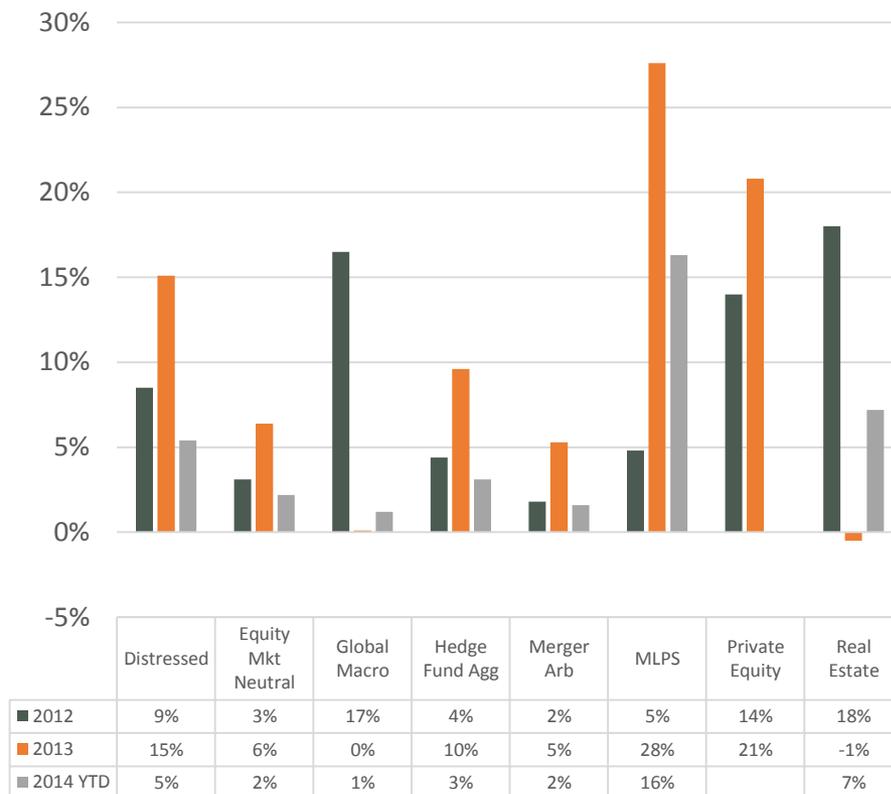


Yields and Spreads	3/31/2014	6/30/2014	YTD High	YTD Low
3 Month T-Bill	0.03%	<b>0.02%</b>	0.08%	0.00%
2 Year Treasury	0.42%	<b>0.46%</b>	0.48%	0.30%
10 Year Treasury	2.72%	<b>2.53%</b>	3.03%	2.44%
30 Year Treasury	3.56%	<b>3.36%</b>	3.97%	3.30%
Yield Curve 2-10 Year	230	<b>207</b>	265	206
Yield Curve 2-30 Year	314	<b>290</b>	359	290

# Alternative Investments – Second Quarter, 2014

- Alternative investments posted diverse returns during the second quarter. Generally speaking, their returns trailed traditional asset categories.
- Hedge funds posted modest returns during the quarter. The HFRI weighted composite index gained 2.0% during the quarter, led by event driven and relative value arbitrage. While hedge funds have continued to gather assets, a few high profile institutions (California Public Employees' Retirement System most notably) have indicated dissatisfaction with the asset class.
- Real estate investments earned positive returns during the quarter (7.2%). Low-risk core real estate returns have been above average as investors have flocked to the asset class as an alternative to bonds. Real estate investors are moving in larger numbers towards higher risk/return categories and structures.
- Private equity returns have been positive but reasonable. The asset class gained just over 20% during 2013.
- Master Limited Partnerships (energy infrastructure/transport entities) were the best category of alternative assets, gaining 14% during the second quarter. Domestic energy production is undergoing a renaissance that saw the U.S. surpass Russia and Saudi Arabia in daily production over the past year. The gains resulted from extraction of oil and natural gas from shale formations which places the U.S. as the largest producer of oil in the world.
- Commodity prices remained relatively stable. Oil and natural gas stayed within established trading ranges. Gold prices moved slightly higher while food prices also gained.

## Alternative Asset Category Returns



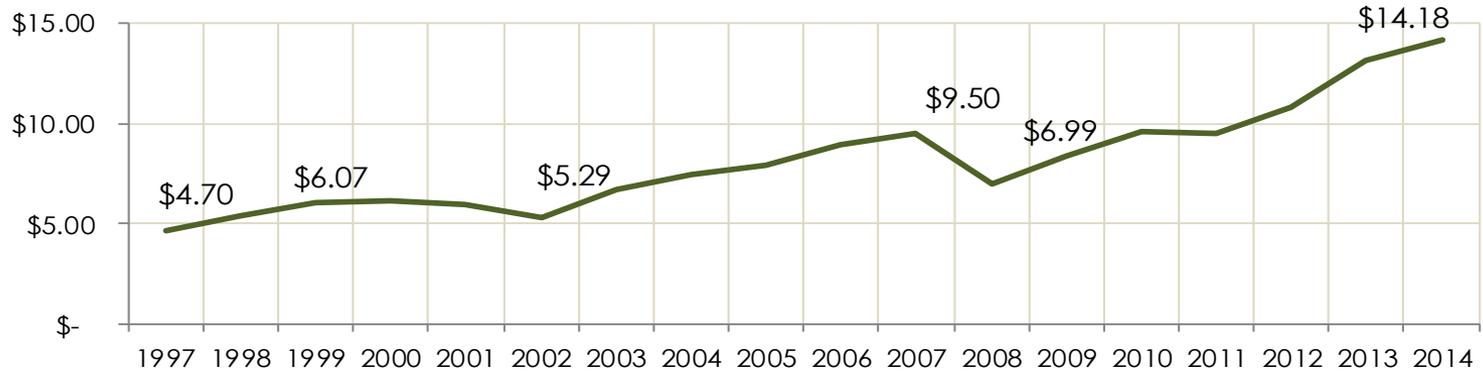
Domestic Equity	Last Quarter	Last Year	Last Three Years Annualized	Last Five Years Annualized	Last Ten Years Annualized
S&P 500	5.2	24.6	16.6	18.8	7.8
Russell 1000	5.1	25.4	16.6	19.3	8.2
Russell 1000 Value	5.1	23.8	16.9	19.2	8.0
Russell 1000 Growth	5.1	26.9	16.3	19.2	8.2
Russell 3000	4.9	25.2	16.5	19.3	8.2
Russell Midcap	5.0	26.9	16.1	22.1	10.4
Russell Midcap Value	5.6	27.8	17.6	23.0	10.7
Russell Midcap Growth	4.4	26.0	14.5	21.2	9.8
Russell 2000	2.1	23.6	14.6	20.2	8.7
Russell 2000 Value	2.4	22.5	14.7	19.9	8.2
Russell 2000 Growth	1.7	24.7	14.5	20.5	9.0
Alerian MLP	14.2	21.6	19.0	26.2	17.3
<b>Fixed Income</b>					
Barclays Capital Aggregate Bond	2.1	4.4	3.7	4.9	4.9
Barclays Capital Credit	2.7	7.4	5.9	7.7	5.9
Barclays Capital Government	1.3	2.1	2.9	3.5	4.4
Barclays Capital Govt/Credit	1.9	4.3	4.1	5.1	4.9
Barclays Capital Interm Credit	1.8	5.2	4.5	6.4	5.2
Barclays Capital Interm Govt	0.9	1.5	2.0	2.8	3.9
Barclays Capital Interm Govt/Cred	1.2	2.9	2.8	4.1	4.3
Barclays Capital Long Credit	5.0	13.3	9.8	11.1	7.7
Barclays Capital Long Term Govt	4.7	6.4	8.7	7.4	7.2
Barclays Capital Long Govt/Credit	4.9	10.8	9.6	9.6	7.6
Barclays Capital Fixed Rate MBS	2.4	4.7	2.8	3.9	5.0
Merrill Lynch US High Yield Master II	2.6	11.8	9.3	13.9	8.9
91 Day T-Bill	0.8	2.1	1.8	2.2	2.3
Consumer Price Index	0.0	0.0	0.1	0.1	1.5
<b>International</b>					
MSCI EAFE	4.1	23.6	8.1	11.8	6.9
MSCI World ex US	4.6	23.8	7.6	11.7	7.2
MSCI Europe	3.3	29.3	8.7	13.0	7.5
MSCI Japan	6.7	9.9	7.6	7.2	3.3
MSCI Pacific ex Japan	4.3	18.8	6.3	14.0	11.9
MSCI Emerging Markets	5.6	11.8	-2.9	6.7	9.3

## Trailing Year Total Fund Return

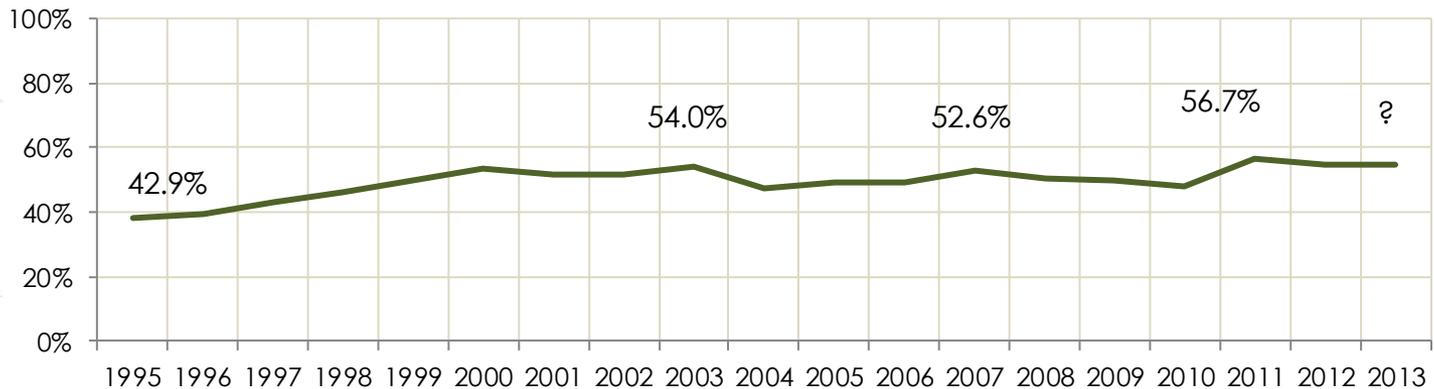
+22.4%

# Plan History

## Market Value History (\$Billions)



## Funded Status History



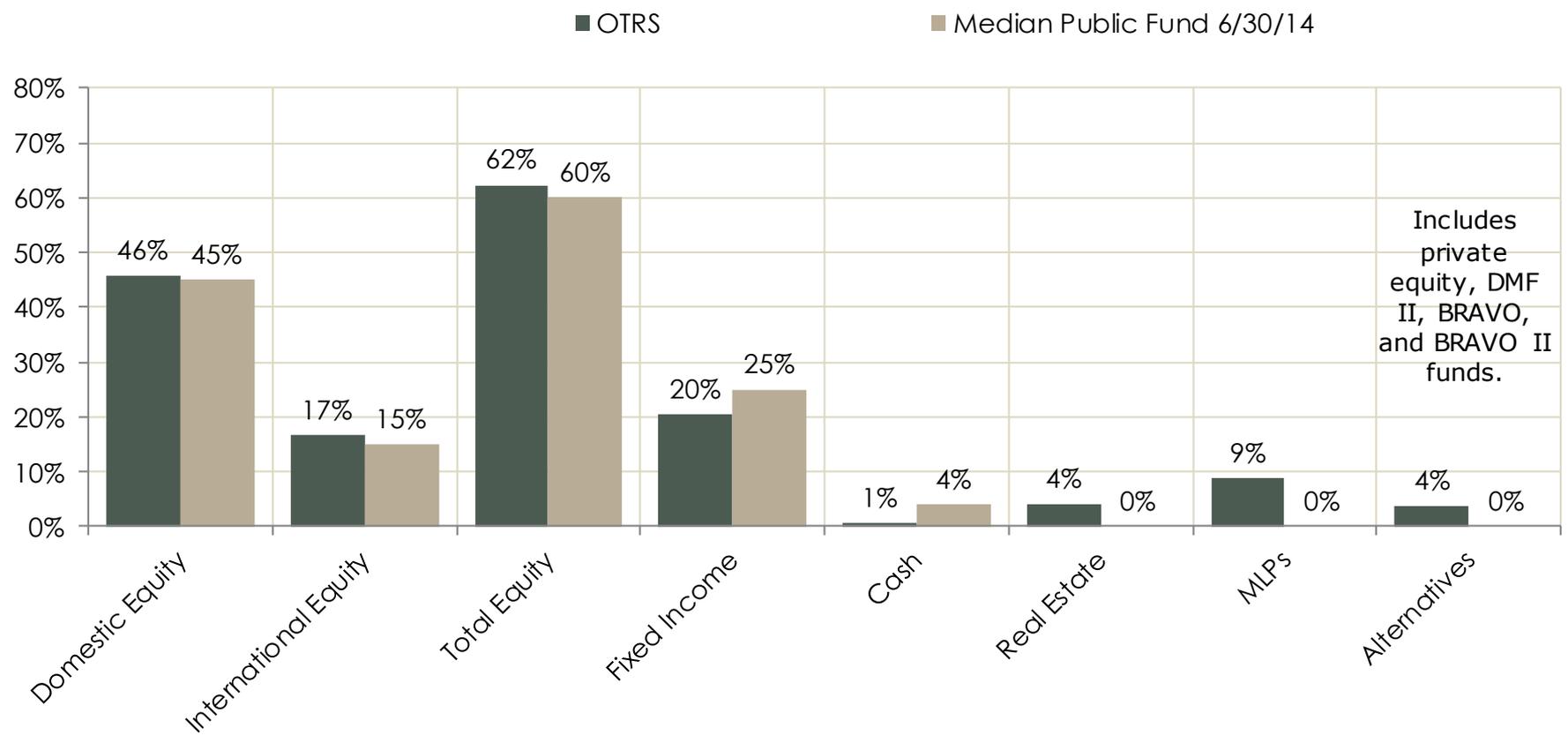
## Observations – second quarter, 2014

- **INVESTMENT PERFORMANCE:** Total fund returns were positive during the quarter. The total fund earned a 4.9% return. Domestic equity results were positive. Core and High Yield fixed income results were also positive. The total fund's trailing returns were exceptional. The trailing year return was well above the actuarial assumption, above the allocation index and ranked in the top 1 percent among peer Pension Funds. **The total fund ranked in the first percentile of public funds for all observation periods.**
- **INVESTMENT MANAGEMENT:** Two large cap index fund portfolios were added in 2012. The new international small cap equity allocation added returns during the quarter. The MLP allocation is performing well above expectation. Five new domestic small cap managers were funded during the second quarter of 2013. An international equity index fund was added during early 2013.
- **ASSET ALLOCATION:** The total fund's aggregate asset allocations are in the process of moving to new long-term targets. No additional allocations were made to the Opportunistic Portfolio although several investments are under consideration. The private equity portfolio called significantly more capital over the past year compared to previous years. The three real estate managers are fully invested, at their previous target level. A full review of real estate options is currently underway.

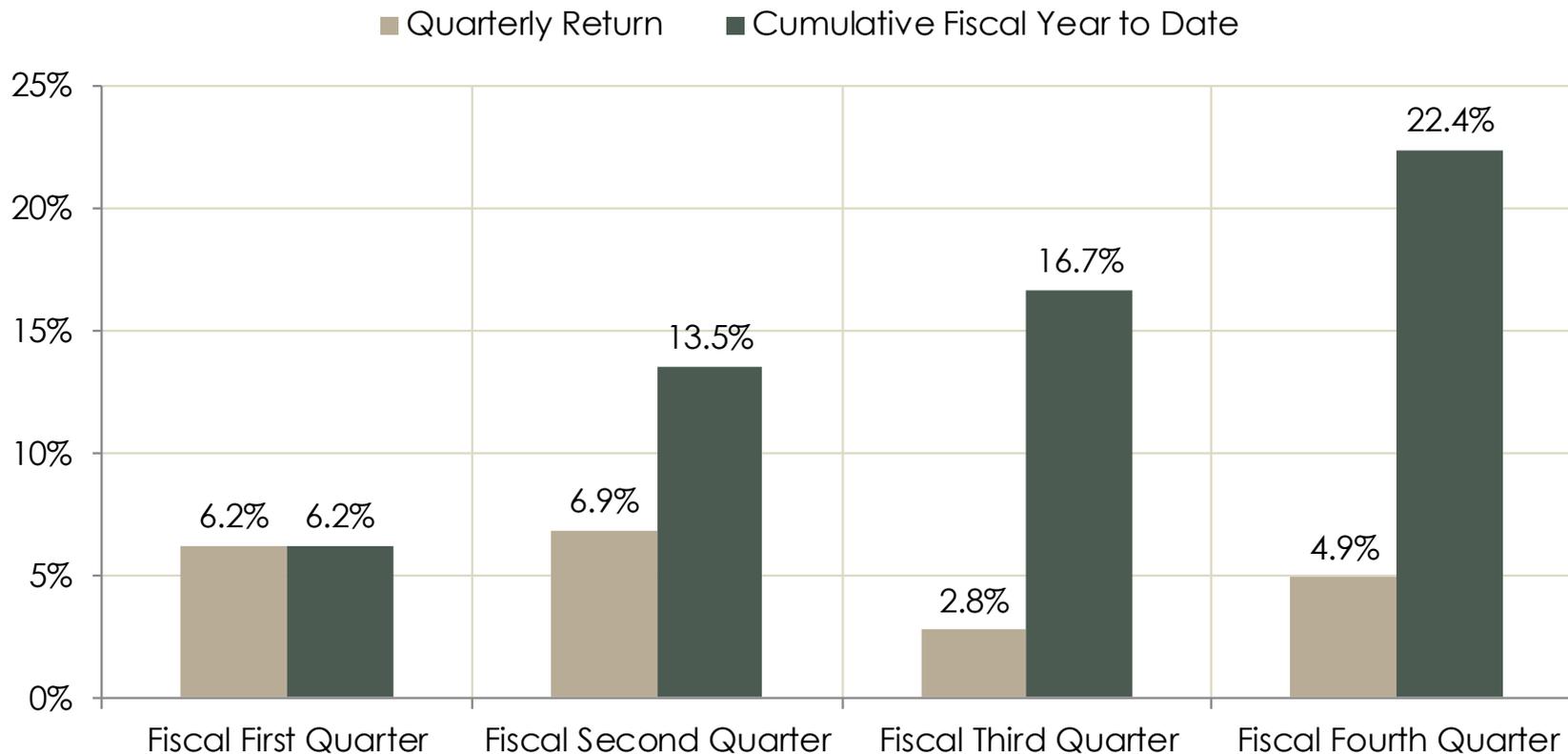
# Asset Allocation Summary – Total Fund

	Current Allocation	New Target Allocation	Difference
Domestic Equity	45.68%	40.00%	5.68%
<b>International Equity</b>	<b>16.60%</b>	<b>17.50%</b>	<b>-0.90%</b>
Core Fixed Income	14.89%	17.50%	-2.61%
<b>Opportunistic Assets</b>	<b>1.19%</b>	<b>0.00%</b>	<b>1.19%</b>
High Yield Fixed Income	5.54%	6.00%	-0.46%
<b>Real Estate</b>	<b>4.07%</b>	<b>7.00%</b>	<b>-2.93%</b>
Private Equity	2.61%	5.00%	-2.39%
<b>MLPs</b>	<b>8.76%</b>	<b>7.00%</b>	<b>1.76%</b>
Cash	0.66%	0.00%	0.66%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>

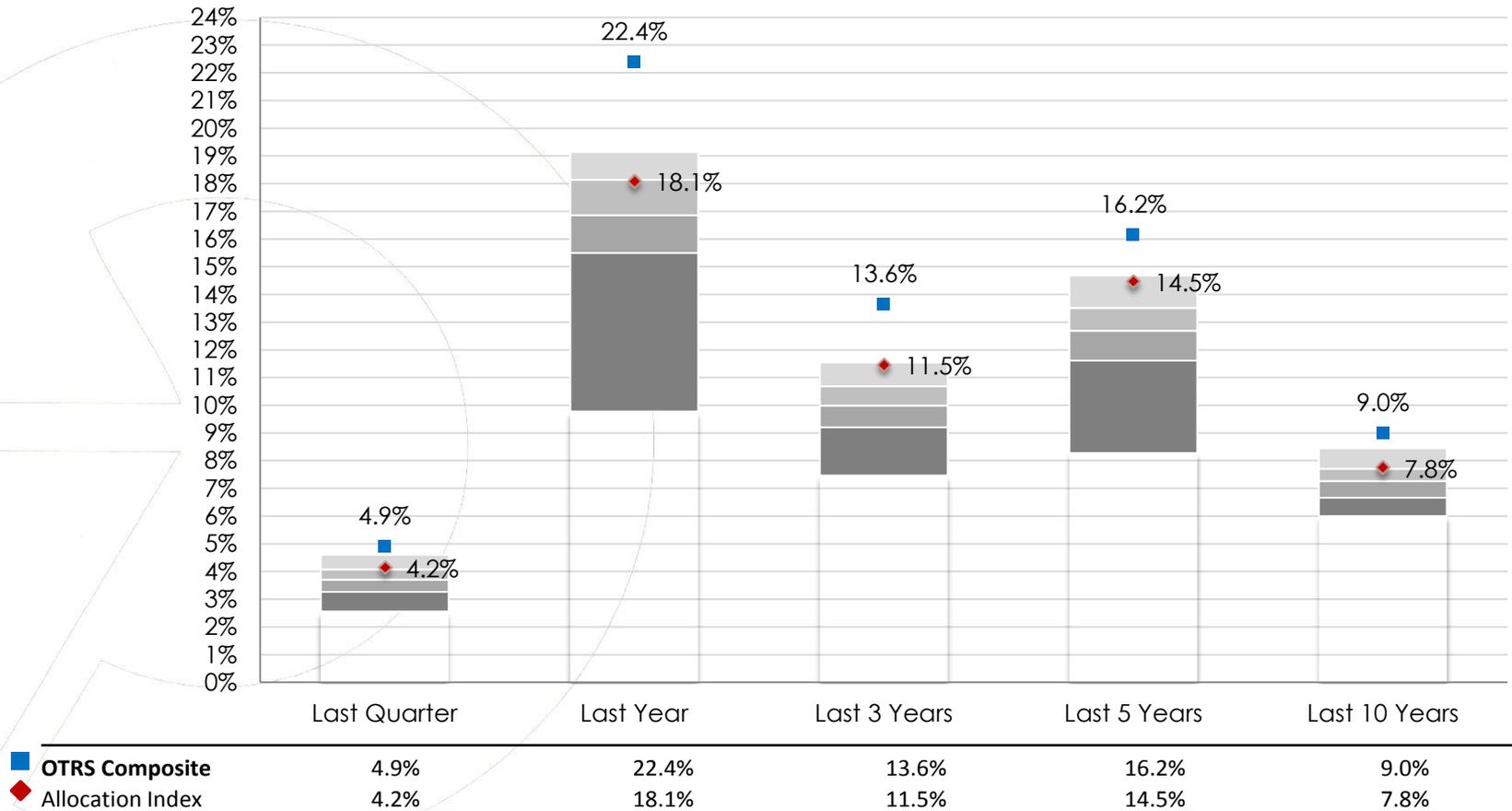
# Total Fund Allocation vs. Median Public Fund



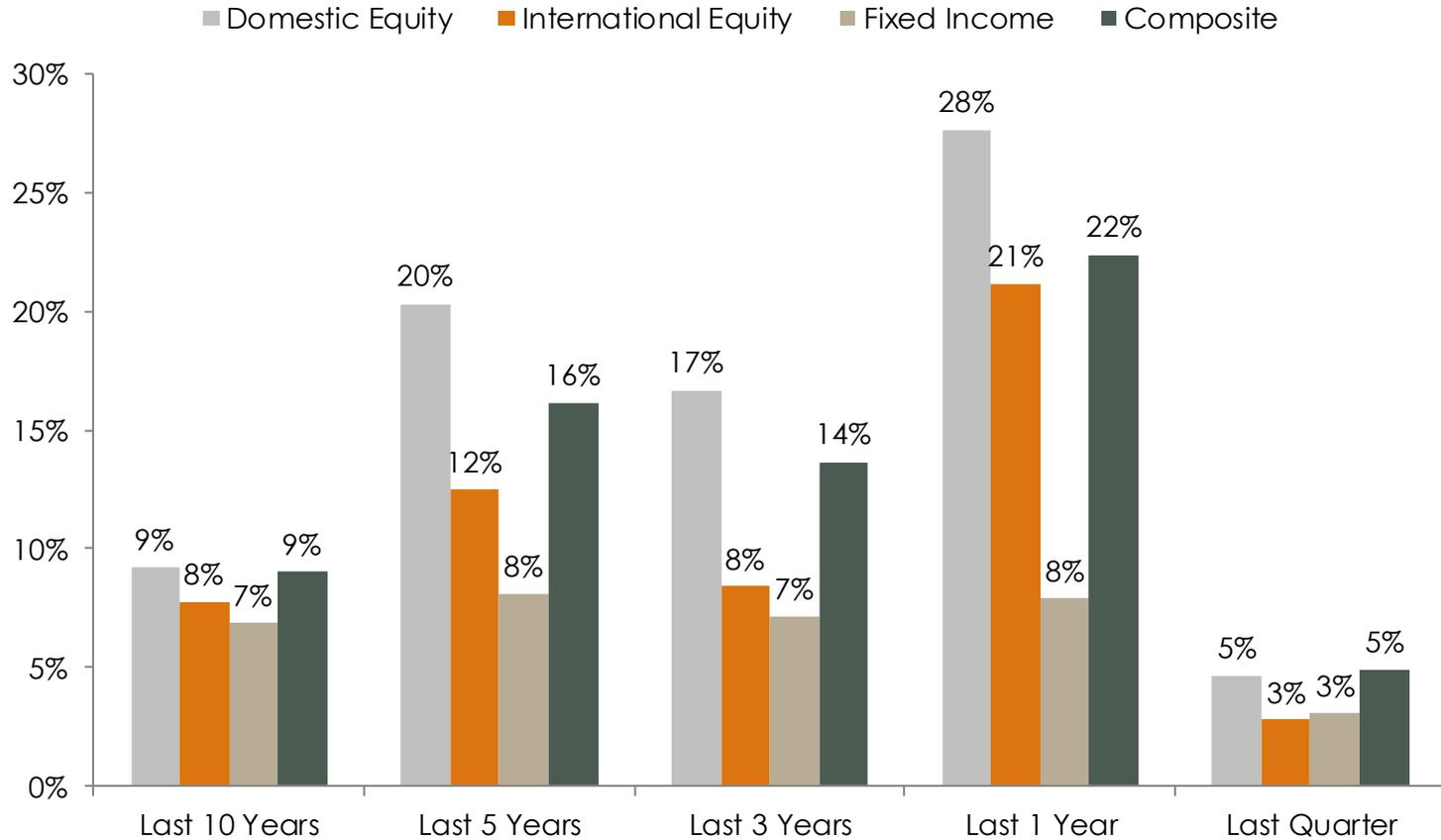
# Composite Performance Summary as of June 30, 2014



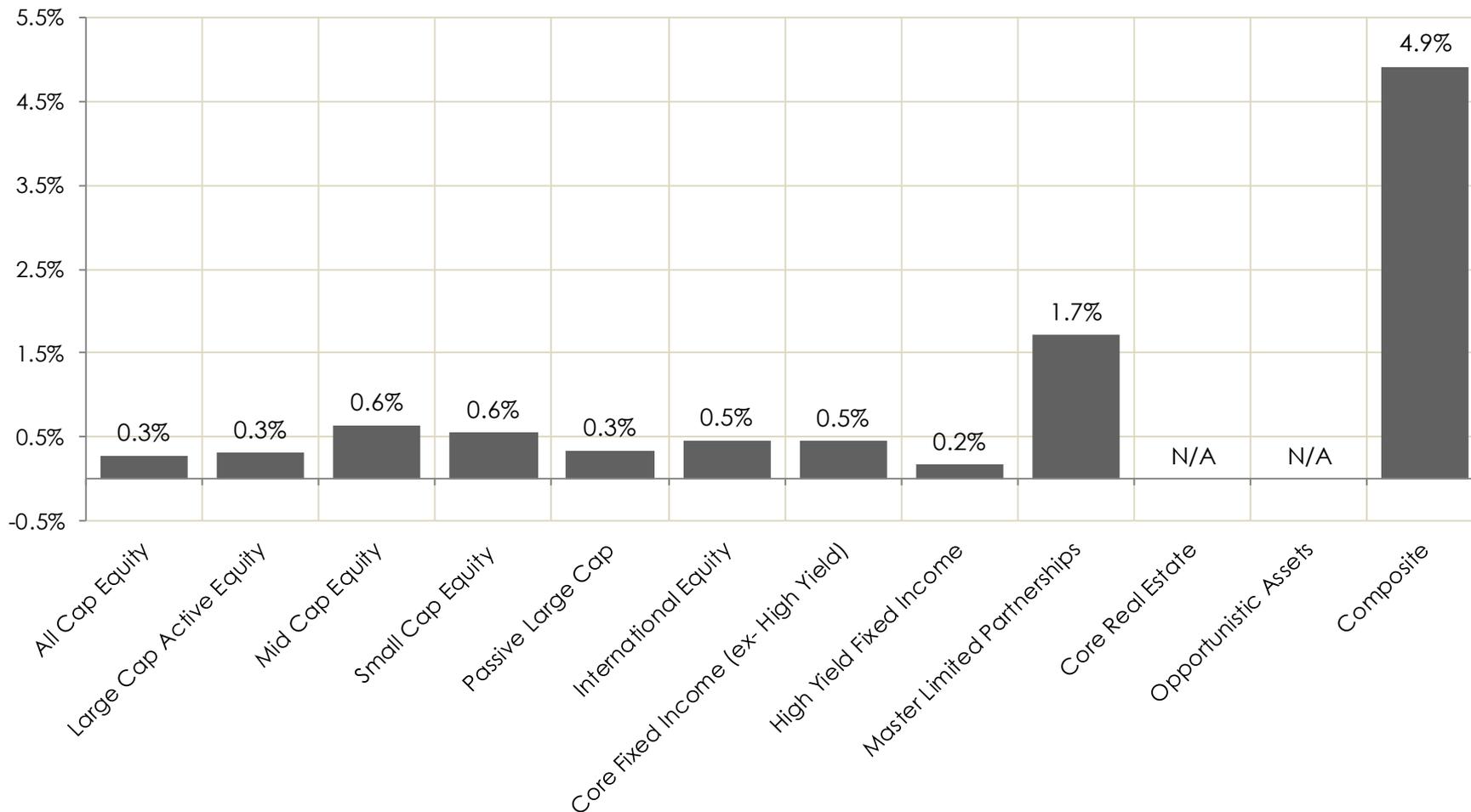
# Total Fund vs. Public Fund Peer Universe



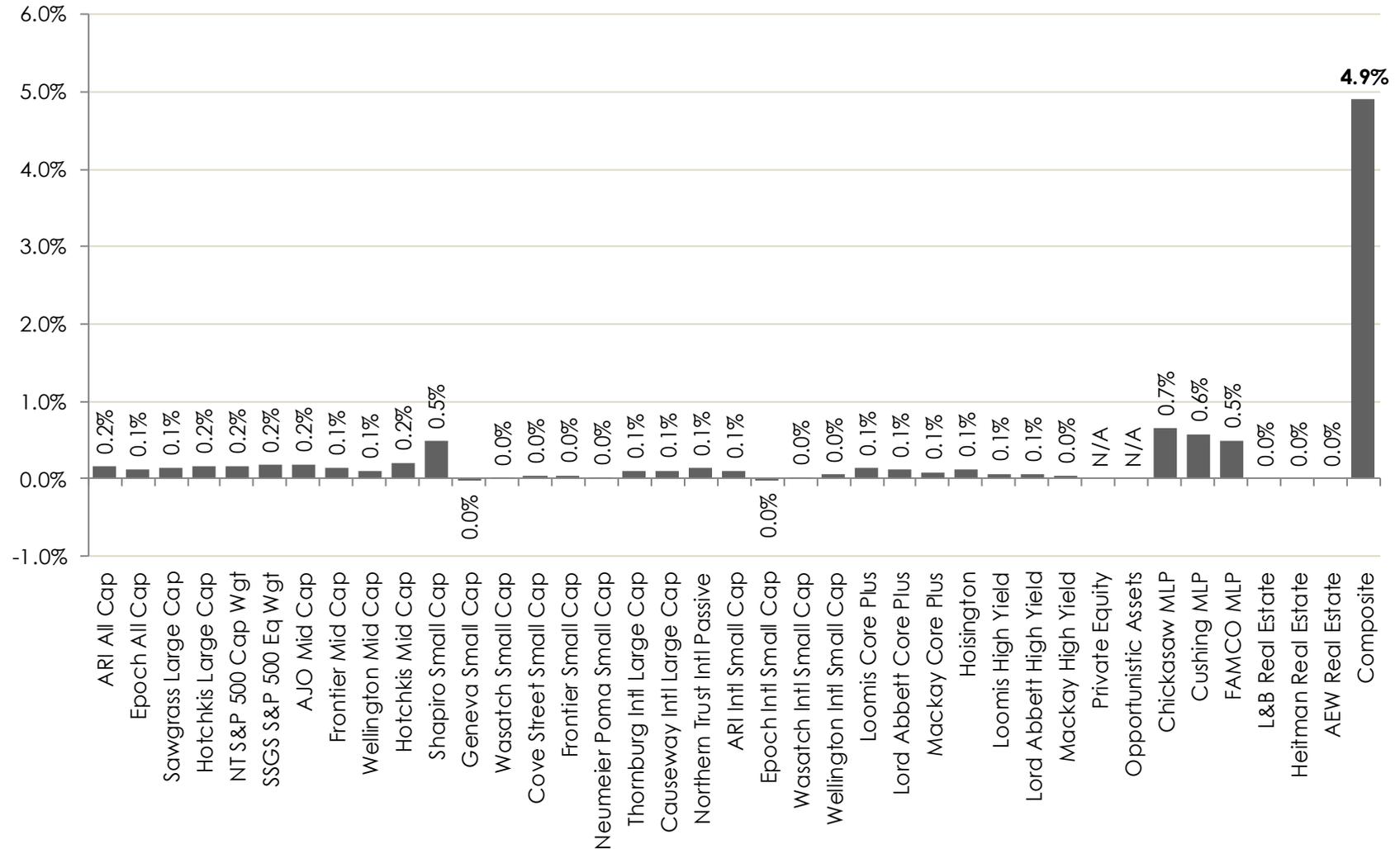
# Composite Performance Summary as of June 30, 2014



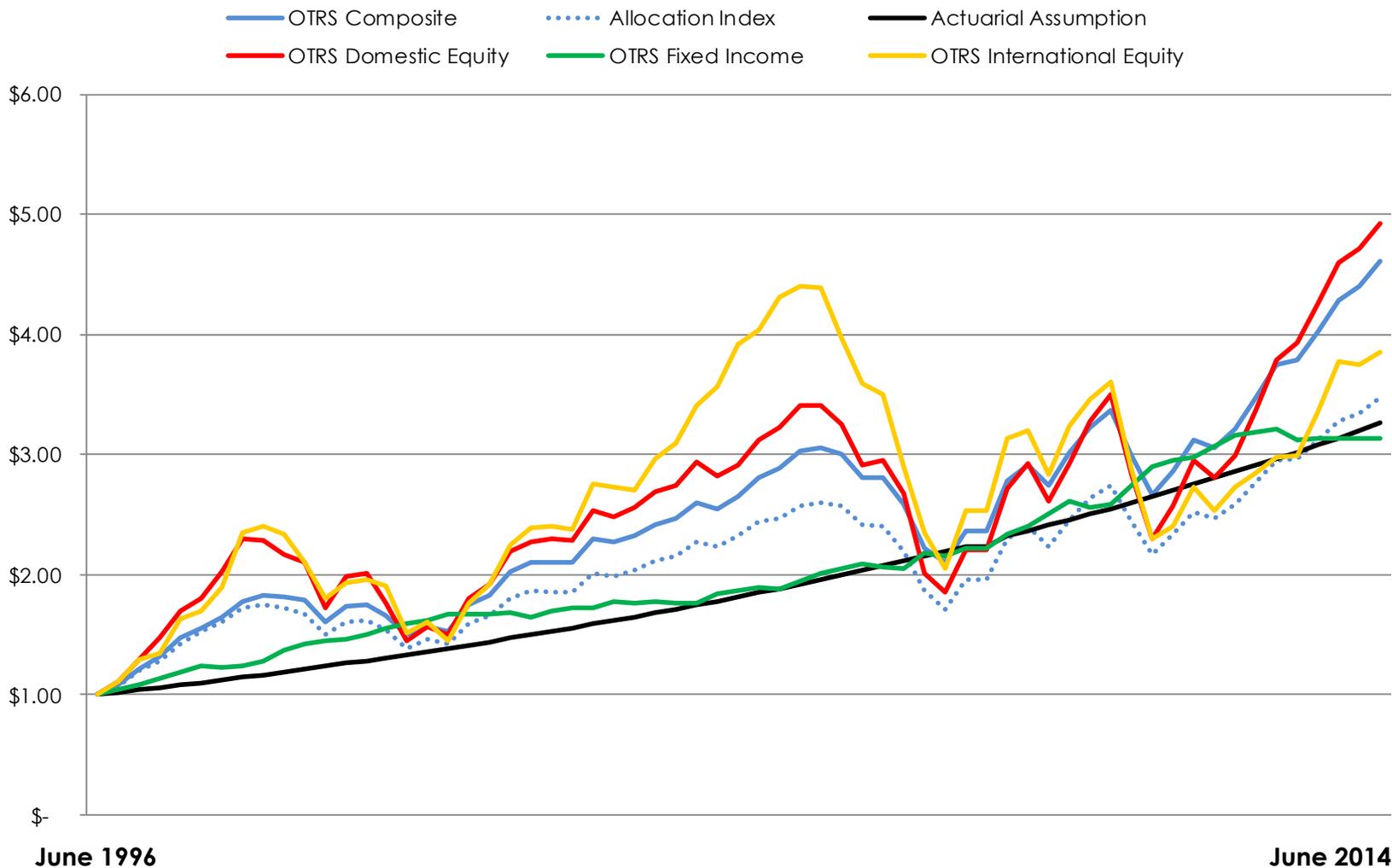
# Composition of Quarterly Return by Asset Class



# Composition of Quarterly Return by Portfolio



# Growth of a Dollar Over Time: Period Ended June 30, 2014



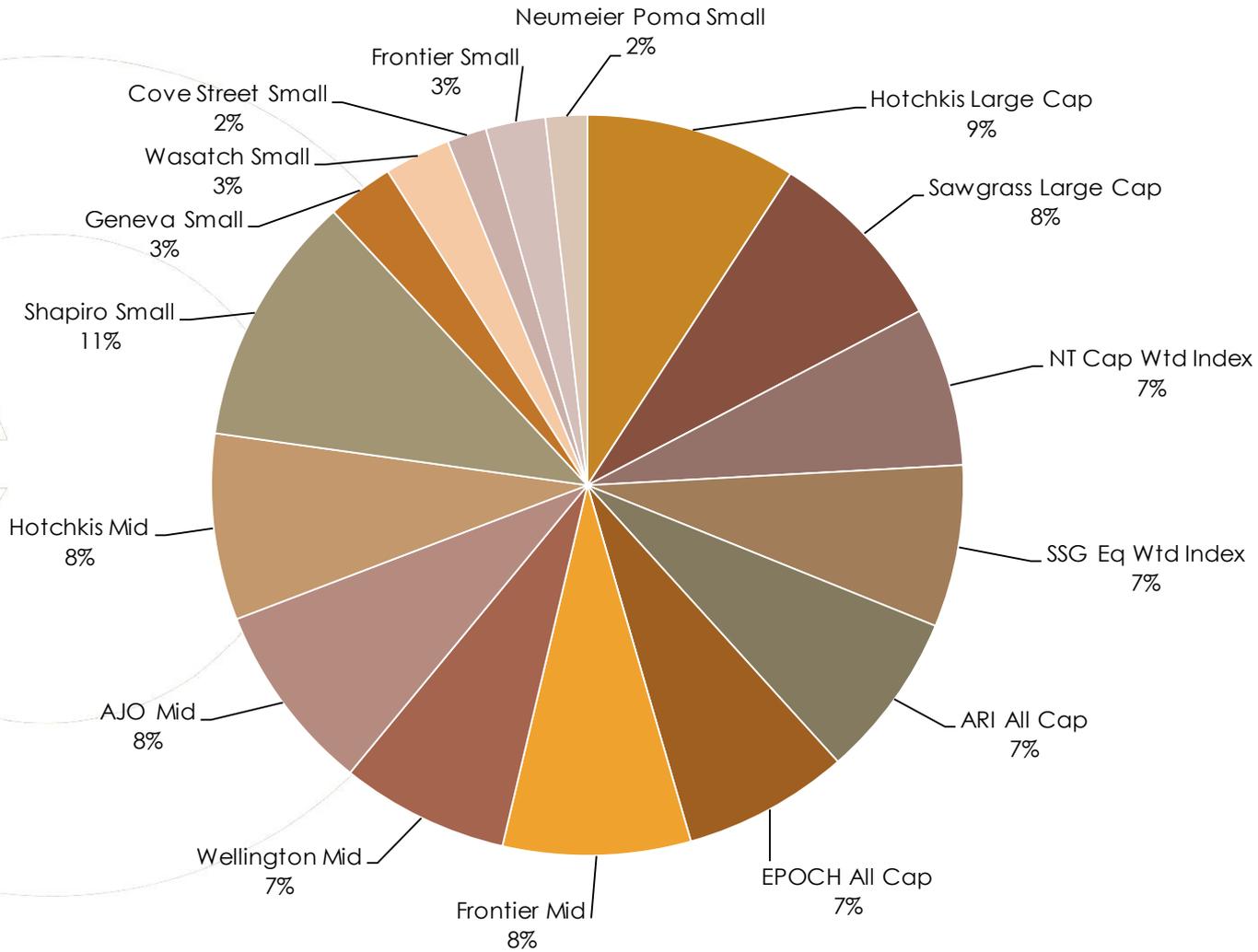
# Performance – Total Fund

	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Years	% Rank	Last Quarter	% Rank
<b>Total Fund</b>	<b>9.0</b>	<b>1</b>	<b>16.1</b>	<b>1</b>	<b>13.6</b>	<b>1</b>	<b>22.4</b>	<b>1</b>	<b>4.9</b>	<b>1</b>
<i>Allocation Index</i>	7.8		14.5		11.5		18.1		4.2	
<i>Actuarial Assumption</i>	8.0		8.0		8.0		8.0		1.9	
<b>Total Domestic Equity</b>	<b>9.2</b>	<b>19</b>	<b>20.3</b>	<b>2</b>	<b>16.7</b>	<b>3</b>	<b>27.6</b>	<b>4</b>	<b>4.7</b>	<b>37</b>
<i>S&amp;P 500</i>	7.8		18.8		16.6		24.6		5.2	
<b>Total International Equity</b>	<b>7.8</b>	<b>58</b>	<b>12.5</b>	<b>47</b>	<b>8.4</b>	<b>22</b>	<b>21.1</b>	<b>77</b>	<b>2.8</b>	<b>96</b>
<i>MSCI ACWI ex-US</i>	7.8		11.1		5.7		21.8		5.0	
<b>Total Core Fixed Income</b>	<b>6.8</b>	<b>2</b>	<b>8.1</b>	<b>21</b>	<b>7.1</b>	<b>13</b>	<b>7.9</b>	<b>22</b>	<b>3.1</b>	<b>8</b>
<i>Barclays Aggregate</i>	4.9		4.9		3.7		4.4		2.0	

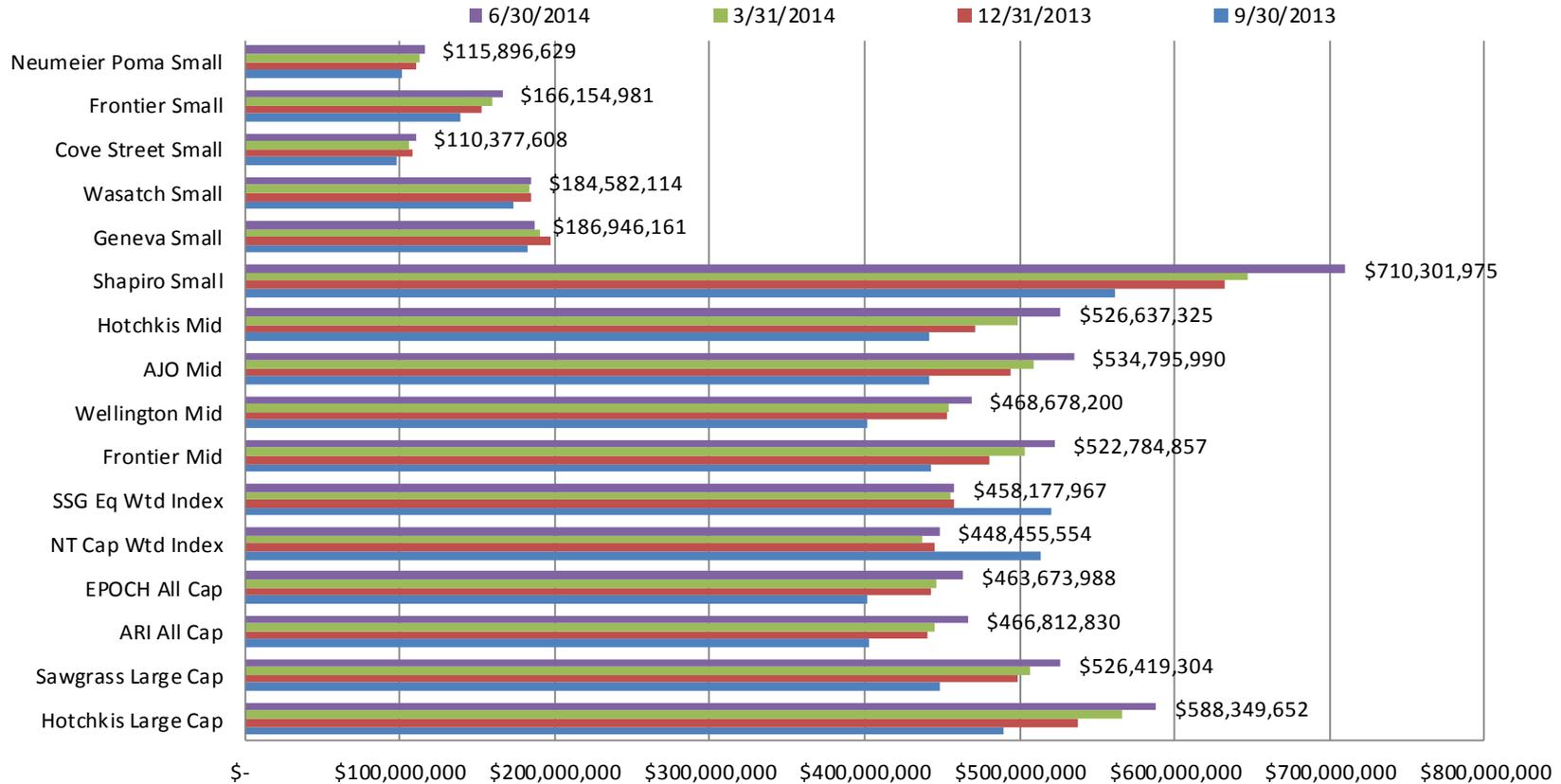
# Composite Peer Ranking History

Periods Ended	Trailing 5 Years	Trailing 3 Years	Trailing Year	Last Quarter
<b>2q2014</b>	1	1	1	1
1q2014	3	1	1	7
<b>4q2013</b>	1	1	1	2
3q2013	2	3	1	14
<b>2q2013</b>	1	3	1	11
1q2013	3	4	4	3
<b>4q2012</b>	15	3	11	24
3q2012	21	13	8	10
<b>2q2012</b>	24	4	<b>33</b>	<b>75</b>
1q2012	22	13	25	14
<b>4q2011</b>	<b>36</b>	14	<b>52</b>	8
3q2011	<b>31</b>	23	<b>95</b>	<b>89</b>
<b>2q2011</b>	20	13	23	<b>93</b>
1q2011	9	21	5	17
<b>4q2010</b>	21	<b>29</b>	15	<b>29</b>
3q2010	<b>30</b>	<b>38</b>	10	18
<b>2q2010</b>	<b>35</b>	<b>46</b>	11	<b>62</b>
1q2010	24	25	<b>70</b>	<b>44</b>
<b>4q2009</b>	<b>36</b>	<b>43</b>	15	25
3q2009	26	42	<b>32</b>	13
<b>2q2009</b>	<b>46</b>	<b>50</b>	<b>44</b>	<b>28</b>
1q2009	23	24	18	28
<b>4q2008</b>	<b>47</b>	<b>61</b>	<b>62</b>	<b>64</b>
3q2008	24	59	<b>67</b>	<b>48</b>
<b>2q2008</b>	25	52	<b>83</b>	17
1q2008	19	49	83	79
<b>4q2007</b>	19	46	62	<b>78</b>
3q2007	18	36	<b>37</b>	<b>87</b>
<b>2q 2007</b>	10	29	18	<b>34</b>
1q 2007	15	27	<b>38</b>	19
<b>4q 2006</b>	23	44	59	<b>36</b>
3q 2006	15	24	69	57
<b>Average Rank</b>	<b>20</b>	<b>26</b>	<b>33</b>	<b>35</b>
% of Observations in Top Quartile	75%	53%	53%	50%
<b>% of Observations Above Median</b>	<b>100%</b>	<b>91%</b>	<b>69%</b>	<b>72%</b>

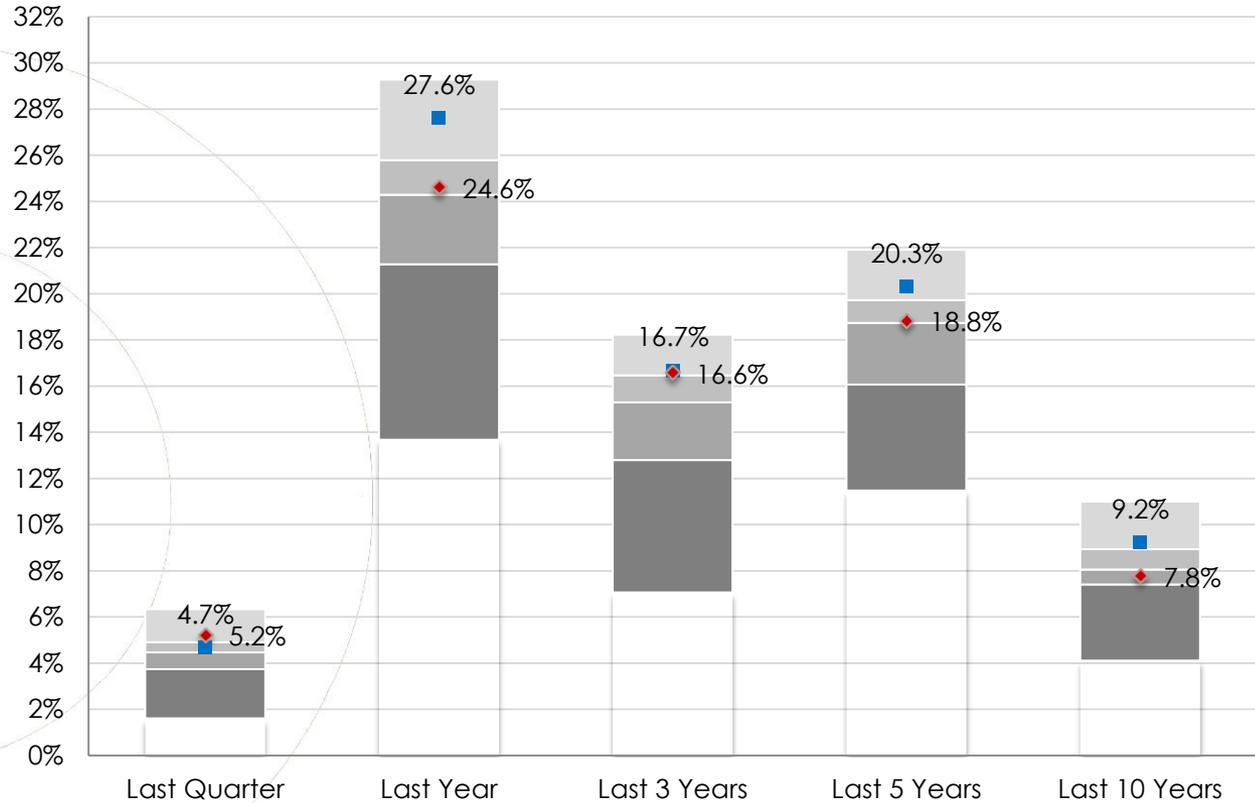
# Asset Allocation Summary – Domestic Equity Allocation



# Asset Allocation Summary – Domestic Equity Allocation



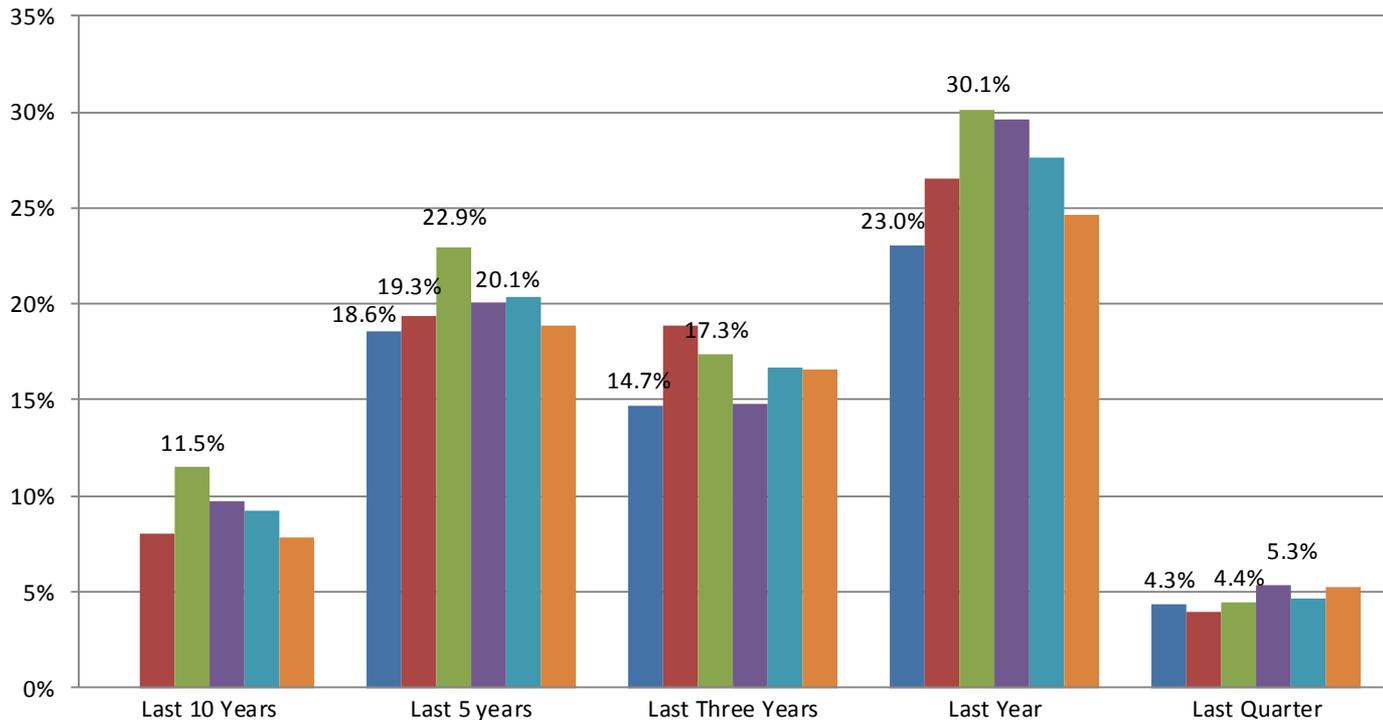
# Domestic Equity Composite vs. U.S. Equity Allocation Peer Universe



■ OTRS Equity Composite  
◆ S&P 500

4.7%	27.6%	16.7%	20.3%	9.2%
5.2%	24.6%	16.6%	18.8%	7.8%

# Domestic Equity Performance: Capitalization Composites



■ All Cap		18.6%	14.7%	23.0%	4.3%
■ Large Cap Active	8.0%	19.3%	18.9%	26.6%	3.9%
■ Mid Cap	11.5%	22.9%	17.3%	30.1%	4.4%
■ Small Cap	9.7%	20.1%	14.8%	29.6%	5.3%
■ All Domestic Equity	9.2%	20.3%	16.7%	27.6%	4.7%
■ S&P 500 (Cap Weighted)	7.8%	18.8%	16.6%	24.6%	5.2%

## Performance – All Cap and Large Cap Equity Managers

	Last 10 Years	% Rank	Last 5 Year	% Rank	Last 3 Years	% Rank	Last 1 Year	% Rank	Last Quarter	% Rank
<b>Advisory Research</b>	-	-	<b>18.7</b>	<b>71</b>	<b>15.0</b>	<b>65</b>	<b>22.4</b>	<b>70</b>	<b>4.8</b>	<b>33</b>
<b>EPOCH</b>	-	-	<b>18.4</b>	<b>76</b>	<b>14.4</b>	<b>72</b>	<b>23.7</b>	<b>58</b>	<b>3.8</b>	<b>55</b>
<i>Russell 3000 Value</i>	-		19.3		16.5		25.2		4.9	
<i>Russell 3000</i>	-		19.3		16.6		25.2		4.9	
<b>Hotchkis LCV</b>	<b>7.7</b>	<b>N/A</b>	<b>21.9</b>	<b>1</b>	<b>19.9</b>	<b>1</b>	<b>27.6</b>	<b>15</b>	<b>4.0</b>	<b>70</b>
<b>Sawgrass LCG</b>	-		<b>19.0</b>	<b>55</b>	<b>17.6</b>	<b>27</b>	<b>25.4</b>	<b>29</b>	<b>3.8</b>	<b>76</b>
<i>S&amp;P 500</i>	7.8		18.8		16.6		24.6		5.2	
<i>Russell 1000 Value</i>	8.0		19.2		16.9		23.8		5.1	
<i>Russell 1000 Growth</i>	-		19.2		16.3		26.9		5.1	
<b>NT Cap Weighted</b>	-	-	-	-	-	-	<b>24.3</b>	<b>71</b>	<b>5.3</b>	<b>24</b>
<b>SSGA Equal Weighted</b>	-	-	-	-	-	-	<b>27.0</b>	<b>16</b>	<b>5.5</b>	<b>24</b>
<i>S&amp;P 500 Cap Weighted</i>	7.8		18.8		16.6		24.6		5.2	
<i>S&amp;P 500 Equal Weighted</i>	10.1		22.4		17.2		27.4		5.5	

## Performance – Mid Cap and Small Cap Equity Managers

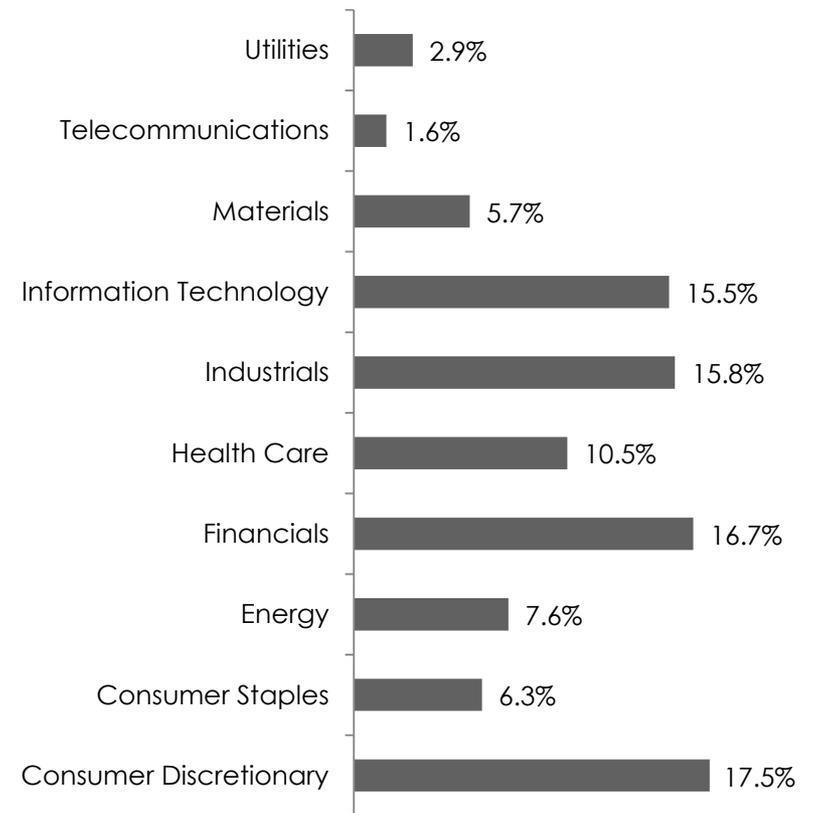
	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Year	% Rank	Last Quarter	% Rank
<b>AJO MCC</b>	11.1	74	23.2	22	17.7	28	30.6	17	5.0	29
<b>Frontier MCG</b>	11.9	37	20.1	76	15.6	41	29.5	21	3.9	26
<b>Hotchkis MCV</b>	12.2	N/A	28.4	7	23.5	5	29.7	25	5.7	71
<b>Wellington MCG</b>	10.4	63	20.3	74	12.3	80	31.0	6	3.1	52
<i>Russell MC</i>	10.4		22.1		16.1		26.9		5.0	
<i>Russell MC Growth</i>	9.8		21.2		14.5		26.0		4.4	
<i>Russell MC Value</i>	10.7		23.0		17.6		27.8		5.6	
<b>Shapiro SCC</b>	13.3	1	25.2	4	19.7	3	39.5	1	9.7	1
<b>Geneva SCG</b>	-	-	-	-	-	-	17.3	79	-2.1	78
<b>Wasatch SCG</b>	-	-	-	-	-	-	17.0	81	0.7	52
<b>Cove Street SCV</b>	-	-	-	-	-	-	23.6	44	4.7	14
<b>Frontier SCV</b>	-	-	-	-	-	-	29.0	14	4.2	25
<b>Neumeier Poma SCV</b>	-	-	-	-	-	-	24.6	38	2.4	57
<i>Russell 2000</i>	8.7		20.2		14.6		23.6		2.0	
<i>Russell 2000 Value</i>	8.7		20.2		14.6		23.6		2.1	

# Total Equity Portfolio Holdings Review

## Largest Equity Positions

Position	% of Total Equity Allocation
Aarons	0.49%
ADT	0.47%
Entergris	0.46%
Compass Minerals	0.46%
Axiall	0.45%
WPX Energy	0.45%
CST Brands	0.44%
Molson Coors Brewing	0.44%
Cablevision	0.43%
Lindsay	0.43%
<b>Top Ten Total Weight</b>	<b>4.52%</b>

## Sector Weightings



## Composite Equity Portfolio Characteristics – Trailing Five Years

	Average Market Cap	Dividend Yield	Tracking Error	Alpha	R <sup>2</sup>	Sharpe Ratio	Standard Deviation
Active All Cap/Large Cap Equity	\$109.85 billion	1.95%	3.85%	2.16	0.95	1.46	13.65
Mid Cap Equity	\$9.83 billion	1.05%	5.02%	-1.25	0.94	1.26	17.91
Small Cap Equity	\$12.25 billion	0.92%	2.71%	3.44	0.44	0.67	8.31
International Equity	\$38.81 billion	2.28%	2.29%	0.28	0.52	0.42	9.53
<b>Total Equity</b>	<b>\$44.89 billion</b>	<b>1.59%</b>	<b>3.04%</b>	<b>0.61</b>	<b>0.66</b>	<b>0.86</b>	<b>11.37</b>

## Active Domestic Equity Characteristics – Trailing Five Years

	<b>Asset Class</b>	<b>Upside Capture Ratio %</b>	<b>Downside Capture Ratio %</b>	<b>Trailing Five Year Return</b>	<b>Correlation vs. S&amp;P 500</b>	<b>Correlation vs. BC Aggregate</b>
Hotchkis & Wiley	Large Cap Value	123.5	106.3	21.9%	0.96	-0.32
Sawgrass	Large Cap Growth	94.4	85.7	19.1%	0.98	-0.18
Advisory Research	All Cap	97.3	95.6	18.8%	0.98	-0.29
EPOCH	All Cap	108.2	121.0	18.3%	0.98	-0.29
AJO	Mid Cap Core	138.4	115.2	23.2%	0.96	-0.30
Frontier	Mid Cap Growth	108.9	101.1	20.2%	0.92	-0.18
Hotchkis & Wiley	Mid Cap Value	195.4	129.5	28.6%	0.93	-0.28
Wellington	Mid Cap Growth	151.9	160.9	20.4%	0.93	-0.33
Shapiro	Small Cap Value/Core	166.9	123.5	26.0%	0.91	-0.35
Cove Street	Small Cap Value	128.7	90.6	24.0%	0.94	-0.24
Neumeier Poma	Small Cap Value	131.2	98.7	23.7%	0.90	-0.28
Frontier	Small Cap Value	150.5	89.6	27.1%	0.94	-1.39
Geneva	Small Cap Growth	116.3	121.4	19.5%	0.82	-0.35
Wasatch	Small Cap Growth	105.1	87.3	20.4%	0.88	-0.37

Upside and downside capture ratios measured against the S&P 500 index.

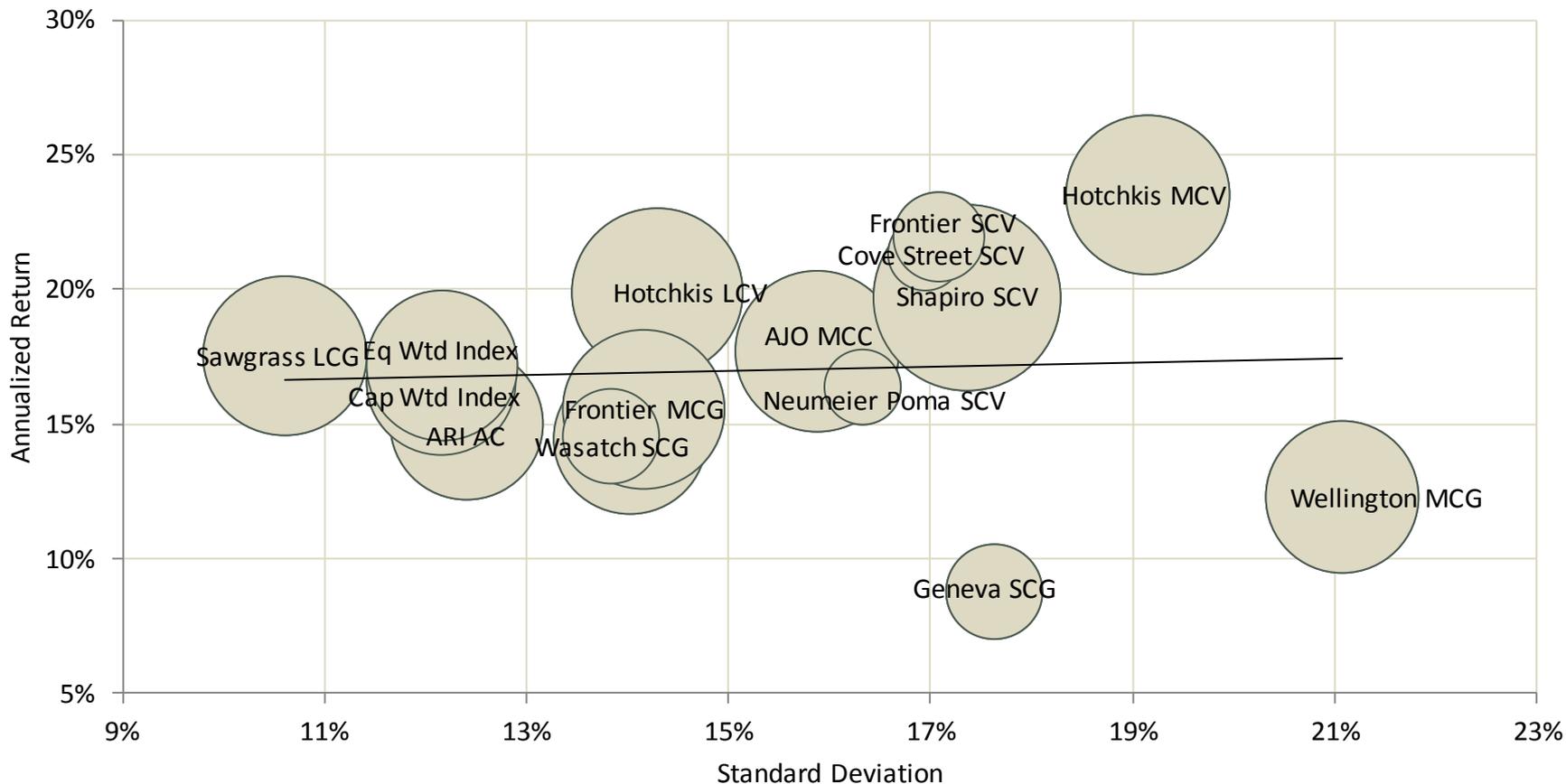
second quarter, 2014

# Domestic Equity Portfolios: 5 Year Correlation Matrix

Trailing Five Years	AJO MCC	ARI AC	Cove Street SCV	Epoch AC	Frontier MCG	Frontier SCV	Geneva SCG	Hotchkis LCV	Hotchkis MCV	Neumeier Poma SCV	Sawgrass LCG	Shapiro SCC	Wasatch SCG	Wellington MCG
AJO MCC	-													
ARI AC	0.96	-												
Cove Street SCV	0.94	0.92	-											
Epoch AC	0.97	0.95	0.90	-										
Frontier MCG	0.97	0.92	0.89	0.95	-									
Frontier SCV	0.98	0.96	0.95	0.96	0.95	-								
Geneva SCG	0.94	0.93	0.90	0.91	0.93	0.95	-							
Hotchkis LCV	0.93	0.93	0.89	0.94	0.91	0.93	0.90	-						
Hotchkis MCV	0.92	0.95	0.95	0.95	0.94	0.96	0.92	0.96	-					
Neumeier Poma SCV	0.96	0.94	0.91	0.95	0.93	0.95	0.92	0.88	0.91	-				
Sawgrass LCG	0.97	0.96	0.91	0.96	0.94	0.94	0.91	0.94	0.92	0.91	-			
Shapiro SCC	0.95	0.94	0.94	0.93	0.94	0.96	0.92	-	-	0.94	0.92	-		
Wasatch SCG	0.94	0.90	0.92	0.93	0.95	0.95	0.96	0.89	0.94	0.92	0.91	0.94	-	
Wellington MCG	0.97	0.94	0.93	0.94	0.95	0.94	0.92	0.93	0.95	0.94	0.92	0.97	0.94	-

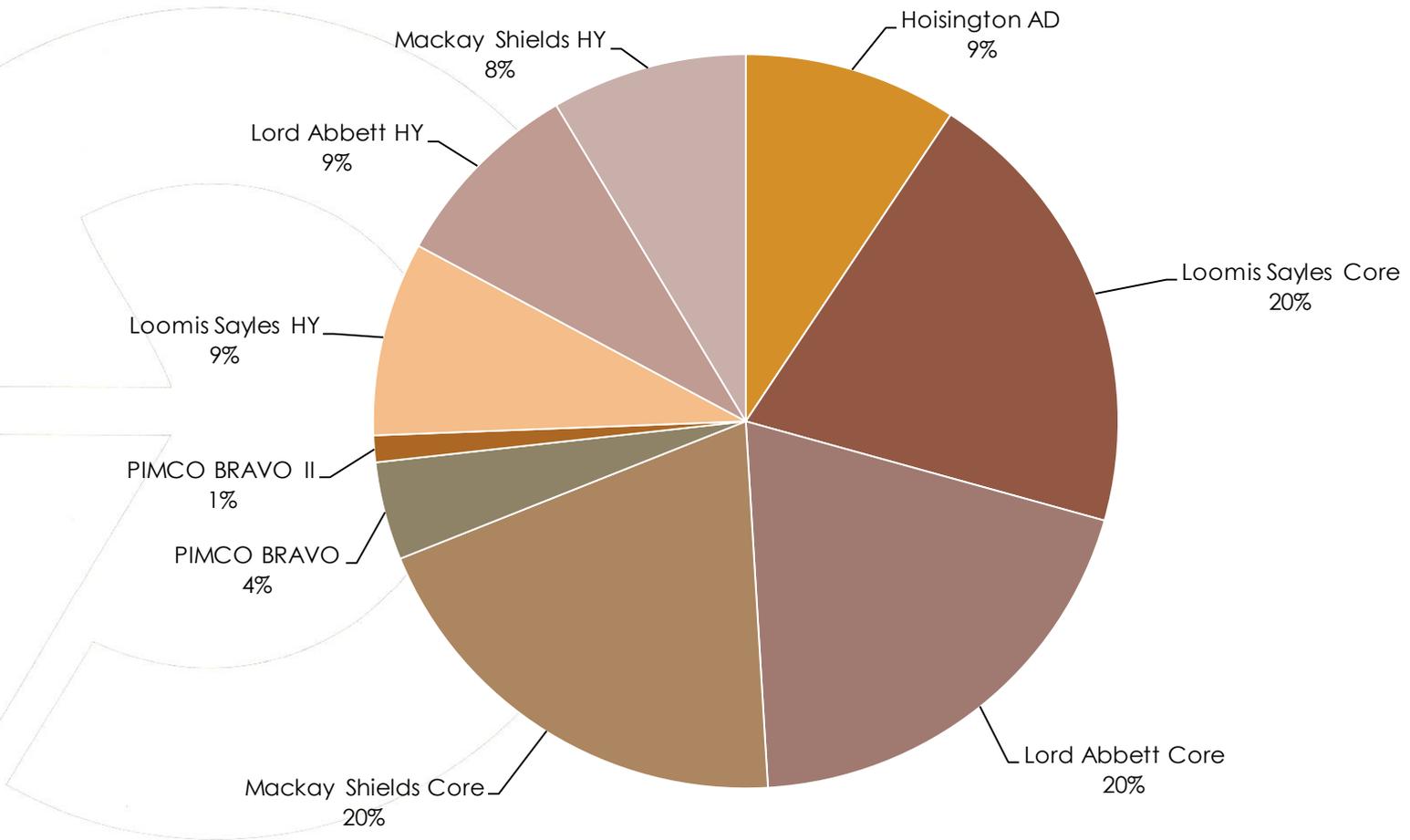
# Domestic Equity Risk Return Comparison

Composite Data Used – Three Years Ended June 30, 2014

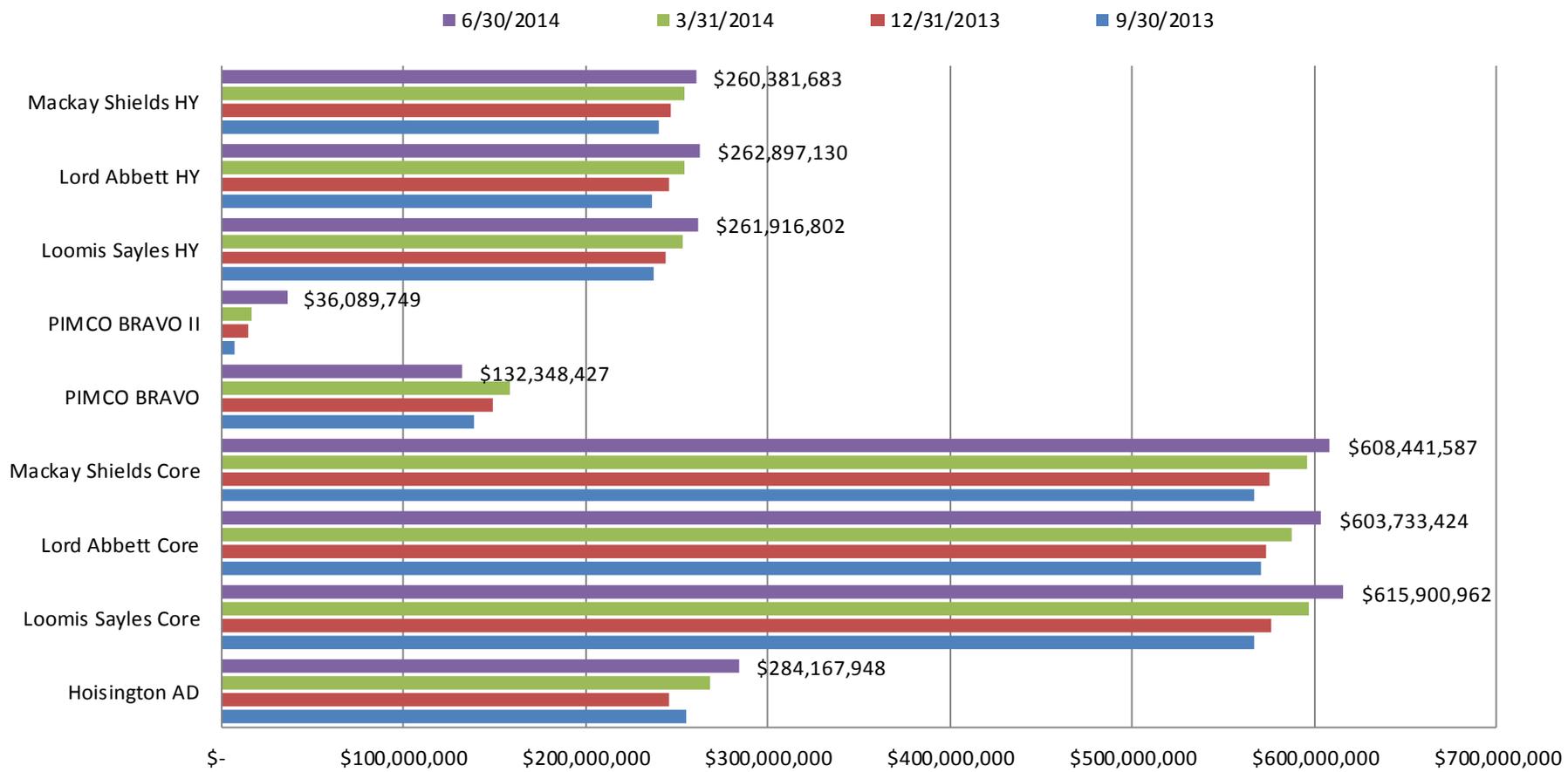


\*Composite performance used when necessary.

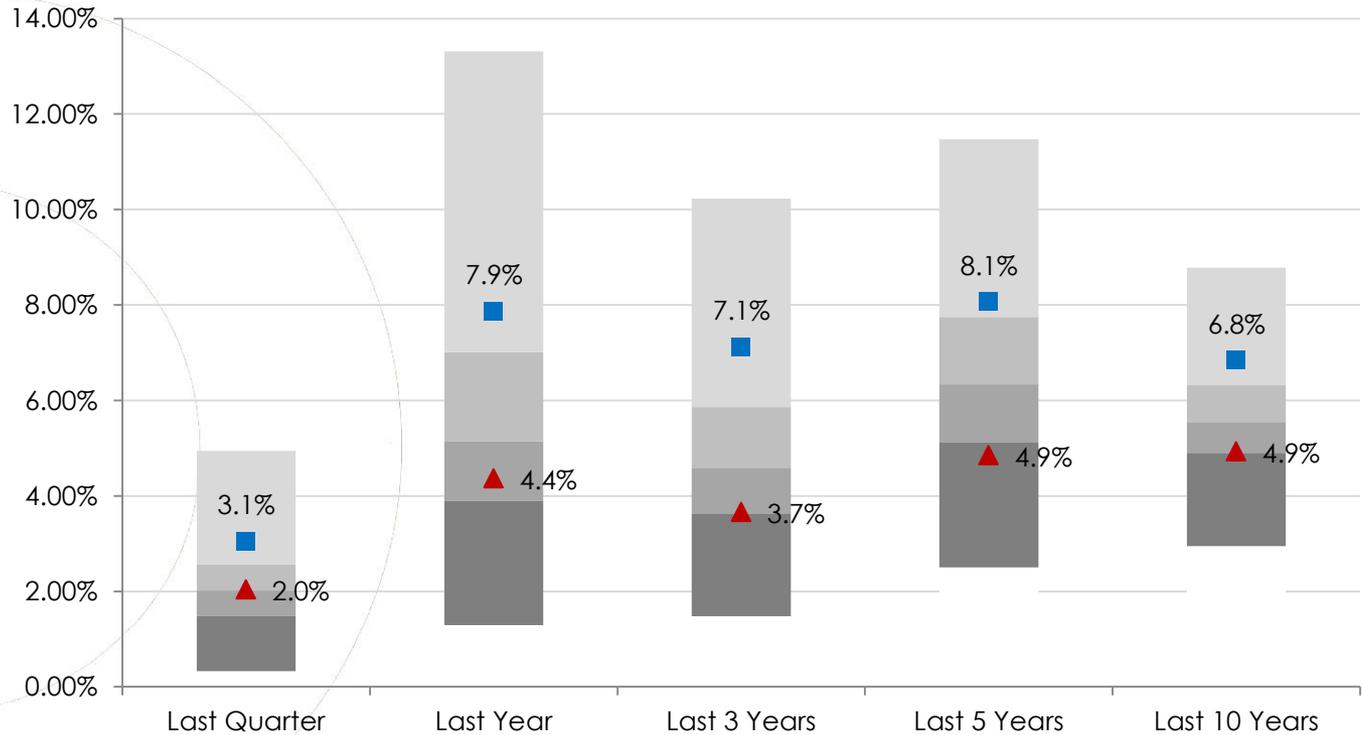
# Asset Allocation Summary – Fixed Income Allocation



# Asset Allocation Summary – Fixed Income Allocation



# Fixed Income Composite vs. Core Fixed Income Peer Universe



■ OTRS Fixed Income Composite  
 ◆ Barclays Capital Aggregate

■ OTRS Fixed Income Composite	3.1%	7.9%	7.1%	8.1%	6.8%
◆ Barclays Capital Aggregate	2.0%	4.4%	3.7%	4.9%	4.9%

## Performance – Fixed Income Managers

	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last Year	% Rank	Last Quarter	% Rank
Loomis Sayles	8.1	8	9.7	12	7.4	17	9.5	15	3.1	22
Lord Abbett	-	-	7.5	25	5.9	23	6.6	25	2.7	30
Mackay Shields	-	-	8.1	22	6.5	20	6.9	24	2.0	75
Hoisington	-	-	8.5	36	11.7	4	7.8	43	5.9	2
<i>BC Aggregate</i>	4.9		4.9		3.7		4.4		2.0	
Loomis HY	-	-	13.7	40	8.4	78	12.5	39	3.6	29
Lord Abbett HY	-	-	15.3	17	10.9	12	14.2	19	3.4	33
Mackay HY	-	-	12.7	68	9.4	46	10.9	66	2.3	61
<i>ML High Yield II</i>	-		13.9		9.3		11.8		2.6	

## Fixed Income Portfolio Characteristics – Trailing Five Years

	Asset Class	Credit Quality	Modified Duration	Maturity	Yield to Maturity
Loomis Sayles	Core Plus	A-	5.3	7.8	3.4%
Lord Abbett	Core Plus	AA	5.2	7.2	2.9%
Mackay Shields	Core Plus	A+	3.4	8.8	2.9%
Hoisington	Active Duration	AAA	20.0	24.2	3.3%
<b>Core Fixed Income Composite</b>	<b>Core Plus</b>	<b>A+</b>	<b>6.7</b>	<b>10.1</b>	<b>3.1%</b>
Loomis Sayles	High Yield	B	4.3	7.0	4.6%
Lord Abbett	High Yield	B+	5.5	6.9	6.1%
Mackay Shields	High Yield	B+	3.2	6.1	4.7%
<b>High Yield Composite</b>	<b>High Yield</b>	<b>B</b>	<b>4.2</b>	<b>6.7</b>	<b>5.1%</b>

## Fixed Income Performance Characteristics – Trailing Five Years

	Asset Class	Upside Capture Ratio %	Downside Capture Ratio %	Trailing Five Year Return	Correlation vs. BC Aggregate	Correlation vs. S&P 500
Loomis Sayles	Core Plus	186.8%	42.1%	9.4%	0.64	0.62
Lord Abbett	Core Plus	146.0%	53.1%	7.5%	0.82	0.43
Mackay Shields	Core Plus	140.6%	28.4%	7.4%	0.89	0.36
Hoisington	Active Duration	297.1%	593.7%	8.5%	0.75	-0.33
Loomis Sayles	High Yield	286.1%	-260.3%	16.0%	0.24	0.75
Lord Abbett	High Yield	252.9%	-305.0%	15.3%	0.22	0.71
Mackay Shields	High Yield	216.5%	-297.7%	12.8%	0.23	0.69

Upside and downside capture ratios measured against the Barclays Capital Aggregate index.  
\*Composite performance used when necessary.

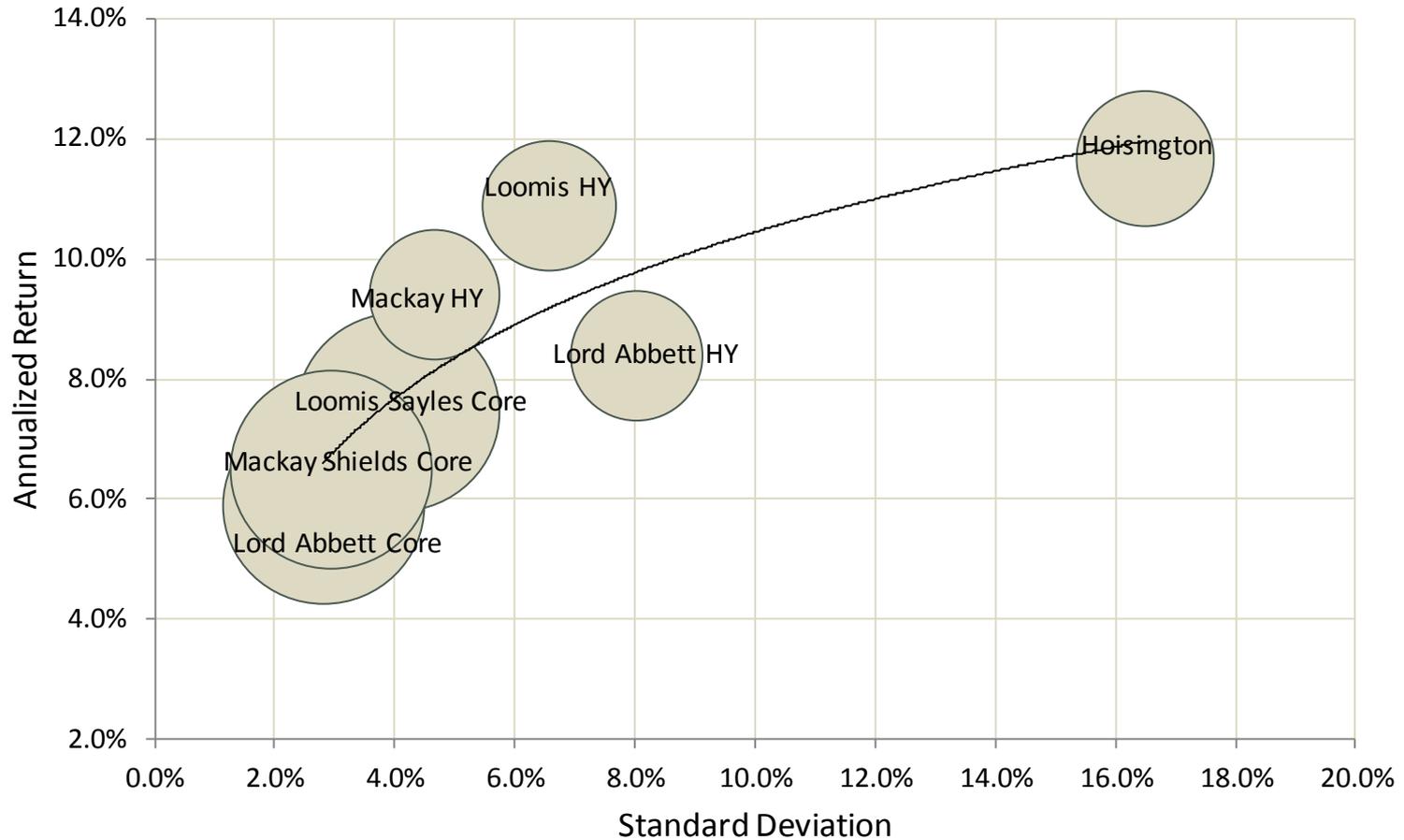
## Fixed Income Portfolios: 5 Year Correlation Matrix

Trailing Five Years	Hoisington	Loomis Core	Loomis High Yield	Lord Abbett Core	Lord Abbett High Yield	Mackay Shields Core	Mackay Shields High Yield
Hoisington	-						
Loomis Core	0.17	-					
Loomis High Yield	-0.49	0.72	-				
Lord Abbett Core	0.31	0.91	0.59	-			
Lord Abbett High Yield	-0.53	0.66	0.97	0.53	-		
Mackay Shields Core	0.38	0.91	0.51	0.88	0.46	-	
Mackay Shields High Yield	-0.43	0.73	0.96	0.63	0.97	0.52	-

\*Composite performance used when necessary.

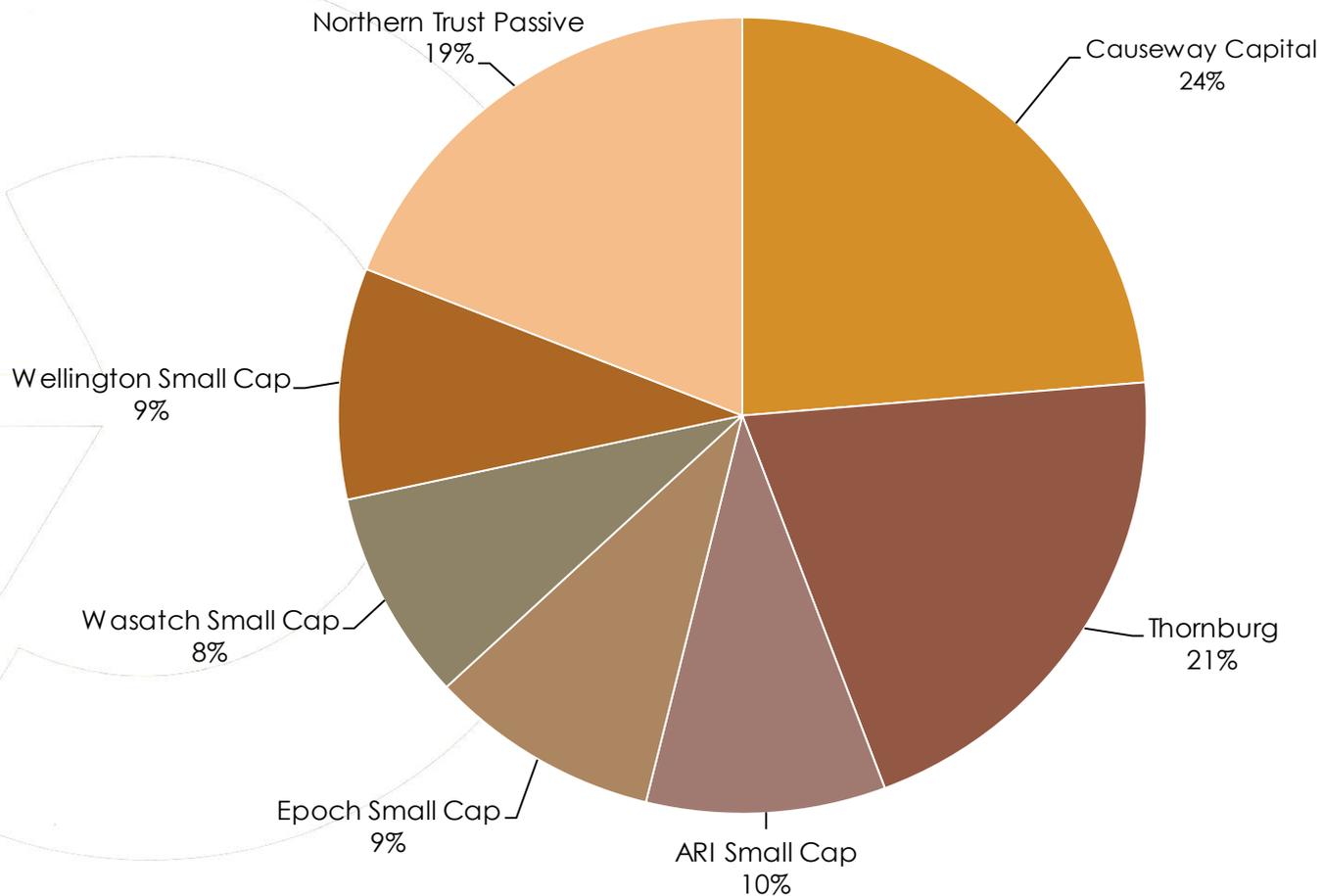
# Fixed Income Risk Return Comparison

Composite Data Used – Three Years Ended June 30, 2014



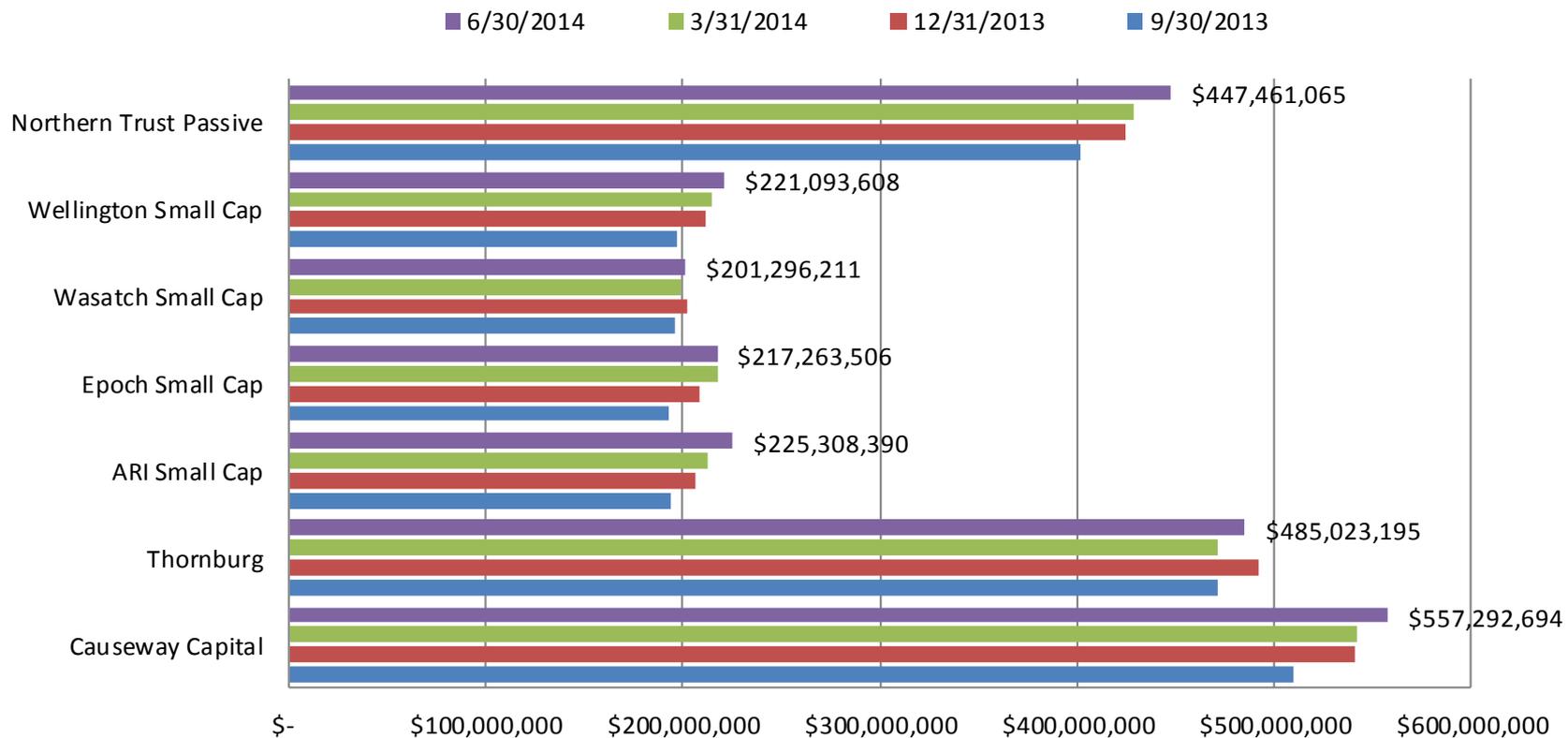
\*Composite performance used when necessary to calculate figures.

# Asset Allocation Summary – International Equity Allocation

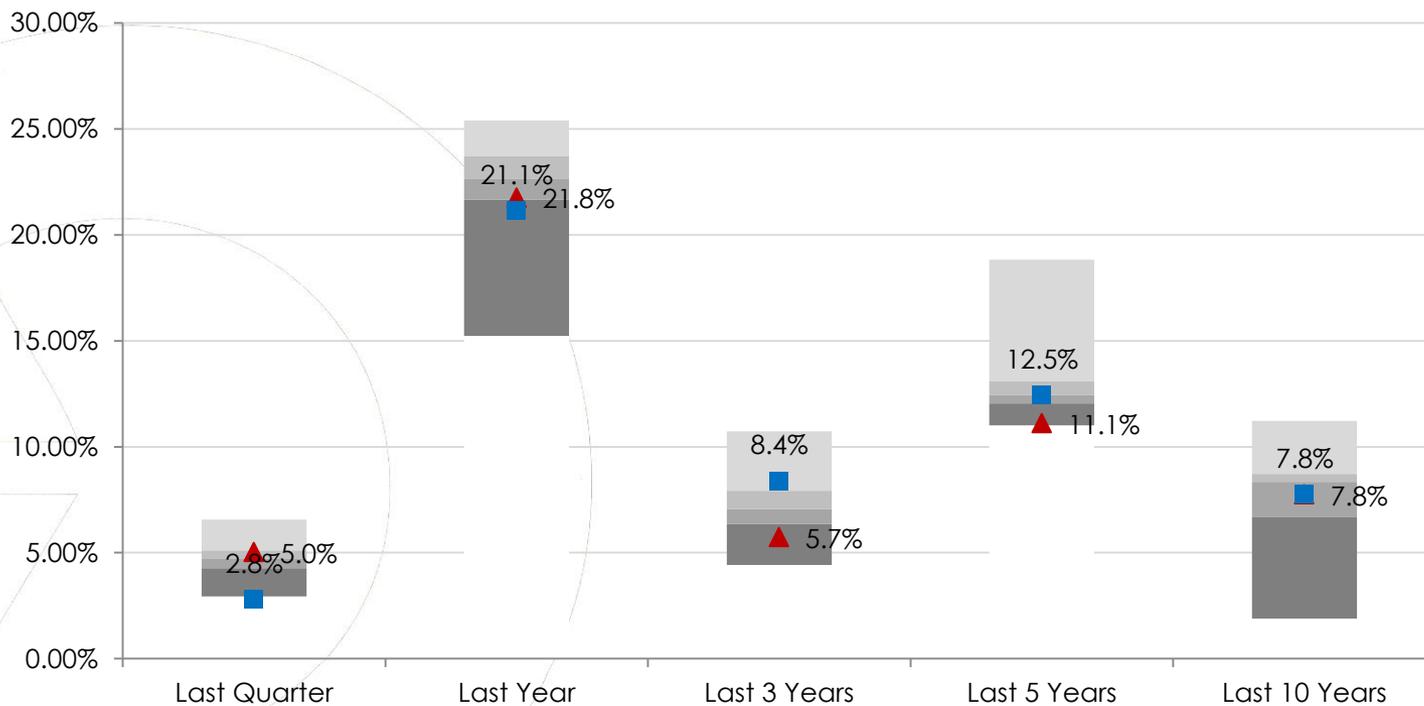


second quarter, 2014

# Asset Allocation Summary – International Equity Allocation



## International Equity Composite vs. Non-US Equity Allocation Peer Universe



■ OTRS International Equity Composite

◆ MSCI ACWI Ex-US

2.8%

5.0%

21.1%

21.8%

8.4%

5.7%

12.5%

11.1%

7.8%

7.8%

## Performance – International Equity Managers

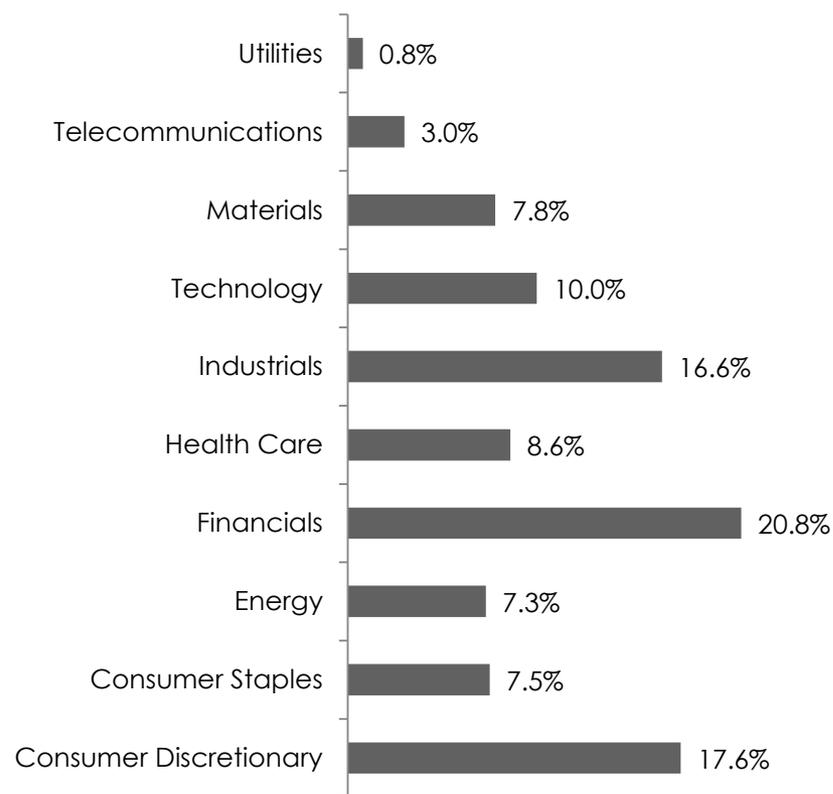
	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Year	% Rank	Last Quarter	% Rank
Causeway	8.0	55	14.6	20	8.9	18	21.8	72	2.8	95
Northern Trust Passive	-		-		-		-		4.3	74
Thornburg	-		10.7	95	3.7	97	13.4	96	2.9	95
MSCI ACWI Ex US	6.9		-		-		-		-	
ARI	-	-	-	-	-	-	29.8	2	6.2	10
EPOCH	-	-	-	-	-	-	28.3	4	-0.2	97
Wasatch	-	-	-	-	-	-	16.7	90	1.2	95
Wellington	-	-	-	-	-	-	29.5	3	3.2	91
MSCI EAFE Small Cap	8.7		15.2		9.8		29.1		2.1	

# Total International Equity Portfolio Holdings Review

## Largest Equity Positions

Position	% of Total Equity Allocation
Reed Elsevier	1.04%
AKZO Nobel	0.86%
KDDI	0.82%
Toyota	0.80%
Sanofi	0.76%
Daimler	0.75%
Novartis	0.75%
Nestle	0.73%
Novartis	0.69%
British American Tobacco	0.68%
<b>Top Ten Total Weight</b>	<b>7.88%</b>

## Sector Weightings



## Active International Equity Characteristics – Trailing Five Years

	<b>Asset Class</b>	<b>Upside Capture Ratio %</b>	<b>Downside Capture Ratio %</b>	<b>Trailing Five Year Return</b>	<b>Correlation vs. S&amp;P 500</b>	<b>Correlation vs. MSCI ACWI ex US</b>
Causeway	Large Cap Value	129.1%	91.3%	16.1%	0.92	0.97
Northern Trust	Passive Index	100.0%	100.0%	11.4%	0.88	0.99
Thornburg	Large Cap Core	86.5%	90.5%	10.4%	0.92	0.99
Advisory Research	Small Cap Value	115.4%	70.3%	16.9%	0.85	0.95
EPOCH	Small Cal Value	137.8%	95.6%	16.7%	0.89	0.97
Wasatch	Small Cap Growth	150.4%	65.3%	21.9%	0.86	0.95
Wellington	Small Cap Growth	110.1%	88.5%	14.0%	0.92	0.99

Upside and downside capture ratios measured against the MSCI ACWI ex-US index.

\*Composite performance used when necessary.

## International Equity Portfolios: 5 Year Correlation Matrix

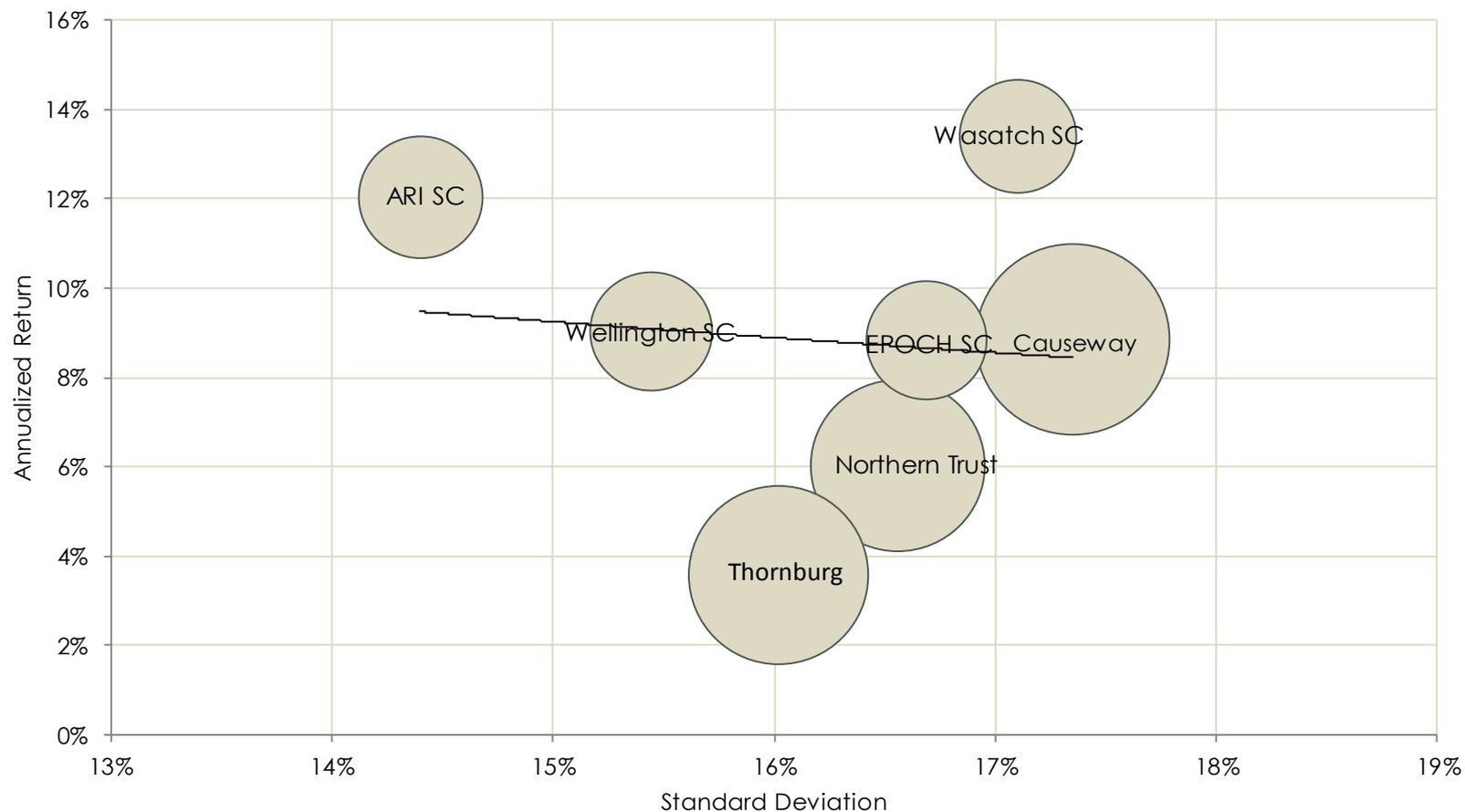
Trailing Five Years	ARI SCI	Causeway LCI	EPOCH SCI	Northern Trust	Thornburg LCI	Wasatch SCI	Wellington SCI
ARI SCI	-						
Causeway LCI	0.92	-					
EPOCH SCI	0.93	0.94	-				
Northern Trust Passive	0.93	0.97	0.96	-			
Thornburg LCI	0.90	0.96	0.95	0.98	-		
Wasatch SCI	0.87	0.88	0.94	0.94	0.93	-	
Wellington SCI	0.92	0.98	0.96	0.99	0.98	0.93	-

\*Composite performance used when necessary.

second quarter, 2014

# International Equity Risk Return Comparison

Composite Data Used – Three Years Ended June 30, 2014



## Performance – MLPs

	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Year	% Rank	Last Quarter	% Rank
<b>Chickasaw</b>	-	-	<b>38.0</b>	-	<b>54.6</b>	-	<b>21.5</b>	-
<b>FAMCO</b>	-	-	<b>30.3</b>	-	<b>29.3</b>	-	<b>17.5</b>	-
<b>Swank</b>	-	-	<b>22.2</b>	-	<b>47.3</b>	-	<b>19.5</b>	-
<i>Alerian MLP</i>	-		19.0		21.6		14.2	

## August Manager Status Report

Manager	Mandate	Strategy	AUM	% of Portfolio	Current Status	Reason for Status Change	Status Change Effective Date	Date of Last Review	Date of Next Review	Expectations
Thornburg Investment Management	International Equity	All Cap	485,023,195	3.42%	On Alert	Performance Issues	November 2013	June 2014	December 2014	Improvement in performance compared to peers and benchmark.
MacKay Shields LLC	Fixed Income	High Yield	260,381,683	1.84%	On Alert	Personnel Change	June 2014	June 2014	December 2014	Maintain continuity of management practices and results
Geneva Capital Management, LTD	Domestic Equity	Small Cap	178,201,055	4.35%	On Alert	Acquisition	July 2014	July 2014	December 2014	Maintain continuity of management practices and results
Lord Abbett & Co. LLC	Fixed Income	Core Plus	602,869,128	1.29%	On Alert	Personnel Change	July 2014	July 2014	December 2014	Maintain continuity of management practices and results

All other managers currently rated In Compliance

July 8, 2014

Oklahoma Teachers Retirement System  
 Oliver Hodge Education Building  
 2500 North Lincoln Blvd., 5th floor  
 Oklahoma City, OK 73105

Dear Board Members,

Franklin Park has helped Oklahoma Teacher Retirement System (“OTRS”) build its private equity program since 2010 through the management of OTRS/FP Private Equity Fund, L.P. (“OTRS/FP”) and oversight of OTRS Legacy P/E Assets Fund (“OTRS Legacy”). A summary of the aggregate portfolio is provided below, as of March 31, 2014.

<b>Partnership</b>	<b>Committed Capital (\$M)</b>	<b>Contributed Capital (\$M)</b>	<b>% Drawn</b>	<b>Distributed Capital (\$M)</b>	<b>Remaining Value (\$M)</b>
OTRS Legacy	\$97.5	\$86.3	89%	\$46.4	\$72.7
OTRS/FP	1,000.0	250.5	25%	17.8	265.6
<b>Total</b>	<b>\$1,097.5</b>	<b>\$336.8</b>	<b>31%</b>	<b>\$64.2</b>	<b>\$338.3</b>

As of March 31, 2014, OTRS’ private equity portfolio had a value of \$338.3 million, equal to 2.5% of the total plan assets of \$13.5 billion.

In order to reach a 5% target allocation to private equity within the next 5 years, Franklin Park’s proprietary model estimates that OTRS needs to continue at an investment pace of \$200 million/year in commitments.

Therefore, Franklin Park is requesting an additional \$400 million commitment to OTRS/FP that will be committed to private equity funds between now and the end of 2016.

Franklin Park has enjoyed working with OTRS over the past 5 years and looks forward to continuing our relationship going forward.

If there are any questions, please contact me at 610-822-0502 or mbacine@franklinparkllc.com.

Regards,



Michael D. Bacine  
 Managing Director

**FRANKLIN PARK**

251 St. Asaphs Road • Three Bala Plaza • Suite 500 West • Bala Cynwyd, PA 19004

P 610.822.0500 • F 610.822.0499

www.franklinparkllc.com



LORD ABBETT

August 19, 2014

Investment Committee  
Teachers' Retirement System of Oklahoma  
P.O. Box 53524  
Oklahoma City, OK 73152-3524

Dear Sirs/Madams:

The System's Investment Policy Statement stipulates for High Yield portfolios that no more than 10% may be concentrated in developing or emerging markets issuers as defined by MSCI. Lord Abbett would like to request an exception going forward that its maximum limit on such issuers be increased to 15% for a proposed three-year period.

Lord Abbett continues to expand its activities in emerging markets debt with the launch of two additional EM mutual funds last year as well as a significant build out of our EM portfolio management and credit research resources. We are finding an increasing number of attractive investments in the EM debt markets and believe a higher limit for permissible EM exposure in the High Yield portfolio we manage for the System would allow us the appropriate flexibility to implement our best thinking in the System's portfolio.

Our performance attribution does not currently break out EM as a separate category apart from those issuers' inclusion in their respective assigned industries, so we would propose that attribution from the EM allocation will be reported as a component of portfolio total return.

Thank you for your consideration of this exception request. Please feel free to contact me if you have any questions or concerns.

Very truly yours,

Thomas J. McDonald III  
Client Portfolio Manager

CC: Mr. Douglas Anderson  
gregory.w.group



LORD ABBETT

August 8, 2014

Ms. Melissa Kempkes  
Oklahoma Teachers Retirement System  
P.O. Box 53524  
Oklahoma City, OK 73152-3524

Dear Melissa:

According to the Investment Policy Statement of Oklahoma Teachers Retirement System, we are required to submit this letter through you to the Board of Trustees requesting exception under the Policy to continue to hold a security whose credit rating has been downgraded to below 'CCC.' On July 31, 2014 following a missed interest payment on outstanding bonds, Standard & Poor's, which had previously not rated Argentina's debt, assigned a rating of SD (Selective Default). Moody's does not rate Argentina and Fitch downgraded the debt on July 31 from CC to D. The core plus portfolio that we manage for OTRS held a position in the 8.28% bonds due 12/31/2033 in a face amount of \$226,000. The portfolio's exposure to this issue represents 0.03% (3 basis points) of total assets compared with a weighting of 0.05% in the Barclays U.S. Universal Index.

Argentina had made available at its clearing bank the necessary funds to meet the scheduled interest payment on a timely basis. But the bank was enjoined by ruling of a federal judge from making the payment without also paying in full certain hedge funds holding previously defaulted bonds that had not been converted under a prior debt restructuring.

Given current market conditions, we would prefer to hold the position for now in the expectation that there will be some eventual resolution of Argentina's dispute with the hedge funds holding previously defaulted Argentine debt. We will keep this matter under close review and might of course at some point in the future decide that a disposition becomes the better course of action.

We appreciate your and the Board's consideration of this request.

Sincerely yours,

Thomas J. McDonald III  
Client Portfolio Manager

CC: Mr. Douglas Anderson, gregory.w.group

### **Thornburg Investment Management Announcement**

Pete Trevisani will be stepping down as head of the Institutional Group and will leave Thornburg Investment Management on September 30, 2014. Pete will be pursuing a new business opportunity outside of Thornburg Investment Management. It is possible that Thornburg Investment Management or certain Managing Directors of the firm will be financial investors in that business.

Pete joined Thornburg Investment Management in 2001. Under his leadership, the Institutional Group has grown client assets from less than \$1 billion to more than \$27 billion. The staff of the Institutional Group has grown from a handful of individuals to 62 people.

Randy Dry will take over management of the Institutional Group. Randy joined Thornburg Investment Management in 2001. During his tenure with the company, he has worked in trading, business development, client services and operations, and has been responsible for our Separate Account Group. He is also a member of many internal committees and is the Head of our Risk Committee. Randy has worked in asset management since 1997 and has a deep understanding of the industry and our operations and clients. Randy's experience and skills are ideally suited to lead our Institutional Group to continued success.

We would like to take this opportunity to reconfirm the importance of the Institutional Group and the commitment we have to the business.

We thank Pete for his valuable contributions to Thornburg these past 13 years.

Please join us in congratulating Randy and wishing Pete well.

### **Thornburg Investment Management Announcement**

Wendy Trevisani, portfolio manager of the Thornburg International Equity Strategy, International ADR Strategy and the Socially Screened International Equity Strategy, will be leaving on March 1, 2015 to spend more time with her three young children. Since joining Thornburg in 1999, Wendy has been a valuable contributor to the growth and success of our firm.

Effective immediately, Charlie Wilson, co-manager of the International ADR Strategy, will be co-manager of the Thornburg International Equity Strategy for institutional clients. Rolf Kelly, current co-manager of the Socially Screened International Equity Strategy will be the portfolio manager for these institutional accounts. Between now and the date of her departure Wendy will work closely with Charlie and Rolf to ensure a seamless transition of all portfolio management responsibilities.

The 15 portfolio managers and analysts currently supporting Thornburg Investment Management's International Equity Strategy with primary coverage of one or more investments owned in the strategy will continue to work together in a collaborative manner, as a team, similar to prior years. This team includes Bill Fries and Rocky Wang, portfolio managers of Thornburg International Value Fund.

Please join us in congratulating Charlie and Rolf on their new positions. We wish Wendy all the best in this new chapter of her life.

*Before investing, carefully consider the Fund's investment goals, risks, charges, and expenses. For a prospectus or summary prospectus containing this and other information, contact your financial advisor or visit [thornburg.com](http://thornburg.com). Read them carefully before investing.*

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