



OKLAHOMA TEACHERS RETIREMENT SYSTEM

INVESTMENT COMMITTEE MEETING

NOVEMBER 19, 2013

3:00 PM

MEETING MATERIALS

ALL BOARD MEMBERS ARE ENCOURAGED TO ATTEND INVESTMENT COMMITTEE MEETINGS

INVESTMENT COMMITTEE MEMBERS:

Chair: Bill Peacher

Members: James Dickson, Roger Gaddis, Jill Geiger, Vernon Florence, Gary Trennepohl

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TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA
Investment Committee Meeting
Tuesday, November 19, 2013 – 3:00 PM
TRS Administration Board Room
2500 N. Lincoln Blvd., 5th 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 MLP PORTFOLIO REALLOCATION**
- 5. DISCUSSION AND POSSIBLE ACTION ON REAL ESTATE PORTFOLIO ALLOCATION**
- 6. DISCUSSION AND POSSIBLE ACTION ON FRANKLIN PARK FEES**
- 7. DISCUSSION AND POSSIBLE ACTION ON \$200 MILLION/YEAR FUNDING EXTENSION TO FRANKLIN PARK**
- 8. DISCUSSION AND POSSIBLE ACTION ON COVE STREET EXCEPTION REQUEST**
- 9. DISCUSSION AND POSSIBLE ACTION ON LORD ABBETT EXCEPTION REQUEST**
- 10. DISCUSSION AND POSSIBLE ACTION ON MACKAY SHIELDS EXCEPTION REQUEST**
- 11. DISCUSSION AND POSSIBLE ACTION ON LOOMIS SAYLES EXCEPTION REQUEST**
- 12. QUESTIONS AND COMMENTS FROM TRUSTEES**
- 13. ADJOURNMENT**

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INVESTMENT COMMITTEE:

Chair: Bill Peacher

Members: James Dickson, Roger Gaddis, Jill Geiger, Vernon Florence, Gary Trennepohl

Manager Profile - Causeway Capital Management



Asset Class:	International Large Cap Equity
Status:	In Compliance
Portfolio Size:	\$527,889,629
Inception Date:	5/1/2003
Actual Allocation:	4.1%
Annual Management Fee:	0.37%
Location:	Los Angeles, CA
Structure:	Privately Held
Portfolio Management Team:	Sarah H. Ketterer Harry W. Hartford

Notes:

Causeway employs a team of fundamental analysis to develop expected returns for undervalued securities. Portfolios are constructed using quantitative measures to control risk and optimize performance characteristics.

Represented by:	Harry W. Hartford Eric Crabtree
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Founded: 2001

Return Profile	Since Inception	Last 10 Years	Last 5 Years	Last 3 Years	Last Year	Last Quarter	Last Month
Causeway	11.4	9.6	15.9	10.1	25.7	9.3	3.6
MSCI ACWI Ex US	10.5	8.5	12.5	6.0	20.3	9.4	3.7

Risk Characteristics	Number of Holdings	Average Mkt Cap	Dividend Yield	P/E Ratio	P/B Ratio
Causeway	188	\$54,558	2.9%	11.1	1.7
MSCI ACWI Ex US	1,823	\$46,669	2.9%	12.6	1.7

Manager Profile - Thornburg Investment Management



Asset Class:	International Large Cap Equity
Status:	In Compliance
Portfolio Size:	\$476,939,468
Inception Date:	12/1/2005
Actual Allocation:	3.7%
Annual Management Fee:	0.51%
Location:	Santa Fe, NM
Structure:	Privately Held
Portfolio Management Team:	Lei Wang, CFA Bill Fries, CFA Wendy Trevisani
Represented by:	Rolf Kelly, CFA Christa Maxwell, CFA Eric Edmond, CFA

Notes:

Thornburg uses a bottom-up approach to build portfolios. Their portfolios are constructed of holdings in three groups: Basic Value, Consistent Earners, and Emerging Franchises. The portfolio management team allocates to the segments according to their market outlook. The three basket approach allow the strategy to participate in a variety of market environments.

Founded: 1982

Return Profile		Since Inception	Last 10 Years	Last 5 Years	Last 3 Years	Last Year	Last Quarter	Last Month
Thornburg		7.3	-	12.4	6.4	18.6	6.0	1.1
	MSCI ACWI Ex US	10.5	8.5	12.5	6.0	20.3	9.4	3.7

Risk Characteristics		Number of Holdings	Average Mkt Cap	Dividend Yield	P/E Ratio	P/B Ratio
Thornburg		70	\$70,658	2.2%	15.7	2.1
	MSCI ACWI Ex US	1,823	\$46,669	2.9%	12.6	1.7

Monthly Asset Allocation Review



Asset Class	Total Market Value	Current Percentage	New Target Percentage	Difference	Notes
All Cap/Large Cap	2,853,023,846	22.3%	17.0%	5.3%	Excess allocation bound for Private Equity and Real Estate
Mid Cap	1,784,782,335	14.0%	13.0%	1.0%	
Small Cap	1,307,833,707	10.2%	10.0%	0.2%	
Total Domestic Equity	5,945,639,887	46.5%	40.0%	6.5%	
Large Cap International Equity	1,471,322,675	11.5%	11.5%	0.0%	
Small Cap International Equity	805,274,575	6.3%	6.0%	0.3%	
Total International Equity	2,276,597,250	17.8%	17.5%	0.3%	
Core Fixed Income	1,989,318,027	15.6%	17.5%	-1.9%	
High Yield Bonds	729,681,739	5.7%	6.0%	-0.3%	
MLPs	776,075,467	6.1%	7.0%	-0.9%	
Private Equity	261,836,979	2.0%	5.0%	-3.0%	
Real Estate	546,204,481	4.3%	7.0%	-2.7%	
Opportunistic Assets	159,280,743	1.2%	0.0%	1.2%	
Total Non-Core Assets	2,473,079,409	19.4%	25.0%	-5.6%	
Cash	90,212,843	0.7%	0.0%	0.7%	
Composite	12,774,887,049	100.0%	100.0%	0.0%	

Total Fund + Class Composite Summary

As of October 31, 2013

	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month
Total Fund (Gross of Fees)	12,774,887,049	12/1/1991	21.9	9.7	8.8	15.0	12.8	22.3	9.5	5.1	3.1
Total Fund (Net of Fees)				9.3	8.4	14.6	12.4	21.9	9.1	5.0	3.0
<i>Allocation Index</i>				9.3	7.9	9.3	11.8	14.9	5.1	5.1	3.5
<i>Actuarial Assumption</i>				8.0	8.0	8.0	8.0	8.0	6.6	1.9	0.6
Total Domestic Equity	5,945,639,887 S&P 500 46.5%	4/1/1990	23.6	10.9	9.1	17.9	17.3	35.3	12.3	5.6	3.8
Total All Cap Equity	833,179,451 Russell 3000 6.5%	9/1/2006	7.2	6.9	-	15.6	16.1	30.1	10.2	4.7	3.5
Total Large Cap Active Equity	976,021,919 S&P 500 7.6%	1/1/1995	18.8	10.3	7.8	16.3	18.0	32.4	10.8	4.6	4.1
Total Mid Cap Equity	1,784,782,335 Russell Mid Cap 14.0%	11/1/1998	15.0	10.3	11.3	21.3	18.8	39.7	13.1	5.3	3.3
Total Small Cap Equity	1,307,833,707 Russell 2000 10.2%	2/1/1998	15.8	9.6	9.8	18.3	15.8	40.7	15.0	7.7	4.1
Total International Equity	2,276,597,250 MSCI ACWI ex-US 17.8%	2/1/1998	15.8	9.5	9.0	13.5	9.3	27.2	15.3	9.4	2.7
Core Fixed Income (ex- High Yield)	1,989,318,027 Barclays Aggregate 15.6%	4/1/1990	23.6	7.3	6.4	9.4	5.7	-0.6	2.0	1.9	1.5
Master Limited Partnerships	776,075,467 Alerian MLP Index 6.1%	2/28/2011	2.7	18.6	-	-	-	29.7	3.8	3.0	3.4
High Yield Fixed Income	729,681,739 ML High Yield II 5.7%	2/1/2009	4.7	16.6	-	-	9.2	8.5	4.6	3.0	2.3
Core Real Estate	546,204,481 NCREIF 4.3%	4/1/2011	2.6	-	-	-	-	-	-	-	-
Cash	90,212,843 91 Day T-bill 0.7%	4/1/1990	23.6	-	-	-	-	-	-	-	-
					1.7	0.1	0.1	0.1	0.0	0.0	0.0

Equity Portfolios Summary

As of October 31, 2013



	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month
Hotchkis & Wiley Large Cap Russell 1000 Value	505,637,524 4.0%	4/1/1990	23.6	11.0 10.1	7.8 7.8	18.8 14.1	18.4 16.8	36.2 28.3	9.7 8.5	3.4 2.9	3.2 4.4
Sawgrass Russell 1000 Growth	470,384,395 3.7%	7/1/2006	7.3	8.1 10.1	- 7.8	16.3 14.1	18.1 16.8	28.5 28.3	12.0 8.5	5.9 2.9	5.0 4.4
ARI All Cap Russell 3000 Value	416,979,226 3.3%	9/1/2006	7.2	6.0 6.9	- -	15.0 15.9	16.2 16.9	29.0 29.0	9.3 10.9	3.9 5.1	3.4 4.3
EPOCH All Cap Russell 3000 Value	416,200,225 3.3%	9/1/2006	7.2	7.6 6.9	- -	16.0 15.9	16.0 16.9	31.4 29.0	11.0 10.9	5.5 5.1	3.6 4.3
NT Cap Weighted Passive S&P 500 Cap Weighted	522,345,507 4.1%	4/1/2012	1.6	18.2 17.5	- 7.5	- 15.2	- 16.6	27.1 27.2	10.1 10.1	4.7 4.8	4.6 4.6
SSGA Eq Weighted Passive S&P 500 Equal Weighted	521,476,969 4.1%	4/1/2012	1.6	22.0 -	- 10.1	- 20.3	- 18.0	33.8 33.9	11.2 -	5.4 5.5	4.2 4.3
Frontier Capital Russell Mid Cap Growth	457,022,132 3.6%	6/1/2002	11.4	10.3 9.3	11.4 9.6	18.1 20.3	16.6 17.2	32.5 33.9	13.2 12.2	5.6 5.6	3.1 2.6
Wellington Management Russell Mid Cap Growth	417,123,223 3.3%	9/1/1998	15.2	10.7 8.9	10.0 9.6	19.7 20.3	15.4 17.2	44.8 33.9	16.6 12.2	8.4 5.6	3.9 2.6
AJO Partners Russell MidCap	463,510,506 3.6%	8/1/1998	15.3	11.0 9.2	10.7 10.4	20.8 19.7	19.6 17.4	37.7 33.8	13.2 11.5	5.8 5.4	4.9 3.5
Hotchkis & Wiley Mid Cap Russell MidCap Value	447,126,474 3.5%	8/1/2002	11.3	14.5 11.6	12.7 10.6	27.5 18.9	23.6 17.5	43.9 33.5	10.1 10.7	1.8 5.1	1.3 4.6
Shapiro Capital Management Russell 2000	585,484,233 4.6%	2/1/1998	15.8	10.6 8.6	13.0 8.8	22.8 14.8	18.3 16.3	39.9 32.8	15.0 11.1	8.1 4.4	4.3 3.3
Geneva Capital Russell 2000 Growth	190,896,486 1.5%	6/1/2013	0.4	19.9 14.1	- -	- -	- -	- -	19.7 11.1	12.1 4.4	4.7 3.3
Wasatch Advisors Russell 2000 Growth	177,573,436 1.4%	6/1/2013	0.4	10.0 14.1	- -	- -	- -	- -	12.6 11.1	5.6 4.4	2.3 3.3
Cove Street Capital Russell 2000 Value	103,810,032 0.8%	6/1/2013	0.4	14.6 10.6	- -	- -	- -	- -	16.3 11.1	8.3 4.4	6.2 3.3
Frontier Capital Russell 2000 Value	144,902,097 1.1%	6/1/2013	0.4	8.4 10.6	- -	- -	- -	- -	12.5 11.1	4.7 4.4	4.0 3.3
Neumeier Poma Russell 2000 Value	105,167,422 0.8%	6/1/2013	0.4	13.8 10.6	- -	- -	- -	- -	13.0 11.1	5.2 4.4	3.5 3.3
Causeway Capital MSCI ACWI Ex US	527,889,629 4.1%	5/1/2003	10.5	11.4 10.5	9.6 8.5	15.9 12.5	10.1 6.0	25.7 20.3	15.3 14.1	9.3 9.4	3.6 3.7
International Transition Account MSCI ACWI Ex US	50,732,370 0.4%	-	-	-	-	-	-	-	-	-	-
Northern Trust Passive MSCI EAFE	415,376,060 3.3%	9/1/2013	0.2	3.8 3.4	- 7.7	- 12.0	- 8.4	- 26.9	- 15.3	- 9.5	3.4 3.4
Thornburg MSCI ACWI Ex US	476,939,468 3.7%	12/1/2005	7.9	7.3 5.5	- 8.5	12.4 12.5	6.4 6.0	18.6 20.3	11.5 14.1	6.0 9.4	1.1 3.7
ARI Small Cap International MSCI EAFE Small Cap	201,711,469 1.6%	12/1/2011	1.9	23.2 22.7	- 9.8	- 18.3	- 11.0	29.8 32.2	16.2 19.0	11.9 12.2	3.9 3.0
Epoch Small Cap International MSCI EAFE Small Cap	202,217,309 1.6%	12/1/2011	1.9	22.5 22.7	- 9.8	- 18.3	- 11.0	31.4 32.2	19.4 19.0	12.0 12.2	4.9 3.0
Wasatch Small Cap International MSCI EAFE Small Cap	198,904,538 1.6%	12/1/2011	1.9	31.8 22.7	- 9.8	- 18.3	- 11.0	34.1 32.2	15.3 19.0	8.7 12.2	1.6 3.0
Wellington Small Cap International MSCI EAFE Small Cap	202,441,260 1.6%	12/1/2011	1.9	29.9 22.7	- 9.8	- 18.3	- 11.0	38.5 32.2	18.6 19.0	12.3 12.2	2.8 3.0

Fixed Income Portfolios Summary

As of October 31, 2013



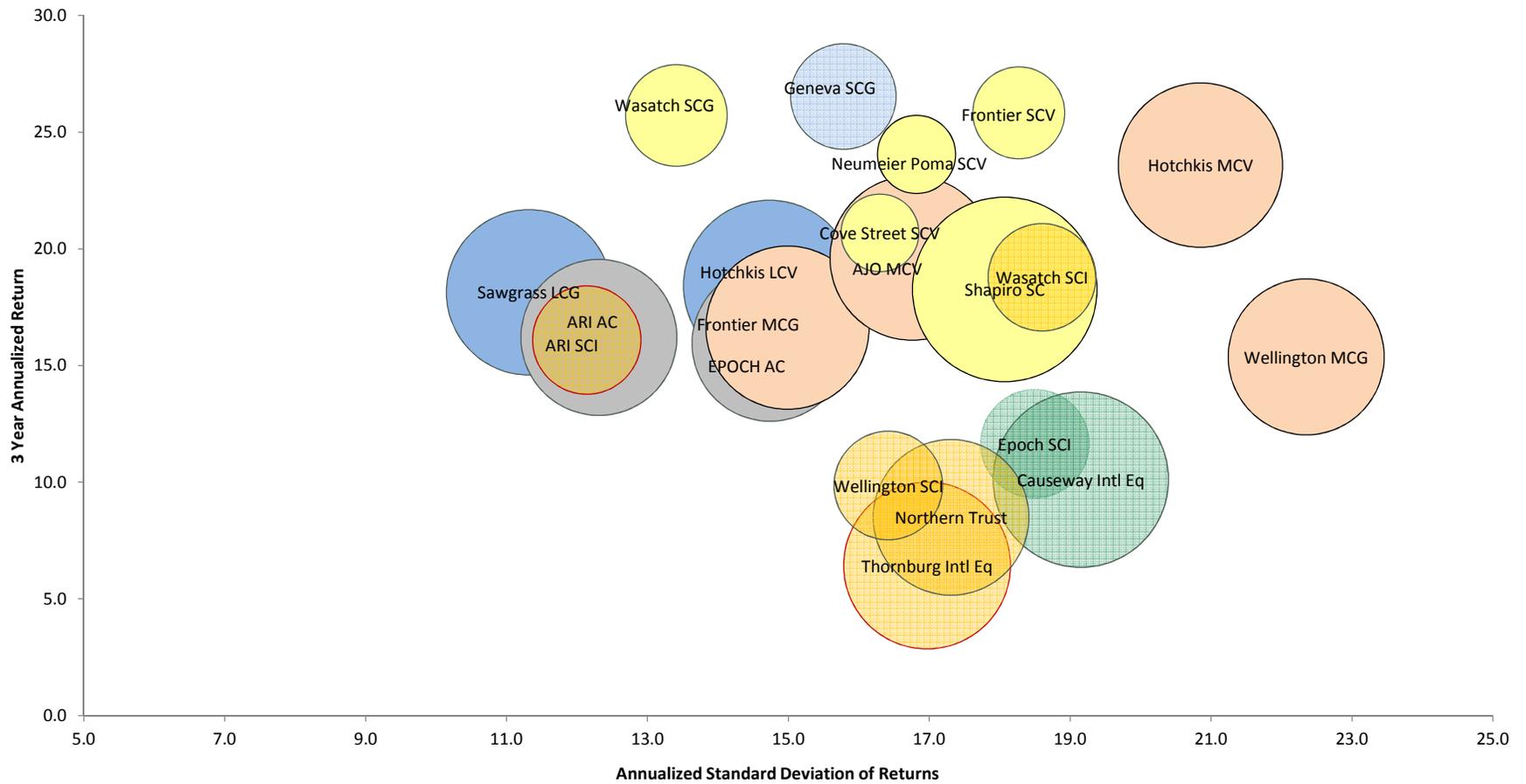
	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month
Loomis Sayles	579,071,754	8/1/1999	14.3	7.2	7.7	12.2	6.3	1.1	3.0	2.5	2.1
<i>Barclays Aggregate</i>	<i>4.5%</i>			5.7	4.8	6.1	3.0	-1.1	1.4	1.2	0.8
Lord Abbett	576,627,696	11/1/2004	9.0	6.2	-	9.5	5.0	0.5	1.8	1.6	1.1
<i>Barclays Aggregate</i>	<i>4.5%</i>			4.7	-	6.1	3.0	-1.1	1.4	1.2	0.8
Mackay Shields	574,466,424	11/1/2004	9.0	6.5	-	9.2	6.0	1.5	2.1	1.4	1.4
<i>Barclays Aggregate</i>	<i>4.5%</i>			4.7	-	6.1	3.0	-1.1	1.4	1.2	0.8
Hoisington	259,152,152	11/1/2004	9.0	7.4	-	8.2	6.8	-12.6	-1.7	1.0	1.6
<i>Barclays Aggregate</i>	<i>2.0%</i>			4.7	-	6.1	3.0	-1.1	1.4	1.2	0.8
Loomis Sayles High Yield	242,670,290	2/1/2009	4.7	16.7	-	-	7.9	6.6	4.2	3.3	2.3
<i>Merrill Lynch High Yield II</i>	<i>1.9%</i>			18.2	-	-	8.9	8.8	4.8	2.8	2.5
Lord Abbett High Yield	242,189,995	2/1/2009	4.7	17.6	-	-	10.3	11.0	5.2	3.0	2.4
<i>Merrill Lynch High Yield II</i>	<i>1.9%</i>			18.2	-	-	8.9	8.8	4.8	2.8	2.5
Mackay Shields High Yield	244,821,454	2/1/2009	4.7	15.6	-	-	9.2	7.8	4.2	2.5	2.2
<i>Merrill Lynch High Yield II</i>	<i>1.9%</i>			18.2	-	-	8.9	8.8	4.8	2.8	2.5

Non-Traditional Portfolios Summary

As of October 31, 2013

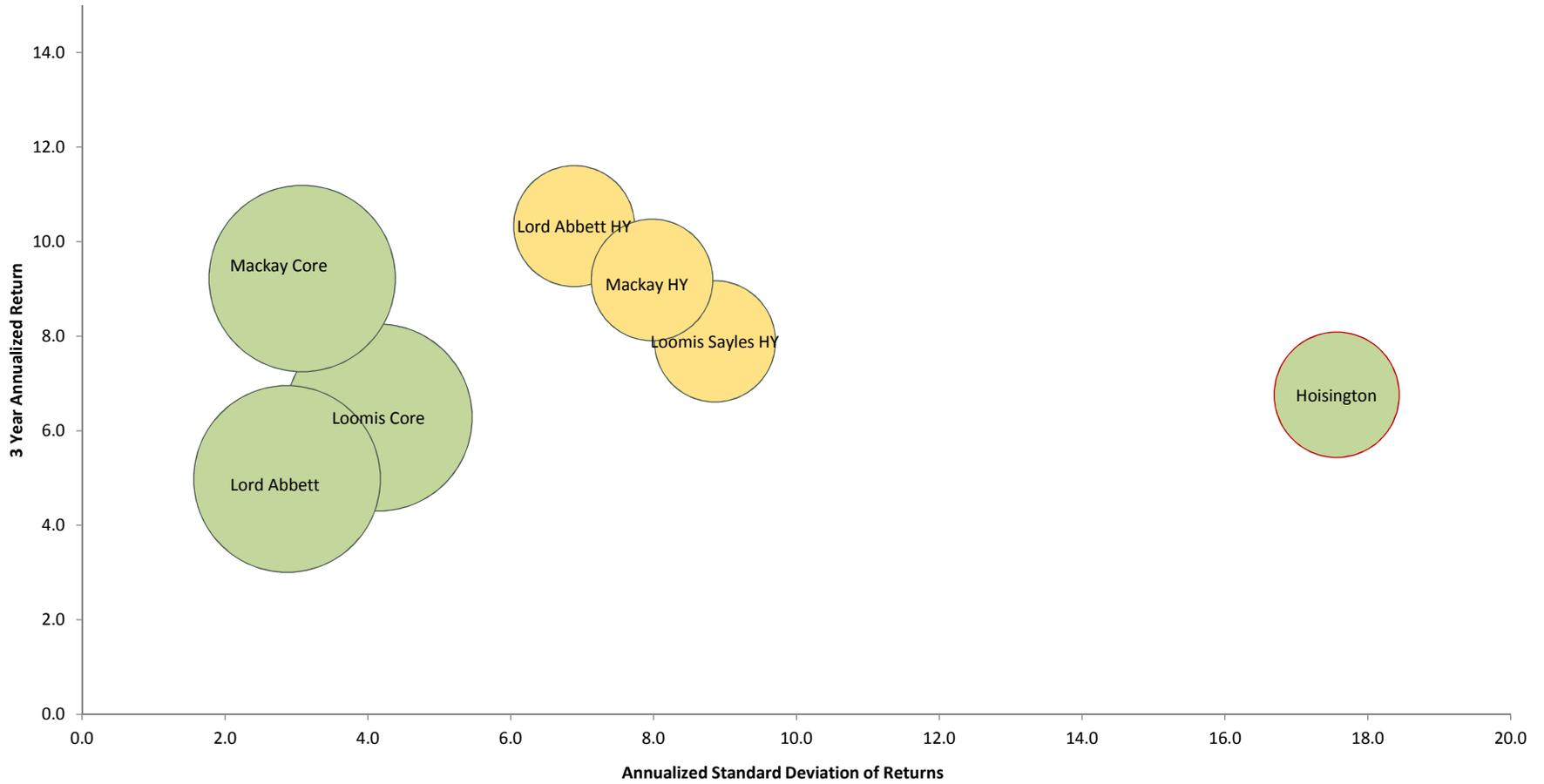
	Market Value	Inception Date	Time Since Inception (Years)	Since Inception	10 Years	5 Years	3 Years	1 Year	Fiscal YTD	Last Quarter	Last Month
Chickasaw Capital MLP	228,945,776	2/28/2011	2.7	26.2	-	-	-	40.5	7.3	7.0	5.5
<i>Alerian MLP Index</i>	1.8%			14.2	-	-	-	19.6	1.9	2.4	2.7
Cushing MLP Management	197,766,037	2/28/2011	2.7	19.0	-	-	-	32.8	5.4	4.5	3.9
<i>Alerian MLP Index</i>	1.5%			14.2	-	-	-	19.6	1.9	2.4	2.7
FAMCO MLP	349,363,653	2/28/2011	2.7	13.8	-	-	-	22.0	0.8	-0.4	1.8
<i>Alerian MLP Index</i>	2.7%			14.2	-	-	-	19.6	1.9	2.4	2.7
Legacy Private Equity Portfolio	71,835,241	10/1/2008	5.1	-	-	-	-	-	-	-	-
Franklin Park Private Equity	190,001,738	4/1/2010	3.6	-	-	-	-	-	-	-	-
	2.0%										
AEW Real Estate	182,265,413	5/1/2011	2.5	-	-	-	-	-	-	-	-
<i>NCREIF - OEDCE</i>	1.4%			-	-	-	-	-	-	-	-
Heitman Real Estate	192,671,534	5/1/2011	2.5	-	-	-	-	-	-	-	-
<i>NCREIF - OEDCE</i>	1.5%			-	-	-	-	-	-	-	-
L&B Real Estate	171,267,534	4/1/2011	2.6	-	-	-	-	-	-	-	-
<i>NCREIF - OEDCE</i>	1.3%			-	-	-	-	-	-	-	-
PIMCO BRAVO	144,763,263	3/31/2011	2.6	-	-	-	-	-	-	-	-
<i>Barclays Aggregate</i>	1.1%			-	-	-	-	-	-	-	-
PIMCO BRAVO II	7,774,143	3/31/2013	0.6	-	-	-	-	-	-	-	-
<i>Barclays Aggregate</i>	0.1%			-	-	-	-	-	-	-	-

Three Year Risk/Return Review - Equity Portfolios



¹Actual OTRS results used when available, composite when necessary.

Three Year Risk/Return Review - Fixed Income Portfolios



¹Actual OTRS results used when available, composite when necessary.



OKLAHOMA TEACHERS RETIREMENT SYSTEM

**executive summary report
third quarter, 2013**

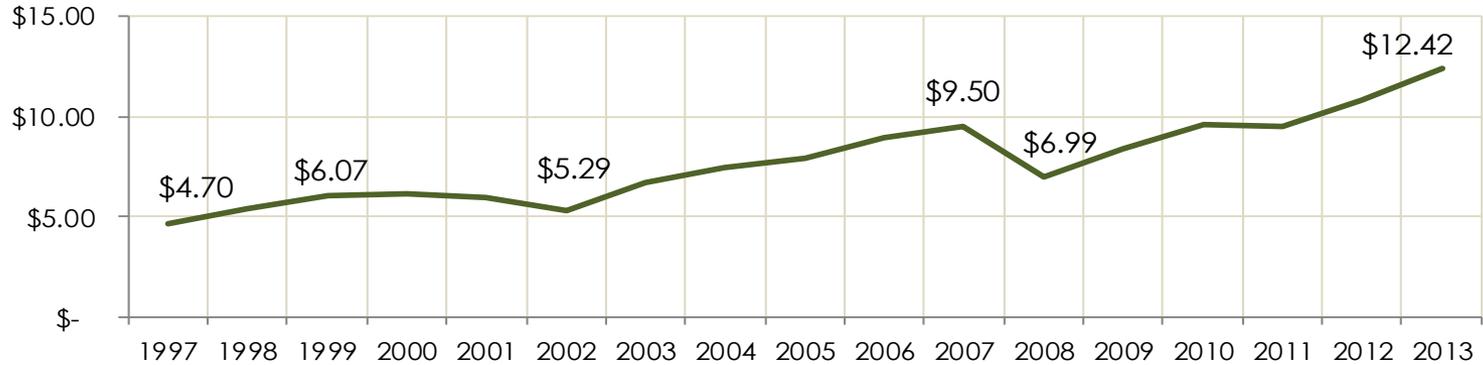


Trailing Year Total Fund Return

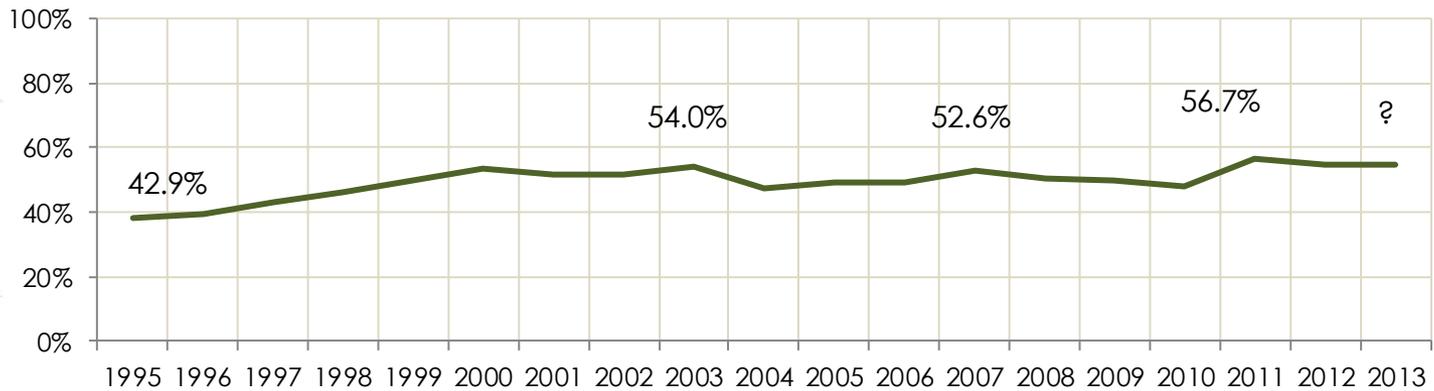
+18.7%

Plan History

Market Value History (\$Billions)



Funded Status History



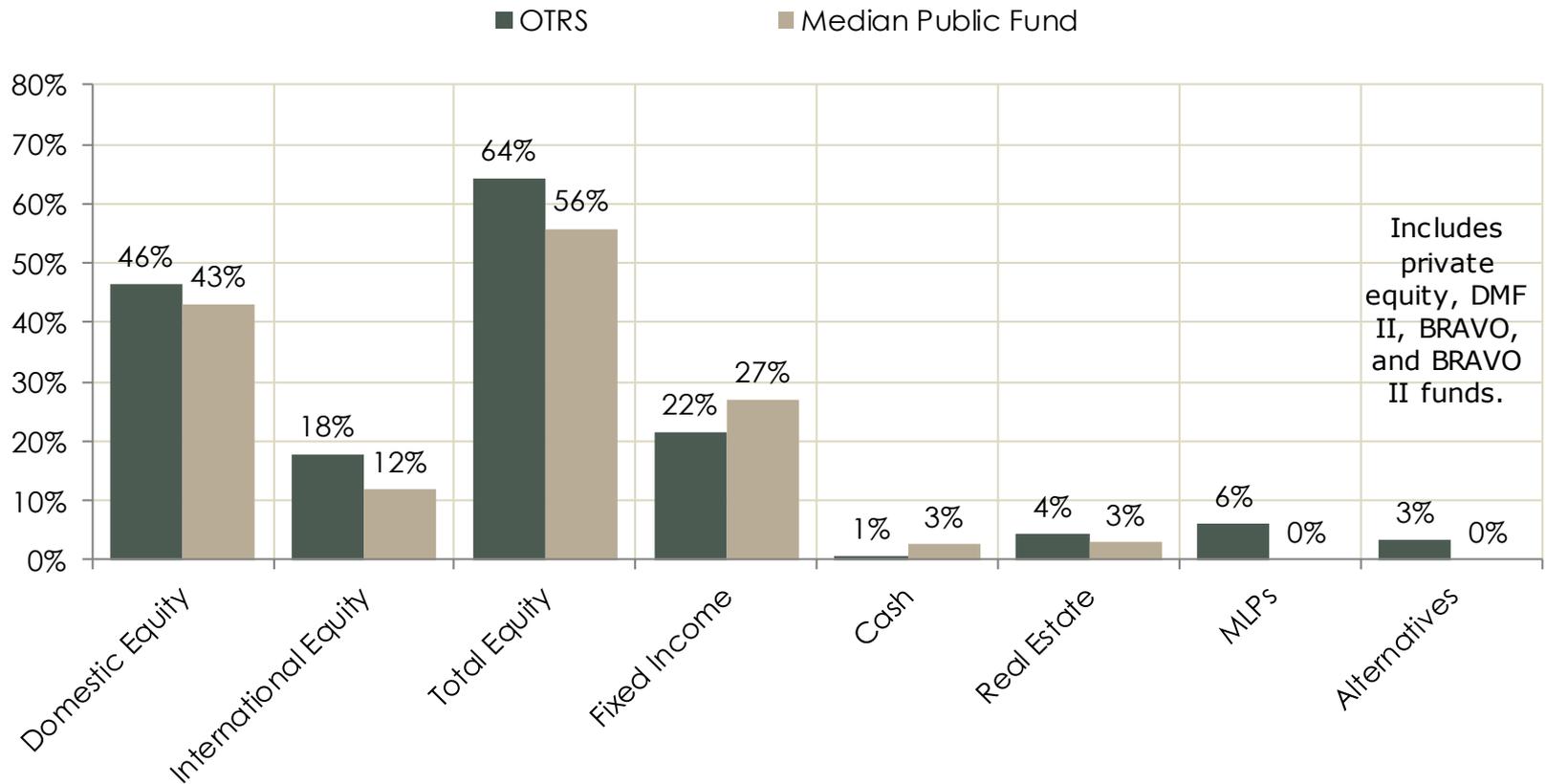
Observations – third quarter, 2013

- **INVESTMENT PERFORMANCE:** Total fund returns were positive during the quarter. The total fund earned a 6.2% return. Equity results were strongly positive. Core and High Yield fixed income results were also positive, although more modest. 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 top decile of public funds for all long term observation periods.** The ten year return (+9.0%) ranked in the 2nd percentile of all public funds.
- **INVESTMENT MANAGEMENT:** Two large cap index fund portfolios were added last year. 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 prior quarter. An international equity index fund was added earlier this year.
- **ASSET ALLOCATION:** A full asset allocation study was recently completed. 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 are under consideration.

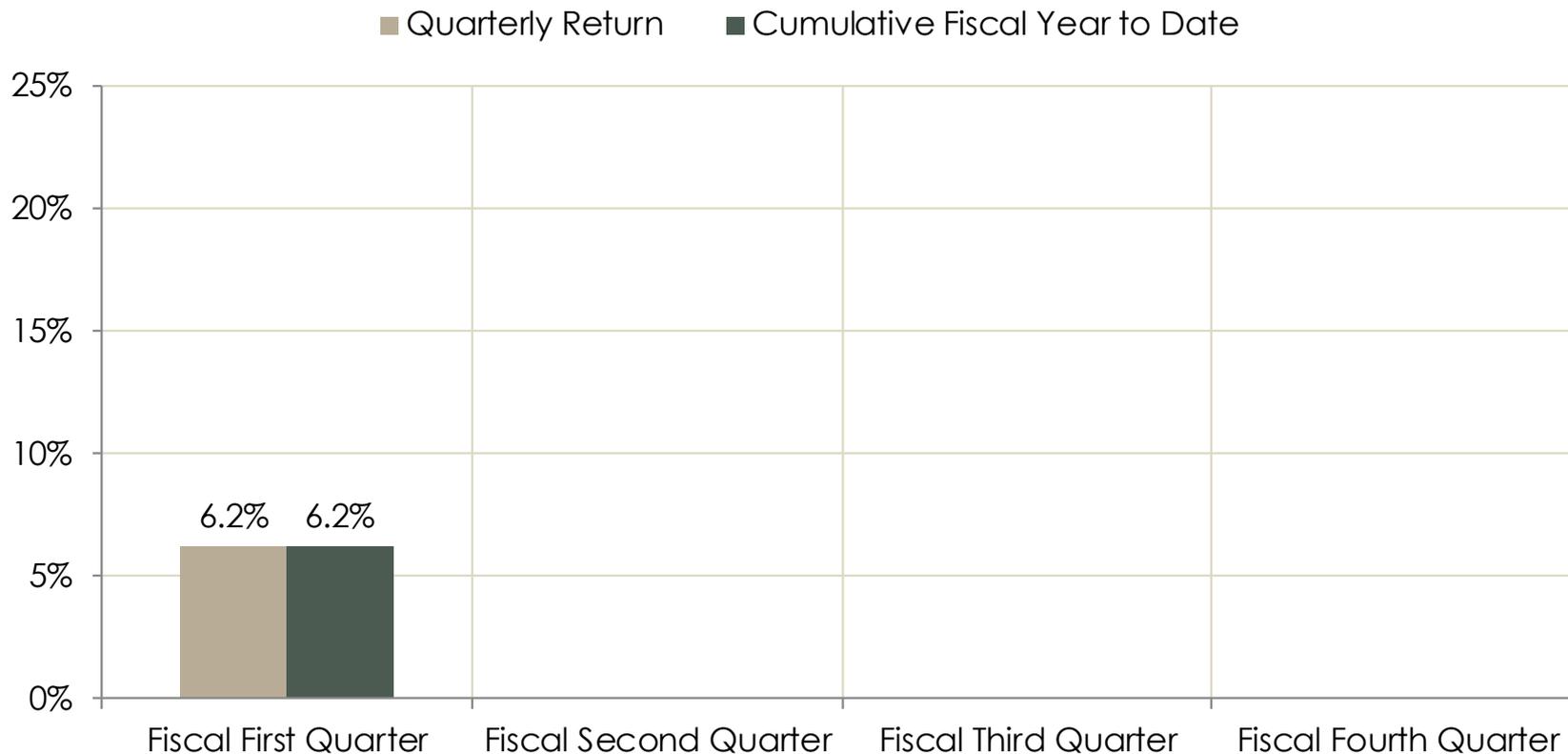
Asset Allocation Summary – Total Fund

	Current Allocation	New Target Allocation	Difference
Domestic Equity	46.37%	40.00%	6.37%
International Equity	17.82%	17.50%	0.32%
Core Fixed Income	15.77%	17.50%	-1.73%
Opportunistic Assets	1.23%	0.00%	1.23%
High Yield Fixed Income	5.74%	6.00%	-0.26%
Real Estate	4.27%	7.00%	-2.73%
Private Equity	2.10%	5.00%	-2.90%
MLPs	6.04%	7.00%	-0.96%
Cash	0.65%	0.00%	0.65%
Total	100.00%	100.00%	0.00%

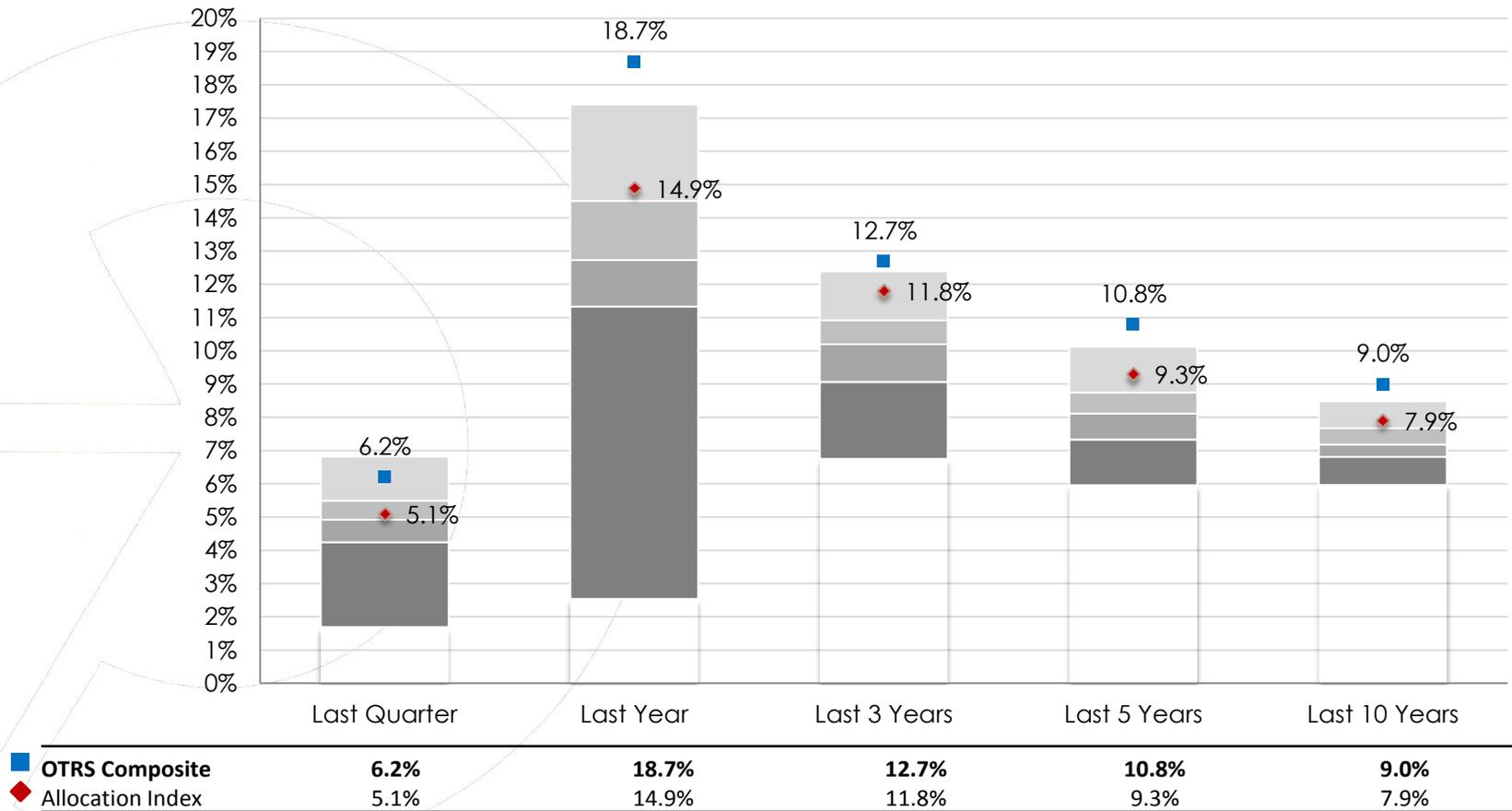
Total Fund Allocation vs. Median Public Fund



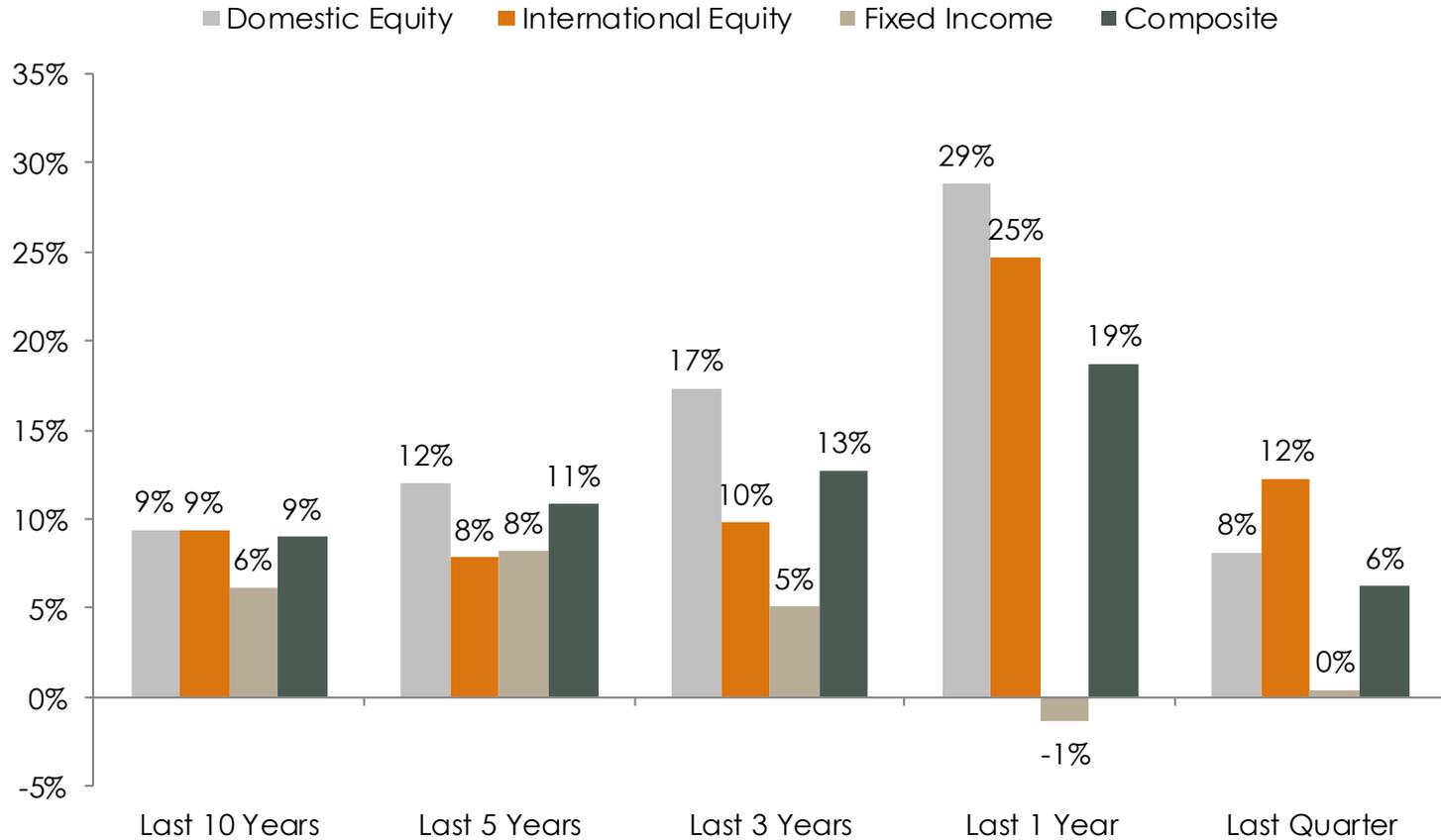
Composite Performance Summary as of September 30, 2013



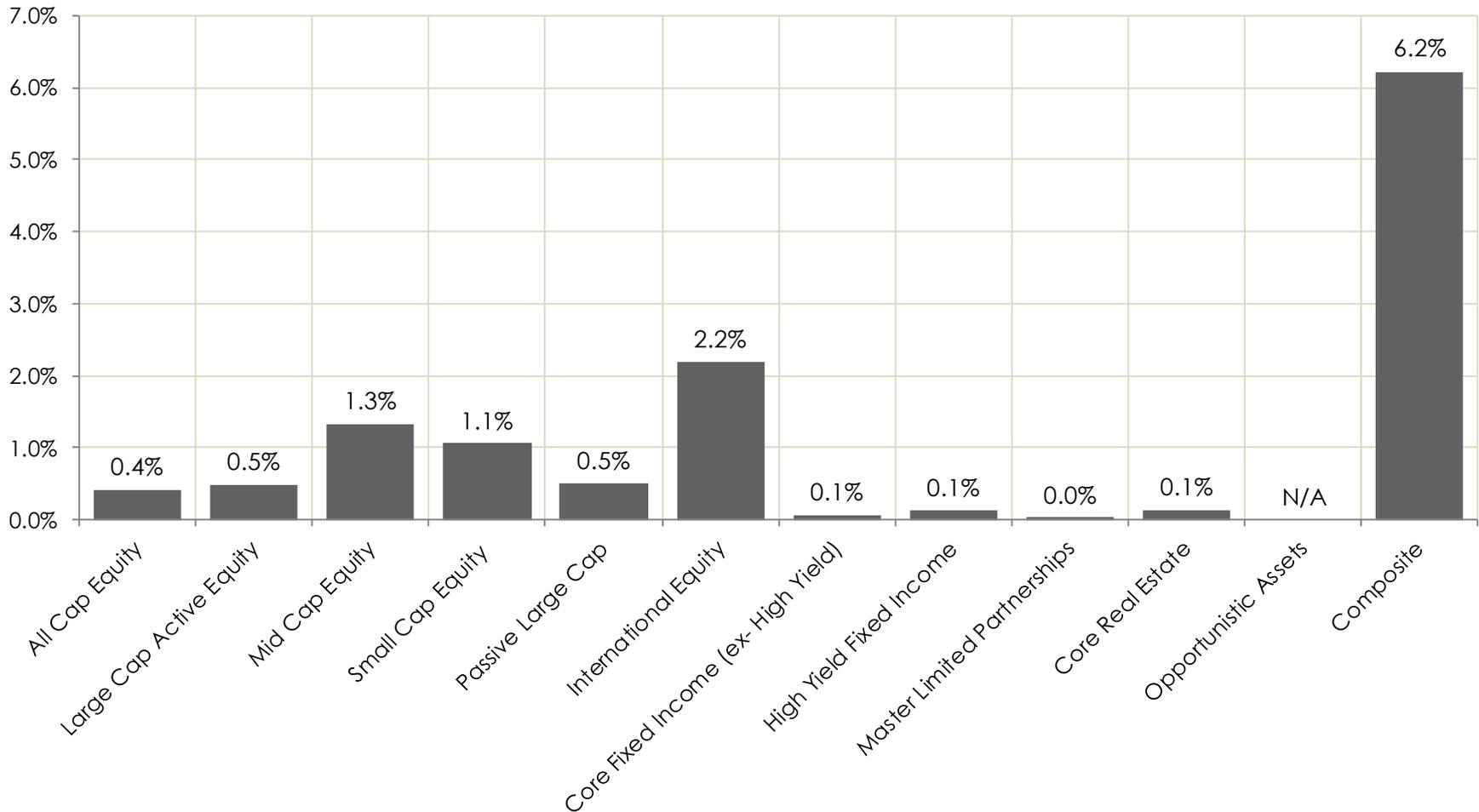
Total Fund vs. Public Fund Peer Universe



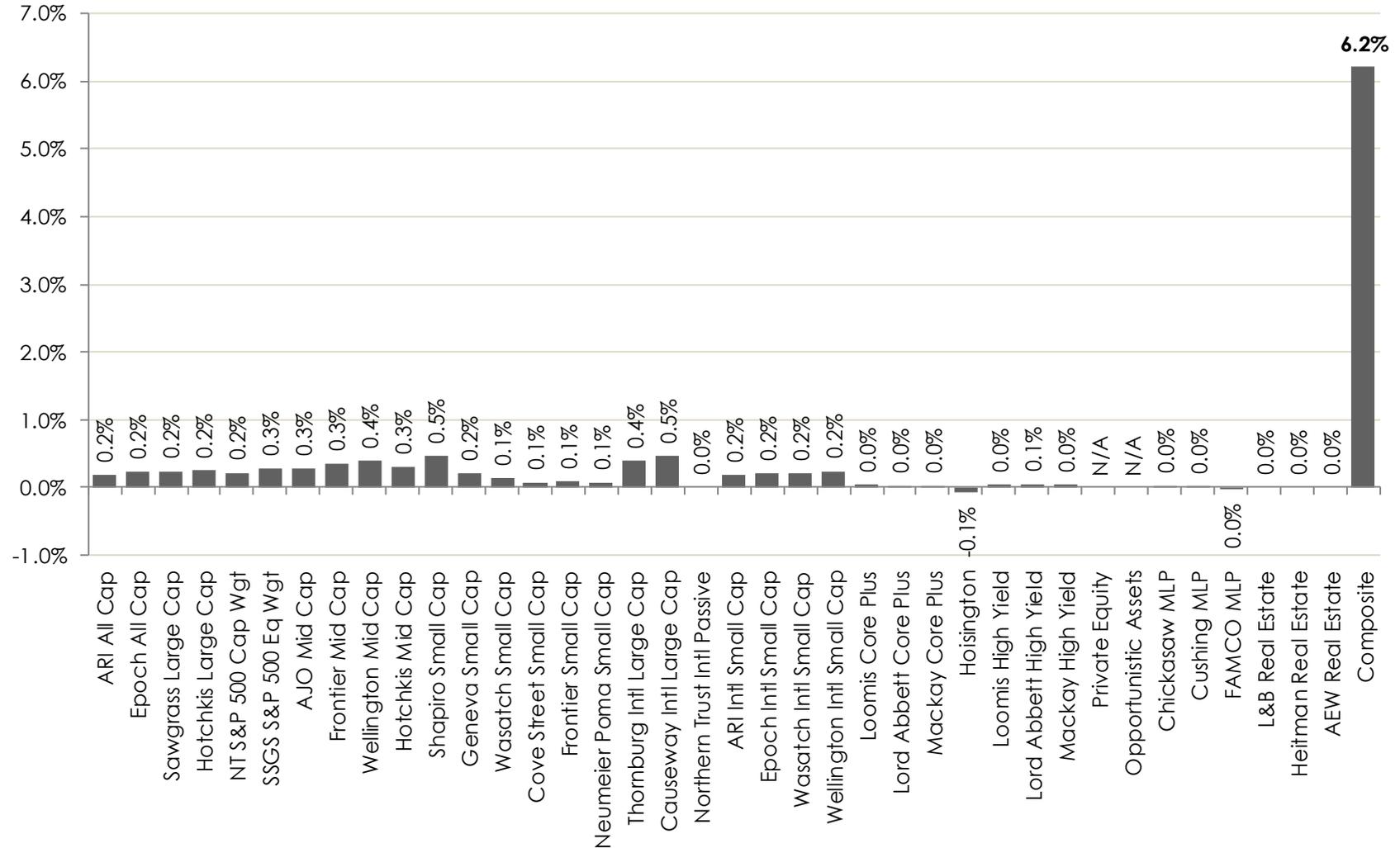
Composite Performance Summary as of September 30, 2013



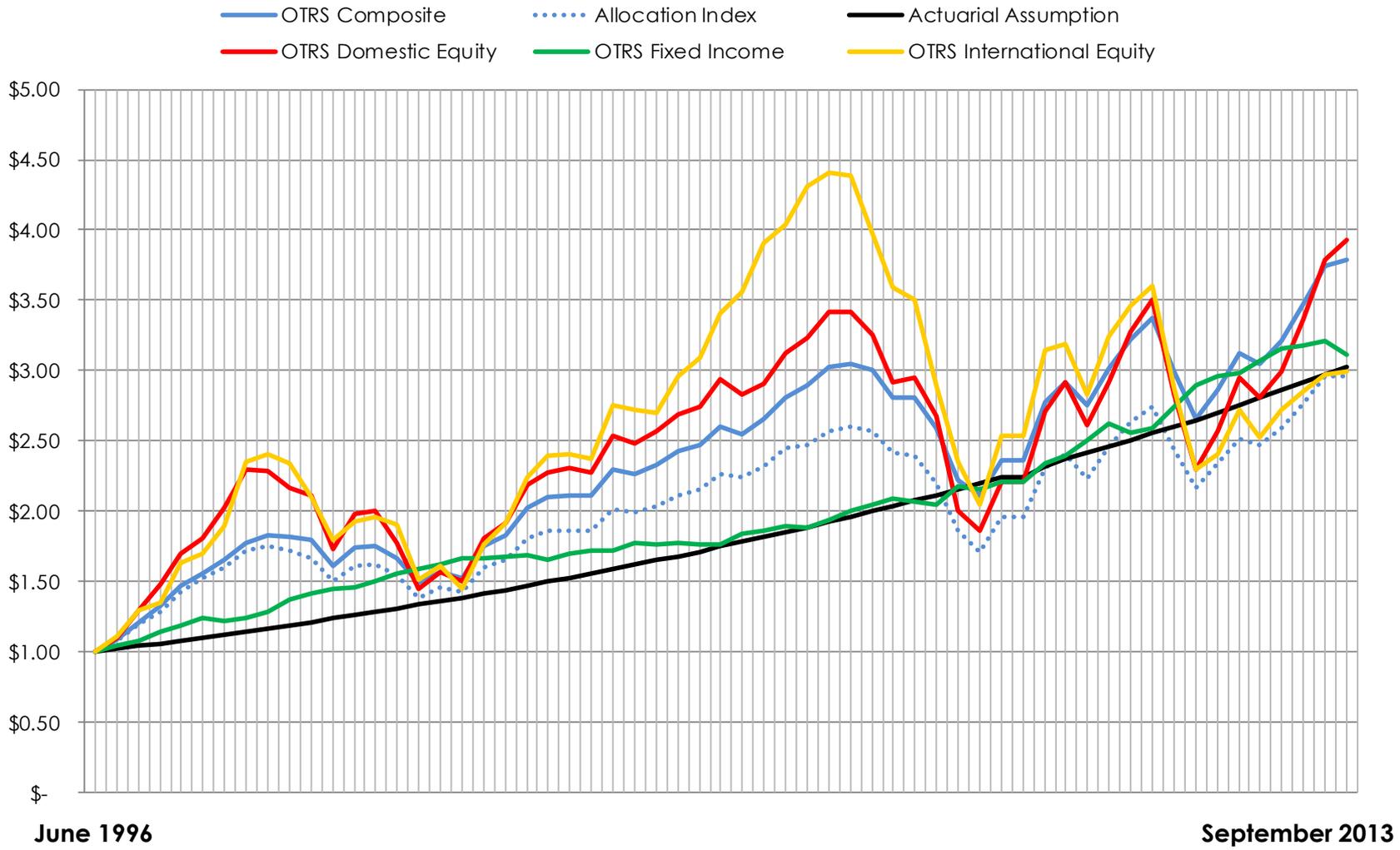
Composition of Quarterly Return by Asset Class



Composition of Quarterly Return by Portfolio



Growth of a Dollar Over Time: Period Ended September 30, 2013



Performance – Total Fund

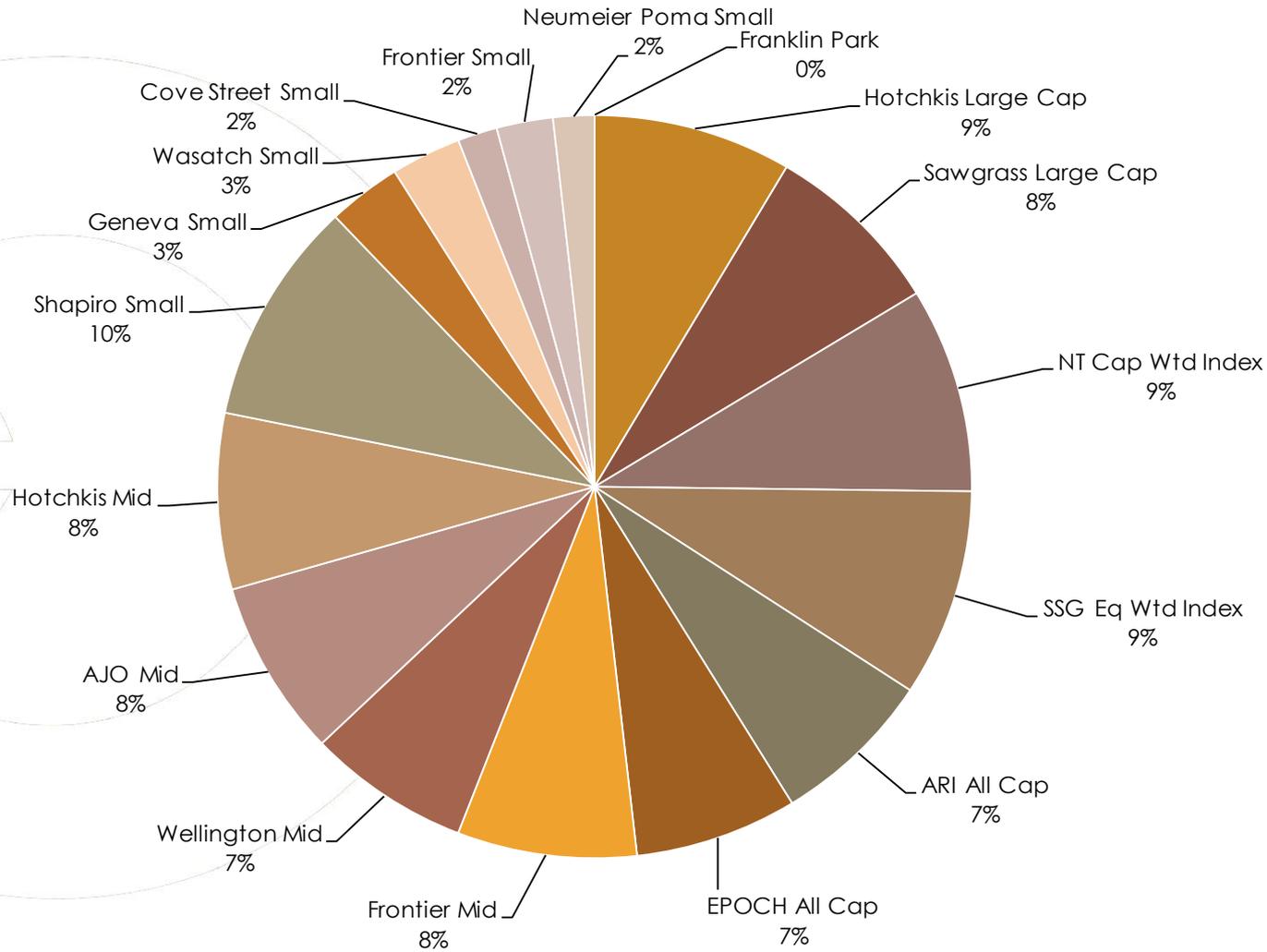
	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Years	% Rank	Last Quarter	% Rank
Total Fund	9.0	2	10.8	2	12.7	3	18.7	1	6.2	14
<i>Allocation Index</i>	7.9		9.3		11.8		14.9		5.1	
<i>Actuarial Assumption</i>	8.0		8.0		8.0		8.0		1.9	
Total Domestic Equity	9.4	20	12.0	22	17.3	24	28.8	3	8.1	18
<i>S&P 500</i>	7.6		10.0		16.3		19.3		5.2	
Total International Equity	9.4	37	7.8	38	9.8	23	24.7	16	12.3	12
<i>MSCI ACWI ex-US</i>	8.8		6.3		6.0		16.5		10.1	
Total Core Fixed Income	6.2	24	8.2	25	5.1	23	-1.4	67	0.4	76
<i>Barclays Aggregate</i>	4.6		5.4		2.9		-1.7		0.6	

Composite Peer Ranking History

Periods Ended	Trailing 5 Years	Trailing 3 Years	Trailing Year	Last Quarter
3q2013	2	3	1	14
2q2013	1	3	1	11
1q2013	3	4	4	3
4q2012	15	3	11	24
3q2012	21	13	8	10
2q2012	24	4	33	75
1q2012	22	13	25	14
4q2011	36	14	52	8
3q2011	31	23	95	89
2q2011	20	13	23	93
1q2011	9	21	5	17
4q2010	21	29	15	29
3q2010	30	38	10	18
2q2010	35	46	11	62
1q2010	24	25	70	44
4q2009	36	43	15	25
3q2009	26	42	32	13
2q2009	46	50	44	28
1q2009	23	24	18	28
4q2008	47	61	62	64
3q2008	24	59	67	48
2q2008	25	52	83	17
1q2008	19	49	83	79
4q2007	19	46	62	78
3q2007	18	36	37	87
2q 2007	10	29	18	34
1q 2007	15	27	38	19
4q 2006	23	44	59	36
3q 2006	15	24	69	57
Average Rank	22	29	36	39
% of Observations in Top Quartile	72%	48%	48%	45%
% of Observations Above Median	100%	90%	66%	69%

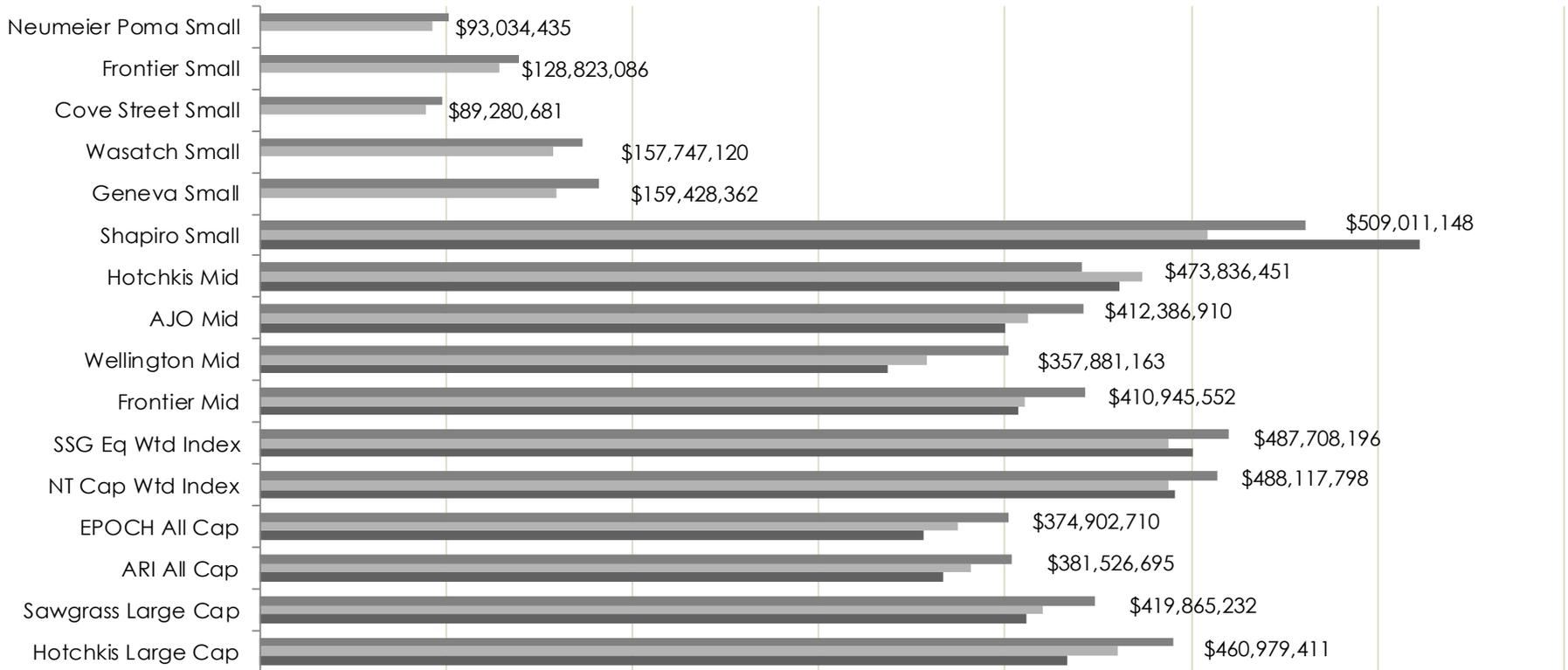
third quarter, 2013

Asset Allocation Summary – Domestic Equity Allocation

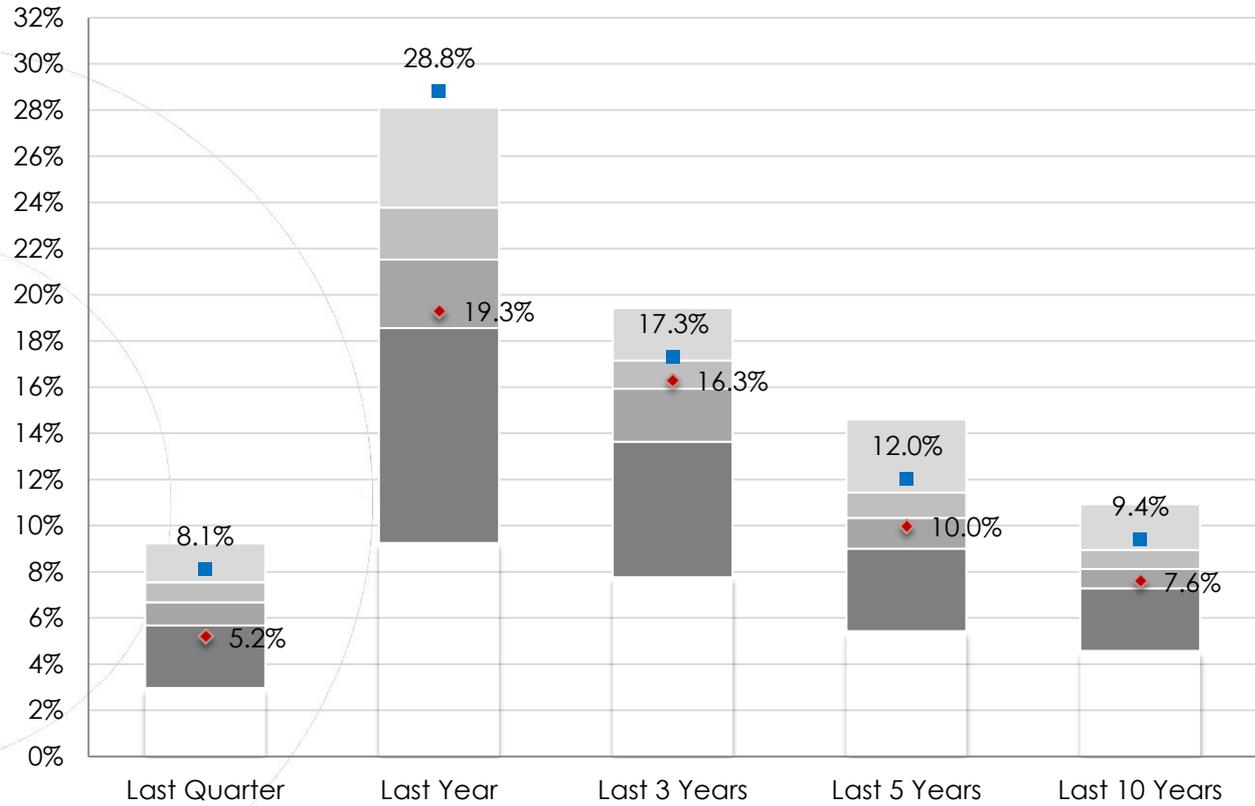


Asset Allocation Summary – Domestic Equity Allocation

■ 9/30/2013 ■ 6/30/2013 ■ 3/31/2013



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

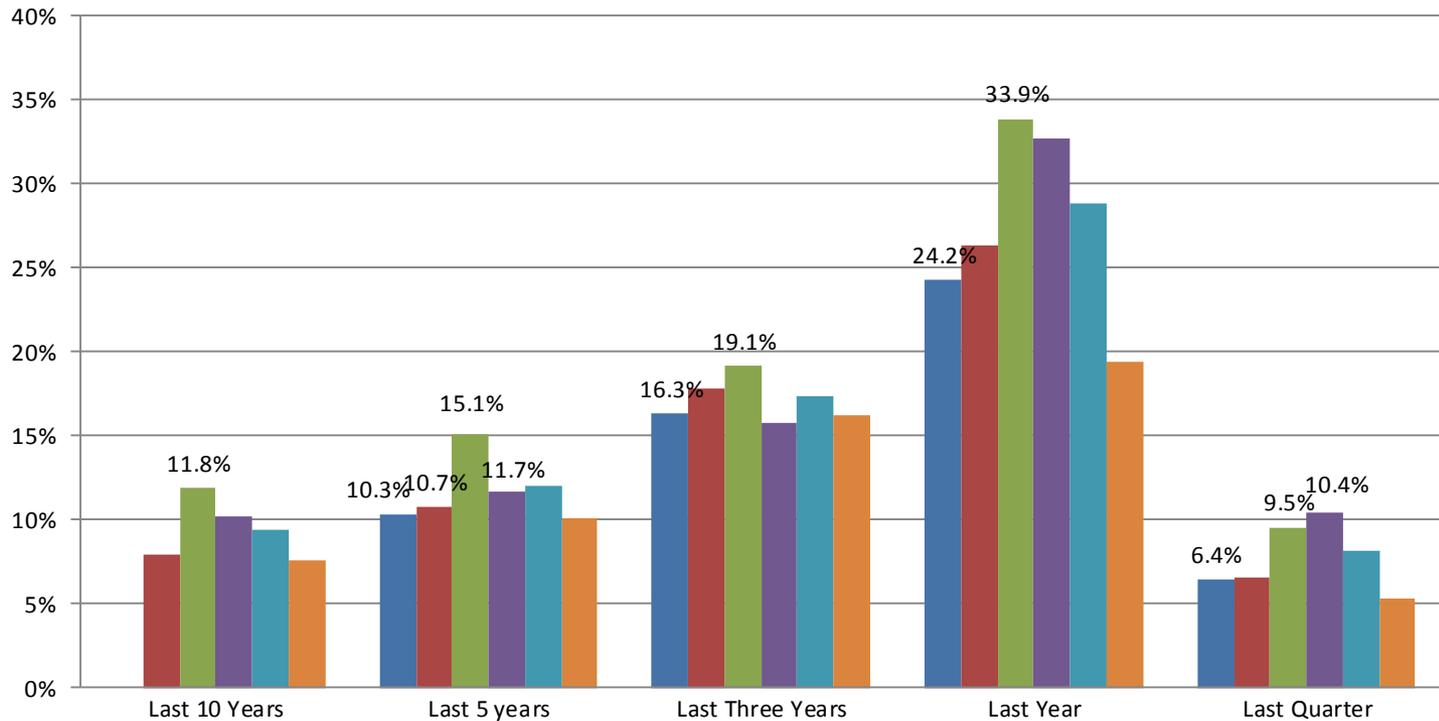


■ OTRS Equity Composite

◆ S&P 500

8.1%	28.8%	17.3%	12.0%	9.4%
5.2%	19.3%	16.3%	10.0%	7.6%

Domestic Equity Performance: Capitalization Composites



■ All Cap	10.3%	16.3%	24.2%	6.4%
■ Large Cap Active	7.9%	10.7%	17.8%	6.5%
■ Mid Cap	11.8%	15.1%	19.1%	9.5%
■ Small Cap	10.1%	11.7%	15.8%	10.4%
■ All Domestic Equity	9.4%	12.0%	17.3%	8.1%
■ S&P 500	7.6%	10.0%	16.3%	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
Advisory Research	-	-	10.0	60	16.2	53	22.8	24	5.7	40
EPOCH	-	-	10.4	46	16.3	50	25.8	13	7.1	17
<i>Russell 3000 Value</i>	-		8.9		16.3		22.7		4.2	
<i>Russell 3000</i>	-		10.6		16.3		21.6		6.3	
Hotchkis LCV	8.1	N/A	13.6	3	18.4	20	32.8	2	6.3	13
Sawgrass LCG	-		11.1	60	17.8	30	20.0	57	6.7	76
<i>S&P 500</i>	7.6		10.0		16.3		19.3		5.2	
<i>Russell 1000 Value</i>	8.0		8.9		16.2		22.3		3.9	
<i>Russell 1000 Growth</i>	-		12.1		16.9		19.3		8.1	
NT Cap Weighted	-	-	-	-	-	-	19.3	69	5.2	63
SSGA Equal Weighted	-	-	-	-	-	-	27.3	7	6.7	21
<i>S&P 500 Cap Weighted</i>	7.6		10.0		16.3		19.3		5.2	
<i>S&P 500 Equal Weighted</i>	10.4		13.8		17.7		27.4		6.8	

Performance – Mid Cap and Small Cap Equity Managers

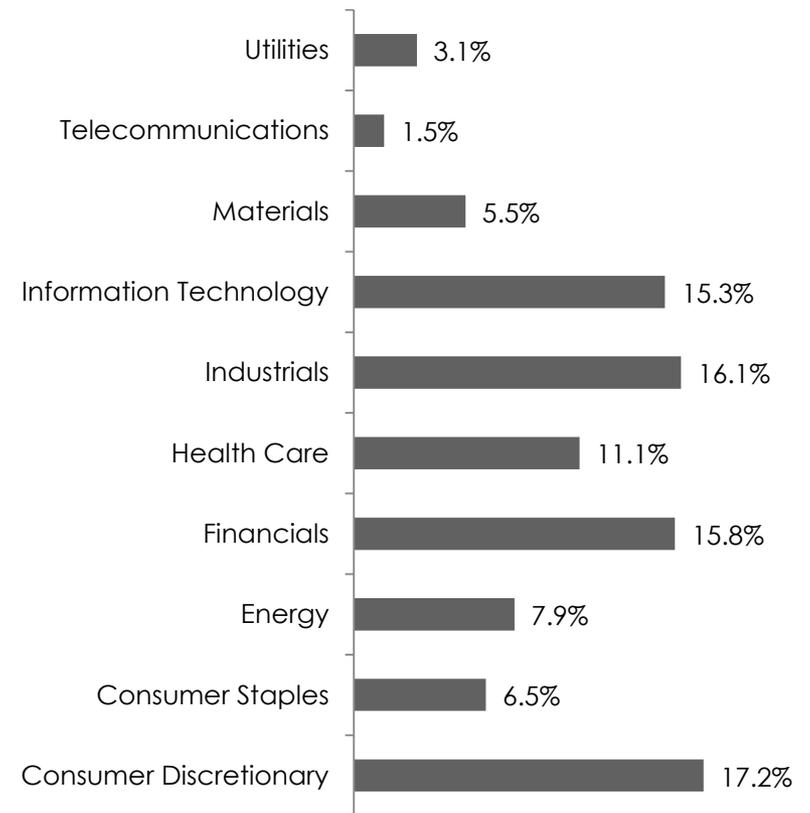
	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Year	% Rank	Last Quarter	% Rank
AJO MCC	11.0	74	14.0	33	19.5	21	29.5	49	7.9	55
Frontier MCG	12.1	58	13.0	73	17.3	62	26.3	67	9.8	46
Hotchkis MCV	13.3	N/A	22.0	4	24.4	5	42.8	3	8.7	48
Wellington MCG	10.6	77	12.2	80	15.3	86	36.8	2	12.2	20
<i>Russell MC</i>	<i>10.8</i>		<i>13.0</i>		<i>17.5</i>		<i>27.9</i>		<i>7.7</i>	
<i>Russell MC Growth</i>	<i>10.2</i>		<i>13.9</i>		<i>17.7</i>		<i>27.5</i>		<i>9.3</i>	
<i>Russell MC Value</i>	<i>10.9</i>		<i>11.9</i>		<i>17.3</i>		<i>27.8</i>		<i>5.9</i>	
Shapiro	13.3	10	15.3	14	18.2	56	32.4	33	10.3	24
Geneva	-	-	-	-	-	-	-	-	14.4	25
Wasatch	-	-	-	-	-	-	-	-	10.0	82
Cove Street	-	-	-	-	-	-	-	-	9.5	18
Frontier	-	-	-	-	-	-	-	-	8.2	64
Neumeier Poma	-	-	-	-	-	-	-	-	9.2	23
<i>Russell 2000</i>	<i>9.6</i>		<i>11.2</i>		<i>18.3</i>		<i>30.1</i>		<i>10.2</i>	
<i>Russell 2000 Value</i>	<i>9.3</i>		<i>9.1</i>		<i>16.6</i>		<i>27.0</i>		<i>7.6</i>	

Total Equity Portfolio Holdings Review

Largest Equity Positions

Position	% of Total Equity Allocation
General Electric	0.45%
Whitewave Foods	0.42%
Xylem	0.41%
Live Nation Entertainment	0.41%
Exelis	0.38%
Babcock & Wilcox	0.37%
Apple	0.37%
Bill Barrett	0.36%
Axiall	0.34%
WPX Energy	0.33%
Top Ten Total Weight	3.84%

Sector Weightings



Composite Equity Portfolio Characteristics – Trailing Five Years

	Average Market Cap	Dividend Yield	Tracking Error	Alpha	R ²	Sharpe Ratio	Standard Deviation
Active All Cap/Large Cap Equity	\$104.53 billion	2.06%	4.92%	2.40	0.96	0.72	18.99
Mid Cap Equity	\$8.25 billion	1.11%	6.08%	1.73	0.95	0.73	23.17
Small Cap Equity	\$12.25 billion	1.04%	3.64%	2.88	0.40	0.31	11.14
International Equity	\$37.86 billion	2.36%	2.55%	1.02	0.52	0.26	12.05
Total Equity	\$42.45 billion	1.69%	3.58%	1.40	0.63	0.44	14.47

Active Domestic Equity Characteristics – Trailing Five Years

	Asset Class	Upside Capture Ratio %	Downside Capture Ratio %	Trailing Five Year Return	Correlation vs. S&P 500	Correlation vs. BC Aggregate
Hotchkis & Wiley	Large Cap Value	131.2	107.5	13.6%	0.97	-0.37
Sawgrass	Large Cap Growth	90.0	86.4	11.1%	0.98	-0.19
Advisory Research	All Cap	101.5	100.1	10.0%	0.98	0.07
EPOCH	All Cap	112.9	106.8	10.4%	0.98	0.02
AJO	Mid Cap Core	138.7	106.4	14.0%	0.97	0.06
Frontier	Mid Cap Growth	155.2	97.8	13.0%	0.94	-0.03
Hotchkis & Wiley	Mid Cap Value	216.9	110.4	22.0%	0.95	-0.41
Wellington	Mid Cap Growth	176.6	128.9	12.2%	0.93	-0.03
Shapiro	Small Cap Value/Core	182.0	114.8	15.3%	0.91	-0.37
Cove Street	Small Cap Value	159.1	94.4	19.0%	0.90	0.13
Neumeier Poma	Small Cap Value	140.1	103.8	14.6%	0.89	-0.31
Frontier	Small Cap Value	155.2	97.8	17.8%	0.95	0.00
Geneva	Small Cap Growth	140.7	97.6	16.1%	0.85	-0.04
Wasatch	Small Cap Growth	125.5	80.0	18.8%	0.91	-0.03

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

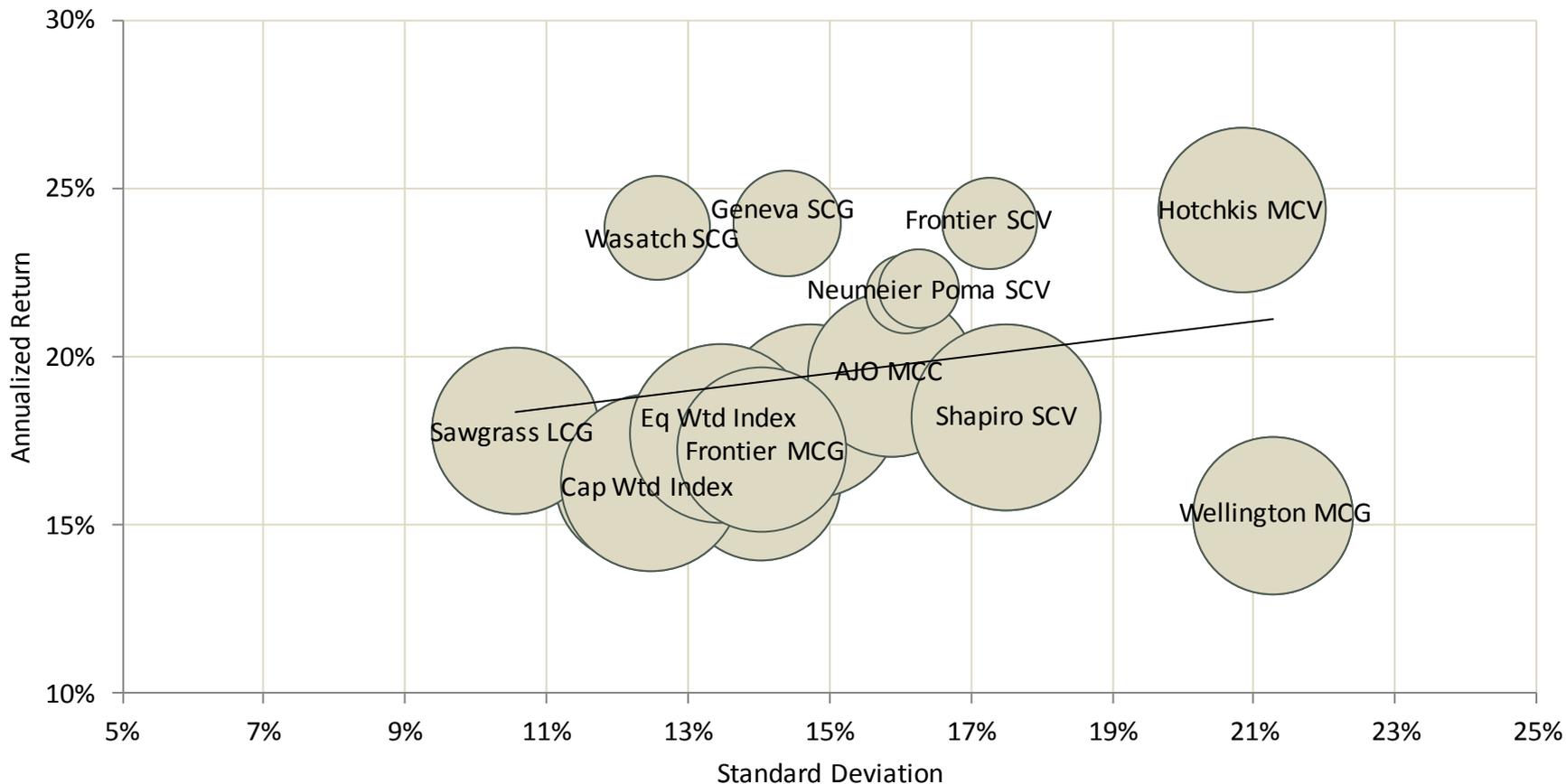
third quarter, 2013

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	0.97	-												
Cove Street SCV	0.94	0.91	-											
Epoch AC	0.98	0.96	0.91	-										
Frontier MCG	0.97	0.92	0.89	0.96	-									
Frontier SCV	0.97	0.95	0.94	0.95	0.95	-								
Geneva SCG	0.94	0.93	0.90	0.91	0.92	0.95	-							
Hotchkis LCV	0.93	0.95	0.88	0.95	0.90	0.92	0.90	-						
Hotchkis MCV	0.94	0.96	0.93	0.95	0.94	0.97	0.91	0.96	-					
Neumeier Poma SCV	0.96	0.94	0.92	0.94	0.92	0.96	0.92	0.87	0.91	-				
Sawgrass LCG	0.96	0.95	0.90	0.97	0.95	0.93	0.90	0.93	0.91	0.91	-			
Shapiro SCC	0.96	0.94	0.94	0.94	0.94	0.95	0.92	-	-	0.94	0.92	-		
Wasatch SCG	0.94	0.91	0.92	0.93	0.94	0.95	0.97	0.89	0.93	0.92	0.91	0.94	-	
Wellington MCG	0.97	0.93	0.92	0.95	0.95	0.95	0.92	0.92	0.95	0.94	0.92	0.97	0.94	-

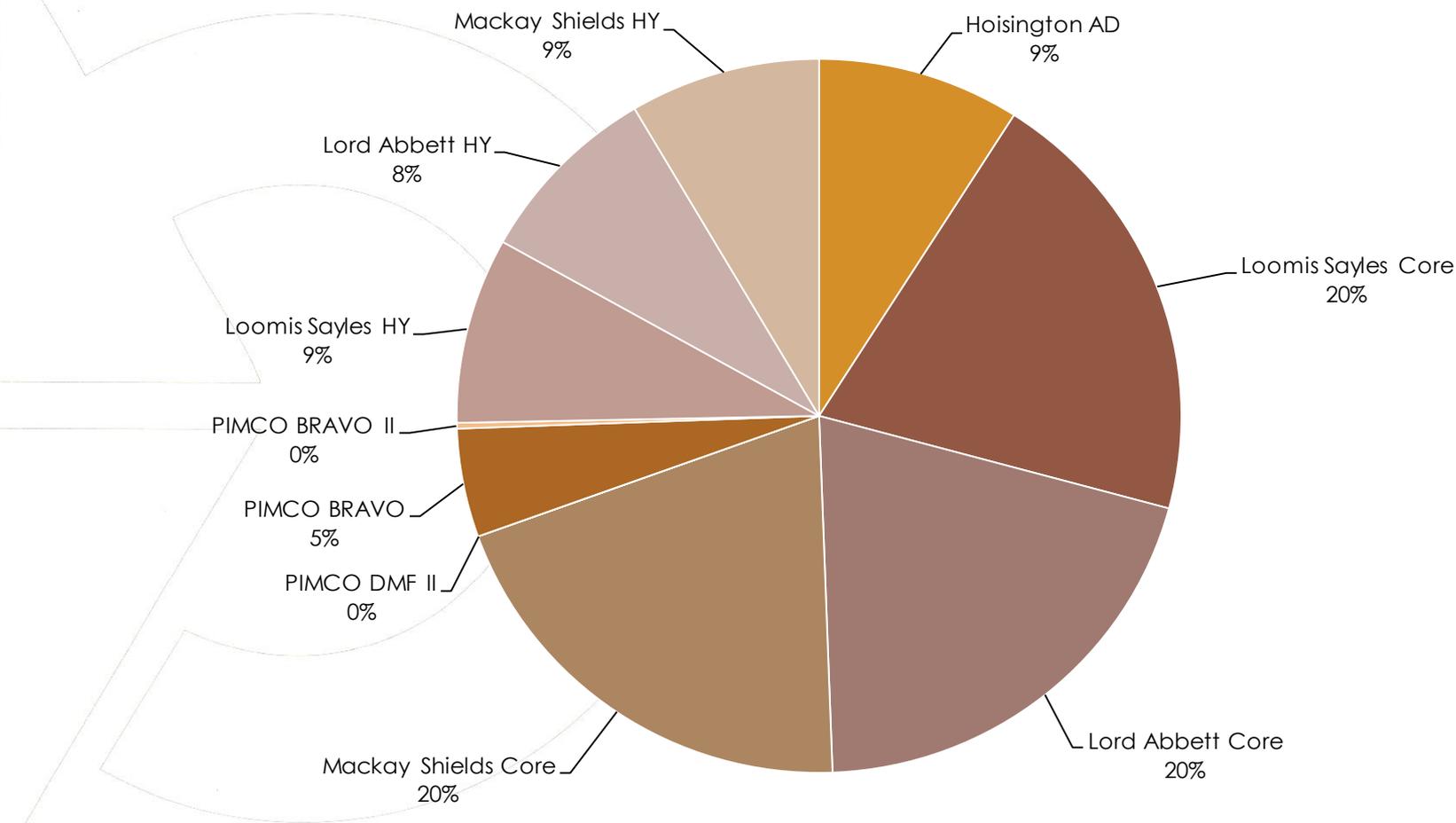
Domestic Equity Risk Return Comparison

Composite Data Used – Three Years Ended September 30, 2013

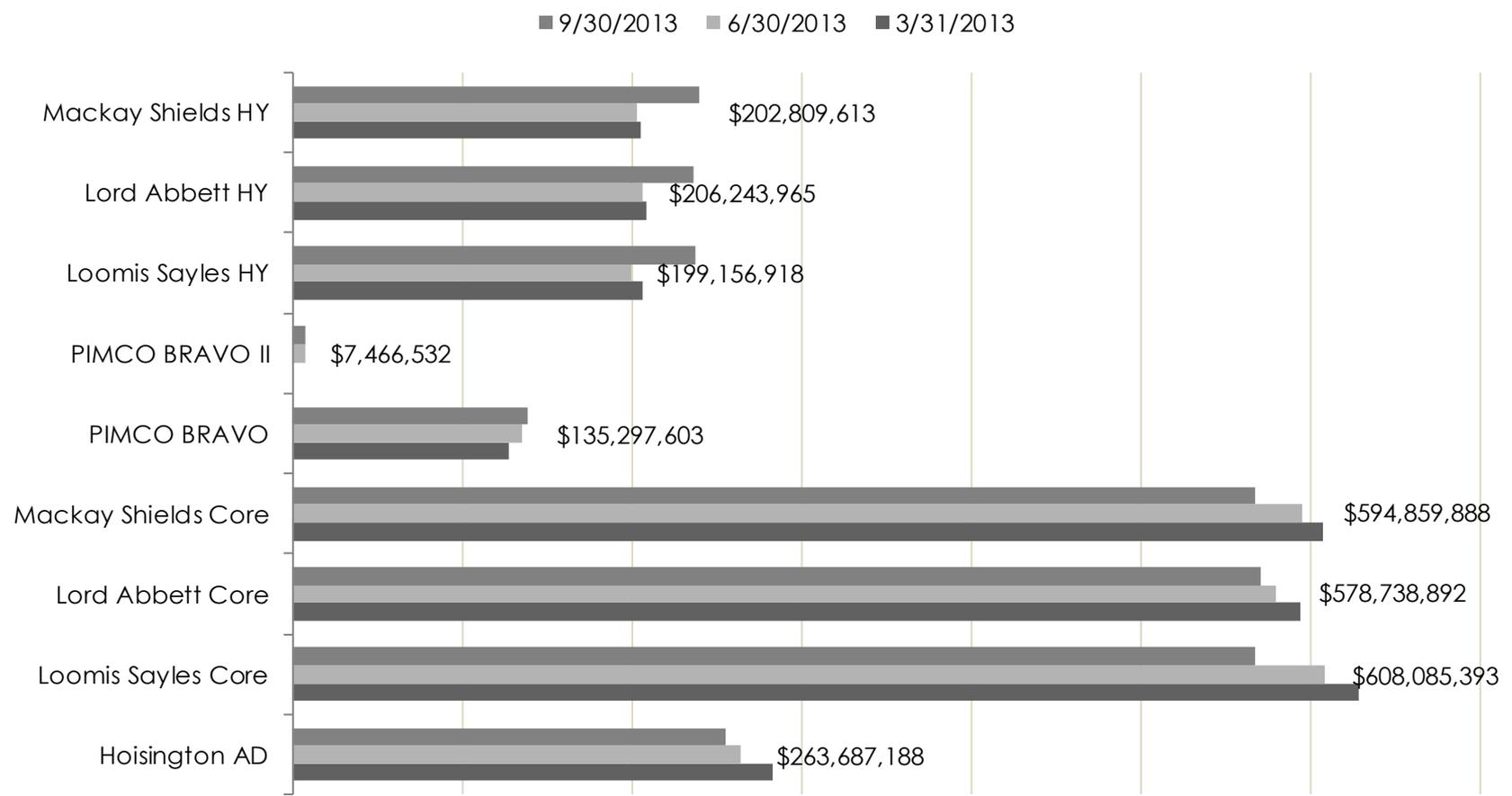


*Composite performance used when necessary.

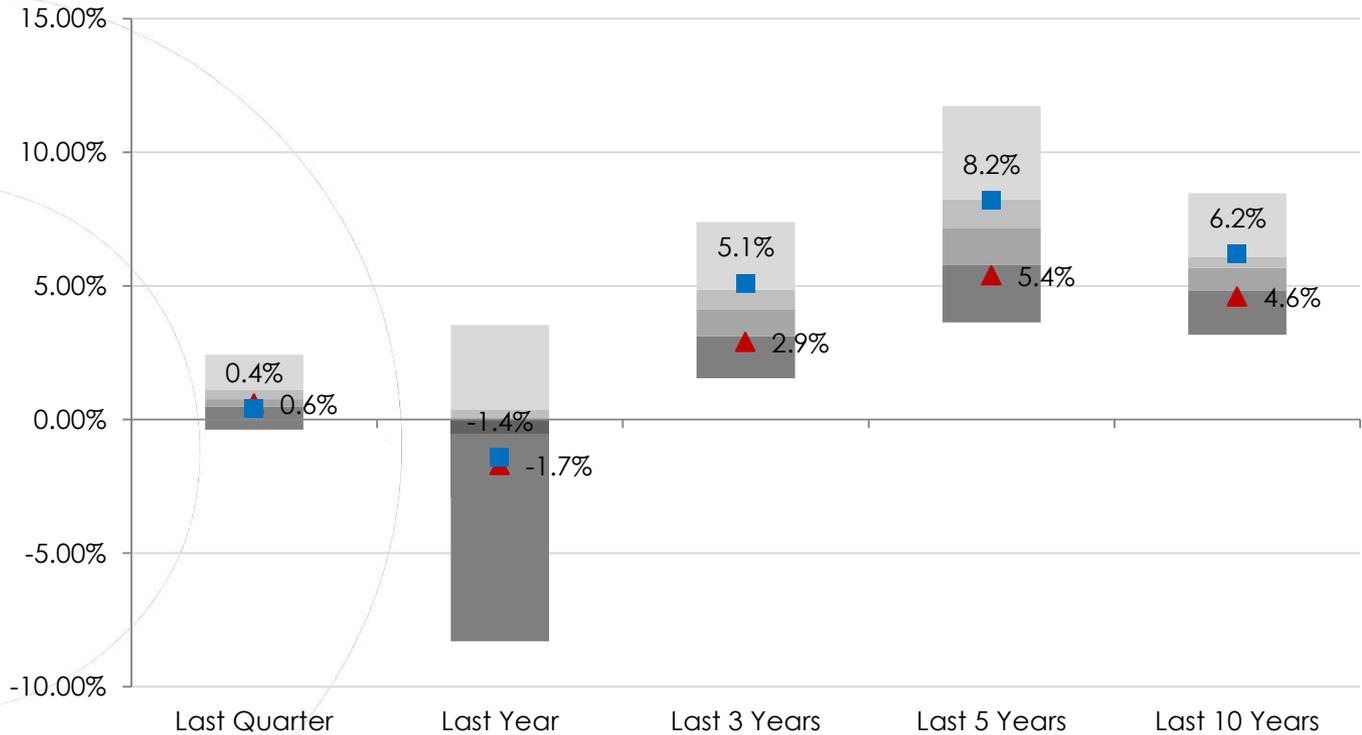
Asset Allocation Summary – Fixed Income Allocation



Asset Allocation Summary – Fixed Income Allocation



Fixed Income Composite vs. Core Fixed Income Peer Universe



■ OTRS Fixed Income Composite	0.4%	-1.4%	5.1%	8.2%	6.2%
◆ Barclays Capital Aggregate	0.6%	-1.7%	2.9%	5.4%	4.6%

Performance – Fixed Income Managers

	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last Year	% Rank	Last Quarter	% Rank
Loomis Sayles	7.4	2	10.7	12	5.9	3	-0.1	4	0.9	24
Lord Abbett	-	-	8.0	23	4.8	16	0.0	3	0.7	39
Mackay Shields	-	-	8.3	21	5.9	3	1.3	1	0.7	39
Hoisington	-	-	7.1	47	4.0	52	-14.1	98	-3.3	99
<i>BC Aggregate</i>	4.6		5.4		2.9		-1.7		0.6	
Loomis HY	-	-	-		8.0	5	7.3	7	1.9	5
Lord Abbett HY	-	-	-		10.5	2	9.6	1	2.7	1
Mackay HY	-	-	-		9.2	3	6.4	9	2.0	3
<i>ML High Yield II</i>	-		-		8.9		7.1		2.3	

Fixed Income Portfolio Characteristics – Trailing Five Years

	Asset Class	Credit Quality	Modified Duration	Maturity	Yield to Maturity
Loomis Sayles	Core Plus	A	6.3	9.5	4.10%
Lord Abbett	Core Plus	A	5.1	7.2	3.31%
Mackay Shields	Core Plus	A+	3.2	6.9	3.21%
Hoisington	Active Duration	Govt	19.8	24.3	3.46%
Core Fixed Income Composite	Core Plus	A	6.5	9.8	4.17%
Loomis Sayles	High Yield	B	5.3	8.8	6.3%
Lord Abbett	High Yield	B	5.2	6.7	N/A
Mackay Shields	High Yield	B+	3.5	6.2	5.7%
High Yield Composite	High Yield	B	4.7	7.2	6.0%

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	216.69%	46.73%	10.7%	0.64	0.62
Lord Abbett	Core Plus	144.67%	72.64%	8.0%	0.82	0.43
Mackay Shields	Core Plus	136.84%	58.64%	8.3%	0.89	0.36
Hoisington	Active Duration	216.93%	537.27%	7.1%	0.75	-0.33
Loomis Sayles	High Yield	248.79%	-166.64%	14.8%	0.24	0.75
Lord Abbett	High Yield	228.47%	-193.79%	14.1%	0.22	0.71
Mackay Shields	High Yield	186.85%	-127.14%	11.6%	0.23	0.69

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

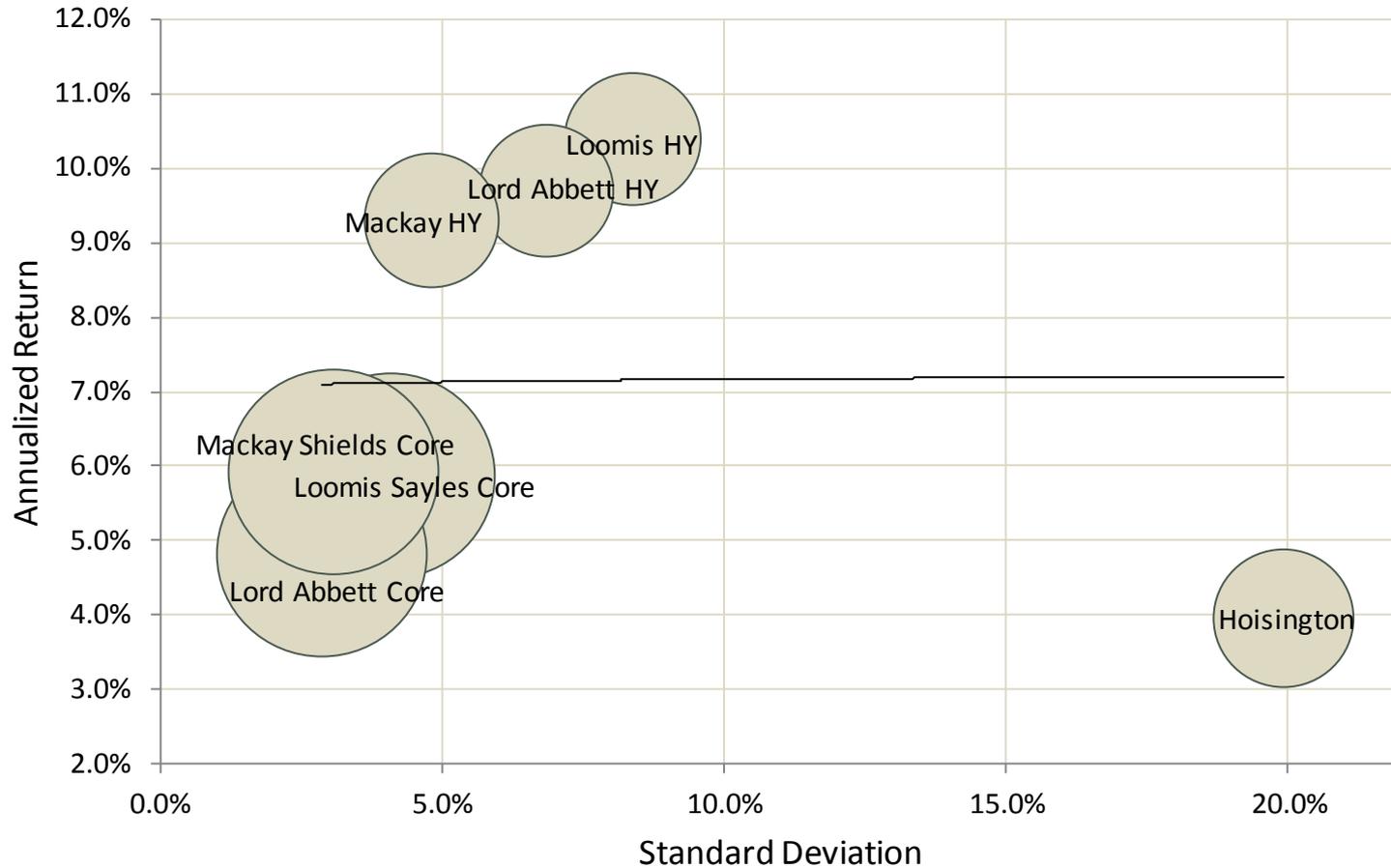
Fixed Income Portfolios: 5 Year Correlation Matrix

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	0.11	-					
Loomis High Yield	-0.32	0.86	-				
Lord Abbett Core	0.36	0.89	0.71	-			
Lord Abbett High Yield	-0.33	0.84	0.98	0.69	-		
Mackay Shields Core	0.48	0.83	0.55	0.89	0.53	-	
Mackay Shields High Yield	-0.30	0.81	0.97	0.71	0.98	0.52	-

*Composite performance used when necessary.

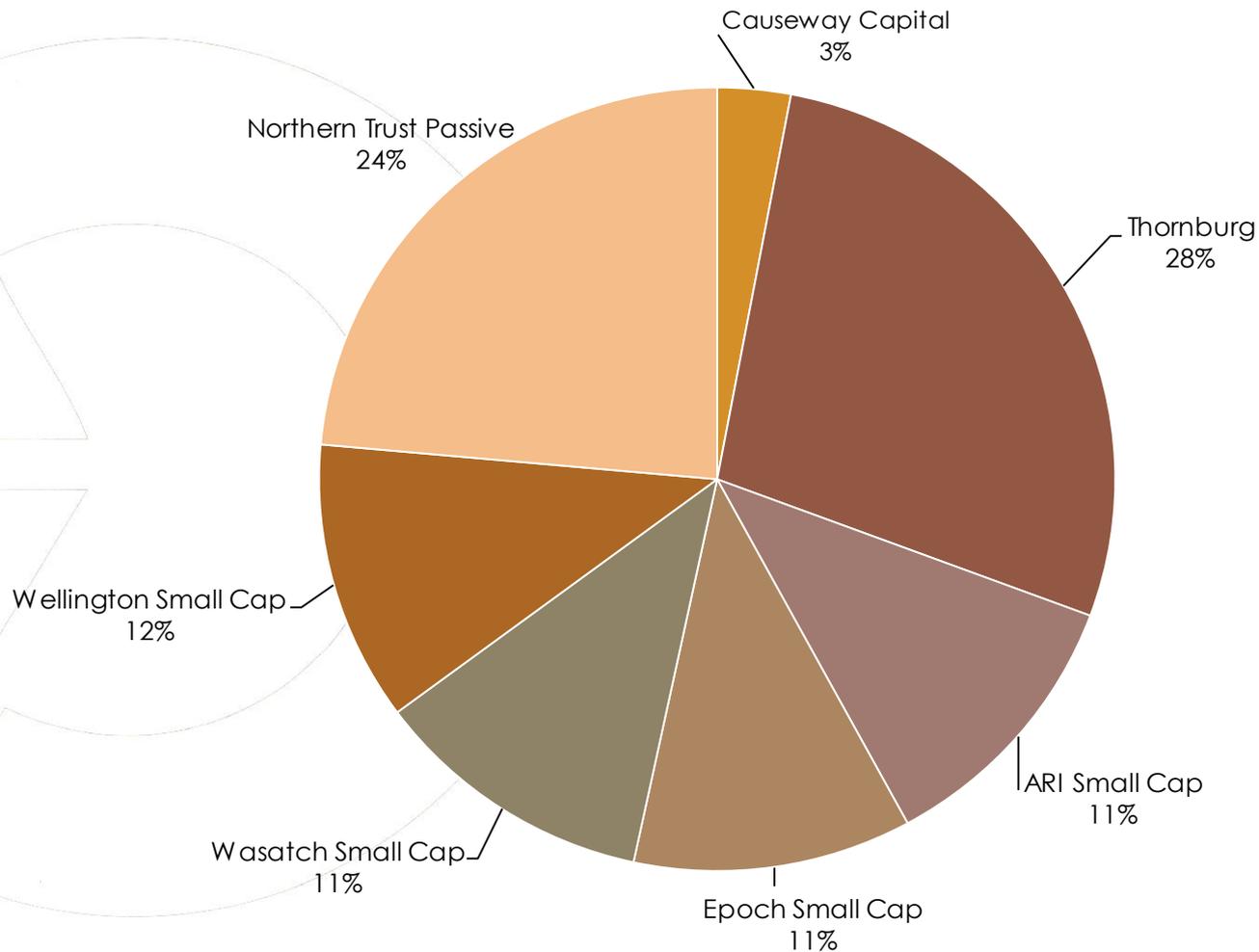
Fixed Income Risk Return Comparison

Composite Data Used – Three Years Ended September 30, 2013



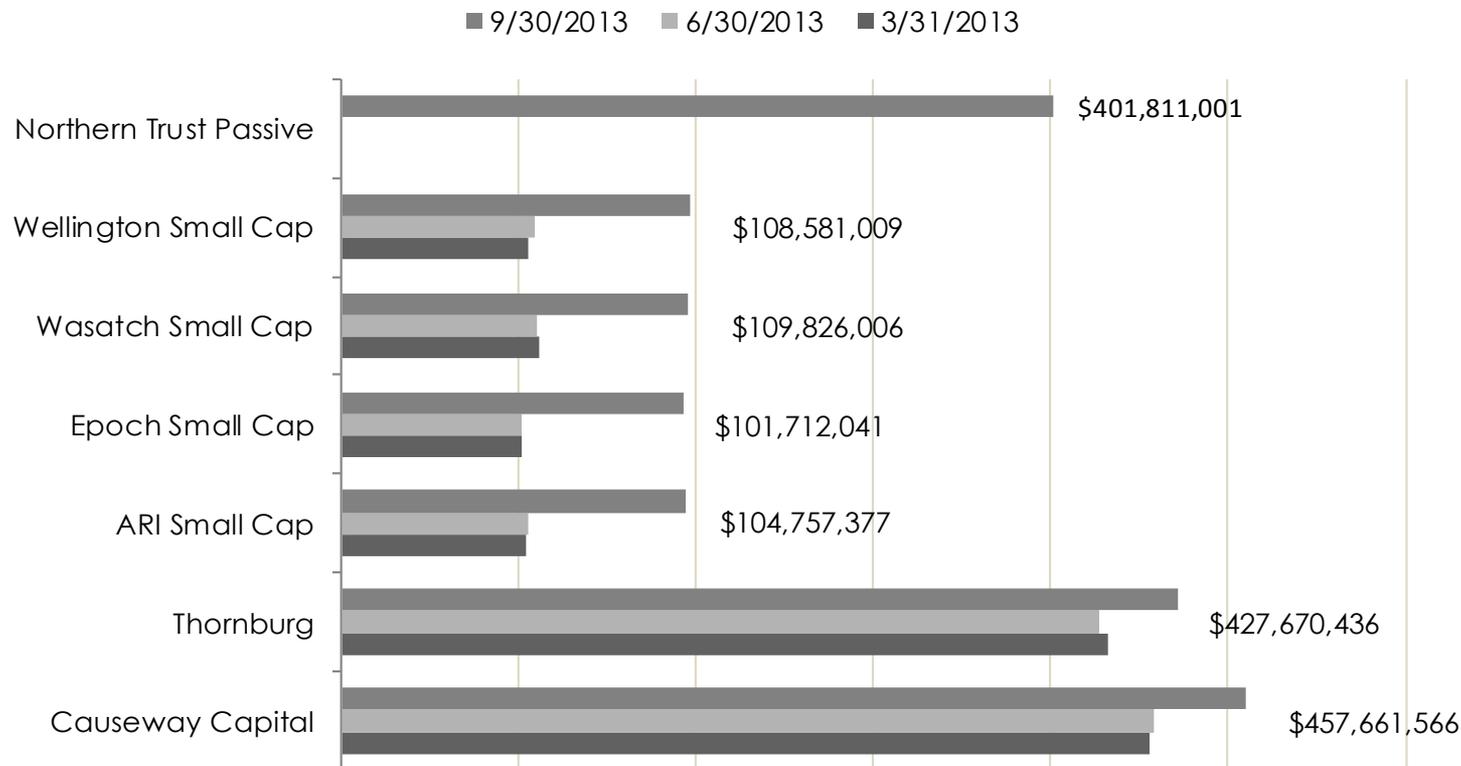
*Composite performance used when necessary to calculate figures.

Asset Allocation Summary – International Equity Allocation

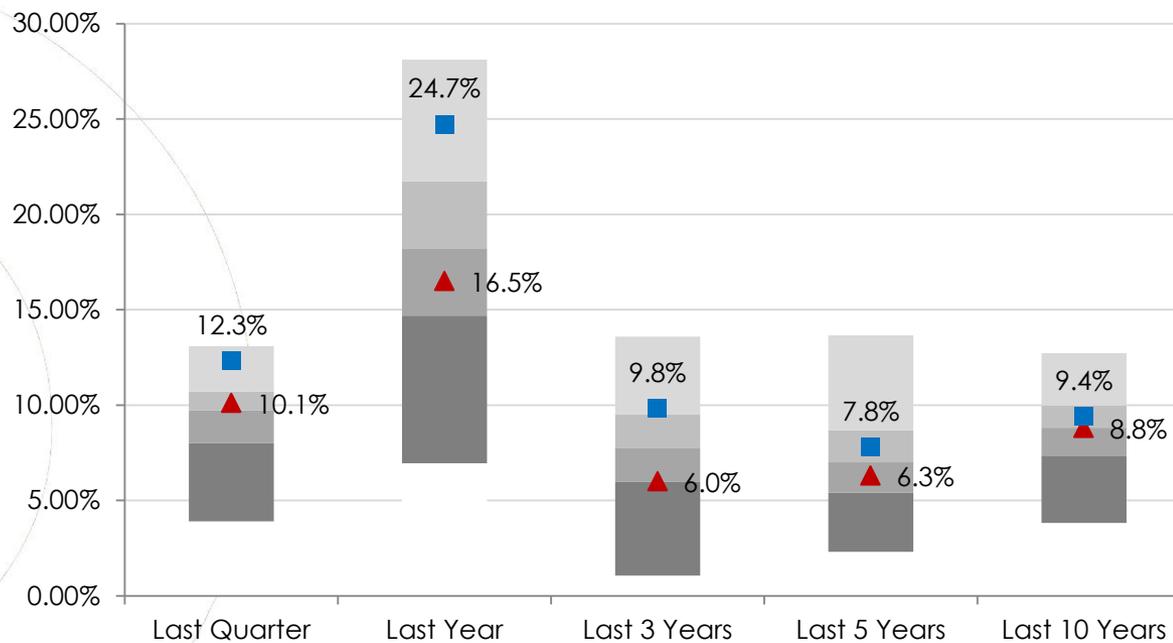


third quarter, 2013

Asset Allocation Summary – International Equity Allocation



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



■ OTRS International Equity Composite

◆ MSCI ACWI Ex-US

12.3%

10.1%

24.7 %

16.5%

9.8%

6.0%

7.8%

6.3%

9.4%

8.8%

Performance – International Equity Managers

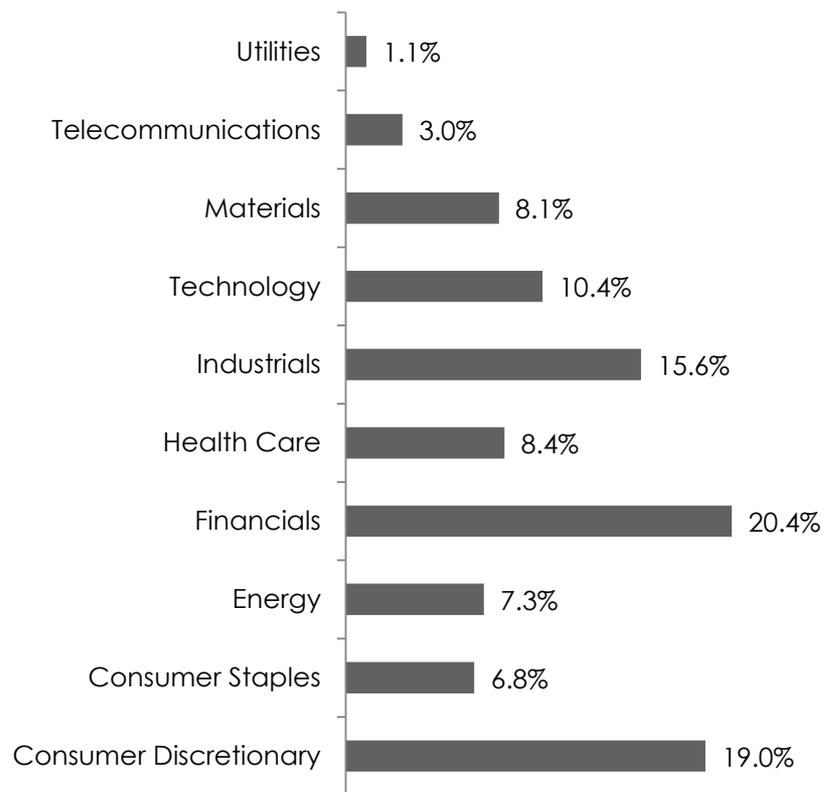
	Last 10 Years	% Rank	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Year	% Rank	Last Quarter	% Rank
Causeway	9.8	29	9.3	23	10.6	20	22.2	24	11.3	20
Northern Trust Passive	-		-		-		-		-	
Thornburg	-		7.8	38	7.6	52	18.3	49	10.3	35
<i>MSCI ACWI Ex US</i>	8.5		6.3		6.0		16.5		10.1	
ARI	-	-	-	-	-	-	25.0	15	11.9	15
EPOCH	-	-	-	-	-	-	26.5	10	13.8	2
Wasatch	-	-	-	-	-	-	33.4	3	13.4	4
Wellington	-	-	-	-	-	-	36.9	1	15.3	1
<i>MSCI EAFE Small Cap</i>	10.3		11.4		11.3		29.4		15.5	

Total International Equity Portfolio Holdings Review

Largest Equity Positions

Position	% of Total Equity Allocation
Reed Elsevier	1.02%
Toyota Motor Corp	0.93%
Toyota Motor Corp	0.89%
Mitsubishi UFJ Financial	0.84%
LVHM Moet Louis Vuitton	0.77%
AKZO Nobel	0.71%
Novartis AG	0.71%
Siemens AG	0.70%
Roche Holding	0.67%
Daimler	0.67%
Top Ten Total Weight	7.91%

Sector Weightings



Active International Equity Characteristics – Trailing Five Years

	Asset Class	Upside Capture Ratio %	Downside Capture Ratio %	Trailing Five Year Return	Correlation vs. S&P 500	Correlation vs. MSCI ACWI ex US
Causeway	Large Cap Core	125.3%	96.5%	9.3%	0.92	0.97
Northern Trust	Passive Index	100.0%	100.0%	6.4%	0.88	0.99
Thornburg	Large Cap Core	196.2%	92.2%	7.8%	0.92	0.99
Advisory Research	Small Cap Value	109.6%	83.8%	11.8%	0.85	0.95
EPOCH	Small Cal Value	132.1%	95.8%	11.7%	0.89	0.97
Wasatch	Small Cap Growth	183.4%	79.2%	21.9%	0.86	0.95
Wellington	Small Cap Growth	103.6%	90.2%	9.4%	0.92	0.99

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

*Composite performance used when necessary.

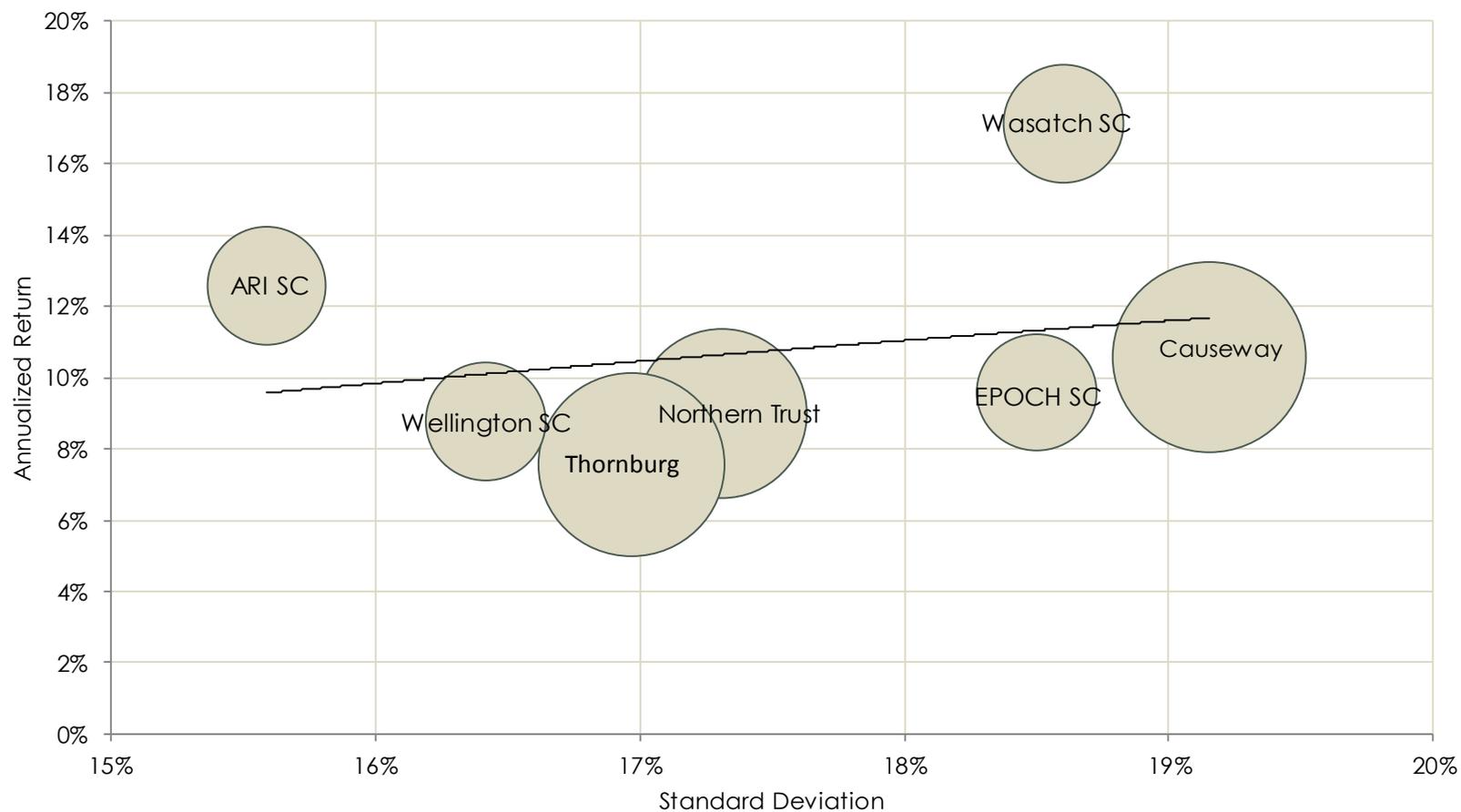
International Equity Portfolios: 5 Year Correlation Matrix

Trailing Five Years	ARI SCI	Causeway LCI	EPOCH SCI	Northern Trust	Thornburg LCI	Wasatch SCI	Wellington SCI
ARI SCI	-						
Causeway LCI	0.94	-					
EPOCH SCI	0.94	0.96	-				
Northern Trust Passive	0.93	0.97	0.94	-			
Thornburg LCI	0.92	0.97	0.97	0.97	-		
Wasatch SCI	0.90	0.91	0.96	0.91	0.95	-	
Wellington SCI	0.93	0.98	0.96	0.98	0.99	0.94	-

*Composite performance used when necessary.

International Equity Risk Return Comparison

Composite Data Used – Three Years Ended September 30, 2013



Performance – MLPs and Real Estate

	Last 5 Years	% Rank	Last 3 Years	% Rank	Last 1 Year	% Rank	Last Quarter	% Rank
Chickasaw	-	-	-	-	32.5	-	1.7	-
FAMCO	-	-	-	-	19.3	-	-0.9	-
Swank	-	-	-	-	29.6	-	1.5	-
<hr/>								
<i>Alerian MLP</i>	-		-		<i>17.0</i>		<i>-0.7</i>	
<hr/>								
AEW	-	-	-	-	-	-	-	-
Heitman	-	-	-	-	-	-	-	-
L&B	-	-	-	-	-	-	-	-
<hr/>								
<i>NCREIF - OEDCE</i>	-		-		-		-	
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Master Limited Partnership Allocation

Review – November 2013

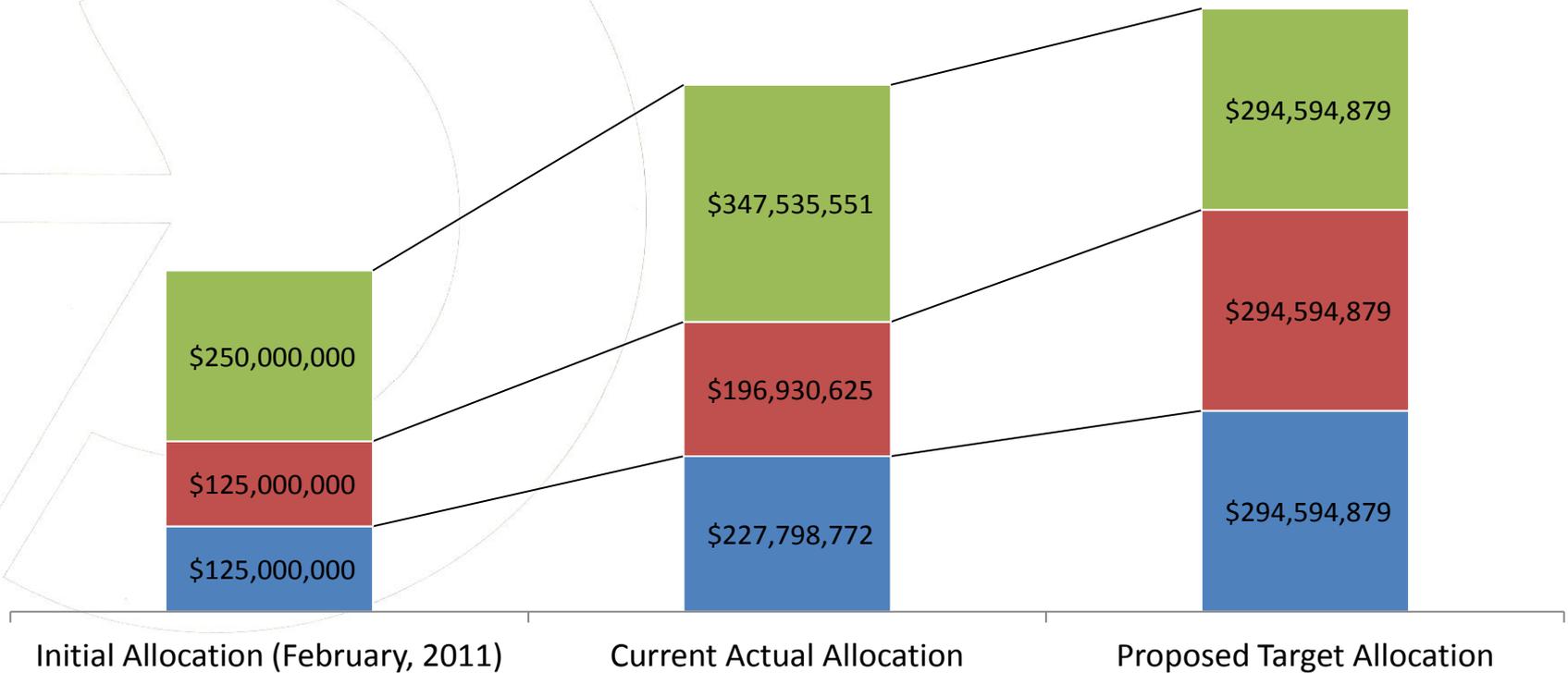
Current vs. Target Allocation

- The new target asset allocation increased the MLP mandate from a 5% target to a 7% target.
- The current asset allocation is slightly over 6%.
- Based on current market values, an increase of a little more than \$111 is required to elevate the asset class to target.



Allocation Summary: Inception to Date

■ Chickasaw ■ Cushing ■ FAMCO



Proposed Reallocation: Equal Weighted Allocation

	Current Actual Allocation	Proposed Target Allocation	Difference
Chickasaw	\$ 227,798,772	\$ 294,594,879	\$ 66,796,107
Cushing	\$ 196,930,625	\$ 294,594,879	\$ 97,664,254
FAMCO	\$ 347,535,551	\$ 294,594,879	-\$ 52,940,672
Composite TMV	\$ 12,625,496,076	\$ 12,625,496,076	
MLP TMV	\$ 772,264,948	\$ 883,784,637	\$ 111,519,689
MLP % of Total	6.12%	7.00%	+0.88%



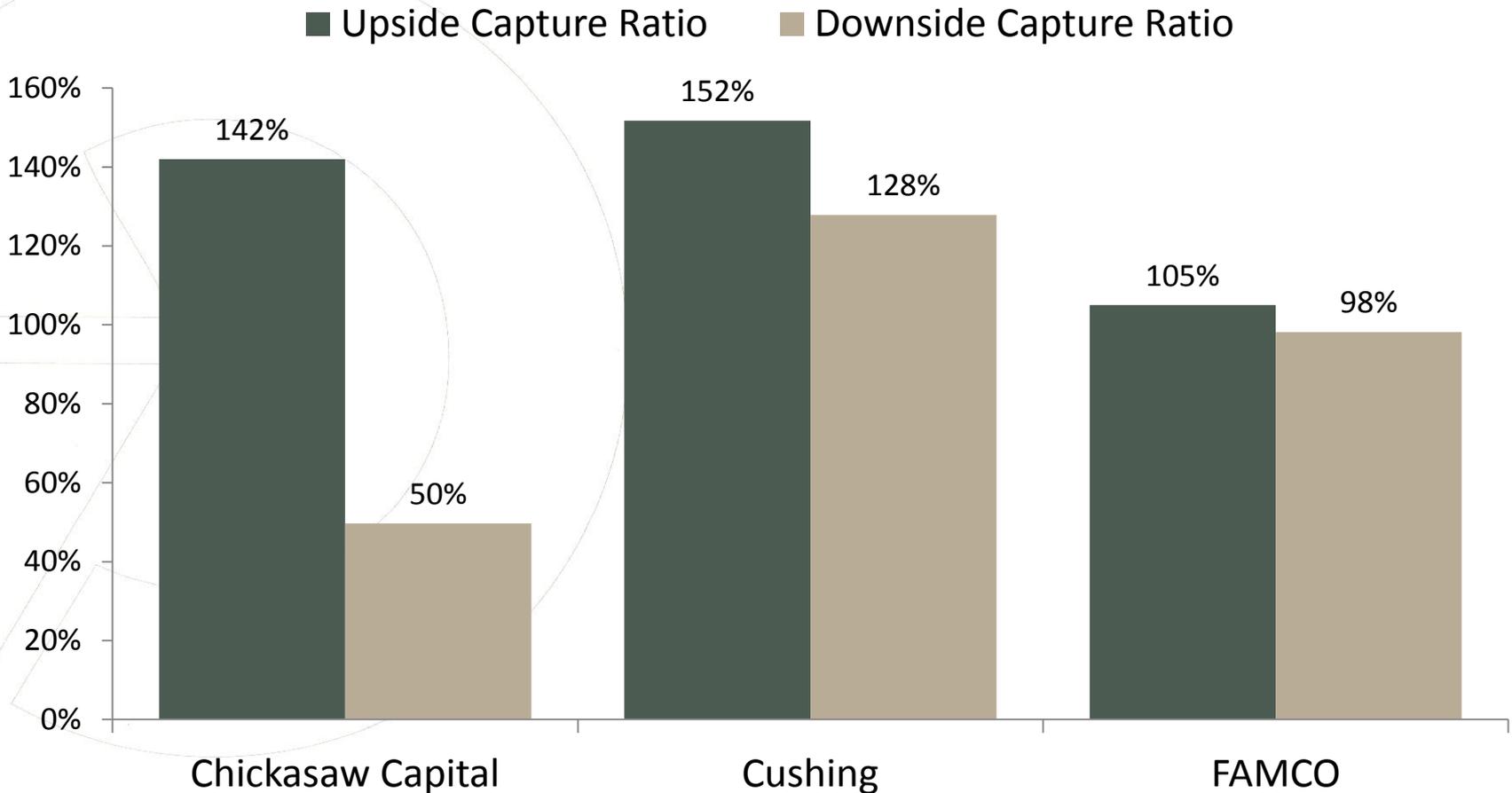
Performance Summary: Periods Ended June 30, 2013

	Portfolio A: 50% FAMCO, 25% Chickasaw, 25% Cushing	Portfolio B: 33% FAMCO, 33% Chickasaw, 33% Cushing	Alerian MLP Index
Last Year	39.3%	41.4%	28.3%
Last 3 Years	26.3%	27.7%	21.0%
Last 5 Years	18.2%	17.8%	18.2%
Last 10 Years	17.2%	17.1%	16.3%



Upside/Downside Capture Ratio Comparison

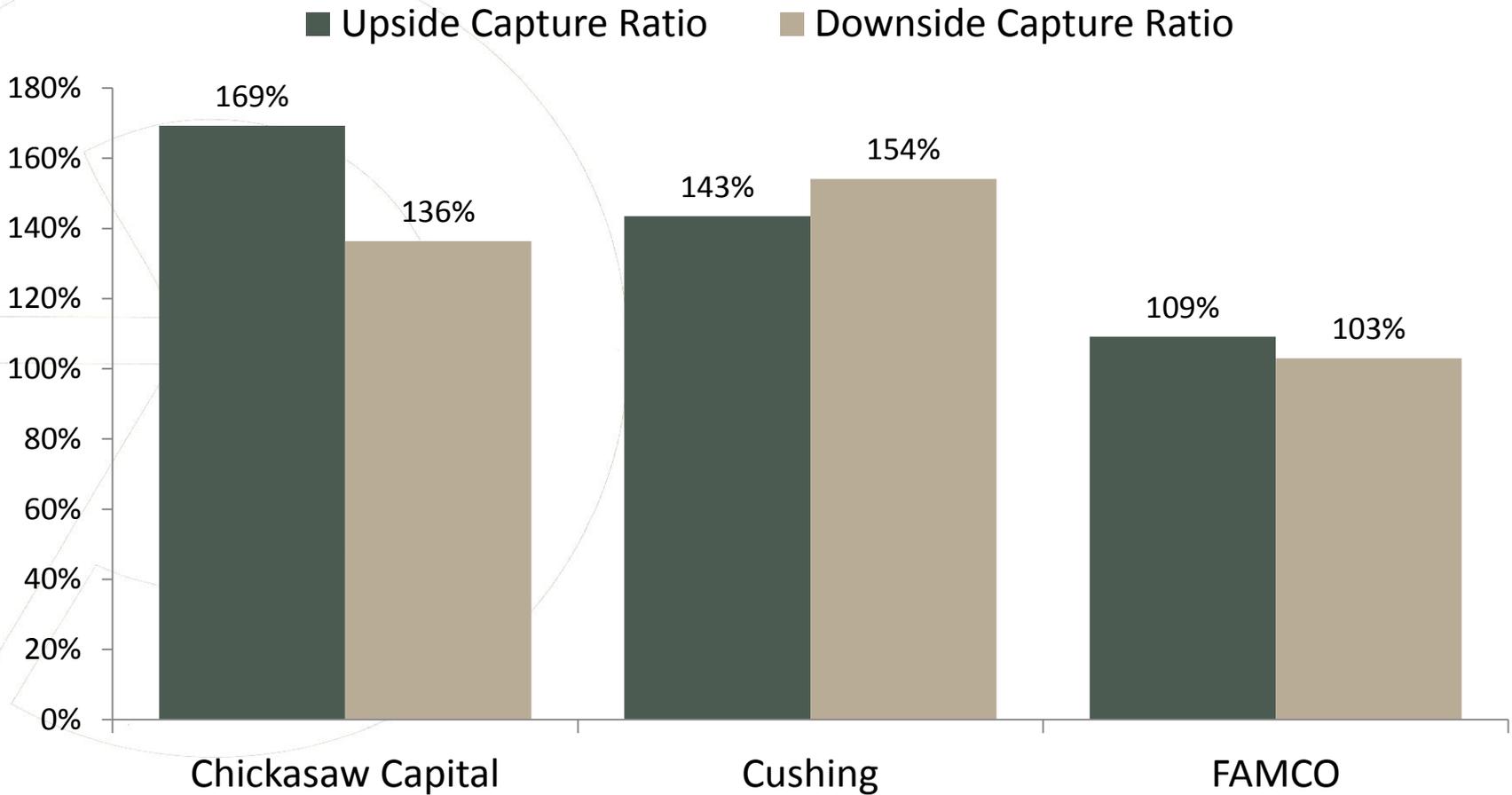
Three Year Observation Period



¹Composite data used for returns and standard deviation.



Upside/Downside Capture Ratio Comparison Five Year Observation Period



¹Composite data used for returns and standard deviation.



Correlation Matrix

Three Year Observation	Chickasaw Capital	Cushing	FAMCO
Chickasaw Capital	1.0000	0.92	0.95
Cushing	0.92	1.0000	0.94
FAMCO	0.95	0.94	1.0000

Five Year Observation	Chickasaw Capital	Cushing	FAMCO
Chickasaw Capital	1.0000	0.94	0.94
Cushing	0.94	1.0000	0.92
FAMCO	0.94	0.92	1.0000

¹Composite data used for returns and standard deviation.



Risk/Return Comparison

Three Year Observation	Mean Return ¹	Standard Deviation	Sharpe Ratio
Chickasaw Capital	29.3%	13.6%	2.13
Cushing	29.0%	15.1%	1.90
FAMCO	22.1%	13.9%	1.57

¹Composite data used for returns and standard deviation.



Real Estate Allocation

Review – November 2013

Introduction

- The Oklahoma Teachers' Retirement System started investing in real estate in 2011. At the time, the asset class was relatively depressed and had attractive yields.
- The asset class **was seen as an alternative source of income**. Bond prices were and still are seen as extremely vulnerable to rising interest rates. The bond-like income stream produced by high quality real estate returns was the primary reason the real estate allocation was funded.
- The most recent iteration of the System's asset allocation model increased the target allocation to real estate from 5% to 7%. We have diligently applied our research process to how the additional 2% allocation should be structured.



Current vs. Target Allocation

- The new target asset allocation increased the real estate mandate from a 5% target to a 7% target.
- The current asset allocation is 4.3%.
- Based on recent market values, an increase of roughly \$283 million is required to elevate the asset class to target. The total target allocation would amount to just under \$900 million.
- The current real estate allocation is diversified among three core portfolios. The characteristics of core portfolios are very bond-like: stable income and low price volatility.
- The three current investments are invested in open-ended core vehicles. There may be some waiting period to enter some of the funds. The waiting period could be up to six months.
- We believe this is the most appropriate risk profile for most of the real estate allocation, as it acts like a bond substitute. However, we believe that additional diversification can be useful.



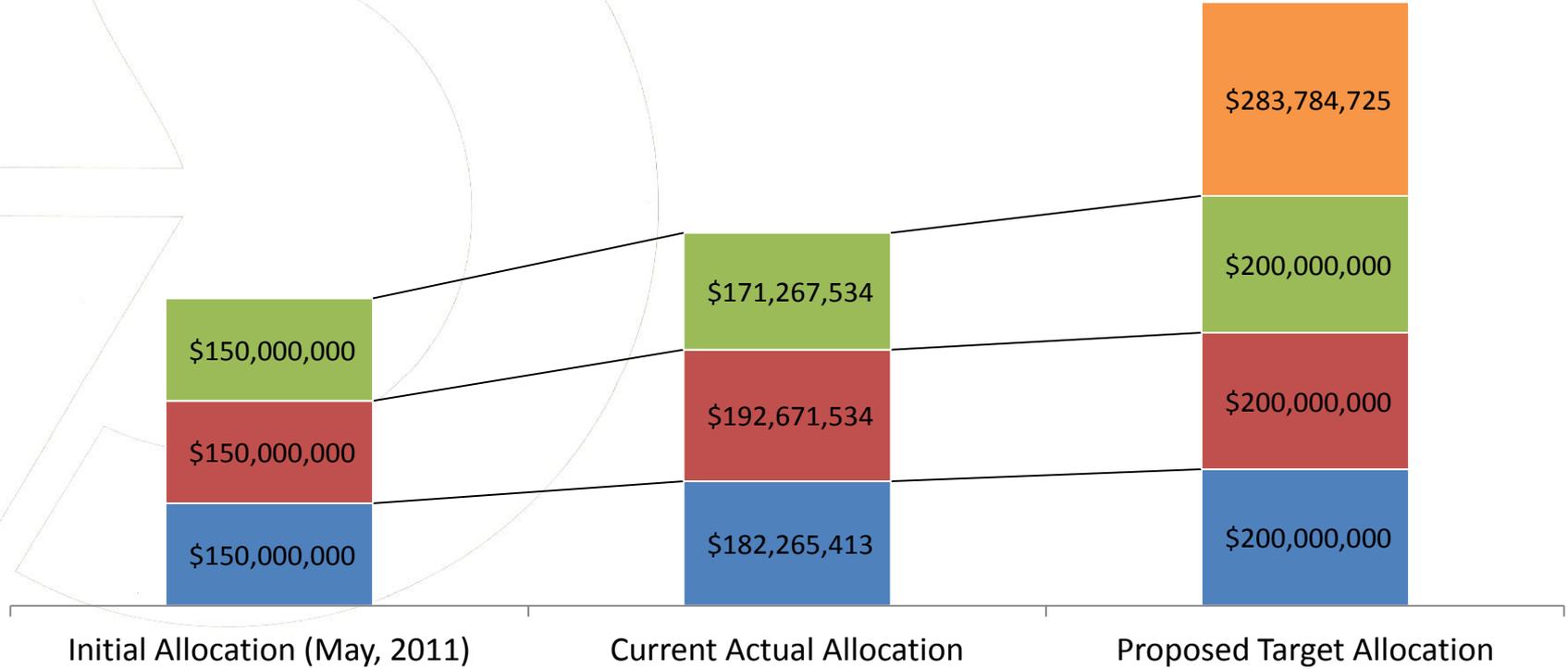
Core vs. Non-Core Real Estate

	Core	Non-Core
Property Types	Office, Retail, Apartments, and Industrial	Office, Retail, Apartments, Industrial, Hotel, Storage, Student and Senior Housing
Occupancy at Acquisition	Greater than 85%	Less than 85%
Target Markets	Primary	Primary, Secondary, Tertiary
Asset Physical Needs	Minor	Renovation, Rehabilitation, Development
Holding Period	+7 Years	1 – 7 Years
Income as a % of Total Return	70%	0% - 70%
Leverage	0% - 35%	40% - 80%
Long Term Return Expectation	7% - 11%	10% - 20%



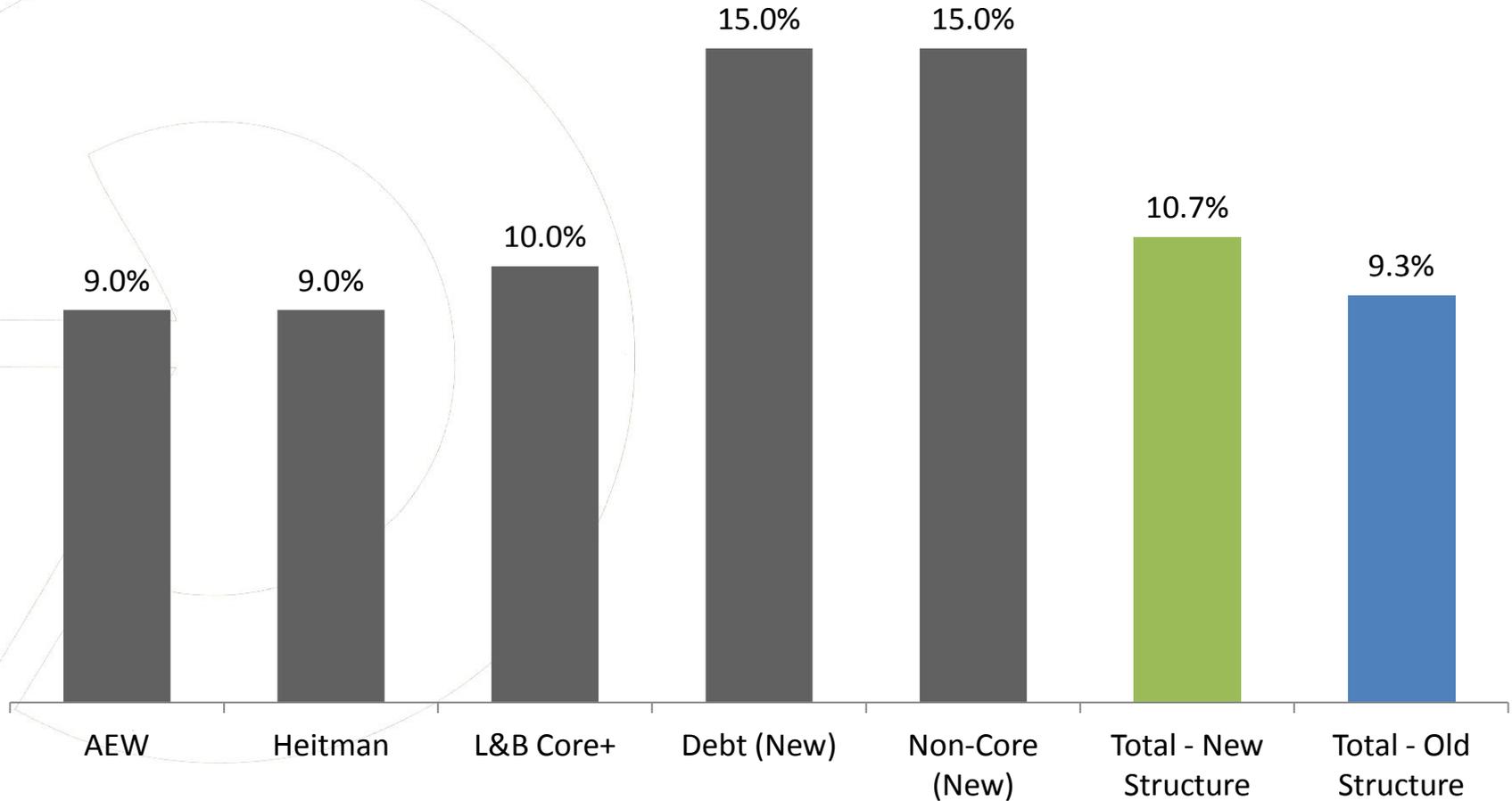
Allocation Summary: Inception to Date

■ AEW ■ Heitman ■ L&B ■ Additional Allocation



Long-term Performance Expectations

Real Estate Portfolio Components



Proposed Real Estate Project Timeline

Enlarge Current Core Allocation

- Increase core portfolios to **\$200 million each**.
- **Stable income and low volatility** still primary goals of the real estate allocation.
- Allocation to core real estate will be roughly 2/3 of the overall real estate portfolio.
- Optimize portfolio structures where possible.

Issue RFP for Real Estate Debt Funds

- Asset class complements the current real estate portfolio.
- **High income and the ability to prosper in a rising interest rate environment** make this the most logical next step for the real estate allocation.
- Returns are expected to be roughly the same as non-core real estate: 10% to 20% annualized.

Issue RFP for non-Core Real Estate Management

- Allocating into non-core assets can raise the return profile of the real estate allocation. However, the risk inherent to non-core strategies is significantly higher than core real estate.
- We would consider existing managers but also other specialty investors during the non-Core real estate search.

Appendix



Real Estate Debt Funds

Why real estate debt? It should provide above actuarial rate returns and hedge the real estate allocation in an economic environment where interest rates rise without a significant increase in inflation.

Annualized return expectations for real estate debt can range from 10% to 20%.

Real estate debt is a relatively small, but growing, segment of the institutional marketplace. Fund raising has been growing on a year over year basis. Funds are being offered by private equity firms, large banks, and real estate specialists. The loans can be originated by the funds' managers or purchased on the private market.

Real estate debt investments are generally structured as private partnerships with well-defined time lines. Risk profiles of the individual funds vary greatly. The funds are of limited duration – four to six year life spans are most common.

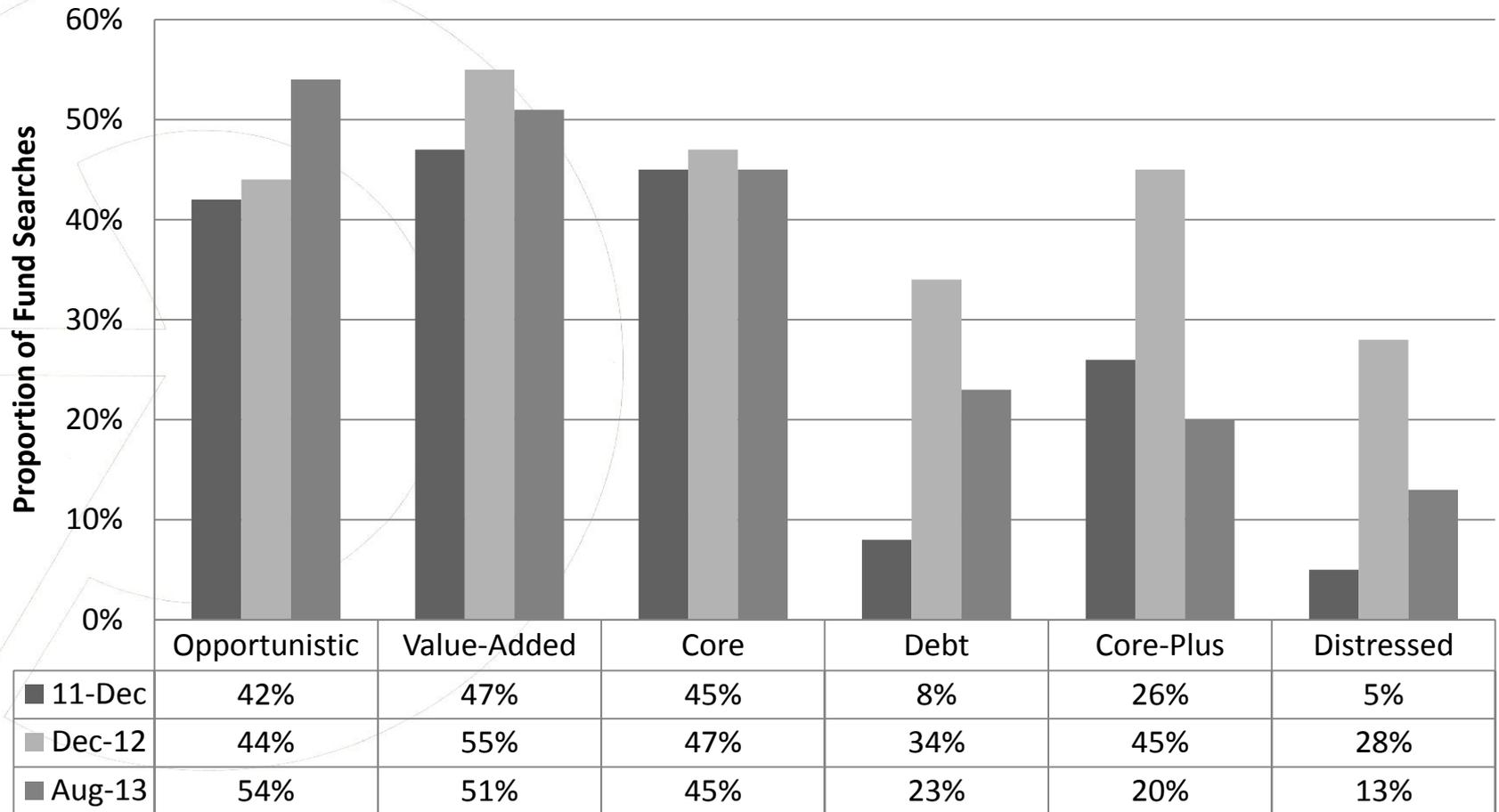
Distressed funds focus on buying non-performing, late or defaulted loans at significant discounts. Returns are generated through capital gains and income. Recently, some investors have placed the PIMCO Funds (DMF 1 and 2, and BRAVO 1 and 2) in their real estate allocations.

Mezzanine funds invest in loans that are often used to secure supplementary financing for development projects, typically in cases where the primary mortgage or construction loan equity requirements are larger than 10%. These sorts of mezzanine loans are often collateralized by the stock of the development company rather than the developed property itself (as would be the case with a traditional mortgage).

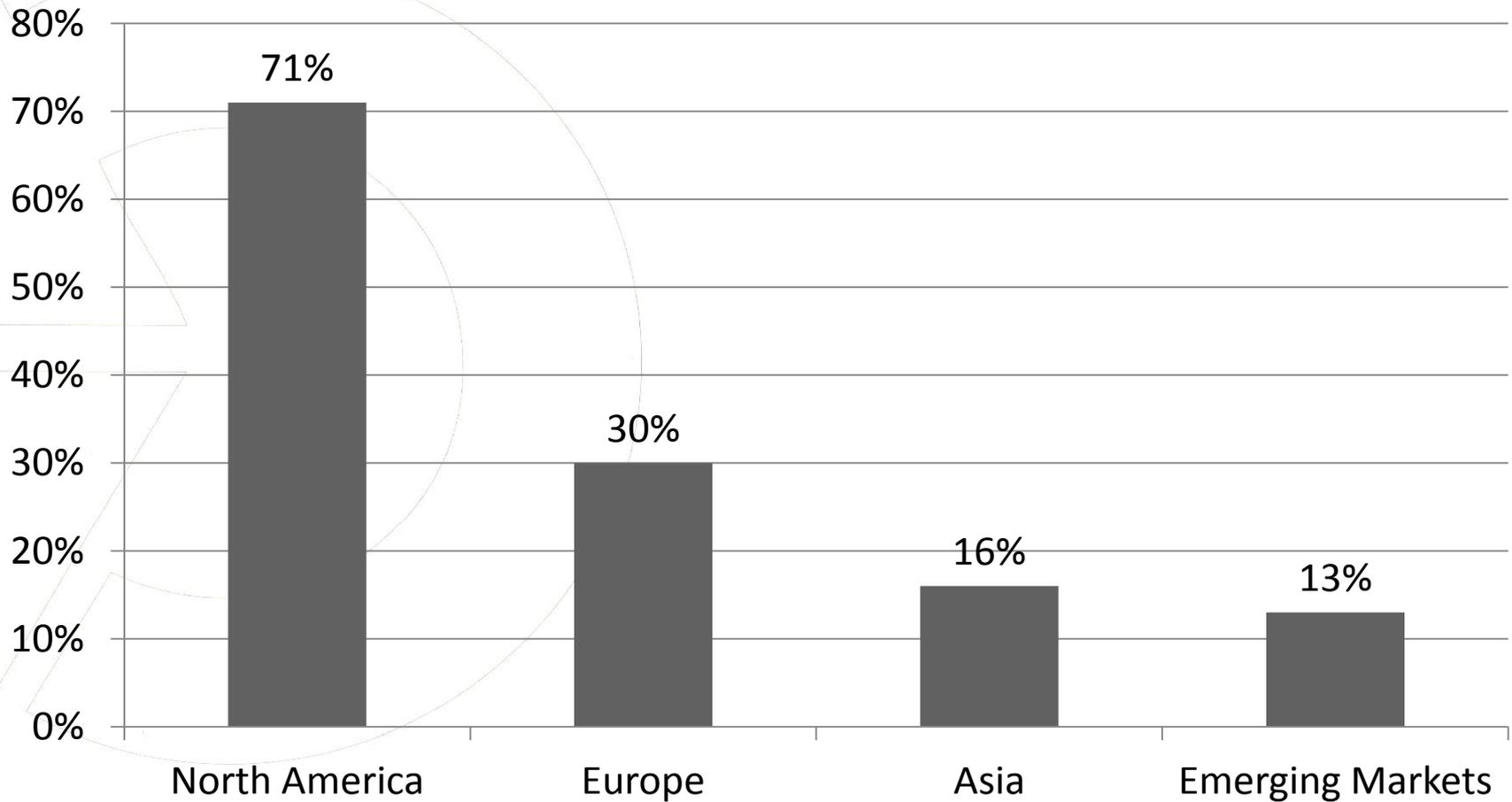
Secondary funds assemble existing, performing real estate loans into portfolios. The return profile of secondary funds should be lower than other real estate debt investments.



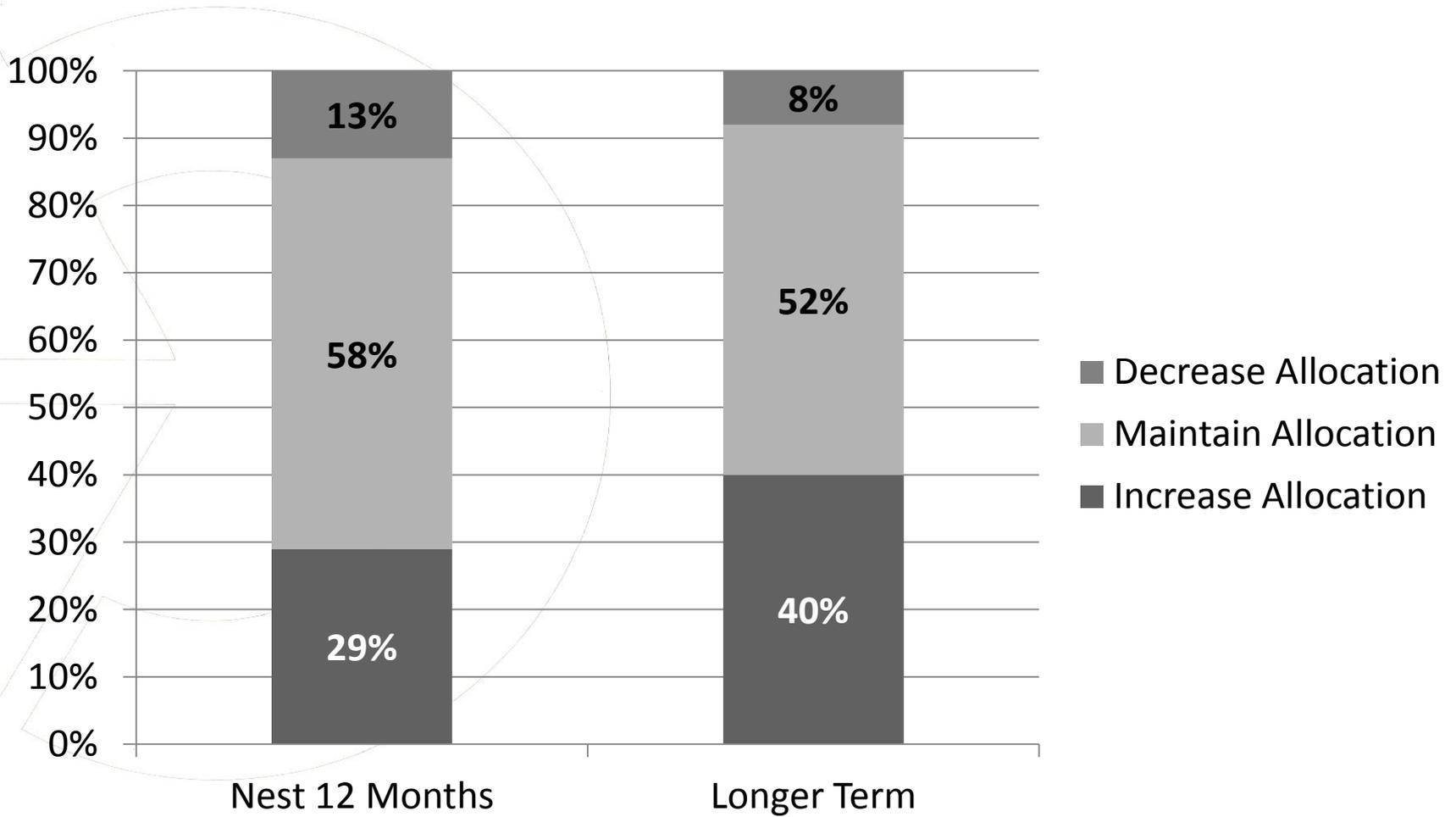
Strategies Targeted in the Next 12 Months by Private Real Estate Investors, December 2011 - August 2013



Geographies Investors Believe Are Presenting the Best Opportunities in the Current Market



Investors' Intentions for Their Real Estate Allocations in the Next 12 Months and Longer Term



Franklin Park Fee Summary

Private Equity Fund Management and Monitoring Service

- o 0.75% of annual commitment pace (\$200 million) in first year
- o 0.25% of net invested capital (cost of remaining investments) in subsequent years (includes Legacy portfolio as well)
- o No carried interest charge

	2010 ¹	2011	2012	1H 2013	TOTAL
OTRS Legacy P/E Assets Fund, L.P.					
<i>Monitoring fees</i>	\$ 118,963	\$ 236,635	\$ 236,913	\$ 117,484	\$ 709,995
OTRS/FP Private Equity Fund, L.P.					
<i>Management & Monitoring fees</i>	\$ 1,500,000	\$ 1,610,770	\$ 2,088,996	\$ 1,384,241	\$ 6,584,007
Total	\$ 1,618,963	\$ 1,847,405	\$ 2,325,909	\$ 1,501,725	\$ 7,294,002

¹ OTRS Legacy P/E Assets Fund, L.P. commenced operations on July 1, 2010.





November 4, 2013

Mr. William Peacher
Chair of Investment Committee
State of Oklahoma
Oklahoma Teachers Retirement System
Oliver Hodge Education Building
2500 North Lincoln Blvd, 5th Floor
Oklahoma City, OK 73105

Dear Bill:

As a follow-up to a question posed by the staff - "Has your firm requested an investment policy exemption from OTRS? If so, can you confirm whether your organization would like for this request to remain active?" – we would respond "cash."

We would like the ability to have up to 20% "transitional" cash in the portfolio for the following reasons:

1. The market has had a huge run and we are having difficulty finding new ideas.
2. As a result, we are seeing valuation based sales not being met with new ideas leading toward transitional cash positions.

We are pursuing this line of thought solely on a bottom up, risk focused approach, not a "I hate the world" philosophy. Our motto has always been "worry top-down, but invest bottom up." We are also aware that we are judged on total return and will not show up at your door with the "well, net of cash we did well" story. We share your long term time horizon and do not worry about one month here and one month there. We treat your money as if its our own and we think this flexibility enables us to add value when we should, not because we "have" to.

We are delighted to get off to a good start with OTRS and we look forward to a long and mutually prosperous relationship. We appreciate your consideration.

Sincerely,

A handwritten signature in black ink that reads "Jeff Bronchick".

Jeff Bronchick
Chief Investment Officer

A handwritten signature in black ink that reads "Daniele Beasley".

Daniele Beasley
President

cc: OTRS Board of Trustees
OTRS Staff
Gregory Group



November 8, 2013

Mr. Josh Richardson
Director – Strategic Initiatives and Risk Management
Oklahoma Teachers Retirement System
P.O. Box 53524
Oklahoma City, OK 73152-3524

Dear Josh:

According to the Investment Policy Statement of Oklahoma Teachers Retirement System, we are required to submit this letter requesting exception under the Policy to continue to hold a security whose credit rating has been downgraded to below ‘CCC.’ On October 1, 2013 following a missed interest payment on outstanding bonds, Standard & Poor’s downgraded the debt of Brazil’s oil producer OGX Petróleo e Gás Participações, S.A., from CCC- to D. The core plus portfolio that we manage for OTRS held a position in the 8.5% bonds due 6/1/2018 of a subsidiary company OGX Austria GmbH in a face amount of \$450,000. As a result of the default and downgrade, these bonds are currently bid in the market in the range of \$9-10 per \$100 face, so the position represents less than one basis point of the portfolio’s market value.

Our original investment thesis was based on the assumption that oil production of the company’s contingent, risked prospective and potential resources would be more than sufficient to generate the necessary cash flow to service its debt. Delays in producing first oil were attributed to the common difficulty E&P companies often have in transitioning from the exploratory phase to the production phase.

Given the current market for the bonds, we would prefer to hold the position for now in the expectation that there will be better recovery through a restructuring than selling at the current level. 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,

David A. Robbins
Director, Institutional Investor Services

CC: Mr. Grant Rohlmeier, Oklahoma Teachers Retirement System
Mr. Douglas Anderson, gregory.w.group



Instructions to Participate in Master Trading Agreements Negotiated by MacKay Shields

Please deliver to Jennifer Beatty, at MacKay Shields by courier (at the address listed at the bottom of this letter):

- (i) Authorization and Release attached hereto (the “**Release**”) that evidences your consent for MacKay Shields (a) to enter into one or more master trading agreements on your behalf, and (b) to deliver on your behalf each of the items set forth therein, executed by one (or more as applicable) authorized signatories;
- (ii) Appendix A (Representations, Warranties and Covenants), executed by one (or more as applicable) authorized signatories; and
- (iii) Documents requested on Appendix B attached hereto (the “**Requested Documents**”).

If you have any questions, please do not hesitate to contact: Jennifer Beatty, Director at 212-230-3925 or jennifer.beatty@mackayshields.com.



AUTHORIZATION AND RELEASE

The undersigned client (the “**Client**”) hereby consents to the delivery by MacKay Shields LLC to any broker-dealer, futures commission merchant or other counterparty (each, a “**Counterparty**”) of:

- (i) any agreement(s) in place, and related documents thereto, between the Client and MacKay Shields LLC;
- (ii) the documents listed in Appendix B; and
- (iii) any other documents or information concerning the Client that may be requested by a Counterparty.

In addition, the Client hereby authorizes MacKay Shields LLC to enter into or more agreements on behalf of the Client with any Counterparty for the purpose of opening an account with such Counterparties to trade US Treasury and interest rate futures, swaps or other financial instruments, to the extent permitted by investment guidelines in place between the Client and MacKay Shields LLC.

The authorizations and consents described herein may only be revoked by written communication to MacKay Shields LLC and shall supersede any other agreement or understanding between the parties with respect to the subject matter contained hereto.

NAME OF CLIENT

By: _____
Name:
Title:
Date:

Please arrange for execution below by an additional authority signatory below where more than 1 authorized signatory is required to bind the Client

By: _____
Name:
Title:
Date:

REPRESENTATIONS, WARRANTIES AND COVENANTS

The undersigned client (the “**Client**”) represents, warrants and covenants to MacKay Shields LLC (“**MacKay**”) that:

1. MacKay has full discretion, power and authority, without obtaining any prior consent or approval from the Client or any other person, as Client’s agent and attorney-in-fact, to (a) make all investment decisions in respect of the assets of the Client, (b) engage in Transactions of any kind on behalf of the Client, including without limitation futures, derivatives, swaps, caps, collars and floors (including options on any of the foregoing), (c) place orders with respect to, and to arrange for, any of the foregoing, (d) in furtherance of the foregoing, do anything which MacKay in its sole discretion shall deem requisite, appropriate or advisable in connection therewith, and (e) each broker-dealer, futures commission merchant or other counterparty (each, a “**Counterparty**”) is entitled to rely conclusively upon and will incur no liability from operating pursuant to any request, instruction, certificate, representation or other document furnished to a Counterparty, or action taken, by any employee or agent of MacKay in connection with any agreement with a Counterparty entered into on behalf of the Client by MacKay (each a “**Trading Agreement**”) and the Transactions hereunder, as though the same had been given or made by the Client, unless and until such time as the Client delivers written notice to a Counterparty (with a copy to MacKay) affirmatively revoking, terminating or modifying such authorization;
2. The Client is duly organized and in good standing under the laws of the jurisdiction in which it was organized and in all jurisdictions where it is conducting business;
3. The Client is in full compliance with the registration and other requirements of all applicable laws and any applicable regulator or governmental agency, including (but not limited to) with respect to commodity pool operators;
4. No material adverse change in the Client’s financial condition has occurred since the date of the most recent financial statements furnished by the Client to MacKay, and such financial statements are complete and correct and fairly present the Client’s financial condition and results of operations as at the date of such financial statements, all in accordance with generally accepted accounting principles and practices applied on a consistent basis;
5. If Client is subject to the Federal Deposit Insurance Act as an insured depository institution or to similar legislation governing its liquidation or administration in insolvency or receivership as a financial institution, Client represents and warrants that it has taken or caused to be taken, and agrees that it will take or cause to be taken, all actions necessary to maintain the enforceability of this Agreement pursuant to the Federal Deposit Insurance Act or such other legislation, including, but not limited to, the retention and maintenance of all records required to be collected or maintained by it.



Each of the representations, warranties and covenants will be deemed repeated at all times until the Client notifies MacKay in writing otherwise.

NAME OF CLIENT

By: _____
Name:
Title:
Date:

Please arrange for execution below by an additional authority signatory below where more than 1 authorized signatory is required to bind the Client

By: _____
Name:
Title:
Date:

REQUESTED DOCUMENTS:

For All Clients

W-8 or W-9 Tax Form (*as applicable*)
Most recent annual audited financial statement
Authorized Signatory Certificate

-PLUS-

For Clients that are Trusts (including Defined Benefit Plans)

Copy of Trust Agreement

For Clients that are Limited Liability Companies

Operating Agreement
Certificate of Formation

For Clients that are Partnerships

Partnership Agreement
Certificate of Limited Partnership

For Clients that are Corporations

Certificate of Incorporation

For Clients that are Individuals

US citizens: driver's license or passport.
Non-US citizens: foreign passport number and country of issuance or alien identification card number

Futures Disclosure Statements and Notices

Merrill Lynch, Pierce, Fenner & Smith Inc.

540 West Madison St., Chicago, Illinois 60661

Tel: 312-537-6287

NOTICE REGARDING AVERAGE PRICE SYSTEM ("APS")

You should be aware that certain US and non-US exchanges, including the CME and CBOT, may now or in the future allow a futures commission merchant ("FCM") such as Merrill Lynch to confirm trades executed on such exchanges to some or all of their customers on an average price basis regardless of whether the exchanges have average price systems of their own. Average prices that are not calculated by an exchange system will be calculated by your FCM. In either case, trades that are confirmed to you at average prices will be designated as such on your daily and monthly statements.

APS enables a clearing firm to confirm to customers an average price when multiple execution prices are received on an order or series of orders for the same accounts. For example, if an order transmitted by an account manager on behalf of several customers is executed at more than one price, those prices may be averaged and the average may be confirmed to each customer. Customers may choose whether to use APS, and may request that APS be used for discretionary or non-discretionary accounts.

An order subject to APS must be for the same commodity. An APS order may be used for futures, options or combination transactions. An APS order for futures must be for the same commodity and month, and for options, it must be for the same commodity, month, put/call and strike.

An APS indicator will appear on the confirmation and monthly statement for a customer whose positions have been confirmed at an average price. This indicator will notify the customer that the confirmed price represents an average price or rounded average price.

The average price is not the actual execution price. APS will calculate the same price for all customers that participate in the order.

APS may be used when a series of orders are entered for a group of accounts. For example, a bunched APS order (an order that represents more than one customer account) executed at 10:00 a.m. could be averaged with a bunched APS order executed at 12:00 p.m. provided that each of the bunched orders is for the same accounts. In addition, market orders and limit orders may be averaged, as may limit orders at different prices, provided that each order is for the same accounts.

The following scenario exemplifies what occurs if an APS order is only partially executed. At 10:00 a.m. an APS order to buy 100 Dec S & P 500 futures contracts is transmitted at a limit price of 376.00; 50 are executed at 376.00, and the balance is not filled. At 12:00 p.m. an APS order to buy 100 Dec S & P 500 futures contracts is transmitted at a limit price of 375.00; 50 are executed at 375.00, and the balance is not filled. Both orders are part of a series for the same group of accounts. In this example, the two prices will be averaged. If the order was placed for more than one account, the account controller must rely on pre-existing allocation procedures to determine the proportions in which each account will share in the partial fill.

Upon receipt of an execution at multiple prices for an order with an APS indicator, an average will be computed by multiplying the execution prices by the quantities at those prices divided by the total quantities. An average price for a series of orders will be computed based on the average prices of each order in that series. The actual average price or the average price rounded to the next price increment may be confirmed to customers. If a clearing member confirms the rounded average price, the clearing member must round the average price up to the next price increment for a sell order. The rounding process will create a cash residual of the difference between the actual average price and the rounded average price that must be paid to the customer.

APS may produce prices that do not conform to whole cent increments. In such cases, any amounts less than one cent may be retained by the clearing member. For example, if the total residual to be paid to a customer on a rounded average price for 10 contracts is \$83.333333, the clearing member may pay \$83.33 to the customer. If you would like more information on APS orders, please contact account representative.

ELECTRONIC TRADING AND ORDER ROUTING SYSTEMS DISCLOSURE STATEMENT

Electronic trading and order routing systems differ from traditional open outcry pit trading and manual order routing methods. Transactions using an electronic system are subject to the rules and regulations of the exchange(s) offering the system and/or listing the contract. Before you engage in transactions using an electronic system, you should carefully review the rules and regulations of the exchange(s) offering the system and/or listing contracts you intend to trade.

Differences Among Electronic Trading Systems

Trading or routing orders through electronic systems varies widely among the different electronic systems. You should consult the rules and regulations of the exchange offering the electronic system and/or listing the contract traded or order routed to understand, among other things, in the case of trading systems, the system's order matching procedure, opening and closing procedures and prices, error trade policies, and trading limitations or requirements; and in the case of all systems, qualifications for access and grounds for termination and limitations on the types of orders that may be entered into the system. Each of these matters may present different risk factors with respect to trading on or using a particular system. Each system may also present risks related to system access, varying response times, and security. In the case of Internet-based systems, there may be additional types of risks related to system access, varying response times and security, as well as risks related to service providers and the receipt and monitoring of electronic mail.

Risks Associated with System Failure

Trading through an electronic trading or order routing system exposes you to risks associated with system or component failure. In the event of system or component failure, it is possible that, for a certain time period, you may not be able to enter new orders, execute existing orders, or modify or cancel orders that were previously entered. System or component failure may also result in loss of orders or order priority.

Simultaneous Open Outcry and Electronic Pit Trading

Some contracts offered on an electronic trading system may be traded electronically and through open outcry during the same trading hours. You should review the rules and regulations of the exchange offering the system and/or listing the contract to determine how orders that do not designate a particular process will be executed.

Limitation of Liability

Exchanges offering an electronic trading or order routing system and/or listing the contract may have adopted rules to limit their liability, the liability of FCMs, and software and communication system vendors and the amount of damages you may collect for system failure and delays. These limitations of liability provisions vary among the exchanges. You should consult the rules and regulations of the relevant exchange(s) in order to understand these liability limitations.

*Each exchange's relevant rules are available upon request from the industry professional with whom you have an account. Some exchange's relevant rules also are available on the exchange's Internet home page.

UNIFORM NOTIFICATION REGARDING ACCESS TO EXCHANGE MARKET DATA

As a market user you may obtain access to exchange Market Data available through an electronic trading system, software or device that is provided or made available to you by a broker or an affiliate of such. Market Data may include, but is not limited to, "real time" or delayed market prices, opening and closing prices and ranges, high-low prices, settlement prices, estimated and actual volume information, bids or offers and the applicable sizes and numbers of such bids or offers.

You are hereby notified that Market Data constitutes valuable confidential information that is the exclusive proprietary property of the applicable exchange, and is not within the public domain. Such Market Data may only be used for your firm's internal use. You may not, without the authorization of the applicable exchange, redistribute, sell, license, retransmit or otherwise provide Market Data, internally or externally and in any format by electronic or other means, including, but not limited to the Internet.

You must provide upon request of the broker through which your firm has obtained access to Market Data, or the applicable exchange, information demonstrating your firm's use of the Market Data in accordance with this Notification. Each applicable exchange reserves the right to terminate a market user's access to Market Data for any reason. You also agree that you will cooperate with an exchange and permit an exchange reasonable access to your premises should an exchange wish to conduct an audit or review connected to the distribution of Market Data.

NEITHER THE EXCHANGE NOR THE BROKER, NOR THEIR RESPECTIVE MEMBERS, SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS, GUARANTEE THE TIMELINESS, SEQUENCE, ACCURACY OR COMPLETENESS OF THE DESIGNATED MARKET DATA, MARKET INFORMATION OR OTHER INFORMATION FURNISHED NOR THAT THE MARKET DATA HAVE BEEN VERIFIED. YOU AGREE THAT THE MARKET DATA AND OTHER INFORMATION PROVIDED IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS AN OFFER OR SOLICITATION WITH RESPECT TO THE PURCHASE OR SALE OF ANY SECURITY OR COMMODITY.

NEITHER THE EXCHANGE NOR THE BROKER NOR THEIR RESPECTIVE MEMBERS, SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS, SHALL BE LIABLE TO YOU OR TO ANY OTHER PERSON, FIRM OR CORPORATION WHATSOEVER FOR ANY LOSSES, DAMAGES, CLAIMS, PENALTIES, COSTS OR EXPENSES (INCLUDING LOST PROFITS) ARISING OUT OF OR RELATING TO THE MARKET DATA IN ANY WAY, INCLUDING BUT NOT LIMITED TO ANY DELAY, INACCURACIES, ERRORS OR OMISSIONS IN THE MARKET DATA OR IN THE TRANSMISSION THEREOF OR FOR NONPERFORMANCE, DISCONTINUANCE, TERMINATION OR INTERRUPTION OF SERVICE OR FOR ANY DAMAGES ARISING THEREFROM OR OCCASIONED THEREBY, DUE TO ANY CAUSE WHATSOEVER, WHETHER OR NOT RESULTING FROM NEGLIGENCE ON THEIR PART. IF THE FOREGOING DISCLAIMER AND WAIVER OF LIABILITY SHOULD BE DEEMED INVALID OR INEFFECTIVE, NEITHER THE EXCHANGE NOR THE BROKER, NOR THEIR RESPECTIVE SHAREHOLDERS, MEMBERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS SHALL BE LIABLE IN ANY EVENT, INCLUDING THEIR OWN NEGLIGENCE, BEYOND THE ACTUAL AMOUNT OF LOSS OR DAMAGE, OR THE AMOUNT OF THE MONTHLY FEE PAID BY YOU TO BROKER, WHICHEVER IS LESS. YOU AGREE THAT NEITHER THE EXCHANGE NOR THE BROKER NOR THEIR RESPECTIVE SHAREHOLDERS, MEMBERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS, SHALL BE LIABLE TO YOU OR TO ANY OTHER PERSON, FIRM OR CORPORATION WHATSOEVER FOR ANY INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST PROFITS, COSTS OF DELAY, OR COSTS OF LOST OR DAMAGED DATA.

DISCLOSURE STATEMENT ON FUTURES EXCHANGE OWNERSHIP INTERESTS AND INCENTIVE PROGRAMS

You should be aware that your Futures Commission Merchant (“FCM”) or one or more of its affiliates may own stock of, or has some other form of ownership interest in, one or more U.S. or foreign exchanges and clearing houses that you may trade on or that may clear your trades. As a result, you should be aware that your FCM or its affiliate might receive financial benefits related to its ownership interest when trades are executed on such an exchange or cleared at such a clearing house.

In addition, futures exchanges from time to time have in place other arrangements that may provide members with volume or market making discounts or credits, may call for participating members to pre-pay fees based on volume thresholds or may provide other incentive or arrangements that are intended to encourage market participants to trade on or direct trades to that exchange. Your FCM, or one or more of its affiliates, may participate in and obtain financial benefits from such an incentive program.

You should contact your FCM directly if you would like to know whether it has an ownership interest in a particular exchange or clearing house, or whether it participates in any incentive program on a particular exchange or clearing house. You may also contact any particular futures exchange directly to ask if it has any such incentive program for member firms.

DISCLOSURE ON PAYMENT FOR ORDER FLOW

When firms provide execution services to customers, either in conjunction with clearing services or in an execution only capacity, they may, in some circumstances, direct orders to unaffiliated market makers, other executing firms, individual floor brokers or floor brokerage groups for execution. When such unaffiliated parties are used, they may, where permitted, agree to price concessions, volume discounts or refunds, rebates or similar payments in return for receiving such business. Likewise, on occasion, in connection with exchanges that permit pre-execution discussions and "off-floor" transactions such as block trading, exchanges of physicals, swaps or options for futures or equivalent transactions, a counterparty solicited to trade opposite customers of an executing firm may make payments described above and/or pay a commission to the executing firm in connection with that transaction. This could be viewed as an apparent conflict of interest. In order to determine whether transactions executed for your account are subject to the above circumstances, please contact your executing firm account representative.

DIRECT ORDER TRANSMITTAL CLIENT DISCLOSURE STATEMENT

This statement applies to the ability of authorized clients of Merrill Lynch, Pierce, Fenner & Smith Incorporated (“Merrill Lynch”) to place orders for foreign futures and options transactions directly with non-US entities (each, an “Executing Firm”) that execute transactions on behalf of Merrill Lynch’s foreign futures and options customer omnibus accounts.

Please be aware of the following should you be permitted to place the type of orders specified above.

- The orders you place with an Executing Firm are for Merrill Lynch’s foreign futures and options customer omnibus account maintained with a foreign clearing firm. Consequently, Merrill Lynch may limit or otherwise condition the orders you place with the Executing Firm.
- You should be aware of the relationship of the Executing Firm and Merrill Lynch. Merrill Lynch may not be responsible for the acts, omissions, or errors of the Executing Firm, or its representatives, with which you place your orders. In addition, the Executing Firm may not be affiliated with Merrill Lynch. If you choose to place orders directly with an Executing Firm, you may be doing so at your own risk.
- It is your responsibility to inquire about the applicable laws and regulations that govern the foreign exchanges on which transactions will be executed on your behalf. Any orders placed by you for execution on that exchange will be subject to such rules and regulations, its customs and usages, as well as any local laws that may govern transactions on that exchange. These laws, rules, regulations, customs and usages may offer different or diminished protection from those that govern transactions on US exchanges. In particular, funds received from clients to margin foreign futures transactions may not be provided the same protections as funds received to margin futures transactions on domestic exchanges. Before you trade, you should familiarize yourself with the foreign rules which will apply to your particular transaction. United States regulatory authorities may be unable to compel the enforcement of the rules of regulatory authorities or markets in non-US jurisdictions where transactions may be effected.
- It is your responsibility to determine whether the Executing Firm has consented to the jurisdiction of the courts in the United States. In general, neither the Executing Firm nor any individuals associated with the Executing Firm will be registered in any capacity with the Commodity Futures Trading Commission. Similarly, your contacts with the Executing Firm may not be sufficient to subject the Executing Firm to the jurisdiction of courts in the United States in the absence of the Executing Firm’s consent. Accordingly, neither the courts of the United States nor the Commission’s reparations program may be available as a forum for resolution of any disagreements you may have with the Executing Firm, and your recourse may be limited to actions outside the United States.
- Unless you object within five (5) days, by giving us written notice, Merrill Lynch will assume your consent to the aforementioned conditions. Any such notice should be directed to Merrill Lynch, Pierce, Fenner & Smith Incorporated, 540 W Madison St., Chicago, IL 60661, Attention: Futures New Accounts.

FOREIGN BROKER OR TRADER DISCLOSURE STATEMENT AND SPECIAL CALLS FOR INFORMATION

In accordance with Rules 15.05 and 21.03 of the Commodity Futures Trading Commission ("CFTC"), 17 C.F.R. §§15.05 and 21.03, we are considered to be your agent for purposes of accepting delivery and service of communications from or on behalf of the CFTC regarding any commodity futures contracts or commodity option contracts which are or have been maintained in your account(s) with us. In the event that you are acting as agent or broker for any other person(s), we are also considered to be their agent, and the agent of any person(s) for whom they may be acting as agent or broker, for purposes of accepting delivery and service of such communications. Service or delivery to us of any communication issued by or on behalf of the CFTC (including any summons, complaint, order, subpoena, special call, request for information, notice, correspondence or other written document) will be considered valid and effective service or delivery upon you or any person for whom you may be acting, directly or indirectly, as agent or broker.

You should be aware that Rule 15.05 also provides that you may designate an agent other than Merrill Lynch. Any such alternative designation of agency must be evidenced by a written agency agreement which you must furnish to us and which we, in turn, must forward to the CFTC. If you wish to designate an agent other than us, please contact us in writing. You should consult 17 C.F.R. § 15.05 for a more complete explanation of the foregoing.

Upon a determination by the CFTC that information concerning your account(s) with us may be relevant in enabling the CFTC to determine whether the threat of a market manipulation, corner, squeeze, or other market disorder exists, the CFTC may issue a call for specific information from us or from you. In the event that the CFTC directs a call for information to us, we must provide the information requested within the time specified by the CFTC. If the CFTC directs a call for information to you through us as your agent, we must promptly transmit the call to you, and you must provide the information requested within the time specified by the CFTC. If any call by the CFTC for information regarding your account(s) with us is not met, the CFTC has authority to restrict such account(s) to trading for liquidation only. You have the right to a hearing before the CFTC to contest any call for information concerning your account(s) with us, but your request for a hearing will not suspend the CFTC's call for information unless the CFTC modifies or withdraws the call. Please consult 17 C.F.R. §21.03 for a more complete description of the foregoing (including the type of information you may be required to provide).

Certain additional regulations may affect you. Part 17 of the CFTC Regulations, 17 C.F.R. Part 17, requires each futures commission merchant and foreign broker to submit a report to the CFTC with respect to each account carried by such futures commission merchant or foreign broker which contains a reportable futures position. (Specific reportable position levels for all futures contracts traded on U.S. exchanges are established in Rule 15.03.) In addition, Part 18 of the CFTC Regulations, 17 C.F.R. Part 18, requires all traders (including foreign traders) who own or control a reportable futures or options position and who have received a special call from the CFTC to file a Large Trader Reporting Form (Form 103) with the CFTC within one day after the special call upon such trader by the CFTC. Please consult 17 C.F.R. Parts 17 and 18 for more complete information with respect to the foregoing.

NOTICE TO CLIENTS

POSITION LIMIT AND LARGE OPEN POSITION REPORTING REQUIREMENTS FOR OPTIONS AND FUTURES TRADED ON THE HONG KONG EXCHANGES

The Hong Kong regulatory regime imposes position limit and reportable position requirements for stock options and futures contracts traded on the Stock Exchange of Hong Kong and on the Hong Kong Futures Exchange.

These requirements are set out in the Hong Kong Securities and Futures (Contracts Limits and Reportable Positions) Rules (as amended, the "Rules") made by the Securities and Futures Commission ("SFC") under the Securities and Futures Ordinance. The Rules impose monitoring and reporting obligations with regard to large open positions. Where you are holding a reportable position for your client, you must disclose the identity of the client. For the purposes of the Rules, a client is the person who is ultimately responsible for originating instructions you receive for transactions - i.e., the transaction originator.

Further guidance on the Rules and what they require is set out in the SFC's Guidance Note on Position Limits and Large Open Position Reporting Requirements. Copies of the Rules and Guidance Note can be downloaded from the SFC's website (www.sfc.hk).

Purpose of the Rules

The purpose of the Rules is to avoid potentially destabilizing market conditions arising from an over-concentration of futures/options positions accumulated by a single person or group of persons acting in concert, and to increase market transparency.

Some of the major requirements of the Rules and Guidance Note are summarised below. However, you should review the Rules and Guidance Note in their entirety, and consult with your legal counsel in order to ensure that you have a full understanding of your obligations in connection with trading in Hong Kong.

Please note that the Rules make you responsible for ensuring that you comply with the Rules. Section 8 of the Rules makes it a criminal offence not to comply (subject to a maximum fine of HK\$100,000 and imprisonment for up to 2 years).

In 2004, the SFC investigated 6 breaches of the Rules, including a breach by a non-Hong Kong fund manager which was referred to the fund manager's overseas regulator. It should be noted that the SFC has expressly stated that it is not sympathetic to claims by overseas persons that they are not aware of the Hong Kong restrictions, and that a failure to trade within the limits or make reports reflects badly on a firm's internal control measures (which might itself lead to disciplinary action).

Position Limits

The Rules say that you may not hold or control futures contracts or stock options contracts in excess of the prescribed limit, unless you have obtained the prior authorisation of the Hong Kong regulators. For example, the prescribed limit for Hang Seng Index futures and options contracts and Mini-Hang Seng Index futures and options contracts is 10,000 long or short position delta limit for all contract months combined, provided the position delta for the Mini-Hang Seng Index futures contracts or Mini-Hang Seng Index options contracts shall not at any time exceed 2,000 long or short for all contract months combined. For many futures contracts and stock options contracts, the position limit is set at 5,000 contracts for any one contract/expiry month.

The prescribed limit for each contract traded on the Hong Kong exchanges is set out in the Rules.

Reportable Positions

If you hold or control an open position in futures contracts or stock options contracts in excess of the specified level, the Rules require you to report that position in writing to the relevant Hong Kong exchange (i) within one day (ignoring Hong Kong public holidays and Saturdays) of first holding or controlling that position, and (ii) on each succeeding day on which you continue to hold or control that position.

The specified reporting level for each contract traded on the Hong Kong exchanges is set out in the Rules. The report must state:

- (a) the number of contracts held or controlled in respect of the position in each relevant contract month; and
- (b) if the position is held or controlled for a client, the identity of the client, and the number of contracts held or controlled for such person in respect of the reportable position in each relevant contract month.

Scope of the Rules

You should note:

- The prescribed limits and reportable position requirements apply to all positions held or controlled by any person, including positions in any account(s) that such person controls, whether directly or indirectly. The SFC

takes the view that a person is regarded as having control of positions if, for example, the person is allowed to exercise discretion to trade or dispose of the positions independently without the day-to-day direction of the owner of the positions. (Section 4 of the Rules and Para. 2.6 of the Guidance Note)

- If a person holds or controls positions in accounts at more than one intermediary, the Rules require him to aggregate the positions for the purposes of applying the prescribed limits and reportable position requirements. (Para. 6.1 of the Guidance Note)
- The person holding or controlling a reportable position in accounts at more than one intermediary has the sole responsibility to notify the relevant exchange of the reportable position. The person may request its intermediary to submit the notice of the reportable position. If a firm agrees to submit the notice on his behalf, the person should provide to the firm its total positions held at other intermediaries so that the firm can submit the notice of the reportable position. Alternatively, the person should ask all of his intermediaries to report the positions in each of the accounts separately to the exchange, even if the positions in the individual accounts do not reach the reportable level. (Paras. 4.6 and 6.2 of the Guidance Note)
- Where you are holding a reportable position for your client, the Rules say that you must disclose the identity of the client. The SFC's view is that, for the purposes of the Rules, a client is the person who is ultimately responsible for originating the transaction instructions - i.e., the transaction originator. (Para. 6.4 of the Guidance Note)
- The Rules apply separately to the positions held by each of the underlying clients of an omnibus account, except where the omnibus account operator has discretion over the positions in which case the account operator must also aggregate these positions with his own positions. Positions held by different underlying clients should not be netted off for purposes of calculating and reporting reportable positions or determining compliance with the prescribed limits. (Para. 6.8 of the Guidance Note)

A GUIDE TO THE STRUCTURE AND MARKET TERMINOLOGY OF THE LONDON METAL EXCHANGE

INTRODUCTION AND PURPOSE

This document is designed to provide customers of the London Metal Exchange (LME) with an overview of the structure of the LME, market terminology, and order execution. It is not a comprehensive trading guide, nor a complete guide to market terminology. Customers should always ensure that their requirements are explained in detail to the member responsible for order execution.

THE LME

Principal Nature

There are two types of contracts traded on the LME - Exchange Contracts and Client Contracts. Exchange Contracts are contracts between clearing members of the LME. Client Contracts are contracts between customers and ring dealing members (RDMs), or associate broker clearing members (ABCMs), or associate broker members (ABMs). Only RDMs, ABCMs and ABMs may issue Client Contracts. Open Position Statements issued to clients must state clearly "**THIS IS AN LME REGISTERED CLIENT CONTRACT**". Contract criteria relating to LME contracts, including metal/plastic specifications, acceptable currencies, prompt dates, option strike prices for metals etc. are detailed in the LME rulebook and appropriate notices.

Exchange Contracts are traded between members, **matched** in the LME matching and clearing system (LMEMS) and margined by LCH.Clearnet (LCH). Client Contracts are **registered** at the LCH but margining arrangements are left to members to agree with their customers (subject to LME rules).

All LME contracts are between parties acting as principals. This prevents any party entering into an LME Contract as agent for someone else but does not prevent an agent effecting a contract between two parties if the resulting LME

contract is between disclosed parties, each acting as a principal. It is an essential requirement of an LME Client Contract that one party must be an RDM, ABCM or ABM. A list of members is available from the LME, and on the LME website: www.lme.com. A principal relationship does not mean that members do not take on quasi-fiduciary responsibilities when they effect trades for customers. In particular, if a member undertakes to deliver a particular service, for example deal a specific number of lots 'in the Ring' (see below), then it should take care to ensure that it complies with all the terms of such a transaction.

In respect of Exchange Contracts, an LME broker buying metal or plastic under an Exchange Contract from another LME broker cannot do so as agent for his customer. Where an LME broker buys metal or plastic under an Exchange Contract with a view to selling that metal or plastic to his customer, this is achieved by entering into a back-to-back Client Contract with the customer. Brokers and customers can agree the conditions that apply to their Client Contracts. For example, a customer may make it a condition of his Client Contract that the broker must enter into a back-to-back Exchange Contract for the metal or plastic being bought or sold. This does not make the customer a party to the Exchange Contract but does create additional duties and obligations owed by the broker under the Client Contract.

Customers should be clear about conditions that apply to their Client Contracts and about the obligations and duties that the broker owes as a result of those conditions.

Brokers should be clear about the duties and obligations they owe as a result of conditions attaching to their Client Contracts. They should also be clear about the duties they owe to their customers under the FSA's Conduct of Business Rules (COB).

Dual Capacity

LME members may act both in the capacity of market maker and broker. They may act in a particular manner depending on a number of circumstances, including the size of the order, the liquidity of the market at the time the order was placed, and, not least, the customer's instructions. Customer orders may be filled directly from a member's 'book' or following the purchase/sale of metal or plastic in the LME market. Furthermore, customer orders may be offset, amalgamated, broken-up or netted for execution. These methodologies apply equally to orders whether any resulting Exchange Contract is effected in the ring, in the inter-office market, or on LME Select.

Customers with specific order requirements must make these known to the member at the time the order is placed. Customers wishing to know how their order was executed should request such information from the member.

Trading on the LME

Trading takes place on the LME by open outcry in the rings and kerbs, between members in the inter-office, and over the Exchange's electronic trading system LME Select.

Open Outcry

Historically, during ring and kerb sessions, the majority of customer business reflects prices traded in the open outcry sessions. Customers can follow the market activity by monitoring quoted and traded prices disseminated via the LME market data system (MDS), or by listening to the simultaneous floor commentary provided by member(s). The MDS publishes prices traded during ring and kerb times on price vendor information services such as Reuters. Members can continue to 'make a market' when requested by a customer during the ring and kerb sessions, although this is entirely at the member's discretion. Alternatively, the customer can decide whether to place an order using the 'order styles' mentioned below.

Inter-office

Inter-office trading is conducted between members by telephone or by electronic means. On contacting an LME member for a quote, customers will usually be provided with the member's current bid and offer. The customer may trade on this quote, call another member in an attempt to improve the quote, leave a resting order with a member, or wait and monitor prices on the LME market data system. If an order cannot be filled from the member's book, it may be executed via a back-to-back Exchange Contract agreed via a telephone deal with another member or executed via an electronic trading system.

LME Select

LME Select allows members to trade LME futures contracts in metals and plastics, traded options and TAPOs, and an Index future and option. Some brokers offer their customers an order-routing facility via an API where they can view Select prices, execute trades, and place resting orders. All trading on LME Select is in US dollars.

LME Select replaces neither inter-office trading nor trading in the ring. Depending on the time of day, it is possible for members to deal by telephone or electronically in the inter-office, by LME Select, or in the rings. Customers should specify which mechanism their broker should use to effect an order, where they have a preference.

Firm prices of the best bid and offer available on LME Select, the total volumes available at these prices, and the price and volume of each trade transacted are distributed to and displayed in real time by information vendors. Only LME Select prices are displayed, not those of other third party electronic trading systems providing LME prices. Only RDMs and ABCMs are eligible to become LME Select Participants and to have direct access to the system. Customers may effect back-to-back Client Contracts with RDMs and ABCMs based upon prices available on LME Select, whether on the telephone or via electronic order-routing systems.

ORDER STYLES

Ring

Customer orders are not traded in the rings or kerbs, so an order using the term 'in/on/during the ring/kerb' will be executed on the basis of the prices traded/quoted during the particular session. If a customer requires their order to be 'shown' or traded across the ring/kerb then they should make this requirement known to their executor, who may or may not accept this as a term of the order. The equivalent Exchange Contract for a customer order may not replicate its terms. As the customer is **not** a party to any Exchange Contracts i.e. those traded in open outcry between members in the ring/kerb sessions, in specifying ring/kerb, the customer is merely identifying a pricing mechanism. A member which undertakes to match a price traded in the ring/kerb is not necessarily undertaking that it will trade during that ring/kerb, only that it may do so. However, a customer may place an order with the specific request that the member trades an Exchange Contract replicating its order in the ring. In such circumstance the RDM can only trade this order by open outcry in the ring.

If a customer trades at the prevailing market quote proffered in the ring/kerb, their executor is not necessarily obliged to effect an Exchange Contract at the same price. This can lead to situations where the customer has traded at the prevailing market quote, without that same price trading in open outcry across the floor of the Exchange. However, if the instructions from the customer are to achieve a specific price i.e. close of ring 2, then this is the price that should be given, if that specific order is accepted.

Market

In normal circumstances a market order is one executed on a timely basis at the prevailing market price. As mentioned above, at certain times of the business day, trading is taking place simultaneously in the ring or kerb, on LME Select, and in the inter-office market. Traditionally, when open outcry trading is in session, the market is defined by activity within the ring/kerb. At other times, the market is split between inter-office trading and trading on LME Select. During inter-office sessions, indicative quotes are available on the MDS; firm prices are available on LME Select and the LME Select page on information vendors' systems. The indicative prices might not be available to all parties.

Best

Order styles on the LME using the word 'best' confer some discretion upon the members when executing the order, requiring them to use their 'best endeavours' on the customer's behalf. The extent of the discretion is fixed by the terms of the order. This type of order is distinct from 'best execution' as defined by the FSA.

Best orders may be executed both in rings/kerbs, inter-office and on LME Select. Inter-office trades rely upon the members' skill in determining the level of the market at any particular time. Best orders received during ring/kerb times may not result in the customer receiving the 'best' price achieved during the session if the price improves after the member has booked the metal or plastic intended to fill the order. At any given time, the best price on LME

Select will be displayed on the system and by the information vendors. Customers should be aware that depending on market conditions, the best price may move during the period from when the order was placed and when it was executed.

Close

Most orders placed 'on the close' are for either the close of the second ring (official LME prices) or the final kerb (closing prices). Both these prices are demonstrable because of the publication of official and closing prices. Closing prices for other sessions are harder to determine, although the LME does publish unofficial prices which are established at the close of the fourth ring. In all circumstances, customers and members need to agree the style of execution i.e. bid/offer, mean or traded price. Members may not always be able to guarantee execution (price or volume) due to prevailing market conditions. A closing price on LME Select is the last price traded before the system closes.

Open

Customers placing orders to trade on the opening of a market session must provide clear instructions to the LME member which indicate how this order should be activated i.e. basis the opening bid/offer or basis the first trade in the session. Customers will also need to inform their executor of their requirements if the executor is unable to fill the order basis the 'opening' price in its entirety, due to market constraints such as insufficient liquidity. Customers may place orders with members for LME Select that can be placed into the system for activation when the market opens.

Resting Orders

When placing resting orders such as 'good 'til cancelled' ('GTC', or any derivations thereof) or stop loss orders, customers should ensure that they are in agreement with their executor's definition of the 'trigger' point of the order. Usually, this is interpreted as being the point when the order price is seen to be trading in the market, but it is possible to request the order be activated when the order level is either bid or offered as appropriate, via the prevailing market quote. Stop loss orders become market orders when a trade, or a bid or an offer triggers the stop, with members then executing the order at the current market price.

It is possible for a customer not to receive a 'fill' on a resting order despite the 'trigger' point being 'touched'. This could be due to a number of circumstances such as order priority, illiquidity, prevailing market conditions etc. Whatever the reason, the executor should be able to provide the customer with a full explanation of why it was unable to fill the order.

Customers should be aware that resting orders might be activated during periods of illiquidity in the market. As previously mentioned, this could result in the trade not being filled, or for 'stop' orders, a worse fill than anticipated ('slippage'). Customers should ensure the executor is fully aware of their requirements regarding the execution of an order, and adheres to any limitations, especially if the customer is not in contact with the market/member when the trigger point is reached.

It is possible for customers to ask members to place resting orders in LME Select. Where the broker has an order routing system into Select customers will be able to place orders more directly. The system accepts GTC and Good for Day (DAY) orders. DAY orders are automatically deleted from the system at close of trading.

Conclusion

The above order styles do not represent all possible methods of order execution on the LME. Members and customers should ensure that orders are communicated in meaningful terms that deliver the required execution in accordance with LME rules.

For the purposes of this document these categories of members will be referred to as LME members, members or by the appropriate abbreviation.

² TAPO traded average price option

³ API Application Protocol Interface

MERRILL LYNCH BUSINESS CONTINUITY STATEMENT

Merrill Lynch is responsible for creating and maintaining business continuity plans for all of its businesses. In the event of a business disruption, we have plans designed to allow us to continue operations of critical business functions, such as entering of client orders, completing securities transactions and providing clients access to their cash and securities. We accomplish this in part by:

- Relocating impacted businesses to designated recovery locations.
- Using redundant processing capacity at other locations.
- Designing our technology and systems to support the recovery processes for critical business functions.
- Using business and technology teams that are responsible for activating and managing the recovery process.
- Adopting a communication plan to ensure that Merrill Lynch employees receive emergency notifications and instructions via a variety of sources, including in-building announcements, telephone contact, toll-free phone numbers and websites.
- Rehearsing our recovery procedures and testing those procedures on a regular basis.

As part of our plans, Merrill Lynch has identified the applications that are critical to each of our business divisions. These applications are implemented in separate production and recovery data centers using industry-standard practices to copy data from the production site to the recovery site in real time. In most cases, recovery times will range from nearly instantaneous to approximately four hours. For some business functions, next-day recovery is projected.

With regard to client assets, nearly all market-traded securities are held in central depositories (such as the Depository Trust Co. in the U.S.) or with custodian banks, rather than in physical certificates. Ownership of the securities is reflected on a book-entry record-keeping basis with our custodian banks or depositories' participants (such as Merrill Lynch) maintaining on their records the beneficial ownership positions of their clients. This structure is recognized worldwide as providing investors with an unsurpassed level of liquidity and security for the assets they choose to custody with major financial institutions.

As a premier financial service firm, we take our commitment to our clients very seriously and participate globally in various industry-level discussions regarding business continuity planning under the auspices of industry organizations. Participation in these types of forums increases our ability to proactively recognize and manage business disruption risks and coordinate recovery efforts across the financial service industry.

Although we have taken significant steps to develop and implement sound business recovery plans, we cannot guarantee that systems will always be available or recoverable after a disaster or significant business disruption. However, we believe that our planning for such events is robust and consistent with many of the best practices established within the industry. Any material changes to the above information will be available on our website or upon request.

If you have further questions regarding our business continuity plans, please contact your Merrill Lynch representative.

PRIVACY AND DATA SECURITY INFORMATION STATEMENT

With respect to any personal information delivered or made available to Merrill Lynch pursuant to the Institutional Futures Client Account Agreement (the "Agreement"), Merrill Lynch agrees that:

- (a) it shall use and process such personal information solely for the purposes of carrying out its obligations under, and as expressly set forth in, the Agreement and not for any other purposes;
- (b) it shall maintain an effective information security program, keep such personal information confidential and take appropriate administrative, technical and physical measures to secure and protect such personal information against unauthorized, unlawful or accidental access, disclosure, transfer, destruction, loss or alteration;
- (c) it shall limit access to such information to employees and agents who require such access in order to perform the services described in the Agreement and shall inform its employees and agents who have access to such personal information of its highly confidential nature and the limitations and procedures that apply to access and use of such personal information;
- (d) it may make such information available to vendors which provide services to Merrill Lynch for its futures trading and processing, however, it shall not disclose or make such personal information available to a vendor without entering into an agreement in writing with the vendor whereby the vendor agrees to comply with, and treat such personal information in accordance with, these policies
- (e) it shall promptly notify Client if it becomes aware of any unauthorized access of such personal information or if it becomes the subject of any government, other enforcement or private proceeding relating to its data handling practices with respect to such personal information and
- (f) it shall, upon the reasonable request of Client, provide Client with information regarding its privacy/data protection practices.

Nothing herein shall affect any data or information that Merrill Lynch validly receives from a source apart from the Agreement or the relationship established pursuant to the Agreement, nor affect Merrill Lynch's rights to use certain data or information in a non-identifiable, statistical manner.

DISCLOSURE UNDER ERISA SECTION 408(B)(2)

Pursuant to regulations under ERISA section 408(b)(2), under certain circumstances, the U.S. Department of Labor requires service providers to furnish disclosures concerning their services and compensation arrangements to the responsible plan fiduciary of a pension plan governed by ERISA. There may be similar requirements under laws applicable to governmental and other plans which are not governed by ERISA.

This disclosure for all relevant lines of business and products in Bank of America Merrill Lynch's Global Banking & Markets (GBAM) business segment is available at the following web address:

<http://baml.com/ERISA408b2>

Please note that the disclosure in this website will be updated periodically as required under these rules. Please check this website from time to time for any updates.

DISCLOSURE OF FUTURES COMMISSION MERCHANT MATERIAL CONFLICTS OF INTEREST

The purpose of this document is to provide you with information about some of the material conflicts of interest that may arise between you and Merrill Lynch, Pierce, Fenner & Smith Incorporated (“Merrill Lynch”) in connection with Merrill Lynch performing services for you with respect to futures, options on futures, swaps (as defined in the Commodity Exchange Act), forwards or other commodity derivatives (“Contracts”). Conflicts of interests can arise in particular when Merrill Lynch has an economic or other incentive to act, or persuade you to act, in a way that favors Merrill Lynch or its affiliates.

Under applicable law, including regulations of the Commodity Futures Trading Commission (“CFTC”), not all swaps are required to be executed on an exchange or swap execution facility (each, a “Trading Facility”), even if a Trading Facility lists the swap for trading. In such circumstances, it may be financially advantageous for Merrill Lynch or its affiliate to execute a swap with you bilaterally in the over-the-counter market rather than on a Trading Facility and, to the extent permitted by applicable law, we may have an incentive to persuade you to execute your swap bilaterally.

Applicable law may permit you to choose the CFTC-registered derivatives clearing organization (“Clearing House”) to which you submit a swap for clearing. You should be aware that Merrill Lynch may not be a member of, or may not otherwise be able to submit your swap to, the Clearing House of your choice. Merrill Lynch consequently has an incentive to persuade you to use a Clearing House of which Merrill Lynch or its affiliate is a member.

You also should be aware that Merrill Lynch or its affiliate may own stock in, or have some other form of ownership interest in, one or more U.S. or foreign Trading Facilities or Clearing Houses where your transactions in Contracts may be executed and/or cleared. As a result, Merrill Lynch or its affiliate may receive financial or other benefits related to its ownership interest when Contracts are executed on a given Trading Facility or cleared through a given Clearing House, and Merrill Lynch would, in such circumstances, have an incentive to cause Contracts to be executed on that Trading Facility or cleared by that Clearing House. In addition, employees and officers of Merrill Lynch or its affiliate may also serve on the board of directors or on one or more committees of a Trading Facility or Clearing House.

In addition, Trading Facilities and Clearing Houses may from time to time have in place other arrangements that provide their members or participants with volume, market-making or other discounts or credits, may call for members or participants to pre-pay fees based on volume thresholds, or may provide other incentive or arrangements that are intended to encourage market participants to trade on or direct trades to that Trading Facility or Clearing House. Merrill Lynch or its affiliate may participate in and obtain financial benefits from such incentive programs.

When we provide execution services to you (either in conjunction with clearing services or in an execution-only capacity), we may direct orders to affiliated or unaffiliated market-makers, other executing firms, individual brokers or brokerage groups for execution. When such affiliated or unaffiliated parties are used, they may, where permitted, agree to price concessions, volume discounts or refunds, rebates or similar payments in return for receiving such business. Likewise, where permitted by law and the rules of the applicable Trading Facility, we may solicit a counterparty to trade opposite your order or enter into transactions for its own account or the account of other counterparties that may, at times, be adverse to your interests in a Contract. In such circumstances, that counterparty may make payments and/or pay a commission to Merrill Lynch in connection with that transaction. The results of your transactions may differ significantly from the results achieved by us for our own account, our affiliates, or for other customers.

In addition, where permitted by applicable law (including, where applicable, the rules of the applicable Trading Facility), Merrill Lynch, its directors, officers, employees and affiliates may act on the other side of your order or transaction by the purchase or sale for an account, or the execution of a transaction with a counterparty, in which Merrill Lynch or a person affiliated with Merrill Lynch has a direct or indirect interest, or may affect any such order with a counterparty that provides Merrill Lynch or its affiliates with discounts related to fees for Contracts or other products. In cases where we have offered you a discounted commission or clearing fee for Contracts executed through Merrill Lynch as agent or with Merrill Lynch or its affiliate acting as counterparty, Merrill Lynch or its affiliate may be doing so because of the enhanced profit potential resulting from acting as executing broker or counterparty.

Merrill Lynch or its affiliate may act as, among other things, an investor, research provider, placement agent, underwriter, distributor, remarketing agent, structurer, securitizer, lender, investment manager, investment adviser, commodity trading advisor, municipal advisor, market maker, trader, prime broker or clearing broker. In those and other capacities, Merrill Lynch, its directors, officers, employees and affiliates may take or hold positions in, or advise other customers and counterparties concerning, or publish research or express a view with respect to, a Contract or a related financial instrument that may be the subject of advice from us to you. Any such positions and other advice may not be consistent with, or may be contrary to, your interests or to positions which are the subject of advice previously provided by Merrill Lynch or its affiliate to you, and unless otherwise disclosed in writing, we are not necessarily acting in your best interest and are not assessing the suitability for you of any Contract or related financial instrument. Acting in one or more of the capacities noted above may give Merrill Lynch or its affiliate access to information relating to markets, investments and products. As a result, Merrill Lynch or its affiliate may be in possession of information which, if known to you, might cause you to seek to dispose of, retain or increase your position in one or more Contracts or other financial instruments. Merrill Lynch and its affiliate will be under no duty to make any such information available to you, except to the extent we have agreed in writing or as may be required under applicable law.

RISK DISCLOSURE STATEMENT FOR FUTURES AND OPTIONS

This brief statement does not disclose all of the risks and other significant aspects of trading in futures and options. In light of the risks, you should undertake such transactions only if you understand the nature of the contracts (and contractual relationships) into which you are entering and the extent of your exposure to risk. Trading in futures and options is not suitable for many members of the public. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

FUTURES

1. Effect of 'Leverage' or 'Gearing'

Transactions in futures carry a high degree of risk. The amount of initial margin is small relative to the value of the futures contract so that transactions are 'leveraged' or 'geared.' A relatively small market movement will have a proportionately larger impact on the funds you have deposited or will have to deposit: this may work against you as well as for you. You may sustain a total loss of initial margin funds and any additional funds deposited with the firm to maintain your position. If the market moves against your position or margin levels are increased, you may be called upon to pay substantial additional funds on short notice to maintain your position. If you fail to comply with a request for additional funds within the time prescribed, your position may be liquidated at a loss and you will be liable for any resulting deficit.

2. Risk-reducing orders or strategies

The placing of certain orders (e.g., 'stop-loss' orders, where permitted under local law, or 'stop-limit' orders) which are intended to limit losses to certain amounts may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions, such as 'spread' and 'straddle' positions, may be as risky as taking simple 'long' or 'short' positions.

OPTIONS

3. Variable degree of risk

Transactions in options carry a high degree of risk. Purchasers and sellers of options should familiarize themselves with the type of option (i.e., put or call) which they contemplate trading and the associated risks. You should calculate the extent to which the value of the options must increase for your position to become profitable, taking into account the premium and all transaction costs.

The purchaser of options may offset or exercise the options or allow the options to expire. The exercise of an option results either in a cash settlement or in the purchaser acquiring or delivering the underlying interest. If the option is on a future, the purchaser will acquire a futures position with associated liabilities for margin (see the section on Futures above). If the purchased options expire worthless, you will suffer a total loss of your investment, which will consist of the option premium plus transaction costs. If you are contemplating purchasing deep-out-of-the-money options, you should be aware that the chance of such options becoming profitable ordinarily is remote.

Selling ('writing' or 'granting') an option generally entails considerably greater risk than purchasing options. Although the premium received by the seller is fixed, the seller may sustain a loss well in excess of that amount. The seller will be liable for additional margin to maintain the position if the market moves unfavorably. The seller will also be exposed to the risk of the purchaser exercising the option and the seller will be obligated to either settle the option in cash or to acquire or deliver the underlying interest. If the option is on a future, the seller will acquire a position in a future with associated liabilities for margin (see the section on Futures above). If the position is 'covered' by the seller holding a corresponding position in the underlying interest or a future or another option, the risk may be reduced. If the option is not covered, the risk of loss can be unlimited.

Certain exchanges in some jurisdictions permit deferred payment of the option premium, exposing the purchaser to liability for margin payments not exceeding the amount of the premium. The purchaser is still subject to the risk of losing the premium and transaction costs. When the option is exercised or expires, the purchaser is responsible for any unpaid premium outstanding at that time.

Additional risks common to futures and options

4. Terms and conditions of contracts

You should ask the firm with which you deal about the terms and conditions of the specific futures or options which you are trading and associated obligations (e.g., the circumstances under which you may become obligated to make or take delivery of the underlying interest of a futures contract and, in respect of options, expiration dates and restrictions on the time for exercise). Under certain circumstances the specifications of outstanding contracts (including the exercise price of an option) may be modified by the exchange or clearing house to reflect changes in the underlying interest.

5. Suspension or restriction of trading and pricing relationships

Market conditions (e.g., illiquidity) and/or the operation of the rules of certain markets (e.g., the suspension of trading in any contract or contract month because of price limits or 'circuit breakers') may increase the risk of loss by making it difficult or impossible to effect transactions or liquidate/offset positions. If you have sold options, this may increase the risk of loss.

Further, normal pricing relationships between the underlying interest and the future, and the underlying interest and the option may not exist. This can occur when, for example, the futures contract underlying the option is subject to price limits while the option is not. The absence of an underlying reference price may make it difficult to judge 'fair' value.

6. Deposited cash and property

You should familiarize yourself with the protections accorded money or other property you deposit for domestic and foreign transactions, particularly in the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specified legislation or local rules. In some jurisdictions, property which had been specifically identifiable as your own will be pro-rated in the same manner as cash for purposes of distribution in the event of a shortfall.

7. Commission and other charges

Before you begin to trade, you should obtain a clear explanation of all commissions, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

8. Transactions in other jurisdictions

Transactions on markets in other jurisdictions, including markets formally linked to a domestic market, may expose you to additional risk. Such markets may be subject to regulation which may offer different or diminished investor protection. Before you trade, you should inquire about any rules relevant to your particular transactions. Your local regulatory authority will be unable to compel the enforcement of the rules of regulatory authorities or markets in other jurisdictions where your transactions have been effected. You should ask the firm with which you deal for details about the types of redress available in both your home jurisdiction and other relevant jurisdictions before you start to trade.

9. Currency risks

The profit or loss in transactions in foreign currency-denominated contracts (whether they are traded in your own or another jurisdiction) will be affected by fluctuations in currency rates where there is a need to convert from the currency denomination of the contract to another currency.

10. Trading facilities

Most open-outcry and electronic trading facilities are supported by computer-based component systems for the order-routing, execution, matching, registration or clearing of trades. As with all facilities and systems, they are vulnerable to temporary disruption or failure. Your ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, the clearing house and/or member firms. Such limits may vary; you should ask the firm with which you deal for details in this respect.

11. Electronic trading

Trading on an electronic trading system may differ not only from trading in an open-outcry market but also from trading on other electronic trading systems. If you undertake transactions on an electronic trading system, you will be exposed to risk associated with the system, including the failure of hardware and software. The result of any system failure may be that your order is either not executed according to your instructions or is not executed at all.

12. Off-exchange transactions

In some jurisdictions, and only then in restricted circumstances, firms are permitted to effect off-exchange transactions. The firm with which you deal may be acting as your counterparty to the transaction. It may be difficult or impossible to liquidate an existing position, to assess the value, to determine a fair price or to assess the exposure to risk. For these reasons, these transactions may involve increased risks. Off-exchange transactions may be less regulated or subject to a separate regulatory regime. Before you undertake such transactions, you should familiarize yourself with applicable rules and attendant risks.