

Portfolio Performance Review

Quarter Ending March 31, 2013



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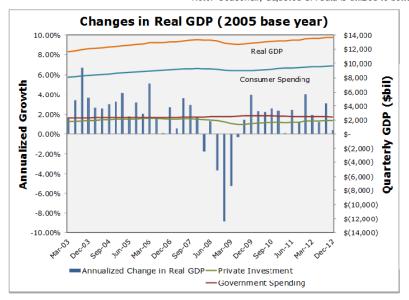
Executive Summary

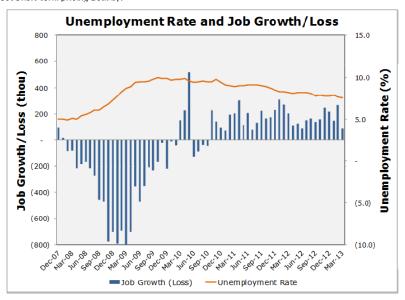




March 31, 2013		Key Eco	onomic Indicators	
CPI (all items)	Monthly	Change	Cumulative (Change
Seasonally adjusted	Mar-13	-0.2	3-Month	0.5
	Feb-13	0.7	12-Month	1.5
	Jan-13	0.0	10-Yr Annual	2.4
Breakeven Inflation	10-Year	2.5		
Consumer Sentiment	Mar-13	78.6		
Unv. of Michigan Survey	Feb-13	77.6		
	1-Yr Ago	76.2	10-Yr Avg	78.9
Manufacturing	Mar-13	51.3	Change in Manufactur	ing Sector
Inst. for Supply Mgmt	Feb-13	54.2	>50 Ex	cpansion
Purchasing Mngrs' ldx	1-Yr Avg	51.7	<50 Cd	ontraction

Note: Seasonally adjusted CPI data is utilized to better reflect short-term pricing activity.

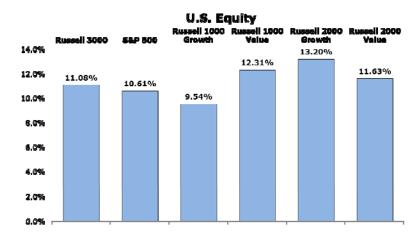




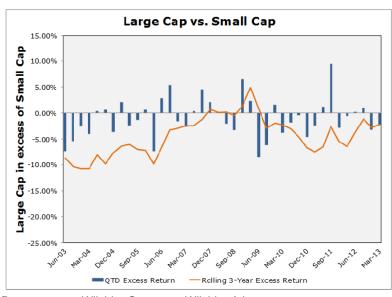
Data sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve Bank of St. Louis, Barclays Capital

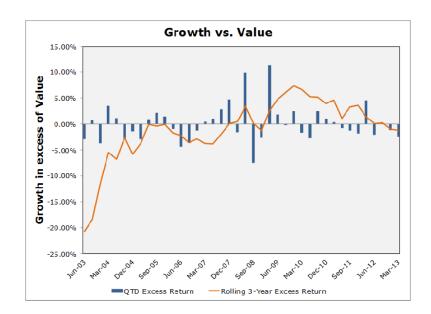


U.S. Capital Markets: Equity



- U.S. stock market got off to a strong start, up 11.1% during the first quarter, with all economic sectors enjoying positive returns.
- U.S. GDP posted a preliminary annualized growth rate of 2.5% in 1Q13, an increase from 0.4% in 4Q12.
- Consumer Price Index rose 0.5% (preliminary) for the quarter.
- · Small-cap growth stocks performed strongest for the quarter.

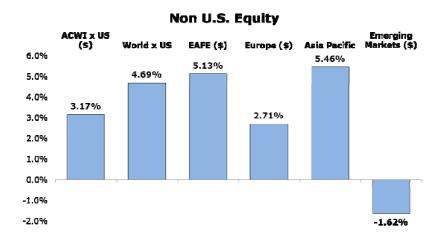


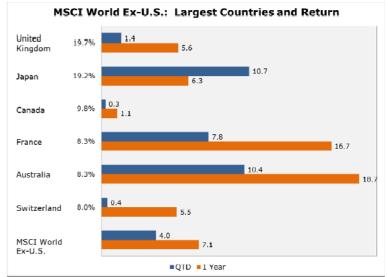


Data sources: Wilshire Compass, Wilshire Atlas



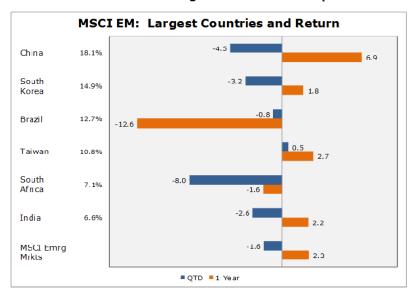
Non-U.S. Capital Markets





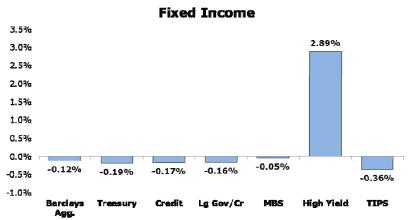
Data sources: Wilshire Compass, MSCI Barra

- Global equity markets struggled with multiple systematic challenges.
- Asia-Pacific generated positive returns mostly due to the Bank of Japan's action to stimulate the nation's economy.
- European stock markets struggled as the UK's growth was hobbled by fiscal instability and growing debt, while the European Union fought to maintain solvency of another member, Cyprus.
- Emerging Markets experienced a pullback during the quarter due to slowdown in China's economy, and the death of Hugo Chavez in Venezuela adding to investor anxiety.

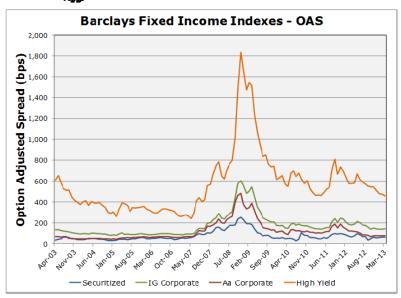


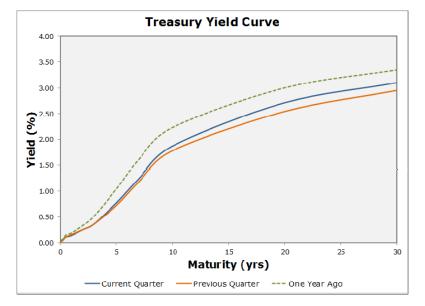


U.S. Capital Markets: Fixed Income



- With Interest rates still low, bond investors moved into riskler asset space looking for stronger returns.
- High Yield outperformed investment grade bond market due to strong stock market performance and investors searching for yield.



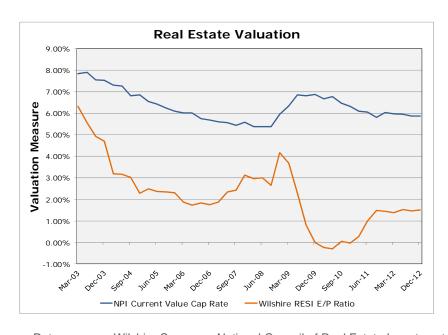


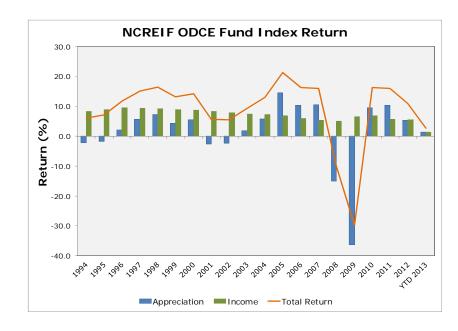
Data sources: Wilshire Compass, Barclays Capital, U.S. Treasury



March 31, 2013	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Barclays U.S. TIPS Index	-0.4	-0.4	5.7	8.6	5.9	6.3
Dow Jones UBS Commodity Index	-1.1	-1.1	-3.0	1.4	-7.1	3.7
Global Public Real Estate*	6.8	6.8	18.2	17.4	5.2	13.2
NCREIF ODCE Fund Index	2.7	2.7	10.8	15.1	-0.8	6.8
NCREIF Timberland Index	1.5	1.5	9.0	3.6	2.1	8.3
Alerian MLP Index (Oil & Gas)	19.7	19.7	23.1	21.5	18.4	17.8

^{*} Wilshire Global Real Estate Securities from March 2003 to December, 2004. Wilshire Global REITs from 2004 to present.





Data sources: Wilshire Compass, National Council of Real Estate Investment Fiduciaries



Performance Overview

- LACERS' investment portfolio ended the quarter with a market value of \$12.0 billion, an increase of \$0.5 billion from the previous quarter. The Fund's net of fee return was 5.8% for the quarter and 11.8% for the one-year period.
- The Total Fund outperformed its policy benchmark by 0.6% for the quarter and 1.2% for the one-year period.
- In a comparison to other public funds with market values greater than \$10 billion in TUCS (Trust Universe Comparison Service) peer universe, LACERS ranked in the 12th percentile for the quarter and in the 8th percentile for the one-year period.
- All asset classes produced positive returns for the quarter.
- U.S. Equity, Non-U.S. Equity, and Fixed Income outperformed their respective benchmarks for the quarter.
- Private Equity¹ significantly outperformed its benchmark, while Private Real Estate trailed its benchmark for the quarter.

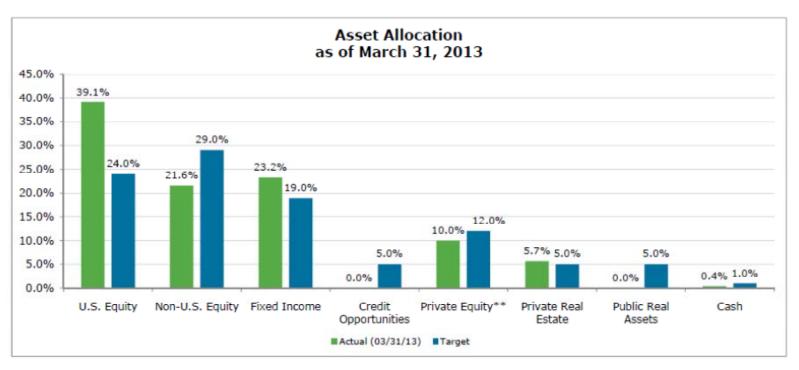
Note: Due to the J-curve effect in early stages of a fund's life, returns may lag prior to realization of proceeds in later years.

1 Name change from "Alternative Investments."



Fund Overview





	Actual	Target*	Min.	Max
U.S. Equity	39.1%	24.0%	19.0%	29.0%
Non-U.S. Equity	21.6%	29.0%	24.0%	34.0%
Fixed Income	23.2%	19.0%	15.0%	22.0%
Credit Opportunities	0.0%	5.0%	0.0%	10.0%
Private Equity**	10.0%	12.0%	n/a	n/a
Private Real Estate	5.7%	5.0%	n/a	n/a
Public Real Assets	0.0%	5.0%	2.0%	8.0%
Cash	0.4%	1.0%	0.0%	2.0%

^{*} Revised 1st Qtr 2012: decrease U.S. Equity from 37% to 24%; increase Non-U.S. Equity from 20% to 29%; decrease Fixed Income from 26% to 19%; allocate 5% in Credit Opportunities; increase Alternative Inv. from 9% to 12%; decrease Private Real Estate from 7% to 5%; allocate 5% in Public Real Assets. The implementation of the new Asset Allocation will be in stages over a period of 18 months.

^{**}Name change from "Alternative Investments."



Detail Actual vs Target Allocation

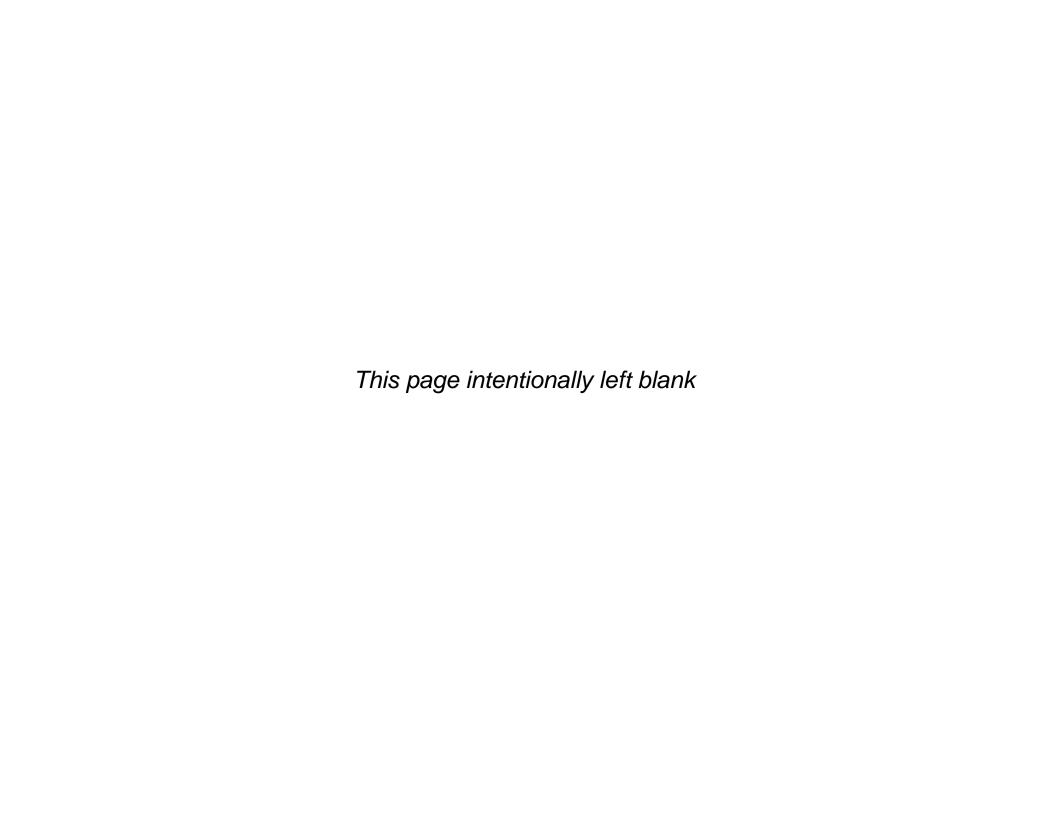
Asset Class / Style	Benchmark	et Value Billion)	Market Value to Total Fund (%)	Target to Total Fund (%)	Difference from Target (%)
	Equity	\$ 8.48	70.6%	65.0%	5.6%
U.S. Equity		\$ 5.89	49.1%	24.0%	25.1%
Passive		\$ 2.99	24.9%	17.5%	7.4%
Large Cap Core	S&P 500	2.43	20.2%	16.6%	3.7%
Large Cap Growth	Russell 1000 Growth	-	0.0%	1.0%	-1.0%
Large Cap Value	Russell 1000 Value	0.56	4.7%	0.0%	4.7%
Active		\$ 1.71	14.2%	6.5%	7.7%
All Cap	Russell 3000	0.09	0.8%	0.2%	0.5%
Large Cap Core	S&P 500	-	0.0%	0.0%	0.0%
Large Cap Growth	Russell 1000 Growth	-	0.0%	0.0%	0.0%
Large Cap Value	Russell 1000 Value	0.48	4.0%	1.0%	3.1%
Mid Cap Core	Russell Mid Cap	0.06	0.5%	1.2%	-0.7%
Small Cap Core	Russell 2000	0.32	2.7%	1.2%	1.5%
Small Cap Growth	Russell 2000 Growth	0.44	3.6%	1.4%	2.2%
Small Cap Value	Russell 2000 Value	0.31	2.6%	1.4%	1.1%
Non-U.S. Equity		\$ 2.59	21.5%	29.0%	-7.5%
Passive		\$ 1.19	9.9%	10.2%	-0.3%
World ex-U.S.	MSCI World ex-U.S.	1.19	9.9%	10.2%	-0.3%
Active		\$ 1.40	11.7%	18.8%	-7.1%
European	MSCI Europe/10% Abs.	0.48	4.0%	0.0%	4.0%
Asia/Pacific Basin	MSCI Asia/Pacific	0.48	4.0%	0.0%	4.0%
Developed Core	MSCI EAFE/World ex-U.S.	0.14	1.2%	2.9%	-1.7%
Developed Growth	MSCI EAFE/World ex-U.S. Growth	-	0.0%	2.9%	-2.9%
Developed Value	MSCI EAFE/World ex-U.S. Value	-	0.0%	2.9%	-2.9%
Emerging Markets Core	MSCI Emerging Markets	0.11	0.9%	2.6%	-1.7%
Emerging Markets Growth	MSCI Emerging Market Growth	-	0.0%	2.3%	-2.3%
Emerging Markets Value	MSCI Emerging Market Value	0.19	1.6%	2.3%	-0.7%
Small Cap Core	MSCI EAFE Small Cap	-	0.0%	2.9%	-2.9%
Private Equity 1	Vintage Year	\$ 1.20	10.0%	12.0%	-2.0%

Name change from "Alternative Investments."



Detail Actual vs Target Allocation

Asset Class / Style	Benchmark		cet Value Billion)	Market Value to Total Fund (%)	Target to Total Fund (%)	Difference from Target (%)
F	ixed Income	\$	2.79	23.3%	24.0%	-0.7%
Core		\$	2.79	23.3%	19.0%	4.3%
Passive	Barclays Capital (BC) Aggregate	\$	175	0.0%	6.7%	-6.7%
Active		\$	2.79	23.3%	12.3%	11.0%
Core	Barclays Capital (BC) Aggregate		-	0.0%	10.4%	-10.4%
Core Plus	Barclays Capital (BC) Universal		2.55	21.2%	0.0%	21.2%
Intermediate Core	BC U.S. Govt/Credit Intermediate		0.25	2.0%	1.9%	0.1%
Credit Opportunities		\$	2	0.0%	5.0%	-5.0%
U.S. High Yield	BC U.S. High Yield 2% Capped	'	-	0.0%	2.8%	-2.8%
Emerging Market Debt	JP Morgan - EMBI Global Diversified		-	0.0%	1.8%	-1.8%
Opportunistic Credit	TBD		-	0.0%	0.4%	-0.4%
1	Real Assets	\$	0.68	5.7%	10.0%	-4.3%
Public Real Assets		\$	-	0.0%	5.0%	-5.0%
TIPS	BC U.S. TIPS		-	0.0%	3.0%	-3.0%
REITS	Wilshire REIT		-	0.0%	0.5%	-0.5%
Commodities	S&P-GSCI Total Index		-	0.0%	1.0%	-1.0%
Multi Asset Real Assets	CPI + 5%		-	0.0%	0.5%	-0.5%
Private Real Estate		\$	0.68	5.7%	5.0%	0.7%
	Cash	\$	0.05	0.4%	1.0%	-0.6%
TOTA	AL PORTFOLIO	\$	12.01	100.0%	100.0%	0.0%





Fund Performance



LACERS Total Fund

(Returns are Net of Fees)

		ket Value Smillion)	% to Total Fund	Current Quarter	One Year	Three Years	Five Years	Ten Years	Fifteen Years ¹	Since Inception ¹	5 Year Tracking Error
LACERS Master Trust	\$	12,011	100.0%	5.8	11.8	9.7	4.6	8.8	6.2	8.3	2.5
Policy Benchmark				<i>5.2</i>	10.6	9.9	5.1	8.8	6.1	8.3	
Excess Return				0.6	1.2	-0.2	-0.5	0.0	0.1	0.0	
U.S. Equity Russell 3000 *	\$	4,698	39.1%	11.6 11.1	14.9 14.6	12.6 13.0	6.4 6.3	9.4 9.2	5.4 <i>4.1</i>	9.8 8.4	1.3
Excess Return				0.5	0.3	-0.4	0.1	0.2	1.3	1.4	
Non-U.S. Equity MSCI ACWI ex U.S.*	\$	2,592	21.6%	4.7 3.2	10.8 <i>8.4</i>	5.3 <i>4.4</i>	0.5 -0.4	11.0 <i>10.9</i>	4.9 4.8	5.0 5.4	1.6
Excess Return				1.5	2.4	0.9	0.9	0.1	0.1	-0.4	
Total Fixed Income BC U.S. Universal *	\$	2,792	23.2%	0.2 <i>0.1</i>	6.7 4.7	7.0 6.0	7.4 5.9	6.4 5.4	6.9 5.7	7.4 6.4	2.7
Excess Return				0.1	2.0	1.0	1.5	1.0	1.2	1.0	
Private Real Estate ** NCREIF Property Lagged + 100	\$ Obps [*]	683	5.7%	2.1 <i>2.8</i>	8.3 <i>11.4</i>	8.6 12.9	-8.0 <i>2.3</i>	2.5 8.5	4.9 9.3	5.8 9.4	10.3
Excess Return				-0.7	-3.1	-4.3	-10.3	-6.0	-4.4	-3.6	
Private Equity ² ** Russell 3000 + 300bps *	\$	1,196	10.0%	2.7 12.1	14.0 18.6	13.8 17.0	5.6 10.3	13.2 13.2	11.1 8.1	9.9 12.4	20.1
Excess Return				-9.4	-4.6	-3.2	-4.7	0.0	3.0	-2.5	

¹ Indicates gross returns

² Name change from "Alternative Investments."

^{*} Both the MS ACWI ex US and Barclays US Universal indices are historically blended with other indices.

^{**} Due to the J-Curve effect in early stages of a fund's life, returns may lag prior to realization of proceeds in later years.



Private Investments¹

Performance by IRR and Multiples

		10-Year Equity	Since	Since Inception
Private Equity	10-Year IRR	Multiple	Inception IRR	Equity Multiple
Aggregate Portfolio	13.8%	1.63x	10.7%	1.41x
Core Portfolio	14.7%	1.69x	11.2%	1.44x
Specialized Portfolio	2.1%	1.07x	2.1%	1.07x
Russell 3000 + 300 bps	10.7%	N/A	10.2%	N/A

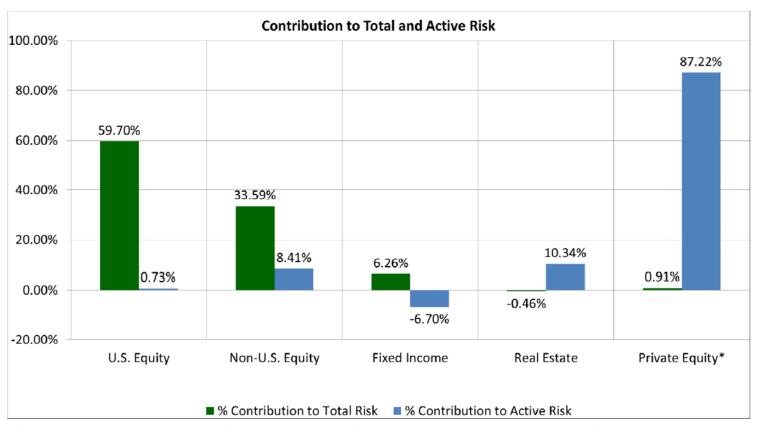
		Since Inception	Since	Since-Inception
Real Estate	10-Year TWR	TWR	Inception IRR	Equity Multiple
Total Portfolio (TWR)	3.2%	5.3%	3.1%	1.10x
NCREIF + 100 bps (TWR)	9.4%	8.3%	N/A	N/A

Note: Courtland could not provide cash flow weighted benchmark, so only time weighted is reported.

¹Returns as of 12/31/2012



Total Fund – Contribution to 5-Year Total & Active Risk

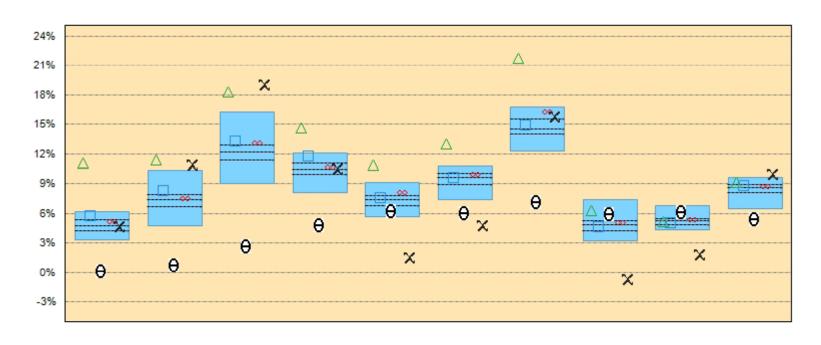


- Public equities comprises 93% of total risk despite actual weighting of 61%.
- Private markets (Real Estate and Private Equities) comprises 97% of active risk as it is difficult to separate active from 'beta' exposures in those asset classes.
- Fixed Income provided reduction to active risk, but not total risk as desired.
- Real Estate has provided modest total risk reduction.

^{*}Name change from "Alternative Investments."

Trust Universe Comparsion Service Performance Comparison

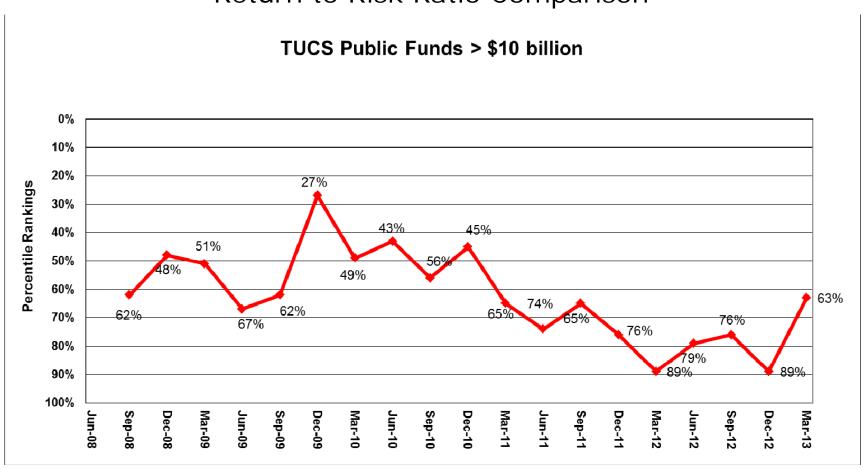
Total Returns of Public Defined Benefit Plans >\$10 billion Cumulative Periods Ending : March 31, 2013



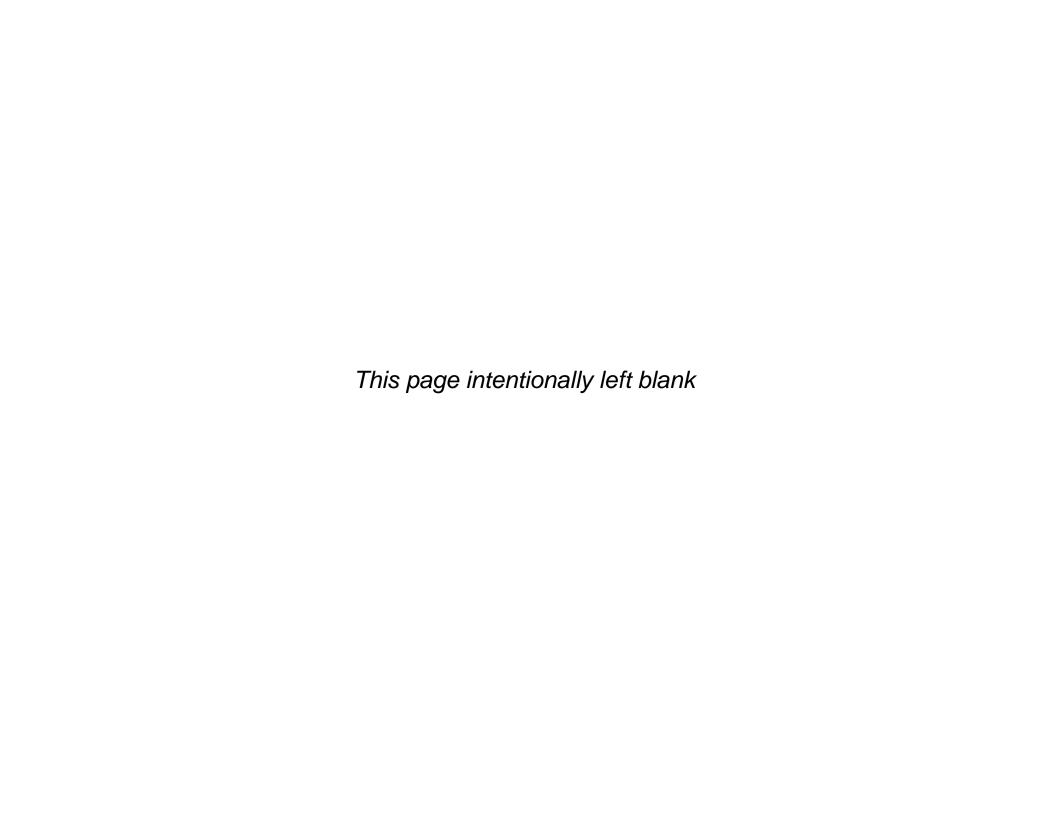
										40.14
Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	6.14	10.33	16.28	12.06	9.13	10.75	16.79	7.41	6.81	9.67
25th	5.38	7.87	12.89	11.11	7.84	10.03	15.54	5.27	5.51	8.93
50th	4.81	7.39	12.22	10.50	7.43	9.62	14.50	4.84	5.30	8.62
75th	4.30	6.74	11.41	9.90	6.76	8.89	13.97	4.28	4.85	8.16
95th	3.30	4.79	8.99	8.16	5.63	7.37	12.29	3.26	4.36	6.46
No. Of Obs	41	41	41	41	41	38	37	37	37	36
Total Fund NOF	5.76 (12)	8.36 (8)	13.30 (14)	11.77 (8)	7.64 (42)	9.65 (47)	14.94 (38)	4.64 (52)	5.03 (69)	8.81 (33)
Total Fund Policy	5.21 (35)	7.50 (42)	13.09 (20)	10.69 (42)	8.07 (14)	9.95 (30)	16.28 (10)	5.11 (33)	5.37 (44)	8.77 (33)
🔼 Russell 3000	11.08(1)	11.37(1)	18.31 (1)	14.59(1)	10.82(1)	12.98(1)	21.76(1)	6.32 (8)	5.14 (63)	9.16 (14)
K MSCI Wld Ex US (Net)	4.69 (57)	10.90(1)	18.99 (1)	10.42 (62)	1.52 (100)	4.78 (100)	15.73 (22)	-0.75 (100)	1.85 (100)	9.95(1)
🗦 Barclays US Univ Indx	0.08 (100)	0.66 (100)	2.67 (100)	4.72 (100)	6.14 (93)	6.00 (100)	7.08 (100)	5.86 (13)	6.13 (10)	5.41 (100)



Return to Risk Ratio Comparison



- Return to risk ratio comparison puts funds with different asset allocation objectives on even footing.
- LACERS currently ranks 63rd percentile versus peers on return/risk ratio basis.





U.S. Equity Managers



U.S. Equity Managers

(Returns are Net of Fees)

	Inception Date	ket Value million)	% to Total U.S. Equity	Current Quarter	One Year	Three Years	Five Years	Ten Years	Since Inception ¹	5 Year Tracking Error
U.S. Equity	Oct-94	\$ 4,698	100.0%	11.6	14.9	12.6	6.4	9.4	9.8	1.3
Russell 3000				11.1	14.6	13.0	6.3	9.2	8.4	
Excess Return				0.5	0.3	-0.4	0.1	0.2	1.4	
Aronson, Johnson & Ortiz Russell 1000 Value	Oct-01	\$ 485	10.3%	12.7 12.3	17.3 18.8	14.3 <i>12.7</i>	6.2 4.8	10.0 <i>9.2</i>	7.8 6.7	3.3
Excess Return				0.4	-1.5	1.6	1.4	0.8	1.1	
Blackrock Russell 1000 Value (Passive) Russell 1000 Value	Dec-98	\$ 562	12.0%	12.3 12.3	18.7 18.8	12.8 12.7	5.0 4.8	9.3 9.2	5.4 5.3	0.1
Excess Return				0.0	-0.1	0.1	0.2	0.1	0.1	
Thomson Horstmann Russell 2000	Oct-95	\$ 281	6.0%	13.3 <i>12.4</i>	18.5 <i>16.3</i>	12.2 13.5	7.2 8.2	11.1 <i>11.5</i>	10.6 <i>8.4</i>	6.5
Excess Return				0.9	2.2	-1.3	-1.0	-0.4	2.2	
Franklin Advisers Russell 2000 Growth	Sep-94	\$ 229	4.9%	18.8 <i>13.2</i>	16.7 14.5	17.6 14.7	10.6 <i>9.0</i>	11.6 <i>11.6</i>	9.2 6.8	4.8
Excess Return				5.6	2.2	2.9	1.6	0.0	2.4	
Sit Investments Russell 2000 Growth	Jan-01	\$ 208	4.4%	8.2 13.2	5.8 14.5	13.5 14.7	7.7 9.0	11.1 11.6	4.1 4.4	6.1
Excess Return				-5.0	-8.7	-1.2	-1.3	-0.5	-0.3	

¹ Indicates gross returns



U.S. Equity Managers

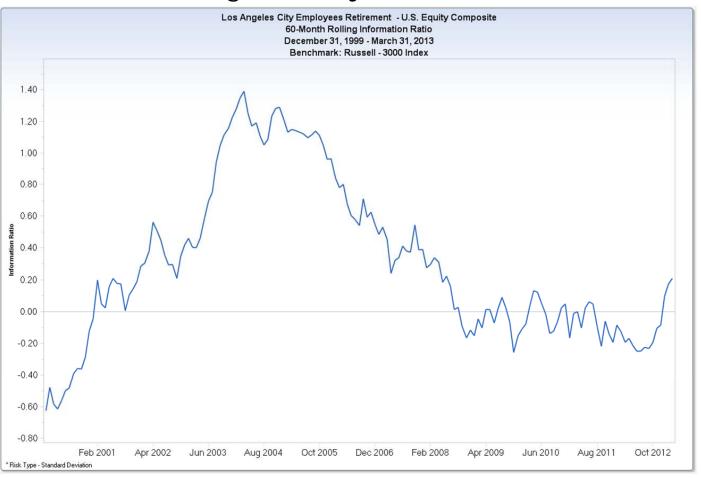
(Returns are Net of Fees)

	Inception Date	ket Value million)	% to Total U.S. Equity	Current Quarter	One Year	Three Years	Five Years	Ten Years	Since Inception ¹	5 Year Trackino Error
Donald Smith & Co. Russell 2000 Value	Feb-06	\$ 110	2.3%	11.6 <i>11.6</i>	19.8 <i>18.1</i>	9.0 12.1	8.2 <i>7.3</i>		6.6 4.5	9.2
Excess Return				0.0	1.7	-3.1	0.9		2.1	
PanAgora Asset Management Russell 2000 Value	Feb-06	\$ 199	4.2%	14.3 <i>11.6</i>	21.5 <i>18.1</i>	17.5 <i>12.1</i>	10.0 <i>7.3</i>		4.5 4.5	2.9
Excess Return				2.7	3.4	5.4	2.7		0.0	
New Mountain Cap Group Russell Midcap Blend	Mar-08	\$ 64	1.4%	7.8 13.0	13.8 <i>17.3</i>	7.8 11.8		<u></u>	5.3 4.4	
Excess Return				-5.2	-3.5	-4.0			1.0	
Rhumbline Advisors (Passive) S&P 500	Mar-93	\$ 802	17.1%	10.6 <i>10.6</i>	14.0 <i>14.0</i>	12.8 <i>12.7</i>	6.0 5.8	8.7 <i>8.5</i>	8.8 8.6	0.3
Excess Return				0.0	0.0	0.1	0.2	0.2	0.2	
Blackrock S&P 500 Index Plus S&P 500	Feb-10	\$ 1,627	34.6%	10.6 <i>10.6</i>	13.9 <i>14.0</i>	12.9 12.7			14.5 <i>14.3</i>	
Excess Return				0.0	-0.1	0.2			0.2	
Manager-of-Manager Programs			2.8%							
Attucks <i>Russell 2000</i>	Nov-05	\$ 38	0.8%	14.2 12.4	17.4 <i>16.3</i>	14.0 <i>13.5</i>	7.5 <i>8.2</i>	 	6.4 6.2	3.3
Excess Return				1.8	1.1	0.5	-0.7		0.2	
Capital Prospects <i>Russell 3000</i>	Dec-05	\$ 35	0.7%	10.8 <i>11.1</i>	12.7 14.6	12.1 13.0	5.5 <i>6.3</i>	 	5.2 5.7	2.5
Excess Return				-0.3	-1.9	-0.9	-0.8		-0.5	
Progress Investment <i>Russell 3000</i>	Oct-06	\$ 57	1.2%	11.0 11.1	11.0 <i>14.6</i>	10.5 13.0	4.6 6.3	 	3.4 4.6	2.4
Excess Return				-0.1	-3.6	-2.5	-1.7		-1.2	

¹ Indicates gross returns



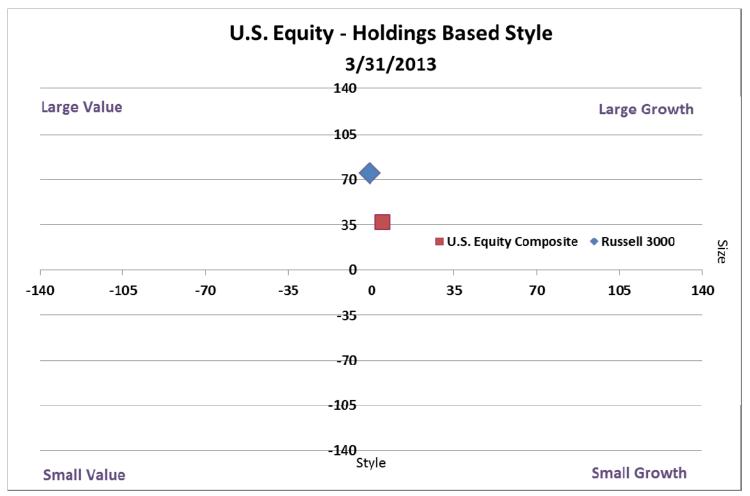
5-Year Rolling Risk-Adjusted Active Returns



- Active returns are returns earned over/under benchmark return.
- For the past five years, LACERS' information ratio showed mixed results, but it is trending upward.

Risk-adjusted active returns are referred to as "Information Ratio". Information Ratio = Excess return (alpha) / Excess risk (tracking error)





- LACERS U.S. Equity Portfolio exhibits significant smaller cap and slight growth bias versus Russell 3000 benchmark.
- As small cap stocks currently outperforming large cap stocks, this bias is source of outperformance versus benchmark.



MANAGER REPORT CARD1

	U.S. Managers	Inception Date	Mandate	Current Quarter		One Year		Three Years			ive ears	Since Inception	Comments ²
	-			ı	U	ı	U	ı	U	ı	U	I	
>	Aronson, Johnson & Ortiz	Oct-01	Large Cap Value	✓	✓	×	✓	✓	✓	✓	✓	✓	Performance satisfactory.
>	Thomson Horstmann	Oct-95	Small Cap	✓	✓	✓	✓	×	×	x	×	✓	Performance mixed. Monitoring manager.
>	Franklin Advisers	Sep-94	Small Cap Growth	✓	✓	1	✓	✓	✓	✓	✓	✓	Performance satisfactory.
>	Sit Investments	Jan-01	Small Cap Growth	×	×	×	×	×	×	×	×	3c	Performance is poor. Monitor manager.
>	Donald Smith	Feb-06	Small Cap Value	=	✓	✓	✓	×	×	✓	×	✓	Performance mixed. Monitoring manager.
>	PanAgora	Feb-06	Small Cap Value	✓	✓	✓	✓	✓	✓	✓	×	=	Performance satisfactory; removed from "Watch" list on 11/12.
>	New Mountain Cap Grp	Mar-08	Corp Gov	×	n/a	×	n/a	×	n/a	n/a	n/a	✓	Limited track record.
>	Attucks	Nov-05	Fund of Funds	✓	n/a	✓	n/a	✓	n/a	x	n/a	3c	"On Watch" since 6/11 - performance.
>	Capital Prospects	Dec-05	Fund of Funds	×	n/a	×	n/a	×	n/a	×	n/a	×	"On Watch" since 6/11 - performance.
>	Progress	Oct-06	Fund of Funds	×	n/a	x	n/a	×	n/a	x	n/a	æ	"On Watch" since 10/09 - performance.
>	BlackRock R1000 Value	Dec-98	R1000 Value Index	x	✓	×	✓	✓	✓	✓	x	✓	Performance satisfactory.
>	BlackRock S&P 500 Index Plus	Feb-10	S&P 500 Index	=	JC .	×	x	✓	n/a	n/a	n/a	✓	Limited track record.
>	Rhumbline Advisors	Mar-93	S&P 500 Index	=	×	=	✓	✓	✓	✓	×	✓	Performance satisfactory.

¹ Current Quarter, 1-Yr, 3-Yrs, and 5-Yrs returns are net of fees. Since Inception returns are gross of fee.

² Managers are placed on the Watch List for concerns with organization, process, and performance. Managers are normally on the Watch List for 6 months though can be longer if manager issues still remain but not severe enough to warrant contract termination recommendation.

	LEGEND		
/	outperformed index	1	index
k	underperformed index	U	universe median
=	equal to index		



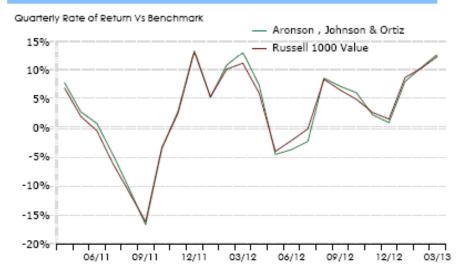
Aronson, Johnson & Ortiz

Mandate: Large Cap Value Benchmark: Russell 1000 Value

Strategy

Aronson invests in US stocks with large market caps, low P/E ratios and lower historical earnings per share that are expected to increase.

Performance



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Aronson , Johnson &	12.7	17.3	12.3	14.3	6.2	7.8	Oct-2001
Russell 1000 Value	12.3	18.8	11.6	12.7	4.8	6.7	
Excess Return	0.4	(1.5)	0.7	1.6	1.4	1.1	

Objective: Outperform the benchmark by 200 bps , annualized over a full market cycle (normally 3-5 years).

	anr	nualized ov	er a tu	I mar	ket (cycle	(norm	nally	3-5 yea	rs).
Quartil	e Ranking	js –								
30% ¬										
25% -										
23% -										
20% -										
15% -										
10% -	•		-		•					
10%										
5% -									•	
0%					_		_			\neg
	Three Months	One Year	Two Year		Thr Yea		Fo: Vea		Five Years	
			QTD						4 Yrs.	
	on , Johns	on & Ortiz	12.		17.6	12		14.6		
Rank				1	22		7			
•	ll 1000 Va	lue	12.		18.8	11		12.7		
Rank			2	9	15	2	23	35	45	76
	10th Pe	ercentile	13.5	20.	1	12.3	14.	1	25.7	9.2
	1st	Quartile	12.5	17.	4	11.5	13.	1	24.0	6.9
		Median	11.2	14.5	9	9.8	11.	8	21.4	6.1
	3rd Quartile			12.	6	7.7	10.	5	20.2	4.9
	90th Pe	ercentile	7.7	10.	1	4.0	8.	3	18.7	3.9
Numbe	er Of Obse	rvations	227	20	0	173	14	-7	114	103



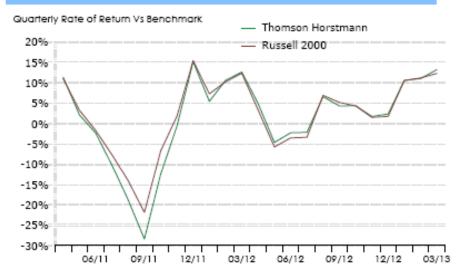
Thomson Horstmann

Mandate: Small Cap Benchmark: Russell 2000

Strategy

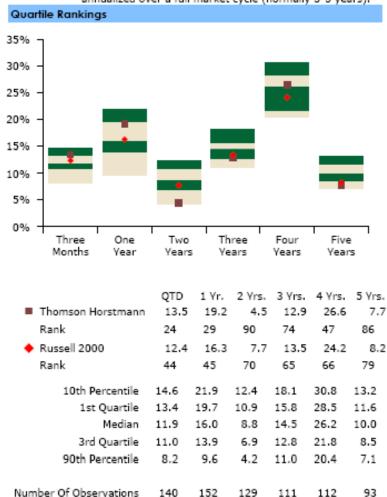
Thomson invests in US stocks with small market caps and low P/E ratios.

Performance



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Thomson Horstmann	13.3	18.5	3.8	12.2	7.2	10.6	Oct-1995
Russell 2000	12.4	16.3	7.7	13.5	8.2	8.4	
Excess Return	0.9	2.2	(3.9)	(1.3)	(1.0)	2.2	

Objective: Outperform the benchmark by 250 bps , annualized over a full market cycle (normally 3-5 years).





Franklin Global Advisers

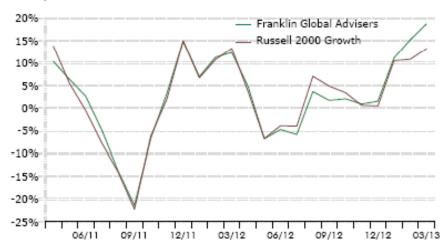
Mandate: Small Cap Growth Benchmark: Russell 2000 Growth

Strategy

Franklin invests in US stocks with small market caps, low P/E ratios and earnings per share that are expected to increase at rates much greater than the overall market.

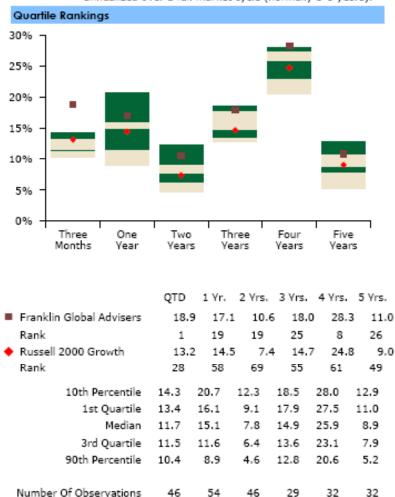
Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Franklin Global Advis	18.8	16.7	10.3	17.6	10.6	9.2	Sep-1994
Russell 2000 Growth	13.2	14.5	7.4	14.7	9.0	6.8	
Excess Return	5.6	2.2	2.9	2.9	1.6	2.4	

Objective: Outperform the benchmark by 200 bps, annualized over a full market cycle (normally 3-5 years).





Sit Investments

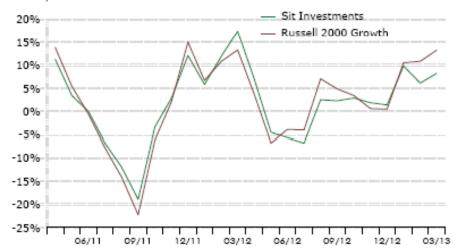
Mandate: Small Cap Growth Benchmark: Russell 2000 Growth

Strategy

SIT invests in US stocks with small market caps, low P/E ratios and earnings per share that are expected to increase at rates much greater than the overall market.

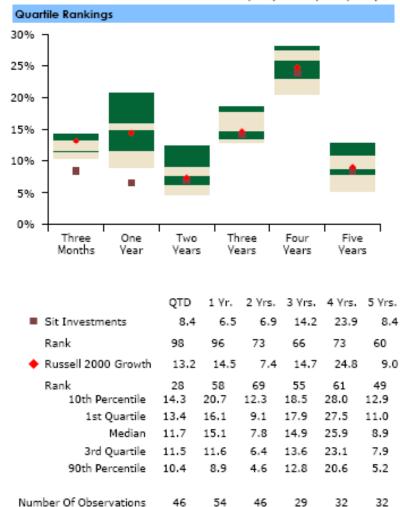
Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Sit Investments	8.2	5.8	6.2	13.5	7.7	4.1	Jan-2001
Russell 2000 Growth	13.2	14.5	7.4	14.7	9.0	4.4	
Excess Return	(5.0)	(8.7)	(1.2)	(1.2)	(1.3)	(0.3)	

Objective: Outperform the benchmark by 300-450 bps, annualized over a full market cycle (normally 3-5 years).





Donald Smith & Co.

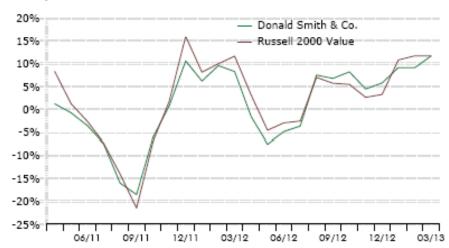
Mandate: Small Cap Value Benchmark: Russell 2000 Value

Strategy

Donald Smith invests in US stocks with small market caps, low P/E ratios and lower historical earnings per share that are expected to increase.

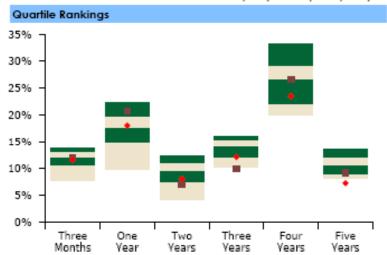
Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Donald Smith & Co.	11.6	19.8	6.1	9.0	8.2	6.6	Feb-2006
Russell 2000 Value	11.6	18.1	8.1	12.1	7.3	4.5	
Excess Return	0.0	1.7	(2.0)	(3.1)	0.9	2.1	

Objective: Outperform the benchmark by 300 bps , annualized over a full market cycle (normally 3-5 years).



	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
■ Donald Smith & Co.	11.9	20.8	7.0	9.9	26.6	9.2
Rank	56	19	78	92	51	71
 Russell 2000 Value 	11.6	18.1	8.1	12.1	23.5	7.3
Rank	62	48	70	75	70	96
10th Percentile	13.8	22.3	12.4	16.2	33.2	13.5
1st Quartile	13.1	19.9	11.0	15.5	29.2	12.1
Median	12.2	17.8	9.6	14.3	26.6	10.6
3rd Quartile	10.7	15.0	7.5	12.1	22.0	8.9
90th Percentile	7.8	9.9	4.2	10.3	20.0	8.2
Number Of Observations	86	91	78	77	79	60



PanAgora Asset Management

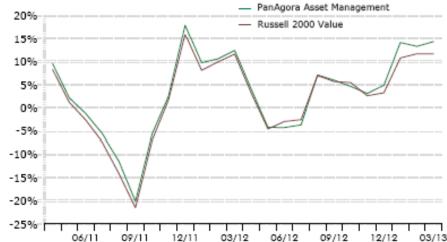
Mandate: Small Cap Value Benchmark: Russell 2000 Value

Strategy

Panagora invests in US stocks with small market caps, low P/E ratios and lower historical earnings per share that are expected to increase.

Performance

Quarterly Rate of Return Vs Benchmark

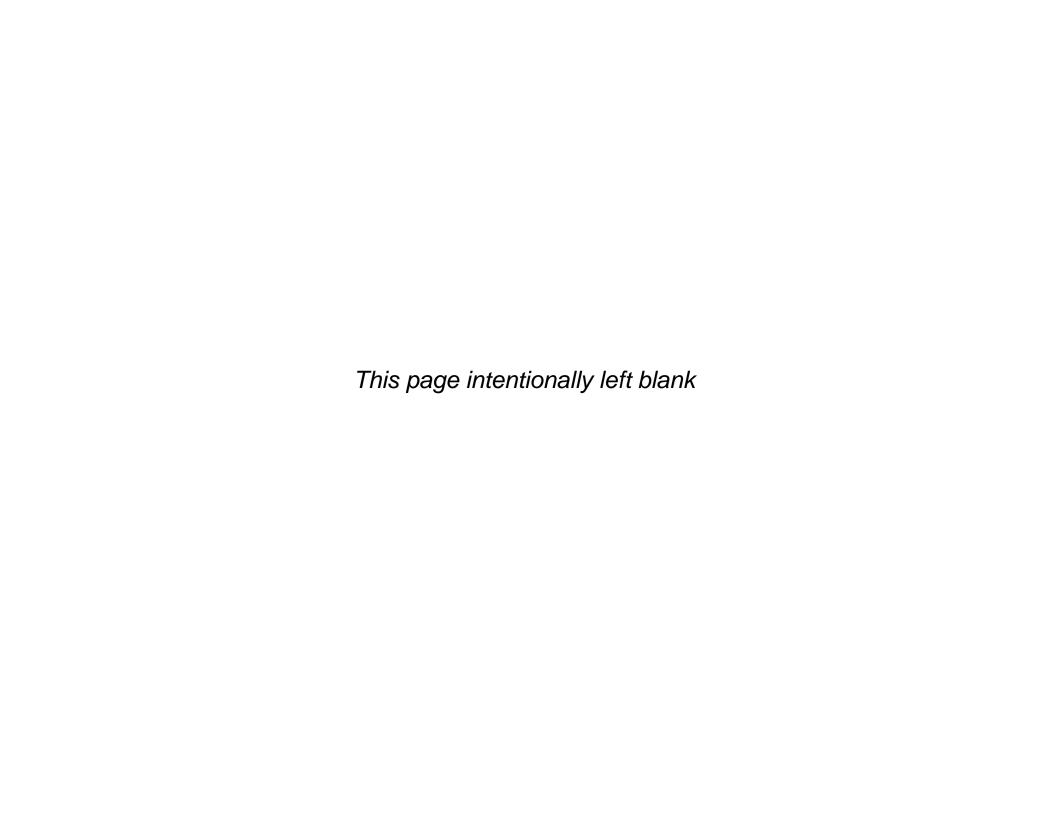


Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
PanAgora Asset Mana	14.3	21.5	12.8	17.5	10.0	4.5	Feb-2006
Russell 2000 Value	11.6	18.1	8.1	12.1	7.3	4.5	
Excess Return	2.7	3.4	4.7	5.4	2.7	(0.0)	

Objective: Outperform the benchmark by 200 bps , annualized over a full market cycle (normally 3-5 years).

Quartil	e Ranking	gs				
35% 7						
30% -						
25% -					•	
20% -						
15% -						
10% -	•		•	•		
5% -						•
0%						
·	Three Months	One Year	Two Years	Three Years	Four Years	Five Years

	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
PanAgora Asset Mana	14.5	22.3	13.5	18.2	29.4	10.8
Rank	9	9	2	3	24	45
 Russell 2000 Value 	11.6	18.1	8.1	12.1	23.5	7.3
Rank	62	48	70	75	70	96
10th Percentile	13.8	22.3	12.4	16.2	33.2	13.5
1st Quartile	13.1	19.9	11.0	15.5	29.2	12.1
Median	12.2	17.8	9.6	14.3	26.6	10.6
3rd Quartile	10.7	15.0	7.5	12.1	22.0	8.9
90th Percentile	7.8	9.9	4.2	10.3	20.0	8.2
Number Of Observations	86	91	78	77	79	60





Non-U.S. Equity Managers



Non-U.S. Equity Managers

(Returns are Net of Fees)

	Inception Date	ket Value Smillion)	% to Total Non-U.S. Equity	Current Quarter	One Year	Three Years	Five Years	Ten Years	Since Inception¹	5 Year Tracking Error
Non-U.S. Equity	Oct-94	\$ 2,592	100.0%	4.7	10.8	5.3	0.5	11.0	5.0	1.6
MSCI ACWI ex U.S.*				3.2	8.4	4.4	-0.4	10.9	5.5	
Excess Return				1.5	2.4	0.9	0.9	0.1	-0.5	
Emerging Markets MSCI Emerging Markets ND	Jun-12	\$ 303	11.7%	-2.6 -1.6					11.3 <i>11.9</i>	
Excess Return				-1.0					-0.6	
Batterymarch MSCI Emerging Markets ND	Sep-08	\$ 113	4.4%	-1.2 -1.6	1.4 <i>2.0</i>	0.2 3.3	 	 	8.4 9.1	
Excess Return				0.4	-0.6	-3.1			-0.7	
Boston Company MSCI Emerging Markets ND	Jan-03	\$ 190	7.3%	-3.5 -1.6	-1.2 2.0	-0.2 3.3	1.0 1.1	 	15.7 16.1	4.0
Excess Return				-1.9	-3.2	-3.5	-0.1		-0.4	
Developed ex-U.S. MSCI EAFE ND	Jun-12	\$ 2,289	88.3%	5.8 5.1	 	 	 	 	21.3 19.8	
Excess Return				0.7					1.5	
Capital Guardian <i>MSCI Europe</i>	May-96	\$ 475	18.3%	4.5 <i>2.7</i>	14.8 10.6	7.1 4.8	-0.3 -2.1	10.2 9.7	8.9 6.6	2.9
Excess Return				1.8	4.2	2.3	1.8	0.5	2.3	
Daiwa <i>MSCI Pacific*</i>	Dec-95	\$ 215	8.3%	6.6 9.7	9.4 12.8	3.4 5.7	0.7 1.9	9.8 9.6	4.2 1.2	2.4
Excess Return				-3.1	-3.4	-2.3	-1.2	0.2	3.0	
Franklin Templeton MS AC Asia Pacific*	Nov-91	\$ 264	10.2%	10.0 5.5	20.6 <i>10.0</i>	13.8 <i>5.4</i>	7.0 1.9	15.1 11.0	8.4 <i>3.5</i>	5.4
Excess Return				4.5	10.6	8.4	5.1	4.1	4.9	

¹ Indicates gross returns



Non-U.S. Equity Managers

(Returns are Net of Fees)

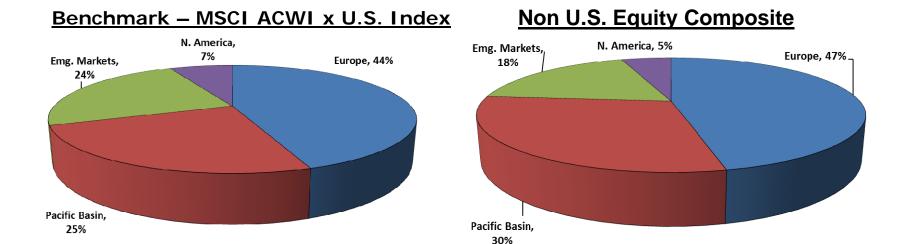
	Inception Date	ket Value million)	% to Total Non-U.S. Equity	Current Quarter	One Year	Three Years	Five Years	Ten Years	Since Inception ¹	5 Year Tracking Error
State Street Equity (Passive)	Aug-93	\$ 1,186	45.8%	5.1	10.9	5.4	0.1	10.4	5.8	0.5
MSCI World ex U.S.				5.0	10.5	5.1	-0.4	10.1	5.1	
Excess Return				0.1	0.4	0.3	0.5	0.3	0.7	
TT International MSCI World ex U.S.	May-01	\$ 144	5.6%	7.9 4.7	12.3 <i>10.4</i>	4.2 4.8	-2.7 -0.7	9.0 9.9	4.4 4.8	4.4
Excess Return				3.2	1.9	-0.6	-2.0	-0.9	-0.4	
Knight Vinke Asset Knight Vinke 10%	Apr-06	\$ 5	0.2%	-20.5 2.4	-19.3 <i>10.0</i>	-14.6 <i>10.0</i>	-15.1 <i>10.0</i>	 	-10.8 10.0	26.5
Excess Return				-22.9	-29.3	-24.6	-25.1		-20.8	

¹ Indicates gross returns

^{*} The MS ACWI ex U.S., MSCI Pacific, and MSCI AC Asia Pacific indices are historically blended with other indices.



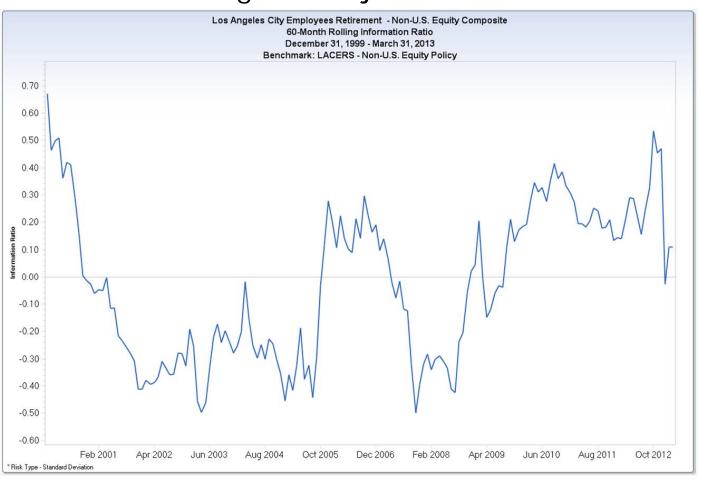
Country Allocation



• As LACERS implements the new asset allocation, the geographic weightings of the Non-U.S. Equity Composite will become closer to the benchmark.



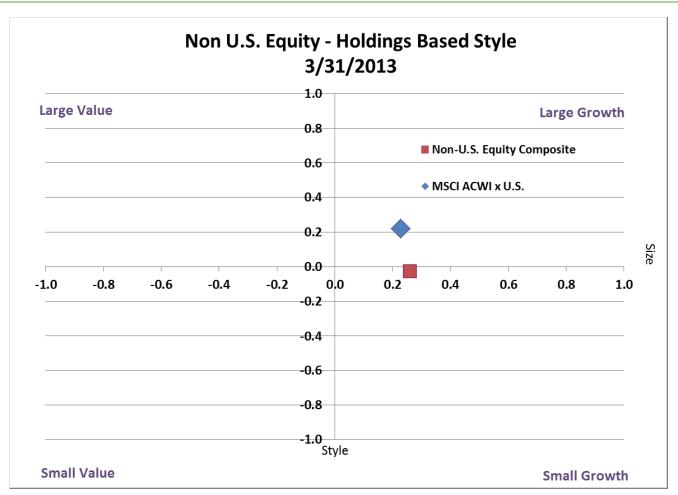
5-Year Rolling Risk-Adjusted Active Returns



- Active returns are returns earned over/under benchmark return.
- Non-U.S. Equity's rolling information ratio has been mostly increasing for past 3 years.

Risk-adjusted active returns are referred to as "Information Ratio". Information Ratio = Excess return (alpha) / Excess risk (tracking error)





 LACERS Non-U.S. Equity Portfolio has exhibited modest small cap bias compared to MSCI ACWI x U.S. index.



MANAGER REPORT CARD¹

	Non-U.S. Managers	Inception Date	Mandate		rent irter	One	Year		ree ars		ve ars	Since Inception	Comments ²
				I	U	ı	U	ı	U	ı	U	I	
>	Batterymarch	Sep-08	Emerging Markets	✓	×	×	×	×	×	n/a	n/a	*	Performance improving. Monitoring manager.
>	Boston Company	Jan-03	Emerging Markets	×	x	×	×	×	×	×	x	3 0	"On Watch" since 02/12 - performance lagging. Monitoring manager.
>	Capital Guardian	May-96	Europe	✓	✓	✓	✓	✓	=	✓	✓	✓	Performance satisfactory.
>	Daiwa	Dec-95	Asia Pacific	×	×	×	×	x	×	x	n/a	✓	"On Watch" since 10/11 - organization. Performance improving. Monitoring manager.
>	Franklin Templeton	Nov-91	Asia Pacific	✓	✓	✓	✓	✓	✓	✓	✓	✓	Performance satisfactory.
>	TT International	May-01	Non-U.S. Developed	✓	✓	✓	✓	×	×	×	×	×	"On Watch" since 01/09 - performance improving. Monitoring manager.
>	State Street	Aug-93	Non-U.S. Developed Index	✓	✓	✓	×	✓	×	✓	×	✓	Performance satisfactory.
>	Knight Vinke	Apr-06	Corp Gov - Europe	×	n/a	×	n/a	×	n/a	×	n/a	*	In redemption process.

¹ Current Quarter, 1-Yr, 3-Yrs, and 5-Yrs returns are net of fees. Since Inception returns are gross of fee.

² Managers are placed on the Watch List for concerns with organization, process, and performance. Managers are normally on the Watch List for 6 months though can be longer if manager issues still remain but not severe enough to warrant contract termination recommendation.

	LEGEND		
✓	outperformed index	I	index
×	underperformed index	U	universe median
=	equal to index		



Batterymarch

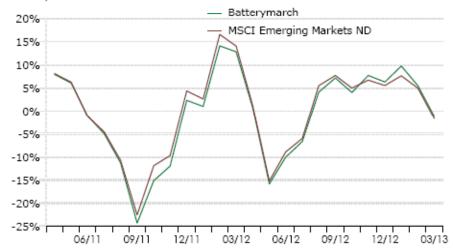
Mandate: Emerging Markets Equity
Benchmark: MSCI Emerging Markets ND

Strategy

Batterymarch invests in Non-US stocks in emerging countries that are part of the MSCI Emerging Markets index.

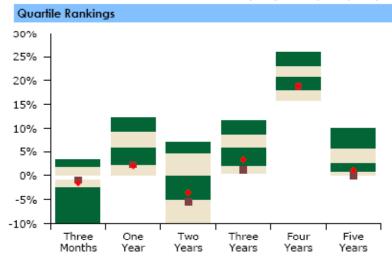
Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Batterymarch	(1.2)	1.4	(6.4)	0.2		8.4	Sep-2008
MSCI Emerging Mark	(1.6)	2.0	(3.6)	3.3		9.1	
Excess Return	0.4	(0.6)	(2.8)	(3.1)		(0.7)	

Objective: Outperform the benchmark by 300 bps , annualized over a full market cycle (normally 3-5 years).



	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
■ Batterymarch	(0.9)	2.3	(5.6)	1.2	18.7	
Rank	77	75	81	83	65	
♦ MSCI Emerging Mark	(1.6)	2.0	(3.6)	3.3	18.8	1.1
Rank 10th Percentile	86 3.3	77 12.3	72 6.9	67 11.5	64 25.9	71 9.9
1st Quartile	1.9	9.3	4.8	8.8	23.2	5.7
Median	0.1	5.8	(0.2)	5.9	21.0	2.6
3rd Quartile	(0.9)	2.2	(5.2)	2.0	18.1	1.0
90th Percentile	(2.4)	0.1	(6.7)	0.6	15.8	0.0
Number Of Observations	79	72	67	63	54	49



Boston Company

Mandate: Emerging Markets Equity
Benchmark: MSCI Emerging Markets ND

Strategy

Boston Co. invests in Non-US stocks in emerging countries that are part of the MSCI Emerging Markets index.

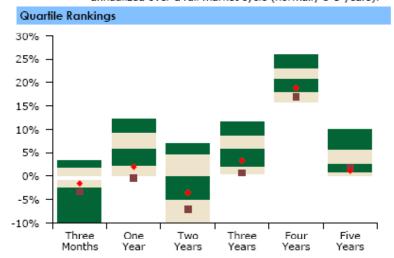
Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Boston Company	(3.5)	(1.2)	(7.8)	(0.2)	1.0	15.7	Jan-2003
MSCI Emerging Mark	(1.6)	2.0	(3.6)	3.3	1.1	16.1	
Excess Return	(1.9)	(3.2)	(4.2)	(3.5)	(0.1)	(0.4)	

Objective: Outperform the benchmark by 200-300 bps, annualized over a full market cycle (normally 3-5 years).



	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
Boston Company	(3.3)	(0.5)	(7.1)	0.6	17.0	1.8
Rank	94	98	96	86	78	63
MSCI Emerging Market	(1.6)	2.0	(3.6)	3.3	18.8	1.1
Rank	86	77	72	67	64	71
10th Percentile	3.3	12.3	6.9	11.5	25.9	9.9
1st Quartile	1.9	9.3	4.8	8.8	23.2	5.7
Median	0.1	5.8	(0.2)	5.9	21.0	2.6
3rd Quartile	(0.9)	2.2	(5.2)	2.0	18.1	1.0
90th Percentile	(2.4)	0.1	(6.7)	0.6	15.8	0.0
Number Of Observations	79	72	67	63	54	49



Capital Guardian

Mandate: Europe Region Equity Manager

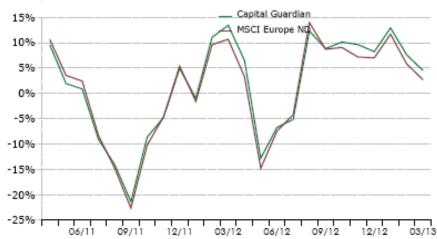
Benchmark: MSCI Europe ND

Strategy

Capital Guardian invests in Non-US stocks across all developed European countries.

Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Capital Guardian	4.5	14.8	4.1	7.1	(0.3)	8.9	May-1996
MSCI Europe ND	2.7	10.6	1.1	4.8	(2.1)	6.6	
Excess Return	1.8	4.3	3.0	2.3	1.8	2.3	

Objective: Outperform the benchmark by 200 bps , annualized over a full market cycle (normally 3-5 years).

Quartile Rankings				
25% 7				
20% -				
15% -				
10% -				
5% -	•			
0% -	•			
-5%				
Three Months	Two Years	-	Four Years	Five Years

	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
Capital Guardian	4.6	15.4	4.6	7.6	17.3	0.1
Rank	40	35	40	50	60	50
 MSCI Europe ND 	2.7	10.6	1.1	4.8	15.8	(2.1)
Rank 10th Percentile	75 6.8	75 18.6	70 8.7	70 12.2	75 22.9	75 5.0
1st Quartile	5.3	16.1	5.6	9.6	20.2	2.3
Median	4.1	13.0	2.9	7.1	17.7	(0.1)
3rd Quartile	2.4	10.5	0.1	4.4	15.3	(2.1)
90th Percentile	0.3	7.7	(2.6)	3.1	13.1	(3.8)
Number Of Observations	120	119	114	113	106	102



Daiwa

Mandate: Pacific Basin Manager

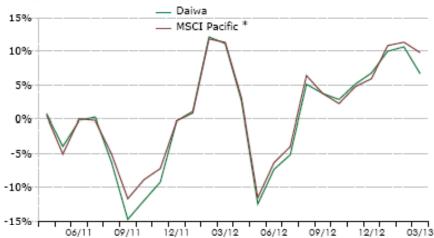
Benchmark: MSCI Pacific

Strategy

DAIWA invests in Non-US stocks primarily in Japan and Australia. Investment opportunities in other Asian countries are also pursued.

Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Daiwa	6.6	9.4	1.5	3.4	0.7	4.2	Dec-1995
MSCI Pacific *	9.7	12.8	5.1	5.7	1.9	1.2	
Excess Return	(3.1)	(3.5)	(3.7)	(2.3)	(1.2)	3.1	

Objective: Outperform the benchmark by 200 bps , annualized over a full market cycle (normally 3-5 years).

Quartile Rankings						
30% 7						
25% -						
20% -						
15% -				•		
10% -			-			
5% -	•					
0%	_				1	_
Three Months	Two Years	·	·	Four Years	Five Years	
Daiwa	6.7	9.5	1.6	3.5	13.6	0.9
■ Daiwa Rank	6.7 75	9.5 99	1.6 99	3.5 99	13.6 99	0.9 99
Rank	75	99	99	99	99	99
Rank ◆ MSCI Pacific *	75 9.7	99 12.8	99 5.1	99 5.7	99 15.6	99 1.9
Rank ◆ MSCI Pacific * Rank	75 9.7 25	99 12.8 75	99 5.1 75	99 5.7 99	99 15.6 99	99 1.9 75
Rank MSCI Pacific * Rank 10th Percentile	75 9.7 25 11.8	99 12.8 75 21.2	99 5.1 75 11.8	99 5.7 99 14.3	99 15.6 99 26.7	99 1.9 75 8.5
Rank ◆ MSCI Pacific * Rank 10th Percentile 1st Quartile	75 9.7 25 11.8 8.5	99 12.8 75 21.2 18.4	99 5.1 75 11.8 9.1	99 5.7 99 14.3 10.9	99 15.6 99 26.7 25.7	99 1.9 75 8.5 6.6
Rank ◆ MSCI Pacific * Rank 10th Percentile 1st Quartile Median	75 9.7 25 11.8 8.5 6.9	99 12.8 75 21.2 18.4 13.6	99 5.1 75 11.8 9.1 6.7	99 5.7 99 14.3 10.9 9.3	99 15.6 99 26.7 25.7 19.0	99 1.9 75 8.5 6.6 3.2



Franklin Templeton

Mandate: Pocific Bosin Monoger

Benchmark: MS AC Asia Pacific *

Strategy

Franklin invests in Non-US stocks in the Asia/Pacific region. Investments are in both developed and emerging countries.

Performance

Quarterly Rate of Refum Vs Benchmark

— Franklin Templeton

MS AC Asia Pacific *

10%

5%

-10%

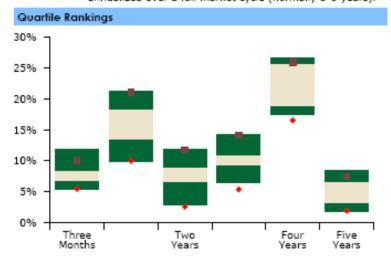
-15%

-20%

06/11 09/11 12/11 03/12 06/12 09/12 12/12 03/13

Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Franklin Templeton	10.0	20.6	11.3	13.8	7.0	8.4	Nov-1991
MS AC Asia Pacific *	5.5	10.0	2.6	5.4	1.9	3.5	
Excess Return	4.5	10.7	8.7	8.4	5.1	4.9	

Objective: Outperform the benchmark by 200 bps , annualized over a full market cycle (normally 3-5 years).



	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
■ Franklin Templeton	10.1	21.1	11.8	14.3	25.9	7.4
Rank	25	25	25	25	25	25
MS AC Asia Pacific *	5.5	10.0	2.6	5.4	16.6	1.9
Rank	99	75	99	99	99	75
10th Percentile	11.8	21.2	11.8	14.3	26.7	8.5
1st Quartile	8.5	18.4	9.1	10.9	25.7	6.6
Median	6.9	13.6	6.7	9.3	19.0	3.2
3rd Quartile	5.5	9.9	2.9	6.4	17.6	1.8
90th Percentile	5.5	9.9	2.9	6.4	17.6	1.8
Number Of Observations	10	10	10	10	10	9



TT International

Mandate: Non-US Developed Equity Mgrs.

Benchmark: MSCI World ex US

Strategy

TT Intl invests in Non-US stocks primarily in developed countries. There is no regional focus. Potential investment opportunities are pursued in all countries within the MSCI World ex US index.

Performance



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
TT International	7.9	12.3	1.4	4.2	(2.7)	4.4	May-2001
MSCI World ex US	4.7	10.4	1.5	4.8	(0.7)	4.8	
Excess Return	3.2	1.9	(0.1)	(0.6)	(2.0)	(0.4)	

Objective: Annualized absolute excess returns expected to be 15% per annum over a full market cycle (normally 3-5 years).

Quarti	le Ranking	js .				
25% -						
20% -						
15% -						
10% -		•				
5% -	•					
0% -						
-5% -		-		<u> </u>		
	Three Months	One Year	Two Years	Three Years	Four Years	Five Years

	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
■ TT International	8.0	12.9	1.9	4.8	15.3	(2.1)
Rank	6	32	67	81	79	94
MSCI World ex US	4.7	10.4	1.5	4.8	15.7	(0.7)
Rank	50	60	71	81	74	83
10th Percentile	7.8	17.4	8.9	10.5	20.5	6.1
1st Quartile	6.1	13.7	5.8	8.4	19.8	2.9
Median	4.7	11.1	3.1	6.7	17.5	1.3
3rd Quartile	3.1	8.4	1.4	5.1	15.5	(0.2)
90th Percentile	2.5	6.2	(1.0)	2.9	13.1	(1.3)
Number Of Observations	185	180	172	159	139	117



Fixed Income Managers



Fixed Income Managers

(Returns are Net of Fees)

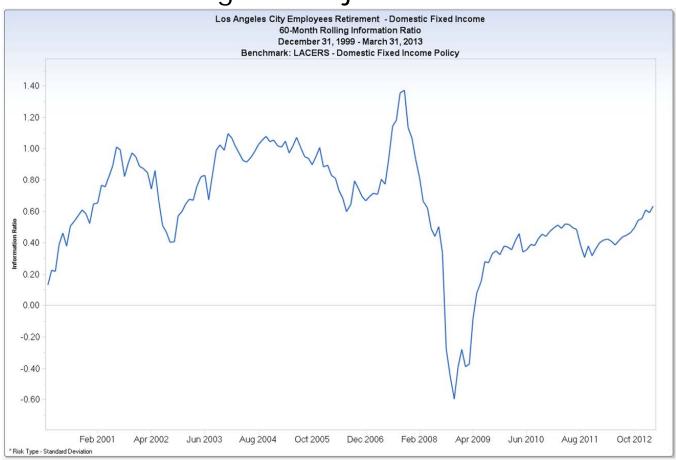
	Inception Date	ket Value Smillion)	% to Total Fixed Income	Current Quarter	One Year	Three Years	Five Years	Ten Years	Since Inception ¹	5 Year Tracking Error
Total Fixed Income	Oct-94	\$ 2,792	100.0%	0.2	6.7	7.0	7.4	6.4	7.4	2.7
BC U.S. Universal*				0.1	4.7	6.0	5.9	5.4	6.4	
Excess Return				0.1	2.0	1.0	1.5	1.0	1.0	
Core Fixed Income BC U.S. Universal	Jun-12	\$ 2,792	100.0%	0.2 0.1					4.7 <i>2.6</i>	
Excess Return				0.1					2.1	
Loomis Sayles <i>BC U.S. Universal*</i>	Jun-80	\$ 1,127	40.4%	0.2 0.1	7.0 4.7	7.2 6.0	7.6 5.9	6.9 5.4	10.1 <i>8.5</i>	4.2
Excess Return				0.1	2.3	1.2	1.7	1.5	1.6	ı
Neuberger Berman BC U.S. Universal*	Nov-90	\$ 1,146	41.0%	0.2 0.1	6.4 4.7	7.4 6.0	8.5 <i>5.9</i>	6.9 5.4	7.8 6.9	3.4
Excess Return				0.1	1.7	1.4	2.6	1.5	0.9	
Baird Advisors BC U.S. Agg Govt/Credit Intermed	Mar-05	\$ 246	8.8%	0.7 <i>0.3</i>	5.6 <i>3.5</i>	6.5 <i>4.7</i>	6.0 4.6		5.7 <i>5.0</i>	1.3
Excess Return				0.4	2.1	1.8	1.4		0.7	•
LM Capital Group BC U.S. Universal*	Mar-05	\$ 274	9.8%	-0.1 <i>0.1</i>	5.2 <i>4.7</i>	5.7 5.4	6.0 5.0	 	6.0 5.3	2.9
Excess Return				-0.2	0.5	0.3	1.0		0.7	

¹ Indicates gross returns

^{*} The BC U.S. Universal index has historical data blended with other indices.



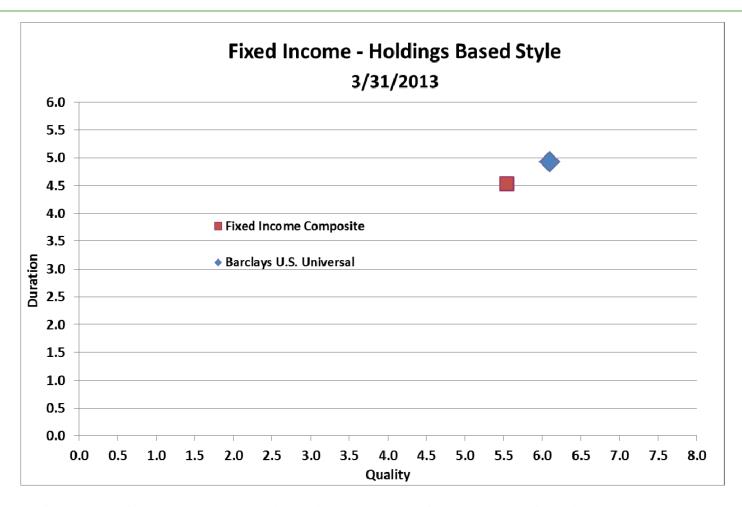
5-Year Rolling Risk-Adjusted Active Returns



- Active returns are returns earned over/under benchmark return.
- Despite dip in 2008, fixed income composite has provided mostly positive risk-adjusted active returns since inception.

Risk-adjusted active returns are referred to as "Information Ratio". Information Ratio = Excess return (alpha) / Excess risk (tracking error)





- LACERS Fixed Income portfolio has slightly lower duration than benchmark.
- Portfolio is modestly lower quality versus benchmark.



MANAGER REPORT CARD¹

	Core Fixed Income	Inception Date	Mandate	Curi Qua		One	Year	Three Years		Five Years		Since Inception	Comments ²
				ı	U	ı	U	ı	U	I	U	ı	
>	Baird Advisors	Mar-05	Intermediate	✓	✓	✓	✓	✓	✓	✓	✓	✓	Performance satisfactory.
>	LM Capital Group	Feb-05	Core - Plus	×	×	✓	✓	✓	✓	✓	✓	✓	Performance satisfactory.
>	Loomis Sayles	Jun-80	Core - Plus	✓	=	✓	✓	✓	✓	✓	✓	✓	Performance satisfactory.
>	Neuberger Berman	Nov-90	Core - Plus	✓	=	✓	✓	✓	✓	✓	✓	✓	Performance satisfactory.

¹ Current Quarter, 1-Yr, 3-Yrs, and 5-Yrs returns are net of fees. Since Inception returns are gross of fee.

²Managers are placed on the Watch List for concerns with organization, process, and performance. Managers are normally on the Watch List for 6 months though can be longer if manager issues still remain but not severe enough to warrant contract termination recommendation.

	LEGEND											
\	outperformed index	I	index									
×	underperformed index	U	universe median									
=	equal to index											



Baird Advisors

Mandate: Intermediate Fixed Income
Benchmark: BC US Agg Govt/Credit Intermed

Strategy

Baird invests primarily in US investment-grade bonds in the government and credit sectors with 3-5 year maturities.

Performance

Quarterly Rate of Return Vs Benchmark

— Baird Advisors

— BC US Agg Govt/Credit Interr

3%

2%

1%

1%

0%

-1%

Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Baird Advisors	0.7	5.6	6.2	6.5	6.0	5.7	Mar-2005
BC US Agg Govt/Cred	0.3	3.5	4.8	4.7	4.6	5.0	
Excess Return	0.4	2.1	1.4	1.8	1.4	0.7	

03/12

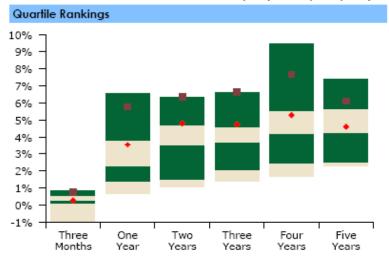
06/12

09/12

12/12

12/11

Objective: Outperform the benchmark by 15-40 bps , annualized over a full market cycle (normally 3-5 years).



	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
Baird Advisors	0.7	5.8	6.3	6.6	7.7	6.1
Rank	15	14	10	10	18	20
 BC US Agg Govt/Cred 	0.3	3.5	4.8	4.7	5.3	4.6
Rank	47	29	24	22	31	46
10th Percentile	8.0	6.5	6.3	6.6	9.4	7.4
1st Quartile	0.5	3.8	4.7	4.6	5.5	5.6
Median	0.2	2.3	3.5	3.7	4.2	4.3
3rd Quartile	0.1	1.4	1.5	2.0	2.4	2.5
90th Percentile	(0.0)	0.7	1.0	1.4	1.6	2.3
n l ofol i				40		
Number Of Observations	51	47	44	43	37	31



LM Capital Group

Mandate: Intermediate Fixed Income

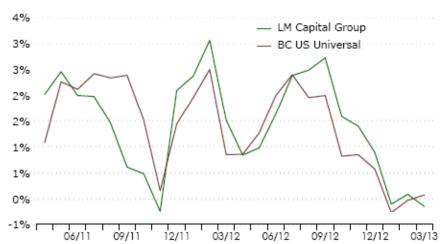
Benchmark: BC US Universal

Strategy

LM Capital invests primarily in US investment-grade bonds in the govenment and credit sectors with 3-5 year maturities.

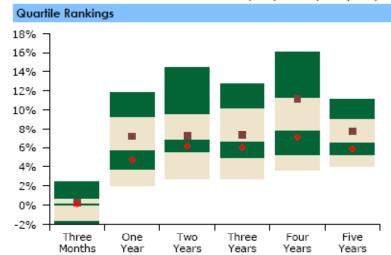
Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
LM Capital Group	(0.1)	5.2	5.8	5.7	6.0	6.0	Mar-2005
BC US Universal	0.1	4.7	5.8	5.4	5.0	5.3	
Excess Return	(0.2)	0.5	(0.0)	0.3	1.0	0.7	

Objective: Outperform the benchmark by 30-80 bps, annualized over a full market cycle (normally 3-5 years).



	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
LM Capital Group	(0.1)	5.3	5.9	5.9	8.3	6.2
Kank	9/	15	11	12	1/	20
 BC US Universal 	0.1	4.7	5.8	5.4	5.8	5.0
Rank 10th Percentile	77 0.8	17 6.5	12 6.3	15 6.6	21 9.4	40 7.4
1st Quartile	0.5	3.8	4.7	4.6	5.5	5.6
Median	0.2	2.3	3.5	3.7	4.2	4.3
3rd Quartile	0.1	1.4	1.5	2.0	2.4	2.5
90th Percentile	(0.0)	0.7	1.0	1.4	1.6	2.3
Number Of Observations	51	47	44	43	37	31



Loomis Sayles

Mandate: US Fixed Income Manager

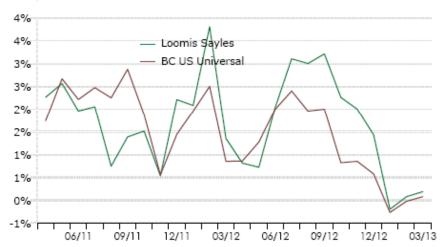
Benchmark: BC US Universal

Strategy

Loomis invests primarily in US investment-grade bonds rated BBB- or higher by Moodys.

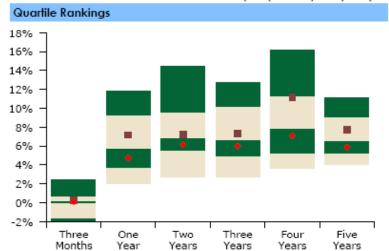
Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Loomis Sayles	0.2	7.0	7.1	7.2	7.6	10.1	Jun-1980
BC US Universal	0.1	4.7	6.1	6.0	5.9	8.5	
Excess Return	0.1	2.3	1.0	1.2	1.7	1.6	

Objective: Outperform the benchmark by 50 bps, annualized over a full market cycle (normally 3-5 years).



	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
Loomis Sayles	0.2	7.2	7.2	7.3	11.2	7.7
Rank	50	39	45	39	26	34
 BC US Universal 	0.1	4.7	6.1	6.0	7.1	5.9
Rank 10th Percentile	61 2.4	63 11.8	64 14.4	60 12.7	61 16.1	63 11.1
1st Quartile	0.7	9.3	9.6	10.2	11.4	9.0
Median	0.2	5.8	6.8	6.6	7.9	6.6
3rd Quartile	(0.1)	3.7	5.5	5.0	5.2	5.2
90th Percentile	(1.6)	2.0	2.7	2.8	3.7	4.0
Number Of Observations	452	416	392	356	306	254



Neuberger Berman

Mandate: US Fixed Income Manager

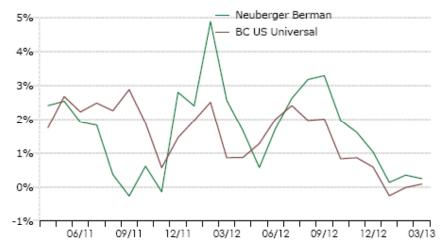
Benchmark: BC US Universal

Strategy

Nueberger invests in investment-grade bonds rated BBB- or higher by Moodys.

Performance

Quarterly Rate of Return Vs Benchmark



Net Returns %	LCQ	1 Yr.	2 Yrs.	3 Yrs.	5 Yrs.	Gross ITD Return	Inception Date
Neuberger Berman	0.2	6.4	6.8	7.4	8.5	7.8	Nov-1990
BC US Universal	0.1	4.7	6.1	6.0	5.9	6.9	
Excess Return	0.1	1.7	0.7	1.4	2.6	0.9	

Objective: Outperform the benchmark by 100 bps , annualized over a full market cycle (normally 3-5 years).

Quarti	le Ranking	gs				
18% ¬						
16% -						
14% -						
12% -						
10% -						
8% -					•	
6% -		-		•		•
4% -		•				
2% -						
0% -	•					
-2% -		_				
	Three Months	One Year	Two Years	Three Years	Four Years	Five Years

	QTD	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.
Neuberger Berman	0.3	6.6	7.0	7.7	11.9	8.7
Rank	44	42	47	36	23	28
 BC US Universal 	0.1	4.7	6.1	6.0	7.1	5.9
Rank	61	63	64	60	61	63
10th Percentile	2.4	11.8	14.4	12.7	16.1	11.1
1st Quartile	0.7	9.3	9.6	10.2	11.4	9.0
Median	0.2	5.8	6.8	6.6	7.9	6.6
3rd Quartile	(0.1)	3.7	5.5	5.0	5.2	5.2
90th Percentile	(1.6)	2.0	2.7	2.8	3.7	4.0
Number Of Observations	452	416	392	356	306	254



Definitions



I. Asset Allocation

Market %: market value as a percent of the total fund's market value.

Target %: investment policy on target allocation for each asset classes.

Minimum and Maximum %: range of allocation for each asset classes.

II. Policy Benchmarks

Current (adopted January 24, 2012)

♦ U.S Equity: 24% Russell 3000

Non-U.S Equity: 29% MS ACWI ex U.S. Net Div

Fixed Income: 19% Barclays Capital (BC) Aggregate

Credit Opportunities:
 5% 65% Barclays U.S. High Yield Capped / 35% JP Morgan EMBI - Global Diversified

♦ Public Real Assets: 5% CPI + 5%

Private Real Estate: 5% NCREIF + 100 bps annually

♦ Private Equity: 12% Russell 3000 plus 300 bps annually. Calculated on a dollar-weighted basis, and

holding cash flows at 0% return for the first 36 months

♦ Cash: 1% 90-day Treasury Bill

Total: 24% U.S. Equity; 29% Non-U.S. Equity; 19% Fixed Income; 5% Credit Opportunities; 5% Public Real Assets;
 5% Private Real Estate; 12% Private Equity; 1% Cash

Prior (adopted October 13, 2009)

U.S Equity: 27% Russell 3000

Non-U.S Equity: 20% MS ACWI ex U.S. Net Div
 Core Fixed Income: 26% Barclays Capital (BC) Universal

Private Real Estate: 7% NCREIF

Private Equity: 9% Russell 3000 plus 400 bps annually. Calculated on a dollar-weighted basis, and holding

cash flows at 0% return for the first 36 months.

◆ Cash: 1% 90-day Treasury Bill

Total: 37% U.S. Equity; 20% Non-U.S. Equity; 26% Core Fixed Income; 7% Private Real Estate; 9% Private Equity;
 1% Cash



III. Indices

Cash

Salomon Brothers 3-Month Treasury Bills: an average of the last three 3-month treasury bill issues' monthly return equivalents of yield averages, which are not marked to market. Month-end discount yields are converted to bond-equivalent yields, then a simple average is taken, and that number is decompounded to a monthly return using the actual number of days in the month and a 365-day year.

Equity

- Dow Jones Industrial Average: This index is the price-weighted average of 30 actively traded blue chip stocks.
- NASDAQ: A market value weighted index that measures all domestic and non-US based securities, more than 4700 companies listed on the NASDAQ stock market.
- Russell Midcap Value: contains Russell Midcap stocks having less-than-average growth orientation and are included in the Russell 1000 Value Index.
- Russell 1000: consists of the 1000 largest securities in the Russell 3000 Index. The Russell 1000 is capitalizationweighted.
- Russell 1000 Growth: contains Russell 1000 stocks having greater-than-average growth orientation. Stocks tend
 to exhibit lower dividend yields and higher price-to-book ratios, price-earnings ratios and forecast growth values than
 the Value universe. The index is capitalization-weighted (as opposed to equal-weighted).
- Russell 1000 Value: contains those Russell 1000 securities with a less-than-average growth orientation. Securities
 in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower
 forecasted growth values than the Growth universe. Russell 1000 Value is capitalization-weighted.
- Russell 2000: contains the smallest 2,000 stocks in the Russell 3000 Index, representing approximately 11% of the Russell 3000 total market capitalization. The index is capitalization-weighted (as opposed to equal-weighted).
- Russell 2000 Growth: contains those Russell 2000 securities with a greater-than-average growth orientation.
 Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.
- Russell 2000 Value: contains those Russell 2000 securities with a less-than-average growth orientation. Securities
 in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower
 forecasted growth values than the Growth universe.
- Russell 3000: measures performance of the 3000 largest US companies based on total market capitalization. This
 index represents approximately 98% of the investable US equity market. The Russell 3000 is capitalization-weighted.



- Standard and Poor 500: the S&P, which represents approximately 75% of NYSE market capitalization and 30% of NYSE issues, contains 500 industrial, utility, transportation and financial companies in the U.S. markets (mostly NYSE issues). The S&P is capitalization-weighted (as opposed to equal-weighted), calculated on a total return basis with dividends reinvested.
- Morgan Stanley All Country World ex USA: an arithmetic, market value-weighted average of approx. 1800 securities from outside the United States. The index is calculated on a total return basis, including reinvestment of gross dividends before deduction of withholding taxes.
- Morgan Stanley Capital International Emerging Markets Free: contains securities of the following counties which are available to all investors regardless of local status: Argentina, Brazil, Chile, Colombia, Greece, India, Indonesia, Israel, Jordan, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Portugal, South Africa, Sri Lanka, Thailand, Turkey and Venezuela.
- Morgan Stanley Capital International EAFE: an arithmetic, market value-weighted average of over 900 securities
 from Europe, Australia, and the Far East. The index is calculated on a total return basis, including reinvestment of
 gross dividends before deduction of withholding taxes. The following countries are represented: Australia, Austria,
 Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Malaysia, Netherlands, New
 Zealand, Norway, Singapore, Spain, Sweden, Switzerland and the United Kingdom.
- Morgan Stanley Capital International Europe: includes companies representing 15 European countries: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.
- Morgan Stanley Capital International Pacific: includes companies representing 5 countries: Australia, Hong Kong, Japan, New Zealand and Singapore.
- Morgan Stanley Capital International Pacific ex Japan: includes companies representing 4 countries: Australia, Hong Kong, New Zealand and Singapore.
- Morgan Stanley All Country Asia Pacific: includes companies representing 14 countries: Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, Pakistan, Philippines, Korea, New Zealand, Singapore, Thailand, and Taiwan. It is calculated on a total return basis with dividends reinvested.

Fixed Income

 Barclays Capital Aggregate: an aggregate of the Government/Corporate Bond Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The index contains fixed rate debt issues with at least oneyear maturity, \$100 million par value outstanding, and investment grade ratings by Moody's, S&P or Fitch (in that order). Returns are market-value weighted inclusive of accrued interest.



- Barclays Capital Universal: This index contains the Barclays Capital Aggregate index bonds plus approximately 10% of the remaining index includes US High Yield, Eurodollar, Emerging Markets, 144A Private Placements, and CMBS bonds.
- Barclays Capital US Govt/Credit Intermediate: This index is a sub-component of the Barclays Capital Aggregate index. Bonds consist of the US Treasury, US Agency (non-MBS), and US Investment-grade credit holdings with a maturity range of 1 to 10 years.
- Bond Rating Methodology: Bond ratings are intended to characterize the risk associated with holding a particular bond or categories of bonds. These ratings are the risk assessed by the market and that the bond issuer must pay to attract purchasers to the bond. These ratings are expressed as a series of letters and sequences.

Rating Categories in descending order:

\Q	AAA:	The best quality rating, stable cash flo	ws, very protective bond covenants,	very low probability of
		default.		

 Aa: The second best rating. Stable cash flows, less protective bond covenants, very low probability of default.

A: Stable cash flows, less protective bond covenants, long-term probability of default is higher than AAA or Aa.

Medium quality rating, reliable cash flows short term, less-reliable cash flows long term, bond covenants offer limited protection. Moderate probability of default. Downgrade to a lower rating is also possible. Baa bonds are the lowest rating still considered 'investment grade.

Ba thru B: Highly speculative. Long-term assurance of cash flows and protective elements are low.

Purchasers of these bonds generally specialize in assessing credit risk of specific bond issues.

Much higher spreads versus investment grade bonds provide the incentive for purchasers. High default or downgrade risk.

♦ Caa thru C: Poor standing. Either close to default or in default. Highly probable loss of principal.

Coupon payments were not paid on the due date which puts the bond In default. Unless both

Protective covenants and issuer assets are adequate (not likely), holder loses all likelihood of recovering principal.

Private Real Estate

NCREIF Property Index: the NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Data is collected quarterly from a membership of investment managers and plan sponsors.



Returns are gross of fees; include income, realized gains/losses, and appreciation/depreciation; and are market-value weighted. Property values are determined by consistent appraisal methodology and sold properties are removed in the quarter of the sale (the historical data remains). Current quarter performance is preliminary.

IV. Universe Comparison

All Northern Trust Universes are gross of fees. Universe breaks are at 10, 25, 50, 75 and 90 percentiles.

TUCS Plan Universes

Published on a quarterly basis using monthly observations. Over time, the plan population members will change due to new plans being introduced and other plans closing or leaving the universe.

Public Funds

Includes the range of performance of all Public Funds greater than 10 billion dollars. Monitored by the Wilshire's Trust Universe Comparison Services Group. Plans include state and municipal plans and systems.

Manager Universes

Created using the performance of managers used by sponsor subscribers to the Risk & Performance Services Group (RPS). Each occurrence of a manager is considered as an observation. The manager universes are used to describe the actual experience of plan sponsors use of the managers; no manager supplied representative portfolios or composites are used in the creation of the universes. All occurrences of a manager are included in the magnitudes they are used by the sponsors; no stratification or judgments are introduced by RPS to alter a manager's representation. Manager portfolios are used from all market segments (ERISA, Public, Foundation & Endowments, and Wealth) since managers are hired to fulfill a specific policy objective that is not unique by plan type. Inclusion in a universe is based upon quantitative screening using the criteria described; an RPS analyst determines the comparison of a manager to this style background for reporting purposes. The portfolio criteria are applied as the average of the values over the time period being observed and not simply the current point in time value.

U.S. Equity - Large Cap Core

Includes portfolios with a portfolio average market capitalization greater than \$10 billion but not displaying any significant growth or value bias. The Barra Growth and Barra Book to Price risk factors are used to determine style orientation. Most of the portfolios also display a market-like beta.



U.S. Equity - Large Cap Growth

Includes portfolios with a portfolio average market capitalization greater than \$10 billion. Portfolios will also display a significant growth bias as represented by a Barra Growth Risk Factor in the top 40% of all US equity portfolios and a Barra Price/Book score in the bottom 70% of all US equity portfolios monitored by RPS. Most growth portfolios display an above market beta.

U.S. Equity - Large Cap Value

Includes portfolios with a portfolio average market capitalization greater than \$10 billion. Portfolios will also display a significant value bias as represented by a Barra Price/Book score in the top 30% of all US equity portfolios monitored by RPS. Most value portfolios display a below market beta and above market dividend yield.

U.S. Equity - Small Cap Growth

Includes portfolios with a portfolio average market capitalization of less than \$2 billion. Small Cap Growth portfolios will also display a growth bias as represented by a Barra Growth Risk Factor in the top 31% of all US equity portfolios monitored by RPS.

U.S. Equity - Small Cap Value

Includes portfolios with a portfolio average market capitalization of less than \$2 billion. Small Cap Value portfolios will also display a value bias as represented by a Barra Price/Book score in the top 27% and a Barra Growth factor score in the bottom 31% of all US equity portfolios monitored by RPS.

Non-U.S. Equity - Developed Markets

Includes all managers investing in developed markets outside of North America. The majority of the portfolios in this universe are EAFE-oriented but may contain an opportunistic allocation to emerging markets equity (extended EAFE). There are a few regional non-US equity managers (Europe & Pacific Basin) also represented.

Non-U.S. Equity - Emerging Markets

Includes all managers investing in emerging markets. The universe includes emerging markets managers that are diversified across all emerging markets as well as specialists in regional emerging markets.

U.S. Core Fixed Income

Includes all managers, active and passive, investing in US Fixed Income.



· Credit Opportunities

Includes all managers, active and passive, investing in US high yield and emerging market debt managers.

Public Real Assets

Includes all managers investing in Public REITS, TIPS, Commodities, and Multi Asset Real Asset/Return managers.

V. Investment Performance

- Time: the internal rate of return (accounting for daily cash flows) monthly based on trade-date, full accrual accounting, and using market values. For periods of greater than one month, a time series of linked monthly returns is maintained, introducing a time weighted effect.
- The Private Real Estate and the Private Equity returns are lagged one quarter.
- The LACERS Total Fund return is dollar-weighted to include Private Equity.

VI. Performance Attribution

Holdings-Based Attribution.

U.S. Equity, Non-U.S. Equity, and Fixed Income tables are Holdings-based. The table details various attribution subcategories which impacted each manager's performance such as: selection, weighting, duration, yield, quality, etc.

VII. Terminology

- Duration: A measure of the sensitivity of the price (the value of principal) of a fixed-income portfolio given a 1% change in the US Treasury yield curve (interest rates). A portfolio with a duration of 4 would be expected to lose 4% of its value when interest rates rise 1%. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices.
- Information ratio: A ratio of portfolio returns above the returns of a benchmark (usually an index) to the volatility of
 those returns. The information ratio (IR) measures a portfolio manager's ability to generate excess returns relative to a
 benchmark, but also attempts to identify the consistency of the investor. This ratio will identify if a manager has beaten



the benchmark by a lot in a few months or a little every month. The higher the IR the more consistent a manager is and consistency is an ideal trait.

- Standard deviation: A statistical measure of volatility or the degree to which an individual value in a probability
 distribution tends to vary from the mean of the distribution. A manager with a one-year return of 5% and a standard
 deviation of 5, indicates the range of returns for this manager will likely fall between 0% and 10% during most annual
 time periods.
- Tracking error: A measure of the difference between returns of the portfolio and that of the benchmark it was attempting to imitate; reported as a "standard deviation percentage" difference.