WILSHIRE ASSOCIATES

Wilshire Consulting

Employees' Retirement Fund of the City of Dallas

Executive Summary of Performance

Third Quarter 2019

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Capital Market Overview

U.S. Equity Market

The U.S. stock market, represented by the Wilshire 5000 Total Market Index, was up 1.2% for the third quarter of 2019 and 20.1% for the year. Trade talks with China continue to be an important unknown while the Federal Reserve's possible continued monetary easing has added to the uncertainty surrounding markets. Investors are encouraged, however, as the U.S. economy remains sound, especially compared to global economic conditions.

Large capitalization stocks outperformed small caps for the quarter as the Wilshire Large-Cap Index was up 1.5% versus a loss of -1.8% for the Wilshire US Small-Cap Index. The large-cap segment of the market leads small-caps for the past twelve months, as well. The Wilshire US Micro-Cap Index was down -5.1% for the quarter and -8.6% for the year. Growth stocks trailed value during the third quarter but outperformed in the small cap space during the past twelve months.

Eight of the eleven major sectors were in positive territory during the third quarter. The strongest performing sectors were Utilities (+8.1%), Real Estate (+7.6%) and Consumer Staples (+5.9%). The worst performing sectors were Energy (-7.1%) and Health Care (-3.8%).

Fixed Income Market

The U.S. Treasury yield curve fell across all maturities during the quarter with the biggest decreases occurring in long end of the curve. The U.S. Treasury yield curve fell across all maturities with the biggest decreases occurring in the long end of the curve. The Federal Open Market Committee decreased its overnight rate by 0.25% at both the July and September meetings. Credit spreads were little changed by quarter-end within both the investment grade and high yield markets. The 10-year U.S. Treasury yield has fallen a full 1% this year. The problem for investors in search of yield is the U.S. currently offers some of the best rates in the developed world.

Non-U.S. Markets

Equity markets outside of the U.S. continue to enjoy a strong 2019. Germany's manufacturing recession worsened during the quarter to levels last seen during the global financial crisis. News out of Britain is more encouraging although the looming Brexit deadline of October 31 is rapidly approaching without an exit deal. Emerging Markets were down, in aggregate, largely due to a negative quarter for China, which comprises nearly one-third of the index. Also, some of the world's major economies such as France and Germany are experiencing negative rates both in the short and long-term portion of the curve. A recent study by the Bank for International Settlements shows there is a record $17 trillion in global debt that carries a negative yield, equal to approximately 20% of global GDP.

Real Assets Markets

U.S. real estate securities outperformed broader equities during the quarter and continue to lead for the year. Global real estate securities are up double-digits for the year, as well. Crude oil markets are likely near equilibrium, where current global demand is approximately equal to current global supply. Natural gas and crude oil prices continue to be volatile. MLPs were down for the quarter (-5.02%) but are up strong for the year. Finally, gold prices were up and finished at approximately $1,466 per troy ounce, up +3.7% from last quarter.

Summary of Index Returns

For Periods Ended September 30, 2019

	Quarter	One Year	Three Years	Five Years	Ten Years
Domestic Equity					
Standard & Poor's 500	1.70%	4.25%	13.39%	10.84%	13.24%
Wilshire 5000	1.23	2.95	12.91	10.58	13.09
Wilshire 4500	-1.40	-3.34	10.17	9.11	12.67
Wilshire Large Cap	1.53	4.05	13.41	10.87	13.21
Wilshire Small Cap	-1.76	-6.99	8.25	8.00	12.07
Wilshire Micro Cap	-5.08	-16.93	4.93	5.13	9.20
Domestic Equity					
Wilshire Large Value	2.19%	6.41%	10.83%	9.39%	12.28%
Wilshire Large Growth	0.82	1.54	16.02	12.26	14.13
Wilshire Mid Value	1.44	0.81	8.17	8.86	12.67
Wilshire Mid Growth	-1.97	-1.00	12.21	8.71	12.77
Wilshire Small Value	-0.86	-7.41	5.48	7.38	11.35
Wilshire Small Growth	-2.68	-6.59	10.97	8.46	12.66
International Equity					
MSCI All World ex U.S.	-1.80%	-1.23%	6.33%	2.90%	4.45%
MSCI All World ex U.S. (LC)	0.74	1.34	8.03	5.78	6.68
MSCI EAFE	-1.07	-1.34	6.48	3.27	4.90
MSCI Europe	-1.80	-0.75	6.56	2.38	4.61
MSCI Pacific	0.23	-2.17	6.53	5.11	5.61
MSCI Emerging Markets Index	-4.25	-2.02	5.97	2.33	3.37
Domestic Fixed Income					
Bloomberg Aggregate Bond	2.27%	10.30%	2.92%	3.38%	3.75%
Bloomberg Credit	2.98	12.63	4.33	4.54	5.32
Bloomberg Mortgage Back Sec.	1.37	7.80	2.32	2.80	3.14
Bloomberg Treasury	2.40	10.48	2.24	2.91	3.08
Citigroup High Yield Cash Pay	0.95	5.73	5.77	4.97	7.54
Bloomberg US TIPS	1.35	7.13	2.21	2.45	3.46
91-Day Treasury Bill	0.56	2.39	1.54	0.98	0.54
International Fixed Income					
Citigroup Non-U.S. Gov. Bond	-0.11%	6.78%	0.60%	1.28%	1.15%
Citigroup World Gov. Bond	0.85	8.13	1.19	1.80	1.69
Currency*					
Euro vs. $	-4.27%	-6.14%	-1.01%	-2.90%	-2.89%
Yen vs. $	-0.31	5.10	-2.15	0.30	-1.87
Pound vs. $	-3.17	-5.50	-1.74	-5.34	-2.57
Real Estate					
Wilshire REIT Index	7.88%	18.39%	7.21%	10.17%	13.06%
Wilshire RESI	7.85	18.27	7.47	10.49	13.19

*Positive values indicate dollar depreciation.

Total Fund Overview

Asset Class Performance

	Assets ($Mil)	Assets (%)	Performance (%) QTR	YTD	1-year	3-year	5-year	10-year
U.S. Equity	465.4	13.1	0.42	18.11	-0.89	11.28	9.60	12.34
International Equity	485.6	13.7	-2.93	10.93	-4.02	5.95	3.27	5.74
Global Equity	251.2	7.1	-1.33	14.00	-1.82	9.10	5.85	-.-
Global Low Volatility	363.3	10.2	2.38	17.40	8.39	9.80	-.-	-.-
Real Estate	418.9	11.8	3.10	12.72	10.06	6.12	8.53	12.49
Global Fixed Income	518.9	14.6	2.29	8.84	9.84	3.29	3.72	4.58
High Yield	355.9	10.0	1.42	11.10	5.57	5.23	4.77	7.12
Credit Opportunities	175.6	4.9	0.60	9.39	5.96	5.20	-.-	-.-
MLPs	239.1	6.7	-5.56	13.25	-8.51	-1.31	-5.71	-.-
Private Equity	250.7	7.1	3.37	9.52	15.90	14.23	11.78	14.76
Cash Equivalents	29.2	0.8	0.57	1.82	2.40	1.54	0.98	0.54
Total Fund	**3,553.7**	**100.0**	**0.53**	**12.81**	**4.16**	**7.12**	**5.81**	**8.63**
Asset Allocation Policy			**0.88**	**13.54**	**4.85**	**6.94**	**5.56**	**8.41**
Value Added vs Policy			*-0.35*	*-0.73*	*-0.69*	*0.18*	*0.25*	*0.22*
Actuarial Rate			1.94	3.92	8.00	8.00	8.02	8.14
Wilshire 5000 Index			1.23	20.11	2.95	12.91	10.58	13.09
S&P 500 Index			1.70	20.55	4.25	13.39	10.84	13.24
MSCI ACWI x-U.S. IMI Index			-1.72	11.39	-1.84	6.10	3.04	4.66
MSCI EAFE Index			-1.07	12.80	-1.34	6.48	3.27	4.90
Bloomberg Aggregate Bond Index			2.27	8.52	10.30	2.92	3.38	3.75
Citigroup High Yield Cash Pay			0.95	10.93	5.73	5.77	4.97	7.54
Wilshire RE Securities Index			7.85	27.15	18.27	7.47	10.49	13.19
91-Day Treasury Bill			0.56	1.81	2.39	1.54	0.98	0.54

Total Fund Asset Growth

($Millions)	Beg. Mkt Value	Net Contrib.	Net Distrib.	Investment Fees	Investment Gain/Loss	End Mkt Value	Total Return
1Q15	3,402.5	36.1	73.5	3.5	85.2	3,446.8	2.40%
2Q15	3,446.8	44.4	83.3	3.7	6.5	3,410.6	0.08%
3Q15	3,410.6	29.6	69.6	3.4	(202.7)	3,164.5	-6.08%
4Q15	3,164.5	49.4	82.5	3.2	71.0	3,199.2	2.12%
1Q16	3,199.2	89.0	127.7	3.0	40.9	3,198.3	1.28%
2Q16	3,198.3	70.8	105.2	2.8	116.2	3,277.3	3.54%
3Q16	3,277.3	32.9	67.4	2.9	117.3	3,357.2	3.48%
4Q16	3,357.2	28.1	66.0	3.0	21.4	3,337.8	0.62%
1Q17	3,337.8	36.2	74.6	2.6	140.0	3,436.7	4.15%
2Q17	3,436.7	24.9	68.7	3.2	86.6	3,476.4	2.46%
3Q17	3,476.4	47.8	84.0	3.5	110.0	3,546.6	3.10%
4Q17	3,546.6	31.1	74.1	3.3	107.5	3,607.8	3.02%
1Q18	3,607.8	31.9	74.7	3.1	(37.9)	3,524.0	-1.09%
2Q18	3,524.0	27.2	71.0	3.6	68.0	3,544.4	1.83%
3Q18	3,544.4	31.6	75.1	3.3	101.0	3,598.8	2.74%
4Q18	3,598.8	27.5	73.9	3.5	(274.6)	3,274.3	-7.66%
1Q19	3,274.3	32.4	71.8	3.2	292.5	3,524.2	8.90%
2Q19	3,524.2	27.7	76.6	3.4	108.0	3,579.9	3.04%
3Q19	3,579.9	32.8	76.2	3.2	20.4	3,553.7	0.53%

- At the end of the third quarter of 2019, the Fund's market value was $3,553.7 million, which represented a decrease of $26.2 million in total net asset value over the previous quarter. The change in the Fund's value was driven by $32.8 million in net contributions, $20.4 million gain on investments, $76.2 million in net distributions and $3.2 million in investment management fees.

Quarterly Total Fund Attribution vs. Policy

Asset Class	Assets (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
U.S. Equity	13.4	0.42	15.0	1.23	-1.58	-0.81	-0.01	0.01	-0.12	-0.12
International Equity	13.8	-2.93	15.0	-1.72	-1.22	-1.21	0.02	0.02	-0.18	-0.15
Global Equity	7.1	-1.33	7.5	-0.03	-0.43	-1.31	0.00	0.01	-0.10	-0.09
Global Low Volatility	10.0	2.38	10.0	2.74	0.02	-0.36	0.00	0.00	-0.04	-0.04
Public REITs	4.9	7.79	5.0	7.85	-0.06	-0.06	-0.01	0.00	0.00	-0.01
Direct Core Real Estate	6.6	-0.34	5.0	-0.45	1.58	0.11	-0.02	0.00	0.01	-0.01
Global Fixed Income	14.5	2.29	15.0	2.27	-0.48	0.02	-0.02	0.00	0.00	-0.02
High Yield	10.0	1.42	10.0	0.95	0.04	0.46	0.00	0.00	0.05	0.04
Credit Opportunities	5.1	0.60	5.0	1.24	0.06	-0.64	0.00	0.00	-0.03	-0.03
MLPs	6.9	-5.56	7.5	-5.02	-0.59	-0.54	0.03	0.00	-0.04	-0.01
Private Equity	6.9	3.37	5.0	3.49	1.93	-0.12	0.05	0.00	-0.01	0.03
Cash Equivalents	0.7	0.57	0.0	0.56	0.74	0.00	0.00	0.00	0.00	0.00
Monthly Linked Return	**100.0**	**0.48**	**100.0**	**0.88**		**-0.40**	**0.05**	**0.03**	**-0.48**	**-0.40**
Trading/Hedging		*0.05*		*0.00*		*0.05*				***0.05***
Total		**0.53**		**0.88**		**-0.34**				**-0.34**

0.88	**Asset Allocation Policy**
0.05	Actual/Tactical Asset Allocation
-0.48	Active Management
0.03	Interaction
0.05	Trading
0.53	**Total Fund Return**

**Note: factors may not sum exactly to total return due to rounding.*

The Total Fund attribution table, shown above, displays the return contribution of each asset class to the Total Fund's overall return. The attribution provides some insights as to whether tactical allocation and active management within asset classes helped or hurt performance during the quarter.

- ***Strategic Policy:*** The contribution to total return from each asset class, calculated as the percentage allocated to each asset class multiplied by the benchmark for that asset class.
- ***Actual Allocation:*** The return contribution during the quarter due to differences in the actual allocation from the policy allocation (i.e.: the actual allocation to U.S. equity was higher than the policy allocation). A positive number would indicate an overweight allocation benefited performance, and vice versa.
- ***Active Management:*** The return contribution from active management. This number would be positive if the asset class outperformed the designated policy index and vice versa (i.e.: the U.S. equity segment outperformed the policy index, the Wilshire 5000 Index, during the quarter and contributed positively to active management).
- ***Interaction:*** Captures the interaction of managers' performance and asset class weighting differences.
- ***Actual Return:*** The actual return of the asset classes if allocations to them were static during the quarter. These returns will not match exactly with the actual segment returns since asset class allocations change during the quarter due to market movement, cash flows, etc.

One-Year Total Fund Attribution vs. Policy

Asset Class	Assets (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
U.S. Equity	13.5	-0.89	15.0	2.95	-1.5	-3.84	-0.06	0.03	-0.56	-0.59
International Equity	13.7	-4.02	15.0	-1.84	-1.3	-2.17	0.05	0.02	-0.34	-0.27
Global Equity	7.0	-1.82	7.5	1.38	-0.5	-3.20	0.00	0.01	-0.25	-0.24
Global Low Volatility	10.2	8.39	10.0	9.77	0.2	-1.37	0.01	0.00	-0.14	-0.13
Public REITs	5.0	19.78	5.0	18.27	0.0	1.51	-0.03	0.00	0.07	0.04
Direct Core Real Estate	6.7	3.27	5.0	3.64	1.7	-0.37	-0.05	-0.01	-0.02	-0.08
Global Fixed Income	14.1	9.84	15.0	10.30	-0.9	-0.46	-0.16	0.01	-0.07	-0.23
High Yield	10.1	5.57	10.0	5.73	0.1	-0.16	-0.02	0.00	-0.02	-0.03
Credit Opportunities	5.1	5.96	5.0	6.95	0.1	-0.99	-0.01	0.00	-0.05	-0.06
MLPs	7.0	-8.51	7.5	-8.13	-0.5	-0.38	0.02	-0.02	-0.01	0.00
Private Equity	6.8	15.90	5.0	8.84	1.8	7.07	0.01	0.10	0.32	0.43
Cash	0.8	2.40	0.0	2.39	0.8	0.00	0.03	0.00	0.00	0.03
Monthly Linked Return	**100.0**	**3.72**	**100.0**	**4.85**		**-1.13**	**-0.22**	**0.15**	**-1.06**	**-1.13**
Trading		0.45		0.00		0.45				**0.45**
Total		***4.16***		***4.85***		***-0.68***				***-0.68***

4.85	**Strategic Policy Allocation**
-0.22	Actual/Tactical Asset Allocation
-1.06	Active Management
0.15	Interaction
0.45	Trading
4.16	Total Return

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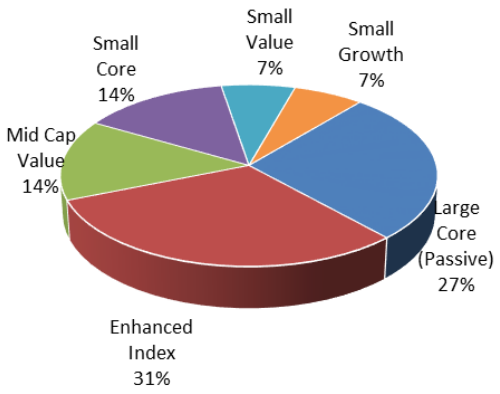
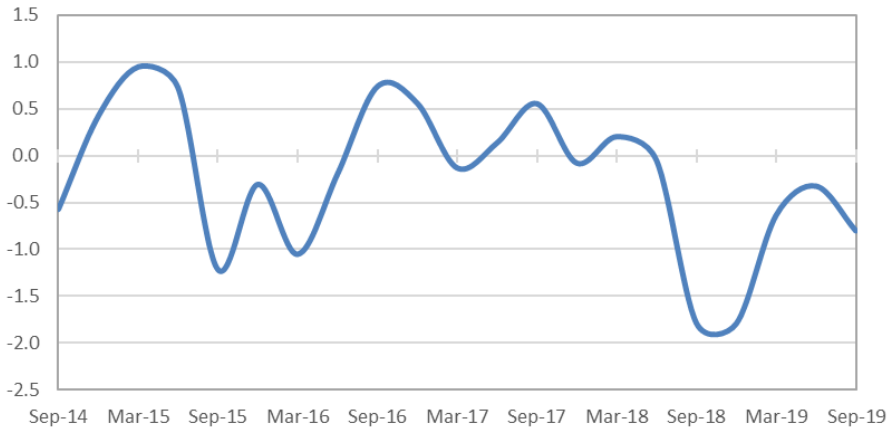
- ***Actual Return:*** The actual return of the asset classes if allocations to them were static during the quarter. These returns will not match exactly with the actual segment returns since asset class allocations change during the quarter due to market movement, cash flows, etc.

U.S. Equity Overview

U.S. Equity Structure



U.S. Equity Composite
Quarterly Excess Return



Composite

	Assets (Millions)	Performance QTR	YTD	1-year	3-year	5-year	10-year
Total U.S. Equity (Gross)	**$ 465.4**	**0.52**	**18.49**	**-0.47**	**11.69**	**9.99**	**12.73**
Total U.S. Equity (Net)		**0.42**	**18.11**	**-0.89**	**11.28**	**9.60**	**12.34**
Custom Benchmark [1]		1.23	20.11	2.95	12.91	10.58	13.09
Net of Fee Value Added vs Benchmark		*-0.81*	*-2.00*	*-3.84*	*-1.63*	*-0.98*	*-0.75*
Small Cap Composite	**$ 129.4**	-2.84	13.67	-9.13	7.59	8.25	11.22
Wilshire 5000 Index		1.23	20.11	2.95	12.91	10.58	13.09
S&P 500 Index		1.70	20.55	4.25	13.39	10.84	13.24
Russell 2000 Index		-2.40	14.18	-8.89	8.23	8.19	11.19

U.S. Equity Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Large Core - Passive								
Northern Trust S&P 500 (Gross)	**$ 126.3**	**1.70**	**20.61**	**4.30**	**13.41**	**10.88**	**10.01**	**Dec-94**
Northern Trust S&P 500 (Net)		**1.70**	**20.61**	**4.30**	**13.41**	**10.88**	**9.98**	**Dec-94**
S&P 500 Index		1.70	20.55	4.25	13.39	10.84	9.94	Dec-94
Net of Fee Value Added vs Benchmark		*0.00*	*0.06*	*0.05*	*0.02*	*0.04*	*0.04*	
Enhanced Index								
T. Rowe Price (Gross)	**$ 142.7**	**1.64**	**21.65**	**5.12**	**14.49**	**11.89**	**9.49**	**Mar-06**
T. Rowe Price (Net)		**1.56**	**21.38**	**4.81**	**14.15**	**11.54**	**9.17**	**Mar-06**
S&P 500 Index		1.70	20.55	4.25	13.39	10.84	8.62	Mar-06
Net of Fee Value Added vs Benchmark		*-0.14*	*0.83*	*0.56*	*0.76*	*0.70*	*0.55*	
Information Ratio				**0.64**	**0.62**	**0.59**		
Sharpe Ratio				**0.12**	**1.01**	**0.86**		

[1] Domestic Equity Custom Benchmark: Wilshire 5000 Index (3q99 – Present); S&P 500 Index (1q90 – 2q99).

U.S. Equity Overview (Continued)

U.S. Equity Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Small Core - Active								
Systematic Financial (Gross)	**$ 65.4**	**0.26**	**15.64**	**-5.85**	**10.97**	**11.33**	**11.36**	**Jun-03**
Systematic Financial (Net)		**0.06**	**14.91**	**-6.66**	**10.03**	**10.39**	**10.56**	**Jun-03**
Russell 2000 Index		-2.40	14.18	-8.89	8.23	8.19	8.90	Jun-03
Net of Fee Value Added vs Benchmark		*2.46*	*0.73*	*2.23*	*1.80*	*2.20*	*1.66*	
Information Ratio				**0.54**	**0.41**	**0.51**		
Sharpe Ratio				**-0.37**	**0.50**	**0.61**		
Small Value - Active								
Channing Capital Management (Gross) *	**$ 32.7**	**-1.85**	**16.66**	**-8.83**	**6.43**	**6.93**	**5.88**	**Oct-13**
Channing Capital Management (Net) *		**-2.07**	**15.83**	**-9.73**	**5.41**	**5.92**	**4.90**	**Oct-13**
Russell 2000 Value Index		-0.57	12.82	-8.24	6.54	7.17	5.57	Oct-13
Net of Fee Value Added vs Benchmark		*-1.50*	*3.01*	*-1.49*	*-1.13*	*-1.25*	*-0.67*	
Information Ratio				**-0.25**	**-0.22**	**-0.26**		
Sharpe Ratio				**-0.41**	**0.20**	**0.28**		
Small Growth - Active								
Redwood Investments (Gross) *	**$ 31.2**	**-8.93**	**9.64**	**-12.72**	**4.98**	**-.-**	**4.98**	**Sep-16**
Redwood Investments (Net) *		**-9.09**	**9.08**	**-13.34**	**4.37**	**-.-**	**4.37**	**Sep-16**
Russell 2000 Growth Index		-4.17	15.34	-9.63	9.79	-.-	9.79	
Net of Fee Value Added vs Benchmark		*-4.92*	*-6.26*	*-3.71*	*-5.42*		*-5.42*	
Information Ratio				**-0.68**	**-0.93**	**-.-**		
Sharpe Ratio				**-0.61**	**0.15**	**-.-**		
Mid Cap Value - Active								
Smith Graham Mid Cap Value (Gross) *	**$ 67.0**	**1.68**	**15.37**	**-6.16**	**-.-**	**-.-**	**-0.57**	**Dec-17**
Smith Graham Mid Cap Value (Net) *		**1.49**	**14.73**	**-6.88**	**-.-**	**-.-**	**-1.25**	**Dec-17**
Russell Midcap Index		0.48	21.93	3.19	-.-	-.-	6.08	
Net of Fee Value Added vs Benchmark		*1.01*	*-7.20*	*-10.07*			*-7.33*	
Information Ratio				**-0.94**	**-.-**	**-.-**		
Sharpe Ratio				**-0.32**	**-.-**	**-.-**		

- The Fund's domestic equity composite generated a return of 0.42% (net of fees) during the third quarter of 2019, trailing the Wilshire 5000 Total Market Index, which returned 1.23%. Relative performance was negative during the quarter for all active U.S. equity managers in the composite aside from Smith Graham and Systematic. Following this quarter's results, the domestic equity composite is trailing its benchmark over the one-, three-, five- and ten-year periods.

U.S. Equity Overview (Continued)

Northern Trust (Passive)

- Northern Trust manages a passive large-cap core equity portfolio for the Fund, which is designed to track the S&P 500 Index and replicate the performance of overall market. To date, the passive large-cap core portfolio is performing in line with expectations, mirroring the risk and return profile of the benchmark index and exhibiting very low tracking error over all time periods.

T. Rowe Price (Enhanced)

- T. Rowe Price manages the Fund's enhanced equity index portfolio. The T. Rowe Price portfolio returned 1.56% (net of fees) during the third quarter, trailing its benchmark index (S&P 500) which returned 1.70%. During the period stock selection and sector positioning were modestly additive during the period but lagged in the Energy and Health Care sectors, leading to relative underperformance compared to the benchmark. During the period stock selection was strongest within the portfolio's Consumer Staples and Utilities sectors, both of which posted returns above that of their respective benchmark holdings. Stock selection was weakest within Energy and Health Care. Historically, the portfolio's overall sector allocation does not deviate too broadly from the Standard & Poor's 500 (approximately +/- 1%) which means the bulk of the value-added will come from stock selection. The T. Rowe portfolio remains concentrated in large-capitalization stocks (with an average market cap of $248,939 million). The portfolio is currently outperforming against its benchmark over the one-, three-, and five-year periods as well as since inception (3/06).

Systematic Financial (Small-Cap Core)

- Systematic Financial manages the Fund's small-cap core portfolio. The Systematic portfolio returned 0.06% (net of fees) during the third quarter, outperforming its benchmark (Russell 2000) which returned -2.40%. Accordingly, stock selection had a positive contribution to performance. Selection within Industrials and Energy sectors were standouts, offsetting negative impacts from the Consumer Discretionary and Communication sectors. Sector allocation also had a positive effect on relative returns. Underweight positions to Energy nicely added to outperformance in the period, while an underweight to Utilities was a slight headwind to relative performance. The Systematic portfolio is currently outperforming against its benchmark over the one-, three-, five- and ten-year periods as well as since inception despite its recent struggles relative to the benchmark.

Channing Capital Management (Small-Cap Value)

Channing Capital manages the Fund's small-cap value portfolio. The Channing portfolio was down -2.07% (net of fees) during the third quarter, underperforming its benchmark (Russell 2000 Value) which was down only -0.57%. Poor performance in the Communication Services, Consumer Discretionary, and Health Care were the main drivers of underperformance this quarter. Here, the portfolio's holdings were down -28.0%, -3.1%, and -9.3% versus -5.7%, 5.7%, and -6.4% for the respective benchmark holdings. To date, the Channing portfolio is positioned with an underweight allocation to financials (23% portfolio weight vs. 30% benchmark weight) with overweight allocation to industrials (17% portfolio weight vs 12% benchmark weight). The Channing portfolio is outperforming over the YTD period but continues to trail its benchmark over all other extended time periods including since inception (12/13).

U.S. Equity Overview (Continued)

Redwood Investments (Small-Cap Growth)

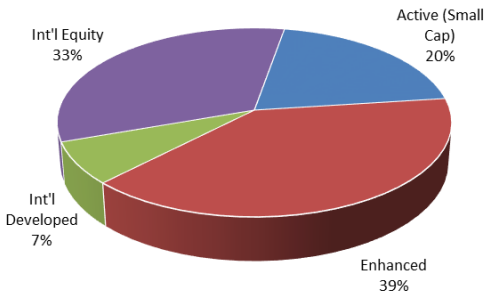
- Redwood Investments manages the Fund's small-cap growth portfolio, which was funded in late 2016. The Redwood portfolio was down -9.09% during the third quarter, trailing its benchmark (Russell 2000 Growth) which was down -4.17%. The portfolio currently holds 52 securities which is considerably more concentrated than the benchmark, as such, individual stock selection typically emerges as the predominant driver of relative performance in any given period. During the quarter, several stocks within the portfolio delivered strong returns relative to the benchmark. Of note, from a stock selection perspective the portfolio was aided by contributions from its Consumer Staples holdings. Success in this segment was mitigated by poor stock picking results in Health Care and Financials. The largest individual contributors to performance during the period were Trex Company, Inc. and Liveperson, Inc. During the period management increased exposure to the Consumer Staples and Information Technology sectors while reducing exposure to the Health Care and Communication Service sectors. The Redwood portfolio is currently trailing its benchmark for the one-year, three-year, and since inception periods (09/16).

Smith, Graham & Co. (Mid-Cap Value)

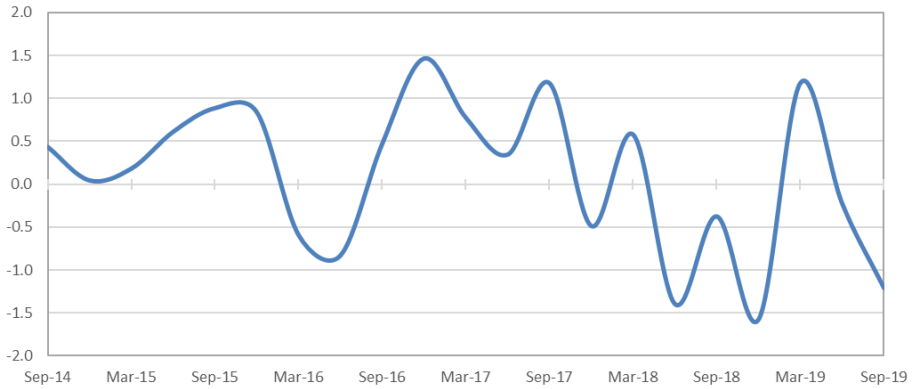
- Smith, Graham & Co. manages the Fund's mid-cap value portfolio, which was funded in December of 2017. The mid-cap portfolio returned 1.49% (net of fees) during the third quarter, outperforming its benchmark (Russell Mid Cap Index) which returned 0.48%. During the quarter, the portfolio's strongest sector performance relative to the Russell Midcap Index sectors was in: Energy, Technology and Materials & Processing. The portfolio sectors with the weakest performance compared to the Russell Midcap Index sectors were: Financial Services and Consumer Staples. The stocks that contributed the most to absolute performance during the quarter were: Western Digital, Chico's FAS, Jabil, Dick's Sporting Goods and AutoNation. The stocks that detracted the most from absolute performance were: Macy's, Anthem, United States Steel, Ralph Lauren and JetBlue Airways. During the quarter, one new position was established: LogMeln, Inc.; and WellCare Health Plans was eliminated following the announcement of an acquisition by Centene. At the end of September, the portfolio was diversified among 68 securities, none exceeding a 2.4% position. The 10 largest holdings represented approximately 20% of the total portfolio. Sector weightings were within plus/minus five percentage points of the Russell Midcap Index. Cash represented approximately 1.2% of the portfolio on September 30th. Smith Graham portfolio trails its benchmark over the one-year period and since inception (12/17).

International Equity Overview

International Equity Structure



International Equity Composite
Quarterly Excess Return



International Equity Composite

	Assets (Millions)	Performance QTR	YTD	1-year	3-year	5-year	10-year
Total International Equity (Gross)	**$ 485.6**	**-2.87**	**11.24**	**-3.65**	**6.41**	**3.70**	**6.19**
Total International Equity (Net)		**-2.93**	**10.93**	**-4.02**	**5.95**	**3.27**	**5.74**
Custom Benchmark [1]		-1.72	11.39	-1.84	6.10	3.04	4.62
Net of Fee Value Added vs Benchmark		*-1.21*	*-0.46*	*-2.18*	*-0.15*	*0.23*	*1.12*
MSCI ACWI x-US IMI (Net)		-1.72	11.39	-1.84	6.10	3.04	4.66
MSCI ACWI x-US (Net)		-1.80	11.56	-1.23	6.33	2.90	4.45
MSCI EAFE (Net)		-1.07	12.80	-1.34	6.48	3.27	4.90
MSCI Emerging Markets		-4.25	5.90	-2.02	5.97	2.33	3.37

International Equity Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Int'l Small Cap - Active								
Acadian International (Gross)	**$ 98.1**	**-5.11**	**9.99**	**-7.96**	**6.92**	**5.19**	**8.53**	**Mar-89**
Acadian International (Net)		**-5.24**	**9.53**	**-8.48**	**6.32**	**4.62**	**8.08**	**Mar-89**
Custom Benchmark		-1.19	10.28	-5.63	4.64	3.98	5.68	Mar-89
Net of Fee Value Added vs Benchmark		*-4.05*	*-0.75*	*-2.85*	*1.68*	*0.64*	*2.40*	
Information Ratio				**-0.73**	**0.40**	**0.17**		
Sharpe Ratio				**-0.57**	**0.35**	**0.27**		

[2] International Equity Custom Benchmark: MSCI ACWI x-US IMI (2q10 – Present); MSCI ACWI x-US (1q99 – 1q10); Wilshire Non-US/Non-SA (2q96 – 4q98); MSCI EAFE (4q89 – 1q96)

[3] Acadian Custom Benchmark: MSCI ACWI x-US Small Cap (3q09 – Present); MSCI EAFE Small Cap (4q99 – 2q09); S&P/Citigroup Eur/Pac EMI Index (2q96 – 3q99); MSCI EAFE (2q89 – 1q96). Performance Objective: Custom Benchmark +2% (1q05 – Present); +1% (2q89 – 4q04).

International Equity Overview (Continued)

International Equity Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Int'l Enhanced Index								
AQR Capital Management (Gross)	**$ 191.4**	**-2.86**	**9.32**	**-5.43**	**5.26**	**3.20**	**3.33**	**Mar-06**
AQR Capital Management (Net)		**-2.86**	**9.01**	**-5.84**	**4.70**	**2.63**	**2.81**	**Mar-06**
Custom Benchmark		-1.80	11.56	-1.23	6.33	2.90	2.62	Mar-06
Net of Fee Value Added vs Benchmark		*-1.06*	*-2.55*	*-4.61*	*-1.63*	*-0.27*	*0.19*	
Information Ratio				**-1.50**	**-0.59**	**-0.11**		
Sharpe Ratio				**-0.44**	**0.24**	**0.13**		
Int'l Developed								
Ativo International Developed (Gross) *	**$ 35.3**	**-1.10**	**14.42**	**-0.21**	**-.-**	**-.-**	**0.26**	**Dec-17**
Ativo International Developed (Net) *		**-1.25**	**13.91**	**-0.82**	**-.-**	**-.-**	**-0.28**	**Dec-17**
MSCI EAFE Index		-1.07	12.80	-1.34	-.-	-.-	-1.58	
Net of Fee Value Added vs Benchmark		*-0.18*	*1.11*	*0.52*			*1.30*	
Information Ratio				**0.16**	**-.-**	**-.-**		
Sharpe Ratio				**-0.20**	**-.-**	**-.-**		
Int'l Equity (Active)								
Baillie Gifford (Gross)	**$ 81.7**	**-1.69**	**-.-**	**-.-**	**-.-**	**-.-**	**4.06**	**Mar-19**
Baillie Gifford (Net)		**-1.69**	**-.-**	**-.-**	**-.-**	**-.-**	**4.03**	**Mar-19**
MSCI ACWI x-US (Net)		-1.80	-.-	-.-	-.-	-.-	1.13	
Net of Fee Value Added vs Benchmark		*0.11*					*2.90*	
Information Ratio				**-.-**	**-.-**	**-.-**		
Sharpe Ratio				**-.-**	**-.-**	**-.-**		
Int'l Equity (Active)								
Earnest Partners (Gross) *	**$ 79.1**	**-2.01**	**-.-**	**-.-**	**-.-**	**-.-**	**0.57**	**Mar-19**
Earnest Partners (Net) *		**-2.15**	**-.-**	**-.-**	**-.-**	**-.-**	**0.39**	**Mar-19**
MSCI ACWI x-US (Net)		-1.80	-.-	-.-	-.-	-.-	1.13	
Net of Fee Value Added vs Benchmark		*-0.35*					*-0.74*	
Information Ratio				**-.-**	**-.-**	**-.-**		
Sharpe Ratio				**-.-**	**-.-**	**-.-**		

- The Fund's international equity composite was down -2.93% (net of fees) during the third quarter of 2019, trailing the MSCI ACWI x-US Investable Market Index (IMI) which was down -1.72%. Active management was nearly in-line across the board for the Fund's international equity program with all managers except Baillie Gifford trailing their respective benchmarks. The program's long-standing small cap international equity mandate managed by Acadian faltered in the third quarter trailing its benchmark by a considerable margin ultimately leading to composite underperformance for the quarter. The recently funded Earnest Partners portfolio also trailed its benchmark during the period but only modestly. The international equity composite is currently outperforming against its benchmark for the five- and ten-, and since inception (12/89) periods but trailing against all others.

[5] AQR Custom Benchmark: MSCI ACWI x-US (2q10 – Present); MSCI EAFE (1q06 – 1q10); Performance Objective: Custom Benchmark + 1.5%.

Acadian (International Small-Cap)

- Acadian International manages the Fund's active small-cap international equity portfolio. During the third quarter the Acadian portfolio was down -5.24% (net of fees), underperforming against its benchmark (MSCI ACWI x-U.S. Small Cap) which was down only -1.19%. For the third quarter, the portfolio underperformed its benchmark, as gains realized from country allocation were offset by value lost from stock selection. Key sources of positive active return included stock selection in India, Turkey and France. Underweight positions in South Korea and Australia proved less successful, as did stock selection in Japan and Germany. Notable contributors during the period included Nova Measuring Instruments, Powerlong Real Estate Holdings, Sailun Group and Capcom Co. Notable decliners during the period included Telkom, Evraz, Deutz and Cyber Ark Software. As of quarter-end, the Acadian portfolio is outperforming against its benchmark for the three-, five-year, and since inception (3/89) periods.

AQR Capital Management (International-ACWI X-US)

- AQR Capital manages the Fund's international equity portfolio. The AQR portfolio was down -2.86% (net of fees) during the third quarter, underperforming its benchmark (MSCI ACWI x-US) which was down -1.80%. For developed markets, stock selection (-1.0%) was the largest detractor followed by country selection (-0.1%), while currency selection was flat. In emerging markets, stock selection (-0.2%) detracted from excess return, while country and currency selection were flat. Within stock selection, value and momentum were the main drivers of underperformance for the quarter. Quality and sentiment also detracted. Sector allocation was mostly flat for the quarter, with Materials being the largest detractor and Consumer Discretionary the largest contributor. Following this quarter's results, the AQR portfolio is underperforming against its benchmark for all periods except since inception (03/06).

Ativo (International Developed)

- Ativo manages the Fund's international developed equity portfolio. During the third quarter the Ativo portfolio was down -1.25%, trailing the MSCI EAFE Index, which was down -1.07%. Underperformance was primarily due to stock selection, although overall impact of regional and sector allocations was negative as well. Stock selection detracted in Japan and Pacific ex-Japan and was also unfavorable in most sectors, especially Materials and Energy. Underweights in Japan, Health Care, and Consumer Staples were additional headwinds. On the positive side, stock selection added value in Developed Europe/Middle East ex-UK, Canada, and the U.K. Stock selection also generated positive alpha in the Consumer Discretionary, Financials, and Industrials sectors. An underweight in Materials was another plus. The most significant changes to portfolio positioning during the quarter were reducing the overweight in the Pacific ex-Japan region and moving from underweight to overweight in the Financials and Consumer Discretionary sectors. The Ativo portfolio currently leads its benchmark comfortably over the one-year period and since inception (12/17).

Baillie Gifford (International Developed)

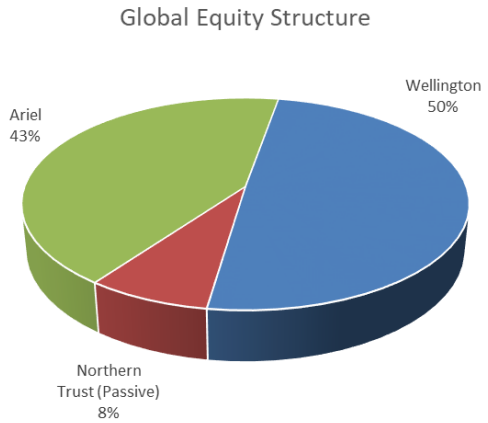
- Baillie Gifford manages one of the Fund's international developed equity portfolios. The portfolio outperformed the benchmark over the third quarter, with stock selection being the main driver of relative outperformance. Emerging Markets and the UK bore the brunt of the decline this quarter, though they were strong relative contributors to performance, driven by stock selection. At a sector level, stock selection in industrials was strong, though selection within Financials was a relative detractor. The long-standing underweight position in energy was helpful over the quarter. At a stock level, TSMC, the Taiwanese semiconductor manufacturer, was among the top contributors. Deutsche Boerse, the German stock exchange operator, also was a strong contributor. Other contributors included SMC and Bonhoo. Detractors from relative performance included Discovery, the South African insurance company and Rio Tinto, the Anglo-Australian diversified miner. Other detractors included SAP and Spotify. After completing its first two

quarters of performance within the Fund, the Baillie Gifford portfolio currently leads its benchmark since inception (03/19).

Earnest (International Developed)

- Earnest manages one of the Fund's international developed equity portfolios. Stock selection was positive for the quarter as the high quality nature of the portfolio holdings held up relatively better than peers; however, traditional defensive sectors outperformed which was a headwind to performance as the portfolio is relatively underweight sectors like Consumer Staples and Utilities. From a regional perspective, stock selection was also positive, particularly in Latin America, Japan, and Europe (ex UK), where fundamentals have played a larger role in pricing securities, and investors tend to be less focused on macro economic factors like trade and Brexit. Emerging Market stocks in the portfolio also outperformed, on average, compared to peers in the index during the quarter however, a relative overweight to developing countries detracted from performance as stocks in developed countries outperformed. After completing its first two quarters of performance within the Fund, the Earnest portfolio currently trails its benchmark since inception (03/19).

Global Equity Overview



Global Equity Composite

	Assets (Millions)	Performance QTR	YTD	1-year	3-year	5-year	10-year
Total Global Equity (Gross)	**$ 251.2**	**-1.20**	**14.48**	**-1.27**	**9.60**	**6.35**	**-.-**
Total Global Equity (Net)		**-1.33**	**14.00**	**-1.82**	**9.10**	**5.85**	**-.-**
MSCI ACWI (Net)		-0.03	16.20	1.38	9.71	6.65	-.-
Net of Fee Value Added vs Index		*-1.30*	*-2.20*	*-3.20*	*-0.61*	*-0.80*	
MSCI ACWI IMI (Net)		-0.18	15.87	0.48	9.35	6.60	8.45
MSCI ACWI (Net)		-0.03	16.20	1.38	9.71	6.65	8.35
MSCI World (Net)		0.53	17.60	1.83	10.20	7.18	9.01

Global Equity Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Global Equity - Active								
Wellington (Gross)	**$ 124.5**	**-2.13**	**17.18**	**-1.48**	**9.27**	**7.72**	**11.53**	**Jan-00**
Wellington (Net)		**-2.27**	**16.66**	**-2.07**	**8.64**	**7.11**	**10.91**	**Aug-12**
MSCI ACWI (Net)		-0.03	16.20	1.38	9.71	6.65	9.20	Aug-12
Net of Fee Value Added vs Benchmark		*-2.24*	*0.46*	*-3.45*	*-1.07*	*0.46*	*1.71*	
Information Ratio				**-0.87**	**-0.31**	**0.13**		
Sharpe Ratio				**-0.21**	**0.53**	**0.47**		
Global Equity - Active								
Ariel (Gross) *	**$ 107.3**	**-0.36**	**11.15**	**-1.47**	**-.-**	**-.-**	**3.10**	**Dec-17**
Ariel (Net) *		**-0.51**	**10.64**	**-2.08**	**-.-**	**-.-**	**2.53**	**Dec-17**
MSCI ACWI (Net)		-0.03	16.20	1.38	-.-	-.-	2.97	
Net of Fee Value Added vs Benchmark		*-0.48*	*-5.56*	*-3.46*			*-0.44*	
Information Ratio				**-0.91**	**-.-**	**-.-**		
Sharpe Ratio				**-0.27**	**-.-**	**-.-**		
Global Equity - Passive								
Northern Trust (Gross)	**$ 19.4**	**0.22**	**16.59**	**1.24**	**9.94**	**-.-**	**10.65**	**Oct-15**
Northern Trust (Net)		**0.22**	**16.56**	**1.21**	**9.88**	**-.-**	**10.60**	**Oct-15**
MSCI ACWI IMI (Net)		-0.18	15.87	0.48	9.35	-.-	10.07	Oct-15
Net of Fee Value Added vs Benchmark		*0.40*	*0.69*	*0.73*	*0.53*		*0.53*	

Global Equity Overview (Continued)

- The global equity composite is comprised of an actively-managed strategy (with a U.S. bias relative to the benchmark) managed by Wellington. This strategy is complemented by a passively-managed strategy provided by Northern Trust. The composite also recently added an exposure to the Ariel Global Product strategy which has recently completed its first full year of performance. The new structure favors active management (currently 92% active/8% passive) versus the previous 50%/50% allocation between active and passively managed funds within the composite. During the third quarter the recently funded Ariel strategy underperformed the benchmark while the Wellington strategy underperformed as well. The global equity composite is currently trailing its benchmark all time periods including since inception (9/12).

Wellington (Active)

- Wellington manages one of the Fund's active global equity portfolio. During the third quarter, the Wellington portfolio was down -2.27% (net of fees), underperforming its benchmark (MSCI ACWI Index) which was down -0.03%. The portfolio underperformed the index for the period. Security selection was the primary driver of relative underperformance. Weak selection in information technology, consumer discretionary and communication services was modestly offset by selection in consumer staples. Sector allocation, a result of the bottom-up stock selection process, contributed to returns. Allocation effect was driven by an underweight to materials and energy, but partially offset by an underweight to utilities, consumer staples and financials. On a regional basis, stock selection was weakest in North America and Developed Europe & Middle East ex UK. At the issuer level, the top two relative contributors were overweights to Walmart and Nike, while the top two relative detractors were not owning Apple and an overweight to Elanco Animal Health. The Wellington portfolio is currently underperforming over the one- and three-year periods but continues to outperform the benchmark over the five-year period along with since inception (09/12).

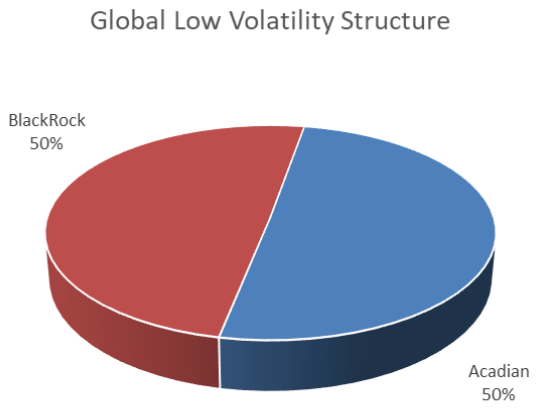
Ariel (Active)

- Ariel manages the Fund's second active global equity portfolio. During the period the Ariel portfolio was down -0.51% (net of fees), trailing its benchmark (MSCI ACWI Index) which was down -0.03%. On a regional basis, underexposure to U.S. equities was a main detractor this quarter. The portfolio continues to be overweight Communication Services and Health Care, and underweight Industrials, Financials, and Materials. Underperformance is attributable to weakness in Energy and Industrials. By comparison, Financials and Health Care contributed positively to performance. At the stock level, GlaxoSmithKline was the top contributor during the quarter. Deutsche Boerse was another top contributor. By contrast, Fluor was a top detractor from the resulting performance. Michelin, due to global concerns, was another top detractor. Following this quarter's performance, the Ariel portfolio now slightly trails its benchmark since inception (12/17).

Northern Trust (Passive)

- In late 2015 the Fund added a new global equity manager to the segment. Managed by Northern Trust, this strategy gives the Fund broadly diversified exposure to global stocks via a passively managed investment vehicle, which will result in lower turnover and costs incurred. At quarter-end the strategy represented approximately 8% of the segment's total value. After its third full year of performance, the Northern Trust portfolio continues to closely track the risk profile while modestly outperforming its benchmark index MSCI ACWI (+45) basis points since inception.

Global Low Volatility Equity Overview



Global Low Volatility Composite

	Assets (Millions)	Performance QTR	YTD	1-year	3-year	5-year	10-year
Total Global Low Volatility (Gross)	**$ 363.3**	**2.43**	**17.57**	**8.60**	**9.99**	**-.-**	**-.-**
Total Global Low Volatility (Net)		**2.38**	**17.40**	**8.39**	**9.80**	**-.-**	**-.-**
MSCI ACWI Minimum Volatility (Net)		2.74	17.57	9.77	9.84	-.-	-.-
Net of Fee Value Added vs Index		*-0.36*	*-0.17*	*-1.38*	*-0.04*		
MSCI ACWI Minimum Volatility (Net)		2.74	17.57	9.77	9.84	9.45	10.38
MSCI World x-US Minimum Volatility (Net)		1.37	13.42	4.79	6.66	6.48	7.27
MSCI ACWI (Net)		-0.03	16.20	1.38	9.71	6.65	8.35

Global Equity Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Global Low Volatility - Active								
Acadian Global Low Vol (Gross)	**$ 182.4**	**2.05**	**17.18**	**6.99**	**9.59**	**-.-**	**9.24**	**Jun-15**
Acadian Global Low Vol (Net)		**1.96**	**16.88**	**6.63**	**9.25**	**-.-**	**8.91**	**Jun-15**
MSCI ACWI (Net)		-0.03	16.20	1.38	9.71	-.-	7.10	Jun-15
Net of Fee Value Added vs MSCI ACWI		*1.99*	*0.68*	*5.25*	*-0.46*		*1.81*	
MSCI ACWI Min Vol (Net)		2.74	17.57	9.77	9.84	-.-	9.56	Jun-15
Net of Fee Value Added vs MSCI ACWI Min Vol		*-0.78*	*-0.69*	*-3.14*	*-0.59*		*-0.65*	
Information Ratio				**-0.68**	**-0.17**	**-.-**		
Sharpe Ratio				**0.33**	**0.84**	**-.-**		
Global Low Volatility - Passive								
BlackRock Global Low Vol (Gross)	**$ 180.9**	**2.82**	**17.96**	**10.20**	**10.37**	**-.-**	**10.10**	**Jun-15**
BlackRock Global Low Vol (Net)		**2.81**	**17.93**	**10.16**	**10.34**	**-.-**	**10.08**	**Jun-15**
MSCI ACWI Min Vol (Net)		2.74	17.57	9.77	9.84	-.-	9.56	Jun-15
Net of Fee Value Added vs Benchmark		*0.07*	*0.36*	*0.39*	*0.50*		*0.52*	

***Acadian Info Ratio/Sharpe Ratio statistics based on MSCI ACWI Min Vol benchmark.**

Global Low Volatility Equity Overview (Continued)

- In 2015, the Board elected to transfer assets from existing strategies elsewhere in the Fund into two new global low volatility equity portfolios. The first portfolio is actively-managed and run by Acadian. Its primary mandate is to provide the Fund with a better risk/return profile relative to the broad MSCI ACWI, its primary benchmark (the Acadian portfolio's performance is also measured against the MSCI ACWI Minimum Volatility as a secondary benchmark). The second portfolio is a passively-managed index fund provided through BlackRock. Taken together, both funds will add diversification benefits to the existing suite of public equity managers. Since its inception within the Fund, the global low volatility equity composite is in line with the MSCI ACWI Minimum Volatility Index.

Acadian (Global Low Volatility – Active)

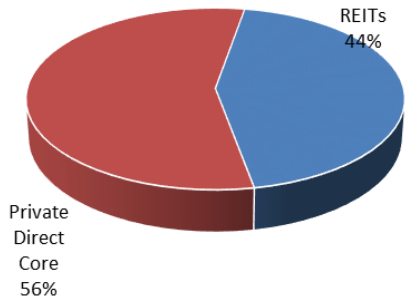
- Acadian manages the Fund's active global low volatility equity portfolio. The strategy recently completed its fourth year of performance within the Fund. During the third quarter, the Acadian portfolio returned 1.96% (net of fees). The portfolio's primary benchmark is the traditional cap-weighted MSCI All-Country World Index (ACWI). In addition, the portfolio is viewed in comparison to its secondary benchmark, the MSCI ACWI Minimum Volatility. The Acadian portfolio has wide dispersion in its economic sector allocations as compared to the cap-weighted index, potentially leading to a higher degree of tracking error (this difference is reduced when comparing against the secondary minimum volatility benchmark). During the quarter, the Acadian portfolio outpaced the MSCI ACWI but trailed the MSCI ACWI Minimum Volatility index. The effect of the lower beta tilt relative to the index was positive for the quarter, contributing approximately 60 basis points. The portfolio's emphasis on lower volatility stocks yielded positive results, contributing roughly 50 basis points. A combination of stock selection and an overweight position in Consumer Staples contributed roughly 80 basis points, driven by a position in Carlsberg. Stock selection in Materials also contributed approximately 50 basis points, led by an investment in Polyus. Offsetting these results was roughly 40 basis points of negative return from an underweight position in Information Technology, driven by a lack exposure to Apple. The Acadian portfolio is currently outperforming its primary benchmark since inception (+181 bps) (07/15). Following this quarter's results, the portfolio slightly trails its secondary minimum volatility benchmark since inception (-65 bps).

BlackRock (Global Low Volatility – Passive)

- BlackRock manages the Fund's passive global volatility equity strategy. The BlackRock portfolio is intended to provide a low-cost, highly diversified global equity investment strategy focused on minimizing volatility. The BlackRock portfolio is benchmark against the MSCI ACWI Minimum Volatility. To date, the portfolio continues to perform in line with expectations, closely tracking the risk profile of the benchmark index while outperforming the benchmark (+52 bps) since inception.

Real Estate Overview

Real Estate Structure



Total Real Estate Composite
Quarterly Excess Return

Real Estate Composite

	Assets (Millions)	Performance QTR	YTD	1-year	3-year	5-year	10-year
Total Real Estate (Gross)	**$ 418.9**	**3.25**	**13.21**	**10.71**	**6.75**	**9.22**	**13.25**
Total Real Estate (Net)		**3.10**	**12.72**	**10.06**	**6.12**	**8.53**	**12.49**
Custom Benchmark [1]		3.66	14.34	11.11	6.40	8.96	12.51
Net of Fee Value Added vs Benchmark		*-0.56*	*-1.62*	*-1.05*	*-0.28*	*-0.43*	*-0.02*
REIT Strategies	$ 185.5	7.79	28.52	19.78	7.74	10.05	13.09
Private Core Real Estate	$ 233.4	-0.34	2.31	3.27	4.92	7.24	-.-
Wilshire Real Estate Securities Index		7.85	27.15	18.27	7.47	10.49	13.19
NCREIF Open Diversified Core Equity (Net)		1.08	3.08	4.65	6.34	8.35	-.-

Real Estate Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Real Estate Securities - Public								
Adelante Capital Management (Gross)	**$ 92.5**	**7.72**	**29.36**	**21.26**	**8.84**	**10.72**	**10.97**	**Sep-01**
Adelante Capital Management (Net)		**7.56**	**28.80**	**20.56**	**8.22**	**10.08**	**10.39**	**Sep-01**
Wilshire Real Estate Securities		7.85	27.15	18.27	7.47	10.49	10.73	Sep-01
Net of Fee Value Added vs Index		*-0.29*	*1.65*	*2.29*	*0.75*	*-0.41*	*-0.34*	
Information Ratio				**1.61**	**0.46**	**-0.21**		
Sharpe Ratio				**1.11**	**0.53**	**0.66**		
CenterSquare (Gross)	**$ 93.0**	**8.16**	**28.51**	**19.40**	**-.-**	**-.-**	**19.34**	**May-18**
CenterSquare (Net)		**8.03**	**28.06**	**18.83**	**-.-**	**-.-**	**18.86**	**May-18**
Wilshire Real Estate Securities		7.85	27.15	18.27	-.-	-.-	17.80	May-18
Net of Fee Value Added vs Index		*0.18*	*0.91*	*0.56*			*1.06*	
Information Ratio				**0.44**	**-.-**	**-.-**		
Sharpe Ratio				**0.99**	**-.-**	**-.-**		

[6] Real Estate Custom Benchmark: 50% Wilshire RESI / 39% NCREIF ODCE NOF/11% Invesco Custom Benchmark (4q13 – Present); Wilshire RESI (4q89 – 4q10).

Real Estate Overview (Continued)

Real Estate Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Direct Core Real Estate - Private								
Heitman America Real Estate Trust (Gross)	**$ 93.2**	**1.80**	**3.04**	**3.84**	**6.70**	**9.03**	**11.75**	**Aug-10**
Heitman America Real Estate Trust (Net)		**1.57**	**2.36**	**2.92**	**5.75**	**8.07**	**10.71**	**Aug-10**
NCREIF Open-End Diversified Core (Net)		1.08	3.08	4.65	6.34	8.35	10.48	Aug-10
Net of Fee Value Added vs Index		*0.49*	*-0.72*	*-1.73*	*-0.59*	*-0.28*	*0.23*	
Invesco Core Real Estate USA (Gross)	**$ 78.8**	**2.24**	**4.91**	**7.43**	**9.03**	**10.86**	**12.08**	**Aug-10**
Invesco Core Real Estate USA (Net)		**2.02**	**4.23**	**6.51**	**8.10**	**9.91**	**11.10**	**Aug-10**
NCREIF Open-End Diversified Core (Net)		1.08	3.08	4.65	6.34	8.35	10.48	Aug-10
Net of Fee Value Added vs Index		*0.94*	*1.15*	*1.86*	*1.76*	*1.56*	*0.62*	
Invesco II	**$ 61.4**	**-5.80**	**-0.13**	**-0.13**	**-0.33**	**1.58**	**-0.21**	**Oct-13**

- The Fund's total real estate composite is comprised of both public market real estate securities (REITs) and private investment in direct core real estate. The total segment returned 3.10% (net of fees) during the third quarter, trailing its benchmark (split 50% Wilshire Real Estate Securities Index, 39% NCREIF Open-End Diversified Core Index and 11% Invesco II Custom Benchmark) which returned 3.66%. On the public side, one REIT exposure underperformed while the other outperformed the Wilshire Real Estate Securities Index. On the private side, both Invesco and Heitman led the NCREIF ODCE Index. Currently, the Fund's total real estate composite continues to trail the benchmark since inception (12/89).

Adelante Capital Management (REIT)

- Adelante Capital manages one of the Fund's real estate securities (REIT) portfolios. During the third quarter, the Adelante portfolio returned 7.56% (net of fees), trailing its benchmark index (Wilshire Real Estate Securities) which returned 7.85%. The underperformance was driven primarily by group weighting as the cash drag and underweight to the Health Care sector combined to detract 38 basis points from relative performance. The best performing holding this period was Sun Communities, Inc. (SUI), gaining 16.4%; the worst performing holding was Paramount Group, Inc. (PGRE), falling 4.4%. Stock selection was the best in the Apartments sector where Equity Residential, our biggest overweight, was the best performing. Stock selection was the worst in the Industrial Mixed sector where M&A rumors boosted Cyrus One, Inc., a name not held in the portfolio at the start of the quarter. At Quarter-end, the Total Return Strategy held 34 positions and provided a 3.1% dividend yield. The portfolio is currently leading its benchmark over the YTD, one- and three-year periods but trails its benchmark since inception (09/01).

CenterSquare (REIT)

- CenterSquare manages the Fund's recently hired real estate securities (REIT) portfolio. During the third quarter, CenterSquare's portfolio returned 8.03% (net of fees), leading its benchmark index by 18 basis points. For the quarter, sector allocation contributed 16bps to alpha, while stock selection contributed 24bps to alpha. Stock selection was particularly strong in the data center, specialty and alternative housing sectors. In data centers, the portfolio benefited from our overweight position in Cyrusone, where reports of a potential acquisition of the company boosted shares. In the specialty and alternative housing sectors, our overweight positions in Americold Realty Trust, Iron Mountain and Sun Communities all generated alpha. Elsewhere, in the self-storage sector, the portfolio was well served by a significant underweight position in Public Storage, the benchmark's largest position in the sector. We view this stock as the weakest in the space and therefore underweight it in our portfolio. The major detractors from stock section included overweight positions to diversified, industrial and hotel names Mack Cali, Liberty Property Trust and Park

Hotels & Resorts. Sector selection was mostly positive, with the broader gains from overweights in alternative housing and net lease and underweights in regional malls and hotels being partially offset by an underweight position in specialty and a neutral position in data centers. From a positioning perspective, alternative housing and net lease were our largest overweights. However, the portfolio did add weight to the net lease sector by increasing the overweight to National Retail Properties. Over the quarter we shifted from underweight to overweight in health care, given the long-term nature of the leases in the space, low interest rate environment and defensive nature. This was accomplished via our purchases of CareTrust REIT, HCP Inc., and Omega Health Care Investors. In regional malls, we increased our underweight to the sector primarily by trimming our holdings in The Macerich Co., and Simon Property Group. In the industrial space, we shifted from neutral to underweight by selling completely out of the portfolio's positions in Duke Realty Corp. and Stag Industrial. Lastly, we shifted from neutral to underweight in the diversified sector by trimming our position in Mack Cali. Following this quarter's results, the CenterSquare portfolio is currently leading its benchmark since inception (04/18).

Heitman (Direct Core Real Estate)

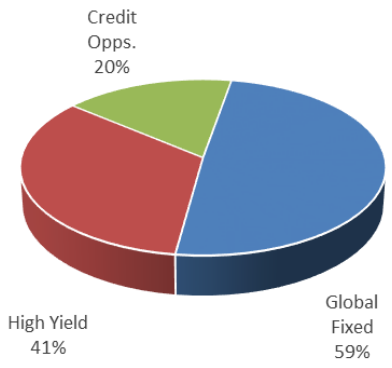
- Heitman manages one of the Fund's three direct core real estate portfolios. The Heitman portfolio returned 1.57% (net of fees) during the second quarter, outperforming its benchmark (NCREIF Open End Diversified Core Index) which returned 1.08%. Heitman achieved a gross return of 1.78 in the third quarter of 2019 comprised of 1.13% in income and 0.65% in appreciation. Heitman's one-year total gross return was 3.82%. The appreciation return included 66 basis points of property valuation, and negative-one basis point of debt marking to market. In order of magnitude, the industrial, office, self-storage, and apartment asset valuations increased, offset by a decrease in retail asset valuations. At quarter end the portfolio's allocation is well diversified across the apartment (22% allocation), office (27%), retail (20%), self-storage (20%) and industrial (11%) segments of the market. The portfolio is also well diversified across the U.S. geographical landscape allocating 37% of the portfolio to the Western region of the U.S., 22% to the Southern region, 17% to the Midwest region and 24% to the Eastern region of the country. Following this quarter's results, the Heitman portfolio is currently trailing its benchmark over the one-, three- and five-year periods but continues to lead its benchmark since inception (08/10).

Invesco Core Real Estate-USA (Direct Core Real Estate)

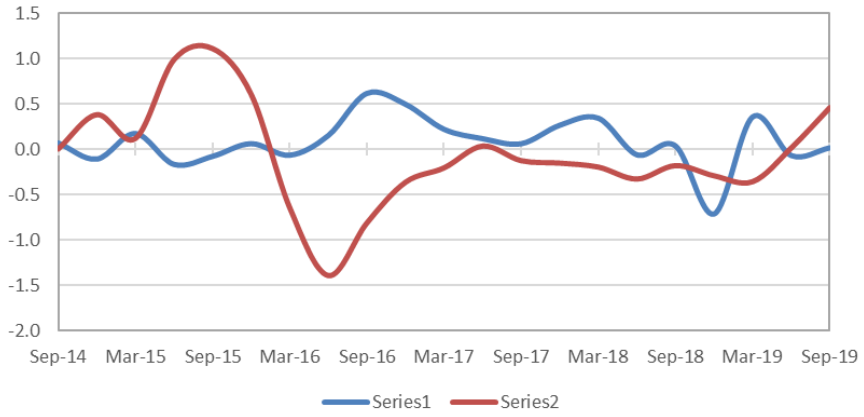
- Invesco manages two of the Fund's three direct core real estate portfolios. The Invesco Core Real Estate-USA portfolio returned 2.02% (net of fees) during the third quarter, leading its benchmark (NCREIF Open End Diversified Core Index) which returned 1.08%. The total gross return comprised of 0.91% income and 1.09% appreciation. Appreciation was higher this quarter than in recent periods and was broad-based across the Industrial, Office and Apartment sectors with Industrial leading the way and most assets in the Portfolio generating increases in value. Key performance drivers this quarter included San Francisco Office (101 Second and 631 Howard) and the two California Industrial development projects (Avion Burbank in southern California and Pacific Commons in the SF Bay Area). The Fund's Western and Boston exposures also continue to buoy performance: markets in the West + Boston currently represent the top six performing markets nationwide. The Manage-to-Core portfolio delivered strong performance with $75 million (72 bps) of net appreciation (before promote) during the quarter. Like last quarter, performance was tempered by Retail and debt-mark-to-market, although to a much lesser extent this quarter. In the Retail sector, a handful of assets – primarily in SoHo (-21 bp impact) - experienced write-downs due to lower market rents. Debt mark-to-market impact for the quarter totaled -8 bps (-75 bps for the trailing year) but is "basis points in the bank" that will be accretive to returns in the future. The Invesco portfolio is currently outperforming its benchmark over all extended time periods including since inception (08/10).

Fixed Income Overview

Fixed Income Structure



Global Fixed Income and High Yield Quarterly Excess Return



Fixed Income Composites

	Assets (Millions)	QTR	YTD	1-year	3-year	5-year	10-year
		Performance					
Global Fixed Income (Gross)	**$ 518.9**	**2.34**	**9.01**	**10.07**	**3.51**	**3.92**	**4.78**
Global Fixed Income (Net)		**2.29**	**8.84**	**9.84**	**3.29**	**3.72**	**4.58**
Bloomberg Aggregate Bond Index		2.27	8.52	10.30	2.92	3.38	3.75
Net of Fee Value Added vs Benchmark		*0.02*	*0.32*	*-0.46*	*0.37*	*0.34*	*0.83*
High Yield (Gross)	**$ 355.9**	**1.53**	**11.49**	**6.07**	**5.73**	**5.27**	**7.63**
High Yield (Net)		**1.42**	**11.10**	**5.57**	**5.23**	**4.77**	**7.12**
Custom Benchmark [1]		0.95	10.93	5.73	5.77	4.97	7.54
Net of Fee Value Added vs Benchmark		*0.47*	*0.17*	*-0.16*	*-0.54*	*-0.20*	*-0.42*
Bloomberg Aggregate		2.27	8.52	10.30	2.92	3.38	3.75
Citigroup High Yield Cash Pay		0.95	10.93	5.73	5.77	4.97	7.54
BofA ML High Yield Master II		1.22	11.50	6.34	6.07	5.36	7.85

Global Fixed Income Managers

	Assets (Millions)	QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
		Performance (%)						
Global Fixed Income								
Securian Asset Mgmt. (Gross)	**$ 224.7**	**2.37**	**9.14**	**10.00**	**3.86**	**4.29**	**5.01**	**May-07**
Securian Asset Mgmt. (Net)		**2.33**	**9.00**	**9.81**	**3.68**	**4.12**	**4.83**	**May-07**
Bloomberg Aggregate		2.27	8.52	10.30	2.92	3.38	4.44	**May-07**
Net of Fee Value Added vs Benchmark		*0.06*	*0.48*	*-0.49*	*0.76*	*0.74*	*0.39*	
Information Ratio				**-0.57**	**1.17**	**1.21**		
Sharpe Ratio				**2.10**	**0.70**	**1.10**		
Aberdeen (Gross)	**$ 224.2**	**2.29**	**9.46**	**10.71**	**3.30**	**3.61**	**5.06**	**Apr-07**
Aberdeen (Net)		**2.23**	**9.28**	**10.46**	**3.06**	**3.41**	**4.85**	**Apr-07**
Bloomberg Aggregate		2.27	8.52	10.30	2.92	3.38	4.29	Apr-07
Net of Fee Value Added vs Benchmark		*-0.04*	*0.76*	*0.16*	*0.14*	*0.03*	*0.56*	
Information Ratio				**0.15**	**0.16**	**0.03**		
Sharpe Ratio				**2.00**	**0.45**	**0.78**		

[7] High Yield Custom Benchmark: Citigroup High Yield Cash Pay (4q99 – Present); Citigroup High Yield Composite Index (1q97 – 3q99).

Fixed Income Overview (Continued)

Global Fixed Income Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
Global Fixed Income								
Garcia Hamilton (Gross)	**$ 69.9**	**2.40**	**7.29**	**8.38**	**3.12**	**3.71**	**3.99**	**Oct-13**
Garcia Hamilton (Net)		**2.34**	**7.09**	**8.10**	**2.85**	**3.44**	**3.74**	**Oct-13**
Bloomberg Aggregate		2.27	8.52	10.30	2.92	3.38	3.38	Oct-13
Net of Fee Value Added vs Benchmark		*0.07*	*-1.43*	*-2.20*	*-0.07*	*0.06*	*0.36*	
Information Ratio				**-1.82**	**-0.07**	**0.05**		
Sharpe Ratio				**1.83**	**0.48**	**0.82**		

- The Fund's global fixed income segment returned 2.29% (net of fees) during the third quarter of 2019, slightly leading the Bloomberg Aggregate Bond Index, which returned 2.27%. The segment is comprised of three actively managed strategies: (1) Securian Asset Management (previously Advantus Capital Management), (2) Aberdeen Asset Management, and (3) Garcia Hamilton. During the period, one of the three actively managed portfolios *(Aberdeen)* trailed the Bloomberg Aggregate Index. Securian and Aberdeen (both with early 2007 inception dates) manage roughly the same level of assets for the Fund while the Garcia Hamilton portfolio has a smaller mandate. Therefore, quarter to quarter performance is largely driven by the results of the Securian and Aberdeen accounts while the Garcia Hamilton account does not have the ability to move the needle as much, so to speak, on account of its smaller size. Following this period's results, the global fixed income composite continues to outperform against the Bloomberg Aggregate over the three-, five- and ten-year periods.

Securian Asset Management (Core Fixed Income)

- Securian Asset Management (*formerly Advantus*) manages one of the Fund's three global fixed income portfolios. During the third quarter, the Securian portfolio returned 2.33% (net of fees), outperforming its benchmark (Bloomberg Aggregate) which returned 2.27% for the quarter. Overall results have been quite strong, considering a shorter duration positioning relative to the index has been a significant headwind in 2019. Security selection and asset allocation decisions yielded strong excess returns in the third quarter and so far in 2019. Exposure to corporate bonds was little changed overall during the quarter. The portfolio remains overweight financials, utilities and to a lesser extent, industrials. Structured exposure fell during the third, primarily in Agency MBS. Proceeds were reinvested primarily in Treasuries. The portfolio remains overweight ABS, CMBS and non-Agency MBS, and underweight Agency MBS. The overall duration of the portfolio shortened slightly during the quarter and remains short of the benchmark by just under a tenth of a year. The Securian portfolio is currently outperforming against its benchmark over the three- and five-year periods as well as since inception (06/07).

Fixed Income Overview (Continued)

Aberdeen (Core Fixed Income)

- Aberdeen manages another of the Fund's global fixed income portfolios. During the third quarter the Aberdeen portfolio returned 2.23% (net of fees), in line with its benchmark the Bloomberg Aggregate Index which returned 2.27% during the period. Many of the same themes that aided the fund in Q2 helped relative results in Q3. In the Fund's core segment, U.S. Treasury yield-curve positioning, asset allocation and security selections all contributed to performance for the quarter. The Fund's slightly long duration position via an overweight to the intermediate part of the yield curve had a positive impact on performance. Fund performance was also bolstered by a sizeable underweight position in U.S. Treasuries versus the benchmark, along with an overweight allocation to commercial mortgage-backed securities (CMBS). An underweight position in investment-grade corporate bonds was slightly detractive, as corporates again produced solid gains during the period. The Aberdeen portfolio continues to outperform against its benchmark over the one-, three-, five- and since inception periods (06/07).

Garcia Hamilton (Core Fixed Income)

- Garcia Hamilton is the Fund's third global fixed income manager. During the third quarter, the portfolio returned 2.34% (net of fees), outperforming its benchmark index (Bloomberg Aggregate Index) which returned 2.27%. As of quarter end, the account held approximately 60% in the corporate sector versus the index weighting of 25%. In the agency and agency MBS sectors, the account held approximately 11% and 5% versus the benchmark weightings of 6% and 27%, respectively. Although shorter duration detracted from relative performance this quarter as rates declined, the yield curve positioning benefitted performance as the curve flattened. The Fund received a positive contribution from sector positioning, specifically in the corporate and MBS sectors. The Fund was overweight corporate floating rate notes and underweight fixed-rate corporate bonds, and corporate floaters outperformed this quarter. Additionally, positioning was underweight the MBS sector which underperformed. Lastly, even though the portfolio was defensively positioned, the yield of the portfolio was marginally higher than the index as floating rate securities exposure provided attractive income relative to fixed rate securities. The decline in rates this year are seen as a severe overreaction and disagree with the notion that a recession is imminent because money supply is expanding rapidly, consumer confidence and small business optimism are high, and the labor market is very healthy. Therefore, rates have the bias to move higher as the economy continues to grow and exceed market expectations. The Garcia Hamilton portfolio is currently outperforming against its benchmark over the five-year period as well as since inception (12/13).

Fixed Income Overview (Continued)

High Yield/Credit Opportunities Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
High Yield								
Oaktree Capital Management (Gross)	**$ 178.7**	**1.21**	**10.77**	**5.03**	**5.22**	**4.71**	**7.21**	**Dec-96**
Oaktree Capital Management (Net)		**1.09**	**10.37**	**4.52**	**4.70**	**4.19**	**6.69**	**Dec-96**
Custom Benchmark		0.95	10.93	5.73	5.77	4.97	6.89	Dec-96
Net of Fee Value Added vs Benchmark		*0.14*	*-0.56*	*-1.21*	*-1.07*	*-0.78*	*-0.20*	
Information Ratio				**-2.30**	**-1.65**	**-1.07**		
Sharpe Ratio				**0.31**	**0.72**	**0.59**		
BlackRock High Yield (Gross)	**$ 177.2**	**1.85**	**12.21**	**7.11**	**6.23**	**5.37**	**6.92**	**Sep-06**
BlackRock High Yield (Net)		**1.74**	**11.83**	**6.62**	**5.75**	**4.87**	**6.44**	**Sep-06**
Citigroup High Yield Cash Pay		0.95	10.93	5.73	5.77	4.97	6.95	Sep-06
Net of Fee Value Added vs Benchmark		*0.79*	*0.90*	*0.89*	*-0.02*	*-0.10*	*-0.51*	
Information Ratio				**1.50**	**-0.03**	**-0.05**		
Sharpe Ratio				**0.64**	**1.02**	**0.79**		
Credit Opportunities								
Neuberger Berman (Gross)	**$ 175.6**	**0.68**	**9.67**	**6.33**	**5.50**	**-.-**	**7.67**	**Jan-16**
Neuberger Berman (Net)		**0.60**	**9.39**	**5.96**	**5.20**	**-.-**	**7.39**	**Jan-16**
Custom Benchmark		1.24	10.38	6.95	5.09	-.-	7.80	Jan-16
Net of Fee Value Added vs Benchmark		*-0.64*	*-0.99*	*-0.99*	*0.11*		*-0.41*	
Information Ratio				**-0.78**	**0.08**	**-.-**		
Sharpe Ratio				**0.68**	**0.93**	**-.-**		

- The high yield composite returned 1.42% (net of fees) during the third quarter, outperforming against the Citigroup High Yield Cash Pay Index, which returned 0.95%. The composite is currently split equally between the two actively-managed strategies. During the period, both BlackRock and Oaktree edged out the benchmark. The high yield composite is currently underperforming its benchmark over all extended time periods greater than one year including since inception (03/97).

[8] Oaktree Capital Management Performance Objective: Citigroup High Yield Cash Pay + 1% (4q99 – Present); Citigroup High Yield Composite Index + 1% (2q97 – Present).

Oaktree Capital Management (High Yield Fixed Income)

- Oaktree Capital manages one of the Fund's two high yield fixed income portfolios. The Oaktree portfolio returned 1.09% (net of fees) during the third quarter, outperforming its benchmark (Citigroup High Yield Cash Pay) which returned 0.95%. High yield bonds didn't enjoy the same tailwinds as their longer-duration counterparts, but they still managed to turn in a solid return for the third consecutive quarter. The portfolio performed essentially in line with the benchmark during the third quarter on a net-of-fee basis. While management would like to gain an edge in every market environment, the defensively positioned portfolio typically performs best when risk aversion increases and defaults are on the rise – not a description of the third quarter. High Yield bonds have posted strong returns YTD but still lag their investment-grade counterparts. Oaktree portfolio is currently underperforming over the one-, three- and five-year periods, as well as since inception (03/97).

BlackRock (High Yield Fixed Income)

- BlackRock manages the Fund's other high yield fixed income portfolio. During the third quarter, the BlackRock portfolio returned 1.74%, leading its benchmark (Citigroup High Yield Cash Pay) which returned 0.95%. Similar to its companion strategy managed by Oaktree, the BlackRock portfolio exhibits a more defense structure relative to the benchmark but is not afraid to dip into C-CCC rated issues. Higher quality names led the market during the third quarter. The portfolio's more defensive posture relative to the benchmark should perform better in an environment where quality issues are in favor. Modest contributions from sector/issue selection and interest rate positioning also accrued favorably to results versus the benchmark. The BlackRock portfolio is currently underperforming over the three- and five-year periods as well as since inception period (09/06).

Neuberger Berman (Credit Opportunities)

- Neuberger Berman manages the Fund's credit opportunities portfolio. During the beginning of 2016 the Neuberger Berman Credit Opportunities portfolio was funded to further diversify the plan's fixed income basket. Now in its fourth year of performance the portfolio returned 0.60% for the period, trailing its custom benchmark (*33% ML High Yield Master II Index/33% S&P LSTA Leveraged Loan Index/33% JPM EMBI Global Diversified Index*) which returned 1.24%. Sector positioning within U.S. rates, loans markets and currency overlay were the main detractors this period relative to the benchmark. Meanwhile, security selection was negative within emerging markets exposures detracting from results. Contributors during the period included sector positioning in investment grade credit, U.S. high yield credit and Pan European high yield credit. As of quarter end, the portfolio maintained a notable overweight to Latin America with underweight allocations to the U.S. and Asia Ex-Japan regions. Meanwhile, the credit quality of the portfolio (BB) matched that of the benchmark, such that this was not a meaningful source of added or detracted value. The Neuberger Berman portfolio is currently leads its benchmark over the three-year period but is slightly underperforming its custom benchmark since inception (01/16).

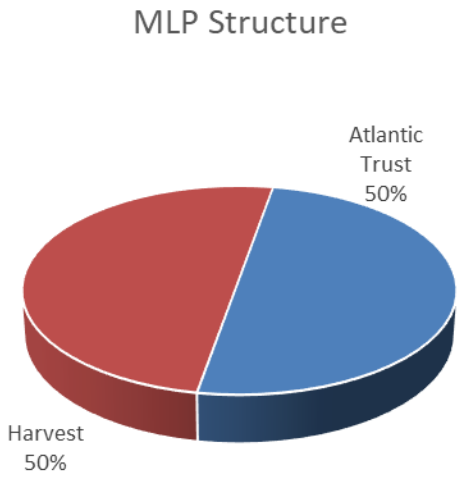
Private Equity Overview

Private Equity Composite

	Total Commitment	Cumulative Capital Called		Cumulative Distributions	Capital Balance	Multiple	Calculated IRR
Hamilton Lane Fund VII LP (Series A)	30,000,000	25,297,247	84.3%	22,967,435	16,600,217	1.56	10.2%
Hamilton Lane Fund VII LP (Series B)	20,000,000	17,695,467	88.5%	8,502,983	11,089,674	1.11	2.2%
Hamilton Lane Fund VII LP (Total)	*50,000,000*	*42,992,714*	86.0%	*31,470,418*	*27,689,891*	1.38	7.0%
Hamilton Lane Secondary Fund II LP	25,000,000	22,848,181	91.4%	26,827,994	1,791,753	1.25	8.9%
Hamilton Lane Secondary Fund III LP	30,000,000	17,762,479	59.2%	17,448,462	12,091,507	1.66	20.0%
Hamilton Lane Secondary Fund IV LP	30,000,000	15,336,494	51.1%	1,065,637	19,609,719	1.35	30.0%
Hamilton Lane Fund VIII LP (Global)	30,000,000	16,412,837	54.7%	3,388,561	22,418,398	1.57	11.6%
GCM Grosvenor - Partnership, L.P.	75,000,000	81,462,229	108.6%	86,300,329	46,089,441	1.63	15.3%
GCM Grosvenor - Partnership II, L.P. (2014)	60,000,000	57,828,815	96.4%	18,715,561	49,163,565	1.17	11.8%
GCM Grosvenor - Partnership II, L.P. (2015)	20,000,000	25,994,916	130.0%	2,775,246	30,854,151	1.29	16.3%
GCM Grosvenor - Partnership II, L.P. (2017)	30,000,000	6,775,214	22.6%	104,310	6,706,414	1.01	-5.5%
Fairview Capital III *	40,000,000	30,395,179	76.0%	1,630,828	34,297,771	1.18	10.6%
Total Private Equity Program	**390,000,000**	**317,809,058**	**81.5%**	**189,727,346**	**250,712,610**	**1.39**	**13.1%**

- Multiple calculation = (market value + distributions) / capital called
- Internal Rate of Return shown here is calculated by Wilshire based on cumulative cash flows and annualized since inception.

MLP Overview



MLP Composite

	Assets (Millions)	Performance QTR	YTD	1-year	3-year	5-year	10-year
Total MLPs (Gross)	**$ 239.1**	**-5.41**	**13.79**	**-7.89**	**-0.66**	**-5.10**	**-.-**
Total MLPs (Net)		**-5.56**	**13.25**	**-8.51**	**-1.31**	**-5.71**	**-.-**
Alerian MLP Index		-5.02	11.08	-8.13	-2.46	-8.65	-.-
Net of Fee Value Added vs Index		*-0.54*	*2.17*	*-0.38*	*1.15*	*2.94*	
Alerian MLP Index		-5.02	11.08	-8.13	-2.46	-8.65	6.25
S&P MLP Index		-4.04	13.28	-6.88	-0.80	-8.02	7.08
Bloomberg Commodities Index		-1.84	3.13	-6.57	-1.50	-7.18	-4.32

Managers

	Assets (Millions)	Performance (%) QTR	YTD	1-year	3-year	5-year	Since Inception	Inception Date
MLPs								
Harvest Fund Advisors (Gross)	**$ 120.3**	**-4.80**	**15.88**	**-7.31**	**0.04**	**-5.25**	**5.14**	
Harvest Fund Advisors (Net)		**-4.97**	**15.25**	**-8.02**	**-0.71**	**-5.90**	**4.41**	**Dec-11**
Alerian MLP Index		-5.02	11.08	-8.13	-2.46	-8.65	0.21	Dec-11
Net of Fee Value Added vs Benchmark		*0.05*	*4.17*	*0.11*	*1.75*	*2.75*	*4.20*	
Information Ratio				**0.03**	**0.55**	**0.67**		
Sharpe Ratio				**-0.43**	**-0.12**	**-0.34**		
Atlantic Trust CIBC (Gross)	**$ 118.8**	**-6.02**	**11.75**	**-8.47**	**-1.35**	**-5.62**	**5.60**	
Atlantic Trust CIBC (Net)		**-6.15**	**11.29**	**-9.00**	**-1.90**	**-6.14**	**5.02**	**Dec-11**
Alerian MLP Index		-5.02	11.08	-8.13	-2.46	-8.65	0.21	Dec-11
Net of Fee Value Added vs Benchmark		*-1.13*	*0.21*	*-0.87*	*0.56*	*2.51*	*4.81*	
Information Ratio				**-0.24**	**0.18**	**0.64**		
Sharpe Ratio				**-0.50**	**-0.19**	**-0.35**		

MLP Overview (Continued)

- The Fund's Master Limited Partnership (MLP) program is comprised of two individual managers, Harvest Fund Advisors and Atlantic Trust (formerly Invesco), with the mandates essentially split evenly between the two. Commodity results were negative for the quarter as crude oil fell -7.5% to $54.07 per barrel. Natural gas prices were up 1.0%, ending the quarter at $2.33 per million BTUs. MLPs were down for the quarter (-5.02%) but are up strong for the year. The return of crude price stability following the Saudi Arabia facility attacks has resulted in a broad decline in energy stocks including MLPs. For much of the year, crude production stability, shareholder friendly actions, and the lack of surprises, have been favorable to the MLP space.

Harvest Fund Advisors (MLPs)

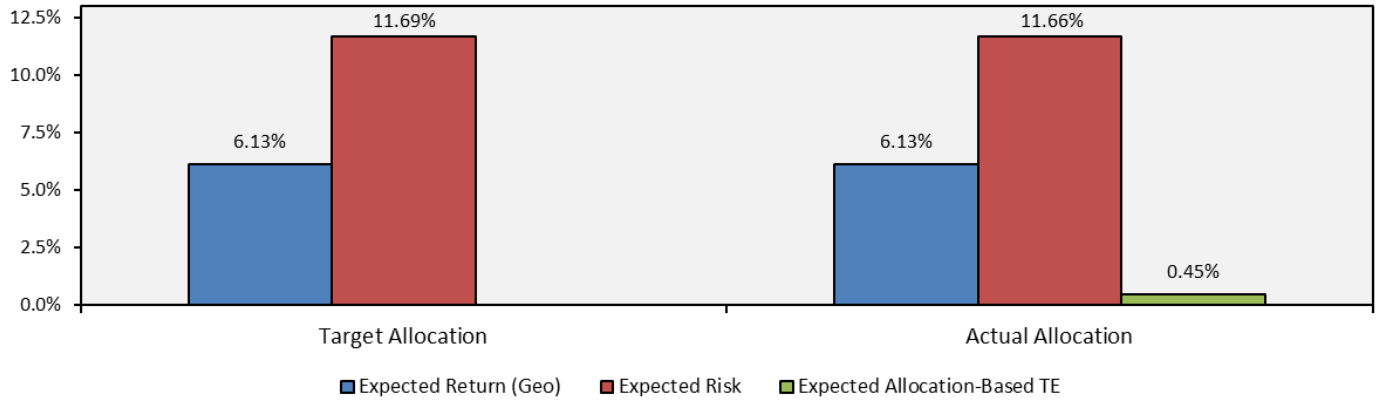
- Harvest Fund Advisors manages one of the Fund's two MLP portfolios. During the third quarter the Harvest portfolio was down -4.97% (net of fees), about in-line with its benchmark (Alerian MLP Index) which was down -5.02%. Since the Harvest portfolio typically has approximately anywhere from 96% to 100% of its value invested in energy sector MLPs, sector weighting has not historically been a meaningful source of added or detracted value. During the period the portfolio's energy holdings delivered performance slightly above that of the benchmark. Following this quarter's results the Harvest Fund Advisors MLP portfolio continues to outperform against its benchmark for the one-, three- and five-year periods, as well as since inception (12/11)

Atlantic Trust (MLPs)

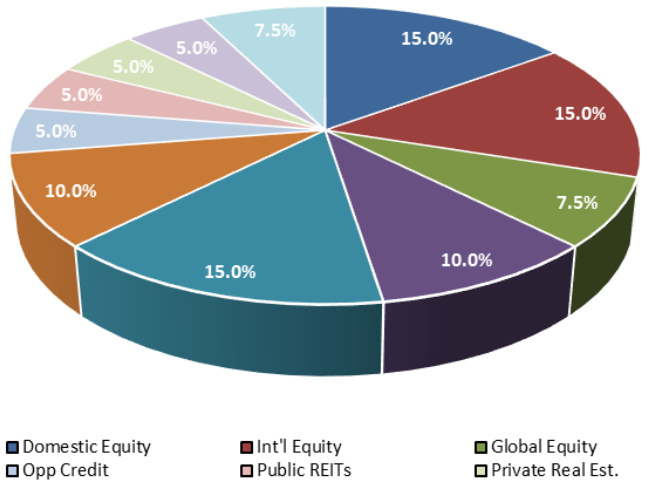
- Atlantic Trust CIBC (formerly Invesco) manages the Fund's other MLP portfolio. During the third quarter, the Atlantic Trust portfolio was down -6.15% (net of fees), trailing its benchmark (Alerian MLP Index) which was down -5.02%. It is important to note that the Atlantic Trust portfolio (containing 24 stocks) is more concentrated than the Harvest portfolio (29 stocks) as well as the benchmark (40 stocks). As a result, many of its position sizes are relatively much larger and have a greater impact on the overall return. The portfolio's performance during the period was primarily as a result of stock selection, which was confined to the energy segment (this is of course the dominant segment in the market space, comprising over 99% of the benchmark's total asset value). Despite this period's relative performance, the portfolio continues to succeed in retaining a mix of higher quality names from within this segment, which has allowed it to recoup some of the relative losses it experienced elsewhere in the portfolio. The Atlantic Trust MLP portfolio is outperforming against its benchmark for the three- and five-year periods as well as since inception (12/11)

Appendix: Risk Analysis & Performance Objectives

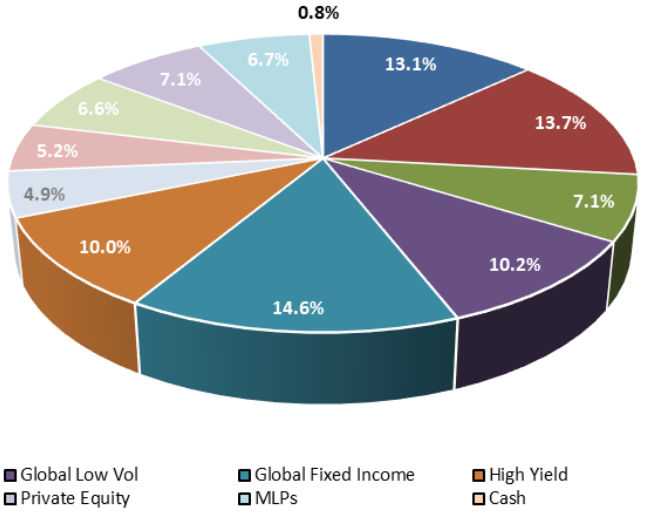
Expected Return and Risk



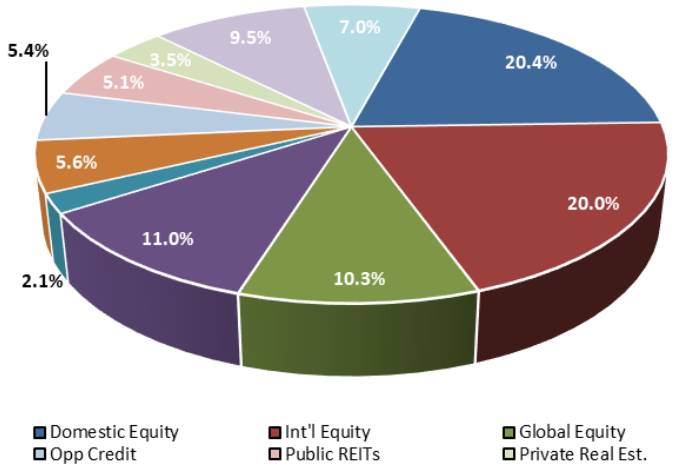
Target Asset Allocation



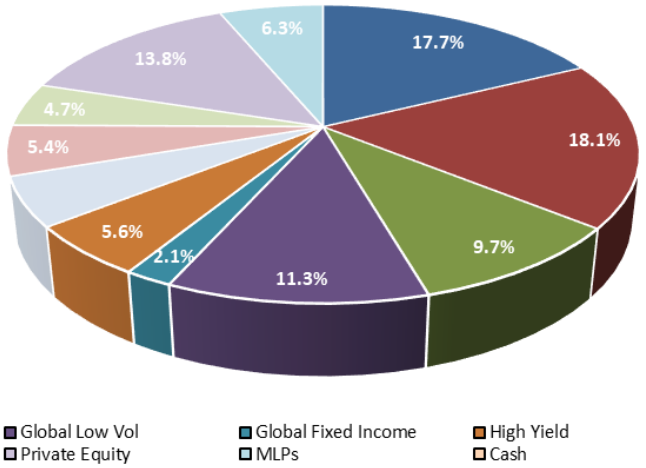
Actual Asset Allocation



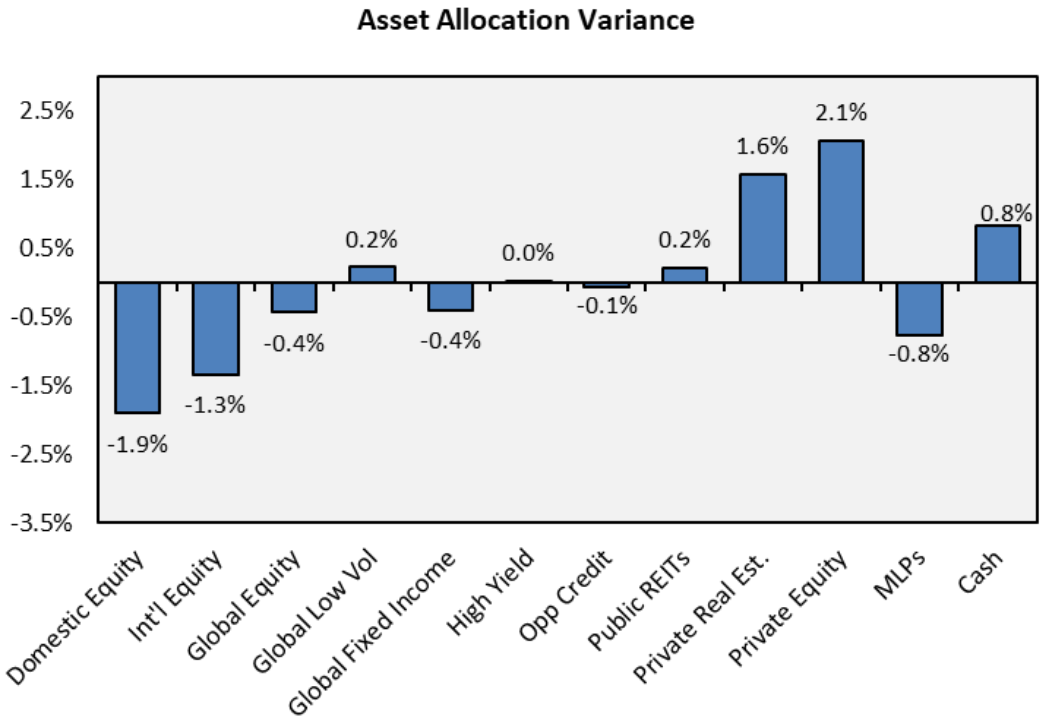
Contribution to Total Risk - Target Allocation

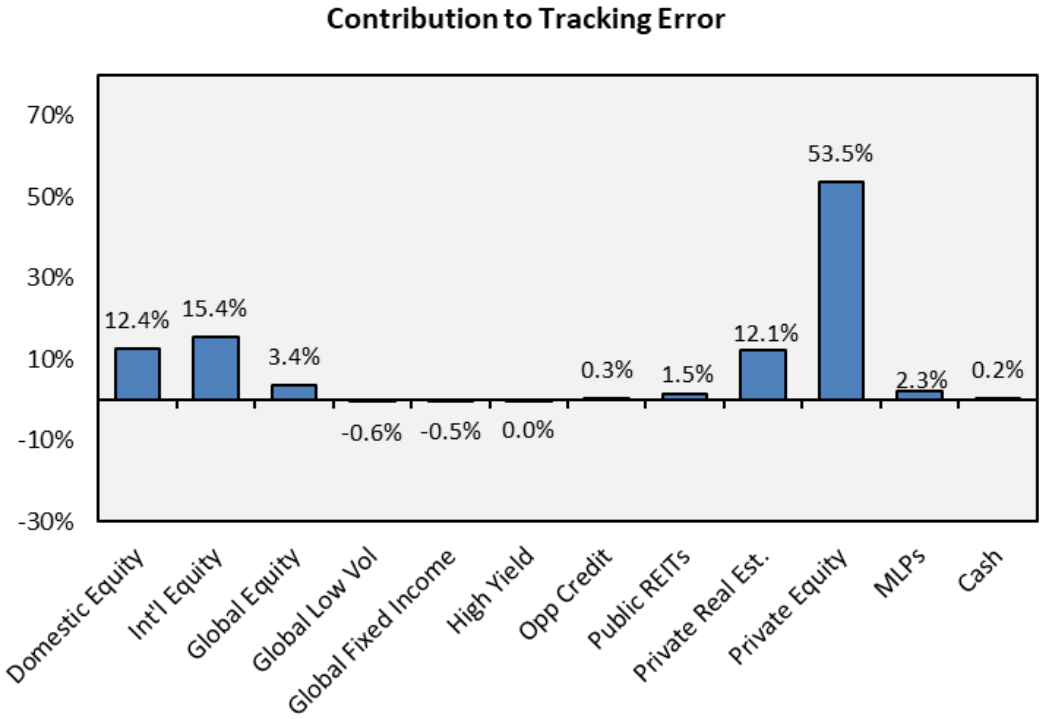


Contribution to Total Risk - Actual Allocation



Expected Return and Tracking Error based on Wilshire's Asset Assumptions





- The variance between the Fund's actual asset allocation and the target allocation is a source of tracking error for the Fund. This "asset allocation tracking error" is currently forecasted to be 0.45% (for the one-year period) at quarter-end. Overweight allocations to private real estate and private equity provided the largest contributions to tracking error at the total fund level.

Manager Risk Statistics

U.S. Equity				
T. Rowe Price (Enhanced Index)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	19.15	12.29	12.14	12.76
Standard Deviation (Index)	18.75	12.18	11.93	12.55
Sharpe Ratio	0.12	1.01	0.86	1.00
Sharpe Ratio (Index)	0.10	0.96	0.82	1.01
Excess Risk	0.83	1.08	1.08	0.98
Information Ratio	0.64	0.62	0.59	0.17

Systematic (Small Core)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	24.15	16.86	15.26	17.46
Standard Deviation (Index)	24.87	17.21	16.16	17.29
Sharpe Ratio	-0.37	0.50	0.61	0.70
Sharpe Ratio (Index)	-0.44	0.38	0.44	0.61
Excess Risk	4.56	4.05	3.98	3.61
Information Ratio	0.54	0.41	0.51	0.39

Channing Capital (Small Value)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	28.64	19.15	17.74	*n/a*
Standard Deviation (Index)	24.46	17.67	16.08	*n/a*
Sharpe Ratio	-0.41	0.20	0.28	*n/a*
Sharpe Ratio (Index)	-0.42	0.28	0.38	*n/a*
Excess Risk	6.34	4.9	4.55	*n/a*
Information Ratio	-0.25	-0.22	-0.26	*n/a*

Redwood (Small Growth)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	25.11	*18.12*	*n/a*	*n/a*
Standard Deviation (Index)	25.92	*17.47*	*n/a*	*n/a*
Sharpe Ratio	-0.61	*0.15*	*n/a*	*n/a*
Sharpe Ratio (Index)	-0.45	*n/a*	*n/a*	*n/a*
Excess Risk	6.01	*5.31*	*n/a*	*n/a*
Information Ratio	-0.68	*-0.93*	*n/a*	*n/a*

Smith Graham (Mid-Cap)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	27.98	*n/a*	*n/a*	*n/a*
Standard Deviation (Index)	21.41	*n/a*	*n/a*	*n/a*
Sharpe Ratio	-0.32	*n/a*	*n/a*	*n/a*
Sharpe Ratio (Index)	0.04	*n/a*	*n/a*	*n/a*
Excess Risk	10.35	*n/a*	*n/a*	*n/a*
Information Ratio	-0.94	*n/a*	*n/a*	*n/a*

Real Estate Investment Trusts				
Adelante (REIT)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	16.04	12.43	13.69	14.98
Standard Deviation (Index)	16.14	12.78	14.25	15.64
Sharpe Ratio	1.11	0.53	0.66	0.85
Sharpe Ratio (Index)	0.96	0.46	0.66	0.80
Excess Risk	1.20	1.52	1.75	1.71
Information Ratio	1.61	0.46	-0.21	0.08

Real Estate Investment Trusts				
Centersquare (REIT)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	16.21	*n/a*	*n/a*	*n/a*
Standard Deviation (Index)	16.14	*n/a*	*n/a*	*n/a*
Sharpe Ratio	0.99	*n/a*	*n/a*	*n/a*
Sharpe Ratio (Index)	0.96	*n/a*	*n/a*	*n/a*
Excess Risk	1.08	*n/a*	*n/a*	*n/a*
Information Ratio	0.44	*n/a*	*n/a*	*n/a*

Non-U.S. Equity				
Acadian (Int'l Small Cap)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	18.78	13.40	13.35	15.62
Standard Deviation (Index)	16.65	11.69	12.29	14.80
Sharpe Ratio	-0.57	0.35	0.27	0.54
Sharpe Ratio (Index)	-0.47	0.26	0.24	0.38
Excess Risk	4.13	4.01	3.67	3.45
Information Ratio	-0.73	0.40	0.17	0.79

AQR (Int'l Equity)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	18.40	12.94	12.73	15.38
Standard Deviation (Index)	16.13	11.45	12.48	14.49
Sharpe Ratio	-0.44	0.24	0.13	0.28
Sharpe Ratio (Index)	-0.22	0.41	0.15	0.25
Excess Risk	3.11	2.61	2.52	2.48
Information Ratio	-1.50	-0.59	-0.11	0.26

Ativo (Int'l Developed)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	15.44	*n/a*	*n/a*	*n/a*
Standard Deviation (Index)	15.48	*n/a*	*n/a*	*n/a*
Sharpe Ratio	-0.20	*n/a*	*n/a*	*n/a*
Sharpe Ratio (Index)	-0.24	*n/a*	*n/a*	*n/a*
Excess Risk	3.29	*n/a*	*n/a*	*n/a*
Information Ratio	0.16	*n/a*	*n/a*	*n/a*

Global Equity				
Wellington (Global Equity)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	20.56	13.08	13.02	*n/a*
Standard Deviation (Index)	17.41	11.32	11.71	*n/a*
Sharpe Ratio	-0.21	0.53	0.47	*n/a*
Sharpe Ratio (Index)	-0.06	0.71	0.48	*n/a*
Excess Risk	3.91	3.19	3.27	*n/a*
Information Ratio	-0.87	-0.31	0.13	*n/a*

Ariel (Global Equity)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	16.03	*n/a*	*n/a*	*n/a*
Standard Deviation (Index)	17.41	*n/a*	*n/a*	*n/a*
Sharpe Ratio	-0.27	*n/a*	*n/a*	*n/a*
Sharpe Ratio (Index)	-0.06	*n/a*	*n/a*	*n/a*
Excess Risk	3.76	*n/a*	*n/a*	*n/a*
Information Ratio	-0.91	*n/a*	*n/a*	*n/a*

Global Low Volatility				
Acadian (Global Low Volatility)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	12.56	9.00	*n/a*	*n/a*
Standard Deviation (Index)	17.41	11.32	*n/a*	*n/a*
Sharpe Ratio	0.33	0.84	*n/a*	*n/a*
Sharpe Ratio (Index)	-0.06	0.71	*n/a*	*n/a*
Excess Risk	6.81	4.67	*n/a*	*n/a*
Information Ratio	0.76	-0.09	*n/a*	*n/a*

Fixed Income (Core)				
Securian (Core Fixed Income)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	3.44	2.99	2.84	2.85
Standard Deviation (Index)	3.73	3.35	3.08	2.95
Sharpe Ratio	2.10	0.70	1.10	1.54
Sharpe Ratio (Index)	2.07	0.41	0.77	1.08
Excess Risk	0.78	0.62	0.59	0.69
Information Ratio	-0.57	1.17	1.21	1.69

Manager Risk Statistics

High Yield Fixed Income				
BlackRock (High Yield)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	6.46	4.05	4.86	5.32
Standard Deviation (Index)	6.66	4.19	5.61	5.85
Sharpe Ratio	0.64	1.02	0.79	1.28
Sharpe Ratio (Index)	0.49	0.99	0.70	1.19
Excess Risk	0.56	0.47	1.68	1.30
Information Ratio	1.50	-0.03	-0.05	-0.11

Oaktree (High Yield)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	6.80	4.34	5.37	5.48
Standard Deviation (Index)	6.66	4.19	5.61	5.85
Sharpe Ratio	0.31	0.72	0.59	1.12
Sharpe Ratio (Index)	0.49	0.99	0.70	1.19
Excess Risk	0.50	0.61	0.70	1.13
Information Ratio	-2.30	-1.65	-1.07	-0.69

Neuberger Berman (Credit Opps)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	5.16	3.86	*n/a*	*n/a*
Standard Deviation (Index)	5.02	3.49	*n/a*	*n/a*
Sharpe Ratio	0.68	0.93	*n/a*	*n/a*
Sharpe Ratio (Index)	0.89	1.00	*n/a*	*n/a*
Excess Risk	1.19	1.25	*n/a*	*n/a*
Information Ratio	-0.78	0.08	*n/a*	*n/a*

Fixed Income (Core)				
Aberdeen (Core Fixed Income)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	3.94	3.32	3.07	3.08
Standard Deviation (Index)	3.73	3.35	3.08	2.95
Sharpe Ratio	2.00	0.45	0.78	1.19
Sharpe Ratio (Index)	2.07	0.41	0.77	1.08
Excess Risk	0.99	0.83	0.88	1.15
Information Ratio	0.15	0.16	0.03	0.40

Garcia Hamilton (Core Fixed Income)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	3.04	2.67	2.95	*n/a*
Standard Deviation (Index)	3.73	3.35	3.08	*n/a*
Sharpe Ratio	1.83	0.48	0.82	*n/a*
Sharpe Ratio (Index)	2.07	0.41	0.77	*n/a*
Excess Risk	1.10	1.01	1.09	*n/a*
Information Ratio	-1.82	-0.07	0.06	*n/a*

Master Limited Partnerships				
Harvest (MLP)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	23.4	18.43	20.01	*n/a*
Standard Deviation (Index)	19.84	16.99	19.27	*n/a*
Sharpe Ratio	-0.43	-0.12	-0.34	*n/a*
Sharpe Ratio (Index)	-0.52	-0.23	-0.49	*n/a*
Excess Risk	4.26	3.24	4.46	*n/a*
Information Ratio	0.03	0.55	0.67	*n/a*

Atlantic Trust CIBC (MLP)	1 Yr	3 Yr	5 Yr	10 Yr
Standard Deviation	22.13	17.96	20.37	*n/a*
Standard Deviation (Index)	19.80	16.99	19.27	*n/a*
Sharpe Ratio	-0.50	-0.19	-0.35	*n/a*
Sharpe Ratio (Index)	-0.52	-0.23	-0.49	*n/a*
Excess Risk	3.89	3.27	4.26	*n/a*
Information Ratio	-0.24	0.18	0.64	*n/a*

Manager Performance Objectives

Domestic Equity	3-year	5-year	Since Inception	Inception Date
Enhanced Index				
T. Rowe Price (Net)	**14.15**	**11.54**	**9.17**	**Mar-06**
S&P 500 Index + 1%	14.39	11.84	9.62	Mar-06
Net of Fee Value Added vs Objective	*-0.24*	*-0.30*	*-0.45*	
S&P 500 Index	13.39	10.84	8.62	Mar-06
Net of Fee Value Added vs Benchmark	*0.76*	*0.70*	*0.55*	
Small Core - Active				
Systematic Financial (Net)	**10.03**	**10.39**	**10.56**	**Jun-03**
Russell 2000 Index + 1.25%	9.48	9.44	10.15	Jun-03
Net of Fee Value Added vs Objective	*0.55*	*0.95*	*0.41*	
Russell 2000 Index	8.23	8.19	8.90	Jun-03
Net of Fee Value Added vs Benchmark	*1.80*	*2.20*	*1.66*	
Small Value - Active				
Channing Capital Management (Net) *	**5.41**	**5.92**	**4.90**	**Oct-13**
Russell 2000 Value Index + 1.25%	7.79	8.42	6.82	Oct-13
Net of Fee Value Added vs Objective	*-2.38*	*-2.50*	*-1.92*	
Russell 2000 Value Index	6.54	7.17	5.57	Oct-13
Net of Fee Value Added vs Benchmark	*-1.13*	*-1.25*	*-0.67*	
Small Growth - Active				
Redwood Investments (Net) *	**4.37**	**-.-**	**4.37**	**Sep-16**
Russell 2000 Growth Index + 1.50%	11.29	-.-	11.29	Sep-16
Net of Fee Value Added vs Objective	*-6.92*		*-6.92*	
Russell 2000 Growth Index	9.79	-.-	9.79	
Net of Fee Value Added vs Benchmark	*-5.42*		*-5.42*	
Mid Cap Value - Active				
Smith Graham Mid Cap Value (Net) *	**-.-**	**-.-**	**-1.25**	**Dec-17**
Russell Midcap Index + 2%	-.-	-.-	8.21	**Dec-17**
Net of Fee Value Added vs Objective			*-9.46*	
Russell Midcap Index	-.-	-.-	6.08	
Net of Fee Value Added vs Benchmark			*-7.33*	

Manager Performance Objectives

International Equity	3-year	5-year	Since Inception	
Int'l Small Cap - Active				
Acadian International (Net)	**6.32**	**4.62**	**8.08**	**Mar-89**
Custom Benchmark + 2%	6.64	5.98	7.68	Mar-89
Net of Fee Value Added vs Objective	*-0.32*	*-1.36*	*0.40*	
Custom Benchmark	4.64	3.98	5.68	Mar-89
Net of Fee Value Added vs Benchmark	*1.68*	*0.64*	*2.40*	
Int'l Enhanced Index				
AQR Capital Management (Net)	**4.70**	**2.63**	**2.81**	**Mar-06**
Custom Benchmark + 1.5%	7.83	4.40	4.12	Mar-06
Net of Fee Value Added vs Objective	*-3.13*	*-1.77*	*-1.31*	
Custom Benchmark	6.33	2.90	2.62	Mar-06
Net of Fee Value Added vs Benchmark	*-1.63*	*-0.27*	*0.19*	
Int'l Developed				
Ativo International Developed (Net) *	**-.-**	**-.-**	**-0.28**	**Dec-17**
MSCI EAFE Index + 2%	-.-	-.-	0.42	
Net of Fee Value Added vs Objective			*-0.70*	
MSCI EAFE Index	-.-	-.-	-1.58	
Net of Fee Value Added vs Benchmark			*1.30*	
Int'l Equity (Active)				
Baillie Gifford (Net)	**-.-**	**-.-**	**4.03**	**Mar-19**
MSCI ACWI x-US (Net) + 2%	-.-	-.-	1.63	
Net of Fee Value Added vs Objective			*2.40*	
MSCI ACWI x-US (Net)	-.-	-.-	1.13	
Net of Fee Value Added vs Benchmark			*2.90*	
Int'l Equity (Active)				
Earnest Partners (Net) *	**-.-**	**-.-**	**0.39**	**Mar-19**
MSCI ACWI x-US (Net) + 2%	-.-	-.-	1.63	
Net of Fee Value Added vs Objective			*-1.24*	
MSCI ACWI x-US (Net)	-.-	-.-	1.13	
Net of Fee Value Added vs Benchmark			*-0.74*	

Manager Performance Objectives

Global Equity	3-year	5-year	Since Inception	Inception Date
Global Equity - Active				
Wellington (Net)	**8.64**	**7.11**	**10.91**	**Aug-12**
MSCI ACWI (Net) + 2%	11.71	8.65	11.20	Aug-12
Net of Fee Value Added vs Objective	*-3.07*	*-1.54*	*-0.29*	
MSCI ACWI (Net)	9.71	6.65	9.20	Aug-12
Net of Fee Value Added vs Benchmark	*-1.07*	*0.46*	*1.71*	
Global Equity - Active				
Ariel (Net) *	**-.-**	**-.-**	**2.53**	**Dec-17**
MSCI ACWI (Net) + 1.5%	-.-	-.-	4.47	
Net of Fee Value Added vs Objective			*-1.94*	
MSCI ACWI (Net)	-.-	-.-	2.97	
Net of Fee Value Added vs Benchmark			*-0.44*	

	3-year	5-year	Since Inception	Inception Date
Global Low Volatility - Active				
Acadian Global Low Vol (Net)	**9.25**	**-.-**	**8.91**	**Jun-15**
MSCI ACWI (Net) + 2%	11.71	-.-	9.10	Jun-15
Net of Fee Value Added vs Objective	*-2.46*		*-0.19*	
MSCI ACWI (Net)	9.71	-.-	7.10	Jun-15
Net of Fee Value Added vs MSCI ACWI	*-0.46*		*1.81*	
MSCI ACWI Min Vol (Net)	9.84	-.-	9.56	Jun-15
Net of Fee Value Added vs MSCI ACWI Min Vol	*-0.59*		*-0.65*	

Manager Performance Objectives

Real Estate	3-year	5-year	Since Inception	Inception Date
Real Estate Securities - Public				
Adelante Capital Management (Net)	**8.22**	**10.08**	**10.39**	**Sep-01**
Wilshire Real Estate Securities + 1%	8.47	11.49	11.73	Sep-01
Net of Fee Value Added vs Objective	*-0.25*	*-1.41*	*-1.34*	
Wilshire Real Estate Securities	7.47	10.49	10.73	Sep-01
Net of Fee Value Added vs Index	*0.75*	*-0.41*	*-0.34*	
CenterSquare (Net)	**-.-**	**-.-**	**18.86**	**May-18**
Wilshire Real Estate Securities + 1%	-.-	-.-	18.98	May-18
Net of Fee Value Added vs Objective			*-0.12*	
Wilshire Real Estate Securities	-.-	-.-	17.80	May-18
Net of Fee Value Added vs Index			*1.06*	
Direct Core Real Estate - Private				
Heitman America Real Estate Trust (Net)	**5.75**	**8.07**	**10.71**	**Aug-10**
NCREIF Open-End Diversified Core (Net)	6.34	8.35	10.48	Aug-10
Net of Fee Value Added vs Index	*-0.59*	*-0.28*	*0.23*	
Invesco Core Real Estate USA (Net)	**8.10**	**9.91**	**11.10**	**Aug-10**
NCREIF Open-End Diversified Core (Net)	6.34	8.35	10.48	Aug-10
Net of Fee Value Added vs Index	*1.76*	*1.56*	*0.62*	

Manager Performance Objectives

Fixed Income	3-year	5-year	Since Inception	Inception Date
Global Fixed Income				
Securian Asset Mgmt. (Net)	**3.68**	**4.12**	**4.83**	**May-07**
Bloomberg Aggregate + 0.5%	3.42	3.88	4.94	**May-07**
Net of Fee Value Added vs Objective	*0.26*	*0.24*	*-0.11*	
Bloomberg Aggregate	2.92	3.38	4.44	**May-07**
Net of Fee Value Added vs Benchmark	*0.76*	*0.74*	*0.39*	
Aberdeen (Net)	**3.06**	**3.41**	**4.85**	**Apr-07**
Bloomberg Aggregate + 0.5%	3.42	3.88	4.79	Apr-07
Net of Fee Value Added vs Objective	*-0.36*	*-0.47*	*0.06*	
Bloomberg Aggregate	2.92	3.38	4.29	Apr-07
Net of Fee Value Added vs Benchmark	*0.14*	*0.03*	*0.56*	
Garcia Hamilton (Net)	**2.85**	**3.44**	**3.74**	**Oct-13**
Bloomberg Aggregate + 0.5%	3.42	3.88	3.88	Oct-13
Net of Fee Value Added vs Objective	*-0.57*	*-0.44*	*-0.14*	
Bloomberg Aggregate	2.92	3.38	3.38	Oct-13
Net of Fee Value Added vs Benchmark	*-0.07*	*0.06*	*0.36*	

	3-year	5-year	Since Inception	Inception Date
High Yield				
Oaktree Capital Management (Net)	**4.70**	**4.19**	**6.69**	**Dec-96**
Performance Objective	6.77	5.97	7.89	Dec-96
Net of Fee Value Added vs Objective	*-2.07*	*-1.78*	*-1.20*	
Custom Benchmark	5.77	4.97	6.89	Dec-96
Net of Fee Value Added vs Benchmark	*-1.07*	*-0.78*	*-0.20*	
BlackRock High Yield (Net)	**5.75**	**4.87**	**6.44**	**Sep-06**
Citigroup High Yield Cash Pay + 1%	6.77	5.97	7.95	Sep-06
Net of Fee Value Added vs Objective	*-1.02*	*-1.10*	*-1.51*	
Citigroup High Yield Cash Pay	5.77	4.97	6.95	Sep-06
Net of Fee Value Added vs Benchmark	*-0.02*	*-0.10*	*-0.51*	
Credit Opportunities				
Neuberger Berman (Net)	**5.20**	**-.-**	**7.39**	**Jan-16**
Custom Benchmark + 1%	6.09	-.-	8.80	Jan-16
Net of Fee Value Added vs Objective	*-0.89*		*-1.41*	
Custom Benchmark	5.09	-.-	7.80	Jan-16
Net of Fee Value Added vs Benchmark	*0.11*		*-0.41*	

Manager Performance Objectives

MLP's	3-year	5-year	Since Inception	Inception Date
MLPs				
Harvest Fund Advisors (Net)	**-0.71**	**-5.90**	**4.41**	**Dec-11**
Alerian MLP Index + 1.5%	-0.96	-7.15	1.71	Dec-11
Net of Fee Value Added vs Objective	*0.25*	*1.25*	*2.70*	
Alerian MLP Index	-2.46	-8.65	0.21	Dec-11
Net of Fee Value Added vs Benchmark	*1.75*	*2.75*	*4.20*	
Atlantic Trust CIBC (Net)	**-1.90**	**-6.14**	**5.02**	**Dec-11**
Alerian MLP Index + 1.5%	-0.96	-7.15	1.71	Dec-11
Net of Fee Value Added vs Objective	*-0.94*	*1.01*	*3.31*	
Alerian MLP Index	-2.46	-8.65	0.21	Dec-11
Net of Fee Value Added vs Benchmark	*0.56*	*2.51*	*4.81*	