



Vermont Pension Investment Committee

First Fiscal Quarter 2018 Preliminary Investment Performance Analysis

November 28, 2017

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Market Environment



HIGHLIGHTS OF THIRD QUARTER HAPPENINGS AT NEPC



NEPC INSIGHTS

- A Tale of Two Countries: What's Next for Investors? (July 2017)
- Is the Buy-Write Strategy Right For You? (July 2017)
- 2017 2nd Quarter Market Thoughts (July 2017)
- The Top Three Stressors for Pension Plans (July 2017)
- 2017 Q2 Endowment & Foundation Survey Results & Infographic (August 2017)
- NEPC Healthcare Operating Fund Universe Results and Infographic (August 2017)
- Monitoring the Economic Impact of Harvey (August 2017)
- Market Chatter: Should the Underperformance of CTAs Give Investors Pause (September 2017)
- Defined Contribution Plan & Fee Survey: Healthcare Findings Infographic (September 2017)

WEBINAR REPLAYS

NEPC's 12th Annual Defined Contribution Plan & Fee Survey (September 2017)

To download NEPC's recent insights and webinar replays, visit: www.NEPC.com/insights

RECENT UPDATES

- Our team continues to grow: Please join us in welcoming our Partner, Sam Austin; and Senior Consultants, Kiersten Christensen, Andrew Coupe and Rick Ciccione!
- NEPC was featured in over 45 pieces of news coverage including Bloomberg, Pensions & Investments and FundFire to name a few.
- **SAVE THE DATE!** We will be hosting our 23rd Annual Investment Conference on May 14-15, 2018.













Performance Overview

Q3 Market Summary

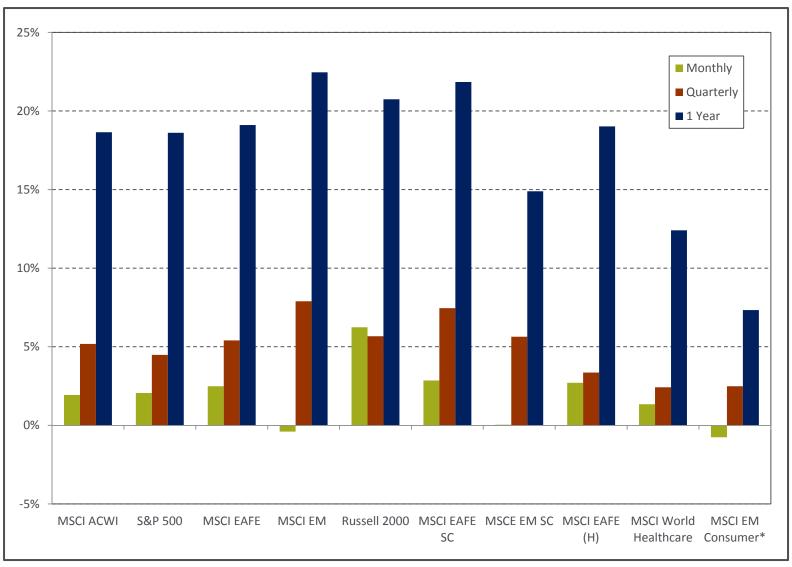
	Macro		Equity Credit Real		ty Cr		Credit		al Asse	ets	
US Dollar	VIX	US 10-Yr	S&P 500	MSCI EAFE	MSCI EM	US Agg.	High Yield	Dollar EMD	Oil	Gold	REITS
-2.7%	-1.7	3 bps	4.5%	5.4%	7.9%	0.8%	2.0%	2.4%	12.2%	3.1%	1.3%

- Equities continued to push higher with supportive macroeconomic data, robust earnings, and accommodative central banks
 - Emerging markets continued their outperformance led by strong returns in China
- Bond yields were little changed over the quarter reflecting minimal volatility seen in US economic growth and inflation rates
- Reflecting the pro-risk environment, the US dollar declined relative to both the euro and yuan while volatility remained near historic lows

Market segment (index representation) as follows: US Dollar (DXY Index), VIX (CBOE Volatility Index), US 10-Year (US 10-Year Treasury Yield), S&P 500 (US Equity), MSCI EAFE Index (International Developed Equity), MSCI Emerging Markets (Emerging Markets Equity), US Agg (Barclays US Aggregate Bond Index), High Yield (Barclays US High Yield Index), Dollar EMD (JPM Emerging Market Bond Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index).



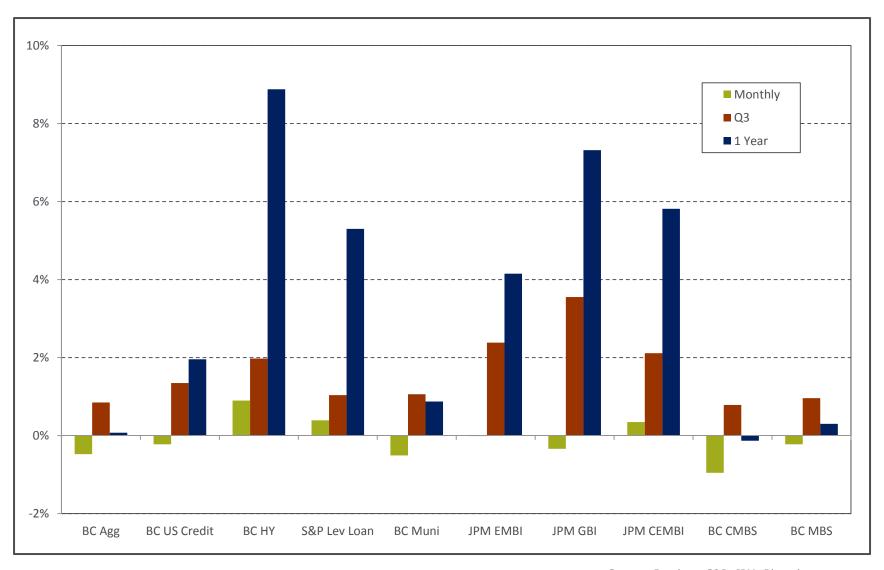
Equity Index Returns- September 30, 2017



*Equal-weighted EM Healthcare, Consumer Durables & Apparel, Consumer Discretionary, Consumer Staples Source: MSCI, S&P, Russell, NEPC, Bloomberg



Index Returns



Source: Barclays, S&P, JPM, Bloomberg



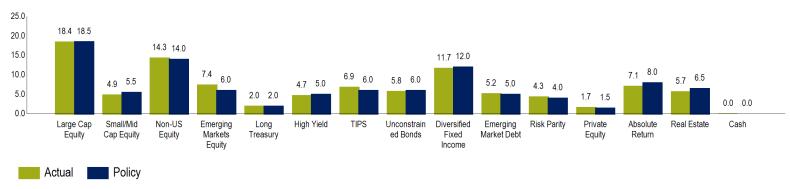
State Teachers' Retirement System



Total Fund Performance Summary - Net

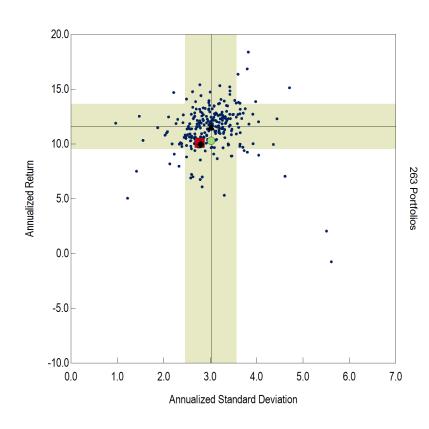
	Market Value	3 Mo	Rank	Fiscal YTD	Rank	YTD	Rank	1 Yr	Rank	3 Yrs I	Rank	5 Yrs I	Rank	7 Yrs I	Rank	10 Yrs	Rank
Total Teachers Composite	\$1,807,013,452	2.9%	80	2.9%	80	9.9%	72	10.1%	82	5.5%	80	6.1%	94	6.8%	90	4.1%	90
Policy Index		3.2%	54	3.2%	54	9.8%	74	10.0%	85	5.6%	79	6.2%	92	6.5%	94	4.1%	90
Allocation Index		3.4%	40	3.4%	40	10.4%	59	10.3%	79	5.6%	79	6.2%	93	6.4%	95	4.1%	90
InvestorForce Public DB Net Median		3.3%		3.3%		10.7%		11.6%		6.4%		8.0%		7.9%		5.3%	
				3 Years	Ending	Septemb	er 30, 2	2017									
	Anlzd Ret		Rank	Α	nlzd Sto	d Dev	Ra	nk	Sharp	e Ratio		Rank	Sort	ino Ratio	RF	Rank	
Total Teachers Composite	5.52%		80		5.119	6	10	6	1	.02		56		1.73		19	
Policy Index	5.59%		79		4.97%	6	1	1	1	.06		43		1.78		16	
Allocation Index	5.57%		79		5.13%	6	1	7	1	.02		54		1.64		25	
				5 Years I	Ending	Septemb	er 30, 2	2017									
	Anlzd Ret		Rank	Aı	nlzd Std	l Dev	Rai	nk	Sharp	e Ratio		Rank	Sort	ino Ratio I	RF	Rank	
Total Teachers Composite	6.13%		94		5.32%	, 0	26	6	1	.11		87		1.95		73	
Policy Index	6.23%		92		5.01%	0	12	2	1	.20		75		2.13		55	
Allocation Index	6.16%		93		5.07%	0	16	6	1	.17		80		2.01		67	

Actual vs Target Allocation (%)





1 Year Ending September 30, 2017

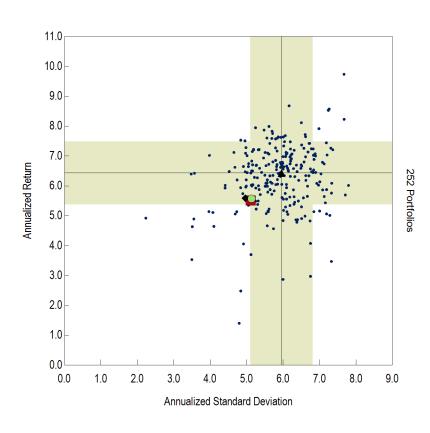


1 Year Ending September 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Teachers Composite	10.11%	82	2.77%	32	3.39	67
Policy Index	9.96%	85	2.80%	35	3.30	72
S&P 500	18.61%	1	5.46%	99	3.28	74
Citi WGBI	-2.69%	99	7.03%	99	-0.49	99
MSCI ACWI	18.65%	1	4.57%	99	3.92	33
MSCI ACWI ex USA	19.61%	1	6.63%	99	2.85	89
InvestorForce Public DB Net Median	11.60%		3.02%		3.61	-

- Total Teachers Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

3 Years Ending September 30, 2017

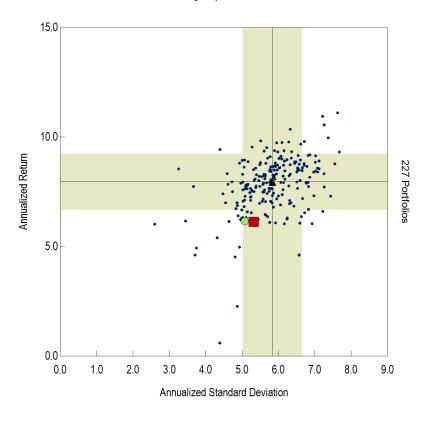


3 Years Ending September 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Teachers Composite	5.52%	80	5.11%	16	1.02	56
Policy Index	5.59%	79	4.97%	11	1.06	43
S&P 500	10.81%	1	10.07%	99	1.04	48
Citi WGBI	0.88%	99	5.81%	44	0.10	99
MSCI ACWI	7.43%	11	10.57%	99	0.67	97
MSCI ACWI ex USA	4.70%	96	12.25%	99	0.36	99
InvestorForce Public DB Net Median	6.43%		5.96%		1.04	-

- Total Teachers Composite
- Policy Index
- Allocation Index
- Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

5 Years Ending September 30, 2017

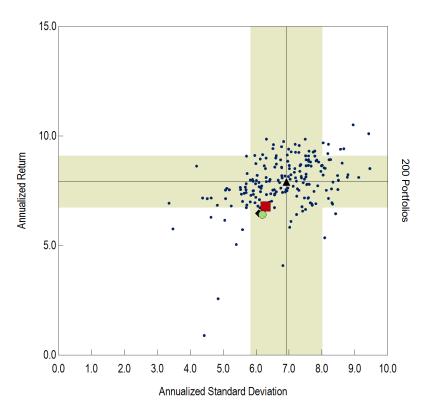


5 Years	Ending	Septemb	er 30, 2017
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	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Teachers Composite	6.13%	94	5.32%	26	1.11	87
Policy Index	6.23%	92	5.01%	12	1.20	75
S&P 500	14.22%	1	9.55%	99	1.47	22
Citi WGBI	-0.43%	99	5.39%	29	-0.12	99
MSCI ACWI	10.20%	2	9.94%	99	1.00	93
MSCI ACWI ex USA	6.97%	82	11.55%	99	0.59	99
InvestorForce Public DB Net Median	7.95%		5.83%		1.34	

- Total Teachers Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

7 Years Ending September 30, 2017



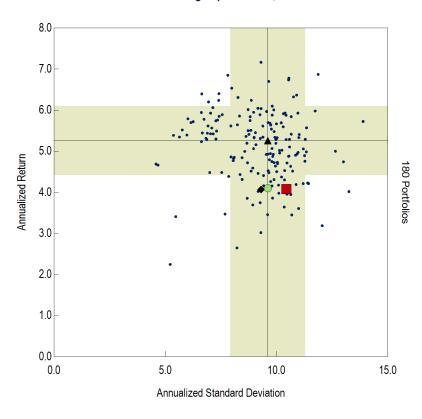
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anizd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Teachers Composite	6.79%	90	6.28%	30	1.05	76
Policy Index	6.47%	94	6.08%	24	1.04	77
S&P 500	14.38%	1	10.90%	99	1.30	19
Citi WGBI	0.80%	99	5.48%	9	0.12	99
MSCI ACWI	9.17%	11	12.23%	99	0.74	99
MSCI ACWI ex USA	5.25%	99	14.18%	99	0.36	99
InvestorForce Public DB Net Median	7.91%		6.92%		1.14	

7 Years Ending September 30, 2017

Anlzd

- Total Teachers Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

10 Years Ending September 30, 2017

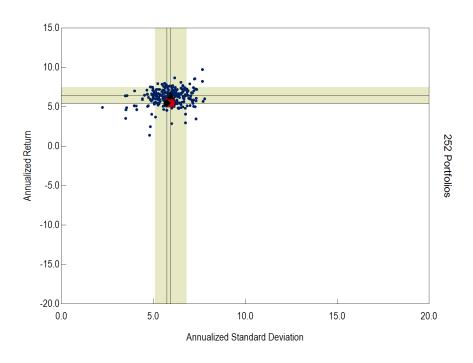


	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Teachers Composite	4.08%	90	10.44%	78	0.36	92
Policy Index	4.07%	90	9.31%	46	0.40	84
S&P 500	7.44%	1	15.14%	99	0.47	62
Citi WGBI	2.95%	99	6.74%	9	0.38	87
MSCI ACWI	3.88%	93	16.89%	99	0.21	99
MSCI ACWI ex USA	1.28%	99	19.06%	99	0.05	99
InvestorForce Public DB Net Median	5.26%		9.60%		0.51	

- Total Teachers Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

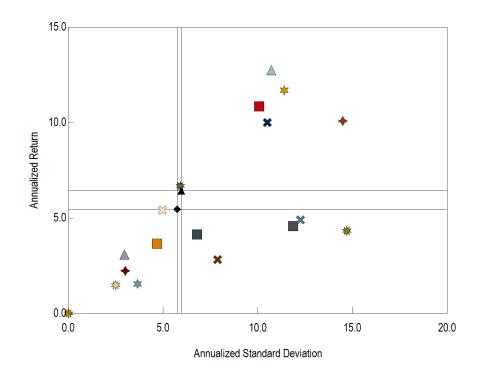
Total Marketable Assets - Net

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017



- Total Marketable Assets
- Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017

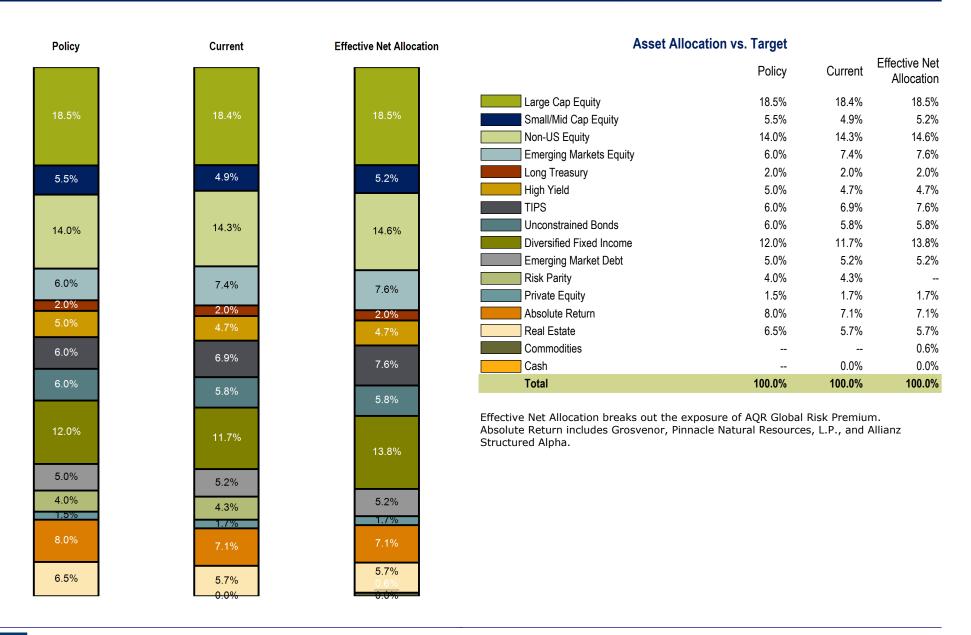


- SSgA S&P 500 Cap-Wgt
- ★ SSgA S&P 500 Equal-Wgt
- T. Rowe
- Wellington
- * Acadian
- Mondrian
- SSgA ACWI Ex US
- * Aberdeen
- ▲ PIMCO Core Plus
- * BlackRock TIPS

- KDP
- Guggenheim
- Wellington Opportunistic EMD
- PIMCO Unconstrained
- Mellon Dynamic Growth
- * AQR Global Risk Premium
- Vermont Cash
- Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval



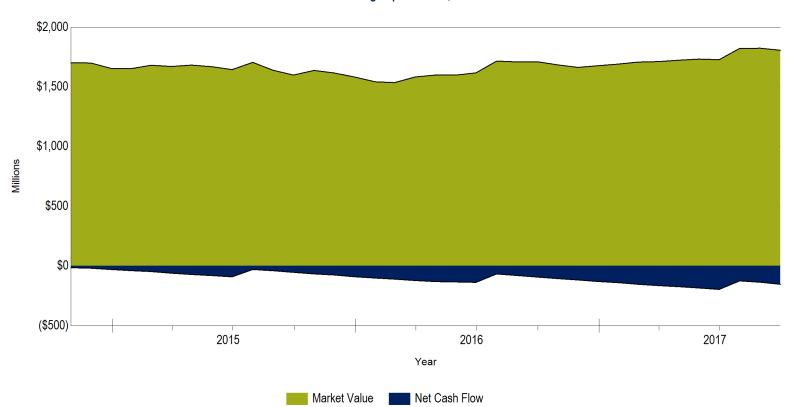
Total Fund Asset Allocation vs. Policy Targets





Total Fund Asset Growth Summary

3 Years Ending September 30, 2017



	Last Three Months	Fiscal Year-To-Date	Year-To-Date	One Year	Three Years
Beginning Market Value	\$1,727,857,454	\$1,727,857,454	\$1,677,902,518	\$1,710,896,076	\$1,697,054,148
Contributions	\$185,125,453	\$185,125,453	\$390,198,674	\$408,808,031	\$1,184,557,754
Withdrawals	-\$142,083,371	-\$142,083,371	-\$413,212,662	-\$469,232,373	-\$1,338,138,984
Net Cash Flow	\$43,042,082	\$43,042,082	-\$23,013,988	-\$60,424,343	-\$153,581,230
Net Investment Change	\$36,113,916	\$36,113,916	\$152,124,922	\$156,541,719	\$263,540,534
Ending Market Value	\$1,807,013,452	\$1,807,013,452	\$1,807,013,452	\$1,807,013,452	\$1,807,013,452



Total Fund Asset Growth Summary by Manager

Quarter E	nding Se	ptember 3	0, 2017
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				,		_
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Aberdeen	\$127,994,726	\$237,603	-\$237,603	\$0	\$5,616,299	\$133,611,025
Acadian	\$73,833,468	\$94,819	-\$13,294,819	-\$13,200,000	\$4,889,076	\$65,522,543
Allianz Structured Alpha	\$31,764,261	\$0	-\$163,304	-\$163,304	\$577,410	\$32,178,367
AQR Global Risk Premium	\$75,005,803	\$132,432	-\$132,432	\$0	\$3,427,762	\$78,433,565
BlackRock TIPS	\$81,433,141	\$41,639,812	-\$12,911	\$41,626,900	\$1,054,265	\$124,114,306
Champlain	\$49,496,679	\$4,076,430	-\$102,003	\$3,974,427	\$435,639	\$53,906,746
GAM	\$176,710	\$0	\$0	\$0	\$31	\$176,740
GAM Unconstrained Bond	\$60,607,654	\$0	-\$70,889	-\$70,889	\$862,059	\$61,398,824
Grosvenor	\$85,424,173	\$0	-\$33,253,800	-\$33,253,800	\$881,603	\$53,051,976
Guggenheim	\$65,121,555	\$76,429	-\$76,429	\$0	\$1,192,535	\$66,314,090
Harbourvest Dover IX Fund	\$2,456,701	\$472,565	\$0	\$472,565	\$0	\$2,929,266
Harbourvest Dover VIII Fund	\$7,785,396	\$0	-\$452,211	-\$452,211	\$0	\$7,333,185
Harbourvest Partners IX Buyout Fund	\$7,071,833	\$0	-\$371,546	-\$371,546	\$0	\$6,700,288
Harbourvest Partners IX Credit Opportunities	\$1,012,491	\$0	-\$36,772	-\$36,772	\$0	\$975,719
Harbourvest Partners IX Venture Fund	\$5,086,893	\$0	-\$247,006	-\$247,006	\$0	\$4,839,887
Harbourvest Partners X Buyout Fund	\$2,709,250	\$0	\$0	\$0	\$0	\$2,709,250
Harbourvest Partners X Venture Fund	\$1,345,381	\$342,201	\$0	\$342,201	\$0	\$1,687,582
HIPEP VII	\$2,505,967	\$225,801	\$0	\$225,801	\$0	\$2,731,768
KDP	\$18,495,662	\$29,194	-\$29,194	\$0	\$278,286	\$18,773,948
Mellon Dynamic Growth	\$51,397	\$0	\$0	\$0	\$62	\$51,459
Mondrian	\$70,563,580	\$70,959	-\$11,570,959	-\$11,500,000	\$3,672,501	\$62,736,081
PIMCO Core Plus	\$94,321,498	\$72,847	-\$72,847	\$0	\$1,107,149	\$95,428,647
PIMCO Unconstrained	\$41,886,744	\$67,064	-\$67,064	\$0	\$630,550	\$42,517,294
Pinnacle Natural Resources, L.P.	\$41,671,356	\$0	\$0	\$0	\$1,191,900	\$42,863,256
RREEF America REIT III	\$248,324	\$0	-\$921	-\$921	-\$38,965	\$208,437



Total Fund Asset Growth Summary by Manager

Quarter Ending September 30, 2017

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Siguler Guff DREOF II	\$13,336,119	\$0	-\$8,126	-\$8,126	-\$83,577	\$13,244,415
Siguler Guff DREOF II Co-Investment	\$4,038,258	\$156,639	\$0	\$156,639	\$36,037	\$4,230,934
SSgA ACWI Ex US	\$109,541,925	\$13,816,257	-\$16,257	\$13,800,000	\$6,813,586	\$130,155,511
SSgA Barclays Aggregate Index	\$79,938,016	\$34,795,046	-\$8,750	\$34,786,297	\$946,709	\$115,671,021
SSgA S&P 500 Cap-Wgt	\$227,553,900	\$20,020,004	-\$20,004	\$20,000,000	\$11,060,562	\$258,614,461
SSgA S&P 500 Equal-Wgt	\$68,095,774	\$4,007,451	-\$7,451	\$4,000,000	\$2,609,403	\$74,705,177
State Street Long U.S. Treasury Index	\$34,742,858	\$15,001,003	-\$14,600,000	\$401,003	\$301,658	\$35,445,519
T. Rowe	\$2,468	\$0	\$0	\$0	\$0	\$2,468
Transwestern / Aslan III	\$128,447	\$0	\$0	\$0	\$0	\$128,447
UBS Trumbull	\$50,155,193	\$49,428,441	-\$174,324	\$49,254,116	-\$13,927,778	\$85,481,531
Vermont Cash	\$761,859	\$280,992	-\$749,708	-\$468,715	\$0	\$293,144
Wellington	\$39,866,154	\$81,464	-\$6,043,105	-\$5,961,640	\$101,643	\$34,006,156
Wellington Opportunistic EMD	\$91,362,908	\$0	\$0	\$0	\$2,477,510	\$93,840,419
Z Terminated - Morgan Stanley Prime Property	\$60,262,935	\$0	-\$60,262,935	-\$60,262,935	\$0	
Total	\$1,727,857,454	\$185,125,453	-\$142,083,371	\$43,042,082	\$36,113,916	\$1,807,013,452



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Teachers Composite	1,807,013,452	100.0	100.0	2.9	80	2.9	80	9.9	72	10.1	82	5.5	80	6.1	94	4.1	90
Policy Index				3.2	54	3.2	54	9.8	74	10.0	85	5.6	79	6.2	92	4.1	90
Allocation Index				3.4	40	3.4	40	10.4	59	10.3	79	5.6	79	6.2	93	4.1	90
InvestorForce Public DB Net Median				3.3		3.3		10.7		11.6		6.4		8.0		5.3	
Total Marketable Assets	1,545,542,406	85.5	84.0	3.2	60	3.2	60	11.4	30	11.2	60	5.6	79	5.9	97	-	
Total Marketable Assets Custom Index				3.5	30	3.5	30	10.8	46	10.4	75	5.5	82	6.3	92		
InvestorForce Public DB Net Median				3.3		3.3		10.7		11.6		6.4		8.0		5.3	
Total Domestic Equity	421,235,009	23.3	24.0	3.6	69	3.6	69	11.7	55	17.1	63	11.1	34				
Russell 3000				4.6	48	4.6	48	13.9	40	18.7	48	10.7	38	14.2	38	7.6	52
eA All US Equity Net Median				4.5		4.5		12.4		18.5		9.9		13.6		7.6	
Total Large Cap Equities	333,322,107	18.4	18.5	4.3	55	4.3	55	13.6	50	17.9	54	10.6	28	14.5	26	8.0	31
S&P 500				4.5	49	4.5	49	14.2	44	18.6	46	10.8	25	14.2	32	7.4	45
eA US Large Cap Equity Net Median				4.5		4.5		13.6		18.2		9.4		13.4		7.3	
SSgA S&P 500 Cap-Wgt	258,614,461	14.3	14.0	4.5	49	4.5	49	14.2	45	18.6	46	10.8	25	14.2	31		
S&P 500				4.5	49	4.5	49	14.2	44	18.6	46	10.8	25	14.2	32	7.4	45
SSgA S&P 500 Equal-Wgt	74,705,177	4.1	4.5	3.6	72	3.6	72	11.8	66	15.9	73	10.0	39	15.0	15	8.7	16
S&P 500 Equal Weighted				3.6	73	3.6	73	11.9	65	16.2	70	10.1	38	15.0	15	8.9	13
T. Rowe	2,468	0.0	0.0														



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Small/Mid Cap Equities	87,912,902	4.9	5.5	1.3	95	1.3	95	5.8	90	14.1	84	11.6	23	14.1	37	8.7	34
Russell 2000 eA US Small-Mid Cap Equity Net Median				5.7 4.1	22	5.7 4.1	22	10.9 11.0	51	20.7 18.0	24	12.2 9.8	18	13.8 13.3	39	7.8 8.0	53
Champlain	53,906,746	3.0	2.8	2.0	88	2.0	88	12.8	46	17.4	42	12.7	8	15.6	14		
Russell 2500 eA US Mid Cap Equity Net	, ,			4.7	29	4.7	29	11.0	57	17.8	41	10.6	31	13.9	46	8.2	49
Median				3.7		3.7		11.9		16.4		9.4		13.5		8.1	
Wellington	34,006,156	1.9	2.8	0.5	97	0.5	97	-2.0	99	10.5	98	10.1	67	12.2	76	8.7	30
Russell 2000 Value				5.1	45	5.1	45	5.7	63	20.5	44	12.1	36	13.3	60	7.1	72
eA US Small Cap Value Equity Net Median				5.0		5.0		6.6		19.8		11.0		14.0		7.9	
Total Non US Equity	392,025,161	21.7	20.0	5.5	62	5.5	62	23.4	34	20.6	43	6.1	57	7.4	86		
MSCI EAFE				5.4	65	5.4	65	20.0	68	19.1	58	5.0	75	8.4	69	1.3	81
MSCI ACWI ex USA				6.2	46	6.2	46	21.1	54	19.6	52	4.7	81	7.0	92	1.3	84
eA All EAFE Equity Net Median				5.9		5.9		21.4		19.7		6.3		9.4		2.7	
Total Core Non US Equity	258,414,136	14.3	14.0	6.2	45	6.2	45	23.2	36	22.5	30	7.2	41	9.9	38	2.0	66
MSCI EAFE				5.4	65	5.4	65	20.0	68	19.1	58	5.0	75	8.4	69	1.3	81
eA All EAFE Equity Net Median	07 700 740			5.9		5.9		21.4		19.7		6.3	4.0	9.4		2.7	0.1
Acadian	65,522,543	3.6	4.0	6.9	37	6.9	37	30.2	9	30.5	3	11.7	10	13.1	15	2.2	64
Mondrian	62,736,081	3.5	4.0	5.8	53	5.8	53	18.7	76	18.0	67	4.6	82	8.4	68	2.0	66
MSCI EAFE	100 155 511	7.0	0.0	5.4	65	5.4	65	20.0	68	19.1	58	5.0	75	8.4	69	1.3	81
SSgA ACWI Ex US	130,155,511	7.2	6.0	6.2	51	6.2	51	21.4	66	19.8	54	4.9	74	7.2	81		
MSCI ACWI ex USA eA ACWI ex-US All Cap Equity Net Median				6.2 6.2	51	6.2 6.2	51	21.1 24.0	69	19.6 20.4	56	4.7 6.7	77	7.0 9.2	84	1.3 2.7	84
Total Emerging Market Equity	133,611,025	7.4	6.0	4.2	88	4.2	88	23.8	76	17.2	80	4.3	68	3.3	88		
Aberdeen	133,611,025	7.4	6.0	4.2	88	4.2	88	23.8	76	17.2	80	4.3	68	3.2	88		
MSCI Emerging Markets	100,011,020	7.4	0.0	7.9	46	7.9	46	27.8	55	22.5	45	4.9	59	4.0	77	1.3	 79
eA Emg Mkts Equity Net Median				7.8	70	7.8	70	28.4	00	21.9	40	5.3	00	5.2	11	2.3	73



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fixed Income	653,504,068	36.2	36.0	1.3	30	1.3	30	5.1	29	3.3	26	4.2	28	-	-	-	
BBgBarc US Aggregate TR				0.8	55	0.8	55	3.1	56	0.1	87	2.7	54	2.1	59	4.3	54
eA All US Fixed Inc Net Median Total Diversified Fixed Income	244 000 000	11.7	40.0	0.9	40	0.9	40	3.4 4.1	20	1.1	0.4	2.9	27	2.5	20	4.4	EC
	211,099,668	11.7	12.0	1.0	42	1.0	42		39	-0.3	94	4.3	27	3.3	38	4.2	56
BBgBarc US Aggregate TR eA All US Fixed Inc Net Median				0.8 0.9	55	0.8 0.9	55	3.1 3.4	56	0.1 1.1	87	2.7 2.9	54	2.1 2.5	59	4.3 4.4	54
PIMCO Core Plus	95,428,647	5.3	6.0	1.1	9	1.1	9	4.4	5	1.1	20	3.1	28	2.1	66		
BBgBarc US Aggregate TR				0.8	52	0.8	52	3.1	64	0.1	73	2.7	61	2.1	66	4.3	78
SSgA Barclays Aggregate Index	115,671,021	6.4	6.0	0.9	31	0.9	31	3.2	61	0.1	69						
BBgBarc US Aggregate TR				0.8	52	0.8	52	3.1	64	0.1	73	2.7	61	2.1	66	4.3	78
3-Month Libor Total Return USD				0.3	99	0.3	99	0.9	99	1.2	19	0.7	99	0.5	99	0.9	99
eA US Core Fixed Inc Net Median				0.9		0.9		3.3		0.4		2.8		2.3		4.6	
Total TIPS	124,114,306	6.9	6.0	0.8	74	0.8	74	1.6	57	-0.8	70	1.6	28	-0.1	54		
BlackRock TIPS	124,114,306	6.9	6.0	8.0		0.8		1.6		-0.8		1.5		-0.1	-		
BBgBarc US TIPS TR				0.9		0.9		1.7		-0.7		1.6		0.0		3.9	
Total High Yield Bonds	85,088,038	4.7	5.0	1.6	68	1.6	68	5.4	80	8.1	52	5.1	48	5.9	39	7.2	43
BBgBarc US High Yield TR				2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	15
eA US High Yield Fixed Inc Net Median				1.8		1.8		6.5		8.1		5.0		5.7		7.0	
KDP	18,773,948	1.0	1.0	1.3	83	1.3	83	4.8	87	5.5	89	3.7	89	4.1	95		
BBgBarc US High Yield TR				2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	15
BofA Merrill Lynch US High Yield BB-B Rated				1.9	40	1.9	40	6.6	47	8.0	56	5.8	27	6.1	31	7.2	42
Guggenheim	66,314,090	3.7	4.0	1.7	63	1.7	63	5.5	79	8.8	35	5.4	36	-			
BBgBarc US High Yield TR				2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	15
eA US High Yield Fixed Inc Net Median				1.8		1.8		6.5		8.1		5.0		5.7		7.0	



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Emerging Market Debt	93,840,419	5.2	5.0	2.7	81	2.7	81	9.7	68	6.5	63	6.7	10	5.0	17		
Wellington Opportunistic EMD	93,840,419	5.2	5.0	2.7	81	2.7	81	9.7	68	6.5	63	6.7	10	5.0	17	-	
JP Morgan EMBI Global Index				2.4	91	2.4	91	8.7	81	4.2	94	6.1	19	4.3	31	7.3	30
eA All Emg Mkts Fixed Inc Net Median				3.3		3.3		11.6		7.4		4.6		3.1		6.5	
Total Long Treasury	35,445,519	2.0	2.0	0.5		0.5											
State Street Long U.S. Treasury Index	35,445,519	2.0	2.0	0.5		0.5											
BBgBarc US Treasury Long TR				0.6		0.6		6.0		-6.4		4.9		2.8		6.9	
Total Unconstrained Fixed Income	103,916,118	5.8	6.0	1.3	77	1.3	77	5.6	53	6.9	31	-					
25% HY, 25% EMD, 50% BC Agg				1.5	68	1.5	68	5.5	58	3.3	85	4.4	14	3.7	30	6.0	30
BBgBarc Global Aggregate TR				1.8	50	1.8	50	6.3	50	-1.3	99	1.3	88	0.5	93	3.3	88
eA Global Unconstrained Fixed Inc Net Median				1.8		1.8		6.0		6.1		2.6		2.7		5.0	
PIMCO Unconstrained	42,517,294	2.4	2.5	1.3	77	1.3	77	4.4	75	5.8	59	2.2	62	1.5	89		
25% HY, 25% EMD, 50% BC Agg				1.5	68	1.5	68	5.5	58	3.3	85	4.4	14	3.7	30	6.0	30
3-Month Libor Total Return USD				0.3	99	0.3	99	0.9	99	1.2	99	0.7	92	0.5	93	0.9	99
GAM Unconstrained Bond	61,398,824	3.4	3.5	1.3	78	1.3	78	6.4	43	7.7	25						
3-Month LIBOR + 3%				1.1	85	1.1	85	3.2	89	4.2	74	3.7	27	3.5	31	3.9	78
eA Global Unconstrained Fixed Inc Net Median				1.8		1.8		6.0		6.1		2.6		2.7		5.0	



Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Risk Parity/GAA	78,485,025	4.3	4.0	4.4	28	4.4	28	10.0	48	7.6	60	2.9	58	3.8	64	4.1	52
Mellon Dynamic Growth	51,459	0.0	0.0	0.1	97	0.1	97	4.2	61	2.6	89	4.1	30	5.0	58	2.6	64
Mellon Dynamic Growth Benchmark				3.9	14	3.9	14	12.2	12	9.8	29	4.8	23	6.0	37	3.7	35
Total Risk Parity	78,433,565	4.3	4.0	4.4	28	4.4	28	10.5	47	7.8	58	2.8	58	3.5	66	-	
eA Global TAA Net Median				3.0		3.0		9.6		8.5		3.5		4.6		4.2	
AQR Global Risk Premium	78,433,565	4.3	4.0	4.4	28	4.4	28	10.5	47	7.8	58	2.8	58	3.4	66	-	
60% MSCI World (Net) / 40% CITI WGBI				3.6	39	3.6	39	12.1	39	9.4	41	5.1	28	6.4	26	4.0	53
Total Cash	293,144	0.0	0.0														
Vermont Cash	293,144	0.0	0.0	0.0	-	0.0	-	0.0		0.0		0.0		0.0		0.5	
91 Day T-Bills				0.3		0.3		0.6		0.7		0.3		0.2		0.4	
Total Real Estate	103,293,763	5.7	6.5	1.5		1.5		3.8		5.9		9.5		11.0			
NCREIF Property Index				1.7		1.7		5.1		6.9		9.8		10.3		6.2	
Total Real Estate Core	85,818,414	4.7	5.0	1.3		1.3		3.2		5.1		9.3		10.8			
UBS Trumbull	85,481,531	4.7		1.3		1.3		3.2		4.4		8.5		8.8		4.5	
RREEF America REIT III	208,437	0.0		-0.8		-0.8		-4.8		-5.1		-5.0		4.5		-6.5	
Transwestern / Aslan III	128,447	0.0		0.0		0.0		0.0		0.0		-2.4		9.4		-23.1	
Total Real Estate Non-Core	17,475,349	1.0	1.5	3.1		3.1		7.7		11.1		10.3					
Siguler Guff DREOF II	13,244,415	0.7		3.8		3.8		8.1		12.3		10.7					
Siguler Guff DREOF II Co- Investment	4,230,934	0.2		0.9		0.9		6.8			-		-	-			

Real Estate performance reported on a quarterly basis. NCREIF Property is available 25 days after quarter end. Real Estate values are preliminary as of 09/30/2017.



Total Fund Performance Detail - Net

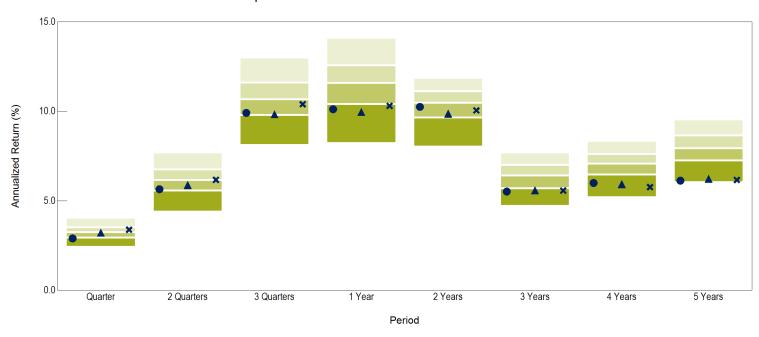
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Absolute Return	128,270,339	7.1	8.0	2.0	53	2.0	53	1.8	89	4.0	77	0.9	80	4.3	69		
HFRI Fund of Funds Composite Index eV Alt Fund of Funds - Multi- Strategy Median				2.3 2.1	46	2.3 2.1	46	5.6 5.3	48	6.5 6.5	51	2.2 2.6	60	3.8 5.3	73	1.1 3.0	90
Grosvenor	53,051,976	2.9	3.0	1.7	63	1.7	63	3.9	63	6.2	53	2.3	59	5.4	49		
Allianz Structured Alpha	32,178,367	1.8	2.0	1.3	74	1.3	74	3.6	70	5.1	64	7.8	7	6.2	33		
91 Day T-Bills				0.3	96	0.3	96	0.6	96	0.7	96	0.3	88	0.2	99	0.4	96
eV Alt Fund of Funds - Multi- Strategy Median				2.1		2.1		5.3		6.5		2.6		5.3		3.0	
Pinnacle Natural Resources, L.P.	42,863,256	2.4	3.0	2.9		2.9		-8.4		-5.3							
Bloomberg Commodity Index				2.5		2.5		-2.9		-0.3		-10.4		-10.5		-6.8	
GAM	176,740	0.0	0.0														
Total Private Equity	29,906,943	1.7	1.5	0.0		0.0	-	6.4		8.4		15.0					
Cambridge Associates US All PE				0.0		0.0		7.6		12.4		9.0		12.4		9.2	

Absolute Return composite formerly shown as Hedge Funds composite. As of 04/01/2016, Absolute Return includes Allianz Structured Alpha. Allianz Structured Alpha was included Diversified Fixed income composite prior to 04/01/2016. Harbourvest values based on final Capital Account Statements for Q2, and cash adjusted through Q3.



Total Fund Return Summary vs. Peer Universe - Net

Total Teachers Composite vs. InvestorForce Public DB Net

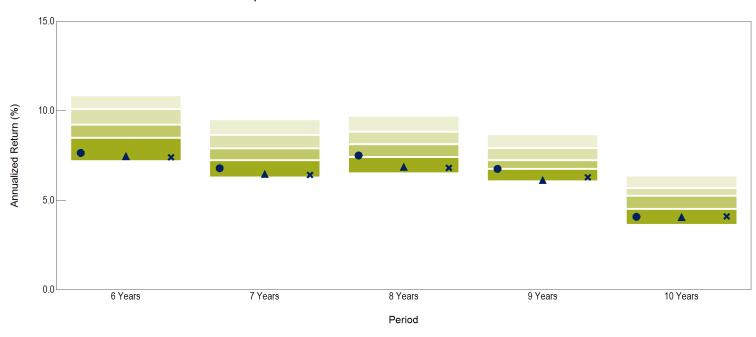


		Return (Rank))														
	5th Percentile	4.0		7.7		13.0		14.1		11.9		7.7		8.3		9.5	
	25th Percentile	3.5		6.8		11.6		12.6		11.1		7.0		7.6		8.7	
	Median	3.3		6.2		10.7		11.6		10.5		6.4		7.1		8.0	
	75th Percentile	3.0		5.6		9.8		10.4		9.7		5.7		6.5		7.3	
	95th Percentile	2.4		4.4		8.1		8.2		8.0		4.7		5.2		6.1	
	# of Portfolios	264		264		264		263		258		252		234		227	
•	Total Teachers Composite	2.9	(80)	5.6	(73)	9.9	(72)	10.1	(82)	10.2	(56)	5.5	(80)	6.0	(86)	6.1	(94)
•	Policy Index	3.2	(54)	5.9	(62)	9.8	(74)	10.0	(85)	9.9	(70)	5.6	(79)	5.9	(88)	6.2	(92)
×	Allocation Index	3.4	(40)	6.2	(51)	10.4	(59)	10.3	(79)	10.0	(65)	5.6	(79)	5.8	(90)	6.2	(93)



Total Fund Return Summary vs. Peer Universe - Net

Total Teachers Composite vs. InvestorForce Public DB Net

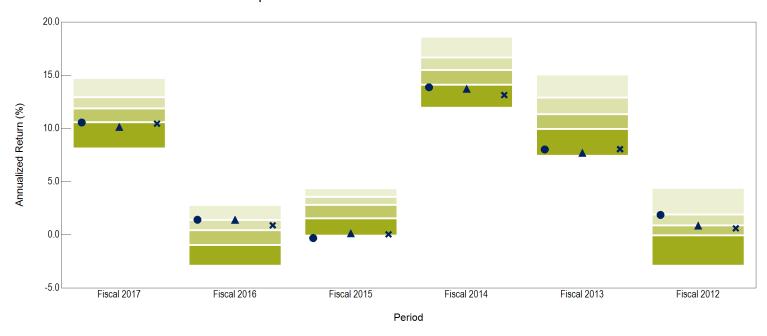


	Return (Rank)								
5th Percentile	10.9		9.5		9.7	8.7		6.4	
25th Percentile	10.1		8.7		8.8	7.9		5.7	
Median	9.2		7.9		8.1	7.2		5.3	
75th Percentile	8.5		7.2		7.4	6.8		4.5	
95th Percentile	7.2		6.3		6.5	6.1		3.6	
# of Portfolios	211		200		190	183		180	
Total Teachers Composite	7.6	(93)	6.8	(90)	7.5 (73	3) 6.8	(77)	4.1	(90)
▲ Policy Index	7.5	(95)	6.5	(94)	6.9 (93	6.1	(93)	4.1	(90)
× Allocation Index	7.4	(95)	6.4	(95)	6.8 (94	4) 6.3	(91)	4.1	(90)



Total Fund Return Summary vs. Peer Universe - Net

Total Teachers Composite vs. InvestorForce Public DB Net

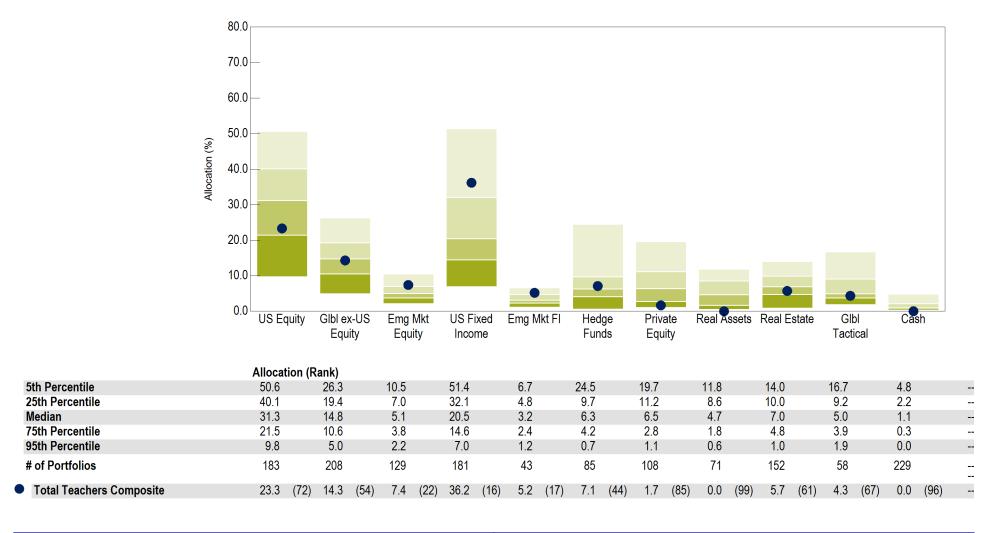


	Return (Rank)										
5th Percentile	14.7		2.8		4.4		18.6	15.0		4.4	
25th Percentile	12.9		1.4		3.6		16.7	12.9		1.9	
Median	11.9		0.4		2.8		15.5	11.3		0.9	
75th Percentile	10.6		-0.9		1.6		14.1	9.9		0.0	
95th Percentile	8.1		-2.9		-0.1		11.9	7.4		-2.9	
# of Portfolios	282		258		231		173	192		147	
Total Teachers Composite	10.5	(77)	1.4	(25)	-0.3	(96)	13.9 (83	3) 8.0	(94)	1.9	(26)
Policy Index	10.1	(82)	1.4	(25)	0.1	(94)	13.7 (84	1) 7.7	(94)	0.9	(51)
× Allocation Index	10.4	(79)	0.9	(37)	0.0	(95)	13.1 (9	1) 8.0	(94)	0.6	(59)



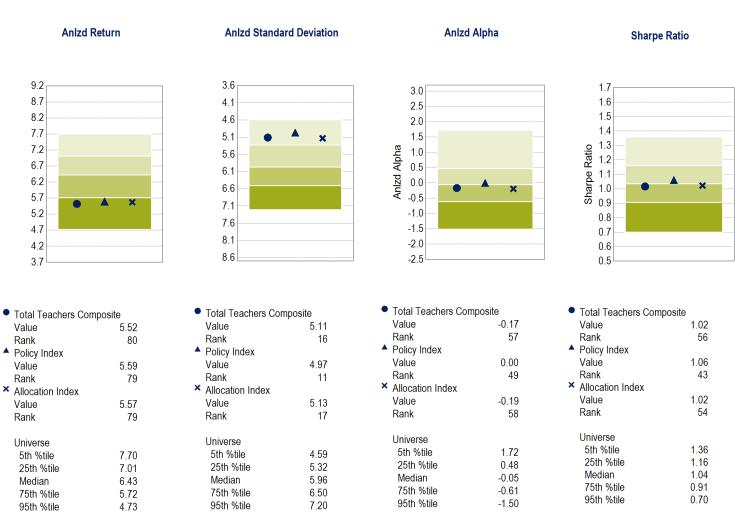
Total Fund Allocation vs. Peer Universe - Net

Total Plan Allocation vs. InvestorForce Public DB Net
As of September 30, 2017



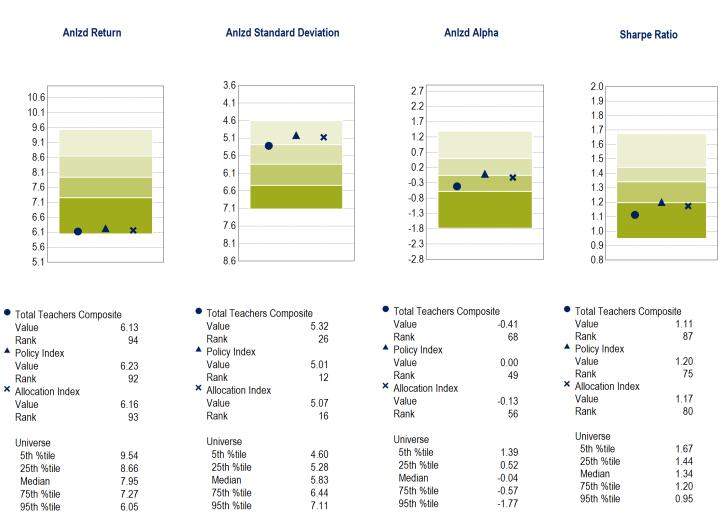


Teachers Composite vs. IFx Public DB Net 3 Years





Teachers Composite vs. IFx Public DB Net 5 Years





Teachers Composite vs. IFx Public DB Net 7 Years

Anizd Return Anizd Standard Deviation Anizd Alpha Sharpe Ratio 4.0 1.8 10.8 2.3 4.5 1.7 10.3 1.8 5.0 1.6 9.8 5.5 1.3 1.5 9.3 6.0 8.0 AnIzd Alpha 1.4 8.8 6.5 0.3 1.3 8.3 7.0 -0.2 1.2 7.8 7.5 -0.7 1.1 7.3 8.0 -1.2 1.0 6.8 8.5 -1.7 0.9 6.3 9.0 -2.2 8.0 9.5 5.8 10.0 -2.7 0.7 5.3 Total Teachers Composite Total Teachers Composite Total Teachers Composite Total Teachers Composite Value Value 0.15 1.05 Value Value 6.79 6.28 Rank 76 Rank 34 90 Rank 30 Rank Policy Index Policy Index ▲ Policy Index ▲ Policy Index Value 1.04 Value 0.00 Value 6.08 Value 6.47 Rank 77 Rank 42 Rank 24 Rank 94 × Allocation Index × Allocation Index × Allocation Index × Allocation Index Value 1.01 -0.16 Value Value 6.42 Value 6.19 Rank 80 Rank 52 29 95 Rank Rank Universe Universe Universe Universe 5th %tile 1.45 5th %tile 1.22 5th %tile 9.52 5th %tile 5.04 25th %tile 1.27 25th %tile 0.43 25th %tile 25th %tile 6.11 8.66 Median 1.14 Median -0.14 Median 6.92 Median 7.91 75th %tile 1.05 75th %tile -0.78 75th %tile 7.59 75th %tile 7.24 95th %tile 0.86 95th %tile -1.75 95th %tile 8.48 95th %tile 6.29



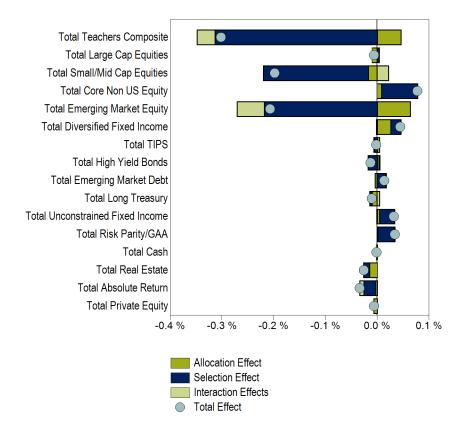
Teachers Composite vs. IFx Public DB Net 10 Years

Anizd Return AnIzd Standard Deviation Anizd Alpha Sharpe Ratio 6.0 1.1 2.7 7.6 1.0 2.2 7.1 7.0 0.9 1.7 6.6 8.0 6.1 8.0 1.2 0.7 0.7 5.6 0.6 9.0 0.2 5.1 0.5 -0.3 4.6 10.0 0.4 8.0-4.1 0.3 -1.3 3.6 11.0 0.2 -1.8 3.1 0.1 -2.3 2.6 12.0 Total Teachers Composite Total Teachers Composite Total Teachers Composite Total Teachers Composite Value 0.36 Value -0.44Value Value 4.08 10.44 92 Rank 70 Rank 90 Rank 78 Rank ▲ Policy Index Policy Index ▲ Policy Index ▲ Policy Index Value 0.40 Value 0.00 Value 9.31 Value 4.07 Rank 84 Rank 56 Rank 46 Rank 90 × Allocation Index × Allocation Index × Allocation Index × Allocation Index Value 0.39 -0.09 Value Value 4.10 Value 9.61 Rank 86 Rank 61 51 Rank 90 Rank Universe Universe Universe Universe 5th %tile 0.84 5th %tile 1.50 5th %tile 6.37 5th %tile 6.15 25th %tile 0.61 25th %tile 0.63 25th %tile 25th %tile 5.70 8.19 0.51 Median Median 0.13 Median 9.60 Median 5.26 75th %tile 0.42 75th %tile -0.57 75th %tile 10.36 75th %tile 4.53 95th %tile 0.34 95th %tile -1.26 95th %tile 11.35 95th %tile 3.64



Total Fund Attribution Analysis - Net

Attribution Effects Relative to Policy Index 3 Months Ending September 30, 2017



Attribution Summary 3 Months Ending September 30, 2017

	Wtd. , Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Large Cap Equities	4.3%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Small/Mid Cap Equities	1.3%	4.9%	-3.6%	-0.2%	0.0%	0.0%	-0.2%
Total Core Non US Equity	6.2%	5.7%	0.5%	0.1%	0.0%	0.0%	0.1%
Total Emerging Market Equity	4.2%	7.9%	-3.7%	-0.2%	0.1%	-0.1%	-0.2%
Total Diversified Fixed Income	1.0%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%
Total TIPS	0.8%	0.9%	-0.1%	0.0%	0.0%	0.0%	0.0%
Total High Yield Bonds	1.6%	2.0%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Debt	2.7%	2.4%	0.3%	0.0%	0.0%	0.0%	0.0%
Total Long Treasury	0.5%	0.8%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Unconstrained Fixed Income	1.3%	0.8%	0.5%	0.0%	0.0%	0.0%	0.0%
Total Risk Parity/GAA	4.4%	3.6%	0.8%	0.0%	0.0%	0.0%	0.0%
Total Cash	0.0%	0.3%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	1.5%	1.7%	-0.2%	0.0%	0.0%	0.0%	0.0%
Total Absolute Return	2.0%	2.3%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Private Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	2.9%	3.2%	-0.3%	-0.3%	0.0%	0.0%	-0.3%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policyindex asset weights the underlying policy indices of each option in the plan and the respective benchmark.

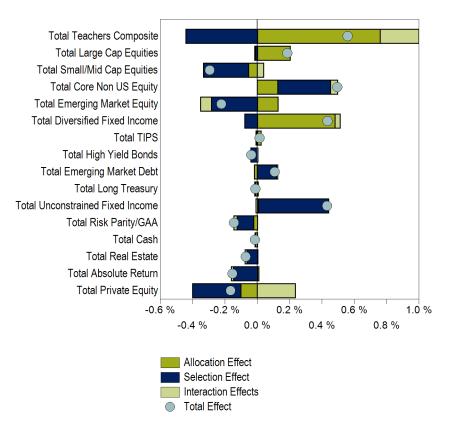
The allocation, selection, and interaction effects are calculated using the custom index described above alongwith the policy or target weight of each composite. May not add up due to rounding.

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.



Total Fund Attribution Analysis - Net

Attribution Effects Relative to Policy Index 1 Year Ending September 30, 2017



Attribution Summary 1 Year Ending September 30, 2017

		•	•				
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Large Cap Equities	17.9%	18.0%	-0.1%	0.0%	0.2%	0.0%	0.2%
Total Small/Mid Cap Equities	14.1%	19.1%	-4.9%	-0.3%	-0.1%	0.0%	-0.3%
Total Core Non US Equity	22.5%	19.4%	3.1%	0.3%	0.1%	0.0%	0.5%
Total Emerging Market Equity	17.2%	22.5%	-5.3%	-0.3%	0.1%	-0.1%	-0.2%
Total Diversified Fixed Income	-0.3%	0.1%	-0.4%	-0.1%	0.5%	0.0%	0.4%
Total TIPS	-0.8%	-0.7%	-0.1%	0.0%	0.0%	0.0%	0.0%
Total High Yield Bonds	8.1%	8.9%	-0.8%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Debt	6.5%	4.2%	2.3%	0.1%	0.0%	0.0%	0.1%
Total Long Treasury				0.0%	0.0%	0.0%	0.0%
Total Unconstrained Fixed Income	6.9%	0.1%	6.8%	0.4%	0.0%	0.0%	0.4%
Total Risk Parity/GAA	7.6%	9.4%	-1.9%	-0.1%	0.0%	0.0%	-0.1%
Total Cash	0.0%	0.7%	-0.7%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	5.9%	6.9%	-1.0%	-0.1%	0.0%	0.0%	-0.1%
Total Absolute Return	4.0%	5.6%	-1.6%	-0.1%	0.0%	0.0%	-0.2%
Total Private Equity	8.4%	12.4%	-4.0%	-0.3%	-0.1%	0.2%	-0.2%
Total	10.2%	9.8%	0.4%	-0.4%	0.8%	0.2%	0.6%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policyindex asset weights the underlying policy indices of each option in the plan and the respective benchmark.

The allocation, selection, and interaction effects are calculated using the custom index described above alongwith the policy or target weight of each composite. May not add up due to rounding.

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.



Analytics Definitions

Asset Allocation Effect - Measures VPIC's ability to effectively allocate their portfolio's assets to various asset classes. The allocation effect determines whether the overweighting or underweighting of asset classes relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is overweighted in an asset class that outperforms the benchmark. Negative allocation occurs when the portfolio is overweighted in an asset class that underperforms the benchmark and underweighted in an asset class that outperforms the benchmark.

Selection Effect - Measures VPIC's ability to select managers within a given asset class relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by VPIC's allocation to the asset class. The weight of the manager in the portfolio determines the size of the effect -- the larger the manager, the larger the effect is, positive or negative.

Interaction Effect - The interaction effect measures the combined impact of VPIC's manager selection and manager allocation decisions within an asset class. For example, if VPIC had superior manager selection and overweighted that particular asset class, the interaction effect is positive. If VPIC had superior manager selection, but underweighted that asset class, the interaction effect is negative. In this case, VPIC did not take advantage of the superior manager selection by allocating more assets to that asset class.

Vermont State Teachers

Risk Statistics - 3 Years

RISK Statistics	% of Tot	Anlzd Ret	Rank	Anlzd Std	Rank	Anlzd AJ	Rank	Sharpe	Rank	Sortino	Rank	Tracking	Rank
				Dev				Ratio		Ratio RF		Error	
Total Teachers Composite	100.00%	5.52%	80	5.11%	16	-0.16%	56	1.02	56	1.73	19	0.81%	27
Policy Index		5.59%	79	4.97%	11	0.00%	49	1.06	43	1.78	16	0.00%	1
Total Domestic Equity	23.31%	11.06%	34	10.29%	26	0.37%	34	1.04	19	1.54	32	1.41%	2
Russell 3000		10.74%	38	10.24%	25	0.00%	40	1.02	22	1.46	39	0.00%	1
Total Large Cap Equities	18.45%	10.62%	28	10.12%	35	-0.22%	34	1.02	25	1.58	29	0.72%	1
S&P 500		10.81%	25	10.07%	34	0.00%	30	1.04	21	1.58	29	0.00%	1
Total Small/Mid Cap Equities	4.87%	11.63%	23	11.94%	41	1.90%	28	0.95	22	1.74	15	4.41%	8
Russell 2000		12.18%	18	14.48%	89	0.00%	58	0.82	41	1.28	42	0.00%	1
Total Core Non US Equity	14.30%	7.22%	41	11.42%	38	2.56%	41	0.60	40	1.02	32	1.95%	7
MSCI EAFE		5.04%	75	12.27%	78	0.00%	78	0.38	78	0.62	78	0.00%	1
Total Emerging Market Equity	7.39%	4.32%	68	14.70%	51	-0.02%	62	0.27	65	0.52	57	5.36%	64
MSCI Emerging Markets		4.90%	59	15.73%	79	0.00%	62	0.29	62	0.53	54	0.00%	1
Total Fixed Income	36.16%	4.17%	28	3.08%	64	1.81%	25	1.25	22	1.82	26	1.93%	43
BBgBarc US Aggregate TR		2.71%	54	2.85%	58	0.00%	76	0.84	64	1.11	69	0.00%	1
Total Diversified Fixed Income	11.68%	4.26%	27	3.98%	77	0.71%	43	0.99	46	1.27	55	1.42%	29
BBgBarc US Aggregate TR		2.71%	54	2.85%	58	0.00%	76	0.84	64	1.11	69	0.00%	1
Total Unconstrained Fixed Income	5.75%												
25% HY, 25% EMD, 50% BC Agg	-	4.36%	14	3.50%	46	0.00%	47	1.16	20	1.76	27	0.00%	1
Total High Yield Bonds	4.71%	5.11%	48	4.86%	47	0.27%	56	0.99	53	1.67	55	1.44%	26
BBgBarc US High Yield TR		5.83%	26	5.81%	83	0.00%	62	0.95	60	1.85	46	0.00%	1
Total TIPS	6.87%	1.56%	28	3.65%	66	-0.08%	32	0.34	28	0.74	25	0.18%	5
BBgBarc US TIPS TR		1.62%	25	3.58%	60	0.00%	22	0.36	21	0.79	20	0.00%	1
Total Emerging Market Debt	5.19%	6.67%	10	5.91%	27	0.71%	11	1.08	11	1.63	8	1.31%	7
JP Morgan EMBI Global Index	-	6.05%	19	5.85%	25	0.00%	24	0.98	19	1.39	25	0.00%	1
Total Real Estate	5.72%	9.52%		4.20%		-0.10%		2.19		96.20		1.01%	
NCREIF Property Index	-	9.83%	-	4.17%	-	0.00%		2.28	-	99.41	-	0.00%	
Total Absolute Return	7.10%	0.87%	80	3.14%	22	-1.01%	74	0.18	77	0.20	78	1.67%	7
HFRI Fund of Funds Composite Index		2.23%	60	3.32%	26	0.00%	61	0.57	50	0.65	57	0.00%	1
Total Risk Parity/GAA	4.34%	2.86%	58	7.07%	59	-1.37%	67	0.36	72	0.59	64	4.55%	42
60% MSCI World (Net) / 40% CITI WGBI		5.09%	28	6.75%	57	0.00%	40	0.71	31	1.35	4	0.00%	1



Vermont State Teachers

Risk Statistics - 5 Years

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Total Teachers Composite	100.00%	6.13%	94	5.32%	26	-0.40%	68	1.11	87	1.95	73	0.81%	25
Policy Index		6.23%	92	5.01%	12	0.00%	49	1.20	75	2.13	55	0.00%	1
Total Domestic Equity	23.31%												
Russell 3000		14.22%	38	9.80%	18	0.00%	31	1.43	13	2.45	19	0.00%	1
Total Large Cap Equities	18.45%	14.47%	26	9.65%	28	0.14%	26	1.48	12	2.68	12	0.74%	1
S&P 500		14.22%	32	9.55%	25	0.00%	28	1.47	12	2.53	19	0.00%	1
Total Small/Mid Cap Equities	4.87%	14.06%	37	11.86%	43	2.71%	40	1.17	36	2.38	12	3.88%	4
Russell 2000		13.79%	39	14.00%	90	0.00%	84	0.97	73	1.61	66	0.00%	1
Total Core Non US Equity	14.30%	9.92%	38	11.21%	41	2.02%	42	0.87	39	1.60	27	2.08%	9
MSCI EAFE		8.38%	69	11.73%	71	0.00%	76	0.70	74	1.21	70	0.00%	1
Total Emerging Market Equity	7.39%	3.25%	88	14.26%	63	-0.48%	85	0.21	86	0.36	84	4.89%	53
MSCI Emerging Markets		3.99%	77	14.40%	70	0.00%	80	0.26	79	0.44	74	0.00%	1
Total Fixed Income	36.16%												
BBgBarc US Aggregate TR		2.06%	59	2.84%	54	0.00%	79	0.65	74	0.91	69	0.00%	1
Total Diversified Fixed Income	11.68%	3.28%	38	4.26%	78	0.38%	59	0.72	66	1.01	62	1.67%	37
BBgBarc US Aggregate TR		2.06%	59	2.84%	54	0.00%	79	0.65	74	0.91	69	0.00%	1
Total Unconstrained Fixed Income	5.75%												
25% HY, 25% EMD, 50% BC		2 720/	20	2 600/	EO	0.000/	72	0.05	46	1 22	EO	0.000/	1
Agg		3.73%	30	3.69%	58	0.00%	12	0.95	46	1.33	53	0.00%	1
Total High Yield Bonds	4.71%	5.95%	39	4.34%	29	0.75%	36	1.32	35	2.04	47	1.37%	37
BBgBarc US High Yield TR		6.36%	26	5.24%	76	0.00%	63	1.18	58	2.09	43	0.00%	1
Total TIPS	6.87%	-0.06%	54	4.51%	69	-0.08%	55	-0.06	55	-0.08	56	0.16%	1
BBgBarc US TIPS TR		0.02%	47	4.47%	59	0.00%	41	-0.04	41	-0.05	41	0.00%	1
Total Emerging Market Debt	5.19%	5.03%	17	6.48%	31	0.87%	19	0.74	18	1.01	20	1.26%	8
JP Morgan EMBI Global Index		4.32%	31	6.62%	33	0.00%	34	0.62	31	0.85	34	0.00%	1
Total Real Estate	5.72%	10.97%		4.73%		-0.10%		2.27		130.65		1.29%	
NCREIF Property Index		10.35%		4.26%		0.00%		2.38		123.09		0.00%	
Total Absolute Return	7.10%	4.29%	69	3.50%	32	0.62%	61	1.17	50	1.75	46	1.64%	7
HFRI Fund of Funds Composite Index		3.84%	73	3.25%	27	0.00%	68	1.12	53	1.47	57	0.00%	1
Total Risk Parity/GAA	4.34%	3.82%	64	7.18%	61	-1.98%	84	0.50	79	0.74	78	4.09%	42
60% MSCI World (Net) / 40% CITI WGBI	-	6.42%	26	6.60%	52	0.00%	46	0.94	17	1.95	5	0.00%	1



State Employees' Retirement System



Total Fund Performance Summary - Net

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	YTD I	Rank	1 Yr I	Rank	3 Yrs I	Rank	5 Yrs I	Rank	7 Yrs	Rank	10 Yrs F	Rank
Total Employees Composite	\$1,789,351,251	3.0%	72	3.0%	72	10.1%	67	10.3%	78	5.5%	80	6.2%	92	6.8%	88	4.3%	84
Policy Index		3.2%	54	3.2%	54	9.8%	74	10.0%	85	5.6%	79	6.2%	92	6.5%	94	4.4%	83
Allocation Index		3.4%	38	3.4%	38	10.5%	56	10.4%	76	5.6%	78	6.3%	91	6.5%	94	4.4%	83
InvestorForce Public DB Net Median		3.3%		3.3%		10.7%		11.6%		6.4%		8.0%		7.9%		5.3%	

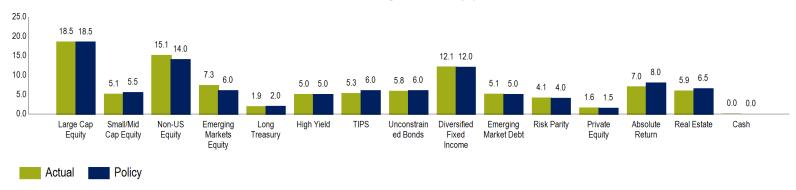
3 Years Ending September 30, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Employees Composite	5.50%	80	5.26%	23	0.98	64	1.62	27
Policy Index	5.59%	79	4.97%	11	1.06	43	1.78	16
Allocation Index	5.63%	78	5.16%	19	1.03	52	1.66	23

5 Years Ending September 30, 2017

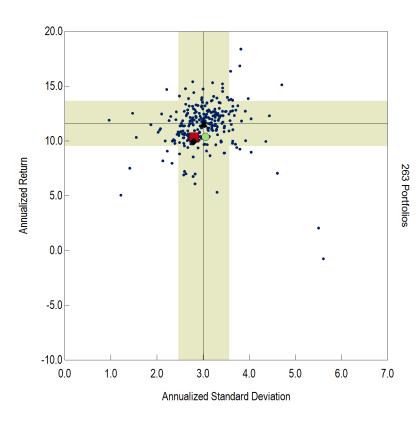
	3 · · · · · · · · · · · · · · · · · · ·										
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank			
Total Employees Composite	6.21%	92	5.44%	30	1.10	89	1.90	76			
Policy Index	6.23%	92	5.01%	12	1.20	75	2.13	55			
Allocation Index	6.29%	91	5 14%	19	1 18	78	2 04	62			

Actual vs Target Allocation (%)





1 Year Ending September 30, 2017

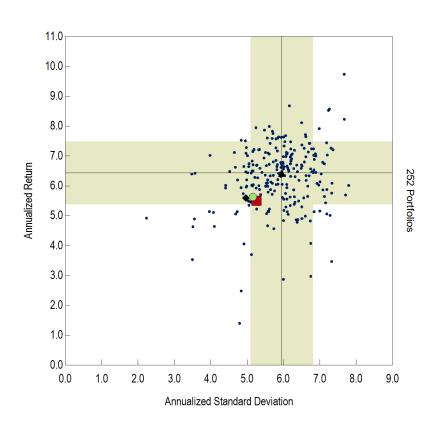


- Total Employees Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

1 Year Ending September 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Employees Composite	10.32%	78	2.81%	35	3.42	66
Policy Index	9.96%	85	2.80%	35	3.30	72
S&P 500	18.61%	1	5.46%	99	3.28	74
Citi WGBI	-2.69%	99	7.03%	99	-0.49	99
MSCI ACWI	18.65%	1	4.57%	99	3.92	33
MSCI ACWI ex USA	19.61%	1	6.63%	99	2.85	89
InvestorForce Public DB Net Median	11.60%		3.02%		3.61	

3 Years Ending September 30, 2017

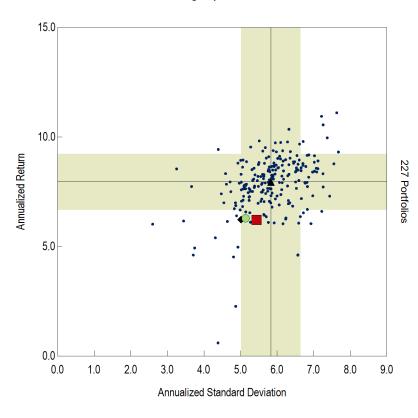


3 Years Ending September 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Employees Composite	5.50%	80	5.26%	23	0.98	64
Policy Index	5.59%	79	4.97%	11	1.06	43
S&P 500	10.81%	1	10.07%	99	1.04	48
Citi WGBI	0.88%	99	5.81%	44	0.10	99
MSCI ACWI	7.43%	11	10.57%	99	0.67	97
MSCI ACWI ex USA	4.70%	96	12.25%	99	0.36	99
InvestorForce Public DB Net Median	6.43%		5.96%		1.04	

- Total Employees Composite
- Policy Index
- Allocation Index
- Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

5 Years Ending September 30, 2017

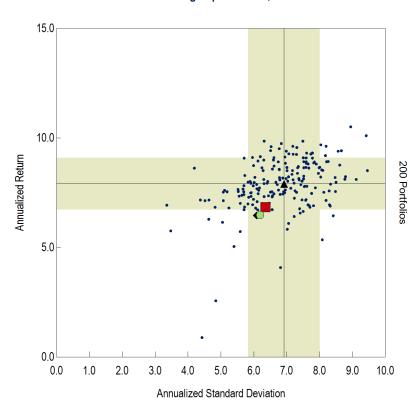


5 Years	Ending	Septemb	per 30, 201	7
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	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Employees Composite	6.21%	92	5.44%	30	1.10	89
Policy Index	6.23%	92	5.01%	12	1.20	75
S&P 500	14.22%	1	9.55%	99	1.47	22
Citi WGBI	-0.43%	99	5.39%	29	-0.12	99
MSCI ACWI	10.20%	2	9.94%	99	1.00	93
MSCI ACWI ex USA	6.97%	82	11.55%	99	0.59	99
InvestorForce Public DB Net Median	7.95%		5.83%		1.34	

- Total Employees Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

7 Years Ending September 30, 2017

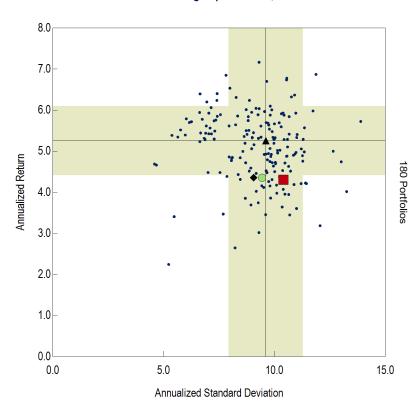


7 Years	Ending	September	r 30	2017
<i>i</i> itais	Ellulliu	September	JU.	Z UI <i>I</i>

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Employees Composite	6.84%	88	6.36%	34	1.05	76
Policy Index	6.47%	94	6.09%	24	1.03	77
S&P 500	14.38%	1	10.90%	99	1.30	19
Citi WGBI	0.80%	99	5.48%	9	0.12	99
MSCI ACWI	9.17%	11	12.23%	99	0.74	99
MSCI ACWI ex USA	5.25%	99	14.18%	99	0.36	99
InvestorForce Public DB Net Median	7.91%		6.92%		1.14	

- Total Employees Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

10 Years Ending September 30, 2017



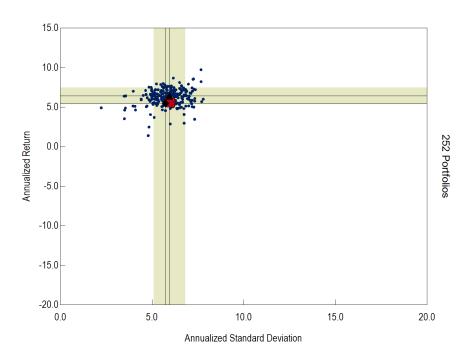
10 Years	Ending	September	30,	201
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	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Employees Composite	4.31%	84	10.40%	77	0.38	88
Policy Index	4.36%	83	9.06%	40	0.44	69
S&P 500	7.44%	1	15.14%	99	0.47	62
Citi WGBI	2.95%	99	6.74%	9	0.38	87
MSCI ACWI	3.88%	93	16.89%	99	0.21	99
MSCI ACWI ex USA	1.28%	99	19.06%	99	0.05	99
InvestorForce Public DB Net Median	5.26%		9.60%		0.51	

- Total Employees Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

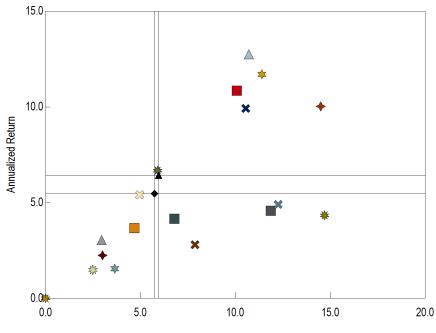
Total Marketable Assets - Net

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017



- Total Marketable Assets
- Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017

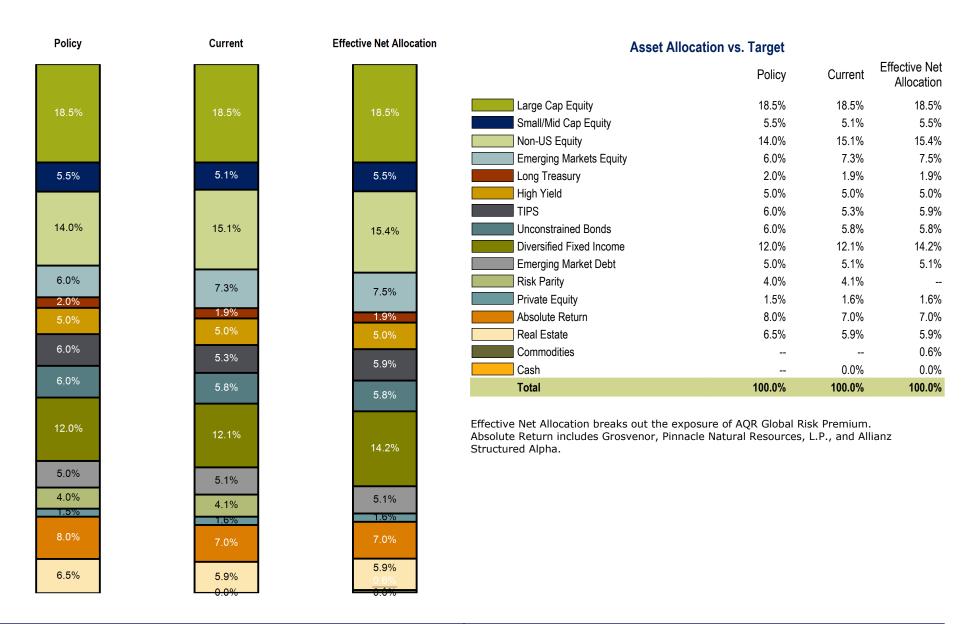


- Annualized Standard Deviation
- SSgA S&P 500 Cap-Wgt
- ★ SSgA S&P 500 Equal-Wgt
- * T. Rowe
- △ Champlain
- Wellington
- * Acadian
- Mondrian
- SSgA ACWI Ex US
- * Aberdeen
- ▲ PIMCO Core Plus
- **☀** BlackRock TIPS

- KDP
- Guggenheim
- Wellington Opportunistic EMD
- PIMCO Unconstrained
- Mellon Dynamic Growth
- * AQR Global Risk Premium
- Vermont Cash
- Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval



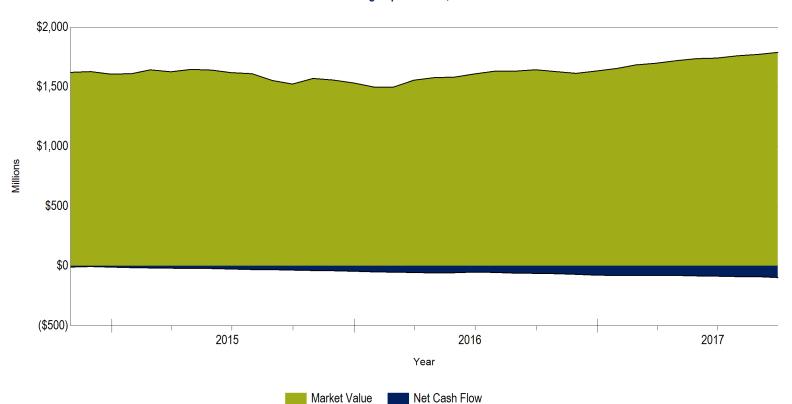
Total Fund Asset Allocation vs. Policy Targets





Total Fund Asset Growth Summary

3 Years Ending September 30, 2017



	Last Three Months	Fiscal Year-To-Date	Year-To-Date	One Year	Three Years
Beginning Market Value	\$1,741,704,960	\$1,741,704,960	\$1,633,425,741	\$1,643,822,689	\$1,611,661,732
Contributions	\$115,720,596	\$115,720,596	\$315,547,417	\$326,862,536	\$957,876,953
Withdrawals	-\$127,271,337	-\$127,271,337	-\$335,612,893	-\$361,899,230	-\$1,055,360,903
Net Cash Flow	-\$11,550,742	-\$11,550,742	-\$20,065,476	-\$35,036,693	-\$97,483,950
Net Investment Change	\$59,197,033	\$59,197,033	\$175,990,987	\$180,565,256	\$275,173,469
Ending Market Value	\$1,789,351,251	\$1,789,351,251	\$1,789,351,251	\$1,789,351,251	\$1,789,351,251



Total Fund Asset Growth Summary by Manager

Quarter Ending September 30, 2017

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Aberdeen	\$125,909,267	\$224,588	-\$224,588	\$0	\$5,524,790	\$131,434,057
Acadian	\$80,016,537	\$94,459	-\$21,594,459	-\$21,500,000	\$5,288,226	\$63,804,763
Allianz Structured Alpha	\$31,515,625	\$0	-\$151,115	-\$151,115	\$561,980	\$31,926,489
AQR Global Risk Premium	\$70,923,651	\$141,836	-\$141,836	\$0	\$3,241,208	\$74,164,859
BlackRock TIPS	\$77,902,684	\$15,711,372	-\$13,828	\$15,697,543	\$802,423	\$94,402,650
Champlain	\$48,665,355	\$4,644,549	-\$94,427	\$4,550,122	\$419,737	\$53,635,214
GAM	\$167,030	\$0	\$0	\$0	\$29	\$167,059
GAM Unconstrained Bond	\$60,377,596	-\$88,610	\$0	-\$88,610	\$876,777	\$61,165,763
Grosvenor	\$80,649,409	\$0	-\$31,395,087	-\$31,395,087	\$832,326	\$50,086,648
Guggenheim	\$69,745,638	\$75,145	-\$75,145	\$0	\$1,277,214	\$71,022,851
Harbourvest Dover IX Fund	\$2,816,097	\$541,698	\$0	\$541,698	\$0	\$3,357,795
Harbourvest Dover VIII Fund	\$7,234,498	-\$186,900	-\$233,313	-\$420,213	\$0	\$6,814,285
Harbourvest Partners IX Buyout Fund	\$6,543,989	\$0	-\$343,813	-\$343,813	\$0	\$6,200,175
Harbourvest Partners IX Credit Opportunities	\$937,293	\$0	-\$34,041	-\$34,041	\$0	\$903,252
Harbourvest Partners IX Venture Fund	\$4,734,892	\$0	-\$229,914	-\$229,914	\$0	\$4,504,978
Harbourvest Partners X Buyout Fund	\$2,610,033	\$0	\$0	\$0	\$0	\$2,610,033
Harbourvest Partners X Venture Fund	\$1,296,111	\$329,669	\$0	\$329,669	\$0	\$1,625,780
HIPEP VII	\$2,302,255	\$207,446	\$0	\$207,446	\$0	\$2,509,701
KDP	\$17,419,455	\$28,125	-\$28,125	\$0	\$1,354,493	\$18,773,948
Mellon Dynamic Growth	\$49,875	\$0	\$0	\$0	\$60	\$49,935
Mondrian	\$72,707,105	\$66,048	-\$12,166,048	-\$12,100,000	\$4,196,039	\$64,803,144
PIMCO Core Plus	\$96,838,784	\$70,689	-\$70,689	\$0	\$1,136,697	\$97,975,480
PIMCO Unconstrained	\$42,550,951	\$61,372	-\$61,372	\$0	\$640,549	\$43,191,500
Pinnacle Natural Resources, L.P.	\$41,129,191	\$0	\$0	\$0	\$1,176,393	\$42,305,584
RREEF America REIT III	\$198,454	\$0	-\$952	-\$952	\$17,803	\$215,305



Total Fund Asset Growth Summary by Manager

Quarter Ending September 30, 2017

			4			
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Siguler Guff DREOF II	\$13,239,126	\$0	-\$8,067	-\$8,067	-\$231,802	\$12,999,257
Siguler Guff DREOF II Co-Investment	\$3,954,304	\$153,382	\$0	\$153,382	\$35,288	\$4,142,974
SSgA ACWI Ex US	\$106,490,797	\$28,616,691	-\$16,691	\$28,600,000	\$6,642,488	\$141,733,285
SSgA Barclays Aggregate Index	\$91,632,325	\$25,424,429	-\$9,420	\$25,415,009	\$977,220	\$118,024,554
SSgA S&P 500 Cap-Wgt	\$244,998,962	\$15,986	-\$4,515,986	-\$4,500,000	\$10,889,457	\$251,388,419
SSgA S&P 500 Equal-Wgt	\$77,046,136	\$7,650	-\$7,650	\$0	\$2,797,833	\$79,843,969
State Street Long U.S. Treasury Index	\$34,248,042	\$1,135	\$0	\$1,135	\$184,350	\$34,433,526
T. Rowe	\$3,085	\$0	\$0	\$0	\$0	\$3,085
Transwestern / Aslan III	\$102,653	\$0	\$0	\$0	\$0	\$102,653
UBS Trumbull	\$40,082,692	\$39,501,891	-\$180,068	\$39,321,823	\$8,893,508	\$88,298,023
Vermont Cash	\$1,400,264	\$0	-\$611,044	-\$611,044	\$0	\$789,221
Wellington	\$45,640,761	\$77,945	-\$6,903,128	-\$6,825,183	-\$764,056	\$38,051,522
Wellington Opportunistic EMD	\$89,463,508	\$0	\$0	\$0	\$2,426,004	\$91,889,512
Z Terminated - Morgan Stanley Prime Property	\$48,160,530	\$0	-\$48,160,530	-\$48,160,530	\$0	
Total	\$1,741,704,960	\$115,720,596	-\$127,271,337	-\$11,550,742	\$59,197,033	\$1,789,351,251



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Employees Composite	1,789,351,251	100.0	100.0	3.0	72	3.0	72	10.1	67	10.3	78	5.5	80	6.2	92	4.3	84
Policy Index				3.2	54	3.2	54	9.8	74	10.0	85	5.6	79	6.2	92	4.4	83
Allocation Index				3.4	38	3.4	38	10.5	56	10.4	76	5.6	78	6.3	91	4.4	83
InvestorForce Public DB Net Median				3.3		3.3		10.7		11.6		6.4		8.0		5.3	
Total Marketable Assets	1,530,581,260	85.5	84.0	3.2	53	3.2	53	11.5	29	11.3	59	5.6	79	6.1	95		
Total Marketable Assets Custom Index				3.5	30	3.5	30	10.8	46	10.4	75	5.5	82	6.3	92		
InvestorForce Public DB Net Median				3.3		3.3		10.7		11.6		6.4		8.0		5.3	
Total Domestic Equity	422,922,210	23.6	24.0	3.6	70	3.6	70	11.7	55	17.0	63	10.9	37	-	-	-	
Russell 3000				4.6	48	4.6	48	13.9	40	18.7	48	10.7	38	14.2	38	7.6	52
eA All US Equity Net Median				4.5		4.5		12.4		18.5		9.9		13.6		7.6	
Total Large Cap Equities	331,235,474	18.5	18.5	4.3	55	4.3	55	13.6	50	18.0	54	10.6	28	14.5	26	8.0	31
S&P 500				4.5	49	4.5	49	14.2	44	18.6	46	10.8	25	14.2	32	7.4	45
eA US Large Cap Equity Net Median				4.5		4.5		13.6		18.2		9.4		13.4		7.3	
SSgA S&P 500 Cap-Wgt	251,388,419	14.0	14.0	4.5	49	4.5	49	14.2	45	18.6	46	10.8	25	14.2	31	-	
S&P 500				4.5	49	4.5	49	14.2	44	18.6	46	10.8	25	14.2	32	7.4	45
SSgA S&P 500 Equal-Wgt	79,843,969	4.5	4.5	3.6	72	3.6	72	11.8	66	15.9	73	9.9	40	15.0	16	8.6	17
S&P 500 Equal Weighted				3.6	73	3.6	73	11.9	65	16.2	70	10.1	38	15.0	15	8.9	13
T. Rowe	3,085	0.0	0.0														



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Ranl
Total Small/Mid Cap Equities	91,686,736	5.1	5.5	1.3	95	1.3	95	5.5	91	13.7	85	11.2	27	13.9	38	8.6	36
Russell 2000 eA US Small-Mid Cap Equity Net Median				5.7 4.1	22	5.7 4.1	22	10.9 11.0	51	20.7 18.0	24	12.2 9.8	18	13.8 13.3	39	7.8 8.0	50
Champlain	53,635,214	3.0	2.8	2.0	88	2.0	88	12.8	46	17.4	42	12.8	8	15.6	14		
Russell 2500 eA US Mid Cap Equity Net	, ,			4.7	29	4.7	29	11.0	57	17.8	41	10.6	31	13.9	46	8.2	49
Median				3.7		3.7		11.9		16.4		9.4		13.5		8.1	
Wellington	38,051,522	2.1	2.8	0.5	97	0.5	97	-1.9	99	10.6	98	10.0	67	12.1	77	8.6	30
Russell 2000 Value eA US Small Cap Value Equity				5.1 5.0	45	5.1 5.0	45	5.7 6.6	63	20.5 19.8	44	12.1 11.0	36	13.3 14.0	60	7.1 7.9	72
Net Median																1.5	
Total Non US Equity	401,775,250	22.5	20.0	5.6	59	5.6	59	23.5	33	20.7	41	6.1	56	7.5	84		-
MSCI EAFE				5.4	65	5.4	65	20.0	68	19.1	58	5.0	75	8.4	69	1.3	8
MSCI ACWI ex USA				6.2 5.9	46	6.2 5.9	46	21.1 21.4	54	19.6 19.7	52	4.7 6.3	81	7.0 9.4	92	1.3 2.7	84
eA All EAFE Equity Net Median Total Core Non US Equity	270,341,192	15.1	14.0	6.3	45	6.3	45	23.3	35	22.7	27	7.3	40	10.0	37	1.8	6
MSCI EAFE	270,341,192	13.1	14.0	5.4	65	5.4	65	20.0	68	19.1	58	5.0	75	8.4	69	1.3	8
eA All EAFE Equity Net Median				5.9	00	5.9	00	21.4	00	19.7	50	6.3	73	9.4	03	2.7	0 1
Acadian	63,804,763	3.6	4.0	6.9	37	6.9	37	30.2	9	30.6	3	11.7	10	13.1	15	2.2	64
Mondrian	64,803,144	3.6	4.0	5.8	53	5.8	53	18.6	77	17.9	68	4.6	82	8.4	68	2.0	66
MSCI EAFE	, ,			5.4	65	5.4	65	20.0	68	19.1	58	5.0	75	8.4	69	1.3	8
SSgA ACWI Ex US	141,733,285	7.9	6.0	6.2	51	6.2	51	21.4	66	19.8	54	4.9	74	7.2	81		-
MSCI ACWI ex USA eA ACWI ex-US All Cap Equity				6.2	51	6.2	51	21.1	69	19.6	56	4.7	77	7.0	84	1.3	84
Net Median				6.2		6.2		24.0		20.4		6.7		9.2		2.7	
Total Emerging Market Equity	131,434,057	7.3	6.0	4.2	87	4.2	87	23.8	76	17.2	80	4.3	68	3.3	88		-
Aberdeen	131,434,057	7.3	6.0	4.2	87	4.2	87	23.8	76	17.2	80	4.3	68	3.2	88		-
MSCI Emerging Markets				7.9	46	7.9	46	27.8	55	22.5	45	4.9	59	4.0	77	1.3	7
eA Emg Mkts Equity Net Median				7.8		7.8		28.4		21.9		5.3		5.2		2.3	



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fixed Income	630,879,786	35.3	36.0	1.4	28	1.4	28	5.1	29	3.3	25	4.2	28		-		
BBgBarc US Aggregate TR eA All US Fixed Inc Net Median				0.8 0.9	55	0.8 0.9	55	3.1 3.4	56	0.1 1.1	87	2.7 2.9	54	2.1 2.5	59	4.3 4.4	54
Total Diversified Fixed Income	216,000,035	12.1	12.0	1.0	42	1.0	42	4.1	39	-0.3	94	4.2	28	3.2	38	4.2	56
BBgBarc US Aggregate TR eA All US Fixed Inc Net Median				0.8 0.9	55	0.8 0.9	55	3.1 3.4	56	0.1 1.1	87	2.7 2.9	54	2.1 2.5	59	4.3 4.4	54
PIMCO Core Plus	97,975,480	5.5	6.0	1.1	9	1.1	9	4.4	5	1.2	19	3.0	29	2.1	66		
BBgBarc US Aggregate TR				0.8	52	0.8	52	3.1	64	0.1	73	2.7	61	2.1	66	4.3	78
SSgA Barclays Aggregate Index	118,024,554	6.6	6.0	0.9	31	0.9	31	3.2	61	0.1	69				-		
BBgBarc US Aggregate TR 3-Month Libor Total Return USD				0.8 0.3	52 99	0.8 0.3	52 99	3.1 0.9	64 99	0.1 1.2	73 19	2.7 0.7	61 99	2.1 0.5	66 99	4.3 0.9	78 99
eA US Core Fixed Inc Net Median				0.9		0.9		3.3		0.4		2.8		2.3		4.6	
Total TIPS	94,402,650	5.3	6.0	0.8	74	0.8	74	1.6	57	-0.8	70	1.6	28	-0.1	54		
BlackRock TIPS	94,402,650	5.3	6.0	0.8		0.8		1.6		-0.8		1.5		-0.1	-		
BBgBarc US TIPS TR				0.9		0.9		1.7		-0.7		1.6		0.0		3.9	
Total High Yield Bonds	89,796,799	5.0	5.0	1.6	68	1.6	68	5.4	80	8.1	50	5.1	47	6.0	38	7.2	43
BBgBarc US High Yield TR eA US High Yield Fixed Inc Net Median				2.0 1.8	35	2.0 1.8	35	7.0 6.5	26	8.9 8.1	34	5.8 5.0	26	6. <i>4</i> 5. <i>7</i>	26	7.8 7.0	15
KDP	18,773,948	1.0	1.0	1.4	83	1.4	83	4.8	87	5.5	89	3.7	89	4.1	95		
BBgBarc US High Yield TR	10,773,340	1.0	1.0	2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	 15
BofA Merrill Lynch US High Yield BB-B Rated				1.9	40	1.9	40	6.6	47	8.0	56	5.8	27	6.1	31	7.2	42
Guggenheim	71,022,851	4.0	4.0	1.7	62	1.7	62	5.5	79	8.8	36	5.4	36		-		
BBgBarc US High Yield TR				2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	15
eA US High Yield Fixed Inc Net Median				1.8		1.8		6.5		8.1		5.0		5.7		7.0	



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Emerging Market Debt	91,889,512	5.1	5.0	2.7	81	2.7	81	9.7	68	6.5	63	6.7	10	5.0	17		
Wellington Opportunistic EMD	91,889,512	5.1	5.0	2.7	81	2.7	81	9.7	68	6.5	63	6.7	10	5.0	17		
JP Morgan EMBI Global Index eA All Emg Mkts Fixed Inc Net				2.4 3.3	91	2.4 3.3	91	8.7 11.6	81	4.2 7.4	94	6.1 4.6	19	4.3 3.1	31	7.3 6.5	30
Median	04 400 500	4.0	0.0	0.5		0.5											
Total Long Treasury	34,433,526	1.9	2.0	0.5	-	0.5	-		-		-						
State Street Long U.S. Treasury Index	34,433,526	1.9	2.0	0.5		0.5					-						
BBgBarc US Treasury Long TR				0.6		0.6		6.0		-6.4		4.9		2.8		6.9	
Total Unconstrained Fixed Income	104,357,263	5.8	6.0	1.4	75	1.4	75	5.7	52	7.0	31					-	
25% HY, 25% EMD, 50% BC Agg				1.5	68	1.5	68	5.5	58	3.3	85	4.4	14	3.7	30	6.0	30
BBgBarc Global Aggregate TR				1.8	50	1.8	50	6.3	50	-1.3	99	1.3	88	0.5	93	3.3	88
eA Global Unconstrained Fixed Inc Net Median				1.8		1.8		6.0		6.1		2.6		2.7		5.0	
PIMCO Unconstrained	43,191,500	2.4	2.5	1.4	76	1.4	76	4.4	75	5.8	59	2.2	62	1.5	89		
25% HY, 25% EMD, 50% BC Agg				1.5	68	1.5	68	5.5	58	3.3	85	4.4	14	3.7	30	6.0	30
3-Month Libor Total Return USD				0.3	99	0.3	99	0.9	99	1.2	99	0.7	92	0.5	93	0.9	99
GAM Unconstrained Bond	61,165,763	3.4	3.5	1.5	74	1.5	74	6.6	41	7.8	25						
3-Month LIBOR + 3%	,,			1.1	85	1.1	85	3.2	89	4.2	74	3.7	27	3.5	31	3.9	78
eA Global Unconstrained Fixed Inc Net Median				1.8		1.8		6.0		6.1		2.6		2.7		5.0	



Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Risk Parity/GAA	74,214,794	4.1	4.0	4.4	28	4.4	28	10.0	48	7.5	60	2.9	58	3.8	64	4.1	52
Mellon Dynamic Growth	49,935	0.0	0.0	0.1	97	0.1	97	4.2	61	2.6	89	4.2	30	5.0	58	2.6	64
Mellon Dynamic Growth Benchmark				3.9	14	3.9	14	12.2	12	9.8	29	4.8	23	6.0	37	3.7	35
Total Risk Parity	74,164,859	4.1	4.0	4.4	28	4.4	28	10.4	47	7.8	58	2.8	58	3.4	66	-	
eA Global TAA Net Median				3.0		3.0		9.6		8.5		3.5		4.6		4.2	
AQR Global Risk Premium	74,164,859	4.1	4.0	4.4	28	4.4	28	10.4	47	7.8	58	2.8	58	3.4	66		
60% MSCI World (Net) / 40% CITI WGBI				3.6	39	3.6	39	12.1	39	9.4	41	5.1	28	6.4	26	4.0	53
Total Cash	789,221	0.0	0.0														
Vermont Cash	789,221	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.5	
91 Day T-Bills				0.3		0.3		0.6		0.7		0.3		0.2		0.4	
Total Real Estate	105,758,212	5.9	6.5	1.6		1.6		3.9		6.1		9.7		11.0	-		
NCREIF Property Index				1.7		1.7		5.1		6.9		9.8		10.3		6.2	
Total Real Estate Core	88,615,981	5.0	5.0	1.3	-	1.3		3.2		5.1		9.4		10.9	-	-	
UBS Trumbull	88,298,023	4.9		1.3		1.3	-	3.2		4.4	-	8.2	-	8.6	-	4.4	
RREEF America REIT III	215,305	0.0		-0.8		-0.8		-4.8		-5.1		-4.0		5.2		-6.2	
Transwestern / Aslan III	102,653	0.0		0.0		0.0		0.0		0.0		5.0		14.3		-21.4	
Total Real Estate Non-Core	17,142,232	1.0	1.5	3.1		3.1		7.8		11.6		9.9		-	-	-	
Siguler Guff DREOF II	12,999,257	0.7		3.8		3.8		8.1		12.3		10.1					
Siguler Guff DREOF II Co- Investment	4,142,974	0.2		0.9		0.9		6.8									

Real Estate performance reported on a quarterly basis. NCREIF Property is available 25 days after quarter end. Real Estate values are preliminary as of 09/30/2017.



Total Fund Performance Detail - Net

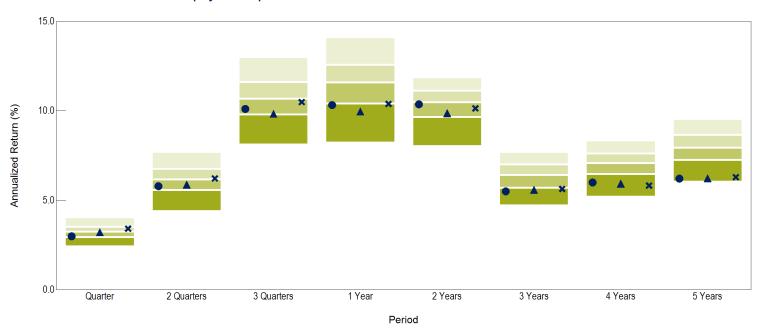
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Absolute Return	124,485,780	7.0	8.0	2.0	53	2.0	53	1.8	89	3.9	77	0.9	81	4.3	69		
HFRI Fund of Funds Composite Index eV Alt Fund of Funds - Multi- Strategy Median				2.3 2.1	46	2.3 2.1	46	5.6 5.3	48	6.5 6.5	51	2.2 2.6	60	3.8 5.3	73	1.1 3.0	90
Grosvenor	50,086,648	2.8	3.0	1.7	63	1.7	63	3.9	63	6.2	53	2.3	59	5.4	49		
Allianz Structured Alpha	31,926,489	1.8	2.0	1.3	74	1.3	74	3.6	70	5.1	64	7.8	7	6.2	33		
91 Day T-Bills				0.3	96	0.3	96	0.6	96	0.7	96	0.3	88	0.2	99	0.4	96
eV Alt Fund of Funds - Multi- Strategy Median				2.1		2.1		5.3		6.5		2.6		5.3		3.0	
Pinnacle Natural Resources, L.P.	42,305,584	2.4	3.0	2.9		2.9		-8.4		-5.3							
Bloomberg Commodity Index				2.5		2.5		-2.9		-0.3		-10.4		-10.5		-6.8	
GAM	167,059	0.0	0.0														
Total Private Equity	28,525,999	1.6	1.5	0.0		0.0	-	6.7		8.9		15.0					
Cambridge Associates US All PE				0.0		0.0		7.6		12.4		9.0		12.4		9.2	

Absolute Return composite formerly shown as Hedge Funds composite. As of 04/01/2016, Absolute Return includes Allianz Structured Alpha. Allianz Structured Alpha was included Diversified Fixed income composite prior to 04/01/2016. Harbourvest values based on final Capital Account Statements for Q2, and cash adjusted through Q3.



Total Fund Return Summary vs. Peer Universe - Net

Total Employees Composite vs. InvestorForce Public DB Net

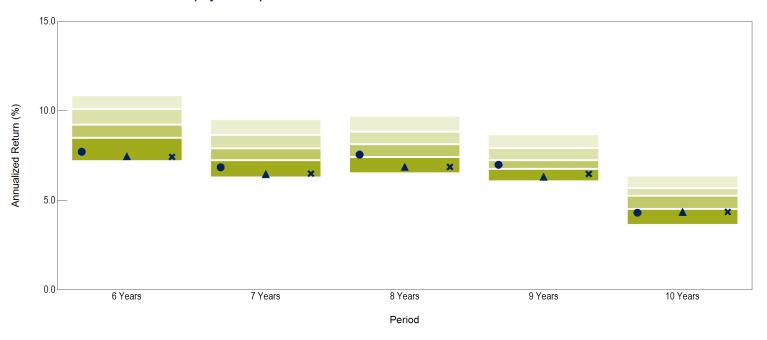


	Return (Rank)														
5th Percentile	4.0	7.		13.0		14.1		11.9		7.7		8.3		9.5	
25th Percentile	3.5	6.	}	11.6		12.6		11.1		7.0		7.6		8.7	
Median	3.3	6.3		10.7		11.6		10.5		6.4		7.1		8.0	
75th Percentile	3.0	5.	i	9.8		10.4		9.7		5.7		6.5		7.3	
95th Percentile	2.4	4.4		8.1		8.2		8.0		4.7		5.2		6.1	
# of Portfolios	264	264		264		263		258		252		234		227	
Total Employees Composite	3.0	(72) 5.8	(68)	10.1	(67)	10.3	(78)	10.4	(53)	5.5	(80)	6.0	(86)	6.2	(92)
▲ Policy Index	3.2	(54) 5.5	(62)	9.8	(74)	10.0	(85)	9.9	(70)	5.6	(79)	5.9	(88)	6.2	(92)
× Allocation Index	3.4	(38) 6.3	(50)	10.5	(56)	10.4	(76)	10.1	(61)	5.6	(78)	5.8	(89)	6.3	(91)



Total Fund Return Summary vs. Peer Universe - Net

Total Employees Composite vs. InvestorForce Public DB Net

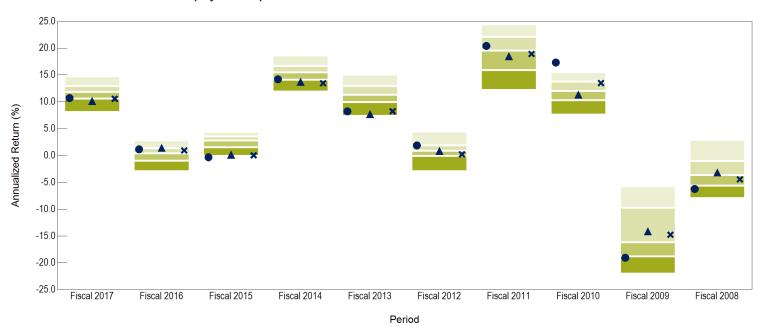


	Return (Rank)								
5th Percentile	10.9		9.5		9.7	8.7		6.4	
25th Percentile	10.1		8.7		8.8	7.9		5.7	
Median	9.2		7.9		8.1	7.2		5.3	
75th Percentile	8.5		7.2		7.4	6.8		4.5	
95th Percentile	7.2		6.3		6.5	6.1		3.6	
# of Portfolios	211		200		190	183		180	
Total Employees Composite	7.7	(90)	6.8	(88)	7.6 (71)	7.0	(65)	4.3	(84)
▲ Policy Index	7.5	(95)	6.5	(94)	6.9 (93)	6.3	(91)	4.4	(83)
× Allocation Index	7.4	(95)	6.5	(94)	6.9 (93)	6.5	(87)	4.4	(83)



Total Fund Return Summary vs. Peer Universe - Net

Total Employees Composite vs. InvestorForce Public DB Net

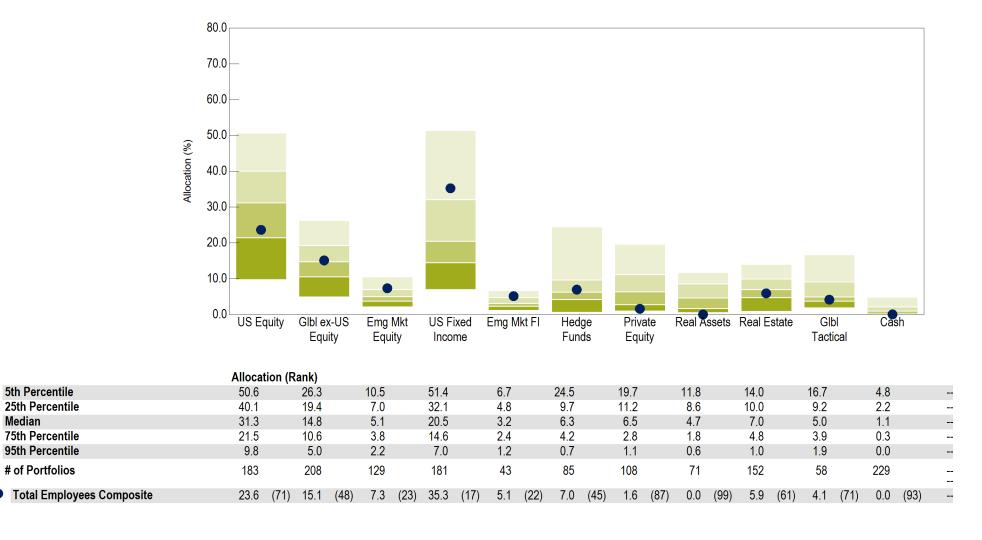


	Return (Rank)									
5th Percentile	14.7	2.8	4.4	18.6	15.0	4.4	24.4	15.5	-5.8	2.9
25th Percentile	12.9	1.4	3.6	16.7	12.9	1.9	22.1	13.8	-9.7	-1.0
Median	11.9	0.4	2.8	15.5	11.3	0.9	19.5	12.0	-16.1	-3.6
75th Percentile	10.6	-0.9	1.6	14.1	9.9	0.0	15.9	10.3	-18.8	-5.6
95th Percentile	8.1	-2.9	-0.1	11.9	7.4	-2.9	12.2	7.6	-22.0	-7.9
# of Portfolios	282	258	231	173	192	147	137	130	127	123
Total Employees Composite	10.7 (73)	1.1 (32)	-0.3 (96)	14.2 (73)	8.2 (93)	1.9 (26)	20.4 (39)	17.3 (1)	-19.1 (77)	-6.3 (79)
▲ Policy Index	10.1 (82)	1.4 (25)	0.1 (94)	13.7 (84)	7.7 (94)	0.8 (52)	18.5 (61)	11.3 (62)	-14.1 (36)	-3.2 (47)
× Allocation Index	10.5 (77)	0.9 (36)	0.0 (95)	13.4 (89)	8.2 (93)	0.2 (70)	18.9 (57)	13.5 (31)	-14.8 (41)	-4.5 (60)



Total Fund Allocation vs. Peer Universe - Net

Total Plan Allocation vs. InvestorForce Public DB Net
As of September 30, 2017





Employees Composite vs. IFx Public DB Net 3 Years

Anizd Alpha Sharpe Ratio AnIzd Standard Deviation Anizd Return 3.6 1.7 9.2 3.0 1.6 8.7 4.1 2.5 1.5 8.2 4.6 2.0 1.4 7.7 5.1 1.5 1.3 7.2 1.0 5.6 1.2 6.7 0.5 6.1 1.1 6.2 0.0 1.0 6.6 -0.5 5.7 0.9 7.1 -1.0 5.2 8.0 7.6 -1.5 4.7 0.7 8.1 -2.0 0.6 4.2 8.6 -2.5 0.5 3.7 Total Employees Composite Total Employees Composite Total Employees Composite Total Employees Composite Value -0.35 Value 5.26 Value 0.98 Value 5.50 65 Rank Rank 23 Rank 64 Rank 80 ▲ Policy Index ▲ Policy Index ▲ Policy Index ▲ Policy Index Value 0.00 Value 4.97 Value 1.06 Value 5.59 Rank 49 Rank 43 Rank 11 Rank 79 × Allocation Index × Allocation Index × Allocation Index × Allocation Index Value -0.16 Value 1.03 5.16 Value 5.63 Value Rank 56 Rank 19 Rank 52 Rank 78 Universe Universe Universe Universe 5th %tile 1.72 5th %tile 4.59 5th %tile 1.36 5th %tile 7.70 5.32 25th %tile 0.48 25th %tile 25th %tile 1.16 25th %tile 7.01 Median -0.05 Median 1.04 Median 5.96 Median 6.43 -0.61 75th %tile 75th %tile 6.50 75th %tile 0.91 75th %tile 5.72 95th %tile -1.50 95th %tile 0.70 7.20 95th %tile 4.73 95th %tile

Employees Composite vs. IFx Public DB Net 5 Years

AnIzd Standard Deviation Anizd Alpha Sharpe Ratio **Anizd Return** 3.6 2.0 2.7 10.6 1.9 4.1 2.2 10.1 1.8 4.6 1.7 9.6 1.7 1.2 5.1 9.1 1.6 0.7 5.6 8.6 1.5 0.2 8.1 6.1 1.4 -0.3 7.6 1.3 6.6 -0.8 7.1 1.2 7.1 -1.3 6.6 1.1 7.6 -1.8 6.1 1.0 8.1 -2.3 0.9 5.6 -2.8 8.6 8.0 5.1 Total Employees Composite Total Employees Composite Total Employees Composite Total Employees Composite Value Value 5.44 -0.49 Value 1.10 Value 6.21 71 Rank 30 Rank Rank 89 92 Rank ▲ Policy Index ▲ Policy Index ▲ Policy Index ▲ Policy Index Value Value 5.01 0.00 Value 1.20 Value 6.23 Rank 49 Rank 12 Rank 75 Rank 92 × Allocation Index × Allocation Index × Allocation Index × Allocation Index Value -0.08 5.14 Value 6.29 Value Value 1.18 Rank 19 Rank 53 Rank 78 Rank 91 Universe Universe Universe Universe 5th %tile 4.60 5th %tile 1.39 5th %tile 1.67 9.54 5th %tile 25th %tile 0.52 25th %tile 5.28 25th %tile 1.44 25th %tile 8.66 Median -0.04 Median 5.83 Median 1.34 Median 7.95 -0.57 7.27 75th %tile 6.44 75th %tile 75th %tile 1.20 75th %tile 95th %tile -1.77 7.11 0.95 95th %tile 6.05 95th %tile 95th %tile

Employees Composite vs. IFx Public DB Net 7 Years

Anizd Alpha AnIzd Standard Deviation Anizd Return Sharpe Ratio 4.0 1.8 10.8 2.3 4.5 1.7 10.3 1.8 5.0 1.6 9.8 5.5 1.3 1.5 9.3 6.0 8.0 1.4 8.8 6.5 0.3 1.3 8.3 7.0 -0.2 1.2 7.8 7.5 -0.7 1.1 7.3 8.0 -1.2 1.0 6.8 8.5 -1.7 0.9 9.0 6.3 -2.2 9.5 8.0 5.8 -2.7 10.0 5.3 0.7 Total Employees Composite Total Employees Composite Total Employees Composite Total Employees Composite Value 0.14 Value 6.36 Value 6.84 Value 1.05 35 Rank Rank 34 88 Rank 76 Rank Policy Index ▲ Policy Index ▲ Policy Index Policy Index Value 0.00 Value 6.09 Value Value 1.03 6.47 Rank 42 Rank 24 77 Rank 94 Rank × Allocation Index × Allocation Index × Allocation Index × Allocation Index Value -0.08 6.19 Value 6.49 Value Value 1.02 Rank 48 Rank 29 Rank 94 Rank 79 Universe Universe Universe Universe 5th %tile 1.22 5th %tile 5.04 9.52 5th %tile 5th %tile 1.45 25th %tile 0.43 25th %tile 6.11 25th %tile 1.27 25th %tile 8.66 Median -0.14 Median 6.92 Median Median 7.91 1.14 -0.78 75th %tile 75th %tile 7.59 75th %tile 1.05 75th %tile 7.24 8.48 95th %tile -1.75 95th %tile 6.29 95th %tile 95th %tile 0.86



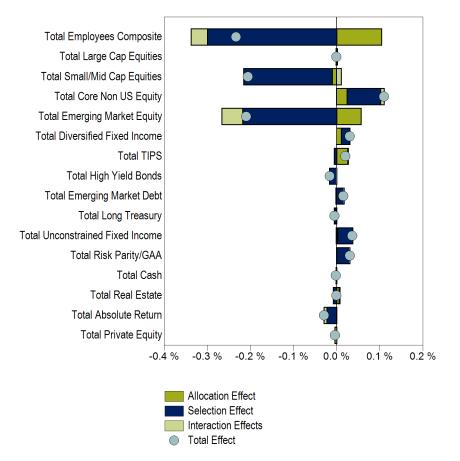
Employees Composite vs. IFx Public DB Net 10 Years

AnIzd Standard Deviation Anizd Return Anizd Alpha Sharpe Ratio 6.0 1.1 7.6 2.7 1.0 7.1 2.2 7.0 0.9 6.6 1.7 8.0 8.0 6.1 1.2 0.7 5.6 0.7 9.0 0.6 5.1 0.2 0.5 × 4.6 -0.3 10.0 0.4 4.1 -0.8 3.6 0.3 -1.3 11.0 3.1 0.2 -1.8 12.0 2.6 -2.3 0.1 Total Employees Composite Total Employees Composite Total Employees Composite Total Employees Composite Value 10.40 Value 4.31 Value -0.64 Value 0.38 Rank 77 84 Rank Rank 79 Rank 88 ▲ Policy Index ▲ Policy Index ▲ Policy Index ▲ Policy Index Value 9.06 Value 4.36 Value 0.00 Value 0.44 Rank 40 Rank 83 Rank 56 Rank 69 × Allocation Index × Allocation Index × Allocation Index × Allocation Index 9.44 Value 4.36 Value Value -0.17 Value 0.42 Rank 48 Rank 83 Rank 75 65 Rank Universe Universe Universe Universe 5th %tile 6.15 6.37 5th %tile 5th %tile 1.50 5th %tile 0.84 25th %tile 8.19 25th %tile 5.70 25th %tile 0.63 25th %tile 0.61 Median 9.60 Median 5.26 Median 0.13 Median 0.51 75th %tile 10.36 75th %tile 4.53 75th %tile -0.57 75th %tile 0.42 11.35 95th %tile 3.64 95th %tile 95th %tile -1.26 95th %tile 0.34



Total Fund Attribution Analysis - Net

Attribution Effects Relative to Policy Index 3 Months Ending September 30, 2017



Attribution Summary
3 Months Ending September 30, 2017

	Wtd. , Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Large Cap Equities	4.3%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Small/Mid Cap Equities	1.3%	4.9%	-3.7%	-0.2%	0.0%	0.0%	-0.2%
Total Core Non US Equity	6.3%	5.7%	0.6%	0.1%	0.0%	0.0%	0.1%
Total Emerging Market Equity	4.2%	7.9%	-3.7%	-0.2%	0.1%	0.0%	-0.2%
Total Diversified Fixed Income	1.0%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%
Total TIPS	0.8%	0.9%	-0.1%	0.0%	0.0%	0.0%	0.0%
Total High Yield Bonds	1.6%	2.0%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Debt	2.7%	2.4%	0.3%	0.0%	0.0%	0.0%	0.0%
Total Long Treasury	0.5%	0.8%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Unconstrained Fixed Income	1.4%	0.8%	0.6%	0.0%	0.0%	0.0%	0.0%
Total Risk Parity/GAA	4.4%	3.6%	0.7%	0.0%	0.0%	0.0%	0.0%
Total Cash	0.0%	0.3%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	1.6%	1.7%	-0.1%	0.0%	0.0%	0.0%	0.0%
Total Absolute Return	2.0%	2.3%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Private Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	3.0%	3.2%	-0.2%	-0.3%	0.1%	0.0%	-0.2%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark.

The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite.

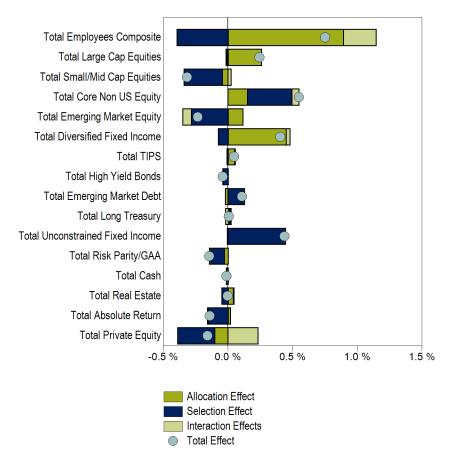
May not add up due to rounding.

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.



Total Fund Attribution Analysis - Net

Attribution Effects Relative to Policy Index 1 Year Ending September 30, 2017



Attribution Summary 1 Year Ending September 30, 2017

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Large Cap Equities	18.0%	18.0%	-0.1%	0.0%	0.3%	0.0%	0.2%
Total Small/Mid Cap Equities	13.7%	19.1%	-5.3%	-0.3%	0.0%	0.0%	-0.3%
Total Core Non US Equity	22.7%	19.4%	3.3%	0.3%	0.2%	0.1%	0.5%
Total Emerging Market Equity	17.2%	22.5%	-5.3%	-0.3%	0.1%	-0.1%	-0.2%
Total Diversified Fixed Income	-0.3%	0.1%	-0.4%	-0.1%	0.5%	0.0%	0.4%
Total TIPS	-0.8%	-0.7%	-0.1%	0.0%	0.1%	0.0%	0.0%
Total High Yield Bonds	8.1%	8.9%	-0.8%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Debt	6.5%	4.2%	2.3%	0.1%	0.0%	0.0%	0.1%
Total Long Treasury				0.0%	0.0%	0.0%	0.0%
Total Unconstrained Fixed Income	7.0%	0.1%	6.9%	0.4%	0.0%	0.0%	0.4%
Total Risk Parity/GAA	7.5%	9.4%	-1.9%	-0.1%	0.0%	0.0%	-0.1%
Total Cash	0.0%	0.7%	-0.7%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	6.1%	6.9%	-0.8%	0.0%	0.0%	0.0%	0.0%
Total Absolute Return	3.9%	5.6%	-1.7%	-0.2%	0.0%	0.0%	-0.1%
Total Private Equity	8.9%	12.4%	-3.6%	-0.3%	-0.1%	0.2%	-0.2%
Total	10.4%	9.8%	0.6%	-0.4%	0.9%	0.3%	0.8%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark.

The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite.

May not add up due to rounding.

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.



September 30, 2017

Analytics Definitions

Asset Allocation Effect - Measures VPIC's ability to effectively allocate their portfolio's assets to various asset classes. The allocation effect determines whether the overweighting or underweighting of asset classes relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is overweighted in an asset class that outperforms the benchmark. Negative allocation occurs when the portfolio is overweighted in an asset class that underperforms the benchmark and underweighted in an asset class that outperforms the benchmark.

Selection Effect - Measures VPIC's ability to select managers within a given asset class relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by VPIC's allocation to the asset class. The weight of the manager in the portfolio determines the size of the effect -- the larger the manager, the larger the effect is, positive or negative.

Interaction Effect - The interaction effect measures the combined impact of VPIC's manager selection and manager allocation decisions within an asset class. For example, if VPIC had superior manager selection and overweighted that particular asset class, the interaction effect is positive. If VPIC had superior manager selection, but underweighted that asset class, the interaction effect is negative. In this case, VPIC did not take advantage of the superior manager selection by allocating more assets to that asset class.

Risk Statistics - 3 Years

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Total Employees Composite	100.00%	5.50%	80	5.26%	23	-0.34%	64	0.98	64	1.62	27	0.83%	30
Policy Index		5.59%	79	4.97%	11	0.00%	49	1.06	43	1.78	16	0.00%	1
Total Domestic Equity	23.64%	10.85%	37	10.33%	27	0.12%	38	1.02	22	1.49	36	1.38%	2
Russell 3000		10.74%	38	10.24%	25	0.00%	40	1.02	22	1.46	39	0.00%	1
Total Large Cap Equities	18.51%	10.62%	28	10.14%	36	-0.24%	34	1.02	25	1.56	29	0.69%	1
S&P 500	-	10.81%	25	10.07%	34	0.00%	30	1.04	21	1.58	29	0.00%	1
Total Small/Mid Cap Equities	5.12%	11.16%	27	12.06%	44	1.31%	34	0.90	27	1.61	19	4.27%	5
Russell 2000	-	12.18%	18	14.48%	89	0.00%	58	0.82	41	1.28	42	0.00%	1
Total Core Non US Equity	15.11%	7.27%	40	11.42%	38	2.61%	41	0.61	39	1.03	32	1.96%	7
MSCI EAFE	-	5.04%	75	12.27%	78	0.00%	78	0.38	78	0.62	78	0.00%	1
Total Emerging Market Equity	7.35%	4.33%	68	14.70%	51	-0.01%	62	0.27	65	0.52	57	5.36%	63
MSCI Emerging Markets		4.90%	59	15.73%	79	0.00%	62	0.29	62	0.53	54	0.00%	1
Total Fixed Income	35.26%	4.17%	28	3.07%	64	1.83%	24	1.26	22	1.81	26	1.95%	43
BBgBarc US Aggregate TR	-	2.71%	54	2.85%	58	0.00%	76	0.84	64	1.11	69	0.00%	1
Total Diversified Fixed Income	12.07%	4.20%	28	3.96%	77	0.66%	44	0.98	48	1.25	57	1.40%	28
BBgBarc US Aggregate TR		2.71%	54	2.85%	58	0.00%	76	0.84	64	1.11	69	0.00%	1
Total Unconstrained Fixed Income	5.83%												
25% HY, 25% EMD, 50% BC Agg	-	4.36%	14	3.50%	46	0.00%	47	1.16	20	1.76	27	0.00%	1
Total High Yield Bonds	5.02%	5.12%	47	4.86%	47	0.28%	56	0.99	53	1.68	55	1.45%	26
BBgBarc US High Yield TR		5.83%	26	5.81%	83	0.00%	62	0.95	60	1.85	46	0.00%	1
Total TIPS	5.28%	1.56%	28	3.65%	66	-0.08%	32	0.34	28	0.74	25	0.18%	5
BBgBarc US TIPS TR		1.62%	25	3.58%	60	0.00%	22	0.36	21	0.79	20	0.00%	1
Total Emerging Market Debt	5.14%	6.67%	10	5.91%	27	0.71%	11	1.08	11	1.63	8	1.31%	7
JP Morgan EMBI Global Index		6.05%	19	5.85%	25	0.00%	24	0.98	19	1.39	25	0.00%	1
Total Real Estate	5.91%	9.67%		4.36%		-0.16%		0.28		0.25		1.32%	
NCREIF Property Index		9.83%		4.17%		0.00%		0.33	-	0.28	-	0.00%	
Total Absolute Return	6.96%	0.85%	81	3.14%	22	-1.03%	74	0.17	78	0.20	79	1.68%	7
HFRI Fund of Funds Composite Index	-	2.23%	60	3.32%	26	0.00%	61	0.57	50	0.65	57	0.00%	1
Total Risk Parity/GAA	4.15%	2.91%	58	7.06%	59	-1.33%	66	0.37	71	0.60	64	4.53%	41
60% MSCI World (Net) / 40% CITI WGBI		5.09%	28	6.75%	57	0.00%	40	0.71	31	1.35	4	0.00%	1



Risk Statistics - 5 Years

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Total Employees Composite	100.00%	6.21%	92	5.44%	30	-0.47%	71	1.10	89	1.90	76	0.83%	29
Policy Index		6.23%	92	5.01%	12	0.00%	49	1.20	75	2.13	55	0.00%	1
Total Domestic Equity	23.64%												
Russell 3000		14.22%	38	9.80%	18	0.00%	31	1.43	13	2.45	19	0.00%	1
Total Large Cap Equities	18.51%	14.49%	26	9.67%	28	0.14%	26	1.48	12	2.66	12	0.73%	1
S&P 500		14.22%	32	9.55%	25	0.00%	28	1.47	12	2.53	19	0.00%	1
Total Small/Mid Cap Equities	5.12%	13.86%	38	11.94%	46	2.41%	46	1.14	38	2.28	16	3.78%	3
Russell 2000		13.79%	39	14.00%	90	0.00%	84	0.97	73	1.61	66	0.00%	1
Total Core Non US Equity	15.11%	9.99%	37	11.21%	41	2.10%	41	0.87	38	1.61	26	2.08%	9
MSCI EAFE		8.38%	69	11.73%	71	0.00%	76	0.70	74	1.21	70	0.00%	1
Total Emerging Market Equity	7.35%	3.26%	88	14.26%	63	-0.47%	84	0.21	86	0.36	83	4.89%	53
MSCI Emerging Markets		3.99%	77	14.40%	70	0.00%	80	0.26	79	0.44	74	0.00%	1
Total Fixed Income	35.26%												
BBgBarc US Aggregate TR		2.06%	59	2.84%	54	0.00%	79	0.65	74	0.91	69	0.00%	1
Total Diversified Fixed Income	12.07%	3.24%	38	4.24%	78	0.36%	60	0.72	67	1.00	62	1.65%	37
BBgBarc US Aggregate TR		2.06%	59	2.84%	54	0.00%	79	0.65	74	0.91	69	0.00%	1
Total Unconstrained Fixed Income	5.83%												
25% HY, 25% EMD, 50% BC Agg		3.73%	30	3.69%	58	0.00%	72	0.95	46	1.33	53	0.00%	1
Total High Yield Bonds	5.02%	5.96%	38	4.35%	29	0.76%	36	1.32	35	2.05	47	1.37%	37
BBgBarc US High Yield TR		6.36%	26	5.24%	76	0.00%	63	1.18	58	2.09	43	0.00%	1
Total TIPS	5.28%	-0.06%	54	4.51%	69	-0.08%	54	-0.06	55	-0.08	55	0.16%	1
BBgBarc US TIPS TR		0.02%	47	4.47%	59	0.00%	41	-0.04	41	-0.05	41	0.00%	1
Total Emerging Market Debt	5.14%	5.03%	17	6.48%	31	0.87%	19	0.74	18	1.01	20	1.26%	8
JP Morgan EMBI Global Index		4.32%	31	6.62%	33	0.00%	34	0.62	31	0.85	34	0.00%	1
Total Real Estate	5.91%	11.00%		4.78%		0.67%		0.09		0.09		1.42%	
NCREIF Property Index	-	10.35%		4.26%		0.00%		-0.05		-0.04	-	0.00%	
Total Absolute Return	6.96%	4.28%	69	3.50%	32	0.62%	61	1.16	50	1.75	46	1.65%	7
HFRI Fund of Funds Composite Index	-	3.84%	73	3.25%	27	0.00%	68	1.12	53	1.47	57	0.00%	1
Total Risk Parity/GAA	4.15%	3.84%	64	7.17%	61	-1.96%	83	0.51	78	0.75	74	4.07%	42
60% MSCI World (Net) / 40% CITI WGBI	-	6.42%	26	6.60%	52	0.00%	46	0.94	17	1.95	5	0.00%	1



State Municipal Employees' Retirement System



Total Fund Performance Summary - Net

	Market Value	3 Mo F	Rank	Fiscal YTD I	Rank	YTD F	Rank	1 Yr I	Rank	3 Yrs	Rank	5 Yrs I	Rank	7 Yrs	Rank	10 Yrs F	Rank
Total Municipal Composite	\$636,080,505	3.0%	70	3.0%	70	10.3%	63	10.5%	73	5.5%	80	6.2%	92	6.9%	86	4.4%	82
Policy Index		3.2%	54	3.2%	54	9.8%	75	9.9%	85	5.6%	79	6.2%	92	6.5%	94	4.4%	81
Allocation Index		3.4%	40	3.4%	40	10.5%	56	10.5%	75	5.7%	75	6.4%	90	6.6%	94	4.5%	77
InvestorForce Public DB Net Median		3.3%		3.3%		10.7%		11.6%		6.4%		8.0%		7.9%		5.3%	

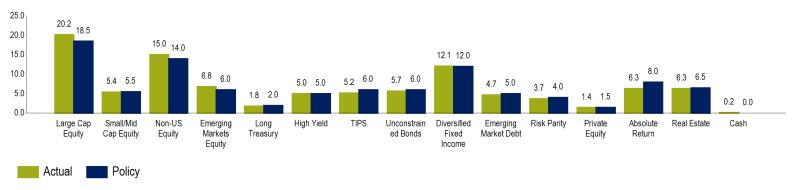
3 Years Ending September 30, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Municipal Composite	5.50%	80	5.32%	25	0.97	67	1.58	32
Policy Index	5.59%	79	4.97%	11	1.06	43	1.78	16
Allocation Index	5.73%	75	5.19%	21	1.04	48	1.67	23

5 Years Ending September 30, 2017

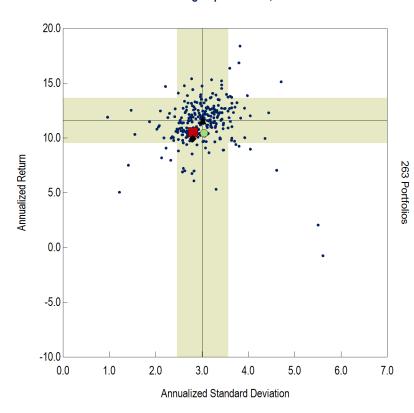
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	
Total Municipal Composite	6.25%	92	5.49%	32	1.10	89	1.89	77	
Policy Index	6.23%	92	5.01%	12	1.20	75	2.13	55	
Allocation Index	6.38%	90	5.17%	21	1.19	76	2.05	62	

Actual vs Target Allocation (%)





1 Years Ending September 30, 2017

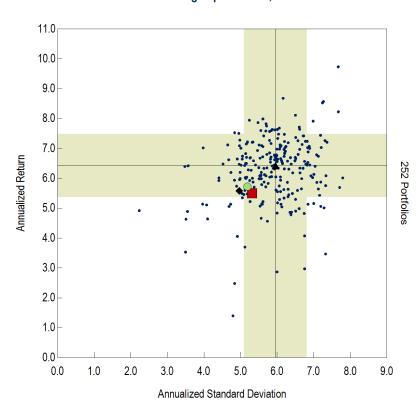


1 Year I	Ending	September	30,	2017
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	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Municipal Composite	10.52%	73	2.81%	35	3.49	61
Policy Index	9.94%	85	2.80%	35	3.29	73
S&P 500	18.61%	1	5.46%	99	3.28	74
Citi WGBI	-2.69%	99	7.03%	99	-0.49	99
MSCI ACWI	18.65%	1	4.57%	99	3.92	33
MSCI ACWI ex USA	19.61%	1	6.63%	99	2.85	89
InvestorForce Public DB Net Median	11.60%		3.02%		3.61	

- Total Municipal Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

3 Years Ending September 30, 2017

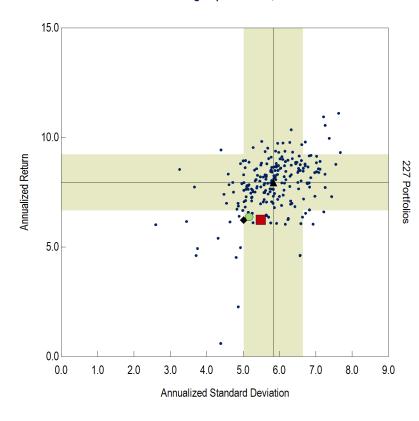


3 Years Ending September 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Municipal Composite	5.50%	80	5.32%	25	0.97	67
Policy Index	5.59%	79	4.97%	11	1.06	43
S&P 500	10.81%	1	10.07%	99	1.04	48
Citi WGBI	0.88%	99	5.81%	44	0.10	99
MSCI ACWI	7.43%	11	10.57%	99	0.67	97
MSCI ACWI ex USA	4.70%	96	12.25%	99	0.36	99
InvestorForce Public DB Net Median	6.43%		5.96%		1.04	

- Total Municipal Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

5 Years Ending September 30, 2017



Total Municipal Composite	6.25%	92	5.49%	32	1.10	89
Policy Index	6.23%	92	5.01%	12	1.20	75
S&P 500	14.22%	1	9.55%	99	1.47	22
Citi WGBI	-0.43%	99	5.39%	29	-0.12	99
MSCI ACWI	10.20%	2	9.94%	99	1.00	93

5 Years Ending September 30, 2017

Anlzd

Standard

Deviation

11.55%

5.83%

Anlzd

Return

Rank

82

Anlzd

Return

6.97%

7.95%

Anlzd

Standard

Deviation

Rank

99

Sharpe

Ratio

0.59

1.34

Sharpe

Ratio

Rank

99

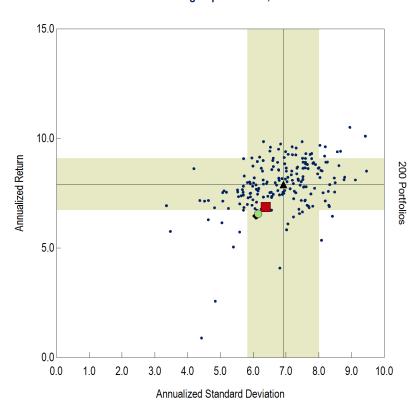
- Total Municipal Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

MSCI ACWI ex USA

Median

InvestorForce Public DB Net

7 Years Ending September 30, 2017

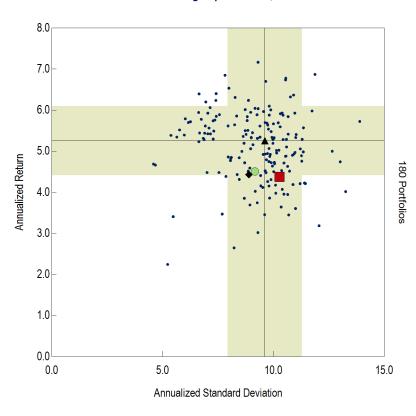


- Total Municipal Composite
- Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

7 Years Ending September 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Municipal Composite	6.88%	86	6.38%	35	1.05	76
Policy Index	6.46%	94	6.09%	24	1.03	77
S&P 500	14.38%	1	10.90%	99	1.30	19
Citi WGBI	0.80%	99	5.48%	9	0.12	99
MSCI ACWI	9.17%	11	12.23%	99	0.74	99
MSCI ACWI ex USA	5.25%	99	14.18%	99	0.36	99
InvestorForce Public DB Net Median	7.91%		6.92%		1.14	

10 Years Ending September 30, 2017



10 Years	Ending	September	30,	201
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	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Municipal Composite	4.38%	82	10.27%	73	0.39	85
Policy Index	4.43%	81	8.89%	36	0.46	65
S&P 500	7.44%	1	15.14%	99	0.47	62
Citi WGBI	2.95%	99	6.74%	9	0.38	87
MSCI ACWI	3.88%	93	16.89%	99	0.21	99
MSCI ACWI ex USA	1.28%	99	19.06%	99	0.05	99
InvestorForce Public DB Net Median	5.26%		9.60%		0.51	

Total Municipal Composite

Policy Index

Allocation Index

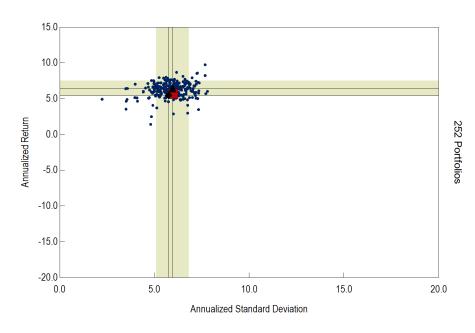
▲ Universe Median

68% Confidence Interval

InvestorForce Public DB Net

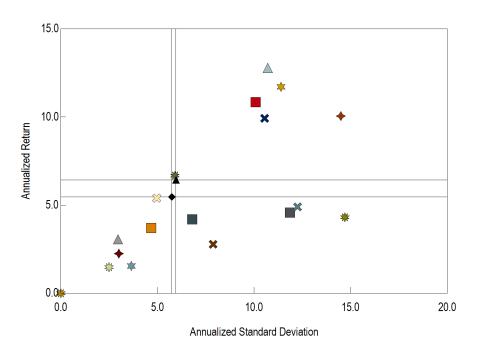
Total Marketable Assets - Net

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017



- Total Marketable Assets
- Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017

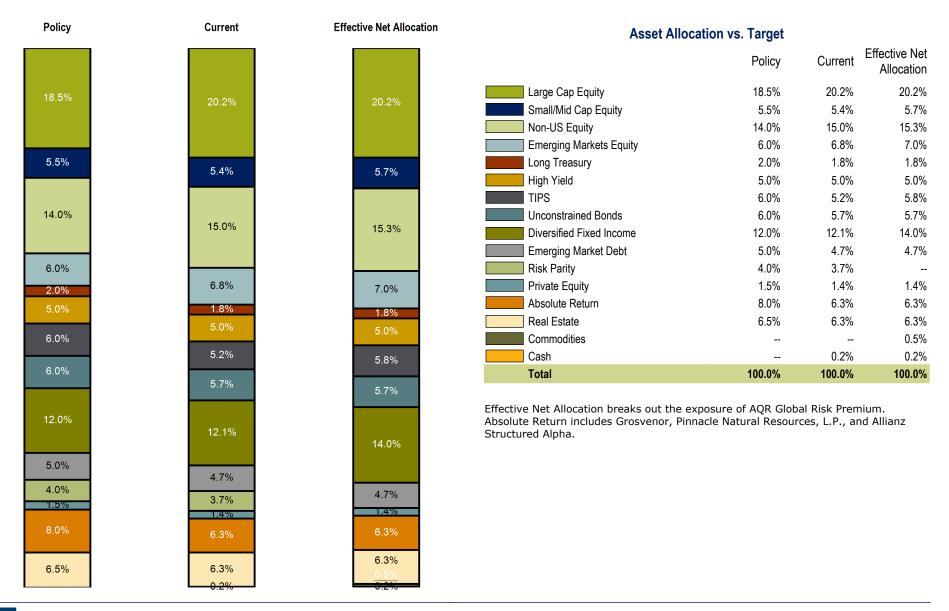


- SSgA S&P 500 Cap-Wgt
- ★ SSgA S&P 500 Equal-Wgt
- T. Rowe
- Wellington
- * Acadian
- Mondrian
- SSgA ACWI Ex US
- Aberdeen
- PIMCO Core Plus
- * BlackRock TIPS

- KDP
- Guggenheim
- Wellington Opportunistic EMD
- → PIMCO Unconstrained
- Mellon Dynamic Growth
- * AQR Global Risk Premium
- Vermont Cash
- Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval



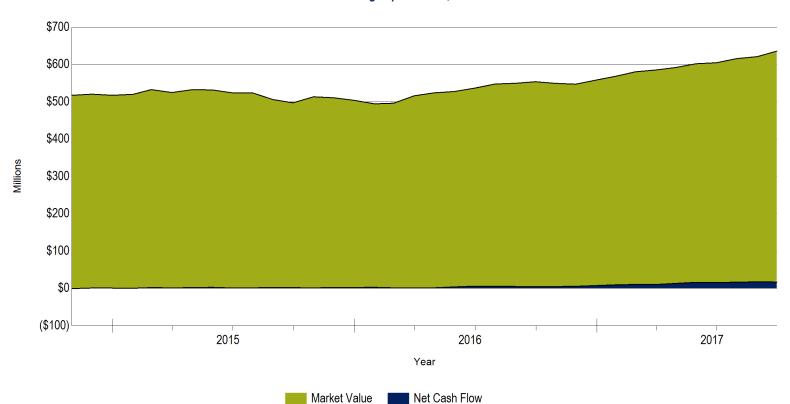
Total Fund Asset Allocation vs. Policy Targets





Total Fund Asset Growth Summary

3 Years Ending September 30, 2017



	Last Three Months	Fiscal Year-To-Date	Year-To-Date	One Year	Three Years
Beginning Market Value	\$604,639,528	\$604,639,528	\$558,383,878	\$553,870,927	\$512,639,692
Contributions	\$42,161,429	\$42,161,429	\$114,768,169	\$123,469,769	\$347,454,240
Withdrawals	-\$41,265,182	-\$41,265,182	-\$105,346,505	-\$111,378,604	-\$330,642,338
Net Cash Flow	\$896,247	\$896,247	\$9,421,664	\$12,091,165	\$16,811,902
Net Investment Change	\$30,544,729	\$30,544,729	\$68,274,963	\$70,118,412	\$106,628,910
Ending Market Value	\$636,080,505	\$636,080,505	\$636,080,505	\$636,080,505	\$636,080,505



Total Fund Asset Growth Summary by Manager

Quarter Ending September 30, 2017

			dualities = littling of	p		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Aberdeen	\$41,632,293	\$77,224	-\$77,224	\$0	\$1,826,789	\$43,459,082
Acadian	\$28,945,939	\$32,798	-\$8,732,798	-\$8,700,000	\$1,911,695	\$22,157,634
Allianz Structured Alpha	\$10,304,614	\$0	-\$46,575	-\$46,575	\$180,914	\$10,438,953
AQR Global Risk Premium	\$22,415,737	\$49,128	-\$49,128	\$0	\$1,024,398	\$23,440,135
BlackRock TIPS	\$27,671,211	\$5,180,346	-\$4,790	\$5,175,557	\$283,119	\$33,129,886
Champlain	\$17,560,896	\$1,504,567	-\$29,117	\$1,475,451	\$1,598,955	\$20,635,302
GAM	\$57,433	\$0	\$0	\$0	\$10	\$57,443
GAM Unconstrained Bond	\$20,964,213	\$0	-\$32,754	-\$32,754	\$306,421	\$21,237,879
Grosvenor	\$26,590,503	\$0	-\$10,351,113	-\$10,351,113	\$274,422	\$16,513,812
Guggenheim	\$24,158,169	\$27,116	-\$27,116	\$0	\$442,395	\$24,600,565
Harbourvest Dover IX Fund	\$965,582	\$185,737	\$0	\$185,737	\$0	\$1,151,319
Harbourvest Dover VIII Fund	\$2,247,565	-\$58,065	-\$72,484	-\$130,549	\$0	\$2,117,016
Harbourvest Partners IX Buyout Fund	\$2,016,890	\$0	-\$105,965	-\$105,965	\$0	\$1,910,925
Harbourvest Partners IX Credit Opportunities	\$289,014	\$0	-\$10,497	-\$10,497	\$0	\$278,517
Harbourvest Partners IX Venture Fund	\$1,467,961	\$0	-\$71,280	-\$71,280	\$0	\$1,396,681
Harbourvest Partners X Buyout Fund	\$856,081	\$0	\$0	\$0	\$0	\$856,081
Harbourvest Partners X Venture Fund	\$425,119	\$108,130	\$0	\$108,130	-\$48,523	\$484,726
HIPEP VII	\$716,278	\$65,541	\$0	\$65,541	\$160,261	\$942,080
KDP	\$7,009,759	\$9,225	-\$9,225	\$0	\$105,469	\$7,115,228
Mellon Dynamic Growth	\$16,023	\$0	\$0	\$0	\$19	\$16,042
Mondrian	\$25,108,688	\$1,520,477	-\$5,620,477	-\$4,100,000	\$1,501,490	\$22,510,178
PIMCO Core Plus	\$36,876,872	\$22,710	-\$22,710	\$0	\$432,862	\$37,309,734
PIMCO Unconstrained	\$14,897,276	\$21,054	-\$21,054	\$0	\$224,259	\$15,121,535
Pinnacle Natural Resources, L.P.	\$12,821,844	\$0	\$0	\$0	\$366,735	\$13,188,579
RREEF America REIT III	\$55,613	\$0	-\$331	-\$331	\$19,507	\$74,789



Total Fund Asset Growth Summary by Manager

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Siguler Guff DREOF II	\$6,452,598	\$0	-\$3,932	-\$3,932	\$1,558,130	\$8,006,796
Siguler Guff DREOF II Co-Investment	\$1,288,501	\$49,979	\$0	\$49,979	\$11,498	\$1,349,978
SSgA ACWI Ex US	\$34,577,959	\$14,305,839	-\$5,839	\$14,300,000	\$2,163,010	\$51,040,969
SSgA Barclays Aggregate Index	\$31,418,855	\$7,902,342	-\$3,647	\$7,898,695	\$329,219	\$39,646,768
SSgA S&P 500 Cap-Wgt	\$94,853,221	\$4,480	-\$4,480	\$0	\$4,258,751	\$99,111,972
SSgA S&P 500 Equal-Wgt	\$28,500,373	\$0	\$0	\$0	\$1,034,955	\$29,535,328
State Street Long U.S. Treasury Index	\$11,474,780	\$420	\$0	\$420	\$61,727	\$11,536,927
T. Rowe	\$1,141	\$0	\$0	\$0	\$0	\$1,141
Transwestern / Aslan III	\$28,766	\$0	\$0	\$0	\$0	\$28,766
UBS Trumbull	\$11,232,427	\$11,069,668	-\$62,549	\$11,007,119	\$8,431,870	\$30,671,416
Vermont Cash	\$1,292,022	\$58,024	-\$166,144	-\$108,120	\$0	\$1,183,902
Wellington	\$14,799,757	\$24,688	-\$2,237,865	-\$2,213,176	\$1,293,865	\$13,880,446
Wellington Opportunistic EMD	\$29,151,468	\$0	\$0	\$0	\$790,508	\$29,941,976
Z Terminated - Morgan Stanley Prime Property	\$13,496,090	\$0	-\$13,496,090	-\$13,496,090	\$0	
Total	\$604,639,528	\$42,161,429	-\$41,265,182	\$896,247	\$30,544,729	\$636,080,505



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Municipal Composite	636,080,505	100.0	100.0	3.0	70	3.0	70	10.3	63	10.5	73	5.5	80	6.2	92	4.4	82
Policy Index				3.2	54	3.2	54	9.8	75	9.9	85	5.6	79	6.2	92	4.4	81
Allocation Index				3.4	40	3.4	40	10.5	56	10.5	75	5.7	75	6.4	90	4.5	77
InvestorForce Public DB Net Median				3.3		3.3		10.7		11.6		6.4		8.0		5.3	
Total Marketable Assets	546,612,627	85.9	84.0	3.2	52	3.2	52	11.5	28	11.4	54	5.7	76	6.2	93	-	
Total Marketable Assets Custom Index				3.5	30	3.5	30	10.8	46	10.4	75	5.5	82	6.3	92		
InvestorForce Public DB Net Median				3.3		3.3		10.7		11.6		6.4		8.0		5.3	
Total Domestic Equity	163,164,188	25.7	24.0	3.7	69	3.7	69	11.9	54	17.1	62	11.0	35	-		-	
Russell 3000				4.6	48	4.6	48	13.9	40	18.7	48	10.7	38	14.2	38	7.6	52
eA All US Equity Net Median				4.5		4.5		12.4		18.5		9.9		13.6		7.6	
Total Large Cap Equities	128,648,440	20.2	18.5	4.3	55	4.3	55	13.7	50	18.0	53	10.6	28	14.5	26	8.0	31
S&P 500				4.5	49	4.5	49	14.2	44	18.6	46	10.8	25	14.2	32	7.4	45
eA US Large Cap Equity Net Median				4.5		4.5		13.6		18.2		9.4		13.4		7.3	
SSgA S&P 500 Cap-Wgt	99,111,972	15.6	14.0	4.5	49	4.5	49	14.2	44	18.6	46	10.8	25	14.2	31		
S&P 500				4.5	49	4.5	49	14.2	44	18.6	46	10.8	25	14.2	32	7.4	45
SSgA S&P 500 Equal-Wgt	29,535,328	4.6	4.5	3.6	71	3.6	71	11.9	66	16.0	72	9.9	40	15.0	16	8.6	17
S&P 500 Equal Weighted				3.6	73	3.6	73	11.9	65	16.2	70	10.1	38	15.0	15	8.9	13
T. Rowe	1,141	0.0	0.0														



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Small/Mid Cap Equities	34,515,747	5.4	5.5	1.3	95	1.3	95	5.9	89	13.8	85	11.3	27	13.9	38	8.6	35
Russell 2000 eA US Small-Mid Cap Equity Net Median				5.7 4.1	22	5.7 4.1	22	10.9 11.0	51	20.7 18.0	24	12.2 9.8	18	13.8 13.3	39	7.8 8.0	53
Champlain	20,635,302	3.2	2.8	2.0	88	2.0	88	12.9	46	17.4	42	12.8	8	15.6	14		
Russell 2500 eA US Mid Cap Equity Net				4.7	29	4.7	29	11.0	57	17.8	41	10.6	31	13.9	46	8.2	49
Median				3.7		3.7		11.9		16.4		9.4		13.5		8.1	
Wellington	13,880,446	2.2	2.8	0.5	97	0.5	97	-1.9	99	10.5	98	10.0	67	12.2	76	8.7	30
Russell 2000 Value				5.1	45	5.1	45	5.7	63	20.5	44	12.1	36	13.3	60	7.1	72
eA US Small Cap Value Equity Net Median				5.0		5.0		6.6		19.8		11.0		14.0		7.9	
Total Non US Equity	139,167,863	21.9	20.0	5.7		5.7	-	23.7		20.9		6.2		7.6			
MSCI EAFE				5.4		5.4		20.0		19.1		5.0		8.4		1.3	
MSCI ACWI ex USA				6.2		6.2		21.1		19.6		4.7		7.0		1.3	
Total Core Non US Equity	95,708,781	15.0	14.0	6.3	44	6.3	44	23.5	34	22.9	27	7.3	40	10.0	37	1.8	67
MSCI EAFE eA All EAFE Equity Net Median				5.4 5.9	65	5. <i>4</i> 5.9	65	20.0 21.4	68	19.1 19.7	58	5. <i>0</i> 6.3	75	8.4 9.4	69	1.3 2.7	81
Acadian	22,157,634	3.5	4.0	6.9	37	6.9	37	30.3	9	30.6	3	11.7	10	13.1	15	2.2	64
Mondrian	22,510,178	3.5	4.0	5.8	53	5.8	53	18.6	77	17.9	68	4.6	82	8.4	68	2.0	66
MSCI EAFE				5.4	65	5.4	65	20.0	68	19.1	58	5.0	75	8.4	69	1.3	81
SSgA ACWI Ex US	51,040,969	8.0	6.0	6.2	51	6.2	51	21.4	66	19.8	54	4.9	74	7.2	81		
MSCI ACWI ex USA eA ACWI ex-US All Cap Equity				6.2	51	6.2	51	21.1	69	19.6	56	4.7	77	7.0	84	1.3	84
Net Median				6.2		6.2		24.0		20.4		6.7		9.2		2.7	
Total Emerging Market Equity	43,459,082	6.8	6.0	4.2	88	4.2	88	23.8	76	17.1	80	4.3	69	3.2	88		
Aberdeen	43,459,082	6.8	6.0	4.2	88	4.2	88	23.8	76	17.1	80	4.3	69	3.2	88		
MSCI Emerging Markets				7.9	46	7.9	46	27.8	55	22.5	45	4.9	59	4.0	77	1.3	79
eA Emg Mkts Equity Net Median				7.8		7.8		28.4		21.9		5.3		5.2		2.3	



	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fixed Income	219,640,498	34.5	36.0	1.3	29	1.3	29	5.1	29	3.3	25	4.1	28	-	-	-	
BBgBarc US Aggregate TR				0.8	55	0.8	55	3.1	56	0.1	87	2.7	54	2.1	59	4.3	54
eA All US Fixed Inc Net Median				0.9		0.9		3.4		1.1		2.9		2.5		4.4	
Total Diversified Fixed Income	76,956,503	12.1	12.0	1.0	42	1.0	42	4.1	39	-0.2	93	4.2	28	3.2	38	4.2	57
BBgBarc US Aggregate TR				0.8	55	0.8	55	3.1	56	0.1	87	2.7	54	2.1	59	4.3	54
eA All US Fixed Inc Net Median				0.9		0.9		3.4		1.1		2.9		2.5		4.4	
PIMCO Core Plus	37,309,734	5.9	6.0	1.1	9	1.1	9	4.4	5	1.2	18	3.1	28	2.1	66		
BBgBarc US Aggregate TR				0.8	52	0.8	52	3.1	64	0.1	73	2.7	61	2.1	66	4.3	78
SSgA Barclays Aggregate Index	39,646,768	6.2	6.0	0.9	31	0.9	31	3.2	61	0.1	69		-		-	-	
BBgBarc US Aggregate TR				0.8	52	0.8	52	3.1	64	0.1	73	2.7	61	2.1	66	4.3	78
3-Month Libor Total Return USD				0.3	99	0.3	99	0.9	99	1.2	19	0.7	99	0.5	99	0.9	99
eA US Core Fixed Inc Net Median				0.9		0.9		3.3		0.4		2.8		2.3		4.6	
Total TIPS	33,129,886	5.2	6.0	0.8	74	0.8	74	1.6	57	-0.8	70	1.6	28	-0.1	53	-	
BlackRock TIPS	33,129,886	5.2	6.0	0.8		0.8		1.6		-0.8		1.5		-0.1			
BBgBarc US TIPS TR				0.9		0.9		1.7		-0.7		1.6		0.0		3.9	
Total High Yield Bonds	31,715,793	5.0	5.0	1.6	68	1.6	68	5.4	80	8.1	53	5.1	50	5.9	40	7.2	44
BBgBarc US High Yield TR				2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	15
eA US High Yield Fixed Inc Net				1.8		1.8		6.5		8.1		5.0		5.7		7.0	
Median				1.0		1.0		0.0		0.1		5.0		5.7		7.0	
KDP	7,115,228	1.1	1.0	1.4	82	1.4	82	4.9	86	5.6	89	3.7	88	4.2	95		
BBgBarc US High Yield TR				2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	15
BofA Merrill Lynch US High Yield BB-B Rated				1.9	40	1.9	40	6.6	47	8.0	56	5.8	27	6.1	31	7.2	42
Guggenheim	24,600,565	3.9	4.0	1.7	62	1.7	62	5.5	79	8.8	36	5.4	36				
BBgBarc US High Yield TR				2.0	35	2.0	35	7.0	26	8.9	34	5.8	26	6.4	26	7.8	15
eA US High Yield Fixed Inc Net Median				1.8		1.8		6.5		8.1		5.0		5.7		7.0	



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	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Emerging Market Debt	29,941,976	4.7	5.0	2.7	81	2.7	81	9.7	68	6.5	63	6.7	10	5.0	17		
Wellington Opportunistic EMD	29,941,976	4.7	5.0	2.7	81	2.7	81	9.7	68	6.5	63	6.7	10	5.0	17		
JP Morgan EMBI Global Index				2.4	91	2.4	91	8.7	81	4.2	94	6.1	19	4.3	31	7.3	30
eA All Emg Mkts Fixed Inc Net Median				3.3		3.3		11.6		7.4		4.6		3.1		6.5	
Total Long Treasury	11,536,927	1.8	2.0	0.5		0.5			-		-		-		-	-	
State Street Long U.S. Treasury Index	11,536,927	1.8	2.0	0.5		0.5											
BBgBarc US Treasury Long TR				0.6		0.6		6.0		-6.4		4.9		2.8		6.9	
Total Unconstrained Fixed Income	36,359,413	5.7	6.0	1.3	77	1.3	77	5.6	53	6.9	31		-	-			
25% HY, 25% EMD, 50% BC Agg				1.5	68	1.5	68	5.5	58	3.3	85	4.4	14	3.7	30	6.0	30
BBgBarc Global Aggregate TR				1.8	50	1.8	50	6.3	50	-1.3	99	1.3	88	0.5	93	3.3	88
eA Global Unconstrained Fixed Inc Net Median				1.8		1.8		6.0		6.1		2.6		2.7		5.0	
PIMCO Unconstrained	15,121,535	2.4	2.5	1.4	76	1.4	76	4.5	75	5.8	59	2.2	62	1.5	89		
25% HY, 25% EMD, 50% BC Agg				1.5	68	1.5	68	5.5	58	3.3	85	4.4	14	3.7	30	6.0	30
3-Month Libor Total Return USD				0.3	99	0.3	99	0.9	99	1.2	99	0.7	92	0.5	93	0.9	99
GAM Unconstrained Bond	21,237,879	3.3	3.5	1.3	78	1.3	78	6.4	43	7.7	25					-	
3-Month LIBOR + 3%				1.1	85	1.1	85	3.2	89	4.2	74	3.7	27	3.5	31	3.9	78
eA Global Unconstrained Fixed Inc Net Median				1.8		1.8		6.0		6.1		2.6		2.7		5.0	



Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Risk Parity/GAA	23,456,177	3.7	4.0	4.3	28	4.3	28	9.9	49	7.5	61	2.9	58	3.8	64	4.2	51
Mellon Dynamic Growth	16,042	0.0	0.0	0.1	97	0.1	97	4.3	61	2.6	89	4.2	30	5.0	58	2.6	63
Mellon Dynamic Growth Benchmark				3.9	14	3.9	14	12.2	12	9.8	29	4.8	23	6.0	37	3.7	35
eV Alt Fund of Funds - Multi- Strategy Median				2.1		2.1		5.3		6.5		2.6		5.3		3.0	
Total Risk Parity	23,440,135	3.7	4.0	4.4	28	4.4	28	10.4	47	7.7	59	2.8	59	3.4	66		
eA Global TAA Net Median				3.0		3.0		9.6		8.5		3.5		4.6		4.2	
AQR Global Risk Premium	23,440,135	3.7	4.0	4.4	28	4.4	28	10.4	47	7.7	59	2.8	59	3.4	66		
60% MSCI World (Net) / 40% CITI WGBI				3.6	39	3.6	39	12.1	39	9.4	41	5.1	28	6.4	26	4.0	53
Total Cash	1,183,902	0.2	0.0														
Vermont Cash	1,183,902	0.2	0.0														
Total Real Estate	40,131,745	6.3	6.5	1.8		1.8	-	4.3		6.4		8.7		10.4			
NCREIF Property Index				1.7		1.7		5.1		6.9		9.8		10.3		6.2	
Total Real Estate Core	30,774,971	4.8	5.0	1.3		1.3	-	3.2		5.1		8.3		10.2			
UBS Trumbull	30,671,416	4.8		1.3		1.3		3.2		4.4		7.0		7.9		4.1	
RREEF America REIT III	74,789	0.0		-0.8		-0.8		-4.8		-5.1		-4.5		4.8		-6.4	
Transwestern / Aslan III	28,766	0.0		0.0		0.0		0.0		0.0		7.8		16.1		-20.8	
Total Real Estate Non-Core	9,356,774	1.5	1.5	3.3		3.3	-	7.8		11.0		9.2					
Siguler Guff DREOF II	8,006,796	1.3		3.8		3.8		8.1		12.3		9.6					
Siguler Guff DREOF II Co- Investment	1,349,978	0.2		0.9		0.9		6.8	-	-					-		

Real Estate performance reported on a quarterly basis. NCREIF Property is available 25 days after quarter end. Real Estate values are preliminary as of 09/30/2017.



Total Fund Performance Detail - Net

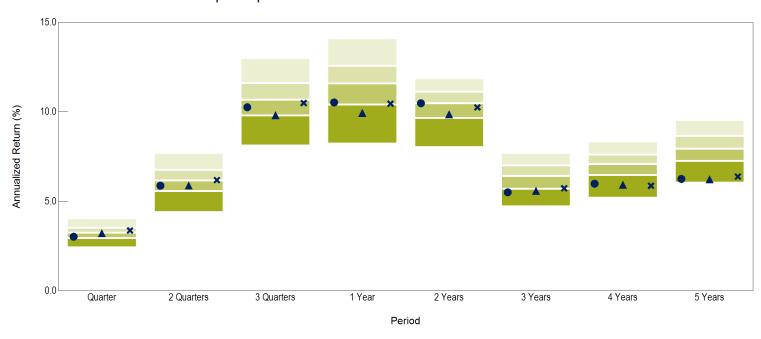
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Absolute Return	40,198,787	6.3	8.0	2.0	53	2.0	53	1.8	89	4.0	77	0.9	81	4.3	69		
HFRI Fund of Funds Composite Index				2.3	46	2.3	46	5.6	48	6.5	51	2.2	60	3.8	73	1.1	90
eV Alt Fund of Funds - Multi- Strategy Median				2.1		2.1		5.3		6.5		2.6		5.3		3.0	
Grosvenor	16,513,812	2.6	3.0	1.7	63	1.7	63	3.9	63	6.2	53	2.3	59	5.4	49		
Allianz Structured Alpha	10,438,953	1.6	2.0	1.3	74	1.3	74	3.6	70	5.1	64	7.8	7	6.2	33		
91 Day T-Bills				0.3	96	0.3	96	0.6	96	0.7	96	0.3	88	0.2	99	0.4	96
eV Alt Fund of Funds - Multi- Strategy Median				2.1		2.1		5.3		6.5		2.6		5.3		3.0	
Pinnacle Natural Resources, L.P.	13,188,579	2.1	3.0	2.9		2.9		-8.4		-5.3							
Bloomberg Commodity Index				2.5		2.5		-2.9		-0.3		-10.4		-10.5		-6.8	
GAM	57,443	0.0	0.0														
Total Private Equity	9,137,345	1.4	1.5	0.0		0.0	-	6.9		9.2		13.5					
Cambridge Associates US All PE				0.0		0.0		7.6		12.4		9.0		12.4		9.2	

Absolute Return composite formerly shown as Hedge Funds composite. As of 04/01/2016, Absolute Return includes Allianz Structured Alpha. Allianz Structured Alpha was included Diversified Fixed income composite prior to 04/01/2016. Harbourvest values based on final market values for Q2 and cash adjusted through Q3.



Total Fund Return Summary vs. Peer Universe - Net

Total Municipal Composite vs. InvestorForce Public DB Net

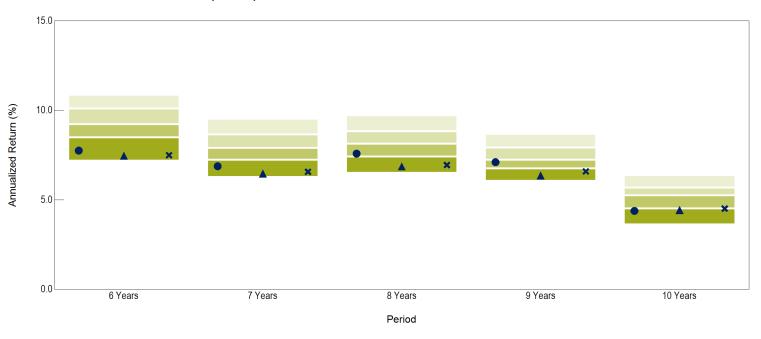


		Return (Rank)															
	5th Percentile	4.0		7.7		13.0		14.1		11.9		7.7		8.3		9.5	
	25th Percentile	3.5		6.8		11.6		12.6		11.1		7.0		7.6		8.7	
	Median	3.3		6.2		10.7		11.6		10.5		6.4		7.1		8.0	
	75th Percentile	3.0		5.6		9.8		10.4		9.7		5.7		6.5		7.3	
	95th Percentile	2.4		4.4		8.1		8.2		8.0		4.7		5.2		6.1	
	# of Portfolios	264		264		264		263		258		252		234		227	
	Total Municipal Composite	3.0	(70)	5.9	(63)	10.3	(63)	10.5	(73)	10.5	(51)	5.5	(80)	6.0	(86)	6.2	(92)
A	Policy Index	3.2	(54)	5.9	(62)	9.8	(75)	9.9	(85)	9.9	(70)	5.6	(79)	5.9	(88)	6.2	(92)
×	Allocation Index	3.4	(40)	6.2	(50)	10.5	(56)	10.5	(75)	10.2	(56)	5.7	(75)	5.9	(88)	6.4	(90)



Total Fund Return Summary vs. Peer Universe - Net

Total Municipal Composite vs. InvestorForce Public DB Net

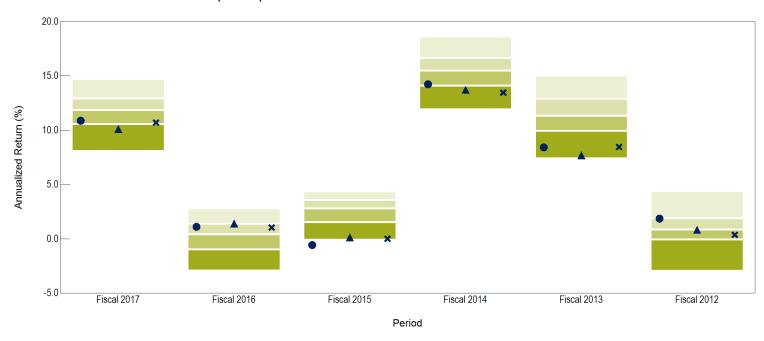


	Return (Rank)								
5th Percentile	10.9		9.5		9.7	8.7		6.4	
25th Percentile	10.1		8.7		8.8	7.9		5.7	
Median	9.2		7.9		8.1	7.2		5.3	
75th Percentile	8.5		7.2		7.4	6.8		4.5	
95th Percentile	7.2		6.3		6.5	6.1		3.6	
# of Portfolios	211		200		190	183		180	
 Total Municipal Composite 	7.7	(89)	6.9	(86)	7.6 (7	1) 7.1	(60)	4.4	(82)
▲ Policy Index	7.5	(95)	6.5	(94)	6.9 (93	3) 6.4	(90)	4.4	(81)
× Allocation Index	7.5	(95)	6.6	(94)	6.9 (92	2) 6.6	(84)	4.5	(77)



Total Fund Return Summary vs. Peer Universe - Net

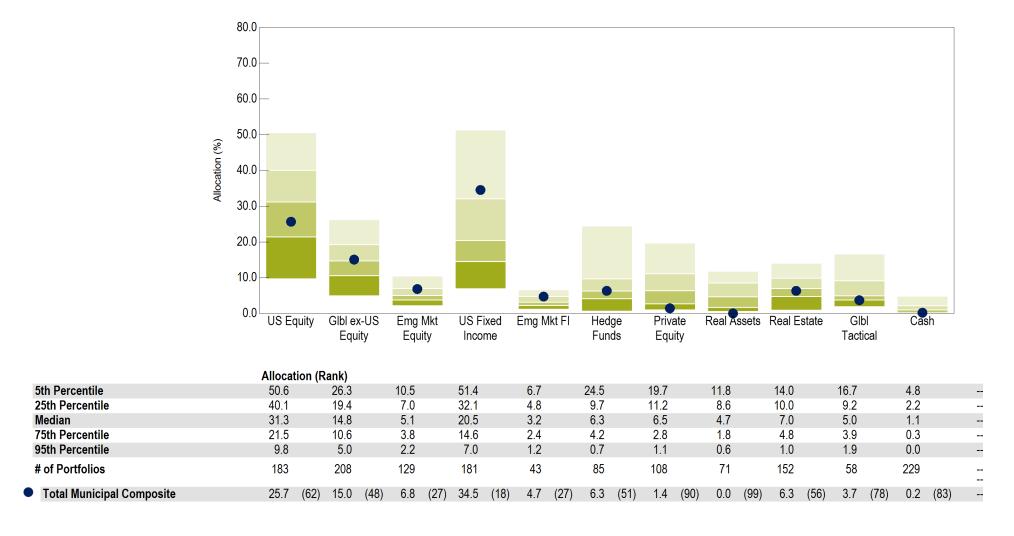
Total Municipal Composite vs. InvestorForce Public DB Net



		Return (Rank)										
	5th Percentile	14.7		2.8		4.4		18.6	15.0		4.4	
	25th Percentile	12.9		1.4		3.6		16.7	12.9		1.9	
	Median	11.9		0.4		2.8		15.5	11.3		0.9	
	75th Percentile	10.6		-0.9		1.6		14.1	9.9		0.0	
	95th Percentile	8.1		-2.9		-0.1		11.9	7.4		-2.9	
	# of Portfolios	282		258		231		173	192		147	
	Total Municipal Composite	10.9	(67)	1.1	(33)	-0.6	(97)	14.2 (72) 8.4	(92)	1.9	(26)
•	Policy Index	10.1	(82)	1.4	(25)	0.1	(94)	13.7 (84	7.7	(94)	8.0	(52)
×	Allocation Index	10.7	(73)	1.0	(33)	0.0	(95)	13.5 (89	8.5	(92)	0.4	(66)



Total Plan Allocation vs. InvestorForce Public DB Net
As of September 30, 2017



Total Fund Risk Statistics vs. Peer Universe - Net

Municipal Composite vs. IFx Public DB Net 3 Years

Anizd Return AnIzd Standard Deviation Anizd Alpha Sharpe Ratio 9.2 3.6 1.7 3.0 8.7 1.6 4.1 2.5 8.2 1.5 4.6 2.0 1.4 7.7 5.1 1.5 1.3 7.2 1.0 5.6 1.2 6.7 0.5 6.1 1.1 6.2 0.0 1.0 6.6 5.7 -0.5 0.9 7.1 5.2 -1.0 8.0 7.6 4.7 -1.5 0.7 8.1 4.2 -2.0 0.6 8.6 3.7 0.5 -2.5 Total Municipal Composite Total Municipal Composite Total Municipal Composite Total Municipal Composite Value 5.50 Value 5.32 Value -0.41 Value 0.97 80 Rank 25 Rank 67 Rank Rank 67 ▲ Policy Index ▲ Policy Index Policy Index ▲ Policy Index Value 5.59 Value 4.97 Value 0.00 Value 1.06 79 Rank Rank 11 Rank 49 Rank 43 × Allocation Index × Allocation Index × Allocation Index × Allocation Index Value 5.73 Value 5.19 Value 1.04 Value -0.09 75 Rank Rank 21 Rank 53 Rank 48 Universe Universe Universe Universe 5th %tile 7.70 5th %tile 4.59 5th %tile 1.72 5th %tile 1.36 25th %tile 7.01 25th %tile 5.32 25th %tile 1.16 25th %tile 0.48 6.43 Median Median 5.96 Median 1.04 Median -0.05 75th %tile 5.72 75th %tile 6.50 75th %tile -0.61 75th %tile 0.91 95th %tile 4.73 95th %tile 7.20 95th %tile -1.50 95th %tile 0.70



Total Fund Risk Statistics vs. Peer Universe - Net

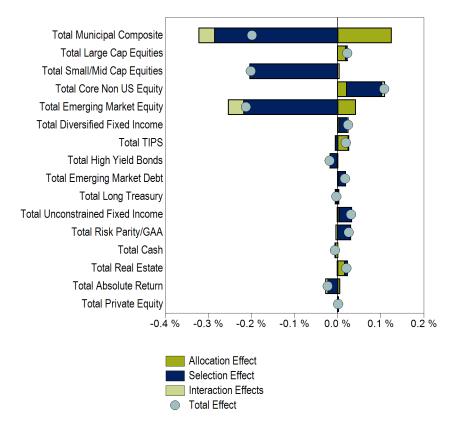
Municipal Composite vs. IFx Public DB Net 5 Years

Anizd Return AnIzd Standard Deviation Anizd Alpha Sharpe Ratio 3.6 2.0 2.7 10.6 1.9 4.1 2.2 10.1 1.8 4.6 1.7 9.6 1.7 5.1 1.2 9.1 × 1.6 0.7 8.6 5.6 1.5 0.2 8.1 6.1 1.4 7.6 -0.3 1.3 6.6 -0.8 7.1 1.2 7.1 6.6 -1.3 1.1 7.6 6.1 -1.8 1.0 8.1 5.6 -2.3 0.9 5.1 8.0 8.6 -2.8 Total Municipal Composite Total Municipal Composite Total Municipal Composite Total Municipal Composite Value 6.25 Value 5.49 Value -0.51 Value 1.10 92 Rank 32 Rank 89 Rank Rank 73 ▲ Policy Index ▲ Policy Index Policy Index ▲ Policy Index Value 6.23 Value 5.01 Value 0.00 Value 1.20 92 Rank Rank 12 Rank 49 Rank 75 × Allocation Index × Allocation Index × Allocation Index × Allocation Index 6.38 Value Value 5.17 Value 1.19 Value -0.02 Rank 90 Rank 21 Rank 49 Rank 76 Universe Universe Universe Universe 9.54 5th %tile 5th %tile 4.60 5th %tile 1.39 5th %tile 1.67 25th %tile 8.66 25th %tile 5.28 25th %tile 1.44 25th %tile 0.52 7.95 Median Median 5.83 -0.04 Median 1.34 Median 75th %tile 7.27 75th %tile 6.44 75th %tile -0.57 75th %tile 1.20 0.95 95th %tile 6.05 95th %tile 7.11 95th %tile -1.77 95th %tile



Total Fund Attribution Analysis - Net

Attribution Effects Relative to Policy Index 3 Months Ending September 30, 2017



Attribution Summary 3 Months Ending September 30, 2017

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Large Cap Equities	4.3%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Small/Mid Cap Equities	1.3%	4.9%	-3.6%	-0.2%	0.0%	0.0%	-0.2%
Total Core Non US Equity	6.3%	5.7%	0.6%	0.1%	0.0%	0.0%	0.1%
Total Emerging Market Equity	4.2%	7.9%	-3.7%	-0.2%	0.0%	0.0%	-0.2%
Total Diversified Fixed Income	1.0%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%
Total TIPS	0.8%	0.9%	-0.1%	0.0%	0.0%	0.0%	0.0%
Total High Yield Bonds	1.6%	2.0%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Debt	2.7%	2.4%	0.3%	0.0%	0.0%	0.0%	0.0%
Total Long Treasury	0.5%	0.8%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Unconstrained Fixed Income	1.3%	0.8%	0.5%	0.0%	0.0%	0.0%	0.0%
Total Risk Parity/GAA	4.3%	3.6%	0.7%	0.0%	0.0%	0.0%	0.0%
Total Cash	0.0%	0.3%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	1.8%	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%
Total Absolute Return	2.0%	2.3%	-0.3%	0.0%	0.0%	0.0%	0.0%
Total Private Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	3.0%	3.2%	-0.2%	-0.3%	0.1%	0.0%	-0.2%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark.

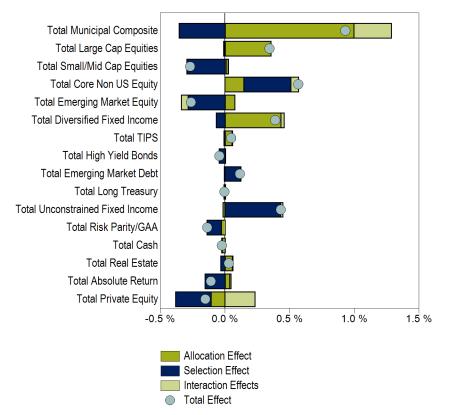
The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite. May not add up due to rounding.

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.



Total Fund Attribution Analysis - Net

Attribution Effects Relative to Policy Index 1 Year Ending September 30, 2017



Attribution Summary 1 Year Ending September 30, 2017

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Large Cap Equities	18.0%	18.0%	-0.1%	0.0%	0.4%	0.0%	0.3%
Total Small/Mid Cap Equities	13.8%	19.1%	-5.3%	-0.3%	0.0%	0.0%	-0.3%
Total Core Non US Equity	22.9%	19.4%	3.5%	0.4%	0.1%	0.1%	0.6%
Total Emerging Market Equity	17.1%	22.5%	-5.3%	-0.3%	0.1%	0.0%	-0.3%
Total Diversified Fixed Income	-0.2%	0.1%	-0.3%	-0.1%	0.4%	0.0%	0.4%
Total TIPS	-0.8%	-0.7%	-0.1%	0.0%	0.1%	0.0%	0.0%
Total High Yield Bonds	8.1%	8.9%	-0.8%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Debt	6.5%	4.2%	2.3%	0.1%	0.0%	0.0%	0.1%
Total Long Treasury				0.0%	0.0%	0.0%	0.0%
Total Unconstrained Fixed Income	6.9%	0.1%	6.8%	0.4%	0.0%	0.0%	0.4%
Total Risk Parity/GAA	7.5%	9.4%	-2.0%	-0.1%	0.0%	0.0%	-0.1%
Total Cash	0.0%	0.7%	-0.7%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	6.4%	6.9%	-0.5%	0.0%	0.1%	0.0%	0.0%
Total Absolute Return	4.0%	5.6%	-1.7%	-0.2%	0.0%	0.0%	-0.1%
Total Private Equity	9.2%	12.4%	-3.2%	-0.3%	-0.1%	0.2%	-0.2%
Total	10.6%	9.8%	0.8%	-0.4%	1.0%	0.3%	0.9%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark.

The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite. May not add up due to rounding.

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.



Analytics Definitions

Asset Allocation Effect - Measures VPIC's ability to effectively allocate their portfolio's assets to various asset classes. The allocation effect determines whether the overweighting or underweighting of asset classes relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is overweighted in an asset class that outperforms the benchmark. Negative allocation occurs when the portfolio is overweighted in an asset class that underperforms the benchmark and underweighted in an asset class that outperforms the benchmark.

Selection Effect - Measures VPIC's ability to select managers within a given asset class relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by VPIC's allocation to the asset class. The weight of the manager in the portfolio determines the size of the effect -- the larger the manager, the larger the effect is, positive or negative.

Interaction Effect - The interaction effect measures the combined impact of VPIC's manager selection and manager allocation decisions within an asset class. For example, if VPIC had superior manager selection and overweighted that particular asset class, the interaction effect is positive. If VPIC had superior manager selection, but underweighted that asset class, the interaction effect is negative. In this case, VPIC did not take advantage of the superior manager selection by allocating more assets to that asset class.

Risk Statistics - 3 Years

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Total Municipal Composite	100.00%	5.50%	80	5.32%	25	-0.39%	66	0.97	67	1.58	32	0.84%	31
Policy Index		5.59%	79	4.97%	11	0.00%	49	1.06	43	1.78	16	0.00%	1
Total Domestic Equity	25.65%	10.98%	35	10.33%	27	0.25%	36	1.03	21	1.50	35	1.40%	2
Russell 3000	-	10.74%	38	10.24%	25	0.00%	40	1.02	22	1.46	39	0.00%	1
Total Large Cap Equities	20.23%	10.63%	28	10.14%	36	-0.23%	34	1.02	25	1.56	30	0.68%	1
S&P 500		10.81%	25	10.07%	34	0.00%	30	1.04	21	1.58	29	0.00%	1
Total Small/Mid Cap Equities	5.43%	11.25%	27	11.97%	42	1.48%	31	0.91	26	1.61	19	4.32%	5
Russell 2000		12.18%	18	14.48%	89	0.00%	58	0.82	41	1.28	42	0.00%	1
Total Core Non US Equity	15.05%	7.33%	40	11.42%	38	2.67%	40	0.61	38	1.04	32	1.97%	7
MSCI EAFE	-	5.04%	75	12.27%	78	0.00%	78	0.38	78	0.62	78	0.00%	1
Total Emerging Market Equity	6.83%	4.31%	69	14.70%	51	-0.04%	62	0.27	66	0.52	57	5.36%	63
MSCI Emerging Markets	-	4.90%	59	15.73%	79	0.00%	62	0.29	62	0.53	54	0.00%	1
Total Fixed Income	34.53%	4.15%	28	3.06%	64	1.81%	25	1.25	22	1.82	26	1.93%	43
BBgBarc US Aggregate TR		2.71%	54	2.85%	58	0.00%	76	0.84	64	1.11	69	0.00%	1
Total Diversified Fixed Income	12.10%	4.21%	28	3.95%	77	0.68%	44	0.98	47	1.26	57	1.39%	28
BBgBarc US Aggregate TR		2.71%	54	2.85%	58	0.00%	76	0.84	64	1.11	69	0.00%	1
Total High Yield Bonds	4.99%	5.05%	50	4.86%	47	0.22%	56	0.97	54	1.65	56	1.46%	26
BBgBarc US High Yield TR	-	5.83%	26	5.81%	83	0.00%	62	0.95	60	1.85	46	0.00%	1
Total TIPS	5.21%	1.56%	28	3.65%	66	-0.08%	31	0.34	28	0.74	25	0.18%	5
BBgBarc US TIPS TR	-	1.62%	25	3.58%	60	0.00%	22	0.36	21	0.79	20	0.00%	1
Total Emerging Market Debt	4.71%	6.67%	10	5.91%	27	0.71%	11	1.08	11	1.63	8	1.31%	7
JP Morgan EMBI Global Index	-	6.05%	19	5.85%	25	0.00%	24	0.98	19	1.39	25	0.00%	1
Total Real Estate	6.31%	8.66%		3.67%		0.18%		2.27		87.21		1.00%	
NCREIF Property Index		9.83%		4.17%		0.00%		2.28		99.41		0.00%	
Total Absolute Return	6.32%	0.86%	81	3.14%	22	-1.02%	74	0.17	77	0.20	79	1.68%	7
HFRI Fund of Funds Composite Index		2.23%	60	3.32%	26	0.00%	61	0.57	50	0.65	57	0.00%	1
Total Risk Parity/GAA	3.69%	2.85%	58	7.04%	58	-1.38%	67	0.36	72	0.59	64	4.49%	40
60% MSCI World (Net) / 40% CITI WGBI	-	5.09%	28	6.75%	57	0.00%	40	0.71	31	1.35	4	0.00%	1



Risk Statistics - 5 Years

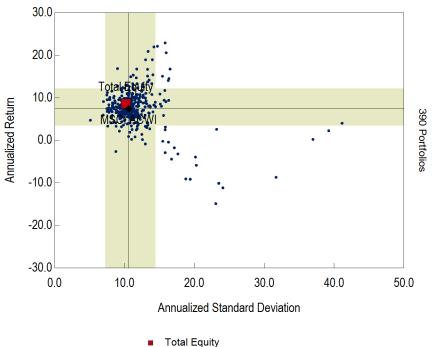
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Total Municipal Composite	100.00%	6.25%	92	5.49%	32	-0.49%	72	1.10	89	1.89	77	0.85%	31
Policy Index		6.23%	92	5.01%	12	0.00%	49	1.20	75	2.13	55	0.00%	1
Total Domestic Equity	25.65%												
Russell 3000	-	14.22%	38	9.80%	18	0.00%	31	1.43	13	2.45	19	0.00%	1
Total Large Cap Equities	20.23%	14.48%	26	9.66%	28	0.12%	26	1.48	12	2.65	13	0.71%	1
S&P 500		14.22%	32	9.55%	25	0.00%	28	1.47	12	2.53	19	0.00%	1
Total Small/Mid Cap Equities	5.43%	13.93%	38	11.91%	44	2.51%	44	1.15	38	2.28	17	3.79%	3
Russell 2000	-	13.79%	39	14.00%	90	0.00%	84	0.97	73	1.61	66	0.00%	1
Total Core Non US Equity	15.05%	10.00%	37	11.21%	41	2.11%	40	0.87	37	1.61	26	2.09%	9
MSCI EAFE	-	8.38%	69	11.73%	71	0.00%	76	0.70	74	1.21	70	0.00%	1
Total Emerging Market Equity	6.83%	3.25%	88	14.26%	63	-0.49%	85	0.21	86	0.36	84	4.89%	53
MSCI Emerging Markets		3.99%	77	14.40%	70	0.00%	80	0.26	79	0.44	74	0.00%	1
Total Fixed Income	34.53%												
BBgBarc US Aggregate TR		2.06%	59	2.84%	54	0.00%	79	0.65	74	0.91	69	0.00%	1
Total Diversified Fixed Income	12.10%	3.24%	38	4.24%	78	0.36%	60	0.72	67	1.00	62	1.65%	37
BBgBarc US Aggregate TR		2.06%	59	2.84%	54	0.00%	79	0.65	74	0.91	69	0.00%	1
Total High Yield Bonds	4.99%	5.93%	40	4.34%	29	0.74%	37	1.32	36	2.04	47	1.38%	37
BBgBarc US High Yield TR		6.36%	26	5.24%	76	0.00%	63	1.18	58	2.09	43	0.00%	1
Total TIPS	5.21%	-0.06%	53	4.51%	69	-0.08%	54	-0.06	55	-0.08	55	0.16%	1
BBgBarc US TIPS TR		0.02%	47	4.47%	59	0.00%	41	-0.04	41	-0.05	41	0.00%	1
Total Emerging Market Debt	4.71%	5.03%	17	6.48%	31	0.87%	19	0.74	18	1.01	20	1.26%	8
JP Morgan EMBI Global Index		4.32%	31	6.62%	33	0.00%	34	0.62	31	0.85	34	0.00%	1
Total Real Estate	6.31%	10.37%		4.43%		0.06%		2.29		123.37		1.28%	
NCREIF Property Index		10.35%		4.26%		0.00%		2.38		123.09		0.00%	
Total Absolute Return	6.32%	4.28%	69	3.50%	32	0.62%	61	1.16	50	1.75	46	1.65%	7
HFRI Fund of Funds Composite Index	-	3.84%	73	3.25%	27	0.00%	68	1.12	53	1.47	57	0.00%	1
Total Risk Parity/GAA	3.69%	3.80%	64	7.16%	61	-2.00%	85	0.50	79	0.74	79	4.05%	42
60% MSCI World (Net) / 40% CITI WGBI	-	6.42%	26	6.60%	52	0.00%	46	0.94	17	1.95	5	0.00%	1



Manager Characteristics

Total Equity Composite

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017



- MSCI ACWI
- 68% Confidence Interval
- eA All Global Equity Net

U.S. Effective Style Map 3 Years Ending September 30, 2017



First Rolling Period

♦ Last Rolling Period

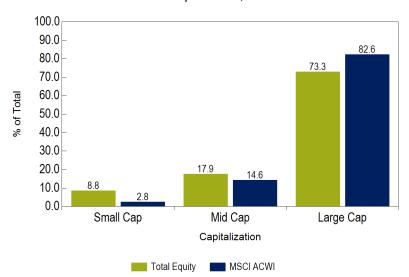


Total Equity Composite

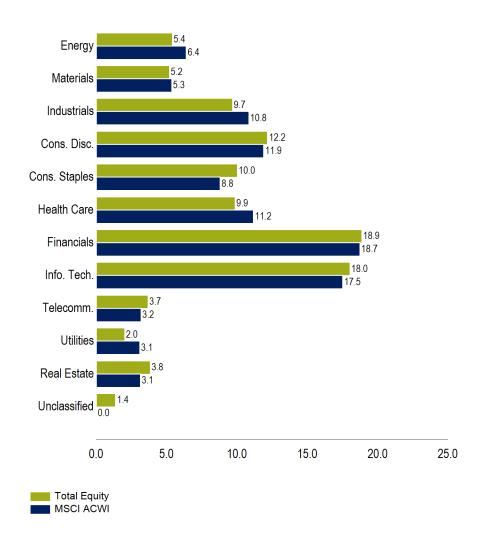
Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	2,786	2,491
Weighted Avg. Market Cap. (\$B)	84.22	111.18
Median Market Cap. (\$B)	10.62	10.03
Price To Earnings	24.04	22.98
Price To Book	4.44	3.66
Price To Sales	3.21	2.87
Return on Equity (%)	18.87	16.34
Yield (%)	2.00	2.35
Beta	0.96	1.00
R-Squared	0.98	1.00

Market Capitalization As of September 30, 2017



Sector Allocation (%) vs MSCI ACWI





Total Equity Composite

Top Positive Contributors

Top Negative Contributors

			Relative			Relative	
Top Ten Holdings			Contribution %	Return %		Contribution %	Return %
SAMSUNG ELECTRONICS	1.7%		70			70	
BANK CENTRAL ASIA	1.5%	BNC.BRADESCO PF.SPN.ADR 1:1	0.1%	31.4%	ASTRA INTERNATIONAL	-0.2%	-12.4%
ASTRA INTERNATIONAL	1.5%	BANK CENTRAL ASIA	0.1%	10.7%	TENCENT HOLDINGS	-0.1%	20.4%
TELEKOMUNIKASI INDONESIA	1.4%	LOJAS RENNER ON	0.1%	38.2%	ITC	-0.1%	-21.0%
APPLE	1.4%	SAMSUNG ELTN.PREF.	0.1%	10.6%	ALIBABA GROUP HLDG.SPN. ADR 1:1	-0.1%	22.6%
SAMSUNG ELTN.PREF.	1.1%	SAMSUNG ELECTRONICS	0.1%	7.8%	MATAHARI DEPARTMENT SOE.	-0.1%	-35.3%
BANK RAKYAT INDONESIA	1.0%	HOUSING DEVELOPMENT FIN.	0.0%	7.7%	APPLE	-0.1%	7.4%
MICROSOFT	1.0%	STMICROELECTRONICS (PAR)	0.0%	35.3%	INTEL	0.0%	13.7%
TAIWAN SEMICON.MNFG.	0.8%	MAGNIT	0.0%	14.5%	NAVER	0.0%	-11.2%
CASH - USD	0.8%	NEXT	0.0%	46.5%	ROYAL DUTCH SHELL A(LON)	0.0%	16.0%
		ROYAL DUTCH SHELL A	0.0%	15.9%	BAIDU 'A' ADR 10:1	0.0%	38.5%

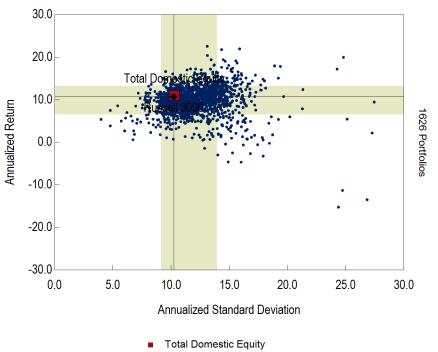
Equity Sector Attribution

			Attribution Effects		F	Returns	Sect	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1%	0.0%	0.0%	0.0%	9.0%	9.7%	5.9%	6.1%
Materials	-0.1%	0.0%	0.0%	-0.1%	6.9%	9.1%	4.9%	4.8%
Industrials	-0.2%	-0.2%	0.0%	0.0%	3.1%	5.3%	11.1%	10.8%
Consumer Discretionary	-0.3%	-0.3%	0.0%	0.0%	0.9%	3.7%	11.7%	12.1%
Consumer Staples	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	10.0%	9.2%
Health Care	0.1%	0.1%	0.0%	0.0%	3.1%	2.6%	10.7%	11.6%
Financials	0.0%	0.2%	0.0%	-0.2%	5.7%	5.7%	18.7%	18.8%
Information Technology	-0.3%	-0.3%	0.0%	0.0%	7.1%	8.9%	16.4%	17.0%
Telecommunication Services	-0.1%	0.0%	0.0%	0.0%	2.2%	3.9%	4.1%	3.2%
Utilities	0.0%	0.0%	0.0%	0.0%	2.1%	3.4%	2.6%	3.1%
Real Estate	-0.1%	-0.1%	0.0%	0.0%	1.7%	3.6%	3.7%	3.2%
Cash	0.0%	0.0%	0.0%	0.0%	0.3%		0.3%	0.0%
Portfolio	-1.2%	= -0.7%	+ -0.1%	+ -0.5%	4.1%	5.3%	100.0%	100.0%



Domestic Equity Composite

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017



- ◆ Russell 3000
- 68% Confidence Interval
- eA All US Equity Net

U.S. Effective Style Map 3 Years Ending September 30, 2017



First Rolling Period

♦ Last Rolling Period

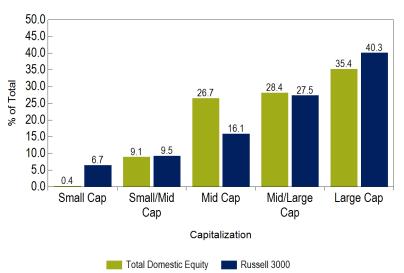


Domestic Equity Composite

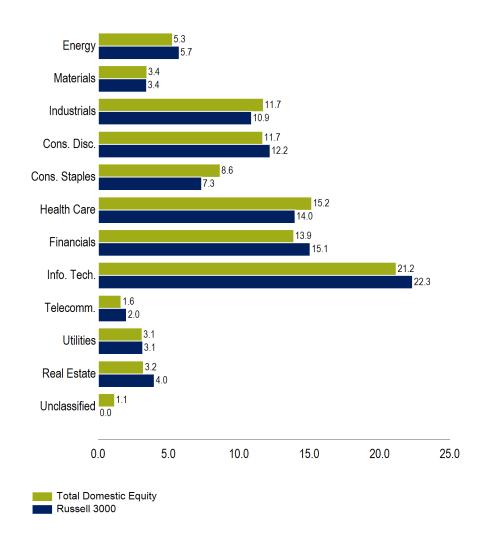
Characteristics

	Portfolio	Russell 3000
Number of Holdings	537	2,981
Weighted Avg. Market Cap. (\$B)	120.29	135.88
Median Market Cap. (\$B)	19.67	1.65
Price To Earnings	26.63	25.07
Price To Book	5.31	4.39
Price To Sales	3.61	3.58
Return on Equity (%)	20.05	17.19
Yield (%)	1.80	1.83
Beta	1.00	1.00
R-Squared	0.98	1.00

Market Capitalization As of September 30, 2017



Sector Allocation (%) vs Russell 3000



Domestic Equity Composite

_	D 141	A 4 11 4
Inn	Positive	Contributors

Top Negative Contributors

			Relative			Relative	
Top Ten Holdings			Contribution %	Return %		Contribution %	Return %
APPLE	2.5%		70			70	
MICROSOFT	1.8%	BNC.BRADESCO PF.SPN.ADR 1:1	0.1%	31.4%	APPLE	-0.2%	7.4%
FACEBOOK CLASS A	1.3%	BANK CENTRAL ASIA	0.1%	10.7%	ASTRA INTERNATIONAL	-0.1%	-12.4%
AMAZON.COM	1.2%	LOJAS RENNER ON	0.1%	38.2%	FACEBOOK CLASS A	-0.1%	13.2%
CASH - USD	1.1%	SAMSUNG ELTN.PREF.	0.1%	10.6%	MICROSOFT	-0.1%	8.6%
BERKSHIRE HATHAWAY 'B'	1.1%	SAMSUNG ELECTRONICS	0.1%	7.8%	BOEING	-0.1%	29.3%
JOHNSON & JOHNSON	1.1%	GENERAL ELECTRIC	0.1%	-9.6%	INTEL	-0.1%	13.7%
EXXON MOBIL	1.1%	ALTRIA GROUP	0.1%	-13.9%	ITC	-0.1%	-21.0%
JP MORGAN CHASE & CO.	1.1%	STMICROELECTRONICS (PAR)	0.0%	35.3%	BERKSHIRE HATHAWAY 'B'	-0.1%	8.2%
ALPHABET 'A'	0.9%	HOUSING DEVELOPMENT FIN.	0.0%	7.7%	CHEVRON	-0.1%	13.8%
		NEXT	0.0%	46.5%	ABBVIE	-0.1%	23.6%

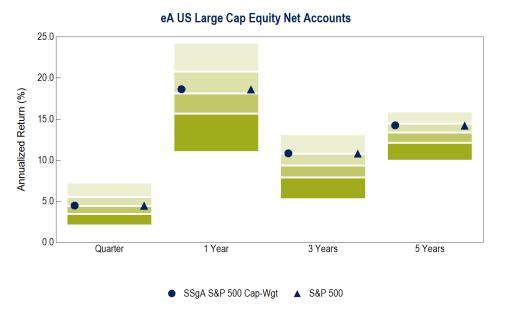
Equity Sector Attribution

			Attribution Effects		R	leturns	Sect	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	0.0%	0.0%	0.1%	9.0%	6.8%	5.9%	5.7%
Materials	0.1%	0.0%	0.0%	0.0%	6.9%	5.3%	4.9%	2.8%
Industrials	-0.2%	-0.3%	0.0%	0.1%	3.1%	5.1%	11.1%	10.9%
Consumer Discretionary	0.0%	-0.1%	0.0%	0.1%	0.9%	1.3%	11.7%	12.7%
Consumer Staples	0.0%	0.1%	-0.1%	0.1%	-0.1%	-1.2%	10.0%	7.8%
Health Care	0.0%	-0.1%	0.0%	0.1%	3.1%	3.7%	10.7%	14.1%
Financials	0.1%	0.0%	0.0%	0.0%	5.7%	5.2%	18.6%	15.1%
Information Technology	-0.4%	-0.3%	-0.2%	0.1%	7.1%	8.4%	16.3%	21.7%
Telecommunication Services	-0.1%	-0.1%	0.0%	-0.1%	2.2%	6.3%	4.1%	2.0%
Utilities	0.0%	-0.1%	0.0%	0.0%	2.1%	3.1%	2.6%	3.2%
Real Estate	0.0%	0.0%	0.0%	0.0%	1.7%	1.1%	3.6%	4.1%
Cash	0.0%	0.0%	0.0%	0.0%	0.3%		0.5%	0.0%
Portfolio	-0.5%	= -0.8%	+ -0.2%	+ 0.5%	4.0%	4.5%	100.0%	100.0%

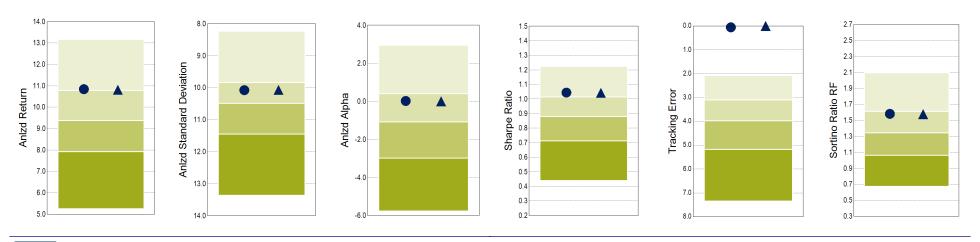


SSgA S&P 500 Cap-Wgt

Using a replication process, we purchase each security for the Strategy in the same capitalization weight as it appears in the S&P 500 Index. Replication results in low turnover, accurate tracking, and low costs. SSgA's internal liquidity has allowed the firm to acquire many of the benchmark constituents for free. These free trading opportunities have allowed SSgA to gradually reduce security-level misweights while avoiding the open market. This process has resulted in portfolios that look and behave like the benchmark, and do so at a very low cost. SSgA's passive equity process objective is to remain fully invested in the equity market at all times. To accomplish this, it holds a small amount of unleveraged exchange-traded S&P 500® futures contracts to maintain full exposure. SSgA tends to hold approximately 1-3% of the strategy's value in suitable CFTC approved index futures contracts. This position in futures also allows the firm to accommodate cash flows into and out of the portfolio on a daily basis and to equitize dividend receivables to achieve closer tracking.



3 Year Risk Statistics





SSgA S&P 500 Cap-Wgt

Top Positive Contributors

Top Negative Contributors

				Relative			Relative	
Characteristics	Portfolio	S&P 500		Contribution %	Return %		Contribution %	Return %
Number of Holdings	505	505	DR PEPPER SNAPPLE GROUP (DPS)	0.0%	-2.3%	INTEL (INTC)	-0.1%	13.7%
Weighted Avg. Market Cap. (\$B)	163.6	163.1	ABBVIE	0.0%	23.6%	MICRON TECHNOLOGY (MU)	0.0%	31.7%
Median Market Cap. (\$B)	20.7	20.7	LAM RESEARCH (LRCX)	0.0%	31.2%	BIOGEN (BIIB)	0.0%	15.4%
Price To Earnings	25.1	24.6	APPLIED MATS.	0.0%	26.4%	BLACKROCK (BLK)	0.0%	6.5%
Price To Book	5.3	4.8	ACUITY BRANDS (AYI)	0.0%	-15.7%	HALLIBURTON (HAL)	0.0%	8.3%
Price To Sales	3.6	3.4	TEXAS INSTRUMENTS (TXN)	0.0%	17.2%	CVS HEALTH (CVS)	0.0%	1.7%
Return on Equity (%)	21.1	20.0	CISCO SYSTEMS	0.0%	8.4%	ANTHEM (ANTM)	0.0%	1.3%
Yield (%)	2.0	2.0	GOLDMAN SACHS GP. (GS)	0.0%	7.3%	WELLS FARGO & CO (WFC)	0.0%	0.3%
Beta	1.0	1.0	CHIPOTLE MEXN.GRILL (CMG)	0.0%	-26.0%	MICROCHIP TECH. (MCHP)	0.0%	16.8%
R-Squared	1.0	1.0	VERIZON COMMUNICATIONS (VZ)	0.0%	12.3%	ALTRIA GROUP (MO)	0.0%	-13.9%

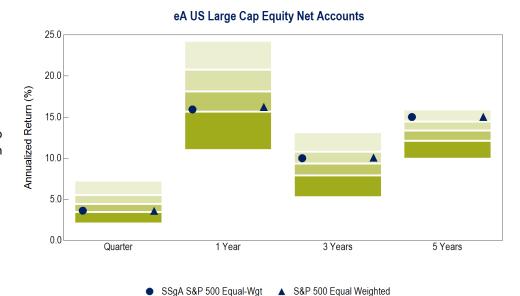
SSgA S&P 500 Cap-Wgt Performance Attribution vs. S&P 500

			Attribution Effects		R	eturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	6.8%	6.8%	6.0%	6.1%
Materials	0.0%	0.0%	0.0%	0.0%	5.0%	4.9%	2.2%	2.2%
Industrials	0.0%	0.0%	0.0%	0.0%	4.2%	4.2%	10.3%	10.4%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	0.9%	0.9%	12.4%	12.4%
Consumer Staples	0.0%	0.0%	0.0%	0.0%	-1.4%	-1.4%	8.8%	8.8%
Health Care	0.0%	0.0%	0.0%	0.0%	3.7%	3.6%	14.7%	14.7%
Financials	0.0%	0.0%	0.0%	0.0%	5.3%	5.3%	14.8%	14.7%
Information Technology	0.0%	0.0%	0.0%	0.0%	8.6%	8.6%	22.5%	22.5%
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	6.8%	6.8%	2.2%	2.2%
Utilities	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	3.2%	3.2%
Real Estate	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	2.9%	3.0%
Cash	0.0%						0.0%	0.0%
Portfolio	0.0%	= 0.0%	+ 0.0%	+ 0.0%	4.5%	4.5%	100.0%	100.0%

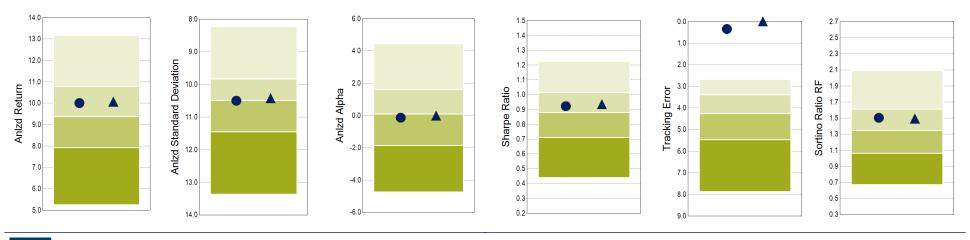


SSgA S&P 500 Equal-Wgt

The Strategy is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the Index. SSgA will typically attempt to invest in the securities comprising the Index, in the same proportions as they are represented in the Index. In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSqA may employ a sampling or optimization technique to construct the portfolio in question. From time to time securities are added to or removed from the Index. SSgA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, in anticipation of their removal from or addition to the Index. The Strategy may at times purchase or sell futures contracts on the Index, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the Strategy's replication of the Index return. The Strategy's return may not match the return of the Index.



3 Year Risk Statistics





SSgA S&P 500 Equal-Wgt

Top Positive Contributors

Top Negative Contributors

				Relative			Relative	
Characteristics	Portfolio	S&P 500		Contribution %	Return %		Contribution %	Return %
Number of Holdings	502	505	GENERAL ELECTRIC (GE)	0.1%	-9.6%	APPLE	-0.3%	7.4%
Weighted Avg. Market Cap. (\$B)	43.7	163.1	NRG ENERGY	0.1%	48.8%	MICROSOFT	-0.2%	8.6%
Median Market Cap. (\$B)	20.6	20.7	GAP	0.1%	34.3%	FACEBOOK CLASS A	-0.2%	13.2%
Price To Earnings	25.5	24.6	TRANSOCEAN (RIG)	0.1%	30.7%	BERKSHIRE HATHAWAY 'B' (BRKB)	-0.1%	8.2%
Price To Book	4.6	4.8	MICHAEL KORS HOLDINGS (KORS)	0.1%	32.0%	CHEVRON (CVX)	-0.1%	13.8%
Price To Sales	3.2	3.4	CF INDUSTRIES HDG.	0.0%	27.0%	BOEING (BA)	-0.1%	29.3%
Return on Equity (%)	19.2	20.0	SCRIPPS NETWORKS INTACT. 'A' (SNI)	0.0%	26.2%	VERIZON COMMUNICATIONS	-0.1%	12.3%
Yield (%)	1.9	2.0	MEDTRONIC (MDT)	0.0%	-11.4%	ABBVIE	-0.1%	23.6%
Beta	1.0	1.0	ALBEMARLE (ALB)	0.0%	29.5%	VISA 'A' (V)	-0.1%	12.4%
R-Squared	0.9	1.0	HUNT JB TRANSPORT SVS. (JBHT)	0.0%	21.9%	INTEL (INTC)	-0.1%	13.7%

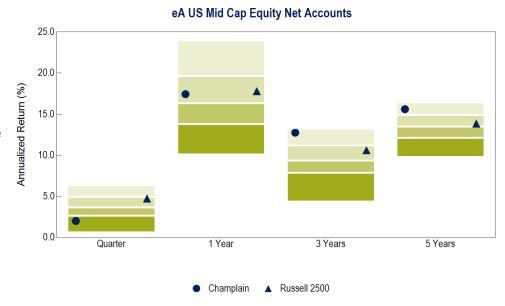
SSgA S&P 500 Equal-Wgt Performance Attribution vs. S&P 500

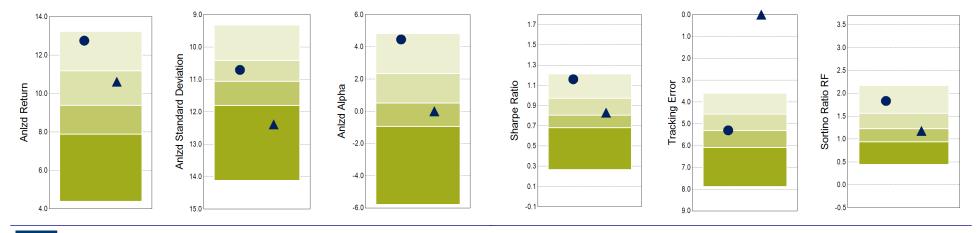
		_	Attribution Effects	;	R	Returns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	6.5%	6.8%	6.3%	6.1%
Materials	0.2%	0.0%	0.1%	0.0%	6.4%	4.9%	4.9%	2.2%
Industrials	0.2%	0.0%	0.1%	0.0%	4.5%	4.2%	13.2%	10.4%
Consumer Discretionary	0.1%	0.0%	0.0%	0.0%	1.0%	0.9%	16.2%	12.4%
Consumer Staples	0.1%	0.1%	0.0%	0.0%	-0.7%	-1.4%	6.3%	8.8%
Health Care	-0.4%	-0.4%	-0.1%	0.1%	0.7%	3.6%	12.4%	14.7%
Financials	-0.1%	0.0%	0.0%	0.0%	5.0%	5.3%	13.8%	14.7%
Information Technology	-0.8%	0.0%	-0.8%	0.0%	8.6%	8.6%	13.3%	22.5%
Telecommunication Services	-0.2%	-0.2%	-0.1%	0.1%	-2.7%	6.8%	0.8%	2.2%
Utilities	0.1%	0.0%	0.1%	0.0%	3.5%	2.9%	5.5%	3.2%
Real Estate	0.0%	0.0%	0.0%	0.0%	0.8%	1.0%	6.2%	3.0%
Cash	0.0%	0.0%	0.0%	0.0%	0.3%		1.1%	0.0%
Portfolio	-0.9%	= -0.6%	+ -0.6%	+ 0.3%	3.6%	4.5%	100.0%	100.0%



Champlain

Champlain employs a fundamental, bottom-up approach to investing in equity assets. They believe that superior companies purchased at attractive valuations have the highest probability to wealth creation. Champlain seeks strong businesses with credible and sincere management and aims to buy shares of their stock at discounts to fair or intrinsic value. Portfolio construction applies sector weight guidelines and position size rules to manage risk. The portfolio will have some exposure to at least seven out of the eight largest sectors of the S&P 400, with a maximum weighting on 25% in any one sector. Individual positions will not represent more than 2% of the respective companies' outstanding shares and are limited to no more than 5% of assets under management. The portfolio typically holds 50-75 securities with average position sizes of 2%. The strategy's minimum market cap is \$1.5 billion at purchase and a maximum market cap of \$15 billion. In general, no more than 10% of portfolio in stocks with a market cap below \$2B and no more than 5% of portfolio in companies with market cap above \$20B.







Champlain

Top Positive Contributors

Top Negative Contributors

Characteristics	i			Relative			Relative	
	Portfolio	Russell 2500		Contributio n %	Return %		Contribution %	Return %
Number of Holdings	57	2,491	ALIGN TECHNOLOGY (ALGN)	0.6%	24.1%	NUVASIVE	-0.5%	-27.9%
Weighted Avg. Market Cap. (\$B)	9.8	4.7	RED HAT (RHT)	0.4%	15.8%	TREEHOUSE FOODS (THS)	-0.4%	-17.1%
Median Market Cap. (\$B)	7.8	1.2	TABLEAU SOFTWARE CL.A (DATA)	0.4%	22.2%	WABTEC (WAB)	-0.3%	-17.1%
Price To Earnings	37.5	25.9	DOVER (DOV)	0.3%	14.6%	ADV.AUTO PARTS (AAP)	-0.2%	-14.9%
Price To Book	6.2	3.5	SPLUNK (SPLK)	0.3%	16.8%	J M SMUCKER (SJM)	-0.2%	-10.8%
Price To Sales	4.0	3.1	ROCKWELL AUTOMATION (ROK)	0.2%	10.5%	DENTSPLY SIRONA (XRAY)	-0.2%	-7.6%
Return on Equity (%)	15.5	12.4	FLOWERS FOODS	0.2%	9.7%	INTEGRA LFSC.HDG. (IART)	-0.2%	-7.4%
Yield (%)	0.9	1.3	SNYDERS LANCE	0.2%	10.6%	HENRY SCHEIN (HSIC)	-0.2%	-10.4%
Beta	0.8	1.0	STERIS (STE)	0.2%	8.9%	NORTHERN TRUST	-0.1%	-5.0%
R-Squared	0.8	1.0	GUIDEWIRE SOFTWARE	0.2%	13.3%	HORMEL FOODS	-0.1%	-5.3%

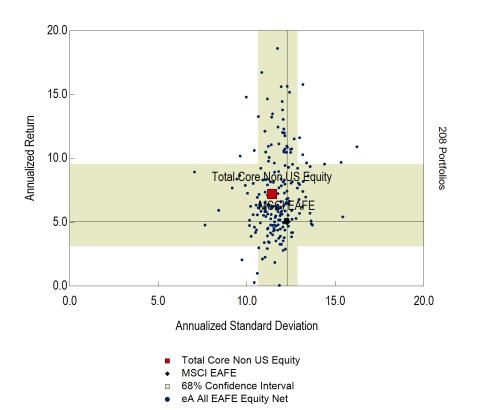
Champlain Performance Attribution vs. Russell 2500

			Attribution Effects	S	R	eturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.3%	-0.4%	-0.2%	0.3%	-3.2%	6.2%	1.4%	4.3%
Materials	-0.3%	-0.3%	-0.1%	0.1%	0.7%	5.9%	3.7%	5.8%
Industrials	-0.6%	-0.6%	0.1%	-0.1%	3.4%	7.4%	17.4%	15.7%
Consumer Discretionary	-0.8%	-1.2%	-0.3%	0.7%	-5.5%	3.8%	5.3%	12.6%
Consumer Staples	-0.3%	-0.1%	0.1%	-0.3%	-1.9%	0.5%	13.8%	2.9%
Health Care	-0.5%	-0.4%	0.5%	-0.5%	-0.2%	3.5%	25.7%	11.9%
Financials	-0.5%	-0.4%	-0.2%	0.1%	2.2%	4.4%	11.2%	16.6%
Information Technology	1.1%	0.5%	0.3%	0.2%	9.3%	6.0%	21.7%	16.1%
Telecommunication Services	0.0%		0.0%			3.0%	0.0%	0.6%
Utilities	-0.2%		-0.2%			5.1%	0.0%	3.8%
Real Estate	-0.1%		-0.1%			1.3%	0.0%	9.7%
Cash	0.0%						0.0%	0.0%
Portfolio	-2.5%	= -2.8%	+ -0.2%	+ 0.5%	2.2%	4.7%	100.0%	100.0%

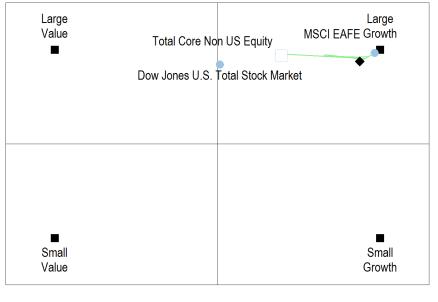


Int'l Equity Composite

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017



U.S. Effective Style Map 3 Years Ending September 30, 2017



First Rolling Period

♦ Last Rolling Period

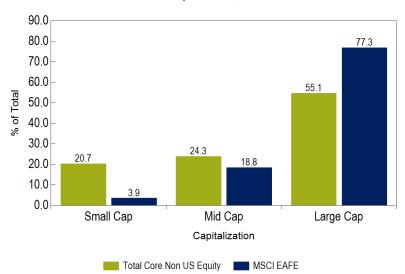


Int'l Equity Composite

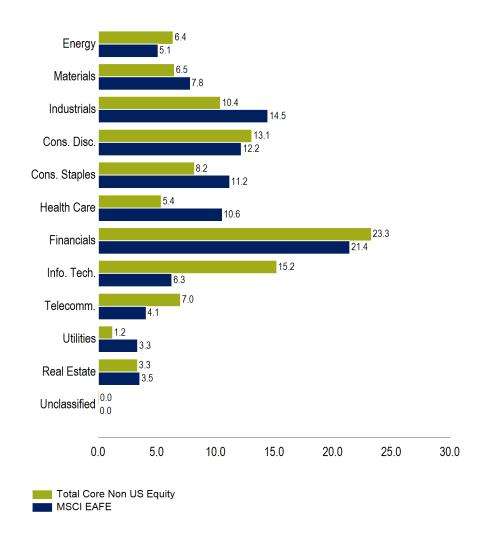
Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	2,232	926
Weighted Avg. Market Cap. (\$B)	40.35	58.65
Median Market Cap. (\$B)	6.91	10.85
Price To Earnings	19.45	20.94
Price To Book	2.96	2.61
Price To Sales	2.27	2.10
Return on Equity (%)	16.77	13.57
Yield (%)	2.15	2.97
Beta	0.92	1.00
R-Squared	0.98	1.00

Market Capitalization As of September 30, 2017



Sector Allocation (%) vs MSCI EAFE





Int'l Equity Composite

Top Positive Contributors

Top Negative Contributors

			Relative			Relative	
Top Ten Holdings			Contribution %	Return %		Contribution %	Return %
SAMSUNG ELECTRONICS	6.4%					/0	
TELEKOMUNIKASI INDONESIA	5.3%	SAMSUNG ELECTRONICS	0.3%	7.8%	ASTRA INTERNATIONAL	-0.3%	-12.4%
BANK CENTRAL ASIA	4.5%	BANK CENTRAL ASIA	0.3%	10.7%	MATAHARI DEPARTMENT SOE.	-0.2%	-35.3%
BANK RAKYAT INDONESIA	3.8%	STMICROELECTRONICS (PAR)	0.1%	35.3%	ROYAL DUTCH SHELL A(LON)	-0.1%	16.0%
ASTRA INTERNATIONAL	3.6%	SK HYNIX	0.1%	22.9%	PERUSAHAAN GAS NEGARA	-0.1%	-30.7%
BANK MANDIRI	2.8%	NEXT	0.1%	46.5%	ASML HOLDING	-0.1%	30.9%
UNILEVER INDONESIA	1.7%	ROYAL DUTCH SHELL A	0.1%	15.9%	HSBC HDG. (ORD \$0.50)	-0.1%	8.0%
BANK NEGARA INDONESIA	1.2%	NORSK HYDRO	0.1%	31.7%	TOYOTA MOTOR	-0.1%	13.7%
UNITED TRACTORS	1.2%	KIRIN HOLDINGS	0.1%	15.5%	TOTAL	-0.1%	10.3%
ROYAL DUTCH SHELL A	1.2%	UNITED TRACTORS	0.1%	15.4%	GLENCORE	-0.1%	23.9%
		TEVA PHARM.INDS.ADR 1:1	0.1%	-46.7%	GUDANG GARAM	-0.1%	-14.1%

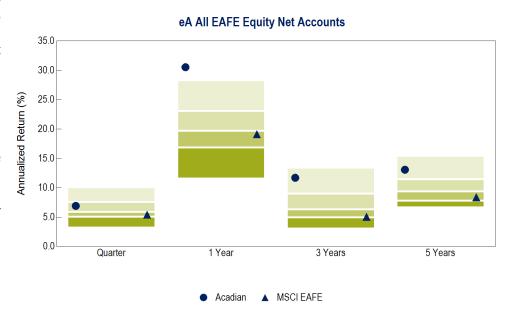
Equity Sector Attribution

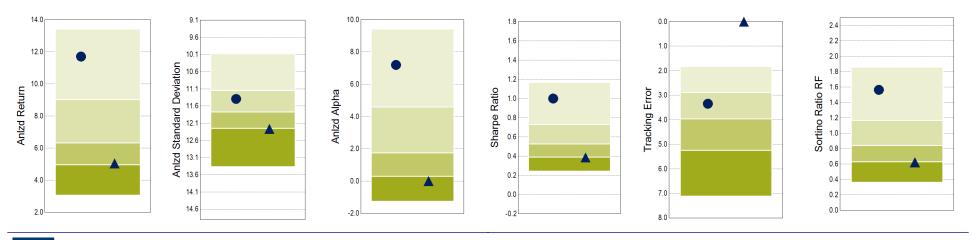
			Attribution Effects	;	Returns		Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.3%	0.1%	0.1%	0.0%	14.6%	13.6%	6.8%	4.8%
Materials	-0.3%	-0.1%	-0.1%	-0.1%	9.0%	11.0%	5.0%	7.5%
Industrials	-0.5%	-0.5%	0.0%	0.0%	2.2%	6.2%	11.7%	14.2%
Consumer Discretionary	-0.9%	-0.8%	0.0%	-0.2%	-0.1%	7.5%	12.8%	12.1%
Consumer Staples	0.0%	0.0%	0.1%	-0.2%	0.0%	1.1%	9.0%	11.5%
Health Care	0.4%	0.4%	0.1%	-0.1%	4.7%	0.9%	8.8%	11.1%
Financials	0.0%	0.4%	0.0%	-0.4%	5.3%	5.2%	19.6%	21.5%
Information Technology	0.0%	-0.1%	0.2%	-0.1%	5.8%	8.3%	13.1%	6.0%
Telecommunication Services	-0.1%	0.0%	-0.1%	0.0%	1.1%	1.8%	7.6%	4.3%
Utilities	-0.1%	-0.1%	0.0%	0.0%	0.2%	4.3%	3.1%	3.4%
Real Estate	0.0%	0.1%	0.0%	-0.1%	3.7%	3.3%	2.5%	3.6%
Cash	0.0%					-	0.0%	0.0%
Portfolio	-1.4%	= -0.5%	+ 0.3%	+ -1.2%	4.1%	5.5%	100.0%	100.0%



Acadian

Acadian believes that the larger the pool of potential investments, the greater the potential opportunity an active manager has to add value. They believe that stocks and markets have many attributes that are related to potential outperformance, and that a successful investment approach must be multi-faceted and highly adaptable. They believe that objectivity is crucial to investment success. Acadian's quantitative process and extensive database allows them to apply their valuation techniques to over 40,000 stocks worldwide. They do not limit the universe other than to employ screens based on invest-ability and availability of data. For example, they only evaluate stocks that have sufficient daily trading volume to be appropriate for institutional investment. Other than these practical considerations, they consider our investment universe to encompass all institutionally investable stocks in the world.







Acadian

Top Positive Contributors

Top Negative Contributors

Characteristics	;			Relative			Relative	
	Portfolio	MSCI EAFE		Contribution %	Return %		Contributio n %	Return %
Number of Holdings	374	926	STMICROELECTRONICS (PAR) (F:STM)	0.5%	35.3%	KT ADR 2:1	-0.2%	-16.6%
Weighted Avg. Market Cap. (\$B)	29.4	58.7	ROYAL DUTCH SHELL A	0.4%	15.9%	LG DISPLAY ADR 2:1	-0.2%	-16.5%
Median Market Cap. (\$B)	0.7	10.9	NORSK HYDRO (N:NHY)	0.4%	31.7%	ASAHI GLASS (J:AG@N)	-0.1%	-11.9%
Price To Earnings	18.5	20.9	FIAT CHRYSLER AUTOS. (I:FCA)	0.3%	71.0%	HOCHTIEF (D:HOT)	-0.1%	-8.1%
Price To Book	2.7	2.6	DEUTSCHE LUFTHANSA (D:LHA)	0.3%	22.4%	KONAMI HOLDINGS (J:KONA)	-0.1%	-13.0%
Price To Sales	1.3	2.1	LONZA GROUP	0.3%	21.3%	MIXI	-0.1%	-13.3%
Return on Equity (%)	17.1	13.6	ICON	0.3%	16.5%	LENZING (O:LNZ)	-0.1%	-18.9%
Yield (%)	2.4	3.0	PEUGEOT (F:PGT)	0.3%	19.6%	MERCK KGAA (D:MRK)	-0.1%	-7.2%
Beta	0.9	1.0	DAITO TST.CONSTRUCTION	0.2%	18.6%	WPP	-0.1%	-11.4%
R-Squared	0.9	1.0	JAFCO	0.2%	26.8%	ALMIRALL (E:LAB)	-0.1%	-37.4%

Acadian Performance Attribution vs. MSCI EAFE

			Attribution Effects		R	teturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.6%	0.0%	0.4%	0.2%	14.1%	13.6%	9.1%	4.8%
Materials	0.1%	0.0%	0.1%	0.0%	11.0%	11.0%	8.6%	7.5%
Industrials	0.0%	-0.3%	0.2%	0.1%	4.7%	6.2%	19.2%	14.2%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	8.2%	7.5%	11.2%	12.1%
Consumer Staples	0.0%	0.3%	0.1%	-0.3%	4.2%	1.1%	3.8%	11.5%
Health Care	0.8%	0.5%	0.0%	0.2%	6.2%	0.9%	13.8%	11.1%
Financials	0.2%	1.1%	-0.2%	-0.7%	9.7%	5.2%	13.4%	21.5%
Information Technology	0.4%	-0.1%	0.6%	-0.1%	6.3%	8.3%	14.7%	6.0%
Telecommunication Services	-0.3%	-0.6%	0.0%	0.3%	-15.0%	1.8%	1.4%	4.3%
Utilities	-0.2%	-0.2%	0.0%	0.1%	-1.8%	4.3%	0.7%	3.4%
Real Estate	0.3%	0.3%	0.0%	0.0%	10.0%	3.3%	4.1%	3.6%
Cash	0.0%						0.0%	0.0%
Portfolio	2.0%	= 1.0%	+ 1.1%	+ -0.1%	7.5%	5.5%	100.0%	100.0%



Acadian

Count	rv Al	location
	<i>, .</i>	

	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
Americas				
Canada	4.7%	0.0%	8.8%	7.9%
Mexico*	0.3%	0.0%	-2.7%	1.5%
United States	0.1%	0.0%	22.2%	4.3%
Total-Americas	5.1%	0.0%	8.2%	
Europe				
Austria	2.3%	0.2%	1.8%	12.8%
Belgium	0.5%	1.1%	-2.3%	9.2%
Denmark	2.7%	1.8%	2.3%	7.8%
Finland	3.0%	1.0%	4.7%	3.3%
France	8.4%	10.5%	15.1%	8.5%
Germany	7.3%	9.5%	5.5%	7.8%
Greece*	0.2%	0.0%	9.8%	-12.1%
Ireland	1.8%	0.5%	16.5%	6.2%
Italy	3.4%	2.3%	27.5%	13.9%
Luxembourg	0.2%	0.0%	10.1%	5.5%
Netherlands	4.3%	3.5%	13.3%	9.5%
Norway	2.1%	0.6%	27.4%	19.3%
Poland*	0.3%	0.0%	11.9%	9.3%
Portugal	0.4%	0.1%	1.2%	13.4%
Russia*	0.0%	0.0%	20.3%	17.6%
Spain	3.8%	3.5%	-5.7%	4.2%
Sweden	3.5%	2.9%	7.9%	5.5%
Switzerland	4.4%	8.5%	9.4%	2.0%
United Kingdom	9.5%	17.6%	5.7%	5.3%
Total-Europe	58.0%	63.8%	9.2%	6.6%

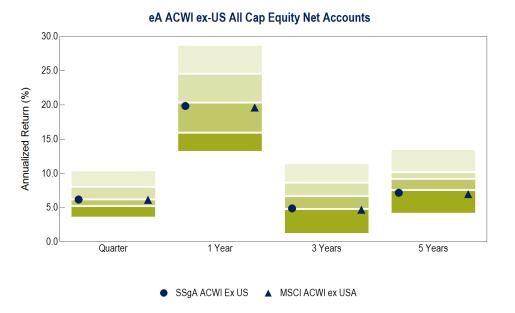
Country Allocation

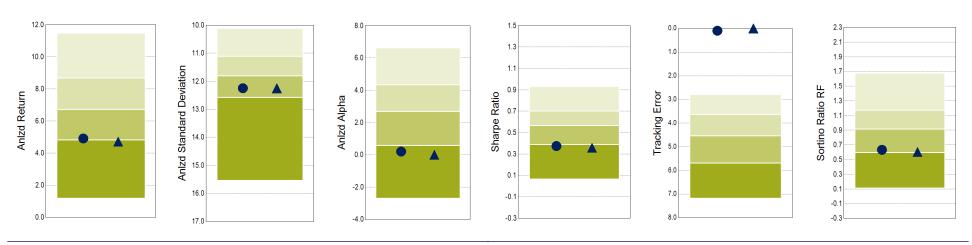
Manager	Index	Manager	Index
Allocation (USD) Alloc	cation (USD)	Return (USD)	Return (USD)
6.4%	7.1%	-2.0%	3.1%
0.8%	3.5%	10.0%	5.1%
0.0%	0.0%	6.9%	0.2%
19.8%	23.4%	2.9%	4.0%
5.2%	0.0%	-0.5%	3.2%
0.1%	0.0%	7.1%	0.1%
0.2%	0.2%	5.2%	0.3%
0.0%	0.0%	12.5%	2.2%
1.3%	1.3%	6.7%	3.1%
0.3%	0.0%	-3.2%	2.8%
0.1%	0.0%	2.8%	2.7%
34.2%	35.5%	1.7%	3.9%
0.6%	0.7%	-3.3%	-12.6%
1.3%	0.0%	10.4%	6.8%
0.0%	0.0%	22.5%	6.1%
1.9%	0.7%	6.7%	-12.6%
92.1%	100.0%	2.5%	5.5%
7.9%	0.0%	2.2%	
	Allocation (USD) Alloca	Allocation (USD) Allocation (USD) 6.4% 7.1% 0.8% 3.5% 0.0% 0.0% 19.8% 23.4% 5.2% 0.0% 0.1% 0.0% 0.2% 0.2% 0.0% 0.0% 1.3% 1.3% 0.3% 0.0% 0.1% 0.0% 34.2% 35.5% 0.6% 0.7% 1.3% 0.0% 0.0% 0.0% 1.3% 0.0% 0.1% 0.0%	Allocation (USD) Allocation (USD) Return (USD) 6.4% 7.1% -2.0% 0.8% 3.5% 10.0% 0.0% 0.0% 6.9% 19.8% 23.4% 2.9% 5.2% 0.0% -0.5% 0.1% 0.0% 7.1% 0.2% 0.2% 5.2% 0.0% 0.0% 12.5% 1.3% 1.3% 6.7% 0.3% 0.0% -3.2% 0.1% 0.0% 2.8% 34.2% 35.5% 1.7% 0.6% 0.7% -3.3% 1.3% 0.0% 10.4% 0.0% 0.0% 22.5% 1.9% 0.7% 6.7%



SSgA ACWI Ex US

The MSCI ACWI ex US Index Strategy tends to hold each security that is held in the benchmark index, but the strategy will not be perfectly weighted in every index constituent on a daily basis. Holding securities in the perfect weights would require increased trading and therefore would incur costs. Thus, there will be securities in the fund that are either over- or under-weighted relative to the benchmark. The individual security mis-weights are very minimal, usually within 1 basis point. However, in aggregate, these small mis-weights can add up and result in tracking error if the mis-weighted securities' performance is volatile. SSgA seek to replicate the index by attempting to hold every security in the fund in its appropriate index weight. SSgA trade only when there is a change to the Index, when we have participant cash flows, or when we receive significant dividend income into the fund.







SSgA ACWI Ex US

Characteristics			Top Positive Cor	ntributors		Top Negative Contributors			
Onaracteristics		MSCI		Relative			Relative		
	Portfolio	ACWI ex USA		Contribution %	Return %		Contribution %	Return %	
Number of Holdings	1,921	1,859	BANK CENTRAL ASIA (ID:BCA)	0.6%	10.7%	ASTRA INTERNATIONAL (ID:ATA)	-0.8%	-12.4%	
Weighted Avg. Market Cap. (\$B)	45.7	62.9	SAMSUNG ELECTRONICS (KO:SGL)	0.5%	7.8%	MATAHARI DEPARTMENT SOE. (ID:MDS)	-0.4%	-35.3%	
Median Market Cap. (\$B)	8.1	8.0	SK HYNIX	0.3%	22.9%	PERUSAHAAN GAS NEGARA	-0.3%	-30.7%	
Price To Earnings	19.9	21.1	UNITED TRACTORS (ID:UTR)	0.2%	15.4%	TENCENT HOLDINGS (K:TCNT)	-0.2%	20.4%	
Price To Book	3.1	2.6	TELEKOMUNIKASI INDONESIA	0.2%	2.5%	ALIBABA GROUP HLDG.SPN. ADR 1:1 (BABA)	-0.2%	22.6%	
Price To Sales	2.8	2.2	BANK NEGARA INDONESIA	0.2%	10.9%	GUDANG GARAM (ID:GUD)	-0.2%	-14.1%	
Return on Equity (%)	16.6	14.6	BANK MANDIRI LG CHEM (KO:LCM)	0.2% 0.1%	4.4% 34.6%	CHAROEN POKPHAND INDO.	-0.1%	-14.7%	
Yield (%)	2.0	2.8	ADARO ENERGY TBK	0.1%	14.3%	MEDIA NUSNT.CITRA (ID:MNC)	-0.1%	-27.3%	
Beta	1.0	1.0	SAMSUNG ELTN.PREF. (KO:SEP)	0.1%	10.6%	ROYAL DUTCH SHELL A(LON) (UKIR:RDSA)	-0.1%	16.0%	
R-Squared	1.0	1.0	,			BAIDU 'A' ADR 10:1	-0.1%	38.5%	

SSgA ACWI Ex US Performance Attribution vs. MSCI ACWI ex USA

		•						
			Attribution Effects	S	R	Returns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.2%	0.4%	-0.3%	-0.4%	15.6%	12.9%	3.6%	6.3%
Materials	-0.4%	-0.1%	-0.1%	-0.2%	7.2%	10.6%	5.8%	7.5%
Industrials	-0.7%	-0.6%	-0.2%	0.0%	-1.2%	5.6%	6.6%	11.8%
Consumer Discretionary	-2.2%	-1.7%	0.2%	-0.7%	-9.7%	7.0%	14.5%	11.3%
Consumer Staples	-0.7%	-0.4%	0.0%	-0.3%	-5.3%	1.3%	11.2%	9.9%
Health Care	0.0%	0.4%	0.0%	-0.4%	4.4%	1.0%	3.0%	8.3%
Financials	-0.4%	0.1%	0.1%	-0.6%	4.1%	6.1%	26.0%	23.3%
Information Technology	0.1%	-0.1%	0.4%	-0.1%	7.9%	9.9%	15.2%	10.8%
Telecommunication Services	0.1%	0.1%	0.1%	-0.1%	1.9%	2.5%	9.7%	4.4%
Utilities	-0.4%	-0.5%	0.0%	0.1%	-12.0%	4.6%	2.1%	3.1%
Real Estate	-0.3%	-0.2%	0.0%	0.0%	-3.3%	6.2%	2.3%	3.2%
Cash	0.0%						0.0%	0.0%
Portfolio	-5.1%	= -2.5%	+ 0.1%	+ -2.6%	1.2%	6.2%	100.0%	100.0%



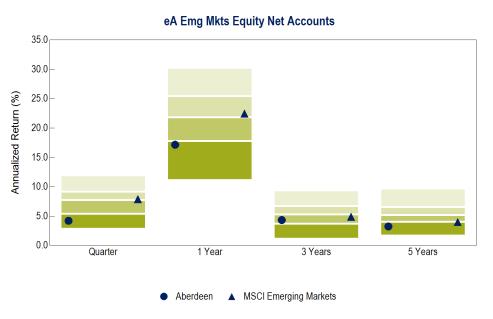
SSgA ACWI Ex US

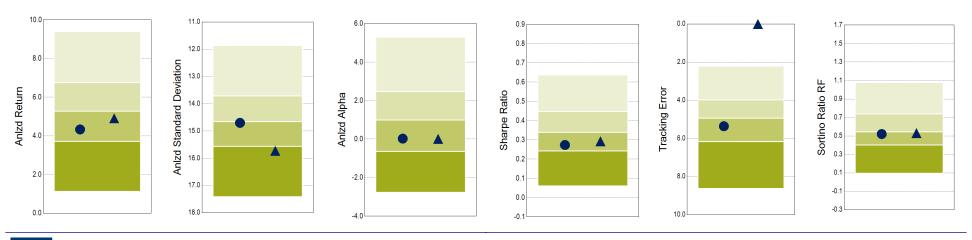
	Country Allocation				Country Allocation				
	Manager	Index	Manager	Index		Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)		Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
Americas					AsiaPacific				
Brazil*	0.0%	1.6%	23.0%	22.9%	Australia	0.0%	5.0%	3.1%	3.1%
Canada	0.1%	6.6%	8.1%	8.1%	China*	0.1%	6.6%	8.8%	14.7%
Chile*	1.2%	0.3%	16.9%	17.0%	Hong Kong	0.3%	2.4%	12.3%	5.1%
Colombia*	2.2%	0.1%	6.5%	6.5%	India*	0.9%	2.1%	3.0%	3.0%
Mexico*	0.1%	0.9%	1.6%	1.5%	Indonesia*	52.1%	0.6%	-1.1%	-1.1%
Peru*	0.0%	0.1%	13.8%	14.1%	Japan	12.3%	16.3%	4.0%	4.0%
United States	0.0%	0.0%	4.3%	4.3%	Korea*	29.0%	3.7%	2.5%	2.5%
Total-Americas	3.6%	9.5%	10.0%	10.2%	Malaysia*	0.0%	0.6%	1.9%	1.9%
Europe					New Zealand	0.0%	0.1%	0.2%	0.2%
Austria	0.0%	0.2%	12.8%	12.8%	Pakistan*	0.0%	0.0%	-16.4%	-16.2%
Belgium	0.0%	0.8%	9.2%	9.2%	Philippines*	0.1%	0.3%	3.5%	3.5%
Czech Republic*	0.0%	0.0%	10.0%	10.1%	Singapore	0.0%	0.9%	2.8%	3.1%
Denmark	0.1%	1.2%	7.8%	7.8%	Taiwan*	0.6%	3.0%	1.4%	1.4%
Finland	0.0%	0.7%	3.3%	3.3%	Thailand*	0.1%	0.5%	8.2%	10.6%
France	0.0%	7.3%	8.6%	8.5%	Total-AsiaPacific	95.6%	42.1%	0.8%	5.2%
Germany	0.0%	6.6%	7.4%	7.8%	Other				
Greece*	0.0%	0.1%	-12.1%	-12.0%	Egypt*	0.0%	0.0%	1.1%	1.1%
Hungary*	0.1%	0.1%	9.6%	9.6%	Israel	0.0%	0.5%	-6.5%	-13.1%
Ireland	0.0%	0.3%	4.0%	6.2%	Qatar*	0.0%	0.2%	-5.0%	-5.0%
Italy	0.0%	1.6%	14.4%	13.9%	South Africa*	0.1%	1.6%	4.0%	4.0%
Luxembourg	0.0%	0.0%	5.7%	6.2%	Turkey*	0.0%	0.3%	0.3%	0.3%
Netherlands	0.0%		11.3%	9.5%	United Arab Emirates*	0.0%	0.2%	3.9%	4.0%
Norway	0.0%		19.3%	19.3%	Total-Other	0.2%	2.7%	3.2%	0.0%
Poland*	0.0%	0.3%	9.6%	9.6%	Totals				
Portugal	0.0%	0.1%	13.4%	13.4%	Developed	13.1%	76.3%	4.2%	5.7%
Russia*	0.0%	0.8%	21.0%	18.1%	Emerging*	86.9%	23.7%	0.7%	8.0%
Spain	0.0%		4.2%	4.2%					
Sweden	0.1%	2.0%	5.4%	5.5%					
Switzerland	0.0%		2.0%	2.0%					
United Kingdom	0.1%	12.3%	4.8%	5.3%					
Total-Europe	0.6%	45.7%	7.8%	6.7%					



Aberdeen

Aberdeen believes, given the inefficiency of markets, that competitive long-term returns are achieved by identifying high quality stocks at attractive valuations and holding for the long term. It is their belief that sound fundamentals drive stock prices over time. They employ a fundamental bottom-up investment approach based upon a rigorous and disciplined proprietary research effort which originates with direct company due diligence visits. Portfolios are constructed to maximize their level of exposure to the most attractive companies filtered from the stock selection process. They run a representative or model' unconstrained portfolio that contains approximately 30 - 70 stocks at any given time. Once a stock has received unanimous approval by the team, the senior investment team members then decide which portfolio category it should enter (i.e. country, regional, Global Emerging Markets) and at what weighting. The Head of Global Emerging Markets then has responsibility to ensure that the decision is implemented.







Aberdeen

Characteristics	Characteristics		Top Positive Control	ributors	Top Negative Contributors			
Ondideteristics		MSCI		Relative			Relative	
	Portfolio	Emerging Markets		Contribution %	Return %		Contribution %	Return %
Number of Holdings	68	839	BNC.BRADESCO PF.SPN.ADR 1:1 (BBD)	0.8%	31.4%	TENCENT HOLDINGS	-0.9%	20.4%
Weighted Avg. Market Cap. (\$B)	41.7	80.6	LOJAS RENNER ON	0.6%	38.2%	ITC	-0.5%	-21.0%
Median Market Cap. (\$B)	16.2	5.5	SAMSUNG ELTN.PREF.	0.5%	10.6%	ASTRA INTERNATIONAL (ID:ATA)	-0.4%	-12.4%
Price To Earnings	23.9	21.5	MAGNIT	0.3%	14.5%	HANG LUNG GROUP (K:HLDV)	-0.2%	-12.6%
Price To Book	3.9		HOUSING DEVELOPMENT FIN.	0.3%	7.7%	NAVER	-0.2%	-11.2%
Price To Sales	3.1	2.2	MULTIPLAN EMPE. IMOBS.ON (BR:MUL) PJSC LUKOIL SPON (LON) ADR	0.2%	18.1%	GRUPO AEROPORTUARIO DEL SURESTE ADR 1:10	-0.2%	-9.3%
Return on Equity (%)	18.7	17.4	(UKIR:LKOD)	0.2%	13.3%	TENARIS ADS. 1:2	-0.1%	-9.1%
Yield (%)	2.4	2.3	BANCO SANTANDER-CHILE SPN.ADR	0.2%	16.9%	FOM.ECO.MEXNO.SAB DE CV SPN.ADR	0.40/	
Beta	0.9	1.0	1:400 (BSAC)	0.2 /0		1:10 (FMX)	-0.1%	-2.9%
R-Squared	0.9	1.0	GPO FINANCE BANORTE (MX:GTB)	0.2%	8.5%	BANK OF THE PHILP.ISLE.	-0.1%	-4.2%
1	0.0		BRF BRASIL FOODS ON (BR:DG3)	0.2%	22.0%	AMOREPACIFIC PF. (KO:APF)	-0.1%	-16.2%

Aberdeen Performance Attribution vs. MSCI Emerging Markets

			Attribution Effects		R	Returns		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.7%	-0.6%	-0.1%	0.1%	3.9%	13.3%	5.6%	6.5%	
Materials	-0.1%	-0.2%	0.2%	-0.1%	6.6%	10.2%	9.1%	7.1%	
Industrials	-0.3%	-0.6%	-0.1%	0.4%	-9.3%	1.7%	1.7%	5.7%	
Consumer Discretionary	0.1%	-0.1%	0.0%	0.1%	5.6%	5.0%	10.9%	10.5%	
Consumer Staples	0.2%	-0.1%	0.2%	0.0%	2.0%	2.4%	17.4%	6.8%	
Health Care	-0.1%	-0.3%	0.0%	0.2%	-4.4%	3.2%	1.2%	2.4%	
Financials	0.2%	0.0%	0.3%	-0.1%	6.9%	7.4%	28.4%	23.6%	
Information Technology	-2.5%	-2.0%	-1.4%	0.9%	3.5%	11.0%	14.0%	26.8%	
Telecommunication Services	-0.1%	-0.1%	0.0%	0.0%	2.1%	3.7%	5.3%	5.4%	
Utilities	-0.2%		-0.1%			6.6%	0.0%	2.6%	
Real Estate	-0.3%	-0.4%	0.7%	-0.5%	3.1%	17.9%	6.4%	2.6%	
Cash	0.0%						0.0%	0.0%	
Portfolio	-3.7%	= -4.2%	+ -0.3%	+ 0.8%	4.3%	8.0%	100.0%	100.0%	



Aberdeen

Country Allocation										
Manager	Index	Manager	Index							
Allocation (USD) Allocation	on (USD)	Return (USD)	Return (USD)							

	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
Americas				
Brazil*	12.5%	6.6%	21.3%	22.9%
Chile*	2.2%	1.1%	17.8%	17.0%
Mexico*	8.3%	3.7%	-0.1%	1.5%
United States	1.8%	0.0%	1.4%	4.3%
Total-Americas	24.7%	12.2%	12.4%	15.1%
Europe				
Hungary*	1.2%	0.3%	-4.4%	9.6%
Luxembourg	1.3%	0.0%	-9.1%	8.0%
Poland*	0.9%	1.3%	4.4%	9.6%
Portugal	1.2%	0.0%	1.2%	13.2%
Russia*	4.0%	3.2%	13.9%	18.1%
United Kingdom	1.6%	0.0%	4.8%	5.2%
Total-Europe	10.2%	5.4%	5.1%	13.1%

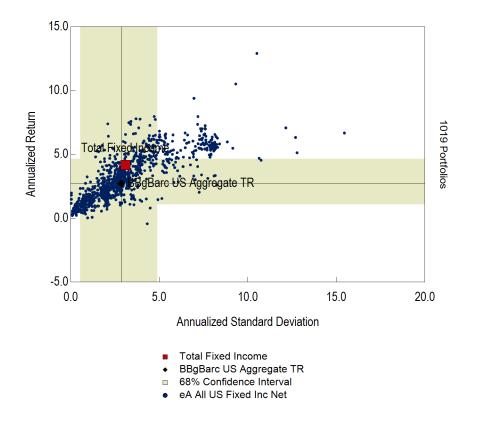
Country Allocation

	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
AsiaPacific				
Hong Kong	11.0%	0.0%	-0.8%	5.1%
India*	17.5%	8.8%	0.2%	3.0%
Indonesia*	5.6%	2.5%	-4.8%	-1.1%
Korea*	8.7%	15.7%	2.7%	2.5%
Malaysia*	1.2%	2.4%	3.6%	1.9%
Philippines*	3.9%	1.2%	4.5%	3.5%
Taiwan*	5.2%	12.5%	3.2%	1.4%
Thailand*	4.7%	2.2%	2.6%	10.6%
Total-AsiaPacific	57.8%	73.2%	0.7%	7.1%
Other				
South Africa*	3.3%	6.6%	6.4%	4.0%
Turkey*	3.9%	1.2%	2.4%	0.3%
Total-Other	7.2%	9.3%	4.3%	2.9%
Totals				
Developed	16.9%	0.0%	-0.5%	-
Emerging*	83.1%	100.0%	5.3%	8.0%

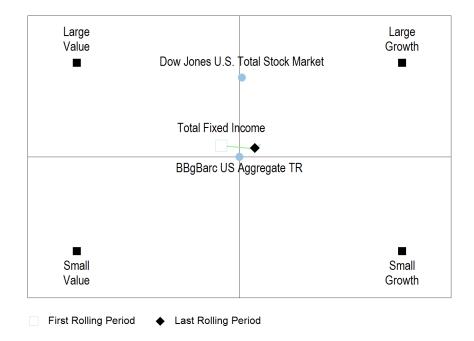


Total Fixed Income Composite

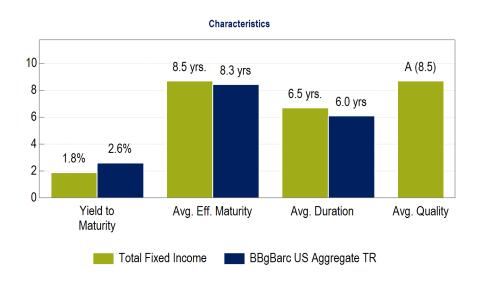
Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017

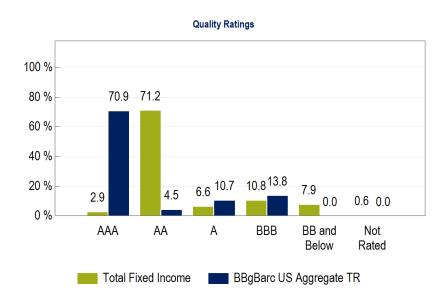


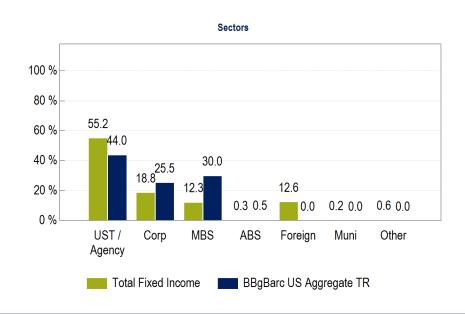
U.S. Effective Style Map 3 Years Ending September 30, 2017



Total Fixed Income Composite



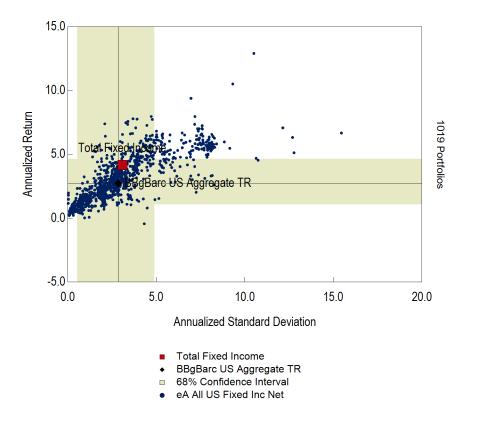




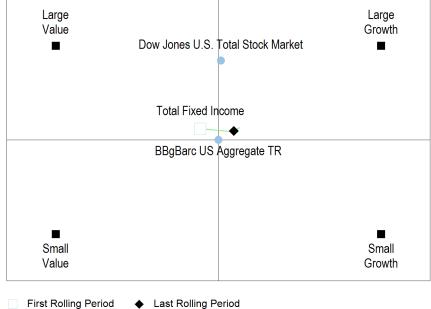


Fixed Income Composite

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2017

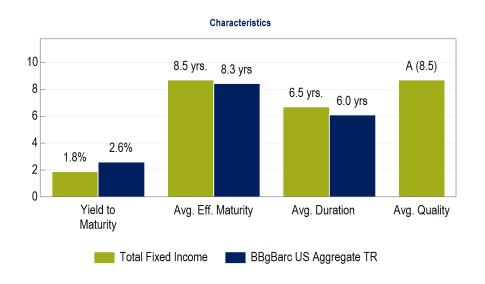


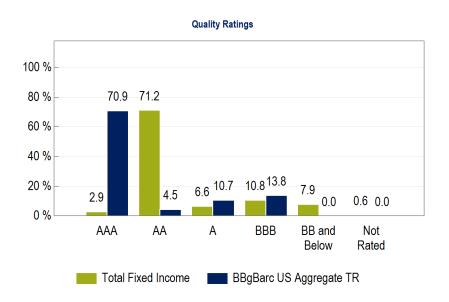
U.S. Effective Style Map 3 Years Ending September 30, 2017

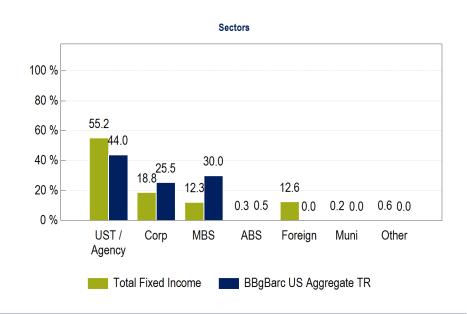




Fixed Income Composite





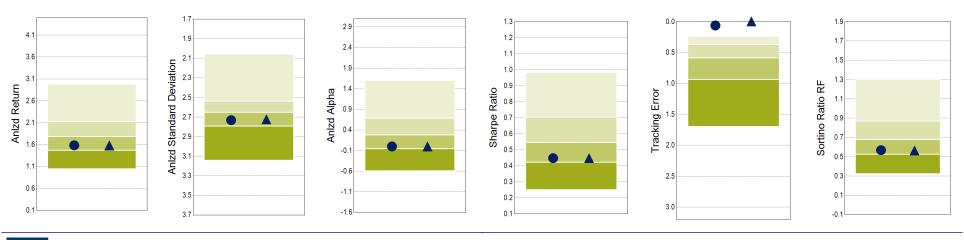




SSgA Barclays Aggregate Index

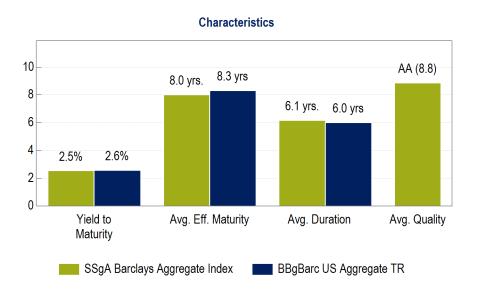


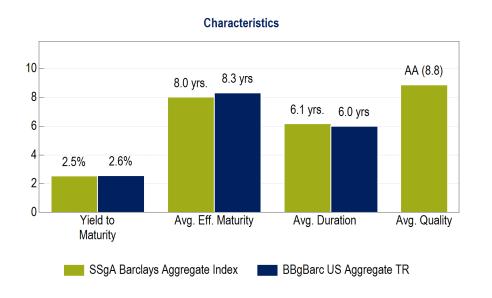
Since Inception Risk Statistics

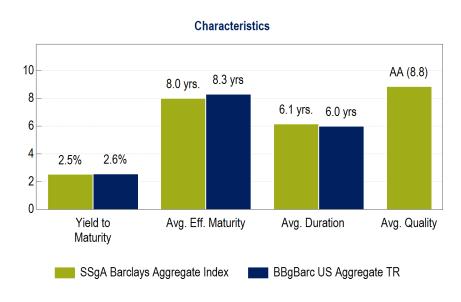




SSgA Barclays Aggregate Index



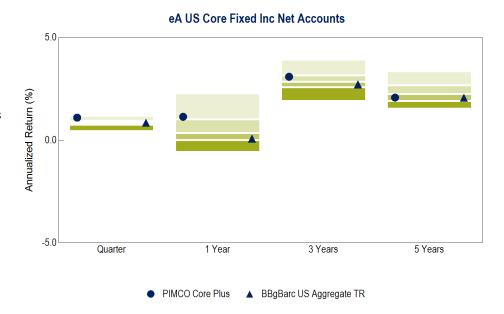


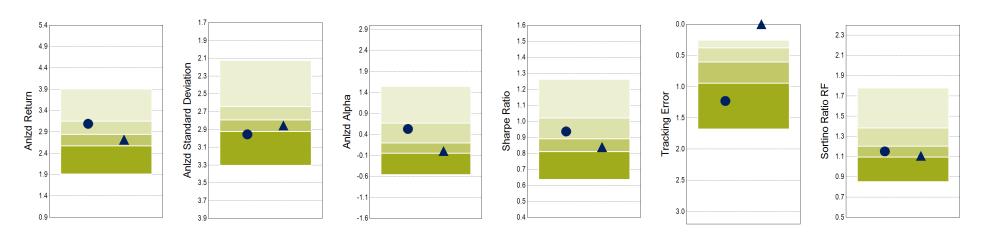




PIMCO Core Plus

PIMCO's investment process expects to generate above-benchmark returns by building diversified, risk-averse portfolios based upon their long-term secular outlook. This is achieved by analyzing fundamental global trends in such areas as political factors, inflation, volatility, growth, and currency, amongst others. The three to five-year secular outlook is the core element of their decision-making process, and serves as a framework for portfolio implementation. In applying the secular outlook to the portfolio, such tools as duration position, yield curve posture and sector allocation are expressed to best represent the firm's view on the macro-economic environment. Bottom-up analysis of specific securities is also an important part of the firm's philosophy. Bonds are evaluated on a rich/cheap basis and fundamental research determines strong portfolio candidates.

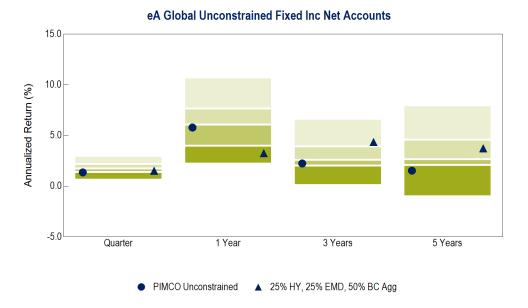


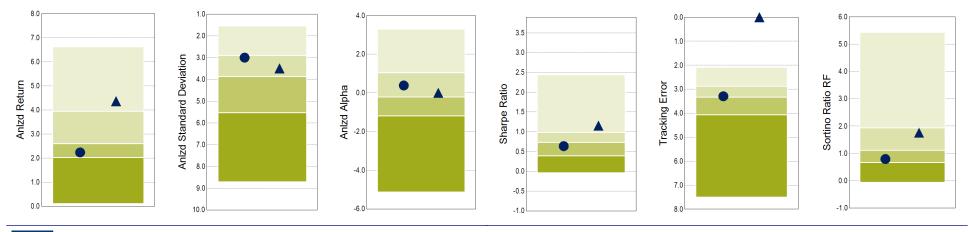




PIMCO Unconstrained

The PIMCO Unconstrained Bond Strategy is an absolute return-oriented, investment grade quality fixed income strategy that embodies PIMCO's secular thinking, global themes, and integrated investment process without the constraints of a benchmark or significant sector/instrument limitations. The strategy is designed to offer the traditional benefits of a core bond portfolio - seeks maximum long-term return consistent with capital preservation and prudent management- but with higher potential alpha and the potential to mitigate downside risk to a greater degree than what is reasonably possible from traditional active fixed income management approaches as the strategy allows for more manager discretion to adjust duration exposure, allocate across sectors and otherwise express the firm's active views. The strategy is governed by PIMCO's investment philosophy and unique, disciplined secular investment process, which focuses on long-term economic, social and political trends that may have lasting impacts on investment returns.



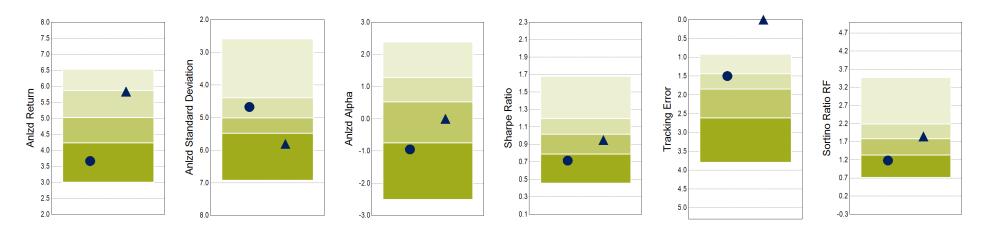




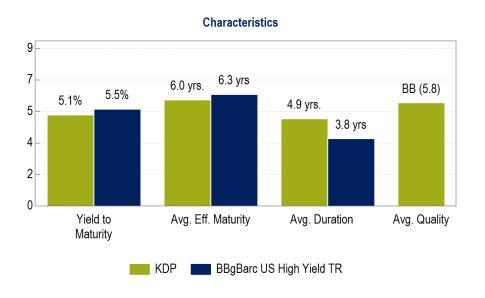
KDP

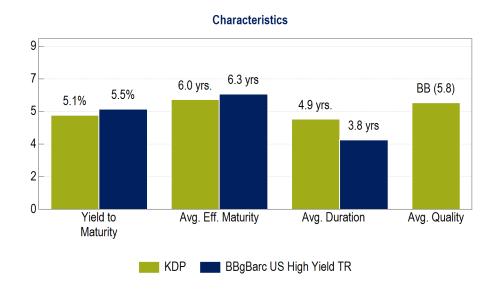
KDP believes that the key to delivering superior risk-adjusted returns lies in controlling credit risk. To do this the firm combines rigorous, bottom-up credit analysis with an active, top-down management approach that ensures a strong overall credit profile and broad portfolio diversification. KDP employs a value-oriented approach to investing that leverages our strong fundamental research capabilities, and seeks to take advantage of market inefficiencies and anomalies on an opportunistic basis in order to capture excess credit spread. KDP places a strong emphasis on issuer, industry and sector diversification, and tends to focus on larger companies, as they tend to be more resilient in times of difficulty and their securities tend to be more liquid. KDP uses a proprietary "Default Risk Ranking (DRR)" System to screen securities eligible for purchase in its portfolios. By assigning default risk probabilities to companies covered, the DRR system is used to identify securities that are overvalued or undervalued relative to the market. The firm minimizes portfolio volatility in part by investing in securities of companies that exhibit greater resilience in times of financial distress. KDP focuses on companies with good management, stable to improving earnings, good balance sheet liquidity and a strong competitive position in industries with favorable underlying fundamentals.

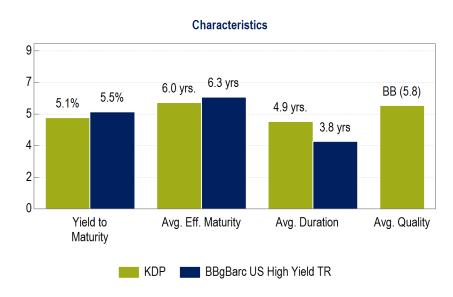










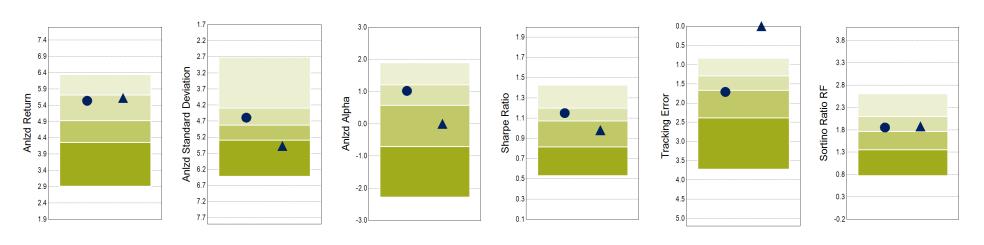




Guggenheim



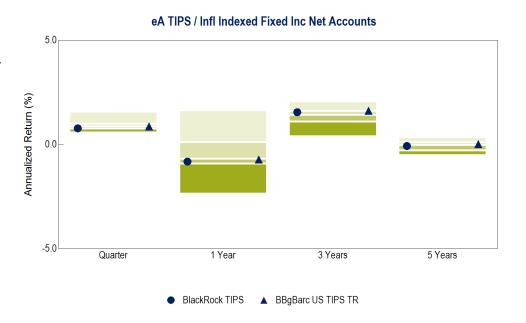
Since Inception Risk Statistics

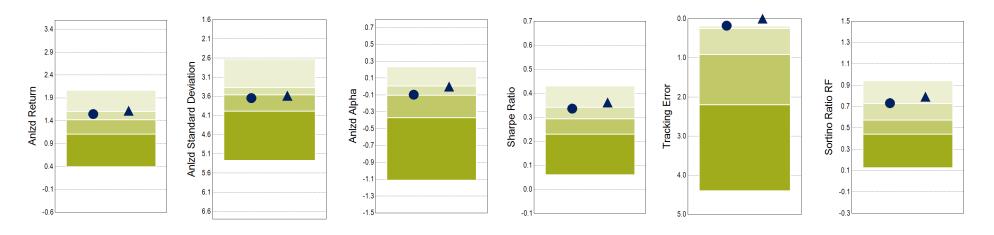




BlackRock TIPS

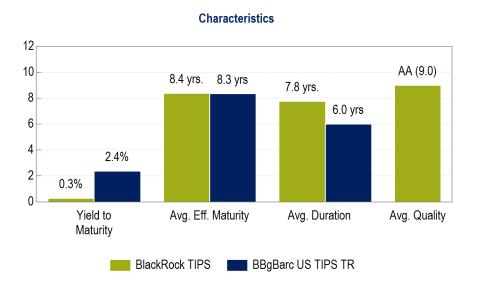
In the management of an inflation-linked bond portfolio, BlackRock will utilize multiple strategies to outperform the index. These include: duration and yield curve positioning, technical supply/demand anomalies related primarily to the ILB auction cycle, seasonal factors related to non-seasonally adjusted inflation-linked indices, break-even spread between ILBs and nominal securities, and, if applicable, sector and country allocation. The team compares nominal yields with real yields and factor in their views on inflation. If the yield spread is less than the inflation rate, then ILBs are considered to trade cheaply to nominal bonds and have greater relative value. The portfolio currently holds about 31 positions, out of 27-29 issues in the benchmark. Turnover is moderate, at around 100-150%.

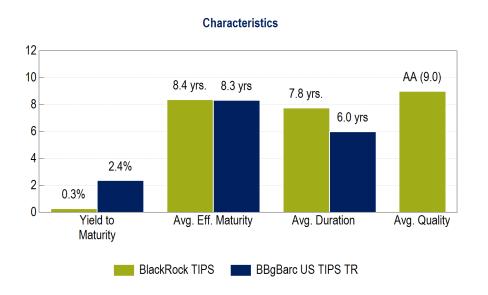


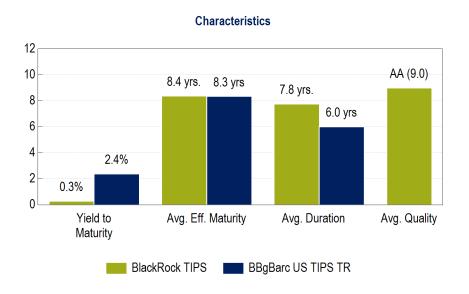




BlackRock TIPS

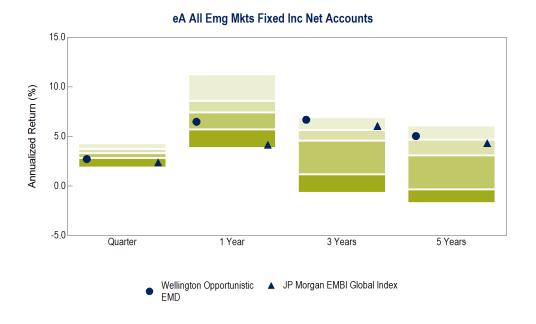


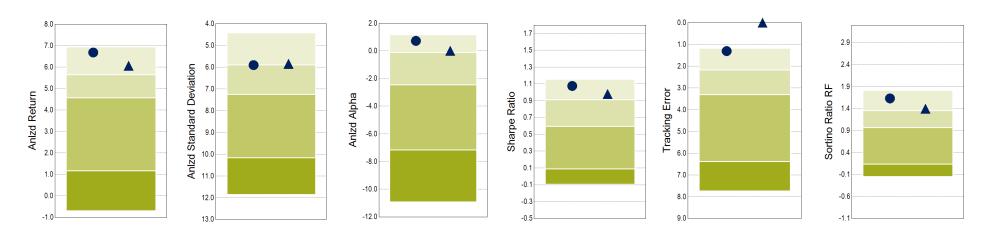






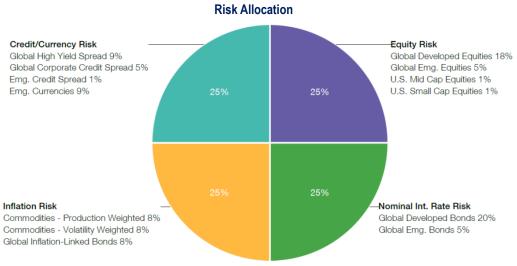
Wellington Opportunistic EMD







AQR Global Risk Premium Fund



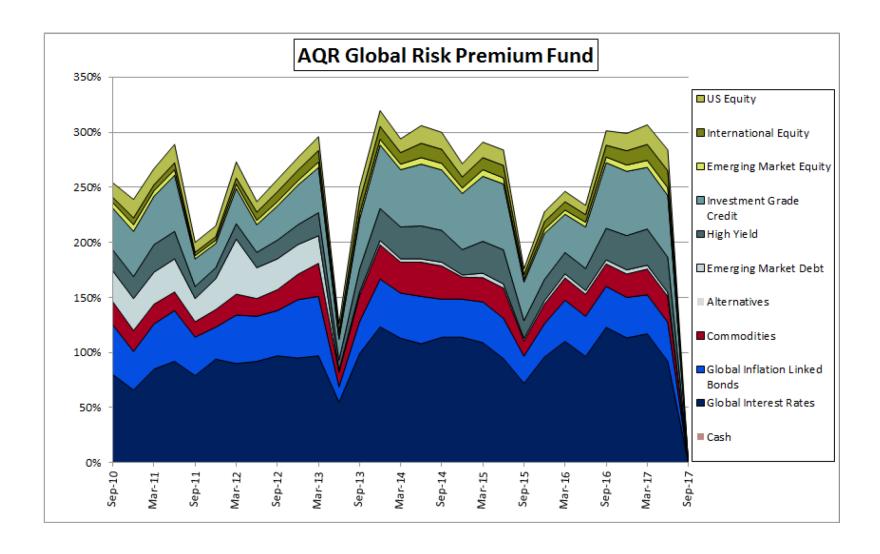
Estimated Exposure Breakdown

	Long Exposure (% of NAV)	Lor	ng Exposure (% of NAV)
Equity Risk		Equity Market Exposures	_
Global Developed Equities	30%	Americas	24%
Global Emerging Equities	7%	Europe	7%
U.S. Mid Cap Equities	2%	Asia ex-Japan	7%
U.S. Small Cap Equities	2%	Japan	3%
Total Equity Risk	41%	Total Equity Market Exposures	41%
Nominal Interest Rate Risk		Bond Market Exposures - Nominal and Inflation-Linked	
Global Developed Bonds	91%	Americas	62%
Global Emerging Bonds	23%	Europe	59%
Total Nominal Interest Rate Risk	114%	Asia	28%
Inflation Risk		Total Bond Market Exposures	149%
Commodities - Production Weighted	10%	Emerging Currency Exposures	
Commodities - Volatility Weighted	17%	Asia	8%
Global Inflation-Linked Bonds	35%	Europe	11%
Total Inflation Risk	61%	Latin America	7%
Credit/Currency Risk		Dollar Block ex-U.S.	0%
Global High Yield Spread	31%	Total Emerging Currency Exposures	27%
Global Corporate Credit Spread	54%		
Emerging Credit Spread	4%		
Emerging Currencies	27%		
Total Credit/Currency Risk	115%		
Total Fund Exposures	332%		

Source: AQR



AQR Global Risk Premium Fund







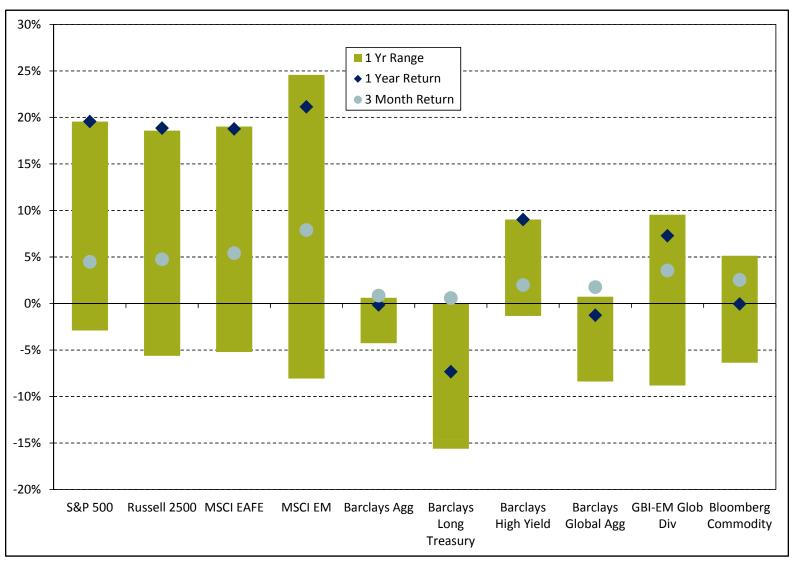
Index Performance Summary as of 09/30/2017

	2009	2010	2011	2012	2013	2014	2015	2016	Q1	Q2	Q3	Sept	YTD
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	11.4%	6.3%	7.9%	-0.4%	27.8%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	7.2%	6.1%	5.4%	2.5%	20.0%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	6.9%	4.3%	5.2%	1.9%	17.3%
JPM GBI-EM Global Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	6.5%	3.6%	3.6%	-0.3%	14.3%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	6.1%	3.1%	4.5%	2.1%	14.2%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	6.0%	3.1%	4.5%	2.1%	14.2%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	3.8%	2.1%	4.7%	4.5%	11.0%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	2.5%	2.5%	5.7%	6.2%	10.9%
JPM EMBI Glob Div	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	3.9%	2.2%	2.6%	0.0%	9.0%
BC US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	1.7%	4.7%	2.2%	-0.2%	8.7%
BC US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	1.8%	6.1%	0.7%	-2.8%	8.7%
BC US Govt/Cred Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	6.7%	1.6%	4.4%	1.5%	-1.0%	7.7%
BC US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	2.7%	2.2%	2.0%	0.9%	7.0%
BC Global Agg	-6.5%	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	1.8%	2.6%	1.8%	-0.9%	6.3%
CS Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	2.1%	0.8%	0.6%	-	4.9%
BC Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	1.6%	2.0%	1.1%	-0.5%	4.7%
FTSE NAREIT Eqy REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	1.2%	1.5%	0.9%	0.0%	3.7%
BC US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	0.8%	1.4%	0.8%	-0.5%	3.1%
CS Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	1.2%	0.8%	1.1%	0.4%	3.0%
BC US Agg Interm	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.0%	0.7%	0.9%	0.7%	-0.4%	2.3%
BC TIPS	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	1.3%	-0.4%	0.9%	-0.6%	1.7%
BC US Govt/Cred 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.3%	0.4%	0.3%	0.3%	-0.1%	1.1%
BBG Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	-2.3%	-3.2%	2.5%	-0.1%	-2.9%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	3.9%	-6.4%	-3.0%	0.7%	-5.6%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse



Near Term Broad Market Performance Summary as of 09/30/2017



Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan *1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago



Q3 2017 Key Market Themes

The US economy is experiencing an extended economic growth cycle

- US consumers and a tightening labor market are driving the US economy
- Growth recovery in Europe and the emerging markets reinforces US economic conditions
- Stable economic growth is a positive backdrop but expected risk asset returns are subdued

Federal Reserve monetary policy remains on a gradual normalization path

- Markets continue to price in a slow pace for Fed rate hikes over the next 36 months
- The Fed will begin to shrink a \$4.5T balance sheet, longer-term impact is untested
- Chair Yellen's uncertain tenure may stoke market unease has her term expires in Feb. 2018

China is modestly tightening financial conditions to slow credit growth and manage an orderly transition to a consumer led economy

- Markets have responded positively to the PBOC's management of a more stable yuan
- While capital outflow pressure has reversed, currency devaluation remains a tail risk
- Continued credit expansion and real estate development risk inflating asset price bubbles

Globalization backlash is disrupting the political and economic orthodoxy

- Conditions driving anti-establishment political sentiment have not subsided and risks stemming from globalization backlash likely lead to higher levels of currency volatility
- Changes to US trade policy under the current administration remain uncertain and an aggressive protectionist policy would represent a material risk to global markets



Macro Performance Overview

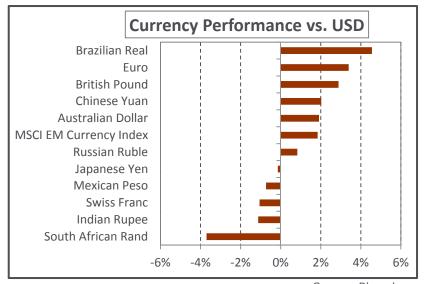
Q3 Macro Market Summary

- US, Europe, Japan, and China continue to grow modestly in a synchronized economic expansion
- Long-term US interest rates were largely unchanged and reflect the low volatility of inflation
- The US Treasury curve flattened slightly as the 2 year rate rose

Central Banks	Current Rate	CPI YOY	Notes from the Quarter
Federal Reserve	1.00% - 1.25%	1.9%	Program to reduce Fed balance sheet is set to begin in October. As of quarter-end, market's probability of a Dec '17 rate hike is 70%
European Central Bank	0.0%	1.5%	An accommodative monetary policy likely remains necessary in a persistent low inflation environment
Bank of Japan	-0.10%	0.7%	The BoJ will continue its QE program as part of their yield curve control policy to keep long-term interest rates near zero

	Yield 6/30/17	Yield 9/30/17	Δ
US 10-Yr	2.30%	2.33%	+.03%
US 30-Yr	2.84%	2.86%	+.02%
US Real 10-Yr	0.58%	0.49%	09%
German 10-Yr	0.47%	0.46%	01%
Japan 10-Yr	0.08%	0.06%	02%
China 10-Yr	3.56%	3.62%	+.06%
EM Local Debt	6.15%	5.99%	16%

Source: Bloomberg



Source: Bloomberg



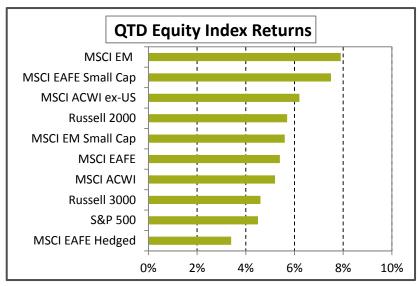
Equity Performance Overview

Q3 Equity Market Summary

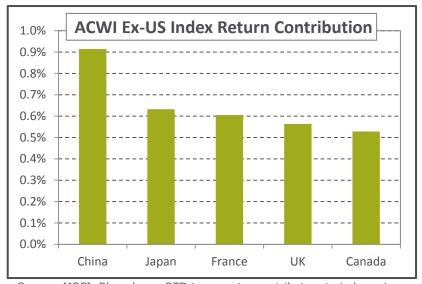
- US small caps rallied as the outlook for US tax reform improved during the quarter
- Corporate earnings growth has accelerated over the last 12 months led by small-caps in Europe/Japan and the technology sector for the US and EM

Russell 3000 QTD Sector Return Contribution		
Information Technology	1.8%	
Industrials	0.9%	
Financials	0.7%	
Health Care	0.5%	
Energy	0.4%	
Consumer Discretionary	0.22%	
Materials	0.19%	
Utilities	0.13%	
Telecommunication	0.05%	
Real Estate	-0.08%	
Consumer Staples	-0.14%	

Source: Russell, Bloomberg



Source: MSCI, Russell, S&P, Bloomberg



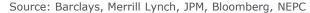
Source: MSCI, Bloomberg. QTD top country contributors to index return

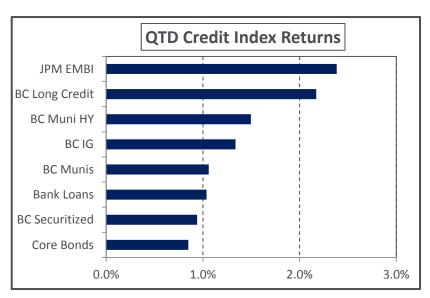


Q3 Credit Market Summary

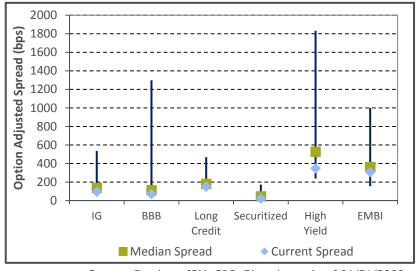
- Credit spreads continue to grind lower across all areas of the credit markets
- High yield and dollar EMD credit spread declines support a broad reduction in exposure
- Long credit continues to benefit from strong demand as spreads remain near long-term averages

Credit Spread (Basis Points)	06/30/17	9/30/17	Δ
BC IG Credit	103	96	-7
BC Long Credit	157	149	-8
BC Securitized	35	26	-9
BC High Yield	364	347	-17
Muni HY	386	309	-77
JPM EMBI	328	308	-20
Bank Loans - Libor	346	349	+3





Source: Barclays, JPM, S&P, Bloomberg



Source: Barclays, JPM, S&P, Bloomberg. As of 01/31/2000



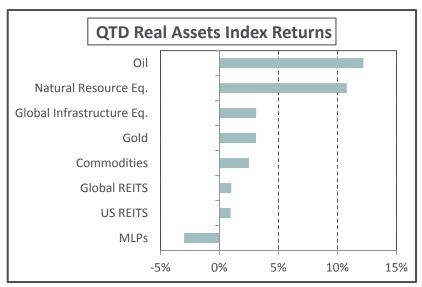
Real Assets Performance Overview

Q3 Real Assets Market Summary

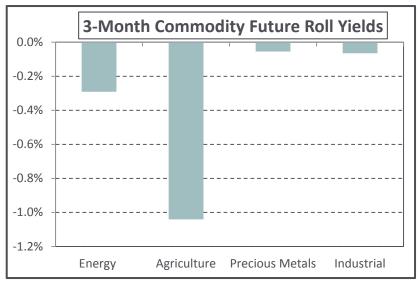
- Oil prices rebounded over the quarter and appear range bound between \$50 to \$60 a barrel
- Gold prices improved and likely benefited from a weaker dollar and geopolitical concerns
- Commodity index roll yield is more negative than the previous quarter, though oil futures are slightly positive

Real Asset Yields	6/30/17	9/30/17
MLPs	7.3%	7.8%
Core Real Estate	4.7%	4.7%
US REITs	4.1%	4.0%
Global REITs	3.7%	3.4%
Global Infrastructure Equities	3.9%	3.9%
Natural Resource Equities	3.5%	3.3%
US 10-Yr Breakeven Inflation	1.7%	1.9%
Commodity Index Roll Yield	-0.4%	-1.5%

Source: NCREIF, Alerian, NAREIT, S&P, Bloomberg



Source: S&P, NAREIT, Alerian, Bloomberg



Source: Bloomberg, NEPC Calculated as of 10/23/2017



Updated 3rd Quarter Key Market Themes and Current Opportunities

Key Market Themes

Extended US Economic Cycle

Federal Reserve Gradualism

China Transitions

Globalization Backlash

Current Opportunities

Trim US Equity Gains

Overweight Non-US Developed Market Equities

Maintain a Market Overweight to Emerging Market Equities

Allocate to TIPS from Core Bonds

Reduce High Yield Bond Exposure

Fund Emerging Local Debt from Risk Assets

Add Macro Hedge Funds

New Opportunity – Add Long Volatility Exposure



Extended US Economic Cycle

US recession concerns are muted

The US economy appears on a path of slow but steady growth as excess capacity is gradually absorbed by the economy

The labor market recovery has been strong but slack remains as many have yet to return to the workforce

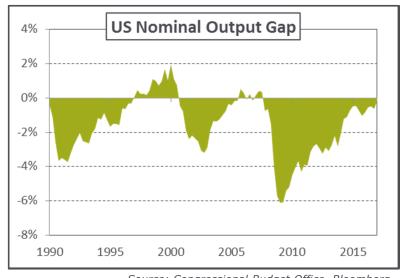
US household balance sheets have room to expand and support further consumer spending gains

Improvement of economic conditions in Europe and emerging markets reinforce US economic gains as global growth factors synchronize

US corporate profitability is near all time highs and may be a challenge for companies to sustain



Source: FRED



Source: Congressional Budget Office, Bloomberg



Federal Reserve Gradualism

The Federal Reserve is expected to slowly increase interest rates

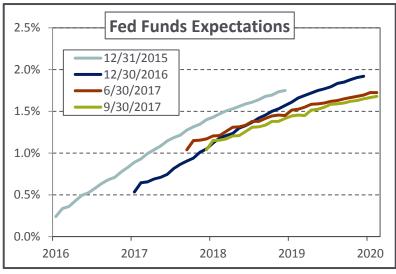
Expected path of Fed policy through 2020 matters more than timing of the next hike as the disconnect between market expectations and Fed signaling has grown

A relatively accommodative Fed is likely to continue, unless there is a dramatic acceleration in inflation

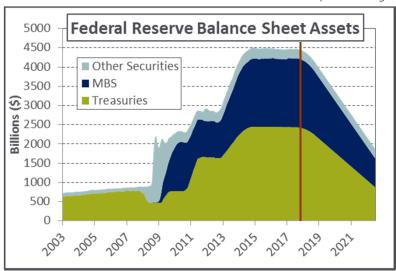
The Fed will begin to reduce its balance sheet in October of 2017

The balance sheet will gradually shrink over time by tapering the reinvestment of maturing securities

The reinvestment of maturing securities will follow a specific schedule that is based on both time and dollar value



Source: Fed, Bloomberg



Source: Fed, Bloomberg, NEPC

Forecast based on the June Fed Minutes: MBS assumes \$4B per month for 3-month intervals over 12 months with a \$20B cap; Treasuries assume \$6B per month for 3-month intervals over 12 months with a \$30B cap; Other Securities are assumed to stay constant



Key Market Themes

China Transitions

China is the global growth engine but faces fundamental transitions

China's economic transition is pivoting from a production to a service and consumption based economy

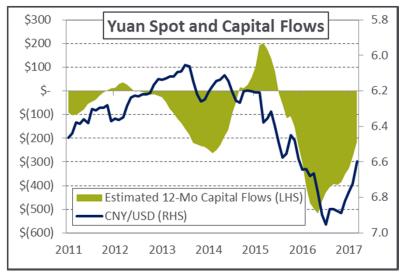
Fixed investment is required to sustain the production based economy and support labor force migration

Any disruption to these transitions will have global repercussions due to China's role in the global economy

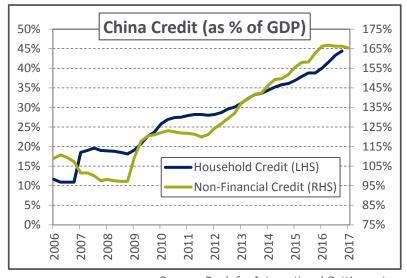
China's government is negotiating a balance between deleveraging and near term economic growth

Unrestrained growth in credit and real estate markets pose a systematic risk

Concerns of capital outflows have forced greater intervention from the central bank to limit currency movements



Source: China Foreign Exchange Trade System, Bloomberg



Source: Bank for International Settlements



Key Market Themes

Globalization Backlash

Uneven economic growth and wage gains have fueled political discontent in the developed world

Election results in France and the UK have assuaged fears of political gridlock in Europe – but political conventions have been meaningfully challenged

Despite election outcomes structural issues that stoked unease in Europe remain unresolved

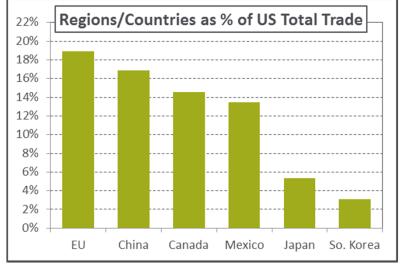
Major shifts in US trade policy have not materialized in 2017

However, a US move to an aggressive protectionist policy would represent a material risk to global markets

Markets have taken to interpreting the administrations rhetoric with a grain of salt but ongoing NAFTA negotiations are a concern







Source: IMF, Bloomberg



Information Disclaimer and Reporting Methodology

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to
 ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank.
 Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.

