

# Juniata College

## 403(b)Plan

June 30, 2017

Thomas J. Scalici, CFP<sup>®</sup>, CEBS, AIF<sup>®</sup>

*Chief Executive Officer*



**74 W. Broad Street, Suite 340, Bethlehem, PA 18018**

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# Section I

# Q2 Macroeconomic Overview

**Asset Class Benchmark Performance Summary**

	MTD	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
S&P 500 TR USD	0.62	3.09	9.34	17.90	9.61	14.63	15.41	7.18
Russell 3000 TR USD	0.90	3.02	8.93	18.51	9.10	14.58	15.34	7.26
NASDAQ Composite TR USD	-0.87	4.16	14.71	28.30	13.02	17.36	17.88	10.15
DJ Industrial Average TR USD	1.74	3.95	9.35	22.12	11.01	13.45	14.71	7.57
Russell 1000 Value TR USD	1.63	1.34	4.66	15.53	7.36	13.94	14.31	5.57
Russell 1000 Growth TR USD	-0.26	4.67	13.99	20.42	11.11	15.30	16.48	8.91
Russell 2000 Value TR USD	3.50	0.67	0.54	24.86	7.02	13.39	13.50	5.92
Russell 2000 TR USD	3.46	2.46	4.99	24.60	7.36	13.70	14.35	6.92
Russell 2000 Growth TR USD	3.44	4.39	9.97	24.40	7.64	13.98	15.16	7.82
MSCI EAFE NR USD	-0.18	6.12	13.81	20.27	1.15	8.69	7.91	1.03
MSCI EAFE Value NR USD	0.30	4.78	11.12	25.01	-0.59	8.12	7.15	-0.08
MSCI EAFE Growth NR USD	-0.65	7.52	16.68	15.70	2.81	9.19	8.60	2.06
MSCI ACWI Ex USA NR USD	0.31	5.78	14.10	20.45	0.80	7.22	6.66	1.13
MSCI EM NR USD	1.01	6.27	18.43	23.75	1.07	3.96	3.87	1.91
HFRX Absolute Return USD	0.10	0.72	1.38	1.93	1.17	1.93	1.11	-1.12
DJ Composite All REIT TR USD	1.99	2.50	5.59	1.63	8.76	9.67	13.01	5.68
Bloomberg Commodity TR USD	-0.19	-3.00	-5.26	-6.50	-14.81	-9.25	-5.68	-6.49
BBgBarc US Treasury US TIPS TR USD	-0.95	-0.40	0.85	-0.63	0.63	0.27	2.87	4.27
BBgBarc US Agg Bond TR USD	-0.10	1.45	2.27	-0.31	2.48	2.21	3.19	4.48
BBgBarc US HY Interm TR USD	0.14	2.12	4.67	12.28	4.13	6.56	7.80	7.31
BBgBarc Municipal 1-10Y Blend 1-12Y TR	-0.35	1.39	2.96	0.16	2.24	2.26	3.01	3.93
BBgBarc Global Aggregate TR USD	-0.09	2.60	4.41	-2.18	-0.35	0.78	2.39	3.69

**Blended Benchmark Performance Summary**

	MTD	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
100% Equity (70.30)	0.72	3.84	10.48	19.17	6.62	12.39	12.74	5.47
80% Equity, 20% Fixed Income	0.56	3.36	8.80	15.04	5.88	10.37	10.92	5.50
60% Equity, 40% Fixed Income	0.39	2.88	7.14	11.03	5.09	8.34	9.05	5.42
40% Equity, 60% Fixed Income	0.23	2.40	5.50	7.14	4.27	6.31	7.14	5.22
20% Equity, 80% Fixed Income	0.06	1.92	3.88	3.35	3.39	4.26	5.18	4.91

**Asset Class Benchmark Performance Summary**

	MTD	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
S&P 500 TR USD	0.31	2.37	11.93	16.23	9.54	14.34	15.44	7.61
Russell 3000 TR USD	0.19	2.08	11.20	16.06	9.08	14.27	15.37	7.70
NASDAQ Composite TR USD	1.43	4.91	20.34	24.73	13.30	17.40	18.62	10.70
DJ Industrial Average TR USD	0.65	3.35	13.01	22.29	11.46	13.70	14.76	7.93
Russell 1000 Value TR USD	-1.16	0.15	4.81	11.58	6.74	13.25	13.98	5.96
Russell 1000 Growth TR USD	1.83	4.54	19.17	20.82	11.67	15.41	16.87	9.39
Russell 2000 Value TR USD	-2.46	-1.84	-1.31	13.47	7.07	12.51	13.35	6.46
Russell 2000 TR USD	-1.27	-0.54	4.42	14.91	7.67	13.15	14.44	7.38
Russell 2000 Growth TR USD	-0.12	0.73	10.78	16.39	8.20	13.75	15.47	8.21
MSCI EAFE NR USD	-0.04	2.85	17.05	17.64	2.83	8.48	7.43	1.62
MSCI EAFE Value NR USD	-0.62	2.70	14.12	20.03	1.03	7.85	6.55	0.62
MSCI EAFE Growth NR USD	0.56	2.99	20.18	15.23	4.55	9.04	8.24	2.55
MSCI ACWI Ex USA NR USD	0.52	4.23	18.92	18.88	2.36	7.36	6.40	1.74
MSCI EM NR USD	2.23	8.32	28.29	24.53	2.38	5.30	4.16	2.43
HFRX Absolute Return USD								
DJ Composite All REIT TR USD	0.70	1.93	7.62	3.09	8.33	9.53	12.15	6.32
Bloomberg Commodity TR USD	0.40	2.67	-2.72	2.99	-12.27	-10.14	-5.86	-6.09
BBgBarc US Treasury US TIPS TR USD	1.06	1.51	2.38	0.46	0.98	0.25	2.82	4.11
BBgBarc US Agg Bond TR USD	0.90	1.33	3.64	0.49	2.64	2.19	3.04	4.40
BBgBarc US HY Interm TR USD	-0.08	0.98	5.70	8.32	4.41	6.14	7.44	7.64
BBgBarc Municipal 1-10Y Blend 1-12Y TR	0.56	1.25	4.25	1.22	2.36	2.33	2.78	3.92
BBgBarc Global Aggregate TR USD	0.99	2.69	7.22	0.19	0.65	0.91	2.09	3.63

**Blended Benchmark Performance Summary**

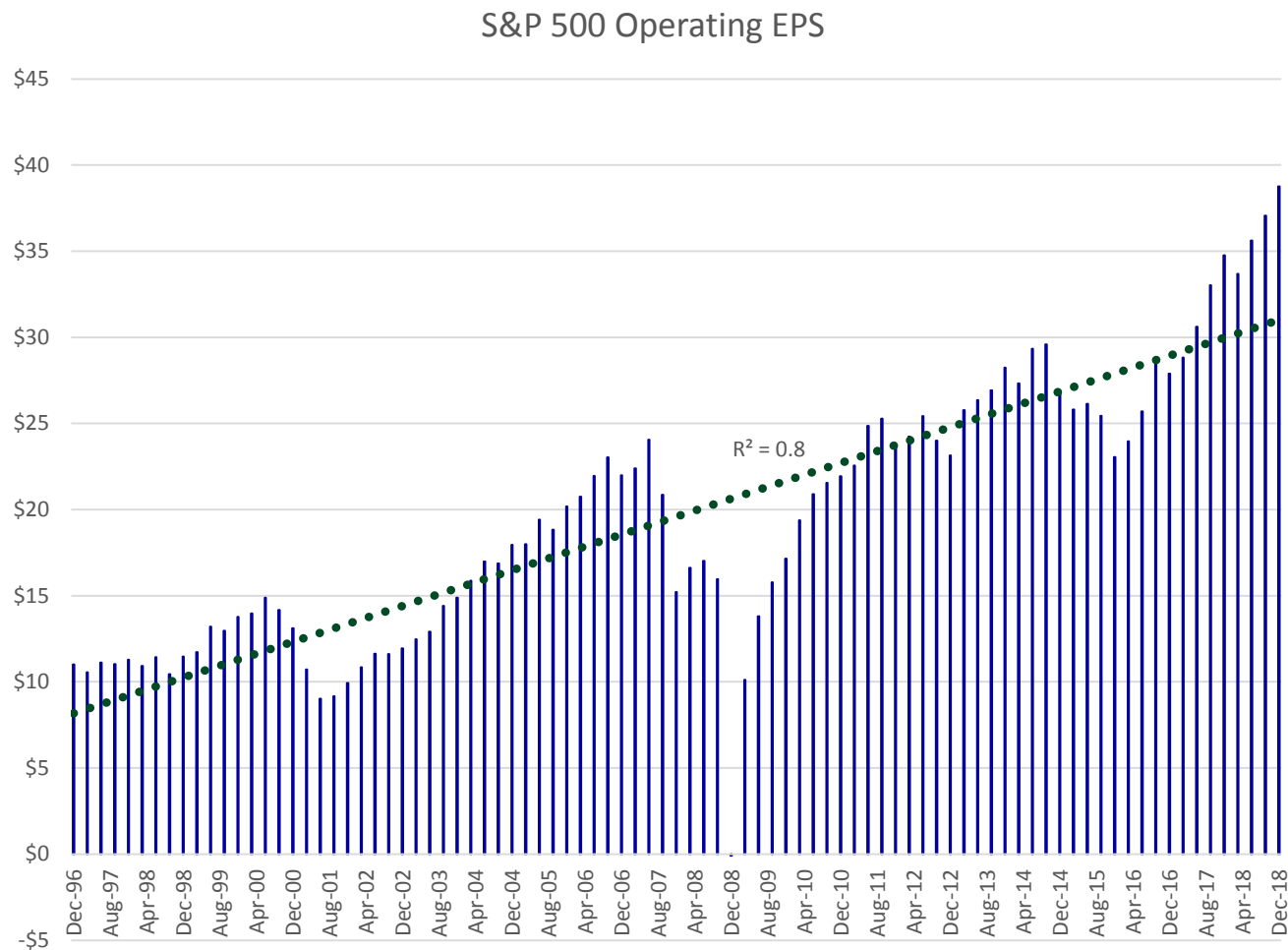
	MTD	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
100% Equity (70.30)	0.29	2.72	13.49	16.98	7.09	12.22	12.67	5.96
80% Equity, 20% Fixed Income	0.41	2.45	11.46	13.52	6.29	10.23	10.83	5.88
60% Equity, 40% Fixed Income	0.53	2.17	9.46	10.15	5.44	8.23	8.94	5.68
40% Equity, 60% Fixed Income	0.65	1.89	7.49	6.85	4.55	6.23	7.01	5.37
20% Equity, 80% Fixed Income	0.78	1.61	5.55	3.63	3.62	4.21	5.04	4.94

# S&P 500 Historical Levels



Bulls walk up the stairs, and bears jump out the window.

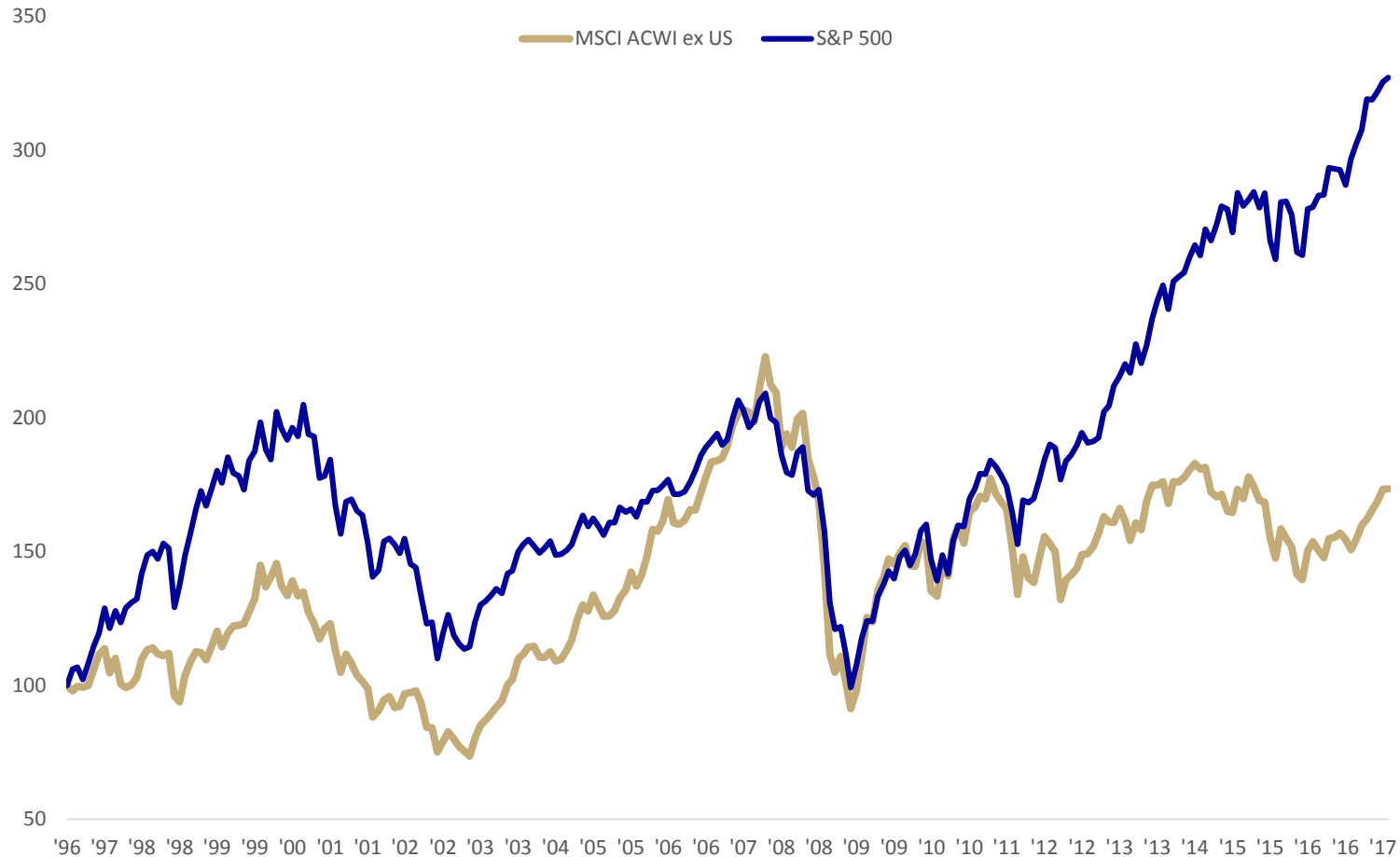
# S&P 500 Operating EPS



The market has priced in earnings per share that are expected to grow well above historical trends.



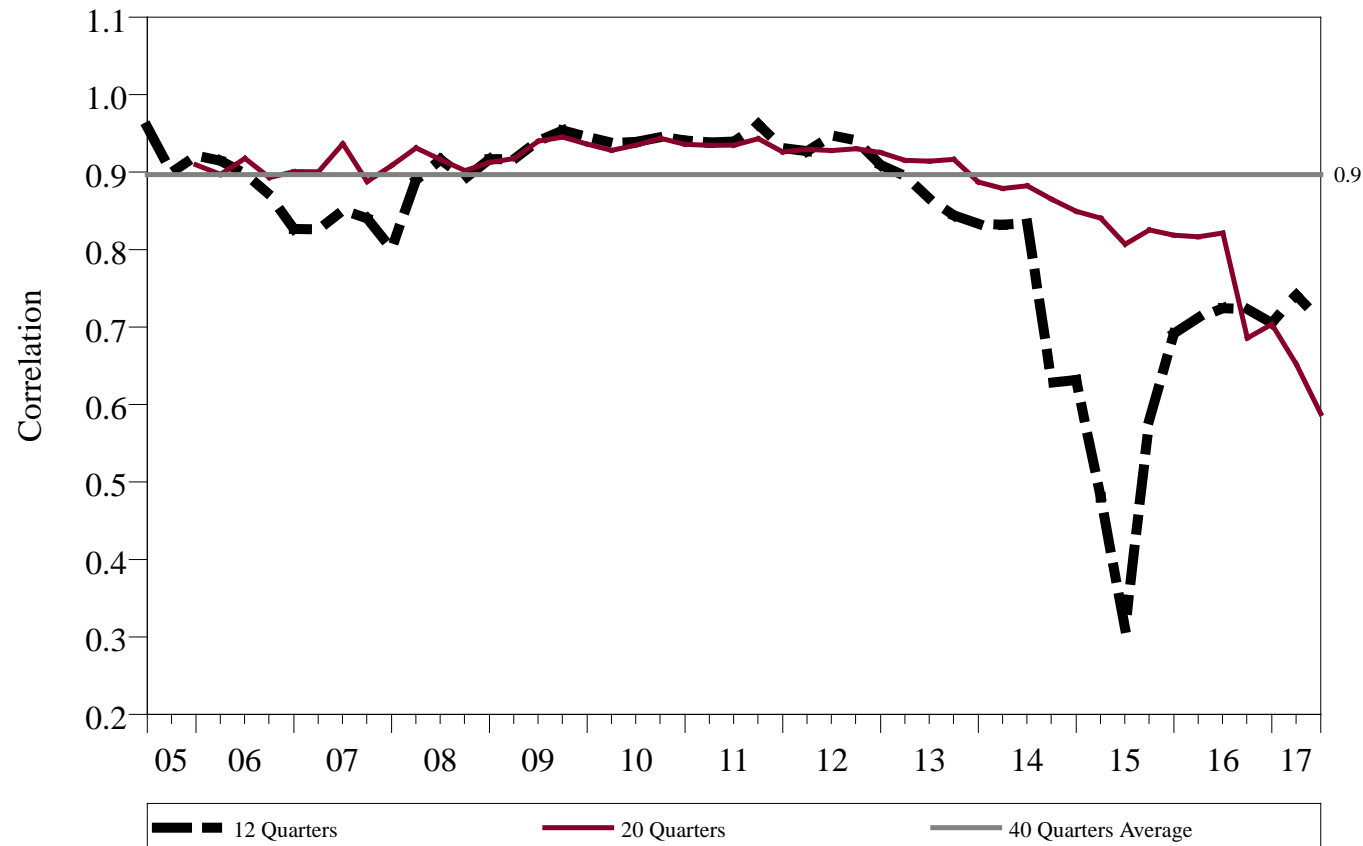
# S&P 500 vs. MSCI ACWI ex US



The historical correlations between domestic and international equity broke down following Great Recession.

# MSCI ACWI ex US correlation to S&P 500

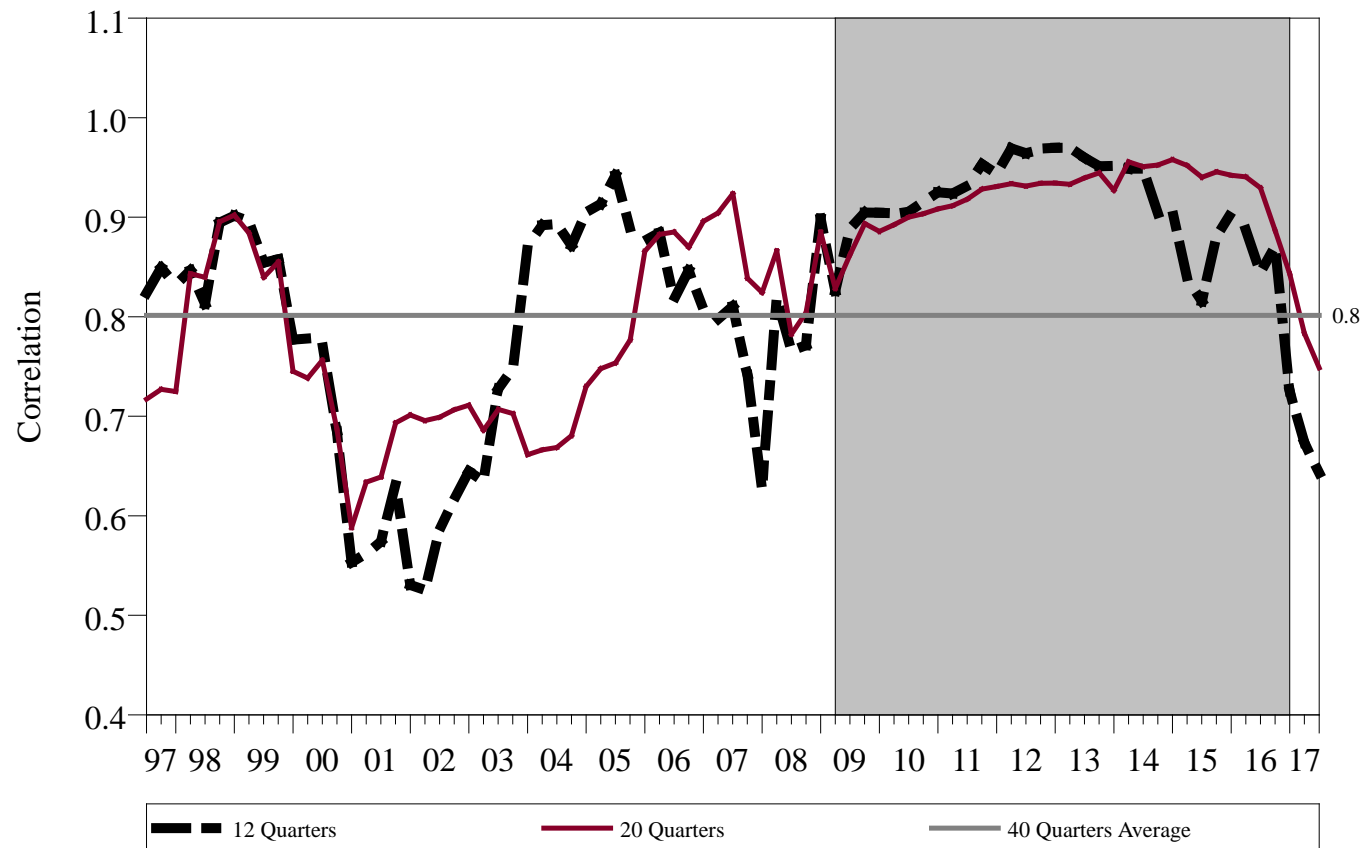
Various Rolling Correlation Relative To S&P:500  
for 12 Years Ended June 30, 2017 Portfolio: MSCI:ACWI ex US



Recent correlations have increased but are still below historical norms.

# A tough environment for active

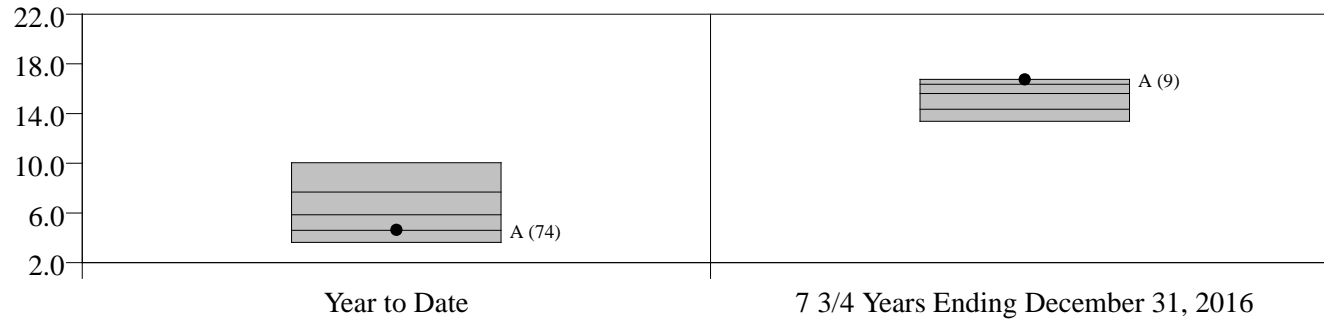
Various Rolling Correlation Relative To Russell:1000 Value  
for 20 Years Ended June 30, 2017 Portfolio: Russell:1000 Growth



The Fed based rally has mitigated diversification benefits.

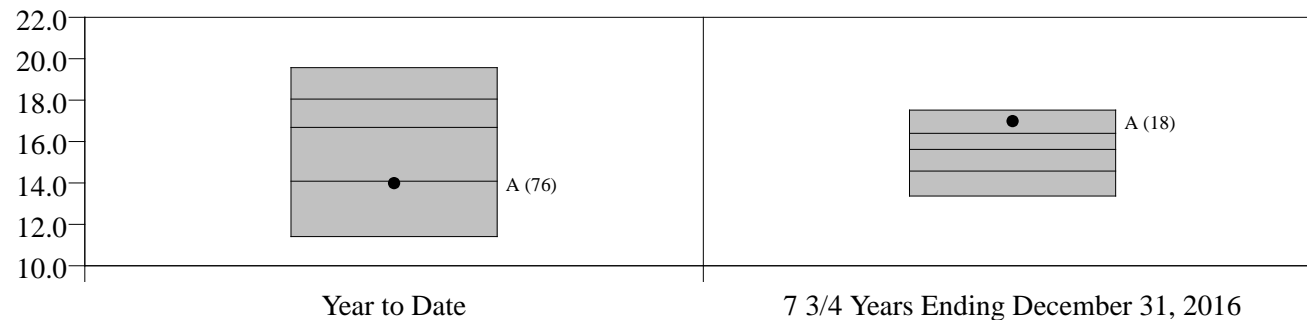
# A Trend Change?

Returns for Various Periods Group: CAI Large Cap Value Mutual Funds



10th Percentile	10.05	16.76
25th Percentile	7.69	16.37
Median	5.86	15.62
Russell:1000 Value ● A	4.66	16.77

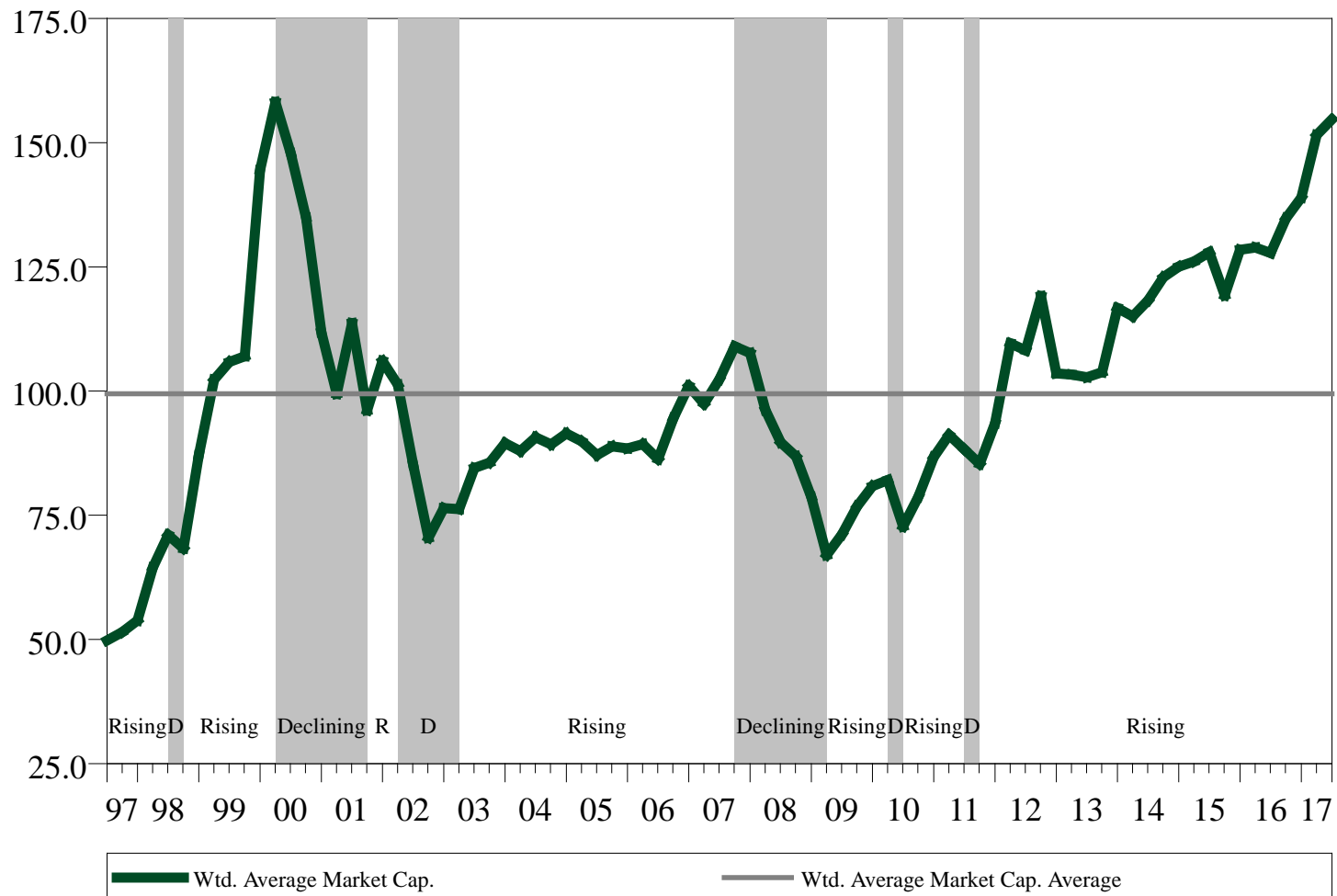
Returns for Various Periods Group: CAI Large Cap Growth Mutual Funds



10th Percentile	19.57	17.53
25th Percentile	18.05	16.40
Median	16.68	15.62
Russell:1000 Growth ● A	13.99	16.99

# The Large Get Larger

Wtd. Average Market Cap. for 20 Years Ended June 30, 2017 Portfolio: S&P:500



# Minsky Moment

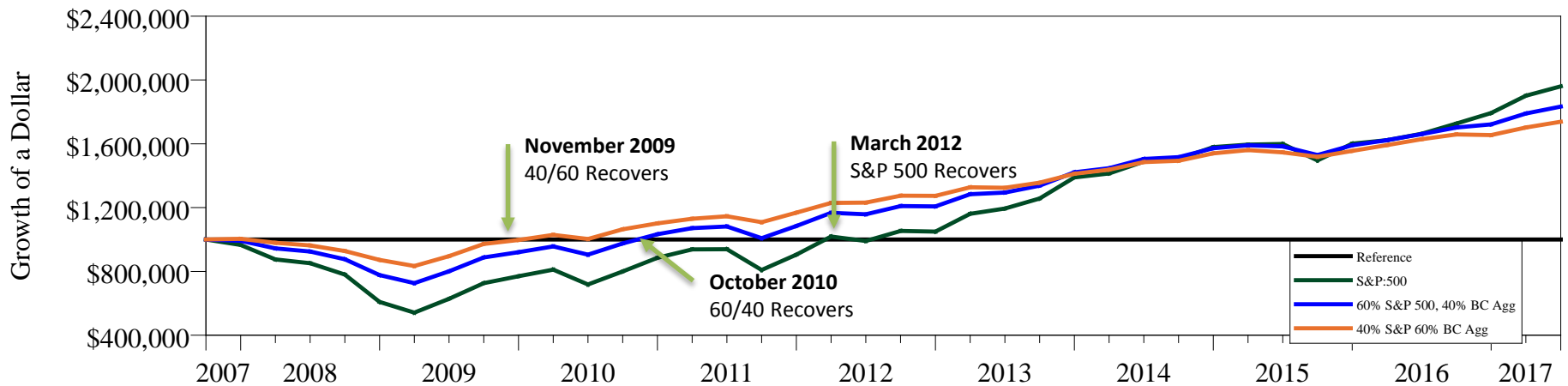
**Minsky Moment** - The late economist Hyman Minsky’s financial instability hypothesis posits that long periods of stability beget instability. Essentially, Minsky’s argument holds that lenders and borrowers are lulled into complacency by the temporary absence of adverse events and take progressively larger risks until an adverse event occurs. The ensuing upheaval is exacerbated by the additional risk that has to be unwound at an especially inopportune time – the “Minsky moment.” This elegant theory became especially apt in the wake of the financial crisis for its detailed illustration of the destabilizing impact excessive debt can have on an economy.



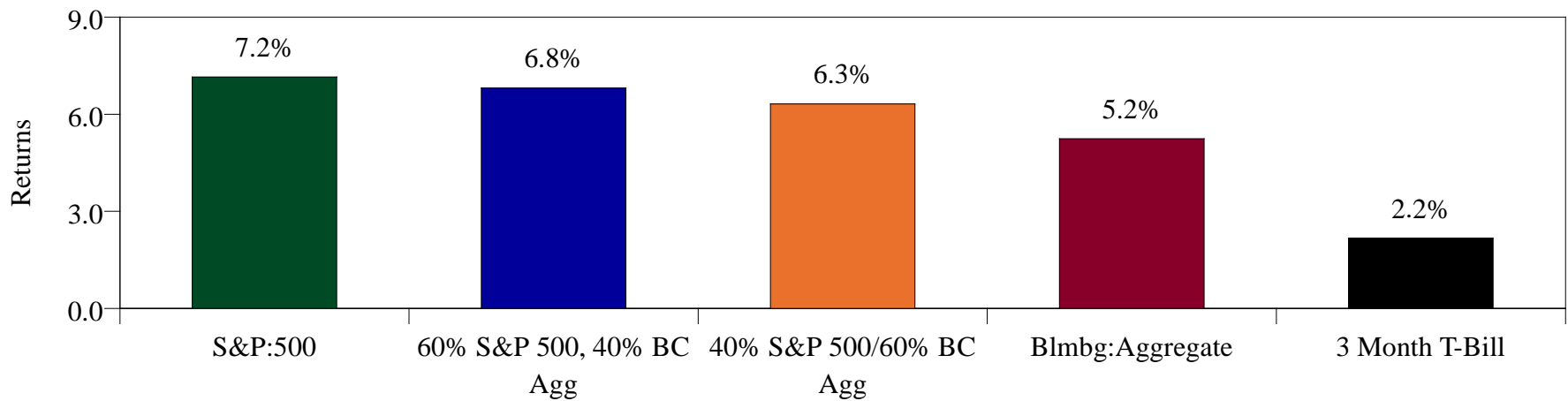
When Wall Street is concerned with unmitigable risks (i.e. geopolitical risk, cyberattacks), one must consider if complacency is upon us.

# Historical Allocation Dispersion

Growth of a Dollar for a \$1,000,000 Mandate



20 Years Returns through Quarter Ending June 30, 2017

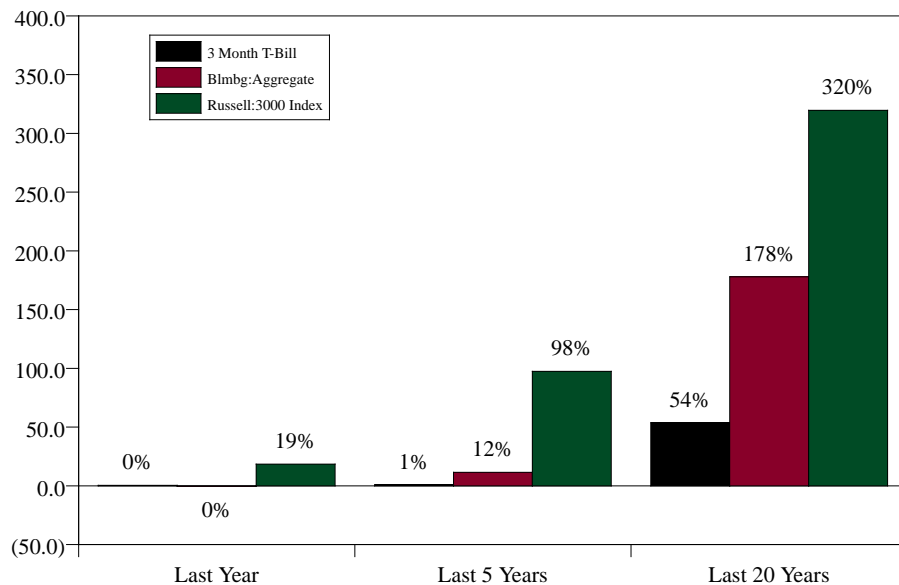


Fixed income has provided significant return support over the past 20 years, but can that continue?

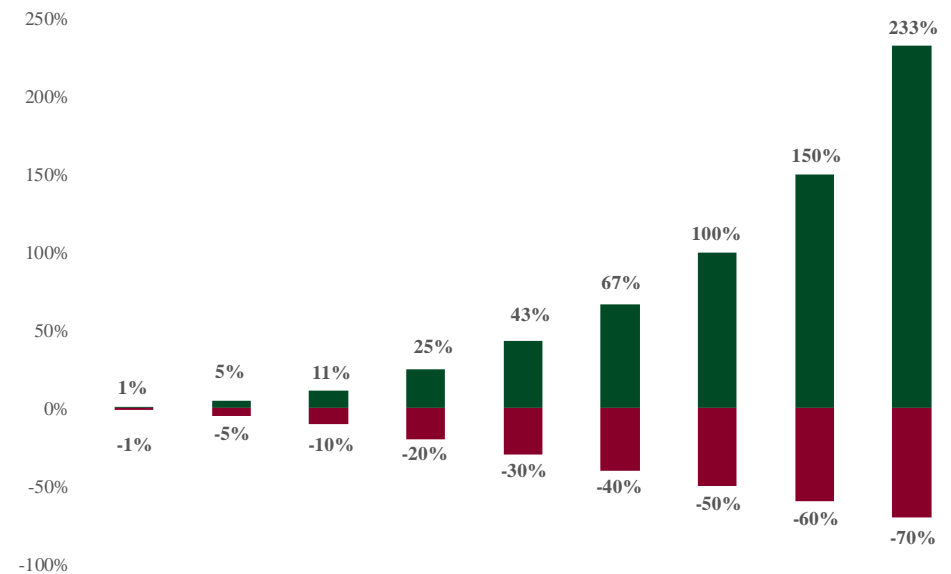
Source: Standard & Poor's and Bloomberg

# Be in the Game but Be Risk Aware

Cumulative Returns through Quarter Ending June 30, 2017



Required Gain to Recoup a Loss



Stocks have been the primary driver of investment gains; however, return impact is asymmetric.



# Section II

**Juniata College 403(b) Plan**  
**June 30, 2017**

Investments - 03/31/2017 to 06/30/2017

Investment Option	Beginning Market Value	Contributions	Forfeitures	Transfers	Withdrawals	Gain/Loss	Ending Market Value
TIAA-CREF Large-Cap Value Idx Retire	\$2,144,662	\$16,808	\$0	\$17,685	(\$8,561)	\$27,668	\$2,198,262
TIAA-CREF Large-Cap Value Retire	\$887,982	\$14,551	\$0	\$271,641	(\$1,677)	\$1,453	\$1,173,950
TIAA RASRA-CREF:Eq Idx R2	\$2,791,017	\$29,125	\$0	(\$69,914)	(\$16,202)	\$81,759	\$2,815,785
TIAA-CREF Equity Index R	\$542,886	\$6,003	\$0	\$34,749	\$0	\$16,513	\$600,151
TIAA-CREF Growth & Income Retire	\$419,258	\$5,107	\$0	(\$21,014)	(\$1,534)	\$13,983	\$415,800
TIAA-CREF S&P 500 Index Retire	\$277,025	\$9,859	\$0	\$51,802	\$0	\$9,638	\$348,324
TIAA-CREF Social Choice Eq Retire	\$172,024	\$3,313	\$0	\$0	(\$109)	\$6,495	\$181,724
TIAA RASRA-CREF:Growth R2	\$5,320,878	\$45,158	\$0	(\$61,401)	(\$7,898)	\$286,949	\$5,583,685
TIAA-CREF Large-Cap Gr Idx Retire	\$318,484	\$7,684	\$0	\$207,948	(\$579)	\$19,285	\$552,822
TIAA-CREF Large-Cap Growth R	\$48,985	\$526	\$0	(\$2,392)	\$0	\$3,334	\$50,453
TIAA-CREF Mid-Cap Value Retire	\$1,362,074	\$11,439	\$0	(\$56,661)	(\$10,347)	\$9,081	\$1,315,585
TIAA-CREF Mid-Cap Growth Retire	\$151,902	\$1,899	\$0	(\$3,224)	(\$83)	\$6,582	\$157,076
Victory Sycamore Small Company Opp A	\$455,225	\$2,899	\$0	\$1,093	(\$2,002)	\$5,476	\$462,691
TIAA-CREF Small-Cap Blend Idx Retire	\$220,187	\$4,701	\$0	(\$9,262)	\$0	\$5,771	\$221,397
TIAA-CREF Small-Cap Equity Retire	\$1,061,145	\$9,613	\$0	\$67,945	(\$2,390)	\$14,384	\$1,150,696
Prudential Jennison Small Company Z	\$87,798	\$1,254	\$0	\$18,204	(\$2,104)	\$2,585	\$107,737
TIAA-CREF International Eq Idx Retire	\$1,274,310	\$14,706	\$0	\$193,008	(\$4,037)	\$84,613	\$1,562,599
TIAA-CREF International Eq Retire	\$458,353	\$5,258	\$0	(\$27,215)	(\$90)	\$39,884	\$476,190
American Funds Europacific Growth R4	\$598,063	\$5,728	\$0	\$17,901	(\$3,597)	\$44,471	\$662,566
Vanguard Emerging Mkts Stock Idx Adm	\$751,193	\$8,568	\$0	\$92,959	(\$1,701)	\$26,537	\$877,556
TIAA RASRA-CREF:Gbl Eq R2	\$2,785,793	\$28,189	\$0	(\$101,711)	(\$10,323)	\$122,184	\$2,824,133
TIAA RASRA-CREF:Stock R2	\$21,149,562	\$120,074	\$0	(\$399,845)	(\$485,342)	\$811,164	\$21,195,613
TIAA-CREF High-Yield R	\$566,870	\$3,955	\$0	\$6,715	(\$572)	\$8,849	\$585,817
T. Rowe Price Emerging Markets Bond	\$84,401	\$638	\$0	(\$23,402)	\$0	\$2,004	\$63,641
TIAA-CREF Bond Plus R	\$1,103,458	\$9,733	\$0	\$5,009	(\$2,746)	\$18,055	\$1,133,508
TIAA RASRA-CREF:Bond Mkt R2	\$2,429,465	\$16,240	\$0	\$73,212	(\$4,149)	\$36,862	\$2,551,629
TIAA-CREF Bond R	\$534,774	\$2,325	\$0	(\$37,775)	(\$1,281)	\$8,318	\$506,362
TIAA-CREF Short-Term Bond R	\$66,267	\$1,248	\$0	(\$2,284)	\$0	\$253	\$65,484
TIAA RASRA-CREF:Infl-Lkd Bond R2	\$1,287,078	\$14,359	\$0	\$30,317	(\$9,440)	(\$6,385)	\$1,315,928
TIAA-CREF Inflation Link Bd R	\$275,250	\$525	\$0	(\$1,942)	(\$342)	(\$1,655)	\$271,836
TIAA RASRA-CREF:Real Estate Acct	\$4,930,216	\$36,191	\$0	(\$26,334)	(\$35,381)	\$39,343	\$4,944,036
TIAA-CREF Real Estate Sec Retire	\$666,517	\$7,542	\$0	\$13,817	(\$1,694)	\$24,793	\$710,975
PIMCO All Asset A	\$5,859	\$196	\$0	\$0	\$0	\$100	\$6,155
TIAA Traditional Account (RA)	\$33,948,475	\$94,965	\$0	\$174,095	(\$380,689)	\$333,428	\$34,170,274
TIAA RASRA-CREF:Money Mkt R2	\$426,406	\$2,442	\$0	\$433	(\$9,599)	\$417	\$420,099
TIAA-CREF Money Market R	\$1,878	\$0	\$0	\$0	\$0	\$2	\$1,880
TIAA RASRA-CREF:Social Choice R2	\$5,656,390	\$40,845	\$0	(\$145,479)	(\$128,086)	\$176,680	\$5,600,350
TIAA-CREF Managed Allc R	\$5,662	\$80	\$0	\$0	\$0	\$181	\$5,924
TIAA-CREF Lifecycle 2055 Retirement	\$234,260	\$24,594	\$0	\$1,013	\$0	\$9,939	\$269,806
TIAA-CREF Lifecycle 2050 Retirement	\$632,118	\$36,845	\$0	(\$2,896)	\$0	\$26,144	\$692,211
TIAA-CREF Lifecycle 2045 Retirement	\$985,137	\$54,640	\$0	\$0	\$0	\$40,825	\$1,080,603
TIAA-CREF Lifecycle 2040 Retirement	\$1,958,434	\$55,996	\$0	(\$151,115)	\$0	\$74,546	\$1,937,860
TIAA-CREF Lifecycle 2035 Retirement	\$1,814,058	\$168,502	\$0	\$0	\$0	\$69,127	\$2,051,687
TIAA-CREF Lifecycle 2030 Retirement	\$1,310,469	\$46,126	\$0	(\$145,935)	\$0	\$47,162	\$1,257,822
TIAA-CREF Lifecycle 2025 Retirement	\$1,423,862	\$37,825	\$0	\$11,743	\$0	\$45,634	\$1,519,064
TIAA-CREF Lifecycle 2020 Retirement	\$823,636	\$19,019	\$0	(\$283)	(\$43,746)	\$24,307	\$822,933

**Juniata College 403(b) Plan**  
**June 30, 2017**

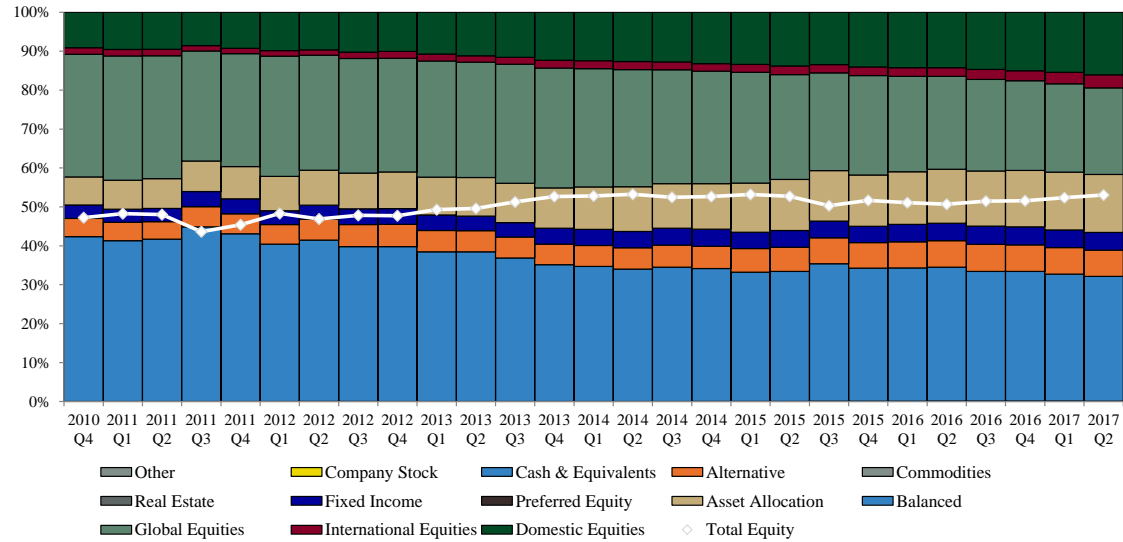
Investments - 03/31/2017 to 06/30/2017

Investment Option	Beginning Market Value	Contributions	Forfeitures	Transfers	Withdrawals	Gain/Loss	Ending Market Value
TIAA-CREF Lifecycle 2015 Retirement	\$470,607	\$8,439	\$0	\$0	\$0	\$12,376	\$491,422
TIAA-CREF Lifecycle 2010 Retirement	\$297,397	\$328	\$0	\$0	(\$9,166)	\$7,232	\$295,792
TIAA-CREF Lifecycle Retire Income Retire	\$5,129	\$212	\$0	(\$1,209)	(\$536)	\$122	\$3,719
Loan Default Fund	\$38,588	\$0	\$0	\$0	(\$34,905)	(\$3,683)	\$0
TIAA-CREF Self Directed Brokerage	\$72,121	\$1,140	\$0	\$0	\$0	\$2,761	\$76,022
<b>Aggregate</b>	<b>\$105,333,587</b>	<b>\$1,037,415</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$1,220,911)</b>	<b>\$2,637,543</b>	<b>\$107,787,635</b>

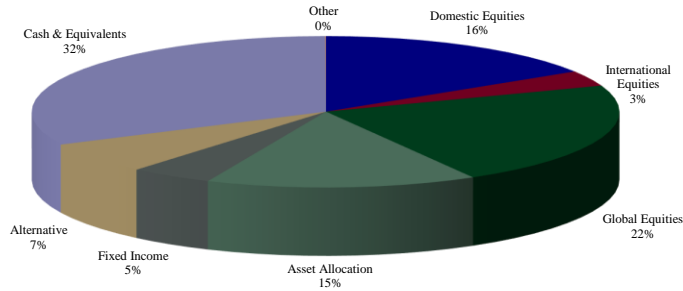
\*The cash flow statement is created from unaudited data obtained directly from the Plan's record keeper. For the reporting period, these balances could differ from the actual balances depending on timing of receipt of data by Cornerstone from the record keeper. Please compare to the custodial statement for accuracy, as applicable.

**Juniata College 403(b) Plan  
Plan Summary - Style & Capitalization**

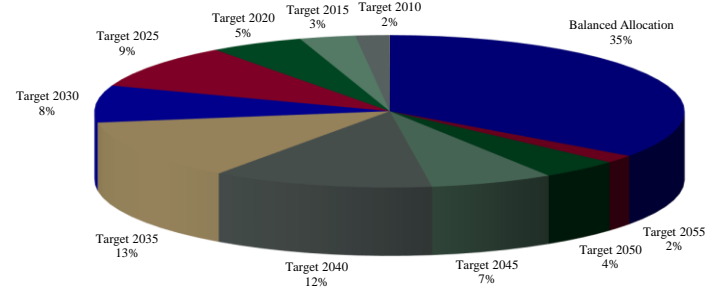
**Historical Asset Allocation**



**Portfolio Allocation**



**Target Date/ Asset Allocations**



	Market Value	Last Qtr	Current Qtr	Change
Domestic Equities	\$17,336,139	15.4%	16.1%	0.6%
International Equities	\$3,578,911	2.9%	3.3%	0.4%
Global Equities	\$24,019,746	22.7%	22.3%	-0.4%
Asset Allocation	\$16,029,194	14.8%	14.9%	0.0%
Fixed Income	\$4,906,441	4.5%	4.6%	0.0%
Alternative	\$7,248,930	6.8%	6.7%	-0.1%
Cash & Equivalents	\$34,592,253	32.6%	32.1%	-0.5%
Other	\$76,022	0.1%	0.1%	0.0%
	\$107,787,635	100%	100%	0%

	Market Value	Last Qtr	Current	Change
Balanced Allocation	\$5,606,274	36.3%	35.0%	-1.3%
Target 2055	\$269,806	1.5%	1.7%	0.2%
Target 2050	\$692,211	4.0%	4.3%	0.3%
Target 2045	\$1,080,603	6.3%	6.7%	0.4%
Target 2040	\$1,937,860	12.5%	12.1%	-0.5%
Target 2035	\$2,051,687	11.6%	12.8%	1.2%
Target 2030	\$1,257,822	8.4%	7.8%	-0.5%
Target 2025	\$1,519,064	9.1%	9.5%	0.4%
Target 2020	\$822,933	5.3%	5.1%	-0.1%
Target 2015	\$491,422	3.0%	3.1%	0.1%
Target 2010	\$295,792	1.9%	1.8%	-0.1%
Target Retirement	\$3,719	0.0%	0.0%	0.0%
	\$16,029,194	100%	100%	0%

**Juniata College 403(b) Plan  
Manager Performance Summary\***

	<i>Quarterly Return 2nd Quarter 2017</i>	<i>Market Value Beginning of Period</i>	<i>Market Value End of Period</i>
<b>TIAA-CREF Large-Cap Value Idx Retire</b>	<b>1.27%</b>	<b>\$2,144,662</b>	<b>\$2,198,262</b>
<b>TIAA-CREF Large-Cap Value Retire</b>	<b>0.05%</b>	<b>\$887,982</b>	<b>\$1,173,950</b>
Russell 1000 Value	1.34%		
<b>TIAA RASRA-CREF:Eq Idx R2</b>	<b>2.94%</b>	<b>\$2,791,017</b>	<b>\$2,815,785</b>
<b>TIAA-CREF Equity Index R</b>	<b>2.92%</b>	<b>\$542,886</b>	<b>\$600,151</b>
<b>TIAA-CREF Growth &amp; Income Retire</b>	<b>3.41%</b>	<b>\$419,258</b>	<b>\$415,800</b>
<b>TIAA-CREF S&amp;P 500 Index Retire</b>	<b>3.02%</b>	<b>\$277,025</b>	<b>\$348,324</b>
<b>TIAA-CREF Social Choice Eq Retire</b>	<b>3.75%</b>	<b>\$172,024</b>	<b>\$181,724</b>
S&P 500	3.09%		
<b>TIAA RASRA-CREF:Growth R2</b>	<b>5.33%</b>	<b>\$5,320,878</b>	<b>\$5,583,685</b>
<b>TIAA-CREF Large-Cap Gr Idx Retire</b>	<b>4.56%</b>	<b>\$318,484</b>	<b>\$552,822</b>
<b>TIAA-CREF Large-Cap Growth R</b>	<b>6.54%</b>	<b>\$48,985</b>	<b>\$50,453</b>
Russell 1000 Growth	4.67%		
<b>TIAA-CREF Mid-Cap Value Retire</b>	<b>0.68%</b>	<b>\$1,362,074</b>	<b>\$1,315,585</b>
Russell Mid-Cap Value	1.37%		
<b>TIAA-CREF Mid-Cap Growth Retire</b>	<b>4.29%</b>	<b>\$151,902</b>	<b>\$157,076</b>
Russell Mid-Cap Growth	4.21%		
<b>Victory Sycamore Small Company Opp A</b>	<b>1.11%</b>	<b>\$455,225</b>	<b>\$462,691</b>
Russell 2000 Value	0.67%		
<b>TIAA-CREF Small-Cap Blend Idx Retire</b>	<b>2.47%</b>	<b>\$220,187</b>	<b>\$221,397</b>
<b>TIAA-CREF Small-Cap Equity Retire</b>	<b>1.34%</b>	<b>\$1,061,145</b>	<b>\$1,150,696</b>
Russell 2000	2.46%		
<b>Prudential Jennison Small Company Z</b>	<b>2.95%</b>	<b>\$87,798</b>	<b>\$107,737</b>
Russell 2000 Growth	4.39%		
<b>TIAA-CREF International Eq Idx Retire</b>	<b>6.42%</b>	<b>\$1,274,310</b>	<b>\$1,562,599</b>
<b>TIAA-CREF International Eq Retire</b>	<b>8.64%</b>	<b>\$458,353</b>	<b>\$476,190</b>
MSCI:EAFE	6.12%		
<b>American Funds Europacific Growth R4</b>	<b>7.58%</b>	<b>\$598,063</b>	<b>\$662,566</b>
MSCI ACWI ex US	5.99%		
<b>Vanguard Emerging Mkts Stock Idx Adm</b>	<b>3.47%</b>	<b>\$751,193</b>	<b>\$877,556</b>
MSCI Emerging Markets	6.38%		
<b>TIAA RASRA-CREF:Gbl Eq R2</b>	<b>4.40%</b>	<b>\$2,785,793</b>	<b>\$2,824,133</b>
<b>TIAA RASRA-CREF:Stock R2</b>	<b>3.89%</b>	<b>\$21,149,562</b>	<b>\$21,195,613</b>
MSCI ACWI	4.45%		
<b>TIAA RASRA-CREF:Social Choice R2</b>	<b>3.12%</b>	<b>\$5,656,390</b>	<b>\$5,600,350</b>
60% ACWI; 40% Global Agg	3.71%		
<b>TIAA-CREF Managed Alle R</b>	<b>3.19%</b>	<b>\$5,662</b>	<b>\$5,924</b>
60% ACWI; 40% Global Agg	3.71%		
<b>TIAA-CREF Lifecycle 2055 Retirement</b>	<b>4.14%</b>	<b>\$234,260</b>	<b>\$269,806</b>
CAI Tgt Dt Idx 2050	3.63%		
<b>TIAA-CREF Lifecycle 2050 Retirement</b>	<b>4.08%</b>	<b>\$632,118</b>	<b>\$692,211</b>
CAI Tgt Dt Idx 2050	3.63%		
<b>TIAA-CREF Lifecycle 2045 Retirement</b>	<b>4.09%</b>	<b>\$985,137</b>	<b>\$1,080,603</b>
CAI Tgt Dt Idx 2045	3.58%		
<b>TIAA-CREF Lifecycle 2040 Retirement</b>	<b>3.93%</b>	<b>\$1,958,434</b>	<b>\$1,937,860</b>
CAI Tgt Dt Idx 2040	3.49%		

**Juniata College 403(b) Plan  
Manager Performance Summary\***

	<i>Quarterly Return 2nd Quarter 2017</i>	<i>Market Value Beginning of Period</i>	<i>Market Value End of Period</i>
<b>TIAA-CREF Lifecycle 2035 Retirement</b> CAI Tgt Dt Idx 2035	<b>3.81%</b> 3.32%	<b>\$1,814,058</b>	<b>\$2,051,687</b>
<b>TIAA-CREF Lifecycle 2030 Retirement</b> CAI Tgt Dt Idx 2030	<b>3.51%</b> 3.07%	<b>\$1,310,469</b>	<b>\$1,257,822</b>
<b>TIAA-CREF Lifecycle 2025 Retirement</b> CAI Tgt Dt Idx 2025	<b>3.17%</b> 2.76%	<b>\$1,423,862</b>	<b>\$1,519,064</b>
<b>TIAA-CREF Lifecycle 2020 Retirement</b> CAI Tgt Dt Idx 2020	<b>2.91%</b> 2.44%	<b>\$823,636</b>	<b>\$822,933</b>
<b>TIAA-CREF Lifecycle 2015 Retirement</b> CAI Tgt Dt Idx 2015	<b>2.62%</b> 2.16%	<b>\$470,607</b>	<b>\$491,422</b>
<b>TIAA-CREF Lifecycle 2010 Retirement</b> CAI Tgt Dt Idx 2010	<b>2.44%</b> 2.03%	<b>\$297,397</b>	<b>\$295,792</b>
<b>TIAA-CREF Lifecycle Retire Income Retire</b> 40% ACWI; 60% Global Agg	<b>2.37%</b> 3.34%	<b>\$5,129</b>	<b>\$3,719</b>
<b>TIAA-CREF High-Yield R</b> Blmbg:Corporate High Yld	<b>1.53%</b> 2.17%	<b>\$566,870</b>	<b>\$585,817</b>
<b>T. Rowe Price Emerging Markets Bond</b> Blmbg:EM Hard Curr Agg	<b>2.10%</b> 2.50%	<b>\$84,401</b>	<b>\$63,641</b>
<b>TIAA-CREF Bond Plus R</b> Barclays Capital U.S. Universal Idx	<b>1.64%</b> 1.52%	<b>\$1,103,458</b>	<b>\$1,133,508</b>
<b>TIAA RASRA-CREF:Bond Mkt R2</b>	<b>1.52%</b>	<b>\$2,429,465</b>	<b>\$2,551,629</b>
<b>TIAA-CREF Bond R</b> Barclays Capital Aggregate	<b>1.58%</b> 1.45%	<b>\$534,774</b>	<b>\$506,362</b>
<b>TIAA-CREF Short-Term Bond R</b> Barclays Capital 1-3 Year Govt/Credit	<b>0.39%</b> 0.31%	<b>\$66,267</b>	<b>\$65,484</b>
<b>TIAA RASRA-CREF:Infl-Lkd Bond R2</b>	<b>-0.48%</b>	<b>\$1,287,078</b>	<b>\$1,315,928</b>
<b>TIAA-CREF Inflation Link Bd R</b> Barclays Capital US TIPS	<b>-0.61%</b> -0.40%	<b>\$275,250</b>	<b>\$271,836</b>
<b>TIAA RASRA-CREF:Real Estate Acct</b>	<b>0.81%</b>	<b>\$4,930,216</b>	<b>\$4,944,036</b>
<b>TIAA-CREF Real Estate Sec Retire</b> FTSE:NAREIT Equity Index	<b>3.70%</b> 1.52%	<b>\$666,517</b>	<b>\$710,975</b>
<b>PIMCO All Asset A</b> CS:AllHedge Ix	<b>1.69%</b> 1.18%	<b>\$5,859</b>	<b>\$6,155</b>
<b>TIAA Traditional Account (GSRA)</b>	<b>0.82%</b>	<b>\$0</b>	<b>\$0</b>
<b>TIAA Traditional Account (RA)</b>	<b>0.99%</b>	<b>\$33,948,475</b>	<b>\$34,170,274</b>
<b>TIAA Traditional Account (SRA)</b> Traditional Index	<b>0.82%</b> 0.99%	<b>\$0</b>	<b>\$0</b>
<b>TIAA RASRA-CREF:Money Mkt R2</b>	<b>0.10%</b>	<b>\$426,406</b>	<b>\$420,099</b>
<b>TIAA-CREF Money Market R</b> 3 Month T-Bill	<b>0.10%</b> 0.20%	<b>\$1,878</b>	<b>\$1,880</b>
<b>Loan Default Fund</b>	<b>N/A</b>	<b>\$38,588</b>	<b>\$0</b>
<b>TIAA-CREF Self Directed Brokerage</b>	<b>N/A</b>	<b>\$72,121</b>	<b>\$76,022</b>
<b>Weighted</b> Investment Return	<b>2.50%</b>	<b>\$105,333,587</b>	<b>\$107,787,635</b>
<b>Blended Benchmark**</b> 60% Equity, 40% Fixed Income	<b>2.63%</b>		

\* Fund returns net of fees

\*\*Composite benchmark based on plan assets

Performance quoted is past performance and is no guarantee of future results.

**Juniata College 403(b) Plan  
Historical Performance Summary**

<i>Time Period</i>	<i>Overall Plan Growth</i>	<i>Net Flow Change</i>	<i>Investment Return</i>	<i>Blended Market Benchmark Return</i>	<i>Market Value Beginning of Period</i>	<i>Market Value End of Period</i>	<i>Net Flows</i>	<i>Income/MV Gain/Loss</i>
<b>Year 2010</b>	<b>5.33%</b>	<b>0.78%</b>	<b>4.56%</b>	<b>4.06%</b>	<b>\$68,058,430</b>	<b>\$71,687,586</b>	<b>\$528,724</b>	<b>\$3,100,433</b>
<b>Year 2011</b>	<b>-0.18%</b>	<b>-0.39%</b>	<b>0.22%</b>	<b>-1.11%</b>	<b>\$71,687,586</b>	<b>\$71,556,256</b>	<b>(\$289,763)</b>	<b>\$158,433</b>
<b>Year 2012</b>	<b>12.02%</b>	<b>1.54%</b>	<b>10.38%</b>	<b>8.79%</b>	<b>\$71,556,256</b>	<b>\$80,159,260</b>	<b>\$1,146,611</b>	<b>\$7,456,393</b>
First Quarter 2013	4.74%	0.17%	4.57%	4.11%	\$80,159,260	\$83,961,194	\$136,321	\$3,665,614
Second Quarter 2013	0.11%	-0.66%	0.77%	-0.02%	\$83,961,194	\$84,050,226	(\$556,298)	\$645,330
Third Quarter 2013	4.18%	-0.15%	4.33%	4.17%	\$84,050,226	\$87,564,096	(\$122,303)	\$3,636,173
Fourth Quarter 2013	4.51%	-0.52%	5.03%	4.23%	\$87,564,096	\$91,515,435	(\$455,296)	\$4,406,635
<b>Year 2013</b>	<b>14.17%</b>	<b>-1.16%</b>	<b>15.47%</b>	<b>13.01%</b>	<b>\$80,159,260</b>	<b>\$91,515,435</b>	<b>(\$997,576)</b>	<b>\$12,353,751</b>
First Quarter 2014	1.04%	-0.23%	1.26%	1.60%	\$91,515,435	\$92,465,523	(\$206,923)	\$1,157,012
Second Quarter 2014	2.46%	-0.58%	3.04%	3.50%	\$92,465,523	\$94,740,524	(\$539,028)	\$2,814,028
Third Quarter 2014	0.81%	1.32%	-0.51%	-0.81%	\$94,740,524	\$95,506,025	\$1,250,137	(\$484,636)
Fourth Quarter 2014	2.47%	0.33%	2.14%	1.83%	\$95,506,025	\$97,867,055	\$319,899	\$2,041,131
<b>Year 2014</b>	<b>6.94%</b>	<b>0.84%</b>	<b>6.03%</b>	<b>6.21%</b>	<b>\$91,515,435</b>	<b>\$97,867,055</b>	<b>\$824,086</b>	<b>\$5,527,534</b>
First Quarter 2015	1.12%	-1.03%	2.16%	1.89%	\$97,867,055	\$98,966,096	(\$1,010,566)	\$2,109,607
Second Quarter 2015	-0.94%	-1.47%	0.54%	0.02%	\$98,966,096	\$98,036,132	(\$1,459,536)	\$529,571
Third Quarter 2015	-4.22%	-0.22%	-4.00%	-4.13%	\$98,036,132	\$93,898,076	(\$216,816)	(\$3,921,241)
Fourth Quarter 2015	3.11%	0.16%	2.95%	3.28%	\$93,898,076	\$96,820,276	\$150,771	\$2,771,430
<b>Year 2015</b>	<b>-1.07%</b>	<b>-2.55%</b>	<b>1.50%</b>	<b>0.91%</b>	<b>\$97,867,055</b>	<b>\$96,820,276</b>	<b>(\$2,536,146)</b>	<b>\$1,489,368</b>
First Quarter 2016	0.36%	-0.24%	0.60%	1.27%	\$96,820,276	\$97,172,426	(\$232,369)	\$584,518
Second Quarter 2016	1.03%	-0.34%	1.36%	1.72%	\$97,172,426	\$98,171,206	(\$327,134)	\$1,325,915
Third Quarter 2016	2.86%	-0.33%	3.18%	2.69%	\$98,171,206	\$100,977,040	(\$319,961)	\$3,125,794
Fourth Quarter 2016	0.43%	-0.82%	1.25%	0.83%	\$100,977,040	\$101,407,935	(\$828,764)	\$1,259,659
<b>Year 2016</b>	<b>4.74%</b>	<b>-1.71%</b>	<b>6.54%</b>	<b>6.66%</b>	<b>\$96,820,276</b>	<b>\$101,407,935</b>	<b>(\$1,708,227)</b>	<b>\$6,295,885</b>
First Quarter 2017	3.87%	0.02%	3.86%	4.00%	\$101,407,935	\$105,333,587	\$15,775	\$3,909,878
Second Quarter 2017	2.33%	-0.17%	2.50%	2.63%	\$105,333,587	\$107,787,635	(\$183,495)	\$2,637,543
<b>Year 2017</b>	<b>6.29%</b>	<b>-0.16%</b>	<b>6.46%</b>	<b>6.73%</b>	<b>\$101,407,935</b>	<b>\$107,787,635</b>	<b>(\$167,720)</b>	<b>\$6,547,421</b>
<b>Historical Performance Cumulative</b>	<b>58.38%</b>	<b>-2.84%</b>	<b>63.02%</b>	<b>54.36%</b>	<b>\$68,058,430</b>	<b>\$107,787,635</b>	<b>(\$3,200,013)</b>	<b>\$42,929,219</b>
<b>Historical Performance Annualized</b>	<b>7.05%</b>	<b>-0.43%</b>	<b>7.51%</b>	<b>6.64%</b>				
1 Year Rolling	9.80%	-1.30%	11.22%	10.51%				
3 Year Rolling	4.39%	-0.94%	5.37%	5.08%				
5 Year Rolling	7.33%	-0.82%	8.19%	7.63%				

Performance quoted is past performance and is no guarantee of future results.

## Juniata College 403(b) Plan

### Fund Selection List

<i>Fund Name</i>	<i>Fund Category</i>	<i>Tot Ret 12 Mo</i>	<i>% Rank Cat 12 Mo</i>	<i>Tot Ret Annlzd 3 Yr</i>	<i>% Rank Cat 3 Yr</i>	<i>Tot Ret Annlzd 5 Yr</i>	<i>% Rank Cat 5 Yr</i>	<i>Beta 3 Yr</i>	<i>% Rank Beta</i>	<i>Std Dev 3 Yr</i>	<i>% Rank Std Dev</i>	<i>Alpha 3 Yr</i>	<i>% Rank Alpha</i>	<i>Sharpe Ratio 3 Yr</i>	<i>% Rank Sharpe Ratio</i>	<i>Expense Ratio</i>	<i>% Rank Expense Ratio</i>
TIAA-CREF Large-Cap Value Idx Retire	Large Cap Value	15.21	75	7.05	42	13.56	35	1.00	40	7.69	59	-0.27	46	0.89	31	0.31	100
TIAA-CREF Large-Cap Value Retire	Large Cap Value	17.16	52	6.26	63	13.17	46	1.10	8	8.79	18	-1.64	81	0.69	77	0.66	77
CAI Large Cap Value MFs	Large Cap Value	17.27	-	6.73	-	13.10	-	-	-	7.91	-	-	-	0.78	-	0.80	-
Russell 1000 Value	Large Cap Value	15.53	73	7.36	26	13.94	23	1.00	40	7.72	58	0.00	39	0.92	25	-	-
TIAA RASRA-CREF:Eq Idx R2	Large Cap Core	18.14	39	8.76	33	14.18	30	1.04	41	7.01	63	-1.12	38	1.22	23	0.34	93
TIAA-CREF Equity Index R	Large Cap Core	18.16	39	8.81	33	14.27	28	1.04	38	7.04	61	-1.11	38	1.22	23	0.30	93
TIAA-CREF Growth & Income Retire	Large Cap Core	18.45	37	8.70	33	14.24	29	1.05	37	7.42	39	-1.24	39	1.14	36	0.67	71
TIAA-CREF S&P 500 Index Retire	Large Cap Core	17.54	46	9.27	19	14.27	29	0.99	62	6.63	76	-0.27	15	1.36	10	0.30	93
TIAA-CREF Social Choice Eq Retire	Large Cap Core	18.56	37	7.59	57	13.84	44	1.01	58	6.93	67	-1.94	54	1.06	48	0.44	89
CAI Large Cap Core MFs	Large Cap Core	17.13	-	7.83	-	13.37	-	-	-	7.27	-	-	-	1.03	-	0.86	-
S&P 500	Large Cap Core	17.90	41	9.61	12	14.63	20	1.00	61	6.67	75	0.00	10	1.41	7	-	-
TIAA RASRA-CREF:Growth R2	Large Cap Growth	20.85	54	10.59	37	15.16	35	1.16	53	8.52	70	-2.06	30	1.21	20	0.38	96
TIAA-CREF Large-Cap Gr Idx Retire	Large Cap Growth	20.03	63	10.75	32	14.93	36	1.00	82	7.23	88	-0.36	9	1.46	6	0.31	97
TIAA-CREF Large-Cap Growth R	Large Cap Growth	20.64	62	10.67	35	15.74	19	1.23	46	9.56	45	-2.67	42	1.09	38	0.68	85
CAI Large Cap Growth MFs	Large Cap Growth	21.01	-	9.72	-	14.22	-	-	-	9.37	-	-	-	1.04	-	0.97	-
Russell 1000 Growth	Large Cap Growth	20.42	62	11.11	23	15.30	29	1.00	82	7.21	89	0.00	8	1.51	4	-	-
TIAA-CREF Mid-Cap Value Retire	Mid Cap Value	14.84	72	5.78	46	13.05	61	0.99	51	7.95	70	-1.53	52	0.70	38	0.66	91
CAI Mid Cap Value MFs	Mid Cap Value	16.95	-	5.56	-	13.48	-	-	-	8.70	-	-	-	0.62	-	1.11	-
Russell Mid-Cap Value	Mid Cap Value	15.93	56	7.46	18	15.14	18	1.00	49	7.94	72	0.00	22	0.91	14	-	-
TIAA-CREF Mid-Cap Growth Retire	Mid Cap Growth	16.40	56	5.72	65	11.96	57	1.12	41	9.27	48	-2.78	66	0.59	60	0.72	93
CAI Mid Cap Growth MFs	Mid Cap Growth	17.26	-	6.31	-	12.38	-	-	-	9.00	-	-	-	0.64	-	1.14	-
Russell Mid-Cap Growth	Mid Cap Growth	17.05	52	7.83	28	14.19	21	1.00	78	7.91	85	0.00	27	0.96	21	-	-
Victory Sycamore Small Company Opp A	Small Cap Value	24.39	19	9.66	1	14.38	21	0.81	57	11.12	71	3.62	7	0.85	10	1.26	28
CAI Small Cap Value MFs	Small Cap Value	21.78	-	6.08	-	13.30	-	-	-	11.90	-	-	-	0.51	-	1.10	-
Russell 2000 Value	Small Cap Value	24.86	18	7.02	31	13.39	45	1.00	5	13.47	13	0.00	55	0.50	50	-	-
TIAA-CREF Small-Cap Blend Idx Retire	Small Cap Broad	24.50	23	7.36	33	13.67	32	1.00	14	12.42	42	0.01	51	0.57	35	0.31	100
TIAA-CREF Small-Cap Equity Retire	Small Cap Broad	26.55	12	8.54	18	14.58	17	0.92	32	11.67	66	1.66	26	0.71	15	0.67	95
CAI Small Cap MFs	Small Cap Broad	21.49	-	6.42	-	13.18	-	-	-	12.14	-	-	-	0.52	-	1.17	-
Russell 2000	Small Cap Broad	24.60	22	7.36	33	13.70	30	1.00	14	12.43	41	0.00	51	0.57	35	-	-
Prudential Jennison Small Company Z	Small Cap Growth	21.01	55	6.87	49	13.21	44	0.65	95	9.25	95	1.66	25	0.72	18	-	-
CAI Small Cap Growth MFs	Small Cap Growth	21.44	-	6.80	-	13.11	-	-	-	12.61	-	-	-	0.51	-	1.17	-
Russell 2000 Growth	Small Cap Growth	24.40	27	7.64	32	13.98	25	1.00	26	12.94	41	0.00	48	0.57	39	-	-
TIAA-CREF International Eq Idx Retire	Intl Large Cap Core	19.73	43	1.13	30	8.55	18	1.00	54	10.71	63	-0.02	31	0.08	31	0.31	100
TIAA-CREF International Eq Retire	Intl Large Cap Core	22.38	20	1.46	24	10.12	5	1.16	9	13.00	10	0.35	24	0.09	30	0.74	89
CAI Intl Lg Cap Core MFs	Intl Large Core	18.85	-	0.44	-	7.09	-	-	-	11.33	-	-	-	0.02	-	1.17	-
MSCI:EAFE	Intl Large Cap Core	20.27	39	1.15	30	8.69	17	1.00	55	10.63	65	0.00	31	0.09	31	-	-
American Funds Europacific Growth R4	Intl Core Plus	21.75	28	3.36	22	9.23	20	0.99	36	11.32	44	2.11	28	0.28	22	0.85	74
CAI Non US Equity MFs	Intl Core Plus	19.23	-	1.59	-	8.40	-	-	-	11.18	-	-	-	0.11	-	1.06	-
MSCI ACWI ex US	International Equities	21.00	33	1.27	56	7.70	76	1.00	31	10.95	58	0.00	66	0.09	57	-	-
Vanguard Emerging Mkts Stock Idx Adm	Emerging Markets	18.86	79	0.64	67	3.36	63	0.94	73	14.09	85	-0.75	74	0.03	66	0.15	100
CAI Emerging Equity MFs	Emerging Markets	23.49	-	1.57	-	4.16	-	-	-	15.14	-	-	-	0.09	-	1.36	-
MSCI Emerging Markets	Emerging Markets	24.17	42	1.44	54	4.33	44	1.00	47	14.78	68	0.00	61	0.08	52	-	-
TIAA RASRA-CREF:Gbl Eq R2	Global Equities	18.70	60	5.02	51	11.06	50	0.94	82	7.87	82	-0.04	53	0.61	40	0.44	100
TIAA RASRA-CREF:Stock R2	Global Equities	19.08	56	6.39	26	12.12	25	0.93	82	7.73	83	1.30	37	0.80	16	0.43	100
CAI Global Equity MFs	Global Equities	20.07	-	5.18	-	11.09	-	-	-	9.61	-	-	-	0.52	-	1.18	-
MSCI ACWI	Global Equities	19.42	52	5.39	48	11.14	47	1.00	65	8.23	80	0.00	52	0.63	38	-	-



## Juniata College 403(b) Plan

### Fund Selection List

<i>Fund Name</i>	<i>Fund Category</i>	<i>Tot Ret 12 Mo</i>	<i>% Rank Cat 12 Mo</i>	<i>Tot Ret Annlzd 3 Yr</i>	<i>% Rank Cat 3 Yr</i>	<i>Tot Ret Annlzd 5 Yr</i>	<i>% Rank Cat 5 Yr</i>	<i>Beta 3 Yr</i>	<i>% Rank Beta</i>	<i>Std Dev 3 Yr</i>	<i>% Rank Std Dev</i>	<i>Alpha 3 Yr</i>	<i>% Rank Alpha</i>	<i>Sharpe Ratio 3 Yr</i>	<i>% Rank Sharpe Ratio</i>	<i>Expense Ratio</i>	<i>% Rank Expense Ratio</i>
TIAA RASRA-CREF:Social Choice R2	Balanced Allocation	10.90	45	4.77	37	8.50	40	0.72	49	4.54	78	2.36	39	1.00	25	0.38	97
Morningstar Alloc 50-70 E	Balanced Allocation	10.63	-	4.37	-	8.22	-	-	-	5.00	-	-	-	0.81	-	1.07	-
60% ACWI; 40% Global Agg	Balanced Allocation	10.33	56	3.19	78	7.00	79	1.00	5	5.78	19	0.00	87	0.51	81	-	-
TIAA-CREF Managed Allc R	Balanced Allocation	12.57	19	5.14	26	8.68	35	0.84	20	5.32	35	2.37	38	0.92	37	0.65	86
Morningstar Alloc 50-70 E	Balanced Allocation	10.63	-	4.37	-	8.22	-	-	-	5.00	-	-	-	0.81	-	1.07	-
60% ACWI; 40% Global Agg	Balanced Allocation	10.33	56	3.19	78	7.00	79	1.00	5	5.78	19	0.00	87	0.51	81	-	-
TIAA-CREF Lifecycle 2055 Retirement	Target Date 2055	19.00	5	6.19	14	11.40	16	1.12	12	7.65	12	-0.14	34	0.78	33	0.70	60
Morningstar Target 2055	Target Date 2055	16.57	-	5.40	-	10.62	-	-	-	7.26	-	-	-	0.72	-	0.81	-
CAI Tgt Dt Idx 2050	Target Date 2050	16.47	53	5.71	34	10.60	51	1.00	77	6.78	84	0.00	27	0.81	22	-	-
TIAA-CREF Lifecycle 2050 Retirement	Target Date 2050	18.69	6	6.10	13	11.34	10	1.12	13	7.64	20	-0.21	31	0.77	31	0.70	64
Morningstar Target 2050	Target Date 2050	16.39	-	5.25	-	10.39	-	-	-	7.25	-	-	-	0.70	-	0.88	-
CAI Tgt Dt Idx 2050	Target Date 2050	16.47	48	5.71	28	10.60	42	1.00	64	6.78	88	0.00	24	0.81	21	-	-
TIAA-CREF Lifecycle 2045 Retirement	Target Date 2045	18.57	6	6.05	15	11.31	11	1.13	10	7.63	10	-0.26	33	0.76	32	0.70	60
Morningstar Target 2045	Target Date 2045	16.25	-	5.26	-	10.26	-	-	-	7.15	-	-	-	0.71	-	0.80	-
CAI Tgt Dt Idx 2045	Target Date 2045	16.21	51	5.66	29	10.48	38	1.00	73	6.69	83	0.00	23	0.81	21	-	-
TIAA-CREF Lifecycle 2040 Retirement	Target Date 2040	17.90	9	5.85	16	11.20	8	1.15	13	7.54	15	-0.44	39	0.75	37	0.69	66
Morningstar Target 2040	Target Date 2040	15.58	-	4.98	-	9.87	-	-	-	6.84	-	-	-	0.69	-	0.87	-
CAI Tgt Dt Idx 2040	Target Date 2040	15.70	47	5.56	27	10.27	35	1.00	69	6.50	83	0.00	21	0.82	17	-	-
TIAA-CREF Lifecycle 2035 Retirement	Target Date 2035	16.36	15	5.63	18	10.75	11	1.12	19	6.93	18	-0.24	35	0.78	34	0.68	61
Morningstar Target 2035	Target Date 2035	14.62	-	4.88	-	9.45	-	-	-	6.52	-	-	-	0.73	-	0.79	-
CAI Tgt Dt Idx 2035	Target Date 2035	14.53	52	5.31	33	9.80	38	1.00	73	6.13	76	0.00	22	0.83	18	-	-
TIAA-CREF Lifecycle 2030 Retirement	Target Date 2030	14.83	13	5.36	14	10.02	12	1.12	22	6.33	30	-0.18	29	0.81	30	0.67	65
Morningstar Target 2030	Target Date 2030	12.83	-	4.48	-	8.75	-	-	-	5.88	-	-	-	0.72	-	0.83	-
CAI Tgt Dt Idx 2030	Target Date 2030	12.95	47	4.98	29	9.10	37	1.00	65	5.57	75	0.00	22	0.85	18	-	-
TIAA-CREF Lifecycle 2025 Retirement	Target Date 2025	13.23	17	5.03	10	9.22	15	1.14	32	5.71	29	-0.10	32	0.84	30	0.66	60
Morningstar Target 2025	Target Date 2025	11.21	-	4.15	-	8.05	-	-	-	5.18	-	-	-	0.78	-	0.78	-
CAI Tgt Dt Idx 2025	Target Date 2025	10.83	60	4.54	33	8.21	43	1.00	63	4.90	67	0.00	24	0.88	20	-	-
TIAA-CREF Lifecycle 2020 Retirement	Target Date 2020	11.59	13	4.71	8	8.38	10	1.17	20	5.10	23	-0.02	27	0.88	27	0.65	64
Morningstar Target 2020	Target Date 2020	9.14	-	3.67	-	6.95	-	-	-	4.55	-	-	-	0.77	-	0.80	-
CAI Tgt Dt Idx 2020	Target Date 2020	8.89	55	4.09	32	7.27	40	1.00	57	4.26	67	0.00	26	0.91	23	-	-
TIAA-CREF Lifecycle 2015 Retirement	Target Date 2015	10.26	16	4.39	15	7.56	18	1.20	28	4.60	26	0.07	22	0.90	23	0.63	62
Morningstar Target 2015	Target Date 2015	8.59	-	3.52	-	6.78	-	-	-	4.38	-	-	-	0.79	-	0.75	-
CAI Tgt Dt Idx 2015	Target Date 2015	7.06	78	3.64	46	6.30	70	1.00	75	3.68	94	0.00	24	0.93	21	-	-
TIAA-CREF Lifecycle 2010 Retirement	Target Date 2010	9.24	2	4.12	1	6.91	1	1.18	9	4.18	9	0.11	16	0.93	20	0.62	64
Morningstar Target Ret	Target Retirement	5.77	-	2.75	-	4.46	-	-	-	3.63	-	-	-	0.74	-	0.72	-
CAI Tgt Dt Idx 2010	Target Date 2010	6.32	36	3.44	17	5.62	15	1.00	48	3.39	56	0.00	23	0.95	16	-	-
TIAA-CREF Lifecycle Retire Income Retire	Retirement Income	8.51	8	3.94	2	6.25	6	0.61	23	3.92	14	2.57	3	0.94	19	0.62	64
Morningstar Target Ret	Target Retirement	5.77	-	2.75	-	4.46	-	-	-	3.63	-	-	-	0.74	-	0.72	-
40% ACWI; 60% Global Agg	Moderate Allocation	6.02	43	2.04	75	4.92	29	1.00	1	5.29	1	0.00	93	0.34	89	-	-
TIAA-CREF High-Yield R	High Yield Bond	11.54	37	3.83	23	5.98	40	0.92	39	5.63	41	-0.29	32	0.64	29	0.61	84
CAI High Yield MFs	High Yield Bond	11.07	-	3.20	-	5.80	-	-	-	5.52	-	-	-	0.56	-	0.84	-
Blmbg:Corporate High Yld	High Yield Bond	12.70	15	4.48	9	6.89	11	1.00	20	6.07	25	0.00	27	0.70	26	-	-
T. Rowe Price Emerging Markets Bond	Emerging Markets Bond	8.87	18	5.09	18	5.49	30	1.20	42	6.51	53	0.94	21	0.75	16	0.92	-
CAI EM Debt USD MFs	Emerging Mkt Debt	11.45	-	5.98	-	5.74	-	-	-	6.80	-	-	-	0.86	-	-	-
Blmbg:EM Hard Curr Agg	Global Emerging Mkt Bond	5.76	83	3.50	64	5.03	47	1.00	78	5.25	86	0.00	45	0.62	43	-	-

## Juniata College 403(b) Plan

### Fund Selection List

<i>Fund Name</i>	<i>Fund Category</i>	<i>Tot Ret 12 Mo</i>	<i>% Rank 12 Mo</i>	<i>Tot Ret 3 Yr</i>	<i>% Rank 3 Yr</i>	<i>Tot Ret 5 Yr</i>	<i>% Rank 5 Yr</i>	<i>Beta 3 Yr</i>	<i>% Rank Beta</i>	<i>Std Dev 3 Yr</i>	<i>% Rank Std Dev</i>	<i>Alpha 3 Yr</i>	<i>% Rank Alpha</i>	<i>Sharpe Ratio 3 Yr</i>	<i>% Rank Sharpe Ratio</i>	<i>Expense Ratio</i>	<i>% Rank Expense Ratio</i>
TIAA-CREF Bond Plus R	Core Plus Bond	1.83	45	2.94	28	3.24	37	0.99	45	3.10	55	0.20	27	0.87	22	0.56	53
CAI Core Plus MFs	Core Plus Bond	1.72	-	2.58	-	3.07	-	-	-	3.13	-	-	-	0.77	-	0.59	-
Barclays Capital U.S. Universal Idx	Universal Bond	0.91	71	2.76	40	2.73	66	1.00	38	3.10	55	0.00	46	0.82	36	-	-
TIAA RASRA-CREF: Bond Mkt R2	Core Bond	0.50	41	2.60	19	2.42	36	0.97	35	3.17	40	0.19	26	0.75	25	0.40	89
TIAA-CREF Bond R	Core Bond	1.00	24	2.84	12	3.00	14	0.97	34	3.21	30	0.43	17	0.81	20	0.56	45
CAI Core Bond MFs	Core Bond	0.12	-	2.21	-	2.31	-	-	-	3.11	-	-	-	0.63	-	0.53	-
Barclays Capital Aggregate	Core Bond	-0.31	82	2.48	29	2.21	62	1.00	8	3.25	22	0.00	36	0.69	35	-	-
TIAA-CREF Short-Term Bond R	Short Term Bond	1.06	45	1.09	44	1.22	49	0.96	36	0.85	45	0.16	56	1.00	50	0.52	58
CAI Defensive FI MFs	Defensive Fixed Income	1.02	-	1.04	-	1.19	-	-	-	0.81	-	-	-	1.00	-	0.55	-
Barclays Capital 1-3 Year Govt/Credit	Short Term Govt/Credit	0.35	71	0.95	61	0.95	65	1.00	32	0.76	56	0.00	67	0.95	53	-	-
TIAA RASRA-CREF:Infl-Lkd Bond R2	TIPS	-0.54	59	0.20	35	-0.14	50	0.88	62	3.27	74	-0.39	35	-0.01	36	0.35	88
TIAA-CREF Inflation Link Bd R	TIPS	-0.97	77	-0.15	57	-0.39	66	0.83	65	3.07	76	-0.72	57	-0.12	62	0.52	71
CAI TIPS MFs	TIPS	-0.23	-	-0.04	-	-0.14	-	-	-	3.67	-	-	-	-0.07	-	0.68	-
Barclays Capital US TIPS	TIPS	-0.63	63	0.63	18	0.27	19	1.00	41	3.65	51	0.00	18	0.11	17	-	-
TIAA RASRA-CREF:Real Estate Acct	Real Estate	3.93	13	7.18	49	8.21	55	0.10	100	1.72	100	7.18	1	4.03	1	0.85	84
TIAA-CREF Real Estate Sec Retire	Real Estate	1.94	17	8.69	9	9.09	17	0.90	67	11.34	64	-0.68	50	0.75	17	0.76	90
CAI Real Estate MFs	Real Estate	-2.02	-	7.15	-	8.35	-	-	-	11.84	-	-	-	0.60	-	1.23	-
FTSE:NAREIT Equity Index		-1.70	46	8.36	15	9.52	12	1.00	32	11.97	39	0.00	31	0.68	26	-	-
PIMCO All Asset A	GTAA	10.22	4	0.96	49	3.73	26	0.69	41	7.69	5	1.64	41	0.09	54	1.33	75
Morningstar Multialt	Multi Alternative	3.01	-	0.88	-	2.87	-	-	-	3.88	-	-	-	0.17	-	1.74	-
CS:AllHedge Ix	Hedge Fund	4.55	35	-0.69	78	1.90	81	1.00	21	3.38	65	0.00	76	-0.27	83	-	-
TIAA Traditional Account (GSRA)	Cash & Equivalents	3.33	1	3.31	1	3.35	1	-	-	-	-	-	-	-	-	0.55	4
TIAA Traditional Account (RA)	Cash & Equivalents	4.03	1	4.00	1	4.03	1	-	-	-	-	-	-	-	-	0.55	4
TIAA Traditional Account (SRA)	Cash & Equivalents	3.33	1	3.31	1	3.35	1	-	-	-	-	-	-	-	-	0.55	4
CAI Stable Value CT		1.47	-	1.35	-	1.29	-	-	-	0.05	-	-	-	18.43	-	0.25	-
3 Month T-Bill	Cash & Equivalents	0.49	100	0.23	100	0.17	100	1.00	-	0.11	7	0.00	-	0.00	100	-	-
TIAA RASRA-CREF:Money Mkt R2	Cash & Equivalents	0.18	60	0.07	61	0.04	65	0.00	-	0.06	69	-0.17	-	-2.94	67	0.34	63
TIAA-CREF Money Market R	Cash & Equivalents	0.17	61	0.06	64	0.04	63	0.00	-	0.06	68	-0.17	-	-2.81	63	0.39	57
CAI Money Market Funds	Cash & Equivalents	0.28	-	0.11	-	0.07	-	-	-	0.08	-	-	-	-1.44	-	0.43	-
3 Month T-Bill	Cash & Equivalents	0.49	29	0.23	24	0.17	18	1.00	-	0.11	33	0.00	-	0.00	21	-	-

Performance quoted is past performance and is no guarantee of future results.













Data was obtained from Callan Associates as of June 30, 2017

## Juniata College 403(b) Plan IPS Performance Criteria Dashboard

Fund Name	3 Yr Alpha	Peer Group % Rankings			Sharpe Ratio - 3Yr	Quadrant Rank - 3Yr	Manager Tenure	Composite Rating
		12 Mo	3 Yr	5 Yr				
TIAA-CREF Large-Cap Value Retire	-1.64	52	63	46	0.69	4	14.58	15
TIAA-CREF Large-Cap Value Idx Retire	-0.27	75	42	35	0.89	1	11.58	8
TIAA RASRA-CREF:Eq Idx R2	-1.12	39	33	30	1.22	1		6
TIAA-CREF S&P 500 Index Retire	-0.27	46	19	29	1.36	1	11.58	7
TIAA-CREF Growth & Income Retire	-1.24	37	33	29	1.14	2	12.33	7
TIAA-CREF Social Choice Eq Retire	-1.94	37	57	44	1.06	3	11.58	9
TIAA-CREF Equity Index R	-1.11	39	33	28	1.22	1	11.58	7
TIAA-CREF Large-Cap Gr Idx Retire	-0.36	63	32	36	1.46	1	11.92	8
TIAA-CREF Large-Cap Growth R	-2.67	62	35	19	1.09	2	11.33	8
TIAA RASRA-CREF:Growth R2	-2.06	54	37	35	1.21	1		7
TIAA-CREF Mid-Cap Value Retire	-1.53	72	46	61	0.70	1	14.75	10
TIAA-CREF Mid-Cap Growth Retire	-2.78	56	65	57	0.59	4	11.08	14
Victory Sycamore Small Company Opp A	3.62	19	1	21	0.85	1	19.08	7
TIAA-CREF Small-Cap Equity Retire	1.66	12	18	17	0.71	1	10.58	7
TIAA-CREF Small-Cap Blend Idx Retire	0.01	23	33	32	0.57	2	11.92	8
Prudential Jennison Small Company Z	1.66	55	49	44	0.72	1	17.17	8
TIAA-CREF International Eq Retire	0.35	20	24	5	0.09	2	18.00	7
TIAA-CREF International Eq Idx Retire	-0.02	43	30	18	0.08	1	11.92	7
American Funds Europacific Growth R4	2.11	28	22	20	0.28	2	25.58	7
Vanguard Emerging Mkts Stock Idx Adm	-0.75	79	67	63	0.03	3	8.92	13
TIAA RASRA-CREF:Stock R2	1.30	56	26	25	0.80	1		7
TIAA RASRA-CREF:Gbl Eq R2	-0.04	60	51	50	0.61	3		9
TIAA RASRA-CREF:Social Choice R2	2.36	45	37	40	1.00	1		6
TIAA-CREF Managed Allc R	2.37	19	26	35	0.92	2	11.33	7
TIAA-CREF Lifecycle 2055 Retirement	-0.14	5	14	16	0.78	2	6.25	7
TIAA-CREF Lifecycle 2050 Retirement	-0.21	6	13	10	0.77	2	9.67	7
TIAA-CREF Lifecycle 2045 Retirement	-0.26	6	15	11	0.76	2	9.67	7
TIAA-CREF Lifecycle 2040 Retirement	-0.44	9	16	8	0.75	2	11.33	7
TIAA-CREF Lifecycle 2035 Retirement	-0.24	15	18	11	0.78	2	11.33	7
TIAA-CREF Lifecycle 2030 Retirement	-0.18	13	14	12	0.81	2	11.33	7
TIAA-CREF Lifecycle 2025 Retirement	-0.10	17	10	15	0.84	2	11.33	7
TIAA-CREF Lifecycle 2020 Retirement	-0.02	13	8	10	0.88	2	11.33	7
TIAA-CREF Lifecycle 2015 Retirement	0.07	16	15	18	0.90	2	11.33	7
TIAA-CREF Lifecycle 2010 Retirement	0.11	2	1	1	0.93	2	11.33	7
TIAA-CREF Lifecycle Retire Income Retire	2.57	8	2	6	0.94	2	9.67	7
TIAA-CREF High-Yield R	-0.29	37	23	40	0.64	2	11.33	7
T. Rowe Price Emerging Markets Bond	0.94	18	18	30	0.75	2	22.58	7
TIAA-CREF Bond Plus R	0.20	45	28	37	0.87	1	11.33	7
TIAA-CREF Bond R	0.43	24	12	14	0.81	2	13.58	7
TIAA RASRA-CREF:Bond Mkt R2	0.19	41	19	36	0.75	2		6
TIAA-CREF Short-Term Bond R	0.16	45	44	49	1.00	2	11.33	8
TIAA-CREF Inflation Link Bd R	-0.72	77	57	66	-0.12	3	8.92	13
TIAA RASRA-CREF:Infl-Lkd Bond R2	-0.39	59	35	50	-0.01	1		7
TIAA-CREF Real Estate Sec Retire	-0.68	17	9	17	0.75	1	11.58	7
TIAA RASRA-CREF:Real Estate Acct	7.18	13	49	55	4.03	1		7
PIMCO All Asset A	1.64	4	49	26	0.09	2	15.00	8

Data was obtained from Morningstar and/or Callan Associates as of June 30, 2017

### Criteria

<b>3 Yr Alpha, Peer Group % Rankings &amp; Sharpe Ratio</b>		Indicates % Rank < 50
		Indicates % Rank >= 50 and <= 75
		Indicates % Rank > 75
<b>Quadrant Rank</b>		1 Indicates Risk/Return Upper Left Quadrant - Less Risk & More Return
		2 Indicates Risk/Return Upper Right Quadrant - More Risk & More Return
		3 Indicates Risk/Return Lower Left Quadrant - Less Risk & Less Return
		4 Indicates Risk/Return Lower Right Quadrant - More Risk & Less Return
<b>Manager Tenure</b>		Indicates Fund Manager Tenure >= 3 Years
		Indicates Fund Manager Tenure < 3 Years
<b>Composite Rating</b>		Total Score <= 11
		Total Score > 11 and <= 17
		Total Score > 17

### Glossary

**Alpha** - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive Alpha figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative Alpha indicates the portfolio has underperformed, given the expectations established by beta.

## *Juniata College 403(b) Plan*

### *IPS Performance Criteria Dashboard*

**Manager Tenure** - The number of years that the current manager has been the portfolio manager for the investment product. For products with more than one manager, the tenure of the manager who has been with the product the longest is shown.

**Peer Group % Rankings** - Percentile Ranking is a standardized ranking. The funds are ranked from 1 to 100 (1 being the best and 100 being the worst) based on their return compared to that of their peers. The rest of the observations are placed an equal distance from each other. All the percentile ranks are based on the peer group (Morningstar or Callan Associates Category).

**Quadrant Rank** - A measure that encompasses both risk and return. It is calculated by comparing the return and standard deviation (A statistical measurement of dispersion about an average, which, for a fund, depicts how widely the returns varied over a certain period of time) to the return and standard deviation of the peer group. This allows a graph to be generated where items are plotted in one of four quadrants. Each quadrant represents an explanation of the managers ability to produce returns relative to the risk they take.



**Sharpe Ratio** - A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the fund's historical risk-adjusted performance. The Sharpe ratio is calculated for the past 36-month period by dividing a fund's annualized excess returns by the standard deviation of a fund's annualized excess returns. Since this ratio uses standard deviation as its risk measure, it is most appropriately applied when analyzing a fund that is an investor's sole holding. The Sharpe Ratio can be used to compare two funds directly on how much risk a fund had to bear to earn excess return over the risk-free rate.

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*Cornerstone has exercised reasonable care in the preparation of this report. Several portions of this report are obtained from third party sources. While we have attempted to verify all information within, we disclaim all responsibility for any errors that may occur due to third party information and data.*

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*Cornerstone shall not be responsible for any trading decisions or damages or other losses resulting from, this information, data, analyses or opinions or their use. Please read the prospectus carefully before investing.*

# Section III

# Manager Due Diligence

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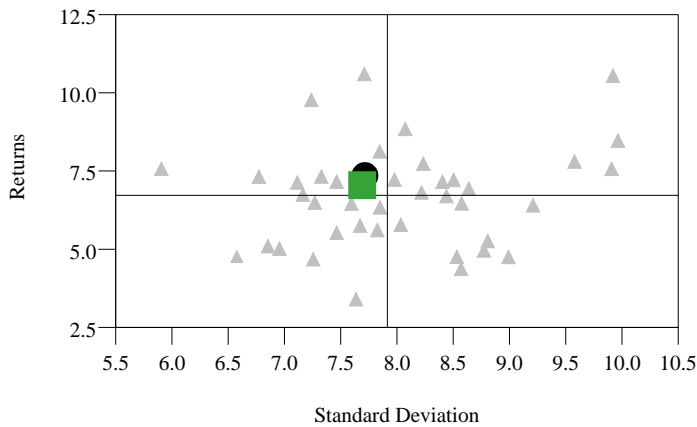
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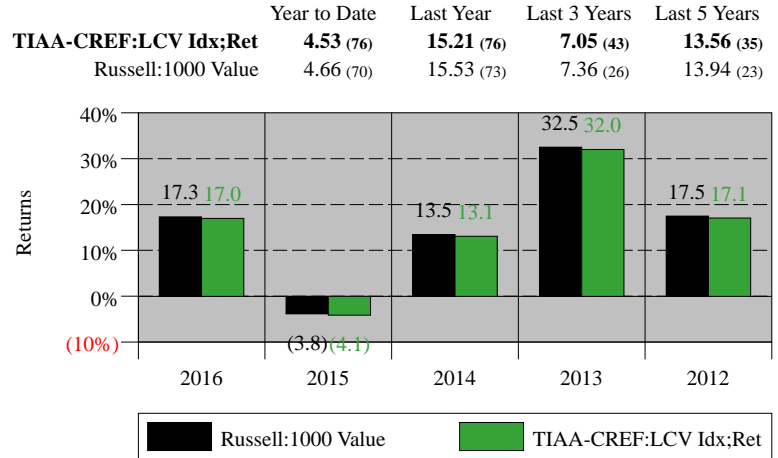
# TIAA-CREF:LCV Idx;Ret

## Russell:1000 Value - (CAI Large Cap Value MFs)

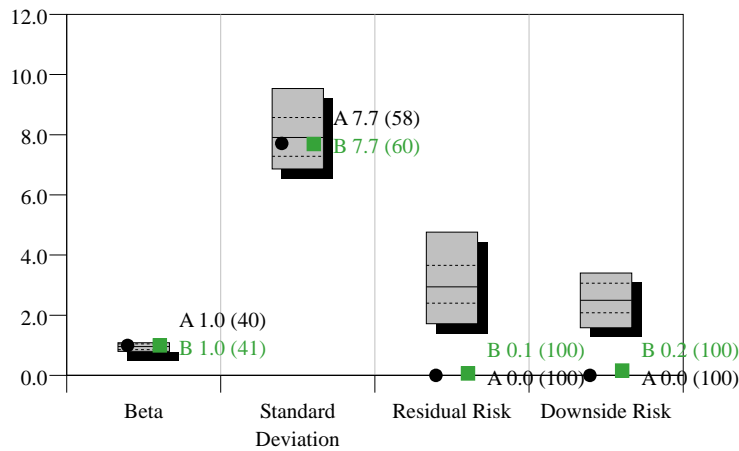
Scatter Chart  
for 3 Years Ended June 30, 2017



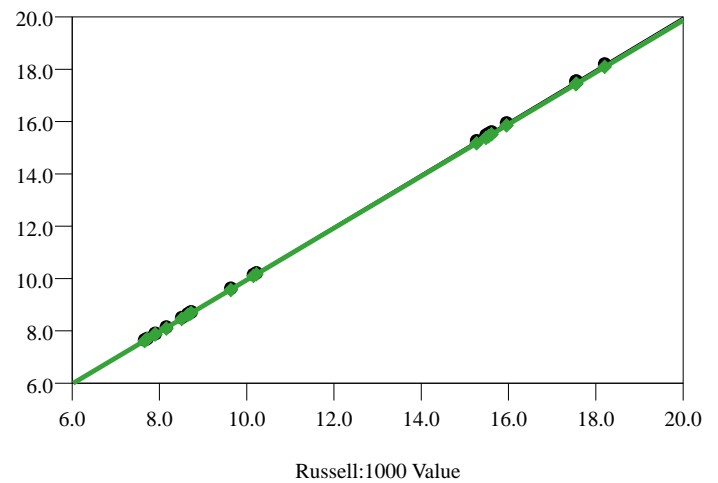
Returns for Various Periods



Risk Statistics for 3 Years



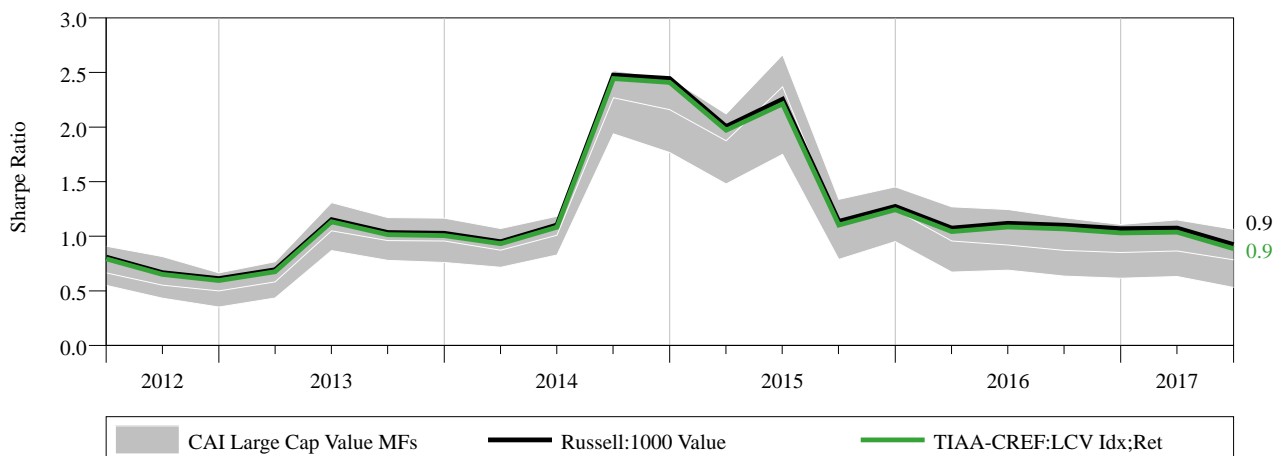
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:LCV Idx;Ret	(0.27) (47)	0.89 (31)	6.84 (44)	(4.25) (100)	(1.90) (100)
Russell:1000 Value	0.00 (39)	0.92 (25)	7.13 (38)	0.00 (39)	--

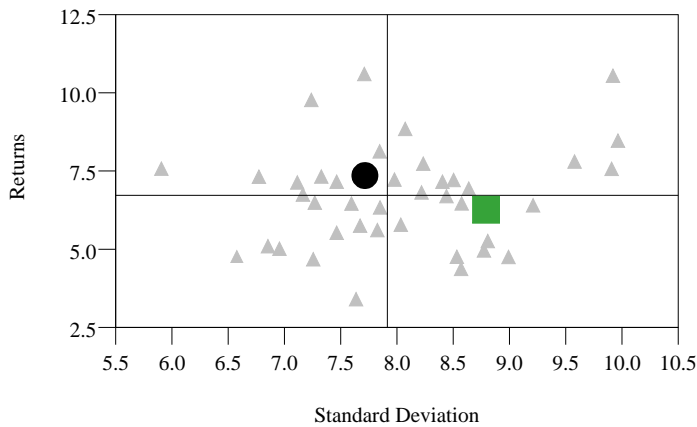
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



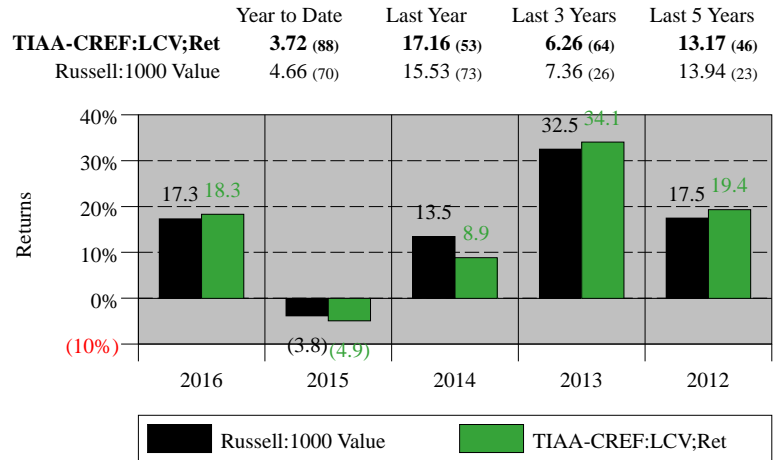
# TIAA-CREF:LCV;Ret

## Russell:1000 Value - (CAI Large Cap Value MFs)

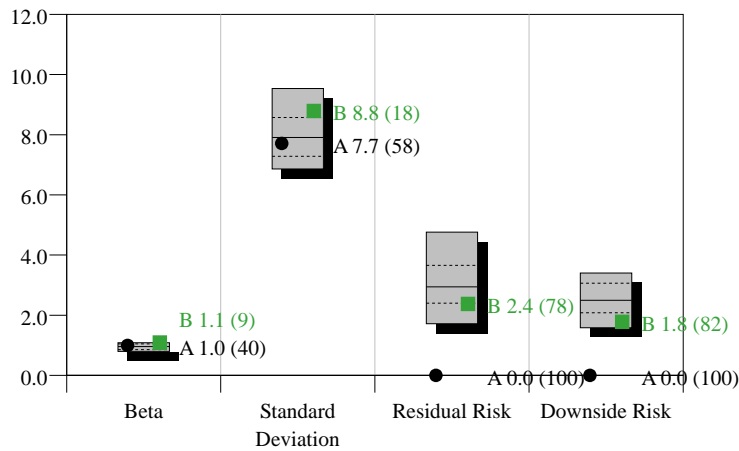
Scatter Chart  
for 3 Years Ended June 30, 2017



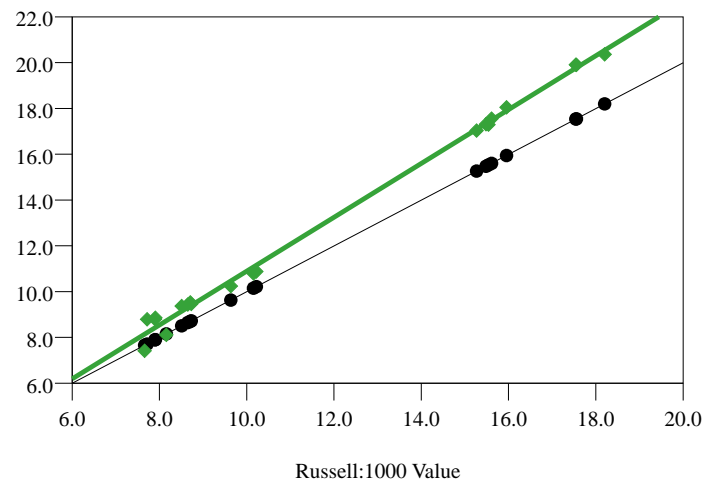
Returns for Various Periods



Risk Statistics for 3 Years



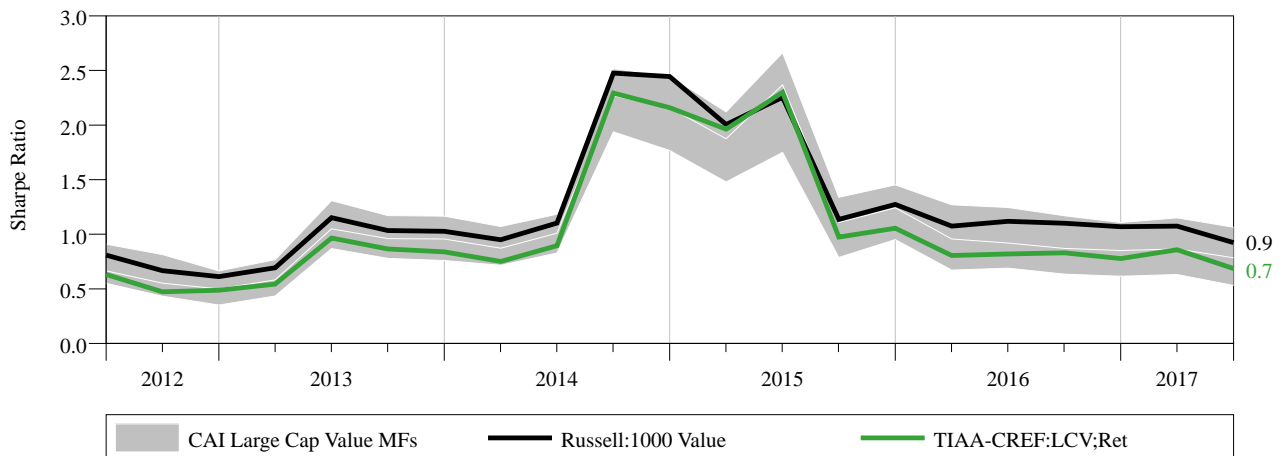
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:LCV;Ret	1.64 (82)	0.69 (78)	5.49 (81)	0.69 (80)	0.61 (67)
Russell:1000 Value	0.00 (39)	0.92 (25)	7.13 (38)	0.00 (39)	--

Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.

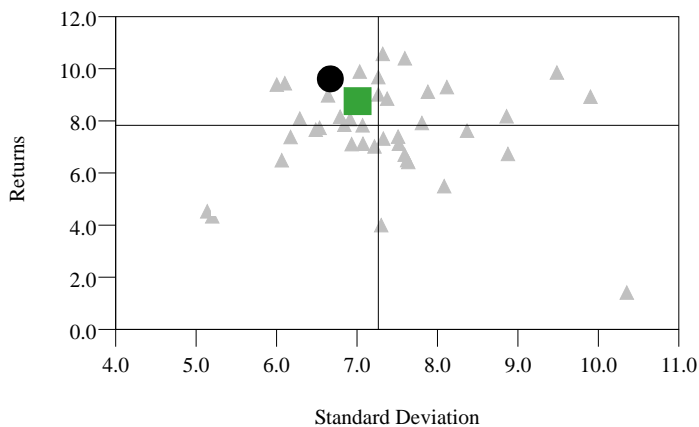




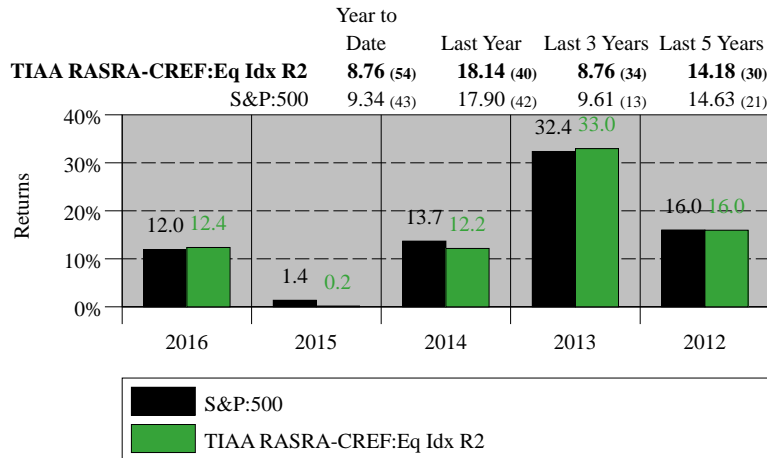
# TIAA RASRA-CREF:Eq Idx R2

S&P:500 - (CAI Large Cap Core MFs)

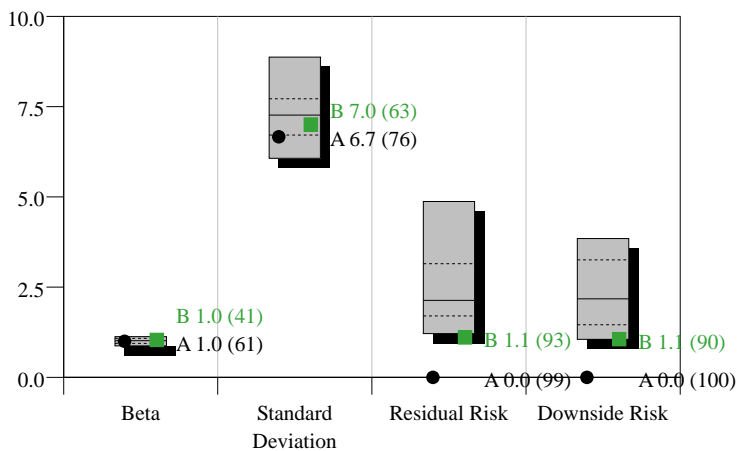
Scatter Chart  
for 3 Years Ended June 30, 2017



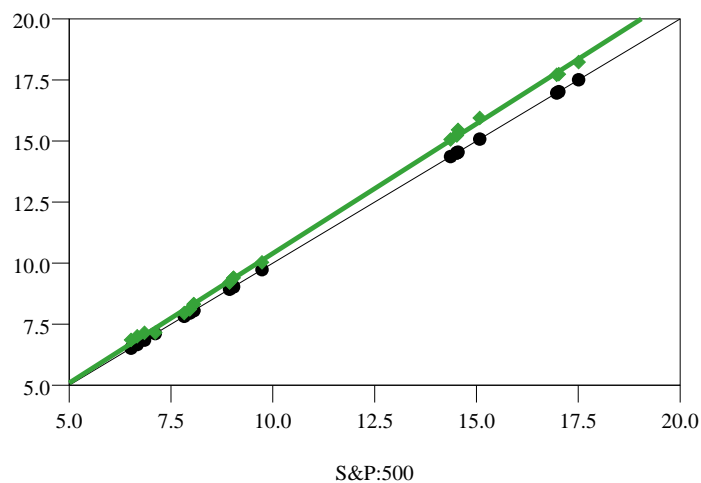
Returns for Various Periods



Risk Statistics for 3 Years



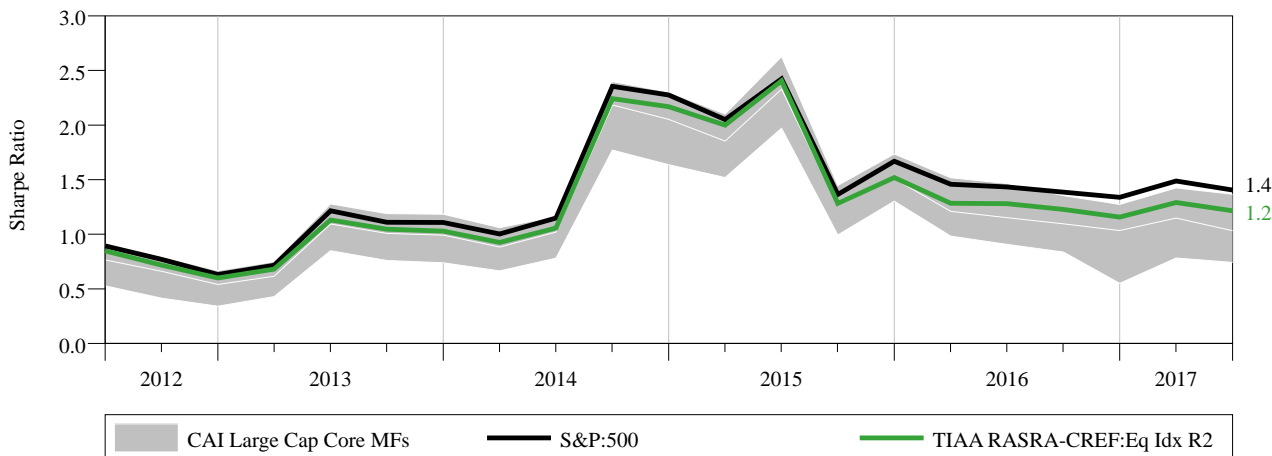
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA RASRA-CREF:Eq Idx R2	(1.12) (38)	1.22 (23)	8.22 (30)	(1.01) (72)	(0.80) (43)
S&P:500	0.00 (11)	1.41 (7)	9.38 (9)	0.00 (10)	--

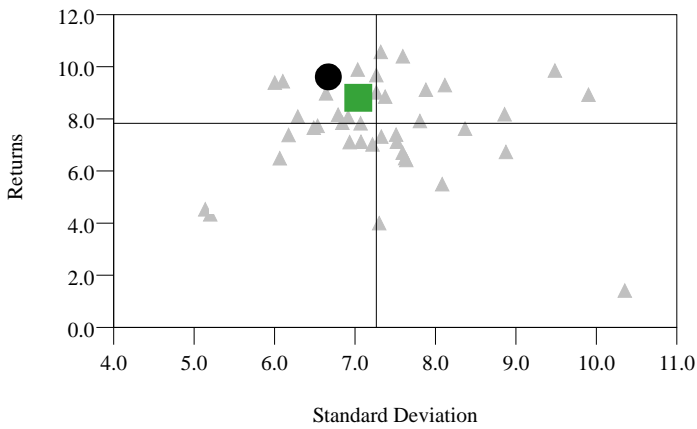
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



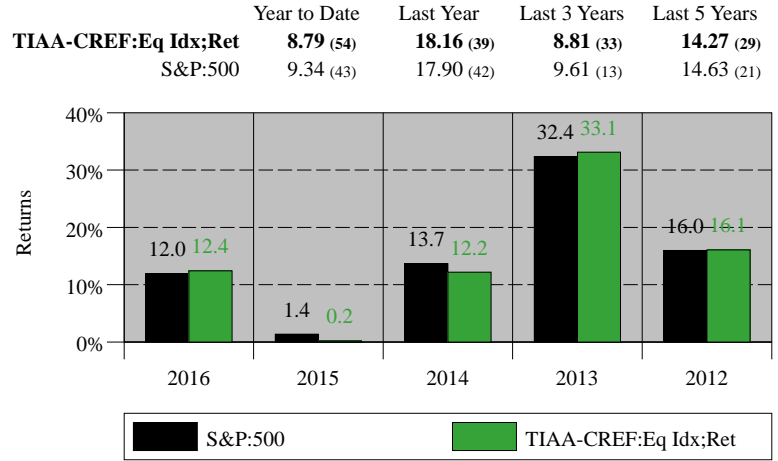
# TIAA-CREF:Eq Idx;Ret

S&P:500 - (CAI Large Cap Core MFs)

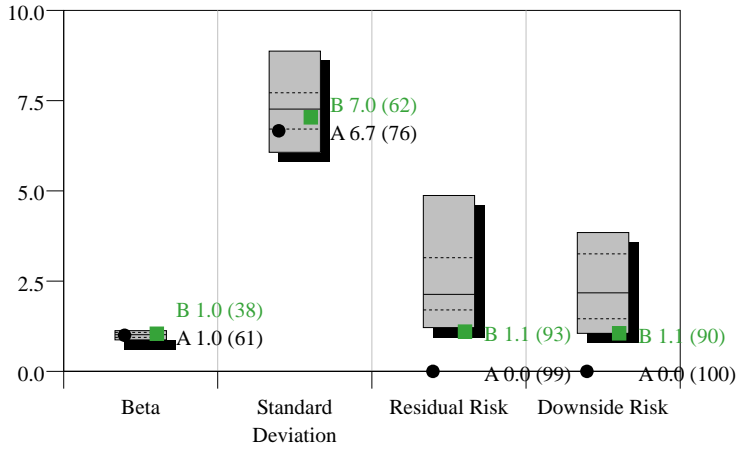
Scatter Chart  
for 3 Years Ended June 30, 2017



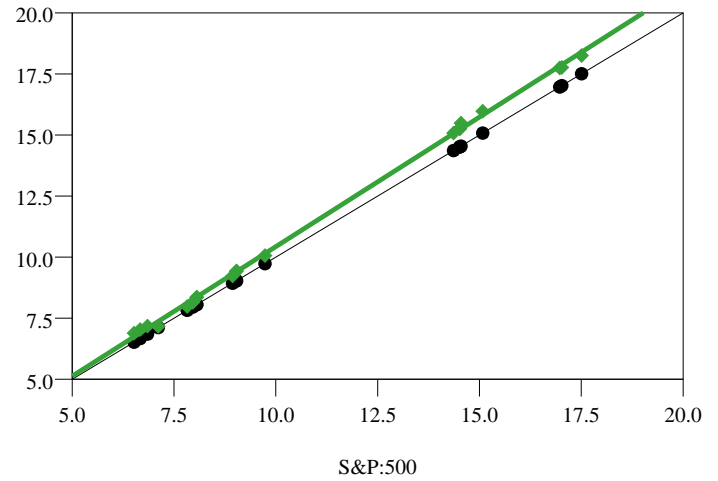
Returns for Various Periods



Risk Statistics for 3 Years



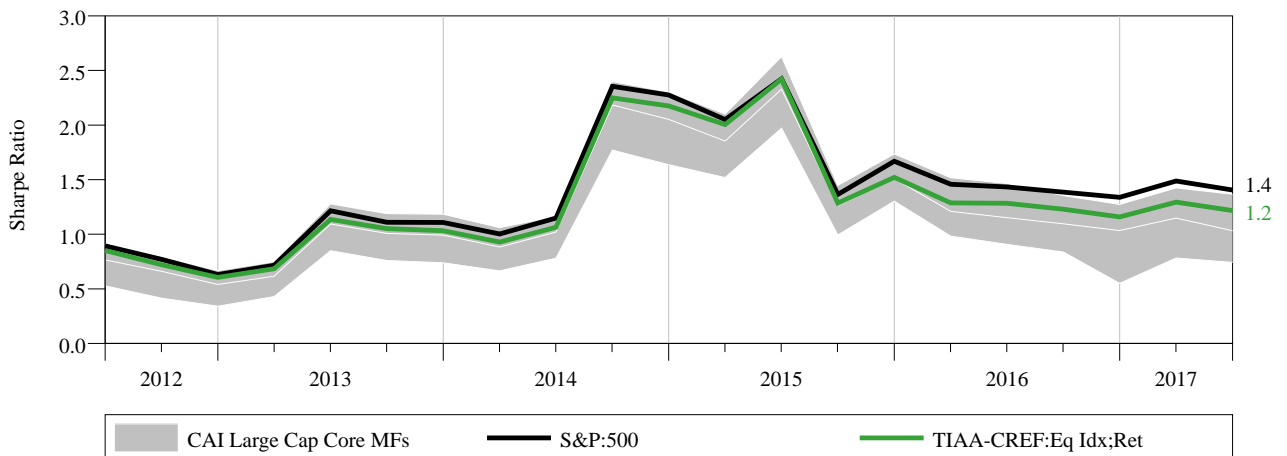
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Eq Idx;Ret	(1.11) (38)	1.22 (23)	8.23 (29)	(1.01) (72)	(0.76) (39)
S&P:500	0.00 (11)	1.41 (7)	9.38 (9)	0.00 (10)	--

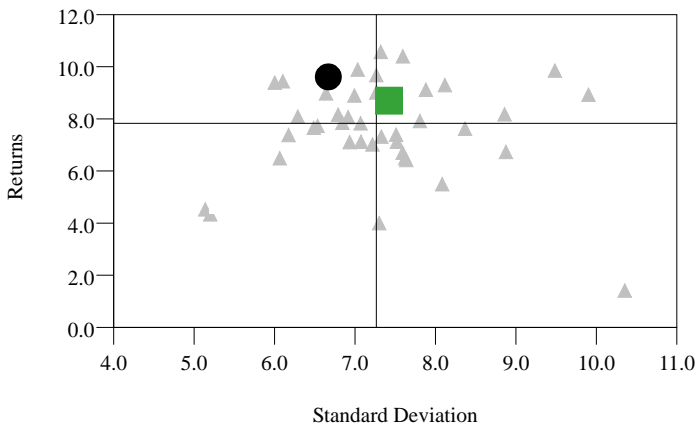
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



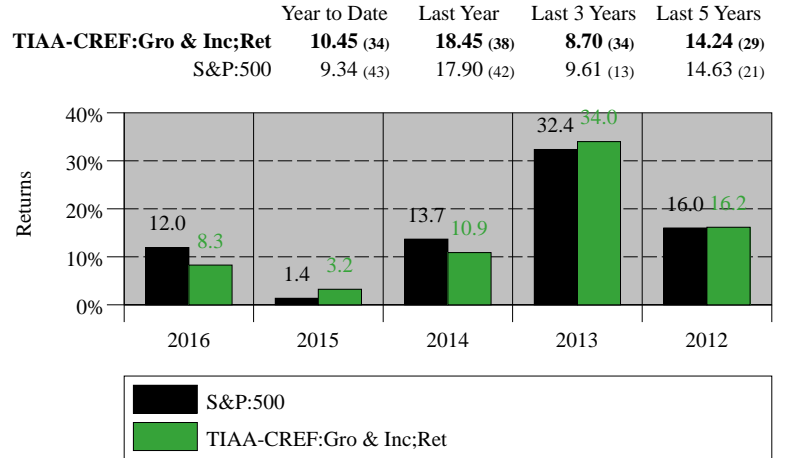
# TIAA-CREF:Gro & Inc;Ret

## S&P:500 - (CAI Large Cap Core MFs)

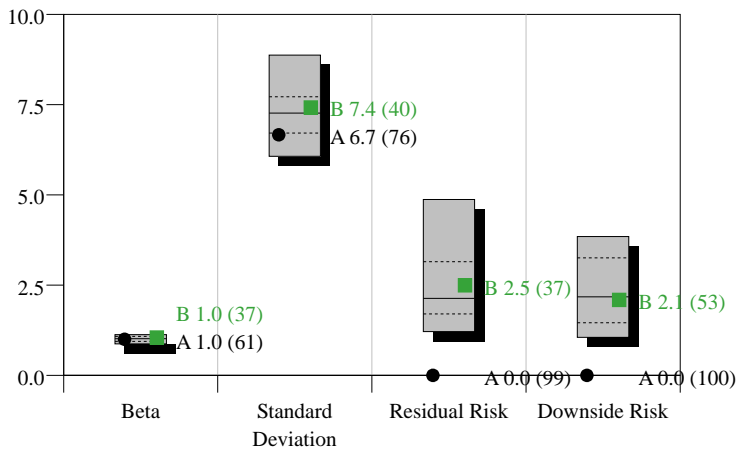
Scatter Chart  
for 3 Years Ended June 30, 2017



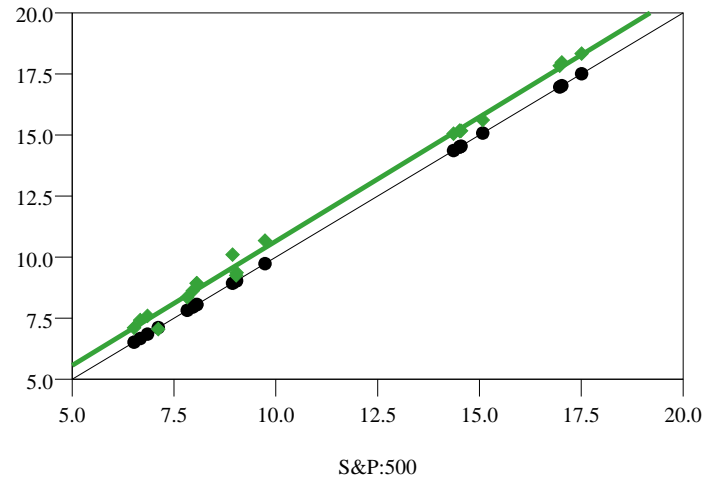
Returns for Various Periods



Risk Statistics for 3 Years



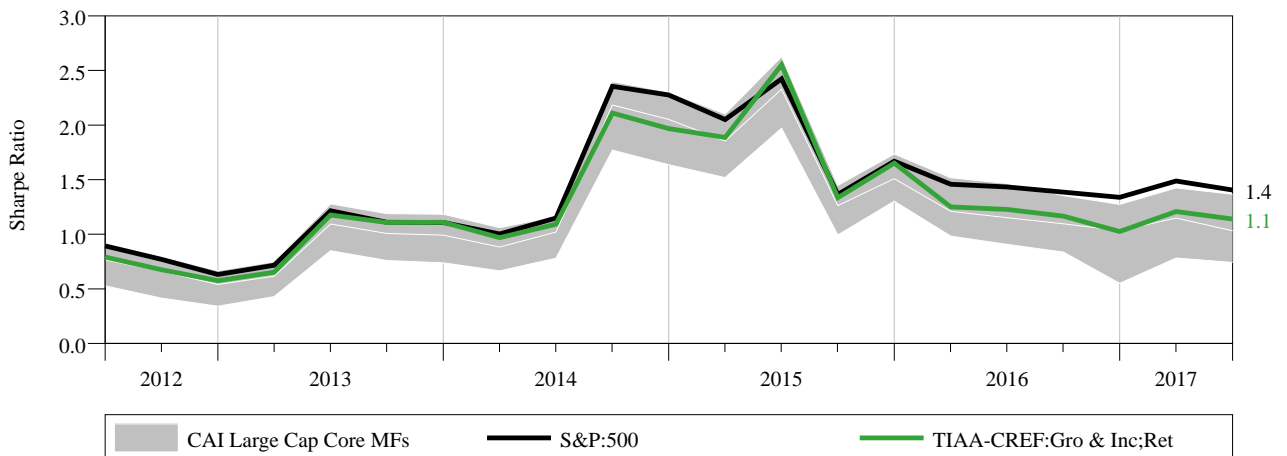
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Gro & Inc;Ret	1.24 (39)	1.14 (36)	8.08 (35)	0.50 (36)	0.43 (29)
S&P:500	0.00 (11)	1.41 (7)	9.38 (9)	0.00 (10)	--

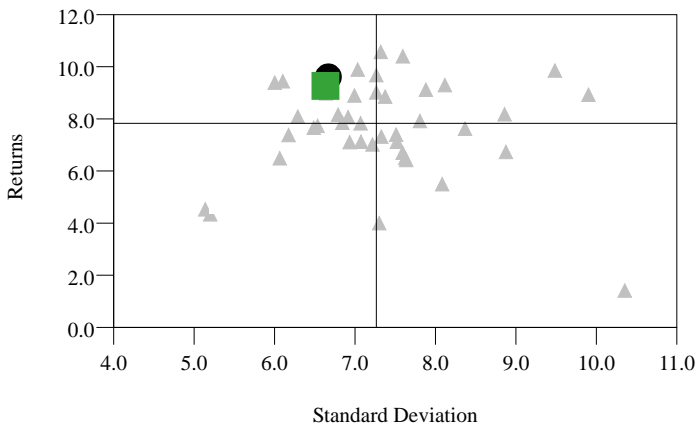
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:S&P500 Idx;Ret

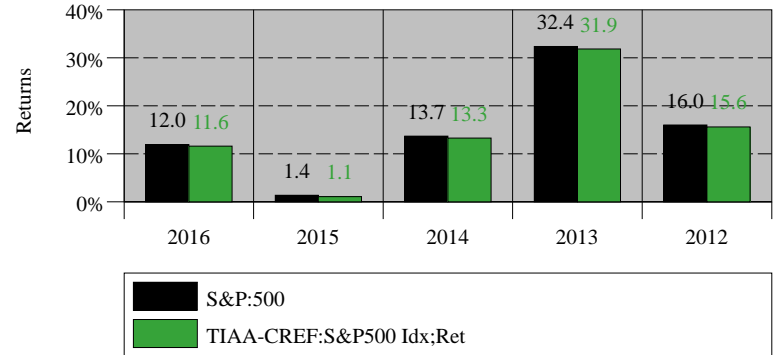
## S&P:500 - (CAI Large Cap Core MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

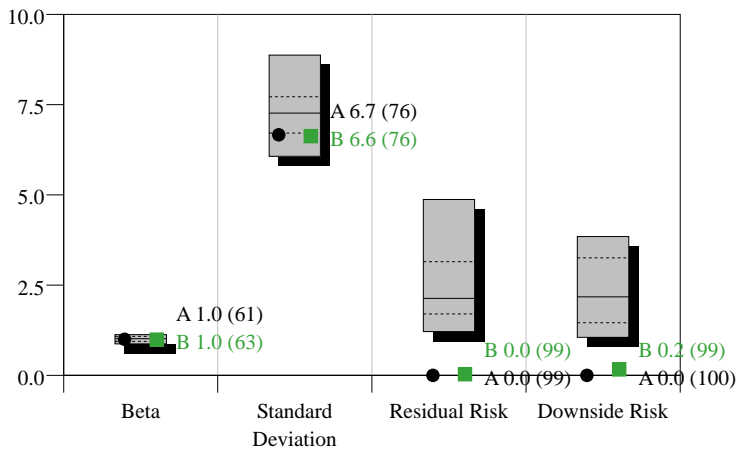


Returns for Various Periods

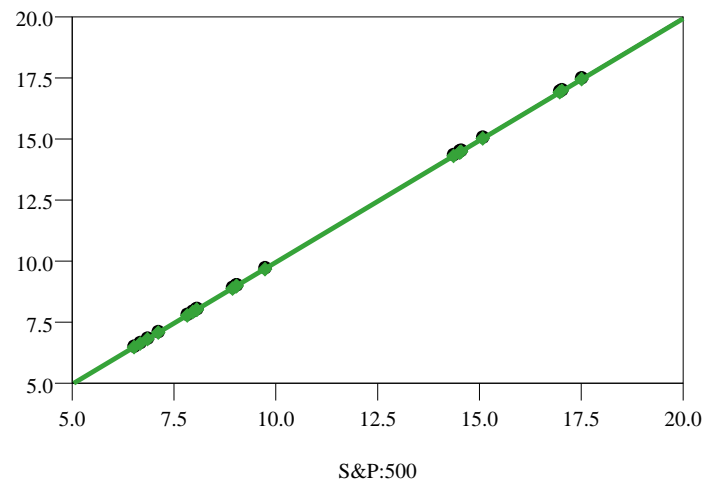
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:S&P500 Idx;Ret	9.18 (44)	17.54 (46)	9.27 (19)	14.27 (29)
S&P:500	9.34 (43)	17.90 (42)	9.61 (13)	14.63 (21)



Risk Statistics for 3 Years



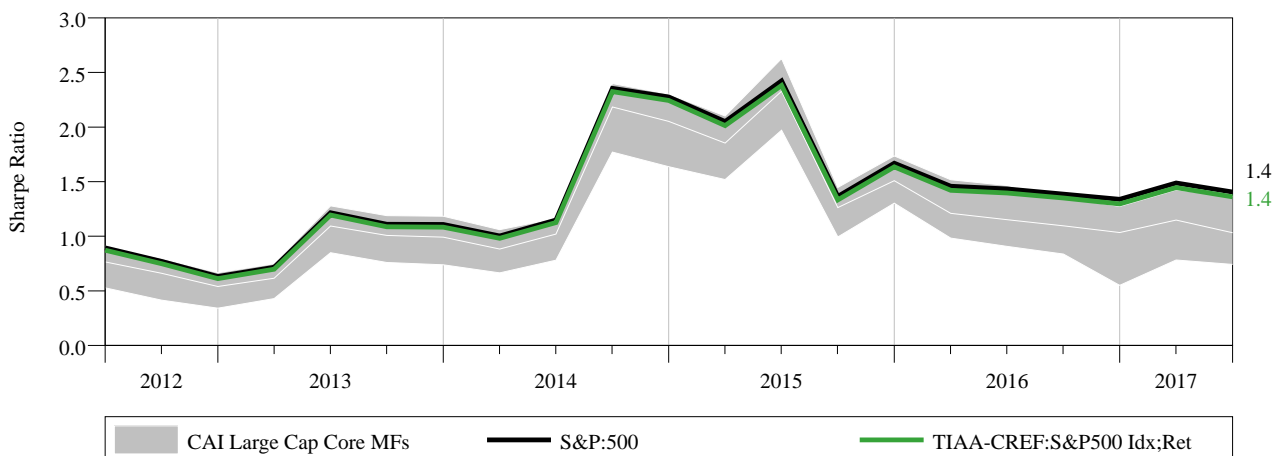
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:S&P500 Idx;Ret	(0.27) (15)	1.36 (10)	9.09 (15)	(8.25) (100)	(2.03) (100)
S&P:500	0.00 (11)	1.41 (7)	9.38 (9)	0.00 (10)	--

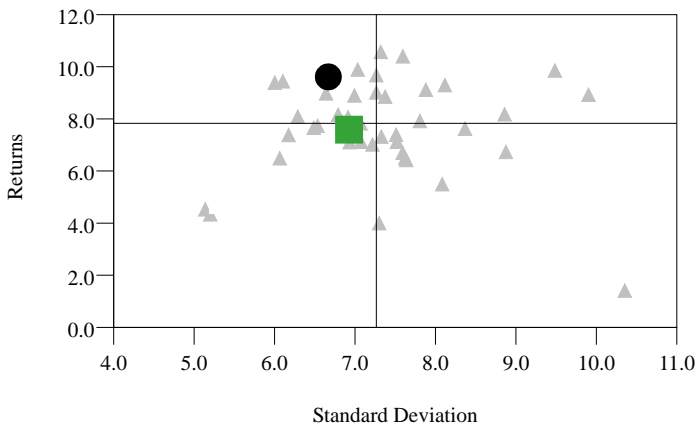
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Soc Ch Eq;Ret

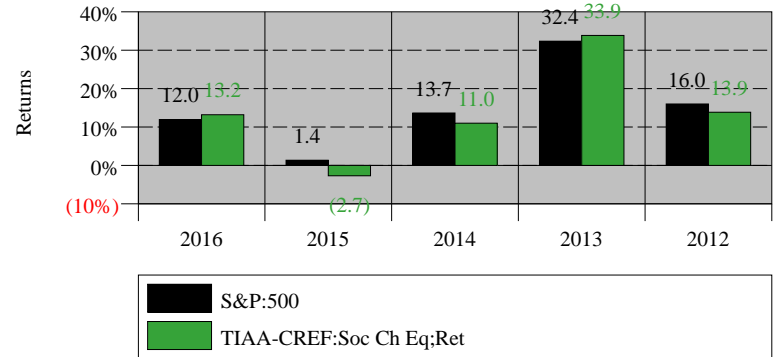
## S&P:500 - (CAI Large Cap Core MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

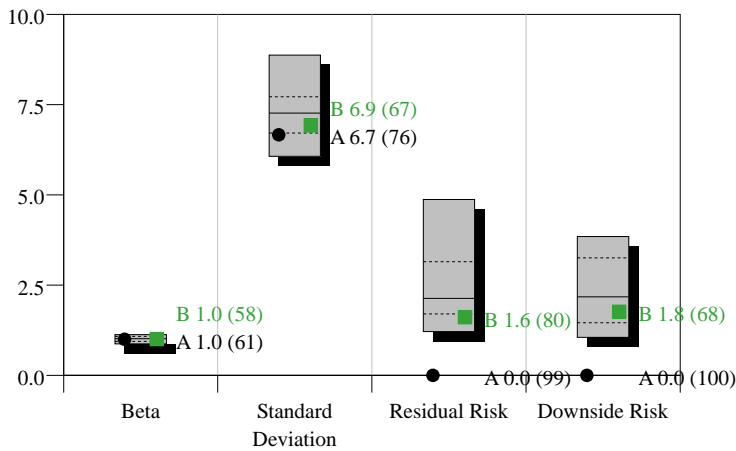


Returns for Various Periods

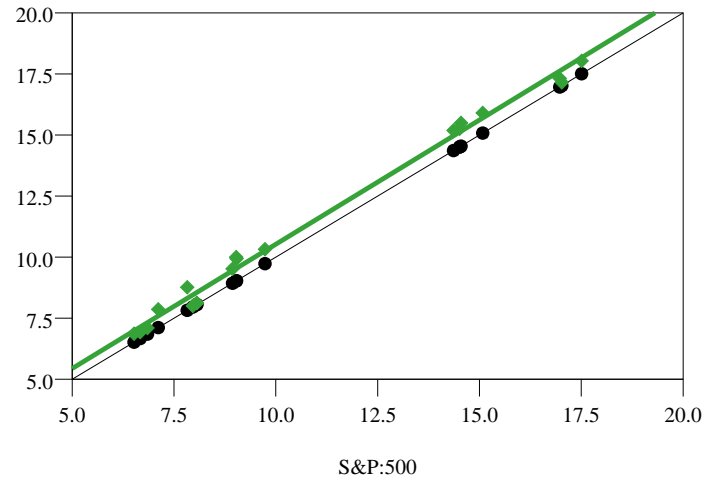
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Soc Ch Eq;Ret	8.96 (49)	18.56 (38)	7.59 (58)	13.84 (44)
S&P:500	9.34 (43)	17.90 (42)	9.61 (13)	14.63 (21)



Risk Statistics for 3 Years



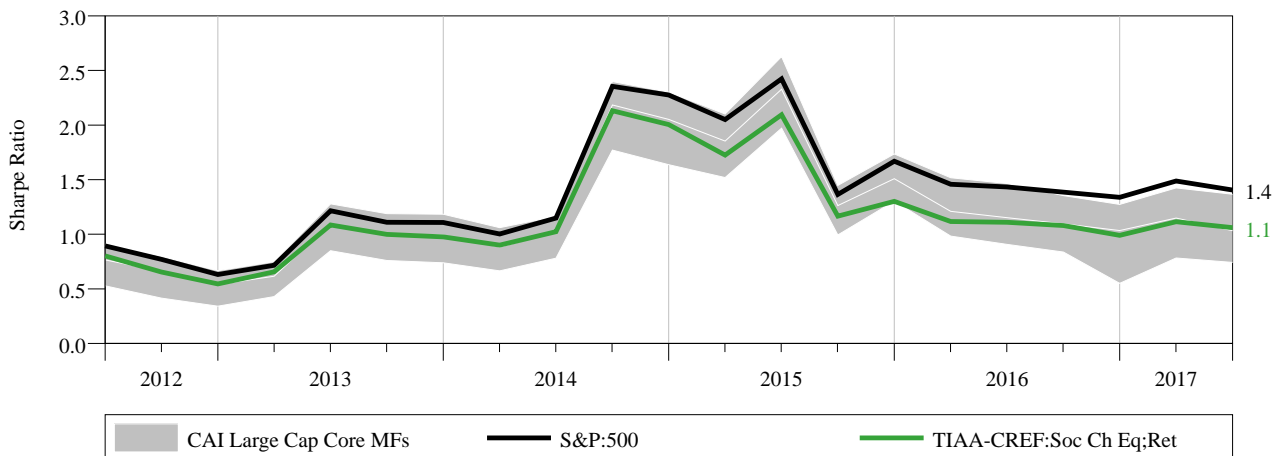
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Soc Ch Eq;Ret	(1.94) (54)	1.06 (48)	7.30 (55)	(1.20) (80)	(1.15) (85)
S&P:500	0.00 (11)	1.41 (7)	9.38 (9)	0.00 (10)	--

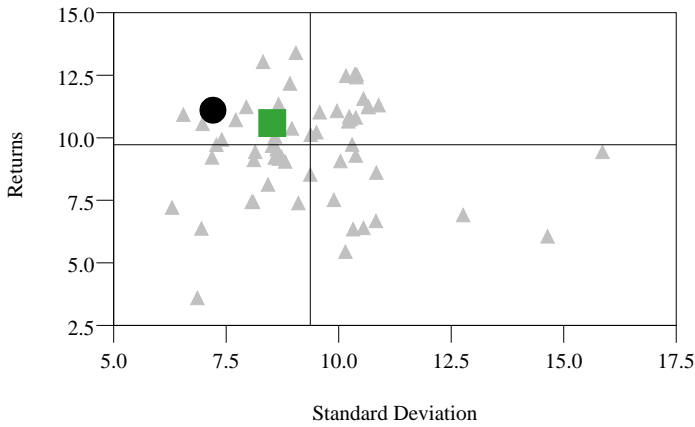
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



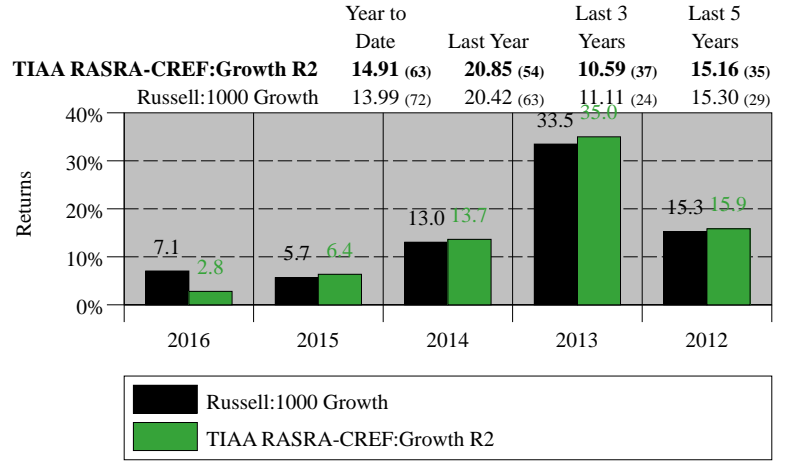
# TIAA RASRA-CREF:Growth R2

Russell:1000 Growth - (CAI Large Cap Growth MFs)

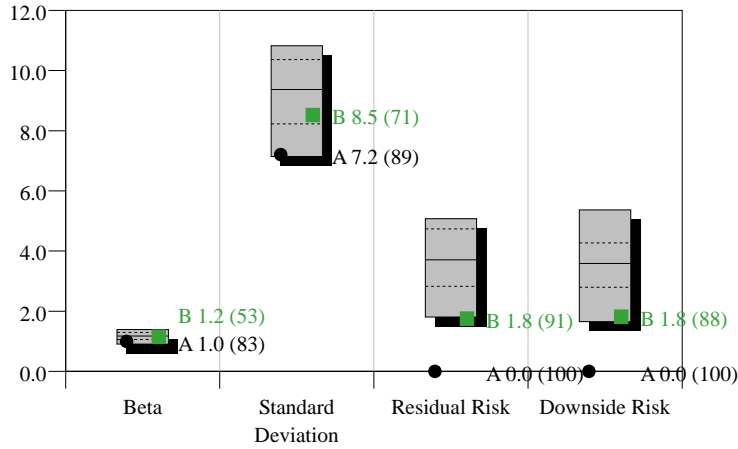
Scatter Chart  
for 3 Years Ended June 30, 2017



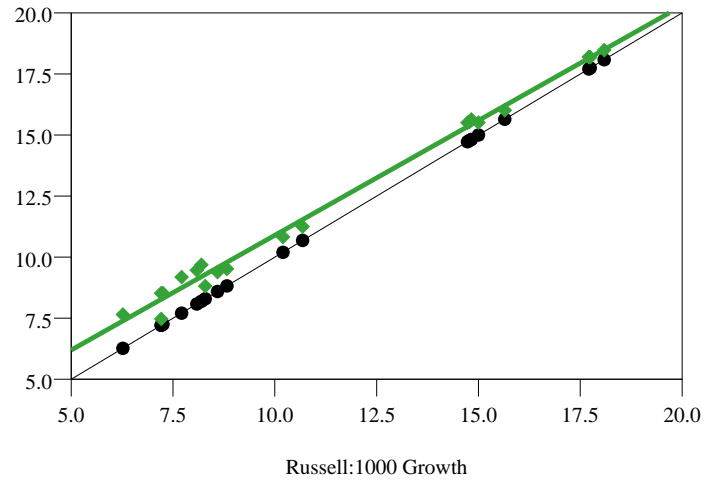
Returns for Various Periods



Risk Statistics for 3 Years



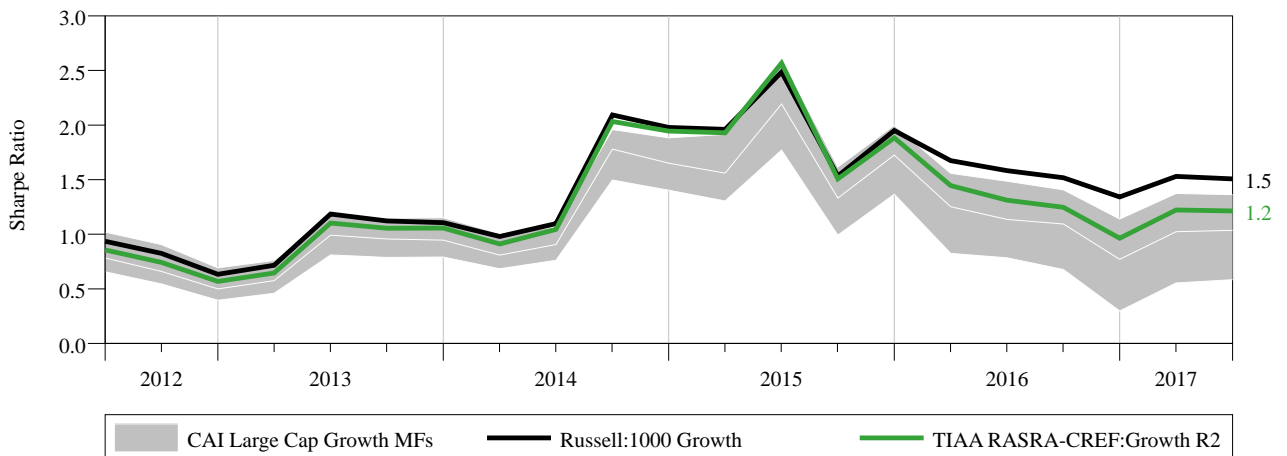
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA RASRA-CREF:Growth R2</b>	<b>(2.06)</b> (31)	<b>1.21</b> (20)	<b>8.94</b> (29)	<b>(1.17)</b> (77)	<b>(0.28)</b> (41)
Russell:1000 Growth	0.00 (9)	1.51 (4)	10.87 (9)	0.00 (9)	--

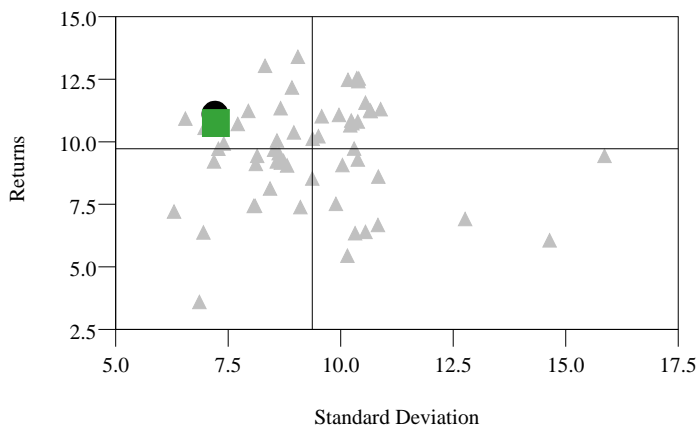
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:LCG Idx;Ret

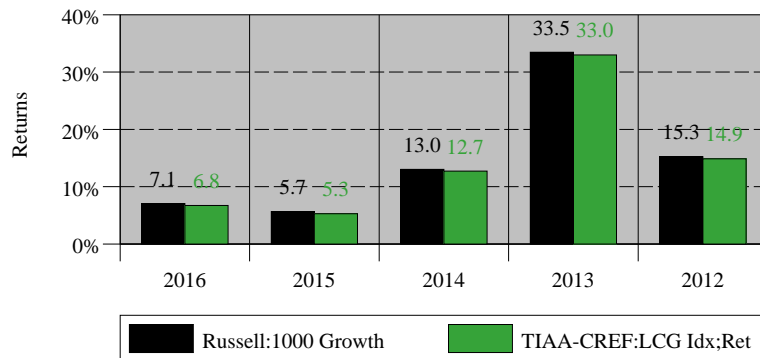
## Russell:1000 Growth - (CAI Large Cap Growth MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

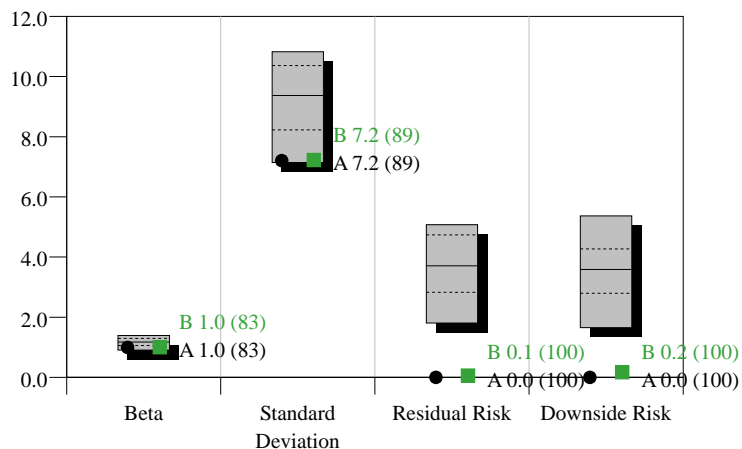


Returns for Various Periods

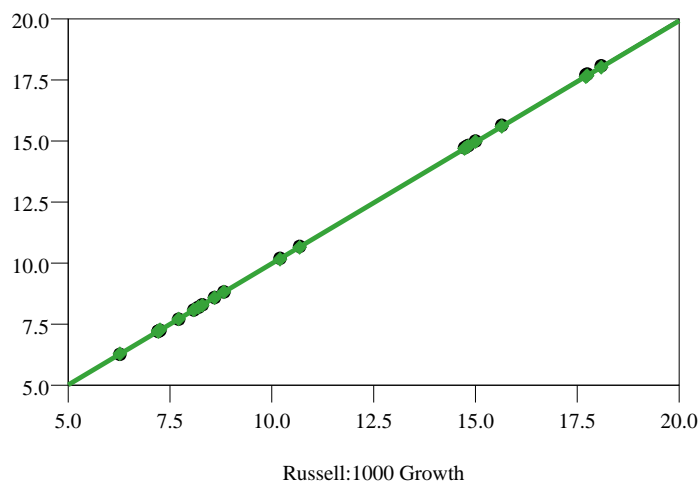
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF:LCG Idx;Ret</b>	<b>13.80</b> (73)	<b>20.03</b> (63)	<b>10.75</b> (33)	<b>14.93</b> (37)
Russell:1000 Growth	13.99 (72)	20.42 (63)	11.11 (24)	15.30 (29)



Risk Statistics for 3 Years



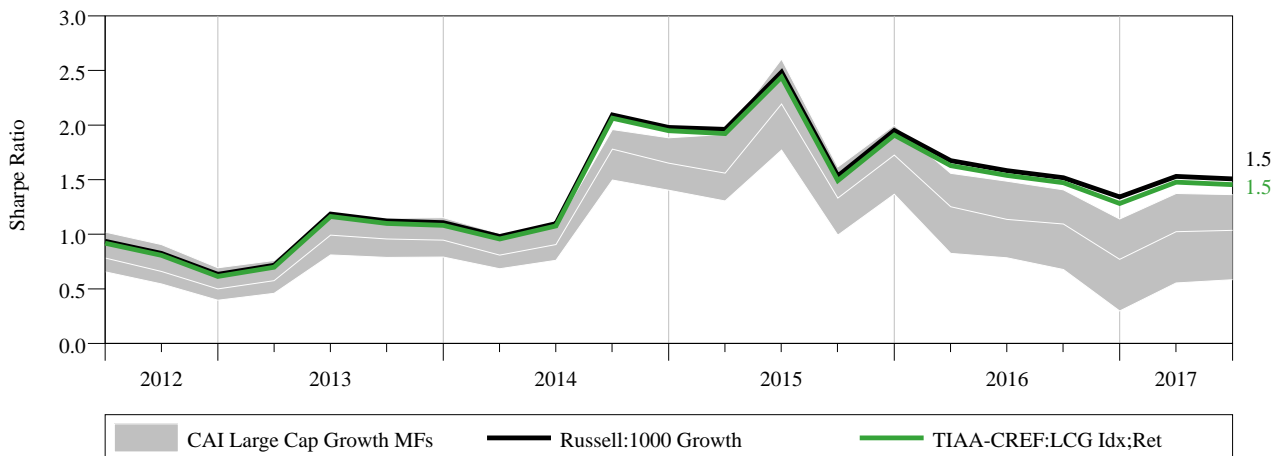
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:LCG Idx;Ret</b>	<b>(0.36)</b> (10)	<b>1.45</b> (7)	<b>10.49</b> (10)	<b>(5.72)</b> (100)	<b>(2.02)</b> (100)
Russell:1000 Growth	0.00 (9)	1.51 (4)	10.87 (9)	0.00 (9)	--

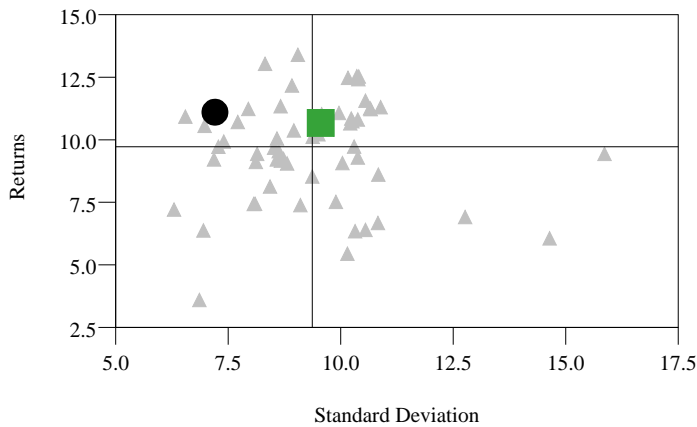
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



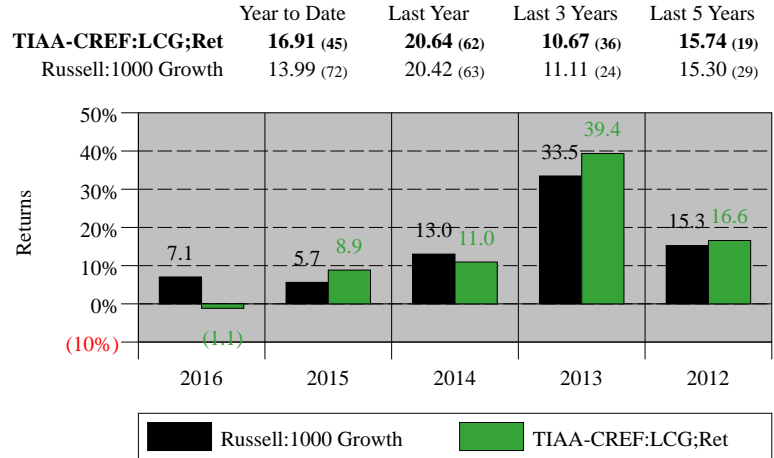
# TIAA-CREF:LCG;Ret

## Russell:1000 Growth - (CAI Large Cap Growth MFs)

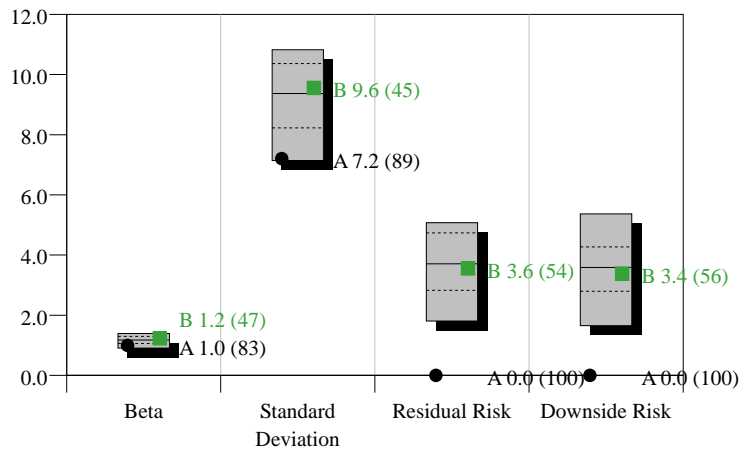
Scatter Chart  
for 3 Years Ended June 30, 2017



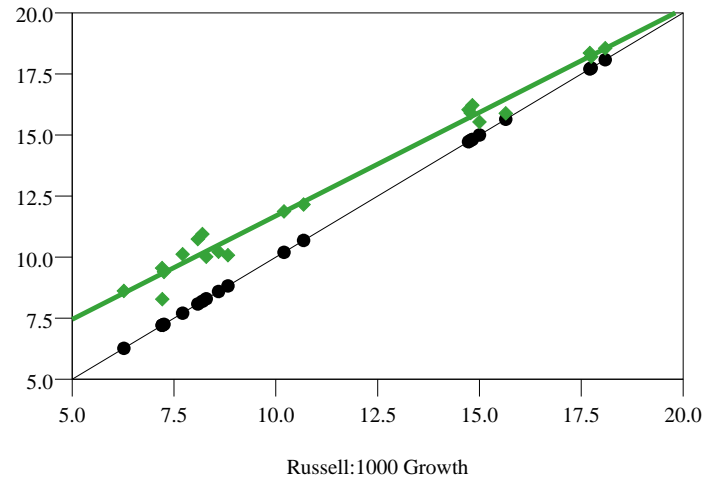
Returns for Various Periods



Risk Statistics for 3 Years



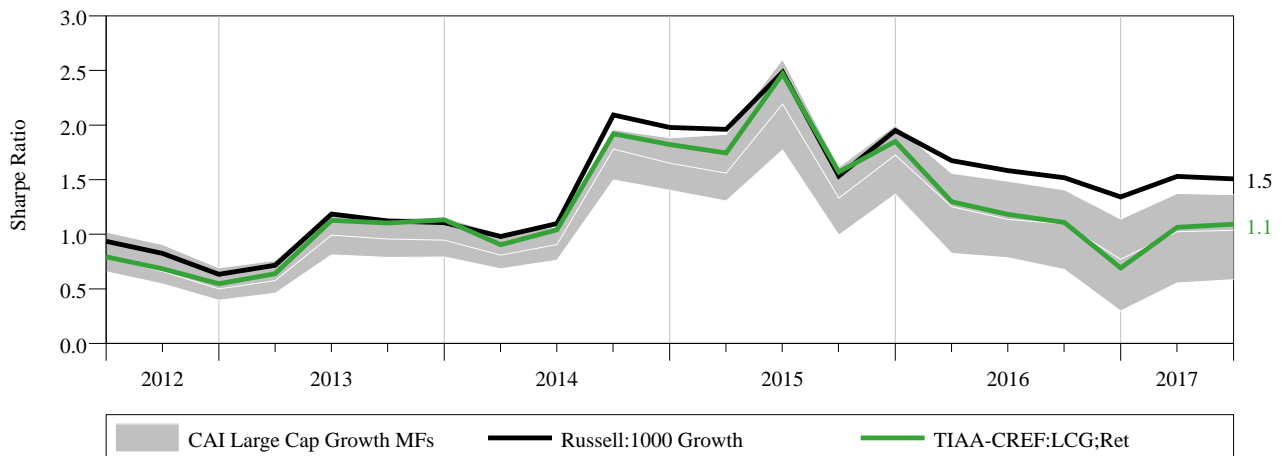
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:LCG;Ret</b>	<b>(2.67)</b> (42)	<b>1.09</b> (39)	<b>8.47</b> (38)	<b>(0.75)</b> (46)	<b>(0.13)</b> (35)
Russell:1000 Growth	0.00 (9)	1.51 (4)	10.87 (9)	0.00 (9)	--

Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.

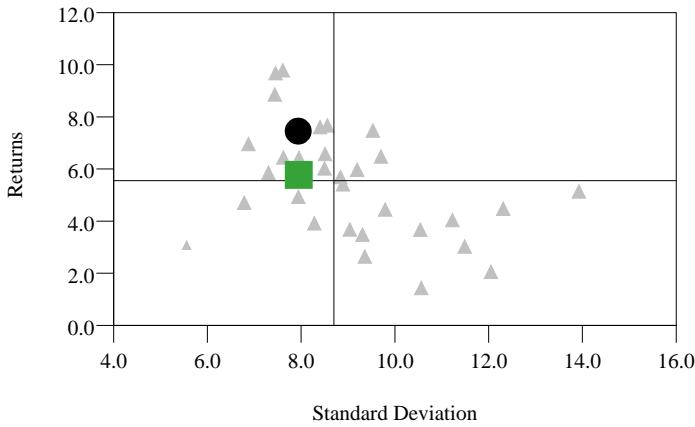




# TIAA-CREF:MCV;Ret

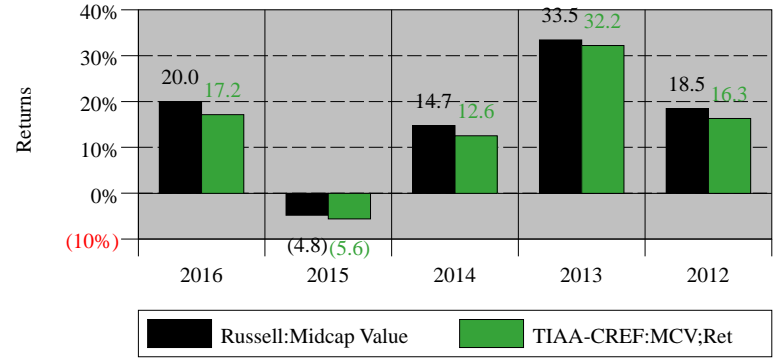
## Russell:Midcap Value - (CAI Mid Cap Value MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

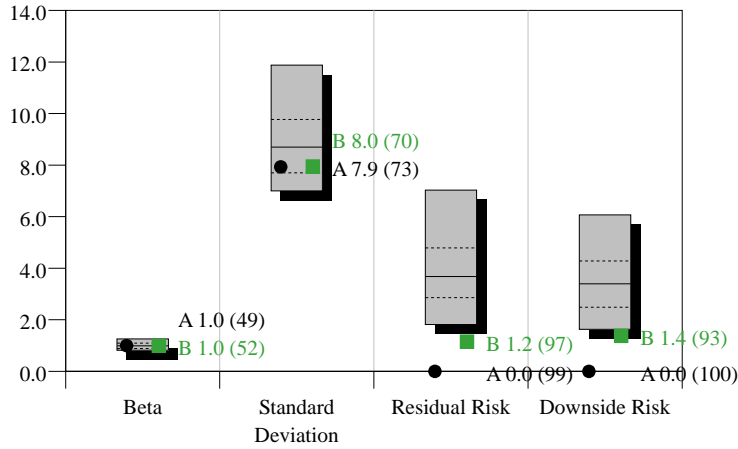


Returns for Various Periods

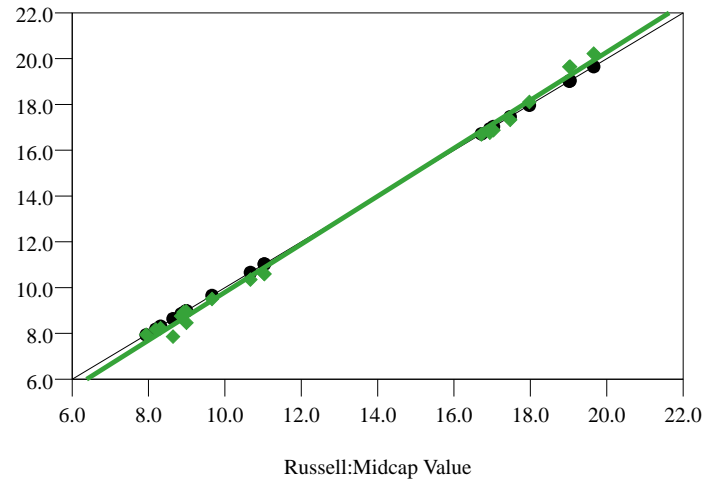
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:MCV;Ret	3.98 (71)	14.84 (73)	5.78 (47)	13.05 (61)
Russell:Midcap Value	5.18 (49)	15.93 (56)	7.46 (18)	15.14 (18)



Risk Statistics for 3 Years



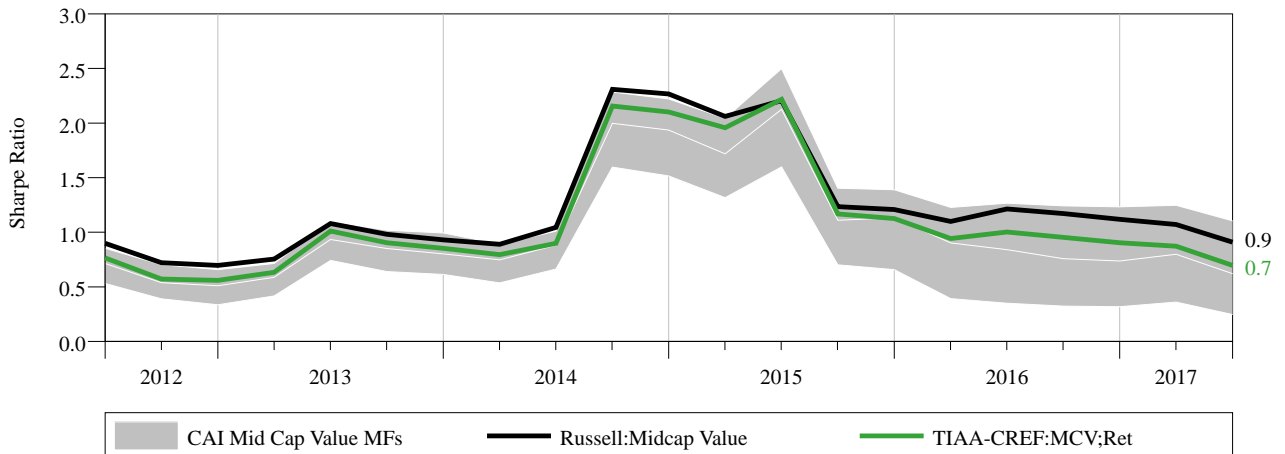
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:MCV;Ret	1.53 (53)	0.70 (38)	5.59 (47)	1.32 (97)	1.22 (97)
Russell:Midcap Value	0.00 (22)	0.91 (14)	7.22 (21)	0.00 (22)	--

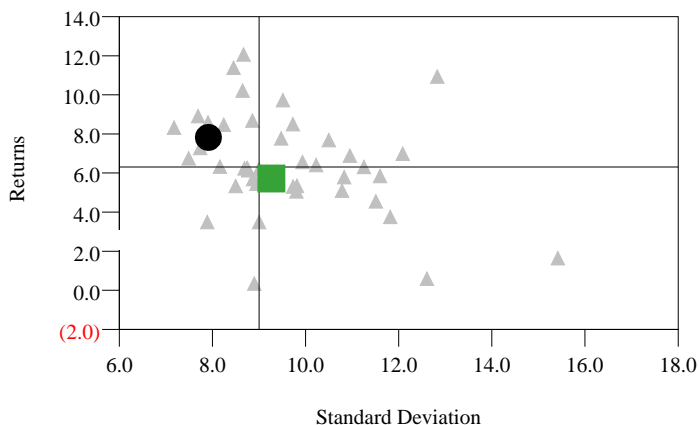
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:MCG;Ret

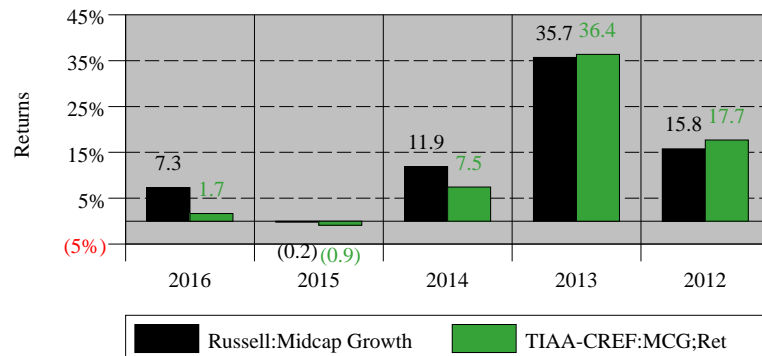
## Russell:Midcap Growth - (CAI Mid Cap Growth MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

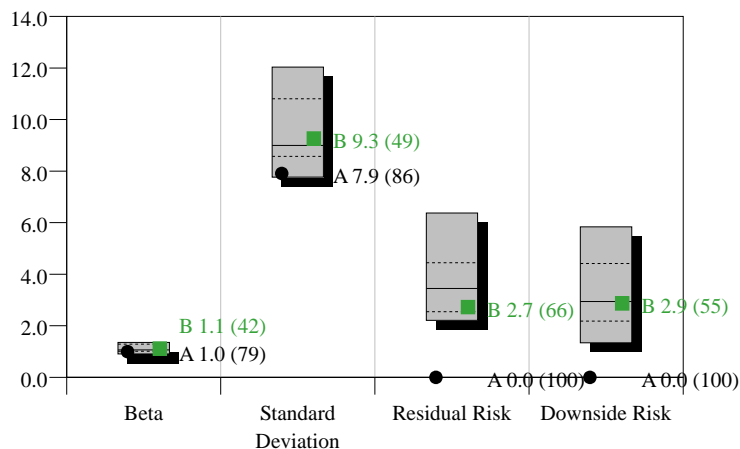


Returns for Various Periods

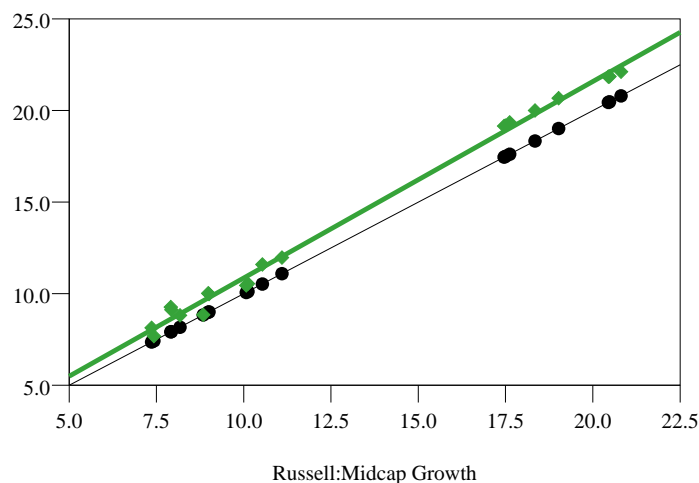
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:MCG;Ret	12.83 (57)	16.40 (57)	5.72 (66)	11.96 (57)
Russell:Midcap Growth	11.40 (71)	17.05 (53)	7.83 (28)	14.19 (22)



Risk Statistics for 3 Years



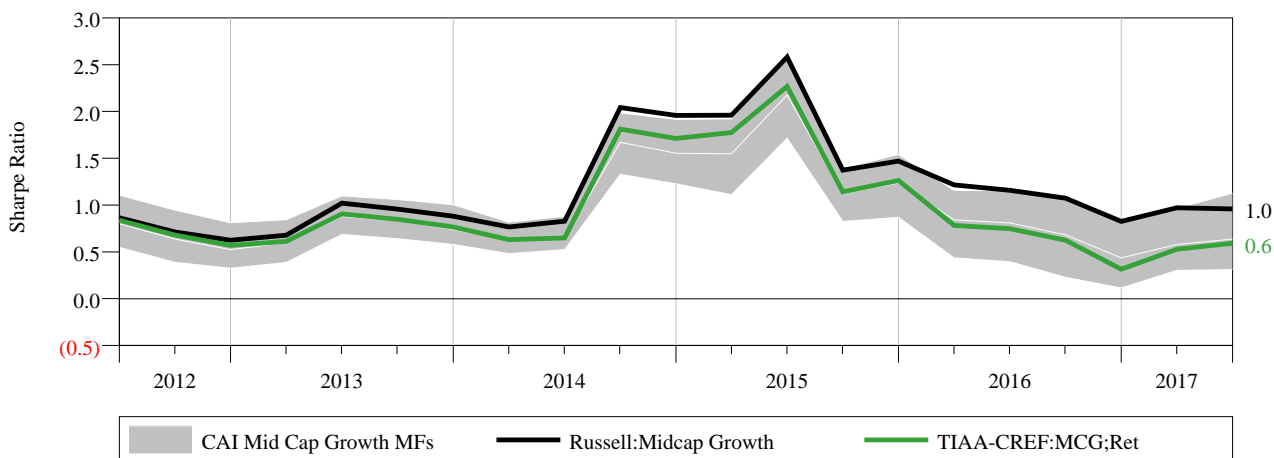
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:MCG;Ret	(2.78) (66)	0.59 (61)	4.90 (65)	(1.02) (76)	(0.73) (72)
Russell:Midcap Growth	0.00 (27)	0.96 (21)	7.60 (27)	0.00 (27)	--

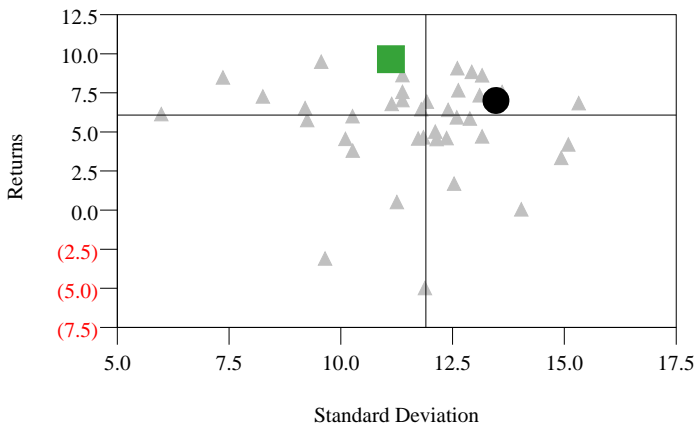
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



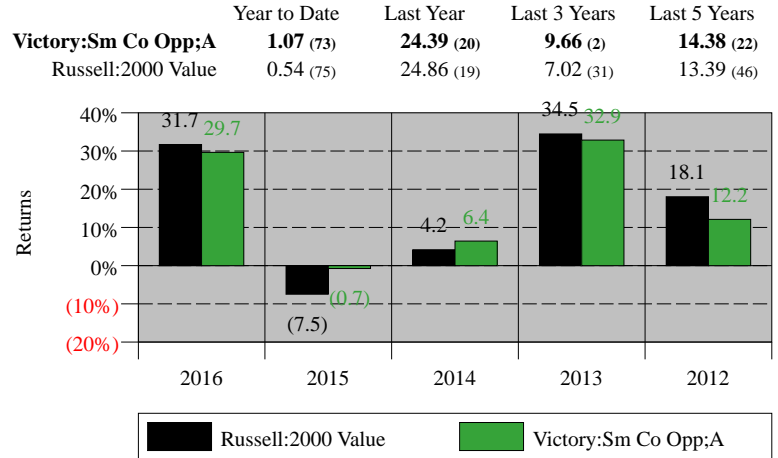
# Victory:Sm Co Opp;A

## Russell:2000 Value - (CAI Small Cap Value MFs)

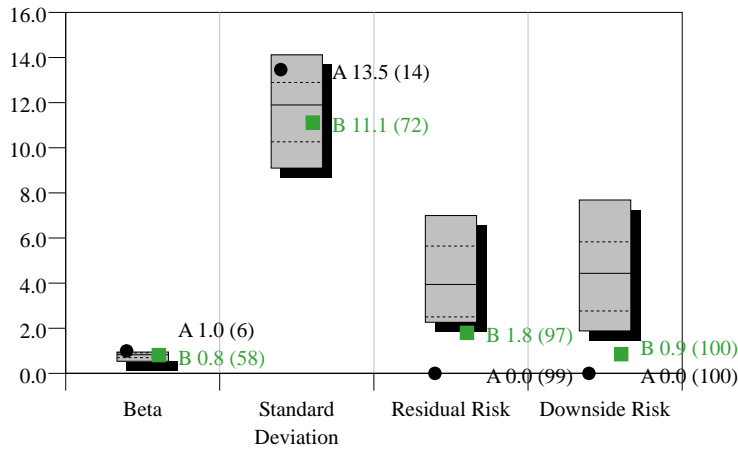
Scatter Chart  
for 3 Years Ended June 30, 2017



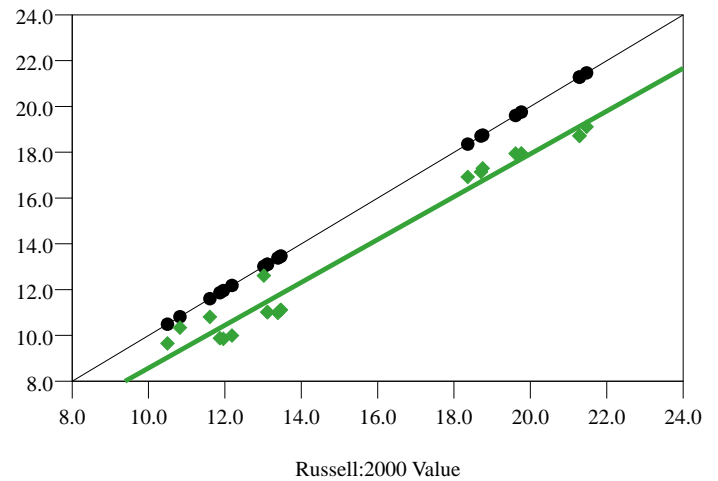
Returns for Various Periods



Risk Statistics for 3 Years



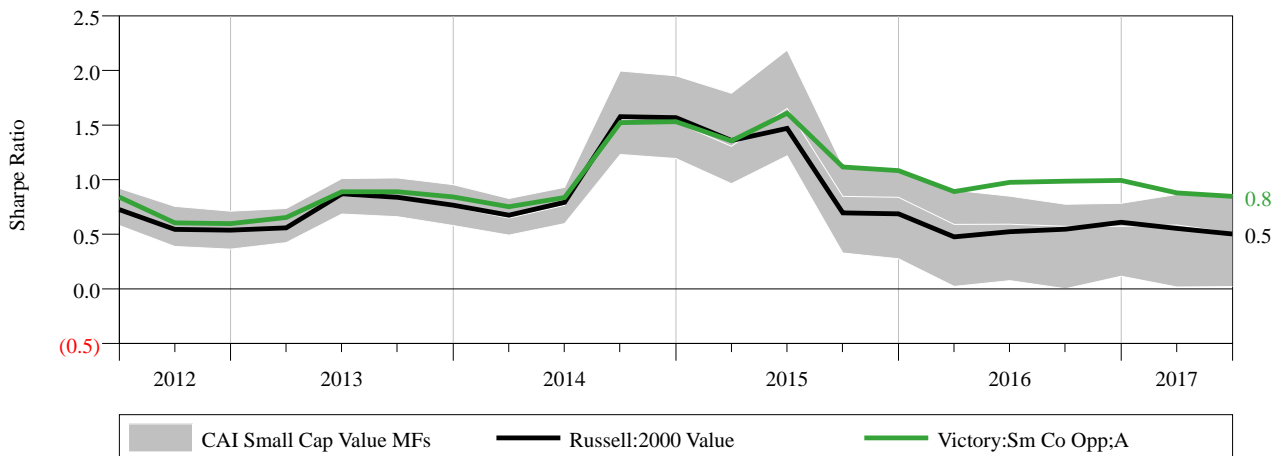
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>Victory:Sm Co Opp;A</b>	<b>3.62</b> (7)	<b>0.85</b> (10)	<b>11.57</b> (12)	<b>2.01</b> (4)	<b>3.07</b> (1)
Russell:2000 Value	0.00 (56)	0.50 (51)	6.79 (55)	0.00 (56)	--

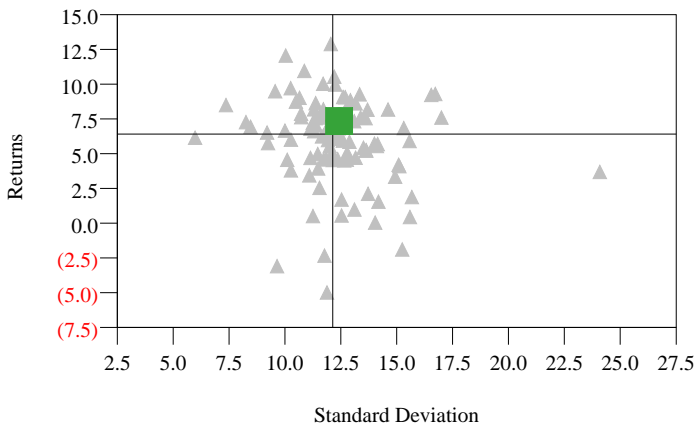
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:SCB Idx;Ret

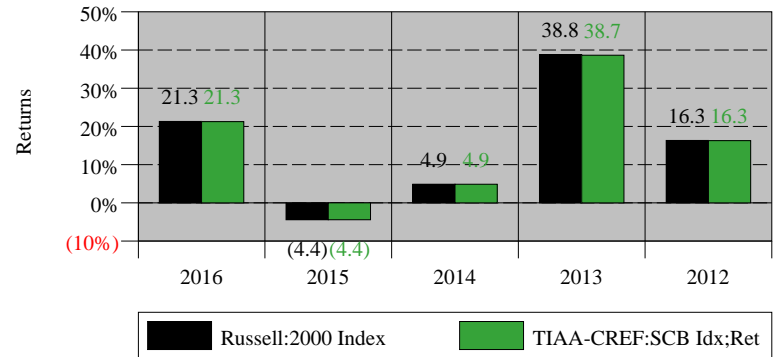
## Russell:2000 Index - (CAI Small Cap MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

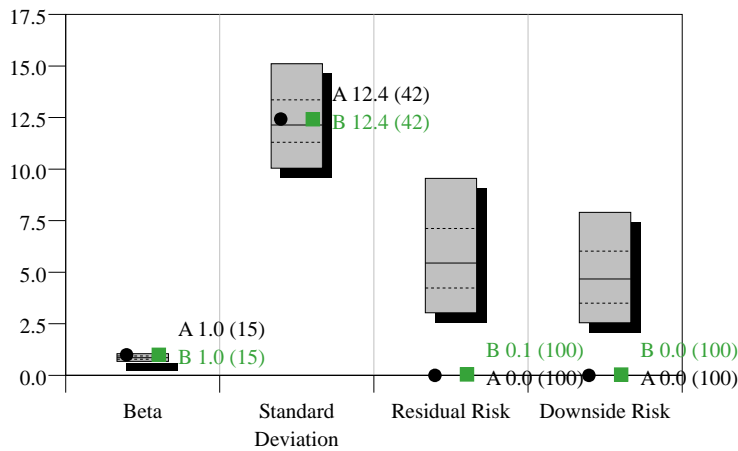


Returns for Various Periods

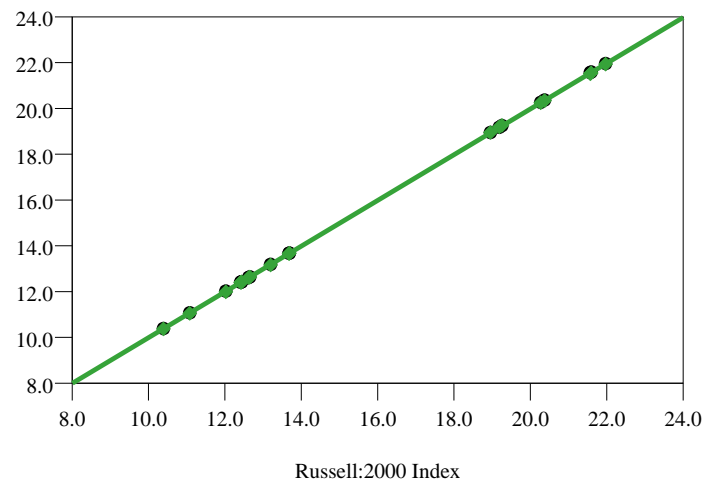
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF:SCB Idx;Ret</b>	<b>4.96</b> (56)	<b>24.50</b> (23)	<b>7.36</b> (33)	<b>13.67</b> (32)
Russell:2000 Index	4.99 (56)	24.60 (23)	7.36 (33)	13.70 (31)



Risk Statistics for 3 Years



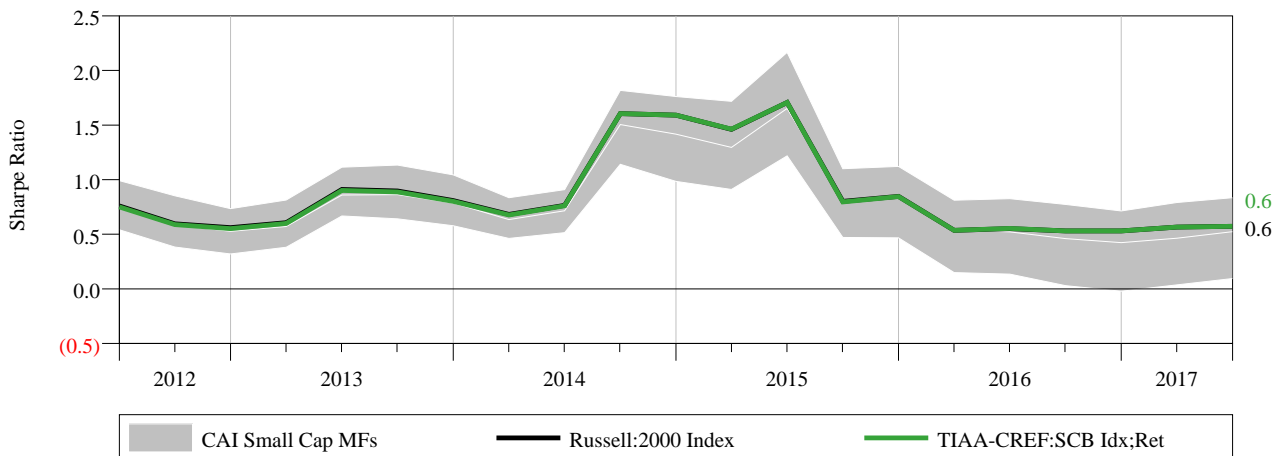
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:SCB Idx;Ret</b>	<b>0.01</b> (51)	<b>0.57</b> (36)	<b>7.13</b> (50)	<b>0.10</b> (43)	<b>(0.02)</b> (35)
Russell:2000 Index	0.00 (51)	0.57 (36)	7.13 (50)	0.00 (51)	--

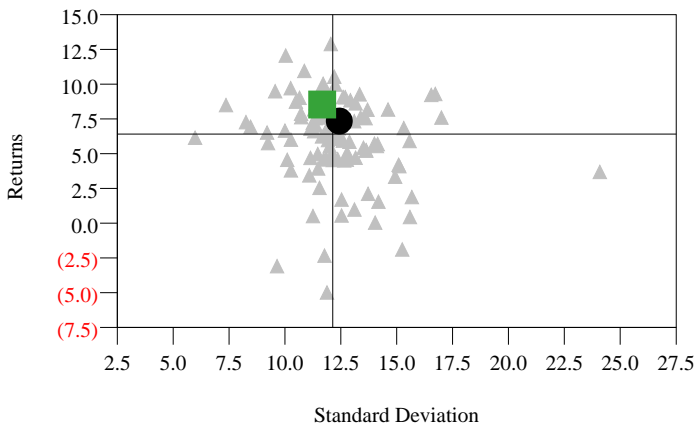
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:SCE;Ret

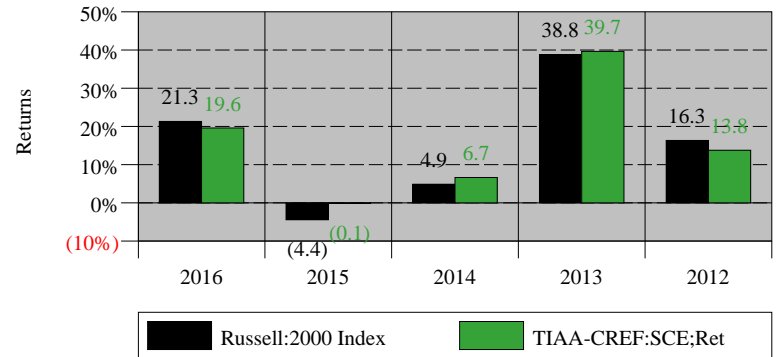
## Russell:2000 Index - (CAI Small Cap MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

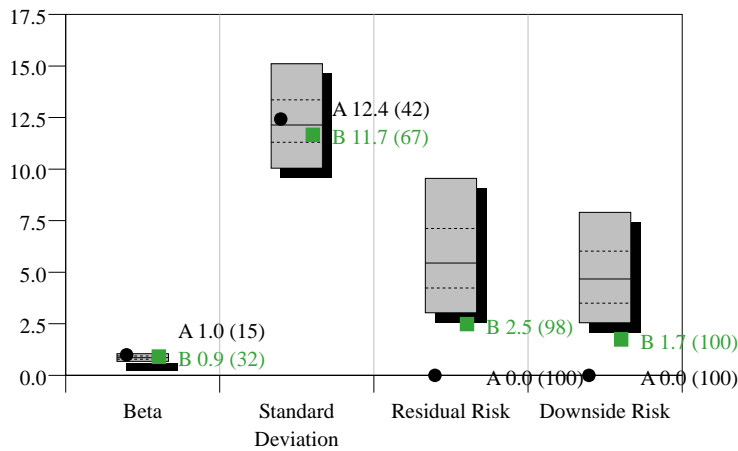


Returns for Various Periods

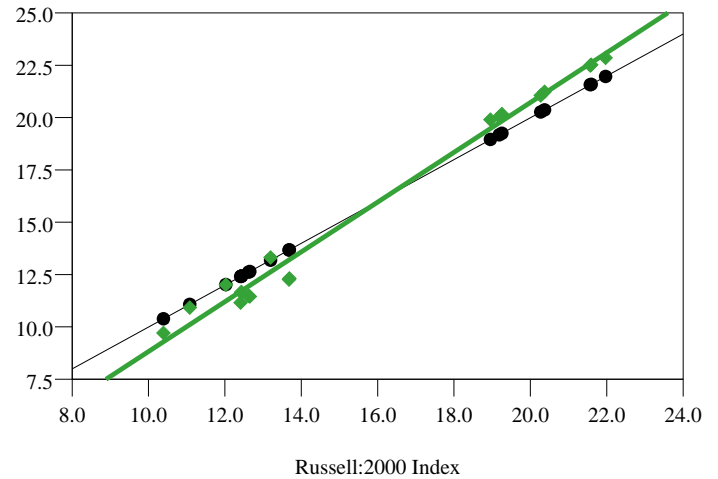
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF:SCE;Ret</b>	<b>4.43</b> (58)	<b>26.55</b> (12)	<b>8.54</b> (18)	<b>14.58</b> (18)
Russell:2000 Index	4.99 (56)	24.60 (23)	7.36 (33)	13.70 (31)



Risk Statistics for 3 Years



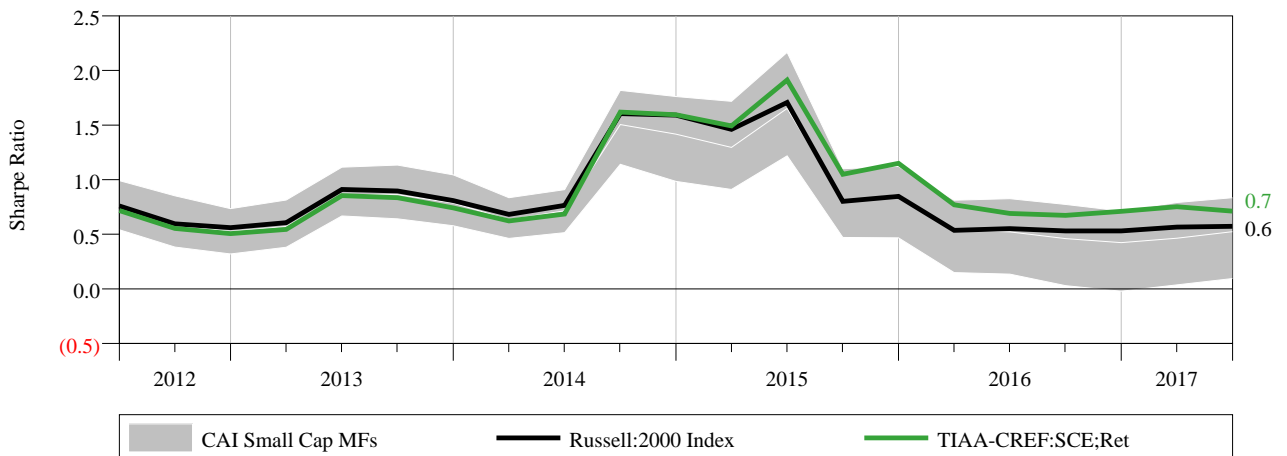
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:SCE;Ret</b>	<b>1.66</b> (27)	<b>0.71</b> (16)	<b>9.06</b> (25)	<b>0.67</b> (12)	<b>0.68</b> (6)
Russell:2000 Index	0.00 (51)	0.57 (36)	7.13 (50)	0.00 (51)	--

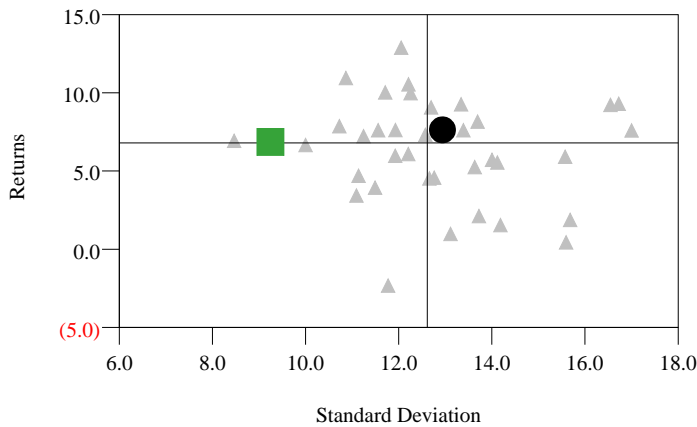
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# Pru Jenn Small Co;Z

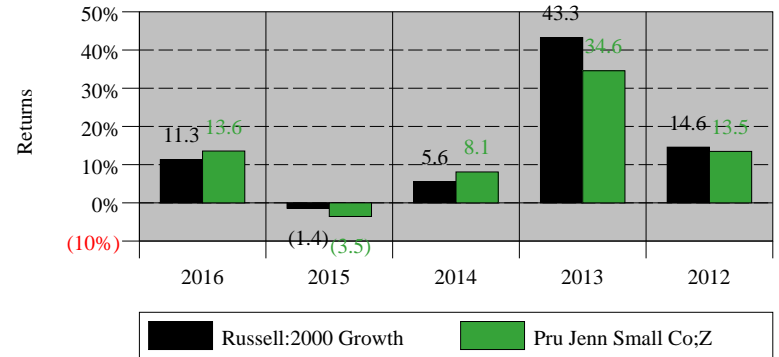
## Russell:2000 Growth - (CAI Small Cap Growth MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

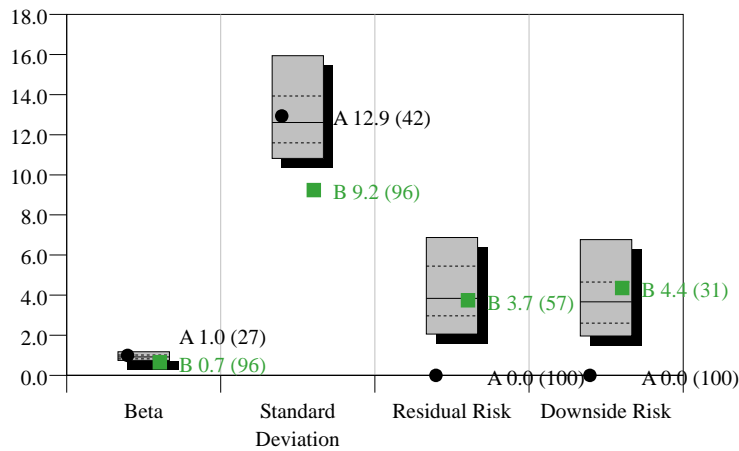


Returns for Various Periods

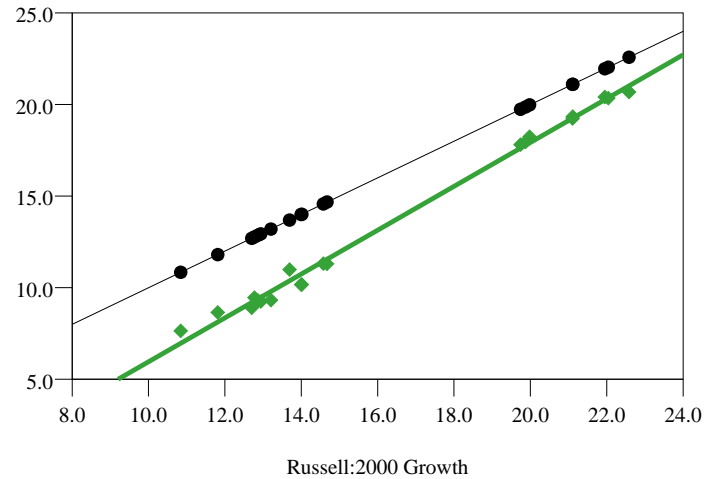
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>Pru Jenn Small Co;Z</b>	<b>9.49</b> (66)	<b>21.01</b> (56)	<b>6.87</b> (49)	<b>13.21</b> (44)
Russell:2000 Growth	9.97 (63)	24.40 (28)	7.64 (32)	13.98 (25)



Risk Statistics for 3 Years



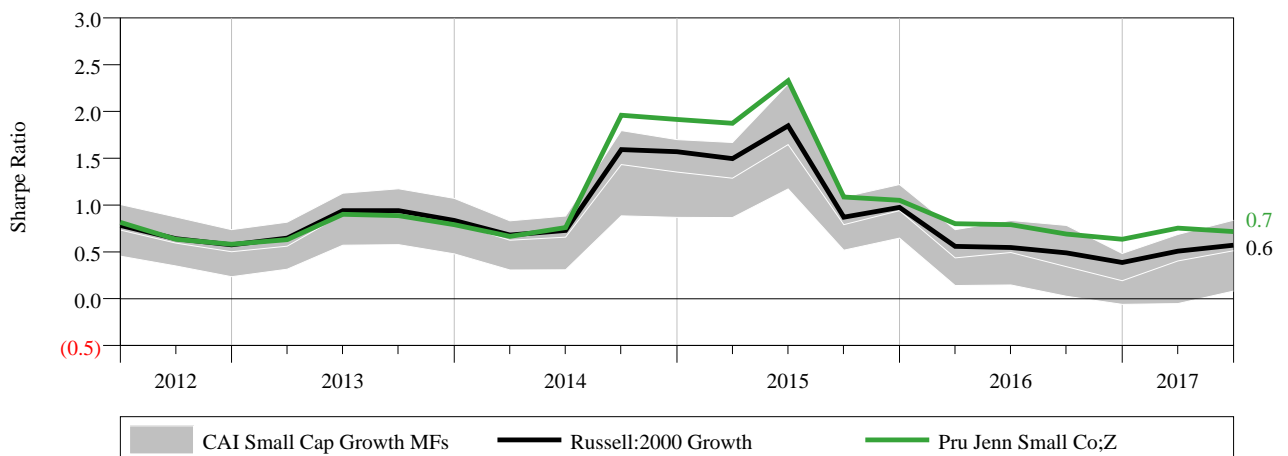
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>Pru Jenn Small Co;Z</b>	<b>1.66</b> (25)	<b>0.72</b> (19)	<b>10.18</b> (21)	<b>0.44</b> (22)	<b>(0.18)</b> (49)
Russell:2000 Growth	0.00 (49)	0.57 (39)	7.41 (48)	0.00 (49)	--

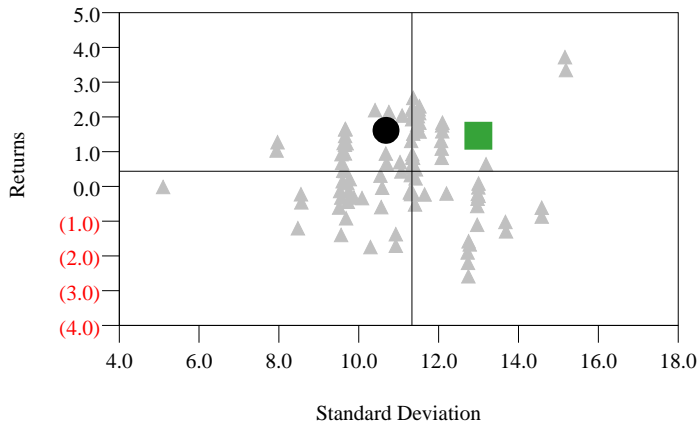
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF: Intl Eq; Ret

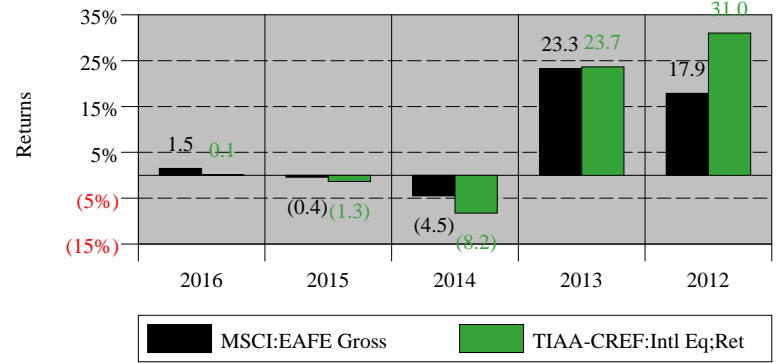
## MSCI:EAFE Gross - (CAI Intl Lg Cap Core MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

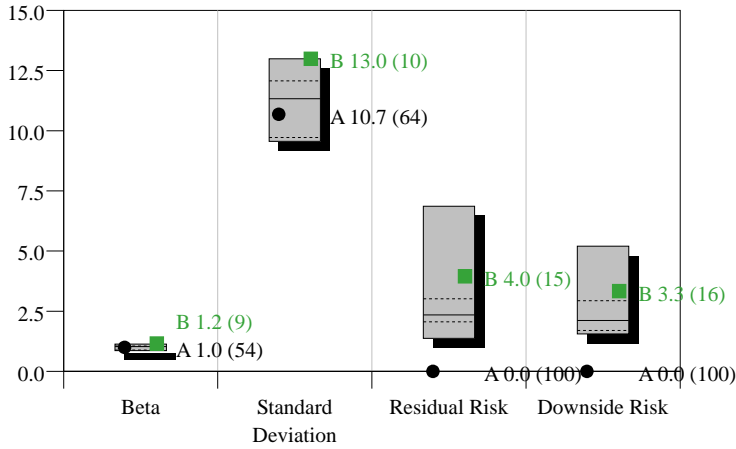


Returns for Various Periods

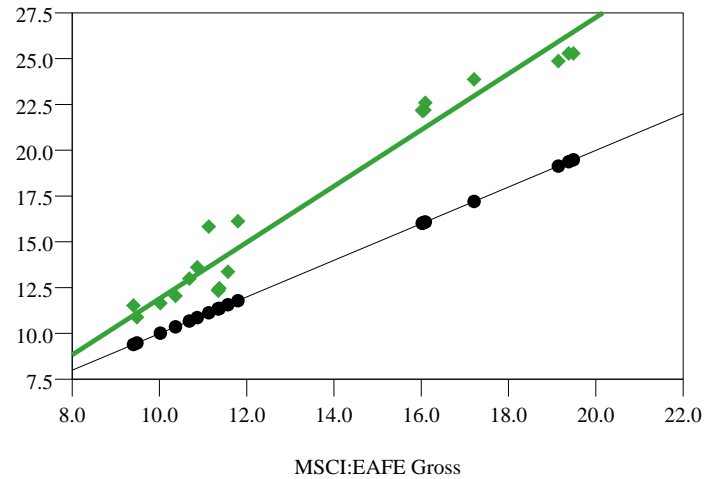
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF: Intl Eq; Ret	18.57 (4)	22.38 (21)	1.46 (24)	10.12 (5)
MSCI:EAFE Gross	14.23 (59)	20.83 (37)	1.61 (21)	9.18 (11)



Risk Statistics for 3 Years



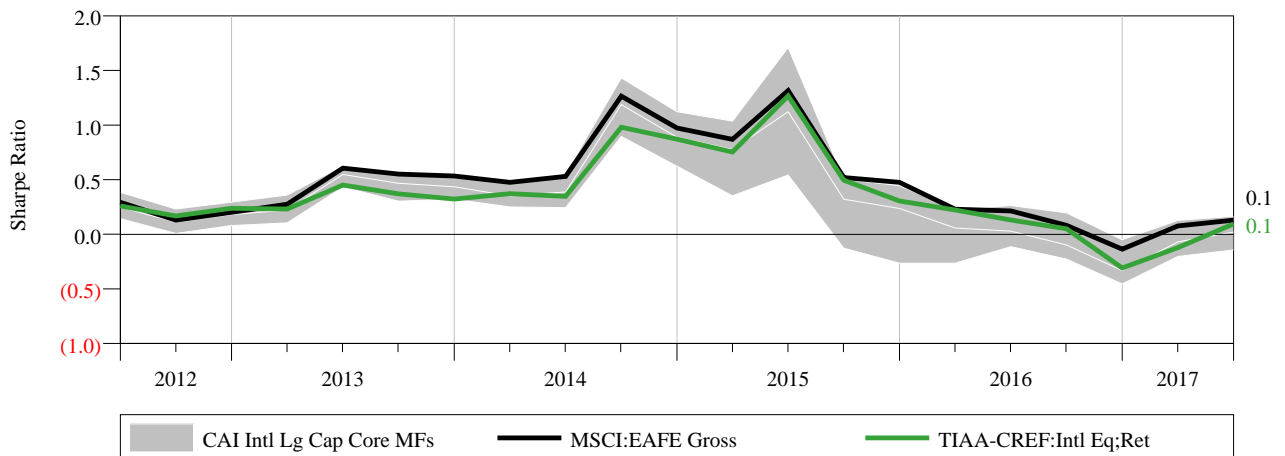
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF: Intl Eq; Ret	(0.19) (26)	0.09 (30)	1.06 (30)	(0.05) (25)	(0.05) (23)
MSCI:EAFE Gross	0.00 (21)	0.13 (21)	1.38 (22)	0.00 (21)	--

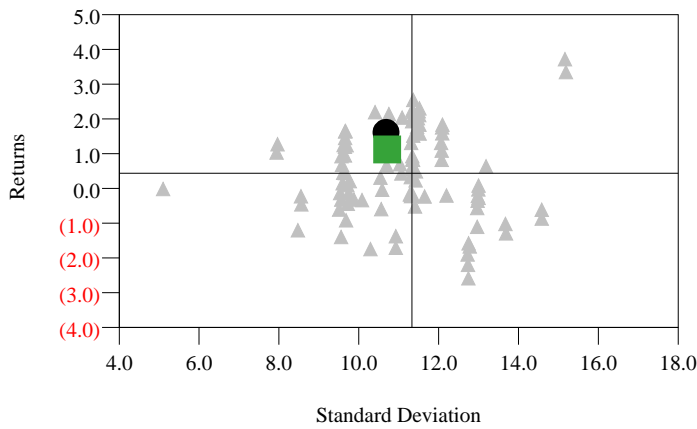
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Itl Eq Ix;Ret

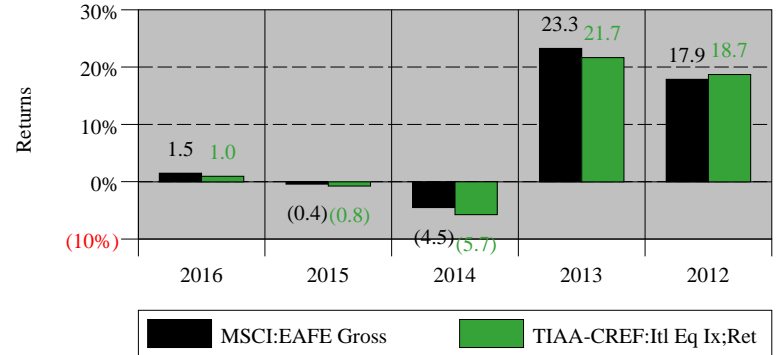
## MSCI:EAFE Gross - (CAI Intl Lg Cap Core MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

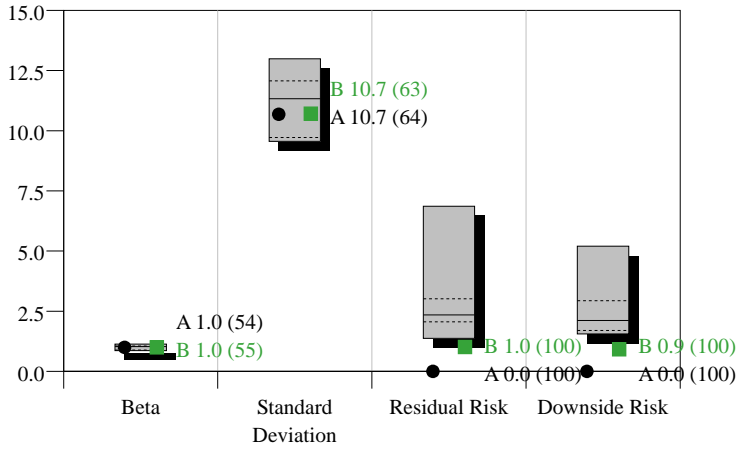


Returns for Various Periods

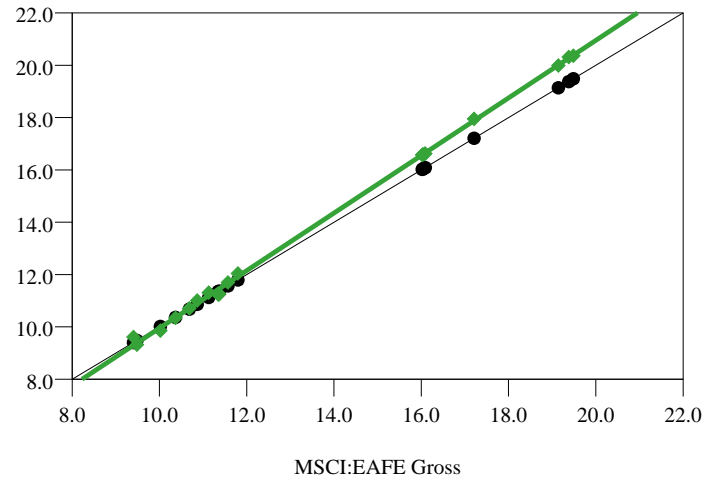
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF:Itl Eq Ix;Ret</b>	<b>14.66</b> (52)	<b>19.73</b> (44)	<b>1.13</b> (31)	<b>8.55</b> (18)
MSCI:EAFE Gross	14.23 (59)	20.83 (37)	1.61 (21)	9.18 (11)



Risk Statistics for 3 Years



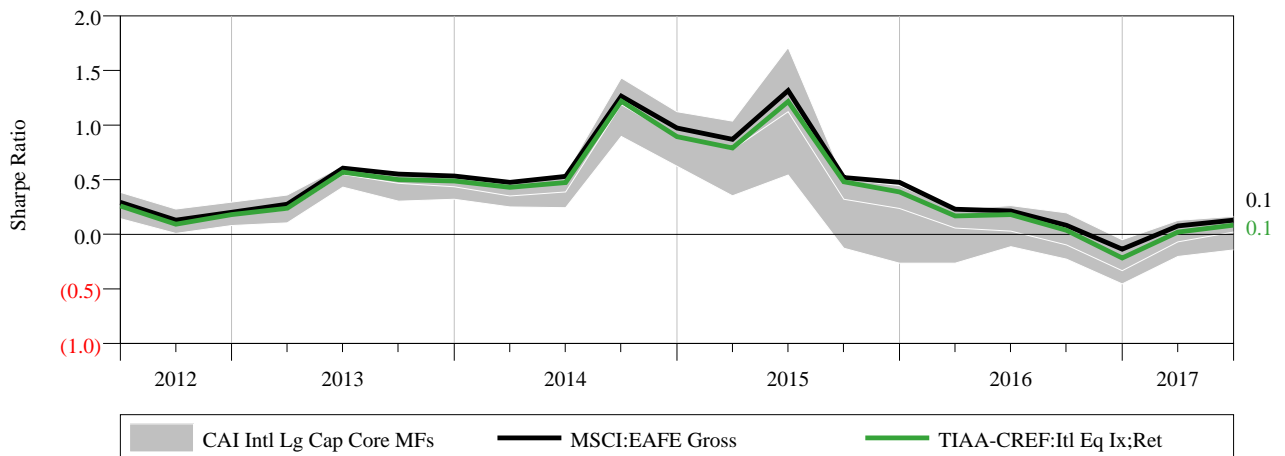
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:Itl Eq Ix;Ret</b>	<b>(0.48)</b> (32)	<b>0.08</b> (32)	<b>0.89</b> (32)	<b>(0.47)</b> (57)	<b>(0.53)</b> (52)
MSCI:EAFE Gross	0.00 (21)	0.13 (21)	1.38 (22)	0.00 (21)	--

Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.

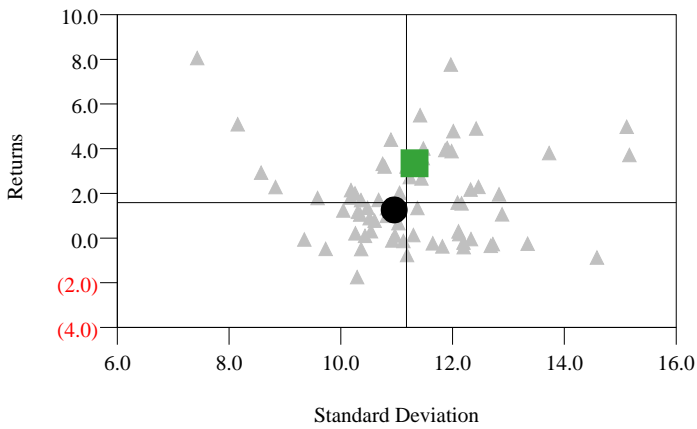




# American Funds EuPc;R-4

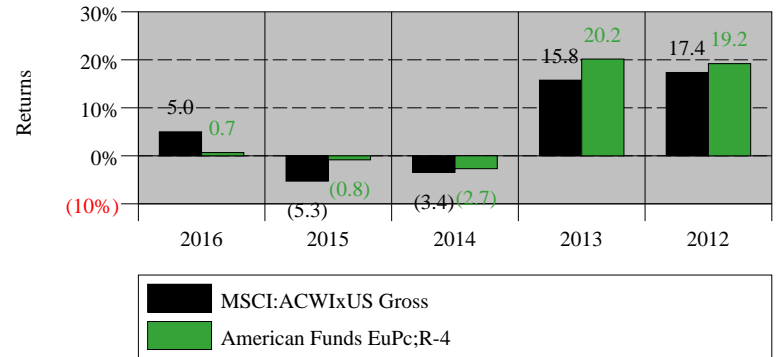
## MSCI:ACWIxUS Gross - (CAI Non US Equity MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

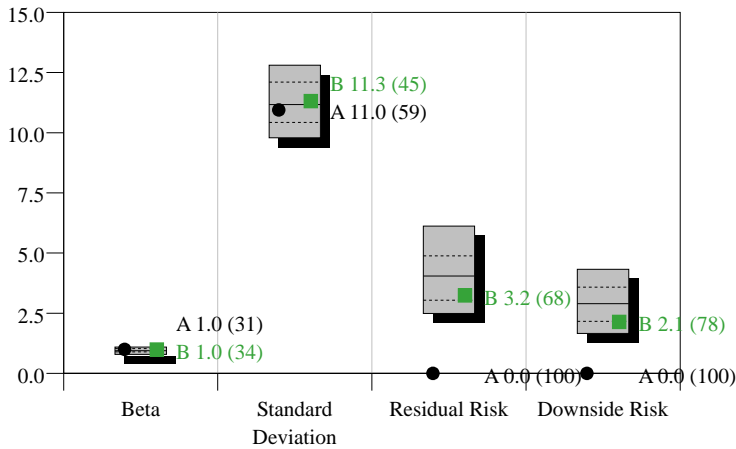


Returns for Various Periods

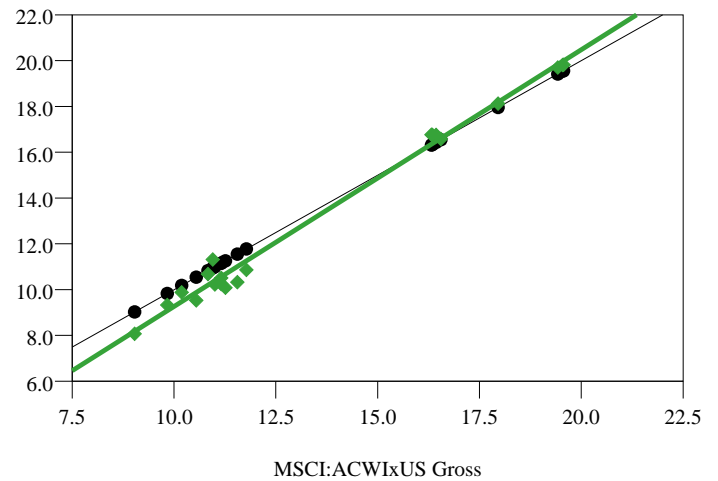
	Year to Date	Last Year	Last 3 Years	Last 5 Years
American Funds EuPc;R-4	17.55 (24)	21.75 (28)	3.36 (22)	9.23 (21)
MSCI:ACWIxUS Gross	14.45 (54)	21.00 (33)	1.27 (57)	7.70 (77)



Risk Statistics for 3 Years



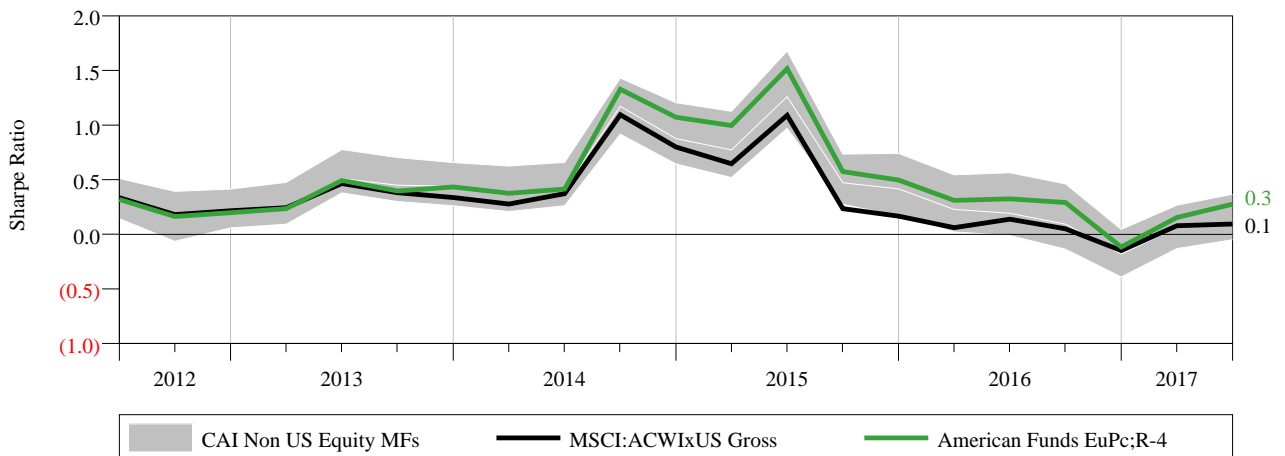
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
American Funds EuPc;R-4	2.11 (22)	0.28 (22)	3.15 (24)	0.65 (14)	0.97 (15)
MSCI:ACWIxUS Gross	0.00 (58)	0.09 (58)	1.03 (58)	0.00 (58)	--

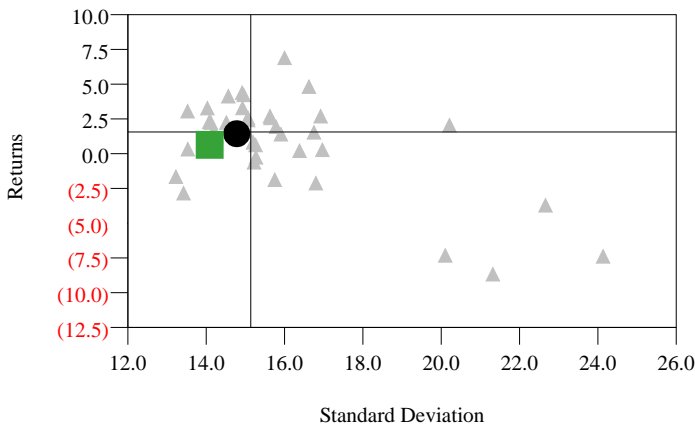
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# Vanguard EM St Idx;Adm

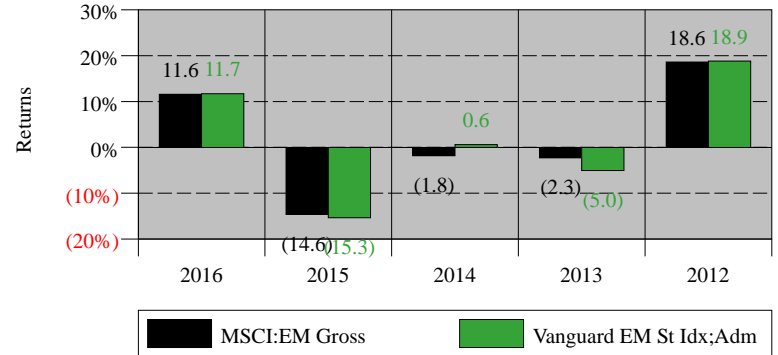
## MSCI:EM Gross - (CAI Emerging Equity MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

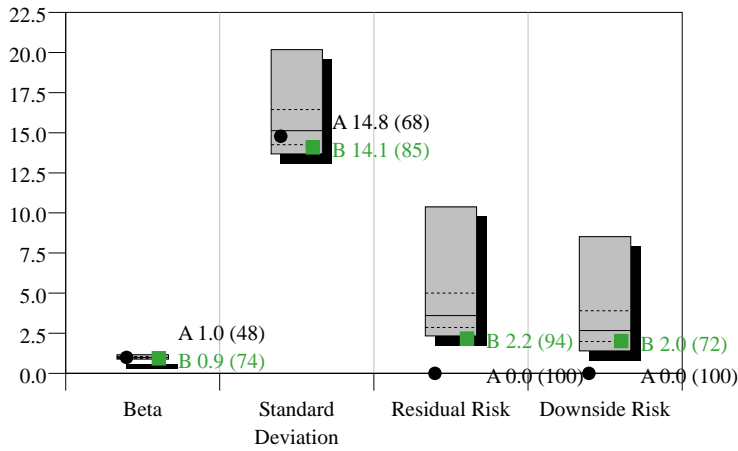


Returns for Various Periods

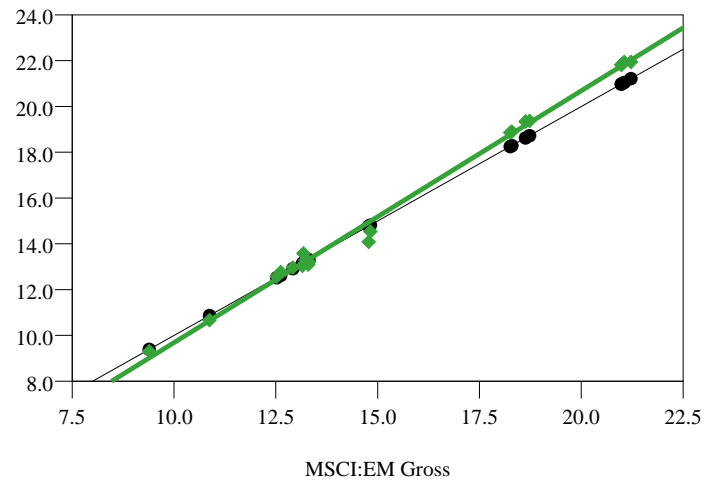
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>Vanguard EM St Idx;Adm</b>	<b>14.69</b> (86)	<b>18.86</b> (79)	<b>0.64</b> (67)	<b>3.36</b> (64)
MSCI:EM Gross	18.60 (72)	24.17 (42)	1.44 (55)	4.33 (45)



Risk Statistics for 3 Years



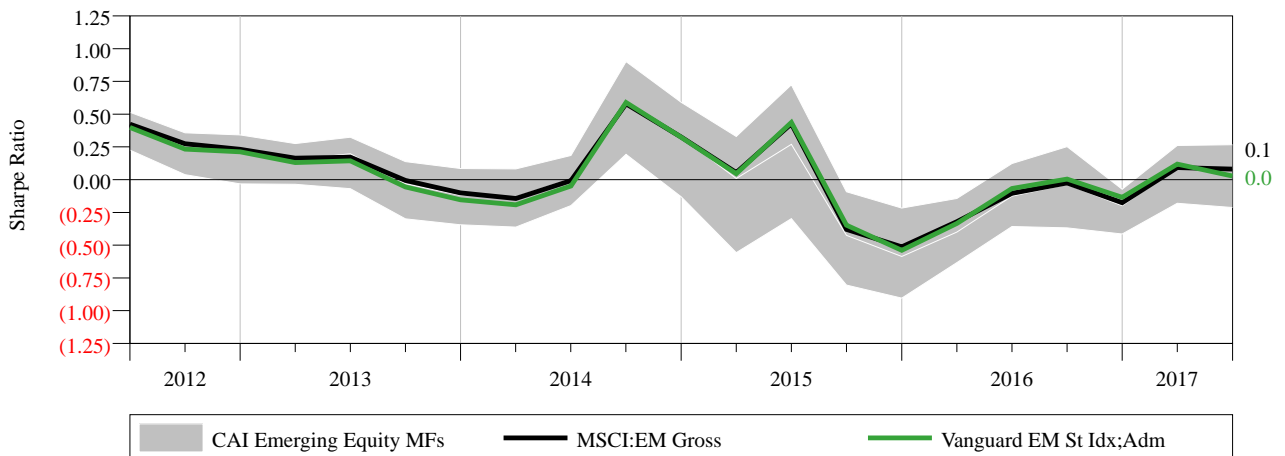
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>Vanguard EM St Idx;Adm</b>	<b>(0.75)</b> (67)	<b>0.03</b> (67)	<b>0.43</b> (67)	<b>(0.34)</b> (75)	<b>(0.40)</b> (72)
MSCI:EM Gross	0.00 (56)	0.08 (53)	1.21 (53)	0.00 (56)	--

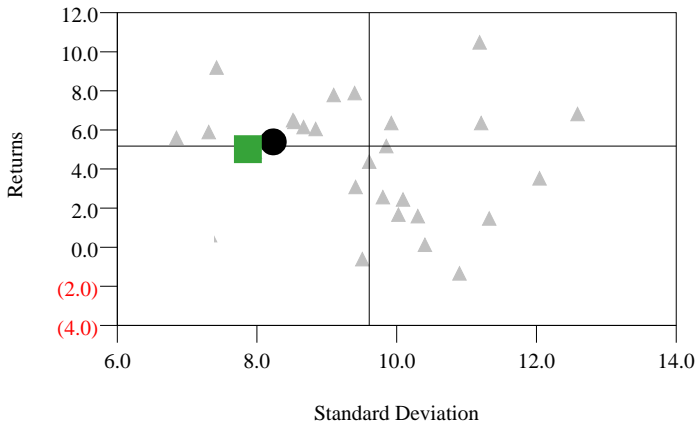
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



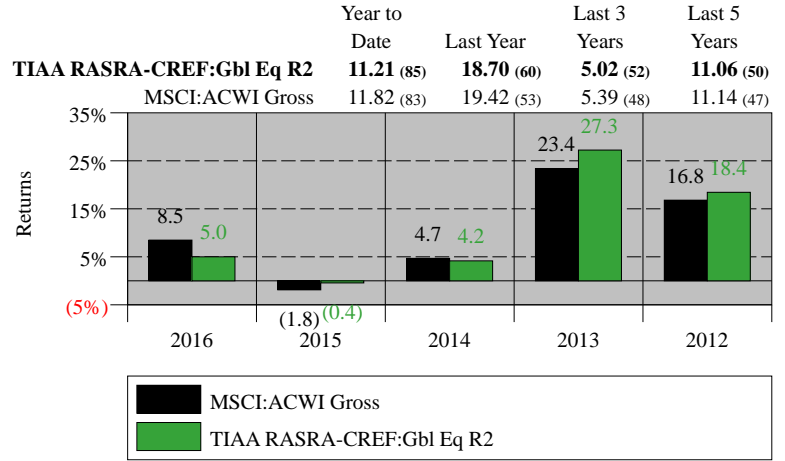
# TIAA RASRA-CREF:Gbl Eq R2

## MSCI:ACWI Gross - (CAI Global Equity MFs)

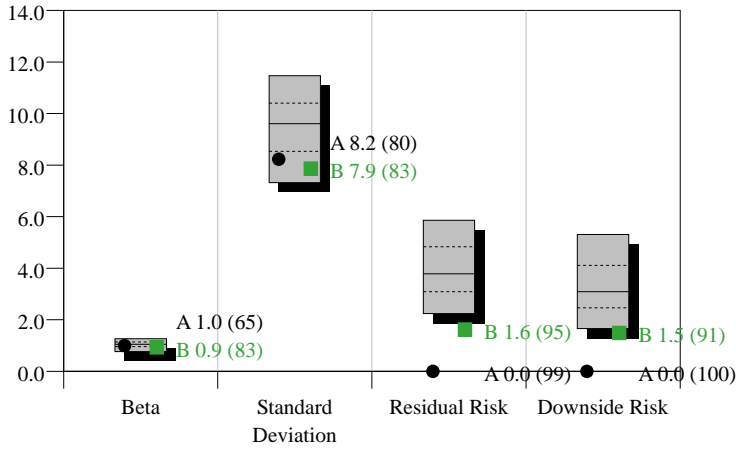
Scatter Chart  
for 3 Years Ended June 30, 2017



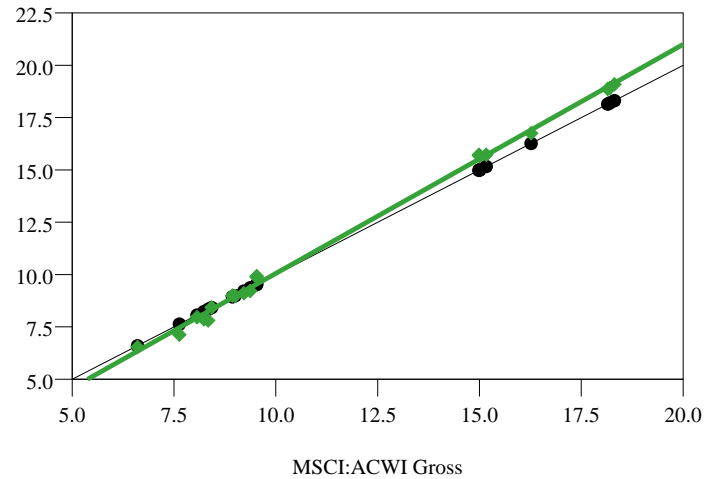
Returns for Various Periods



Risk Statistics for 3 Years



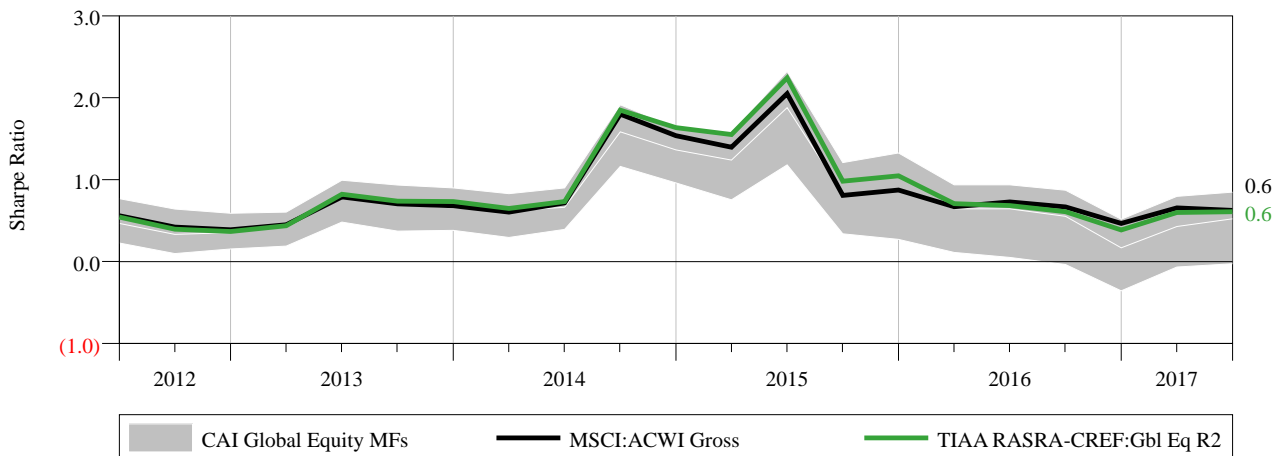
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA RASRA-CREF:Gbl Eq R2</b>	<b>(0.04)</b> (46)	<b>0.61</b> (40)	<b>5.12</b> (45)	<b>(0.02)</b> (46)	<b>(0.25)</b> (53)
MSCI:ACWI Gross	0.00 (46)	0.63 (38)	5.16 (45)	0.00 (46)	--

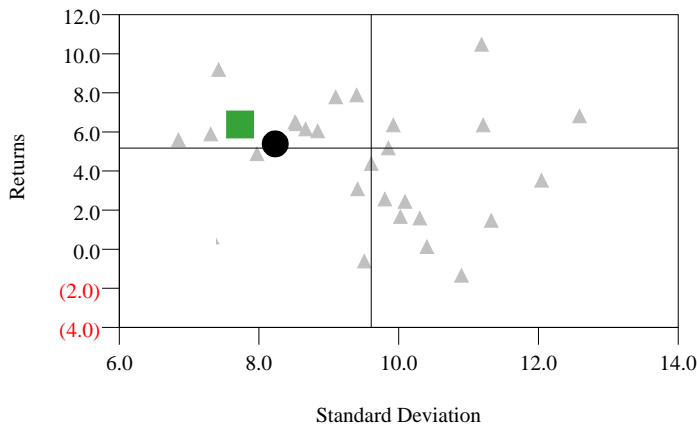
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA RASRA-CREF:Stock R2

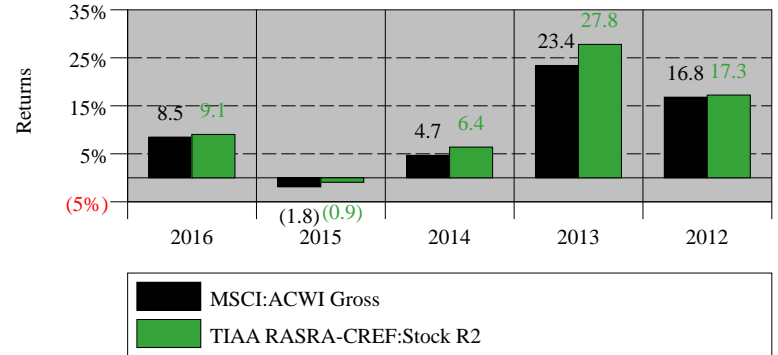
## MSCI:ACWI Gross - (CAI Global Equity MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

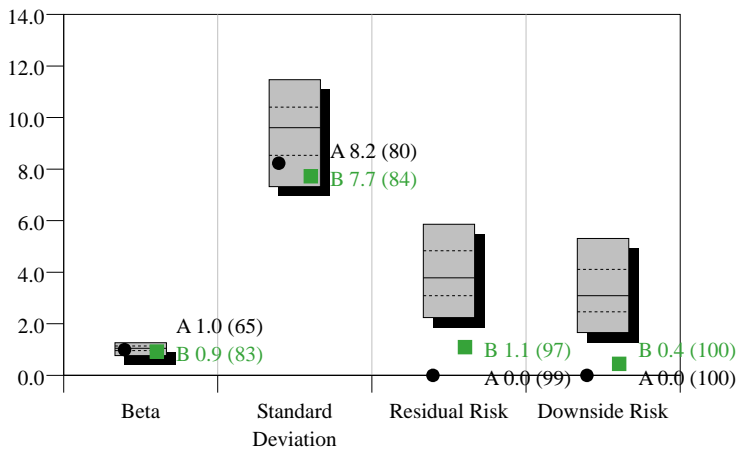


Returns for Various Periods

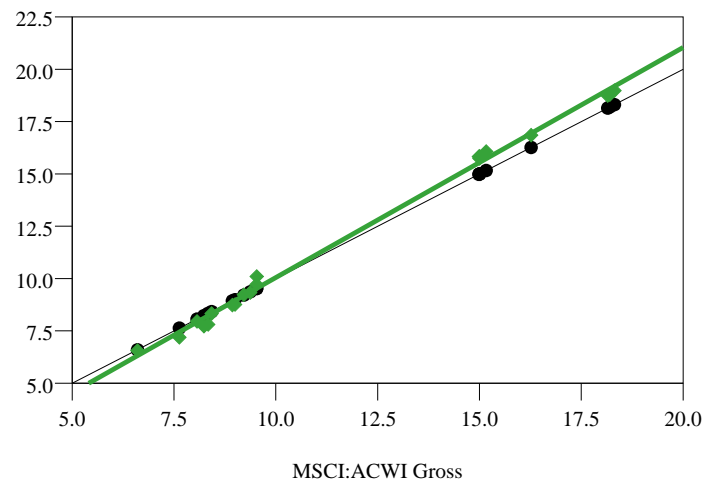
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA RASRA-CREF:Stock R2</b>	<b>10.88</b> (87)	<b>19.08</b> (56)	<b>6.39</b> (27)	<b>12.12</b> (25)
MSCI:ACWI Gross	11.82 (83)	19.42 (53)	5.39 (48)	11.14 (47)



Risk Statistics for 3 Years



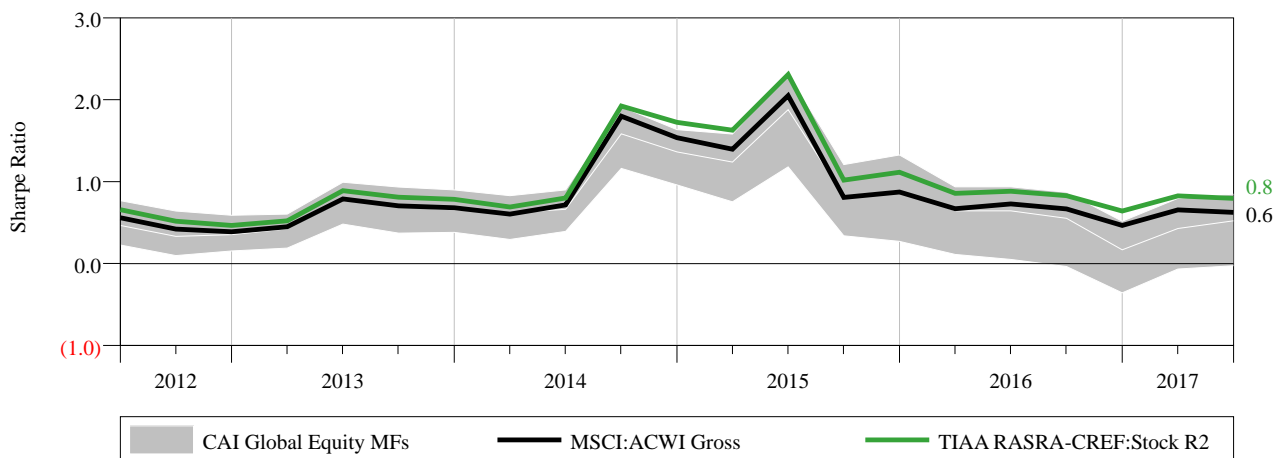
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA RASRA-CREF:Stock R2</b>	<b>1.30</b> (25)	<b>0.80</b> (16)	<b>6.62</b> (24)	<b>1.18</b> (4)	<b>2.22</b> (2)
MSCI:ACWI Gross	0.00 (46)	0.63 (38)	5.16 (45)	0.00 (46)	--

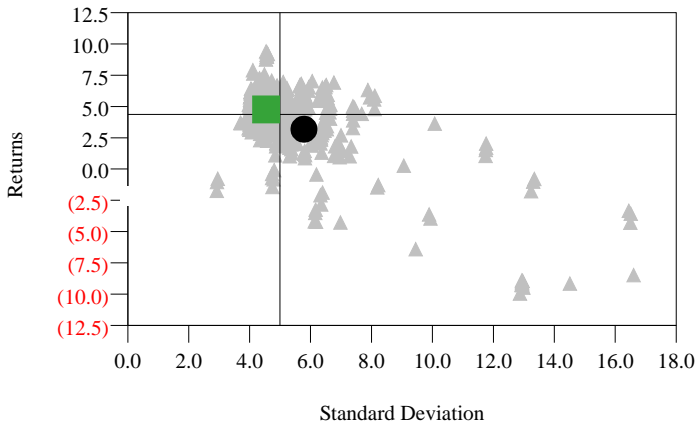
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



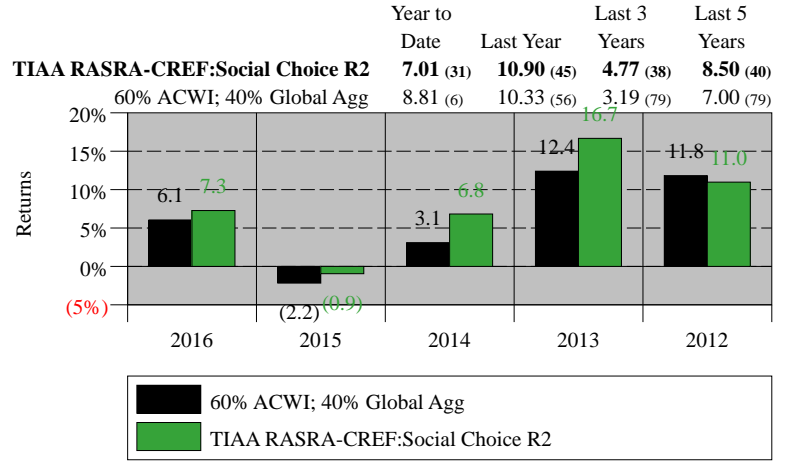
# TIAA RASRA-CREF:Social Choice R2

60% ACWI; 40% Global Agg - (Morningstar Alloc 50-70 E)

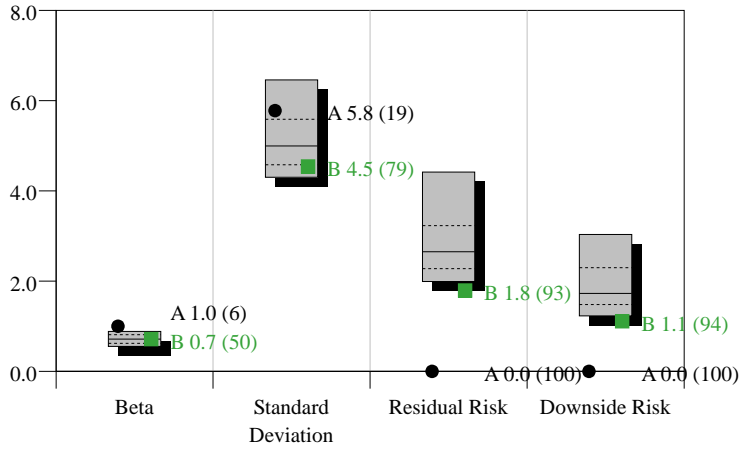
Scatter Chart  
for 3 Years Ended June 30, 2017



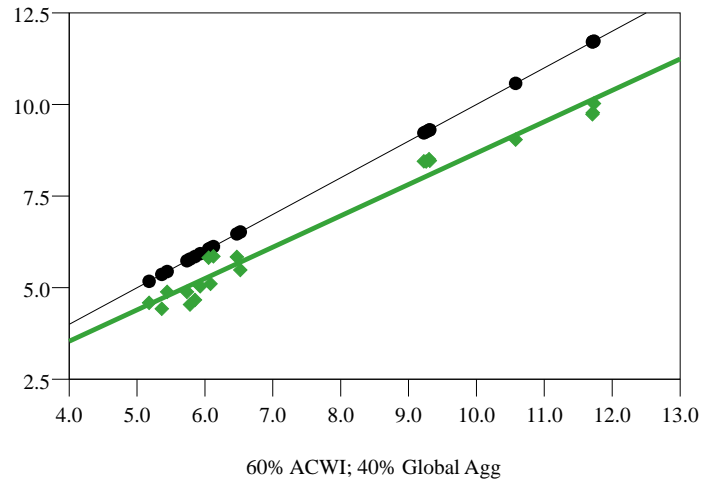
Returns for Various Periods



Risk Statistics for 3 Years



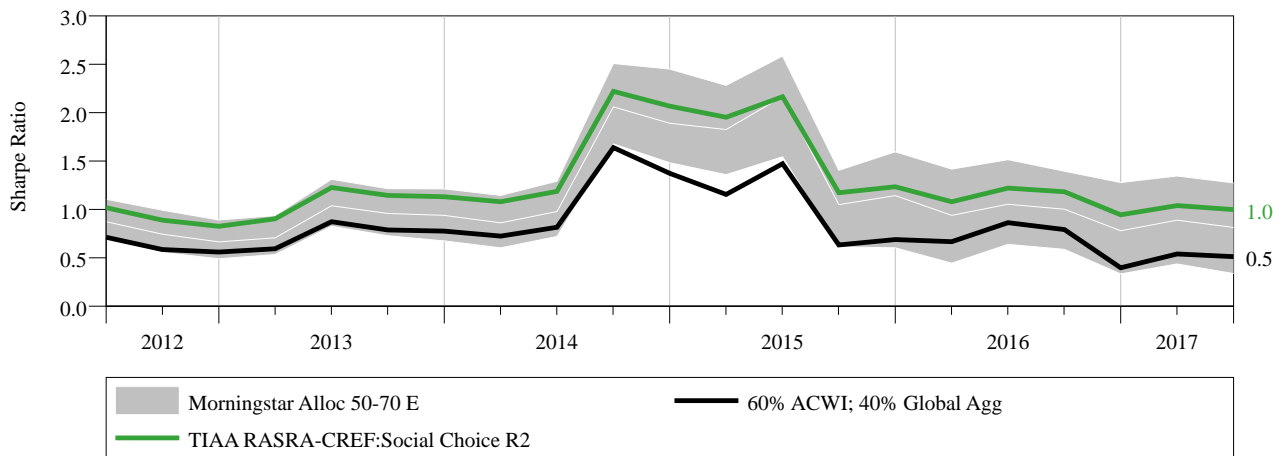
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA RASRA-CREF:Social Choice R2</b>	<b>2.35 (39)</b>	<b>1.00 (25)</b>	<b>6.31 (40)</b>	<b>1.31 (13)</b>	<b>1.42 (20)</b>
60% ACWI; 40% Global Agg	0.00 (87)	0.51 (81)	2.96 (87)	0.00 (87)	--

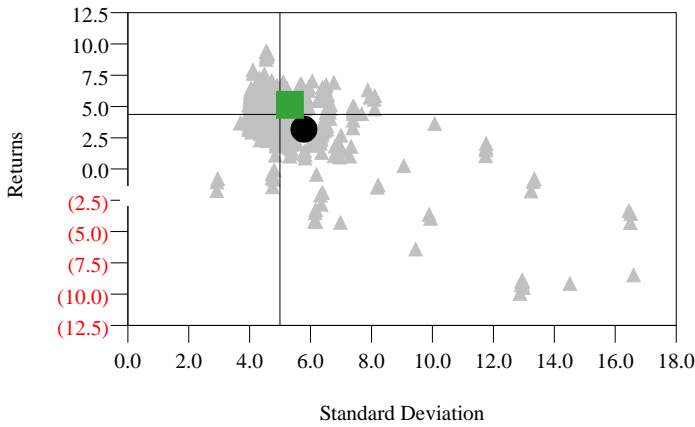
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Mgd Alloc;Ret

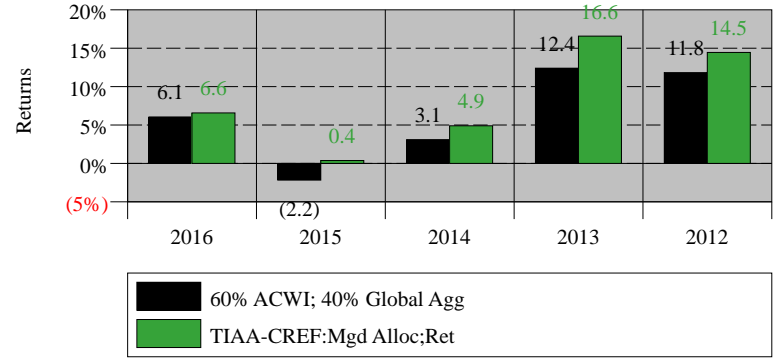
60% ACWI; 40% Global Agg - (Morningstar Alloc 50-70 E)

Scatter Chart  
for 3 Years Ended June 30, 2017

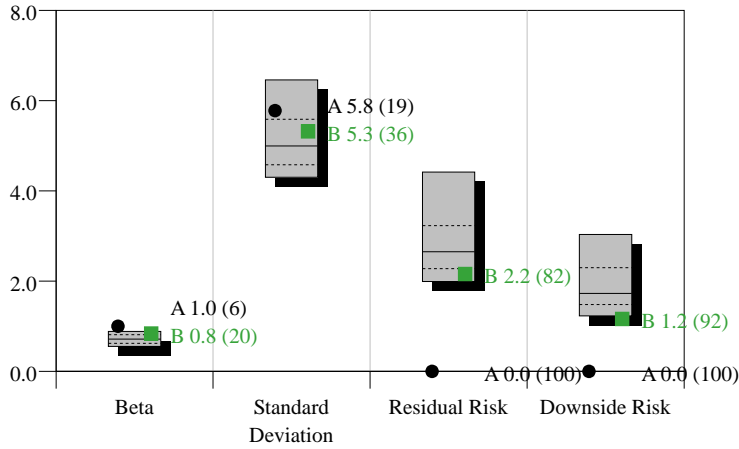


Returns for Various Periods

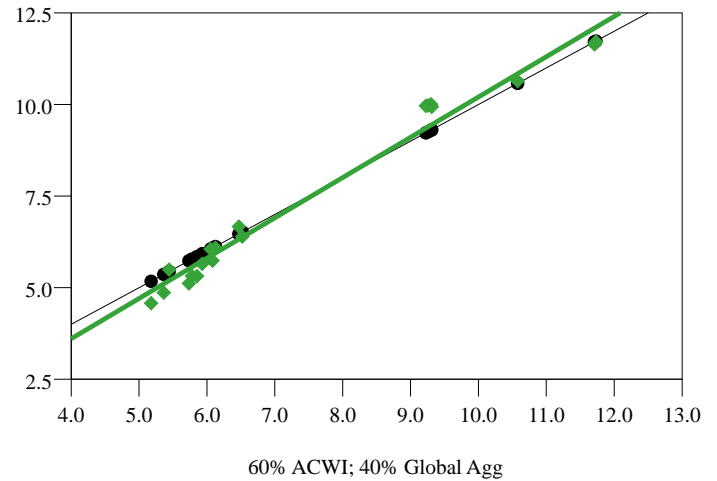
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF:Mgd Alloc;Ret</b>	<b>8.19</b> (13)	<b>12.57</b> (19)	<b>5.14</b> (27)	<b>8.68</b> (35)
60% ACWI; 40% Global Agg	8.81 (6)	10.33 (56)	3.19 (79)	7.00 (79)



Risk Statistics for 3 Years



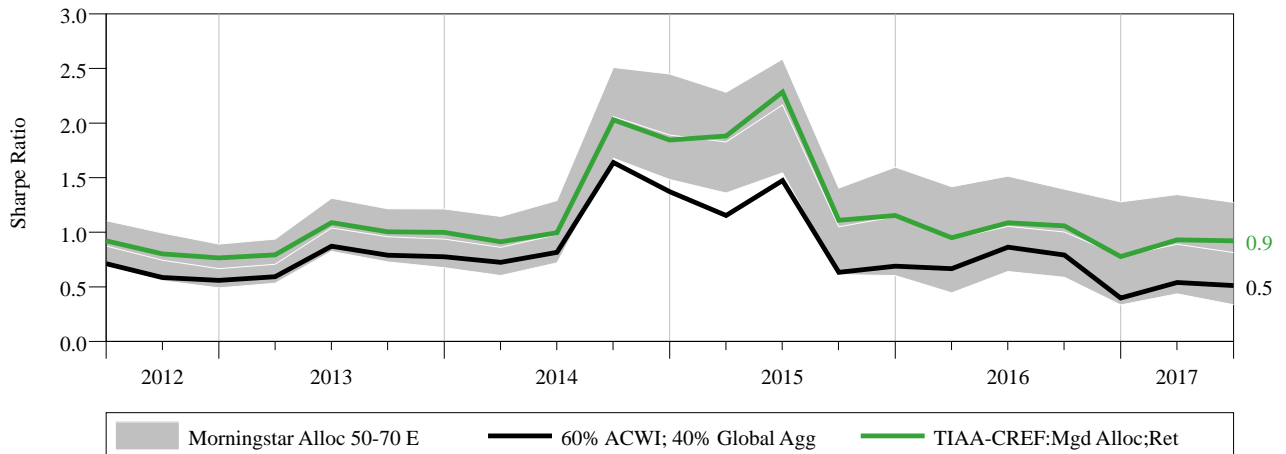
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:Mgd Alloc;Ret</b>	<b>2.37</b> (38)	<b>0.92</b> (37)	<b>5.83</b> (47)	<b>1.10</b> (23)	<b>1.67</b> (16)
60% ACWI; 40% Global Agg	0.00 (87)	0.51 (81)	2.96 (87)	0.00 (87)	--

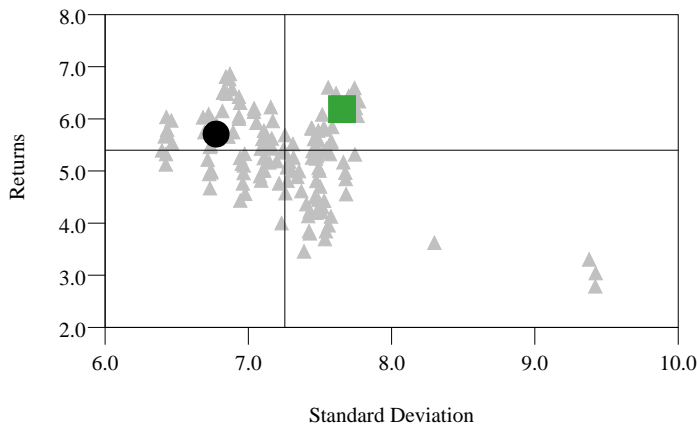
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Lfcy 2055;Ret

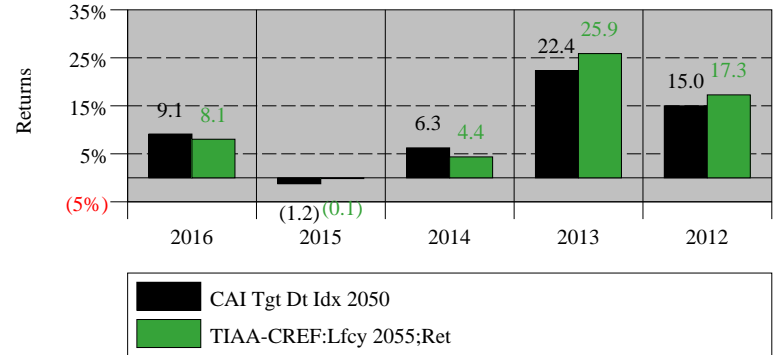
## CAI Tgt Dt Idx 2050 - (Morningstar Target 2055)

Scatter Chart  
for 3 Years Ended June 30, 2017

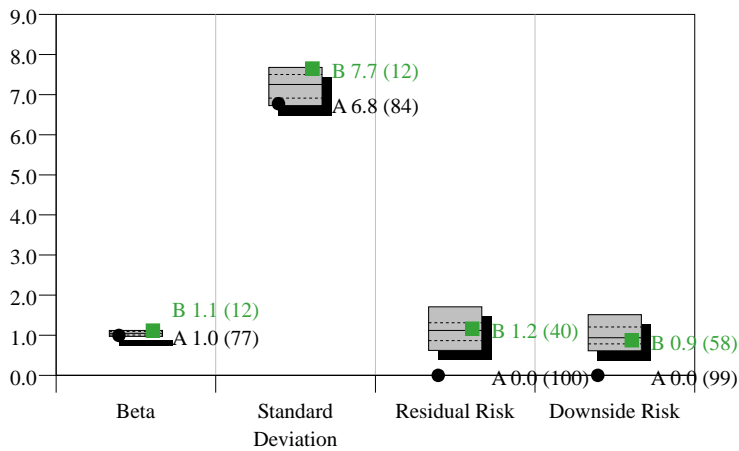


Returns for Various Periods

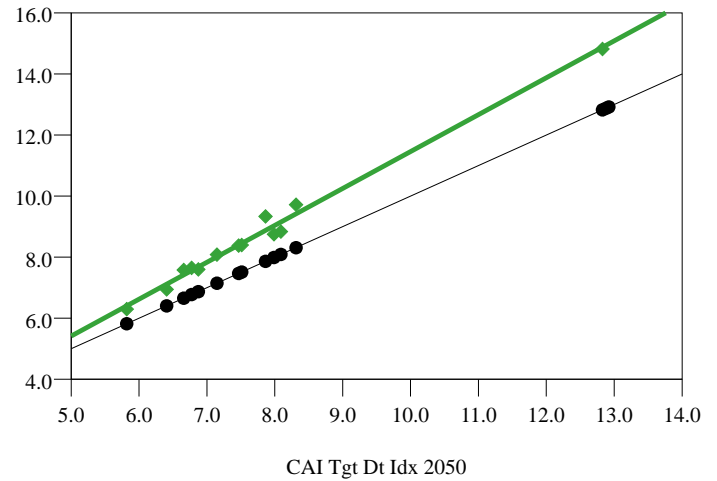
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Lfcy 2055;Ret	11.08 (8)	19.00 (5)	6.19 (14)	11.40 (17)
CAI Tgt Dt Idx 2050	9.52 (77)	16.47 (54)	5.71 (34)	10.60 (51)



Risk Statistics for 3 Years



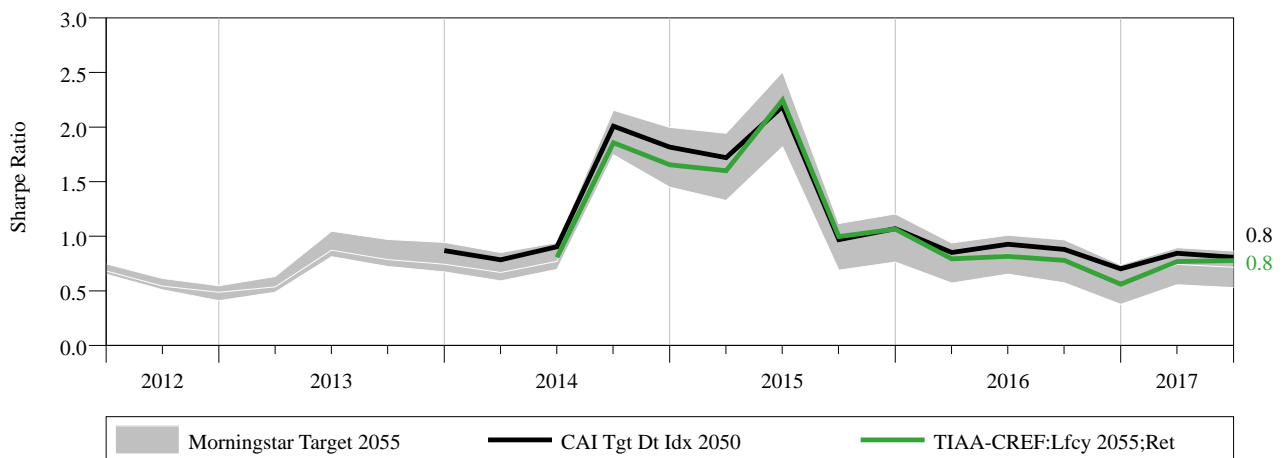
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2055;Ret	(0.14) (34)	0.78 (34)	5.33 (34)	(0.12) (34)	0.54 (15)
CAI Tgt Dt Idx 2050	0.00 (28)	0.81 (23)	5.48 (27)	0.00 (28)	--

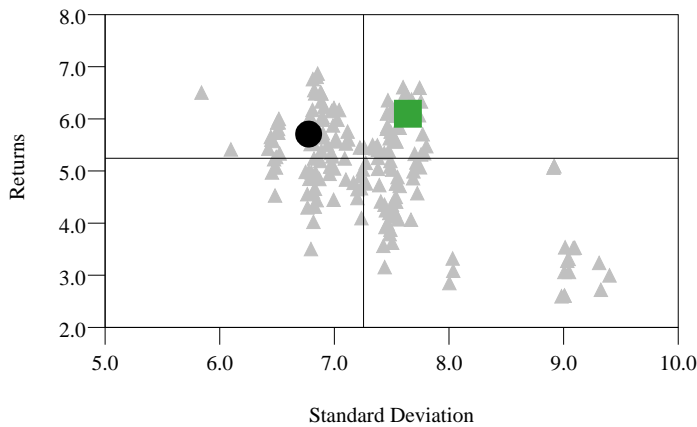
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



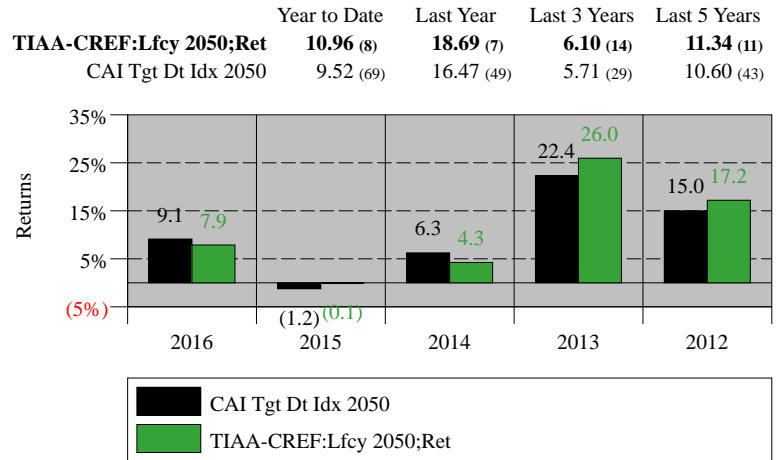
# TIAA-CREF:Lfcy 2050;Ret

## CAI Tgt Dt Idx 2050 - (Morningstar Target 2050)

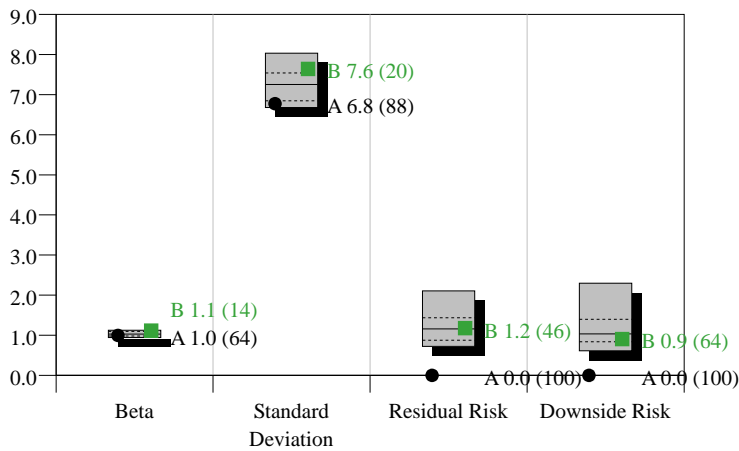
Scatter Chart  
for 3 Years Ended June 30, 2017



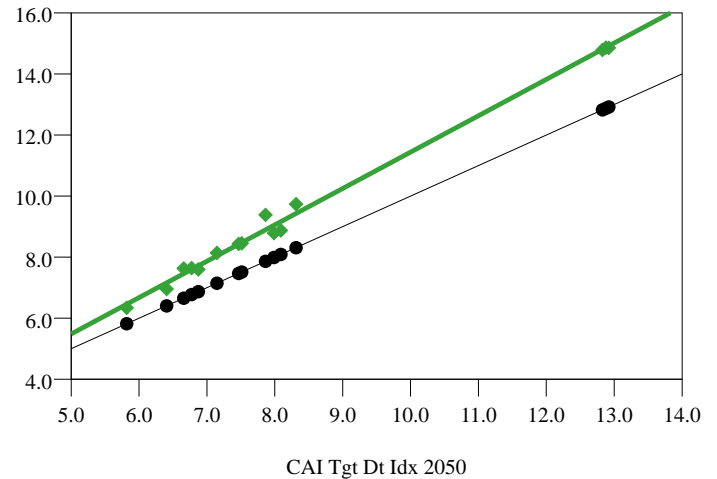
Returns for Various Periods



Risk Statistics for 3 Years



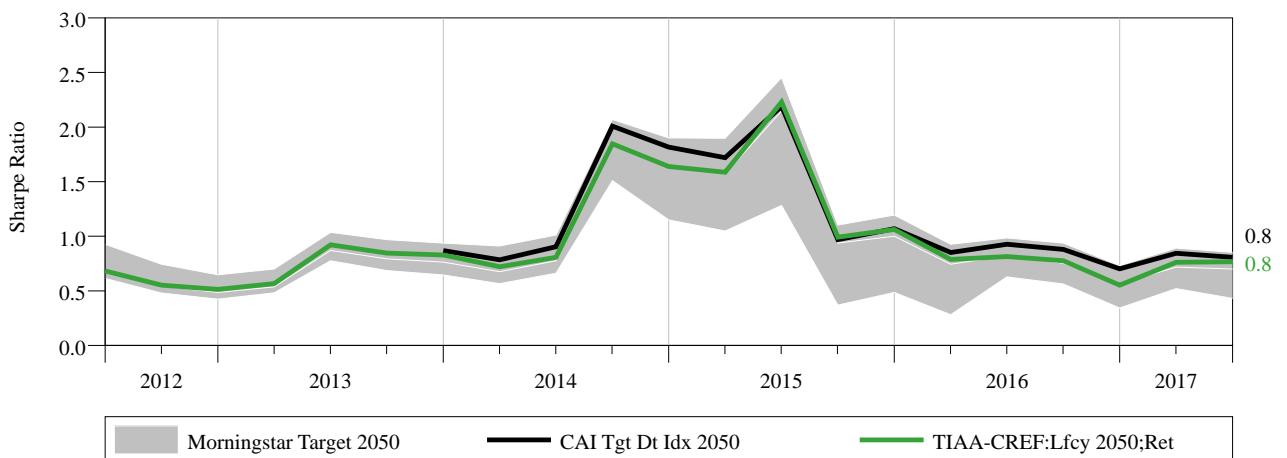
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2050;Ret	<b>(0.21)</b> (32)	<b>0.77</b> (32)	<b>5.26</b> (32)	<b>(0.18)</b> (36)	<b>0.43</b> (14)
CAI Tgt Dt Idx 2050	0.00 (24)	0.81 (21)	5.48 (24)	0.00 (24)	--

Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.

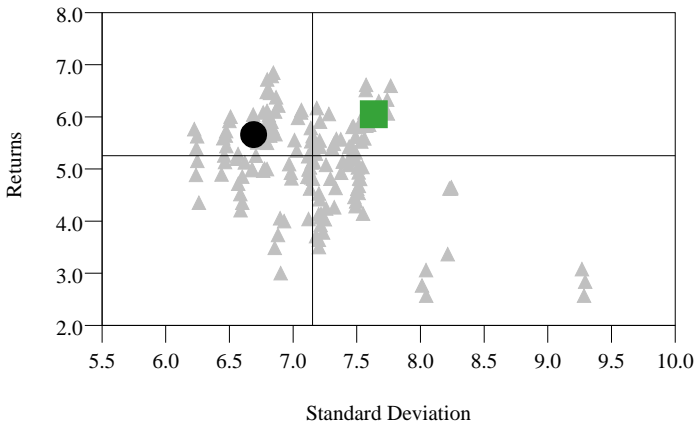




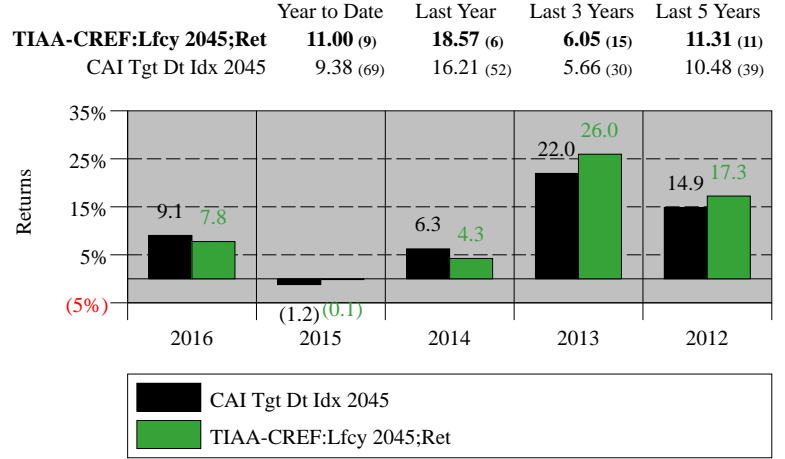
# TIAA-CREF:Lfcy 2045;Ret

## CAI Tgt Dt Idx 2045 - (Morningstar Target 2045)

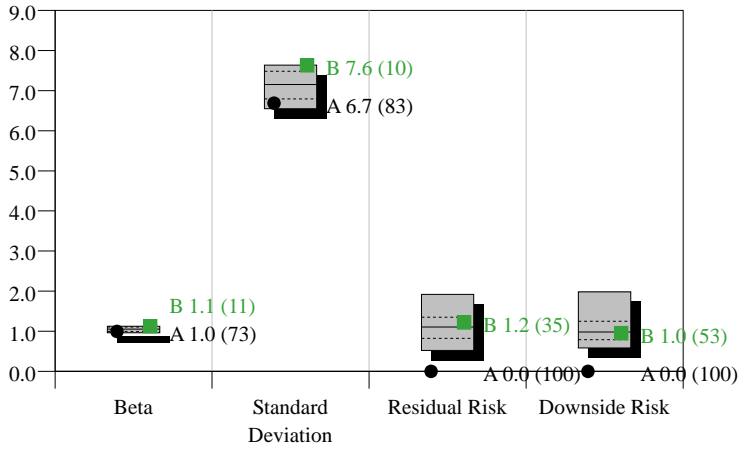
Scatter Chart  
for 3 Years Ended June 30, 2017



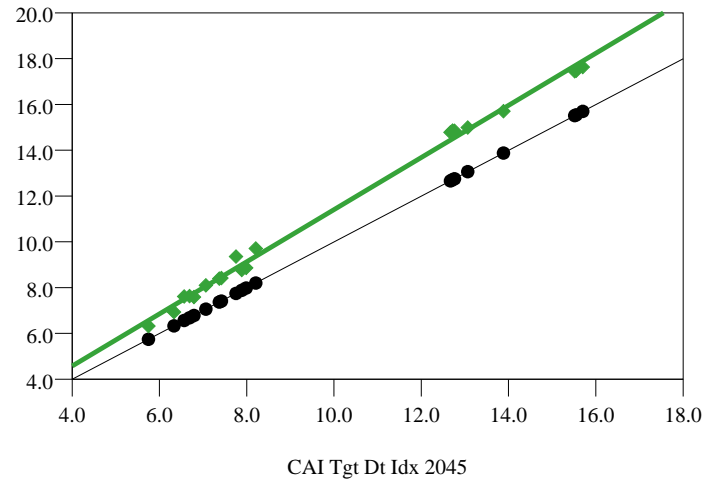
Returns for Various Periods



Risk Statistics for 3 Years



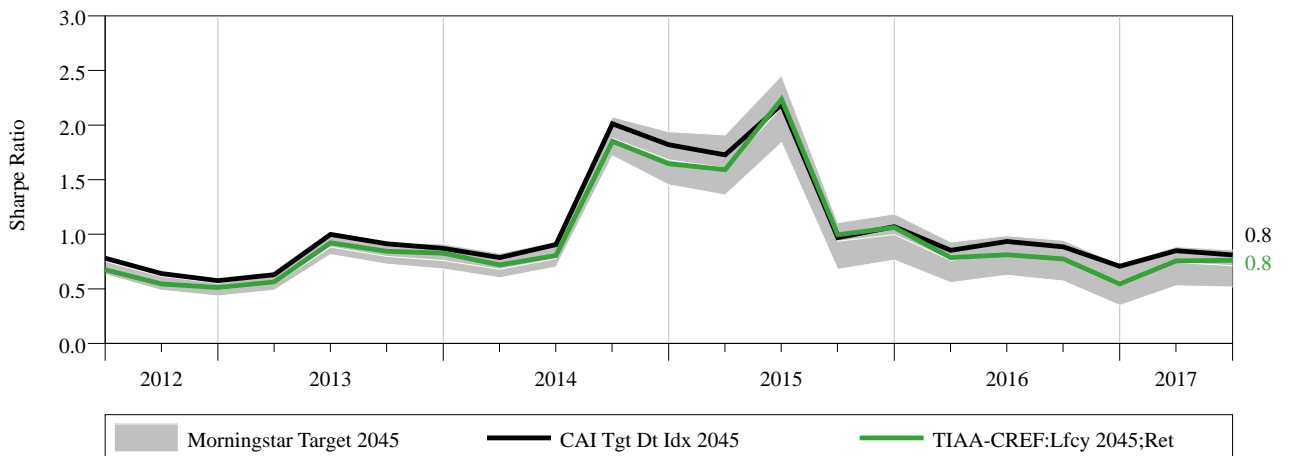
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2045;Ret	(0.26) (33)	0.76 (33)	5.16 (33)	(0.22) (35)	0.41 (16)
CAI Tgt Dt Idx 2045	0.00 (24)	0.81 (22)	5.43 (24)	0.00 (24)	--

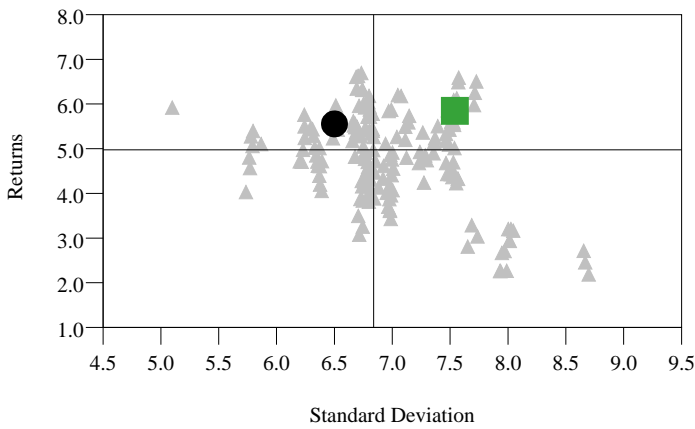
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Lfcy 2040;Ret

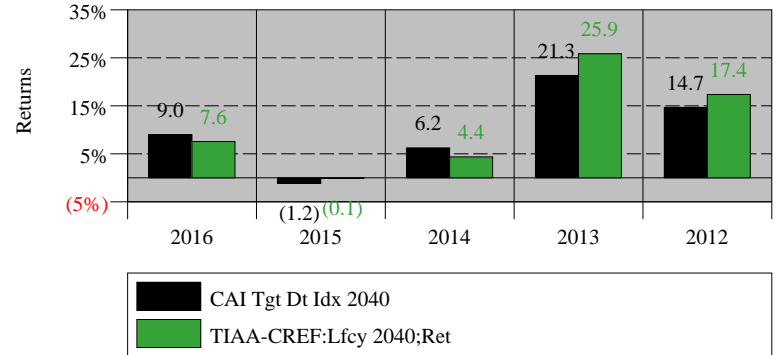
## CAI Tgt Dt Idx 2040 - (Morningstar Target 2040)

Scatter Chart  
for 3 Years Ended June 30, 2017

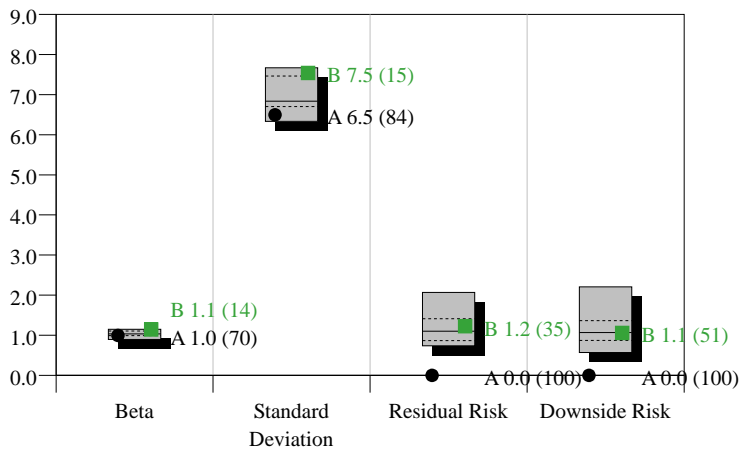


Returns for Various Periods

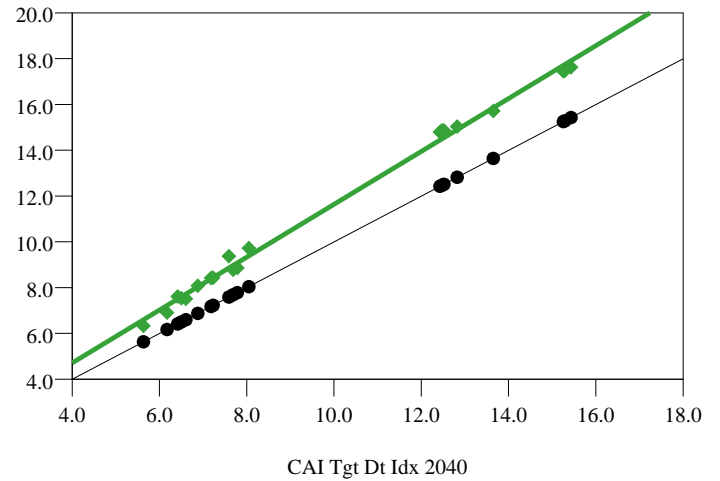
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Lfcy 2040;Ret	10.58 (12)	17.90 (9)	5.85 (17)	11.20 (9)
CAI Tgt Dt Idx 2040	9.10 (67)	15.70 (47)	5.56 (27)	10.27 (35)



Risk Statistics for 3 Years



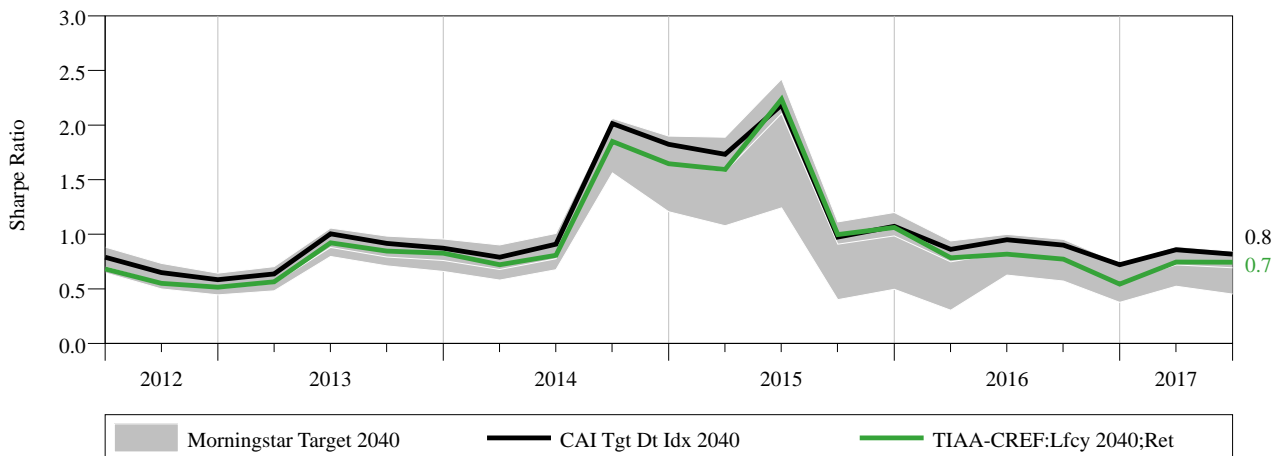
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2040;Ret	(0.44) (40)	0.74 (38)	4.90 (37)	(0.36) (41)	0.28 (20)
CAI Tgt Dt Idx 2040	0.00 (21)	0.82 (18)	5.32 (21)	0.00 (21)	--

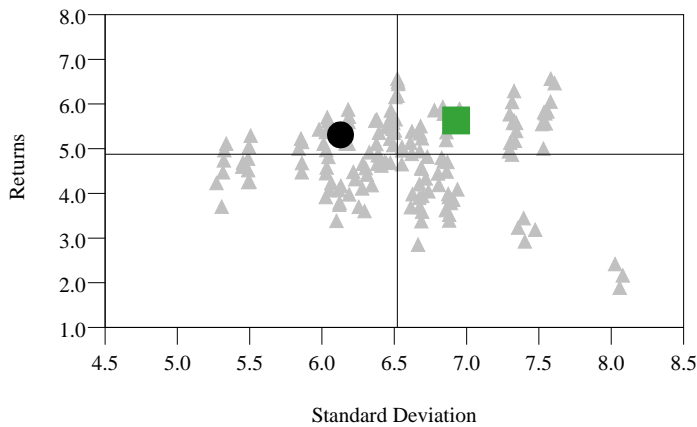
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Lfcy 2035;Ret

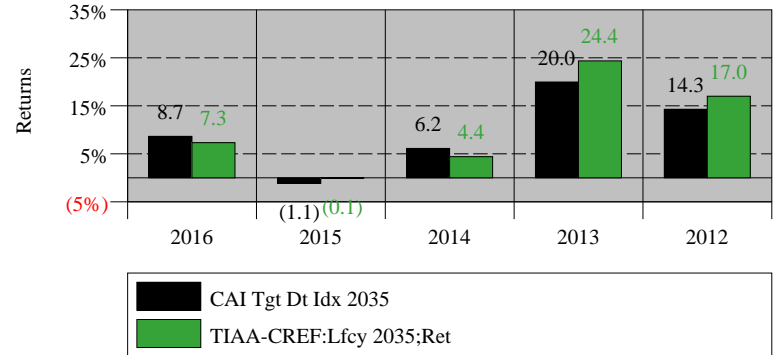
## CAI Tgt Dt Idx 2035 - (Morningstar Target 2035)

Scatter Chart  
for 3 Years Ended June 30, 2017

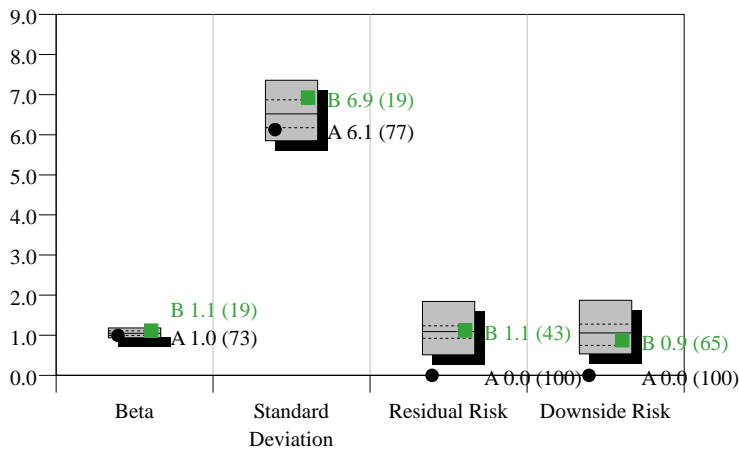


Returns for Various Periods

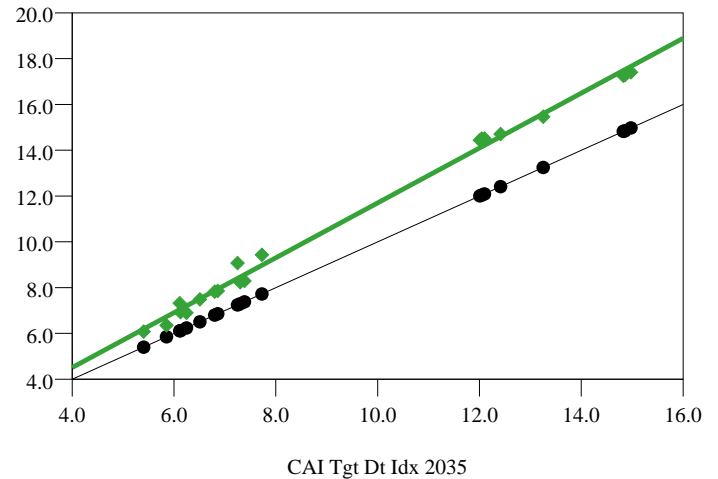
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Lfcy 2035;Ret	9.91 (17)	16.36 (16)	5.63 (18)	10.75 (12)
CAI Tgt Dt Idx 2035	8.57 (70)	14.53 (52)	5.31 (33)	9.80 (38)



Risk Statistics for 3 Years



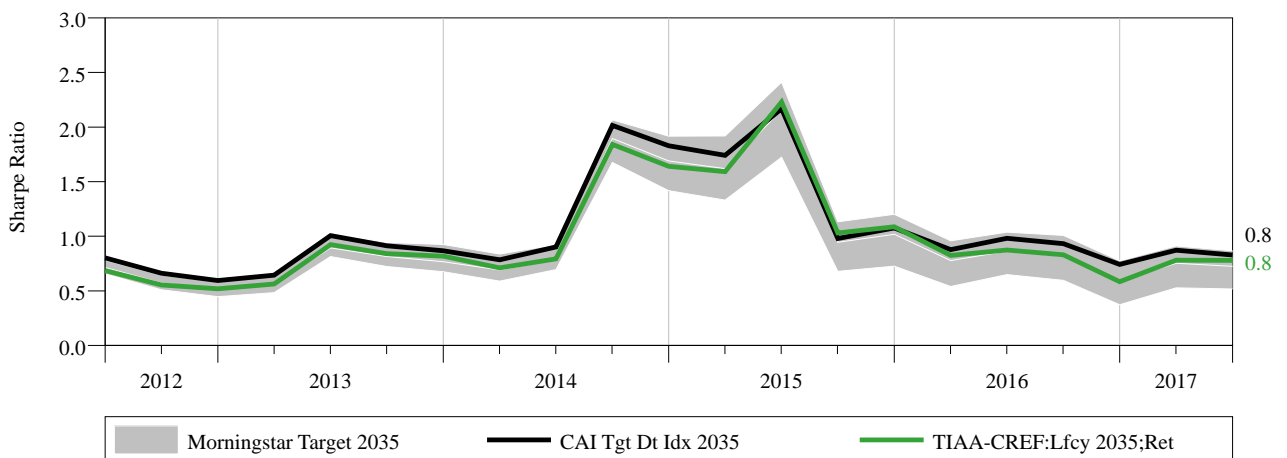
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2035;Ret	0.24 (35)	0.78 (35)	4.83 (35)	0.22 (35)	0.37 (19)
CAI Tgt Dt Idx 2035	0.00 (23)	0.83 (19)	5.08 (23)	0.00 (23)	--

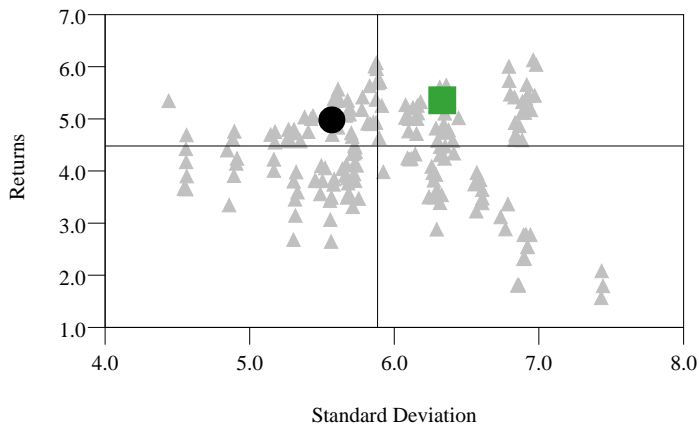
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



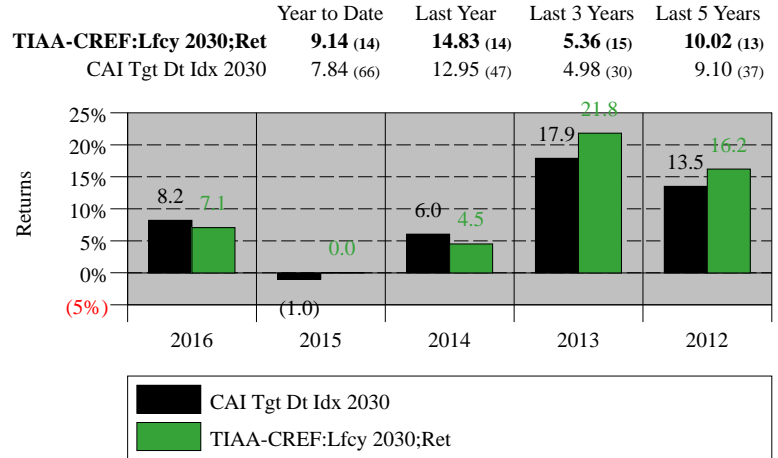
# TIAA-CREF:Lfcy 2030;Ret

## CAI Tgt Dt Idx 2030 - (Morningstar Target 2030)

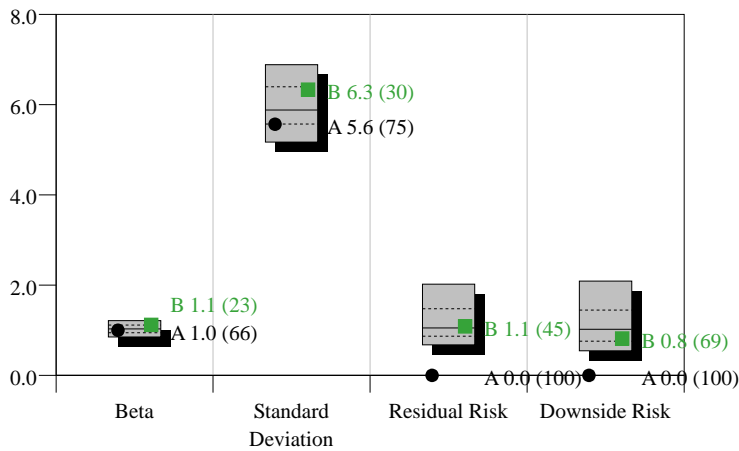
Scatter Chart  
for 3 Years Ended June 30, 2017



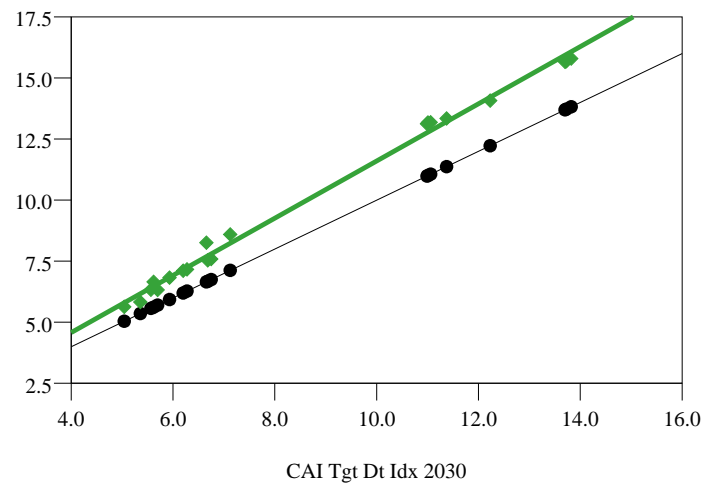
Returns for Various Periods



Risk Statistics for 3 Years



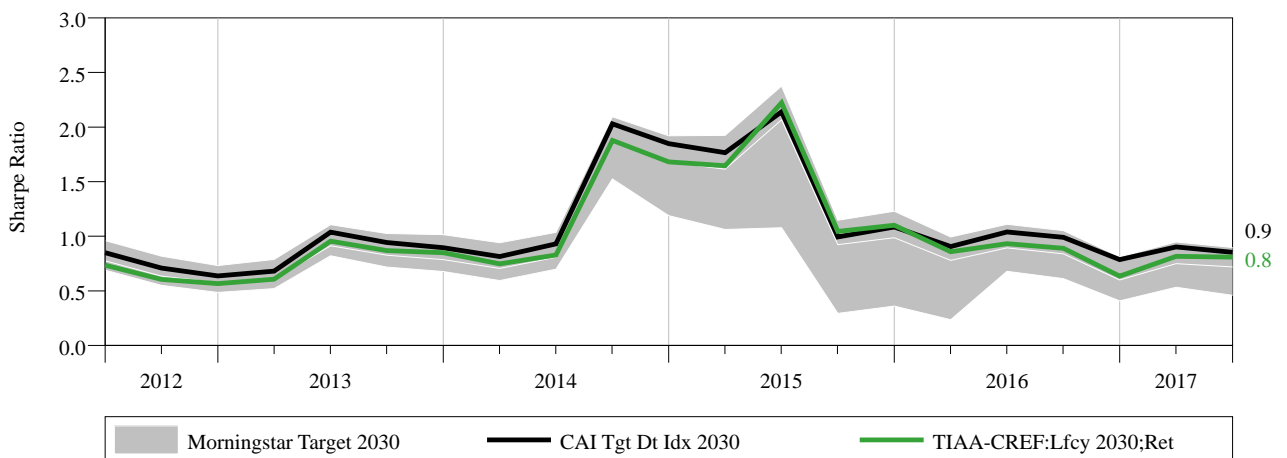
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2030;Ret	<b>(0.18)</b> (30)	<b>0.81</b> (30)	<b>4.57</b> (30)	<b>(0.17)</b> (30)	<b>0.46</b> (15)
CAI Tgt Dt Idx 2030	0.00 (23)	0.85 (18)	4.75 (23)	0.00 (23)	--

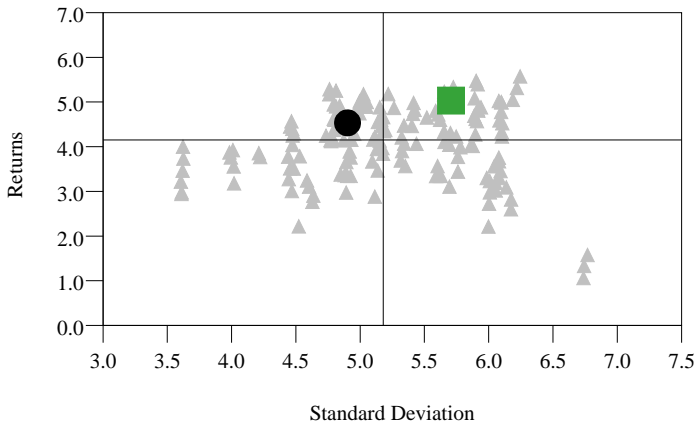
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Lfcy 2025;Ret

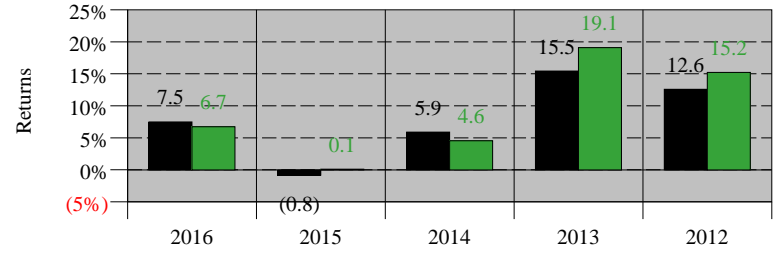
## CAI Tgt Dt Idx 2025 - (Morningstar Target 2025)

Scatter Chart  
for 3 Years Ended June 30, 2017

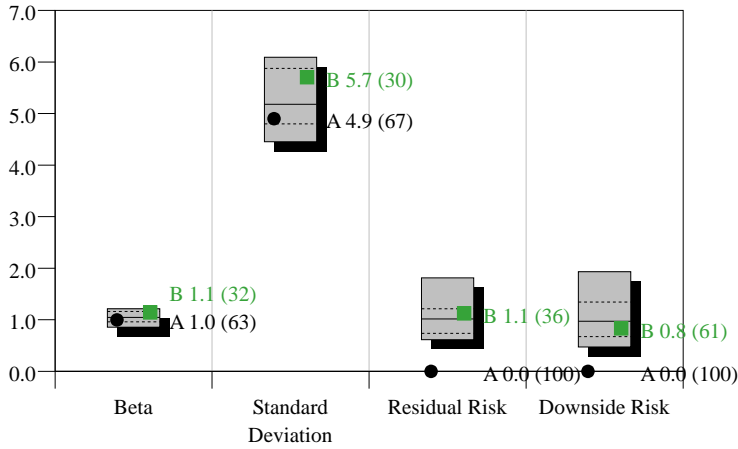


Returns for Various Periods

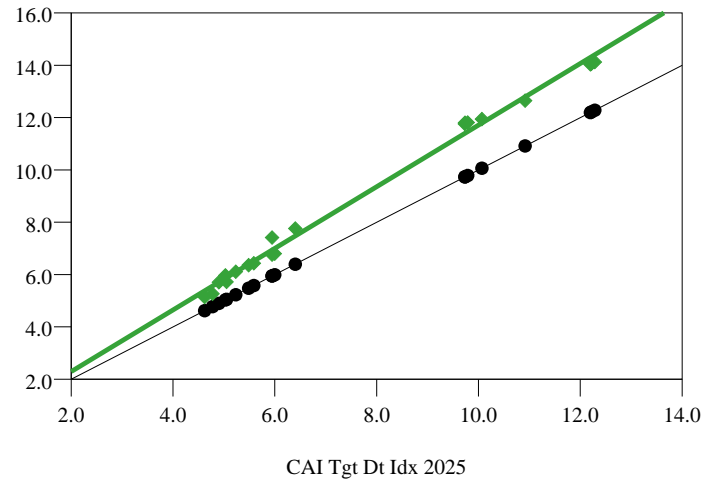
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Lfcy 2025;Ret	8.33 (16)	13.23 (18)	5.03 (10)	9.22 (15)
CAI Tgt Dt Idx 2025	6.93 (69)	10.83 (60)	4.54 (33)	8.21 (44)



Risk Statistics for 3 Years



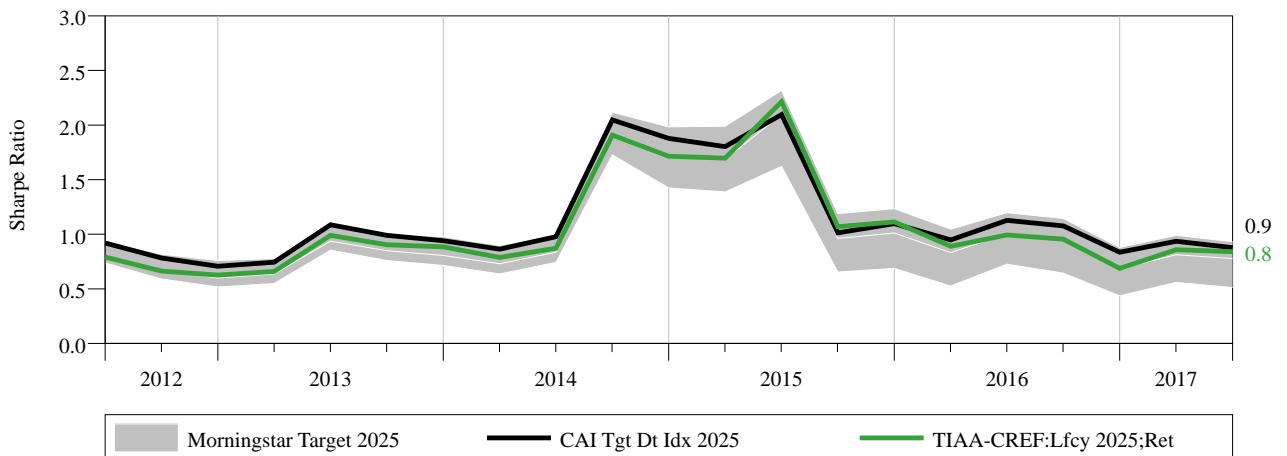
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2025;Ret	(0.10) (32)	0.84 (31)	4.20 (31)	(0.09) (31)	0.59 (14)
CAI Tgt Dt Idx 2025	0.00 (25)	0.88 (21)	4.30 (25)	0.00 (25)	--

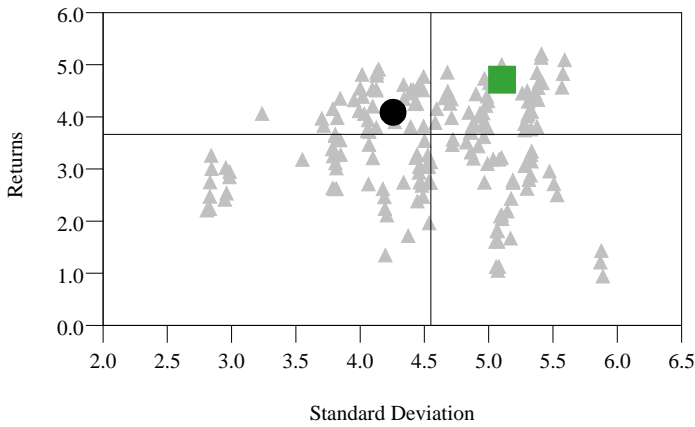
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Lfcy 2020;Ret

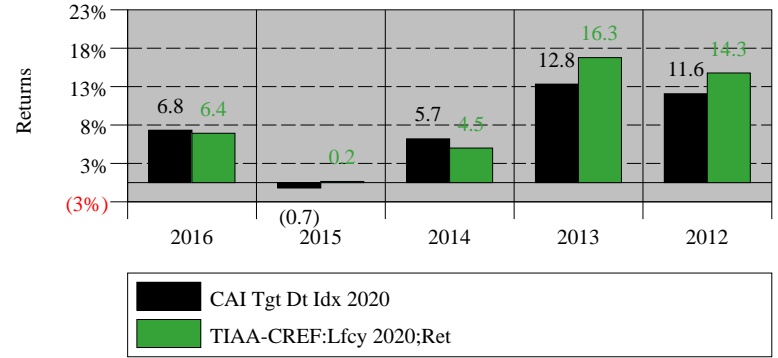
## CAI Tgt Dt Idx 2020 - (Morningstar Target 2020)

Scatter Chart  
for 3 Years Ended June 30, 2017

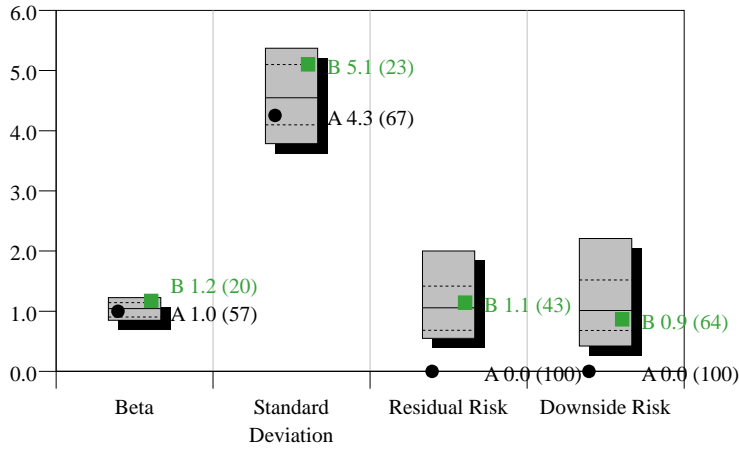


Returns for Various Periods

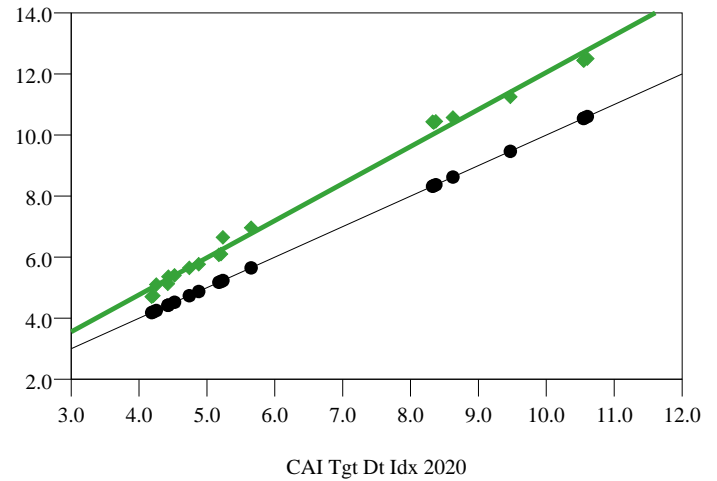
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Lfcy 2020;Ret	7.52 (11)	11.59 (13)	4.71 (8)	8.38 (10)
CAI Tgt Dt Idx 2020	6.03 (61)	8.89 (56)	4.09 (33)	7.27 (41)



Risk Statistics for 3 Years



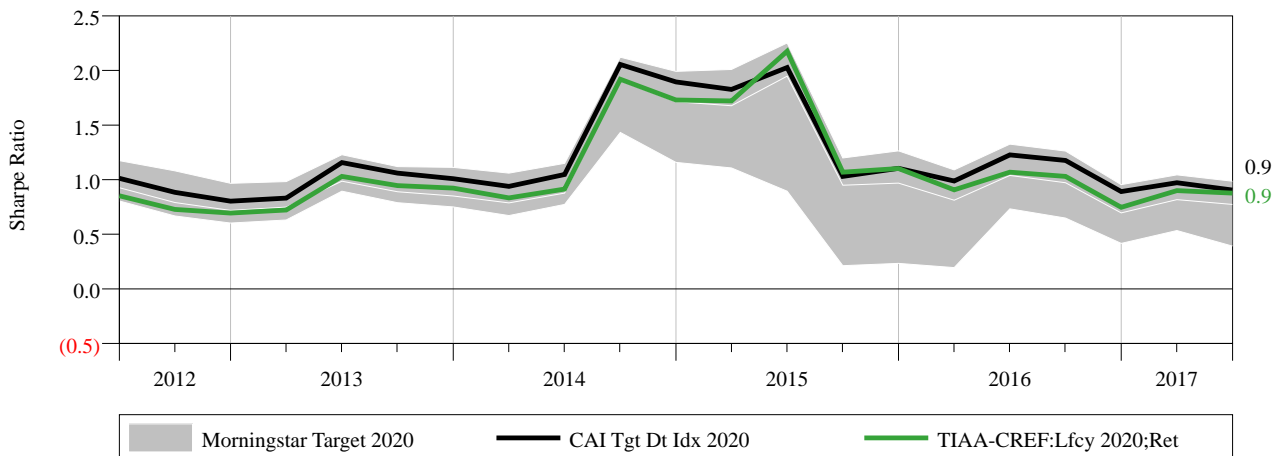
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2020;Ret	(0.02) (27)	0.88 (27)	3.83 (27)	(0.02) (27)	0.72 (14)
CAI Tgt Dt Idx 2020	0.00 (27)	0.91 (23)	3.86 (27)	0.00 (27)	--

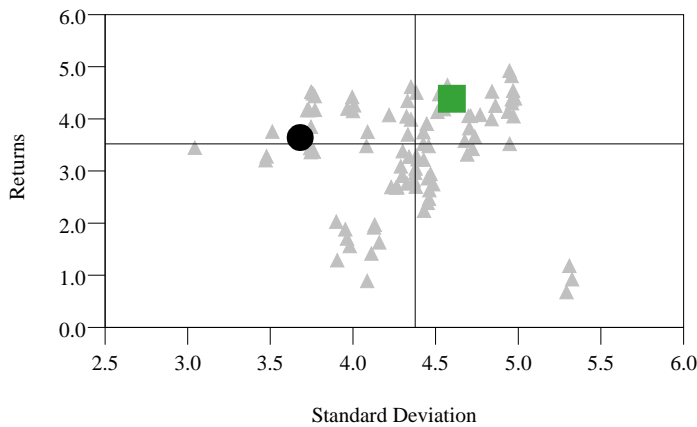
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Lfcy 2015;Ret

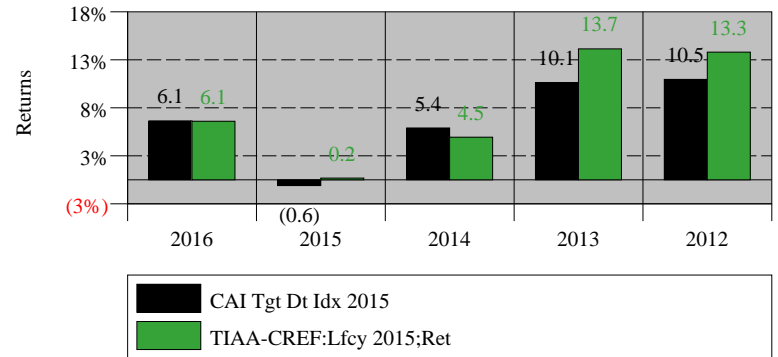
## CAI Tgt Dt Idx 2015 - (Morningstar Target 2015)

Scatter Chart  
for 3 Years Ended June 30, 2017

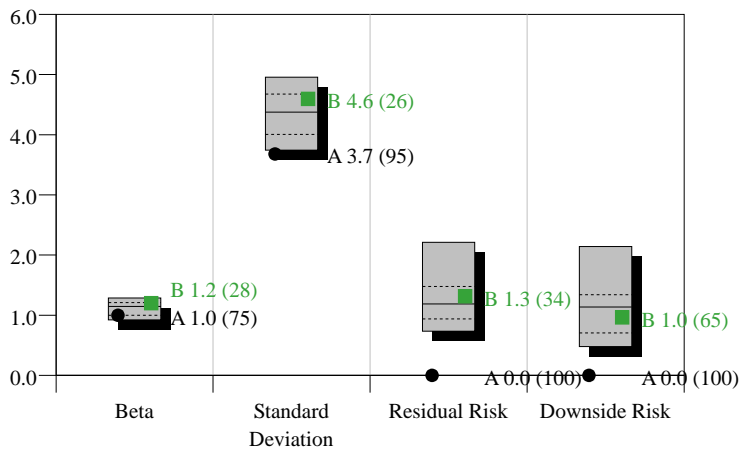


Returns for Various Periods

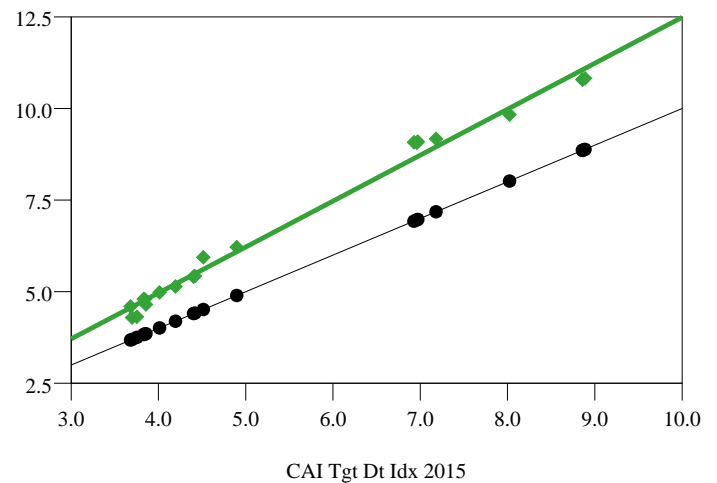
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Lfcy 2015;Ret	6.86 (16)	10.26 (17)	4.39 (15)	7.56 (19)
CAI Tgt Dt Idx 2015	5.26 (74)	7.06 (79)	3.64 (47)	6.30 (70)



Risk Statistics for 3 Years



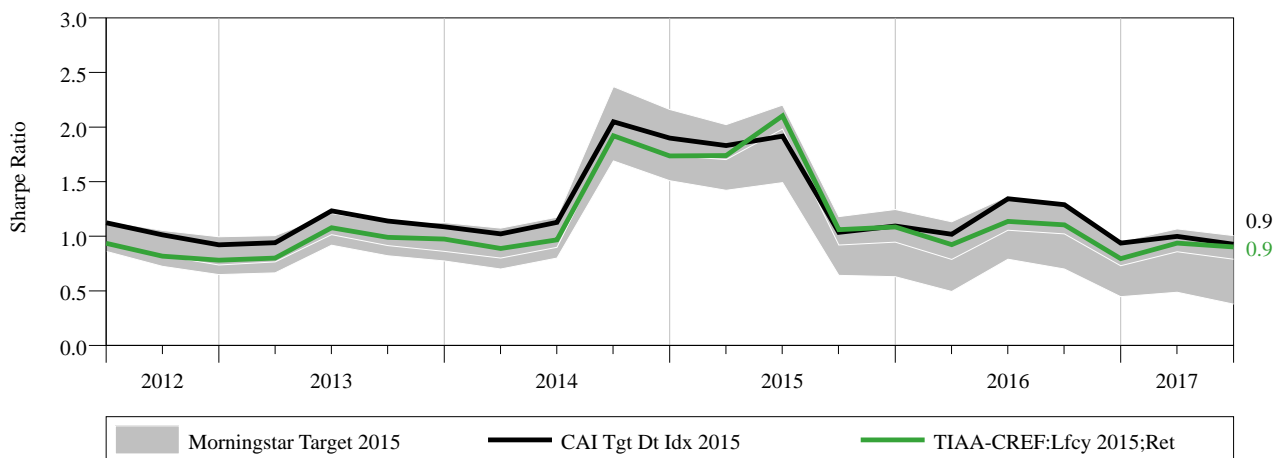
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2015;Ret	0.07 (23)	0.90 (24)	3.46 (23)	0.06 (23)	0.77 (21)
CAI Tgt Dt Idx 2015	0.00 (24)	0.93 (22)	3.41 (24)	0.00 (24)	--

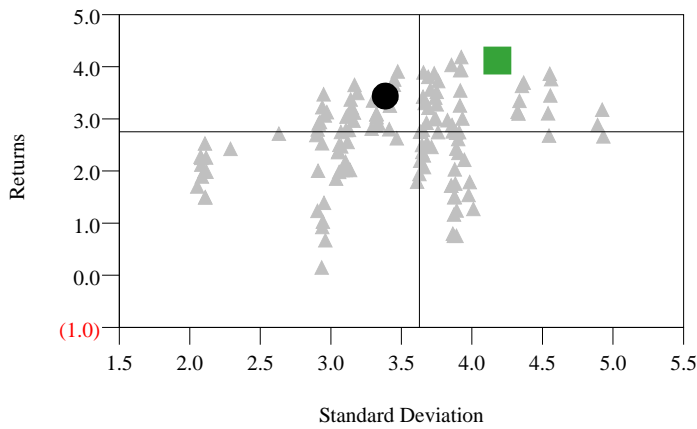
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Lfcy 2010;Ret

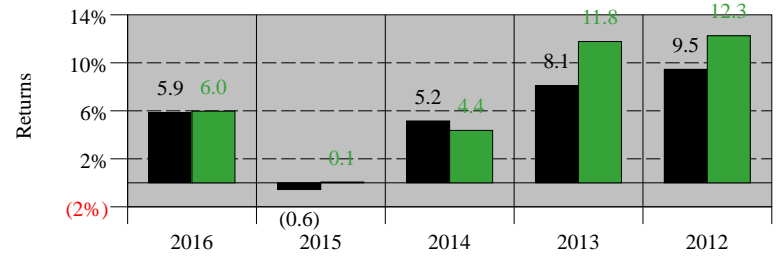
## CAI Tgt Dt Idx 2010 - (Morningstar Target Ret)

Scatter Chart  
for 3 Years Ended June 30, 2017

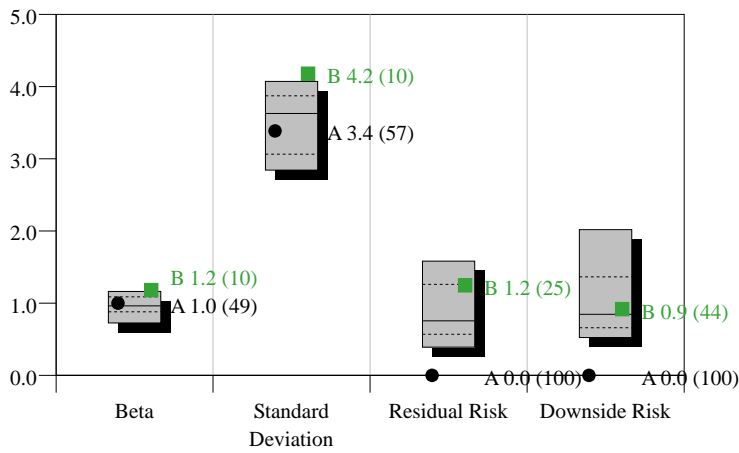


Returns for Various Periods

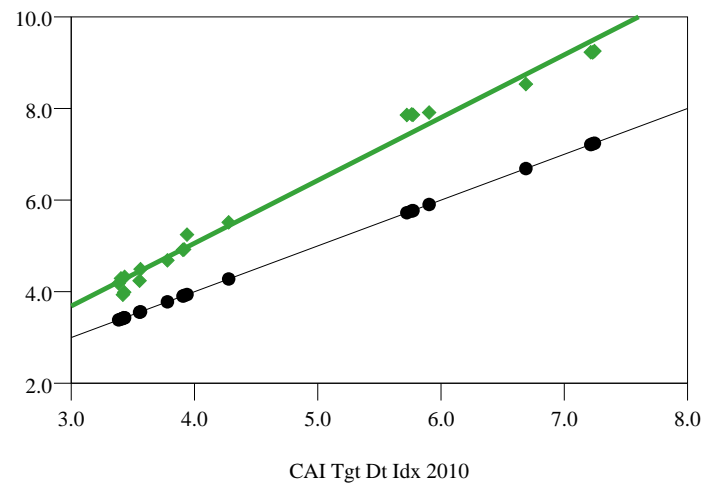
	Year to Date	Last Year	Last 3 Years	Last 5 Years
TIAA-CREF:Lfcy 2010;Ret	<b>6.26</b> (4)	<b>9.24</b> (3)	<b>4.12</b> (1)	<b>6.91</b> (1)
CAI Tgt Dt Idx 2010	4.88 (36)	6.32 (37)	3.44 (18)	5.62 (15)



Risk Statistics for 3 Years



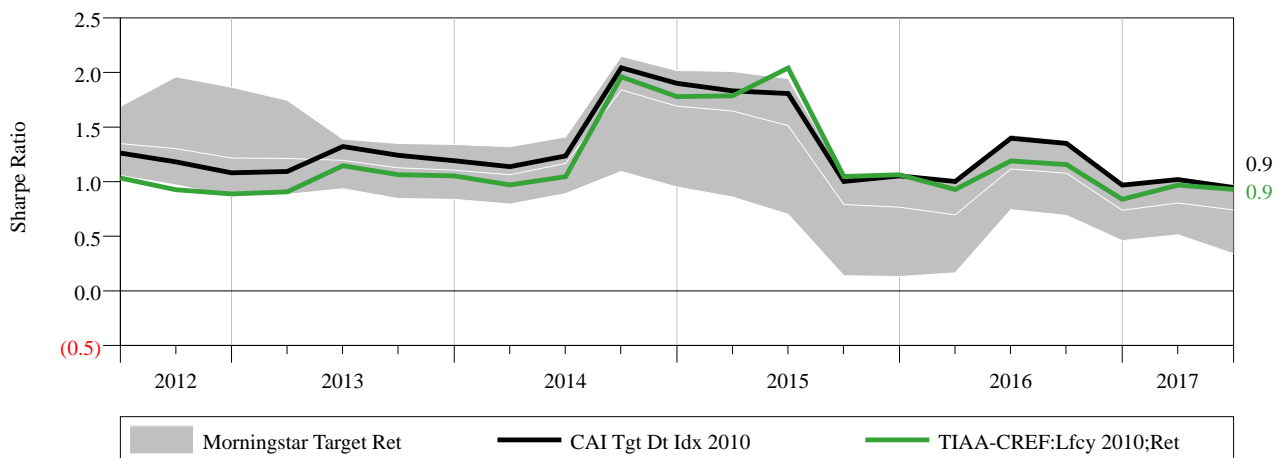
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Lfcy 2010;Ret	<b>0.11</b> (16)	<b>0.93</b> (21)	<b>3.29</b> (19)	<b>0.09</b> (22)	<b>0.74</b> (5)
CAI Tgt Dt Idx 2010	0.00 (24)	0.95 (17)	3.21 (24)	0.00 (24)	--

Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.

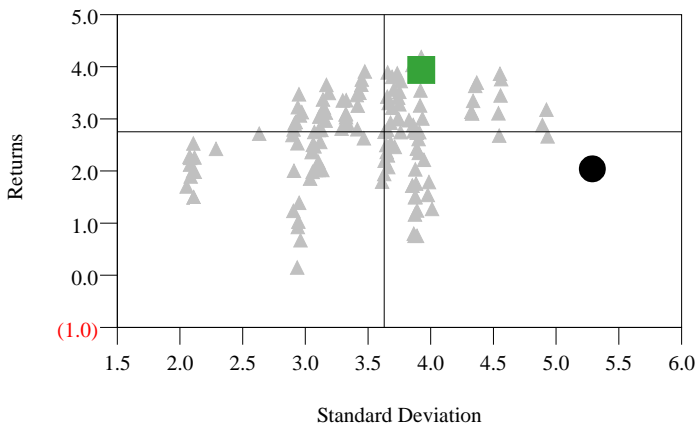




# TIAA-CREF:Lfcy Ret;Ret

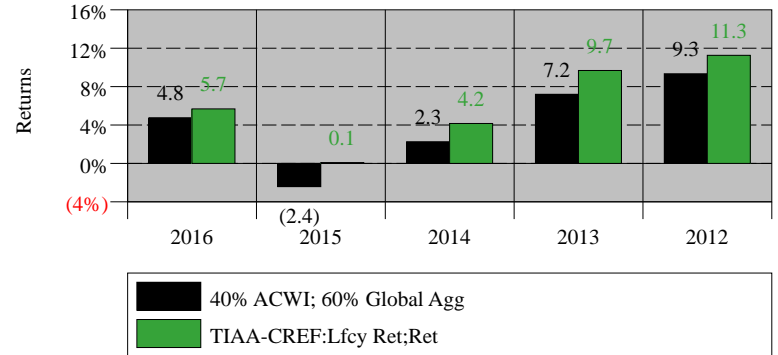
40% ACWI; 60% Global Agg - (Morningstar Target Ret)

Scatter Chart  
for 3 Years Ended June 30, 2017

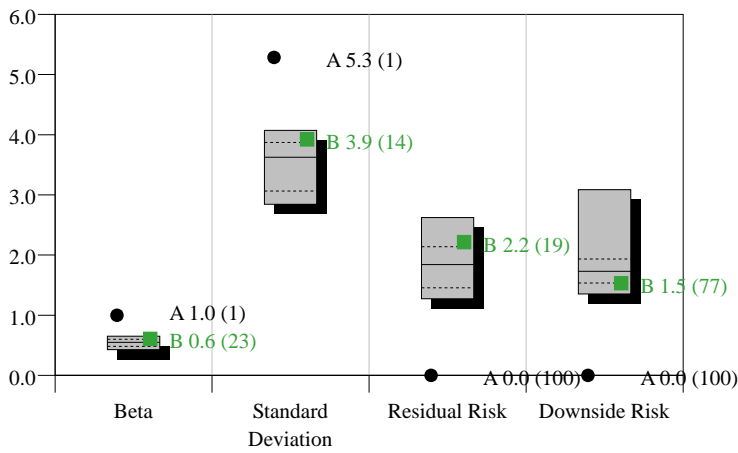


Returns for Various Periods

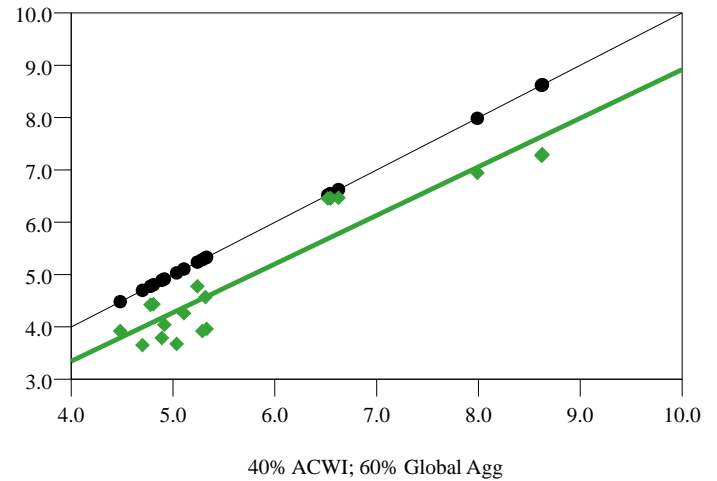
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF:Lfcy Ret;Ret</b>	<b>5.98 (9)</b>	<b>8.51 (9)</b>	<b>3.94 (2)</b>	<b>6.25 (6)</b>
40% ACWI; 60% Global Agg	7.32 (1)	6.02 (43)	2.04 (75)	4.92 (29)



Risk Statistics for 3 Years



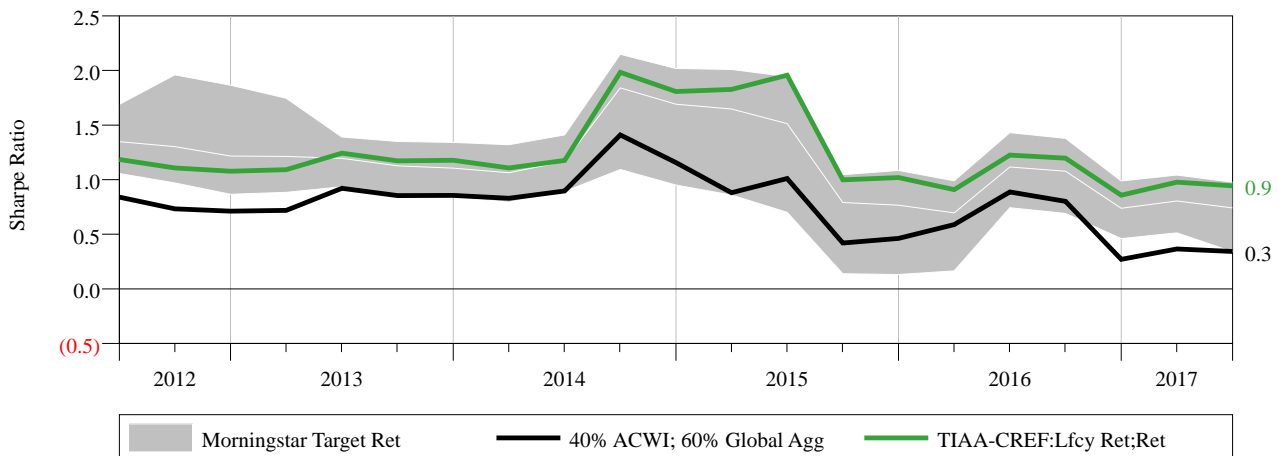
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:Lfcy Ret;Ret</b>	<b>2.57 (4)</b>	<b>0.94 (19)</b>	<b>6.10 (18)</b>	<b>1.16 (23)</b>	<b>1.24 (8)</b>
40% ACWI; 60% Global Agg	0.00 (94)	0.34 (90)	1.81 (94)	0.00 (94)	--

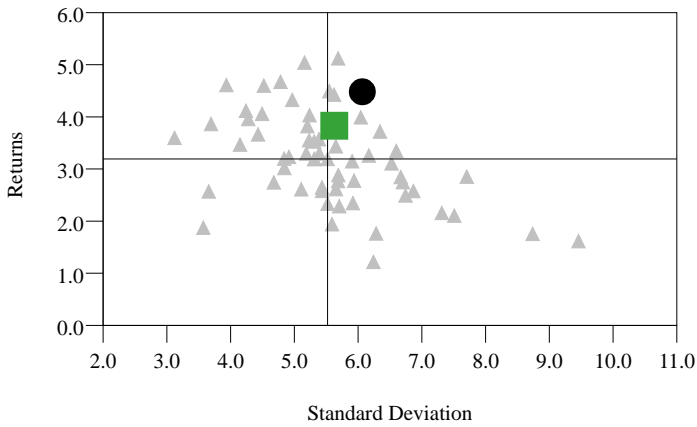
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



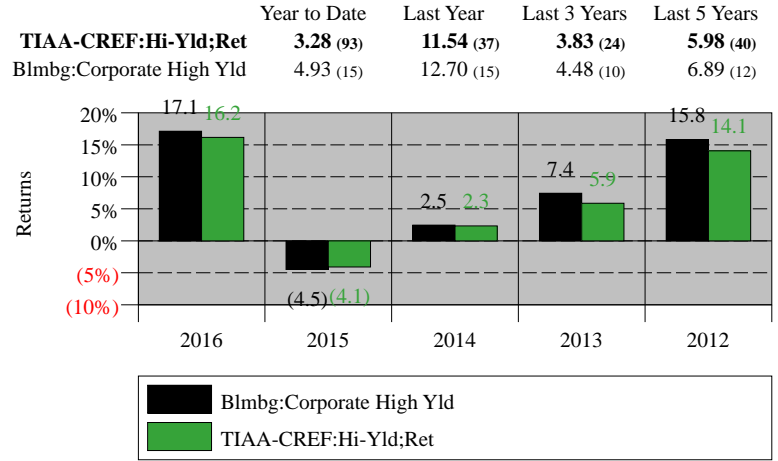
# TIAA-CREF:Hi-Yld;Ret

## Blmbg:Corporate High Yld - (CAI High Yield MFs)

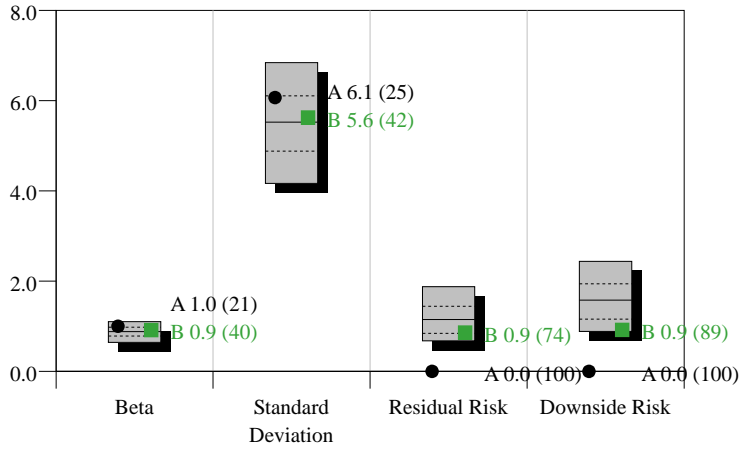
Scatter Chart  
for 3 Years Ended June 30, 2017



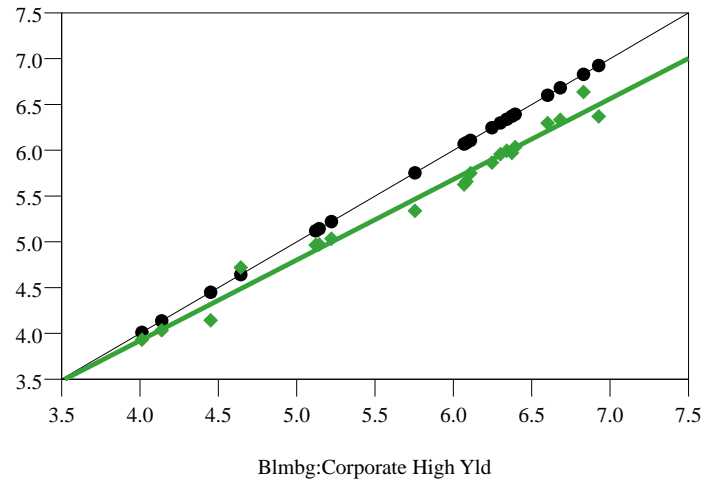
Returns for Various Periods



Risk Statistics for 3 Years



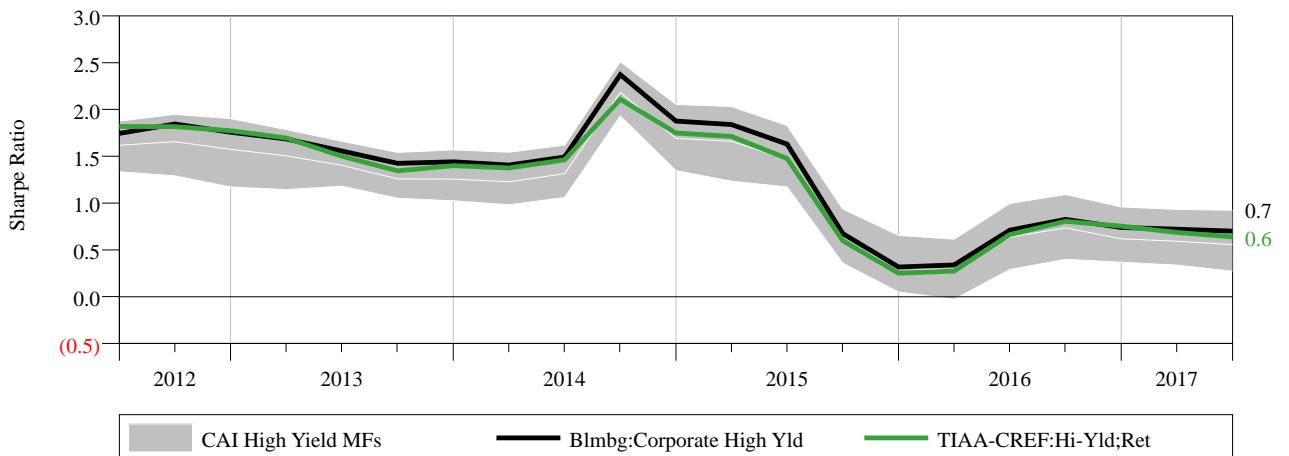
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:Hi-Yld;Ret</b>	<b>(0.29)</b> (33)	<b>0.64</b> (29)	<b>3.93</b> (32)	<b>(0.34)</b> (35)	<b>(0.71)</b> (34)
Blmbg:Corporate High Yld	0.00 (28)	0.70 (27)	4.25 (28)	0.00 (28)	--

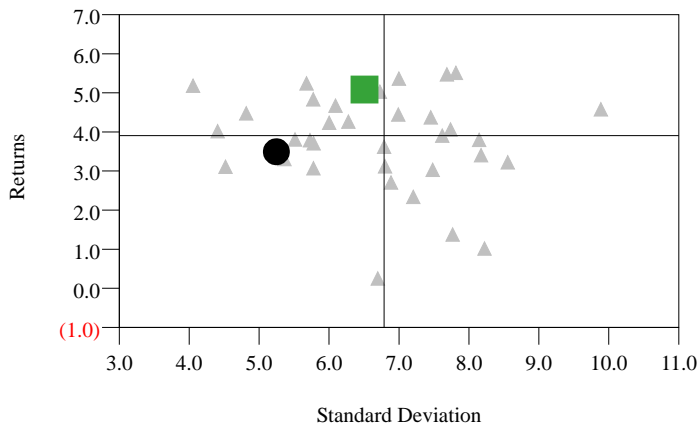
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# T Rowe Price Int:EM Bd

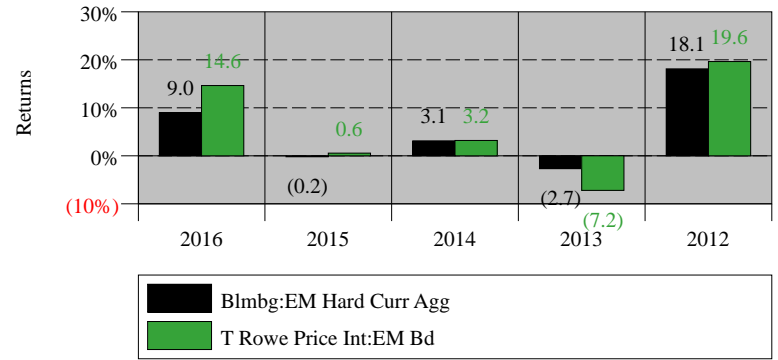
## Blmbg:EM Hard Curr Agg - (CAI EM Debt USD MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

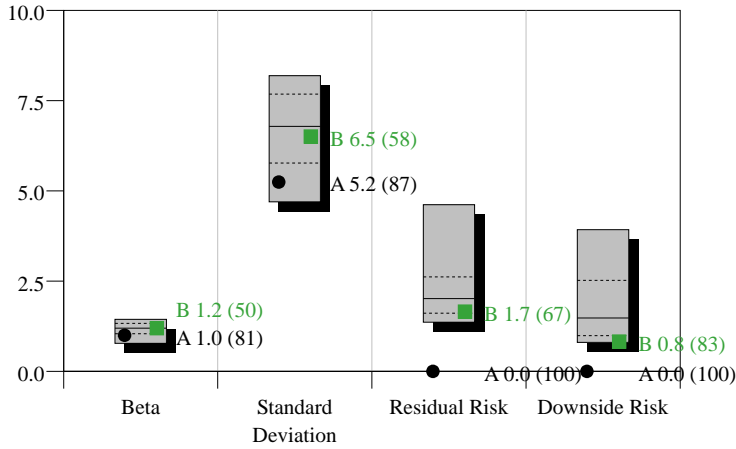


Returns for Various Periods

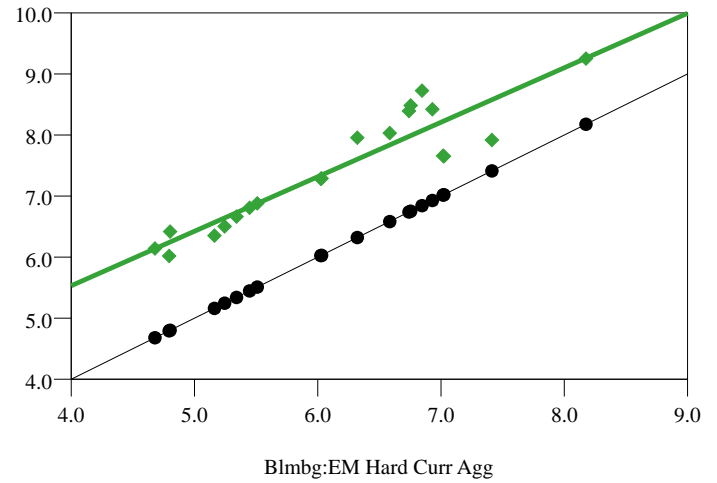
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>T Rowe Price Int:EM Bd</b>	<b>6.30</b> (56)	<b>8.87</b> (42)	<b>5.09</b> (17)	<b>5.49</b> (24)
Blmbg:EM Hard Curr Agg	5.82 (75)	5.76 (91)	3.50 (66)	5.03 (48)



Risk Statistics for 3 Years



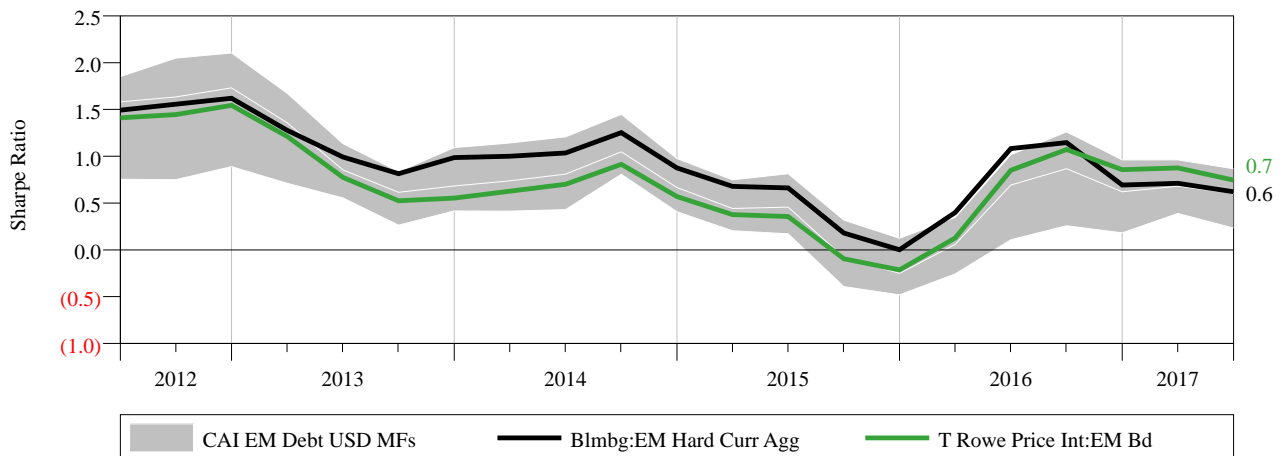
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>T Rowe Price Int:EM Bd</b>	<b>0.94</b> (22)	<b>0.75</b> (17)	<b>4.04</b> (22)	<b>0.57</b> (17)	<b>1.92</b> (8)
Blmbg:EM Hard Curr Agg	0.00 (55)	0.62 (44)	3.26 (53)	0.00 (55)	--

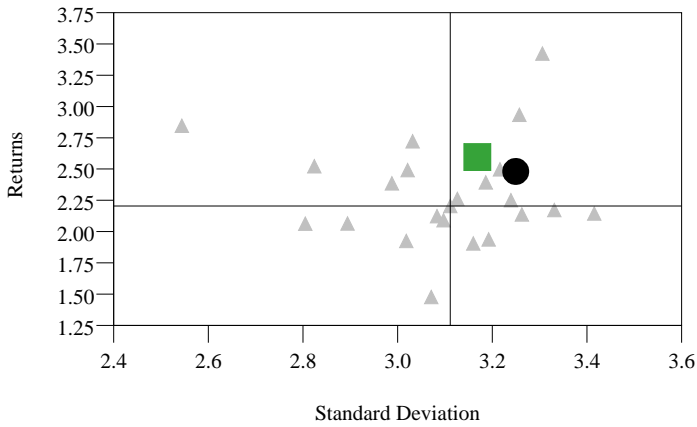
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



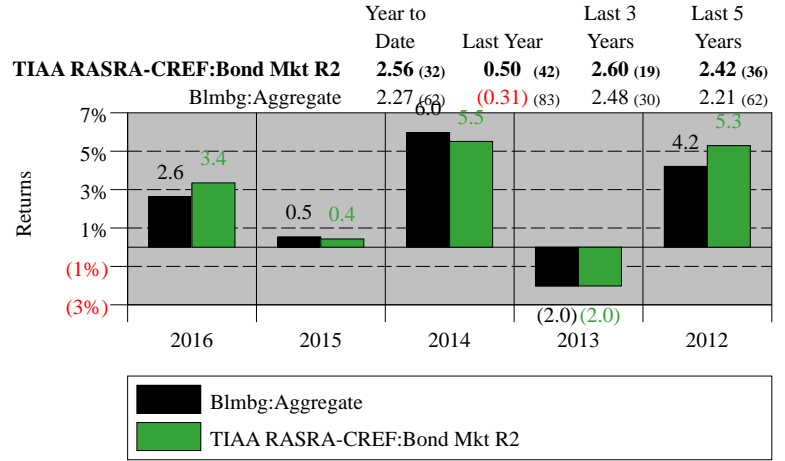
# TIAA RASRA-CREF:Bond Mkt R2

## Blmbg:Aggregate - (CAI Core Bond MFs)

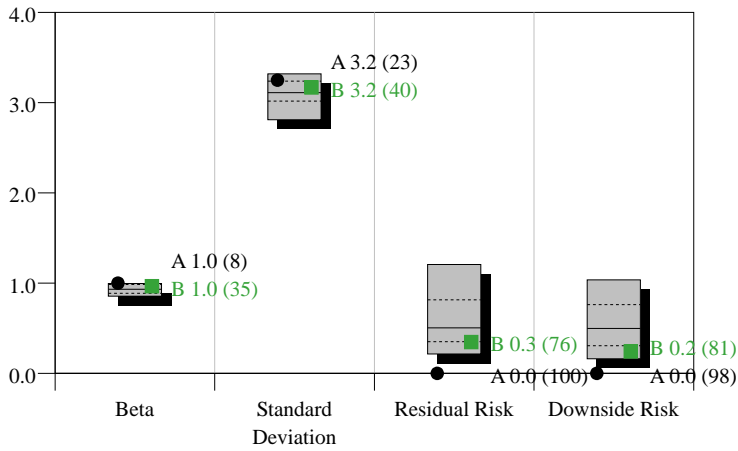
Scatter Chart  
for 3 Years Ended June 30, 2017



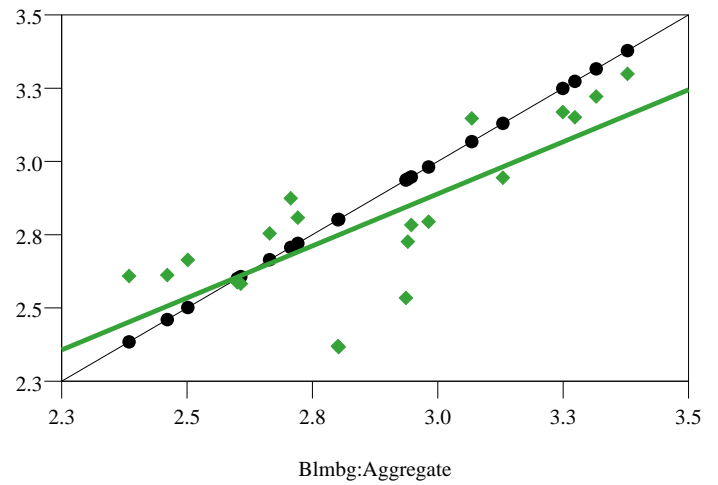
Returns for Various Periods



Risk Statistics for 3 Years



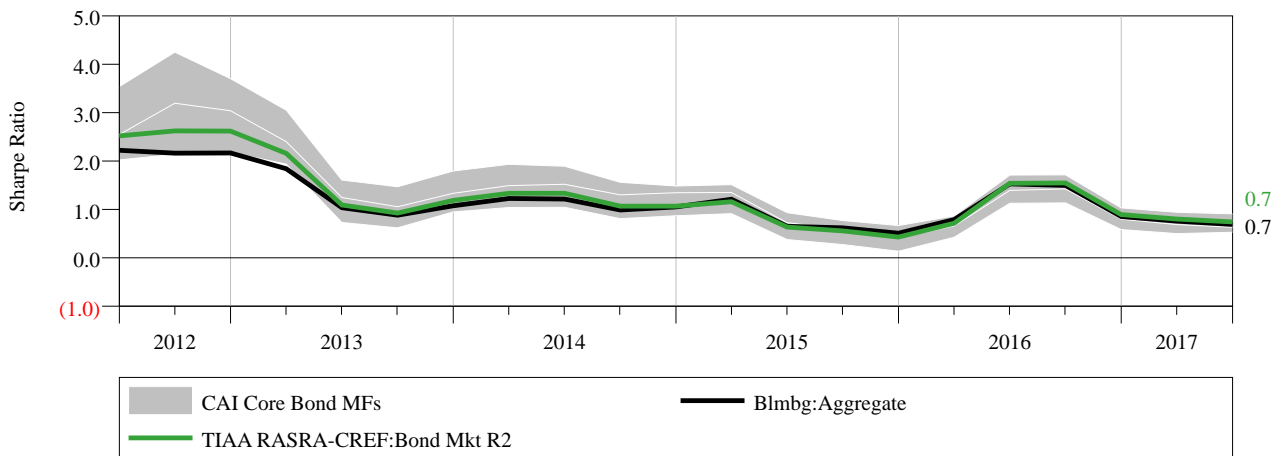
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA RASRA-CREF:Bond Mkt R2</b>	<b>0.19</b> (26)	<b>0.75</b> (25)	<b>2.44</b> (27)	<b>0.53</b> (22)	<b>0.47</b> (12)
<b>Blmbg:Aggregate</b>	<b>0.00</b> (36)	<b>0.69</b> (35)	<b>2.25</b> (36)	<b>0.00</b> (37)	--

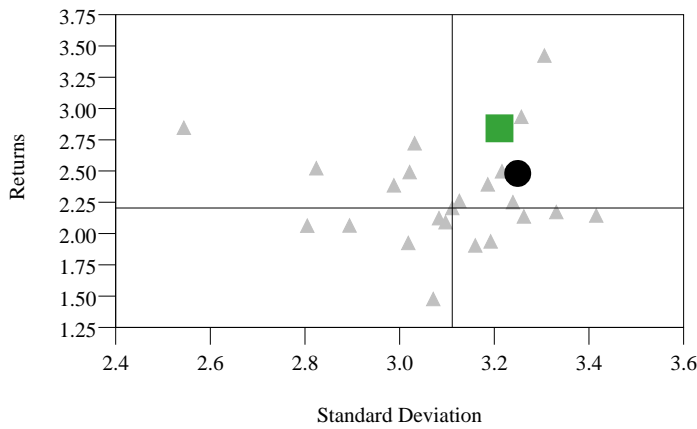
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



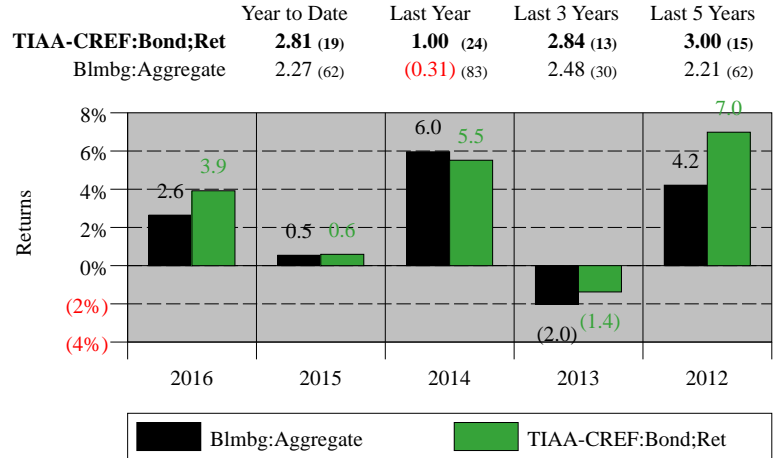
# TIAA-CREF:Bond;Ret

## Blmbg:Aggregate - (CAI Core Bond MFs)

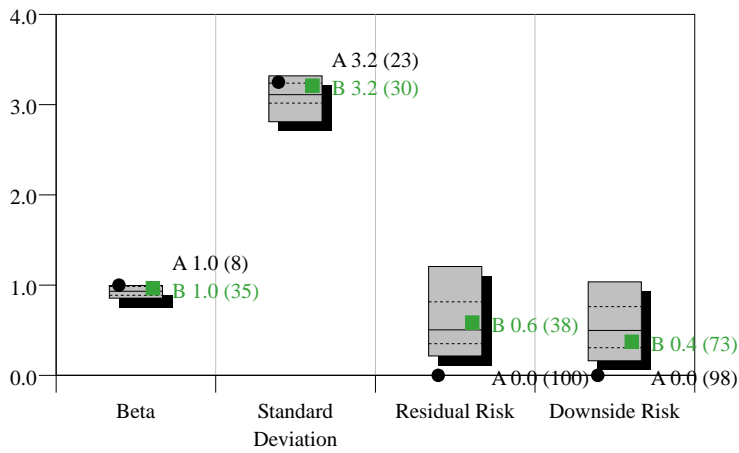
Scatter Chart  
for 3 Years Ended June 30, 2017



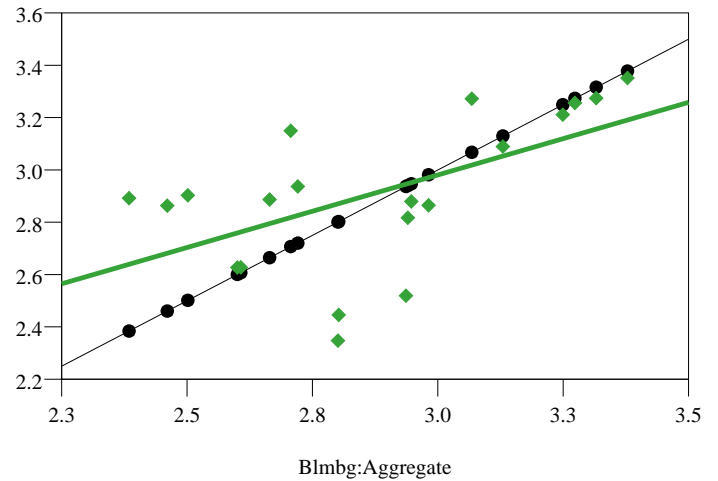
Returns for Various Periods



Risk Statistics for 3 Years



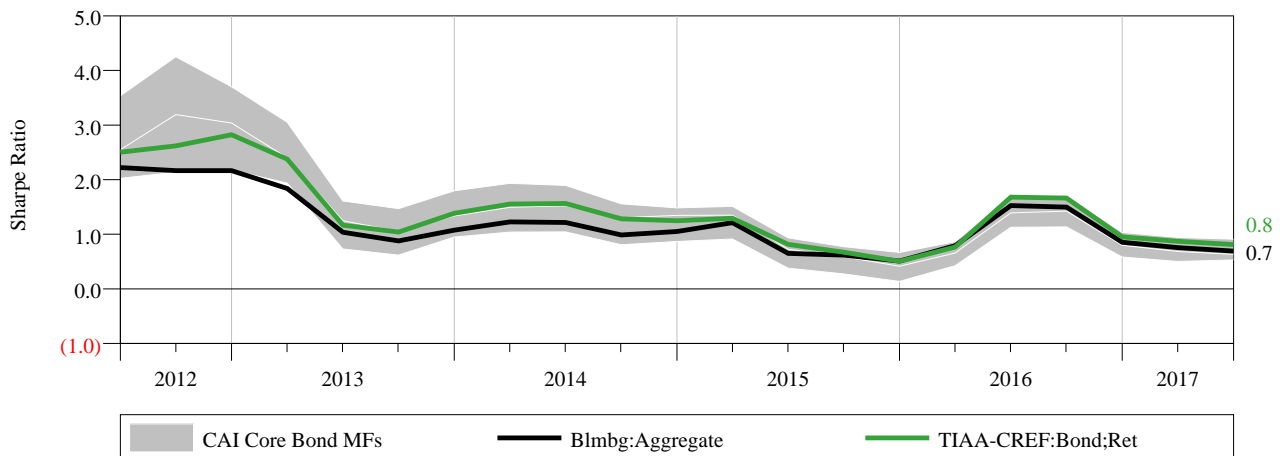
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:Bond;Ret</b>	<b>0.43</b> (18)	<b>0.81</b> (20)	<b>2.70</b> (18)	<b>0.73</b> (18)	<b>0.97</b> (12)
<b>Blmbg:Aggregate</b>	0.00 (36)	0.69 (35)	2.25 (36)	0.00 (37)	--

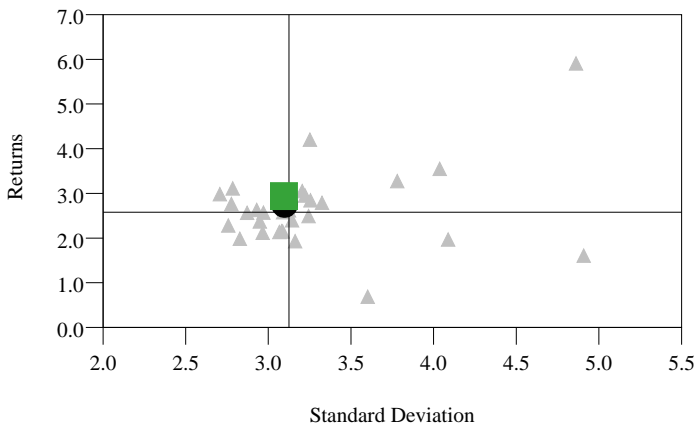
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF: Bond Plus; Ret

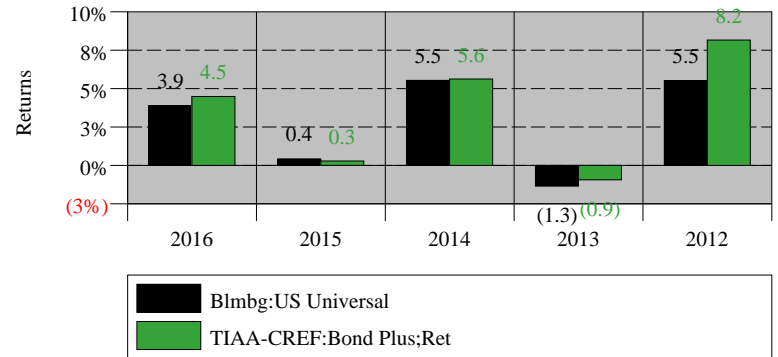
## Blmbg:US Universal - (CAI Core Plus MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

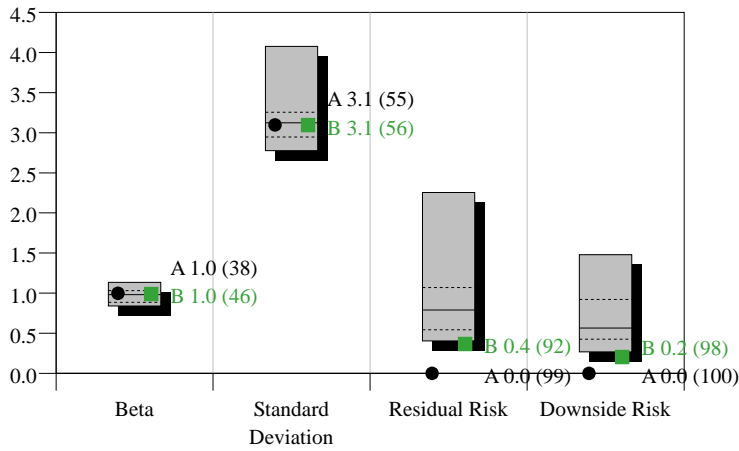


Returns for Various Periods

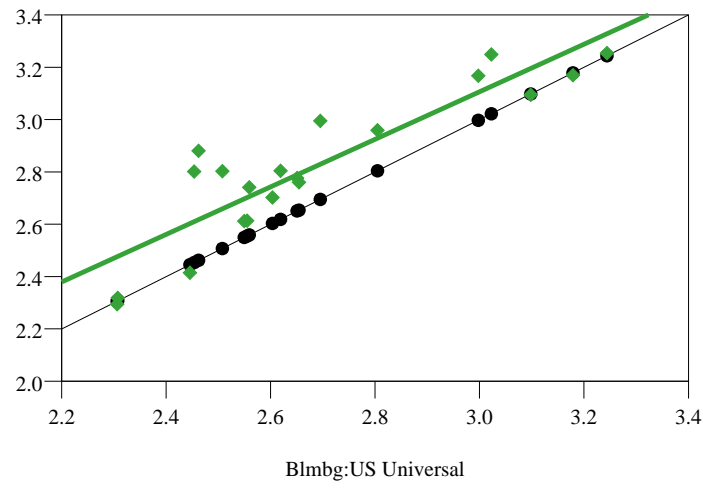
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF: Bond Plus; Ret</b>	<b>2.94</b> (56)	<b>1.83</b> (45)	<b>2.94</b> (29)	<b>3.24</b> (38)
Blmbg:US Universal	2.63 (69)	0.91 (72)	2.76 (41)	2.73 (66)



Risk Statistics for 3 Years



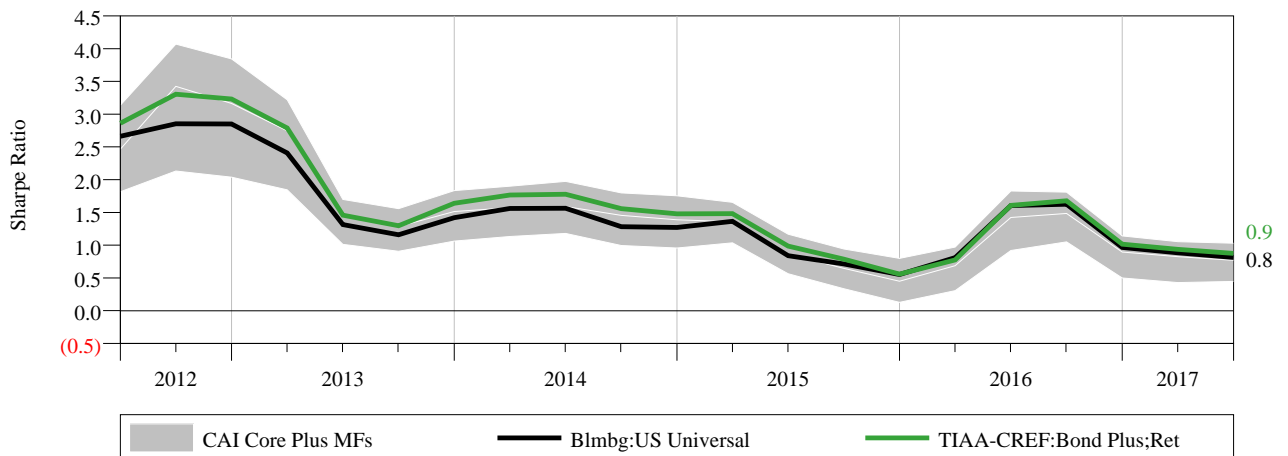
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF: Bond Plus; Ret</b>	<b>0.20</b> (27)	<b>0.87</b> (22)	<b>2.74</b> (27)	<b>0.56</b> (15)	<b>0.89</b> (13)
Blmbg:US Universal	0.00 (47)	0.82 (36)	2.53 (45)	0.00 (47)	--

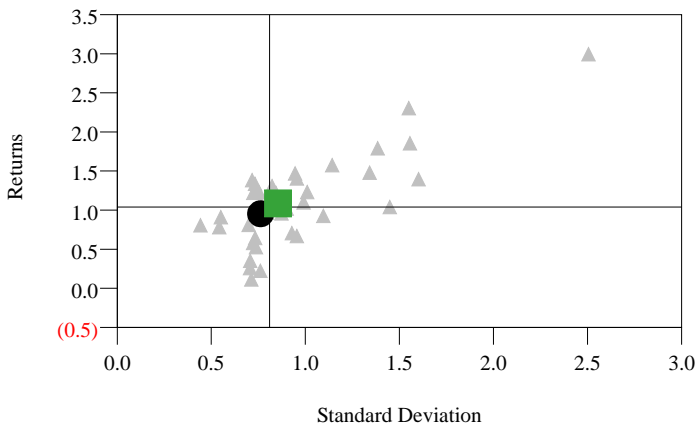
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



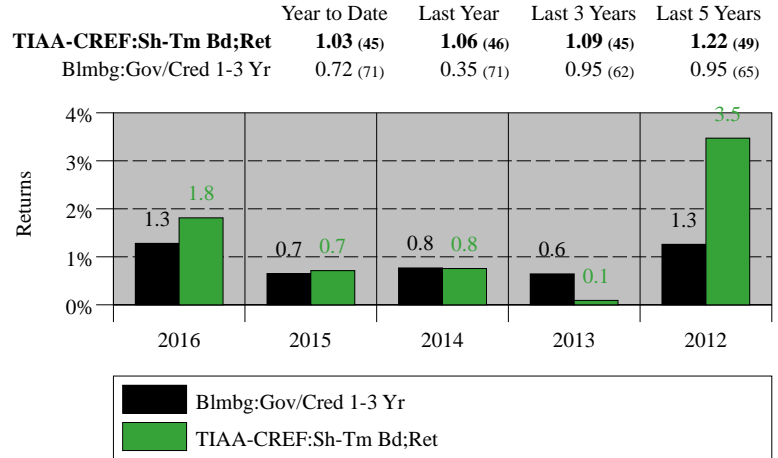
# TIAA-CREF:Sh-Tm Bd;Ret

## Blmbg:Gov/Cred 1-3 Yr - (CAI Defensive FI MFs)

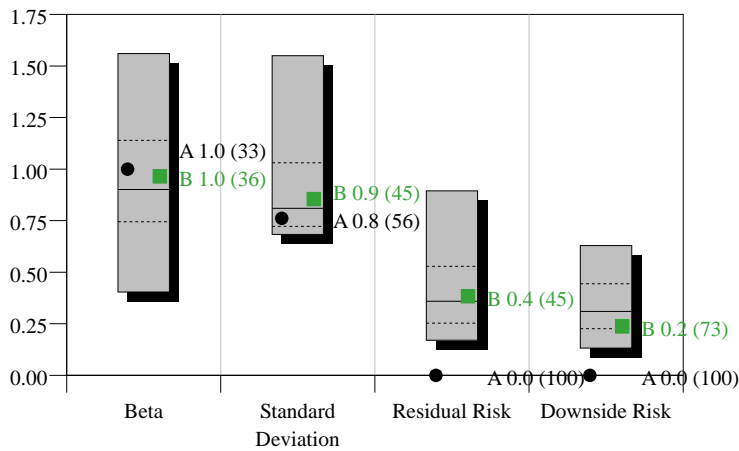
Scatter Chart  
for 3 Years Ended June 30, 2017



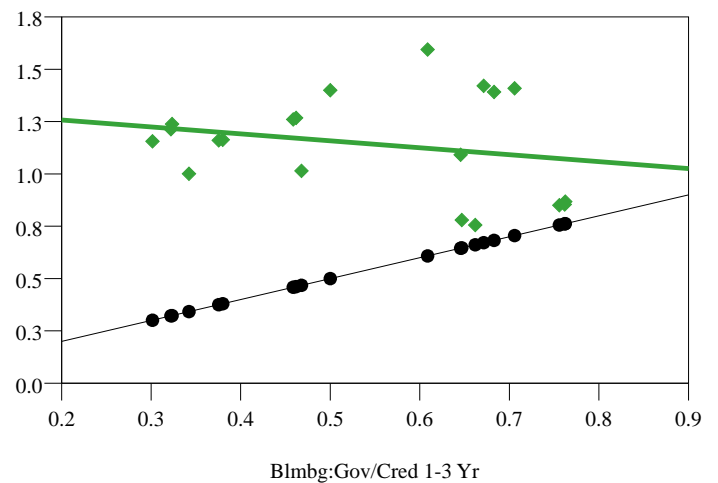
Returns for Various Periods



Risk Statistics for 3 Years



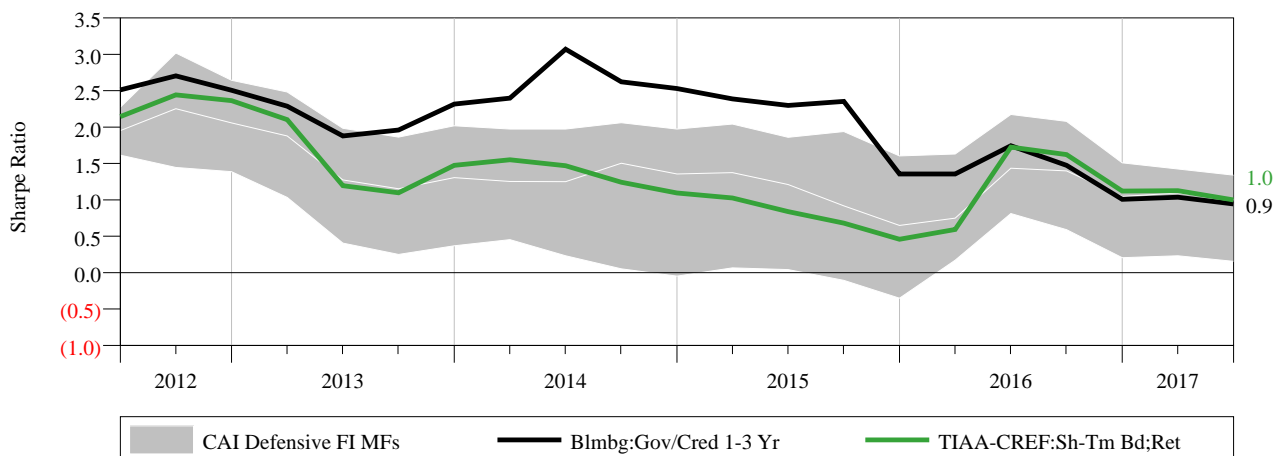
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:Sh-Tm Bd;Ret</b>	<b>0.16</b> (57)	<b>1.00</b> (50)	<b>0.89</b> (48)	<b>0.41</b> (56)	<b>0.56</b> (42)
Blmbg:Gov/Cred 1-3 Yr	0.00 (67)	0.95 (53)	0.72 (62)	0.00 (67)	--

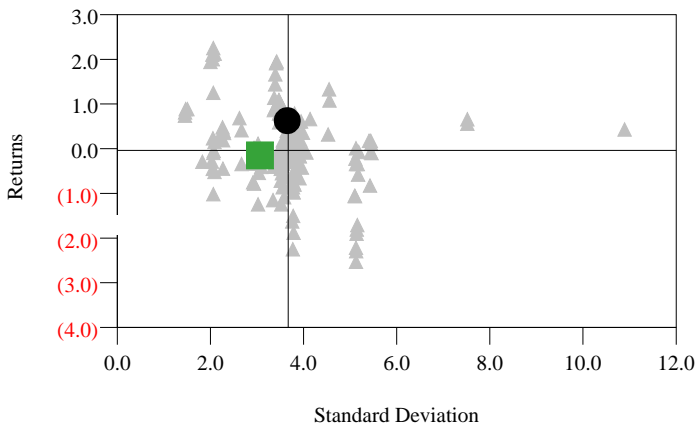
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



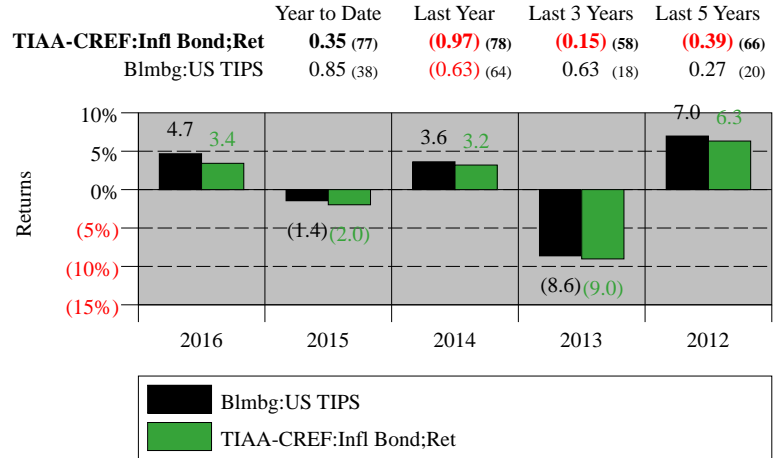
# TIAA-CREF:Infl Bond;Ret

## Blmbg:US TIPS - (CAI TIPS MFs)

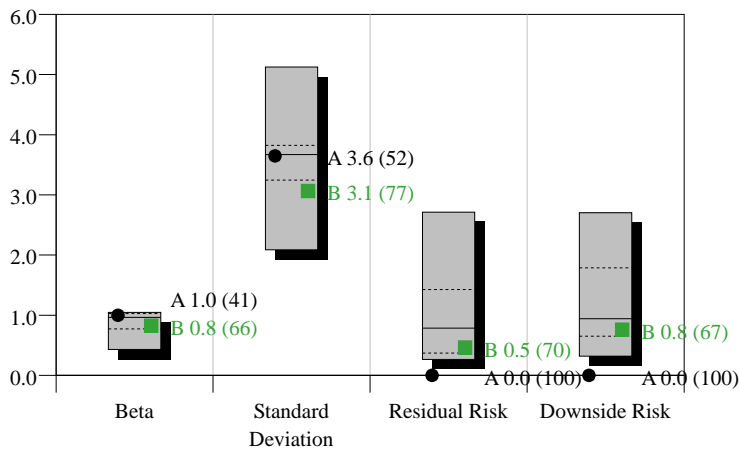
Scatter Chart  
for 3 Years Ended June 30, 2017



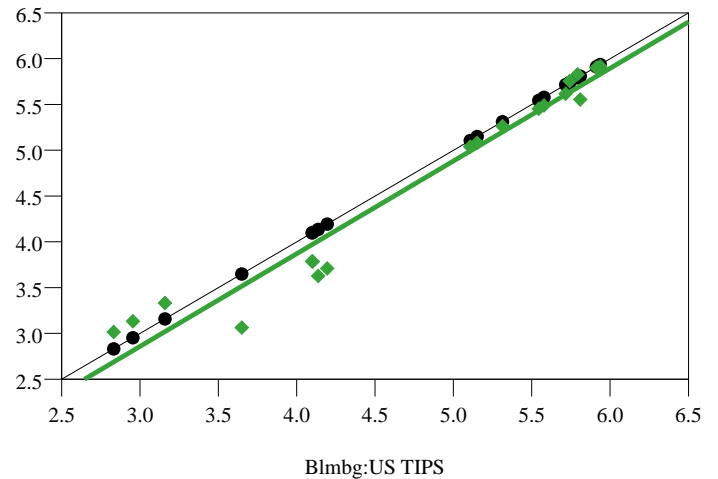
Returns for Various Periods



Risk Statistics for 3 Years



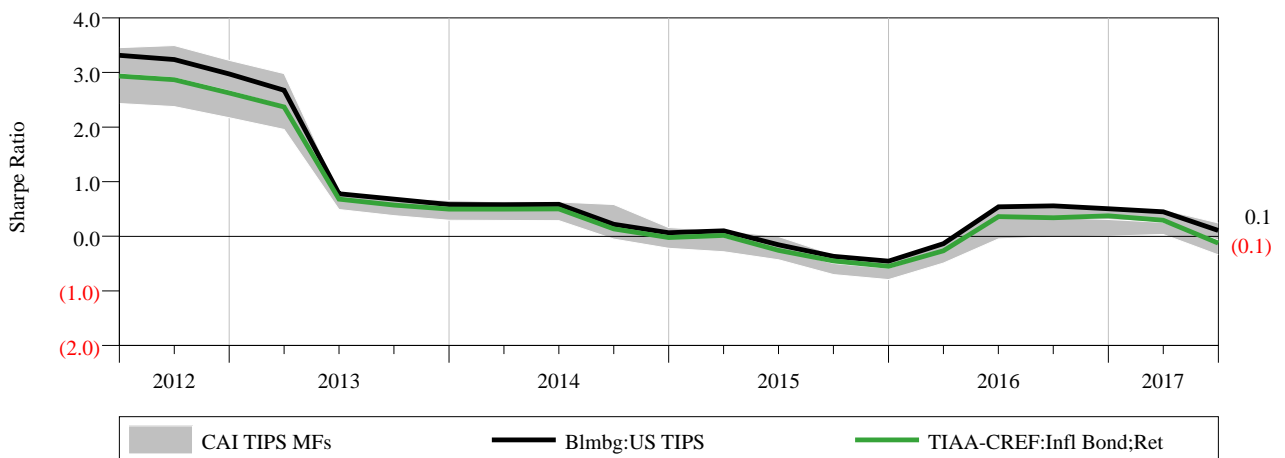
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA-CREF:Infl Bond;Ret	(0.72) (57)	(0.12) (63)	(0.46) (64)	(1.54) (75)	(1.02) (69)
Blmbg:US TIPS	0.00 (19)	0.11 (17)	0.40 (22)	0.00 (19)	--

Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.

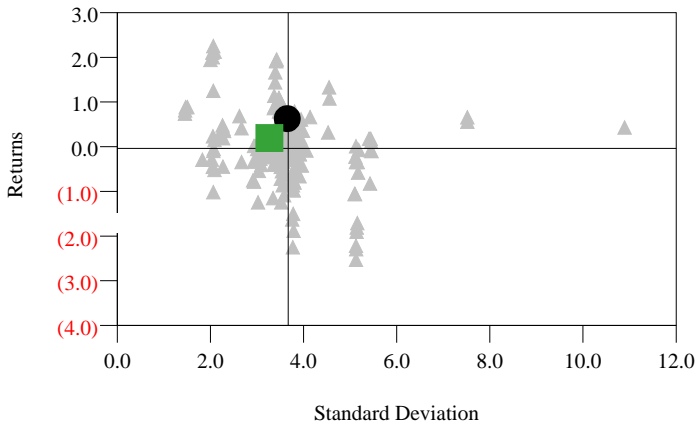




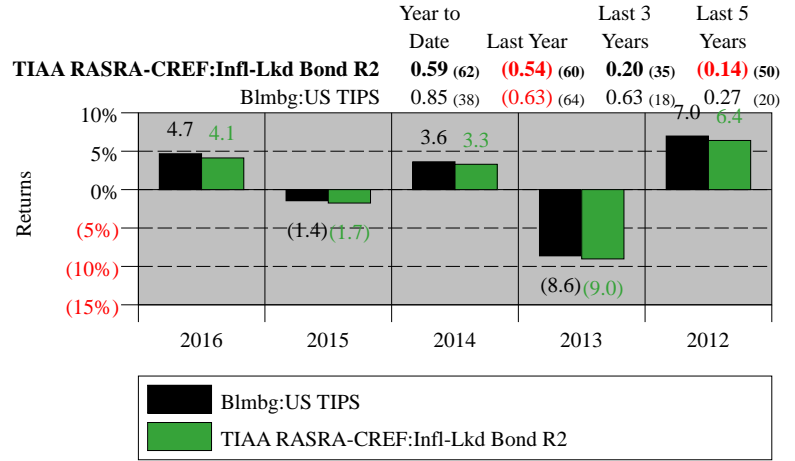
# TIAA RASRA-CREF:Infl-Lkd Bond R2

## Blmbg:US TIPS - (CAI TIPS MFs)

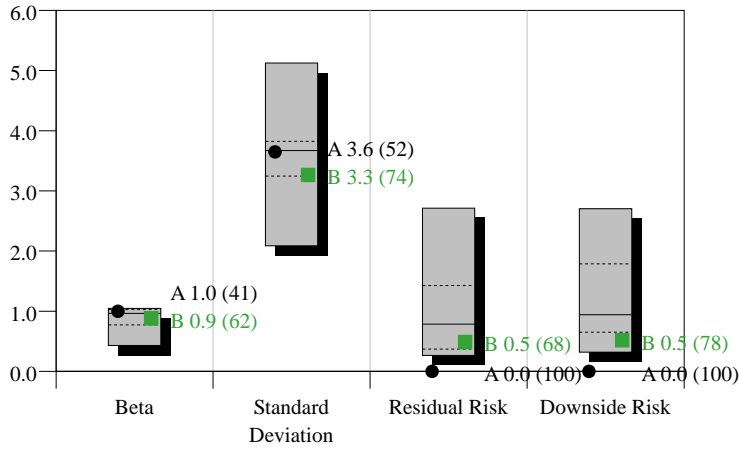
Scatter Chart  
for 3 Years Ended June 30, 2017



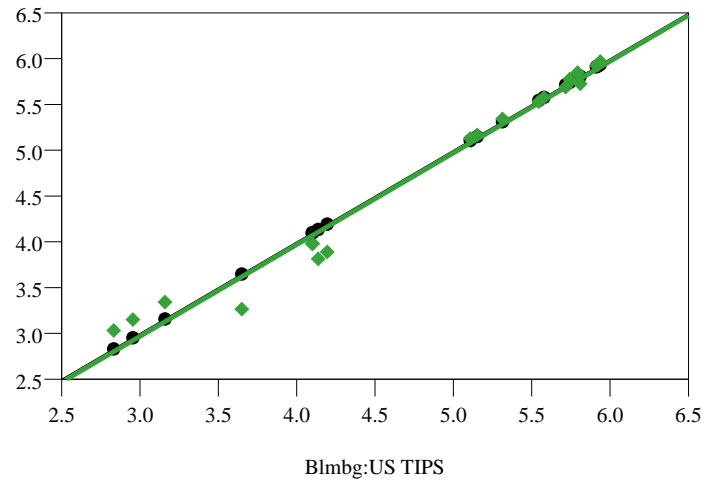
Returns for Various Periods



Risk Statistics for 3 Years



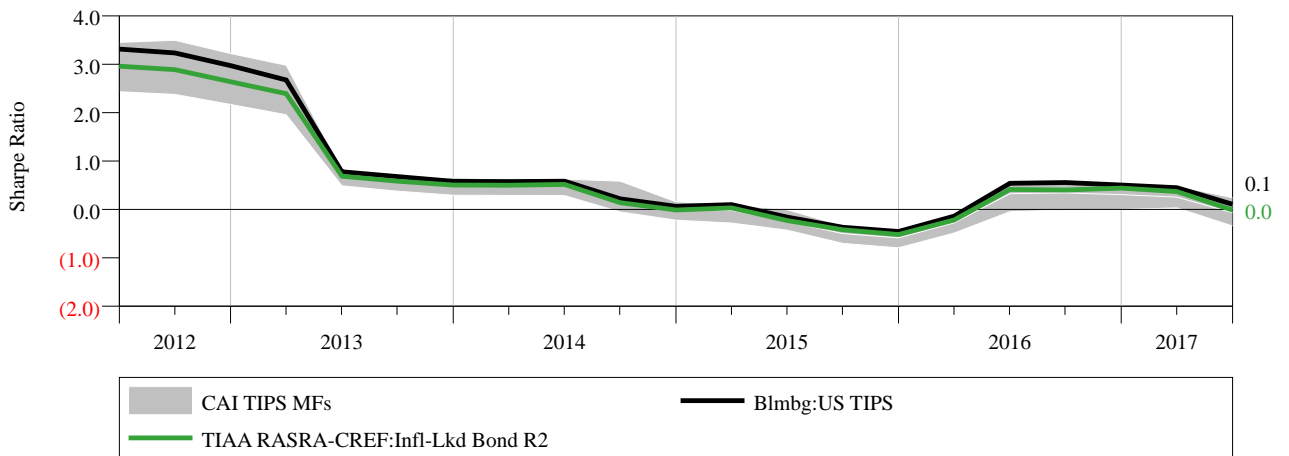
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA RASRA-CREF:Infl-Lkd Bond R2</b>	<b>(0.39)</b> (35)	<b>(0.01)</b> (36)	<b>(0.04)</b> (39)	<b>(0.80)</b> (56)	<b>(0.84)</b> (58)
<b>Blmbg:US TIPS</b>	<b>0.00</b> (19)	<b>0.11</b> (17)	<b>0.40</b> (22)	<b>0.00</b> (19)	--

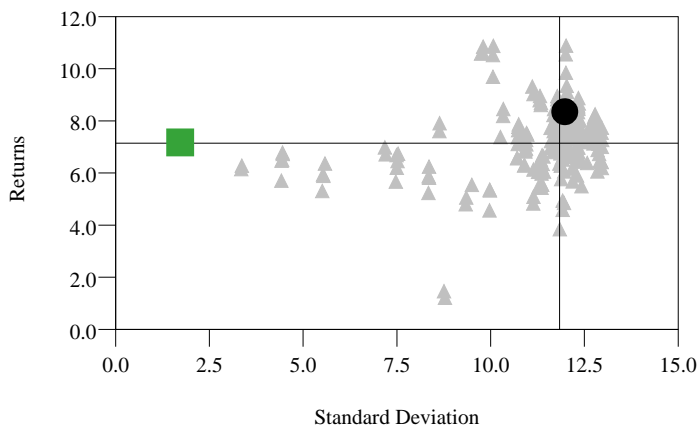
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



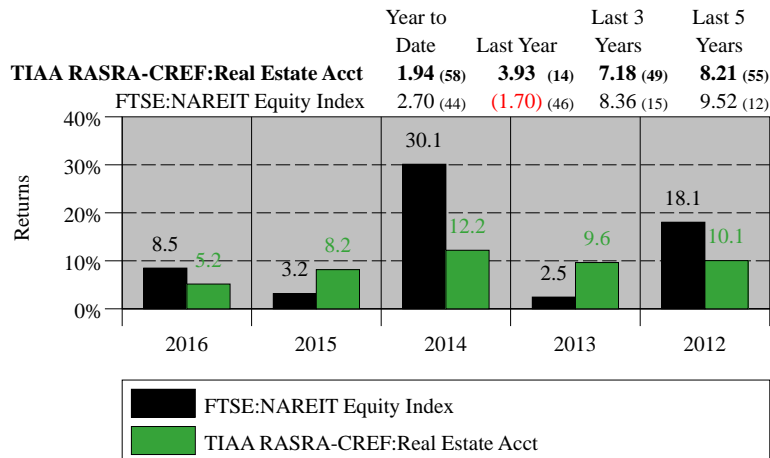
# TIAA RASRA-CREF:Real Estate Acct

## FTSE:NAREIT Equity Index - (CAI Real Estate MFs)

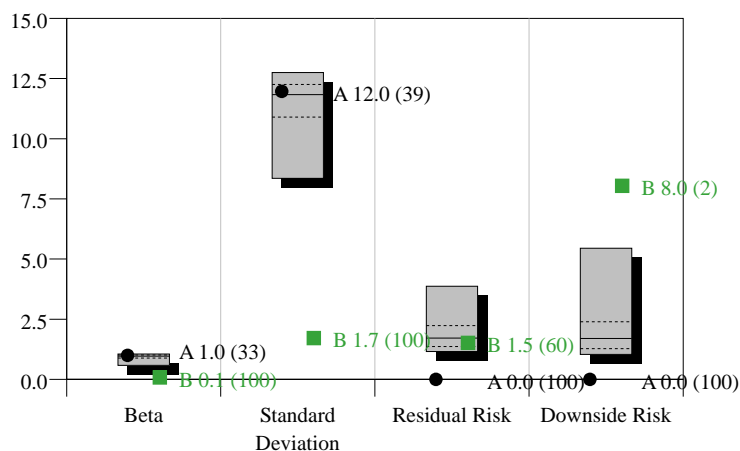
Scatter Chart  
for 3 Years Ended June 30, 2017



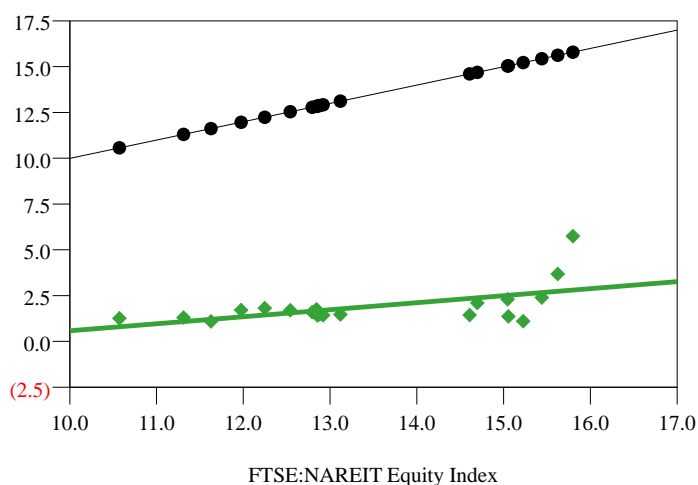
Returns for Various Periods



Risk Statistics for 3 Years



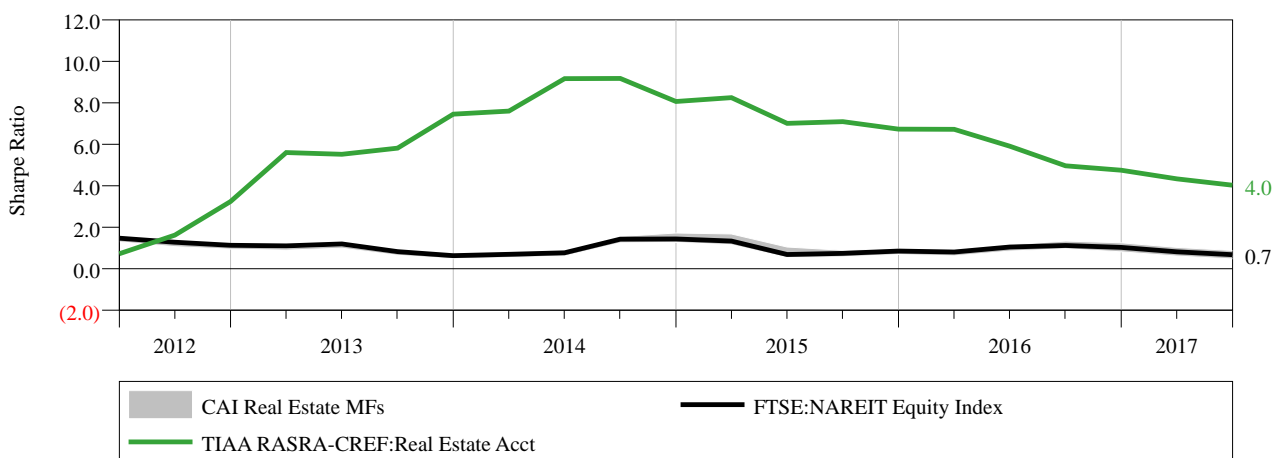
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
TIAA RASRA-CREF:Real Estate Acct	6.22 (1)	4.03 (1)	85.64 (1)	4.09 (1)	(0.15) (19)
FTSE:NAREIT Equity Index	0.00 (32)	0.68 (27)	8.12 (32)	0.00 (32)	--

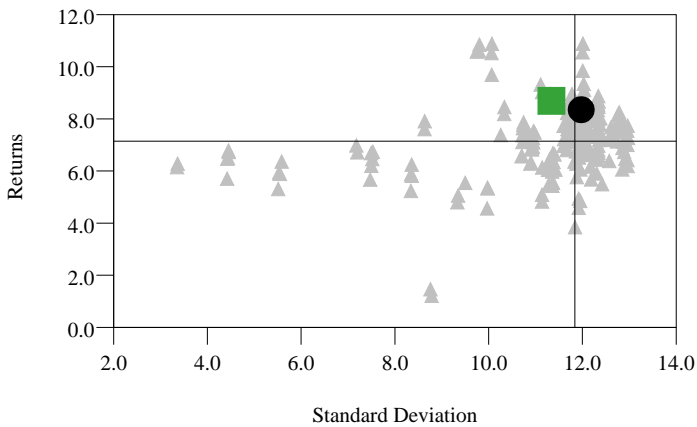
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# TIAA-CREF:Real Est;Ret

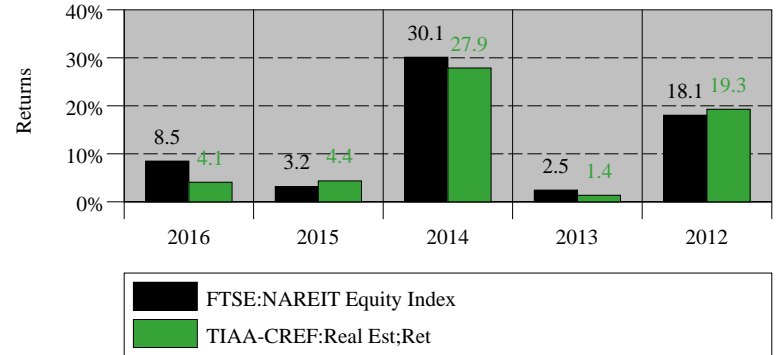
## FTSE:NAREIT Equity Index - (CAI Real Estate MFs)

Scatter Chart  
for 3 Years Ended June 30, 2017

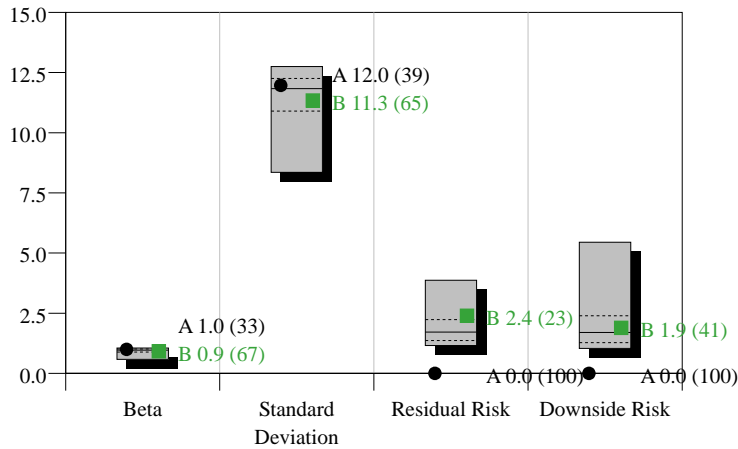


Returns for Various Periods

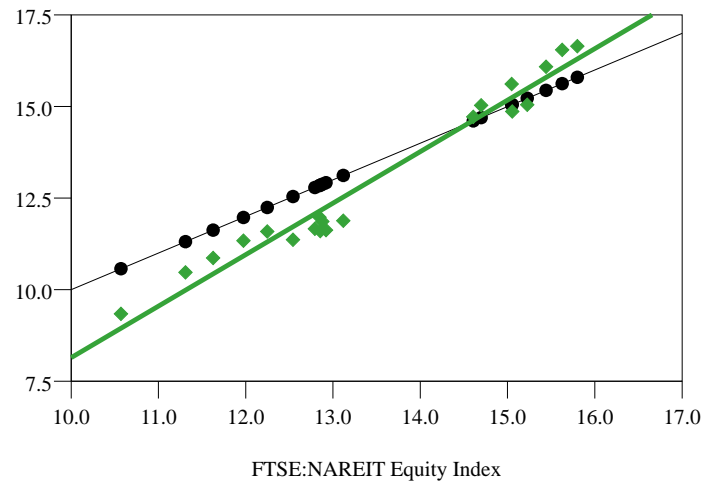
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>TIAA-CREF:Real Est;Ret</b>	<b>6.52</b> (5)	<b>1.94</b> (17)	<b>8.69</b> (10)	<b>9.09</b> (18)
FTSE:NAREIT Equity Index	2.70 (44)	(1.70) (46)	8.36 (15)	9.52 (12)



Risk Statistics for 3 Years



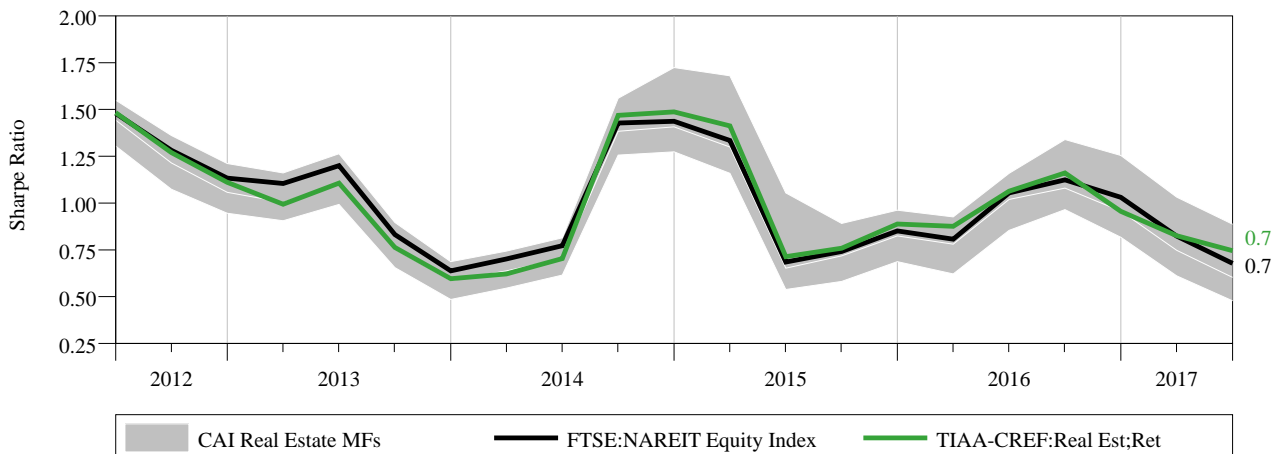
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>TIAA-CREF:Real Est;Ret</b>	<b>0.89</b> (20)	<b>0.75</b> (17)	<b>9.15</b> (20)	<b>0.37</b> (18)	<b>0.18</b> (11)
FTSE:NAREIT Equity Index	0.00 (32)	0.68 (27)	8.12 (32)	0.00 (32)	--

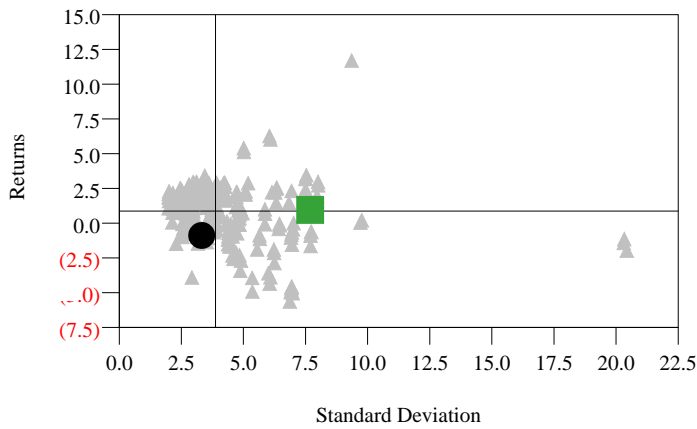
Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# PIMCO:All Asset;A

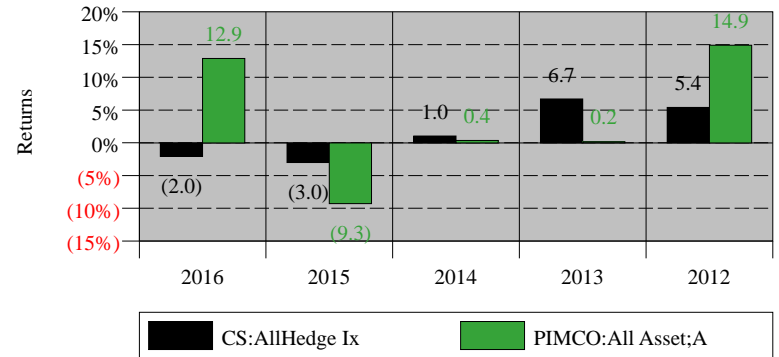
## CS:AllHedge Ix - (Morningstar Multialt)

Scatter Chart  
for 3 Years Ended June 30, 2017

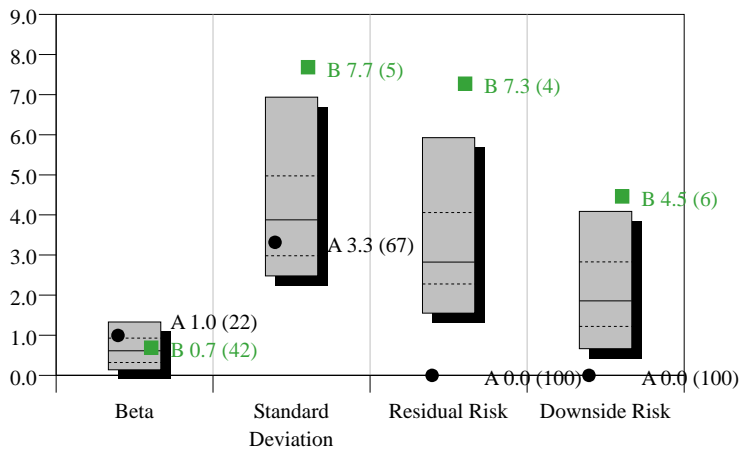


Returns for Various Periods

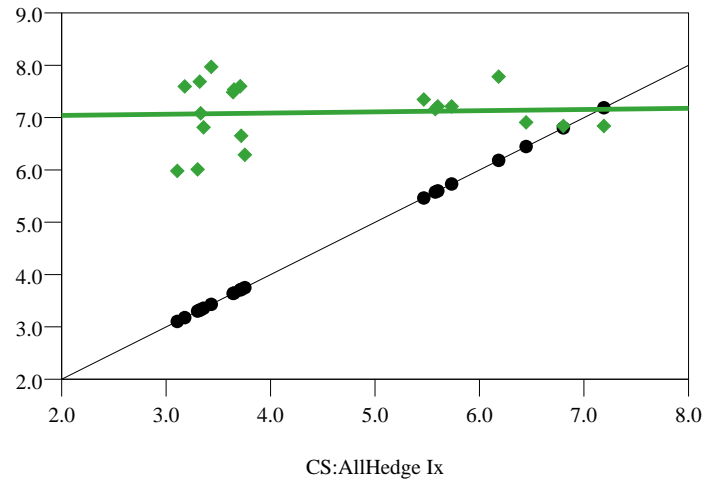
	Year to Date	Last Year	Last 3 Years	Last 5 Years
<b>PIMCO:All Asset;A</b>	<b>6.76</b> (4)	<b>10.22</b> (4)	<b>0.96</b> (49)	<b>3.73</b> (26)
<b>CS:AllHedge Ix</b>	2.67 (43)	3.98 (41)	<b>(0.87)</b> (80)	1.79 (82)



Risk Statistics for 3 Years



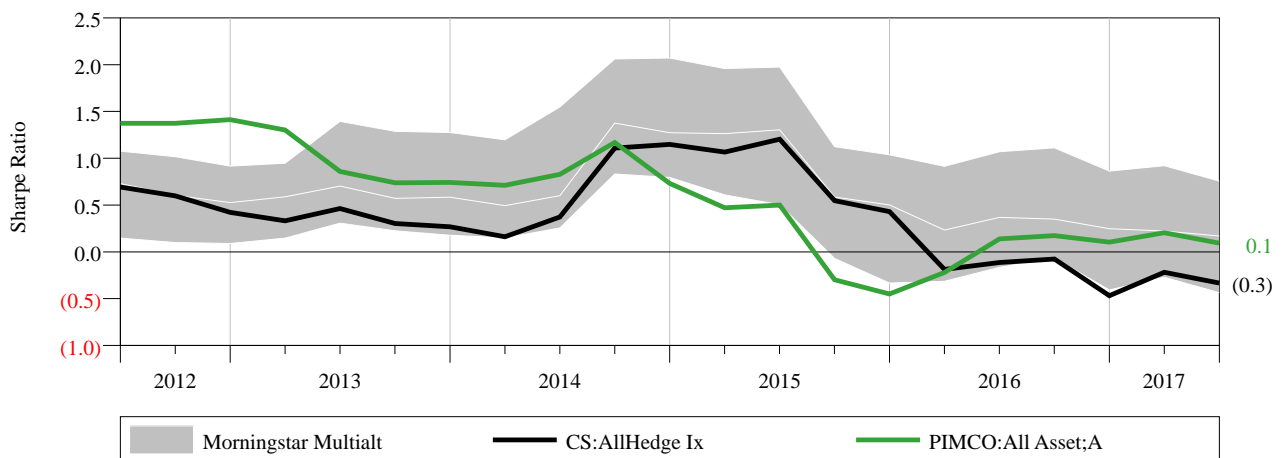
Rolling 12 Quarter Standard Deviation Comparison Chart



Risk Adjusted Statistics for 3 Years

	Alpha	Sharpe Ratio	Treynor Ratio	Information Ratio	Sortino Ratio
<b>PIMCO:All Asset;A</b>	<b>1.77</b> (41)	<b>0.09</b> (54)	<b>1.05</b> (48)	<b>0.24</b> (64)	<b>0.41</b> (65)
<b>CS:AllHedge Ix</b>	0.00 (78)	<b>(0.33)</b> (86)	<b>(1.10)</b> (75)	0.00 (78)	--

Sharpe Ratio is a measure of the risk-adjusted return of a portfolio. The ratio represents the return gained per unit of risk taken.



# Section IV



# Investment Fee & Expense Disclosure

JUNIATA COLLEGE

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

FUND NAME	FUND ID	TICKER	ASSET CLASS	ASSETS AS OF 06/30/2017	AVERAGE ASSETS FOR THE REPORTING PERIOD	NET EXPENSE RATIO <sup>1</sup>		PLAN SERVICES EXPENSE <sup>1</sup>	
						(%)	(\$)	(%)	(\$)
CREF Stock R2	CO	QCSTPX	Equities	\$21,195,612.93	\$21,284,695.09	0.430%	\$22,881.05	0.200%	\$10,642.35
CREF Growth R2	CU	QCGRPX	Equities	\$5,583,685.23	\$5,603,825.82	0.375%	\$5,253.59	0.200%	\$2,801.91
CREF Global Equities R2	CT	QCGLPX	Equities	\$2,824,133.09	\$2,841,973.08	0.440%	\$3,126.17	0.200%	\$1,420.99
CREF Equity Index R2	CY	QCEQPX	Equities	\$2,815,784.88	\$2,823,451.60	0.335%	\$2,364.64	0.200%	\$1,411.73
TIAA-CREF Lg-Cap Val Idx-Rtmt	XF	TRCVX	Equities	\$2,198,261.99	\$2,168,723.33	0.310%	\$1,680.76	0.250%	\$1,355.45
TIAA-CREF Intl Eq Idx-Rtmt <sup>5</sup>	XC	TRIEX	Equities	\$1,562,599.48	\$1,456,327.49	0.310%	\$1,128.65	0.250%	\$910.20
TIAA-CREF Mid-Cap Val-Rtmt	XJ	TRVRX	Equities	\$1,315,585.31	\$1,331,138.32	0.660%	\$2,196.38	0.250%	\$831.96
TIAA-CREF Lg-Cap Val-Rtmt	XE	TRLCX	Equities	\$1,173,950.28	\$1,054,676.24	0.660%	\$1,740.22	0.250%	\$659.17
TIAA-CREF Sm-Cap Eq-Rtmt	XN	TRSEX	Equities	\$1,150,695.71	\$1,101,239.83	0.670%	\$1,844.58	0.250%	\$688.27
Vanguard Emr Mkts Stk Idx Adm	AA	VEMAX	Equities	\$877,555.69	\$823,287.28	0.140%	\$288.15	0.000%	\$0.00
TIAA-CREF Real Est Secs-Rtmt	XL	TRRSX	Equities	\$710,975.24	\$692,725.53	0.760%	\$1,316.18	0.250%	\$432.95
AF EuroPacific Growth Fund R4 <sup>4</sup>	BI	REREX	Equities	\$662,565.76	\$633,134.75	0.850%	\$1,345.41	0.350%	\$553.99
TIAA-CREF Eq Index-Rtmt	XV	TIQRX	Equities	\$600,151.21	\$580,553.83	0.300%	\$435.42	0.250%	\$362.85
TIAA-CREF Lg-Cap Gr Idx-Rtmt	XD	TRIRX	Equities	\$552,822.30	\$484,491.61	0.310%	\$375.48	0.250%	\$302.81
TIAA-CREF Intl Eq-Rtmt <sup>5</sup>	XB	TRERX	Equities	\$476,189.79	\$485,880.74	0.740%	\$898.88	0.250%	\$303.68
VICTORY SYC SMALL COMP OPP A	UU	SSGSX	Equities	\$462,690.70	\$467,156.93	1.260%	\$1,471.54	0.500%	\$583.95
TIAA-CREF Gr & Inc-Rtmt	XA	TRGIX	Equities	\$415,800.49	\$418,990.20	0.670%	\$701.81	0.250%	\$261.87
TIAA-CREF S&P 500 Idx-Rtmt	XR	TRSPX	Equities	\$348,323.88	\$327,600.78	0.300%	\$245.70	0.250%	\$204.75
TIAA-CREF Sm-Cap BI Idx-Rtmt	XM	TRBIX	Equities	\$221,396.79	\$215,856.91	0.310%	\$167.29	0.250%	\$134.91
TIAA-CREF Social Ch Eq-Rtmt	XQ	TRSCX	Equities	\$181,723.64	\$178,645.57	0.440%	\$196.51	0.250%	\$111.65
TIAA-CREF Mid-Cap Gr-Rtmt	XH	TRGMX	Equities	\$157,076.07	\$157,072.50	0.720%	\$282.73	0.250%	\$98.17
Prudential Jennison Small Co Z	NE	PSCZX	Equities	\$107,737.48	\$92,897.56	0.840%	\$195.08	0.250%	\$58.06
TIAA-CREF Lg-Cap Gr-Rtmt	XW	TILRX	Equities	\$50,452.92	\$51,781.14	0.680%	\$88.03	0.250%	\$32.36
CREF Bond Market R2	CR	QCBMPX	Fixed Income	\$2,551,628.72	\$2,500,409.35	0.400%	\$2,500.41	0.200%	\$1,250.20
CREF Inflation-Linked Bond R2	CW	QCILPX	Fixed Income	\$1,315,928.29	\$1,319,428.02	0.350%	\$1,154.50	0.200%	\$659.71
TIAA-CREF Bond Plus-Rtmt	XZ	TCBRX	Fixed Income	\$1,133,507.65	\$1,123,863.56	0.560%	\$1,573.41	0.250%	\$702.41
TIAA-CREF High-Yield-Rtmt <sup>5</sup>	XY	TIHRX	Fixed Income	\$585,817.21	\$586,334.27	0.610%	\$894.16	0.250%	\$366.46
TIAA-CREF Bond-Rtmt	XT	TIDRX	Fixed Income	\$506,361.66	\$521,700.84	0.560%	\$730.38	0.250%	\$326.06
TIAA-CREF Infl-Lnkd Bond-Rtmt	XS	TIKRX	Fixed Income	\$271,835.74	\$274,084.75	0.520%	\$356.31	0.250%	\$171.30
TIAA-CREF Short-Term Bond-Rtmt	Y1	TISRX	Fixed Income	\$65,484.41	\$65,821.23	0.520%	\$85.57	0.250%	\$41.14



# Investment Fee & Expense Disclosure

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

FUND NAME	FUND		ASSET CLASS	ASSETS AS OF 06/30/2017	AVERAGE ASSETS FOR THE REPORTING PERIOD	NET EXPENSE RATIO <sup>1</sup>		PLAN SERVICES EXPENSE <sup>1</sup>	
	ID	TICKER				(%)	(\$)	(%)	(\$)
T Rowe Price Emerging Mkts Bnd <sup>4 9</sup>	PN	PREMX	Fixed Income	\$63,641.44	\$79,277.09	0.920%	\$182.34	0.150%	\$29.73
TIAA Traditional RA <sup>2</sup>	T1	TIAA#	Guaranteed	\$20,645,176.50	\$20,585,103.81	0.470%	\$24,187.50	0.150%	\$7,719.41
TIAA Traditional RA MDO <sup>2</sup>	TL	TIAA#	Guaranteed	\$5,916,064.30	\$5,920,211.79	0.470%	\$6,956.25	0.150%	\$2,220.08
TIAA Traditional GSRA <sup>2</sup>	T4	TIAA#	Guaranteed	\$2,158,163.59	\$2,120,072.19	0.470%	\$2,491.08	0.150%	\$795.03
TIAA Traditional RA TPA <sup>2</sup>	TD	TIAA#	Guaranteed	\$1,914,187.08	\$1,913,406.45	0.470%	\$2,248.25	0.150%	\$717.53
TIAA Traditional SRA <sup>2</sup>	T3	TIAA#	Guaranteed	\$1,585,927.20	\$1,595,912.55	0.470%	\$1,875.20	0.150%	\$598.47
TIAA Traditional RA IPRO <sup>2</sup>	TF	TIAA#	Guaranteed	\$1,525,277.73	\$1,525,277.73	0.470%	\$1,792.20	0.150%	\$571.98
TIAA Traditional SRA MDO <sup>2</sup>	TN	TIAA#	Guaranteed	\$239,520.30	\$239,415.88	0.470%	\$281.31	0.150%	\$89.78
TIAA Traditional GSRA MDO <sup>2</sup>	TP	TIAA#	Guaranteed	\$183,965.98	\$183,994.64	0.470%	\$216.19	0.150%	\$69.00
TIAA Traditional RCP 1 <sup>2</sup>	TA	TIAA#	Guaranteed	\$1,991.43	\$1,985.78	0.470%	\$2.33	0.150%	\$0.74
Plan Loan Default Fund	98	PLDF#	Guaranteed	\$0.00	\$12,904.12	0.470%	\$15.16	0.150%	\$4.84
CREF Money Market R2	CP	QCMMPX	Money Market	\$420,099.29	\$422,318.08	0.340%	\$358.97	0.200%	\$211.16
TIAA-CREF Money Market-Rtmt	XU	TIEXX	Money Market	\$1,879.50	\$1,878.78	0.390%	\$1.83	0.250%	\$1.17
CREF Social Choice R2	CQ	QCSCPX	Multi-Asset	\$5,600,350.42	\$5,712,521.59	0.375%	\$5,355.49	0.200%	\$2,856.26
TIAA-CREF Lifecycle 2035-Rtmt	L6	TCLRXX	Multi-Asset	\$2,051,687.24	\$1,944,019.02	0.680%	\$3,304.83	0.250%	\$1,215.01
TIAA-CREF Lifecycle 2040-Rtmt	L7	TCLOX	Multi-Asset	\$1,937,860.20	\$1,902,731.82	0.690%	\$3,282.21	0.250%	\$1,189.21
TIAA-CREF Lifecycle 2025-Rtmt	L4	TCLFX	Multi-Asset	\$1,519,064.07	\$1,487,275.98	0.660%	\$2,454.01	0.250%	\$929.55
TIAA-CREF Lifecycle 2030-Rtmt	L5	TCLNX	Multi-Asset	\$1,257,822.07	\$1,341,763.47	0.670%	\$2,247.45	0.250%	\$838.60
TIAA-CREF Lifecycle 2045-Rtmt	L9	TTFRX	Multi-Asset	\$1,080,602.92	\$1,053,030.29	0.700%	\$1,842.80	0.250%	\$658.14
TIAA-CREF Lifecycle 2020-Rtmt	L3	TCLTX	Multi-Asset	\$822,933.23	\$841,133.01	0.650%	\$1,366.84	0.250%	\$525.71
TIAA-CREF Lifecycle 2050-Rtmt	LB	TLFRX	Multi-Asset	\$692,211.30	\$676,526.91	0.700%	\$1,183.92	0.250%	\$422.83
TIAA-CREF Lifecycle 2015-Rtmt	L2	TCLIX	Multi-Asset	\$491,421.68	\$486,107.82	0.630%	\$765.62	0.250%	\$303.82
TIAA-CREF Lifecycle 2010-Rtmt	L1	TCLEX	Multi-Asset	\$295,791.89	\$298,862.80	0.620%	\$463.24	0.250%	\$186.79
TIAA-CREF Lifecycle 2055-Rtmt	ZJ	TTRLX	Multi-Asset	\$269,805.94	\$259,000.37	0.700%	\$453.25	0.250%	\$161.88
PIMCO All Asset Fund A <sup>4</sup>	IW	PASAX	Multi-Asset	\$6,155.14	\$6,061.71	1.325%	\$20.08	0.400%	\$6.06
TIAA-CREF Managed Alloc-Rtmt	XX	TITRX	Multi-Asset	\$5,923.75	\$5,861.88	0.650%	\$9.53	0.250%	\$3.66
TIAA-CREF Lfcyle Rtmt Inc-Rtmt	LD	TLIRX	Multi-Asset	\$3,718.81	\$4,607.58	0.620%	\$7.14	0.250%	\$2.88
TIAA-CREF Lifecycle 2060-Rtmt	CJ	TLXRX	Multi-Asset	\$0.00	\$0.00	0.700%	\$0.00	0.250%	\$0.00
TIAA-CREF Self Directed Acct	SD	SDA01#	Other	\$76,022.24	\$75,074.22	0.000%	\$0.00	0.000%	\$0.00
TIAA Real Estate	X1	QREARX	Real Estate	\$4,944,035.63	\$4,914,684.85	0.850%	\$10,443.71	0.240%	\$2,948.81



# Investment Fee & Expense Disclosure

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

<b>ESTIMATED TOTAL / AVERAGE</b>	<b>\$107,787,635.41</b>	<b>\$107,278,790.36</b>	<b>0.122%</b>	<b>\$131,327.72</b>	<b>0.049%</b>	<b>\$52,959.44</b>
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- <sup>1</sup> Net expense ratio percentages are from the most recent prospectuses available to TIAA prior to the end of the reporting period. The plan services expense is a component of and not in addition to the net expense ratio percentage and estimated dollar amounts. Net expense ratio and plan services expense dollars are calculated using the average assets for the reporting period.
- <sup>2</sup> The TIAA Traditional Annuity is not an investment for purposes of federal securities laws; it is a guaranteed insurance contract. Therefore, unlike a variable annuity or mutual fund, the TIAA Traditional Annuity does not include an identifiable expense ratio. Each premium allocated to the TIAA Traditional Annuity buys a definite amount of lifetime income for participants based on the rate schedule in effect at the time the premium is paid. In addition, the TIAA Traditional Annuity provides a guarantee of principal, a guaranteed minimum rate of interest and the potential for additional amounts of interest when declared by TIAA's Board of Trustees. Additional amounts, when declared, remain in effect for the "declaration year" that begins each March 1 for accumulating annuities and January 1 for lifetime payout annuities. Additional amounts are not guaranteed for future years. The recent expense provision in the formula for determining TIAA Traditional Annuity returns has averaged about 47 basis points (.470%) inclusive of administrative and investment expenses. This expense provision is not guaranteed, is subject to change, and is not publicly disclosed.
- <sup>4</sup> TIAA has made reasonable efforts to include the most updated prospectus expense ratio information. However, due to the timing of the prospectus update being too close to the reporting period end-date, the previously issued prospectus information may be used to prepare this report.
- <sup>5</sup> 2.00% redemption or exchange fee may be assessed on shares that are redeemed or exchanged within 60 days of the initial purchase date.
- <sup>9</sup> 2.00% redemption or exchange fee may be assessed on shares that are redeemed or exchanged within 90 days of the initial purchase date.





## Summary of Fees and Compensation for Your Plan

JUNIATA COLLEGE

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

<b>PLAN FEES AND COMPENSATION PAID TO TIAA-CREF AND BUNDLED SERVICE PROVIDERS</b>	<b>YOUR FEES AND COMPENSATION IN DOLLARS</b>	<b>YOUR FEES AND COMPENSATION AS A PERCENTAGE OF ASSETS</b>	<b>PERCENT OF TOTAL PLAN FEES AND COMPENSATION</b>
Investment Fee & Expense	\$131,327.72	0.122%	99.76%
Direct Fees	\$0.00	0.000%	0.00%
Self-Directed Brokerage - Recordkeeping Offset	\$6.85	0.000%	0.01%
TIAA Traditional Net Plan Loan Interest Expense	\$164.39	0.000%	0.12%
Float	\$101.16	0.000%	0.08%
Transactional Fund Earnings (TFE)	\$43.86	0.000%	0.03%
<b>TOTAL PLAN FEES AND COMPENSATION PAID TO TIAA-CREF AND BUNDLED SERVICE PROVIDERS</b>	<b>\$131,643.98</b>	<b>0.122%</b>	<b>100.00%</b>
<b>TOTAL NET PLAN FEES AND COMPENSATION PAID TO TIAA-CREF AND BUNDLED SERVICE PROVIDERS</b>	<b>\$131,643.98</b>	<b>0.122%</b>	<b>100.00%</b>



# Revenue Credit Account Report

JUNIATA COLLEGE

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

<b>OPENING BALANCE AS OF 04/01/2017</b>	\$1,974.50
PLAN SERVICING CREDITS DURING PERIOD	\$0.00
PLAN SERVICING CREDIT ADJUSTMENTS DURING PERIOD	\$0.00
PLAN SERVICING CREDITS ALLOCATED TO PARTICIPANTS	\$0.00
PLAN SERVICING CREDITS ALLOCATION ADJUSTMENTS	\$0.00
INVESTMENT INCOME DURING PERIOD	\$16.93
FEES DURING PERIOD	\$0.00
MISCELLANEOUS ADJUSTMENTS	\$0.00
<b>CLOSING BALANCE AS OF 06/30/2017</b>	\$1,991.43

## DETAILS OF PLAN SERVICING CREDITS and ADJUSTMENTS

INVESTMENT OPTION	DESCRIPTION	TRANSACTION DATE	AMOUNT
<b>TOTAL</b>			<b>\$0.00</b>

## DETAILS OF FEES DURING PERIOD

FIRM NAME	FEE TYPE	TRANSACTION DATE	AMOUNT
<b>TOTAL</b>			<b>\$0.00</b>



# Fund Usage and Diversification

## Balances and Counts by Fund and Contract Type

**JUNIATA COLLEGE**

**For the Period Ending 06/30/2017**

Investment Name	Participant Control		Plan Control		Total	
	Ending Market value	# Participants	Ending Market Value	# Participants	Ending Market Value	# Participants
TIAA Traditional	\$34,168,282.65	455	\$0.00	0	\$34,168,282.65	455
TIAA Real Estate	\$4,944,035.64	250	\$0.00	0	\$4,944,035.64	250
CREF Stock R2	\$21,195,612.89	305	\$0.00	0	\$21,195,612.89	305
CREF Money Market R2	\$420,099.32	41	\$0.00	0	\$420,099.32	41
CREF Social Choice R2	\$5,600,350.39	78	\$0.00	0	\$5,600,350.39	78
CREF Bond Market R2	\$2,551,628.80	125	\$0.00	0	\$2,551,628.80	125
CREF Global Equities R2	\$2,824,133.11	151	\$0.00	0	\$2,824,133.11	151
CREF Growth R2	\$5,583,685.29	155	\$0.00	0	\$5,583,685.29	155
CREF Equity Index R2	\$2,815,784.85	72	\$0.00	0	\$2,815,784.85	72
CREF Inflation-Linked Bond R2	\$1,315,928.23	93	\$0.00	0	\$1,315,928.23	93
TIAA-CREF Lifecycle 2010-Rtmt	\$295,791.90	26	\$0.00	0	\$295,791.90	26
TIAA-CREF Lifecycle 2015-Rtmt	\$491,421.67	21	\$0.00	0	\$491,421.67	21
TIAA-CREF Lifecycle 2020-Rtmt	\$822,933.23	20	\$0.00	0	\$822,933.23	20
TIAA-CREF Lifecycle 2025-Rtmt	\$1,519,064.08	37	\$0.00	0	\$1,519,064.08	37
TIAA-CREF Lifecycle 2030-Rtmt	\$1,257,822.06	36	\$0.00	0	\$1,257,822.06	36
TIAA-CREF Lifecycle 2035-Rtmt	\$2,051,687.25	51	\$0.00	0	\$2,051,687.25	51
TIAA-CREF Lifecycle 2040-Rtmt	\$1,937,860.18	60	\$0.00	0	\$1,937,860.18	60
TIAA-CREF Lifecycle 2045-Rtmt	\$1,080,602.94	43	\$0.00	0	\$1,080,602.94	43
TIAA-CREF Lifecycle 2050-Rtmt	\$692,211.27	54	\$0.00	0	\$692,211.27	54
TIAA-CREF Lifecycle 2055-Rtmt	\$269,805.93	34	\$0.00	0	\$269,805.93	34
TIAA-CREF Lfcyle Rtmt Inc-Rtmt	\$3,718.82	3	\$0.00	0	\$3,718.82	3
TIAA-CREF Bond Plus-Rtmt	\$1,133,507.64	40	\$0.00	0	\$1,133,507.64	40
TIAA-CREF Bond-Rtmt	\$506,361.64	35	\$0.00	0	\$506,361.64	35
TIAA-CREF Eq Index-Rtmt	\$600,151.22	17	\$0.00	0	\$600,151.22	17
TIAA-CREF Gr & Inc-Rtmt	\$415,800.45	33	\$0.00	0	\$415,800.45	33
TIAA-CREF High-Yield-Rtmt	\$585,817.22	40	\$0.00	0	\$585,817.22	40
TIAA-CREF Infl-Lnkd Bond-Rtmt	\$271,835.74	14	\$0.00	0	\$271,835.74	14
TIAA-CREF Intl Eq-Rtmt	\$476,189.81	39	\$0.00	0	\$476,189.81	39
TIAA-CREF Lg-Cap Gr-Rtmt	\$50,452.91	6	\$0.00	0	\$50,452.91	6
TIAA-CREF Lg-Cap Val-Rtmt	\$1,173,950.20	75	\$0.00	0	\$1,173,950.20	75
TIAA-CREF Managed Alloc-Rtmt	\$5,923.75	1	\$0.00	0	\$5,923.75	1
TIAA-CREF Mid-Cap Gr-Rtmt	\$157,076.11	29	\$0.00	0	\$157,076.11	29
TIAA-CREF Mid-Cap Val-Rtmt	\$1,315,585.31	93	\$0.00	0	\$1,315,585.31	93
TIAA-CREF Money Market-Rtmt	\$1,879.50	1	\$0.00	0	\$1,879.50	1
TIAA-CREF Real Est Secs-Rtmt	\$710,975.24	89	\$0.00	0	\$710,975.24	89
TIAA-CREF Short-Term Bond-Rtmt	\$65,484.43	8	\$0.00	0	\$65,484.43	8
TIAA-CREF Sm-Cap Eq-Rtmt	\$1,150,695.72	81	\$0.00	0	\$1,150,695.72	81
TIAA-CREF Social Ch Eq-Rtmt	\$181,723.65	17	\$0.00	0	\$181,723.65	17
TIAA-CREF Intl Eq Idx-Rtmt	\$1,562,599.49	86	\$0.00	0	\$1,562,599.49	86
TIAA-CREF Lg-Cap Gr Idx-Rtmt	\$552,822.27	36	\$0.00	0	\$552,822.27	36
TIAA-CREF Lg-Cap Val Idx-Rtmt	\$2,198,262.02	75	\$0.00	0	\$2,198,262.02	75
TIAA-CREF S&P 500 Idx-Rtmt	\$348,323.87	21	\$0.00	0	\$348,323.87	21
TIAA-CREF Sm-Cap BI Idx-Rtmt	\$221,396.80	33	\$0.00	0	\$221,396.80	33
AF EuroPacific Growth Fund R4	\$662,565.70	53	\$0.00	0	\$662,565.70	53
Prudential Jennison Small Co Z	\$107,737.49	16	\$0.00	0	\$107,737.49	16



# Fund Usage and Diversification

## Balances and Counts by Fund and Contract Type

JUNIATA COLLEGE

For the Period Ending 06/30/2017

Investment Name	Participant Control		Plan Control		Total	
	Ending Market value	# Participants	Ending Market Value	# Participants	Ending Market Value	# Participants
T Rowe Price Emerging Mkts Bnd	\$63,641.44	6	\$0.00	0	\$63,641.44	6
VICTORY SYC SMALL COMP OPP A	\$462,690.68	42	\$0.00	0	\$462,690.68	42
Vanguard Emr Mkts Stk Idx Adm	\$877,555.71	87	\$0.00	0	\$877,555.71	87
PIMCO All Asset Fund A	\$6,155.14	2	\$0.00	0	\$6,155.14	2
TIAA-CREF Self Directed Acct	\$76,022.24	1	\$0.00	0	\$76,022.24	1
<b>Total</b>	<b>\$107,785,643.89</b>	<b>809</b>	<b>\$0.00</b>	<b>0</b>	<b>\$107,785,643.89</b>	<b>809</b>



# Fund Usage and Diversification

## Fund Utilization by Age Group – All Participants

For the Period Ending 06/30/2017

Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Participant Control</b>														
TIAA Traditional	\$0.00	0	\$129,424.60	5	\$750,389.38	57	\$2,509,776.48	97	\$8,824,748.84	145	\$21,953,943.35	151	\$34,168,282.65	455
TIAA Real Estate	\$0.00	0	\$15,419.77	8	\$384,068.88	49	\$942,192.17	73	\$1,273,521.79	71	\$2,328,833.03	49	\$4,944,035.64	250
CREF Stock R2	\$0.00	0	\$102,297.34	5	\$970,413.69	50	\$3,009,976.02	76	\$5,277,758.81	82	\$11,835,167.03	92	\$21,195,612.89	305
CREF Money Market R2	\$0.00	0	\$0.00	0	\$13,007.11	4	\$179,103.46	16	\$65,130.25	8	\$162,858.50	13	\$420,099.32	41
CREF Social Choice R2	\$0.00	0	\$1,887.44	1	\$191,785.46	10	\$1,784,957.11	33	\$1,175,556.52	20	\$2,446,163.86	14	\$5,600,350.39	78
CREF Bond Market R2	\$0.00	0	\$298.00	1	\$117,628.73	21	\$404,817.83	41	\$679,455.32	38	\$1,349,428.92	24	\$2,551,628.80	125
CREF Global Equities R2	\$0.00	0	\$6,961.43	4	\$292,368.27	24	\$865,201.81	55	\$1,024,108.32	43	\$635,493.28	25	\$2,824,133.11	151
CREF Growth R2	\$0.00	0	\$14,888.74	5	\$519,854.11	27	\$1,820,686.18	46	\$2,229,000.07	52	\$999,256.19	25	\$5,583,685.29	155
CREF Equity Index R2	\$0.00	0	\$942.73	1	\$308,431.39	11	\$1,019,170.99	26	\$607,618.24	21	\$879,621.50	13	\$2,815,784.85	72
CREF Inflation-Linked Bond R2	\$0.00	0	\$0.00	0	\$98,755.61	17	\$109,943.63	18	\$416,177.26	29	\$691,051.73	29	\$1,315,928.23	93
TIAA-CREF Lifecycle 2010-Rtmt	\$0.00	0	\$0.00	0	\$4,705.62	2	\$2,153.59	4	\$39,874.94	5	\$249,057.75	15	\$295,791.90	26
TIAA-CREF Lifecycle 2015-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$105,356.68	6	\$386,064.99	15	\$491,421.67	21
TIAA-CREF Lifecycle 2020-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$822,933.23	20	\$0.00	0	\$822,933.23	20
TIAA-CREF Lifecycle 2025-Rtmt	\$0.00	0	\$0.00	0	\$12,286.33	1	\$605,760.13	12	\$901,017.62	24	\$0.00	0	\$1,519,064.08	37
TIAA-CREF Lifecycle 2030-Rtmt	\$0.00	0	\$0.00	0	\$106,478.57	2	\$1,088,756.42	32	\$62,587.07	2	\$0.00	0	\$1,257,822.06	36
TIAA-CREF Lifecycle 2035-Rtmt	\$0.00	0	\$0.00	0	\$688,527.54	19	\$1,350,001.33	31	\$13,158.38	1	\$0.00	0	\$2,051,687.25	51
TIAA-CREF Lifecycle 2040-Rtmt	\$0.00	0	\$39,206.84	4	\$1,780,856.24	52	\$117,797.10	4	\$0.00	0	\$0.00	0	\$1,937,860.18	60
TIAA-CREF Lifecycle 2045-Rtmt	\$0.00	0	\$186,284.01	12	\$850,018.92	28	\$44,300.01	3	\$0.00	0	\$0.00	0	\$1,080,602.94	43
TIAA-CREF Lifecycle 2050-Rtmt	\$0.00	0	\$659,190.10	53	\$0.00	0	\$33,021.17	1	\$0.00	0	\$0.00	0	\$692,211.27	54
TIAA-CREF Lifecycle 2055-Rtmt	\$10,288.94	4	\$258,484.33	29	\$0.00	0	\$0.00	0	\$1,032.66	1	\$0.00	0	\$269,805.93	34
TIAA-CREF Lfycle Rtmt Inc-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$3,718.82	3	\$0.00	0	\$3,718.82	3
TIAA-CREF Bond Plus-Rtmt	\$0.00	0	\$0.00	0	\$14,374.82	3	\$52,456.08	8	\$411,800.78	20	\$654,875.96	9	\$1,133,507.64	40
TIAA-CREF Bond-Rtmt	\$0.00	0	\$0.00	0	\$6,733.30	4	\$60,770.35	10	\$118,443.05	10	\$320,414.94	11	\$506,361.64	35
TIAA-CREF Eq Index-Rtmt	\$0.00	0	\$942.70	1	\$7,249.96	1	\$118,358.82	7	\$473,599.74	8	\$0.00	0	\$600,151.22	17
TIAA-CREF Gr & Inc-Rtmt	\$0.00	0	\$11,050.04	1	\$29,737.54	4	\$81,834.60	13	\$145,441.76	11	\$147,736.51	4	\$415,800.45	33
TIAA-CREF High-Yield-Rtmt	\$0.00	0	\$0.00	0	\$8,773.39	3	\$49,778.44	11	\$190,817.40	19	\$336,447.99	7	\$585,817.22	40
TIAA-CREF Infl-Lnk'd Bond-Rtmt	\$0.00	0	\$0.00	0	\$344.62	1	\$9,667.10	2	\$12,216.56	6	\$249,607.46	5	\$271,835.74	14
TIAA-CREF Intl Eq-Rtmt	\$1,439.74	1	\$45.73	1	\$12,774.71	6	\$200,310.52	13	\$200,164.34	10	\$61,454.77	8	\$476,189.81	39
TIAA-CREF Lg-Cap Gr-Rtmt	\$0.00	0	\$0.00	0	\$307.05	1	\$23,569.33	4	\$26,576.53	1	\$0.00	0	\$50,452.91	6
TIAA-CREF Lg-Cap Val-Rtmt	\$2,697.35	1	\$6,597.30	2	\$77,402.58	12	\$299,526.38	24	\$556,566.69	23	\$231,159.90	13	\$1,173,950.20	75
TIAA-CREF Managed Alloc-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$5,923.75	1	\$0.00	0	\$0.00	0	\$5,923.75	1
TIAA-CREF Mid-Cap Gr-Rtmt	\$0.00	0	\$1,391.76	2	\$16,992.69	5	\$86,176.34	12	\$27,604.46	7	\$24,910.86	3	\$157,076.11	29
TIAA-CREF Mid-Cap Val-Rtmt	\$0.00	0	\$11,483.09	4	\$55,891.93	15	\$476,474.50	30	\$438,524.75	28	\$333,211.04	16	\$1,315,585.31	93
TIAA-CREF Money Market-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$1,879.50	1	\$0.00	0	\$0.00	0	\$1,879.50	1
TIAA-CREF Real Est Secs-Rtmt	\$0.00	0	\$4,710.21	3	\$30,393.21	11	\$145,854.51	29	\$343,896.15	32	\$186,121.16	14	\$710,975.24	89
TIAA-CREF Short-Term Bond-Rtmt	\$0.00	0	\$0.00	0	\$1,267.07	1	\$21,763.25	3	\$42,454.11	4	\$0.00	0	\$65,484.43	8
TIAA-CREF Sm-Cap Eq-Rtmt	\$0.00	0	\$9,737.67	3	\$57,555.19	14	\$299,915.51	21	\$342,734.62	28	\$440,752.73	15	\$1,150,695.72	81
TIAA-CREF Social Ch Eq-Rtmt	\$0.00	0	\$314.97	1	\$8,393.66	1	\$58,734.94	10	\$8,257.14	2	\$106,022.94	3	\$181,723.65	17
TIAA-CREF Intl Eq Idx-Rtmt	\$0.00	0	\$16,198.76	4	\$93,000.18	9	\$340,116.40	28	\$623,323.10	30	\$489,961.05	15	\$1,562,599.49	86
TIAA-CREF Lg-Cap Gr Idx-Rtmt	\$0.00	0	\$961.43	1	\$43,574.45	5	\$289,678.45	15	\$139,714.29	13	\$78,893.65	2	\$552,822.27	36
TIAA-CREF Lg-Cap Val Idx-Rtmt	\$0.00	0	\$23,830.52	5	\$126,106.25	10	\$309,870.58	19	\$872,947.99	28	\$865,506.68	13	\$2,198,262.02	75
TIAA-CREF S&P 500 Idx-Rtmt	\$0.00	0	\$9,725.78	2	\$10,440.61	2	\$230,167.03	11	\$97,990.45	6	\$0.00	0	\$348,323.87	21
TIAA-CREF Sm-Cap Bl Idx-Rtmt	\$2,765.82	1	\$2,437.66	3	\$27,759.72	4	\$94,348.31	14	\$90,701.98	10	\$3,383.31	1	\$221,396.80	33
AF EuroPacific Growth Fund R4	\$0.00	0	\$5,262.55	3	\$40,310.45	7	\$191,790.77	19	\$147,187.69	14	\$278,014.24	10	\$662,565.70	53
Prudential Jennison Small Co Z	\$0.00	0	\$0.00	0	\$7,707.68	1	\$36,826.04	8	\$62,133.98	6	\$1,069.79	1	\$107,737.49	16
T Rowe Price Emerging Mkts Bnd	\$0.00	0	\$0.00	0	\$0.00	0	\$18,284.17	4	\$24,964.90	1	\$20,392.37	1	\$63,641.44	6
VICTORY SYC SMALL COMP OPP A	\$0.00	0	\$2,346.12	1	\$11,394.87	5	\$39,492.20	12	\$203,690.84	7	\$462,690.84	7	\$662,690.84	42
Vanguard Emr Mkts Stk Idx Adm	\$0.00	0	\$9,642.08	3	\$60,508.07	10	\$230,593.86	30	\$374,860.19	33	\$201,951.51	11	\$877,555.71	87
PIMCO All Asset Fund A	\$0.00	0	\$0.00	0	\$0.00	0	\$3,911.39	1	\$2,243.75	1	\$0.00	0	\$6,155.14	2
TIAA-CREF Self Directed Acct	\$0.00	0	\$0.00	0	\$0.00	0	\$76,022.24	1	\$0.00	0	\$0.00	0	\$76,022.24	1



## Fund Usage and Diversification

### Fund Utilization by Age Group – All Participants

For the Period Ending 06/30/2017

Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Participant Control Total</b>	\$17,191.85	5	\$1,531,963.70	105	\$7,838,569.85	148	\$19,741,710.79	183	\$29,503,687.87	188	\$49,152,519.83	180	\$107,785,643.89	809
<b>Total</b>	\$17,191.85	5	\$1,531,963.70	105	\$7,838,569.85	148	\$19,741,710.79	183	\$29,503,687.87	188	\$49,152,519.83	180	\$107,785,643.89	809



# Fund Usage and Diversification

## Fund Utilization by Age Group - Active Participants

For the Period Ending 06/30/2017

Active

Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Participant Control</b>														
TIAA Traditional	\$0.00	0	\$6,183.37	1	\$612,910.21	26	\$1,968,673.40	56	\$5,325,188.66	67	\$8,310,582.13	37	\$16,223,537.77	187
TIAA Real Estate	\$0.00	0	\$11,057.11	6	\$345,295.71	25	\$883,332.62	54	\$1,140,434.82	53	\$1,330,738.31	23	\$3,710,858.57	161
CREF Stock R2	\$0.00	0	\$16,024.66	3	\$751,667.57	20	\$2,512,890.82	45	\$4,359,770.78	55	\$5,553,484.11	29	\$13,193,837.94	152
CREF Money Market R2	\$0.00	0	\$0.00	0	\$3,296.75	1	\$147,549.33	6	\$13,473.11	1	\$21,919.42	3	\$186,238.61	11
CREF Social Choice R2	\$0.00	0	\$1,887.44	1	\$172,184.53	6	\$1,628,364.77	23	\$1,013,675.64	12	\$2,020,612.72	9	\$4,836,725.10	51
CREF Bond Market R2	\$0.00	0	\$298.00	1	\$99,950.54	10	\$345,127.39	30	\$596,866.00	28	\$819,505.98	11	\$1,861,747.91	80
CREF Global Equities R2	\$0.00	0	\$3,028.76	2	\$265,076.42	12	\$705,429.44	33	\$922,964.49	30	\$277,091.19	10	\$2,173,590.30	87
CREF Growth R2	\$0.00	0	\$9,744.43	3	\$455,400.82	16	\$1,586,210.67	28	\$1,802,665.71	32	\$740,570.60	11	\$4,594,592.23	90
CREF Equity Index R2	\$0.00	0	\$942.73	1	\$261,563.22	7	\$913,939.28	14	\$549,274.47	13	\$586,474.57	5	\$2,312,194.27	40
CREF Inflation-Linked Bond R2	\$0.00	0	\$0.00	0	\$95,650.50	11	\$109,943.63	18	\$391,808.28	21	\$442,371.43	18	\$1,039,773.84	68
TIAA-CREF Lifecycle 2010-Rtmt	\$0.00	0	\$0.00	0	\$4,705.62	2	\$1,077.48	3	\$8,042.33	2	\$35,058.03	5	\$48,883.46	12
TIAA-CREF Lifecycle 2015-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$105,313.80	5	\$273,241.96	9	\$378,555.76	14
TIAA-CREF Lifecycle 2020-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$748,415.79	15	\$0.00	0	\$748,415.79	15
TIAA-CREF Lifecycle 2025-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$531,661.31	8	\$857,318.65	20	\$0.00	0	\$1,388,979.96	28
TIAA-CREF Lifecycle 2030-Rtmt	\$0.00	0	\$0.00	0	\$106,478.57	2	\$1,046,354.71	27	\$2,839.05	1	\$0.00	0	\$1,155,672.33	30
TIAA-CREF Lifecycle 2035-Rtmt	\$0.00	0	\$0.00	0	\$546,834.70	13	\$1,228,180.92	26	\$13,158.38	1	\$0.00	0	\$1,788,174.00	40
TIAA-CREF Lifecycle 2040-Rtmt	\$0.00	0	\$16,326.24	1	\$1,698,255.58	41	\$117,797.10	4	\$0.00	0	\$0.00	0	\$1,832,378.92	46
TIAA-CREF Lifecycle 2045-Rtmt	\$0.00	0	\$181,922.26	11	\$747,551.50	23	\$35,219.54	2	\$0.00	0	\$0.00	0	\$964,693.30	36
TIAA-CREF Lifecycle 2050-Rtmt	\$0.00	0	\$407,447.06	31	\$0.00	0	\$33,021.17	1	\$0.00	0	\$0.00	0	\$440,468.23	32
TIAA-CREF Lifecycle 2055-Rtmt	\$10,288.94	4	\$230,052.51	20	\$0.00	0	\$0.00	0	\$1,032.66	1	\$0.00	0	\$241,374.11	25
TIAA-CREF Lfycle Rtmt Inc-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$1,267.01	1	\$0.00	0	\$1,267.01	1
TIAA-CREF Bond Plus-Rtmt	\$0.00	0	\$0.00	0	\$14,092.76	2	\$52,456.08	8	\$384,832.27	14	\$470,626.37	5	\$922,007.48	29
TIAA-CREF Bond-Rtmt	\$0.00	0	\$0.00	0	\$6,398.73	3	\$60,770.35	10	\$93,188.35	6	\$236,683.86	6	\$397,041.29	25
TIAA-CREF Eq Index-Rtmt	\$0.00	0	\$942.70	1	\$7,249.96	1	\$117,869.73	6	\$470,909.04	7	\$0.00	0	\$596,971.43	15
TIAA-CREF Gr & Inc-Rtmt	\$0.00	0	\$11,050.04	1	\$27,290.93	2	\$72,661.91	10	\$89,248.45	8	\$103,921.67	2	\$304,173.00	23
TIAA-CREF High-Yield-Rtmt	\$0.00	0	\$0.00	0	\$7,831.71	2	\$49,642.39	9	\$170,488.59	14	\$328,266.31	5	\$556,229.00	30
TIAA-CREF Infl-Lnkd Bond-Rtmt	\$0.00	0	\$0.00	0	\$344.62	1	\$9,667.10	2	\$7,149.95	4	\$237,911.41	3	\$255,073.08	10
TIAA-CREF Intl Eq-Rtmt	\$1,439.74	1	\$0.00	0	\$10,867.93	2	\$183,510.74	9	\$170,669.85	6	\$41,966.55	4	\$408,454.81	22
TIAA-CREF Lg-Cap Gr-Rtmt	\$0.00	0	\$0.00	0	\$307.05	1	\$23,569.33	4	\$26,576.53	1	\$0.00	0	\$50,452.91	6
TIAA-CREF Lg-Cap Val-Rtmt	\$2,697.35	1	\$2,570.34	1	\$75,087.11	8	\$290,592.13	21	\$451,745.06	15	\$167,347.42	7	\$990,039.41	53
TIAA-CREF Managed Alloc-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$5,923.75	1	\$0.00	0	\$0.00	0	\$5,923.75	1
TIAA-CREF Mid-Cap Gr-Rtmt	\$0.00	0	\$1,391.76	2	\$15,781.57	4	\$79,368.91	8	\$16,486.26	5	\$24,062.71	2	\$137,091.21	21
TIAA-CREF Mid-Cap Val-Rtmt	\$0.00	0	\$7,007.29	3	\$50,366.58	9	\$454,623.99	24	\$351,012.81	20	\$196,423.94	9	\$1,059,434.61	65
TIAA-CREF Money Market-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$1,879.50	1	\$0.00	0	\$0.00	0	\$1,879.50	1
TIAA-CREF Real Est Secs-Rtmt	\$0.00	0	\$2,696.44	2	\$28,825.38	8	\$140,713.68	25	\$302,652.66	21	\$133,357.35	7	\$608,245.51	63
TIAA-CREF Short-Term Bond-Rtmt	\$0.00	0	\$0.00	0	\$1,267.07	1	\$21,617.82	2	\$34,482.60	3	\$0.00	0	\$57,367.49	6
TIAA-CREF Sm-Cap Eq-Rtmt	\$0.00	0	\$5,104.99	2	\$51,647.51	9	\$299,146.60	20	\$263,310.58	18	\$300,783.69	8	\$919,993.37	57
TIAA-CREF Social Ch Eq-Rtmt	\$0.00	0	\$314.97	1	\$8,393.66	1	\$58,729.61	9	\$0.00	0	\$91,832.67	1	\$159,270.91	12
TIAA-CREF Intl Eq Idx-Rtmt	\$0.00	0	\$11,987.45	3	\$89,482.50	7	\$324,059.20	23	\$535,070.76	18	\$299,850.69	7	\$1,260,450.60	58
TIAA-CREF Lg-Cap Gr Idx-Rtmt	\$0.00	0	\$961.43	1	\$43,574.45	5	\$282,758.33	12	\$118,129.76	9	\$72,629.58	1	\$518,053.55	28
TIAA-CREF Lg-Cap Val Idx-Rtmt	\$0.00	0	\$15,154.18	4	\$121,128.17	8	\$289,002.20	15	\$726,281.45	18	\$541,655.22	6	\$1,693,221.22	51
TIAA-CREF S&P 500 Idx-Rtmt	\$0.00	0	\$9,725.78	2	\$7,640.44	1	\$229,180.70	10	\$78,716.22	5	\$0.00	0	\$325,263.14	18
TIAA-CREF Sm-Cap Bl Idx-Rtmt	\$2,765.82	1	\$2,437.66	3	\$27,759.72	4	\$94,217.37	12	\$79,987.77	8	\$0.00	0	\$207,168.34	28
AF EuroPacific Growth Fund R4	\$0.00	0	\$951.77	2	\$38,323.63	6	\$180,969.03	17	\$92,186.47	8	\$214,699.00	5	\$527,129.90	38
Prudential Jennison Small Co Z	\$0.00	0	\$0.00	0	\$7,707.68	1	\$34,347.56	7	\$58,729.08	5	\$0.00	0	\$100,784.32	13
T Rowe Price Emerging Mkts Bnd	\$0.00	0	\$0.00	0	\$0.00	0	\$18,284.17	4	\$24,964.90	1	\$20,392.37	1	\$63,641.44	6
VICTORY SYC SMALL COMP OPP A	\$0.00	0	\$2,346.12	1	\$10,499.90	4	\$31,180.47	9	\$190,377.80	12	\$154,920.63	4	\$389,324.92	30
Vanguard Emr Mkts Stk Idx Adm	\$0.00	0	\$5,823.56	2	\$58,262.99	8	\$220,128.52	26	\$312,359.63	22	\$109,583.92	5	\$706,158.62	63
PIMCO All Asset Fund A	\$0.00	0	\$0.00	0	\$0.00	0	\$3,911.39	1	\$0.00	0	\$0.00	0	\$3,911.39	1
TIAA-CREF Self Directed Acct	\$0.00	0	\$0.00	0	\$0.00	0	\$76,022.24	1	\$0.00	0	\$0.00	0	\$76,022.24	1



## Fund Usage and Diversification

### Fund Utilization by Age Group - Active Participants

For the Period Ending 06/30/2017

Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Participant Control Total</b>	\$17,191.85	5	\$965,381.05	67	\$6,876,954.29	90	\$17,501,578.38	113	\$22,903,066.47	96	\$24,158,565.81	43	\$72,422,737.85	414
<b>Total</b>	\$17,191.85	5	\$965,381.05	67	\$6,876,954.29	90	\$17,501,578.38	113	\$22,903,066.47	96	\$24,158,565.81	43	\$72,422,737.85	414





# Fund Usage and Diversification

## Fund Utilization by Age Group - Terminated Participants

For the Period Ending 06/30/2017

Terminated														
Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Participant Control</b>														
TIAA Traditional	\$0.00	0	\$123,241.23	4	\$137,479.17	31	\$541,103.08	41	\$3,499,560.18	78	\$13,643,361.22	114	\$17,944,744.88	268
TIAA Real Estate	\$0.00	0	\$4,362.66	2	\$38,773.17	24	\$58,859.55	19	\$133,086.97	18	\$998,094.72	26	\$1,233,177.07	89
CREF Stock R2	\$0.00	0	\$86,272.68	2	\$218,746.12	30	\$497,085.20	31	\$917,988.03	27	\$6,281,682.92	63	\$8,001,774.95	153
CREF Money Market R2	\$0.00	0	\$0.00	0	\$9,710.36	3	\$31,554.13	10	\$51,657.14	7	\$140,939.08	10	\$233,860.71	30
CREF Social Choice R2	\$0.00	0	\$0.00	0	\$19,600.93	4	\$156,592.34	10	\$161,880.88	8	\$425,551.14	5	\$763,625.29	27
CREF Bond Market R2	\$0.00	0	\$0.00	0	\$17,678.19	11	\$59,690.44	11	\$82,589.32	10	\$529,922.94	13	\$689,880.89	45
CREF Global Equities R2	\$0.00	0	\$3,932.67	2	\$27,291.85	12	\$159,772.37	22	\$101,143.83	13	\$358,402.09	15	\$650,542.81	64
CREF Growth R2	\$0.00	0	\$5,144.31	2	\$64,453.29	11	\$234,475.51	18	\$426,334.36	20	\$258,685.59	14	\$989,093.06	65
CREF Equity Index R2	\$0.00	0	\$0.00	0	\$46,868.17	4	\$105,231.71	12	\$58,343.77	8	\$293,146.93	8	\$503,590.58	32
CREF Inflation-Linked Bond R2	\$0.00	0	\$0.00	0	\$3,105.11	6	\$0.00	0	\$24,368.98	8	\$248,680.30	11	\$276,154.39	25
TIAA-CREF Lifecycle 2010-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$1,076.11	1	\$31,832.61	3	\$213,999.72	10	\$246,908.44	14
TIAA-CREF Lifecycle 2015-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$42.88	1	\$112,823.03	6	\$112,865.91	7
TIAA-CREF Lifecycle 2020-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$74,517.44	5	\$0.00	0	\$74,517.44	5
TIAA-CREF Lifecycle 2025-Rtmt	\$0.00	0	\$0.00	0	\$12,286.33	1	\$74,098.82	4	\$43,698.97	4	\$0.00	0	\$130,084.12	9
TIAA-CREF Lifecycle 2030-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$42,401.71	5	\$59,748.02	1	\$0.00	0	\$102,149.73	6
TIAA-CREF Lifecycle 2035-Rtmt	\$0.00	0	\$0.00	0	\$141,692.84	6	\$121,820.41	5	\$0.00	0	\$0.00	0	\$263,513.25	11
TIAA-CREF Lifecycle 2040-Rtmt	\$0.00	0	\$22,880.60	3	\$82,600.66	11	\$0.00	0	\$0.00	0	\$0.00	0	\$105,481.26	14
TIAA-CREF Lifecycle 2045-Rtmt	\$0.00	0	\$4,361.75	1	\$102,467.42	5	\$9,080.47	1	\$0.00	0	\$0.00	0	\$115,909.64	7
TIAA-CREF Lifecycle 2050-Rtmt	\$0.00	0	\$251,743.04	22	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$251,743.04	22
TIAA-CREF Lifecycle 2055-Rtmt	\$0.00	0	\$28,431.82	9	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$28,431.82	9
TIAA-CREF Lfycle Rtmt Inc-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$2,451.81	2	\$0.00	0	\$2,451.81	2
TIAA-CREF Bond Plus-Rtmt	\$0.00	0	\$0.00	0	\$282.06	1	\$0.00	0	\$26,968.51	6	\$184,249.59	4	\$211,500.16	11
TIAA-CREF Bond-Rtmt	\$0.00	0	\$0.00	0	\$334.57	1	\$0.00	0	\$25,254.70	4	\$83,731.08	5	\$109,320.35	10
TIAA-CREF Eq Index-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$489.09	1	\$2,690.70	1	\$0.00	0	\$3,179.79	2
TIAA-CREF Gr & Inc-Rtmt	\$0.00	0	\$0.00	0	\$2,446.61	2	\$9,172.69	3	\$56,193.31	3	\$43,814.84	2	\$111,627.45	10
TIAA-CREF High-Yield-Rtmt	\$0.00	0	\$0.00	0	\$941.68	1	\$136.05	2	\$20,328.81	5	\$8,181.68	2	\$29,588.22	10
TIAA-CREF Infl-Lnkd Bond-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$5,066.61	2	\$11,696.05	2	\$16,762.66	4
TIAA-CREF Intl Eq-Rtmt	\$0.00	0	\$45.73	1	\$1,906.78	4	\$16,799.78	4	\$29,494.49	4	\$19,488.22	4	\$67,735.00	17
TIAA-CREF Lg-Cap Val-Rtmt	\$0.00	0	\$4,026.96	1	\$2,315.47	4	\$8,934.25	3	\$104,821.63	8	\$63,812.48	6	\$183,910.79	22
TIAA-CREF Mid-Cap Gr-Rtmt	\$0.00	0	\$0.00	0	\$1,211.12	1	\$6,807.43	4	\$11,118.20	2	\$848.15	1	\$19,984.90	8
TIAA-CREF Mid-Cap Val-Rtmt	\$0.00	0	\$4,475.80	1	\$5,525.35	6	\$21,850.51	6	\$87,511.94	8	\$136,787.10	7	\$256,150.70	28
TIAA-CREF Real Est Secs-Rtmt	\$0.00	0	\$2,013.77	1	\$1,567.83	3	\$5,140.83	4	\$41,243.49	11	\$52,763.81	7	\$102,729.73	26
TIAA-CREF Short-Term Bond-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$145.43	1	\$7,971.51	1	\$0.00	0	\$8,116.94	2
TIAA-CREF Sm-Cap Eq-Rtmt	\$0.00	0	\$4,632.68	1	\$5,907.68	5	\$768.91	1	\$79,424.04	10	\$139,969.04	7	\$230,702.35	24
TIAA-CREF Social Ch Eq-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$5.33	1	\$8,257.14	2	\$14,190.27	2	\$22,452.74	5
TIAA-CREF Intl Eq Idx-Rtmt	\$0.00	0	\$4,211.31	1	\$3,517.68	2	\$16,057.20	5	\$88,252.34	12	\$190,110.36	8	\$302,148.89	28
TIAA-CREF Lg-Cap Gr Idx-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$6,920.12	3	\$21,584.53	4	\$6,264.07	1	\$34,768.72	8
TIAA-CREF Lg-Cap Val Idx-Rtmt	\$0.00	0	\$8,676.34	1	\$4,978.08	2	\$20,868.38	4	\$146,666.54	10	\$323,851.46	7	\$505,040.80	24
TIAA-CREF S&P 500 Idx-Rtmt	\$0.00	0	\$0.00	0	\$2,800.17	1	\$986.33	1	\$19,274.23	1	\$0.00	0	\$23,060.73	3
TIAA-CREF S&P 500 Idx-Rtmt	\$0.00	0	\$0.00	0	\$0.00	0	\$130.94	2	\$10,714.21	2	\$3,383.31	1	\$14,228.46	5
AF EuroPacific Growth Fund R4	\$0.00	0	\$4,310.78	1	\$1,986.82	1	\$10,821.74	2	\$55,001.22	6	\$63,315.24	5	\$135,435.80	15
Prudential Jennison Small Co Z	\$0.00	0	\$0.00	0	\$0.00	0	\$2,478.48	1	\$3,404.90	1	\$1,069.79	1	\$6,953.17	3
VICTORY SYC SMALL COMP OPP A	\$0.00	0	\$0.00	0	\$894.97	1	\$8,311.73	3	\$15,388.85	5	\$48,770.21	3	\$73,365.76	12
PIMCO All Asset Fund A	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$2,243.75	1	\$0.00	0	\$2,243.75	1
Vanguard Emr Mkts Stk Idx Adm	\$0.00	0	\$3,818.52	1	\$2,245.08	2	\$10,465.34	4	\$62,500.56	11	\$92,367.59	6	\$171,397.09	24
<b>Participant Control Total</b>	<b>\$0.00</b>	<b>0</b>	<b>\$566,582.65</b>	<b>38</b>	<b>\$961,615.56</b>	<b>58</b>	<b>\$2,240,132.41</b>	<b>70</b>	<b>\$6,600,621.40</b>	<b>92</b>	<b>\$24,993,954.02</b>	<b>137</b>	<b>\$35,362,906.04</b>	<b>395</b>
	<b>\$0.00</b>	<b>0</b>	<b>\$566,582.65</b>	<b>38</b>	<b>\$961,615.56</b>	<b>58</b>	<b>\$2,240,132.41</b>	<b>70</b>	<b>\$6,600,621.40</b>	<b>92</b>	<b>\$24,993,954.02</b>	<b>137</b>	<b>\$35,362,906.04</b>	<b>395</b>



# Fund Usage and Diversification

## Fund Utilization by Age Group - Terminated Participants

For the Period Ending 06/30/2017

Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Total</b>														



# Fund Usage and Diversification

## Fund Diversification by Age Group and Status

For the Period Ending 06/30/2017

	Number of Funds Invested										Total
	1	2	3	4	5	6	7	8	9	10+	
Active Participant Count											
<b>Participant Control</b>											
<25	4	0	1	0	0	0	0	0	0	0	5
25_34	55	8	0	0	0	1	0	1	0	2	67
35_44	53	9	1	5	5	5	0	1	1	10	90
45_54	40	9	6	6	7	6	3	5	3	28	113
55_64	18	8	9	15	8	6	2	1	3	26	96
65+	6	5	4	7	5	3	3	1	0	9	43
<b>Participant Control Active</b>											
Total	176	39	21	33	25	21	8	9	7	75	414
<b>Total Active Participants</b>											
Total	176	39	21	33	25	21	8	9	7	75	414
Terminated Participant Count											
<b>Participant Control</b>											
25_34	33	3	0	0	0	1	0	0	0	1	38
35_44	23	4	8	8	6	3	0	1	3	2	58
45_54	21	12	13	6	8	3	0	1	0	6	70
55_64	46	12	8	6	3	3	0	2	0	12	92
65+	71	29	11	8	6	0	2	0	1	9	137
<b>Participant Control Terminated</b>											
Total	194	60	40	28	23	10	2	4	4	30	395
<b>Total Terminated Participants</b>											
Total	194	60	40	28	23	10	2	4	4	30	395



# Fund Usage and Diversification

## Fund Diversification by Age Group and Status

For the Period Ending 06/30/2017

	Number of Funds Invested										Total	
	1	2	3	4	5	6	7	8	9	10+		
<b>Plan Total Participant Count</b>												
<b>Active</b>												
<25	4	0	1	0	0	0	0	0	0	0	0	5
25_34	55	8	0	0	0	1	0	1	0	2	67	
35_44	53	9	1	5	5	5	0	1	1	10	90	
45_54	40	9	6	6	7	6	3	5	3	28	113	
55_64	18	8	9	15	8	6	2	1	3	26	96	
65+	6	5	4	7	5	3	3	1	0	9	43	
<b>Total Active Participants</b>	<b>176</b>	<b>39</b>	<b>21</b>	<b>33</b>	<b>25</b>	<b>21</b>	<b>8</b>	<b>9</b>	<b>7</b>	<b>75</b>	<b>414</b>	
<b>Plan Total Participant Count</b>												
<b>Terminated</b>												
25_34	33	3	0	0	0	1	0	0	0	1	38	
35_44	23	4	8	8	6	3	0	1	3	2	58	
45_54	21	12	13	6	8	3	0	1	0	6	70	
55_64	46	12	8	6	3	3	0	2	0	12	92	
65+	71	29	11	8	6	0	2	0	1	9	137	
<b>Total Terminated Participants</b>	<b>194</b>	<b>60</b>	<b>40</b>	<b>28</b>	<b>23</b>	<b>10</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>30</b>	<b>395</b>	
<b>Total</b>	<b>370</b>	<b>99</b>	<b>61</b>	<b>61</b>	<b>48</b>	<b>31</b>	<b>10</b>	<b>13</b>	<b>11</b>	<b>105</b>	<b>809</b>	



## Fund Usage and Diversification

### Number of Participants in a Single Investment by Fund

For the Period Ending 06/30/2017

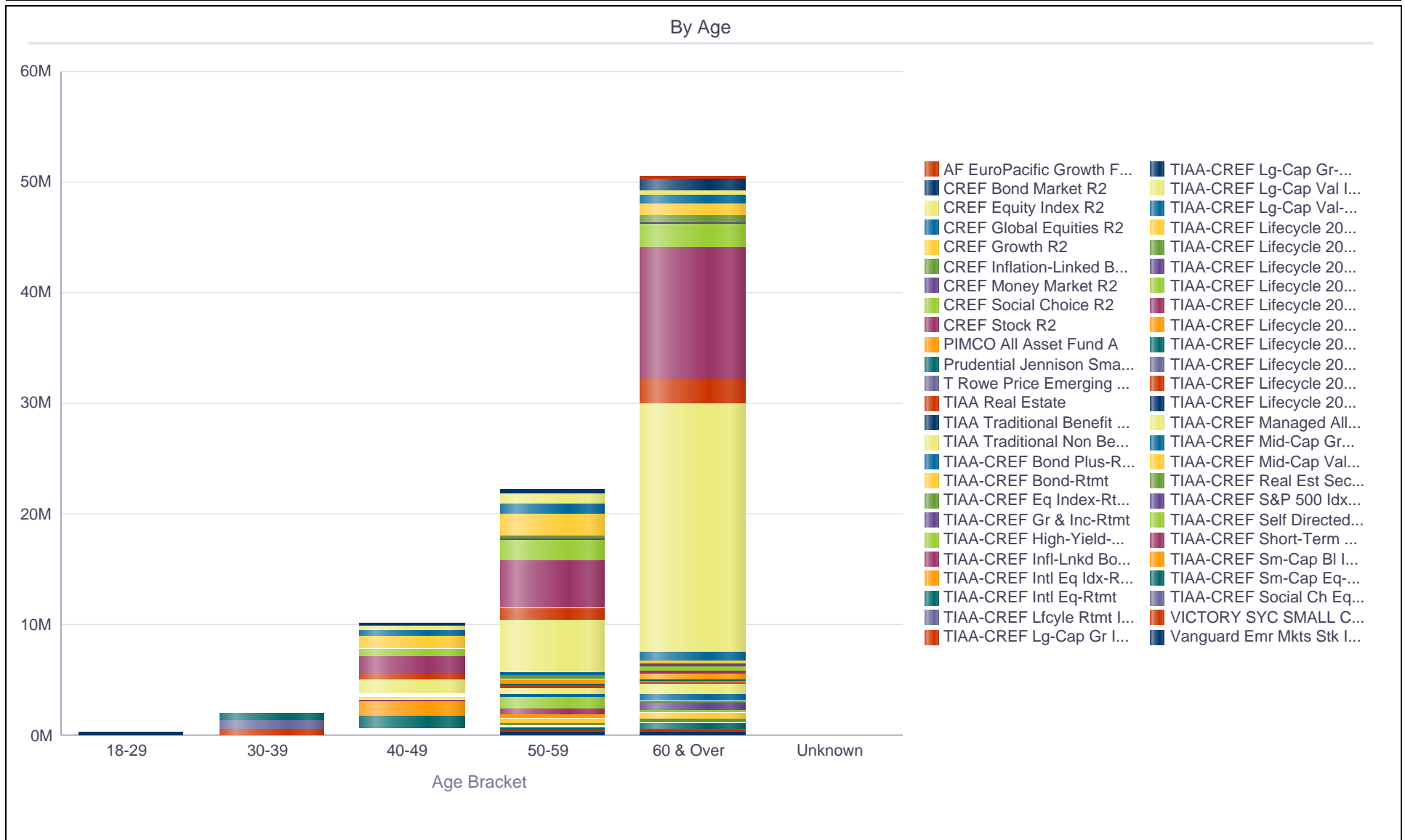
Investment Name	Participant Control	Plan Control	Total Plan
TIAA Traditional	112	0	112
TIAA Real Estate	1	0	1
CREF Stock R2	10	0	10
CREF Money Market R2	4	0	4
CREF Social Choice R2	6	0	6
CREF Growth R2	1	0	1
CREF Equity Index R2	4	0	4
TIAA-CREF Lifecycle 2010-Rtmt	3	0	3
TIAA-CREF Lifecycle 2015-Rtmt	7	0	7
TIAA-CREF Lifecycle 2020-Rtmt	7	0	7
TIAA-CREF Lifecycle 2025-Rtmt	17	0	17
TIAA-CREF Lifecycle 2030-Rtmt	16	0	16
TIAA-CREF Lifecycle 2035-Rtmt	30	0	30
TIAA-CREF Lifecycle 2040-Rtmt	38	0	38
TIAA-CREF Lifecycle 2045-Rtmt	32	0	32
TIAA-CREF Lifecycle 2050-Rtmt	50	0	50
TIAA-CREF Lifecycle 2055-Rtmt	30	0	30
TIAA-CREF Bond Plus-Rtmt	1	0	1
TIAA-CREF Gr & Inc-Rtmt	1	0	1
<b>Total</b>	<b>370</b>	<b>0</b>	<b>370</b>



# Asset Allocation Statistics

JUNIATA COLLEGE

For the Period Ending 06/30/2017





# Investment Fee & Expense Disclosure

JUNIATA COLLEGE

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

FUND NAME	FUND ID	TICKER	ASSET CLASS	ASSETS AS OF 06/30/2017	AVERAGE ASSETS FOR THE REPORTING PERIOD	NET EXPENSE RATIO <sup>1</sup>		PLAN SERVICES EXPENSE <sup>1</sup>	
						(%)	(\$)	(%)	(\$)
CREF Growth R2	CU	QCGRPX	Equities	\$58,825.19	\$58,436.14	0.375%	\$54.78	0.200%	\$29.22
CREF Global Equities R2	CT	QCGLPX	Equities	\$57,389.68	\$56,814.90	0.440%	\$62.50	0.200%	\$28.41
CREF Equity Index R2	CY	QCEQPX	Equities	\$0.00	\$0.00	0.335%	\$0.00	0.200%	\$0.00
TIAA-CREF Sm-Cap Eq-Rtmt	XN	TRSEX	Equities	\$0.00	\$0.00	0.670%	\$0.00	0.250%	\$0.00
CREF Stock R2	CO	QCSTPX	Equities	\$0.00	\$0.00	0.430%	\$0.00	0.200%	\$0.00
AF EuroPacific Growth Fund R4 <sup>4</sup>	BI	REREX	Equities	\$0.00	\$0.00	0.850%	\$0.00	0.350%	\$0.00
TIAA-CREF Mid-Cap Gr-Rtmt	XH	TRGMX	Equities	\$0.00	\$0.00	0.720%	\$0.00	0.250%	\$0.00
TIAA-CREF Real Est Secs-Rtmt	XL	TRRSX	Equities	\$0.00	\$0.00	0.760%	\$0.00	0.250%	\$0.00
TIAA-CREF Eq Index-Rtmt	XV	TIQRX	Equities	\$0.00	\$0.00	0.300%	\$0.00	0.250%	\$0.00
VICTORY SYC SMALL COMP OPP A	UU	SSGSX	Equities	\$0.00	\$0.00	1.260%	\$0.00	0.500%	\$0.00
Vanguard Emr Mkts Stk Idx Adm	AA	VEMAX	Equities	\$0.00	\$0.00	0.140%	\$0.00	0.000%	\$0.00
TIAA-CREF Lg-Cap Val Idx-Rtmt	XF	TRCVX	Equities	\$0.00	\$0.00	0.310%	\$0.00	0.250%	\$0.00
TIAA-CREF Social Ch Eq-Rtmt	XQ	TRSCX	Equities	\$0.00	\$0.00	0.440%	\$0.00	0.250%	\$0.00
TIAA-CREF Intl Eq Idx-Rtmt <sup>5</sup>	XC	TRIEX	Equities	\$0.00	\$0.00	0.310%	\$0.00	0.250%	\$0.00
TIAA-CREF Mid-Cap Val-Rtmt	XJ	TRVRX	Equities	\$0.00	\$0.00	0.660%	\$0.00	0.250%	\$0.00
TIAA-CREF Lg-Cap Gr Idx-Rtmt	XD	TRIRX	Equities	\$0.00	\$0.00	0.310%	\$0.00	0.250%	\$0.00
TIAA-CREF S&P 500 Idx-Rtmt	XR	TRSPX	Equities	\$0.00	\$0.00	0.300%	\$0.00	0.250%	\$0.00
TIAA-CREF Lg-Cap Gr-Rtmt	XW	TILRX	Equities	\$0.00	\$0.00	0.680%	\$0.00	0.250%	\$0.00
TIAA-CREF Gr & Inc-Rtmt	XA	TRGIX	Equities	\$0.00	\$0.00	0.670%	\$0.00	0.250%	\$0.00
TIAA-CREF Sm-Cap Bl Idx-Rtmt	XM	TRBIX	Equities	\$0.00	\$0.00	0.310%	\$0.00	0.250%	\$0.00
Prudential Jennison Small Co Z	NE	PSCZX	Equities	\$0.00	\$0.00	0.840%	\$0.00	0.250%	\$0.00
TIAA-CREF Intl Eq-Rtmt <sup>5</sup>	XB	TRERX	Equities	\$0.00	\$0.00	0.740%	\$0.00	0.250%	\$0.00
TIAA-CREF Lg-Cap Val-Rtmt	XE	TRLCX	Equities	\$0.00	\$0.00	0.660%	\$0.00	0.250%	\$0.00
TIAA-CREF Infl-Lnkd Bond-Rtmt	XS	TIKRX	Fixed Income	\$0.00	\$0.00	0.520%	\$0.00	0.250%	\$0.00
TIAA-CREF High-Yield-Rtmt <sup>5</sup>	XY	TIHRX	Fixed Income	\$0.00	\$0.00	0.610%	\$0.00	0.250%	\$0.00
TIAA-CREF Bond Plus-Rtmt	XZ	TCBRX	Fixed Income	\$0.00	\$0.00	0.560%	\$0.00	0.250%	\$0.00
TIAA-CREF Short-Term Bond-Rtmt	Y1	TISRX	Fixed Income	\$0.00	\$0.00	0.520%	\$0.00	0.250%	\$0.00
CREF Bond Market R2	CR	QCBMPX	Fixed Income	\$0.00	\$0.00	0.400%	\$0.00	0.200%	\$0.00
T Rowe Price Emerging Mkts Bnd <sup>4,9</sup>	PN	PREMX	Fixed Income	\$0.00	\$0.00	0.920%	\$0.00	0.150%	\$0.00
CREF Inflation-Linked Bond R2	CW	QCILPX	Fixed Income	\$0.00	\$0.00	0.350%	\$0.00	0.200%	\$0.00



# Investment Fee & Expense Disclosure

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

FUND NAME	FUND		ASSET CLASS	ASSETS AS OF 06/30/2017	AVERAGE ASSETS FOR THE REPORTING PERIOD	NET EXPENSE RATIO <sup>1</sup>		PLAN SERVICES EXPENSE <sup>1</sup>	
	ID	TICKER				(%)	(\$)	(%)	(\$)
TIAA-CREF Bond-Rtmt	XT	TIDRX	Fixed Income	\$0.00	\$0.00	0.560%	\$0.00	0.250%	\$0.00
TIAA Traditional GSRA <sup>2</sup>	T4	TIAA#	Guaranteed	\$133,590.79	\$133,256.08	0.470%	\$156.58	0.150%	\$49.97
TIAA Traditional RCP 1 <sup>2</sup>	TA	TIAA#	Guaranteed	\$0.00	\$0.00	0.470%	\$0.00	0.150%	\$0.00
TIAA Traditional GSRA MDO <sup>2</sup>	TP	TIAA#	Guaranteed	\$0.00	\$0.00	0.470%	\$0.00	0.150%	\$0.00
CREF Money Market R2	CP	QCMMPX	Money Market	\$0.00	\$0.00	0.340%	\$0.00	0.200%	\$0.00
TIAA-CREF Money Market-Rtmt	XU	TIEXX	Money Market	\$0.00	\$0.00	0.390%	\$0.00	0.250%	\$0.00
PIMCO All Asset Fund A <sup>4</sup>	IW	PASAX	Multi-Asset	\$0.00	\$0.00	1.325%	\$0.00	0.400%	\$0.00
TIAA-CREF Lifecycle 2010-Rtmt	L1	TCLEX	Multi-Asset	\$0.00	\$0.00	0.620%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2025-Rtmt	L4	TCLFX	Multi-Asset	\$0.00	\$0.00	0.660%	\$0.00	0.250%	\$0.00
CREF Social Choice R2	CQ	QCSCPX	Multi-Asset	\$0.00	\$0.00	0.375%	\$0.00	0.200%	\$0.00
TIAA-CREF Lifecycle 2030-Rtmt	L5	TCLNX	Multi-Asset	\$0.00	\$0.00	0.670%	\$0.00	0.250%	\$0.00
TIAA-CREF Lfcyle Rtmt Inc-Rtmt	LD	TLIRX	Multi-Asset	\$0.00	\$0.00	0.620%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2015-Rtmt	L2	TCLIX	Multi-Asset	\$0.00	\$0.00	0.630%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2045-Rtmt	L9	TFFRX	Multi-Asset	\$0.00	\$0.00	0.700%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2040-Rtmt	L7	TCLOX	Multi-Asset	\$0.00	\$0.00	0.690%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2060-Rtmt	CJ	TLXRX	Multi-Asset	\$0.00	\$0.00	0.700%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2020-Rtmt	L3	TCLTX	Multi-Asset	\$0.00	\$0.00	0.650%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2035-Rtmt	L6	TCLRX	Multi-Asset	\$0.00	\$0.00	0.680%	\$0.00	0.250%	\$0.00
TIAA-CREF Managed Alloc-Rtmt	XX	TITRX	Multi-Asset	\$0.00	\$0.00	0.650%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2055-Rtmt	ZJ	TTRLX	Multi-Asset	\$0.00	\$0.00	0.700%	\$0.00	0.250%	\$0.00
TIAA-CREF Lifecycle 2050-Rtmt	LB	TLFRX	Multi-Asset	\$0.00	\$0.00	0.700%	\$0.00	0.250%	\$0.00
TIAA-CREF Self Directed Acct	SD	SDA01#	Other	\$0.00	\$0.00	0.000%	\$0.00	0.000%	\$0.00
TIAA Real Estate	X1	QREARX	Real Estate	\$24,834.93	\$24,760.20	0.850%	\$52.62	0.240%	\$14.86
<b>ESTIMATED TOTAL / AVERAGE</b>				<b>\$274,640.59</b>	<b>\$273,267.32</b>	<b>0.119%</b>	<b>\$326.48</b>	<b>0.045%</b>	<b>\$122.46</b>

<sup>1</sup> Net expense ratio percentages are from the most recent prospectuses available to TIAA prior to the end of the reporting period. The plan services expense is a component of and not in addition to the net expense ratio percentage and estimated dollar amounts. Net expense ratio and plan services expense dollars are calculated using the average assets for the reporting period.

<sup>2</sup> The TIAA Traditional Annuity is not an investment for purposes of federal securities laws; it is a guaranteed insurance contract. Therefore, unlike a variable annuity or mutual fund, the TIAA Traditional Annuity does not include an identifiable expense ratio. Each premium allocated to the TIAA Traditional Annuity buys a definite amount of lifetime income for participants based on the rate schedule in effect at the time the premium is paid. In addition, the TIAA Traditional Annuity provides a guarantee of principal, a guaranteed minimum rate of interest and the potential for additional amounts of interest when declared by TIAA's Board of Trustees. Additional amounts, when declared, remain in effect for the "declaration year" that begins each March 1 for accumulating annuities and January 1 for lifetime payout annuities. Additional amounts are not guaranteed for future years. The recent expense provision in the formula for determining TIAA





## Summary of Fees and Compensation for Your Plan

JUNIATA COLLEGE

Activity for the Reporting Period: 04/01/2017 to 06/30/2017

PLAN FEES AND COMPENSATION PAID TO TIAA-CREF AND BUNDLED SERVICE PROVIDERS	YOUR FEES AND COMPENSATION IN DOLLARS	YOUR FEES AND COMPENSATION AS A PERCENTAGE OF ASSETS	PERCENT OF TOTAL PLAN FEES AND COMPENSATION
Investment Fee & Expense	\$326.47	0.119%	100.00%
Direct Fees	\$0.00	0.000%	0.00%
<b>TOTAL PLAN FEES AND COMPENSATION PAID TO TIAA-CREF AND BUNDLED SERVICE PROVIDERS</b>	<b>\$326.47</b>	<b>0.119%</b>	<b>100.00%</b>
<b>TOTAL NET PLAN FEES AND COMPENSATION PAID TO TIAA-CREF AND BUNDLED SERVICE PROVIDERS</b>	<b>\$326.47</b>	<b>0.119%</b>	<b>100.00%</b>



# Fund Usage and Diversification

## Balances and Counts by Fund and Contract Type

**JUNIATA COLLEGE**

**For the Period Ending 06/30/2017**

Investment Name	Participant Control		Plan Control		Total	
	Ending Market value	# Participants	Ending Market Value	# Participants	Ending Market Value	# Participants
TIAA Traditional	\$133,590.79	1	\$0.00	0	\$133,590.79	1
TIAA Real Estate	\$24,834.93	1	\$0.00	0	\$24,834.93	1
CREF Global Equities R2	\$57,389.68	1	\$0.00	0	\$57,389.68	1
CREF Growth R2	\$58,825.19	1	\$0.00	0	\$58,825.19	1
<b>Total</b>	<b>\$274,640.59</b>	<b>1</b>	<b>\$0.00</b>	<b>0</b>	<b>\$274,640.59</b>	<b>1</b>



# Fund Usage and Diversification

## Fund Utilization by Age Group – All Participants

For the Period Ending 06/30/2017

Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Participant Control</b>														
TIAA Traditional	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$133,590.79	1	\$133,590.79	1
TIAA Real Estate	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$24,834.93	1	\$24,834.93	1
CREF Global Equities R2	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$57,389.68	1	\$57,389.68	1
CREF Growth R2	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$58,825.19	1	\$58,825.19	1
<b>Participant Control Total</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$274,640.59</b>	<b>1</b>	<b>\$274,640.59</b>	<b>1</b>
<b>Total</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$274,640.59</b>	<b>1</b>	<b>\$274,640.59</b>	<b>1</b>



## Fund Usage and Diversification

### Fund Utilization by Age Group - Active Participants

For the Period Ending 06/30/2017

Active

Investment Name	<25		25 – 34		35 – 44		45 – 54		55 – 64		65+		Total	
	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part	Ending Market Value	# Part
<b>Participant Control</b>														
TIAA Traditional	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$133,590.79	1	\$133,590.79	1
TIAA Real Estate	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$24,834.93	1	\$24,834.93	1
CREF Global Equities R2	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$57,389.68	1	\$57,389.68	1
CREF Growth R2	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$58,825.19	1	\$58,825.19	1
<b>Participant Control Total</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$274,640.59</b>	<b>1</b>	<b>\$274,640.59</b>	<b>1</b>
<b>Total</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$274,640.59</b>	<b>1</b>	<b>\$274,640.59</b>	<b>1</b>



# Fund Usage and Diversification

## Fund Diversification by Age Group and Status

For the Period Ending 06/30/2017

	Number of Funds Invested										Total
	1	2	3	4	5	6	7	8	9	10+	
Active Participant Count											
<b>Participant Control</b>											
65+	0	0	0	1	0	0	0	0	0	0	1
<b>Participant Control Active</b>											
Total	0	0	0	1	0	0	0	0	0	0	1
<b>Total Active Participants</b>	0	0	0	1	0	0	0	0	0	0	1



# Fund Usage and Diversification

## Fund Diversification by Age Group and Status

For the Period Ending 06/30/2017

	Number of Funds Invested										Total	
	1	2	3	4	5	6	7	8	9	10+		
<b>Plan Total Participant Count</b>												
<b>Active</b>												
<b>65+</b>	0	0	0	1	0	0	0	0	0	0	0	1
<b>Total Active Participants</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>



# Fund Usage and Diversification

## Number of Participants in a Single Investment by Fund

For the Period Ending 06/30/2017

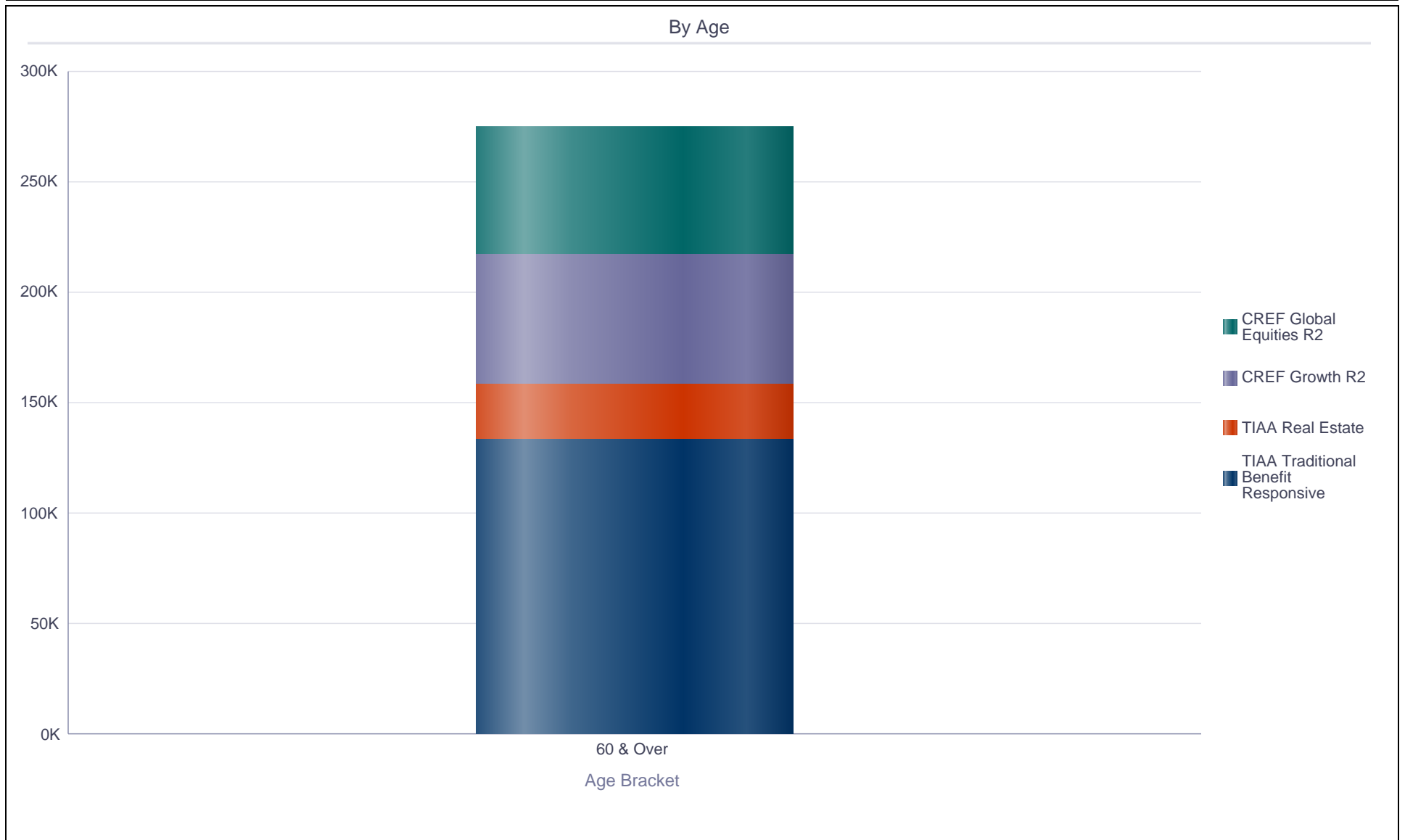
Investment Name	Participant Control	Plan Control	Total Plan
Total	0	0	0



# Asset Allocation Statistics

JUNIATA COLLEGE

For the Period Ending 06/30/2017





# Section V

# Fee Levelization

- Fiduciary responsibility to ensure reasonableness of fees and how they are being paid
  - Level the playing field for participants
- The amount of revenue sharing varies from investment option to investment option
  - Funds with higher costs are subsidizing lower cost funds
  - Participants investing in more expensive funds can end up bearing a disproportionate amount of the fees
- “Levelize” the revenue sharing
  - Determine the amount of plan fees required to cover costs
  - Participants invested in funds generating more than the required amount would be credited back the excess
  - Participants invested in funds generating less than the required amount would have the cost increased to the level
- Credit all revenue sharing back to the participants
  - Regardless of the amount being charged to the participants, 100% of the revenue sharing is credited back to the participants
  - Add a wrap fee to cover Plan’s cost

# Fee Levelization Example

	Account Balance	Investment Option	Required Plan Revenue	Revenue Sharing		Fee Adjustment		Net Fee Paid
Luke	\$100,000	Investment A	0.30%	0.30%	\$300.00	0.00%	\$0.00	\$300.00
Mary	\$50,000	Investment B	0.30%	0.31%	\$155.00	-0.01%	(\$5.00)	\$150.00
Evan	\$25,000	Investment C	0.30%	0.27%	\$67.50	0.03%	\$7.50	\$75.00
Dave	\$12,500	Investment D	0.30%	0.30%	\$37.50	0.00%	\$0.00	\$37.50
Chris	\$6,250	Investment E	0.30%	0.35%	\$21.88	-0.05%	(\$3.13)	\$18.75

- Create an environment in which participants are paying the same rate of revenue sharing regardless of the investment selected
- Apply a fee adjustment to each investment option
  - Luke and Dave receive no adjustments
  - Mary and Chris receive a credit back
  - Evan’s fee is increased by 0.03%

# Fee Levelization Example

	Account Balance	Investment Option	Revenue Sharing		Fee Adjustment		Wrap Fee	Net Fee Paid
Luke	\$100,000	Investment A	0.30%	\$300.00	-0.30%	(\$300.00)	0.30%	\$300.00
Mary	\$50,000	Investment B	0.31%	\$155.00	-0.31%	(\$155.00)	0.30%	\$150.00
Evan	\$25,000	Investment C	0.27%	\$67.50	-0.27%	(\$67.50)	0.30%	\$75.00
Dave	\$12,500	Investment D	0.30%	\$37.50	-0.30%	(\$37.50)	0.30%	\$37.50
Chris	\$6,250	Investment E	0.35%	\$21.88	-0.35%	(\$21.88)	0.30%	\$18.75

- Apply a credit back to each participant equal to the amount of the revenue sharing
- Add a Wrap Fee to cover the expenses
  - Provides fee transparency
- Net result is zero-revenue sharing

# Our Retirement Planning Team

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# Glossary

## MARKET INDICES

- **Citigroup 90-Day Treasury Bill Index** is an unmanaged index that tracks short-term U.S. government debt instruments.
- **Barclays Capital Aggregate Bond Index** is a market capitalization-weighted index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. Municipal bonds and Treasury Inflation-Protected Securities (TIPS) are excluded, due to tax treatment issues. The index includes US Treasury Securities (non TIPS), Government agency bonds, Mortgage backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S.
- **Barclays Capital 1-3 Year Government/Credit Index** is a total return index that incorporates all bonds in both the Treasury Bond Index and the Agency Bond Index, as well as U.S. corporate and some foreign debentures and secured notes, with maturities of one to three years.
- **Barclays Capital 1-3 Year U.S. Government Index** is a broad measure of the performance of short-term government bonds.
- **Barclays Capital Global Aggregate Bond** provides a broad-based measure of the global investment-grade fixed-rate debt markets. The three major components of this index are the US Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The Global Aggregate Bond Index ex-US excludes the US Aggregate component.
- **Barclays Capital Global Emerging Markets Bond Index** consists of the US dollar (USD)-denominated fixed- and floating-rate US Emerging Markets Index and the fixed-rate Pan-European Emerging Markets Index, which is primarily made up of GBP- and EUR-denominated securities. The index includes emerging-markets debt from the following regions: Americas, Europe, Asia, Middle East, and Africa. An emerging market is defined as any country that has a long-term foreign currency debt sovereign rating of Baa1/BBB+/BBB+ or below using the middle rating of Moody's, S&P, and Fitch.
- **Barclays Capital High Yield Index** covers the universe of fixed rate, non-investment grade debt, including corporate and non-corporate sectors. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets are excluded, but Canadian and global bonds (SEC registered) of issuers in non-emerging market countries are included. Original issue zero coupon bonds, step-up coupon structures, and 144-As are also included.
- **Barclays Capital Intermediate Term Government Bond Index** is comprised of approximately 1,000 issues of U.S. Government Treasury and Agency Securities.
- **Barclays Capital U.S. Long Government Index** includes fixed income securities issued by the U.S. Treasury (not including inflation-protected bonds) and U.S. government agencies and instrumentalities, as well as corporate or dollar-denominated foreign debt guaranteed by the U.S. government, with maturities greater than 10 years.
- **Barclays Capital U.S. Long Government/Credit Bond Index** measures the investment return of all medium and larger public issues of U.S. Treasury, agency, investment-grade corporate, and investment-grade international dollar-denominated bonds with maturities longer than 10 years. The average maturity is approximately 20 years.
- **Barclays Capital U.S. Treasury Inflation-Protected Securities (TIPS) Index** is a market value-weighted index that tracks inflation-protected securities issued by the US Treasury. To prevent the erosion of purchasing power, TIPS are indexed to the non-seasonally adjusted Consumer Price Index for All Urban Consumers, or the CPI-U (CPI).
- **Barclays Capital U.S. Universal Bond Index** represents the union of the U.S. Aggregate Index, U.S. Corporate High-Yield Index, Investment-Grade 144A Index, Eurodollar Index, U.S. Emerging Markets Index, and the non-ERISA eligible portion of the CMBS Index. The index covers USD-denominated, taxable bonds that are rated either investment-grade or below investment-grade. Some U.S. Universal Index constituents may be eligible for one or more of its contributing subcomponents that are not mutually exclusive. These securities are not double-counted in the index.
- **Dow Jones-UBS Commodity Index (DJ-UBSCI)** is composed of futures contracts on physical commodities. Unlike equities, which typically entitle the holder to a continuing stake in a corporation, commodity futures contracts normally specify a certain date for the delivery of the underlying physical commodity. In order to avoid the delivery process and maintain a long futures position, nearby contracts must be sold and contracts that have not yet reached the delivery period must be purchased. This process is known as "rolling" a futures position.
- **Dow Jones U.S. Real Estate Index** represents Real Estate Investment Trusts (REIT) and other companies that invest directly or indirectly in real estate through development, management or ownership, including property agencies.

# Glossary Continued

- **Merrill Lynch Convertible Bond Index** represents various markets of convertible bonds and provides reliable benchmarks for asset allocation and portfolio management. There are three groups of indexes; the first two, the G300 Global Convertible Master Index and the Global Investment Grade Convertible Master Index, concentrate the larger more liquid issues, and tend to be the most appropriate for benchmarking. The third series of indexes, the Regional All Convertibles Master Indexes, are rules-driven and allow for more detailed analysis.
- **MSCI All Country World Index** is a market capitalization weighted equity index of stocks traded in 47 world markets.
- **MSCI EAFE Growth Index** is a market capitalization-weighted index that measures the performance of the leading growth stocks in 21 developed countries outside of North America. (The 21 countries include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, Australia, New Zealand, Hong Kong, Japan and Singapore.)
- **MSCI EAFE Index** is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI EAFE Index consists of the following 21 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.
- **MSCI EAFE Small Cap Index** is an unmanaged, free float-adjusted, market-weighted index of small capitalization companies in each industry group of each country represented by the MSCI EAFE Index, which is designed to measure the equity market performance of developed markets outside of the U.S. & Canada.
- **MSCI EAFE Value Index** is an unmanaged index of value stocks of companies located in Europe, Australasia and the Far East.
- **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consisted of the following 21 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.
- **MSCI Global Small Cap Index** provides an exhaustive representation of the small cap size segment. The indices target companies that are in the Investable Market Index (IMI) but that are not in the Standard Index in each market. The indices cover 24 Developed Markets, 21 Emerging Markets and 26 Frontier Markets.
- **Russell 1000 Growth Index** is a market capitalization weighted index that measures the performance of those Russell 1000 companies with higher price-to-book ratio and higher forecasted growth values.
- **Russell 1000 Value Index** is a large cap value index measuring the performance of the largest 1,000 U.S. incorporated companies with lower price-to-book ratios and lower forecasted growth values.
- **Russell 2000 Index** is composed of the 2000 smallest stocks in the Russell 3000® Index and is widely regarded in the industry as the premier measure of small-cap stock performance.
- **Russell 2000 Growth Index** measures the performance of the Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.
- **Russell 2000 Value Index** is an unmanaged, market-value weighted, value-oriented index comprised of small stocks that have relatively low price to book ratios and lower forecasted growth values.
- **Russell Midcap Growth Index** measures the performance of the Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values.
- **Russell Midcap Index** is a market capitalization weighted index representing the smallest 800 companies in the Russell 1000 Index. The average Russell Midcap Index member has a market cap of \$8 billion to \$10 billion, with a median value of \$4 billion to \$5 billion.
- **Russell Midcap Value Index** measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values.
- **S&P 500 Index** is a capitalization-weighted index of 500 stocks. The S&P 500 Index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

# Definitions

- **Alpha** is a measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive Alpha figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative Alpha indicates the portfolio has underperformed, given the expectations established by beta.
- **Annualized Total Return** is the average amount of money earned by an investment each year over a given time period. An annualized total return provides only a snapshot of an investment's performance and does not give investors any indication of its volatility.
- **Beta** is a quantitative measure of the volatility of a given stock, mutual fund, or portfolio, relative to their respective peer group. Specifically, the performance the stock, fund or portfolio has experienced in the last 3 years as their peer group moved 1% up or down. A beta above 1 is more volatile than their respective peer group, while a beta below 1 is less volatile.
- **Consumer Price Index** is a measure of the average change in prices for a fixed market basket of goods and services. This market basket is based on the spending patterns of urban wage earners and clerical workers, who represent 40 percent of the total civilian population.
- **Down Market Capture Ratio** is the percentage of the total market movement achieved by a manager during a period in which the benchmark decreases.
- **Downside Risk** differentiates between "good" risk (upside volatility) and "bad" risk (downside volatility).
- **Expense Ratio** includes management fees, distribution (12b-1) fees, other expenses, and any fee waivers or expense reimbursements.
- **Inception Date** is the date on which an investment began its operations.
- **Information Ratio** is a risk statistic that measures the excess return per unit of residual "non-market" risk in a portfolio.
- **Manager Tenure** is the number of years that the current manager has been the portfolio manager for the investment product. For products with more than one manager, the tenure of the manager who has been with the product the longest is shown.
- **Median Market Cap** is the midpoint of Market Capitalization (market price multiplied by the number of shares outstanding) of the stocks in a portfolio. Half the stocks in the portfolio will have higher market capitalizations; half will have lower.
- **Peer Group % Rankings** is a standardized ranking in which the funds are ranked from 1 to 100 (1 being the best and 100 being the worst) based on their return compared to that of their peers. The rest of the observations are placed an equal distance from each other. All the percentile ranks are based on the peer group (Morningstar or Callan Associates Category).
- **Quadrant Rank** is a measure that encompasses both risk and return. It is calculated by comparing the return and standard deviation (A statistical measurement of dispersion about an average, which, for a fund, depicts how widely the returns varied over a certain period of time) to the return and standard deviation of the peer group. This allows a graph to be generated where items are plotted in one of four quadrants. Each quadrant represents an explanation of the manager's ability to produce returns relative to the risk they take.
- **Residual Risk** is the unsystematic, firm-specific, or diversifiable risk of a security or portfolio.
- **Sharpe Ratio** is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3-Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken.



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