
JUNE 18, 2020

**AGENDA ITEM 3
ACTION ITEM**

SCHOLARSHARE INVESTMENT BOARD

Resolutions to Approve Placement of the T. Rowe Price Institutional Large Cap Growth Fund on Watch Status and Removal of the TIAA-CREF Social Choice Equity Fund from Watch Status; Review and Analysis of Investment Performance for ScholarShare 529

Recommendation

ScholarShare Investment Board (SIB or Board) staff recommends the Board adopt Resolution No. 2020-03 approving the removal of the TIAA-CREF Social Choice Equity Fund from “watch” status and Resolution No. 2020-04 approving the placement of the T. Rowe Price Institutional Large Cap Growth Fund on “watch” status.

Background

SIB and its investment consultant, Meketa Investment Group, Inc. (Meketa), monitor all portfolios in ScholarShare 529 (Plan) in accordance with the ScholarShare Monitoring Procedures and Criteria (Procedures) adopted by the Board.

In this item, SIB will review and discuss “Investment Performance Report” (Exhibit A) for the Plan for first quarter 2020, provided by TIAA-CREF Tuition Financing, Inc., and the “Investment Performance Status Report” (Exhibit B) for first quarter 2020, provided by Meketa. Exhibit B provides comparisons for each underlying fund allocated to the portfolios used in the Plan to applicable benchmark criteria and labels the current status of funds as “positive,” “acceptable,” “caution,” or “watch.”

For the first quarter of 2020:

- Five underlying funds were in the “positive” status,
- 12 underlying funds were in the “acceptable” status (one fund currently on “watch” status), and
- Two underlying funds were in the “caution” status.

As outlined in its memo (Exhibit C), Meketa is recommending the TIAA-CREF Social Choice Equity Fund be removed from “watch” status and the T. Rowe Price Institutional Large Cap Growth Fund be placed on “watch” status, pursuant to the Procedures.

Presenters

Jeremy Thiessen, Senior Director, Institutional Investment Strategist,
TIAA-CREF Tuition Financing, Inc.

Glenn Friedman, Director, Asset Allocation and Investments, TIAA-CREF Tuition Financing, Inc.
Eric White, Principal, Meketa Investment Group, Inc.

RESOLUTION NO. 2020-03

RESOLUTION OF THE SCHOLARSHARE INVESTMENT BOARD APPROVING THE REMOVAL OF THE TIAA-CREF SOCIAL CHOICE EQUITY FUND FROM WATCH STATUS

WHEREAS, the ScholarShare Investment Board (“SIB” or the “Board”) was created under Education Code section 69980 et seq. (the “Golden State ScholarShare Trust Act” or “Act”);

WHEREAS, the Board has a fiduciary responsibility on behalf of the ScholarShare 529 (“Plan”) participants and beneficiaries to monitor the investment manager’s mutual funds and investment performance;

WHEREAS, the Board adopted the Golden State ScholarShare College Savings Trust Monitoring Procedures and Criteria (the “Procedures”) to provide guidelines for monitoring the investment manager’s mutual funds and investment performance as part of its fiduciary responsibility on behalf of the Plan participants and beneficiaries;

WHEREAS, the Board approved the placement of the TIAA-CREF Social Choice Equity Fund (the “Fund”) on watch status at the October 4, 2017 SIB meeting due to the Fund not meeting its respective investment performance criteria as outlined in the Procedures (the “Benchmarks”);

WHEREAS, the SIB staff and Board’s investment consultant (the “Consultant”) have reviewed and analyzed the investment performance of the portfolios and funds in the Plan through the end of first quarter 2020;

WHEREAS, the performance of the TIAA-CREF Social Choice Equity Fund now meets its respective Benchmarks and qualifies for removal from watch status; and

WHEREAS, pursuant to the Procedures, the Board may remove underlying funds from watch status.

NOW, THEREFORE, BE IT RESOLVED, that the Board approves the removal of the TIAA-CREF Social Choice Equity Fund from watch status, as recommended by SIB staff and the Consultant as outlined in the Consultant’s memo dated May 21, 2020.

BE IT FURTHER RESOLVED, that this Resolution becomes effective upon its adoption by the Board.

Attest: _____
Chairperson

Date of Adoption: _____

RESOLUTION NO. 2020-04

RESOLUTION OF THE SCHOLARSHARE INVESTMENT BOARD APPROVING THE PLACEMENT OF THE T. ROWE PRICE INSTITUTIONAL LARGE CAP GROWTH FUND ON WATCH STATUS

WHEREAS, the ScholarShare Investment Board (“SIB” or the “Board”) was created under Education Code section 69980 et seq. (the “Golden State ScholarShare Trust Act” or “Act”);

WHEREAS, the Board has a fiduciary responsibility on behalf of the ScholarShare 529 (“Plan”) participants and beneficiaries to monitor the investment manager’s mutual funds and investment performance;

WHEREAS, the Board adopted the Golden State ScholarShare College Savings Trust Monitoring Procedures and Criteria (the “Procedures”) to provide guidelines for monitoring the investment manager’s mutual funds and investment performance as part of its fiduciary responsibility on behalf of the Plan participants and beneficiaries;

WHEREAS, the SIB staff and Board’s investment consultant (the “Consultant”) have reviewed and analyzed the investment performance of the portfolios and funds in the Plan through the end of first quarter 2020;

WHEREAS, the performance of the T. Rowe Price Institutional Large Cap Growth Fund (the “Fund”) has not met its respective investment performance criteria as outlined in the Procedures (the “Benchmarks”) and qualifies for placement on watch status; and

WHEREAS, pursuant to the Procedures, the Board may place underlying funds on watch status.

NOW, THEREFORE, BE IT RESOLVED, that the Board approves the placement of the T. Rowe Price Institutional Large Cap Growth Fund on watch status, as recommended by SIB staff and the Consultant as outlined in the Consultant’s memo dated May 21, 2020.

BE IT FURTHER RESOLVED, that this Resolution becomes effective upon its adoption by the Board.

Attest: _____
Chairperson

Date of Adoption: _____

Quarterly Investment Report

1st Quarter, 2020

BUILT TO PERFORM.

CREATED TO SERVE.

For Institutional client use only. Not for distribution.

Before investing in the ScholarShare 529 College Savings Plan, you should consider the investment objectives, risks, charges, and expenses. The information contained in this report is subject to further change and amendments over time. Some changes may occur due to the result of adjustments. For a prospectus containing this and other information, as well as a Participant Agreement and Disclosure Statement, please call 1-800-544-5248 or view it online at www.scholarshare529.com. Please read these documents carefully before investing.

TIAA-CREF Tuition Financing, Inc., Program Manager. TIAA-CREF Individual & Institutional Services, LLC, member FINRA and SIPC, distributor and underwriter for the ScholarShare 529 College Savings Plan.

ScholarShare529 

Market Overview: Q1 2020

Key Themes

- The impact from the novel coronavirus (COVID-19) was felt around the world as many countries were forced to close businesses and remain at home to prevent further spreading. Many agree that this health crisis will have meaningful effects on U.S. monetary and fiscal policy, as well as the global economy.

Equities

- All eleven U.S. equity sectors had negative double-digit results. Information Technology was the relative winner, registering -11.93% for the quarter, while Energy lagged, falling just over 50%. Broad baskets of non-U.S. developed and emerging markets both had similar showings, both down more than 22%.

Fixed Income

- The Federal Reserve Board lowered the target for its benchmark fed funds rate twice in two weeks in response to growing concerns caused by the COVID-19 pandemic. The rate now stands at a range of 0.00%-0.25%, which had short-term positive effects on bond prices, but poses challenges for long-term fixed income investors seeking yield.

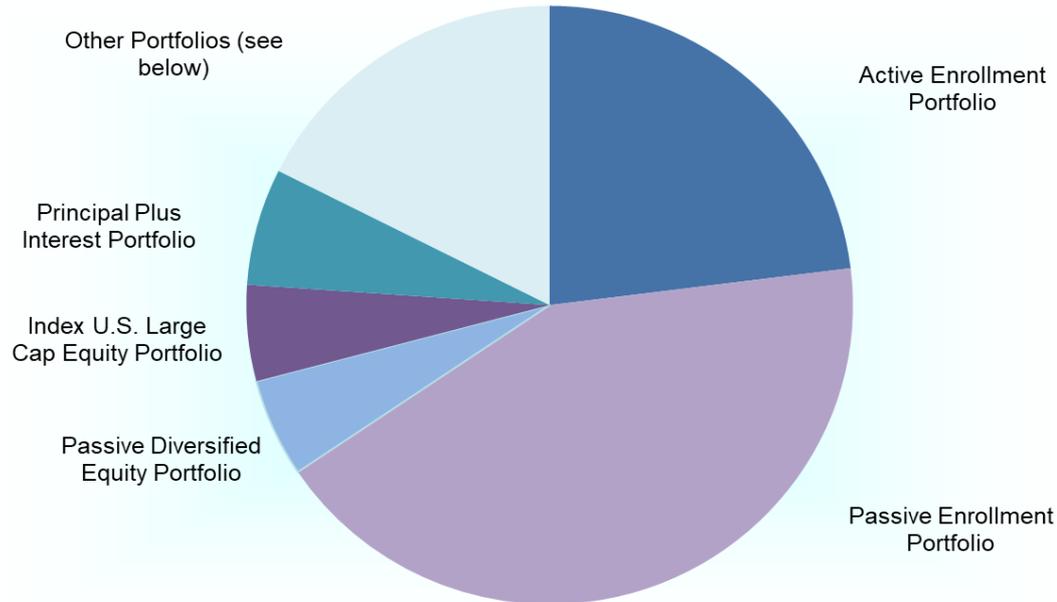
Past performance is not indicative of future results. You can not invest directly in an index. U.S. Equities – Russell 3000 Index; U.S. Growth Stocks – Russell 1000 Growth Index; U.S. Value Stocks – Russell 1000 Value Index; U.S. Mid Cap Stocks – Russell Midcap Index; U.S. Small-Cap Stocks – Russell 2000 Index; International Developed Markets – MSCI EAFE Index; Emerging Markets – MSCI Emerging Markets Index; Real Estate Stocks – FTSE NAREIT All Equity REITS Index; U.S. Investment Grade Bonds – Bloomberg Barclays U.S. Aggregate Bond Index; Long-dated Bonds – Bloomberg Barclays U.S. Government/Credit Long Index; Inflation-Linked Bonds – Bloomberg Barclays TIPS 1-10 Years Index; High Yield Bonds – BofA Merrill Lynch BB/B Cash Pay Index; Commodities - Bloomberg Commodity Index; Cash - Bloomberg Barclays U.S. 3 month Treasury Bellweathers Index C34631

Asset Class	3 Month	1 Year	3 Year	5 Year
U.S. Equities	-20.90	-9.13	4.00	5.77
U.S. Growth Stocks	-14.10	0.91	11.32	10.36
U.S. Value Stocks	-26.73	-17.17	-2.18	1.90
U.S. Mid-Cap Stocks	-27.07	-18.31	-0.81	1.85
U.S. Small-Cap Stocks	-30.61	-23.99	-4.64	-0.25
Int'l Developed Stocks	-22.83	-14.38	-1.82	-0.62
Emerging Markets Stocks	-23.60	-17.69	-1.62	-0.37
Real Estate Stocks	-23.44	-15.93	0.06	1.99
U.S. Investment Grade Bonds	3.15	8.93	4.82	3.36
Long-dated Bonds	6.21	19.32	9.68	5.99
Inflation-Linked Bonds	0.31	4.50	2.54	2.18
High Yield Bonds	-11.87	-5.51	1.29	2.92
Commodities	-23.29	-22.31	-8.61	-7.76
Cash	0.58	2.28	1.85	1.21
Annualized Tuition Inflation Ending as of 2019-2020 Academic Year* (%)				
Educational Institution	1 Year	3 Year	5 Year	
National Average Public 4-Year In-state	2.25	2.59	2.67	
National Average Private Nonprofit 4-Year	3.36	3.26	3.35	
Consumer Price Index, March 2020	1.54	1.92	1.80	

*Data are for the entire academic year and are average total charges for full-time attendance. Tuition and fees were enrollment weighted. SOURCES: CollegeBoard, Trends in College Pricing 2019 and U.S. Department of Labor: Bureau of Labor Statistics

Assets by Portfolio as of Q1 2020

Total Assets: \$8.87 Billion

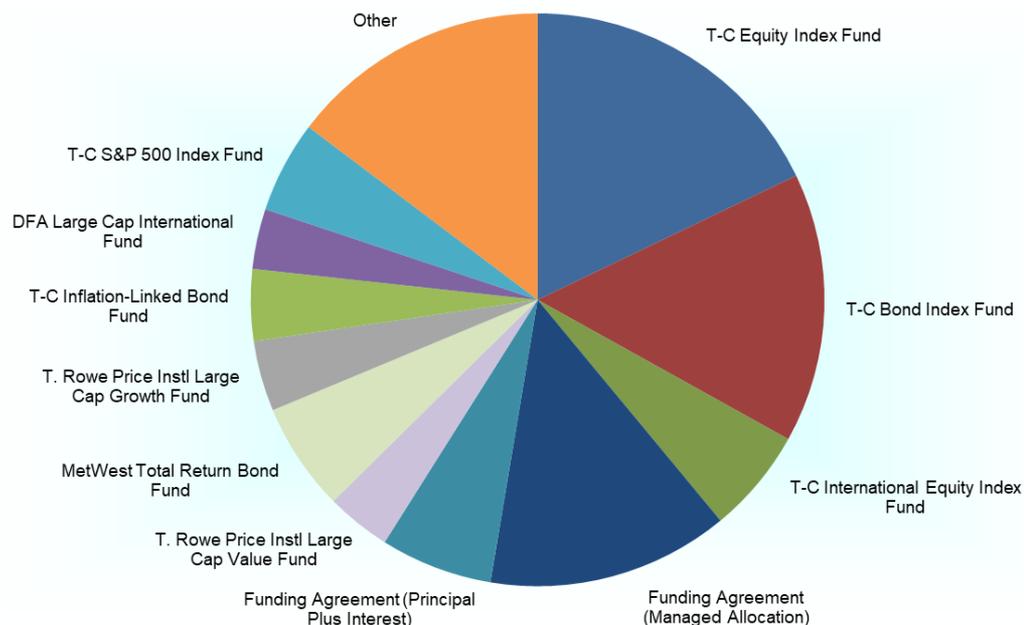


Portfolio	% of Assets	\$ Millions	Portfolio	% of Assets	\$ Millions
Passive Enrollment Portfolio	42.55%	\$ 3,773	Passive Diversified Equity Portfolio	5.32%	\$ 472
Active Enrollment Portfolio	23.03%	\$ 2,043	Index U.S. Large Cap Equity Portfolio	5.18%	\$ 460
Principal Plus Interest Portfolio	6.32%	\$ 560	Other Portfolios (see below)	17.60%	\$ 1,561

Other Portfolios

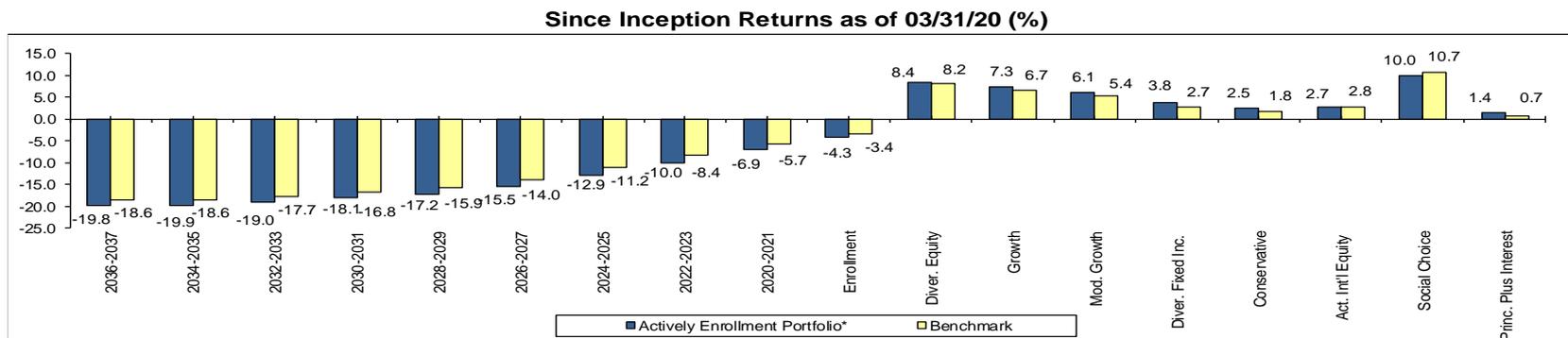
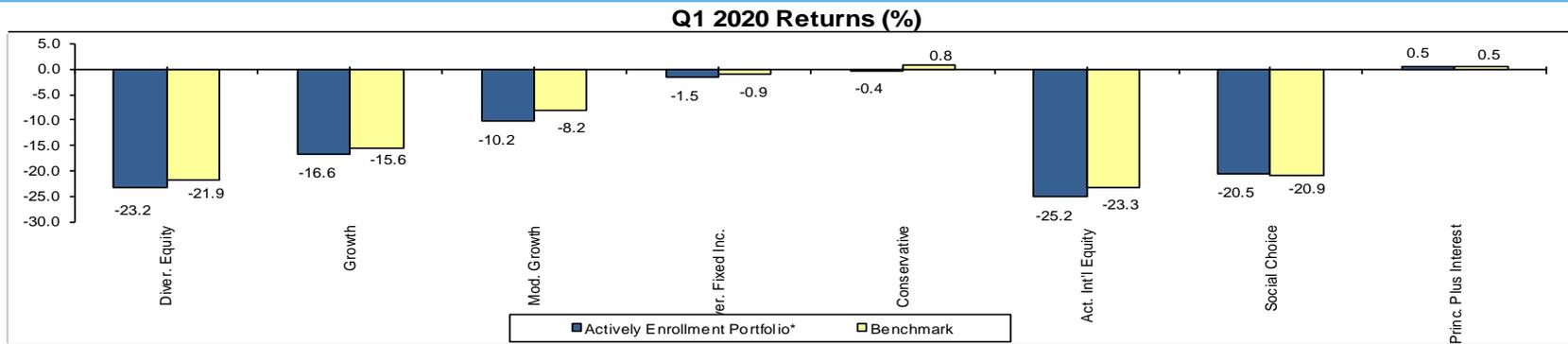
Index U.S. Equity Portfolio	4.61%	\$ 408	Passive Moderate Growth Portfolio	0.71%	\$ 63
Active Diversified Equity Portfolio	2.45%	\$ 218	Active Moderate Growth Portfolio	0.68%	\$ 61
Active Growth Portfolio	1.80%	\$ 160	Passive Conservative Portfolio	0.66%	\$ 59
Social Choice Portfolio	1.71%	\$ 151	Active Conservative Portfolio	0.47%	\$ 42
Passive Growth Portfolio	1.42%	\$ 126	Active Diversified Fixed Income Portfolio	0.36%	\$ 32
Index International Equity Portfolio	1.13%	\$ 100	Passive Diversified Fixed Income Portfolio	0.32%	\$ 28
Index Bond Portfolio	1.02%	\$ 91	Active International Equity Portfolio	0.25%	\$ 23

Assets by Underlying Fund as of Q1 2020



Fund	% of Assets	\$ Millions	Fund	% of Assets	\$ Millions
T-C Equity Index Fund	17.87%	\$ 1,584	Funding Agreement (Principal Plus Interest)	6.32%	\$ 560
T-C Bond Index Fund	15.22%	\$ 1,350	T-C Inflation-Linked Bond Fund	4.04%	\$ 358
Funding Agreement (Managed Allocation)	13.63%	\$ 1,209	T. Rowe Price Instl Large Cap Growth Fund	3.98%	\$ 353
Metropolitan West Total Return Bond Fund	6.11%	\$ 541	T. Rowe Price Instl Large Cap Value Fund	3.65%	\$ 324
T-C International Equity Index Fund	5.92%	\$ 525	DFA Large Cap International Fund	3.40%	\$ 301
T-C S&P 500 Index Fund	5.18%	\$ 460	Other	14.70%	\$ 1,303
Other Funds					
PIMCO Real Return Fund	2.47%	\$ 219	T-C Emerging Markets Equity Index Fund	1.46%	\$ 129
T-C Real Estate Securities Fund	2.38%	\$ 211	T. Rowe Price Instl Floating Rate Fund	1.11%	\$ 98
PIMCO Income Fund	2.29%	\$ 203	DFA Emerging Markets Core Equity Portfolio	0.81%	\$ 72
T-C High Yield Bond Fund	1.74%	\$ 155	T-C Small Cap Equity Fund	0.73%	\$ 64
T-C Social Choice Equity Fund	1.71%	\$ 151			

Actively Managed Portfolios vs Composite Benchmarks Q1 and Since Inception Returns (%)



* Returns are net of most recent weighted average Underlying Fund Fees, Program Management Fees and State Administrative Fees (5 bps).

** Inception for the Multi-Fund and Single-Fund Portfolios was 11/4/11 - 11/10/11. Inception for the Enrollment Year Portfolios was 1/24/20.

- The U.S. economy shed jobs for the first time in a decade in March, dropping 701,000, as the coronavirus pandemic began to erode domestic economic activity. The unemployment rate rose to 4.4%, which was higher than expected.
- Average hourly earnings of all employees on private nonfarm payrolls showed a 3.1% year-over-year increase from last March.
- Confidence among the nation's homebuilders fell two points to 72 in March in the National Association of Home Builders/Wells Fargo Housing Market Index, which was slightly below the median estimate.
- All Active Enrollment Year Portfolios had negative absolute returns since their inception in late January due to the strong downturn in the capital markets.
- Contributing to absolute returns was the MetWest Total Return Bond Fund, which acted as a ballast during a time when risk assets saw significant price depreciation.
- Some larger detractors were the T. Rowe Price Large Cap Value Fund and DFA Emerging Markets Core Equity Portfolio.
- The highest performing option in Q1 was the Principal Plus Interest Portfolio. This returned 0.45% through a guaranteed crediting rate.

Actively Managed Portfolios vs Composite Benchmarks

Investment Portfolios	Average Annual Total Return						Inception Date
	3 Month	YTD	1 Year	3 Year	5 Year	Since Inception	
Enrollment Year Portfolios**							
2036/2037 Enrollment Portfolio Active	-	-	-	-	-	-19.80%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-18.60%	
Difference	-	-	-	-	-	-1.20%	
2034/2035 Enrollment Portfolio Active	-	-	-	-	-	-19.90%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-18.60%	
Difference	-	-	-	-	-	-1.30%	
2032/2033 Enrollment Portfolio Active	-	-	-	-	-	-19.00%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-17.68%	
Difference	-	-	-	-	-	-1.32%	
2030/2031 Enrollment Portfolio Active	-	-	-	-	-	-18.10%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-16.77%	
Difference	-	-	-	-	-	-1.33%	
2028/2029 Enrollment Portfolio Active	-	-	-	-	-	-17.20%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-15.85%	
Difference	-	-	-	-	-	-1.35%	
2026/2027 Enrollment Portfolio Active	-	-	-	-	-	-15.50%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-14.01%	
Difference	-	-	-	-	-	-1.49%	
2024/2025 Enrollment Portfolio Active	-	-	-	-	-	-12.90%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-11.24%	
Difference	-	-	-	-	-	-1.66%	
2022/2023 Enrollment Portfolio Active	-	-	-	-	-	-10.00%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-8.42%	
Difference	-	-	-	-	-	-1.58%	
2020/2021 Enrollment Portfolio Active	-	-	-	-	-	-6.90%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-5.74%	
Difference	-	-	-	-	-	-1.16%	
Enrollment Year Portfolio Active	-	-	-	-	-	-4.30%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-3.35%	
Difference	-	-	-	-	-	-0.95%	
Active Multi-Fund Investment Portfolios							
Active Diversified Equity Portfolio	-23.24%	-23.24%	-14.32%	1.72%	3.52%	8.39%	11/04/11
Blended Benchmark Returns	-21.94%	-21.94%	-11.67%	1.95%	3.68%	8.22%	
Difference	-1.30%	-1.30%	-2.65%	-0.23%	-0.16%	0.17%	
Active Growth Portfolio	-16.63%	-16.63%	-8.35%	2.62%	3.69%	7.31%	11/04/11
Blended Benchmark Returns	-15.59%	-15.59%	-6.40%	2.66%	3.56%	6.68%	
Difference	-1.04%	-1.04%	-1.95%	-0.04%	0.13%	0.63%	
Active Moderate Growth Portfolio	-10.16%	-10.16%	-3.12%	3.17%	3.55%	6.10%	11/09/11
Blended Benchmark Returns	-8.17%	-8.17%	-0.31%	3.57%	3.62%	5.43%	
Difference	-1.99%	-1.99%	-2.81%	-0.40%	-0.07%	0.67%	
Active Conservative Portfolio	-0.40%	-0.40%	2.93%	2.41%	2.13%	2.50%	11/04/11
Blended Benchmark Returns	0.77%	0.77%	4.31%	2.88%	2.09%	1.81%	
Difference	-1.17%	-1.17%	-1.38%	-0.47%	0.04%	0.69%	
Active International Equity Portfolio	-25.19%	-25.19%	-18.00%	-3.24%	-1.23%	2.73%	11/10/11
Blended Benchmark Returns	-23.27%	-23.27%	-15.35%	-1.90%	-0.60%	2.82%	
Difference	-1.92%	-1.92%	-2.65%	-1.34%	-0.63%	-0.09%	
Active Diversified Fixed Income Portfolio	-1.51%	-1.51%	3.71%	3.27%	2.90%	3.80%	11/08/11
Blended Benchmark Returns	-0.90%	-0.90%	4.25%	3.17%	2.70%	2.65%	
Difference	-0.61%	-0.61%	-0.54%	0.10%	0.20%	1.15%	
Active Single Fund Investment Portfolios							
Social Choice Portfolio	-20.49%	-20.49%	-8.32%	4.28%	5.51%	9.99%	11/04/11
Benchmark Returns	-20.90%	-20.90%	-9.13%	4.00%	5.77%	10.74%	
Difference	0.41%	0.41%	0.81%	0.28%	-0.26%	-0.75%	
Principal Plus Interest Portfolio**	0.45%	0.45%	1.72%	1.50%	1.36%	1.37%	11/04/11
Benchmark Returns	0.46%	0.46%	2.07%	1.74%	1.12%	0.06%	
Difference	-0.01%	-0.01%	-0.35%	-0.24%	0.24%	1.31%	

* Returns are net of most recent weighted average Underlying Fund Fees, Program Management Fees and State Administrative Fees (5 bps).

**The crediting rate of 1.70% for the TC Life Funding Agreement in the Active Age-Based Portfolio for the Principal Plus Interest Portfolio are guaranteed through 12/31/20.

Asset Allocation, Fees, and Performance

Active Enrollment Year Portfolio	Annual Asset Based Fees (bp)*	T. Rowe Price Instl Large Cap Growth Fund	T. Rowe Price Instl Large Cap Value Fund	T. Rowe Price Instl Floating Rate Fund	TIAA-CREF Quant Small Cap Equity Fund	TIAA-CREF Real Estate Securities Fund	DFA Large Cap International Portfolio	DFA Emerging Markets Core Equity I Portfolio	MetWest Total Return Bond Fund	PIMCO Real Return Fund	PIMCO Income Fund	T-C Life Funding Agreement
Underlying Fund Expenses (bp)		56	57	58	42	51	22	48	37	45	50	N/A
2036-2037	52	22.70%	22.70%	2.00%	5.00%	5.60%	19.20%	4.80%	10.00%	4.00%	4.00%	0.00%
2034-2035	52	22.70%	22.70%	2.00%	5.00%	5.60%	19.20%	4.80%	10.00%	4.00%	4.00%	0.00%
2032-2033	52	21.60%	21.60%	2.40%	4.80%	5.30%	18.10%	4.60%	12.00%	4.80%	4.80%	0.00%
2030-2031	52	20.40%	20.40%	2.80%	4.50%	5.10%	17.30%	4.30%	14.00%	5.60%	5.60%	0.00%
2028-2029	51	19.30%	19.30%	3.20%	4.30%	4.80%	16.30%	4.00%	16.00%	6.40%	6.40%	0.00%
2026-2027	51	17.00%	17.00%	4.00%	3.80%	4.20%	14.40%	3.60%	20.00%	8.00%	8.00%	0.00%
2024-2025	51	13.60%	13.60%	5.20%	3.00%	3.40%	11.50%	2.90%	26.00%	10.40%	10.40%	0.00%
2022-2023	46	10.20%	10.20%	5.40%	2.30%	2.50%	8.60%	2.20%	27.00%	10.80%	10.80%	10.00%
2020-2021	35	7.10%	7.10%	4.00%	1.50%	1.80%	6.00%	1.50%	20.00%	8.00%	8.00%	35.00%
Enrollment	28	4.20%	4.20%	3.50%	1.00%	1.10%	3.60%	0.90%	17.50%	7.00%	7.00%	50.00%

Active Multi-Fund Investment Portfolios

Active Diversified Equity Portfolio	52	28.35%	28.35%		6.30%	7.00%	24.00%	6.00%				
Active Growth Portfolio	51	19.85%	19.85%	3.00%	4.40%	4.90%	16.80%	4.20%	15.00%	6.00%	6.00%	
Active Moderate Growth Portfolio	51	11.34%	11.34%	6.00%	2.52%	2.80%	9.60%	2.40%	30.00%	12.00%	12.00%	
Active Diversified Fixed Income Portfolio	49			10.00%					50.00%	20.00%	20.00%	
Active Conservative Portfolio	28			5.00%					25.00%	10.00%	10.00%	50.00%
Active International Equity Portfolio	33						80.00%	20.00%				

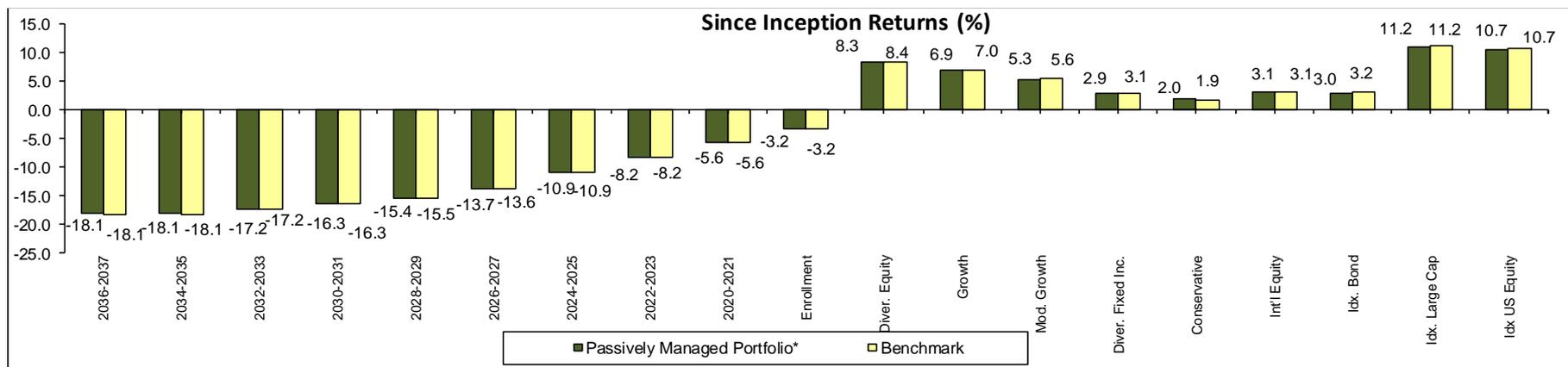
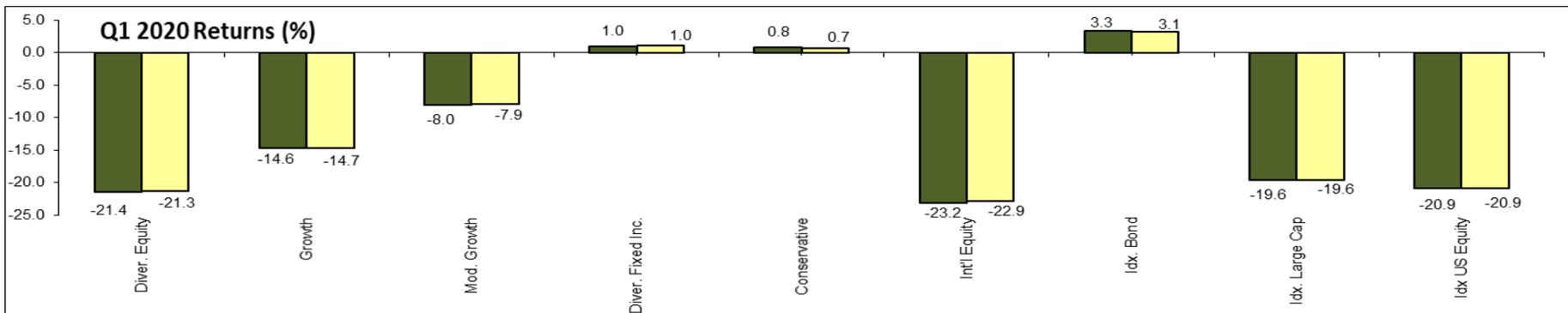
Active Single Fund Investment Portfolios

Investment Portfolios	Annual Asset Based Fees (bp)*	Percent Allocation	Underlying Mutual Fund	Fund's Performance vs Benchmk Q1 2020 (bp)
Social Choice Portfolio	23	100.00%	TIAA-CREF Social Choice Equity Fund	41
Principal Plus Interest Portfolio	N/A	100.00%	TIAA-CREF Life Co. Funding Agreement	(1)

* Asset Based Fees include most recent weighted average Underlying Fund Fees, Program Management Fees and State Administrative Fees (5 bps).

Passively Managed Portfolios vs Composite Benchmarks

Q1 and Since Inception Returns (%)



* Returns are net of most recent weighted average Underlying Fund Fees and Program Management Fees for the quarter, as well as State Administrative Fees (5 bps) before 11/12/13.

** Inception for the Multi-Fund and Single-Fund Portfolios was 11/4/11 - 11/8/11. Inception for the Enrollment Year Portfolios was 1/24/20.

- Global markets in Q1 were devastated by the coronavirus. U.S. equities posted their worst quarter since 2008, with the S&P 500 Index down 20%.
- Treasury yields ended the quarter lower after significant rate cuts from the Fed. The Bloomberg Barclays U.S. Aggregate Bond Index of intermediate-term investment grade U.S. bonds returned 3.15%.
- All Passive Enrollment Year Portfolios posted negative absolute returns since inception in January.
- A main contributor to absolute returns was the TIAA-CREF Bond Index Fund, which tracks a diversified index of investment-grade debt issues.
- Multi-Fund and Single Fund Portfolios saw mixed results in Q1, with more conservative portfolios achieving positive absolute returns. The Index Bond Portfolio saw the highest absolute results due to the interest rate environment, returning 3.30% for the quarter.

Passively Managed Portfolios vs Composite Benchmarks

Investment Portfolios	Average Annual Total Return						
	3 Month	YTD	1 Year	3 Year	5 Year	Since Inception	Inception Date
Passive Enrollment Portfolio**							
2036/2037 Enrollment Portfolio Passive	-	-	-	-	-	-18.10%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-18.14%	
Difference	-	-	-	-	-	0.04%	
2034/2035 Enrollment Portfolio Passive	-	-	-	-	-	-18.10%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-18.14%	
Difference	-	-	-	-	-	0.04%	
2032/2033 Enrollment Portfolio Passive	-	-	-	-	-	-17.20%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-17.25%	
Difference	-	-	-	-	-	0.05%	
2030/2031 Enrollment Portfolio Passive	-	-	-	-	-	-16.30%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-16.35%	
Difference	-	-	-	-	-	0.05%	
2028/2029 Enrollment Portfolio Passive	-	-	-	-	-	-15.40%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-15.45%	
Difference	-	-	-	-	-	0.05%	
2026/2027 Enrollment Portfolio Passive	-	-	-	-	-	-13.70%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-13.65%	
Difference	-	-	-	-	-	-0.05%	
2024/2025 Enrollment Portfolio Passive	-	-	-	-	-	-10.90%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-10.94%	
Difference	-	-	-	-	-	0.04%	
2022/2023 Enrollment Portfolio Passive	-	-	-	-	-	-8.20%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-8.17%	
Difference	-	-	-	-	-	-0.03%	
2020/2021 Enrollment Portfolio Passive	-	-	-	-	-	-5.60%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-5.57%	
Difference	-	-	-	-	-	-0.03%	
Enrollment Year Portfolio Passive	-	-	-	-	-	-3.20%	01/24/20
Blended Benchmark Returns	-	-	-	-	-	-3.24%	
Difference	-	-	-	-	-	0.04%	
Passive Multi-Fund Investment Portfolios							
Passive Diversified Equity Portfolio	-21.41%	-21.41%	-11.03%	2.24%	3.78%	8.34%	11/04/11
Blended Benchmark Returns	-21.33%	-21.33%	-10.89%	2.33%	3.91%	8.45%	
Difference	-0.08%	-0.08%	-0.14%	-0.09%	-0.13%	-0.11%	
Passive Growth Portfolio	-14.63%	-14.63%	-5.29%	3.15%	3.80%	6.93%	11/04/11
Blended Benchmark Returns	-14.67%	-14.67%	-5.29%	3.18%	3.93%	7.04%	
Difference	0.04%	0.04%	0.00%	-0.03%	-0.13%	-0.11%	
Passive Moderate Growth Portfolio	-8.02%	-8.02%	-0.26%	3.61%	3.52%	5.25%	11/08/11
Blended Benchmark Returns	-7.94%	-7.94%	0.03%	3.74%	3.72%	5.57%	
Difference	-0.08%	-0.08%	-0.29%	-0.13%	-0.20%	-0.32%	
Passive Conservative Portfolio	0.77%	0.77%	4.05%	2.68%	2.11%	2.00%	11/04/11
Blended Benchmark Returns	0.73%	0.73%	4.31%	2.90%	2.10%	1.86%	
Difference	0.04%	0.04%	-0.26%	-0.22%	0.01%	0.14%	
Index International Equity Portfolio	-23.20%	-23.20%	-15.48%	-1.79%	-0.41%	3.11%	11/04/11
Blended Benchmark Returns	-22.92%	-22.92%	-14.95%	-1.69%	-0.48%	3.11%	
Difference	-0.28%	-0.28%	-0.53%	-0.10%	0.07%	0.00%	
Passive Diversified Fixed Income Portfolio	0.96%	0.96%	6.21%	3.83%	2.85%	2.85%	11/08/11
Blended Benchmark Returns	1.03%	1.03%	6.58%	4.04%	3.06%	3.06%	
Difference	-0.07%	-0.07%	-0.37%	-0.21%	-0.21%	-0.21%	
Passive Single Fund Investment Portfolios							
Index Bond Portfolio	3.30%	3.30%	8.74%	4.67%	3.18%	3.00%	11/04/11
Benchmark Returns	3.15%	3.15%	8.93%	4.82%	3.36%	3.21%	
Difference	0.15%	0.15%	-0.19%	-0.15%	-0.18%	-0.21%	
Index U.S. Large Cap Equity Portfolio	-19.57%	-19.57%	-7.02%	5.04%	6.64%	11.18%	11/04/11
Benchmark Returns	-19.60%	-19.60%	-6.98%	5.10%	6.73%	11.23%	
Difference	0.03%	0.03%	-0.04%	-0.06%	-0.09%	-0.05%	
Index U.S. Equity Portfolio	-20.88%	-20.88%	-9.20%	3.95%	5.72%	10.69%	11/04/11
Benchmark Returns	-20.90%	-20.90%	-9.13%	4.00%	5.77%	10.74%	
Difference	0.02%	0.02%	-0.07%	-0.05%	-0.05%	-0.05%	

* Returns are net of most recent weighted average Underlying Fund Fees and Program Management Fees for the quarter, as well as State Administrative Fees (5 bps) before 11/12/13.

**The crediting rate of 1.70% for the TC Life Funding Agreement in the Passive Age-Based Portfolio is guaranteed through 12/31/20.

Asset Allocation, Fees, and Performance

Passive Enrollment Portfolio	Annual Asset Based Fees (bp)*	TIAA-CREF Equity Index Fund	TIAA-CREF International Equity Index Fund	TIAA-CREF Emerging Markets Equity Index Fund	TIAA-CREF Real Estate Securities Fund	TIAA-CREF Bond Index Fund	TIAA-CREF Inflation-Linked Bond Fund	TIAA-CREF High Yield Fund	T-C Life Funding Agreement
Underlying Fund Expenses (bp)		5	6	20	51	11	26	36	N/A
2036-2037	12	50.40%	19.20%	4.80%	5.60%	14.00%	4.00%	2.00%	0.00%
2034-2035	12	50.40%	19.20%	4.80%	5.60%	14.00%	4.00%	2.00%	0.00%
2032-2033	12	47.90%	18.20%	4.60%	5.30%	16.80%	4.80%	2.40%	0.00%
2030-2031	12	45.40%	17.30%	4.30%	5.00%	19.60%	5.60%	2.80%	0.00%
2028-2029	13	42.80%	16.30%	4.10%	4.80%	22.40%	6.40%	3.20%	0.00%
2026-2027	13	37.80%	14.40%	3.60%	4.20%	28.00%	8.00%	4.00%	0.00%
2024-2025	14	30.20%	11.50%	2.90%	3.40%	36.40%	10.40%	5.20%	0.00%
2022-2023	13	22.70%	8.60%	2.20%	2.50%	37.80%	10.80%	5.40%	10.00%
2020-2021	10	15.70%	6.00%	1.50%	1.80%	28.00%	8.00%	4.00%	35.00%
Enrollment	8	9.40%	3.60%	0.90%	1.10%	24.50%	7.00%	3.50%	50.00%

Passive Multi-Fund Investment Portfolios

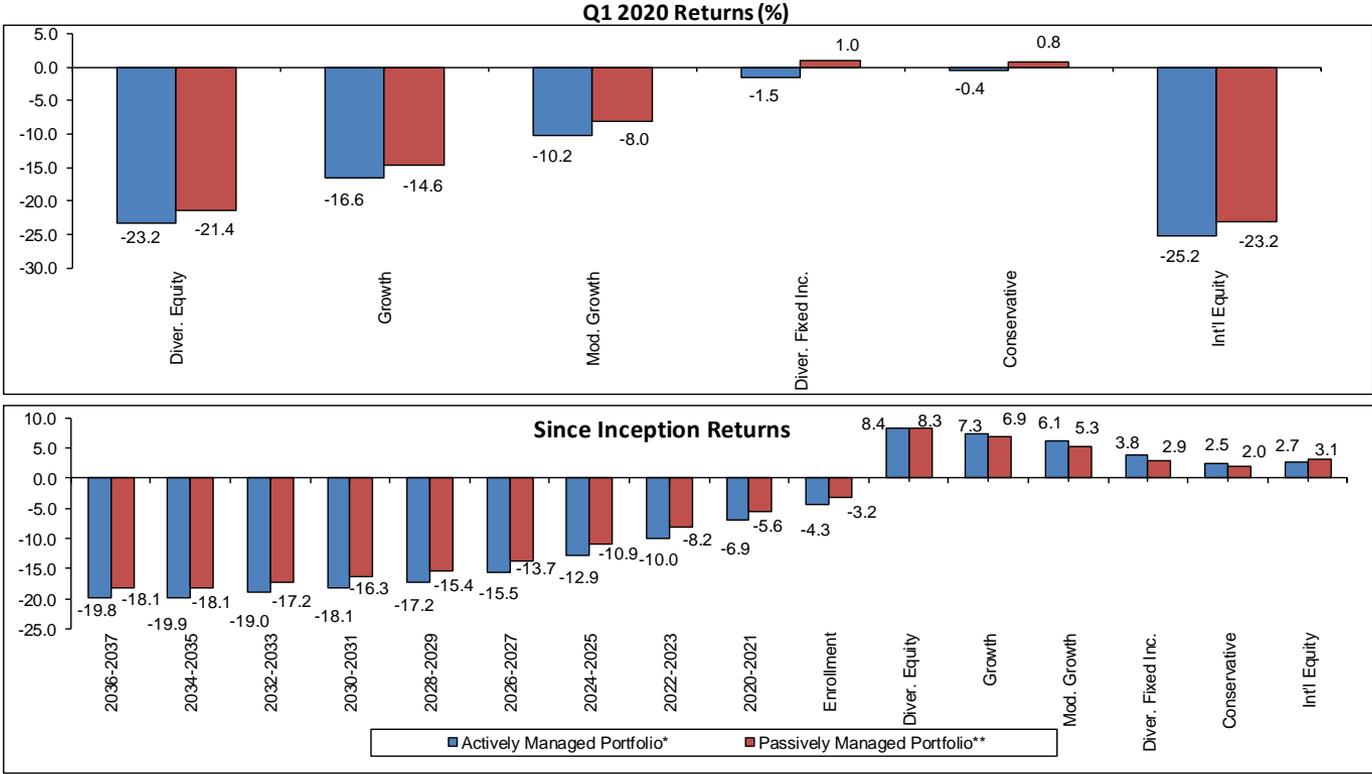
Passive Diversified Equity Portfolio	10	63.00%	24.00%	6.00%	7.00%				
Passive Growth Portfolio	13	44.10%	16.80%	4.20%	4.90%	21.00%	6.00%	3.00%	
Passive Moderate Growth Portfolio	15	25.20%	9.60%	2.40%	2.80%	42.00%	12.00%	6.00%	
Passive Diversified Fixed Income Portfolio	18					70.00%	20.00%	10.00%	
Passive Conservative Portfolio	9					35.00%	10.00%	5.00%	50.00%
Index International Equity Portfolio	10		80.00%	20.00%					

Investment Portfolios	Annual Asset Based Fees (bp)*	Percent Allocation	Underlying Mutual Fund	Fund's Performance vs Benchmk Q1 2020 (bp)
Index Bond Portfolio	12	100.00%	TIAA-CREF Bond Index Fund	19
Index U.S. Large Cap Equity Portfolio	6	100.00%	TIAA-CREF S&P 500 Index Fund	1
Index U.S. Equity Portfolio	6	100.00%	TIAA-CREF Equity Index Fund	3

* Asset Based Fees include most recent weighted average Underlying Fund Fees and Program Management Fees.

Actively Managed Portfolios vs. Passively Managed Portfolios

Q1 and Since Inception Returns (%)



* Returns are net of most recent weighted average Underlying Fund Fees, Program Management Fees, and State Administrative Fees (5 bps).
 ** Returns are net of most recent weighted average Underlying Fund Fees, Program Management Fees, and State Administrative Fees (5 bps) before 11/12/13.
 *** Inception for the Multi-Fund and Single-Fund Portfolios was 11/4/11 - 11/10/11. Inception for the Enrollment Year Portfolios was 1/24/20.

- In Q1, as well as since inception for the Enrollment Year Portfolios, Passively Managed Portfolios outperformed the Actively Managed Portfolios.
- Certain underlying funds in the Active Portfolios underperformed their benchmark, which resulted in lower returns for some portfolios with allocations to those funds compared to their passive counterparts. For example, the PIMCO Income Fund, which has more credit risk than its benchmark, underperformed during a period of widening spreads.
- Since Inception returns for the Multi-Fund Portfolios generally continue to favor the Actively Managed Portfolios overall.

Underlying Funds vs. Benchmarks

TIAA-CREF FUNDS	Average Annual Total Return							Fund Incept. Date
	3 Month	YTD	1 Year	3 Year	5 Year	Life	3-Year Standard Deviation	
TIAA-CREF FUNDS								
T-C Bond Index Fund	3.34%	3.34%	8.83%	4.71%	3.23%	3.76%	2.88%	09/14/2009
Bloomberg Barclays U.S. Aggregate Bond Index	3.15%	3.15%	8.93%	4.82%	3.36%	3.93%	2.91%	
Difference	0.19%	0.19%	-0.10%	-0.11%	-0.13%	-0.17%		
T-C Emerging Markets Equity Index Fund*	-24.02%	-24.02%	-18.18%	-1.92%	-0.49%	0.64%	14.49%	08/31/2010
MSCI Emerging Markets® Index	-23.60%	-23.60%	-17.69%	-1.62%	-0.37%	1.00%	14.37%	
Difference	-0.42%	-0.42%	-0.49%	-0.30%	-0.12%	-0.36%		
T-C Equity Index Fund	-20.87%	-20.87%	-9.17%	3.98%	5.75%	5.28%	12.36%	07/01/1999
Russell 3000 Index	-20.90%	-20.90%	-9.13%	4.00%	5.77%	5.34%	12.38%	
Difference	0.03%	0.03%	-0.04%	-0.02%	-0.02%	-0.06%		
T-C High Yield Bond Fund	-14.27%	-14.27%	-7.96%	0.25%	2.23%	5.75%	4.75%	03/31/2006
ICE BofAML BB/B Cash Pay Index	-11.87%	-11.87%	-5.51%	1.29%	2.91%	5.88%	3.89%	
Difference	-2.40%	-2.40%	-2.45%	-1.04%	-0.68%	-0.13%		
T-C Inflation-Linked Bond Fund	0.49%	0.49%	4.36%	2.41%	1.75%	3.89%	2.09%	10/01/2002
Bloomberg Barclays 1-10 Year U.S. TIPS Index	0.31%	0.31%	4.50%	2.53%	2.18%	3.69%	2.09%	
Difference	0.18%	0.18%	-0.14%	-0.12%	-0.43%	0.20%		
T-C International Equity Index Fund*	-23.01%	-23.01%	-14.79%	-1.84%	-0.53%	6.04%	11.05%	10/01/2002
MSCI EAFE Index	-22.83%	-22.83%	-14.38%	-1.82%	-0.62%	6.02%	10.96%	
Difference	-0.18%	-0.18%	-0.41%	-0.02%	0.09%	0.02%		
T-C Real Estate Securities Fund	-19.62%	-19.62%	-10.16%	3.39%	3.35%	9.35%	11.31%	10/01/2002
FTSE NAREIT Equity Index	-23.44%	-23.44%	-15.93%	0.06%	1.99%	9.15%	11.72%	
Difference	3.82%	3.82%	5.77%	3.33%	1.36%	0.20%		
T-C S&P 500 Index Fund	-19.59%	-19.59%	-7.00%	5.06%	6.67%	8.69%	12.10%	10/01/2002
S&P 500 Index	-19.60%	-19.60%	-6.98%	5.10%	6.72%	8.77%	12.10%	
Difference	0.01%	0.01%	-0.02%	-0.04%	-0.05%	-0.08%		
T-C Quant Small Cap Equity Fund	-33.90%	-33.90%	-28.96%	-6.99%	-1.09%	7.93%	15.39%	10/01/2002
Russell 2000 Index	-30.61%	-30.61%	-23.99%	-4.64%	-0.25%	8.19%	15.94%	
Difference	-3.29%	-3.29%	-4.97%	-2.35%	-0.84%	-0.26%		
T-C Social Choice Equity Fund	-20.49%	-20.49%	-8.25%	4.35%	5.60%	5.13%	12.21%	07/01/1999
Russell 3000 Index	-20.90%	-20.90%	-9.13%	4.00%	5.77%	5.34%	12.38%	
Difference	0.41%	0.41%	0.88%	0.35%	-0.17%	-0.21%		
DFA FUNDS								
DFA Emerging Markets Core Equity Portfolio*	-28.31%	-28.31%	-23.40%	-5.39%	-2.01%	5.09%	13.86%	04/05/2005
MSCI Emerging Markets® Index	-23.60%	-23.60%	-17.69%	-1.62%	-0.37%	5.41%	14.37%	
Difference	-4.71%	-4.71%	-5.71%	-3.77%	-1.64%	-0.32%		
DFA Large Cap International Portfolio*	-24.43%	-24.43%	-16.53%	-2.61%	-0.93%	4.66%	11.48%	07/17/1991
MSCI World Ex US Index	-23.26%	-23.26%	-14.89%	-2.07%	-0.76%	4.79%	10.95%	
Difference	-1.17%	-1.17%	-1.64%	-0.54%	-0.17%	-0.13%		
METWEST FUNDS								
MetWest Total Return Bond Fund	2.26%	2.26%	8.28%	4.71%	3.29%	4.23%	2.87%	07/01/1999
Bloomberg Barclays U.S. Aggregate Bond Index	3.15%	3.15%	8.93%	4.82%	3.36%	3.43%	2.91%	
Difference	-0.89%	-0.89%	-0.65%	-0.11%	-0.07%	0.80%		
PIMCO FUNDS								
PIMCO Income Fund	-7.66%	-7.66%	-3.16%	1.94%	3.59%	7.42%	1.92%	03/30/2007
Barclays Capital U.S. Aggregate Bond Index	3.15%	3.15%	8.93%	4.82%	3.36%	4.40%	2.91%	
Difference	-10.81%	-10.81%	-12.09%	-2.88%	0.23%	3.02%		
PIMCO Real Return Fund	0.77%	0.77%	5.61%	3.02%	2.30%	5.64%	2.87%	01/29/1997
Bloomberg Barclays U.S. TIPS Index	1.69%	1.69%	6.85%	3.46%	2.67%	-	3.00%	
Difference	-0.92%	-0.92%	-1.24%	-0.44%	-0.37%	-		
T. ROWE PRICE FUNDS								
T. Rowe Price Instl Floating Rate Fund	-11.28%	-11.28%	-6.97%	-0.12%	1.50%	4.01%	2.45%	01/31/2008
S&P/LSTA Performing Loan Index	-13.53%	-13.53%	-9.61%	-0.86%	1.26%	3.95%	2.87%	
Difference	2.25%	2.25%	2.64%	0.74%	0.24%	0.06%		
T. Rowe Price Instl Large Cap Growth Fund	-13.87%	-13.87%	-3.49%	12.85%	11.29%	9.88%	13.64%	10/31/2001
Russell 1000 Growth Index	-14.10%	-14.10%	0.91%	11.32%	10.36%	8.08%	13.26%	
Difference	0.23%	0.23%	-4.40%	1.53%	0.93%	1.80%		
T. Rowe Price Instl Large Cap Value Fund	-28.57%	-28.57%	-18.66%	-2.76%	1.55%	6.50%	12.07%	3/31/2000
Russell 1000 Value Index	-26.73%	-26.73%	-17.17%	-2.18%	1.90%	5.36%	12.02%	
Difference	-1.84%	-1.84%	-1.49%	-0.58%	-0.35%	1.14%		

* For funds holding securities traded on foreign exchange that close before the U.S. market, fair value pricing creates tracking error relative to a benchmark index that uses foreign closing prices.



TIAA-CREF Tuition Financing, Inc.

BUILT TO PERFORM.

CREATED TO SERVE.

ScholarShare 529 College Savings Plan

June 18, 2020

1Q 2020 Investment
Performance Status Report

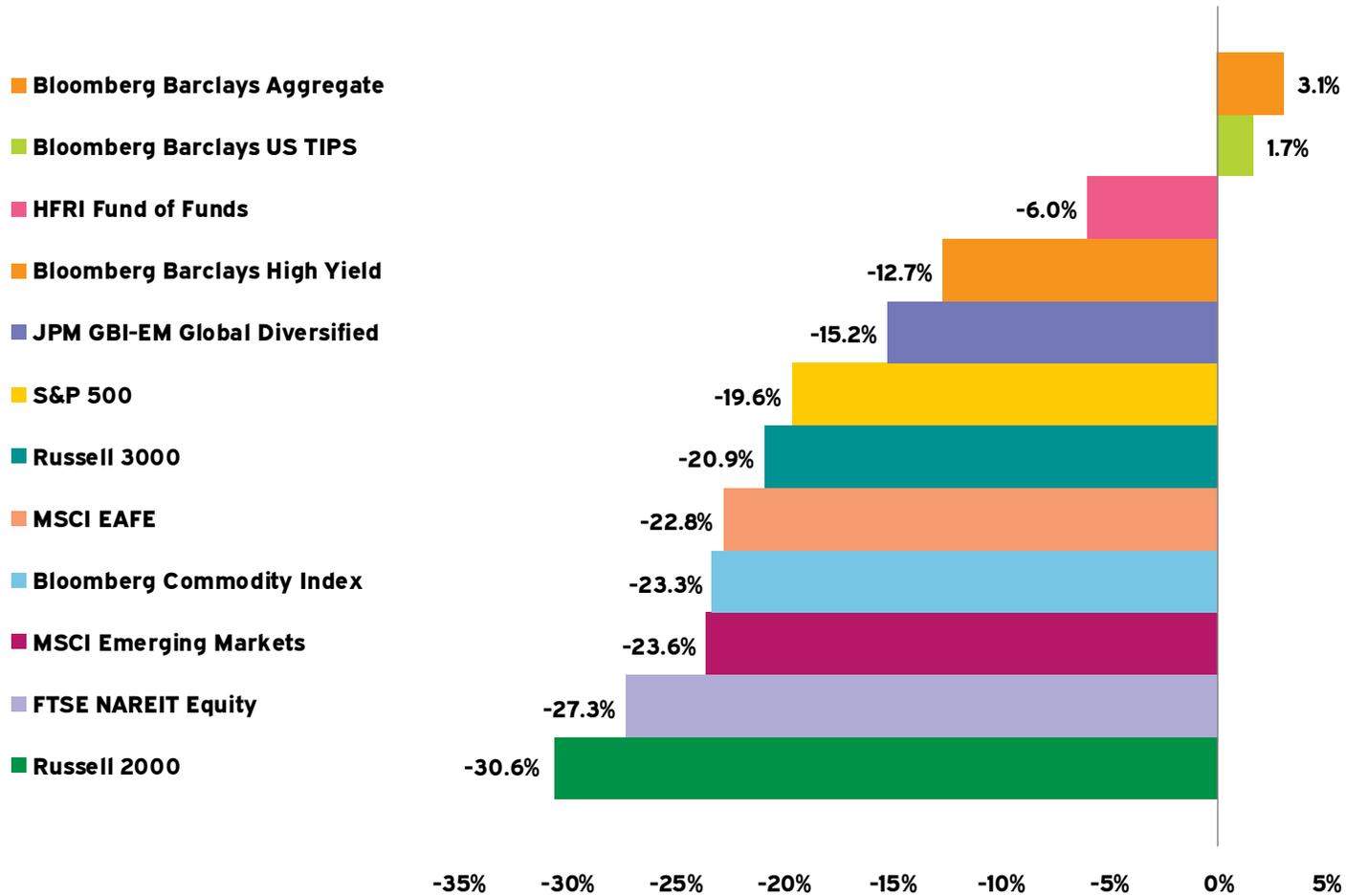
1. The World Markets in the First Quarter of 2020
2. Review of ScholarShare 529 Policy
3. Sensitivity Analyses
4. Summary Points
5. Enrollment Date Fund Analysis
6. Appendix

Takeaways

- The Program transitioned to Enrollment-Date portfolios during the quarter and trailing performance is not yet available.
- Global equities declined sharply in Q1 2020 due to the COVID-19 pandemic and the oil price war between Saudi Arabia and Russia.
- US and International equity posted negative results over the quarter and trailing 1-year periods. US large cap equity fell the least over the quarter, followed by mid, small and microcap. Growth outperformed value in the large-, mid-, and small-cap spaces. The market rotated away from stocks thought to be impacted by the virus and into defensive stocks and those that present opportunities in the current environment.
- Large Cap Growth indices outperformed Large Cap Value indices. The Program's T. Rowe Institutional Large Cap Growth slightly outperformed its benchmark over the quarter.
- The Program's underlying active international fund, DFA Large Cap International, produced negative absolute and relative results over the quarter and trailing 1-year.
- Fixed income returns outperformed equity over the most recent quarter and trailing 1-year. The Program's actively-managed fixed income funds underperformed their respective benchmarks for the quarter. The PIMCO Income fund generated a return of negative (7.7%) and underperformed its benchmark by (10.8%) over the quarter.
- The TIAA Real Estate Securities fund produced negative absolute results, but outperformed its benchmark over the most recent quarter and trailing 1-year periods.

The World Markets First Quarter of 2020

The World Markets¹ First Quarter of 2020



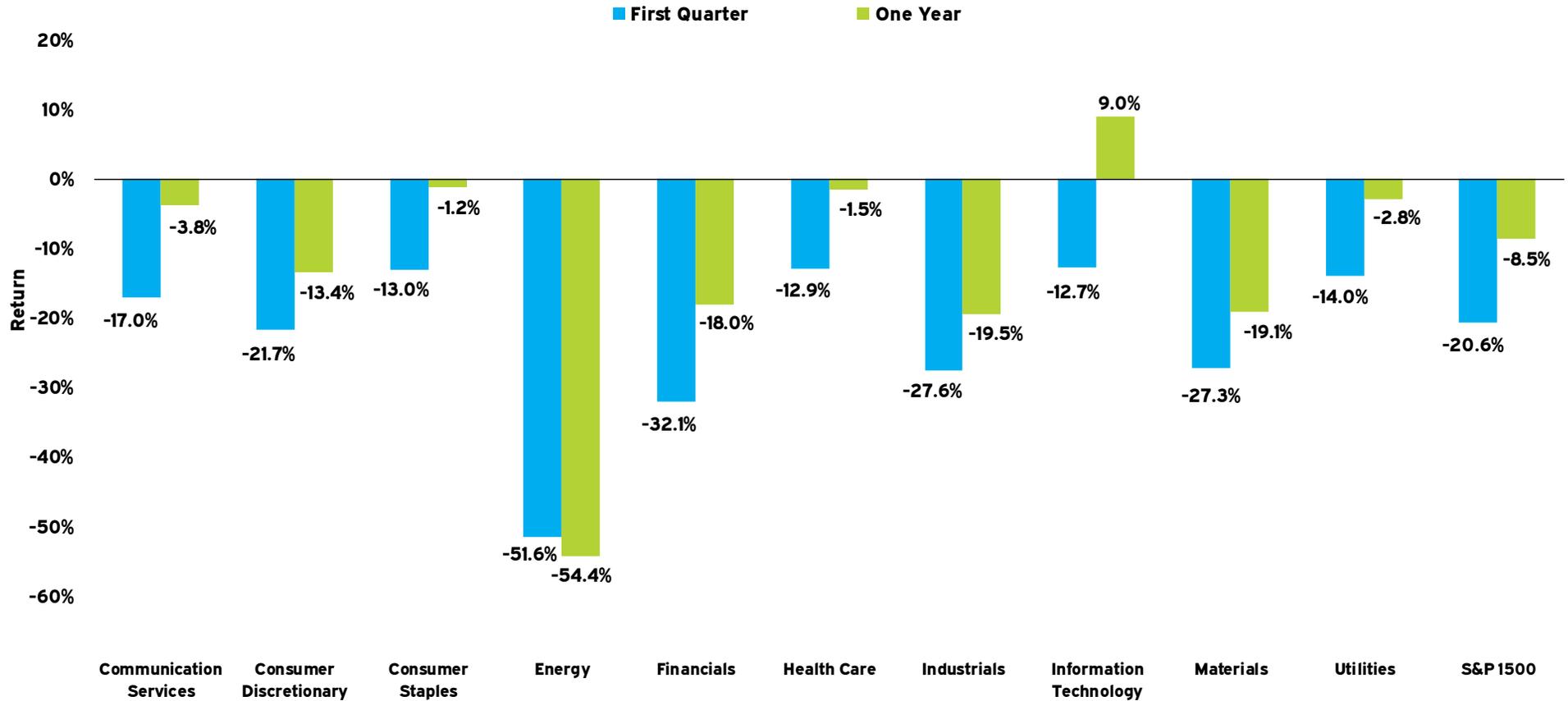
¹ Source: InvestorForce.

Index Returns¹

	1Q20 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity					
S&P 500	-19.6	-7.0	5.1	6.7	10.5
Russell 3000	-20.9	-9.1	4.0	5.8	10.1
Russell 1000	-20.2	-8.0	4.6	6.2	10.4
Russell 1000 Growth	-14.1	0.9	11.3	10.4	13.0
Russell 1000 Value	-26.7	-17.2	-2.2	1.9	7.7
Russell MidCap	-27.1	-18.3	-0.8	1.8	8.8
Russell MidCap Growth	-20.0	-9.4	6.5	5.6	10.9
Russell MidCap Value	-31.7	-24.1	-6.0	-0.8	7.2
Russell 2000	-30.6	-24.0	-4.6	-0.2	6.9
Russell 2000 Growth	-25.8	-18.6	0.1	1.7	8.9
Russell 2000 Value	-35.7	-29.6	-9.5	-2.4	4.8
Foreign Equity					
MSCI ACWI (ex. US)	-23.4	-15.6	-2.0	-0.6	2.1
MSCI EAFE	-22.8	-14.4	-1.8	-0.6	2.7
MSCI EAFE (Local Currency)	-20.5	-12.6	-1.8	-0.1	4.4
MSCI EAFE Small Cap	-27.5	-18.1	-2.9	1.0	4.8
MSCI Emerging Markets	-23.6	-17.7	-1.6	-0.4	0.7
MSCI Emerging Markets (Local Currency)	-19.1	-13.0	1.3	2.0	3.8
Fixed Income					
Bloomberg Barclays Universal	1.3	7.2	4.4	3.4	4.0
Bloomberg Barclays Aggregate	3.1	8.9	4.8	3.4	3.9
Bloomberg Barclays US TIPS	1.7	6.9	3.5	2.7	3.5
Bloomberg Barclays High Yield	-12.7	-6.9	0.8	2.8	5.6
JPM GBI-EM Global Diversified	-15.2	-6.5	-0.8	0.3	0.4
Other					
FTSE NAREIT Equity	-27.3	-21.3	-3.1	-0.3	7.4
Bloomberg Commodity Index	-23.3	-22.3	-8.6	-7.8	-6.7
HFRI Fund of Funds	-6.0	-2.6	1.0	0.6	2.1

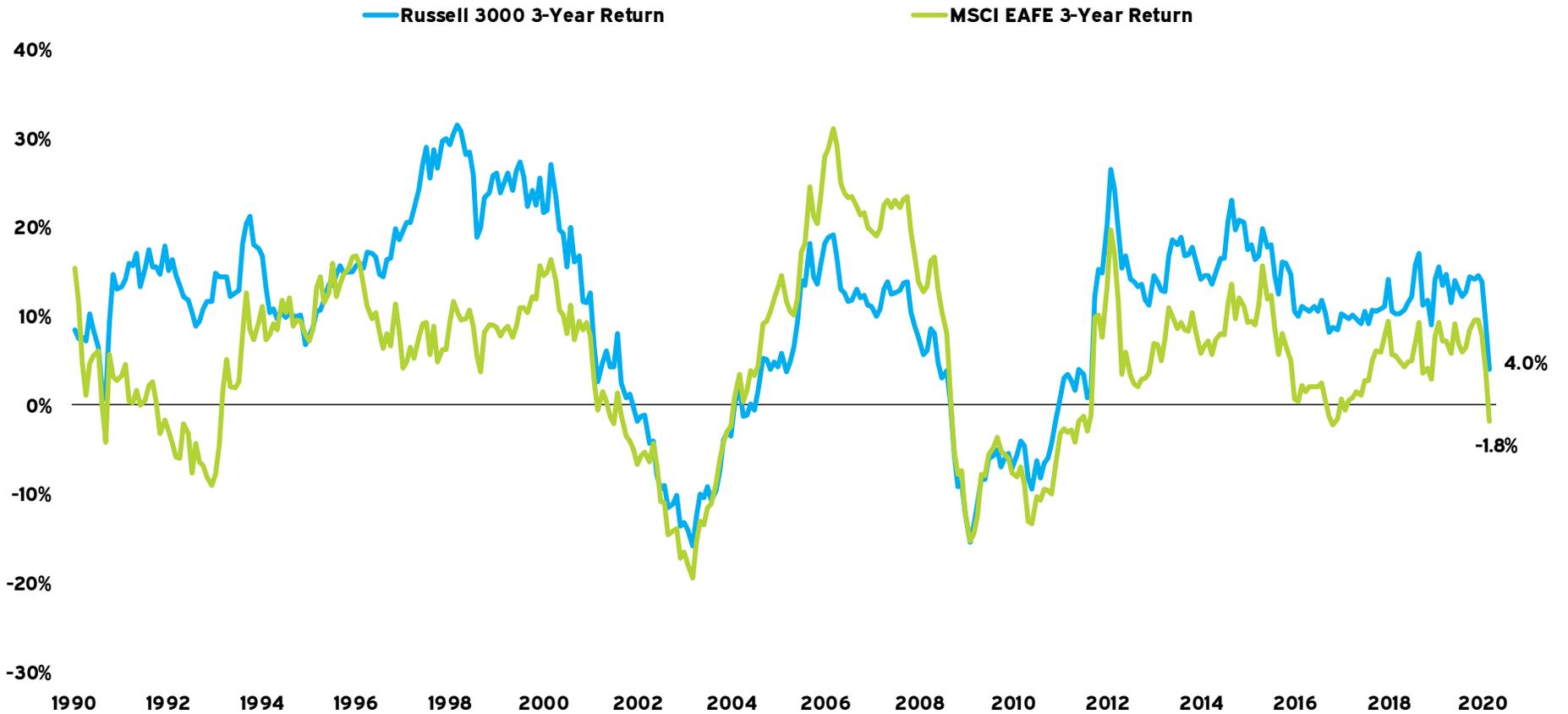
¹ Source: InvestorForce.

S&P Sector Returns¹



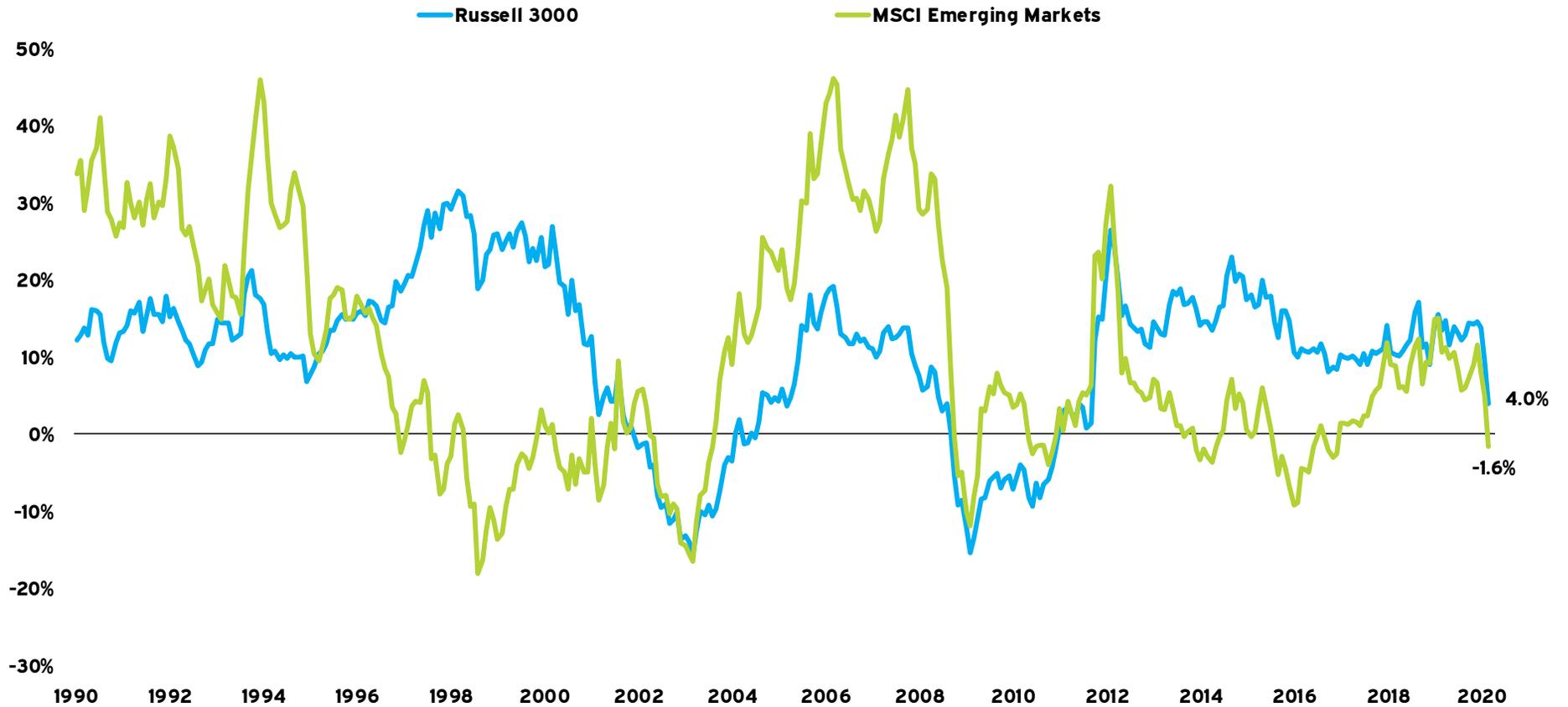
¹ Source: InvestorForce. Represents S&P 1500 (All Cap) data.

US and Developed Market Foreign Equity Rolling Three-Year Returns¹



¹ Source: InvestorForce.

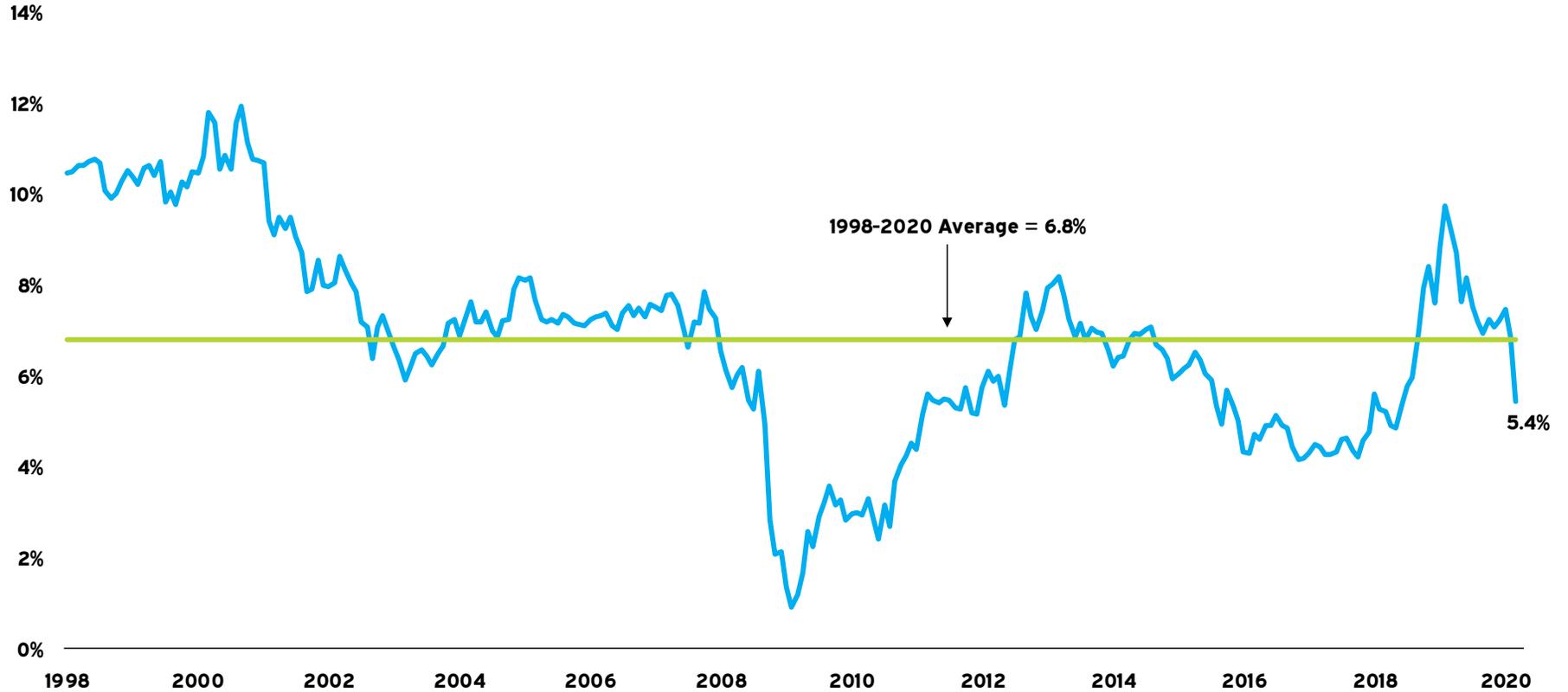
US and Emerging Market Equity Rolling Three-Year Returns¹



¹ Source: InvestorForce.

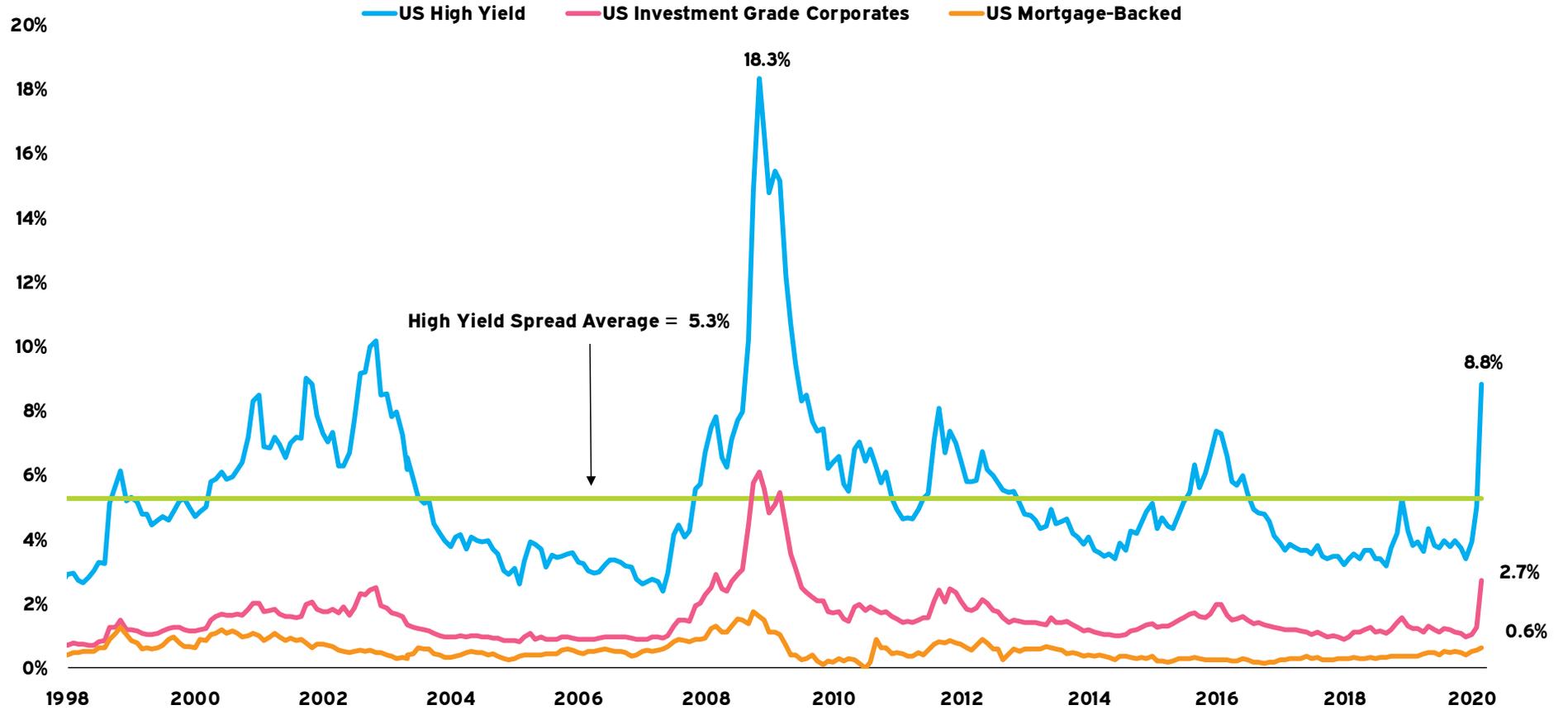
Rolling Ten-Year Returns: 65% Stocks and 35% Bonds¹

— 65% Stocks (MSCI ACWI) / 35% Bonds (Bloomberg Barclays Aggregate) 10-Year Rolling Return



¹ Source: InvestorForce.

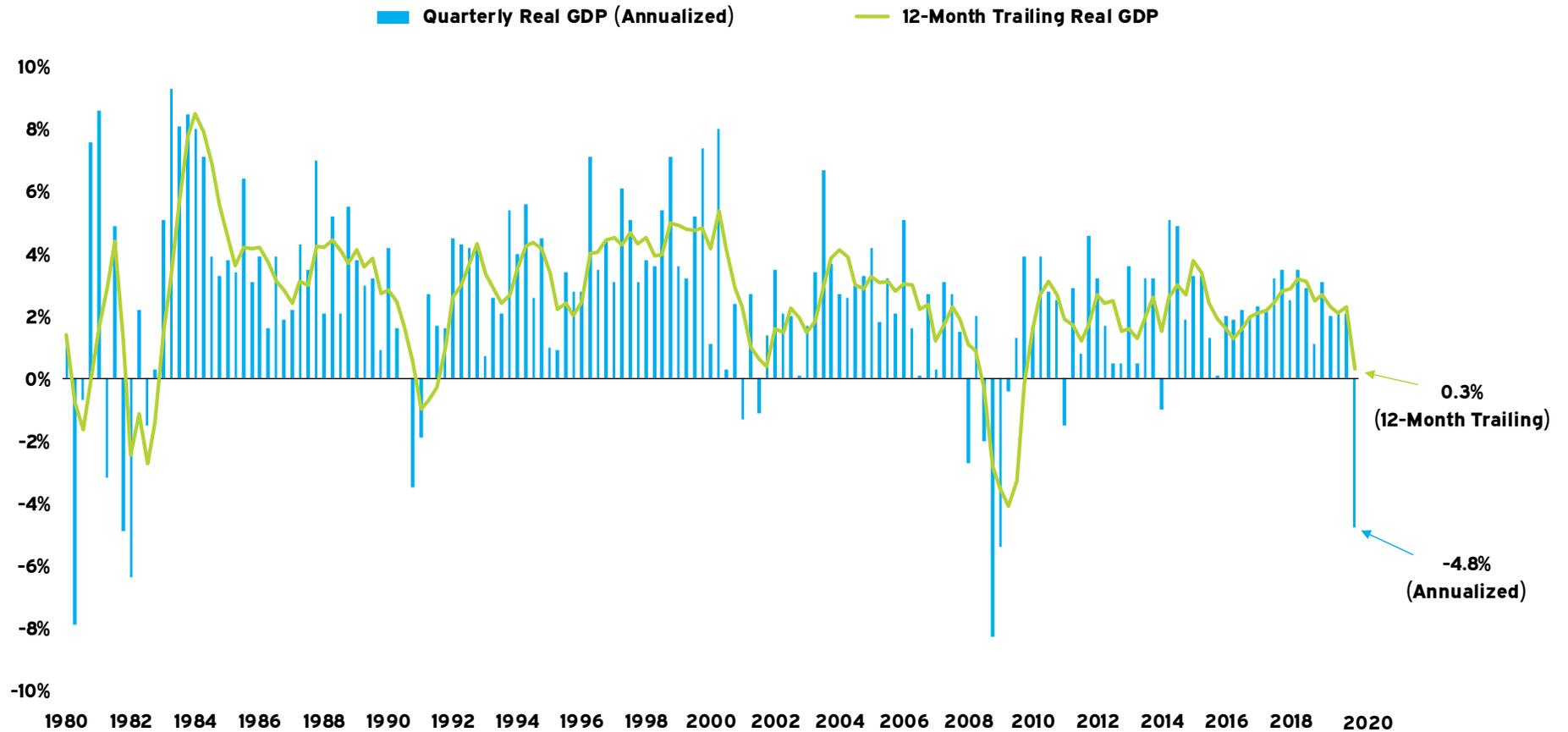
Credit Spreads vs. US Treasury Bonds^{1,2}



¹ Source: Barclays Live. Data represents the OAS.

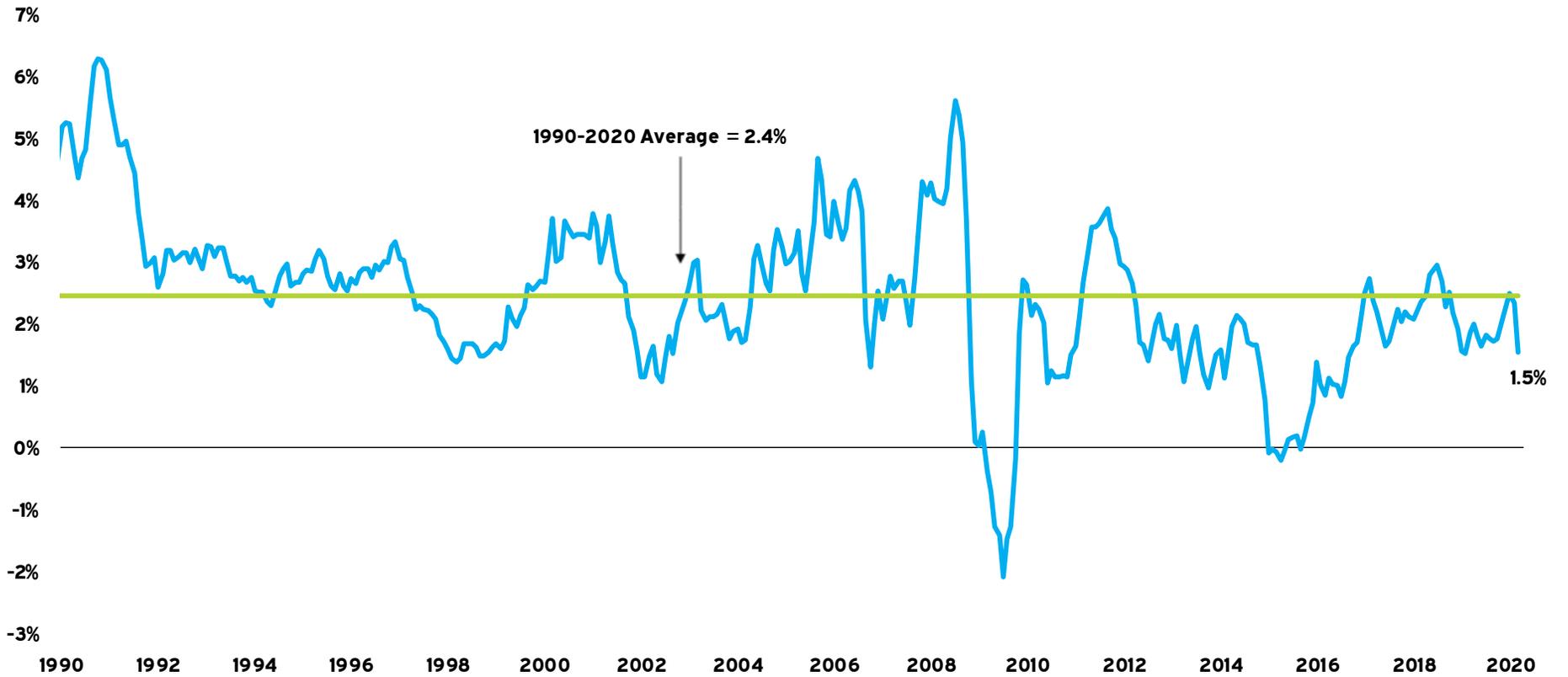
² The median high yield spread was 4.8% from 1997-2020.

US Real Gross Domestic Product (GDP) Growth¹



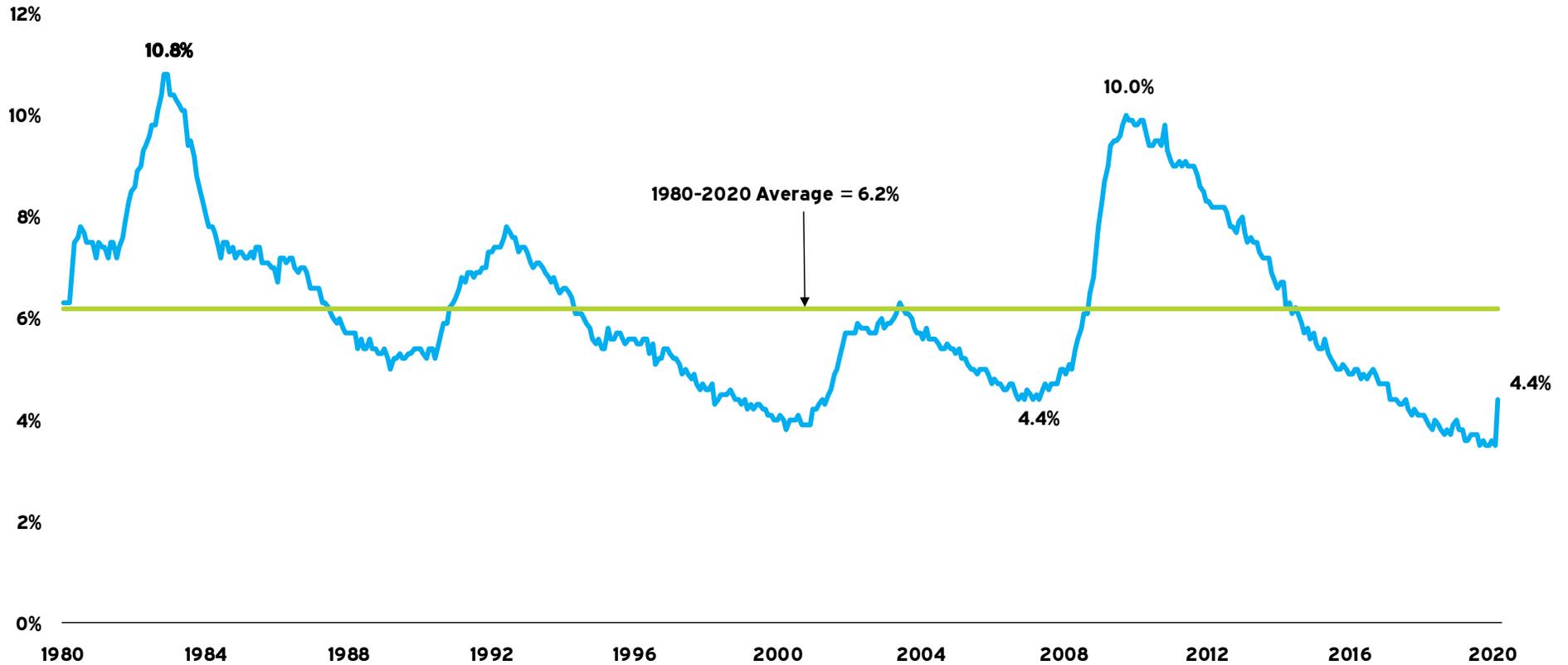
¹ Source: Bureau of Economic Analysis. Data is as of Q1 2020 and represents the first estimate.

US Inflation (CPI)
Trailing Twelve Months¹



¹ Source: Bureau of Labor Statistics. Data is non-seasonally adjusted CPI, which may be volatile in the short-term. Data is as of March 31, 2020.

US Unemployment¹



¹ Source: Bureau of Labor Statistics. Data is as of March 31, 2020.

Review of ScholarShare 529 Policy

Active Funds		
Fund	Asset Class	Benchmark
T. Rowe Price Instl Large Cap Growth	Domestic Equity	Russell 1000 Growth TR USD
T. Rowe Price Instl Large Cap Value	Domestic Equity	Russell 1000 Value TR USD
TIAA-CREF Small Cap Equity	Domestic Equity	Russell 2000 TR USD
TIAA-CREF Social Choice Equity	Domestic Equity	Russell 3000 TR USD
TIAA-CREF Real Estate Securities	Domestic Equity	FTSE NAREIT All Equity REITs TR
DFA Large Cap International	International Equity	MSCI World ex US NR USD
DFA Emerging Markets Core Equity	International Equity	MSCI EM NR USD
Metropolitan West Total Return Bond	Fixed Income	BBg BarCap US Agg Bond TR USD
PIMCO Real Return	Fixed Income	BBg BarCap US Trsy US TIPS TR USD
PIMCO Income	Fixed Income	BBg BarCap US Agg Bond TR USD
TIAA-CREF Inflation-Linked Bond	Fixed Income	BBg BarCap US TIPS 1-10 year TR USD
T. Rowe Price Institutional Floating Rate	High Yield	S&P/LSTA Performing Loan TR
TIAA-CREF High Yield Bond	High Yield	BofA ML US HY C Pay BB-B Constd TR
Passive Funds		
Fund	Asset Class	Benchmark
TIAA-CREF Equity Index	Domestic Equity	Russell 3000 TR USD
TIAA-CREF S&P 500 Index	Domestic Equity	S&P 500 TR
TIAA-CREF International Equity Index	International Equity	MSCI EAFE NR USD
TIAA-CREF Emerging Markets Equity Index	International Equity	MSCI EM NR USD
TIAA-CREF Bond Index	Fixed Income	BBg BarCap US Agg Bond TR USD
T-C Life Funding Agreements		
T-C Life Funding Agreements*	---	---

* Investment through a funding agreement with TIAA-CREF Life Insurance Company. Not benchmarked to an index, rather, portfolio performance is monitored using a set of qualitative guidelines.

Performance Criteria for Placing a Fund on Watch

Actively Managed Funds

Asset Class	Short-Term (rolling 12-month periods)	Medium-term (rolling 36-month periods)	Long-term (> 60 months)
Domestic Equity	Fund return < bench return -3.5% for 6 consecutive months	Fund return < bench return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
International Equity	Fund return < bench return -4.5% for 6 consecutive months	Fund return < bench return -2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Fixed Income	Fund return < bench return -1.0% for 6 consecutive months	Fund return < bench return -0.5% for 6 consecutive months	VRR < 0.98 for 6 consecutive months
High Yield	Fund return < bench return -6.5% for 6 consecutive months	Fund return < bench return -3.25% for 6 consecutive months	VRR < 0.96 for 6 consecutive months
Social Choice	Fund return < bench return -5.0% for 6 consecutive months	Fund return < bench return -2.50% for 6 consecutive months	VRR < 0.9 for 6 consecutive months

Passively Managed Funds

Asset Class	Short-Term (rolling 12-month periods)	Medium-term (rolling 36-month periods)	Long-term (rolling 60-month periods)
Domestic Equity	Tracking Error > 0.30% for 6 consecutive months	Tracking Error > 0.25% for 6 consecutive months	Fd annlzd return < bench annlzd return -0.30% for 6 consecutive months
International Equity	Tracking Error > 0.75% for 6 consecutive months	Tracking Error > 0.70% for 6 consecutive months	Fd annlzd return < bench annlzd return -0.30% for 6 consecutive months
Fixed Income	Tracking Error > 0.40% for 6 consecutive months	Tracking Error > 0.55% for 6 consecutive months	Fd annlzd return < bench annlzd return -0.35% for 6 consecutive months

[1] Return discounts from a benchmark return based on 2/3rds of the typical tracking error estimates of the specified type of fund manager.

[2] Annualized return is the average annual return of either the manager or its benchmark.

[3] VRR – Value Relative Ratio – is calculated as: Manager Cumulative Return / Benchmark Cumulative Return.

[4] Tracking error is a measure of the volatility of the average annual difference between the manager's return and the benchmark's return.

Performance Criteria for Placing a Fund on Watch (Continued)

T-C Life Funding Agreements
(based on non-investment performance criteria)

Fund Name	Financial Strength	Mortgage Portfolio	Bond Portfolio	Account Diversification
T-C Life Funding Agreements	Moody's \geq Aa2 Standard & Poor's \geq AA A.M. Best \geq A+ Fitch \geq AA	100% in Good Standing	At least 90% Investment Grade	Portfolio is diversified across asset classes and types

The T-C Life Funding Agreements are measured against a set of non-investment performance criteria (see above) in a published TIAA-CREF report every quarter.

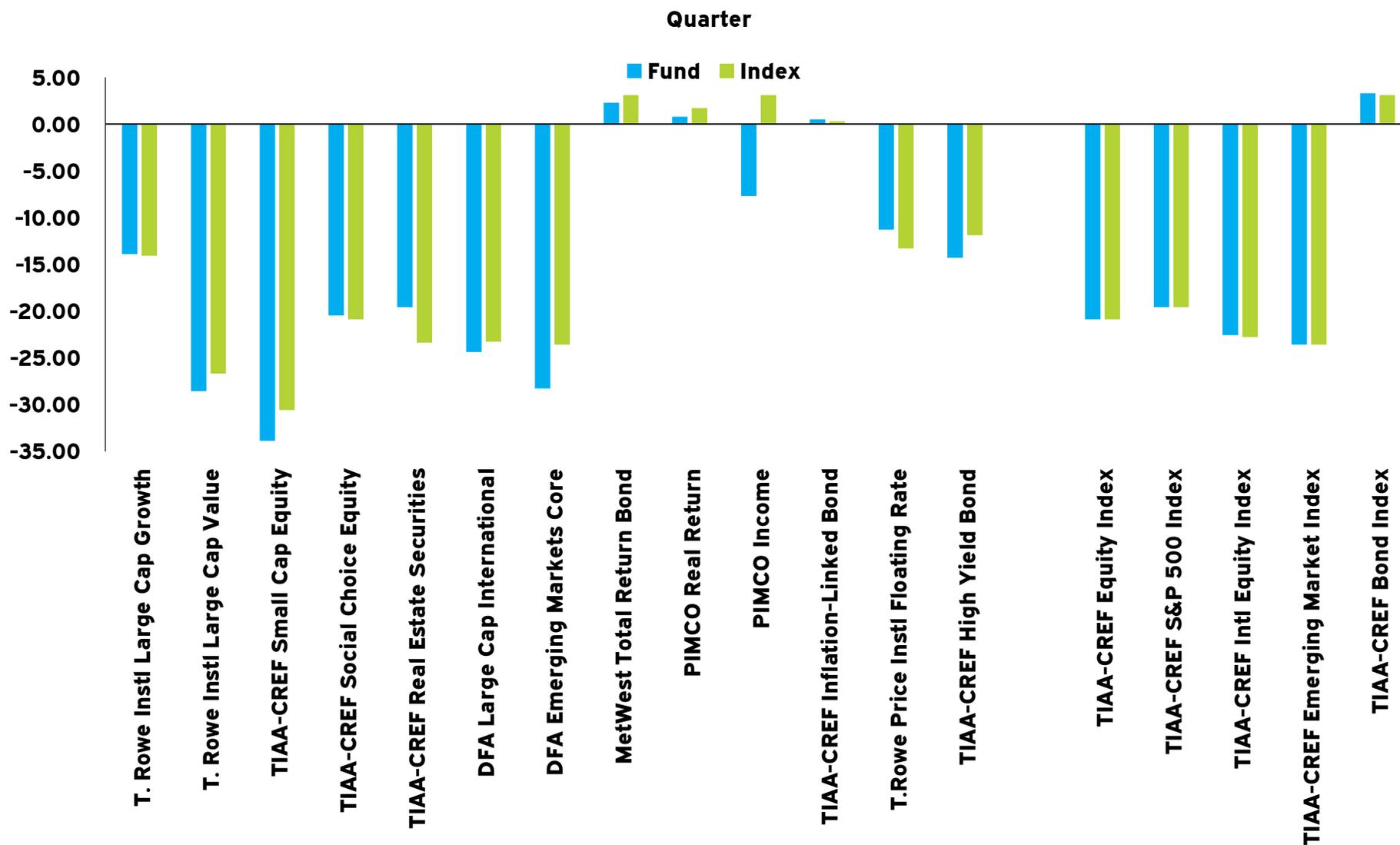
Investment Status Schedule

Performance Category	Actively Managed Portfolios	Passively Managed Portfolios
Positive	<ul style="list-style-type: none"> Performance exceeds the benchmark. 	<ul style="list-style-type: none"> Performance exceeds the benchmark (first 1-12 month period), or Tracking error is within the allowable range¹ (short, medium, and long time periods).
Acceptable	<ul style="list-style-type: none"> Performance meets or is under the benchmark and is within the allowable range. 	<ul style="list-style-type: none"> Performance does not exceed the benchmark but is within the allowable range (first 1-12 month period only).
Caution	<ul style="list-style-type: none"> Performance is below allowable range but either: <ul style="list-style-type: none"> i) for less than six consecutive months, or ii) the Board has not taken (or decided not to take) a formal action to place the asset class or individual fund portfolio on Watch even though performance has been below allowable range for six months or longer. 	<ul style="list-style-type: none"> Tracking error falls outside of the allowable range but either <ul style="list-style-type: none"> i) for less than six consecutive months, or ii) the Board has not voted to place the asset class or stand alone fund on Watch
Watch ²	<ul style="list-style-type: none"> Performance is below allowable range for more than six consecutive months and the Board has formally voted to place the asset class or individual fund on Watch. 	<ul style="list-style-type: none"> Tracking error falls outside of the allowable range for more than six consecutive months and the Board has formally voted to place the asset class or individual fund portfolio on Watch.

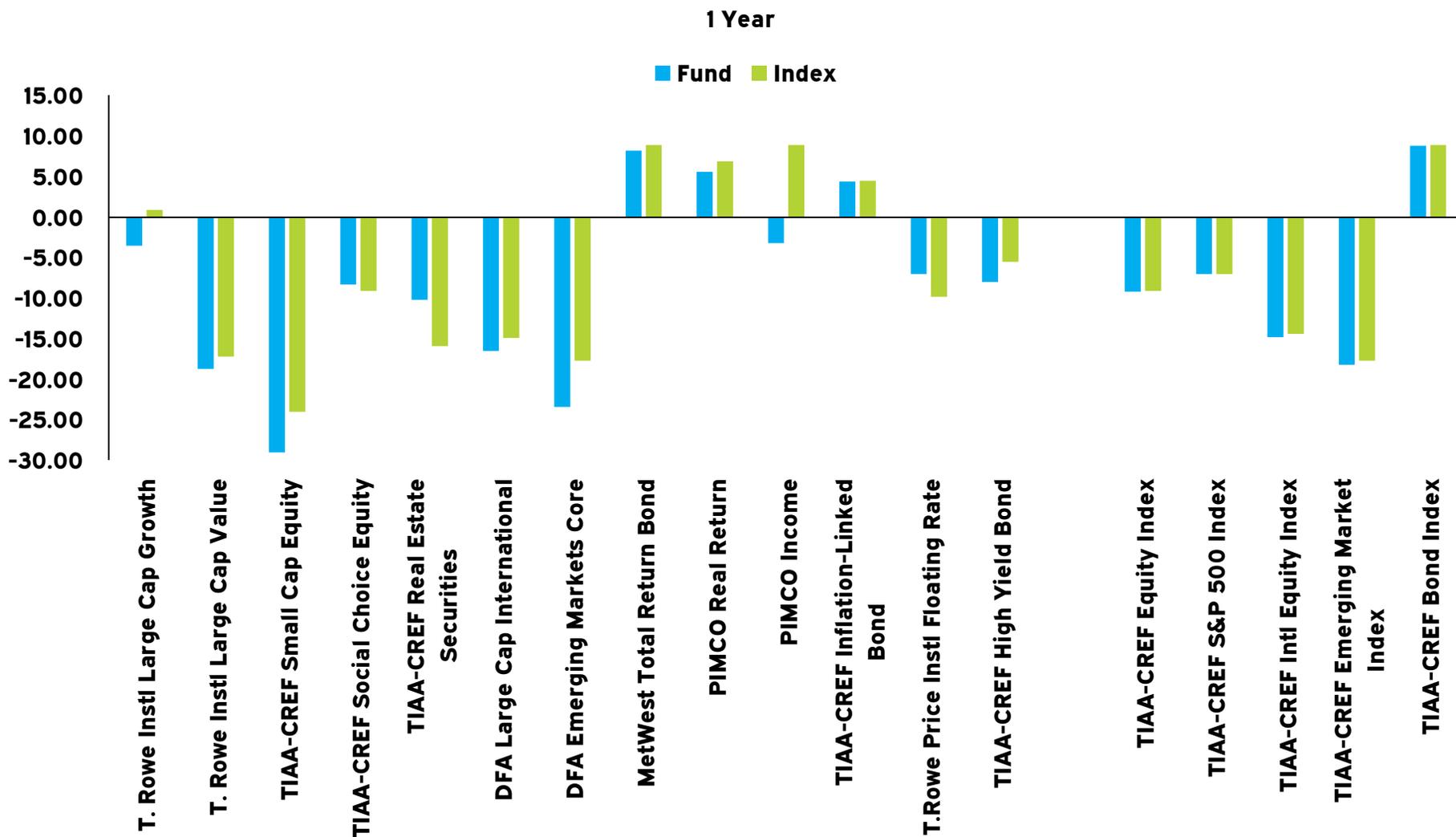
¹ Ranges are shown in the Investment Performance Criteria Schedules.

² The amount of time generally required before an investment is put on watch.

Summary Of Fund Performance 3/31/20



Summary Of Fund Performance 3/31/20



Summary of Fund Performance Status

Program	Total Funds	Positive	Acceptable	Caution	Watch [^]
Number of Funds	19	5	12	2	1
% of Funds	100%	26%	63%	11%	5%
% of Program Assets	100%	36%	58%	6%	2%
Fund Status ↑	0	--	1	--	--
Fund Status ↓	2	--	2	1	--
Domestic Equity Funds	7	1	5	1	1
Intl Equity Funds	4	2	2	--	--
Fixed Income Funds	5	1	3	1	--
High Yield Funds	2	--	2	--	--
Funding Agreement	1	1	--	--	--

[^]Includes funds on Watch and new funds qualifying for Watch status. Number has not been adjusted to remove funds no longer qualifying for Watch.

- Eighty-nine percent of the Program's funds have either a Positive or Acceptable performance status
- One fund improved in status over the quarter.
 - TIAA Social Choice fund improved due to new monitoring criteria
- The status of three funds declined over the quarter
 - T. Rowe Price Large Cap Value
 - Pimco Real Return
 - Pimco Income I
- One new fund qualifies for "Watch" status
 - T. Rowe Large Cap Growth

Summary of Fund Performance Status

Funds	Prior Quarter		Current Quarter	
	Status	On Watch	Status	On Watch
Active Funds				
T. Rowe Price Instl Large Cap Growth	Caution		Caution	
T. Rowe Price Instl Large Cap Value	Positive		Acceptable	
TIAA-CREF Small Cap Equity	Acceptable		Acceptable	
TIAA-CREF Social Choice Equity	Caution	7/1/17	Acceptable	7/1/17
TIAA-CREF Real Estate Securities	Positive		Positive	
DFA Large Cap International	Acceptable		Acceptable	
DFA Emerging Markets Core Equity	Acceptable		Acceptable	
Metropolitan West Total Return Bond	Positive		Positive	
PIMCO Real Return	Positive		Acceptable	
PIMCO Income	Acceptable		Caution	
TIAA-CREF Inflation-Linked Bond	Acceptable		Acceptable	
T. Rowe Price Instl Floating Rate	Acceptable		Acceptable	
TIAA-CREF High-Yield Bond	Acceptable		Acceptable	
Passive Funds				
TIAA-CREF Equity Index	Acceptable		Acceptable	
TIAA-CREF S&P 500 Index	Acceptable		Acceptable	
TIAA-CREF International Equity Index	Positive		Positive	
TIAA-CREF Emerging Markets Index	Positive		Positive	
TIAA-CREF Bond Index	Acceptable		Acceptable	
T-C Life Funding Agreements				
T-C Life Funding Agreements	Positive		Positive	

- Current status is based on Short-Term (rolling 12-month), Medium-Term (rolling 36-month) and Long-Term (rolling 60-month) evaluation results.
- According to the Investment Status Schedule on the previous page, the portfolio's overall "Current Status" equals the lowest status as achieved by one or more of the criteria during the quarter.

Summary of Fund Assets as of 3/31/20

Funds	Assets (\$)	% of Total
Active Funds		
T. Rowe Price Instl Large Cap Growth	352,500,356	3.98
T. Rowe Price Instl Large Cap Value	324,056,565	3.65
TIAA-CREF Small Cap Equity	64,460,710	0.73
TIAA-CREF Social Choice Equity	151,378,184	1.71
TIAA-CREF Real Estate Securities	210,850,393	2.38
DFA Large Cap International	301,168,639	3.40
DFA Emerging Markets Core Equity	71,678,536	0.81
Metropolitan West Total Return Bond	541,437,561	6.11
PIMCO Real Return	218,997,024	2.47
PIMCO Income	203,249,007	2.29
TIAA-CREF Inflation-Linked Bond	358,441,036	4.04
T. Rowe Price Instl Floating Rate	98,391,894	1.11
TIAA-CREF High-Yield Bond	154,666,796	1.74
Active Funds Total	3,051,276,699	34.41
Passive Funds		
TIAA-CREF Equity Index	1,584,363,289	17.87
TIAA-CREF S&P 500 Index	459,511,469	5.18
TIAA-CREF International Equity Index	524,672,384	5.92
TIAA-CREF Emerging Markets Index	129,402,302	1.46
TIAA-CREF Bond Index	1,349,550,666	15.22
Passive Funds Total	4,047,500,109	45.64
T-C Life Funding Agreements		
T-C Life Funding Agreements	1,768,769,877	19.95
TOTAL	8,867,546,685	100.00

Portfolio Management Overview

Fund	Ticker	Current PM Team		Recent PM Departures*	
T.Rowe Price Large Cap Growth	TRLGX	01/01/2017-	Taymour R. Tamaddon	12/31/2002-01/01/2017	Robert W. Sharps
T.Rowe Price Large Cap Value	TILCX	03/31/2000- 02/25/2010- 01/01/2015-	John D. Linehan Mark S. Finn Heather K. McPherson		
TIAA-CREF Small Cap Equity	TISEX	12/31/2006- 03/01/2016- 03/01/2019-	Adam Cao Pei Chen Max Kozlov		
TIAA-CREF Social Choice Equity	TISCX	12/31/2005- 05/30/2014-	Philip James Campagna Lei Liao		
TIAA-CREF Real Estate Securities	TIREX	12/31/2005- 07/10/2006-	David Copp Brendan W. Lee		
DFA Large Cap International	DFALX	02/28/2010- 07/21/2015- 02/28/2020 02/28/2020	Jed S. Fogdall Bhanu P. Singh Joel P. Schneider Arun C. Keswani	02/28/2012-02/28/2017 02/28/2010-02/28/2019 07/21/2015-02/28/2020	Henry F. Gray Joseph H. Chi Mary T. Phillips
DFA Emerging Markets Core Equity	DFCEX	02/28/2010- 07/21/2015- 07/21/2015- 02/28/2017- 02/28/2019-	Jed S. Fogdall Allen Pu Bhanu P. Singh Mary T. Phillips William Collins-Dean	02/28/2010-02/28/2019	Joseph H. Chi
Metropolitan West Total Return Bond	MWTIX	03/31/1997- 03/31/1997- 03/31/1997- 12/31/2004-	Stephen M. Kane Laird R. Landman Tad Rivelle Bryan T. Whalen		
PIMCO Real Return	PRRIX	01/09/2019- 12/11/2019-	Stephen A. Rodosky Daniel He	01/02/2015-01/09/2019 12/31/2007-12/11/2019	Jeramie Banet Mihir P. Worah
PIMCO Income	PIMIX	03/30/2007- 03/15/2013- 07/30/2018-	Daniel J. Ivascyn Alfred T. Murata Joshua Anderson		

*Recent is defined as having occurred in the last three years.

Source: MorningStar

Portfolio Management Overview

Fund	Ticker	Current PM Team	Recent PM Departures*
TIAA-CREF Inflation-Linked Bond	TILX	08/21/2008-08/01/2016 08/01/2019 John Michael Cerra Nicholas Travaglino Chad W. Kemper	
T.Rowe Price Floating Rate	RPIFX	05/01/2009- Paul M. Massaro	
TIAA-CREF High Yield	TIHYX	03/31/2006-10/01/2011- Kevin R. Lorenz Jean C. Lin	
TIAA-CREF Equity Index	TIEIX	12/31/2005-05/30/2014-03/01/2019- Philip James Campagna Lei Liao Darren Tran	
TIAA-CREF S&P 500 Index	TISPX	12/31/2005-05/30/2014-03/01/2019- Philip James Campagna Lei Liao Darren Tran	
TIAA-CREF International Equity Index	TCIEX	08/01/2005-05/30/2014-03/01/2019- Philip James Campagna Lei Liao Darren Tran	
TIAA-CREF Emerging Markets Equity Index	TEQLX	08/31/2010-05/30/2014-03/01/2019- Philip James Campagna Lei Liao Darren Tran	
TIAA-CREF Bond Index	TBIIX	12/31/2009-08/24/2011- Lijun (Kevin) Chen James Tsang	

Observations:

- There were no significant changes during the quarter.

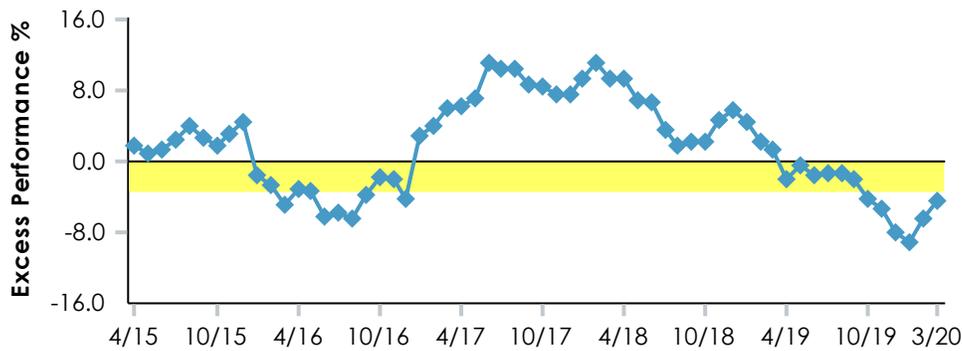
*Recent is defined as having occurred in the last three years.

Source: MorningStar

Sensitivity Analyses: Active Funds

TRowe Price Large Cap Growth I vs. Russell 1000 Growth Index

Short-term (Rolling 12 Months Excess Performance)

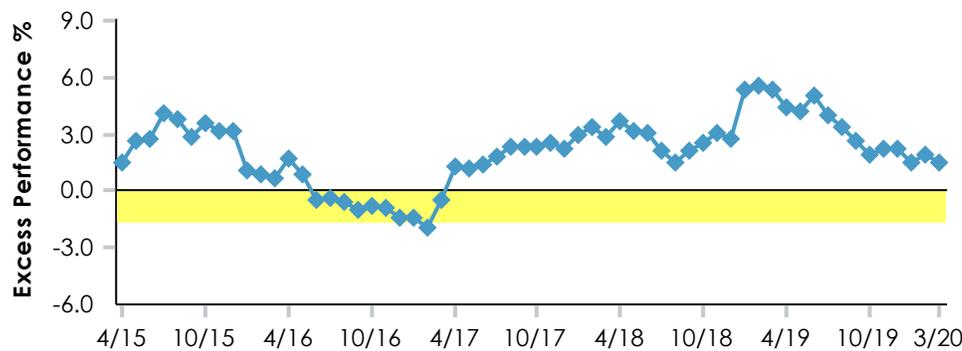


Short-Term Performance

Caution

Probationary Performance -3.50%

Medium-term (Rolling 36 Months Excess Performance)

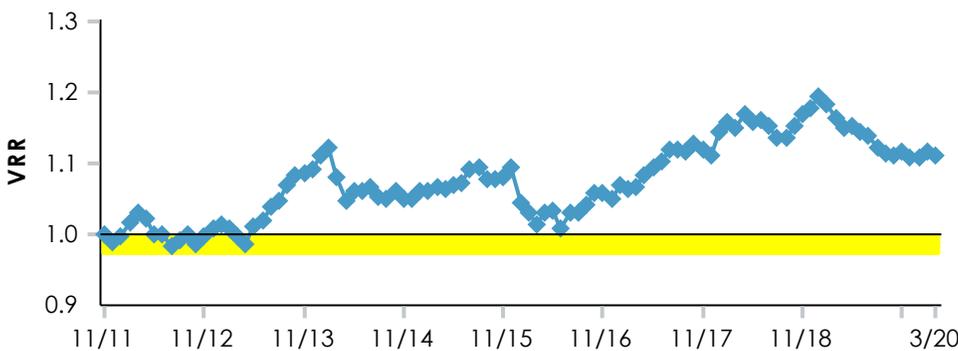


Medium-Term Performance

Positive

Probationary Performance -1.75%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Positive

Probationary Performance < 0.97

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TRowe Price Large Cap Growth I	-13.9 (60)	-3.5 (78)	12.9 (20)	11.3 (8)	15.3 (4)
Russell 1000 Growth Index	-14.1 (64)	0.9 (28)	11.3 (42)	10.4 (24)	13.8 (20)
IM U.S. Large Cap Growth Equity (MF) Median	-13.4	-0.8	10.7	9.1	12.8

Monitoring Status

Caution

TRowe Price Large Cap Growth I | As of March 31, 2020

Description:

The investment seeks to provide long-term capital appreciation through investments in common stocks of growth companies.

In taking a growth approach to stock selection, the fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in the common stocks of large-cap companies. The advisor defines a large-cap company as one whose market capitalization is larger than the median market capitalization of companies in the Russell 1000® Growth Index, a widely used benchmark of the largest U.S. growth stocks. The fund is non-diversified.

Portfolio Fund Information as of March 31, 2020

Ticker	TRLGX
Morningstar Category	Large Growth
Average Market Cap (\$mm)	173,735.71
Net Assets (\$mm)	14,000.34
% Assets in Top 10 Holdings	49.98
Total Number of Holdings	59
Manager Name	Taymour R. Tamaddon
Manager Tenure	3
Expense Ratio	0.56%
Closed to New Investors	No

Return Summary



Large Growth MStar MF Return Comparison

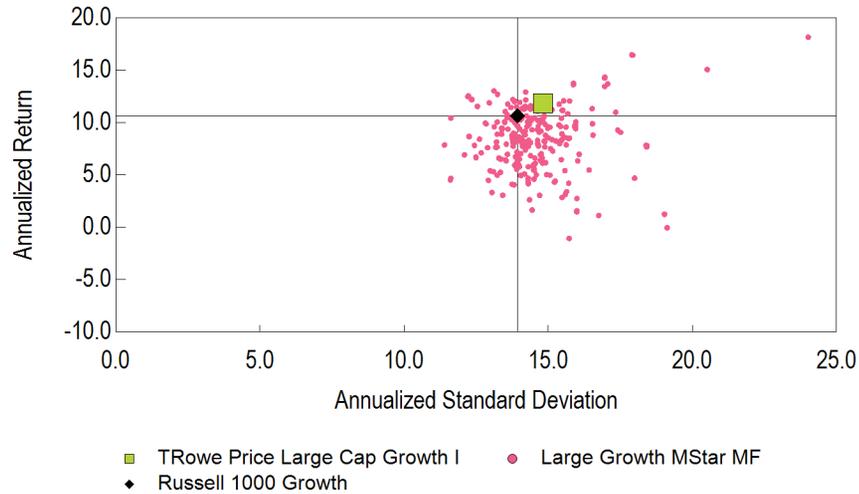


Large Growth MStar MF Return Comparison

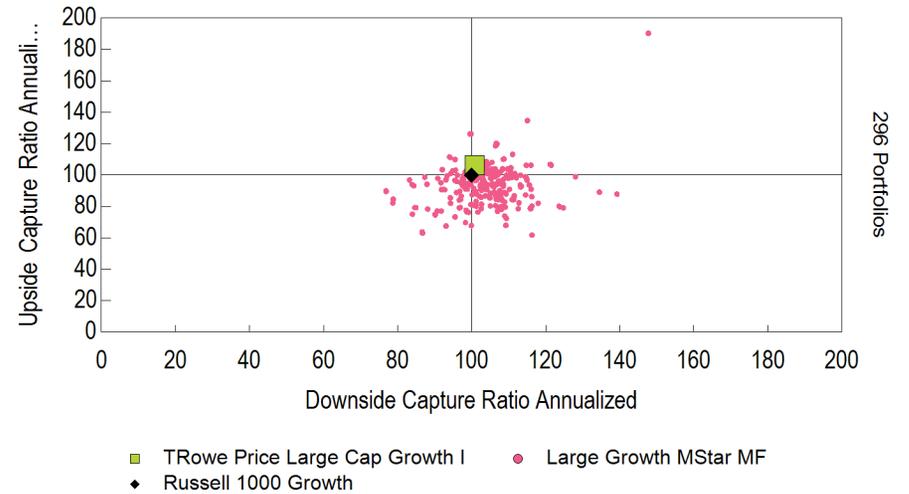


TRowe Price Large Cap Growth I | As of March 31, 2020

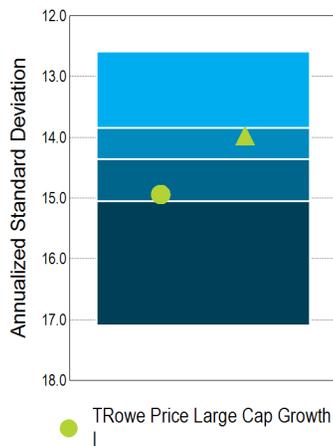
Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



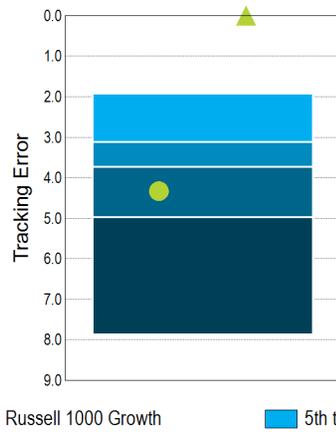
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



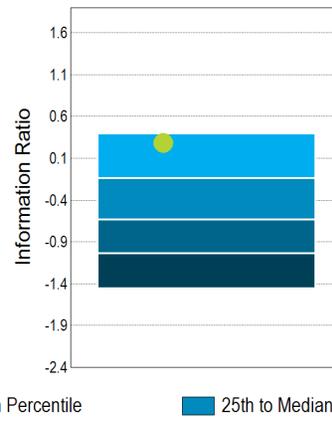
Annualized Standard Deviation



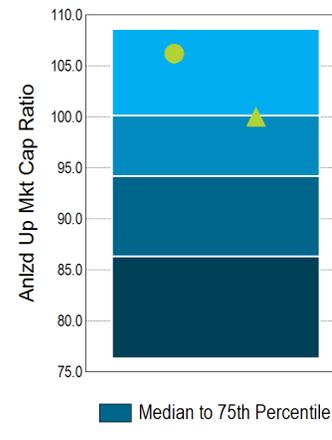
Tracking Error



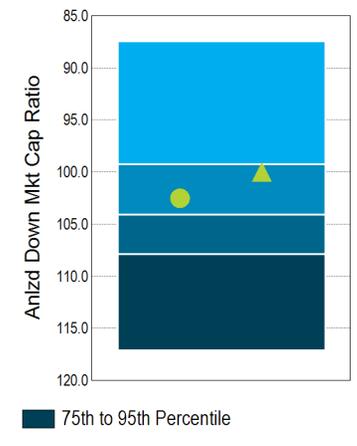
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	0.71
Average Market Cap (\$mm)	173,735.71
Price/Earnings	23.56
Price/Book	3.72
Price/Sales	2.26
Price/Cash Flow	13.79
Dividend Yield	0.67
Number of Equity Holdings	58
R-Squared (3 Year)	0.94
Alpha (3 Year)	0.13%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	0.49%
COMMUNICATION SERVICES	22.52%
CONSUMER CYCLICAL	17.95%
CONSUMER DEFENSIVE	1.70%
ENERGY	0.33%
FINANCIAL SERVICES	7.90%
HEALTHCARE	15.97%
INDUSTRIALS	5.00%
REAL ESTATE	0.79%
TECHNOLOGY	25.30%
UTILITIES	2.05%

Top Holdings as of March 31, 2020

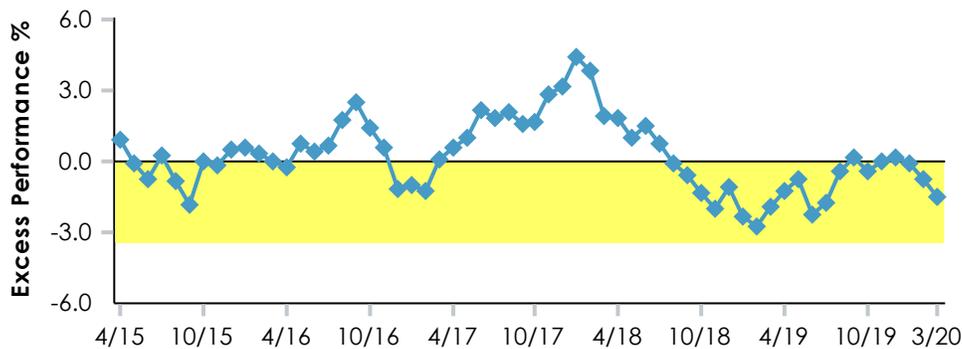
AMAZON.COM INC	9.45%
MICROSOFT CORP	9.15%
ALPHABET INC A	6.13%
FACEBOOK INC A	6.11%
VISA INC CLASS A	5.08%
APPLE INC	3.49%
GLOBAL PAYMENTS INC	2.80%
CIGNA CORP	2.73%
ALIBABA GROUP HOLDING LTD ADR	2.61%
NETFLIX INC	2.43%

Top Countries as of March 31, 2020

United States	93.14%
China	5.38%
Netherlands	1.48%

TRowe Price Large Cap Value I vs. Russell 1000 Value Index

Short-term (Rolling 12 Months Excess Performance)

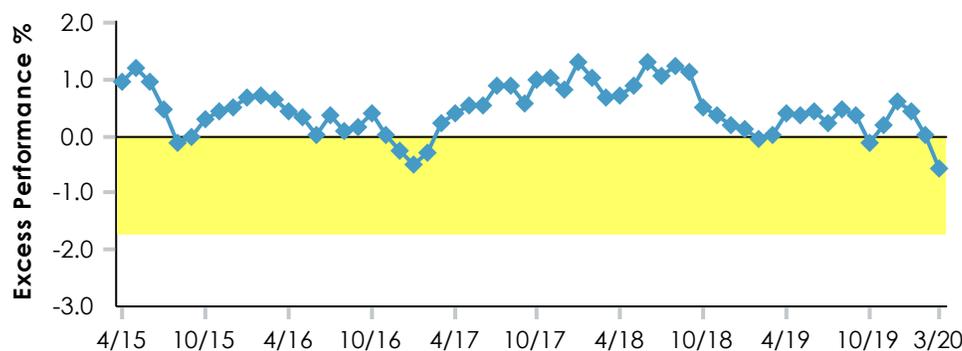


Short-Term Performance

Acceptable

Probationary Performance -3.50%

Medium-term (Rolling 36 Months Excess Performance)

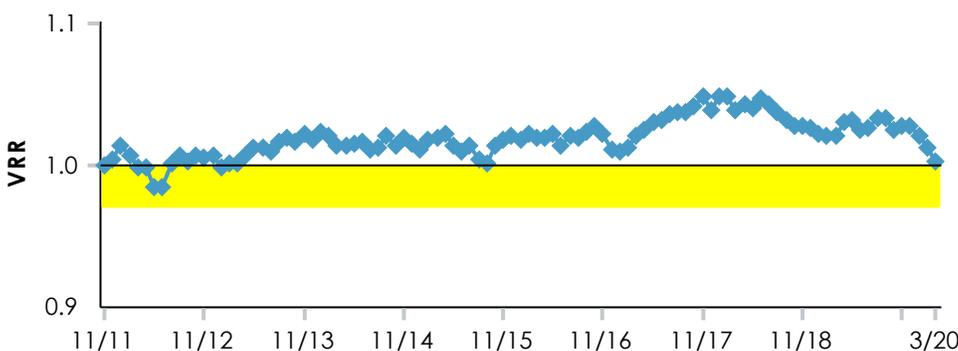


Medium-Term Performance

Positive

Probationary Performance -1.75%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Positive

Probationary Performance < 0.97

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TRowe Price Large Cap Value I	-28.6 (72)	-18.7 (63)	-2.8 (63)	1.6 (48)	8.5 (22)
Russell 1000 Value Index	-26.7 (53)	-17.2 (51)	-2.2 (54)	1.9 (37)	8.5 (23)
IM U.S. Large Cap Value Equity (MF) Median	-26.6	-17.1	-1.9	1.5	7.7

Monitoring Status

Acceptable

TRowe Price Large Cap Value I | As of March 31, 2020

Description:

The investment seeks long-term capital appreciation; income is a secondary objective.

The fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in securities of large-cap companies that the portfolio manager regards as undervalued. The manager defines a large-cap company as having a market capitalization that, at the time of purchase, is either (i) larger than the current median market capitalization of companies in the Russell 1000® Value Index or (ii) larger than the three year average median market capitalization of companies in the index as of December 31 of the three preceding years.

Portfolio Fund Information as of March 31, 2020

Ticker	TILCX
Morningstar Category	Large Value
Average Market Cap (\$mm)	55,493.49
Net Assets (\$mm)	2,657.36
% Assets in Top 10 Holdings	27.16
Total Number of Holdings	85
Manager Name	John D. Linehan
Manager Tenure	20
Expense Ratio	0.57%
Closed to New Investors	No

Return Summary



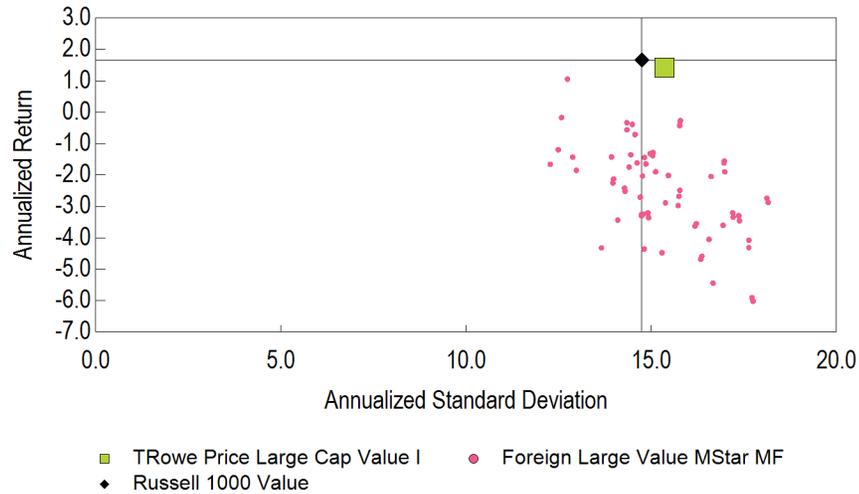
Foreign Large Value MStar MF Return Comparison



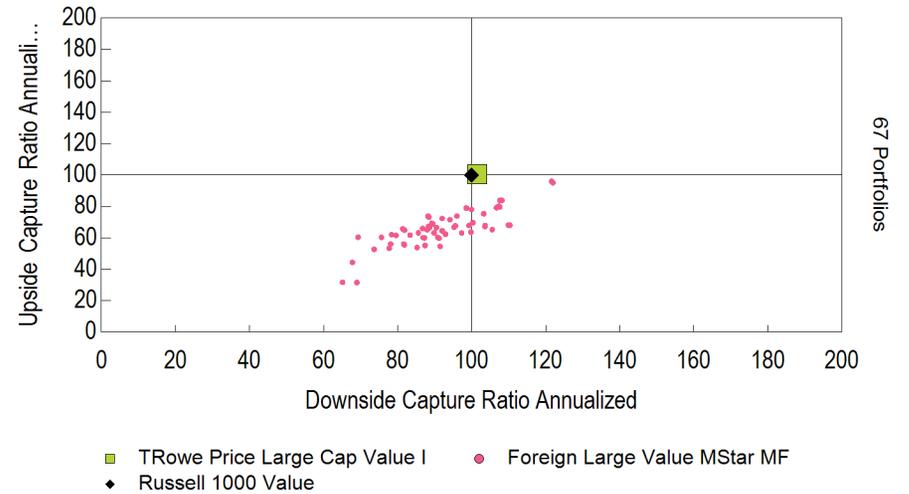
Foreign Large Value MStar MF Return Comparison



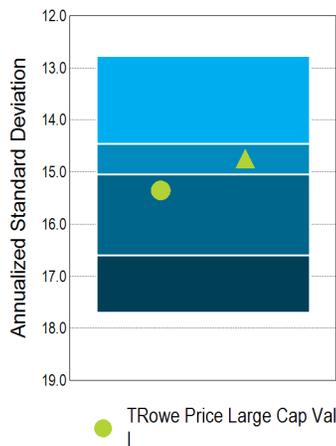
Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



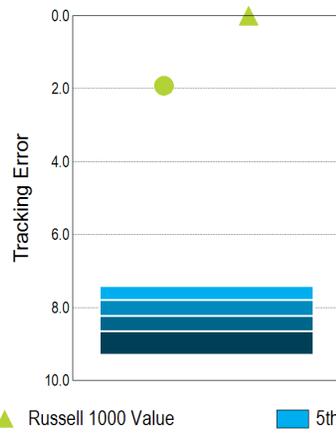
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



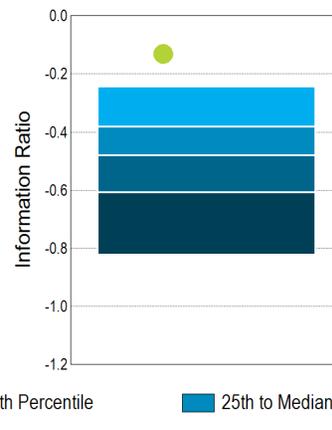
Annualized Standard Deviation



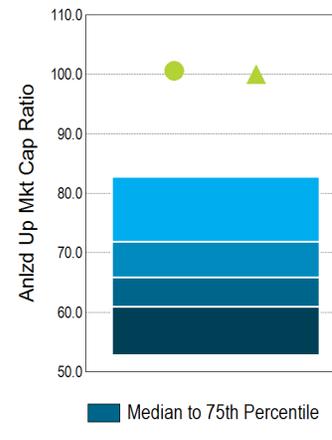
Tracking Error



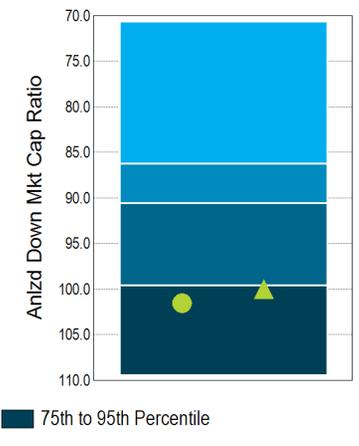
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	-0.26
Average Market Cap (\$mm)	55,493.49
Price/Earnings	11.73
Price/Book	1.36
Price/Sales	1.09
Price/Cash Flow	5.79
Dividend Yield	4.26
Number of Equity Holdings	81
R-Squared (3 Year)	0.99
Alpha (3 Year)	-0.04%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	0.91%
COMMUNICATION SERVICES	5.91%
CONSUMER CYCLICAL	3.87%
CONSUMER DEFENSIVE	10.24%
ENERGY	7.86%
FINANCIAL SERVICES	20.76%
HEALTHCARE	18.11%
INDUSTRIALS	10.92%
REAL ESTATE	1.79%
TECHNOLOGY	11.23%
UTILITIES	8.39%

Top Holdings as of March 31, 2020

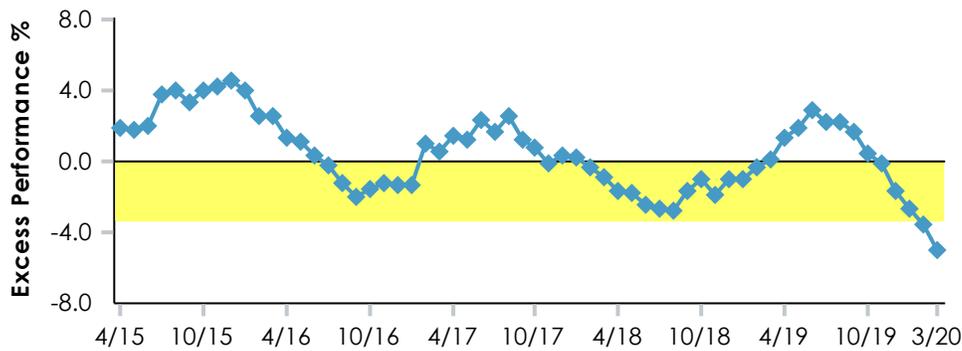
SOUTHERN CO	3.10%
WELLS FARGO & CO	2.97%
GENERAL ELECTRIC CO	2.84%
MICROSOFT CORP	2.81%
TOTAL SA ADR	2.75%
JOHNSON & JOHNSON	2.71%
MEDTRONIC PLC	2.58%
JPMORGAN CHASE & CO	2.57%
MORGAN STANLEY	2.44%
CHUBB LTD	2.38%

Top Countries as of March 31, 2020

United States	91.48%
France	2.83%
Canada	2.74%
Switzerland	2.45%
China	0.51%

TIAA-CREF Small Cap Equity I vs. Russell 2000 Index

Short-term (Rolling 12 Months Excess Performance)

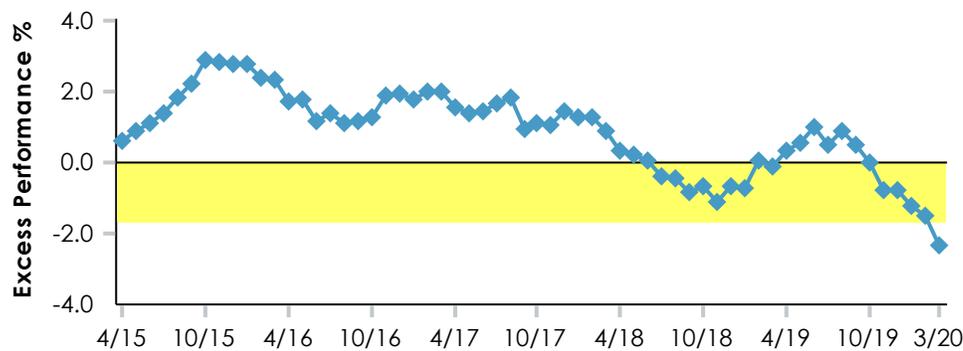


Short-Term Performance

Acceptable

Probationary Performance -3.50%

Medium-term (Rolling 36 Months Excess Performance)

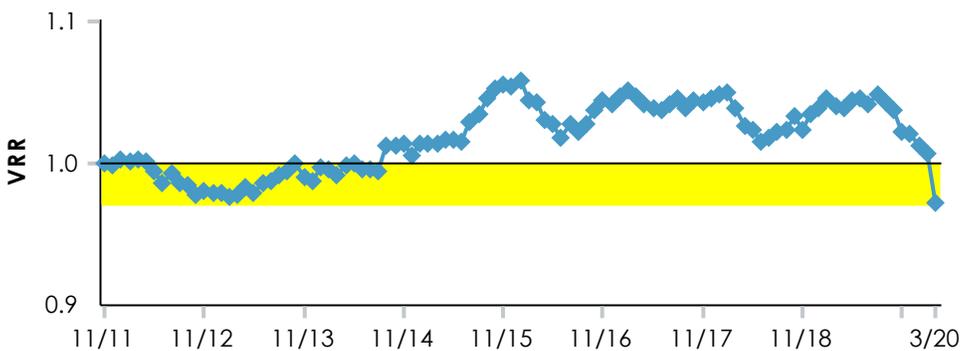


Medium-Term Performance

Acceptable

Probationary Performance -1.75%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Positive

Probationary Performance < 0.97

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF Small Cap Equity I	-33.9 (77)	-29.0 (80)	-7.0 (64)	-1.1 (46)	6.6 (40)
Russell 2000 Index	-30.6 (51)	-24.0 (53)	-4.6 (46)	-0.2 (38)	7.0 (33)
IM U.S. SMID Cap Core Equity (MF) Median	-30.3	-23.6	-5.0	-1.3	6.1

Monitoring Status

Acceptable

Description:

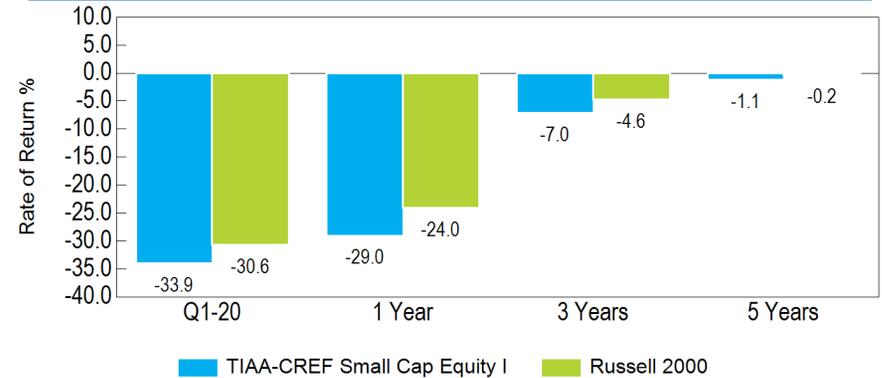
The investment seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of smaller domestic companies.

Under normal circumstances, the fund invests at least 80% of its assets in small-cap equity securities. A small-cap equity security is a security within the capitalization range of the companies included in the fund's benchmark index, the Russell 2000® Index, at the time of purchase. It invests primarily in equity securities of smaller domestic companies across a wide range of sectors, growth rates and valuations.

Portfolio Fund Information as of March 31, 2020

Ticker	TISEX
Morningstar Category	Small Blend
Average Market Cap (\$mm)	1,572.28
Net Assets (\$mm)	940.83
% Assets in Top 10 Holdings	12.50
Total Number of Holdings	412
Manager Name	Adam Cao
Manager Tenure	13
Expense Ratio	0.42%
Closed to New Investors	No

Return Summary



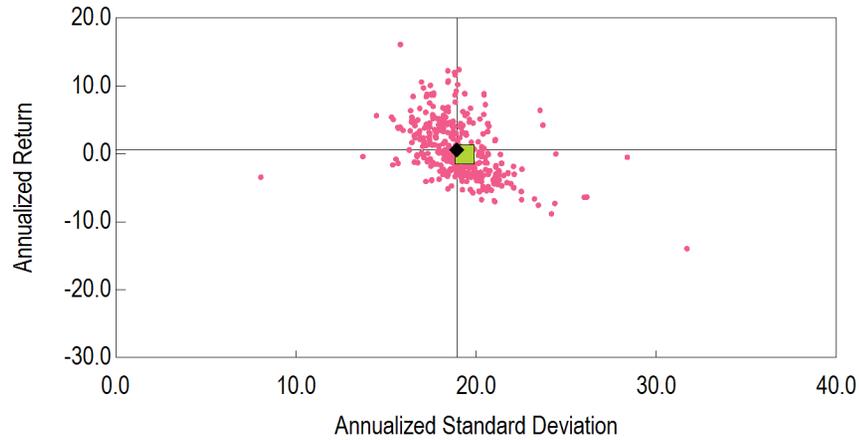
Small Cap MStar MF Return Comparison



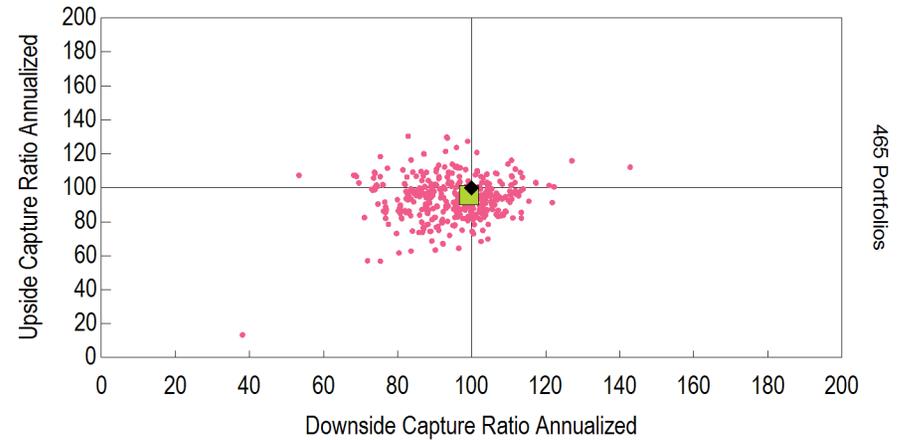
Small Cap MStar MF Return Comparison



Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



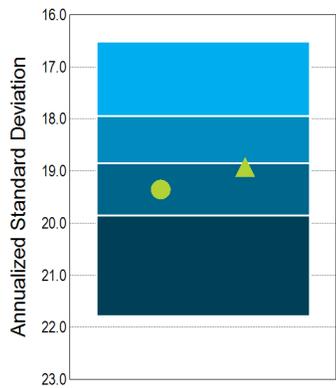
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



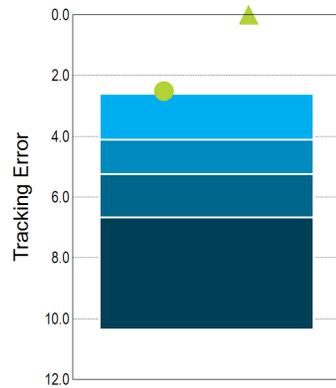
■ TIAA-CREF Small Cap Equity I ◆ Russell 2000 ● Small Cap MStar MF

■ TIAA-CREF Small Cap Equity I ◆ Russell 2000 ● Small Cap MStar MF

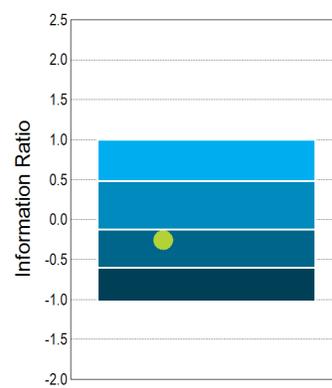
Annualized Standard Deviation



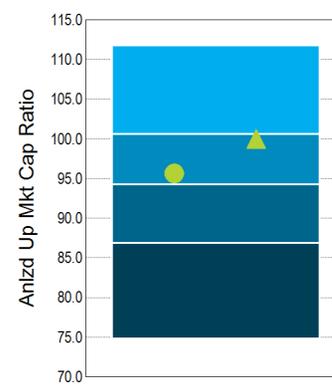
Tracking Error



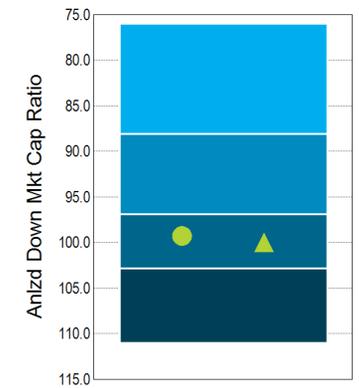
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



● TIAA-CREF Small Cap Equity I ▲ Russell 2000 ■ 5th to 25th Percentile ■ 25th to Median ■ Median to 75th Percentile ■ 75th to 95th Percentile

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	-0.40
Average Market Cap (\$mm)	1,572.28
Price/Earnings	11.94
Price/Book	1.44
Price/Sales	0.74
Price/Cash Flow	5.17
Dividend Yield	1.64
Number of Equity Holdings	400
R-Squared (3 Year)	0.99
Alpha (3 Year)	-0.19%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	4.09%
COMMUNICATION SERVICES	2.44%
CONSUMER CYCLICAL	4.67%
CONSUMER DEFENSIVE	6.16%
ENERGY	1.31%
FINANCIAL SERVICES	13.93%
HEALTHCARE	21.75%
INDUSTRIALS	17.71%
REAL ESTATE	7.47%
TECHNOLOGY	15.86%
UTILITIES	4.60%

Top Holdings as of March 31, 2020

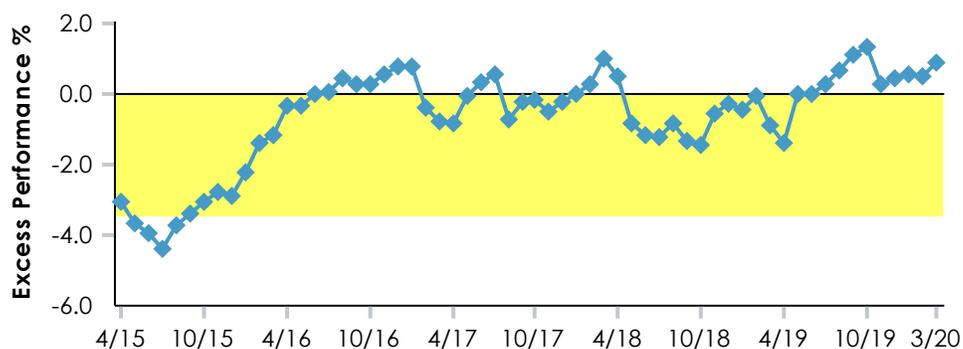
FUTURE ON RUSSELL 2000 JUN20	3.90%
BOSTON BEER CO INC CLASS A	1.06%
EXPONENT INC	1.03%
PS BUSINESS PARKS INC	0.98%
PORTLAND GENERAL ELECTRIC CO	0.97%
EASTGROUP PROPERTIES INC	0.96%
TETRA TECH INC	0.94%
INPHI CORP	0.92%
FIRST INDUSTRIAL REALTY TRUST INC	0.88%
REXNORD CORP	0.85%

Top Countries as of March 31, 2020

United States	99.54%
Puerto Rico	0.31%
Canada	0.11%
Ireland	0.03%

TIAA-CREF Social Choice Equity I vs. Russell 3000 Index

Short-term (Rolling 12 Months Excess Performance)

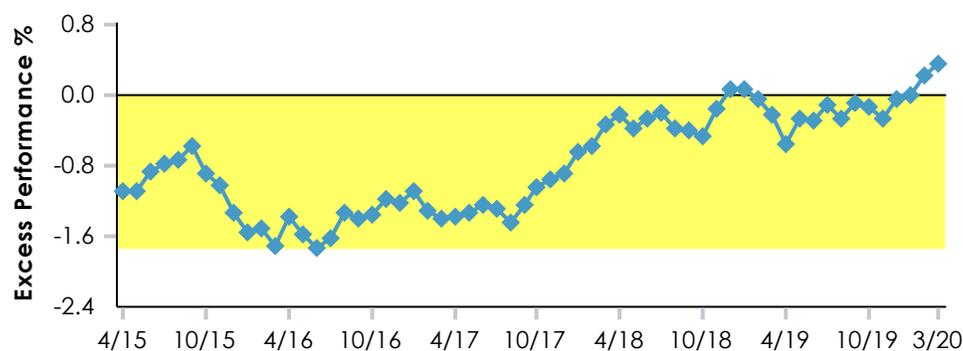


Short-Term Performance

Positive

Probationary Performance -5.00%

Medium-term (Rolling 36 Months Excess Performance)

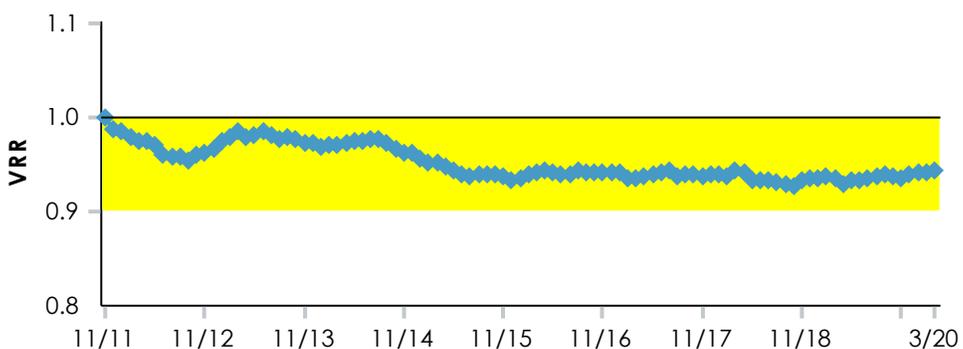


Medium-Term Performance

Positive

Probationary Performance -2.50%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Acceptable

Probationary Performance < 0.90

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF Social Choice Equity I	-20.5 (63)	-8.3 (49)	4.4 (41)	5.6 (42)	10.2 (48)
Russell 3000 Index	-20.9 (69)	-9.1 (59)	4.0 (47)	5.8 (37)	11.0 (29)
IM U.S. Large Cap Core Equity (MF) Median	-19.8	-8.4	3.8	5.2	10.1

Monitoring Status

Acceptable / On Watch

TIAA-CREF Social Choice Equity I | As of March 31, 2020

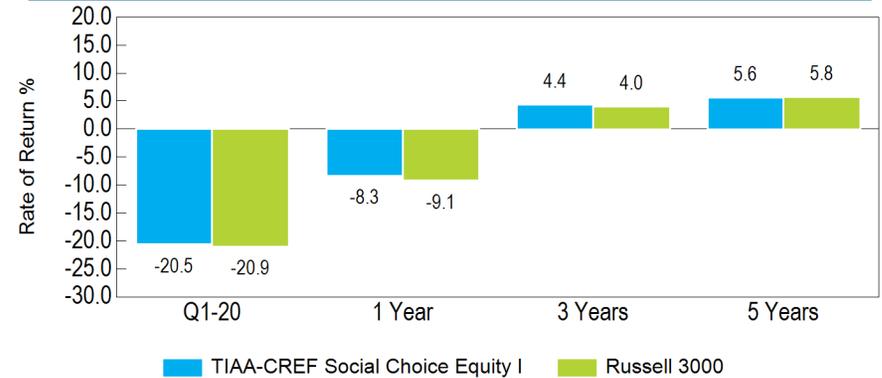
Description:

The investment seeks a favorable long-term total return that reflects the investment performance of the overall U.S. stock market while giving special consideration to certain ESG criteria. Under normal circumstances, the fund invests at least 80% of its assets in equity securities. The Advisor attempts to achieve the return of the U.S. stock market as represented by its benchmark, the Russell 3000® Index, while investing in companies whose activities are consistent with the fund's ESG criteria.

Portfolio Fund Information as of March 31, 2020

Ticker	TISCX
Morningstar Category	Large Blend
Average Market Cap (\$mm)	64,994.50
Net Assets (\$mm)	2,889.60
% Assets in Top 10 Holdings	23.92
Total Number of Holdings	666
Manager Name	Philip James(Jim) Campagna
Manager Tenure	14
Expense Ratio	0.17%
Closed to New Investors	No

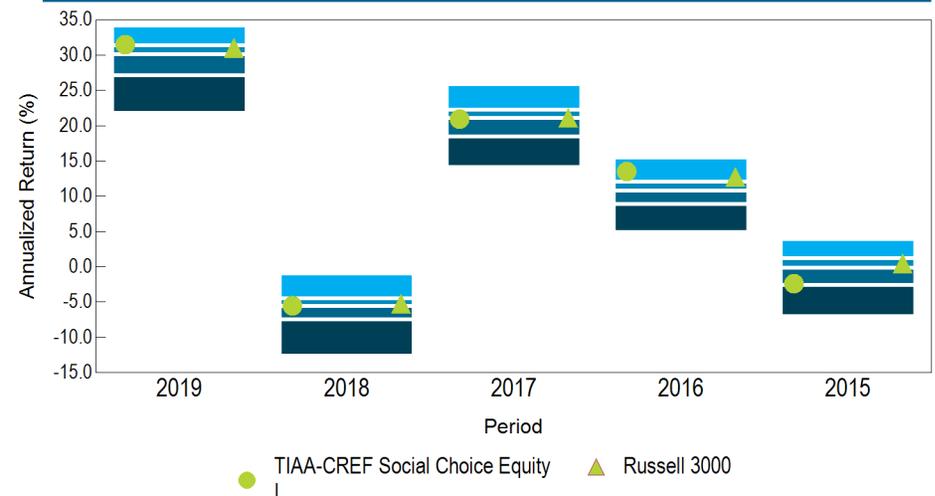
Return Summary



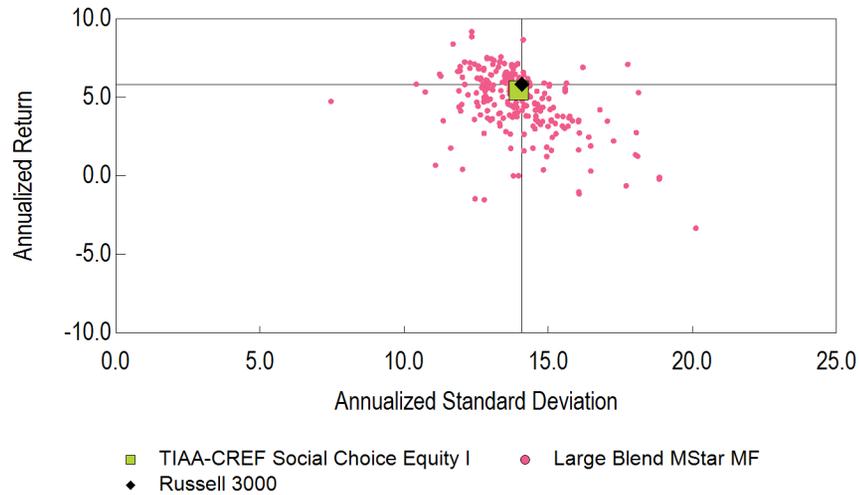
Large Blend MStar MF Return Comparison



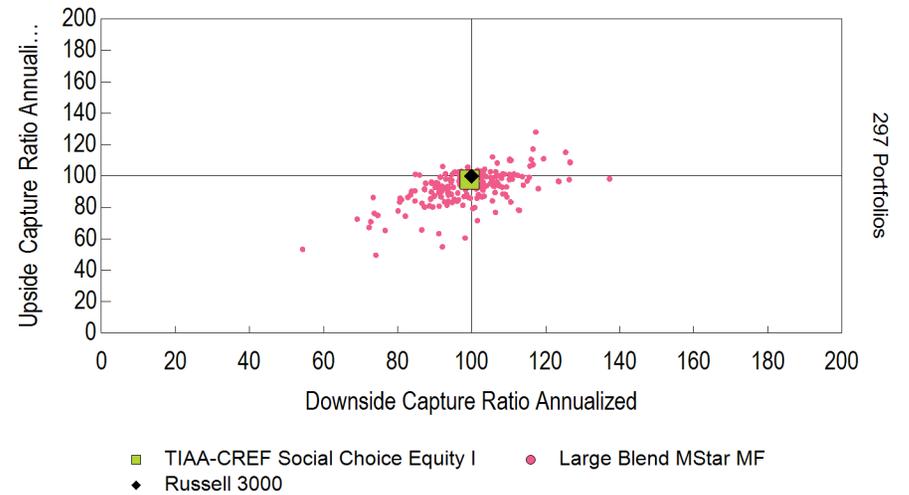
Large Blend MStar MF Return Comparison



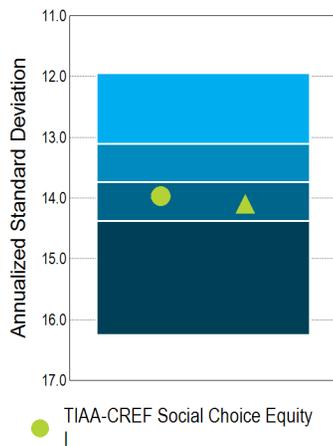
Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



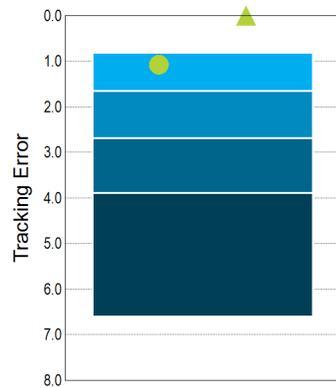
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



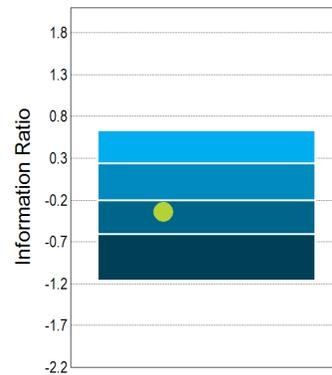
Annualized Standard Deviation



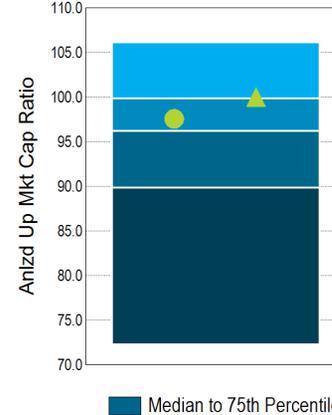
Tracking Error



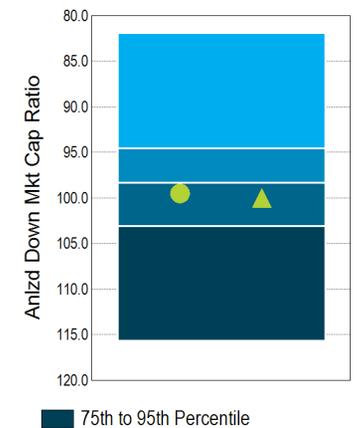
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	0.17
Average Market Cap (\$mm)	64,994.50
Price/Earnings	15.82
Price/Book	2.33
Price/Sales	1.61
Price/Cash Flow	7.83
Dividend Yield	2.40
Number of Equity Holdings	663
R-Squared (3 Year)	1.00
Alpha (3 Year)	0.03%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	2.36%
COMMUNICATION SERVICES	9.18%
CONSUMER CYCLICAL	10.88%
CONSUMER DEFENSIVE	7.32%
ENERGY	2.52%
FINANCIAL SERVICES	12.57%
HEALTHCARE	15.53%
INDUSTRIALS	9.45%
REAL ESTATE	3.78%
TECHNOLOGY	22.93%
UTILITIES	3.47%

Top Holdings as of March 31, 2020

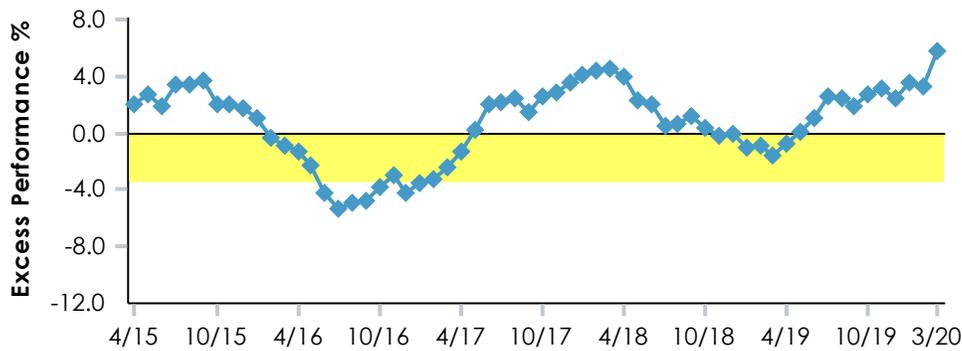
MICROSOFT CORP	5.28%
APPLE INC	4.71%
AMAZON.COM INC	3.74%
ALPHABET INC CLASS C	1.66%
ALPHABET INC A	1.65%
PROCTER & GAMBLE CO	1.55%
INTEL CORP	1.40%
VERIZON COMMUNICATIONS INC	1.38%
MERCK & CO INC	1.29%
UNITEDHEALTH GROUP INC	1.26%

Top Countries as of March 31, 2020

United States	98.48%
United Kingdom	0.90%
Switzerland	0.57%
Canada	0.02%
Ireland	0.02%
Puerto Rico	0.02%

TIAA-CREF Real Estate Securities I vs. FTSE NAREIT All Equity REITs

Short-term (Rolling 12 Months Excess Performance)

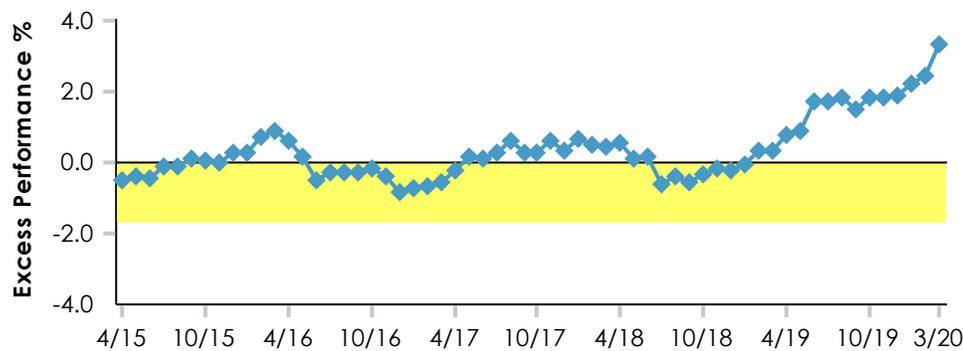


Short-Term Performance

Positive

Probationary Performance -3.50%

Medium-term (Rolling 36 Months Excess Performance)

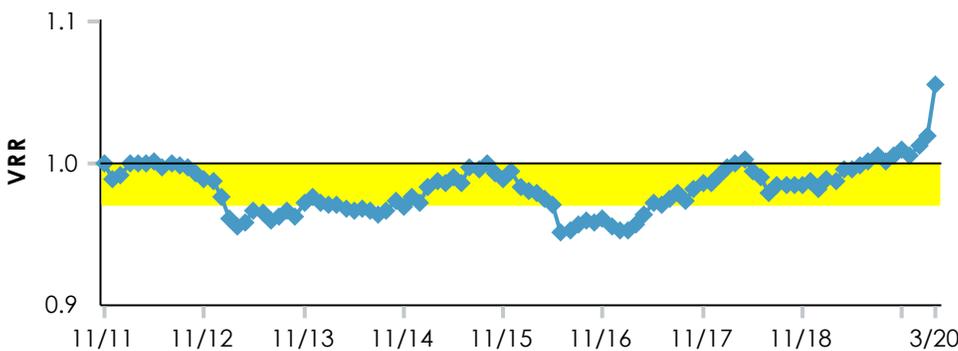


Medium-Term Performance

Positive

Probationary Performance -1.75%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Positive - Long-term Criteria for placing Fund on Watch took effect as of 2Q 2017

Probationary Performance < 0.97

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF Real Estate Securities I	-19.6 (12)	-10.2 (13)	3.4 (8)	3.3 (6)	8.7 (2)
FTSE NAREIT All Equity REITs	-23.4 (50)	-15.9 (50)	0.1 (28)	2.0 (12)	8.0 (11)
IM Real Estate Sector (MF) Median	-23.5	-16.1	-1.3	0.3	6.4

Monitoring Status

Positive

TIAA-CREF Real Estate Securities I | As of March 31, 2020

Description:

The investment seeks to obtain a favorable long-term total return through both capital appreciation and current income, by investing primarily in equity securities of companies principally engaged in or related to the real estate industry.

The fund invests at least 80% of its assets in the securities of companies that are principally engaged in or related to the real estate industry, including those that own significant real estate assets. It may invest up to 15% of its assets in real estate securities of foreign issuers and up to 20% of its assets in equity and debt securities of issuers that are not engaged in or related to the real estate industry.

Portfolio Fund Information as of March 31, 2020

Ticker	TIREX
Morningstar Category	Real Estate
Average Market Cap (\$mm)	17,998.81
Net Assets (\$mm)	1,429.82
% Assets in Top 10 Holdings	50.28
Total Number of Holdings	59
Manager Name	David Copp
Manager Tenure	14
Expense Ratio	0.51%
Closed to New Investors	No

Return Summary



Real Estate MStar MF Return Comparison

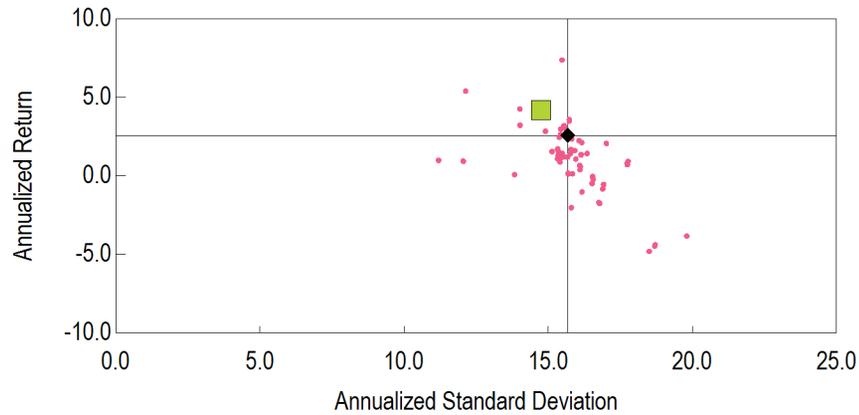


Real Estate MStar MF Return Comparison



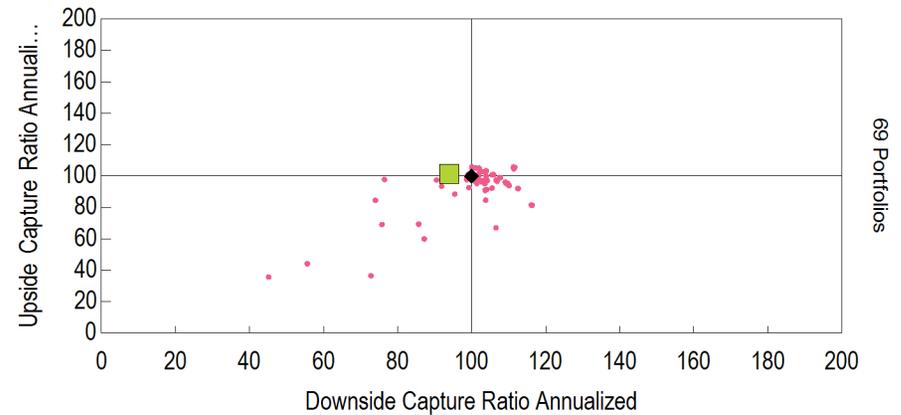
TIAA-CREF Real Estate Securities I | As of March 31, 2020

Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



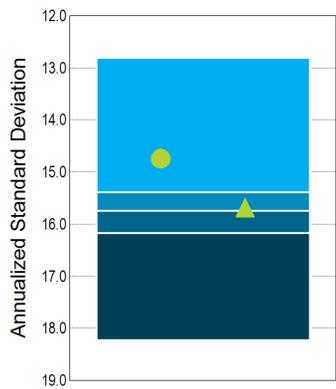
- TIAA-CREF Real Estate Securities I
- ◆ FTSE NAREIT All Equity REIT
- Real Estate MStar MF

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



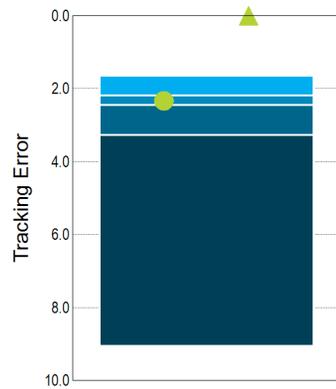
- TIAA-CREF Real Estate Securities I
- ◆ FTSE NAREIT All Equity REIT
- Real Estate MStar MF

Annualized Standard Deviation



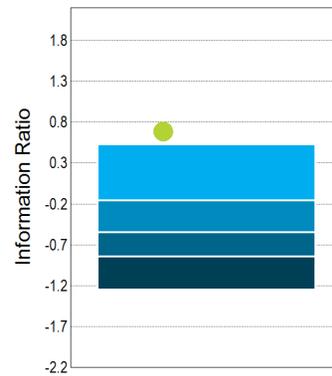
- TIAA-CREF Real Estate Securities

Tracking Error



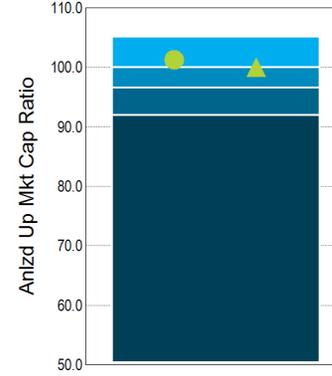
- ▲ FTSE NAREIT All Equity REIT

Information Ratio



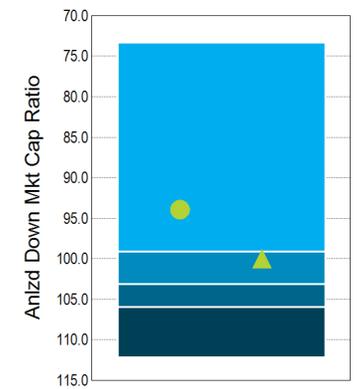
- 5th to 25th Percentile

Anlzd Up Mkt Cap Ratio



- 25th to Median

Anlzd Down Mkt Cap Ratio



- Median to 75th Percentile

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	0.11
Average Market Cap (\$mm)	17,998.81
Price/Earnings	42.82
Price/Book	2.31
Price/Sales	7.39
Price/Cash Flow	16.28
Dividend Yield	3.90
Number of Equity Holdings	48
R-Squared (3 Year)	0.99
Alpha (3 Year)	0.27%

Top Holdings as of March 31, 2020

AMERICAN TOWER CORP	10.10%
PROLOGIS INC	7.27%
EQUINIX INC	6.61%
CROWN CASTLE INTERNATIONAL CORP	4.89%
SUN COMMUNITIES INC	4.14%
EQUITY LIFESTYLE PROPERTIES INC	3.87%
REXFORD INDUSTRIAL REALTY INC	3.71%
SBA COMMUNICATIONS CORP	3.44%
ALEXANDRIA REAL ESTATE EQUITIES INC	3.18%
EQUITY RESIDENTIAL	3.08%

Sector Allocation as of March 31, 2020

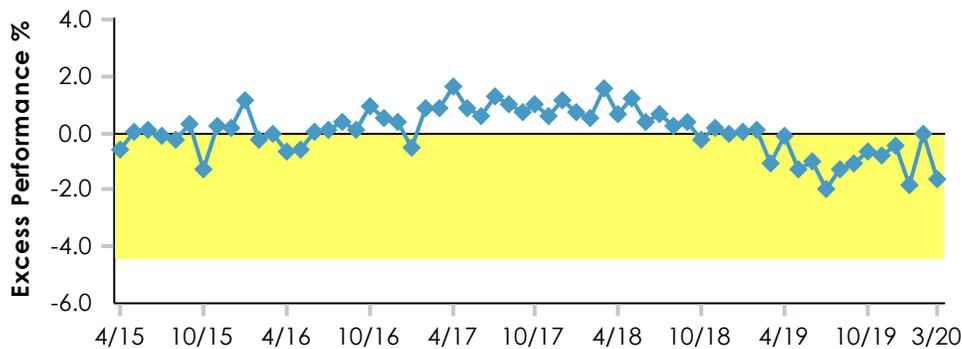
BASIC MATERIALS	0.00%
COMMUNICATION SERVICES	0.00%
CONSUMER CYCLICAL	0.00%
CONSUMER DEFENSIVE	0.00%
ENERGY	0.00%
FINANCIAL SERVICES	0.00%
HEALTHCARE	0.00%
INDUSTRIALS	0.00%
REAL ESTATE	97.04%
TECHNOLOGY	2.96%
UTILITIES	0.00%

Top Countries as of March 31, 2020

United States	97.05%
China	2.43%
Australia	0.52%

DFA Large Cap International I vs. MSCI World ex-U.S. (net)

Short-term (Rolling 12 Months Excess Performance)

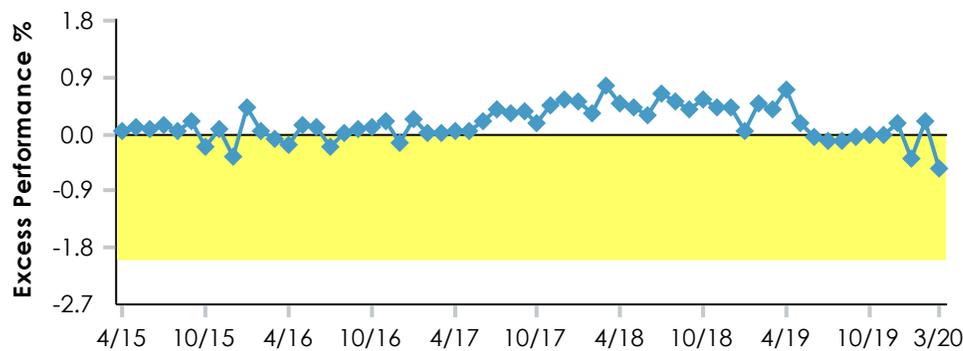


Short-Term Performance

Acceptable

Probationary Performance -4.50%

Medium-term (Rolling 36 Months Excess Performance)

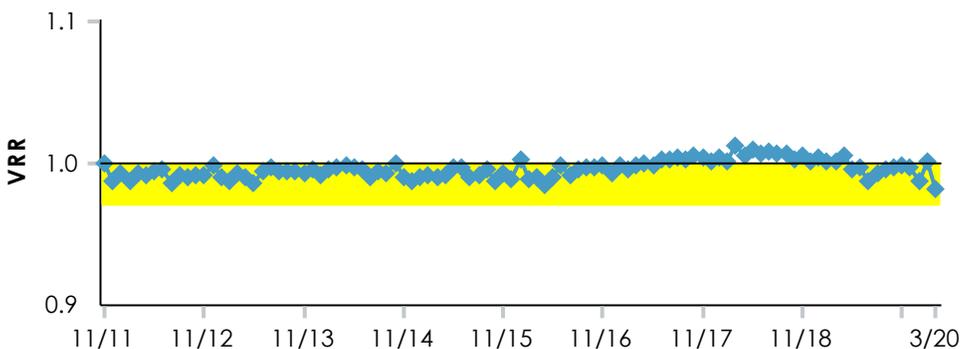


Medium-Term Performance

Positive

Probationary Performance -2.00%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Positive

Probationary Performance < 0.97

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
DFA Large Cap International I	-24.4 (62)	-16.5 (55)	-2.6 (43)	-0.9 (38)	3.3 (47)
MSCI World ex-U.S. (net)	-23.3 (44)	-14.9 (34)	-2.1 (28)	-0.8 (33)	3.5 (39)
IM International Multi-Cap Core Equity (MF) Median	-23.6	-16.2	-3.0	-1.4	3.2

Monitoring Status

Acceptable

DFA Large Cap International I | As of March 31, 2020

Description:

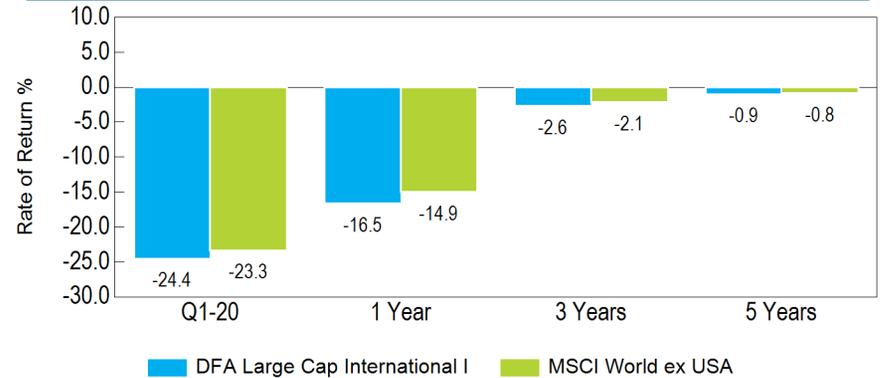
The investment seeks long-term capital appreciation.

The Portfolio will invest at least 80% of its net assets in securities of large cap companies in the particular markets in which the Portfolio invests. The Advisor determines the minimum market capitalization of a large company with respect to each country or region in which the Portfolio invests. It also may purchase or sell futures contracts and options on futures contracts for foreign or U.S. equity securities and indices, to adjust market exposure based on actual or expected cash inflows to or outflows from the Portfolio.

Portfolio Fund Information as of March 31, 2020

Ticker	DFALX
Morningstar Category	Foreign Large Blend
Average Market Cap (\$mm)	24,062.88
Net Assets (\$mm)	4,450.58
% Assets in Top 10 Holdings	11.78
Total Number of Holdings	1,415
Manager Name	Jed S. Fogdall
Manager Tenure	10
Expense Ratio	0.22%
Closed to New Investors	No

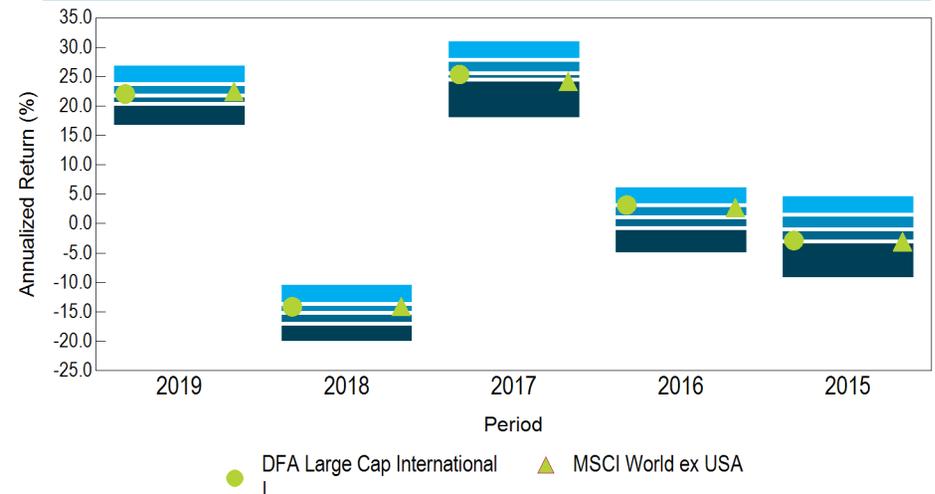
Return Summary



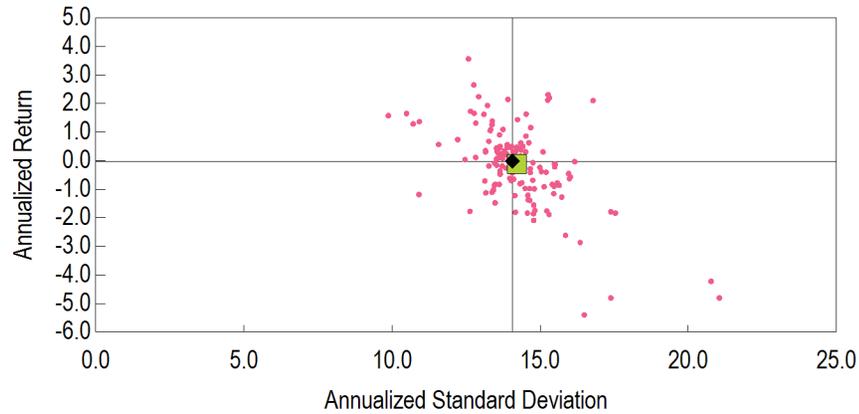
Foreign Large Blend MStar MF Return Comparison



Foreign Large Blend MStar MF Return Comparison

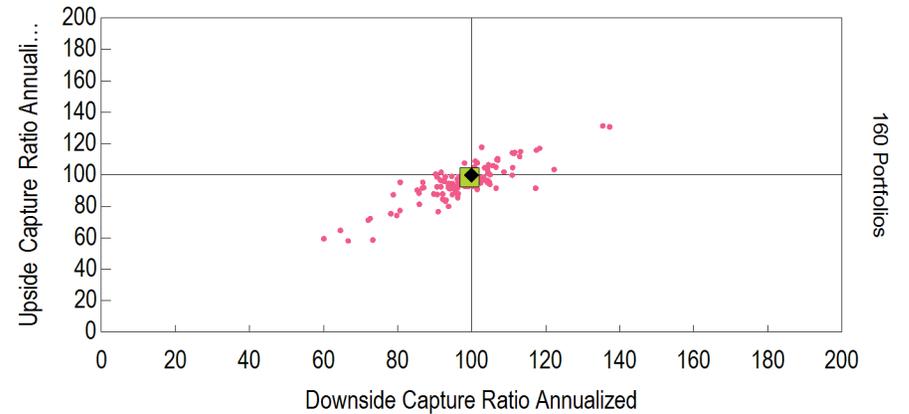


Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



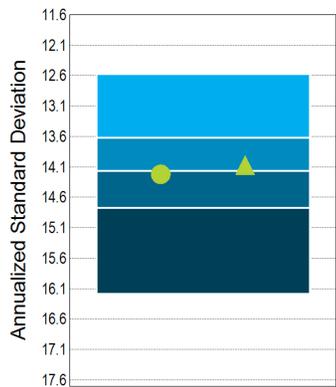
- DFA Large Cap International I
- Foreign Large Blend MStar MF
- ◆ MSCI World ex USA

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



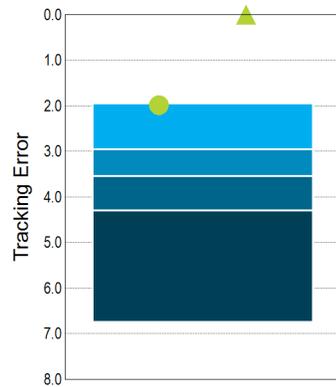
- DFA Large Cap International I
- Foreign Large Blend MStar MF
- ◆ MSCI World ex USA

Annualized Standard Deviation



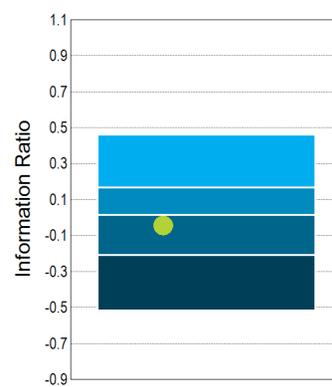
- DFA Large Cap International I
- ▲ MSCI World ex USA

Tracking Error



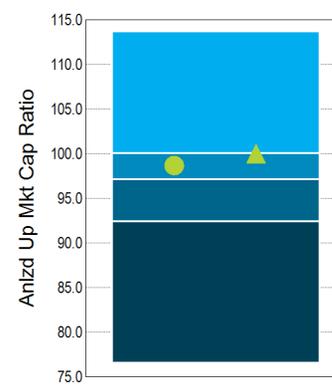
- ▲ MSCI World ex USA

Information Ratio



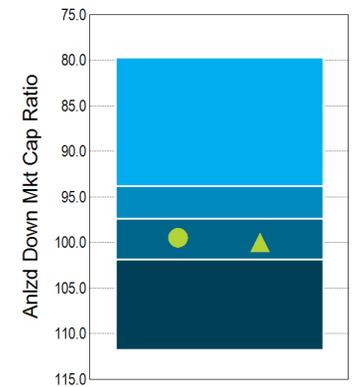
- 5th to 25th Percentile
- 25th to Median

Anlzd Up Mkt Cap Ratio



- Median to 75th Percentile
- 75th to 95th Percentile

Anlzd Down Mkt Cap Ratio



- Median to 75th Percentile
- 75th to 95th Percentile

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	-0.28
Average Market Cap (\$mm)	24,062.88
Price/Earnings	12.45
Price/Book	1.20
Price/Sales	0.82
Price/Cash Flow	5.07
Dividend Yield	4.26
Number of Equity Holdings	1,392
R-Squared (3 Year)	0.99
Alpha (3 Year)	-0.03%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	8.76%
COMMUNICATION SERVICES	7.31%
CONSUMER CYCLICAL	10.80%
CONSUMER DEFENSIVE	11.21%
ENERGY	5.15%
FINANCIAL SERVICES	15.34%
HEALTHCARE	13.28%
INDUSTRIALS	14.83%
REAL ESTATE	2.02%
TECHNOLOGY	7.39%
UTILITIES	3.90%

Top Holdings as of March 31, 2020

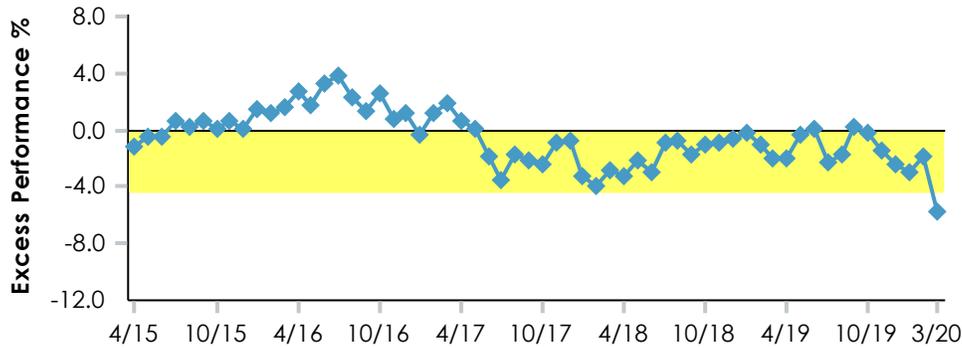
E-MINI S&P 500 FUTURES JUNE20	2.83%
NESTLE SA	2.05%
ROCHE HOLDING AG DIVIDEND RIGHT CERT.	1.60%
TOYOTA MOTOR CORP	0.96%
NOVARTIS AG	0.81%
NOVO NORDISK A/S ADR	0.79%
ROYAL BANK OF CANADA	0.75%
LVMH MOET HENNESSY LOUIS VUITTON SE	0.74%
ASML HOLDING NV ADR	0.65%
BP PLC ADR	0.60%

Top Countries as of March 31, 2020

Japan	24.73%
United Kingdom	13.21%
Switzerland	8.84%
France	8.70%
Canada	8.42%
Germany	7.09%
Australia	4.99%
United States	3.94%
Netherlands	3.82%
Sweden	2.53%

DFA Emerging Markets Core Equity I vs. MSCI Emerging Markets (Net) Index

Short-term (Rolling 12 Months Excess Performance)

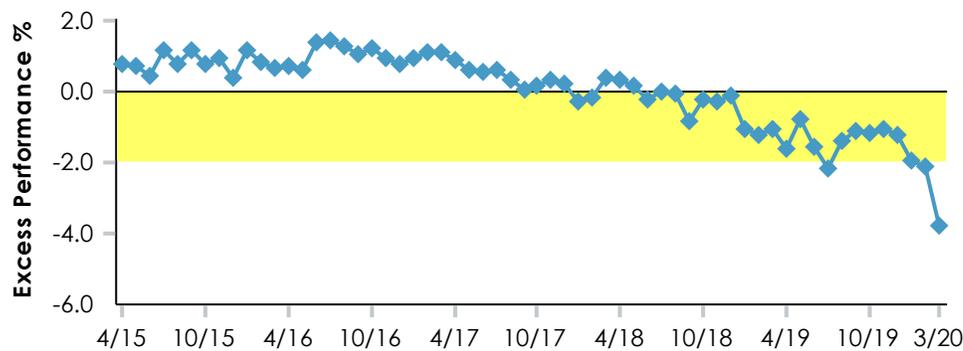


Short-Term Performance

Acceptable

Probationary Performance -4.50%

Medium-term (Rolling 36 Months Excess Performance)

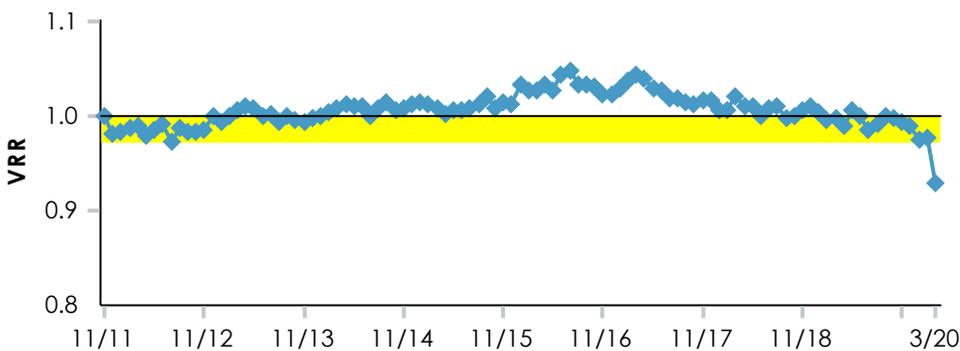


Medium-Term Performance

Acceptable

Probationary Performance -2.00%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Acceptable

Probationary Performance < 0.97

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
DFA Emerging Markets Core Equity I	-28.3 (81)	-23.4 (82)	-5.4 (79)	-2.0 (65)	0.4 (59)
MSCI Emerging Markets (Net) Index	-23.6 (35)	-17.7 (46)	-1.6 (32)	-0.4 (36)	1.3 (40)
IM Emerging Markets Equity (MF) Median	-24.8	-18.3	-3.0	-1.1	0.7

Monitoring Status

Acceptable

DFA Emerging Markets Core Equity I | As of March 31, 2020

Description:

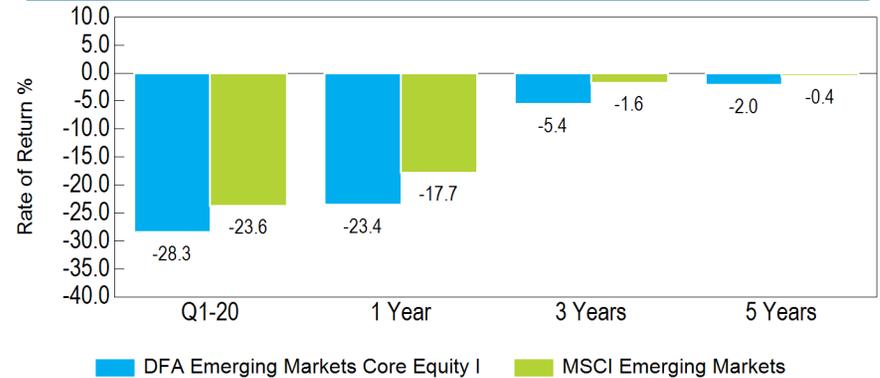
The investment seeks long-term capital appreciation.

The Portfolio purchases a broad and diverse group of securities associated with emerging markets, which may include frontier markets (emerging market countries in an earlier stage of development), authorized for investment by Dimensional Fund Advisors LP's (the "Advisor") Investment Committee ("Approved Markets"), with a greater emphasis on small capitalization, value, and/or high profitability companies.

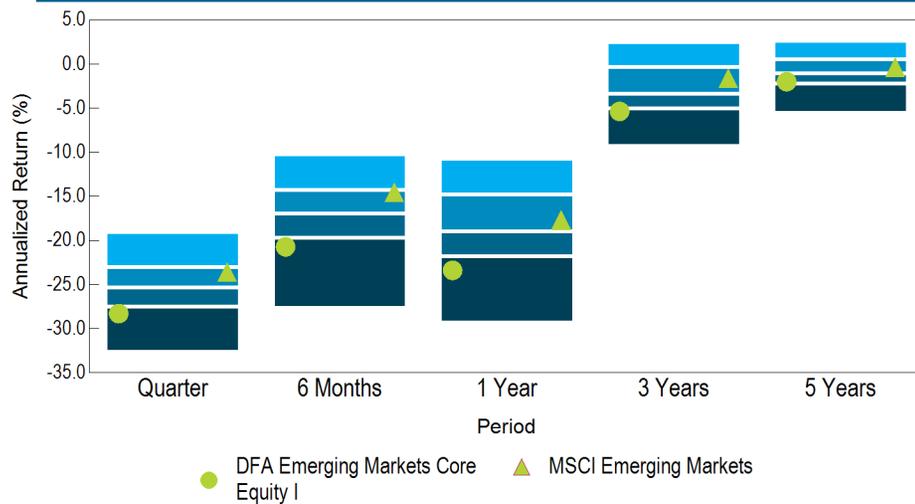
Portfolio Fund Information as of March 31, 2020

Ticker	DFCEX
Morningstar Category	Diversified Emerging Mkts
Average Market Cap (\$mm)	10,876.14
Net Assets (\$mm)	20,316.14
% Assets in Top 10 Holdings	20.40
Total Number of Holdings	4,788
Manager Name	Jed S. Fogdall
Manager Tenure	10
Expense Ratio	0.48%
Closed to New Investors	No

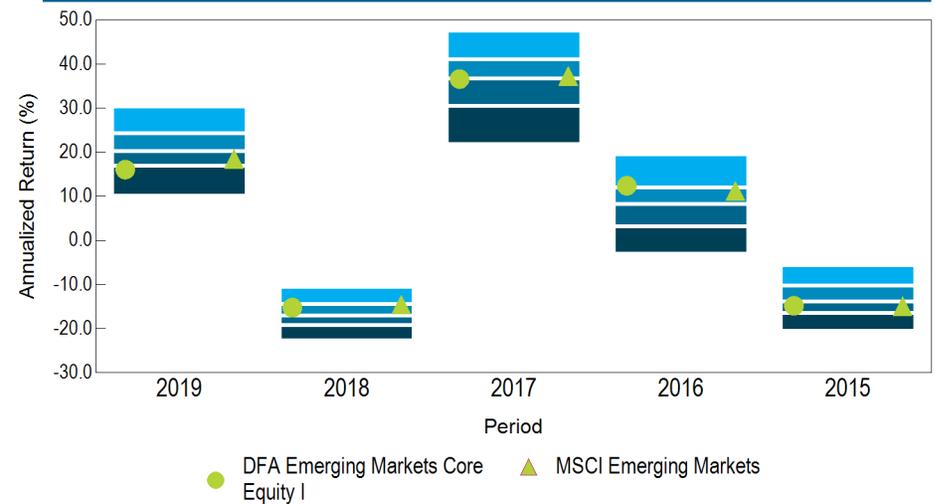
Return Summary



Diversified Emerging Mkts MStar MF Return Comparison

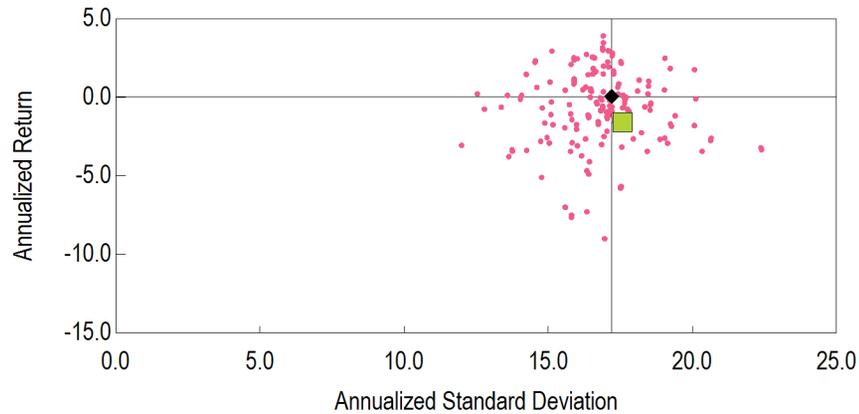


Diversified Emerging Mkts MStar MF Return Comparison

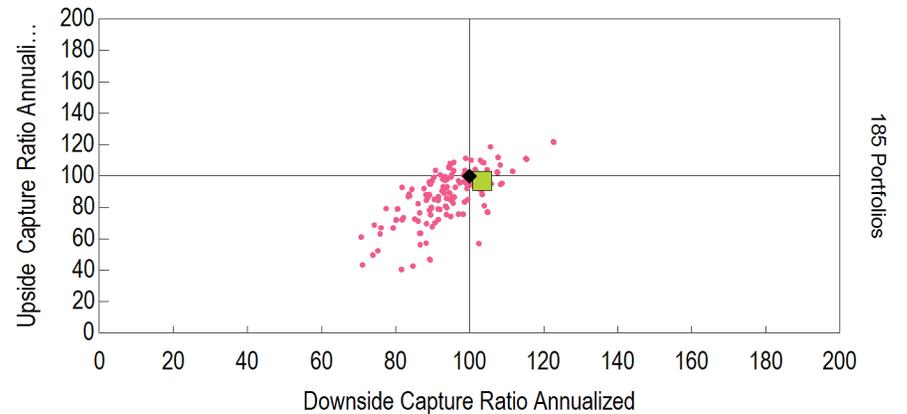


DFA Emerging Markets Core Equity I | As of March 31, 2020

Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



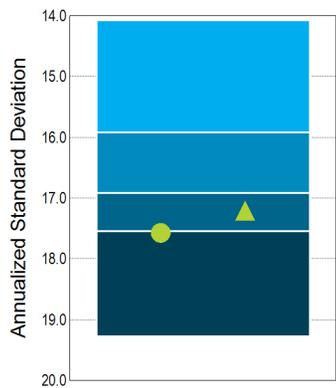
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



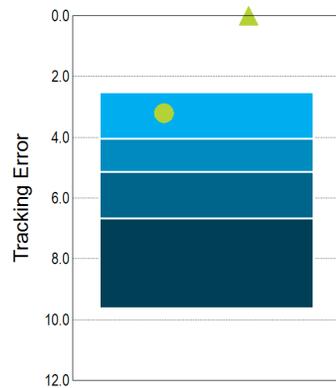
■ DFA Emerging Markets Core Equity I ● Diversified Emerging Mkts MStar MF
◆ MSCI Emerging Markets

■ DFA Emerging Markets Core Equity I ● Diversified Emerging Mkts MStar MF
◆ MSCI Emerging Markets

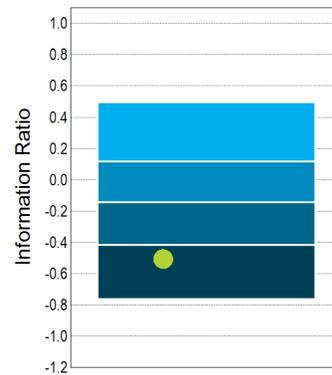
Annualized Standard Deviation



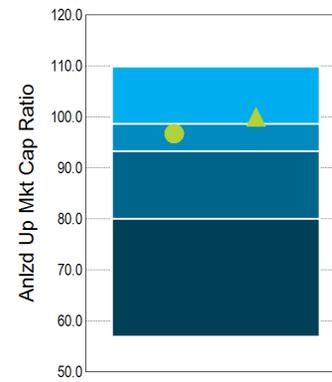
Tracking Error



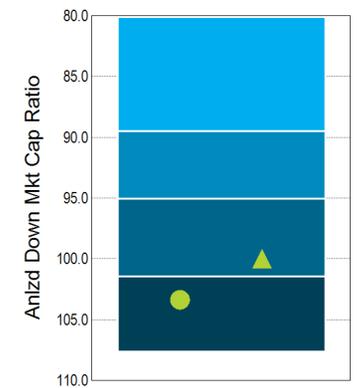
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



● DFA Emerging Markets Core Equity I ▲ MSCI Emerging Markets ■ 5th to 25th Percentile ■ 25th to Median ■ Median to 75th Percentile ■ 75th to 95th Percentile

DFA Emerging Markets Core Equity I | As of March 31, 2020

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	-0.39
Average Market Cap (\$mm)	10,876.14
Price/Earnings	9.61
Price/Book	0.99
Price/Sales	0.65
Price/Cash Flow	3.52
Dividend Yield	4.62
Number of Equity Holdings	4,731
R-Squared (3 Year)	0.96
Alpha (3 Year)	-0.31%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	8.89%
COMMUNICATION SERVICES	10.59%
CONSUMER CYCLICAL	10.02%
CONSUMER DEFENSIVE	6.85%
ENERGY	5.79%
FINANCIAL SERVICES	17.32%
HEALTHCARE	3.94%
INDUSTRIALS	7.95%
REAL ESTATE	4.93%
TECHNOLOGY	20.55%
UTILITIES	3.18%

Top Holdings as of March 31, 2020

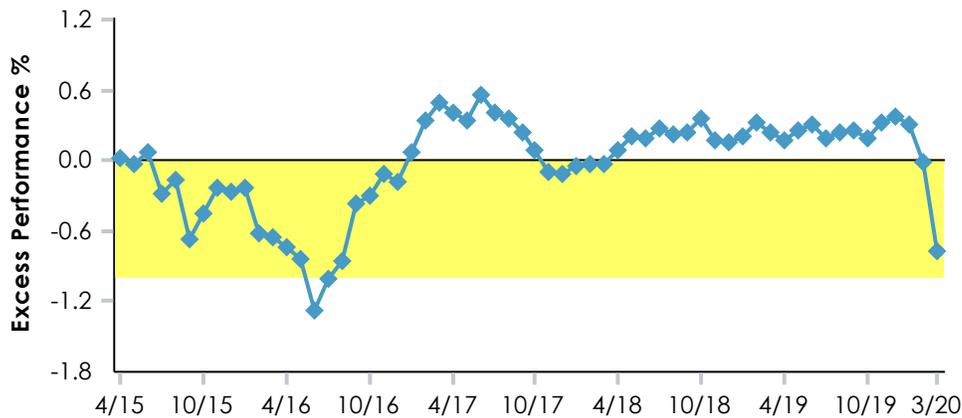
SAMSUNG ELECTRONICS CO LTD	4.85%
TENCENT HOLDINGS LTD	4.16%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD ADR	2.28%
ALIBABA GROUP HOLDING LTD ADR	1.86%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	1.85%
PING AN INSURANCE (GROUP) CO. OF CHINA LTD CLASS H	1.46%
CHINA CONSTRUCTION BANK CORP CLASS H	1.32%
SK HYNIX INC	0.90%
INDUSTRIAL AND COMMERCIAL BANK OF CHINA LTD CLASS H	0.88%
VALE SA	0.84%

Top Countries as of March 31, 2020

China	29.48%
Taiwan	17.33%
South Korea	14.23%
India	10.95%
Brazil	6.36%
South Africa	4.53%
Malaysia	2.50%
Thailand	2.50%
Mexico	2.41%
Indonesia	2.08%

Metropolitan West Total Return Bond I vs. BBg BC U.S. Aggregate Index

Short-term (Rolling 12 Months Excess Performance)

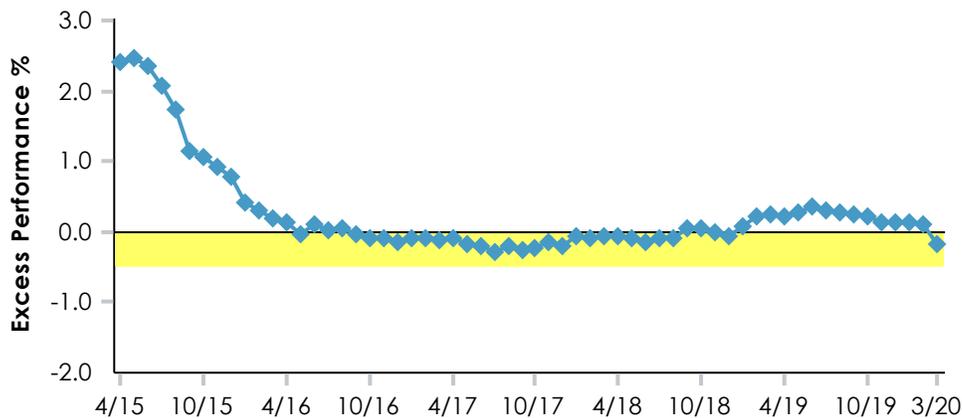


Short-Term Performance

Positive

Probationary Performance -1.00%

Medium-term (Rolling 36 Months Excess Performance)



Medium-Term Performance

Positive

Probationary Performance -0.50%

- Long-term criteria to take effect 1Q 2021

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (10/2015)
Metropolitan West Total Return Bond I	2.3 (15)	8.2 (10)	4.6 (10)	3.2 (17)	3.7 (26)
BBg BC U.S. Aggregate Index	3.1 (9)	8.9 (6)	4.8 (8)	3.4 (10)	3.8 (21)
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-0.9	4.7	3.4	2.7	3.4

Monitoring Status

Positive

Metropolitan West Total Return Bond I | As of March 31, 2020

Description:

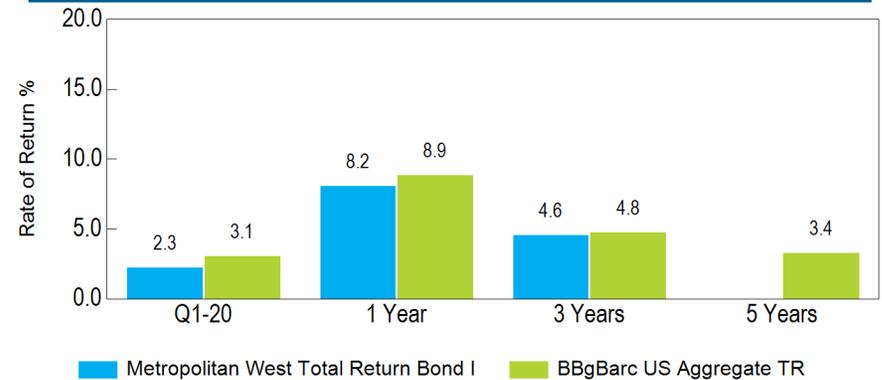
The investment seeks to maximize long-term total return.

The fund pursues its objective by investing, under normal circumstances, at least 80% of its net assets in investment grade fixed income securities or unrated securities determined by the Adviser to be of comparable quality. Up to 20% of the fund's net assets may be invested in securities rated below investment grade or unrated securities determined by the Adviser to be of comparable quality. The fund also invests at least 80% of its net assets plus borrowings for investment purposes in fixed income securities it regards as bonds.

Portfolio Fund Information as of March 31, 2020

Ticker	MWTIX
Morningstar Category	Intermediate Core-Plus Bond
Average Market Cap (\$mm)	
Net Assets (\$mm)	46,028.55
% Assets in Top 10 Holdings	32.60
Total Number of Holdings	2,042
Manager Name	Stephen M. Kane
Manager Tenure	23
Expense Ratio	0.44%
Closed to New Investors	No

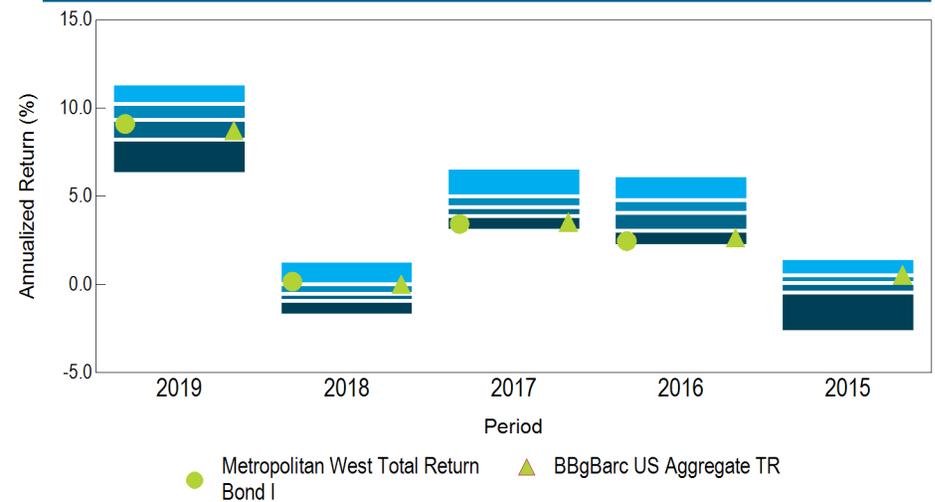
Return Summary



Intermediate Core Plus Bond MStar MF Return Comparison

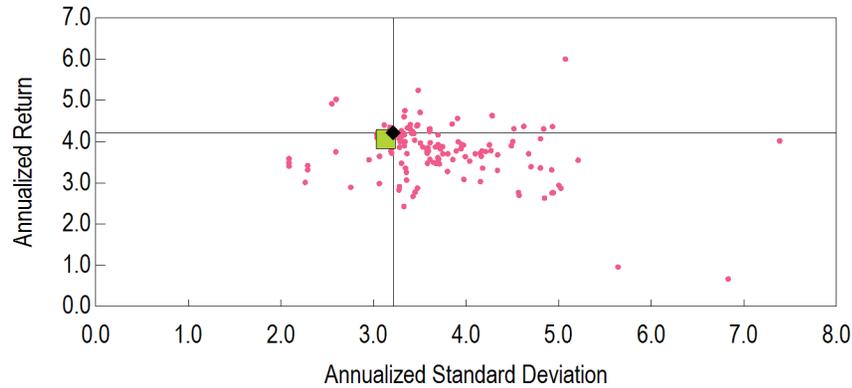


Intermediate Core Plus Bond MStar MF Return Comparison



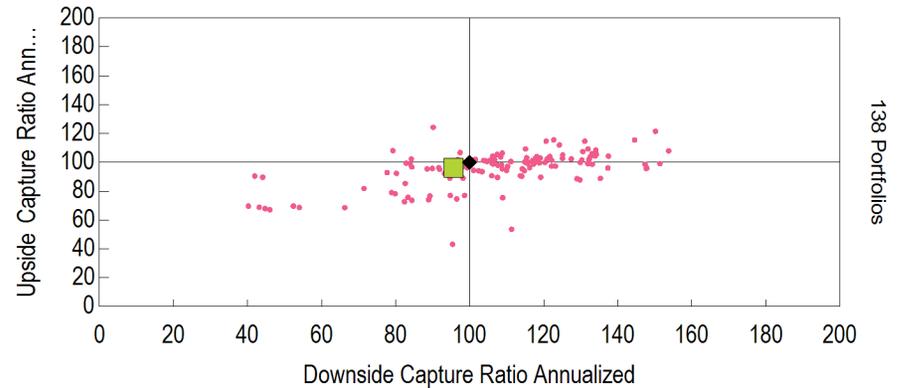
Metropolitan West Total Return Bond I | As of March 31, 2020

Annualized Return vs. Annualized Standard Deviation
4 Years 3 Months Ending March 31, 2020



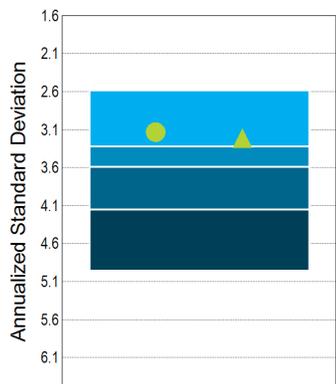
- Metropolitan West Total Return Bond I
- ◆ BBgBarc US Aggregate TR
- Intermediate Core Plus Bond MStar MF

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
4 Years 3 Months Ending March 31, 2020

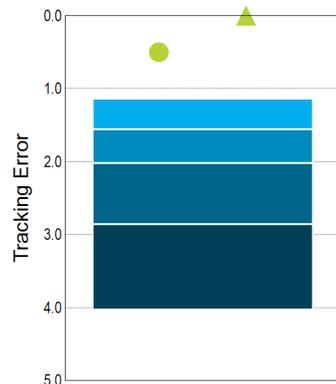


- Metropolitan West Total Return Bond I
- ◆ BBgBarc US Aggregate TR
- Intermediate Core Plus Bond MStar MF

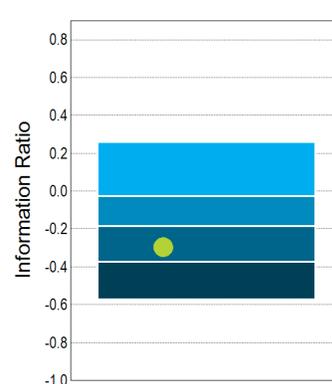
Annualized Standard Deviation



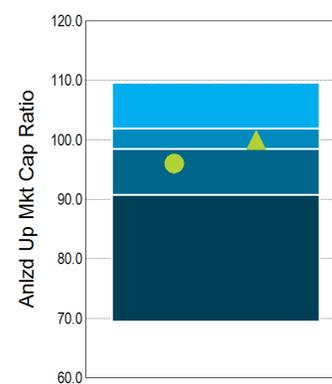
Tracking Error



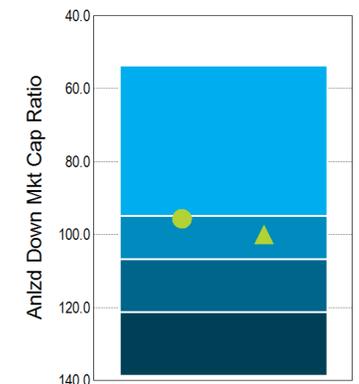
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



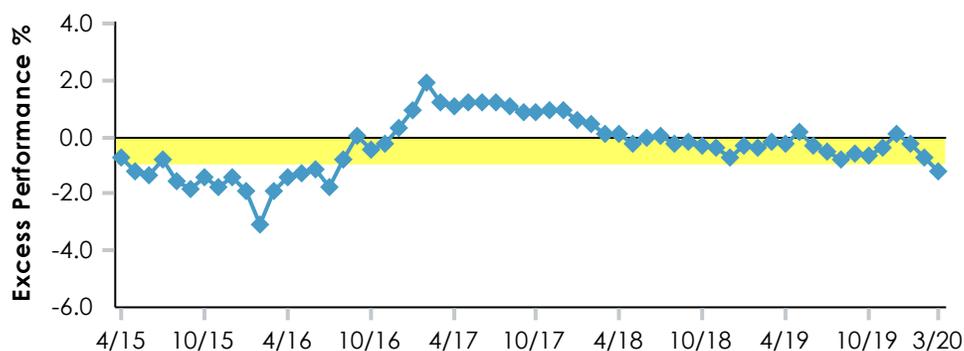
- Metropolitan West Total Return Bond I
- ▲ BBgBarc US Aggregate TR
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile

Metropolitan West Total Return Bond I | As of March 31, 2020

Fund Characteristics as of March 31, 2020		Top Holdings as of March 31, 2020		Fixed Income Sectors as of March 31, 2020	
Sharpe Ratio (3 Year)	0.90	FEDERAL NATIONAL MORTGAGE ASSOCIATION	9.90%	GOVERNMENT	13.38%
Average Duration	5.32	2.5%		MUNICIPAL	1.17%
Average Coupon	3.14%	FEDERAL NATIONAL MORTGAGE ASSOCIATION	6.32%	CORPORATE	25.68%
Average Effective Maturity	7.47	3%		SECURITIZED	55.99%
R-Squared (3 Year)	0.98	UNITED STATES TREASURY NOTES 0.5%	4.19%	CASH & EQUIVALENTS	1.73%
Alpha (3 Year)	-0.02%	FEDERAL NATIONAL MORTGAGE ASSOCIATION	2.93%	DERIVATIVE	2.05%
Beta (3 Year)	1.01	2.5%			
		UNITED STATES TREASURY BONDS 2%	2.88%		
		UNITED STATES TREASURY BONDS 0.25%	1.45%		
		FEDERAL NATIONAL MORTGAGE ASSOCIATION	1.44%		
		3.5%			
		UNITED STATES TREASURY NOTES 1.75%	1.26%		
		UNITED STATES TREASURY NOTES 0.25%	1.23%		
		FEDERAL NATIONAL MORTGAGE ASSOCIATION	1.01%		
		3%			
Credit Quality as of March 31, 2020		Maturities as of March 31, 2020		Top Countries as of March 31, 2020	
AAA	62.52%	1 to 3 Years	4.90%	United States	94.25%
AA	2.94%	3 to 5 Years	7.10%	United Kingdom	1.50%
A	9.04%	5 to 7 Years	7.15%	Germany	1.08%
BBB	19.35%	7 to 10 Years	7.52%	Cayman Islands	0.56%
BB	2.60%	10 to 15 Years	4.41%	Mexico	0.49%
B	0.84%	15 to 20 Years	15.31%	Netherlands	0.47%
Below B	2.71%	20 to 30 Years	36.76%	Ireland	0.36%
Not Rated	0.00%	Greater than 30 Years	15.01%	Canada	0.20%
				Brazil	0.13%
				Belgium	0.11%

PIMCO Real Return vs. Bloomberg Barclays U.S. TIPS Index

Short-term (Rolling 12 Months Excess Performance)

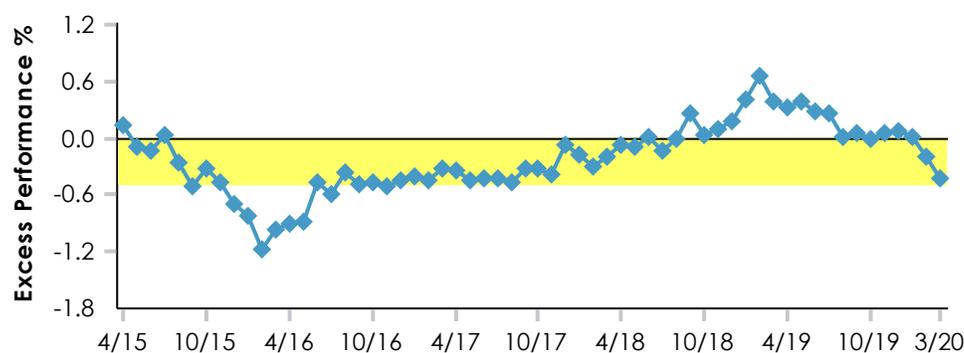


Short-Term Performance

Acceptable

Probationary Performance -1.00%

Medium-term (Rolling 36 Months Excess Performance)

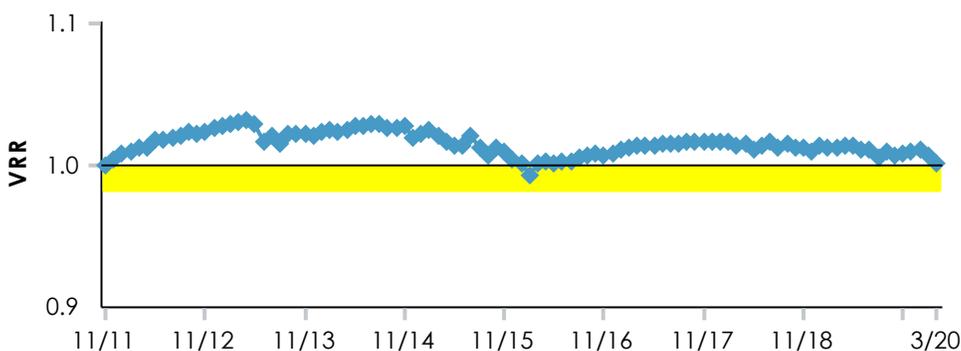


Medium-Term Performance

Positive

Probationary Performance -0.50%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Positive

Probationary Performance < 0.98

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
PIMCO Real Return	0.8 (30)	5.6 (28)	3.0 (22)	2.3 (23)	1.9 (4)
Bloomberg Barclays U.S. TIPS Index	1.7 (17)	6.8 (14)	3.5 (12)	2.7 (10)	1.9 (5)
IM U.S. TIPS (MF) Median	-0.1	4.3	2.2	1.7	1.1

Monitoring Status

Acceptable

Description:

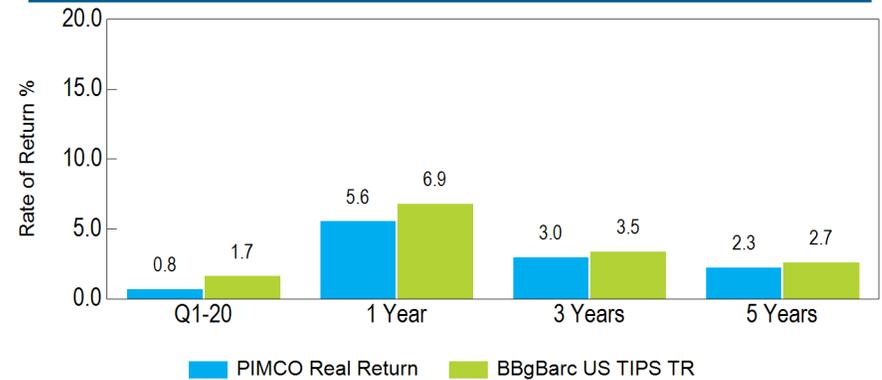
The investment seeks maximum real return, consistent with preservation of capital and prudent investment management.

The fund normally invests at least 80% of its net assets in inflation-indexed bonds of varying maturities issued by the U.S. and non-U.S. governments, their agencies or instrumentalities, and corporations, which may be represented by forwards or derivatives such as options, futures contracts or swap agreements.

Portfolio Fund Information as of December 31, 2019

Ticker	PRRIX
Morningstar Category	Inflation-Protected Bond
Average Market Cap (\$mm)	2,281.22
Net Assets (\$mm)	5,718.38
% Assets in Top 10 Holdings	71.57
Total Number of Holdings	810
Manager Name	Stephen A. Rodosky
Manager Tenure	1
Expense Ratio	0.98%
Closed to New Investors	No

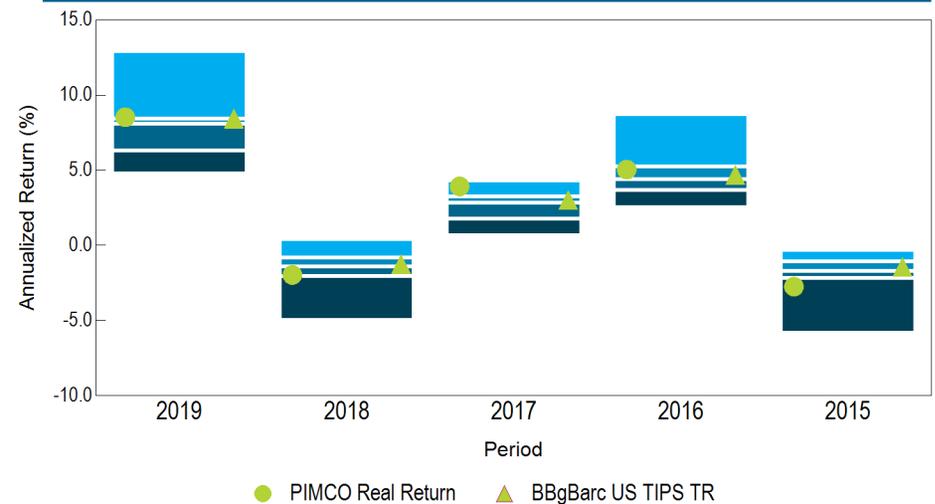
Return Summary



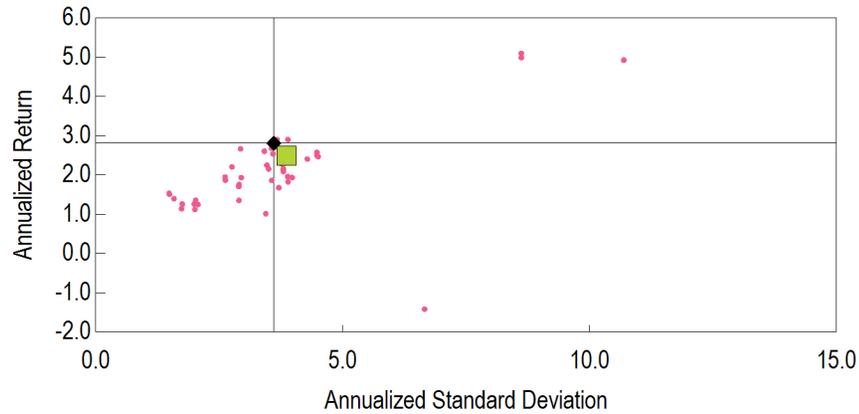
Inflation-Protected Bond MStar MF Return Comparison



Inflation-Protected Bond MStar MF Return Comparison

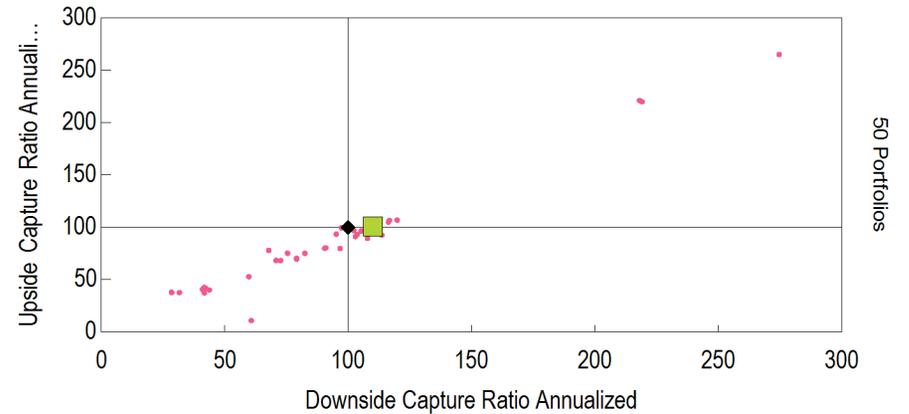


Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



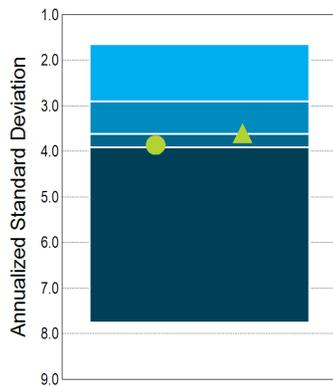
■ PIMCO Real Return ● Inflation-Protected Bond MStar MF
◆ BBgBarc US TIPS TR

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



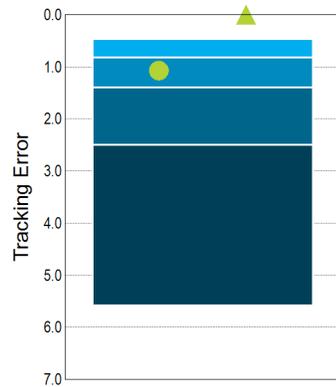
■ PIMCO Real Return ● Inflation-Protected Bond MStar MF
◆ BBgBarc US TIPS TR

Annualized Standard Deviation



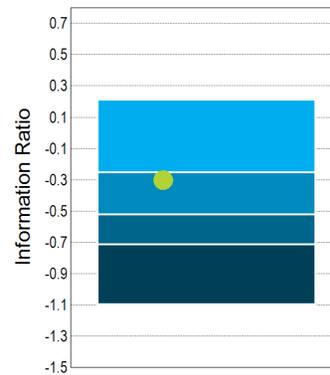
● PIMCO Real Return

Tracking Error

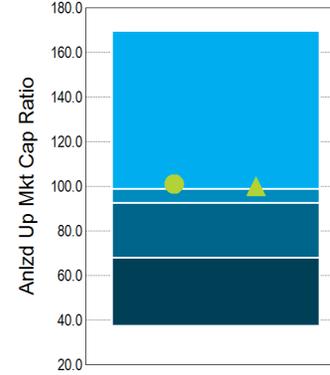


▲ BBgBarc US TIPS TR

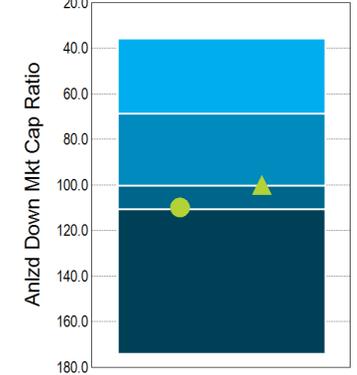
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



■ 5th to 25th Percentile

■ 25th to Median

■ Median to 75th Percentile

■ 75th to 95th Percentile

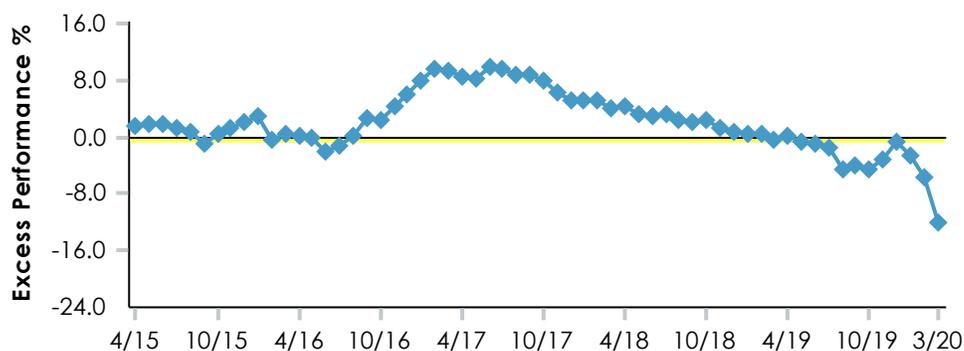
Fund Characteristics as of December 31, 2019		Top Holdings as of December 31, 2019		Fixed Income Sectors as of December 31, 2019	
Sharpe Ratio (3 Year)	0.61	FIN FUT EURO-SCHATZ 2YR EUX 03/06/20	18.45%	GOVERNMENT	67.81%
Average Duration	7.81	UNITED STATES TREASURY BONDS 3.62%	7.79%	MUNICIPAL	0.00%
Average Coupon	2.31%	FEDERAL NATIONAL MORTGAGE ASSOCIATION	7.13%	CORPORATE	1.55%
Average Effective Maturity	7.81	4%		SECURITIZED	15.53%
R-Squared (3 Year)	0.94	UNITED STATES TREASURY BONDS 2.38%	6.48%	CASH & EQUIVALENTS	7.92%
Alpha (3 Year)	0.03%	UNITED STATES TREASURY NOTES 0.62%	6.45%	DERIVATIVE	7.19%
Beta (3 Year)	0.93	UNITED STATES TREASURY BONDS 1.38%	5.59%		
		FIN FUT EUR-BUND 10YR EUX 03/06/20	5.14%		
		FIN FUT EUX SHORT EURO-BTP 03/06/20	5.13%		
		IRS USD 1.75000 09/12/24-5Y CME	4.73%		
		UNITED STATES TREASURY NOTES 0.62%	4.67%		

Maturities as of December 31, 2019	
1 to 3 Years	10.30%
3 to 5 Years	7.70%
5 to 7 Years	14.31%
7 to 10 Years	23.39%
10 to 15 Years	3.11%
15 to 20 Years	3.17%
20 to 30 Years	17.19%
Greater than 30 Years	6.78%

Top Countries as of December 31, 2019	
United States	81.03%
United Kingdom	4.26%
Germany	3.97%
Italy	3.69%
Denmark	1.58%
Japan	0.86%
Ireland	0.78%
New Zealand	0.63%
France	0.59%
Cayman Islands	0.55%

PIMCO Income I vs. Blmbg. Barc. U.S. Aggregate Index

Short-term (Rolling 12 Months Excess Performance)

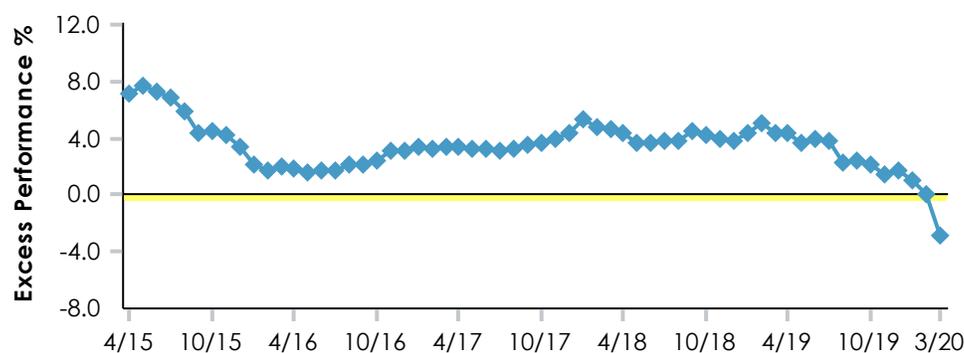


Short-Term Performance

Caution

Probationary Performance -1.00%

Medium-term (Rolling 36 Months Excess Performance)

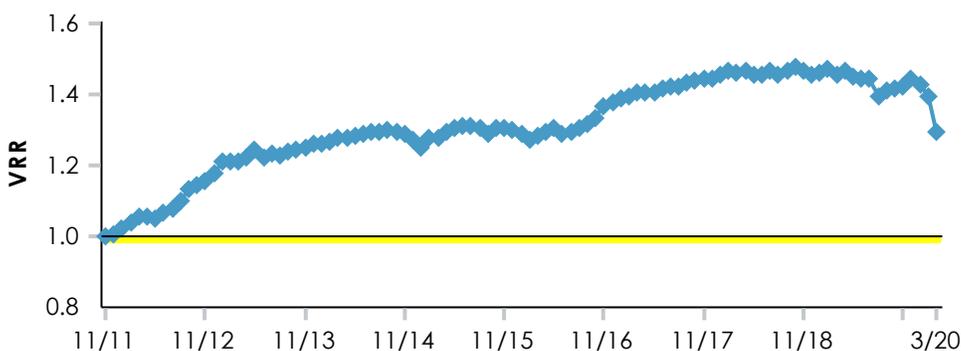


Medium-Term Performance

Positive

Probationary Performance -0.50%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Positive

Probationary Performance < 0.98

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
PIMCO Income I	-7.6 (50)	-3.2 (54)	2.0 (26)	3.6 (6)	6.5 (2)
Blmbg. Barc. U.S. Aggregate Index	3.1 (3)	8.9 (2)	4.8 (3)	3.4 (9)	3.3 (53)
IM Multi-Sector General Bond (MF) Median	-7.7	-2.4	1.0	1.8	3.3

Monitoring Status

Caution

Description:

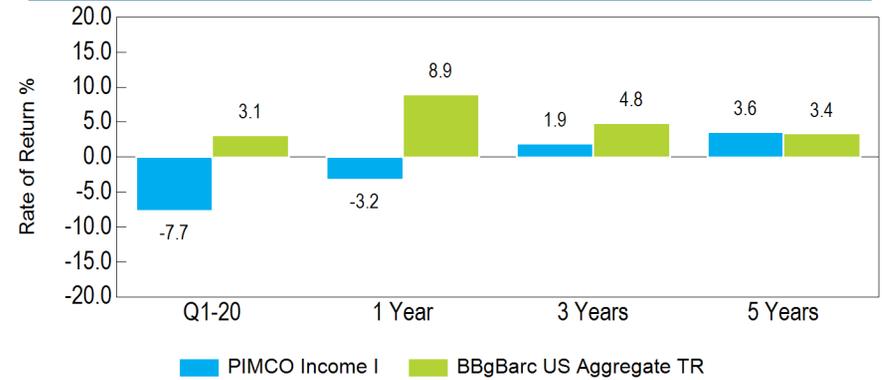
The investment seeks to maximize current income; long-term capital appreciation is a secondary objective.

The fund invests at least 65% of its total assets in a multi-sector portfolio of Fixed Income Instruments of varying maturities, which may be represented by forwards or derivatives such as options, futures contracts or swap agreements. It may invest up to 50% of its total assets in high yield securities rated below investment grade by Moody's, S&P or Fitch, or if unrated, as determined by PIMCO.

Portfolio Fund Information as of December 31, 2019

Ticker	PIMIX
Morningstar Category	Multisector Bond
Average Market Cap (\$mm)	4,893.47
Net Assets (\$mm)	70,648.93
% Assets in Top 10 Holdings	91.37
Total Number of Holdings	7,113
Manager Name	Daniel J. Ivascyn
Manager Tenure	13
Expense Ratio	1.05%
Closed to New Investors	No

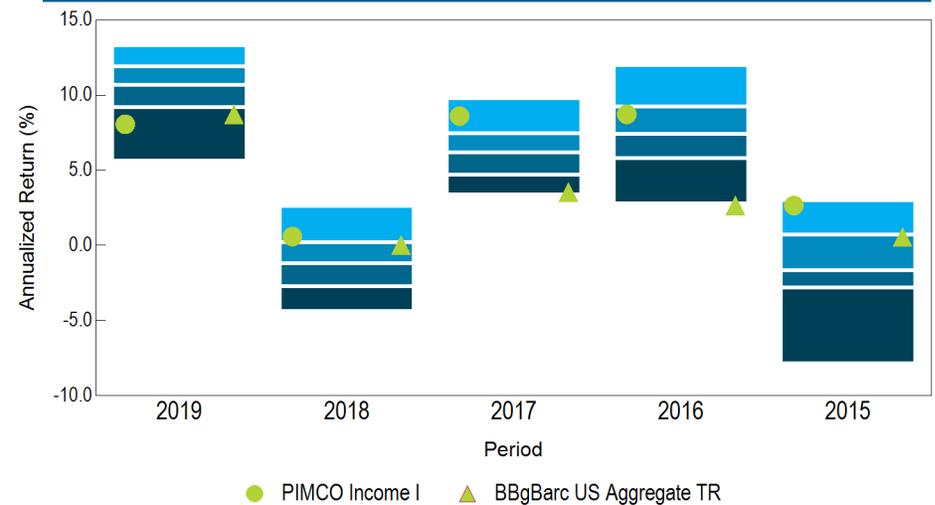
Return Summary



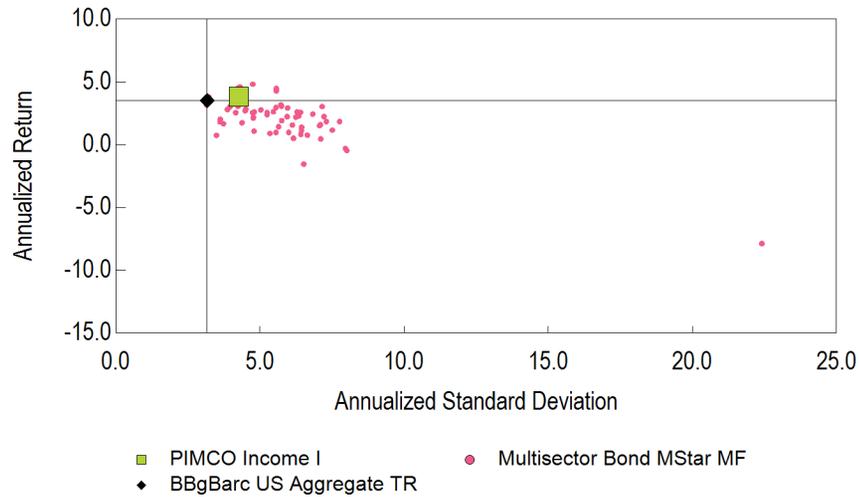
Multisector Bond MStar MF Return Comparison



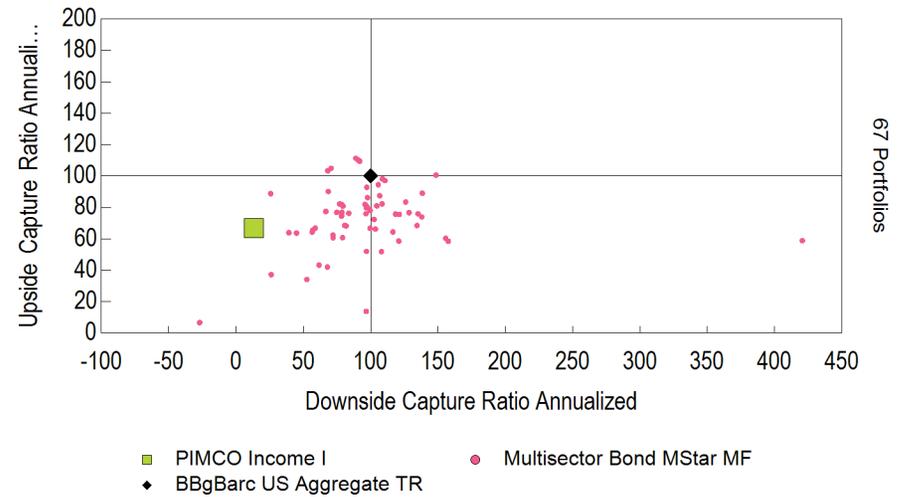
Multisector Bond MStar MF Return Comparison



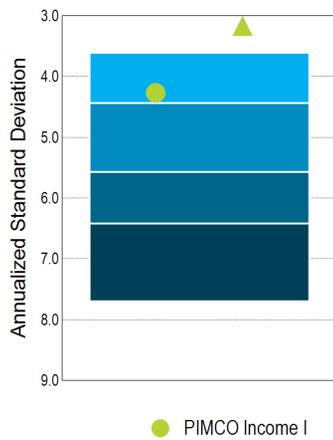
Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



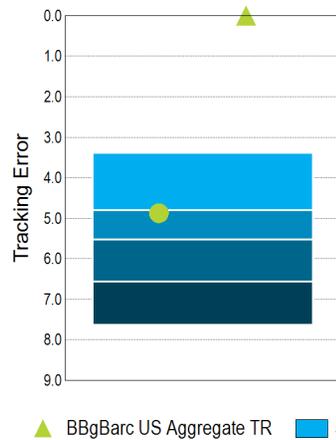
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



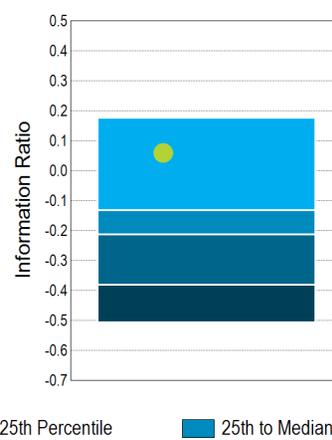
Annualized Standard Deviation



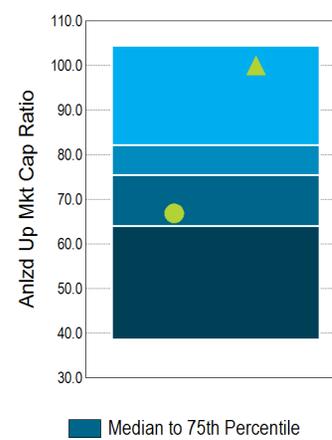
Tracking Error



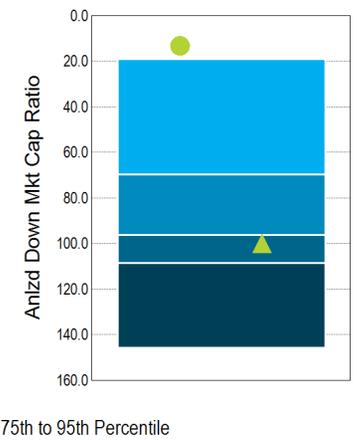
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



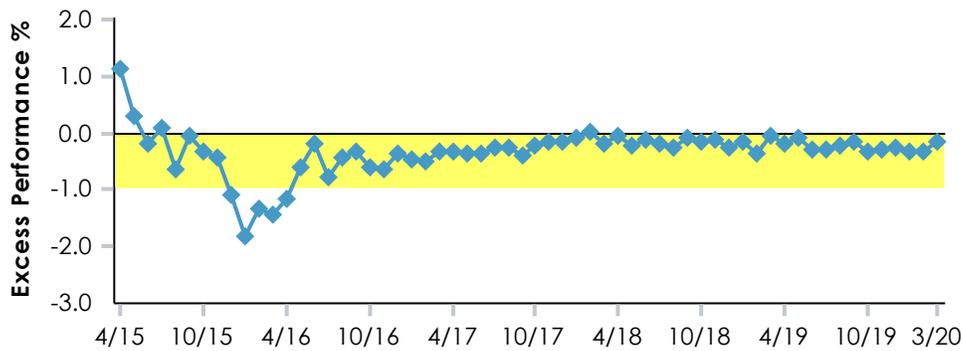
Fund Characteristics as of December 31, 2019		Top Holdings as of December 31, 2019		Fixed Income Sectors as of December 31, 2019	
Sharpe Ratio (3 Year)	2.10	IRS USD 3.00000 06/19/19-5Y CME	13.62%	GOVERNMENT	23.41%
Average Duration	0.91	IRS JPY 0.45000 03/20/19-10Y LCH	13.31%	MUNICIPAL	0.06%
Average Coupon	3.57%	IRS EUR 0.00000 08/19/19-2Y LCH	12.27%	CORPORATE	8.21%
Average Effective Maturity	2.59	5 YEAR TREASURY NOTE FUTURE MAR 20	9.59%	SECURITIZED	30.69%
R-Squared (3 Year)	0.03	FEDERAL NATIONAL MORTGAGE ASSOCIATION	7.98%	CASH & EQUIVALENTS	26.87%
Alpha (3 Year)	0.42%	3%		DERIVATIVE	10.76%
Beta (3 Year)	0.12	CIRS USD 4Y MAT 3.85/2.00% M 7/2020 DUB	7.50%		
		CIRS USD 4Y MAT 3.82/2.00% M 6/2020 MYC	7.49%		
		CIRS USD 4Y MAT 3.82/2.00% M 7/2020 GLM	7.49%		
		IRS EUR 0.00000 09/09/19-2Y LCH	6.23%		
		LONG GILT FUTURE MAR 20	5.88%		

Maturities as of December 31, 2019	
1 to 3 Years	16.84%
3 to 5 Years	8.47%
5 to 7 Years	3.60%
7 to 10 Years	12.37%
10 to 15 Years	1.66%
15 to 20 Years	7.46%
20 to 30 Years	20.99%
Greater than 30 Years	22.07%

Top Countries as of December 31, 2019	
United States	79.86%
United Kingdom	3.68%
Mexico	3.29%
Australia	2.66%
Ireland	1.58%
Russia	1.13%
Argentina	0.63%
Turkey	0.61%
Brazil	0.60%
Peru	0.56%

TIAA-CREF Inflation Link Bond I vs. Blmbg. Barc. U.S. TIPS 1-10 Year

Short-term (Rolling 12 Months Excess Performance)

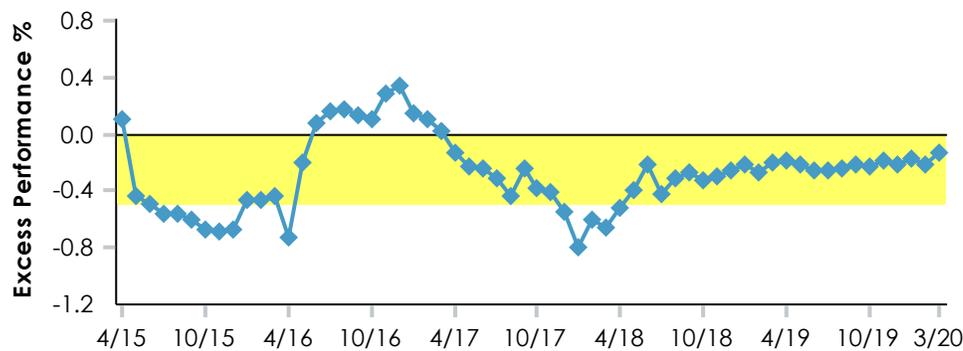


Short-Term Performance

Acceptable

Probationary Performance -1.00%

Medium-term (Rolling 36 Months Excess Performance)

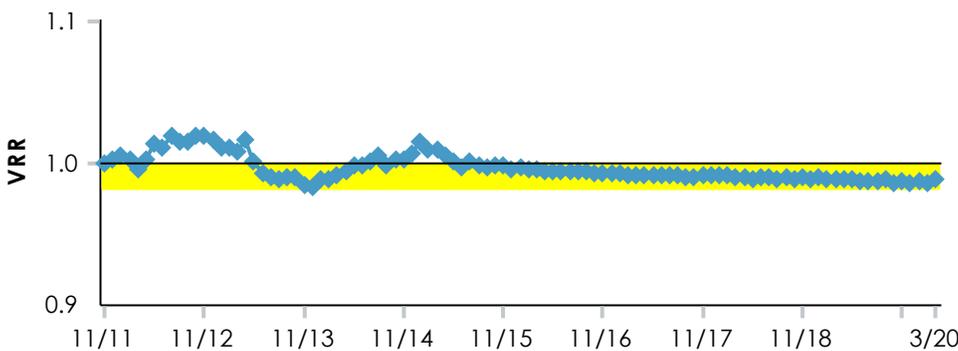


Medium-Term Performance

Acceptable

Probationary Performance -0.50%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Acceptable

Probationary Performance < 0.98

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF Inflation Link Bond I	0.5 (38)	4.4 (48)	2.4 (44)	1.7 (45)	1.3 (39)
Blmbg. Barc. U.S. TIPS 1-10 Year	0.3 (45)	4.5 (46)	2.5 (39)	2.2 (26)	1.4 (29)
IM U.S. TIPS (MF) Median	-0.1	4.3	2.2	1.7	1.1

Monitoring Status

Acceptable

TIAA-CREF Inflation Link Bond I | As of March 31, 2020

Description:

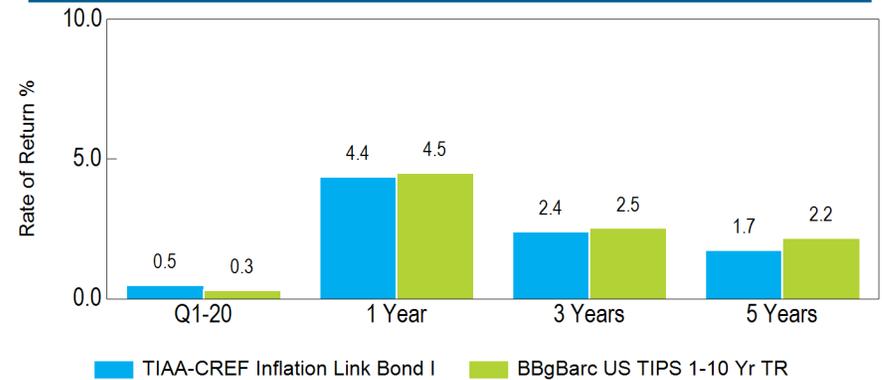
The investment seeks to provide inflation protection and income, primarily through investment in inflation-linked bonds.

The fund invests at least 80% of its assets in fixed-income securities whose principal value increases or decreases based on changes in the Consumer Price Index for All Urban Consumers ("CPI-U"), over the life of the security. Typically, it will invest in U.S. Treasury Inflation-Indexed Securities ("TIS"). Under most circumstances, the fund's investments in inflation-linked bonds of foreign issuers are generally less than 20% of its assets.

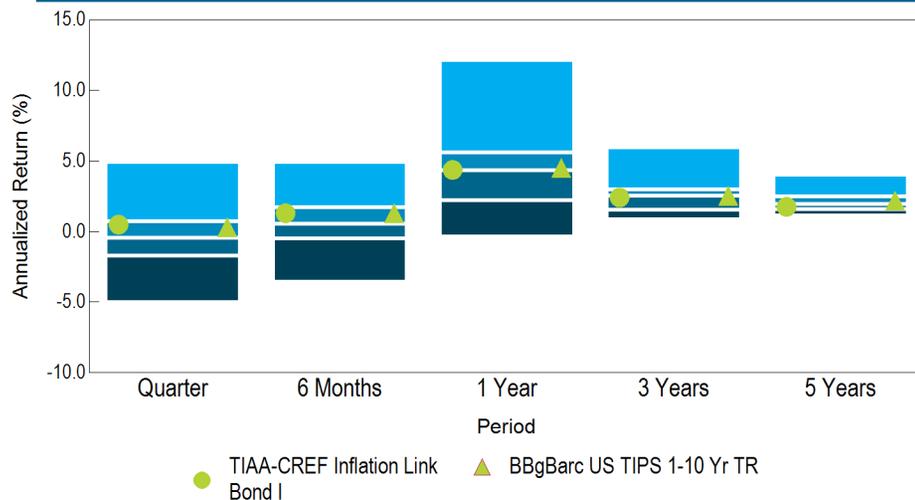
Portfolio Fund Information as of March 31, 2020

Ticker	TILX
Morningstar Category	Inflation-Protected Bond
Average Market Cap (\$mm)	
Net Assets (\$mm)	1,692.91
% Assets in Top 10 Holdings	43.00
Total Number of Holdings	50
Manager Name	John Michael Cerra
Manager Tenure	12
Expense Ratio	0.26%
Closed to New Investors	No

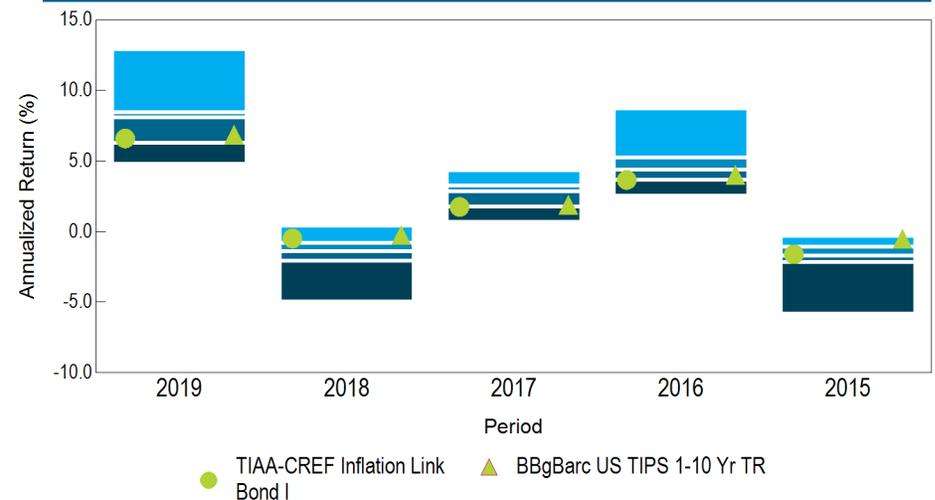
Return Summary



Inflation-Protected Bond MStar MF Return Comparison

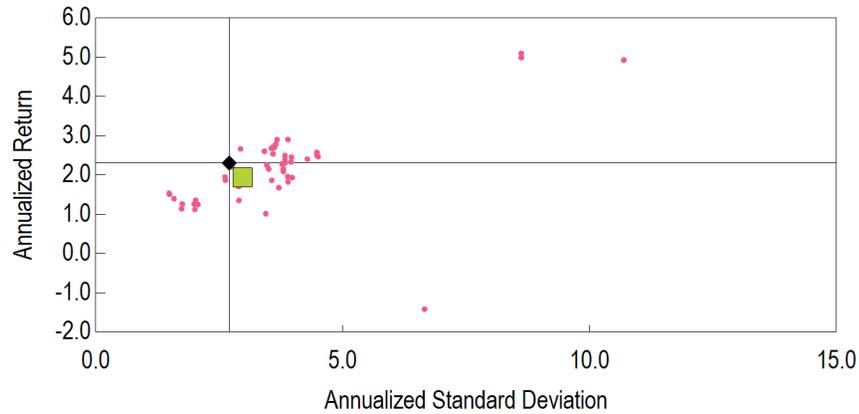


Inflation-Protected Bond MStar MF Return Comparison



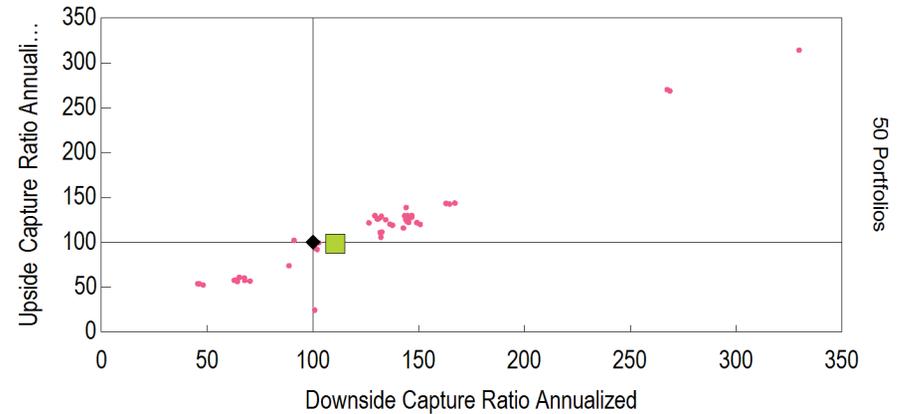
TIAA-CREF Inflation Link Bond I | As of March 31, 2020

Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



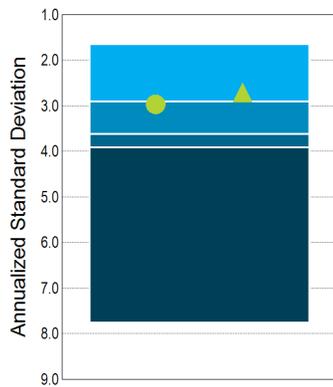
- TIAA-CREF Inflation Link Bond I
- Inflation-Protected Bond MStar MF
- ◆ BBgBarc US TIPS 1-10 Yr TR

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020

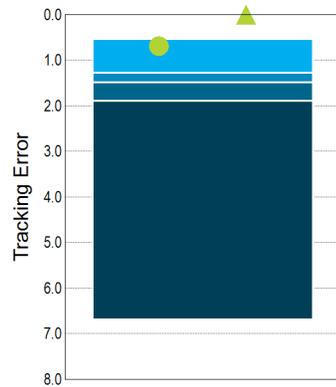


- TIAA-CREF Inflation Link Bond I
- Inflation-Protected Bond MStar MF
- ◆ BBgBarc US TIPS 1-10 Yr TR

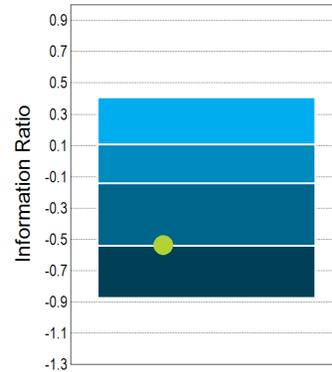
Annualized Standard Deviation



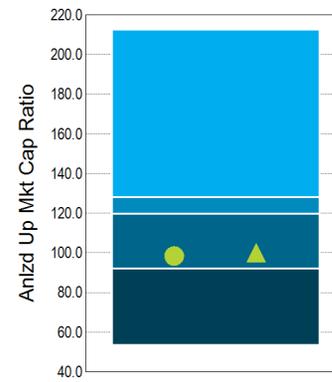
Tracking Error



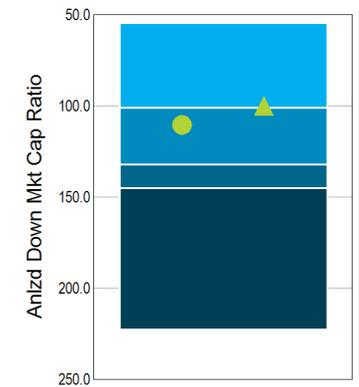
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



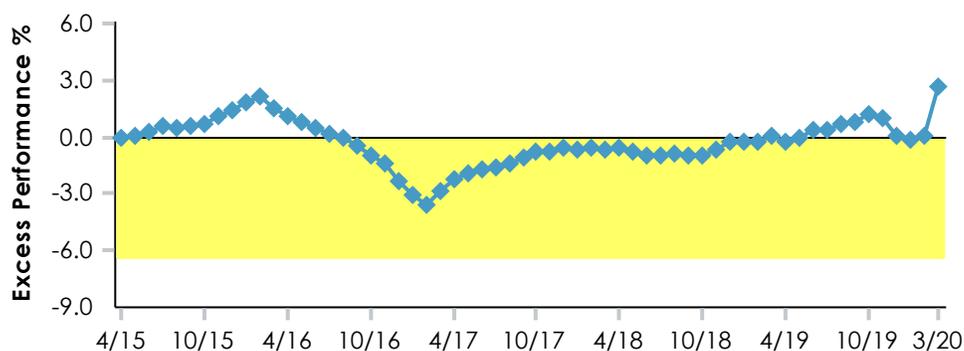
- TIAA-CREF Inflation Link Bond I
- ▲ BBgBarc US TIPS 1-10 Yr TR
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile

Fund Characteristics as of March 31, 2020		Top Holdings as of March 31, 2020		Fixed Income Sectors as of March 31, 2020	
Sharpe Ratio (3 Year)	0.28	UNITED STATES TREASURY NOTES 0.12%	4.92%	GOVERNMENT	98.22%
Average Duration	4.96	UNITED STATES TREASURY BONDS 3.88%	4.59%	MUNICIPAL	0.00%
Average Coupon	0.92%	UNITED STATES TREASURY NOTES 0.25%	4.56%	CORPORATE	0.43%
Average Effective Maturity	5.29	UNITED STATES TREASURY NOTES 0.5%	4.47%	SECURITIZED	1.26%
R-Squared (3 Year)	0.98	UNITED STATES TREASURY NOTES 0.62%	4.36%	CASH & EQUIVALENTS	0.09%
Alpha (3 Year)	0.00%	UNITED STATES TREASURY NOTES 0.12%	4.22%	DERIVATIVE	0.00%
Beta (3 Year)	0.96	UNITED STATES TREASURY NOTES 0.38%	4.10%		
		UNITED STATES TREASURY NOTES 0.12%	3.92%		
		UNITED STATES TREASURY NOTES 0.62%	3.92%		
		UNITED STATES TREASURY NOTES 0.88%	3.92%		

Credit Quality as of March 31, 2020		Maturities as of March 31, 2020		Top Countries as of March 31, 2020	
AAA	99.69%	1 to 3 Years	20.97%	United States	99.88%
AA	0.00%	3 to 5 Years	29.53%	India	0.12%
A	0.00%	5 to 7 Years	18.10%		
BBB	0.00%	7 to 10 Years	26.32%		
BB	0.00%	10 to 15 Years	2.32%		
B	0.00%	15 to 20 Years	0.30%		
Below B	0.00%	20 to 30 Years	0.57%		
Not Rated	0.31%	Greater than 30 Years	0.00%		

T. Rowe Price Floating Rate I vs. S&P/LSTA Performing Loans Index

Short-term (Rolling 12 Months Excess Performance)

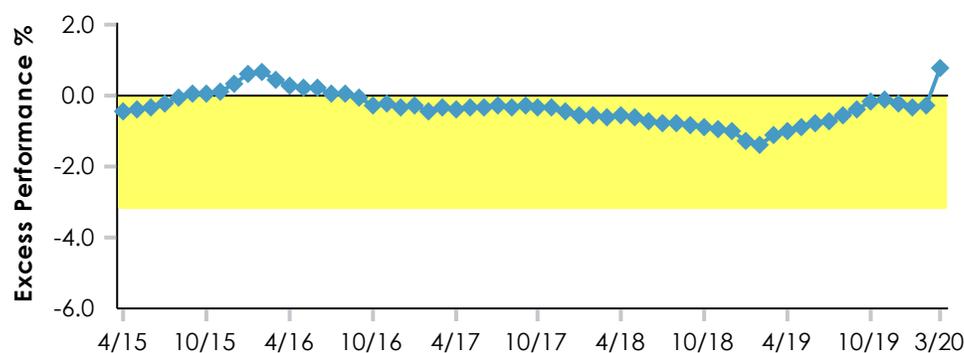


Short-Term Performance

Positive

Probationary Performance -6.50%

Medium-term (Rolling 36 Months Excess Performance)

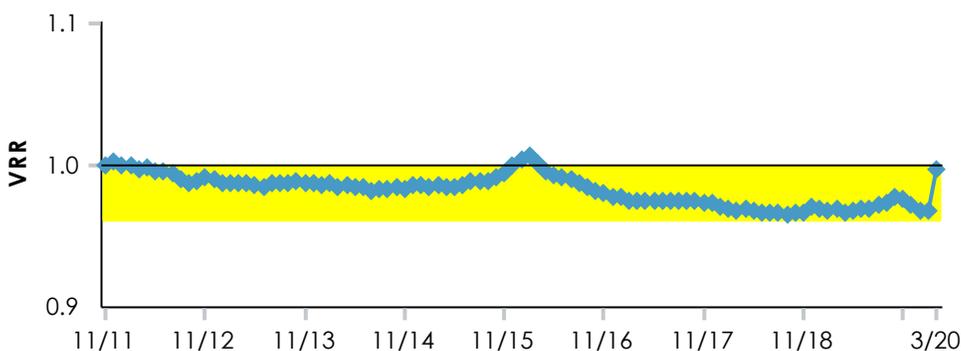


Medium-Term Performance

Positive

Probationary Performance -3.25%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Acceptable

Probationary Performance < 0.96

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
T. Rowe Price Floating Rate I	-11.3 (18)	-7.0 (13)	-0.1 (9)	1.5 (4)	3.1 (4)
S&P/LSTA Performing Loans Index	-13.5 (57)	-9.6 (46)	-0.9 (24)	1.3 (7)	3.1 (4)
IM U.S. Bank Loans (MF) Median	-13.1	-9.8	-1.6	0.4	2.2

Monitoring Status

Acceptable

Description:

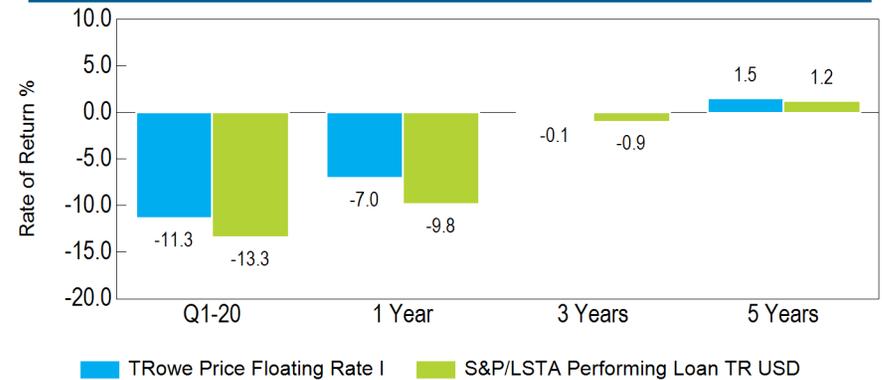
The investment seeks high current income and, secondarily, capital appreciation.

The fund invests at least 80% of its net assets (including any borrowings for investment purposes) in floating rate loans and floating rate debt securities. Floating rate loans represent amounts borrowed by companies or other entities from banks and other lenders. It may invest up to 20% of its net assets in fixed rate debt instruments. The fund may also invest up to 20% of its total assets in non-U.S. dollar-denominated loans and debt instruments (including instruments of issuers in emerging markets) in keeping with the fund's investment objective.

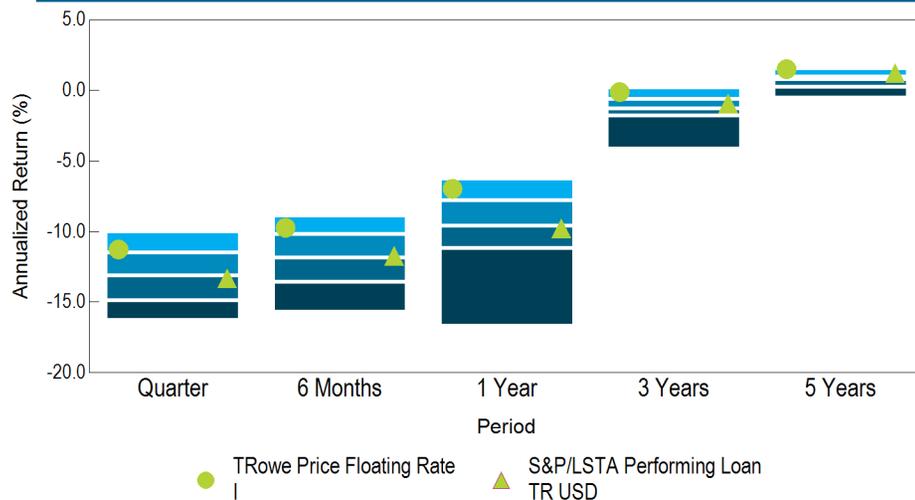
Portfolio Fund Information as of March 31, 2020

Ticker	RPIFX
Morningstar Category	Bank Loan
Average Market Cap (\$mm)	
Net Assets (\$mm)	2,238.90
% Assets in Top 10 Holdings	18.63
Total Number of Holdings	260
Manager Name	Paul M. Massaro
Manager Tenure	11
Expense Ratio	0.58%
Closed to New Investors	No

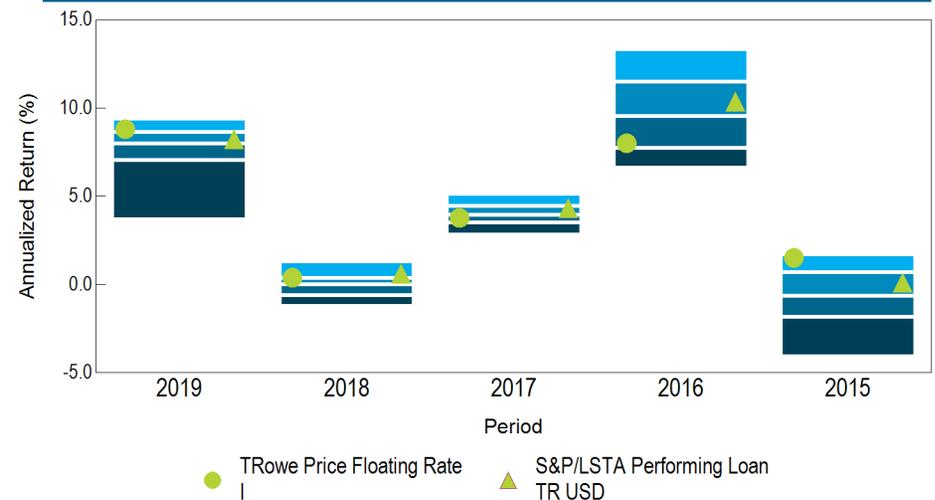
Return Summary



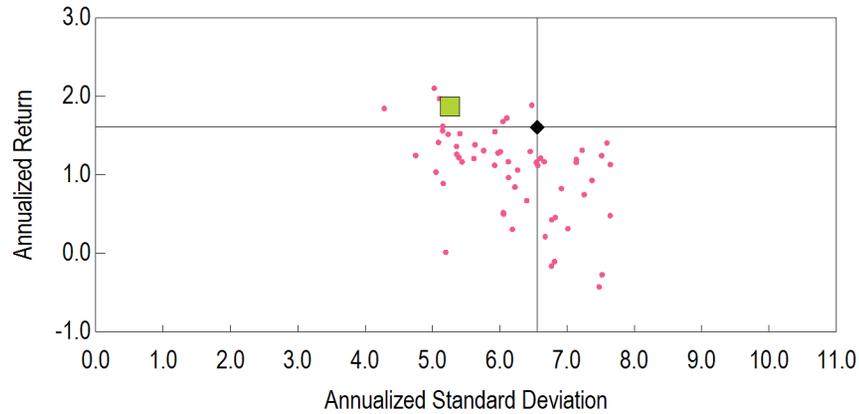
Bank Loan MStar MF Return Comparison



Bank Loan MStar MF Return Comparison

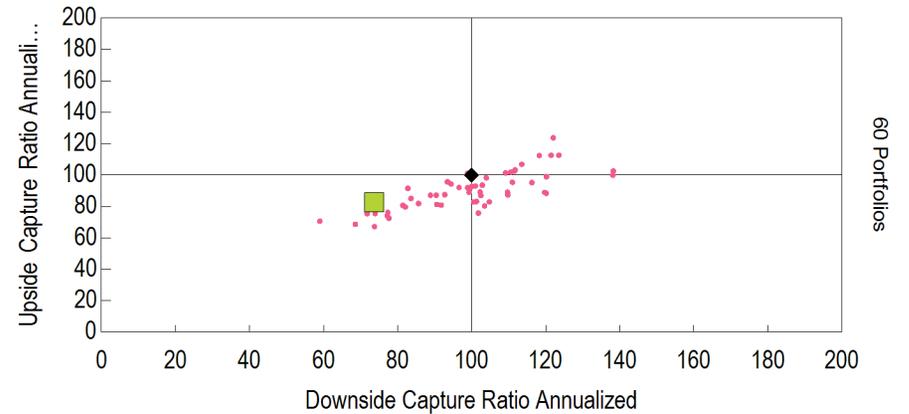


Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



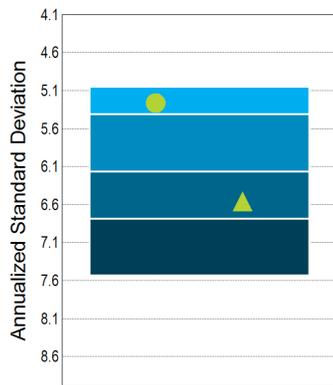
- TRowe Price Floating Rate I
- Bank Loan MStar MF
- ◆ S&P/LSTA Performing Loan TR USD

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



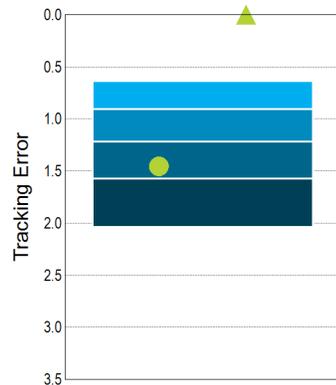
- TRowe Price Floating Rate I
- Bank Loan MStar MF
- ◆ S&P/LSTA Performing Loan TR USD

Annualized Standard Deviation



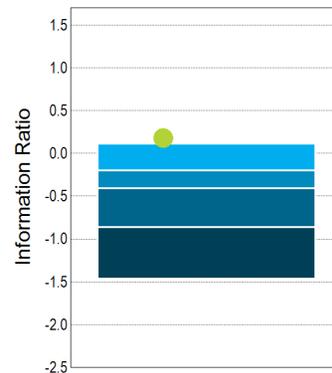
- TRowe Price Floating Rate I

Tracking Error

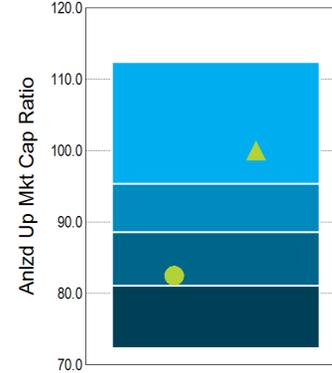


- ▲ S&P/LSTA Performing Loan TR USD

Information Ratio

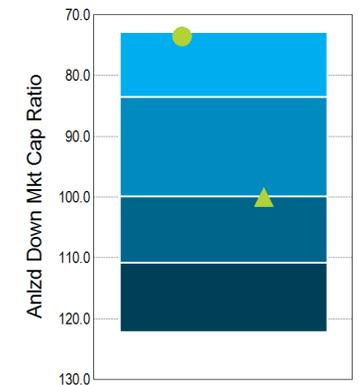


Anlzd Up Mkt Cap Ratio



- Median to 75th Percentile

Anlzd Down Mkt Cap Ratio



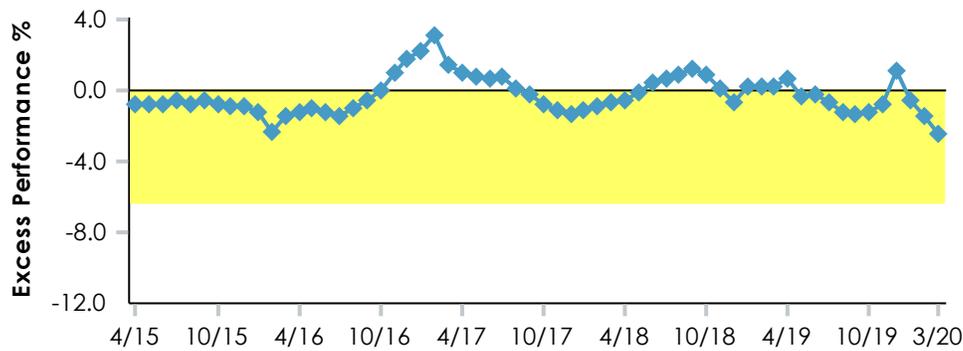
- 75th to 95th Percentile

Fund Characteristics as of March 31, 2020		Top Holdings as of March 31, 2020		Fixed Income Sectors as of March 31, 2020	
Sharpe Ratio (3 Year)	-0.28	ASURION	2.48%	GOVERNMENT	0.00%
Average Duration	0.77	UFC HOLDINGS	2.47%	MUNICIPAL	0.00%
Average Coupon	4.83%	KRONOS INC/MA	2.30%	CORPORATE	93.64%
Average Effective Maturity	5.14	REFINITIV US HOLDINGS	2.29%	SECURITIZED	0.18%
R-Squared (3 Year)	0.99	KRONOS INC/MA	1.88%	CASH & EQUIVALENTS	6.17%
Alpha (3 Year)	0.05%	ULTIMATE SOFTWARE	1.59%	DERIVATIVE	0.00%
Beta (3 Year)	0.80	HUB INTERNATIONAL	1.48%		
		IRIDIUM SATELLITE	1.40%		
		ASCEND LEARNING	1.39%		
		CCC INFORMATION SERVICES	1.36%		

Credit Quality as of March 31, 2020		Maturities as of March 31, 2020		Top Countries as of March 31, 2020	
AAA	8.20%	1 to 3 Years	9.21%	United States	92.08%
AA	0.00%	3 to 5 Years	31.17%	United Kingdom	2.07%
A	0.48%	5 to 7 Years	57.03%	Luxembourg	2.00%
BBB	0.98%	7 to 10 Years	2.21%	Canada	1.70%
BB	26.30%	10 to 15 Years	0.00%	France	1.21%
B	56.99%	15 to 20 Years	0.00%	Finland	0.32%
Below B	6.00%	20 to 30 Years	0.20%	Belgium	0.26%
Not Rated	1.05%	Greater than 30 Years	0.00%	Switzerland	0.20%
				Netherlands	0.17%

TIAA-CREF High-Yield I vs. ICE BofAML High Yield BB-B Constrained Index

Short-term (Rolling 12 Months Excess Performance)

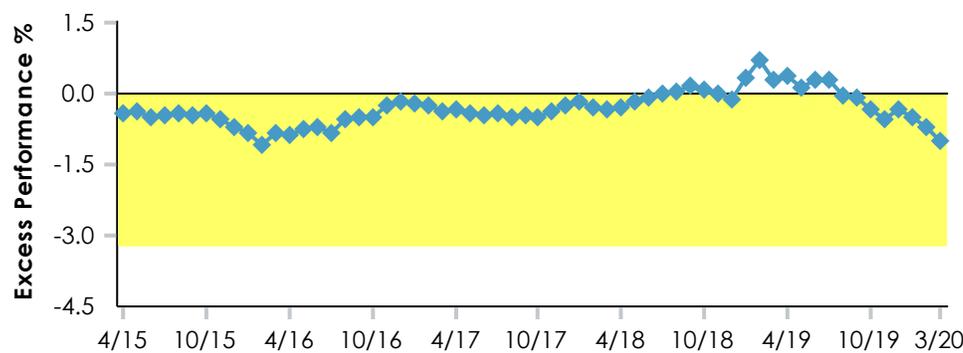


Short-Term Performance

Acceptable

Probationary Performance -6.50%

Medium-term (Rolling 36 Months Excess Performance)

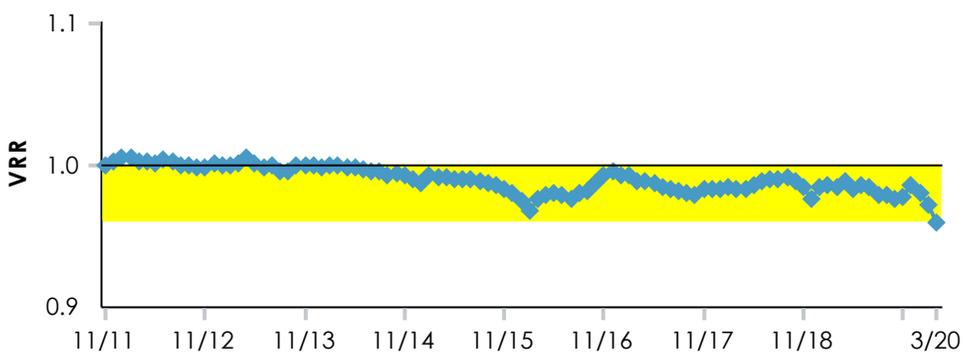


Medium-Term Performance

Acceptable

Probationary Performance -3.25%

Long-term (December 1, 2011 To March 31, 2020 VRR)



Long-Term Performance

Acceptable

Probationary Performance < 0.96

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF High-Yield I	-14.3 (70)	-8.0 (57)	0.3 (37)	2.2 (24)	4.7 (25)
ICE BofAML High Yield BB-B Constrained Index	-11.9 (30)	-5.6 (22)	1.3 (9)	2.9 (6)	5.2 (8)
IM U.S. High Yield Bonds (MF) Median	-12.8	-7.6	-0.1	1.6	4.3

Monitoring Status

Acceptable

Description:

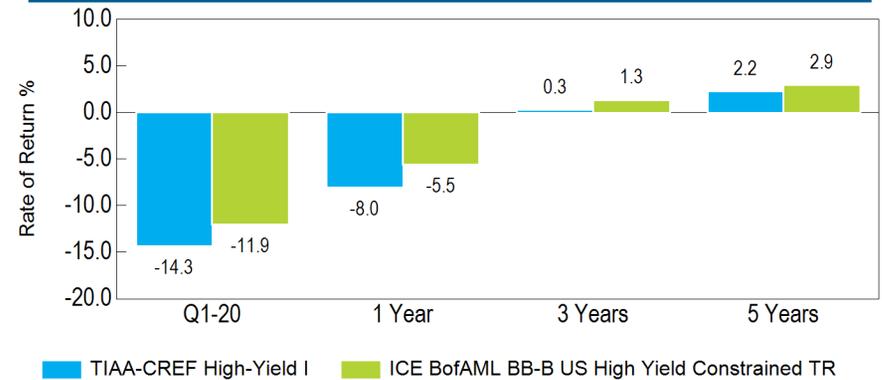
The investment seeks total return primarily through high current income and, when consistent with its primary objective, capital appreciation.

The fund invests primarily in lower-rated, higher-yielding fixed-income securities, such as domestic and foreign corporate bonds, debentures, loan participations and assignments and notes, as well as convertible and preferred securities. Under normal circumstances, it invests at least 80% of its assets in debt and other fixed-income securities rated lower than investment-grade (and their unrated equivalents) or other high-yielding debt securities.

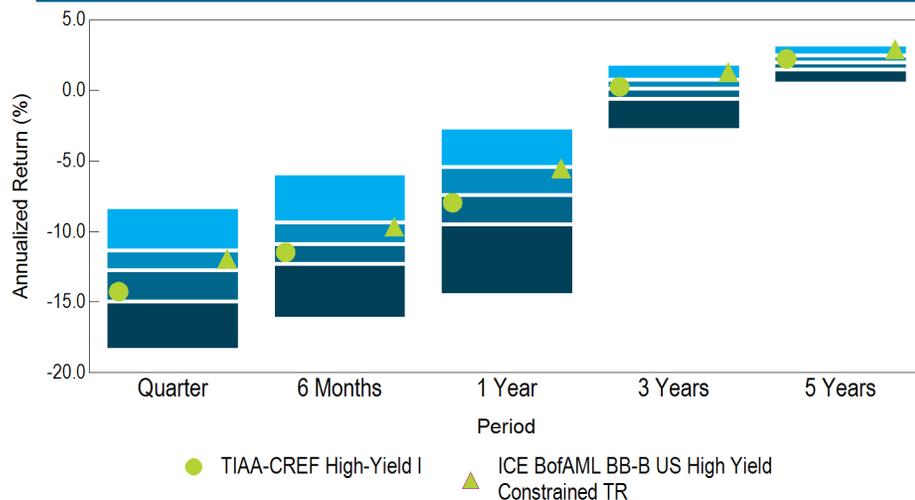
Portfolio Fund Information as of March 31, 2020

Ticker	TIHYX
Morningstar Category	High Yield Bond
Average Market Cap (\$mm)	283.43
Net Assets (\$mm)	2,273.83
% Assets in Top 10 Holdings	9.37
Total Number of Holdings	417
Manager Name	Kevin R. Lorenz
Manager Tenure	14
Expense Ratio	0.36%
Closed to New Investors	No

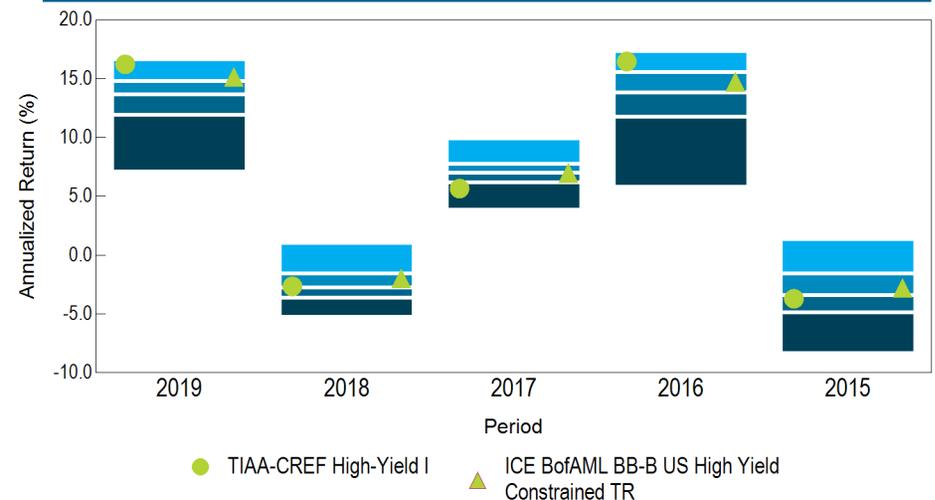
Return Summary



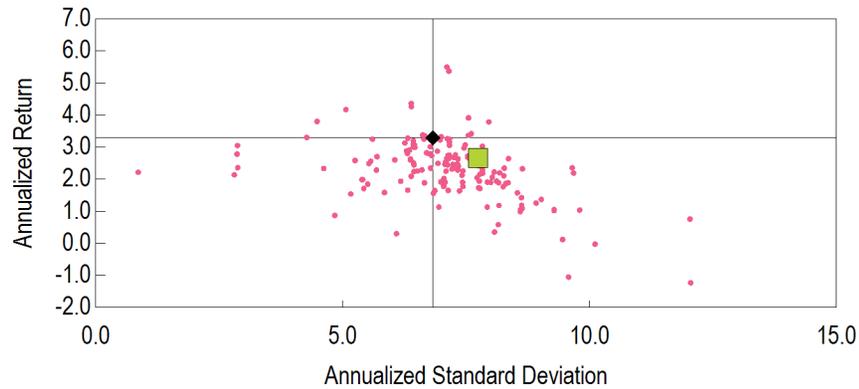
High Yield Bond MStar MF Return Comparison



High Yield Bond MStar MF Return Comparison

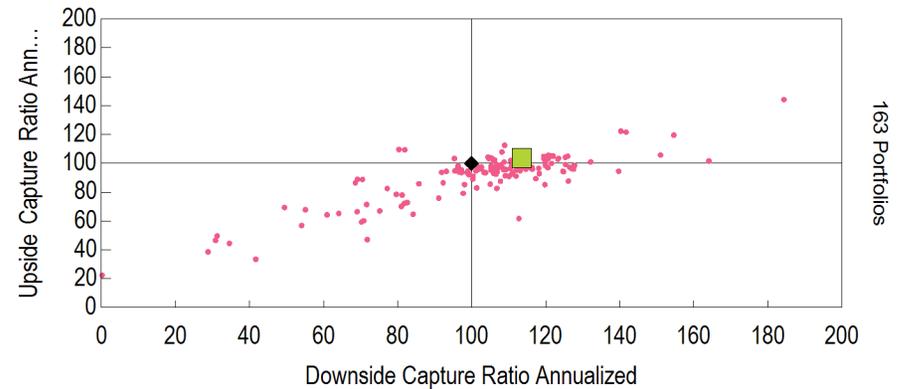


Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



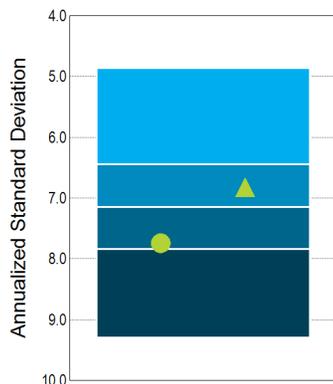
- TIAA-CREF High-Yield I
- ◆ ICE BofAML BB-B US High Yield Constrained TR
- High Yield Bond MStar MF

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



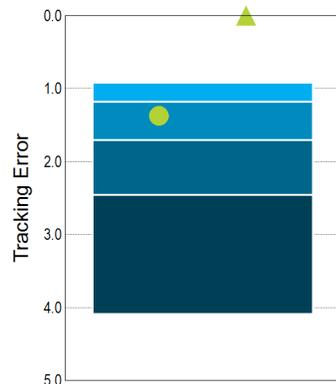
- TIAA-CREF High-Yield I
- ◆ ICE BofAML BB-B US High Yield Constrained TR
- High Yield Bond MStar MF

Annualized Standard Deviation



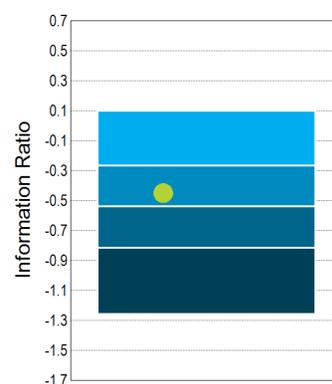
- TIAA-CREF High-Yield I

Tracking Error



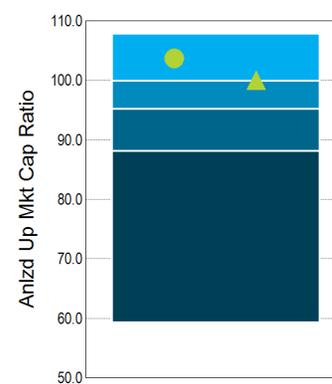
- ▲ ICE BofAML BB-B US High Yield Constrained TR

Information Ratio



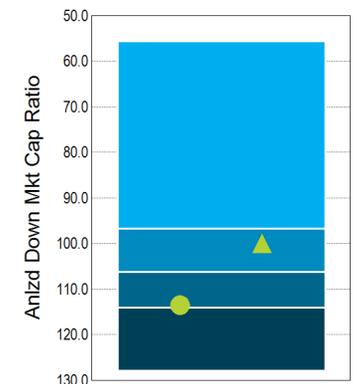
- TIAA-CREF High-Yield I

Anlzd Up Mkt Cap Ratio



- TIAA-CREF High-Yield I

Anlzd Down Mkt Cap Ratio



- ▲ ICE BofAML BB-B US High Yield Constrained TR

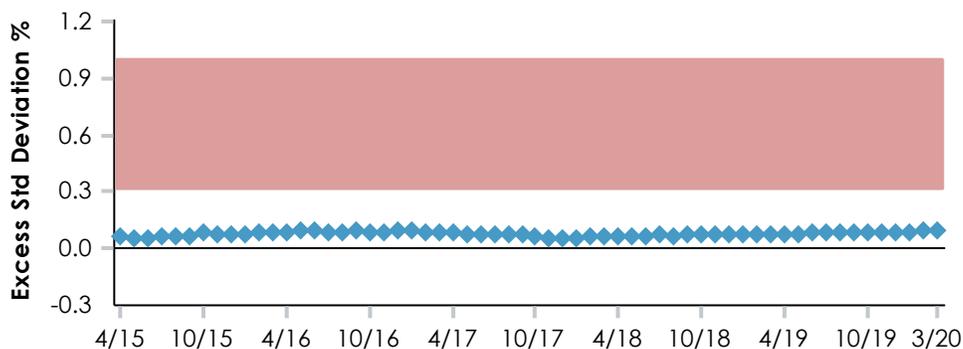
Fund Characteristics as of March 31, 2020		Top Holdings as of March 31, 2020		Fixed Income Sectors as of March 31, 2020	
Sharpe Ratio (3 Year)	-0.17	CCO HOLDINGS, LLC/ CCO HOLDINGS CAPITAL CORP. 5.88%	1.11%	GOVERNMENT	2.42%
Average Duration	3.50	HCA INC. 5.38%	1.07%	MUNICIPAL	0.00%
Average Coupon	5.75%	GATES GLOBAL LLC/GATES GLOBAL CO. 6.25%	1.03%	CORPORATE	89.53%
Average Effective Maturity	5.48	CSC HOLDINGS, LLC 7.5%	0.98%	SECURITIZED	0.00%
R-Squared (3 Year)	0.99	NOVA CHEMICALS CORPORATION 4.88%	0.97%	CASH & EQUIVALENTS	8.05%
Alpha (3 Year)	-0.10%	PRIME SECURITIES SERVICES BORROWER, LLC AND PRIME FINANCE, INC. 5.75%	0.93%	DERIVATIVE	0.00%
Beta (3 Year)	1.13	DISH DBS CORPORATION 7.75%	0.92%		
		COMMSCOPE TECHNOLOGIES LLC 6%	0.83%		
		ISHARES IBOXX \$ HIGH YIELD CORP BD ETF	0.77%		
		STAPLES, INC. 10.75%	0.77%		

Credit Quality as of March 31, 2020		Maturities as of March 31, 2020		Top Countries as of March 31, 2020	
AAA	10.42%	1 to 3 Years	6.90%	United States	88.88%
AA	0.00%	3 to 5 Years	25.06%	Canada	5.13%
A	0.00%	5 to 7 Years	42.87%	France	1.40%
BBB	0.07%	7 to 10 Years	20.50%	Netherlands	0.86%
BB	39.46%	10 to 15 Years	1.05%	Zambia	0.82%
B	43.43%	15 to 20 Years	0.13%	Ireland	0.62%
Below B	4.53%	20 to 30 Years	0.83%	Germany	0.61%
Not Rated	2.09%	Greater than 30 Years	0.01%	United Kingdom	0.46%
				Sweden	0.45%
				Italy	0.43%

Sensitivity Analyses: Passive Funds

TIAA-CREF Equity Index I vs. Russell 3000 Index

Short-term (Rolling 12 Months Tracking Error)

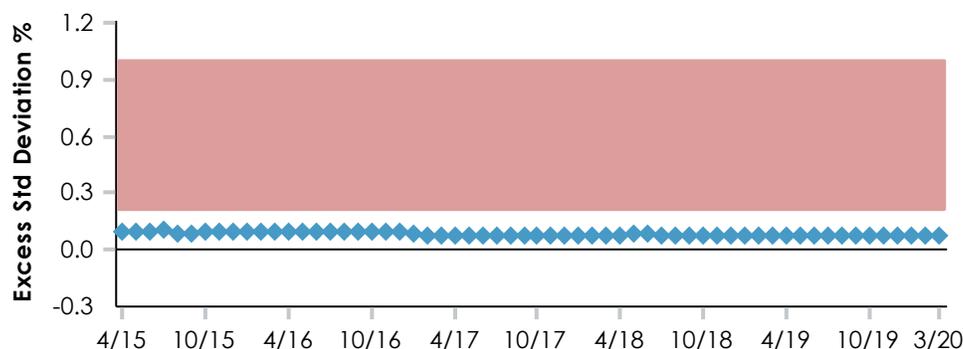


Short-Term Performance

Positive

Probationary Performance 0.30%

Medium-term (Rolling 36 Months Tracking Error)

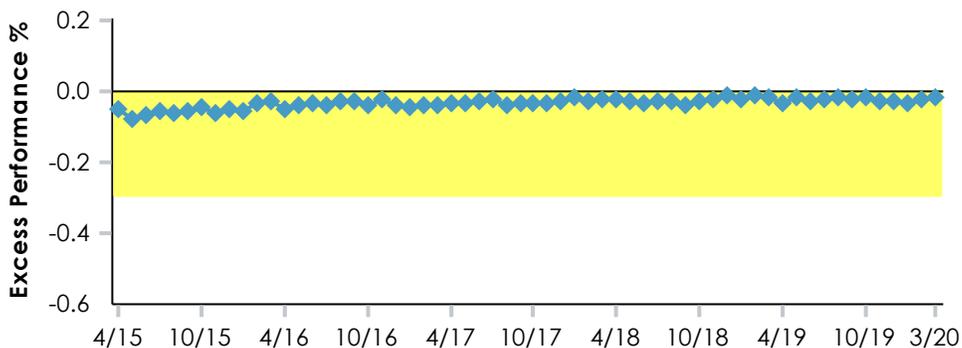


Medium-Term Performance

Positive

Probationary Performance 0.25%

Long-term (Rolling 60 Months Excess Performance)



Long-Term Performance

Acceptable

Probationary Performance -0.30%

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF Equity Index I	-20.9 (38)	-9.2 (30)	4.0 (22)	5.7 (14)	10.9 (12)
Russell 3000 Index	-20.9 (40)	-9.1 (30)	4.0 (21)	5.8 (13)	11.0 (11)
IM U.S. Multi-Cap Core Equity (MF) Median	-21.7	-11.7	1.8	3.3	9.1

Monitoring Status

Acceptable

Description:

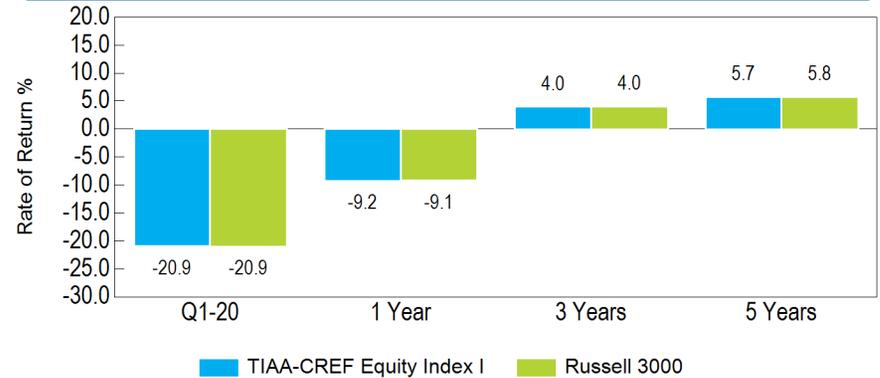
The investment seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities selected to track the overall U.S. equity markets based on a market index.

Under normal circumstances, the fund invests at least 80% of its assets in equity securities of its benchmark index, the Russell 3000® Index. It buys most, but not necessarily all, of the stocks in its benchmark index, and the advisor will attempt to closely match the overall investment characteristics of its benchmark index.

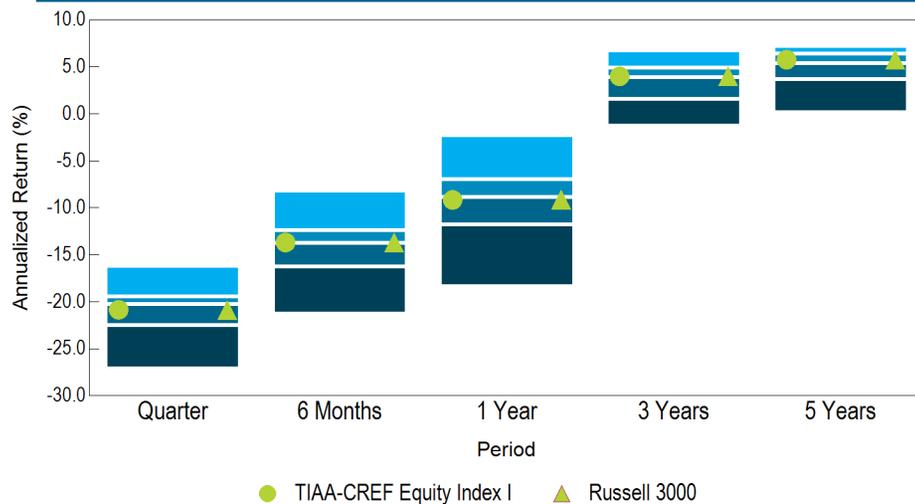
Portfolio Fund Information as of March 31, 2020

Ticker	TIEIX
Morningstar Category	Large Blend
Average Market Cap (\$mm)	68,352.20
Net Assets (\$mm)	7,489.37
% Assets in Top 10 Holdings	21.39
Total Number of Holdings	2,808
Manager Name	Philip James (Jim) Campagna
Manager Tenure	14
Expense Ratio	0.05%
Closed to New Investors	No

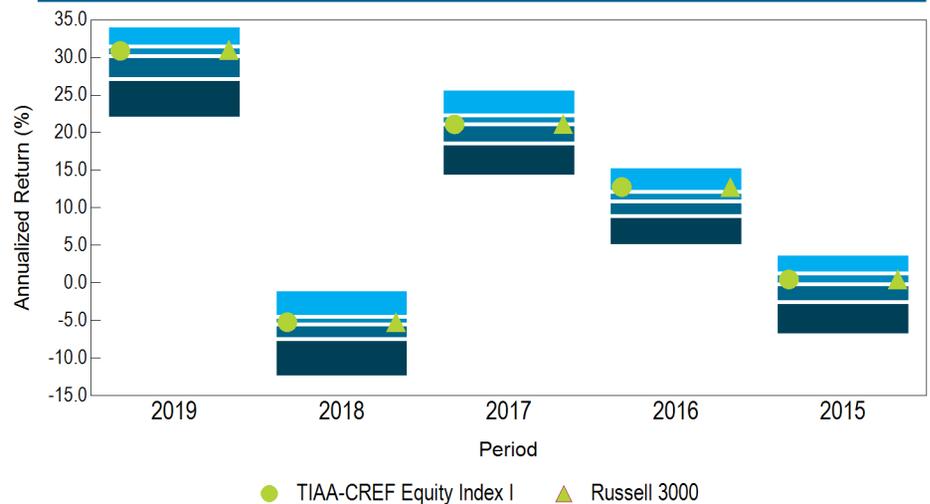
Return Summary



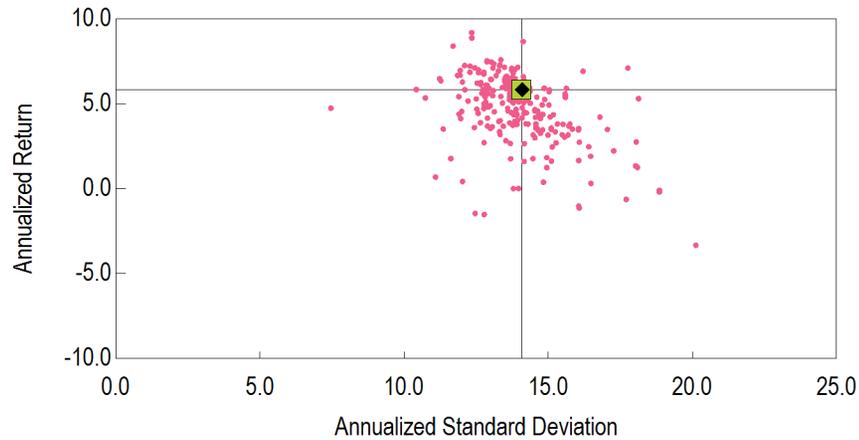
Large Blend MStar MF Return Comparison



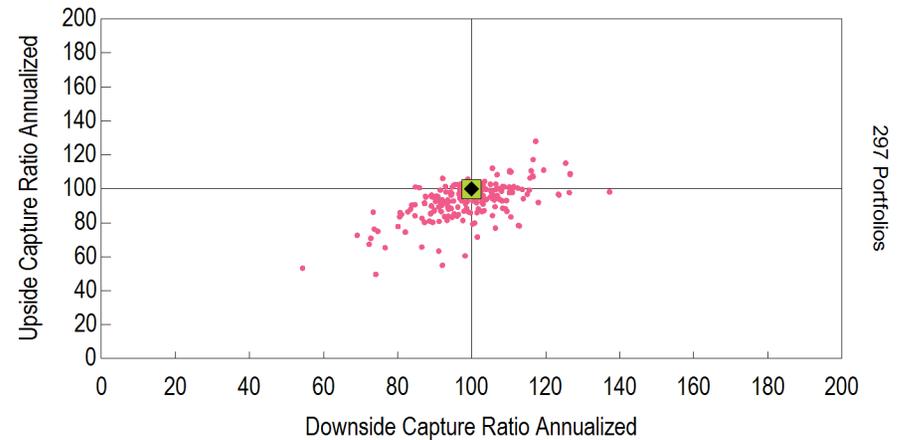
Large Blend MStar MF Return Comparison



Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



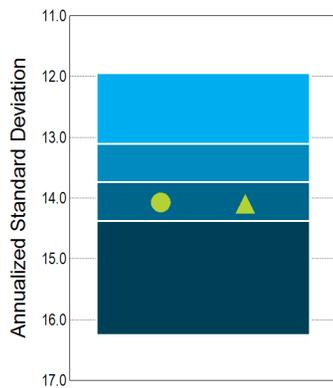
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



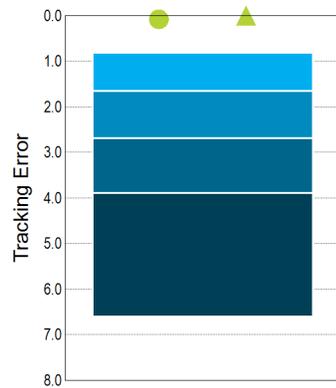
■ TIAA-CREF Equity Index I ◆ Russell 3000 ● Large Blend MStar MF

■ TIAA-CREF Equity Index I ◆ Russell 3000 ● Large Blend MStar MF

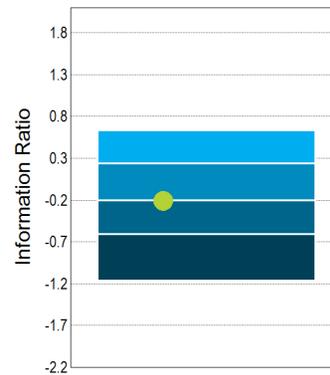
Annualized Standard Deviation



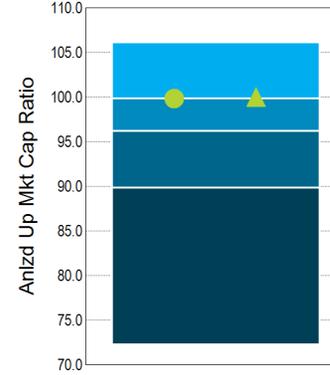
Tracking Error



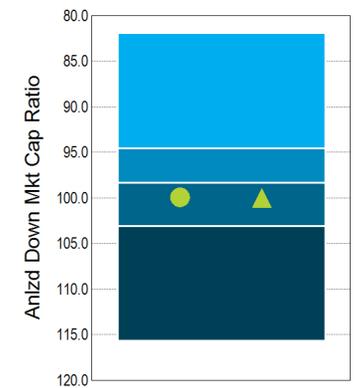
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



● TIAA-CREF Equity Index I ▲ Russell 3000 ■ 5th to 25th Percentile ■ 25th to Median ■ Median to 75th Percentile ■ 75th to 95th Percentile

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	0.14
Average Market Cap (\$mm)	68,352.20
Price/Earnings	15.86
Price/Book	2.24
Price/Sales	1.59
Price/Cash Flow	8.94
Dividend Yield	2.44
Number of Equity Holdings	2,781
R-Squared (3 Year)	1.00
Alpha (3 Year)	0.00%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	2.26%
COMMUNICATION SERVICES	9.92%
CONSUMER CYCLICAL	9.86%
CONSUMER DEFENSIVE	7.43%
ENERGY	2.47%
FINANCIAL SERVICES	13.77%
HEALTHCARE	15.76%
INDUSTRIALS	9.22%
REAL ESTATE	4.07%
TECHNOLOGY	21.73%
UTILITIES	3.50%

Top Holdings as of March 31, 2020

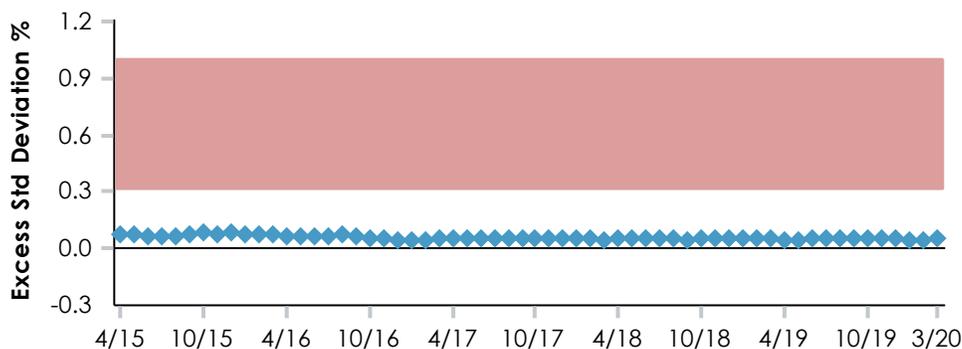
MICROSOFT CORP	4.71%
APPLE INC	4.14%
AMAZON.COM INC	3.22%
FACEBOOK INC A	1.57%
BERKSHIRE HATHAWAY INC CLASS B	1.41%
ALPHABET INC CLASS C	1.38%
JOHNSON & JOHNSON	1.38%
ALPHABET INC A	1.37%
JPMORGAN CHASE & CO	1.11%
VISA INC CLASS A	1.09%

Top Countries as of March 31, 2020

United States	98.81%
United Kingdom	0.51%
Switzerland	0.24%
Ireland	0.23%
China	0.12%
Puerto Rico	0.03%
India	0.02%
Canada	0.01%
Marshall Islands	0.01%
Taiwan	0.01%

TIAA-CREF S&P 500 Index I vs. S&P 500 Index

Short-term (Rolling 12 Months Tracking Error)

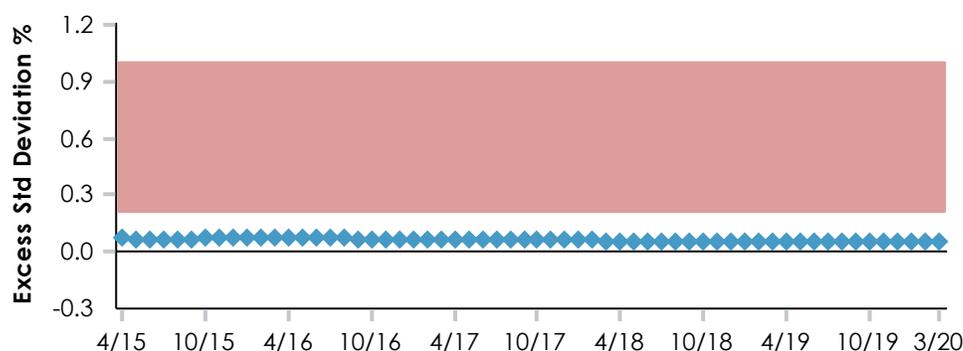


Short-Term Performance

Positive

Probationary Performance 0.30%

Medium-term (Rolling 36 Months Tracking Error)

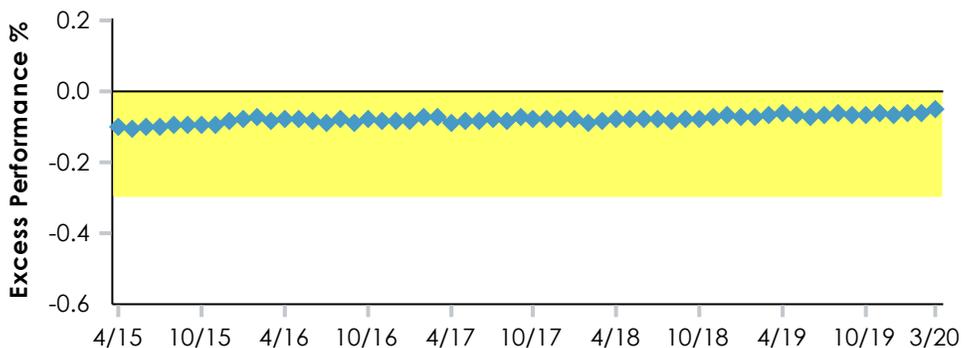


Medium-Term Performance

Positive

Probationary Performance 0.25%

Long-term (Rolling 60 Months Excess Performance)



Long-Term Performance

Acceptable

Probationary Performance -0.30%

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF S&P 500 Index I	-19.6 (17)	-7.0 (13)	5.1 (14)	6.7 (11)	11.4 (12)
S&P 500 Index	-19.6 (23)	-7.0 (8)	5.1 (4)	6.7 (2)	11.4 (1)
IM S&P 500 Index (MF) Median	-19.6	-7.3	4.8	6.3	11.0

Monitoring Status

Acceptable

Description:

The investment seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities of large domestic companies selected to track U.S. equity markets based on a market index.

The fund invests at least 80% of its assets in securities of its benchmark index, the S&P 500® Index. It buys most, but not necessarily all, of the stocks in its benchmark index, and the advisor will attempt to closely match the overall investment characteristics of the fund's benchmark index.

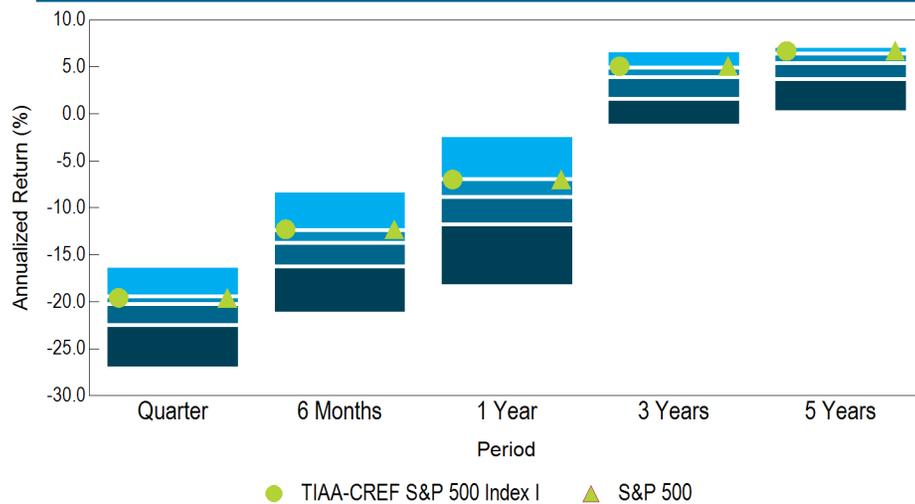
Portfolio Fund Information as of March 31, 2020

Ticker	TISPX
Morningstar Category	Large Blend
Average Market Cap (\$mm)	111,633.01
Net Assets (\$mm)	3,525.40
% Assets in Top 10 Holdings	24.92
Total Number of Holdings	515
Manager Name	Philip James (Jim) Campagna
Manager Tenure	14
Expense Ratio	0.05%
Closed to New Investors	No

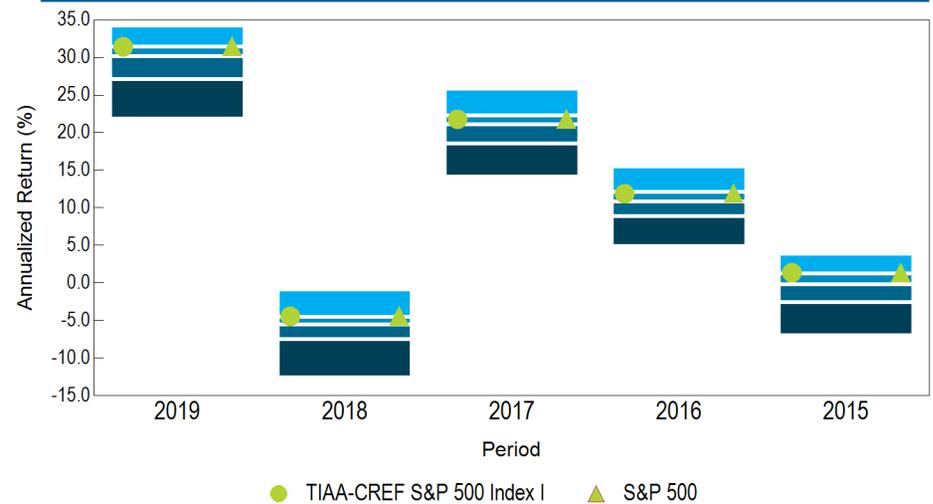
Return Summary



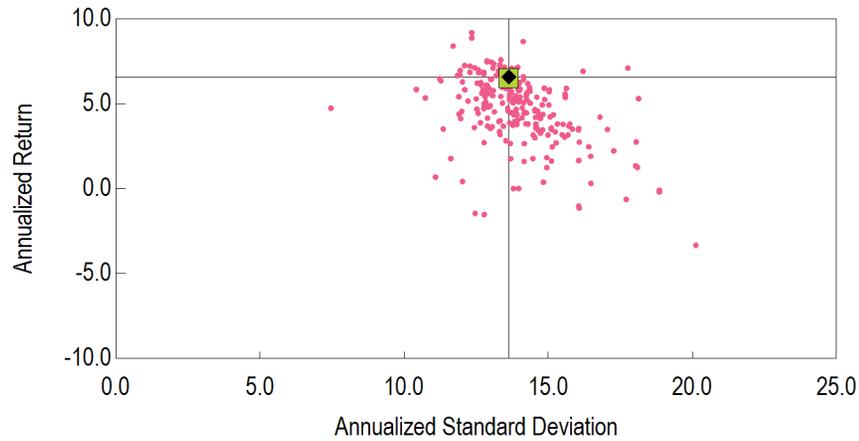
Large Blend MStar MF Return Comparison



Large Blend MStar MF Return Comparison

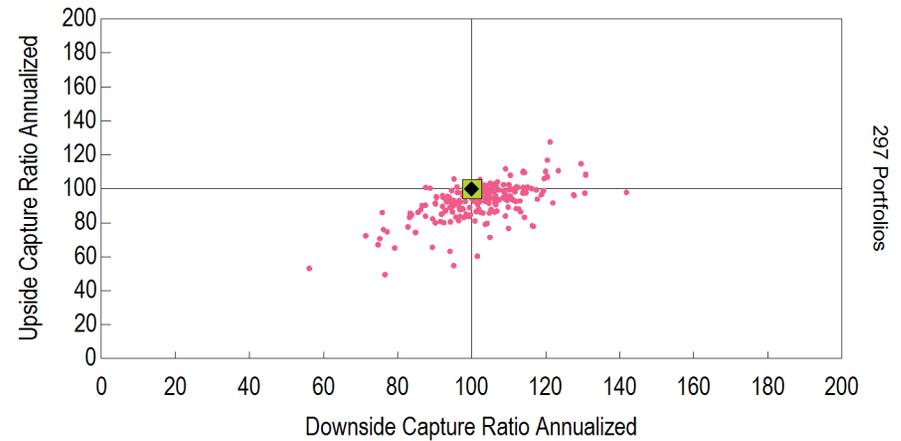


Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



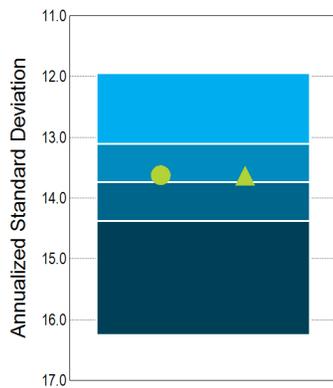
■ TIAA-CREF S&P 500 Index I ◆ S&P 500 ● Large Blend MStar MF

Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020

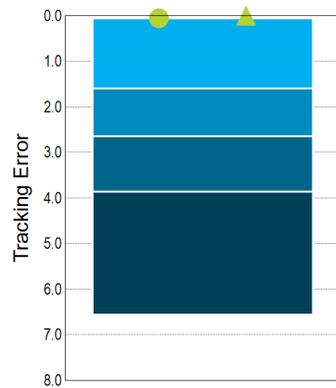


■ TIAA-CREF S&P 500 Index I ◆ S&P 500 ● Large Blend MStar MF

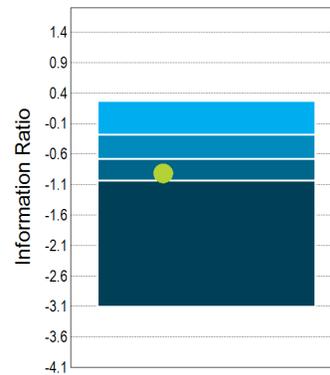
Annualized Standard Deviation



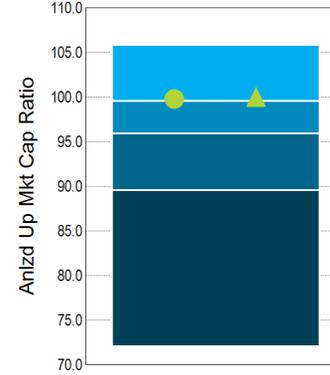
Tracking Error



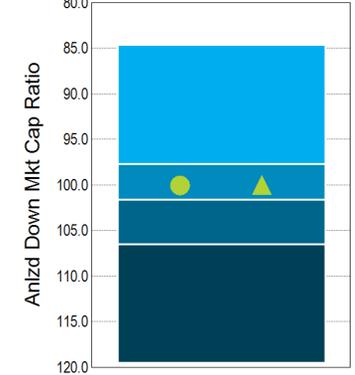
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



● TIAA-CREF S&P 500 Index I ▲ S&P 500 ■ 5th to 25th Percentile ■ 25th to Median ■ Median to 75th Percentile ■ 75th to 95th Percentile

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	0.22
Average Market Cap (\$mm)	111,633.01
Price/Earnings	16.14
Price/Book	2.42
Price/Sales	1.76
Price/Cash Flow	9.56
Dividend Yield	2.49
Number of Equity Holdings	505
R-Squared (3 Year)	1.00
Alpha (3 Year)	0.00%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	2.09%
COMMUNICATION SERVICES	10.75%
CONSUMER CYCLICAL	9.60%
CONSUMER DEFENSIVE	8.13%
ENERGY	2.65%
FINANCIAL SERVICES	13.79%
HEALTHCARE	15.54%
INDUSTRIALS	8.71%
REAL ESTATE	3.01%
TECHNOLOGY	22.17%
UTILITIES	3.56%

Top Holdings as of March 31, 2020

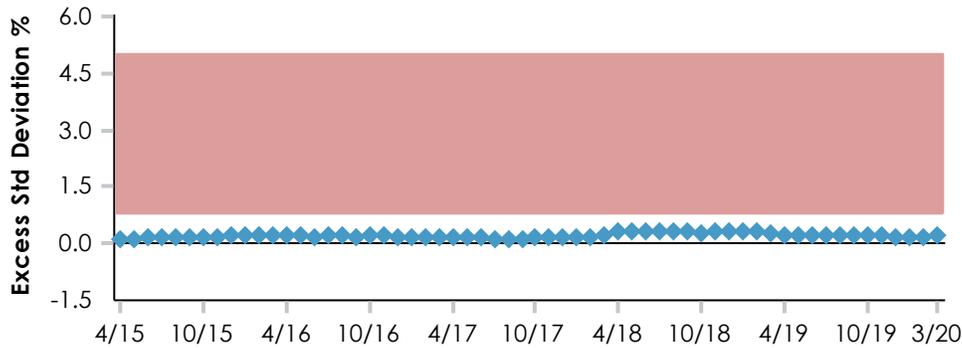
MICROSOFT CORP	5.52%
APPLE INC	4.87%
AMAZON.COM INC	3.72%
FACEBOOK INC A	1.84%
BERKSHIRE HATHAWAY INC CLASS B	1.64%
ALPHABET INC A	1.60%
ALPHABET INC CLASS C	1.59%
JOHNSON & JOHNSON	1.58%
JPMORGAN CHASE & CO	1.29%
VISA INC CLASS A	1.26%

Top Countries as of March 31, 2020

United States	98.75%
United Kingdom	0.63%
Switzerland	0.29%
Ireland	0.27%
Singapore	0.05%
Russia	0.01%

TIAA-CREF International Equity Index I (actual) vs. MSCI EAFE (Net) Index

Short-term (Rolling 12 Months Tracking Error)

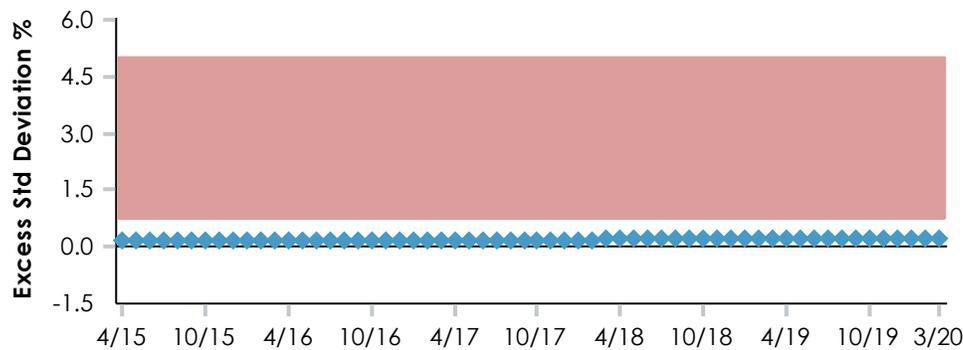


Short-Term Performance

Positive

Probationary Performance 0.75%

Medium-term (Rolling 36 Months Tracking Error)

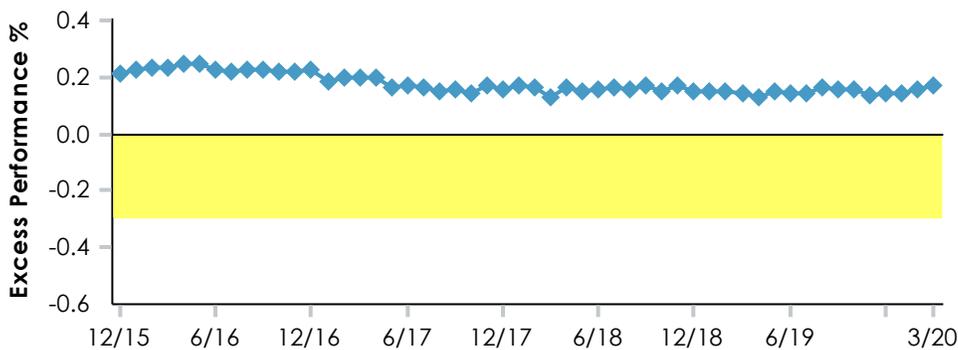


Medium-Term Performance

Positive

Probationary Performance 0.70%

Long-term (Rolling 60 Months Excess Performance)



Long-Term Performance

Positive

Probationary Performance -0.30%

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF International Equity Index I (actual)	-22.6 (27)	-14.1 (26)	-1.7 (17)	-0.4 (21)	4.1 (16)
MSCI EAFE (Net) Index	-22.8 (34)	-14.4 (27)	-1.8 (20)	-0.6 (28)	3.9 (23)
IM International Multi-Cap Core Equity (MF) Median	-23.6	-16.2	-3.0	-1.4	3.2

Monitoring Status

Positive

TIAA-CREF International Equity Index | As of March 31, 2020

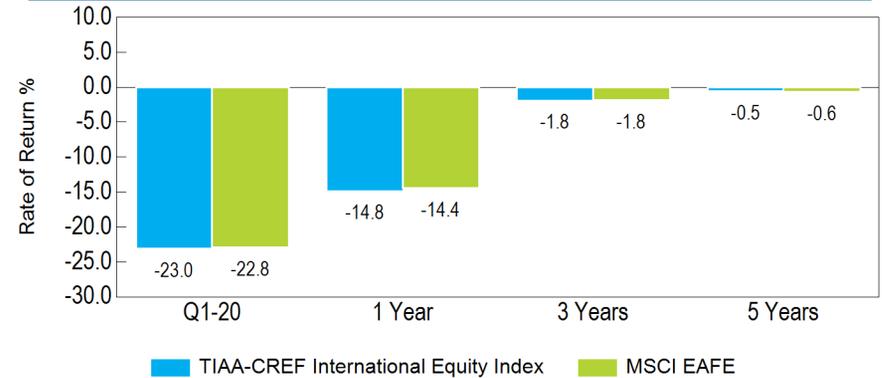
Description:

The investment seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of foreign equity investments based on a market index. Under normal circumstances, the fund invests at least 80% of its assets in securities of its benchmark index, the MSCI EAFE Index. It buys most, but not necessarily all, of the stocks included in its benchmark index, and the advisor will attempt to closely match the overall investment characteristics of the fund's benchmark index.

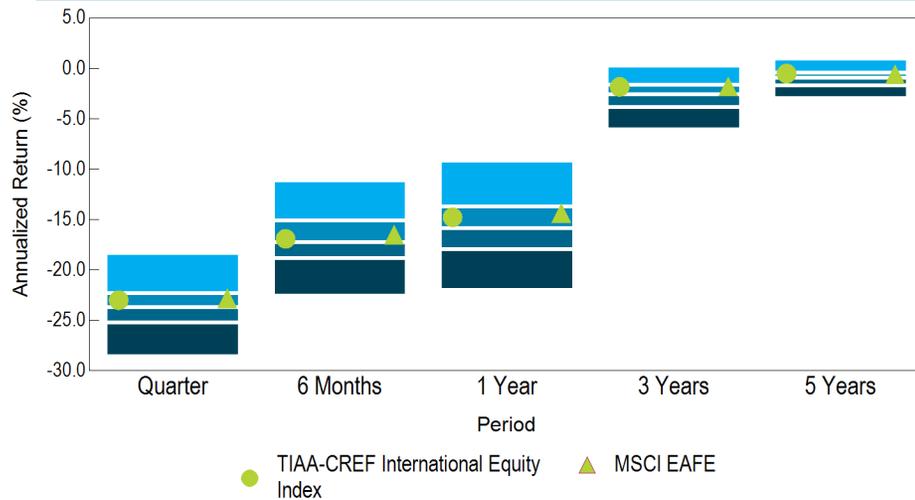
Portfolio Fund Information as of March 31, 2020

Ticker	TCIEX
Morningstar Category	Foreign Large Blend
Average Market Cap (\$mm)	31,072.76
Net Assets (\$mm)	6,561.87
% Assets in Top 10 Holdings	14.62
Total Number of Holdings	952
Manager Name	Philip James(Jim) Campagna
Manager Tenure	15
Expense Ratio	0.06%
Closed to New Investors	No

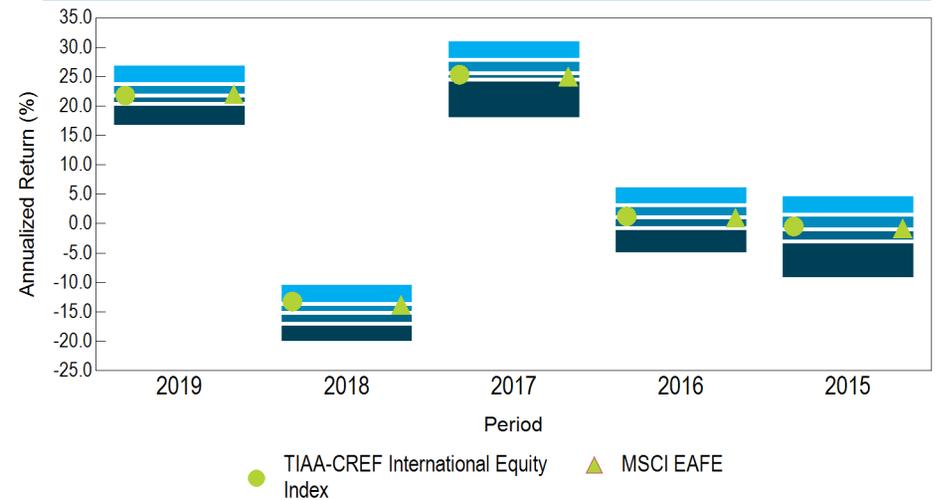
Return Summary



Foreign Large Blend MStar MF Return Comparison

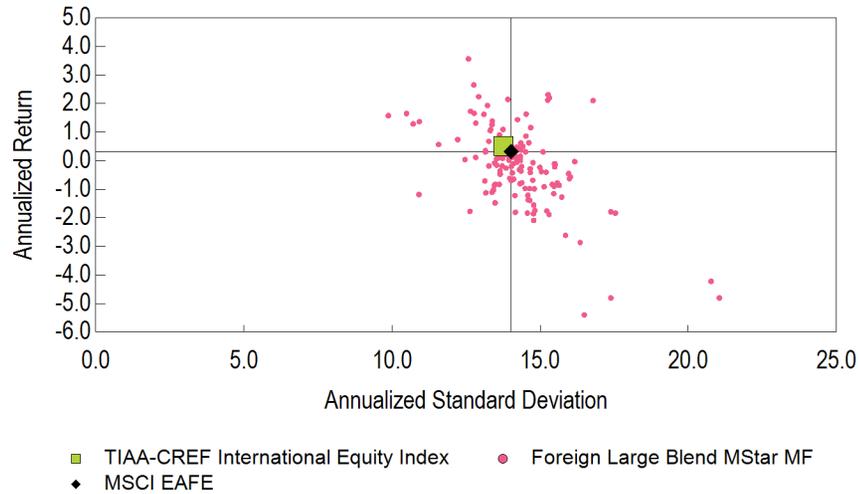


Foreign Large Blend MStar MF Return Comparison

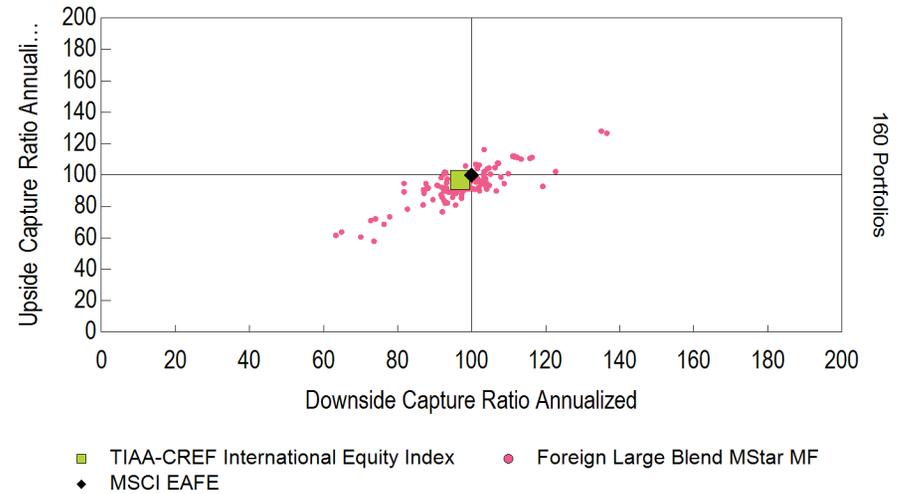


TIAA-CREF International Equity Index | As of March 31, 2020

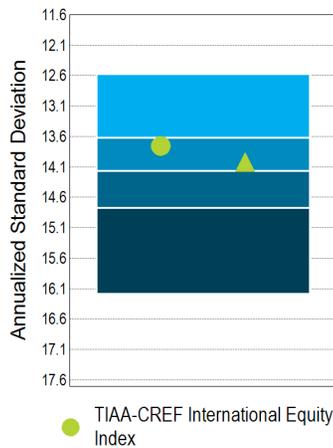
Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



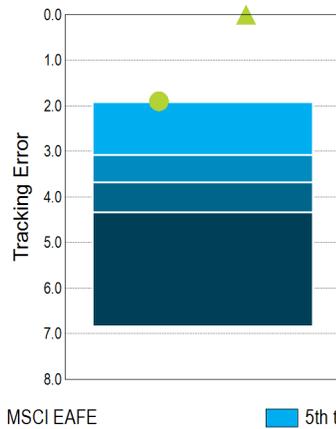
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



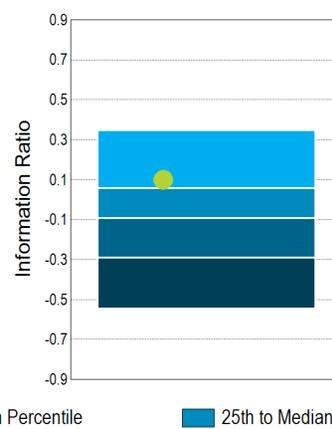
Annualized Standard Deviation



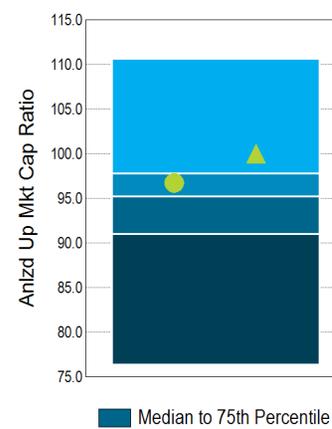
Tracking Error



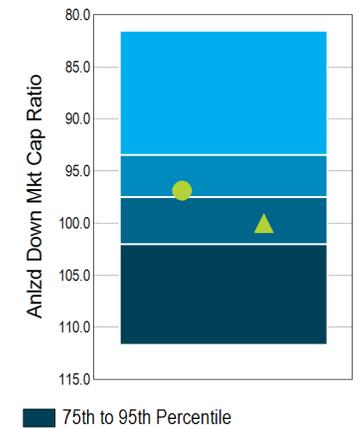
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



TIAA-CREF International Equity Index | As of March 31, 2020

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	-0.24
Average Market Cap (\$mm)	31,072.76
Price/Earnings	12.96
Price/Book	1.21
Price/Sales	0.93
Price/Cash Flow	5.48
Dividend Yield	4.30
Number of Equity Holdings	919
R-Squared (3 Year)	0.99
Alpha (3 Year)	0.00%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	6.65%
COMMUNICATION SERVICES	6.55%
CONSUMER CYCLICAL	9.51%
CONSUMER DEFENSIVE	12.62%
ENERGY	4.19%
FINANCIAL SERVICES	16.50%
HEALTHCARE	14.80%
INDUSTRIALS	13.93%
REAL ESTATE	3.26%
TECHNOLOGY	7.91%
UTILITIES	4.09%

Top Holdings as of March 31, 2020

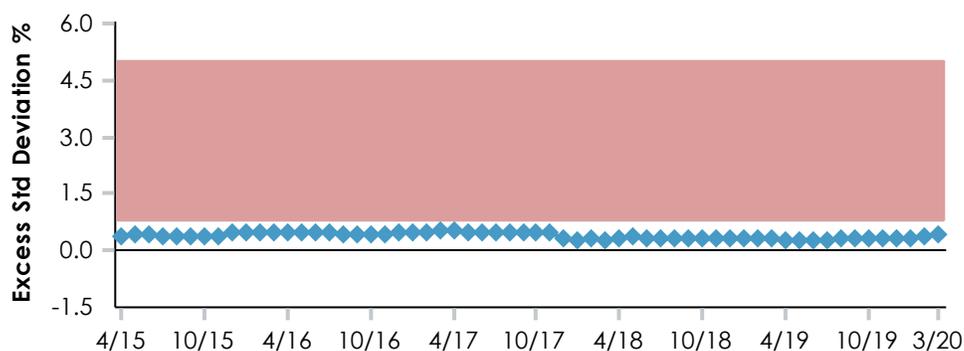
FUTURE ON MSCI EAFE JUN20	2.88%
NESTLE SA	2.54%
ROCHE HOLDING AG DIVIDEND RIGHT CERT.	1.89%
NOVARTIS AG	1.48%
TOYOTA MOTOR CORP	1.15%
ASTRAZENECA PLC	0.97%
HSBC HOLDINGS PLC	0.95%
ASML HOLDING NV ADR	0.94%
SAP SE	0.92%
AIA GROUP LTD	0.90%

Top Countries as of March 31, 2020

Japan	26.11%
United Kingdom	15.02%
Switzerland	10.76%
France	10.06%
Germany	8.15%
Australia	5.86%
Netherlands	4.16%
Hong Kong	3.16%
Spain	2.56%
Sweden	2.50%

TIAA-CREF Emerging Markets Equity Index (actual) vs. MSCI Emerging Markets

Short-term (Rolling 12 Months Tracking Error)

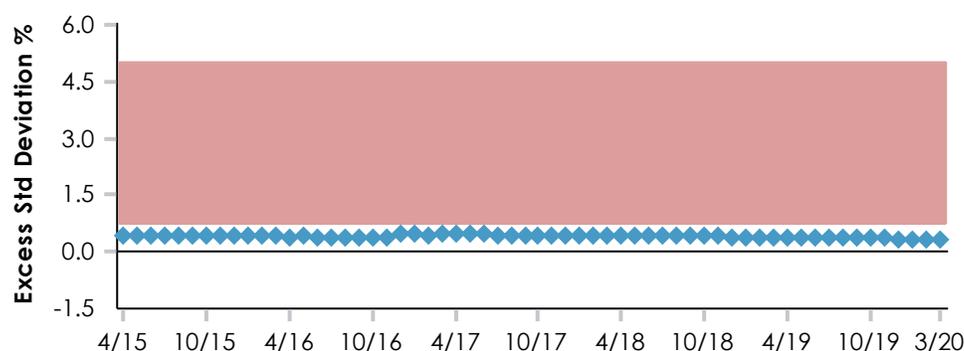


Short-Term Performance

Positive

Probationary Performance 0.75%

Medium-term (Rolling 36 Months Tracking Error)

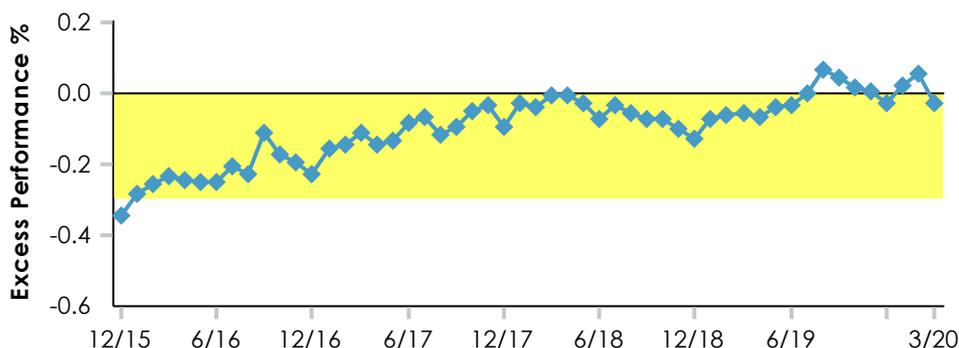


Medium-Term Performance

Positive

Probationary Performance 0.70%

Long-term (Rolling 60 Months Excess Performance)



Long-Term Performance

Positive

Probationary Performance -0.30%

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF Emerging Markets Equity Index (actual)	-23.6 (35)	-17.8 (47)	-1.8 (33)	-0.4 (36)	1.2 (42)
MSCI Emerging Markets (Net)	-23.6 (35)	-17.7 (46)	-1.6 (32)	-0.4 (36)	1.3 (40)
IM Emerging Markets Equity (MF) Median	-24.8	-18.3	-3.0	-1.1	0.7

Monitoring Status

Positive

TIAA-CREF Emerging Markets Equity Index | As of March 31, 2020

Description:

The investment seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of emerging market equity investments based on a market index. Under normal circumstances, the fund invests at least 80% of its assets in equity securities that comprise its benchmark index, the MSCI Emerging Markets® Index ("MSCI EM Index"), or in instruments with economic characteristics similar to all or a portion of the MSCI EM Index. It buys most, but not necessarily all, of the stocks in its benchmark index, and the advisor will attempt to closely match the overall investment attributes of the fund's benchmark index.

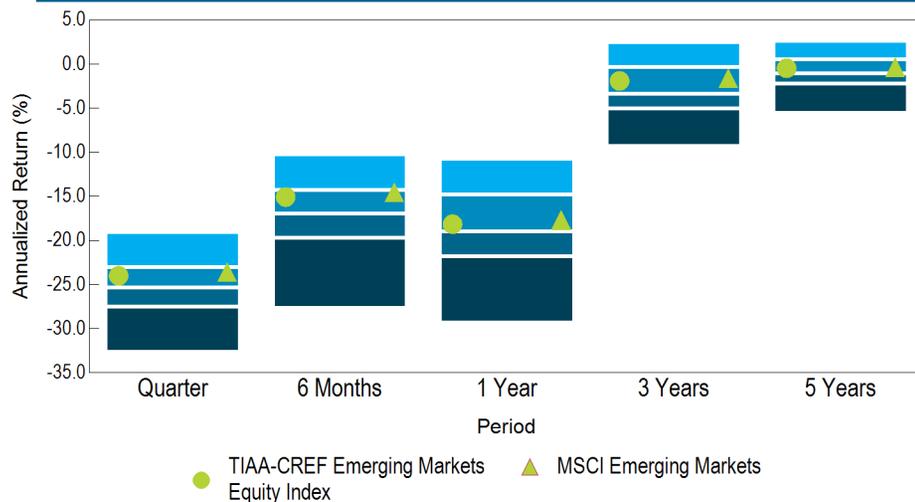
Portfolio Fund Information as of March 31, 2020

Ticker	TEQLX
Morningstar Category	Diversified Emerging Mkts
Average Market Cap (\$mm)	32,625.04
Net Assets (\$mm)	693.65
% Assets in Top 10 Holdings	28.93
Total Number of Holdings	1,411
Manager Name	Philip James (Jim) Campagna
Manager Tenure	10
Expense Ratio	0.20%
Closed to New Investors	No

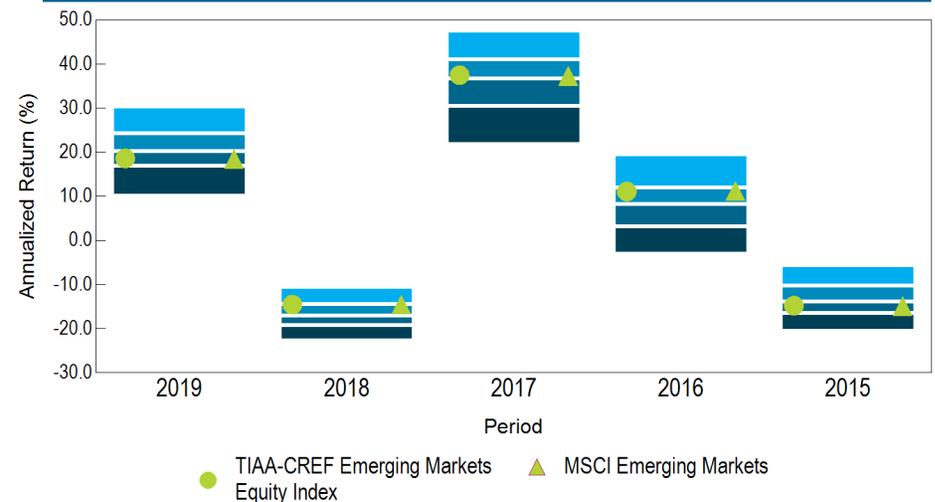
Return Summary



Diversified Emerging Mkts MStar MF Return Comparison

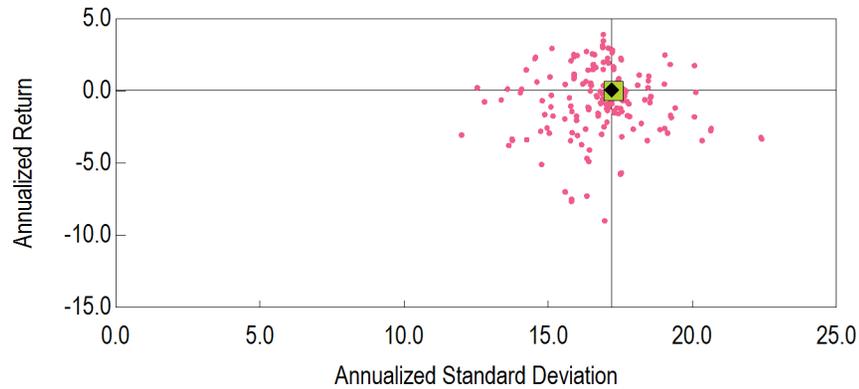


Diversified Emerging Mkts MStar MF Return Comparison

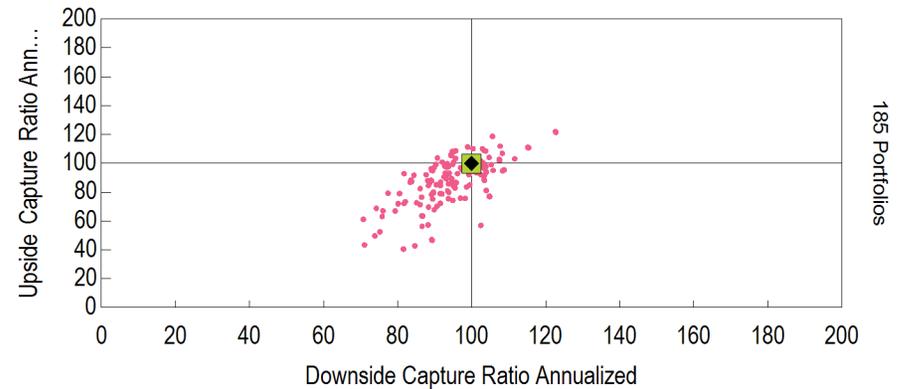


TIAA-CREF Emerging Markets Equity Index | As of March 31, 2020

Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



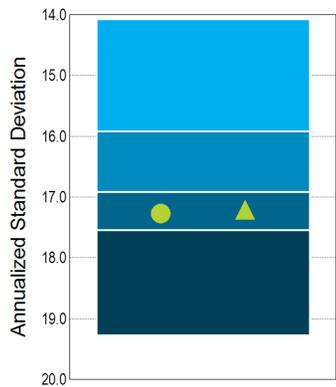
Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020



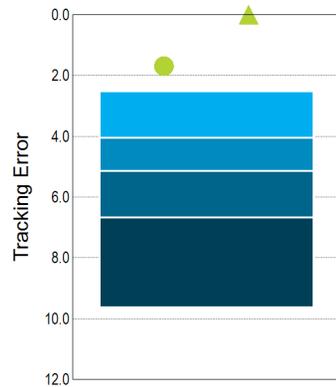
- TIAA-CREF Emerging Markets Equity Index
- ◆ MSCI Emerging Markets
- Diversified Emerging Mkts MStar MF

- TIAA-CREF Emerging Markets Equity Index
- ◆ MSCI Emerging Markets
- Diversified Emerging Mkts MStar MF

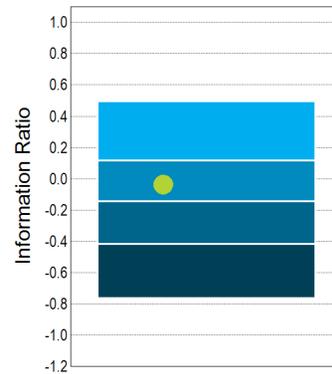
Annualized Standard Deviation



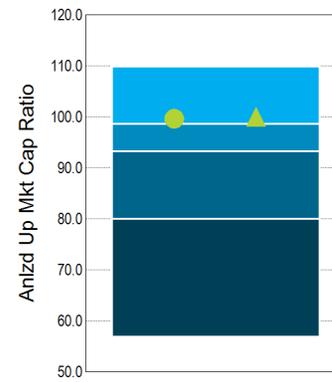
Tracking Error



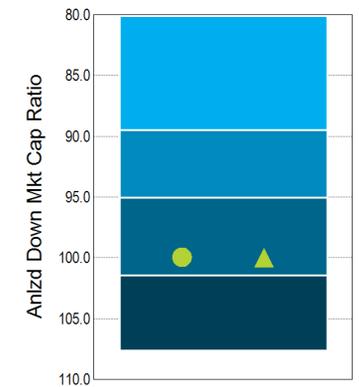
Information Ratio



Anlzd Up Mkt Cap Ratio



Anlzd Down Mkt Cap Ratio



- TIAA-CREF Emerging Markets Equity Index
- ▲ MSCI Emerging Markets
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile

TIAA-CREF Emerging Markets Equity Index | As of March 31, 2020

Fund Characteristics as of March 31, 2020

Sharpe Ratio (3 Year)	-0.21
Average Market Cap (\$mm)	32,625.04
Price/Earnings	11.28
Price/Book	1.16
Price/Sales	0.95
Price/Cash Flow	4.40
Dividend Yield	3.85
Number of Equity Holdings	1,390
R-Squared (3 Year)	0.99
Alpha (3 Year)	-0.02%

Sector Allocation as of March 31, 2020

BASIC MATERIALS	6.70%
COMMUNICATION SERVICES	14.72%
CONSUMER CYCLICAL	13.60%
CONSUMER DEFENSIVE	6.92%
ENERGY	5.49%
FINANCIAL SERVICES	21.48%
HEALTHCARE	3.66%
INDUSTRIALS	5.12%
REAL ESTATE	3.04%
TECHNOLOGY	16.85%
UTILITIES	2.41%

Top Holdings as of March 31, 2020

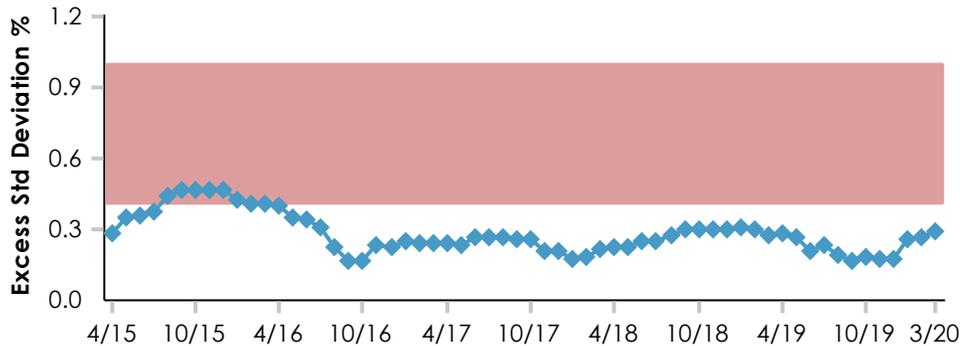
ALIBABA GROUP HOLDING LTD ADR	6.92%
TENCENT HOLDINGS LTD	5.80%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	4.54%
SAMSUNG ELECTRONICS CO LTD	3.80%
VANGUARD FTSE EMERGING MARKETS ETF	1.98%
CHINA CONSTRUCTION BANK CORP CLASS H	1.61%
NASPERS LTD CLASS N	1.29%
PING AN INSURANCE (GROUP) CO. OF CHINA LTD CLASS H	1.12%
CHINA MOBILE LTD	0.95%
INDUSTRIAL AND COMMERCIAL BANK OF CHINA LTD CLASS H	0.92%

Top Countries as of March 31, 2020

China	39.86%
Taiwan	12.39%
South Korea	12.05%
India	7.75%
Brazil	4.88%
South Africa	3.61%
Russia	3.18%
Saudi Arabia	2.60%
Thailand	2.14%
Malaysia	1.93%

TIAA-CREF Bond Index I vs. BBg BC U.S. Aggregate Index

Short-term (Rolling 12 Months Tracking Error)

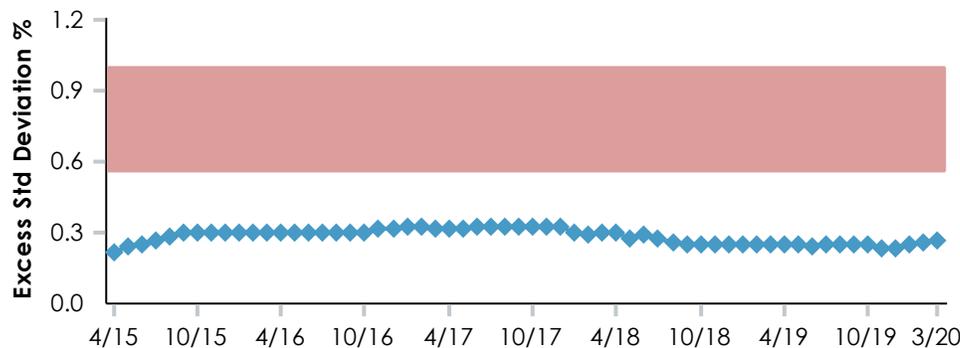


Short-Term Performance

Positive

Probationary Performance 0.40%

Medium-term (Rolling 36 Months Tracking Error)

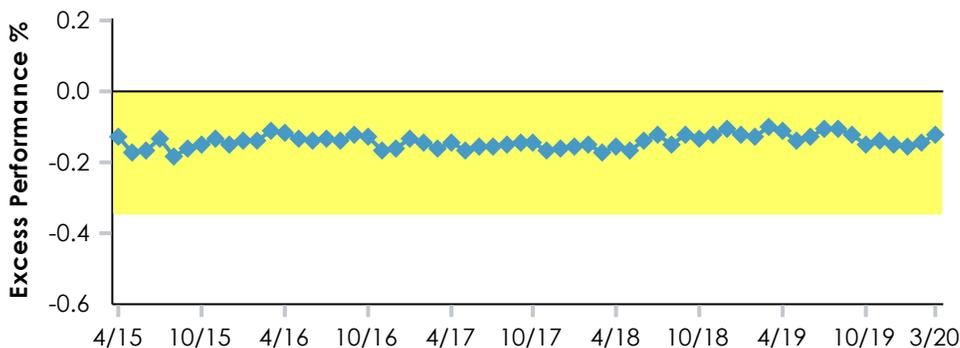


Medium-Term Performance

Positive

Probationary Performance 0.55%

Long-term (Rolling 60 Months Excess Performance)



Long-Term Performance

Acceptable

Probationary Performance -0.35%

Annualized Performance Results (Net of management fees)

	Qtr	1 Year	3 Years	5 Years	Inception (12/2011)
TIAA-CREF Bond Index I	3.3 (12)	8.8 (12)	4.7 (11)	3.2 (15)	3.2 (50)
BBg BC U.S. Aggregate Index	3.1 (16)	8.9 (11)	4.8 (7)	3.4 (7)	3.3 (34)
IM U.S. Broad Market Core Fixed Income (MF) Median	0.6	6.2	3.8	2.7	3.2

Monitoring Status

Acceptable

Description:

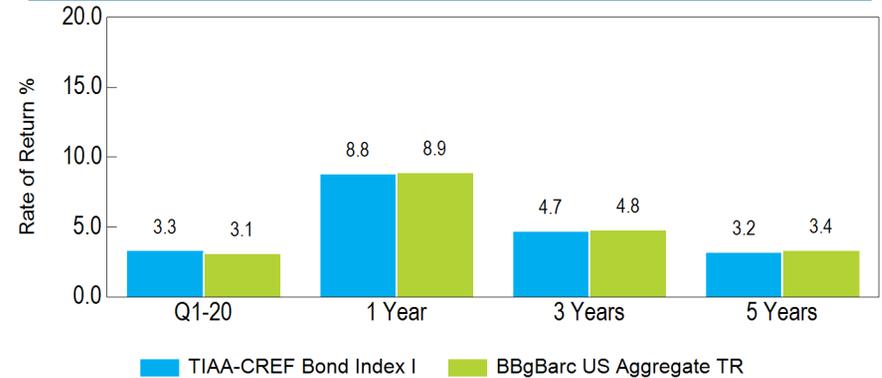
The investment seeks total return that corresponds with the total return of a broad U.S. investment-grade bond market index.

The fund invests at least 80% of its assets in bonds within its benchmark and portfolio tracking index, the Bloomberg Barclays U.S. Aggregate Bond Index. The securities purchased by the fund will mainly be high-quality instruments rated in the top four credit categories by Moody's or S&P or deemed to be of the same quality by the advisors using its own credit quality analysis.

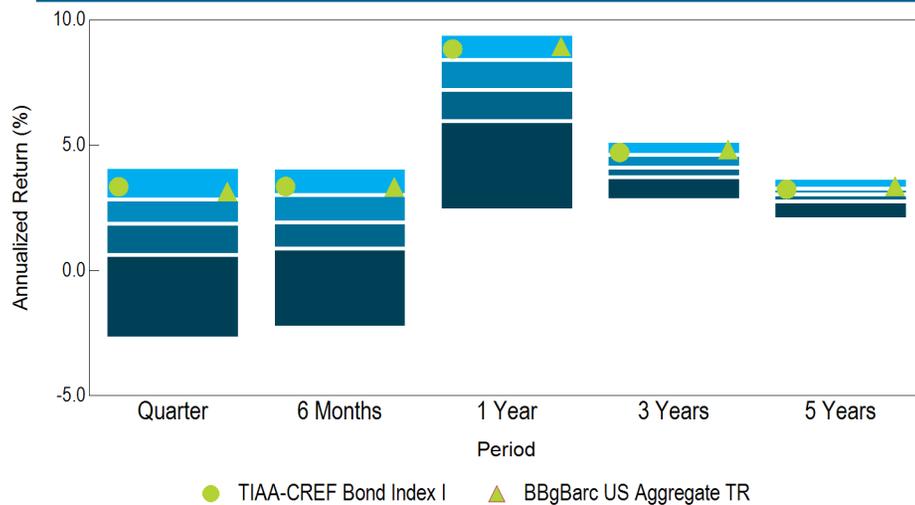
Portfolio Fund Information as of March 31, 2020

Ticker	TBIX
Morningstar Category	Intermediate Core Bond
Average Market Cap (\$mm)	
Net Assets (\$mm)	10,047.04
% Assets in Top 10 Holdings	11.71
Total Number of Holdings	7,251
Manager Name	Lijun (Kevin) Chen
Manager Tenure	10
Expense Ratio	0.11%
Closed to New Investors	No

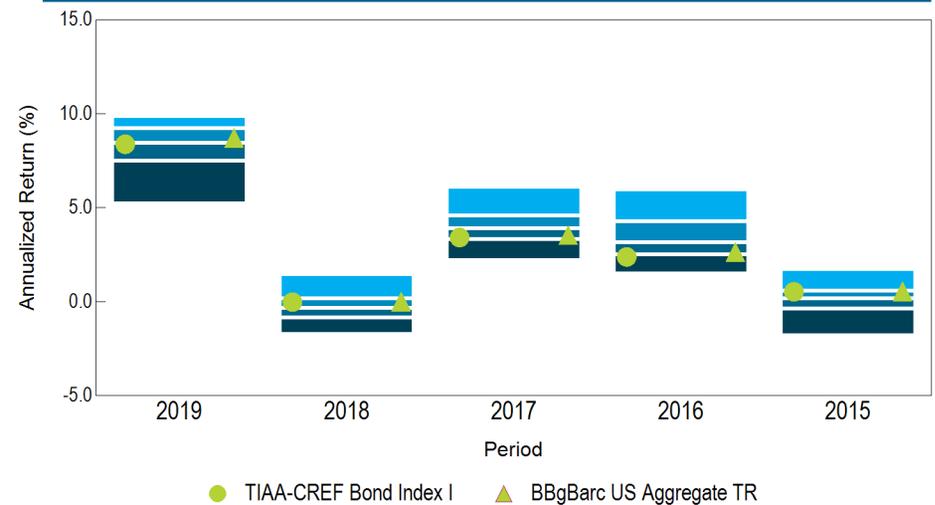
Return Summary



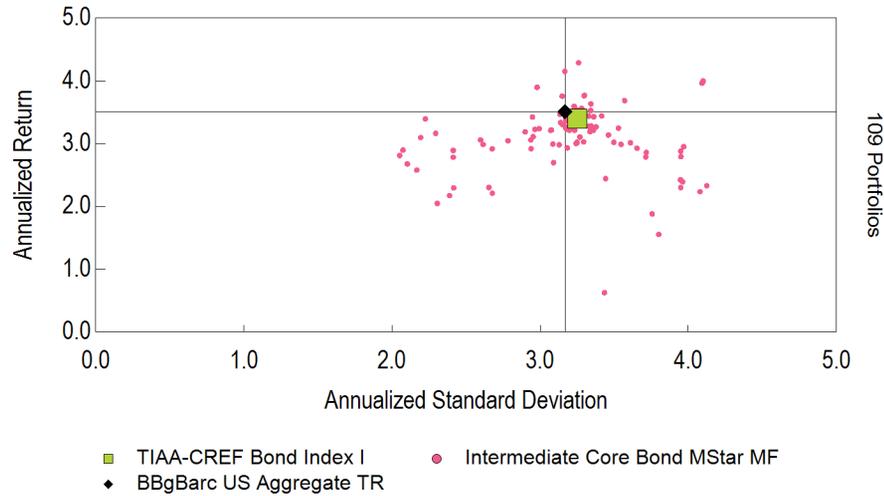
Intermediate Core Bond MStar MF Return Comparison



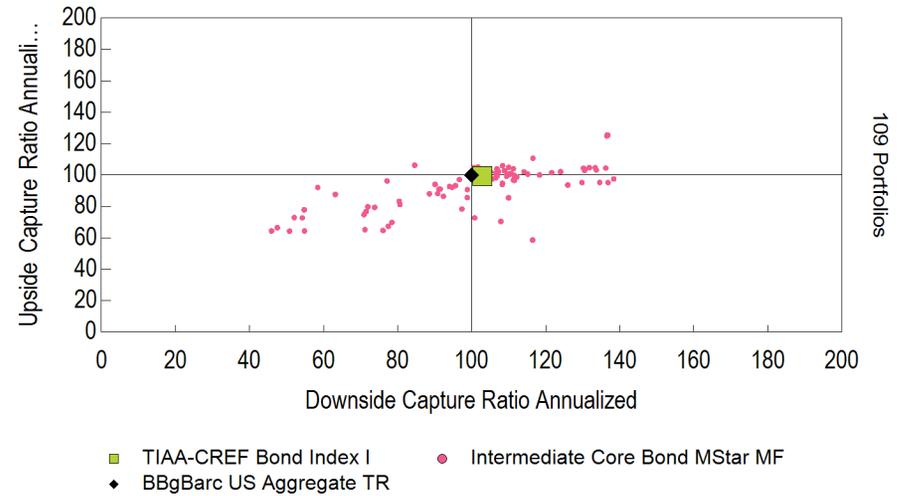
Intermediate Core Bond MStar MF Return Comparison



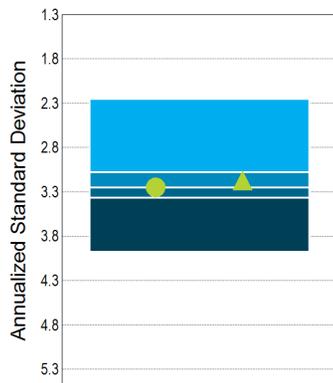
Annualized Return vs. Annualized Standard Deviation
5 Years 3 Months Ending March 31, 2020



Upside Capture Ratio Annualized vs. Downside Capture Ratio Annualized
5 Years 3 Months Ending March 31, 2020

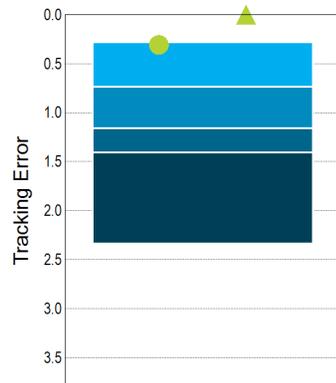


Annualized Standard Deviation



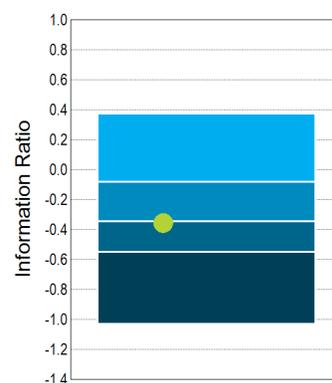
● TIAA-CREF Bond Index I

Tracking Error

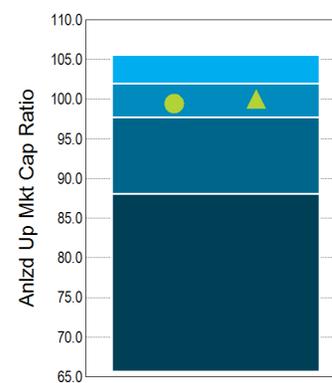


▲ BBgBarc US Aggregate TR

Information Ratio

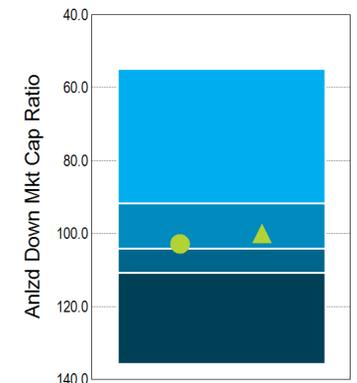


Anlzd Up Mkt Cap Ratio



■ Median to 75th Percentile

Anlzd Down Mkt Cap Ratio



■ 75th to 95th Percentile

Fund Characteristics as of March 31, 2020		Top Holdings as of March 31, 2020		Fixed Income Sectors as of March 31, 2020	
Sharpe Ratio (3 Year)	0.94	UNITED STATES TREASURY NOTES 2.12%	2.10%	GOVERNMENT	44.53%
Average Duration	5.80	UNITED STATES TREASURY BONDS 3.5%	1.84%	MUNICIPAL	0.72%
Average Coupon	3.10%	UNITED STATES TREASURY NOTES 1.75%	1.36%	CORPORATE	24.71%
Average Effective Maturity	8.17	UNITED STATES TREASURY NOTES 2.25%	1.13%	SECURITIZED	29.76%
R-Squared (3 Year)	0.99	UNITED STATES TREASURY BONDS 3%	1.12%	CASH & EQUIVALENTS	0.28%
Alpha (3 Year)	-0.01%	UNITED STATES TREASURY NOTES 1.75%	0.97%	DERIVATIVE	0.00%
Beta (3 Year)	0.99	UNITED STATES TREASURY BONDS 3.12%	0.86%		
		UNITED STATES TREASURY NOTES 2.5%	0.85%		
		UNITED STATES TREASURY NOTES 2.75%	0.76%		
		UNITED STATES TREASURY NOTES 2%	0.72%		

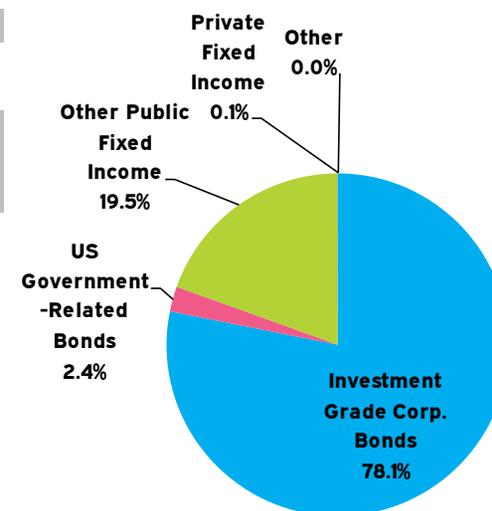
Credit Quality as of March 31, 2020		Maturities as of March 31, 2020		Top Countries as of March 31, 2020	
AAA	72.33%	1 to 3 Years	14.38%	United States	92.04%
AA	3.44%	3 to 5 Years	20.50%	Supranational	1.52%
A	11.34%	5 to 7 Years	6.95%	United Kingdom	0.99%
BBB	12.80%	7 to 10 Years	9.24%	Canada	0.98%
BB	0.05%	10 to 15 Years	3.61%	Japan	0.64%
B	0.00%	15 to 20 Years	5.21%	Germany	0.52%
Below B	0.00%	20 to 30 Years	36.80%	Mexico	0.51%
Not Rated	0.04%	Greater than 30 Years	2.22%	Netherlands	0.43%
				Belgium	0.29%
				Colombia	0.19%

Sensitivity Analyses: T-C Life Funding Agreements

T-C Life Funding Agreements (based on non-investment performance criteria)

Criteria	Status as of 3/31/2020	Status as of 12/31/2019	Status as of 9/30/2019	Status as of 6/30/2019
Financial Strength	Moody's = Aa1	Moody's = Aa1	Moody's = Aa1	Moody's = Aa1
	Standard & Poor's = AA+			
	A.M. Best = A++			
	Fitch = AAA	Fitch = AAA	Fitch = AAA	Fitch = AAA
Mortgage Portfolio	100% in Good Standing*			
Bond Portfolio	99.4% in Investment Grade (at least 90%)	99.7% in Investment Grade (at least 90%)	99.6% in Investment Grade (at least 90%)	99.4% in Investment Grade (at least 90%)
Account Diversification	Portfolio is diversified across asset classes and types (see chart below)	Portfolio is diversified across asset classes and types (see chart below)	Portfolio is diversified across asset classes and types (see chart below)	Portfolio is diversified across asset classes and types (see chart below)

*Portfolio did not contain any commercial mortgages.
Note, prior-period investment status will shift to the right.
Source: TIAA-CREF



Monitoring Status

Positive

Summary Points

Summary Points

	Criteria Utilized for Performance Watch Status			
	On Watch	Short-term	Medium-term	Long-term
T. Rowe Price Instl Large Cap Growth	No	---	---	---
T. Rowe Price Instl Large Cap Value	No	---	---	---
TIAA-CREF Small Cap Equity	No	---	---	---
TIAA-CREF Social Choice Equity	Yes	---	---	---
TIAA-CREF Real Estate Securities	No	---	---	---
DFA Large Cap International	No	---	---	---
DFA Emerging Markets Core Equity	No	---	---	---
Metropolitan West Total Return Bond	No	---	---	N/A
PIMCO Real Return	No	---	---	---
PIMCO Income	No	---	---	---
TIAA-CREF Inflation-Linked Bond	No	---	---	---
T. Rowe Price Instl Floating Rate	No	---	---	---
TIAA-CREF High Yield Bond	No	---	---	---
TIAA-CREF Equity Index	No	---	---	---
TIAA-CREF S&P 500 Index	No	---	---	---
TIAA-CREF International Eq Index	No	---	---	---
TIAA-CREF Emerging Markets Eq Index	No	---	---	---
TIAA-CREF Bond Index	No	---	---	---
T-C Life Funding Agreements	No	N/A	N/A	N/A
Total	1 of 19	0 of 18 eligible portfolios	0 of 18 eligible portfolios	0 of 17 eligible portfolios

- Performance-based watch status criteria is on a relative basis
 - Absolute results may still be negative
- Criteria set up to evaluate managers over differing time periods

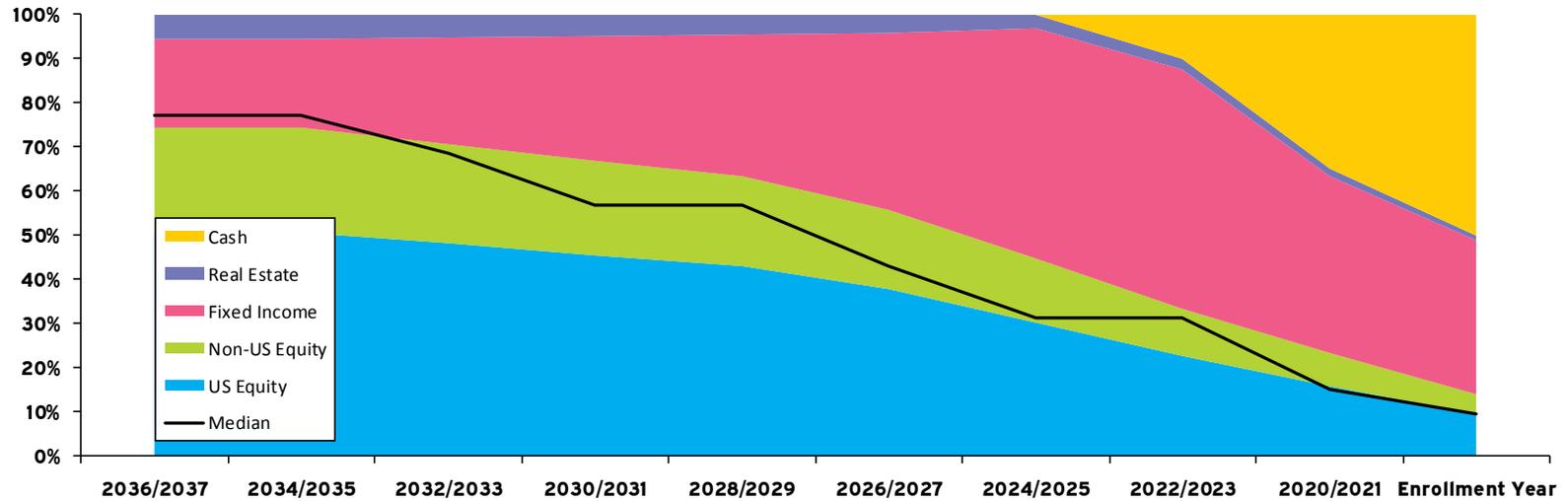
Enrollment Date Fund Analysis

Enrollment Date Portfolios Performance

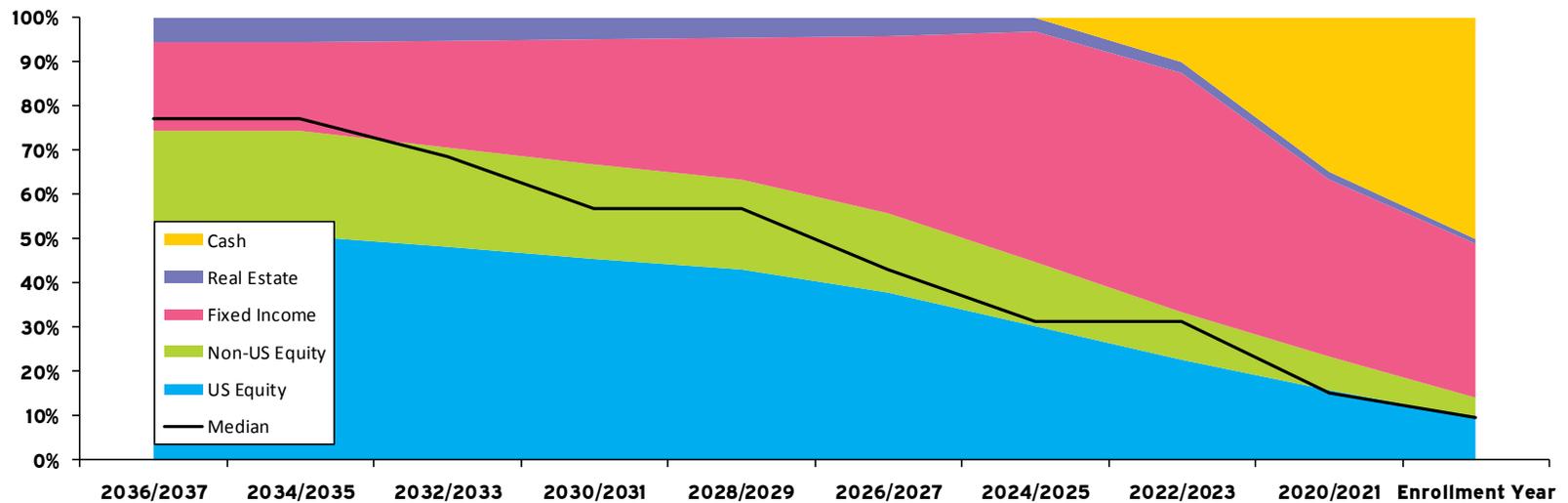
Performance Data not yet available for Enrollment Date portfolios.

Scholarshare Enrollment Date Glidepath

Active Enrollment Date Portfolio



Passive Enrollment Date Portfolio



Appendix

Glossary

Annualized Return – The average annual return of either the manager or its benchmark.

Excess Performance – Manager returns in excess of the benchmark returns.

Standard Deviation – A measure of dispersion of a set of data from its mean.

Excess Standard Deviation – A measure of the volatility of the average annual difference between the manager's return and the benchmark's return, same as tracking error.

VRR – Value Relative Ratio – Is calculated as: $\text{Manager Cumulative Return} / \text{Benchmark Cumulative Return}$.

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

MEMORANDUM

TO: ScholarShare Investment Board (SIB)
FROM: Eric White, Kay Ceserani, Kristen Chase
Meketa Investment Group
DATE: May 21, 2020
RE: Review of Underlying Funds Qualifying for “Watch” Status

Summary

Meketa Investment Group (“Meketa”) has conducted a review of the underlying funds in the ScholarShare 529 Plan. The review included a quantitative analysis of the underlying funds based on specific performance criteria (as per the *Monitoring Procedures and Criteria*) as well as a qualitative analysis, including a review of organizational concerns, stability of personnel, changes in investment objectives, etc. This memo summarizes the period from January 1, 2020, through March 31, 2020.

At the end of the period, **one new fund qualifies for “Watch” status and one fund no longer qualifies for “Watch” status.** At the March 2020 SIB meeting, the SIB elected to adopt new monitoring criteria for the TIAA-CREF Social Choice Equity fund. Under this new criteria, the fund no longer qualifies for “Watch” status.

Performance of Funds on Watch Status As of 3/31/2020

Funds on Watch Status	Board Action Date	Watch Status Start Date	No. Months Since Watch Began	Excess Perf. Since Watch Began
TIAA-CREF Social Choice Equity	10/4/17	7/1/17	33	(0.8)

Background

New Funds Qualifying for “Watch” Status: Meketa has conducted a review of the underlying funds in the ScholarShare College Savings Plan (see also the 1Q2020 ScholarShare 529 Plan Investment Performance Status Report) and determined that the T. Rowe Price Large Cap Growth Fund qualifies for “Watch” status based on its short-term performance.

Funds Currently on “Watch” Status: As of March 31, 2020, one fund, the TIAA-CREF Social Choice Equity Fund, remains on “Watch” status for performance concerns. The fund is discussed in further detail below.

TIAA-CREF Social Choice Equity Fund:

The fund was placed on “Watch” status for performance concerns upon breaching the long-term investment monitoring guidelines as per the Program’s Monitoring Procedures and Criteria as of the period ended June 30, 2017. In March 2020, the Program adopted new Monitoring Procedures and Criteria under which the fund no longer qualifies for “Watch” status.

Investment Role in Program

The investment seeks a favorable long-term total return that reflects the investment performance of the overall US stock market while giving special consideration to certain environmental, social, and governance (“ESG”) criteria. Under normal circumstances, the fund invests at least 80% of its assets in equity securities. The fund attempts to achieve the return of the US stock market as represented by its benchmark, the Russell 3000 Index, while investing only in companies whose activities are consistent with the fund's ESG criteria.

History and Organizational Structure

In October 2014, TIAA completed its acquisition of Nuveen Investments. In 2016, the executive management, distribution teams, marketing organization, and other non-investment functions of TIAA-CREF Asset Management and Nuveen Investments were combined into a unified operating structure. In January 2017, the company rebranded the organization as Nuveen to deliver all their capabilities under one name and operating mandate; Nuveen has become the umbrella brand for TIAA’s asset management capabilities, including TIAA Investments, which oversees TIAA-CREF branded mutual funds.

Nuveen brings together the investment heritage of two 100-year-old companies and the specialist knowledge of their affiliates to be a global asset manager dedicated to helping their clients achieve their investment goals. Nuveen has been providing investment solutions and strategies to a wide range of clients worldwide, including institutional investors, intermediaries, plan sponsors, investment and pension consultants, and individual investors. They are one of the largest global asset managers across multiple asset classes.

Teachers Insurance and Annuity Association of America® (TIAA®) has built its reputation on its long-term investment capabilities, below-average expenses, and seasoned portfolio managers. Their extensive capabilities give their portfolio managers access to investment opportunities throughout the world.

Investment Team

Philip James Campagna is the lead portfolio manager for the fund. Mr. Campagna is a quantitative portfolio manager and has portfolio management responsibilities for all TIAA-CREF equity index strategies and the Social Choice Equity fund. He joined TIAA-CREF in February 2005, became a manager on the Social Choice Equity fund at the end of 2005, and has more than 15 years of investment experience. His prior experience includes seven years at Mellon Capital Management where he was responsible for several mandates and was an index strategy manager.

Lei Liao joined Mr. Campagna as a portfolio manager on the fund in May 2014. Mr. Liao is a managing director and equity index portfolio manager for TIAA. He has 13 years of industry experience, including several years at Northern Trust as a senior equity portfolio manager.

Both portfolio managers are responsible for the day-to-day investment management of the strategy. A team led by Amy O'Brien, Nuveen's Director of Social Investing, oversees the social screening for this strategy and several other socially screened portfolios. The team has grown over recent years and had 18 members as of January 2019, eight of whom were hired in 2018 in a conscious effort to boost Nuveen's ESG capabilities.

Investment Philosophy and Approach

The Social Choice Equity fund's underlying philosophy is to offer competitive returns consistent with the performance of the Russell 3000 Index while giving special consideration to certain ESG criteria. The strategy seeks returns consistent with a broad US core equity benchmark and a portfolio that has higher ESG performance quality relative to the benchmark.

TIAA's ESG criteria for the Social Choice Equity fund seeks to include companies that are leaders within their respective sectors on ESG performance. This performance should reflect a company's positive and negative impacts on its key stakeholders: employees, communities, customers, suppliers, and the planet. Public company performance evaluations should be based on the ESG factors most relevant to the industry a company operates in while also reflecting a company's adherence to international norms and conventions. Typically, ESG performance categories can include: environmental factors related to climate change, natural resource use, waste management, and environmental opportunities; social factors related to human capital, product safety, and social opportunities; and governance factors related to corporate governance, business ethics, and government & public policy.

Additionally, the eligible universe:

- Has no categorical industry exclusions; however, companies' exposure to historically controversial businesses (e.g., alcohol, firearms, tobacco) is incorporated into their overall

ESG performance assessment. While not automatically excluded from the fund, companies with exposure are typically ineligible for inclusion.

- Balances considerations of company strengths and weaknesses in ESG performance.
- Leverages a research process that is built upon diverse sources and the input of multiple stakeholders.
- Results in a portfolio with significantly higher ESG performance than the benchmark.

Consistent with the approach used in all TIAA Asset Management's Social Choice products, TIAA partners with leading independent ESG research providers to implement the ESG guidelines and criteria they have established for the fund. Their partnership with established ESG research partners increases the transparency of the ESG evaluation processes and decisions and provides TIAA Asset Management's equity portfolio managers with broadly diversified and reasonably sized eligible investment universes from which to build portfolios that can achieve their investment mandates.

The team has developed a comprehensive and robust due diligence process to evaluate existing and potential ESG research partners. All potential research partners are assessed per an internally developed framework that includes consideration of the partner's track record and history in ESG research and analysis, analytical capabilities, sources of data utilized, comprehensive factors that encompass a broad range of ESG issues, and consistent ESG methodologies applied across regions.

Nuveen's responsible investing team currently works in collaboration with the social-investment arm at MSCI, Inc.¹, one of the two largest socially responsible investing research firms in the world. The MSCI team does most of the detailed Socially Responsible Investing (SRI) analysis of individual companies, while Nuveen's team focuses more on the big picture, deciding what screening criteria the strategy should use, as well as overseeing corporate engagement and community investing. The strategy formerly used a standard set of ESG criteria from MSCI, but, in 2018, Nuveen and the MSCI teams collaborated to create customized criteria for the strategy. Now, the ESG score threshold for companies to be eligible for portfolio inclusion is generally higher, but ESG momentum is also taken into account, thus advantaging firms with an improving ESG profile. Following more than a decade of stability, these recent changes were designed to improve the strategy's environmental, social, and governance profile, and is not expected to necessarily have much effect on returns. After the social responsible team at MSCI ranks the stocks in the MSCI Investable Market Index according to how well they meet ESG criteria established by Nuveen's team, the quantitative team at TIAA-CREF narrows the acceptable list.

The portfolio managers for the Social Choice Equity fund begin with the eligible universe of securities and, combining industry-recognized optimization techniques with proprietary enhancements, seek to match the risk characteristics of the fund's underlying benchmark: the Russell 3000 Index. The intent is to neutralize, to the extent possible, the inherent biases introduced by the constrained universe of securities. Using a non-proprietary, industry-recognized risk model, the team can avoid unintended exposure to any common or security-specific sources of risk. Its models are designed to replicate the

¹ MSCI Inc. (formerly Morgan Stanley Capital International and MSCI Barra), is an American finance *company* headquartered in New York City. Their line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

risk characteristics of the Russell 3000 Index and do not try to identify specific stocks that will perform better or worse than the Index. This results in a well-balanced and diversified portfolio that allows them to better track the benchmark with minimal risk. The portfolio's sector weightings do not deviate too far from the benchmark because the process is designed to avoid large sector bets. The fund keeps underweightings in certain industries, such as big oil companies and money-center banks, and overweightings in other areas to keep sector weightings close to the benchmark. These differences frequently help or hurt the fund relative to the broader market in the short-term but have tended to balance out over time. Since Mr. Campagna joined the portfolio management team in late 2005, there has been less of an emphasis on excluding companies and more on finding stocks that best fit a set of positive criteria.

The risk model incorporates industry and style factors to capture risk due to the sources common to the universe of equity securities and a sub-model to capture security-specific risk. The models use covariance factors to target risk characteristics like the Index, including 13 fundamental factors and 55 industry group factors. The risk model is reviewed periodically by BARRA² to ensure relevance, accuracy, and reliability. While there are no quantifiable formal tracking error guidelines, ex-post tracking has generally been in the range of 100 to 150 basis points versus the underlying benchmarks.

The investment team typically sells or trims a position when either the optimization model or the risk model recommends a reduction in a stock's weighting due to changes in the stock's or the benchmark's characteristics. If a stock needs to be eliminated because of ESG criteria, a sale is initiated in an orderly fashion to minimize market impact.

Performance

The fund generated mixed results against its prospectus benchmark, the Russell 3000 Index, across the various time periods reported. The fund outperformed its benchmark over the shorter time periods measured and underperformed over the trailing 5-year and Since Inception periods. Some stocks that are in the Russell 3000 Index are not part of the fund's eligible investment universe due to the exclusion of certain stocks based on the fund's ESG criteria; the social screening eliminates some stocks that are prominent in the benchmark (i.e., Facebook, Exxon Mobil, etc.). Thus, some individual securities in the eligible universe may be either overweighted or underweighted relative to the benchmark, which is determined through quantitative modeling. Over the quarter, the three largest individual contributions to the Fund's relative performance came from not owning Exxon Mobil Corporation, JPMorgan Chase & Co., and Boeing Company. All three companies are ineligible for inclusion in the Fund based on ESG criteria. While all three significantly lagged the broad market in the first quarter, Boeing performed the worst.

² MSCI's analytic group that provides investment analytics and trading solutions.

Trailing Performance Results, Net of Fees Ending March 31, 2020

Fund	Quarter	1 Year	3 Years	5 Years	Since Addition (12/2011)
TIAA-CREF Social Choice Equity	(20.5)	(8.3)	4.4	5.6	10.2
<i>Russell 3000 Index</i>	(20.9)	(9.1)	4.0	5.8	11.0
Difference	0.4	0.8	0.4	(0.2)	(0.8)
Percentile Rank*	56	46	39	46	48

*IM US Large Cap Core Equity Universe. 1 = Best, 100 = Worst.

Since being added to the Program in late 2011, on a calendar year basis, the fund has produced mixed results versus its benchmark over the last seven years. In 2012, the fund trailed about two-thirds of its peers and the Russell 3000 Index by (2.4%) as not holding Apple stock in the portfolio detracted. The portfolio posted strong gains and ranked in the top quartile of the peer group in the bull market of 2013; this time, the absence of Apple stock benefitted results as the stock struggled and performance improved to the Acceptable range throughout the period. In 2014 and 2015, the fund underperformed the benchmark by (1.4%) and (2.9%), respectively. During these periods, the fund's exclusion of certain ineligible holdings negatively impacted performance. For 2015, notable names that were not owned by the fund due to the ESG criteria included Amazon, Facebook, and General Electric; these specific exclusions that produced strong results detracted from relative results. The fund's performance improved in 2016 to exceed the benchmark by 80 basis points and ranked in the top quartile of the peer group. The fund has exhibited a historical tendency to perform relatively well in speculation-driven bull markets where risk is favorable. Over the three most recent calendar years (2017, 2018, and 2019), the fund performed roughly in-line with the benchmark and the peer group.

Calendar Year Performance Results, Net of Fees Ending December 31, 2019

Fund	2013	2014	2015	2016	2017	2018	2019
TIAA-CREF Social Choice Equity	34.3	11.2	-2.4	13.5	20.9	(5.5)	31.5
<i>Russell 3000 Index</i>	33.6	12.6	0.5	12.7	21.1	(5.2)	31.0
Difference	0.7	(1.4)	(2.9)	0.8	(0.2)	(0.3)	0.5
Percentile Rank*	20	53	75	16	50	49	29

*IM US Large Cap Core Equity Universe. 1 = Best, 100 = Worst.

At the March 2020 SIB meeting, the SIB elected to the below monitoring criteria for the TIAA-CREF Social Choice Equity fund.

Asset Class	Short-Term (rolling 12-month periods)	Medium-term (rolling 36-month periods)	Long-term (> 60 months)
Social Choice	Fund return < bench return -5.0% for 6 consecutive months	Fund return < bench return -2.50% for 6 consecutive months	VRR < 0.9 for 6 consecutive months

The table below represents the fund’s current standings as of March 31, 2020 under the new monitoring criteria over each time period.

Fund	TIAA Social Choice
Short-Term	Positive
Medium-Term	Positive
Long-Term	Acceptable
Overall Status	Acceptable
Qualifies for Watch	No

Recommendation

Meketa recommends that the SIB remove the TIAA Social Choice Fund from “Watch” status as it no longer qualifies under the monitoring guidelines.

T. Rowe Price Large Cap Growth

Investment Role in Program

The objective of the US Large-Cap Growth Equity Strategy is to provide superior long-term, risk-adjusted returns relative to the Russell 1000 Growth Index by investing primarily in a diversified portfolio of the equity securities of large US companies. The strategy emphasizes investment in companies that have the potential for above-average and sustainable rates of earnings growth.

History and Organizational Structure

T. Rowe Price Group, Inc. is a publicly owned global investment management firm that offers funds, advisory services, account management, and retirement plans and services for individuals, institutions, and financial intermediaries. The firm is headquartered in Baltimore, Maryland, and has 16 international offices that serve clients around the world. It was founded in 1937 by Thomas Rowe Price, Jr. who is best known for developing the growth stock philosophy of investing.

Investment Team

Taymour Tamaddon has been the lead portfolio manager for the fund since January 2017 when he took over for the fund's original portfolio manager, Rob Sharps. Mr. Tamaddon is a vice president and a member of the Investment Advisory Committees for the Health Sciences, New America Growth, Growth Stock, Blue Chip Growth, and Capital Appreciation Strategies. He is a vice president of the T. Rowe Price Institutional International Funds, Inc., T. Rowe Price Group, Inc. and the T. Rowe Price International Funds, Inc. Mr. Tamaddon was previously a healthcare analyst. Mr. Tamaddon manages the fund alongside three other portfolio managers.

Larry J. Puglia is a portfolio manager in the US Equity Division of T. Rowe Price. He is president of the Investment Advisory Committee of the US Large-Cap Core Growth Equity Strategy. He has been managing the US Large-Cap Core Growth Equity Strategy since 1993 and has had lead responsibility for all institutional accounts and other investment products within the strategy since 1997. Mr. Puglia is a vice president of T. Rowe Price Group, Inc.

Joe Fath is the portfolio manager for the US Growth Stock Equity Strategy, including the Growth Stock Fund, in which he is chairman of the investment advisory committee. He is a vice president and member of the investment advisory committee of the US Quantitative, US Mid-Cap Growth Equity, US Communications and Technology and US Large-Cap Growth Equity Strategies. He is vice president of T. Rowe Price Group.

David Rowlett is an associate portfolio manager for the US Large-Cap Core Equity Strategy, including the Growth & Income Fund, in the US Equity Division. He is a vice president and member of the Investment Advisory Committees of the US Large-Cap Growth Equity, US Multi-Cap Growth Equity, US Large-Cap Core Growth Equity, US Growth Stock, Equity, and Institutional Large-Cap Core Growth Strategies. David is a vice president of T. Rowe Price Group, Inc.

Investment Philosophy and Approach

T. Rowe Prices' philosophy is based on the theory that the market can be inefficient. They believe that superior investment results can be produced by capitalizing on two inefficiencies in the US Large-Cap Growth Equity universe. First, the market systematically overestimates the ability of large US companies to grow at double-digit rates. Second, short-term momentum and sentiment are often overemphasized by investors.

The portfolio managers and analysts perform fundamental research that combines financial analysis and qualitative investigation to assess the growth potential of a company, its industry, and its stock price. Financial analysis includes a review of the income statement, balance sheet, and statement of cash flows, as well as discounted cash flow analysis and ratio analysis. The research analysts incorporate ESG factors into company valuations and ratings, and the portfolio manager seeks to balance these ESG factor exposures at the portfolio level. Both the analysts and portfolio manager are able to leverage dedicated, in-house resources to assist them in analyzing ESG criteria.

In researching companies, the analysts focus on the fundamentals of the industry in which the company operates and the fundamental characteristics of the company itself. More specifically:

- Industry analysis seeks to answer the questions, "Does this company compete in an industry that supports profitable growth?" and "Are the industry conditions improving or deteriorating?" This work involves evaluating unit/volume growth, price stability/pricing power, the intensity of the competitive environment, margin structure, return on invested capital, and cyclical trends in capacity and demand.
- Company analysis seeks to answer the question, "Is this company well positioned and managed to capitalize on the growth prospects of its industry?" Here, the work focuses on identifying key characteristics of successful and rapidly growing companies. It incorporates qualitative factors, such as market position and management quality, and an assessment of the company's financial strength based on metrics like free cash flow generation, operating margin, and return on invested capital.

Sources for these data include quarterly and annual financial reports, conference presentations, and online industry databases and analytical tools, such as FirstCall and FactSet.

T. Rowe Price believes meeting with company management is the core strength of their qualitative research. These meetings can take a variety of forms, including on-site visits, face-to-face discussions, attendance at industry and investment conferences, and hosting companies in their offices. These visits provide a forum for their investment analysts to get a firsthand look at operations and make independent judgments about the business model, the efficiency of the operation, and the quality of management. The analysts can survey the corporate headquarters and gauge if the company's operating facilities and technology are state of the art or in need of an upgrade. They can also assess the degree of fiscal responsibility exercised by company management. They also interview customers, suppliers, competitors, and industry experts. These activities allow their analysts to develop relationships with and insights into hundreds of companies within a wide variety of industries. In

In addition, analysts work closely with their portfolio management teams to benefit from their experience and gain an understanding of the qualitative factors that most influence stock selection. These visits are not one-time events; they continually reevaluate companies that they own in their portfolios. Furthermore, this first-hand access is a key advantage with respect to obtaining information and exerting influence over the governance of the businesses in which they invest.

The manager constructs portfolios on the basis of identifying large-cap growth companies that they believe can generate real, double-digit earnings growth for a minimum of three years. Lead portfolio manager Taymour Tamaddon looks for companies on the right side of change, and these tend to be high-quality companies that are well run and score well on environmental, social and governance (ESG) measures. As such, their primary emphasis is on company fundamentals, not the composition of the Russell 1000 Growth Index. They are cognizant of whether or not a potential holding is in the index and of its weighting. However, position size is a function of their conviction in a company's ability to deliver long-term, double-digit growth. Active position sizes typically range up to +5% of their relative weighting in the Russell 1000 Growth Index. Position size ultimately reflects the strength of the investment case, including valuation levels, a company's growth prospects, its ESG profile and other fundamentals and risk factors affecting the stock.

Sector and industry weightings are a residual of their bottom-up stock selection process. In some instances, they may have a macro view that modestly influences sector and industry weightings, but that is a qualitative, not quantitative, judgment. For primary sectors in the Russell 1000 Growth Index (i.e., those weighted approximately 10% or higher), the portfolio's sector weights typically vary from $\pm 10\%$ the index weight for purposes of diversification and risk management.

They tend to build positions carefully over time, but when an unusually attractive entry point develops, they will build a position in a relatively short period of time. While they continuously monitor portfolio holdings, there is no automatic appreciation level that would trigger trimming of a position. They make each decision on a stock-by-stock basis, taking into account factors such as company fundamentals, valuation, confidence level, ESG assessment, and the stock's weight in the portfolio. When selling, they tend to gradually scale out of that holding unless a change in their fundamental view on the company prompts them to divest their position more quickly.

Performance

The fund slightly outperformed the Russell 1000 Growth index over the most recent quarter, but underperformed over the trailing 1-year period by (4.4%). Over the quarter, stock selection in Information Technology, Communication Services, and Consumer Discretionary added to relative returns while stock selection in Industrial and Business Services and Health Care detracted from results.

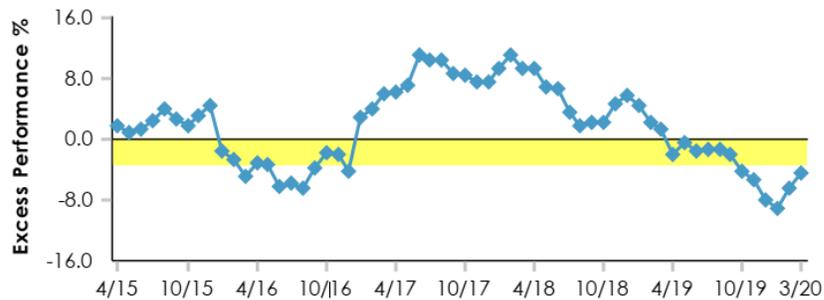
Trailing Performance Results, Net of Fees Ending March 31, 2020

Fund	Quarter	1 Year	3 Years	5 Years	Since Addition (12/2011)
T. Rowe Price Large Cap Growth	(13.9)	(3.5)	12.9	11.3	15.3
Russell 1000 Growth Index	(14.1)	0.9	11.3	10.4	13.8
Difference	0.2	(4.4)	1.6	0.9	1.5
Percentile Rank*	43	60	16	9	4

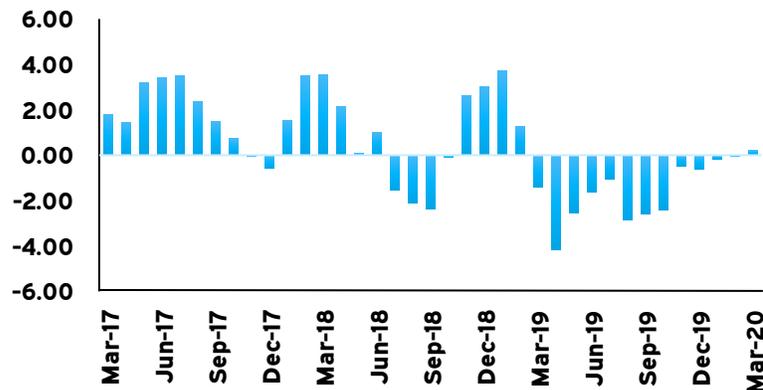
*IM US Large Cap Growth Equity Universe. 1 = Best, 100 = Worst.

The fund is being recommended for “Watch” status because over the last six months its rolling 12 month excess performance has fallen below the -3.5% threshold. The deterioration of short-term performance can be attributed to the fund’s performance during 2019. In 2019, the fund underperformed the Russell 1000 Growth Index by (7.9%). Exposure to managed-care stocks weighed on returns as political rhetoric about healthcare policy took center stage well ahead of the 2020 election.

Short-term (Rolling 12 Months Excess Performance)



Rolling Quarterly Excess Returns



Since being added to the Program in late 2011, on a calendar year basis, the fund has produced mixed results versus its benchmark over the last seven years. The portfolio posted strong gains and ranked in the top ten percent of the peer group in 2013, 2015, 2017, and 2018. In 2014 and 2016, the fund underperformed the benchmark by (4.4%) and (4.2%), respectively. 2019 represents the fund's weakest relative performance in the fund's history with the Program.

Calendar Year Performance Results, Net of Fees Ending December 31, 2019

Fund	2013	2014	2015	2016	2017	2018	2019
T. Rowe Price Large Cap Growth	44.4	8.7	10.1	2.9	37.8	4.3	28.5
<i>Russell 1000 Growth Index</i>	33.5	13.1	5.7	7.1	30.2	(1.5)	36.4
Difference	10.9	(4.4)	4.4	(4.2)	7.6	5.8	(7.9)
Percentile Rank*	3	73	12	43	3	6	88

*IM US Large Cap Growth Equity Universe. 1 = Best, 100 = Worst.

Recommendation

Meketa recommends that the SIB place the T Rowe Large Cap Growth Fund on "Watch" status as it has underperformed the Short-Term monitoring criteria for six consecutive months.



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