

DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

Friday, June 3, 2022
Fort Worth City Credit Union Board Room
2309 Montgomery St, Fort Worth 76107

Agenda Item	Description	Follow-up Action
Attendees	<p>Committee Members: Daryl Trotter (Chair) – Park and Recreation, , Nathan Gregory – Human Resources, Larry Bilbrey – Fire, Darryl Woody, Jared Salzman – Police, Veronica Bailey – TPW, Shannon Elder – Code Compliance, Charlie Ramirez - Retiree</p> <p>Committee Members Not in Attendance: John Samford – (Vice Chair) Finance</p> <p>Professional Advisor: Tony Kay – AndCo Consulting</p> <p>Vendors: – Brad Loomis - TIAA</p> <p>City Staff Attendance: J.B. Strong – Legal, Joanne Hinton, Vivianee Haydon – Human Resources</p> <p>Public Presence: None</p>	
Call to Order	The meeting called to order at 9:05am by Daryl Trotter (Chair)	
Opening Comments	Introductions were done since we had not been together face to face in 2 years . Charlie Ramirez replaced Elizabeth Dierdorf as our retiree member. Rescheduled 8/26/2022 meeting to 8/25/2022 due to HBAC meeting taking place on 8/26/2022.	
Approval of Minutes from February 25, 2022	Jared motioned to approve minutes from February 25, 2022 meeting. Larry seconded. All in favor, minutes were approved.	
Briefings	<p>Briefings</p> <ul style="list-style-type: none">• TIAA First Quarter 2022 Plan Report	

DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

Page 3 does not include any other pension plan benefits or any assets your average participant may have elsewhere. 87% average income replacement ratio, this plan alone is a pretty impressive metric. It is a bit below our peers but it's below our peer group based on asset size. Our peer group uses their retirement plan as their only plan rather than ours that is more of a supplemental benefit. As of the end of Q1 the total plan assets were about 325 million, looking at it today it was about 307 million. There's been some market volatility in the first part of the 2nd quarter. Good news to report on contributions, we've seen positive cashflows into the plan. Distributions are down as well. There were 400 individuals that took advantage of advice. You can access advice by phone, online, through a virtual counseling session or in person. Page 7, new retirements have almost doubled as of March of 2022. We may see cashflow that correlates to the new enrollment trends.

Page 12, new loans issued are up, there was a pretty significant increase. Possible anomaly but if it continues to be a trend and maybe a message to us that we need to do a better job engaging with participants and helping them understand that there are many other ways to manage their finances and not always borrow from themselves. That said, loans do serve a valuable purpose for those who do need to borrow money. Daryl asked if this was based on 2021. Brad replied yes, it is from 4/1/2021 through 3/31/2022. Tony asked Brad when he says anomaly obviously stands out for this plan, are you seeing similar activity across other plans you work with? Brad stated that he was at a plan review similar to us and there was a sizable increase in loans. Over the past 12 months there has been an uptick in loans. Brad

DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

does not think it's reflective of folks bailing out here just at the city since he has seen another plan sponsor do the same. Tony mentioned it could possibly be that the federal government stopped sending checks. Joanne asked how much that's really due to COVID. Didn't they stop the stipulation where you could take a loan for anything back in 2020? Brad doesn't have any evidence to support what the uptick was from but all very relevant points to consider and certainly something to watch for.

Page 14 shows some of the possibility as a plan sponsor if we'd like to do some cleanup. Tony stated that our plan is setup to do those small distributions on an annual basis. The committee has previously approved the ongoing automatic annual distributions. We have 148 participants who have a balance between \$1,000 – \$5,000 who no longer work for City of Fort Worth. We have another 56 who have less than \$1,000. Brad will work with Larry Spradley to make sure those small benefit distributions go off like clockwork.

Page 16, the biggest mover up in contributions as an asset class from 4/1/20221 to 3/31/2022 was in equities. It seems as though our participants may be more inclined to build their own portfolio's rather than just going into those Target Date funds. Relative to other plans that he works with our trajectory of contributions towards equities, mutual funds that invest in individual stocks, is notable given that most plan sponsors you'll see the same increase in those Target Date funds.

Nathan asked what the "other" category is. Brad responded that he thinks its Mission Square. Nathan stated that he's noticed a real trend, population has gotten

DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

	<p>significantly younger in the past 5-10 years. We've dropped about 10 years in average age across the population. We saw a big jump in the millennial classification. Not sure how that plays into this, maybe they're less risk adverse or just earlier in career. Brad will drill down into that 2.6 to see where it is coming from.</p> <ul style="list-style-type: none">• First Quarter Performance <p>Tony handed out a 2-3 pager to put some of the returns into historical perspective. We are looking at the S&P 500 going back to 2007. Anywhere in red signifies a draw down of 5% or more. There has been quite a few of those going back to 2007. This was just updated recently, goes through May 31, 2022. So far down about 18%, close to what we call a bear market. Anything below 20% or worse is typically characterized as a bear market. The takeaway when we look at the chart are that these time periods happen but the long-term story for equities is that they do tend to come back quickly and in a meaningful way. It doesn't look like our employees are overreacting to the recent bout of volatility. We'll continue to monitor this, we don't want to see employees reacting to a quarter or two of market performance. The chart goes back to 2007 and shows the annualized rate of return from 2007 through 5/31/2022. The middle column captures all of the trading days from the S&P 500, close to 3700 trading days. Over that time period S&P 500 went up 9%. That's a pretty historical average.</p>	
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DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

	<p>This quarter the feds started raising interest rates and was forecasting more interest rates. One asset class positive for the quarter is cash, it is the only place that did not lose money during the quarter.</p> <p>Page 4, 3000 growth is down 9.3% and value is doing quite a bit better. When we think about value stocks we tend to think more of financials, energy names, industrials and materials. Growth is more technology, communication services, Netflix, Google etc. This is an emerging trend. Up until recently growth year in and year out have trumped the performance and value. We're starting to see a little bit of a change in market leadership. Value is holding up a lot better than growth.</p> <p>Page 12 tracks the overall allocations for the plan. No significant shifts. Self directed brokerage account is at 2 million as of 3/31/2022. Daryl asked why the drop in cash. Tony responded that it is representative of the Vanguard Money Market fund. It was a holding account for the excess revenue account. Up until recently TIAA was not able to shut off this fund to participants. We worked with TIAA to shut that off and transferred that into the Stable Value fund.</p> <p>Page 15 is the heat map that ties up the investment policy statement for the plan. We never expect this page to be fully green, if it is, chances are that we do not have a diversified lineup. As it stands today, no funds are on the watchlist. This looks like a pretty health picture from our standpoint. Page 16 you can see the index funds are green across the board and the Life Cycle and Target Date funds are mostly green.</p> <p>Page 17, the one thing Tony wanted to point out is the Excess Plan Revenue account is fairly stabilized. Just a reminder to the committee, the way that the plan currently</p>	
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DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

	<p>pays for expenses like recordkeeping is that we use revenue that is generated by the underlying investment funds. If there's a surplus then that gets deposited into this account. If there is a deficit we take from this account. We also use this account for continuing education, anything that is for the benefit of the plan we can use this account to offset those expenses. We are in an environment right now where it is not growing. We've had a couple of quarters where we've had a slight deficit. We expect it to draw down. If it starts to get too low then we'll start to have discussions on changing share classes to generate more fund revenue to pay those expenses. Brad mentioned that of the 2.6%, 1.6% was rollovers. There was rollover activity from a prior plan moving into Mission Square. Page 19 quarterly performance was challenged. All of the returns in this report net of fees. We show an appropriate benchmark in blue, Vanguard Equity Income large cap value fund, we benchmark them against the Russell 1000 Value Index. During the quarter the benchmark was negative, they actually had a positive return. Vanguard for the quarter had a 1.14% rate of return. Average large cap value fund during the quarter down -0.38%.</p> <p>Page 20 50 plus million dollars in the Stable Value fund. Relatively good returns, 1.58% rate of return for the year. Target Date funds have a similar pattern, a little bit of a drawdown for the quarter. No suggested changes to the lineup today.</p> <ul style="list-style-type: none">• 457 Member Fiduciary Training <p>Page 32, we talked about what the brokerage window is. It's a plan feature that we don't have to turn on but we do have it turned on for our plan. We have close to 2</p>	
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DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

	<p>million in participants balances. There are 68 participants that may have elected to say that they wanted to go outside the core lineup and do it on their own. There is a fiduciary obligation to consider when offering the self-directed brokerage window. In the core lineup we generally try to keep it plain vanilla.</p> <p>Page 33, the decision was previously made to offer the self-directed brokerage window, it was in the contract with TIAA. It's a self-selection option, we don't force participants to use it and they essentially have to sign an agreement saying that they want to go into it and that they are eligible to use it. This helps to reduce the fiduciary liability. When a participant elects to go into it, there's a flat fee to open the account and they are paying for any of the trading costs for any additional withdrawal. The Department of Labor came out with guidance on crypto assets, they cautioned plan sponsors that if they do offer it that they would be audited. Daryl asked, in regard to the brokerage accounts, if participants have the opportunity to call TIAA for advice. Tony responded no, that the participant shoulders all of the risk for being in that plan. Daryl also asked if they could do half and half. Yes they can. Brad stated that the one hitch for the brokerage account is that you really have to want it, it's not easy to get into. You have to liquidate out of a core fund, the trade has to settle. Then it moves to a brokerage bucket, then moves over in cash then moves to a security. It's not an overnight immediate trade. Daryl asked if there is a fee for everyone for all of those transactions. Brad will look at our fee schedule, if there is a fee it's not a TIAA fee. It would be through our brokerage provider,</p>	
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DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

	Pershing. Typically there are commissioned fees on those brokerage trades. Tony stated that there are fees that are in line with the industry.	
Future Agenda Items	<ul style="list-style-type: none"> NAGDCA Conference September 18 – 21 at the Hilton Baltimore Inner Harbor. Daryl, Jared and Woody are interested. \$68,000 in Revenue Account to help pay for this expense. 	
Public Comment	None	
Adjourn	The committee meeting was adjourned at 10:35am by the Chair.	

Approval of Meeting Minutes _____

Plan Review City of Fort Worth

Optimizing plan effectiveness to help
drive better outcomes

Delivered by: Brad Loomis

As of June 30, 2022



Executive summary: Snapshot

Outcomes profile

77%

Average income replacement ratio¹

↑ **4.4% Year-over-Year**

Plan profile

\$290.1 Million

Assets

↓ **-11.6% Year-over-Year**

Participant profile

4,499

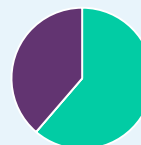
Participants with balances

Contributions

\$23,359,113

↑ **30.5% Year-over-Year**

Employer	0.0%	\$0
Employee	61.3%	\$14,321,249
Matching	0.0%	\$0
Rollovers	38.7%	\$9,037,864

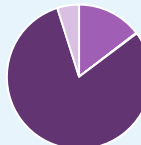


Distributions²

\$19,025,820

↓ **-30.0% Year-over-Year**

Loan	14.6%	\$2,774,853
In-service	0.2%	\$29,339
Terminated	80.4%	\$15,292,060
Other	4.9%	\$929,567



Participant Counts and Average Balances³

Active	3,063	68%	\$54,790
Terminated	1,037	23%	\$99,932
Other	399	9%	\$46,608

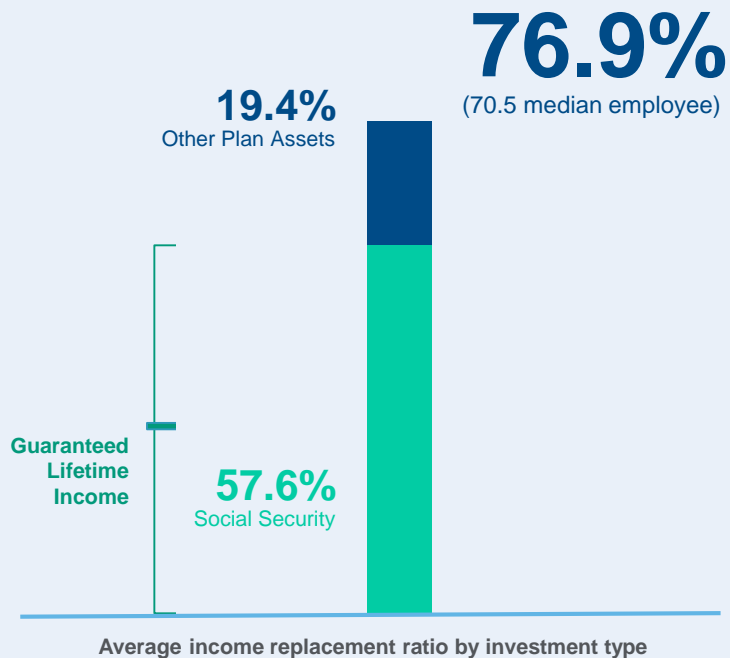
Engagement (as of 6/30/2022)

Total phone calls (Transactional)	373
Advice	435
Increased contributions	1,312
Rebalanced	423

This report is as of the period ending 06/30/2022 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. This report excludes details on non-participant accounts (forfeiture and revenue credit account) but includes the balances. 1. Refer to the "Income replacement ratio methodology and assumptions" page. 2. Certain Distributions (e.g., QDRO, Disability or Age 70.5 Minimum Distribution) may be categorized under In-Service, Terminated or Other. Please see the Glossary for additional information. 3. "Active" participants have a status of Active or Leave, a balance greater than zero and have made a contribution in the last 12 months. "Terminated" participants have a status of Terminated and a balance. "Other" represents all other participants in the plans (other status codes and non-contributing) with a balance.

Executive summary: TIAA Plan Outcome Assessment[®]

Average Income Replacement Ratio^{1,2}



	Your Plan	Peer Benchmark ³
Average Income Replacement Ratio	77%	90%
Average Annual Salary (Pretax)	\$74,125	\$86,654
Average Annual Retirement Income (After Tax)	\$45,688	\$54,202
Average Account Balance	\$59,536	\$126,435
Average Contribution Rate	6%	12%
Average Age	45	45

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1. This report uses estimated salary and/or compensation data. 2. Refer to the "Income replacement ratio methodology and assumptions" page. 3. The peer benchmark represents a group of institutions with TIAA recordkept assets in the not-for-profit market with total plan assets between 100M and 500M.

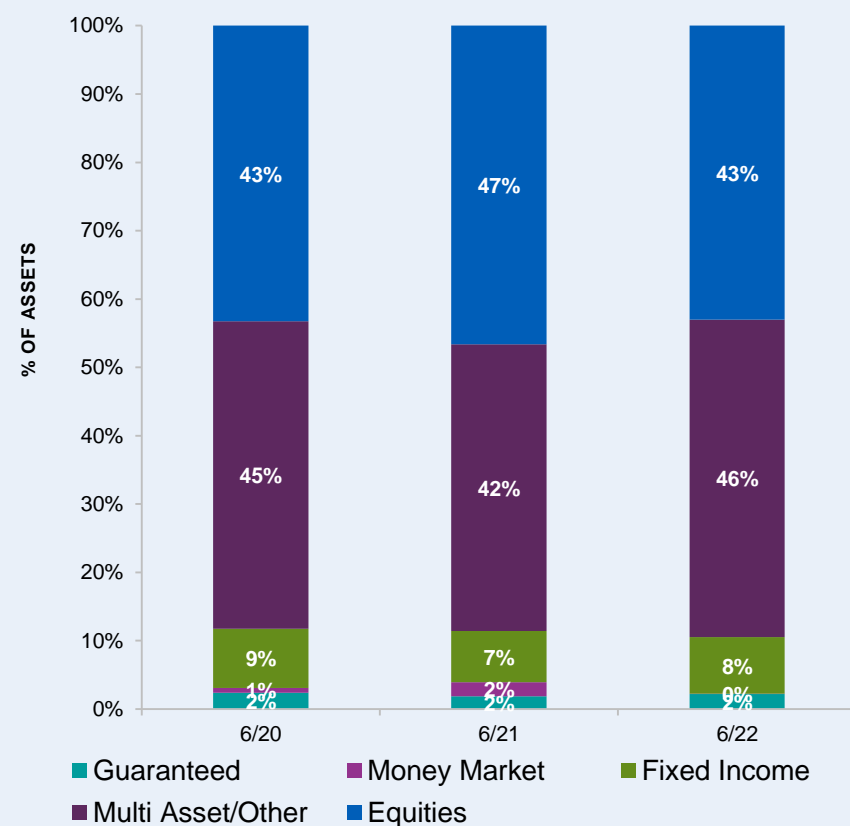
Executive summary: Participant trends

Contributions Impacting Plan Outcome



Contribution data reflects the trailing 12 months of activity.

Diversification



Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage.

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Employee Summary

Important plan and participant details



Employee summary: Enrollment trends

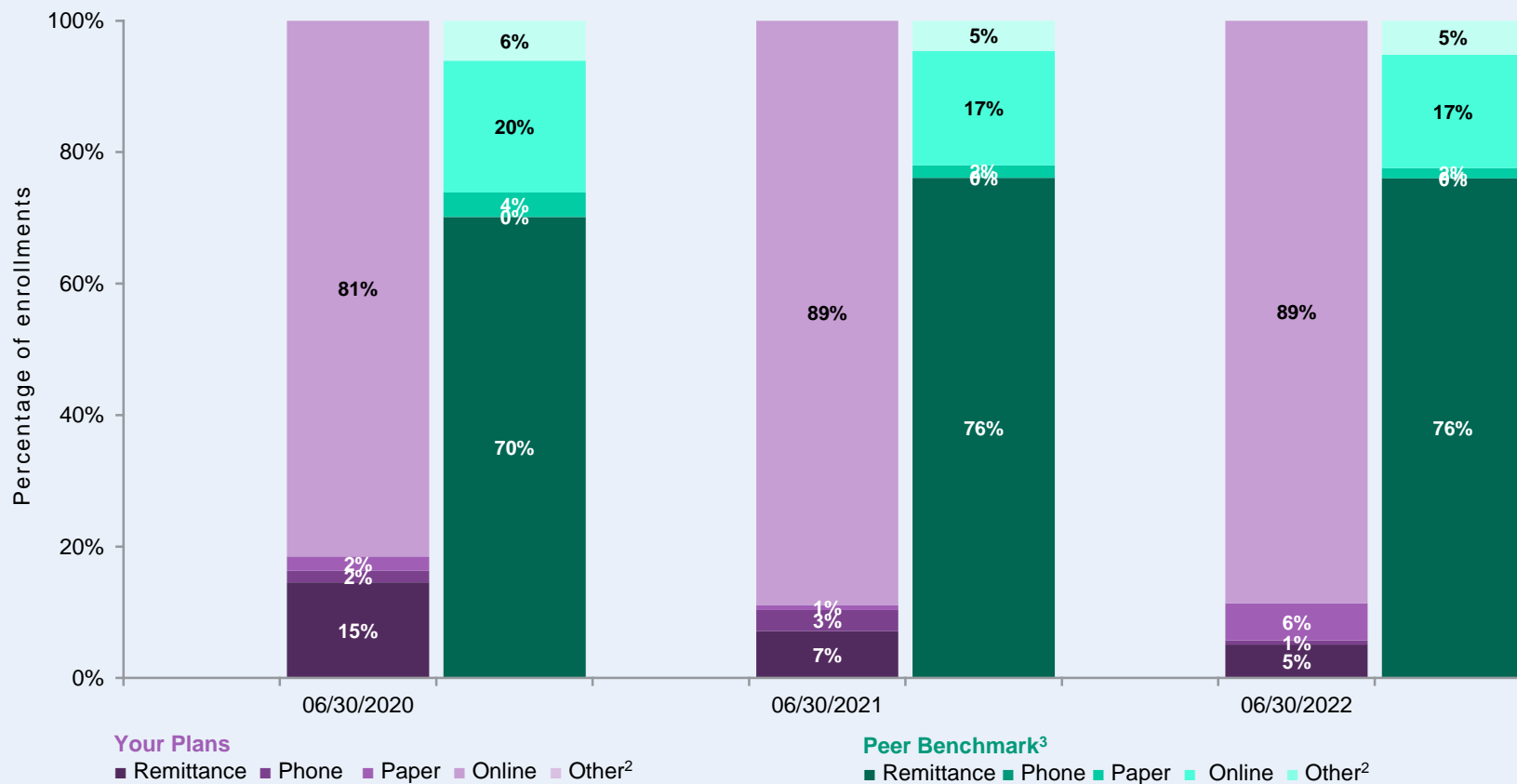
Enrollment by method

Total Number of Enrollments¹

227

126

158

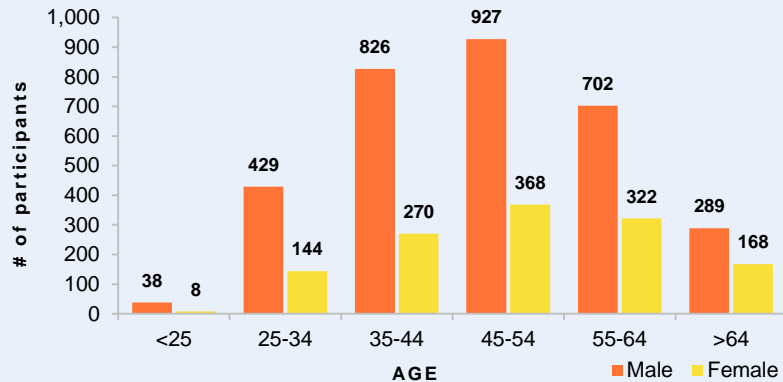


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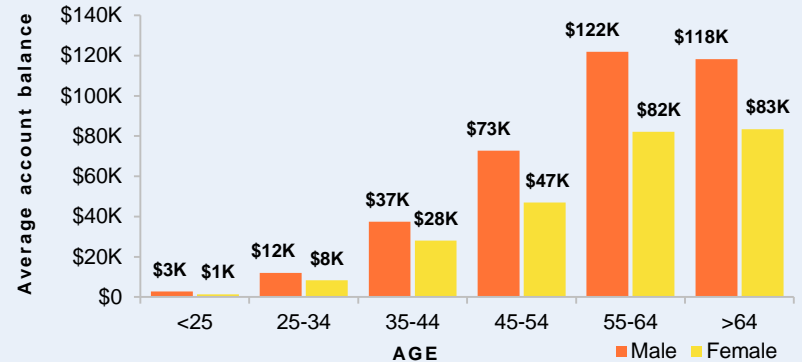
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Employee summary: Gender and age¹

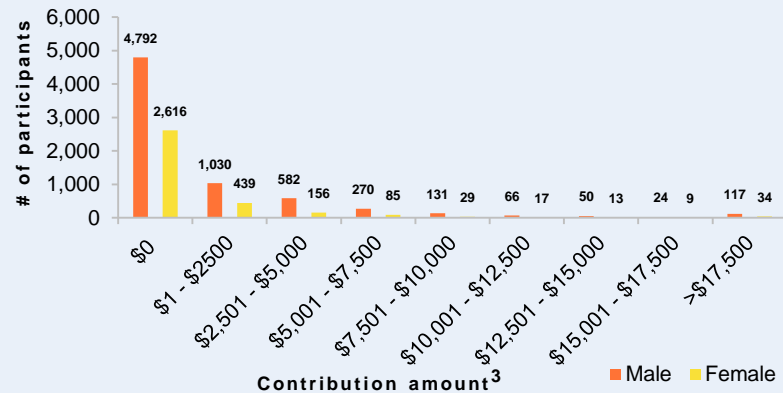
Demographics by Age and Gender



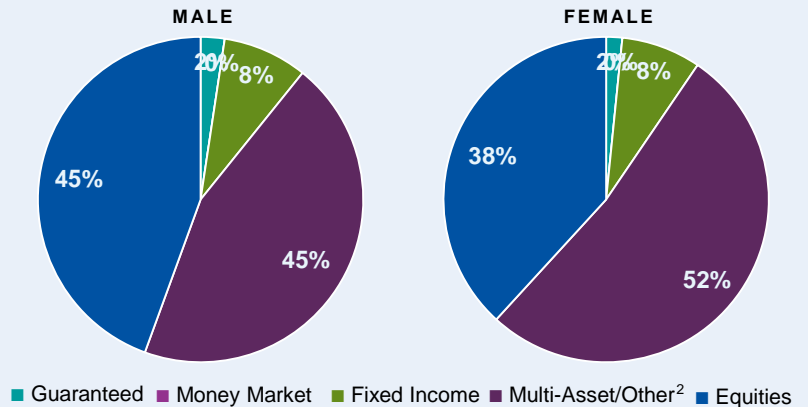
Average Account Balance by Age and Gender



Employee Contribution Amounts by Gender



Diversification by Gender



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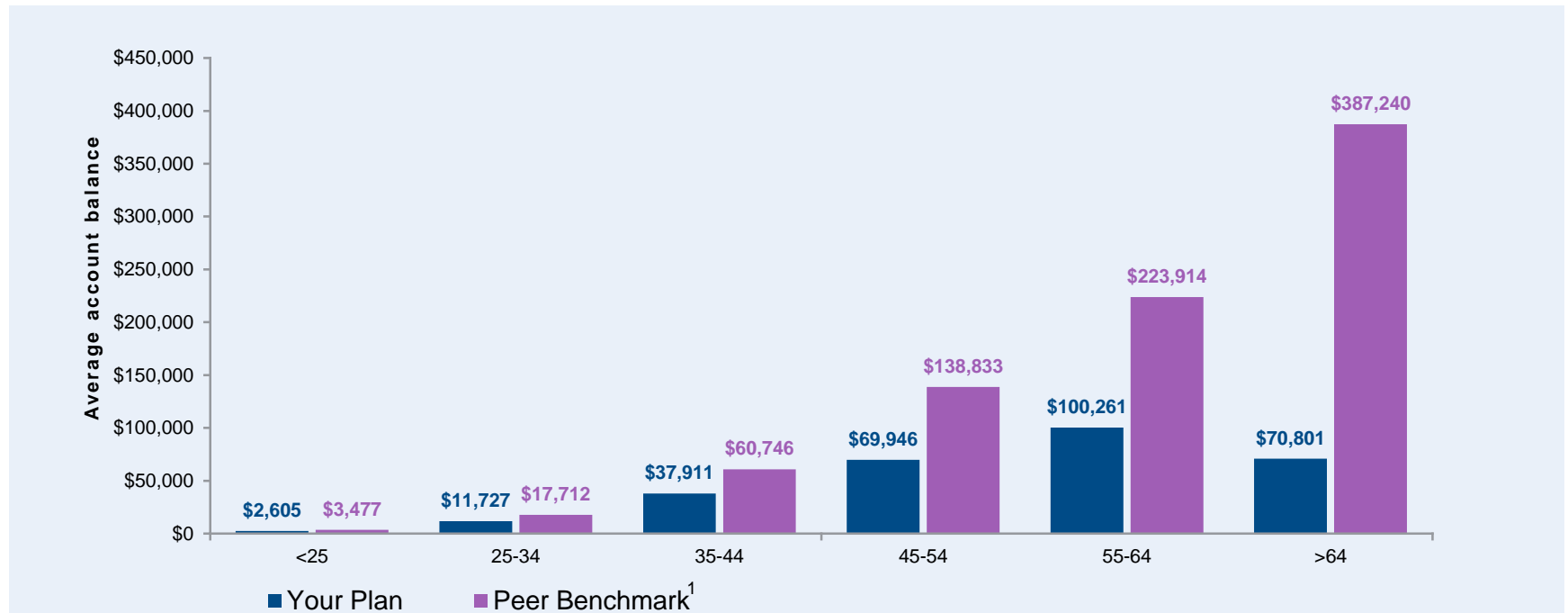
Employee summary: Participant diversification

Diversification by Age and Gender¹

Age	% Guaranteed		% Money Market		% Fixed Income		% Multi Asset/Other ²		% Equities	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<25	0%	0%	0%	0%	1%	0%	97%	90%	2%	10%
25-34	2%	3%	0%	0%	5%	4%	80%	69%	14%	25%
35-44	1%	4%	0%	0%	4%	2%	56%	61%	38%	32%
45-54	3%	4%	0%	0%	9%	8%	46%	35%	41%	53%
55-64	1%	1%	0%	0%	9%	12%	54%	40%	35%	47%
>64	0%	0%	0%	0%	6%	8%	52%	57%	42%	34%

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Active participants: Average account balance by age



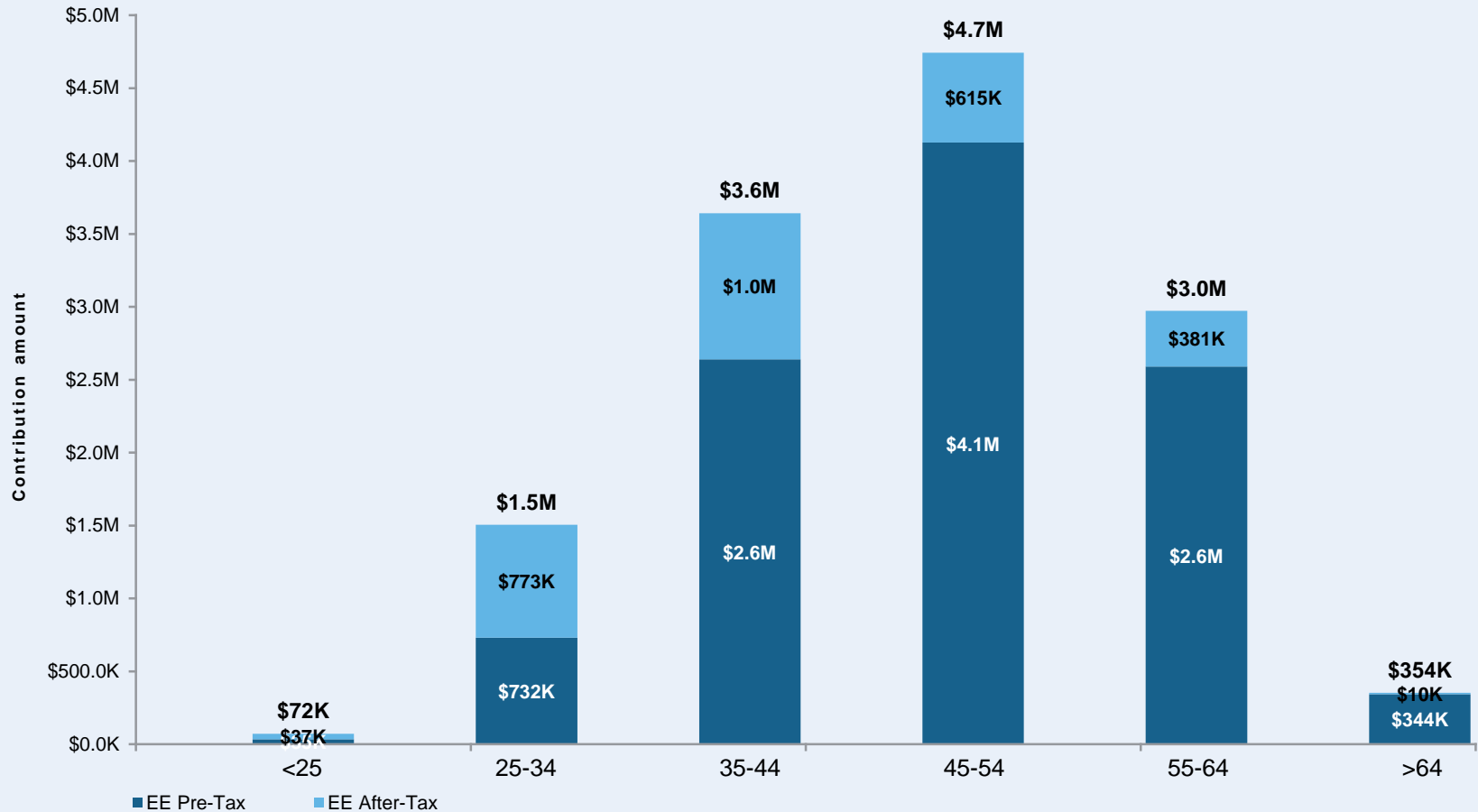
	<25	25-34	35-44	45-54	55-64	>64	Total
# of Active Participants	43	504	930	1008	513	65	3,063
% of Total Active Participants	1%	16%	30%	33%	17%	2%	100%
Total Active Assets	\$111,995	\$5,910,469	\$35,256,867	\$70,505,932	\$51,434,029	\$4,602,060	\$167,821,352
% of Total Active Assets	0%	4%	21%	42%	31%	3%	100%

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Active participants: Contribution amounts by age

Employer (ER) & employee (EE) contributions



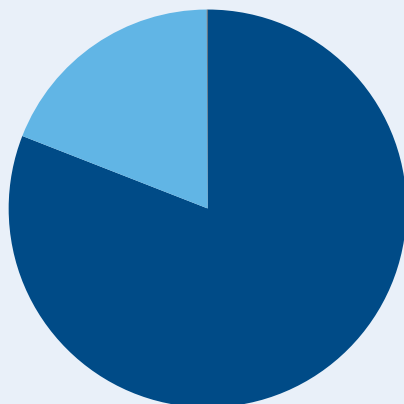
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Active participants: Loan activity summary

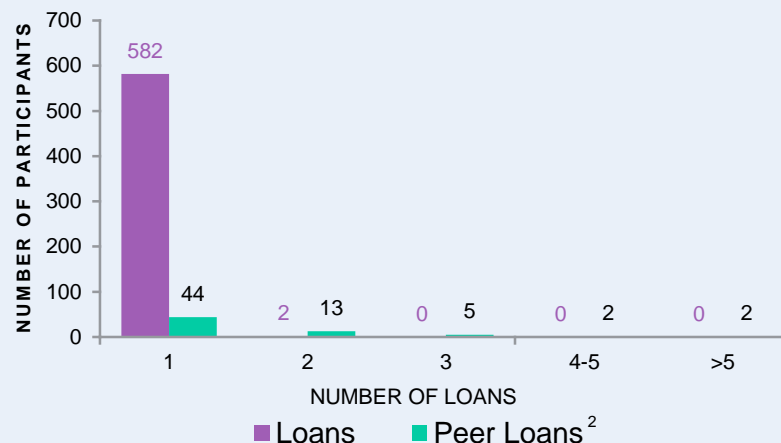
Percentage of employees with loans

NUMBER OF LOANS

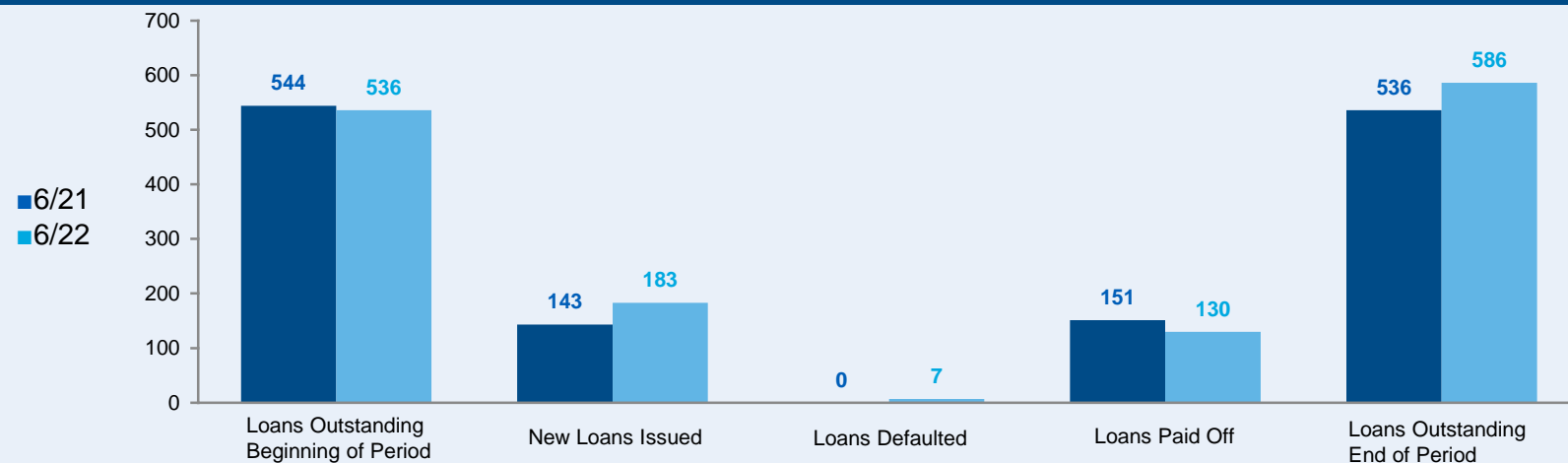
- 0 - 81%
- 1 - 19%
- 2 - 0%
- 3 - 0%
- 4-5 - 0%
- >5 - 0%



Number of participants by number of outstanding loans

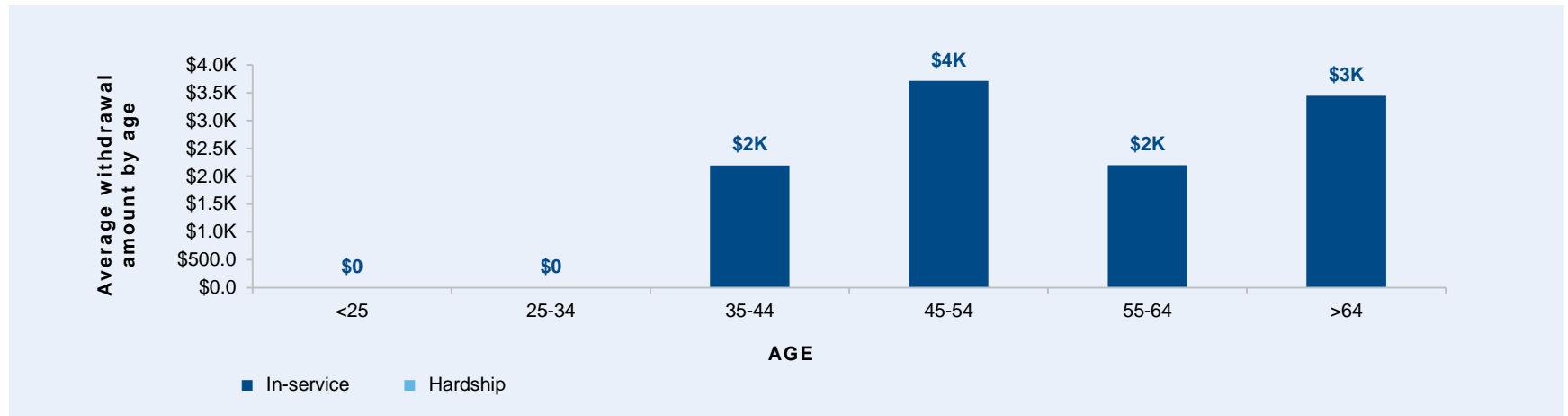


Loan activity¹



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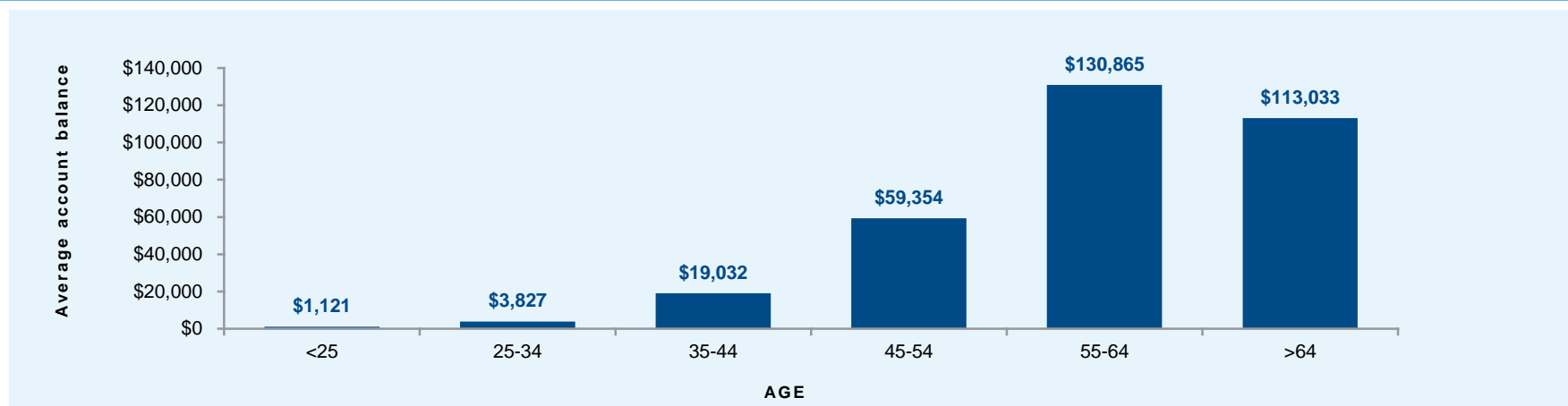
Active participants: Withdrawals summary



Age	<25	25-34	35-44	45-54	55-64	>64	Total
In-Service withdrawals¹							
Count	0	0	1	3	1	4	9
Average Amount	\$0	\$0	\$2,195	\$3,715	\$2,200	\$3,450	n/a
Total Amount	\$0	\$0	\$2,195	\$11,144	\$2,200	\$13,800	\$29,339

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Terminated participants: Summary



Age	<25	25-34	35-44	45-54	55-64	>64	Total
Total Terminated Participants	4	40	82	151	395	365	1037
Terminated Participants as % of All Participants in Age Range	9%	7%	7%	12%	39%	80%	23%
Total Terminated Assets	\$4,484	\$153,093	\$1,560,658	\$8,962,381	\$51,691,571	\$41,256,867	\$103,629,054
Terminated Assets as % of All Plan Assets in Age Range	4%	2%	4%	11%	46%	85%	36%
# of Participants with <\$1,000 balance	2	13	15	17	16	6	69
# of Participants with >= \$1,000 and < \$5,000 balance	2	19	27	40	47	28	163

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Monitoring investments

Simplify your investment lineup. Make it easy for participants to choose and easy for you to monitor.



Assets & contributions by asset class year-over-year

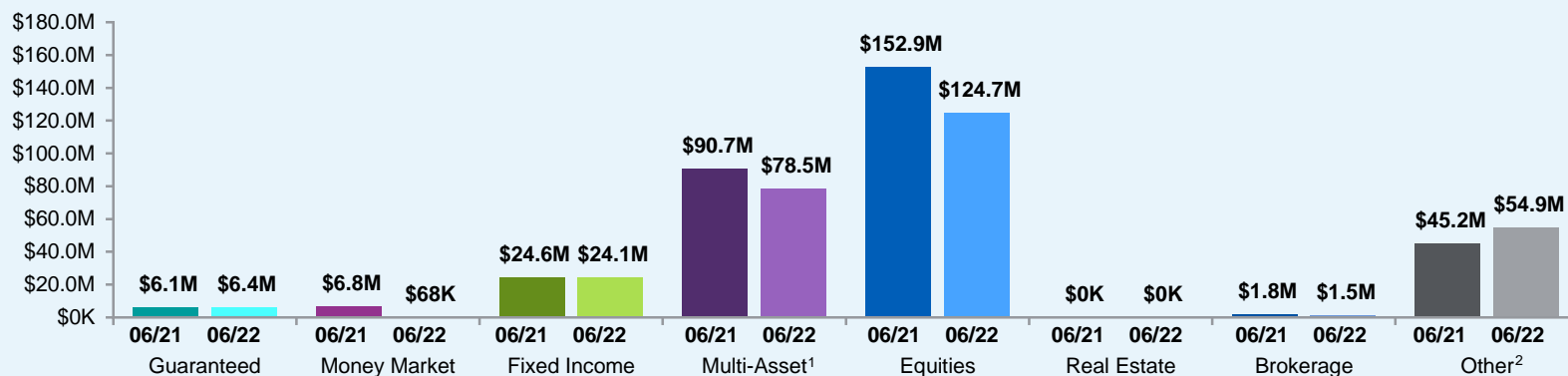
\$290,115,416

Total assets

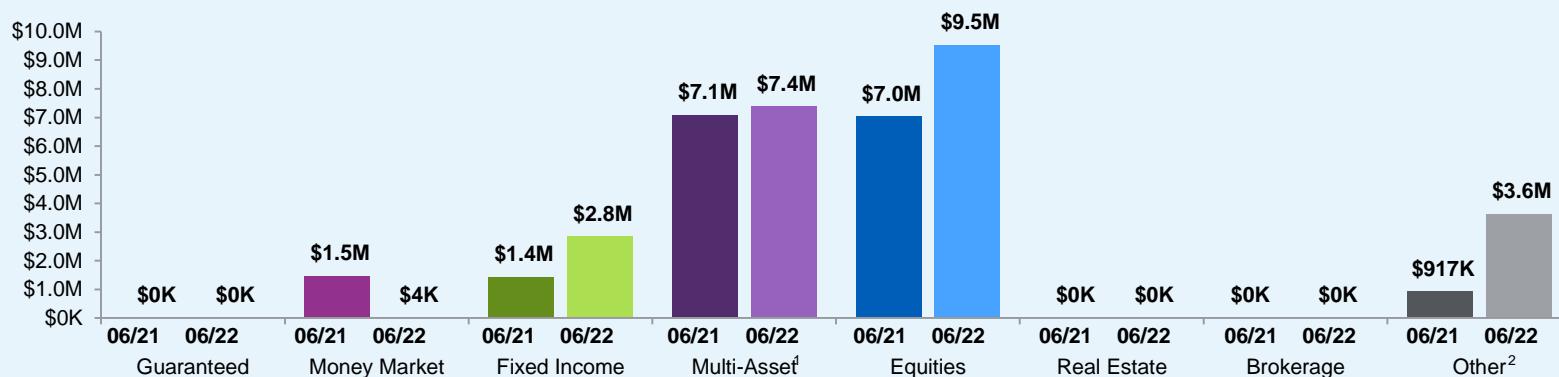
\$23,359,113

Total contributions

Assets



Contributions



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Investment/account utilization by assets

Top 5 investments by Assets

	Participant Count	Total Assets	Balance % of Total	
■ MissionSquare PLUS Fund R10	996	\$54,933,760	18.94%	18.94%
■ American Funds New Economy R5E	1,039	\$29,418,900	10.14%	10.14%
■ Vanguard Inst Idx Inst	1,073	\$29,332,901	10.11%	10.11%
■ TIAA-CREF Lifecycle 2035-Prem	528	\$17,176,037	5.92%	5.92%
■ TIAA-CREF Lifecycle 2030-Prem	373	\$13,505,559	4.66%	4.66%
Total as a % of total assets		\$144,367,157	49.76%	

Bottom 5 investments by Assets

	Participant Count	Total Assets	Balance % of Total	
■ TIAA-CREF Self Directed Acct	56	\$1,455,783	0.50%	0.50%
■ TIAA-CREF Lfcyle Rtmt Inc-Prem	458	\$1,230,521	0.42%	0.42%
■ TIAA-CREF Lifecycle 2060-Prem	156	\$648,349	0.22%	0.22%
■ Vanguard Treasury MoneyMkt Inv	1	\$68,208	0.02%	0.02%
■ TIAA-CREF Lifecycle 2065-Prem	12	\$14,726	0.01%	0.01%
Total as a % of total assets		\$3,417,587	1.18%	

■ Guaranteed ■ Money Market ■ Fixed Income ■ Multi-Asset ■ Equities ■ Real Estate ■ Other¹

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Investment/account utilization by contributions

Top 5 Investments by Contributions

	Participant Count	Total Assets	Balance % of Total	
■ MissionSquare PLUS Fund R10	397	\$3,626,469	15.52%	15.52%
■ Vanguard Inst Idx Inst	693	\$2,301,776	9.85%	9.85%
■ Metropolitan West TotRet Bnd I	334	\$1,662,779	7.12%	7.12%
■ American Funds New Economy R5E	618	\$1,571,572	6.73%	6.73%
■ TIAA-CREF Lifecycle 2035-Prem	426	\$1,511,050	6.47%	6.47%
Total as a % of total assets		\$10,673,646	45.69%	

Bottom 5 Investments by Contributions

	Participant Count	Total Assets	Balance % of Total	
■ TIAA-CREF Lifecycle 2010-Prem	22	\$40,349	0.17%	0.17%
■ TIAA-CREF Lifecycle 2015-Prem	15	\$24,099	0.10%	0.10%
■ TIAA-CREF Lfcyle Rtmt Inc-Prem	17	\$15,312	0.07%	0.07%
■ TIAA-CREF Lifecycle 2065-Prem	9	\$4,553	0.02%	0.02%
■ Vanguard Treasury MoneyMkt Inv	18	\$4,320	0.02%	0.02%
Total as a % of total assets		\$88,632	0.38%	

■ Guaranteed
■ Money Market
■ Fixed Income
■ Multi-Asset
■ Equities
■ Real Estate
■ Other¹

This report is as of the period ending 06/30/2022 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. Other includes uncategorized and brokerage assets.

Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MONEY MARKET					
Vanguard Treasury MoneyMkt Inv	1	\$4,320	0.02%	\$68,208	0.02%
Money Market Total		\$4,320	0.02%	\$68,208	0.02%
FIXED INCOME					
BlackRock High Yield Bd Instl	456	\$738,672	3.16%	\$5,100,347	1.76%
Metropolitan West TotRet Bnd I	514	\$1,662,779	7.12%	\$12,610,704	4.35%
Vanguard Ttl Bd Mkt Idx Adm	371	\$437,631	1.87%	\$6,354,270	2.19%
Fixed Income Total		\$2,839,083	12.15%	\$24,065,321	8.29%
MULTI-ASSET					
TIAA-CREF Lfcyle Rtmt Inc-Prem	458	\$15,312	0.07%	\$1,230,521	0.42%
TIAA-CREF Lifecycle 2010-Prem	67	\$40,349	0.17%	\$1,760,207	0.61%
TIAA-CREF Lifecycle 2015-Prem	71	\$24,099	0.10%	\$2,279,250	0.79%
TIAA-CREF Lifecycle 2020-Prem	188	\$560,791	2.40%	\$5,774,467	1.99%
TIAA-CREF Lifecycle 2025-Prem	277	\$625,290	2.68%	\$10,351,539	3.57%

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Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MULTI-ASSET (Continued)					
TIAA-CREF Lifecycle 2030-Prem	373	\$1,010,644	4.33%	\$13,505,559	4.66%
TIAA-CREF Lifecycle 2035-Prem	528	\$1,511,050	6.47%	\$17,176,037	5.92%
TIAA-CREF Lifecycle 2040-Prem	445	\$1,145,501	4.90%	\$11,752,135	4.05%
TIAA-CREF Lifecycle 2045-Prem	368	\$974,257	4.17%	\$8,096,957	2.79%
TIAA-CREF Lifecycle 2050-Prem	293	\$673,964	2.89%	\$4,041,807	1.39%
TIAA-CREF Lifecycle 2055-Prem	244	\$503,456	2.16%	\$1,839,426	0.63%
TIAA-CREF Lifecycle 2060-Prem	156	\$280,451	1.20%	\$648,349	0.22%
TIAA-CREF Lifecycle 2065-Prem	12	\$4,553	0.02%	\$14,726	0.01%
Multi-Asset Total		\$7,369,718	31.55%	\$78,470,981	27.05%

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Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
EQUITIES					
AME Small Cap World Fund R5E	601	\$792,330	3.39%	\$7,238,120	2.49%
American Funds New Economy R5E	1,039	\$1,571,572	6.73%	\$29,418,900	10.14%
DFA Emerging Mkt Small Cp Inst	375	\$304,937	1.31%	\$2,547,514	0.88%
DFA Real Estate Sec Port Inst	577	\$337,066	1.44%	\$3,941,343	1.36%
Goldman Sachs Sml Cp Val Inst	643	\$360,900	1.55%	\$7,483,921	2.58%
Invesco Diversified Dividnd R5	0	\$188,162	0.81%	\$0	0.00%
Lazard Intl Equity Port Instl	388	\$142,879	0.61%	\$2,034,253	0.70%
Scout Mid Cap Fund	635	\$506,348	2.17%	\$8,895,578	3.07%
TIAA-CREF Intl Eq Idx-Prem	618	\$1,103,072	4.72%	\$8,574,401	2.96%

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Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
EQUITIES (Continued)					
Vanguard Equity Income Adm	755	\$664,779	2.85%	\$10,372,362	3.58%
Vanguard Inst Idx Inst	1,073	\$2,301,776	9.85%	\$29,332,901	10.11%
Vanguard Mid-Cap Idx Adm	593	\$451,699	1.93%	\$7,263,324	2.50%
Vanguard Small-Cap Idx Adm	618	\$794,004	3.40%	\$7,634,981	2.63%
Equities Total		\$9,519,524	40.75%	\$124,737,599	43.00%
BROKERAGE					
TIAA-CREF Self Directed Acct	56	\$0	0.00%	\$1,455,783	0.50%
Brokerage Total		\$0	0.00%	\$1,455,783	0.50%
OTHER²					
Loan Fund	568	\$0	0.00%	\$5,168,242	1.78%
Deemed Loan	117	\$0	0.00%	\$1,215,522	0.42%
OTHER² (Continued)					
MissionSquare PLUS Fund R10	996	\$3,626,469	15.52%	\$54,933,760	18.94%
OTHER² (Continued)					
Other Total		\$3,626,469	15.52%	\$61,317,525	21.14%

This report is as of the period ending 06/30/2022 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. . 1. Guarantees associated with TIAA Traditional are backed by the claims-paying ability of Teachers Insurance and Annuity Association of America. 2. Other includes uncategorized assets.

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Appendix



Glossary

Term	Definition
Active Participants	Participants with a status of “Active” or “Leave” that have a balance greater than zero and have made a contribution in the last 12 months.
Advice	Specific investment recommendations, either in person, online or over the phone, that are tailored to individual circumstances, including variables such as age, current savings rates, plan investments and tolerance for risk.
Annuitants	Persons receiving benefits under a TIAA annuity contract.
Average Annual Payout	The average annual amount that all annuitants are receiving for income generated from an institution’s plan(s).
Average Projected Monthly Payout	The average monthly amount that participants may receive in their retirement years for income generated from the institution’s plan(s).
Average Guaranteed Income	Sources of income that are expected to continue for the participant’s lifetime (e.g., Social Security, TIAA Traditional, Defined Benefits).
Average Projected Monthly Income	The average after-tax retirement income your participants are projected to receive from your TIAA plan(s).
Consolidations	The number of participants who transfer balances from other service providers into TIAA retirement accounts.
Contributing Participants	Participants that have made a contribution in the last 12 months.
Contribution Rate	Annual contributions as a percentage of annual salary.
Defaulted Loans	Loans for which the participant missed the expected repayment and failed to pay the total overdue amount prior to the end of the calendar quarter following the calendar quarter in which the payment was due.

Glossary

Term	Definition
Defaulted Participants	Participants who have not made an investment allocation election and whose contributions have been directed to the plan's default investment.
Distributions	Includes, but is not limited to, the following categories: Loan, Hardship, In-Service, Terminated & Other. "Other" includes: Annuity Settlement Options, Death Benefits, Plan Loan Defaults, Withdrawals due to Opt-Out Option & Test Failure. In-Service and Terminated may include one or more of these categories: Voluntary Termination, Withdrawal, Death, Beneficiary, Installment Payment, Age 70.5 Minimum Distribution, QDRO, Hardship, Disability, Unforeseen Emergency, Full Withdrawal, Unknown, IRA Recharacterization, Excess Aggregate Contribution, Excess Contribution, Excess Deferral, Excess Annual Addition.
Early Engagement	A communication program that supports participants through their online account setup, plan review and goal setting and gives them an overview of the resources available to them at TIAA.
In Range	<p>Participants who are on target to cover their essential retirement expenses such as housing, food and healthcare but aren't yet on target to replace the income needed to maintain their current standard of living in retirement. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below:</p> <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace 80% - 100% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace 60% - 85% of after-tax income in retirement • Current salary >\$125K: Targeted to replace 50% - 70% of after-tax income in retirement
Income Replacement Ratio	The percentage of current salary that is estimated to be replaced during retirement, calculated using multiple variables (e.g., contribution rate, investments, salary). This is a way to visualize how ready your employees are for retirement.
Lifetime Income	An arrangement that provides fixed or variable income payments for the life of the annuitant.
Needs Action	<p>Participants who aren't yet on target to cover essential expense needs in retirement such as housing, food and healthcare. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below:</p> <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace <80% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace <60% of after-tax income in retirement • Current salary >\$125K: Targeted to replace <50% of after-tax income in retirement

Glossary

Term	Definition
On Track	<p>Participants who are on target to meet or exceed the income replacement rate needed to maintain their current standard of living in retirement. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below:</p> <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace >100% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace >85% of after-tax income in retirement • Current salary >\$125K: Targeted to replace >70% of after-tax income in retirement
Other Enrollments	All other enrollments not classified as remittance, phone, paper or online.
Participant-Directed Contributions	Contributions that have been invested per the participant's investment allocation election.
Participation Rate	Participation Rate is calculated by dividing the (number of eligible and participating) by (number of eligible and participating + number of eligible and not participating).
Peer Benchmark	A group of institutions at TIAA who provide a measure of comparison to your plan based on comparable plan asset size and market segment (K-12, Higher Education, Healthcare & Government).
Readiness Influencers	Plan features and participant behaviors that may contribute to a participant's retirement readiness and income replacement ratio.
Rebalanced	Total number of participants who reallocated their account balances during the last 12 months.
Remittance	Participant enrollment information, including investment election specifications, provided to TIAA by the plan sponsor.
Retirement Readiness	Measures the degree to which a participant is on track to retire with sufficient lifetime income while maintaining a desired standard of living.
Terminated Participants	Participants with an employee status of "Terminated."

Glossary

Term	Definition
Total Annual Payout	The total annual amount that all annuitants are receiving for income generated from an institution's plan(s).
Total Participants	Includes participants with an ending balance and at least one contribution during the evaluation period. In addition, other filters are applied to remove participants whose Ibbotson results could disproportionately skew the outcomes of the larger population.

Income replacement ratio methodology and assumptions

Participant-related salary, contribution, retirement age and advice assumptions:

- TIAA estimates participant salary based on a regression-tested analysis of more than 60,000 active, premium-paying participants across 48 institutions. Participant salaries are estimated based on a function of the participant's life stage, organization type, age, TIAA recordkept assets, gender, and region and contribution rate. The participant's gross annual income is used for various calculations, including retirement income replacement ratio, estimated Social Security benefits, and estimated federal and state taxes.
- Participant contributions are aggregated for a 12-month period for participants with a balance at the beginning of the period. For participants without a beginning balance, the contribution amount from the last month of the 12-month period is annualized. IRS contribution limits are applied and adjusted for participants eligible for catch-up provisions. Morningstar Investment Management LLC shifts any contribution amount above the annual limit to after-tax contributions for modeling purposes.
- All retirement plan contributions are considered to be dedicated solely for retirement. Assets will not be liquidated for use prior to retirement, and all contributions will end at the Target Retirement Age (TRA).
- The TRA value is defaulted to 67 for most plan participants. Participants aged 66 or higher have a TRA that is set two years from the current age. Life expectancy values are estimated by Morningstar and are based on participant age and gender.
- The participant's balance is aggregated for all selected plans. Amounts are designed as pretax and Roth contributions, as appropriate.
- The participant's asset allocation, for the purposes of this analysis, is categorized into simplified asset classes (i.e., stable value, equities, real estate, fixed income, multi asset and money market).
- The advice provided Morningstar consists of model portfolios composed of target allocations for the asset classes. Based on the target retirement goals, Morningstar will recommend a specific tolerance level designed to adjust over time based on Morningstar's proprietary methodology which customizes a risk level trajectory for the participant.
- The hypothetical advice target for the model is a 100% replacement ratio.
- The Morningstar tool's advice is based on statistical projections of the likelihood that an individual will achieve their retirement goals. The projections rely on financial and economic assumptions of historical rates of return of various asset classes that may not reoccur in the future, volatility measures and other facts, as well as information the individual provides. Morningstar's advice engine includes tax-rate assumptions, mortality tables, and Social Security estimates.

Retirement income replacement ratio calculation assumptions:

- TIAA measures retirement income replacement ratios by calculating the projected stream of distributions from participants' assets and estimated Social Security benefits in current dollars as a percentage of employees' current salaries.
- Using the participant's estimated salary, current contribution rates and asset allocation, TIAA leverages the advice engine from Morningstar an independent expert retained by TIAA, to perform a sophisticated, Monte Carlo analysis (500 total simulations) to project the retirement income replacement ratio.
- The results indicate the participant's 70% probability of achieving the retirement goal. A lower probability of success is associated with better (and less likely) estimated income. Your participants can also model different outcomes for themselves by going online to **[TIAA.org/retirementadvisor](https://www.tiaa.org/retirementadvisor)** (online Retirement Advisor tool).
- Data provided represents inputs into the Morningstar advice engine for plan management purposes. If a participant uses Retirement Advisor online or has an advice session with a consultant, estimated retirement income is not replaced with any of the information used in the Plan Outcome Assessment report calculations.
- The plan-level retirement income replacement ratio is determined by calculating the average retirement income replacement ratio of all participants in the plan analysis. All actively contributing participants are included in the analysis, unless the participant has annual compensation of less than \$25,000, has contributed less than \$300 in the previous 12-month period, has a current balance less than \$500, or is less than 23 or greater than 65 years of age.
- **IMPORTANT:** Projections, and other information generated through the TIAA Plan Outcome Assessment and the Morningstar tool regarding the likelihood of various investment outcomes, are hypothetical, do not reflect actual investment results, and are not a guarantee of future results. The projections are dependent in part on subjective and proprietary assumptions, including the rate of inflation and the rate of return for different asset classes, and these rates are difficult to accurately predict. The projections also rely on financial and economic historical assumptions that may not reoccur in the future, volatility measures and other facts. Results may vary with each use and over time.

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TIAA.org

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or log on to TIAA.org for underlying product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

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02/21

City of Fort Worth | 8/25/22 | 28

Investment Performance Review
Period Ending June 30, 2022

**City of Fort Worth
457 Deferred Compensation Plan
Manager Review**



Fund Information

Fund Name : Vanguard Fenway Funds: Vanguard Equity Income Fund; Admiral Shares
Fund Family : Vanguard
Ticker : VEIRX
Inception Date : 08/13/2001
Fund Assets : \$48,785 Million
Portfolio Turnover : 29%

Portfolio Assets : \$54,329 Million
Portfolio Manager : Hill/Hand
PM Tenure : 2021--2022
Fund Style : IM Equity Income (MF)
Style Benchmark : Russell 1000 Value Index

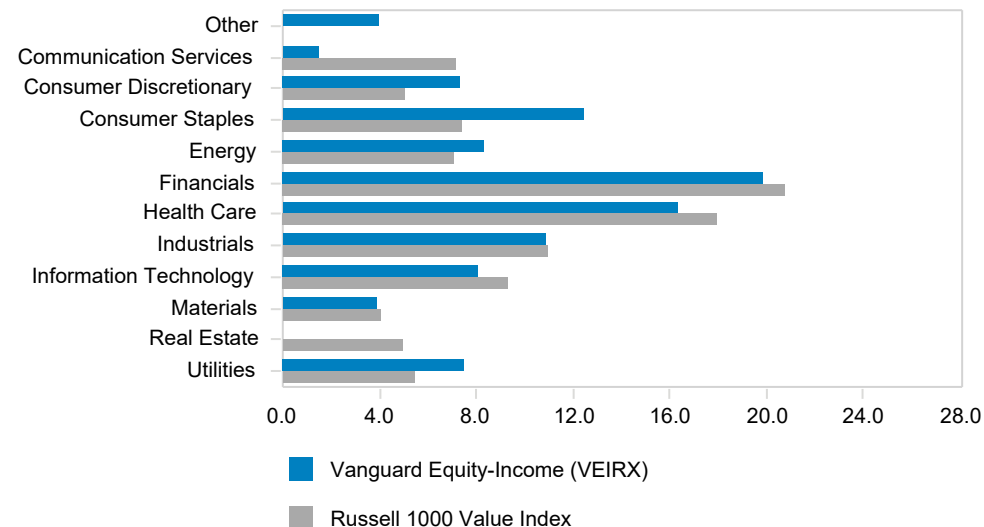
Portfolio Characteristics As of 03/31/2022

	Portfolio	Benchmark
Total Securities	202	848
Avg. Market Cap (\$)	158,976,725,727	13,457,500,350
Price/Earnings (P/E)	20.84	16.71
Price/Book (P/B)	5.06	2.65
Dividend Yield	2.43	1.97
Annual EPS	48.02	9.56
5 Yr EPS	12.11	14.69
3 Yr EPS Growth	12.86	N/A
Beta (5 Years, Monthly)	0.88	1.00

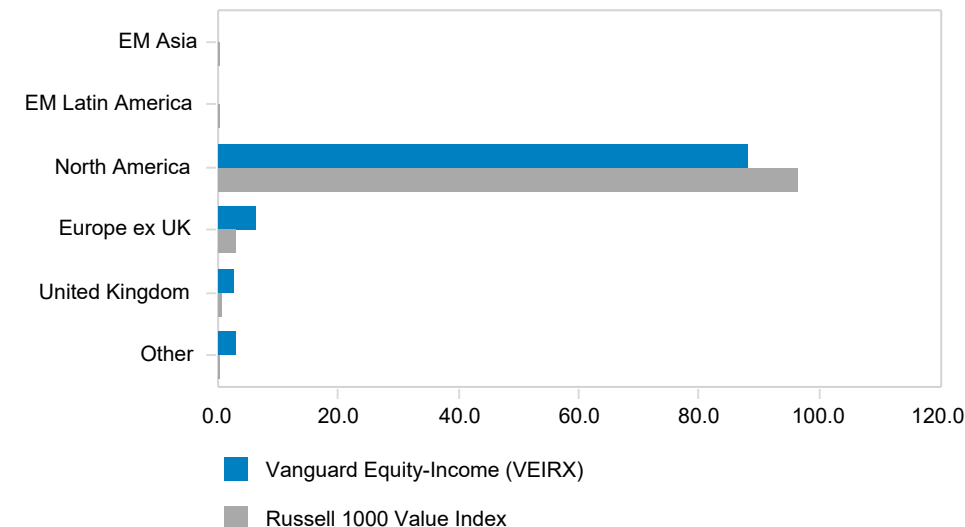
Top Ten Securities As of 03/31/2022

Johnson & Johnson ORD	3.5 %
JPMorgan Chase & Co ORD	3.1 %
Procter & Gamble Co ORD	2.7 %
Pfizer Inc ORD	2.7 %
Vanguard Market Liquidity Fund	2.4 %
Cisco Systems Inc ORD	2.2 %
Eli Lilly and Co ORD	2.0 %
Morgan Stanley ORD	2.0 %
Bank of America Corp ORD	1.9 %
Chubb Ltd ORD	1.9 %

Sector Weights As of 03/31/2022



Region Weights As of 03/31/2022



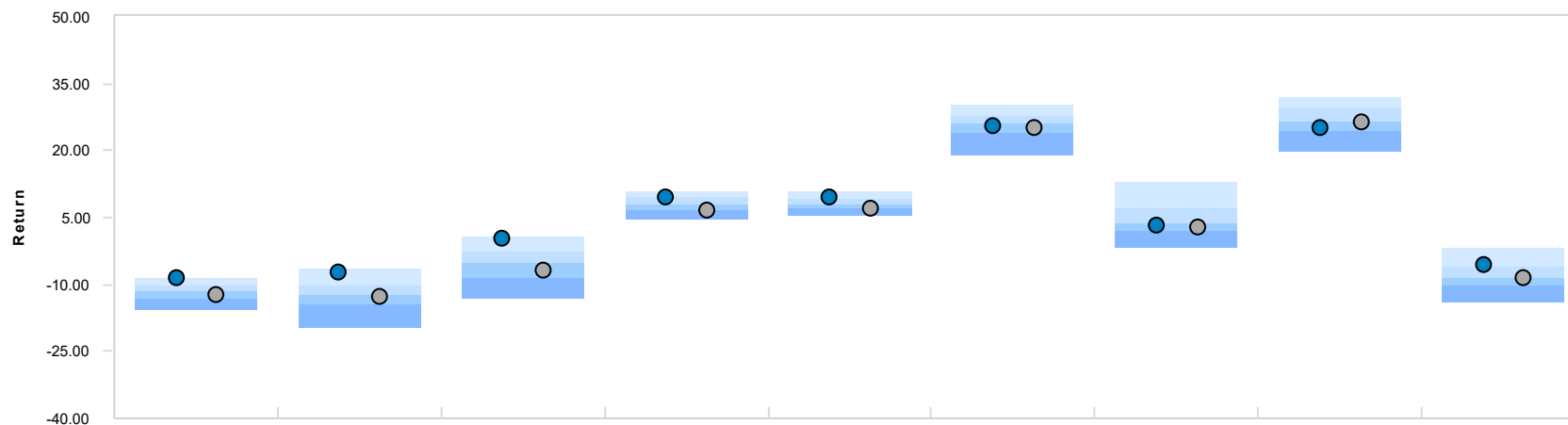
Mutual Fund Info from Lipper

Product Name : Vanguard Equity Inc;Adm (VEIRX)
Fund Family : Vanguard
Ticker : VEIRX
Peer Group : IM U.S. Large Cap Value Equity (MF)
Benchmark : Russell 1000 Value Index
Fund Inception : 08/13/2001
Portfolio Manager : Hill/Hand
Total Assets : \$48,785 Million
Total Assets Date : 05/31/2022
Gross Expense : 0.19%
Net Expense : 0.19%
Turnover : 29%

Summary Description

The Fund seeks to provide an above-average level of current income and reasonable long-term capital appreciation. It invests in common stocks of mid-size and large companies whose stocks typically pay above-average levels of dividend income and are, in the opinion of the advisor, undervalued relative to similar stocks.

Peer Group Analysis - IM U.S. Large Cap Value Equity (MF)

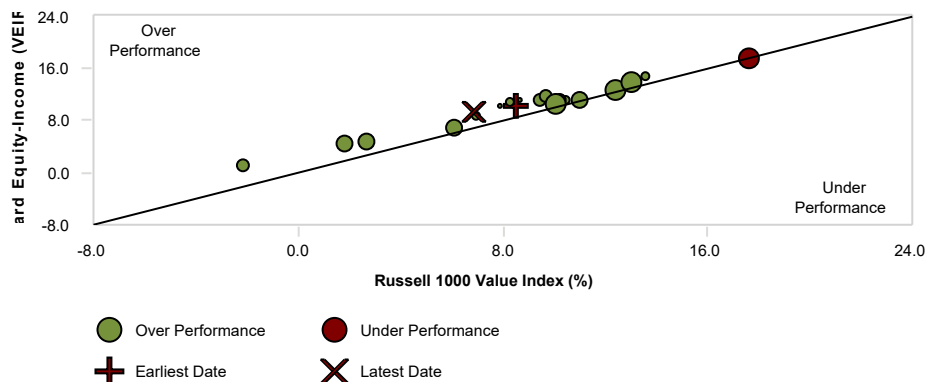


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Vanguard Equity-Income (VEIRX)	-8.36 (5)	-7.31 (7)	0.51 (7)	9.42 (26)	9.56 (21)	25.64 (56)	3.13 (58)	25.35 (67)	-5.65 (24)
● Russell 1000 Value Index	-12.21 (63)	-12.86 (54)	-6.82 (66)	6.87 (73)	7.17 (74)	25.16 (63)	2.80 (61)	26.54 (50)	-8.27 (45)
Median	-11.35	-12.36	-5.22	8.13	8.07	25.96	3.82	26.50	-8.61

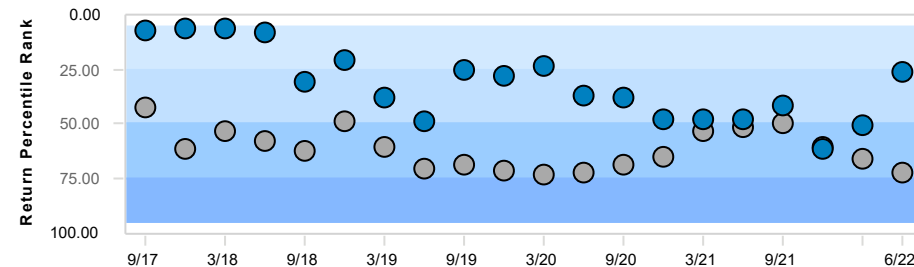
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Vanguard Equity-Income (VEIRX)	1.14 (13)	8.70 (35)	-0.25 (34)	5.27 (55)	10.07 (58)	13.15 (73)
Russell 1000 Value Index	-0.74 (57)	7.77 (63)	-0.78 (68)	5.21 (57)	11.26 (42)	16.25 (33)
IM U.S. Large Cap Value Equity (MF) Median	-0.58	8.32	-0.43	5.39	10.70	14.91

3 Yr Rolling Under/Over Performance - 5 Years

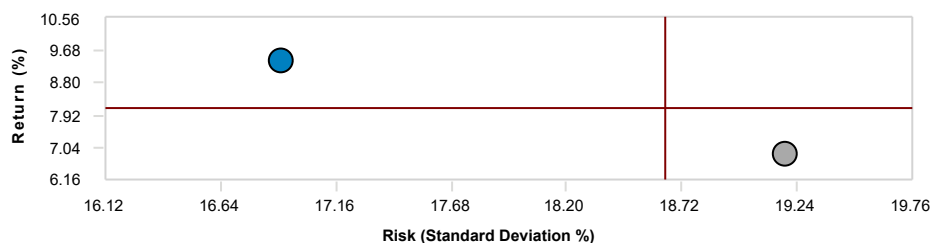


3 Yr Rolling Percentile Ranking - 5 Years



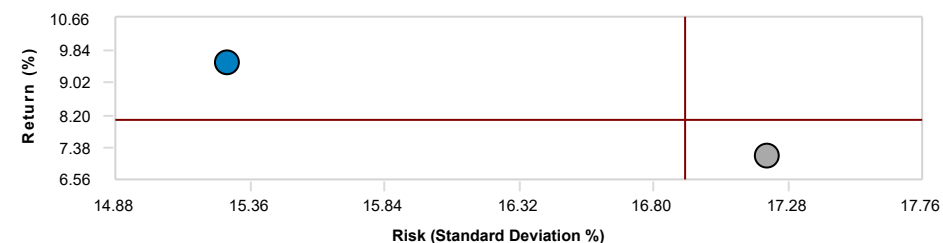
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Vanguard Equity-Income (VEIRX)	20	7 (35%)	11 (55%)	2 (10%)	0 (0%)
Russell 1000 Value Index	20	0 (0%)	3 (15%)	17 (85%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Vanguard Equity-Income (VEIRX)	9.42	16.91
Russell 1000 Value Index	6.87	19.18
Median	8.13	18.64

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Vanguard Equity-Income (VEIRX)	9.56	15.28
Russell 1000 Value Index	7.17	17.21
Median	8.07	16.91

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Equity-Income (VEIRX)	3.65	95.00	83.79	3.09	0.53	0.58	0.87	11.38
Russell 1000 Value Index	0.00	100.00	100.00	0.00	N/A	0.41	1.00	13.53

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Equity-Income (VEIRX)	3.19	96.51	84.64	2.97	0.59	0.60	0.88	10.36
Russell 1000 Value Index	0.00	100.00	100.00	0.00	N/A	0.43	1.00	12.14



Fund Information

Fund Name :	Vanguard Institutional Index Fund: Vanguard Institutional Index Fund; Institutional Shares	Portfolio Assets :	\$261,476 Million
Fund Family :	Vanguard	Portfolio Manager :	Butler/Louie
Ticker :	VINIX	PM Tenure :	2000--2017
Inception Date :	07/31/1990	Fund Style :	IM S&P 500 Index (MF)
Fund Assets :	\$107,603 Million	Style Benchmark :	S&P 500 Index
Portfolio Turnover :	3%		

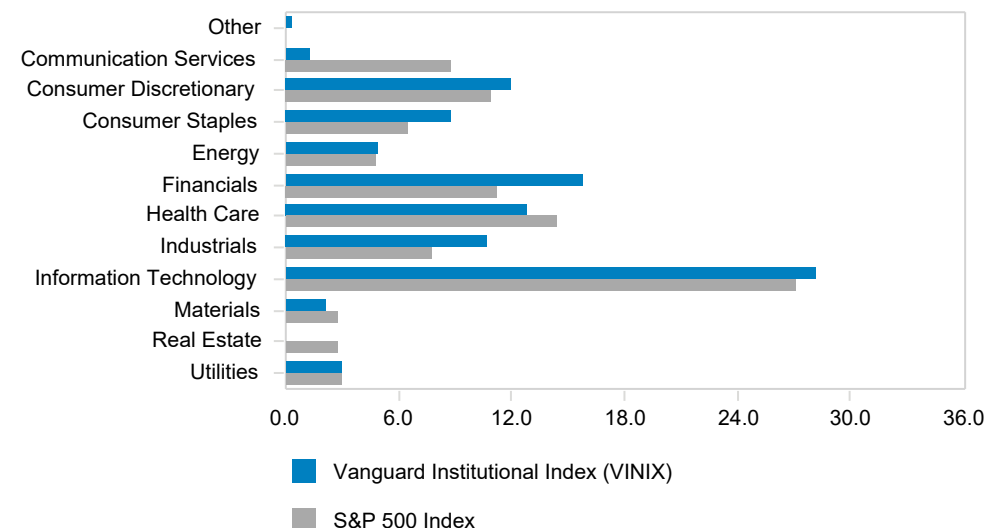
Portfolio Characteristics As of 05/31/2022

	Portfolio	Benchmark
Total Securities	506	504
Avg. Market Cap (\$)	484,536,535,847	29,819,246,970
Price/Earnings (P/E)	27.31	20.22
Price/Book (P/B)	8.76	4.16
Dividend Yield	1.86	1.55
Annual EPS	52.65	14.13
5 Yr EPS	18.87	19.34
3 Yr EPS Growth	19.08	N/A
Beta (5 Years, Monthly)	1.00	1.00

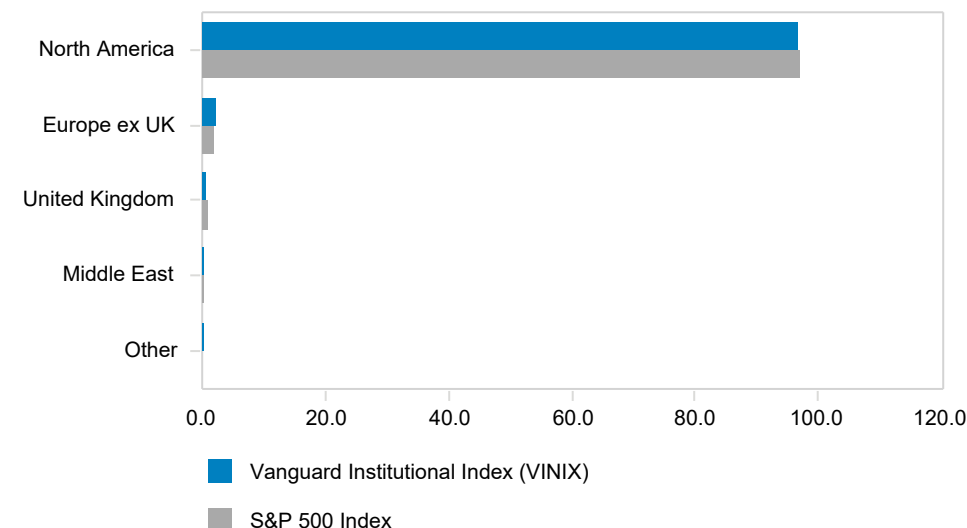
Top Ten Securities As of 05/31/2022

Apple Inc ORD	6.6 %
Microsoft Corp ORD	5.8 %
Amazon.com Inc ORD	3.0 %
Alphabet Inc Class A ORD	2.0 %
Tesla Inc ORD	1.8 %
Alphabet Inc Class C ORD	1.8 %
Berkshire Hathaway Inc ORD	1.7 %
Johnson & Johnson ORD	1.4 %
UnitedHealth Group Inc ORD	1.3 %
NVIDIA Corp ORD	1.3 %

Sector Weights As of 05/31/2022



Region Weights As of 05/31/2022



Statistics provided by Lipper. Most recent available data shown.



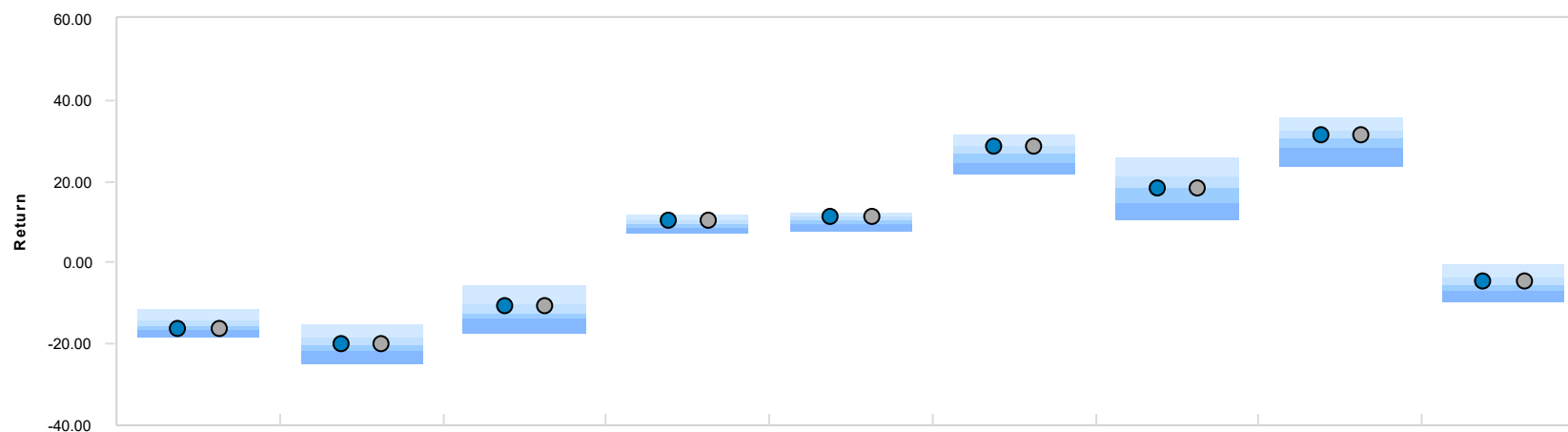
Mutual Fund Info from Lipper

Product Name : Vanguard Instl Indx;Inst (VINIX)
Fund Family : Vanguard
Ticker : VINIX
Peer Group : IM U.S. Large Cap Core Equity (MF)
Benchmark : S&P 500 Index
Fund Inception : 07/31/1990
Portfolio Manager : Butler/Louie
Total Assets : \$107,603 Million
Total Assets Date : 05/31/2022
Gross Expense : 0.04%
Net Expense : 0.04%
Turnover : 3%

Summary Description

The Fund seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks. The Fund employs an indexing investment approach designed to track the performance of the Standard & Poors 500 Index by investing all of its assets in the stocks that make up the Index.

Peer Group Analysis - IM U.S. Large Cap Core Equity (MF)

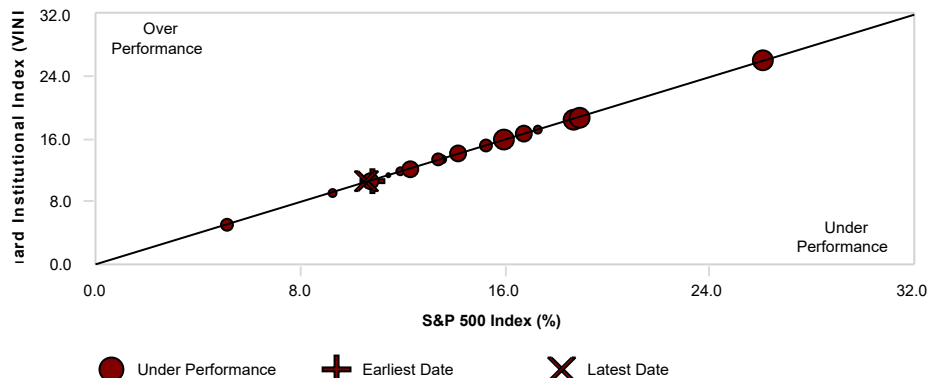


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Vanguard Institutional Index (VINIX)	-16.11 (58)	-19.97 (43)	-10.65 (34)	10.58 (26)	11.28 (26)	28.67 (26)	18.39 (50)	31.46 (37)	-4.42 (32)
● S&P 500 Index	-16.10 (58)	-19.96 (42)	-10.62 (33)	10.60 (26)	11.31 (24)	28.71 (25)	18.40 (50)	31.49 (36)	-4.38 (32)
Median	-15.79	-20.40	-12.54	9.58	10.51	26.95	18.39	30.64	-5.45

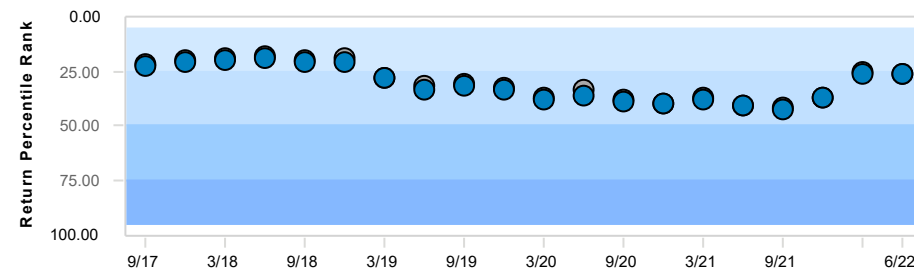
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Vanguard Institutional Index (VINIX)	-4.60 (26)	11.02 (29)	0.57 (33)	8.54 (41)	6.18 (49)	12.15 (43)
S&P 500 Index	-4.60 (26)	11.03 (29)	0.58 (32)	8.55 (40)	6.17 (49)	12.15 (43)
IM U.S. Large Cap Core Equity (MF) Median	-5.62	10.18	0.26	8.32	6.11	11.83

3 Yr Rolling Under/Over Performance - 5 Years

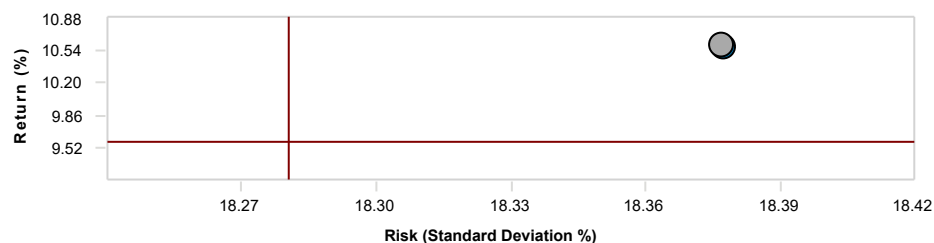


3 Yr Rolling Percentile Ranking - 5 Years



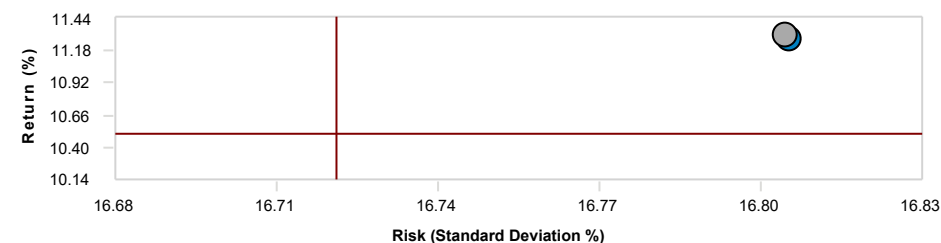
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Vanguard Institutional Index (VINIX)	20	6 (30%)	14 (70%)	0 (0%)	0 (0%)
S&P 500 Index	20	7 (35%)	13 (65%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Vanguard Institutional Index (VINIX)	10.58	18.38
S&P 500 Index	10.60	18.38
Median	9.58	18.28

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Vanguard Institutional Index (VINIX)	11.28	16.81
S&P 500 Index	11.31	16.80
Median	10.51	16.72

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Institutional Index (VINIX)	0.01	99.96	100.05	-0.02	-2.44	0.60	1.00	12.21
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.61	1.00	12.21

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Institutional Index (VINIX)	0.01	99.95	100.05	-0.03	-2.36	0.66	1.00	11.28
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.66	1.00	11.28



Fund Information

Fund Name : Vanguard Index Funds: Vanguard Mid-Cap Index Fund; Admiral Shares
Fund Family : Vanguard
Ticker : VIMAX
Inception Date : 11/12/2001
Fund Assets : \$55,189 Million
Portfolio Turnover : 16%

Portfolio Assets : \$144,497 Million
Portfolio Manager : Butler/Khan
PM Tenure : 2001--2021
Fund Style : IM U.S. Mid Cap Growth Equity (MF)
Style Benchmark : Vanguard Spliced Mid Cap Index

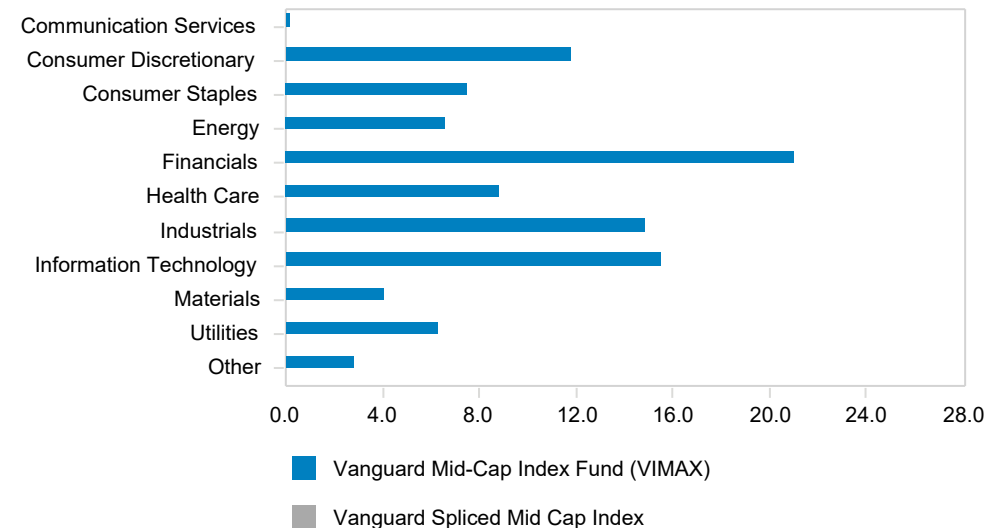
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	377	N/A
Avg. Market Cap (\$)	25,613,501,222	-
Price/Earnings (P/E)	30.28	N/A
Price/Book (P/B)	6.46	N/A
Dividend Yield	2.02	N/A
Annual EPS	41.84	N/A
5 Yr EPS	15.71	N/A
3 Yr EPS Growth	14.70	N/A
Beta (5 Years, Monthly)	1.00	1.00

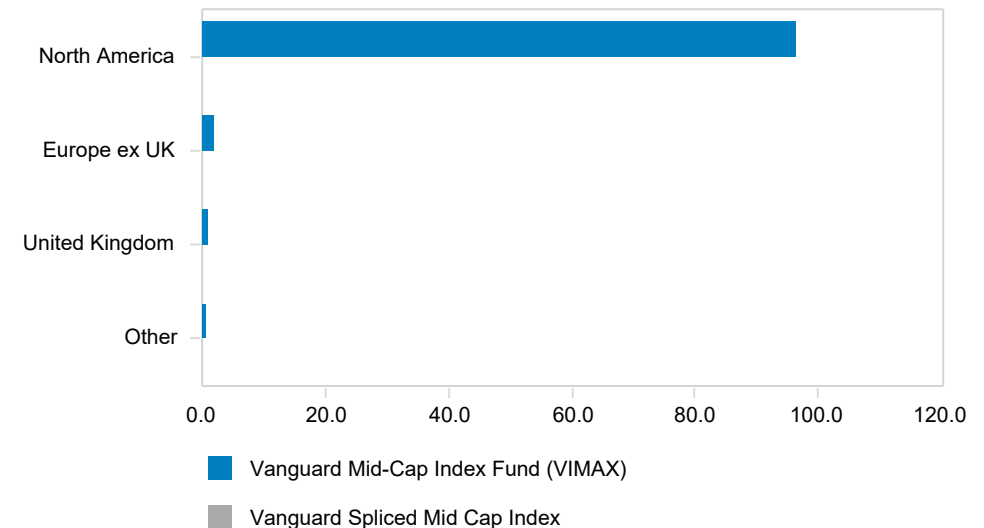
Top Ten Securities As of 04/30/2022

Vanguard Market Liquidity Fund	0.8 %
Occidental Petroleum Corp ORD	0.8 %
Centene Corp ORD	0.7 %
Valero Energy Corp ORD	0.7 %
Nucor Corp ORD	0.7 %
Synopsys Inc ORD	0.7 %
Amphenol Corp ORD	0.7 %
Corteva Inc ORD	0.7 %
Cadence Design Systems Inc ORD	0.7 %
IQVIA Holdings Inc ORD	0.7 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



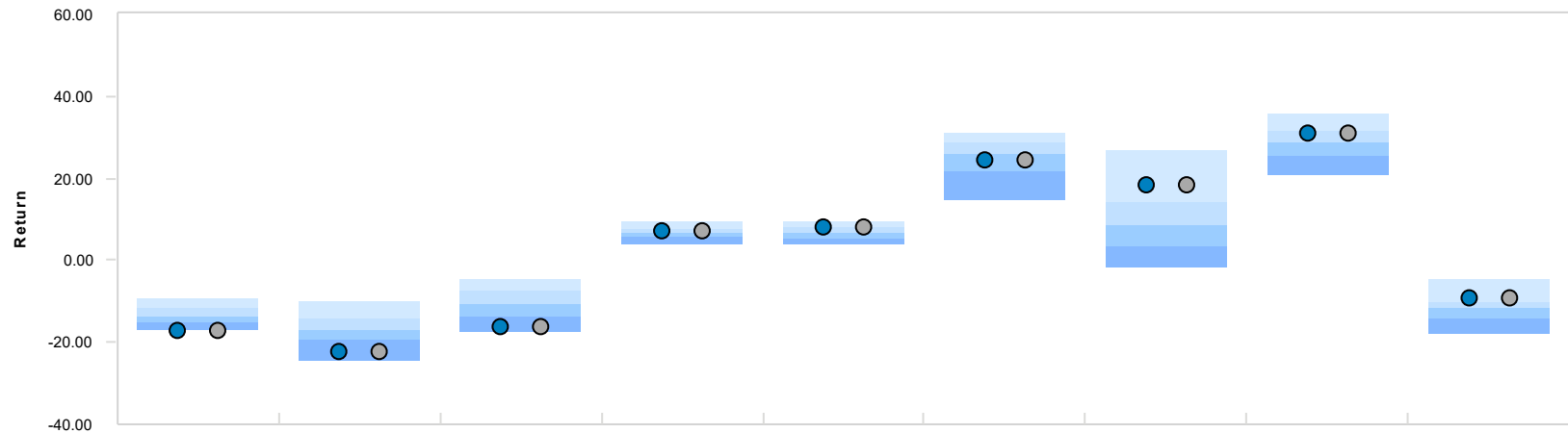
Mutual Fund Info from Lipper

Product Name : Vanguard Md-Cp I;Adm (VIMAX)
Fund Family : Vanguard
Ticker : VIMAX
Peer Group : IM U.S. Mid Cap Core Equity (MF)
Benchmark : Vanguard Spliced Mid Cap Index
Fund Inception : 11/12/2001
Portfolio Manager : Butler/Khan
Total Assets : \$55,189 Million
Total Assets Date : 05/31/2022
Gross Expense : 0.05%
Net Expense : 0.05%
Turnover : 16%

Summary Description

The Fund seeks to track the performance of a benchmark index that measures the investment return of mid-capitalization stocks.

Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)



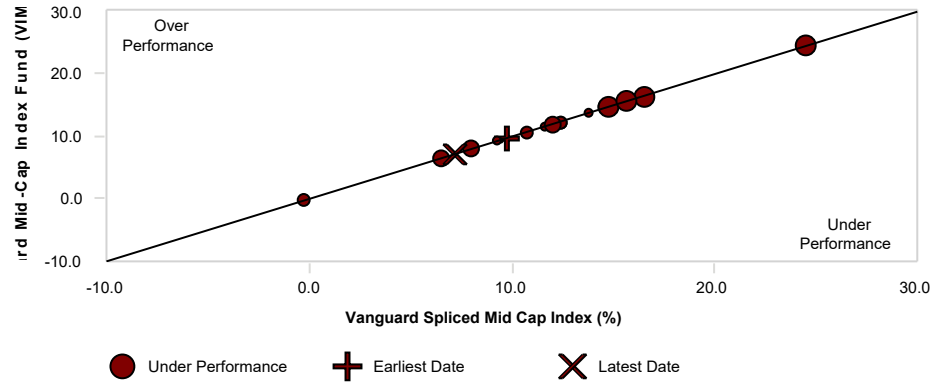
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Vanguard Mid-Cap Index Fund (VIMAX)	-16.96 (93)	-22.21 (94)	-16.00 (87)	7.19 (35)	8.28 (17)	24.51 (60)	18.24 (15)	31.03 (27)	-9.23 (22)
● Vanguard Spliced Mid Cap Index	-16.95 (93)	-22.19 (94)	-15.98 (87)	7.20 (35)	8.30 (17)	24.52 (60)	18.24 (15)	31.09 (27)	-9.22 (22)
Median	-13.63	-17.27	-10.76	6.62	6.73	25.73	8.44	28.59	-11.64

Comparative Performance

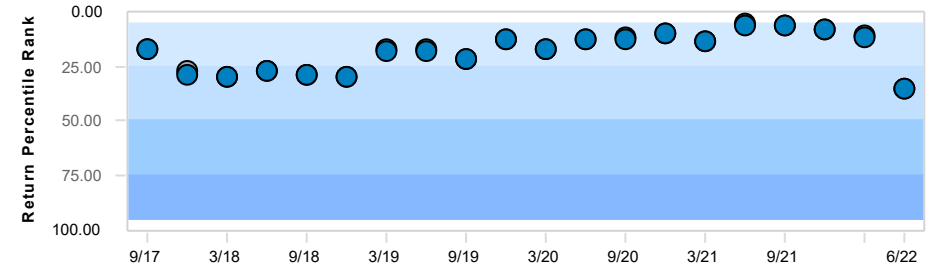
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Vanguard Mid-Cap Index Fund (VIMAX)	-6.32 (83)	7.97 (59)	0.00 (19)	7.58 (2)	7.18 (88)	18.02 (67)
Vanguard Spliced Mid Cap Index	-6.31 (82)	7.98 (59)	0.01 (19)	7.59 (2)	7.18 (88)	18.03 (67)
IM U.S. Mid Cap Core Equity (MF) Median	-4.08	8.20	-0.87	5.14	10.47	19.44



3 Yr Rolling Under/Over Performance - 5 Years

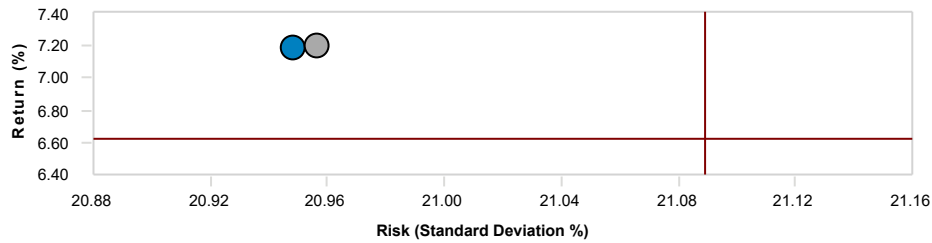


3 Yr Rolling Percentile Ranking - 5 Years



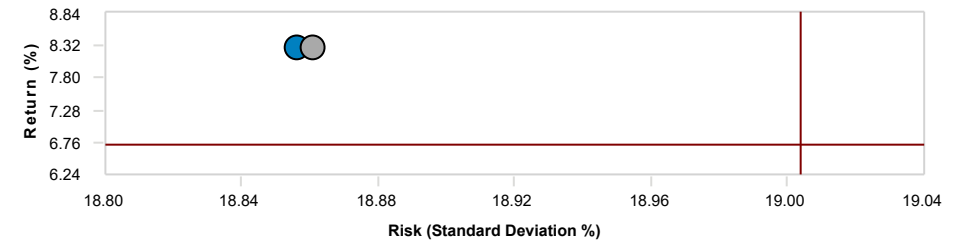
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Vanguard Mid-Cap Index Fund (VIMAX)	20	14 (70%)	6 (30%)	0 (0%)	0 (0%)
Vanguard Spliced Mid Cap Index	20	14 (70%)	6 (30%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Vanguard Mid-Cap Index Fund (VIMAX)	7.19	20.95
Vanguard Spliced Mid Cap Index	7.20	20.96
Median	6.62	21.09

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Vanguard Mid-Cap Index Fund (VIMAX)	8.28	18.86
Vanguard Spliced Mid Cap Index	8.30	18.86
Median	6.73	19.00

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Mid-Cap Index Fund (VIMAX)	0.03	99.97	100.03	-0.01	-0.65	0.41	1.00	14.89
Vanguard Spliced Mid Cap Index	0.00	100.00	100.00	0.00	N/A	0.41	1.00	14.90

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Mid-Cap Index Fund (VIMAX)	0.02	99.97	100.05	-0.02	-0.78	0.46	1.00	13.32
Vanguard Spliced Mid Cap Index	0.00	100.00	100.00	0.00	N/A	0.46	1.00	13.32

Fund Information

Fund Name : Carillon Series Trust: Carillon Scout Mid Cap Fund; Class I Shares
Fund Family : Carillon Tower Advisers
Ticker : UMBMX
Inception Date : 10/31/2006
Fund Assets : \$3,519 Million
Portfolio Turnover : 109%

Portfolio Assets : \$3,895 Million
Portfolio Manager : G. Patrick Dunkerley
PM Tenure : 2006
Fund Style : IM U.S. Mid Cap Core Equity (MF)
Style Benchmark : Russell Midcap Index

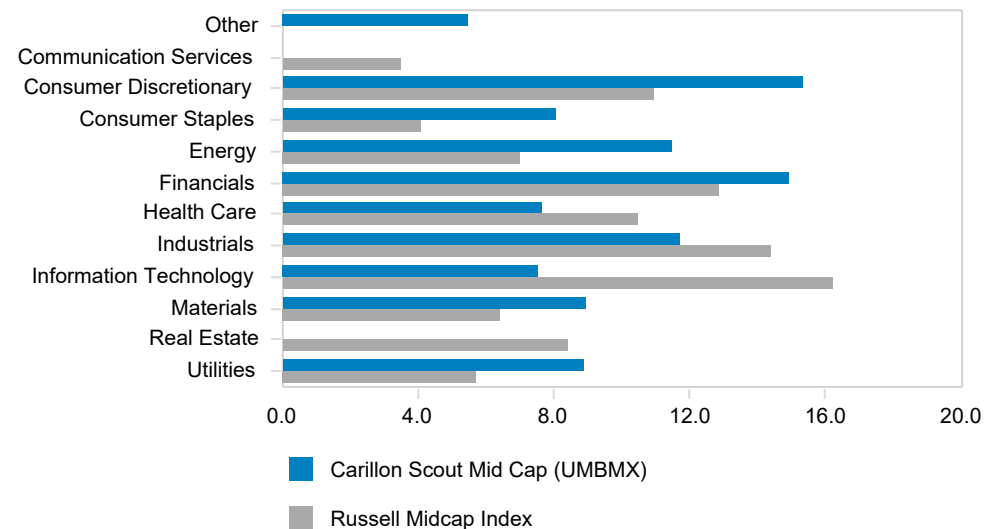
Portfolio Characteristics As of 05/31/2022

	Portfolio	Benchmark
Total Securities	142	822
Avg. Market Cap (\$)	19,215,340,014	9,617,794,180
Price/Earnings (P/E)	25.40	17.60
Price/Book (P/B)	4.64	3.09
Dividend Yield	1.86	1.55
Annual EPS	54.35	6.48
5 Yr EPS	16.36	17.40
3 Yr EPS Growth	19.12	N/A
Beta (5 Years, Monthly)	0.98	1.00

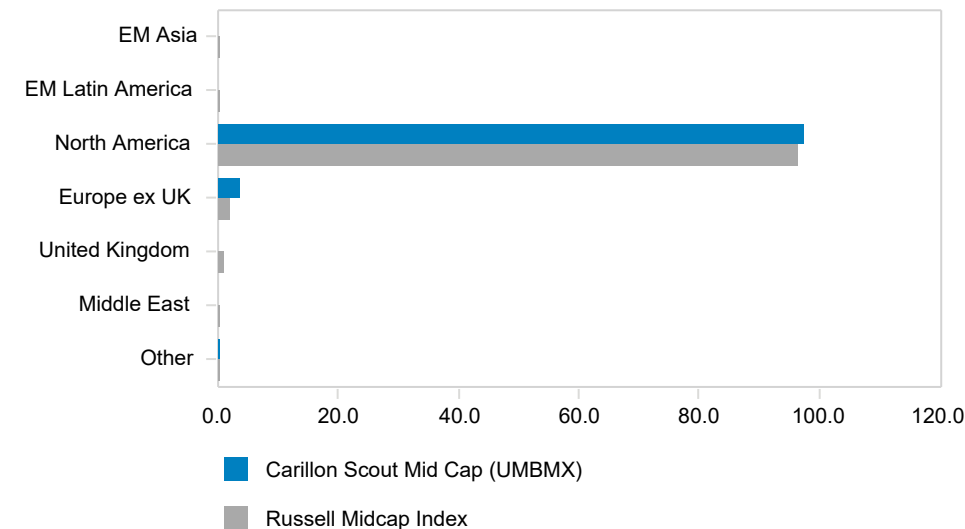
Top Ten Securities As of 05/31/2022

Chesapeake Energy Corp ORD	4.2 %
Mosaic Co ORD	3.4 %
Ovintiv Inc ORD	3.0 %
WEC Energy Group Inc ORD	2.8 %
Evergy Inc ORD	2.6 %
Healthcare Realty Trust Inc ORD	2.1 %
CMS Energy Corp ORD	2.1 %
Southwest Airlines Co ORD	1.7 %
CF Industries Holdings Inc ORD	1.6 %
Brown & Brown Inc ORD	1.6 %

Sector Weights As of 05/31/2022



Region Weights As of 05/31/2022



Statistics provided by Lipper. Most recent available data shown.



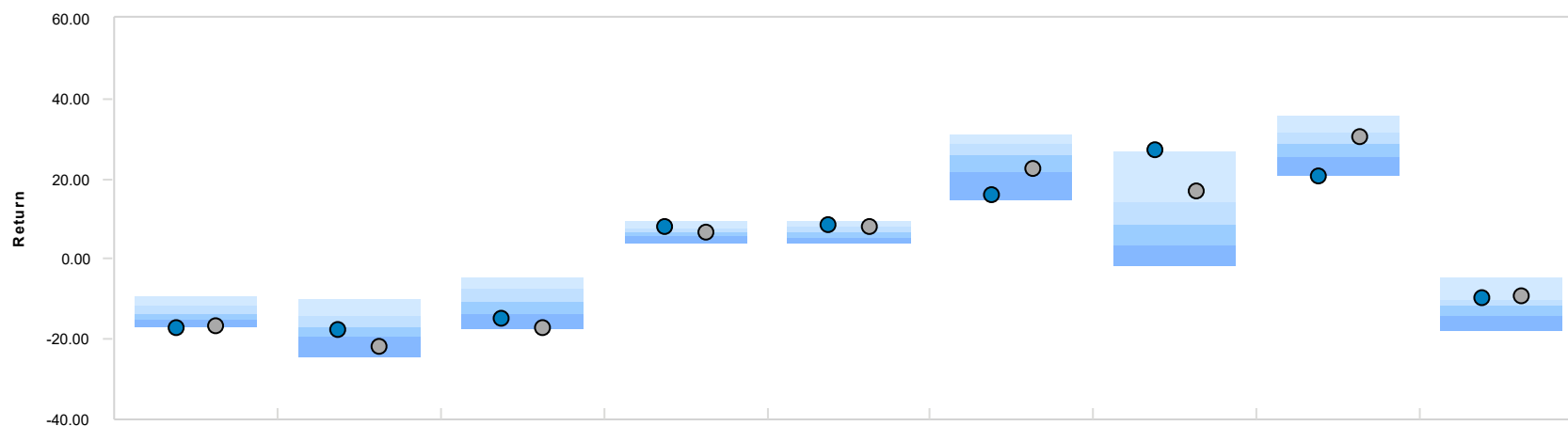
Mutual Fund Info from Lipper

Product Name : Carillon:Sct Mid Cap:I (UMBMX)
Fund Family : Carillon Tower Advisers
Ticker : UMBMX
Peer Group : IM U.S. Mid Cap Core Equity (MF)
Benchmark : Russell Midcap Index
Fund Inception : 10/31/2006
Portfolio Manager : G. Patrick Dunkerley
Total Assets : \$3,519 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.95%
Net Expense : 0.95%
Turnover : 109%

Summary Description

The Fund seeks long-term growth of capital by investing primarily in common stocks of mid-cap companies. The Fund will invest at least 80% of the net assets (plus the amount of any borrowing for investment purposes) in mid-cap equity securities.

Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)



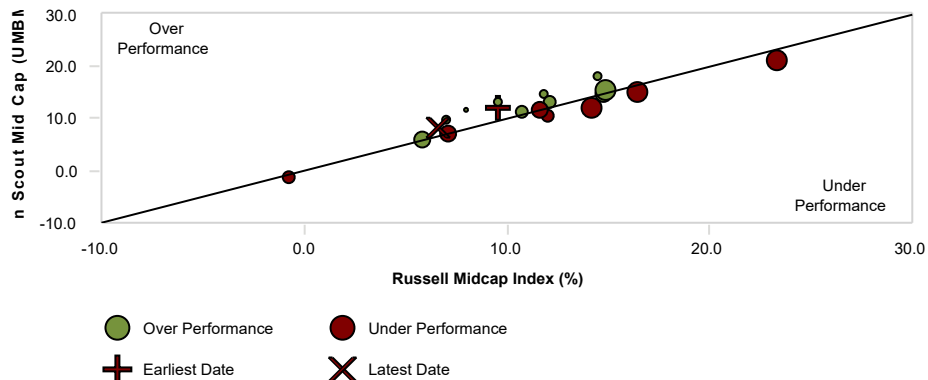
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Carillon Scout Mid Cap (UMBMX)	-16.99 (93)	-17.53 (56)	-14.90 (83)	8.24 (21)	8.53 (11)	15.90 (91)	27.27 (5)	20.76 (95)	-9.74 (24)
● Russell Midcap Index	-16.85 (91)	-21.57 (91)	-17.30 (93)	6.59 (53)	7.96 (23)	22.58 (68)	17.10 (17)	30.54 (31)	-9.06 (21)
Median	-13.63	-17.27	-10.76	6.62	6.73	25.73	8.44	28.59	-11.64

Comparative Performance

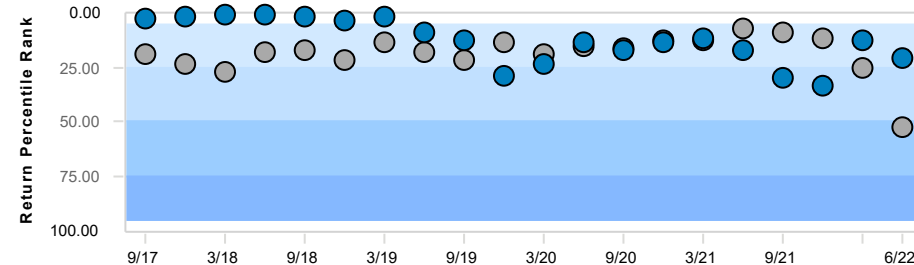
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Carillon Scout Mid Cap (UMBMX)	-0.66 (18)	4.81 (94)	-1.55 (69)	3.59 (86)	8.43 (78)	21.64 (27)
Russell Midcap Index	-5.68 (77)	6.44 (80)	-0.93 (52)	7.50 (3)	8.14 (83)	19.91 (43)
IM U.S. Mid Cap Core Equity (MF) Median	-4.08	8.20	-0.87	5.14	10.47	19.44



3 Yr Rolling Under/Over Performance - 5 Years

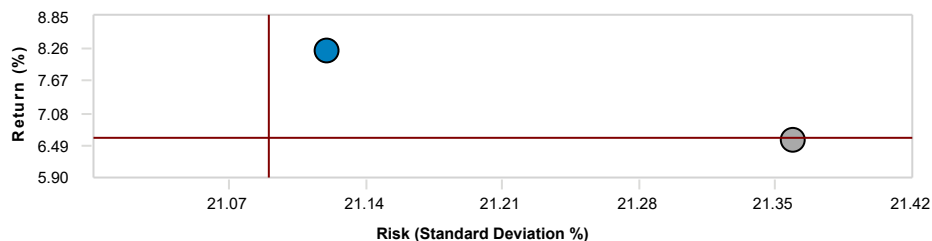


3 Yr Rolling Percentile Ranking - 5 Years



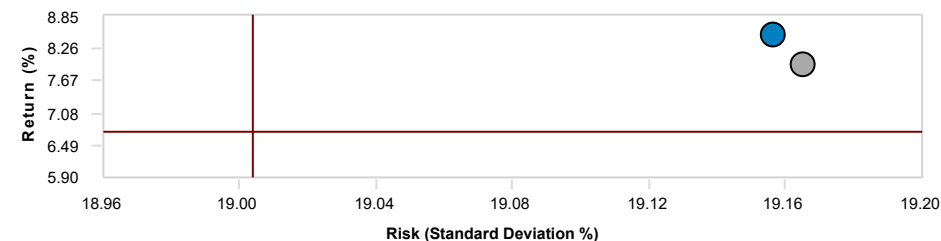
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Carillon Scout Mid Cap (UMBMX)	20	17 (85%)	3 (15%)	0 (0%)	0 (0%)
Russell Midcap Index	20	18 (90%)	1 (5%)	1 (5%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Carillon Scout Mid Cap (UMBMX)	8.24	21.12
Russell Midcap Index	6.59	21.36
Median	6.62	21.09

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Carillon Scout Mid Cap (UMBMX)	8.53	19.16
Russell Midcap Index	7.96	19.16
Median	6.73	19.00

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Carillon Scout Mid Cap (UMBMX)	4.18	99.91	93.36	1.74	0.35	0.45	0.97	14.57
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.38	1.00	15.39

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Carillon Scout Mid Cap (UMBMX)	4.02	98.69	95.43	0.73	0.13	0.47	0.98	13.42
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.44	1.00	13.67



Fund Information

Fund Name :	Goldman Sachs Trust: Goldman Sachs Small Cap Value Fund; Institutional Shares	Portfolio Assets :	\$3,357 Million
Fund Family :	Goldman Sachs	Portfolio Manager :	Davis/Crystal
Ticker :	GSSIX	PM Tenure :	2006--2006
Inception Date :	08/15/1997	Fund Style :	IM U.S. Small Cap Core Equity (MF)
Fund Assets :	\$1,436 Million	Style Benchmark :	Russell 2000 Value Index
Portfolio Turnover :	64%		

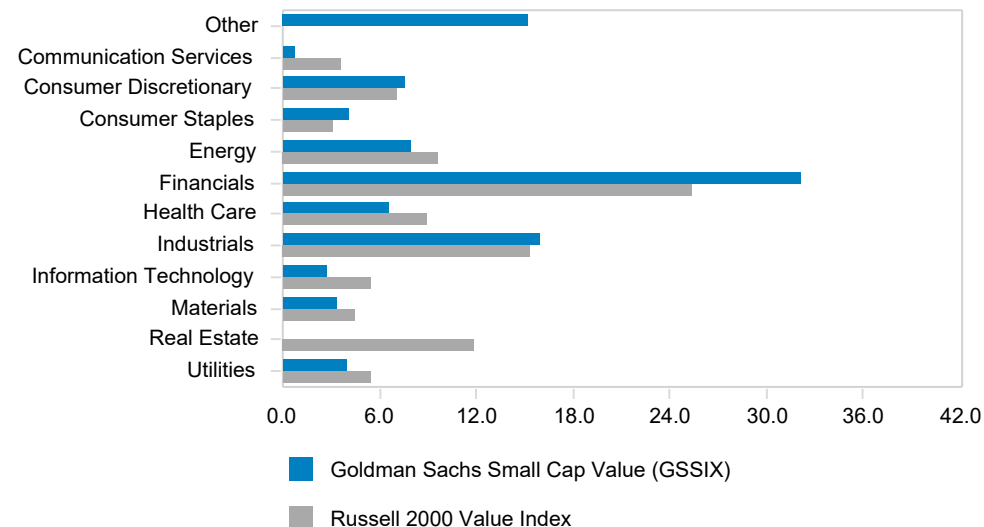
Portfolio Characteristics As of 03/31/2022

	Portfolio	Benchmark
Total Securities	218	1,436
Avg. Market Cap (\$)	4,162,205,285	990,979,980
Price/Earnings (P/E)	24.03	12.03
Price/Book (P/B)	2.65	1.79
Dividend Yield	2.23	1.82
Annual EPS	50.94	3.01
5 Yr EPS	15.05	13.66
3 Yr EPS Growth	10.85	N/A
Beta (5 Years, Monthly)	0.96	1.00

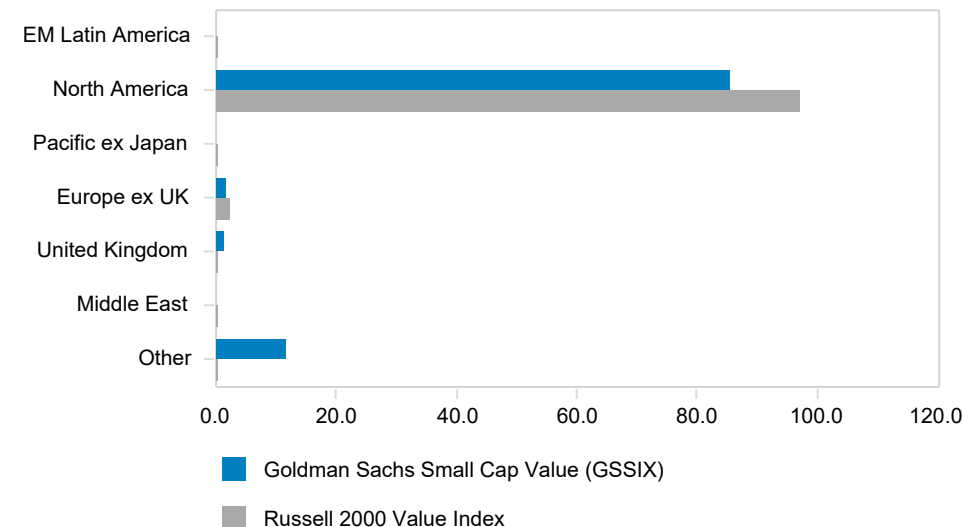
Top Ten Securities As of 03/31/2022

Ovintiv Inc ORD	1.2 %
Avient Corp ORD	1.2 %
KBR Inc ORD	1.1 %
Terreno Realty Corp ORD	1.1 %
Antero Resources Corp ORD	1.1 %
Tenet Healthcare Corp ORD	1.0 %
Goldman Sachs FS Government Fund;Institu	1.0 %
STAG Industrial Inc ORD	1.0 %
Wesco International Inc ORD	0.9 %
RLJ Lodging Trust ORD	0.9 %

Sector Weights As of 03/31/2022



Region Weights As of 03/31/2022



Statistics provided by Lipper. Most recent available data shown.



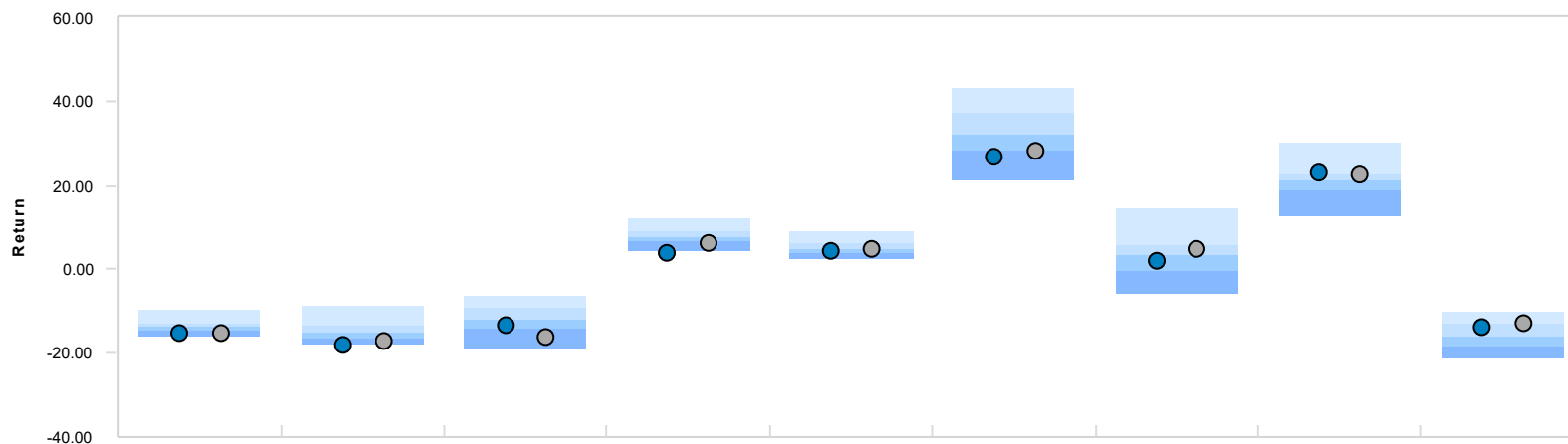
Mutual Fund Info from Lipper

Product Name : Goldman:Sm Cap Val;l (GSSIX)
Fund Family : Goldman Sachs
Ticker : GSSIX
Peer Group : IM U.S. Small Cap Value Equity (MF)
Benchmark : Russell 2000 Value Index
Fund Inception : 08/15/1997
Portfolio Manager : Davis/Crystal
Total Assets : \$1,436 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.99%
Net Expense : 0.96%
Turnover : 64%

Summary Description

The Fund seeks long-term capital growth through investments in equity securities of companies with public stock market capitalizations of \$1 billion or less at the time of investment.

Peer Group Analysis - IM U.S. Small Cap Value Equity (MF)

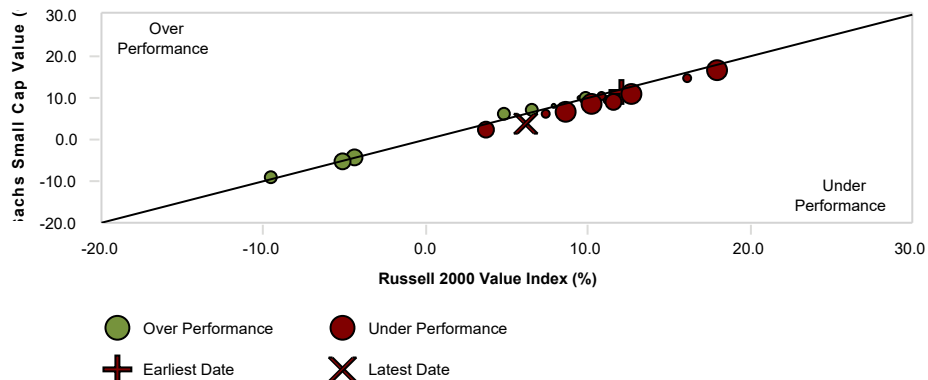


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Goldman Sachs Small Cap Value (GSSIX)	-15.20 (81)	-17.91 (96)	-13.30 (67)	4.03 (98)	4.39 (70)	26.71 (86)	2.06 (63)	23.14 (19)	-14.02 (33)
● Russell 2000 Value Index	-15.28 (83)	-17.31 (88)	-16.28 (87)	6.18 (82)	4.89 (55)	28.27 (73)	4.63 (35)	22.39 (28)	-12.86 (23)
Median	-13.89	-15.31	-11.77	7.60	4.99	31.97	3.57	21.05	-16.08

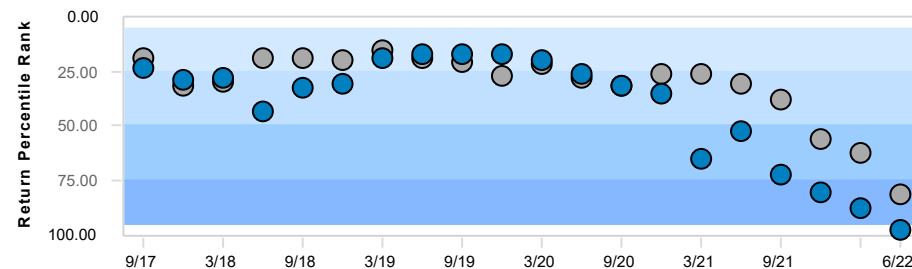
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Goldman Sachs Small Cap Value (GSSIX)	-3.19 (82)	6.95 (31)	-1.24 (27)	2.66 (82)	16.86 (93)	31.58 (61)
Russell 2000 Value Index	-2.40 (63)	4.36 (72)	-2.98 (81)	4.56 (46)	21.17 (63)	33.36 (46)
IM U.S. Small Cap Value Equity (MF) Median	-1.70	5.80	-1.84	4.36	22.30	33.19

3 Yr Rolling Under/Over Performance - 5 Years

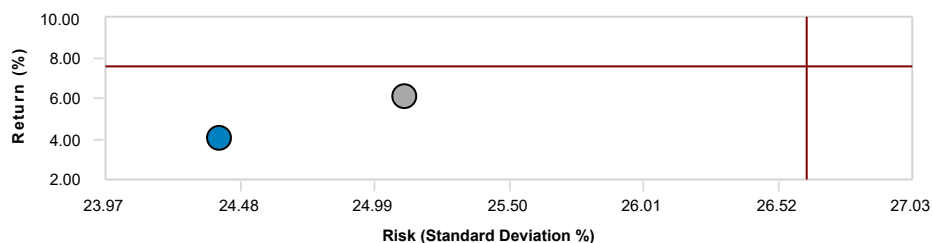


3 Yr Rolling Percentile Ranking - 5 Years



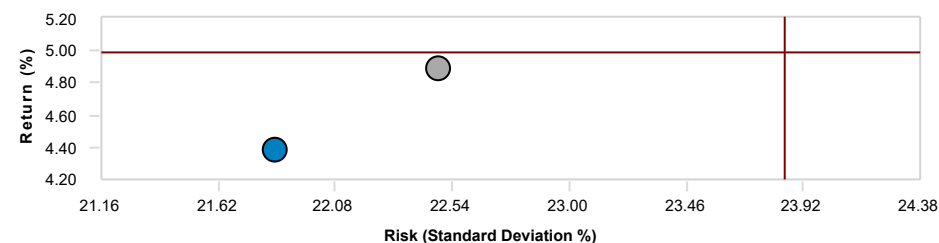
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Goldman Sachs Small Cap Value (GSSIX)	20	6 (30%)	8 (40%)	3 (15%)	3 (15%)
Russell 2000 Value Index	20	8 (40%)	9 (45%)	2 (10%)	1 (5%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Goldman Sachs Small Cap Value (GSSIX)	4.03	24.40
Russell 2000 Value Index	6.18	25.10
Median	7.60	26.63

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Goldman Sachs Small Cap Value (GSSIX)	4.39	21.84
Russell 2000 Value Index	4.89	22.49
Median	4.99	23.85

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Goldman Sachs Small Cap Value (GSSIX)	4.52	92.01	97.26	-1.78	-0.49	0.26	0.96	18.31
Russell 2000 Value Index	0.00	100.00	100.00	0.00	N/A	0.34	1.00	18.31

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Goldman Sachs Small Cap Value (GSSIX)	3.88	94.13	94.82	-0.29	-0.16	0.26	0.96	16.21
Russell 2000 Value Index	0.00	100.00	100.00	0.00	N/A	0.28	1.00	16.40

Fund Information

Fund Name : Vanguard Index Funds: Vanguard Small-Cap Index Fund; Admiral Shares
Fund Family : Vanguard
Ticker : VSMAX
Inception Date : 11/13/2000
Fund Assets : \$47,350 Million
Portfolio Turnover : 17%

Portfolio Assets : \$119,579 Million
Portfolio Manager : Coleman/O'Reilly
PM Tenure : 2016--2016
Fund Style : IM U.S. SMID Cap Growth Equity (MF)
Style Benchmark : Vanguard Spliced Small Cap Index

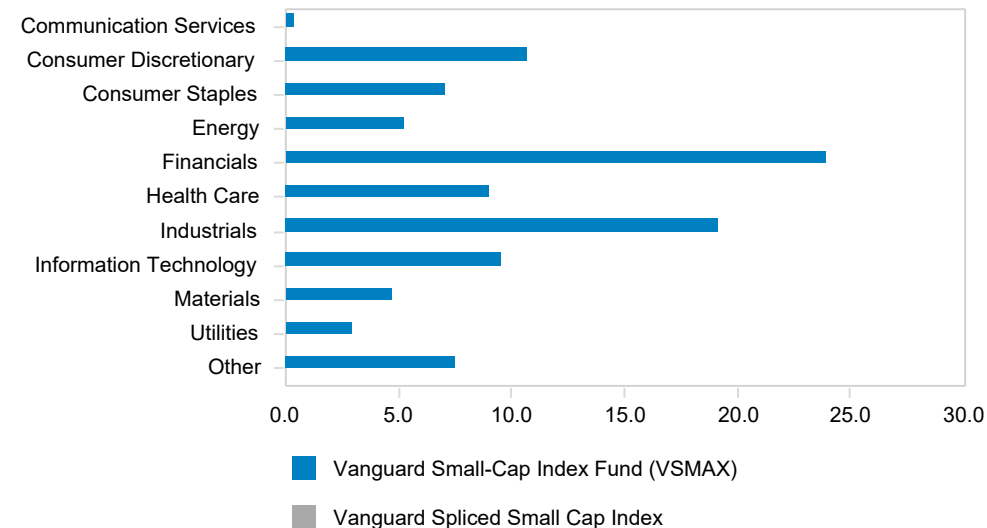
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	1,550	N/A
Avg. Market Cap (\$)	6,638,389,395	-
Price/Earnings (P/E)	24.37	N/A
Price/Book (P/B)	4.46	N/A
Dividend Yield	2.19	N/A
Annual EPS	44.57	N/A
5 Yr EPS	16.14	N/A
3 Yr EPS Growth	17.55	N/A
Beta (5 Years, Monthly)	1.00	1.00

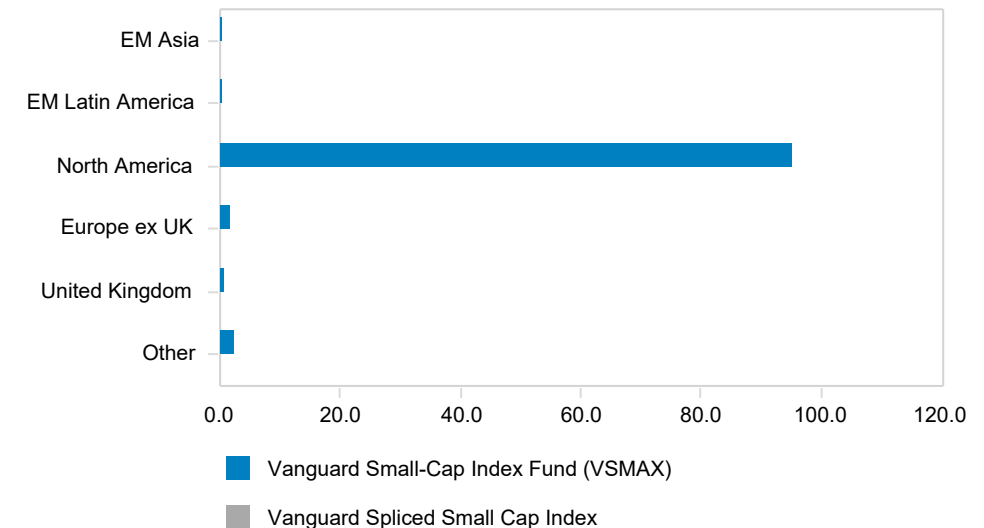
Top Ten Securities As of 04/30/2022

Vanguard Market Liquidity Fund	2.1 %
Constellation Energy Corp ORD	0.4 %
Molina Healthcare Inc ORD	0.4 %
Marathon Oil Corp ORD	0.4 %
Targa Resources Corp ORD	0.3 %
Quanta Services Inc ORD	0.3 %
Steel Dynamics Inc ORD	0.3 %
Bunge Ltd ORD	0.3 %
Kimco Realty Corp ORD	0.3 %
Atmos Energy Corp ORD	0.3 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



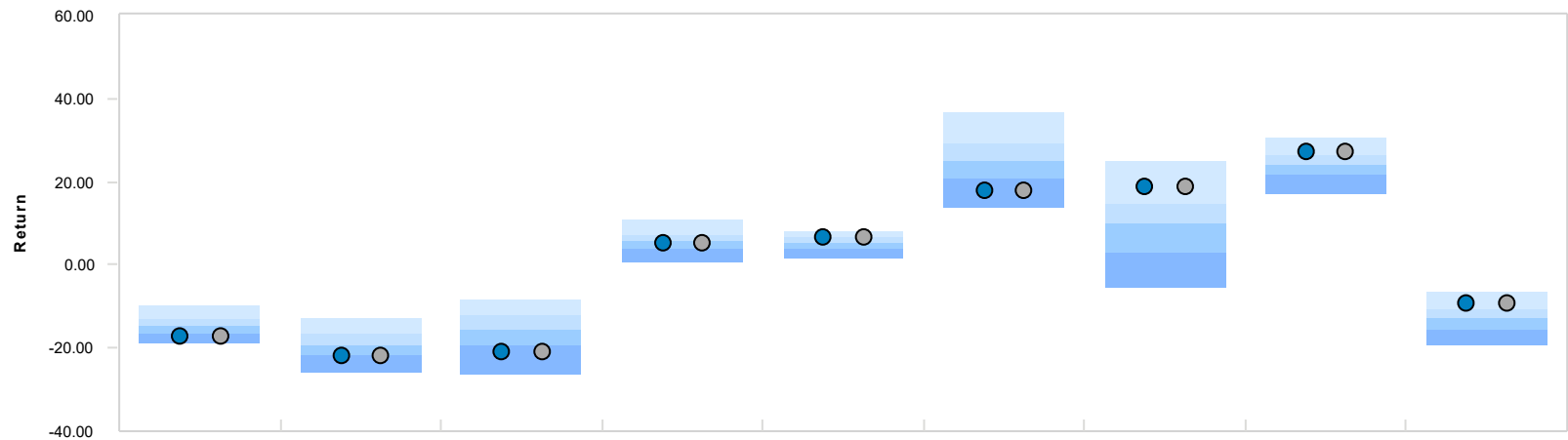
Mutual Fund Info from Lipper

Product Name : Vanguard S-C Id;Adm (VSMAX)
Fund Family : Vanguard
Ticker : VSMAX
Peer Group : IM U.S. Small Cap Core Equity (MF)
Benchmark : Vanguard Spliced Small Cap Index
Fund Inception : 11/13/2000
Portfolio Manager : Coleman/O'Reilly
Total Assets : \$47,350 Million
Total Assets Date : 05/31/2022
Gross Expense : 0.05%
Net Expense : 0.05%
Turnover : 17%

Summary Description

The Fund seeks to track the performance of a benchmark index that measures the investment return of small-capitalization stocks.

Peer Group Analysis - IM U.S. Small Cap Core Equity (MF)



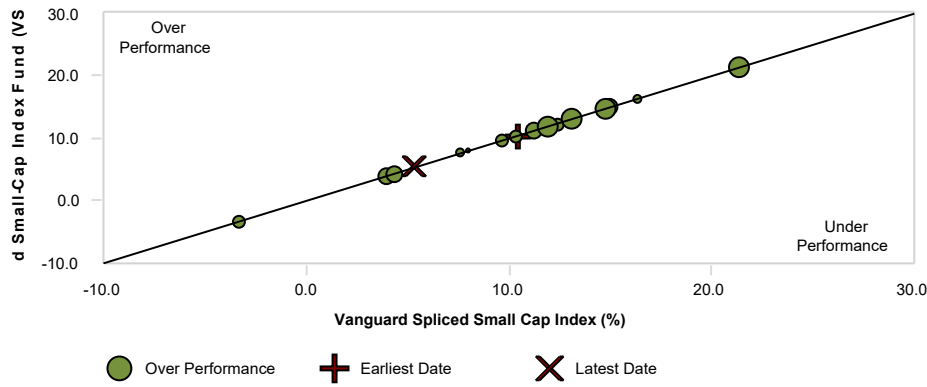
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Vanguard Small-Cap Index Fund (VSMAX)	-16.88 (79)	-21.65 (76)	-20.75 (80)	5.40 (56)	6.88 (21)	17.73 (84)	19.11 (17)	27.37 (16)	-9.31 (18)
● Vanguard Spliced Small Cap Index	-16.88 (79)	-21.65 (76)	-20.75 (80)	5.37 (56)	6.87 (21)	17.71 (84)	19.07 (17)	27.35 (17)	-9.33 (18)
Median	-14.56	-19.23	-15.84	5.77	5.49	25.12	9.89	23.94	-12.71

Comparative Performance

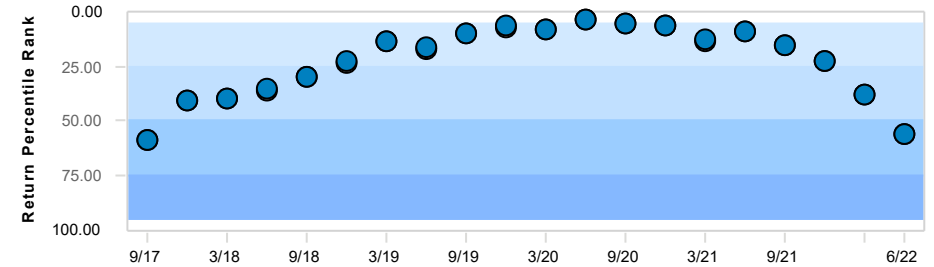
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Vanguard Small-Cap Index Fund (VSMAX)	-5.74 (54)	3.87 (82)	-2.62 (57)	5.60 (17)	10.22 (95)	27.10 (72)
Vanguard Spliced Small Cap Index	-5.74 (53)	3.87 (82)	-2.62 (57)	5.59 (17)	10.21 (95)	27.10 (72)
IM U.S. Small Cap Core Equity (MF) Median	-5.65	5.94	-2.38	4.05	15.68	29.11



3 Yr Rolling Under/Over Performance - 5 Years

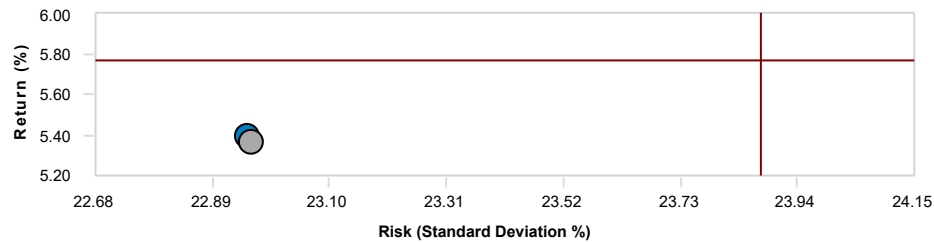


3 Yr Rolling Percentile Ranking - 5 Years



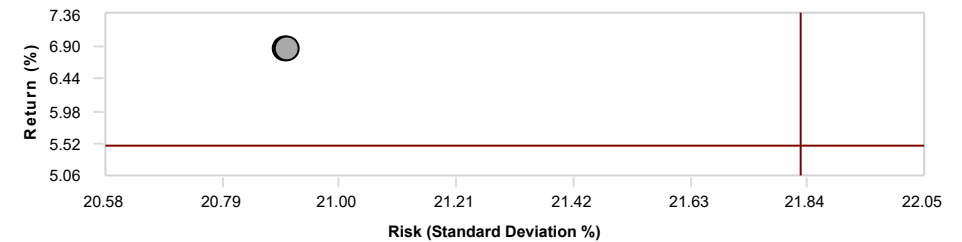
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Vanguard Small-Cap Index Fund (VSMAX)	20	13 (65%)	5 (25%)	2 (10%)	0 (0%)
● Vanguard Spliced Small Cap Index	20	13 (65%)	5 (25%)	2 (10%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Vanguard Small-Cap Index Fund (VSMAX)	5.40	22.95
● Vanguard Spliced Small Cap Index	5.37	22.96
— Median	5.77	23.88

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Vanguard Small-Cap Index Fund (VSMAX)	6.88	20.90
● Vanguard Spliced Small Cap Index	6.87	20.90
— Median	5.49	21.83

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Small-Cap Index Fund (VSMAX)	0.03	100.06	99.98	0.03	0.96	0.32	1.00	16.62
Vanguard Spliced Small Cap Index	0.00	100.00	100.00	0.00	N/A	0.32	1.00	16.63

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Small-Cap Index Fund (VSMAX)	0.02	100.05	100.01	0.01	0.48	0.37	1.00	15.01
Vanguard Spliced Small Cap Index	0.00	100.00	100.00	0.00	N/A	0.37	1.00	15.02



Fund Information

Fund Name : TIAA-CREF Funds: International Equity Index Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TRIPX
Inception Date : 09/30/2009
Fund Assets : \$145 Million
Portfolio Turnover : 5%

Portfolio Assets : \$16,312 Million
Portfolio Manager : Campagna/Liao/Tran
PM Tenure : 2009--2014--2019
Fund Style : IM International Multi-Cap Core Equity (MF)
Style Benchmark : MSCI EAFE (Net) Index

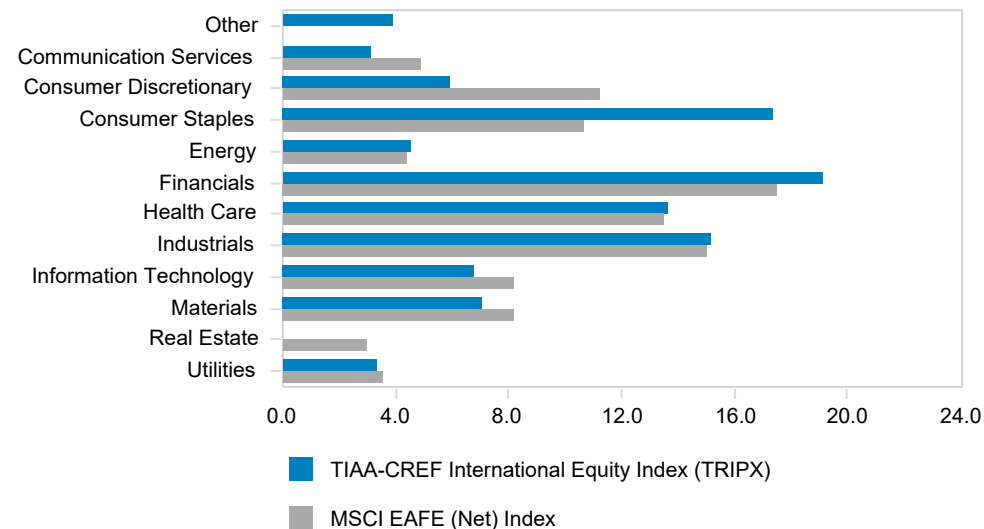
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	855	825
Avg. Market Cap (\$)	77,496,302,219	12,499,435,486
Price/Earnings (P/E)	21.97	14.55
Price/Book (P/B)	4.07	2.59
Dividend Yield	2.97	3.11
Annual EPS	43.23	146.25
5 Yr EPS	11.78	13.76
3 Yr EPS Growth	7.07	N/A
Beta (5 Years, Monthly)	0.99	1.00

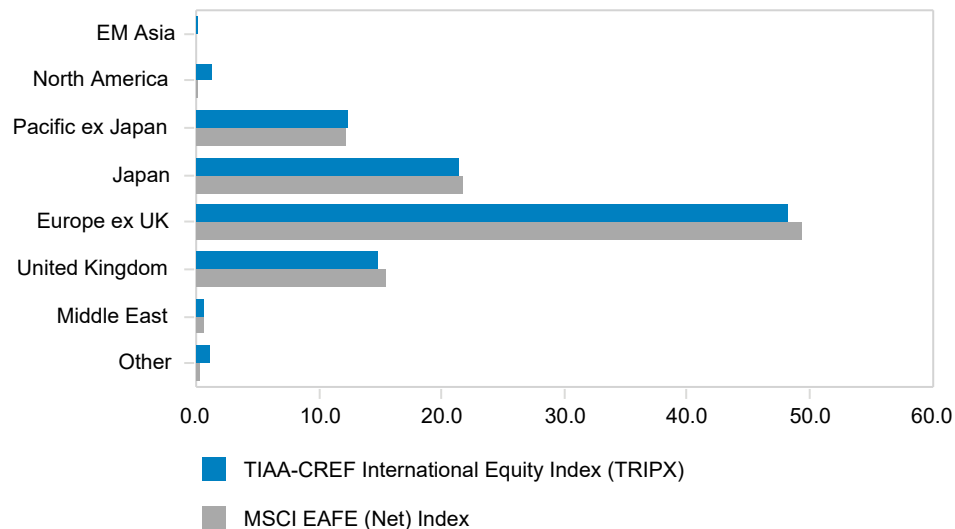
Top Ten Securities As of 04/30/2022

Nestle SA ORD	2.4 %
Roche Holding AG	1.7 %
ASML Holding NV ORD	1.5 %
AstraZeneca PLC ORD	1.4 %
Shell PLC ORD	1.4 %
Novartis AG ORD	1.3 %
Novo Nordisk A/S ORD	1.3 %
Toyota Motor Corp ORD	1.2 %
LVMH Moet Hennessy Louis Vuitton	1.2 %
BHP Group Ltd ORD	1.1 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



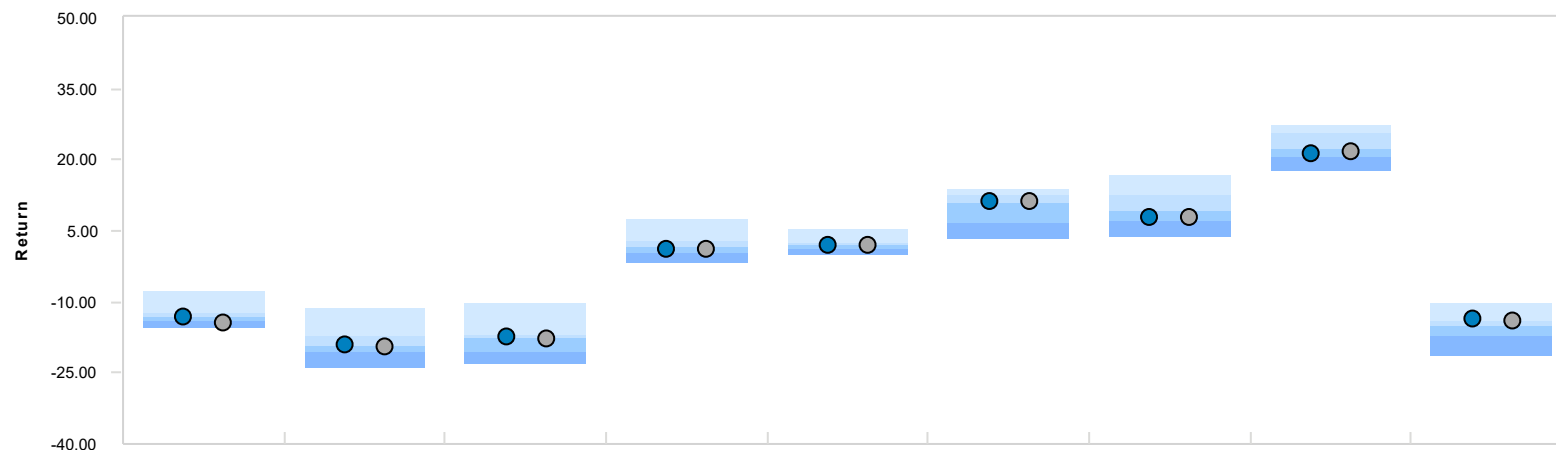
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Itl Eq Ix;Prmr (TRIPX)
Fund Family : TIAA
Ticker : TRIPX
Peer Group : IM International Large Cap Core Equity (MF)
Benchmark : MSCI EAFE (Net) Index
Fund Inception : 09/30/2009
Portfolio Manager : Campagna/Liao/Tran
Total Assets : \$145 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.20%
Net Expense : 0.20%
Turnover : 5%

Summary Description

The Fund seeks a favorable long-term total return, mainly through capital appreciation. The Fund has a policy of investing, under normal circumstances, at least 80% of its assets (net assets, plus the amount of any borrowings for investment purposes) in the equity securities of its benchmark index, the MSCI EAFE Index.

Peer Group Analysis - IM International Large Cap Core Equity (MF)



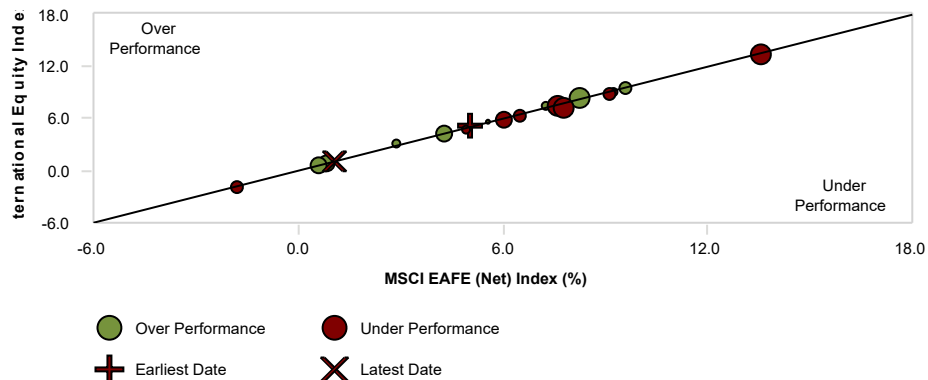
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF International Equity Index (TRIPX)	-13.16 (46)	-19.12 (43)	-17.44 (38)	1.19 (60)	2.21 (40)	11.16 (40)	8.01 (64)	21.59 (60)	-13.39 (14)
● MSCI EAFE (Net) Index	-14.51 (82)	-19.57 (58)	-17.77 (51)	1.07 (62)	2.20 (40)	11.26 (39)	7.82 (67)	22.01 (52)	-13.79 (25)
Median	-13.27	-19.35	-17.76	1.58	1.90	10.74	9.07	22.06	-15.00

Comparative Performance

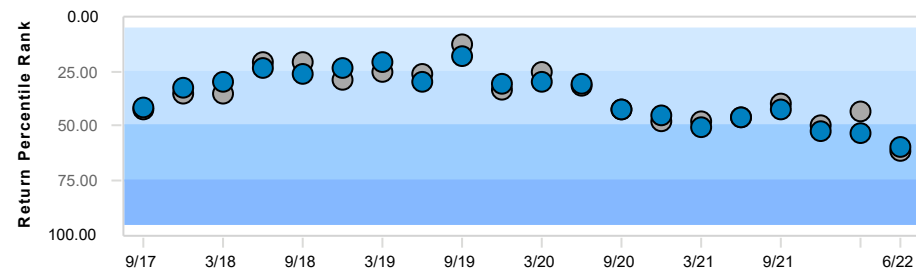
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF International Equity Index (TRIPX)	-6.87 (47)	3.16 (40)	-1.04 (25)	5.26 (44)	3.45 (49)	15.79 (52)
MSCI EAFE (Net) Index	-5.91 (26)	2.69 (62)	-0.45 (13)	5.17 (50)	3.48 (49)	16.05 (46)
IM International Large Cap Core Equity (MF) Median	-6.90	2.93	-1.84	5.17	3.42	15.86



3 Yr Rolling Under/Over Performance - 5 Years

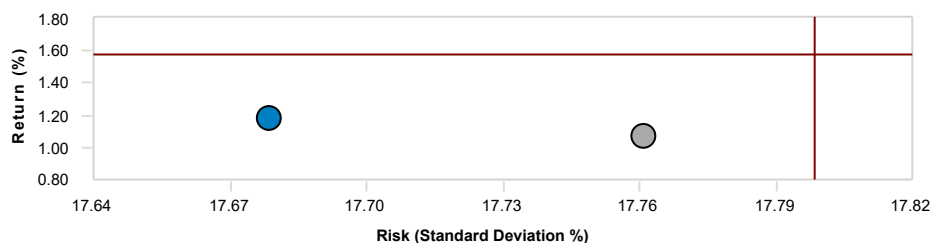


3 Yr Rolling Percentile Ranking - 5 Years



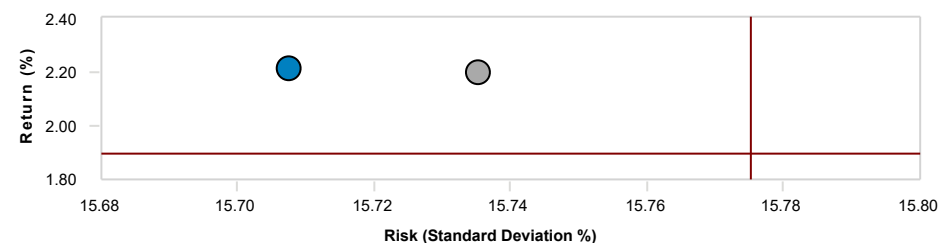
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
TIAA-CREF International Equity Index (TRIPX)	20	4 (20%)	12 (60%)	4 (20%)	0 (0%)
MSCI EAFE (Net) Index	20	5 (25%)	14 (70%)	1 (5%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF International Equity Index (TRIPX)	1.19	17.68
MSCI EAFE (Net) Index	1.07	17.76
Median	1.58	17.80

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF International Equity Index (TRIPX)	2.21	15.71
MSCI EAFE (Net) Index	2.20	15.74
Median	1.90	15.78

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF International Equity Index (TRIPX)	2.07	100.99	100.63	0.14	0.05	0.12	0.99	12.68
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.11	1.00	12.68

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF International Equity Index (TRIPX)	1.78	99.92	99.85	0.04	0.01	0.15	0.99	11.25
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.15	1.00	11.19



Fund Information

Fund Name : New Economy Fund; Class R5E Shares
Fund Family : Capital Group/American Funds
Ticker : RNGHX
Inception Date : 11/20/2015
Fund Assets : \$59 Million
Portfolio Turnover : 28%

Portfolio Assets : \$24,486 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Global Multi-Cap Growth Equity (MF)
Style Benchmark : MSCI AC World Index (Net)

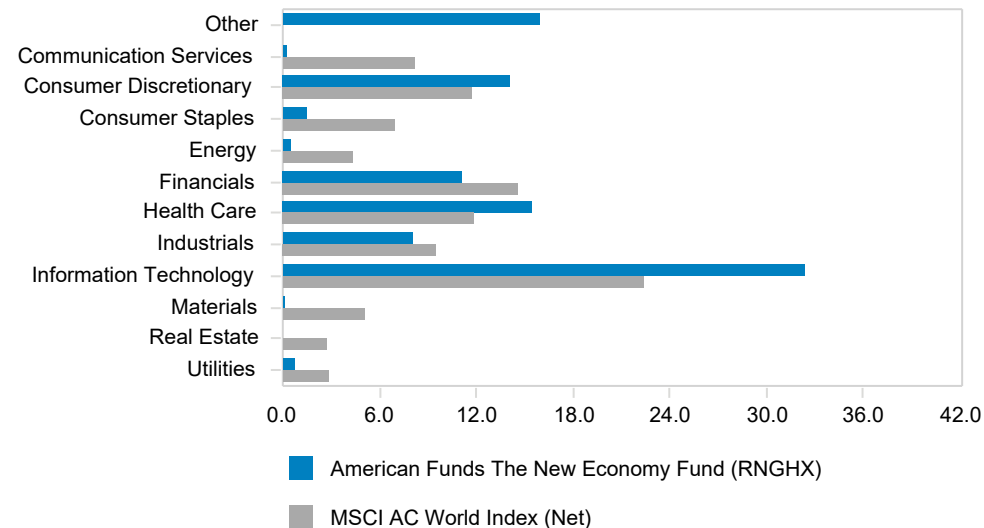
Portfolio Characteristics As of 03/31/2022

	Portfolio	Benchmark
Total Securities	250	2,939
Avg. Market Cap (\$)	342,245,704,866	12,931,133,677
Price/Earnings (P/E)	32.57	18.08
Price/Book (P/B)	9.32	3.57
Dividend Yield	1.16	1.92
Annual EPS	39.22	199.30
5 Yr EPS	25.46	19.11
3 Yr EPS Growth	22.92	N/A
Beta (5 Years, Monthly)	1.03	1.00

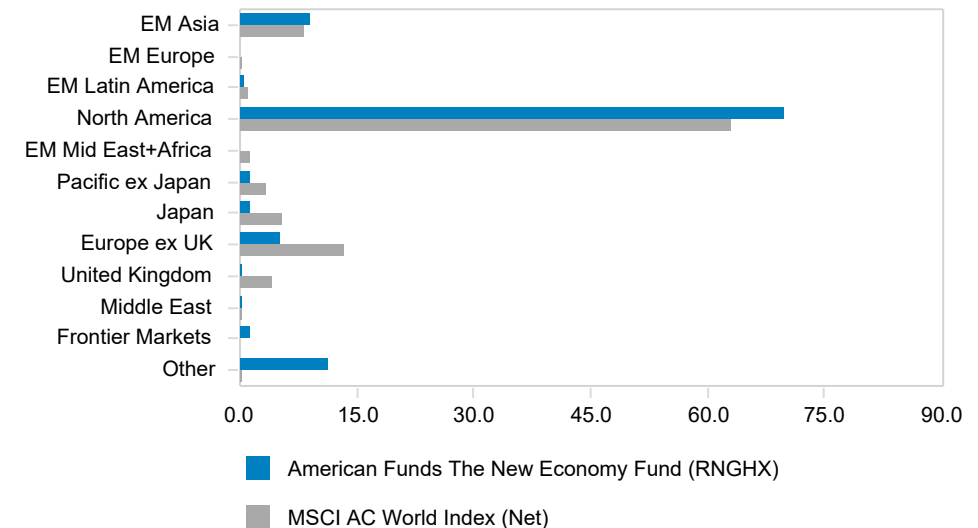
Top Ten Securities As of 03/31/2022

Capital Group Central Cash Fund;	8.8 %
Microsoft Corp ORD	4.7 %
Broadcom Inc ORD	3.6 %
Amazon.com Inc ORD	3.1 %
UnitedHealth Group Inc ORD	2.7 %
Micron Technology Inc ORD	2.5 %
Thermo Fisher Scientific Inc ORD	1.9 %
Alphabet Inc Class C ORD	1.8 %
Netflix Inc ORD	1.7 %
Alphabet Inc Class A ORD	1.6 %

Sector Weights As of 03/31/2022



Region Weights As of 03/31/2022



Statistics provided by Lipper. Most recent available data shown.



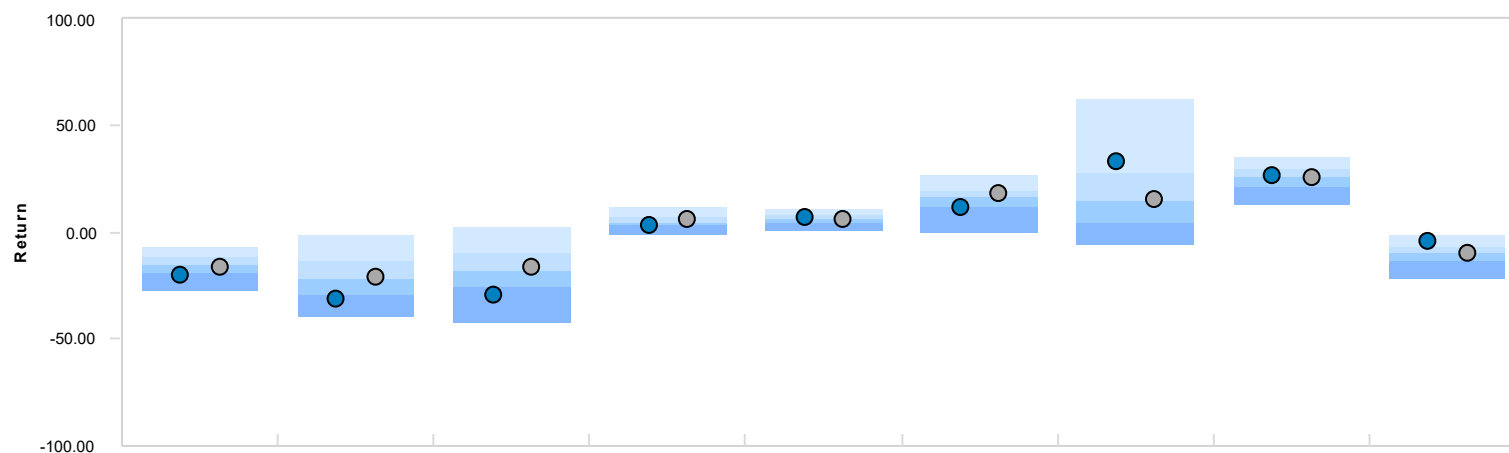
Mutual Fund Info from Lipper

Product Name : American Funds NEco;R5E (RNGHX)
Fund Family : Capital Group/American Funds
Ticker : RNGHX
Peer Group : IM Global Equity (MF)
Benchmark : MSCI AC World Index (Net)
Fund Inception : 11/20/2015
Portfolio Manager : Team Managed
Total Assets : \$59 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.56%
Net Expense : 0.56%
Turnover : 28%

Summary Description

The Fund seeks long-term growth of capital. The Fund invests in securities of companies that can benefit from innovation, exploit new technologies or provide products and services that meet the demands of an evolving global economy. The Fund invests primarily in common stocks that have the potential for growth.

Peer Group Analysis - IM Global Equity (MF)



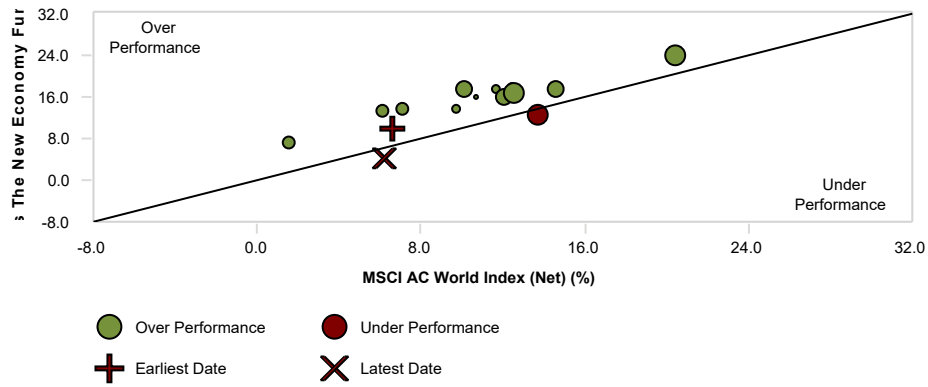
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● American Funds The New Economy Fund (RNGHX)	-19.49 (81)	-30.76 (82)	-28.52 (82)	4.05 (66)	7.65 (29)	12.12 (77)	33.72 (19)	26.69 (48)	-4.04 (13)
● MSCI AC World Index (Net)	-15.66 (55)	-20.18 (44)	-15.75 (44)	6.21 (35)	7.00 (37)	18.54 (34)	16.25 (46)	26.60 (49)	-9.42 (48)
Median	-15.25	-21.44	-17.51	4.98	6.19	16.55	15.37	26.38	-9.55

Comparative Performance

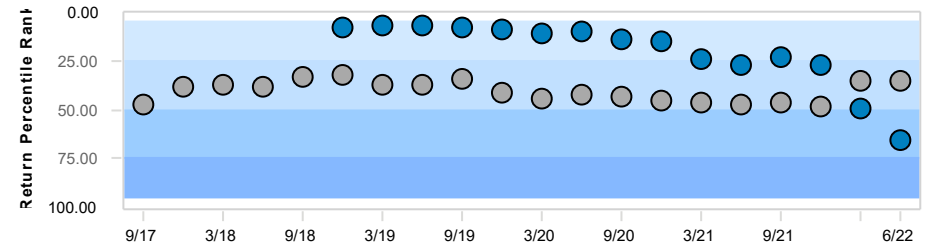
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
American Funds The New Economy Fund (RNGHX)	-14.00 (82)	3.72 (70)	-0.45 (36)	7.83 (36)	0.71 (85)	16.41 (40)
MSCI AC World Index (Net)	-5.36 (36)	6.68 (34)	-1.05 (50)	7.39 (45)	4.57 (42)	14.68 (53)
IM Global Equity (MF) Median	-7.67	5.83	-1.12	7.03	3.98	15.01



3 Yr Rolling Under/Over Performance - 5 Years

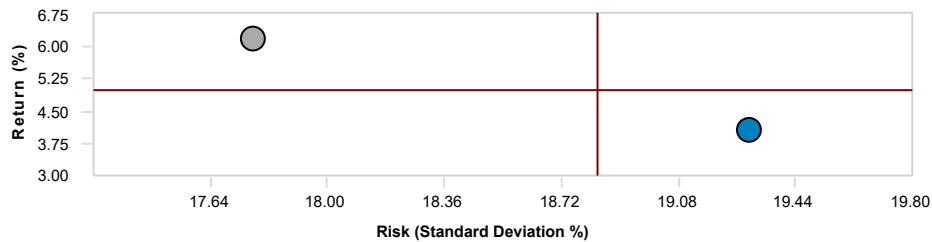


3 Yr Rolling Percentile Ranking - 5 Years



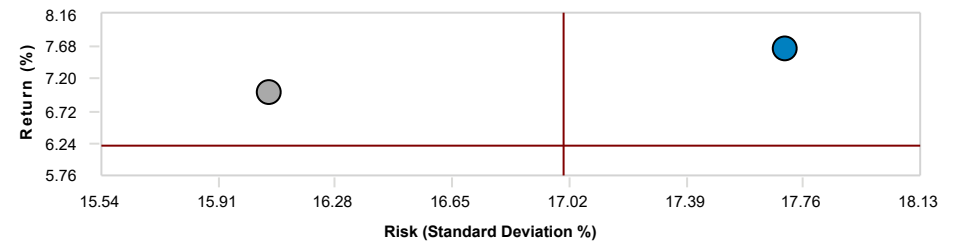
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
American Funds The New Economy Fund (RNGHX)	15	11 (73%)	3 (20%)	1 (7%)	0 (0%)
MSCI AC World Index (Net)	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
American Funds The New Economy Fund (RNGHX)	4.05	19.30
MSCI AC World Index (Net)	6.21	17.77
Median	4.98	18.83

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
American Funds The New Economy Fund (RNGHX)	7.65	17.70
MSCI AC World Index (Net)	7.00	16.07
Median	6.19	17.00

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds The New Economy Fund (RNGHX)	7.03	96.39	103.63	-1.84	-0.25	0.27	1.01	13.76
MSCI AC World Index (Net)	0.00	100.00	100.00	0.00	N/A	0.39	1.00	12.38

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds The New Economy Fund (RNGHX)	6.42	104.67	101.77	0.68	0.14	0.44	1.03	12.33
MSCI AC World Index (Net)	0.00	100.00	100.00	0.00	N/A	0.43	1.00	11.16



Fund Information

Fund Name : Lazard Funds, Inc: Lazard International Equity Portfolio; Institutional Shares
Fund Family : Lazard
Ticker : LZIEX
Inception Date : 10/01/1991
Fund Assets : \$1,091 Million
Portfolio Turnover : 34%

Portfolio Assets : \$1,215 Million
Portfolio Manager : John R. Reinsberg
PM Tenure : 1991
Fund Style : IM International Large Cap Core Equity (MF)
Style Benchmark : MSCI EAFE (Net) Index

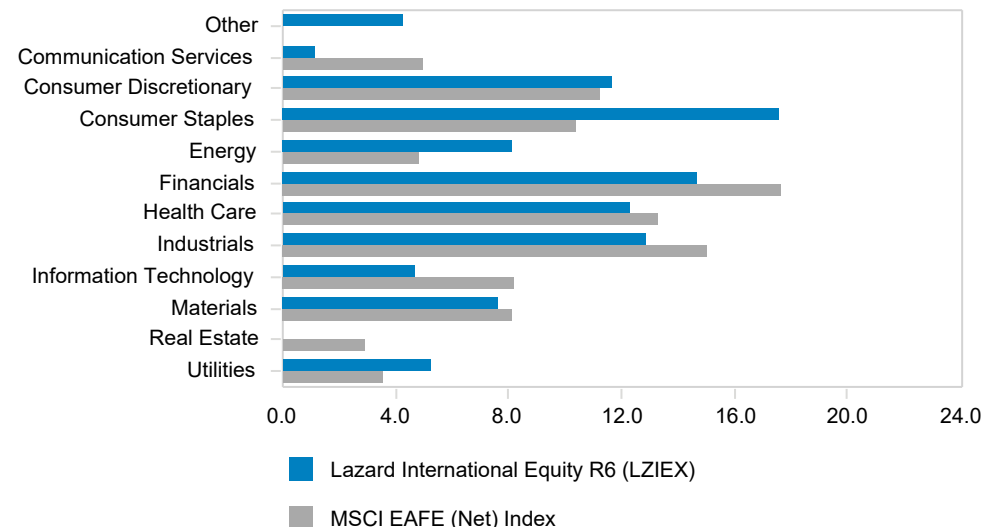
Portfolio Characteristics As of 05/31/2022

	Portfolio	Benchmark
Total Securities	81	826
Avg. Market Cap (\$)	47,993,588,273	12,467,376,423
Price/Earnings (P/E)	22.14	13.60
Price/Book (P/B)	4.09	2.41
Dividend Yield	2.34	3.36
Annual EPS	46.57	154.80
5 Yr EPS	11.14	13.46
3 Yr EPS Growth	10.07	N/A
Beta (5 Years, Monthly)	0.96	1.00

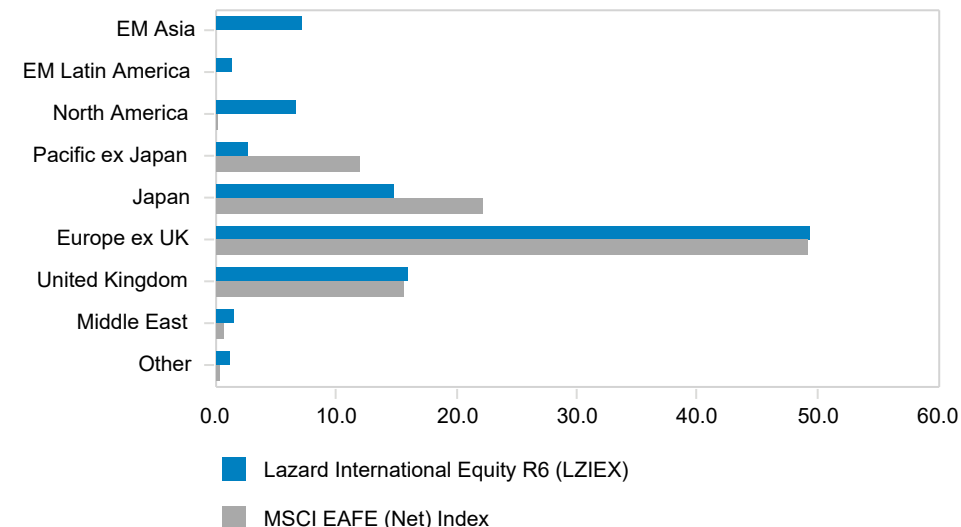
Top Ten Securities As of 05/31/2022

Sanofi SA ORD	3.4 %
Relx PLC ORD	2.6 %
Engie SA ORD	2.5 %
Suncor Energy Inc ORD	2.5 %
Aon PLC ORD	2.4 %
L'Air Liquide Societe Anonyme pour	2.2 %
Abb Ltd ORD	2.0 %
Merck KGaA ORD	1.9 %
Anglo American PLC ORD	1.9 %
Akzo Nobel NV ORD	1.9 %

Sector Weights As of 05/31/2022



Region Weights As of 05/31/2022



Statistics provided by Lipper. Most recent available data shown.



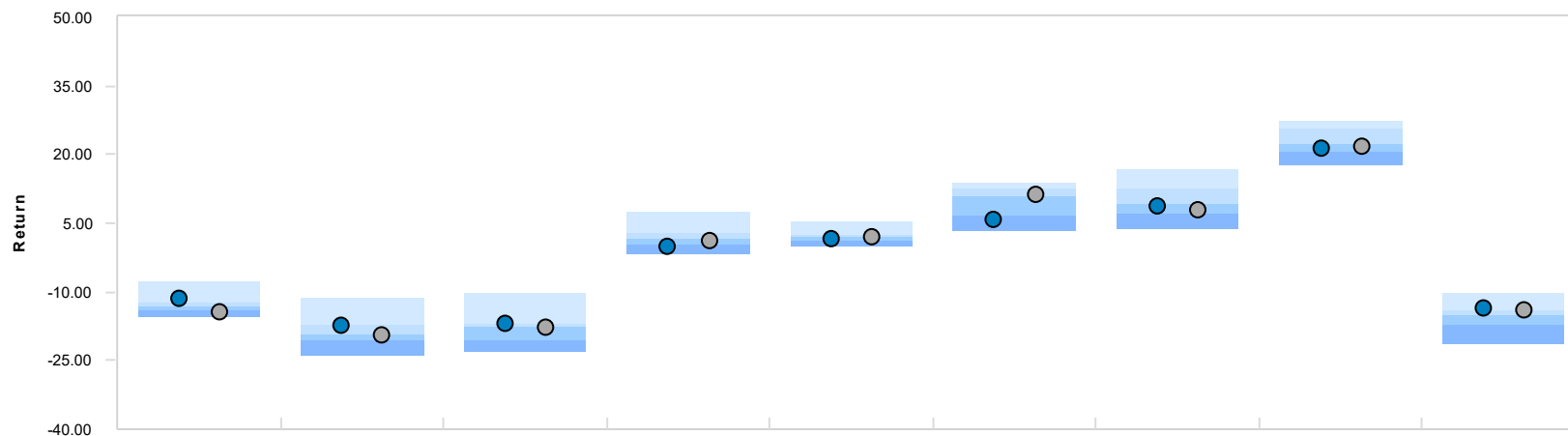
Mutual Fund Info from Lipper

Product Name : Lazard Intl Eqty;Inst (LZIE)
Fund Family : Lazard
Ticker : LZIE
Peer Group : IM International Large Cap Core Equity (MF)
Benchmark : MSCI EAFE (Net) Index
Fund Inception : 10/01/1991
Portfolio Manager : John R. Reinsberg
Total Assets : \$1,091 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.82%
Net Expense : 0.82%
Turnover : 34%

Summary Description

The Fund seeks capital appreciation. The Fund invests primarily in equity securities, including ADRs, GDRs and common stocks, of large non-U.S. companies with market capitalizations in the range of companies included in the MSCI EAFE Index that are undervalued based on their earnings, cash flow or asset values.

Peer Group Analysis - IM International Large Cap Core Equity (MF)

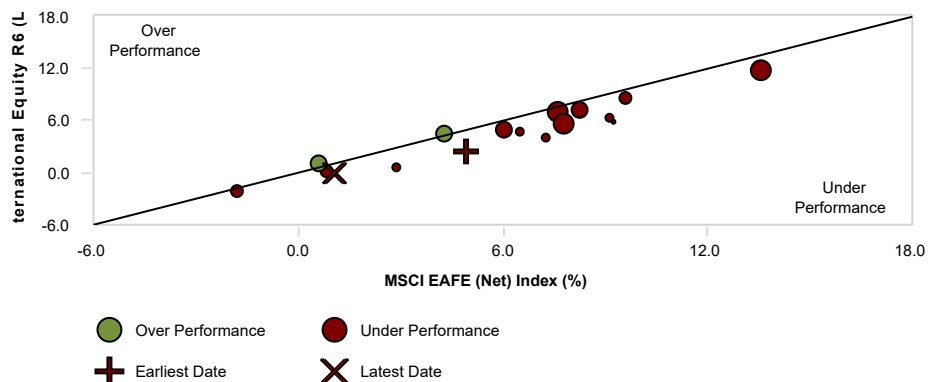


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Lazard International Equity R6 (LZIE)	-11.23 (12)	-17.35 (27)	-16.92 (30)	-0.03 (90)	1.78 (56)	6.00 (81)	8.76 (56)	21.19 (67)	-13.61 (20)
● MSCI EAFE (Net) Index	-14.51 (82)	-19.57 (58)	-17.77 (51)	1.07 (62)	2.20 (40)	11.26 (39)	7.82 (67)	22.01 (52)	-13.79 (25)
Median	-13.27	-19.35	-17.76	1.58	1.90	10.74	9.07	22.06	-15.00

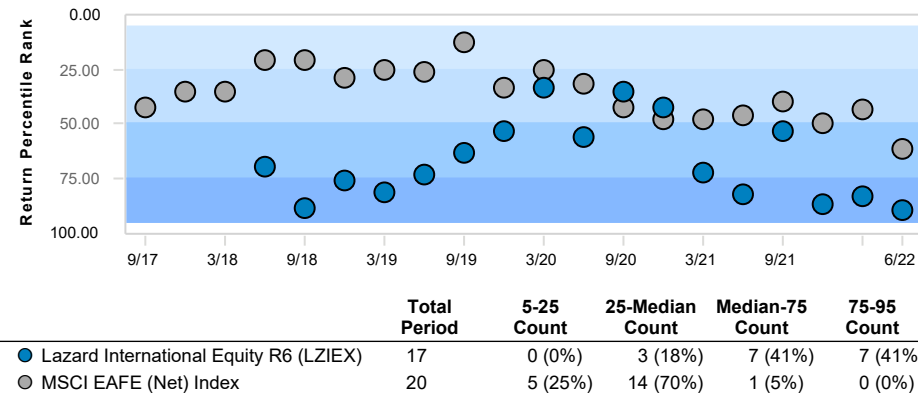
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Lazard International Equity R6 (LZIE)	-6.90 (49)	0.38 (96)	0.14 (5)	3.68 (90)	1.70 (85)	15.34 (60)
MSCI EAFE (Net) Index	-5.91 (26)	2.69 (62)	-0.45 (13)	5.17 (50)	3.48 (49)	16.05 (46)
IM International Large Cap Core Equity (MF) Median	-6.90	2.93	-1.84	5.17	3.42	15.86

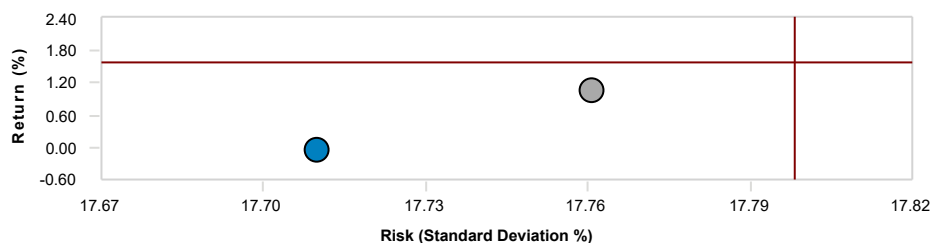
3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years

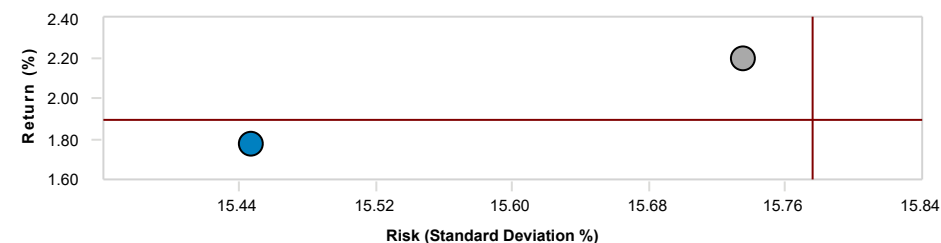


Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Lazard International Equity R6 (LZIEX)	-0.03	17.71
● MSCI EAFE (Net) Index	1.07	17.76
— Median	1.58	17.80

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Lazard International Equity R6 (LZIEX)	1.78	15.45
● MSCI EAFE (Net) Index	2.20	15.74
— Median	1.90	15.78

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Lazard International Equity R6 (LZIEX)	3.44	96.41	100.85	-1.03	-0.32	0.05	0.98	12.89
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.11	1.00	12.68

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Lazard International Equity R6 (LZIEX)	3.24	95.00	96.44	-0.32	-0.14	0.12	0.96	11.14
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.15	1.00	11.19

Fund Information

Fund Name : SMALLCAP World Fund, Inc; Class R5E Shares
Fund Family : Capital Group/American Funds
Ticker : RSLDX
Inception Date : 11/20/2015
Fund Assets : \$142 Million
Portfolio Turnover : 30%

Portfolio Assets : \$58,138 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Global SMID Cap Equity (MF)
Style Benchmark : MSCI World Small Cap (Net)

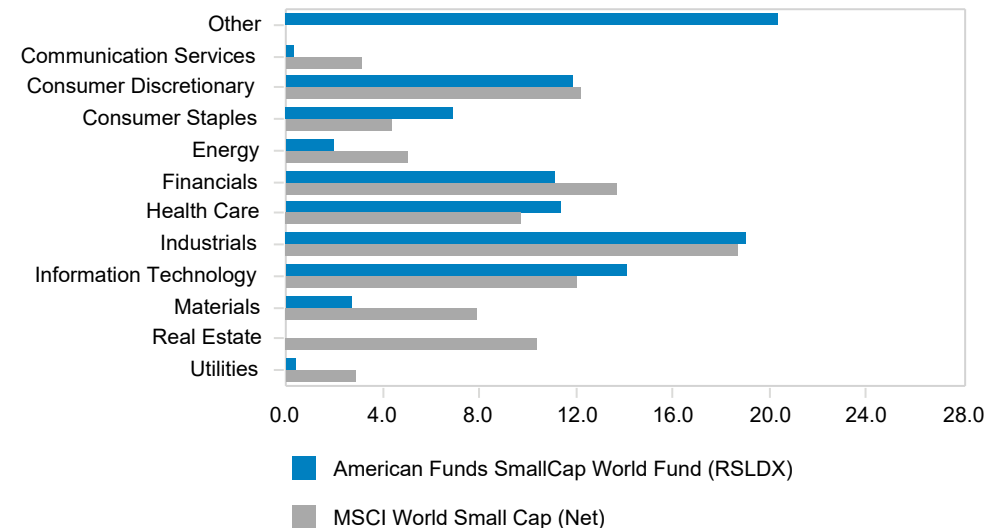
Portfolio Characteristics As of 03/31/2022

	Portfolio	Benchmark
Total Securities	911	4,515
Avg. Market Cap (\$)	7,027,811,845	1,539,041,534
Price/Earnings (P/E)	35.36	13.78
Price/Book (P/B)	7.51	2.50
Dividend Yield	1.37	1.81
Annual EPS	34.24	111.95
5 Yr EPS	21.07	15.32
3 Yr EPS Growth	23.71	N/A
Beta (5 Years, Monthly)	0.94	1.00

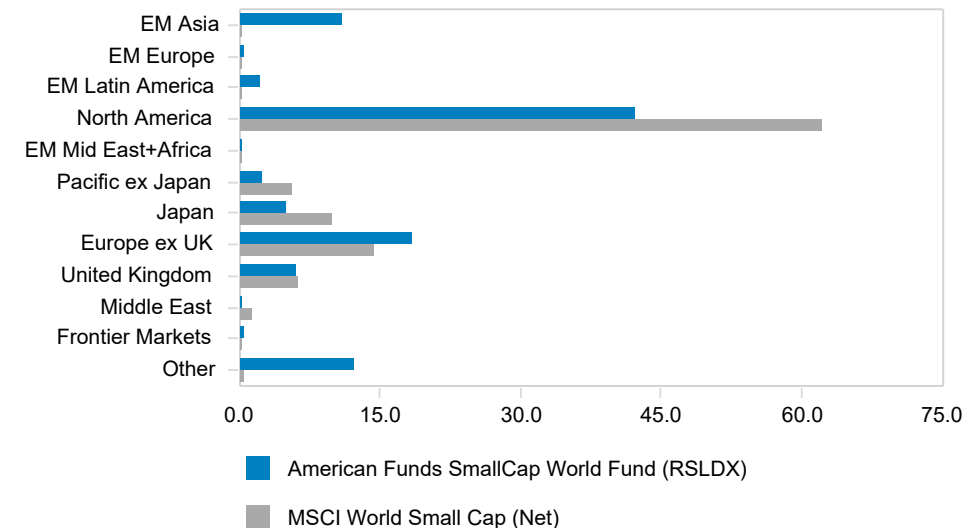
Top Ten Securities As of 03/31/2022

Capital Group Central Cash Fund;	8.7 %
Molina Healthcare Inc ORD	1.1 %
Insulet Corp ORD	1.0 %
Evolution AB (publ) ORD	0.9 %
MongoDB Inc ORD	0.8 %
Wolfspeed Inc ORD	0.8 %
IMCD NV ORD	0.7 %
BayCurrent Consulting Inc ORD	0.6 %
Yeti Holdings Inc ORD	0.6 %
Ares Management Corp ORD	0.6 %

Sector Weights As of 03/31/2022



Region Weights As of 03/31/2022



Statistics provided by Lipper. Most recent available data shown.



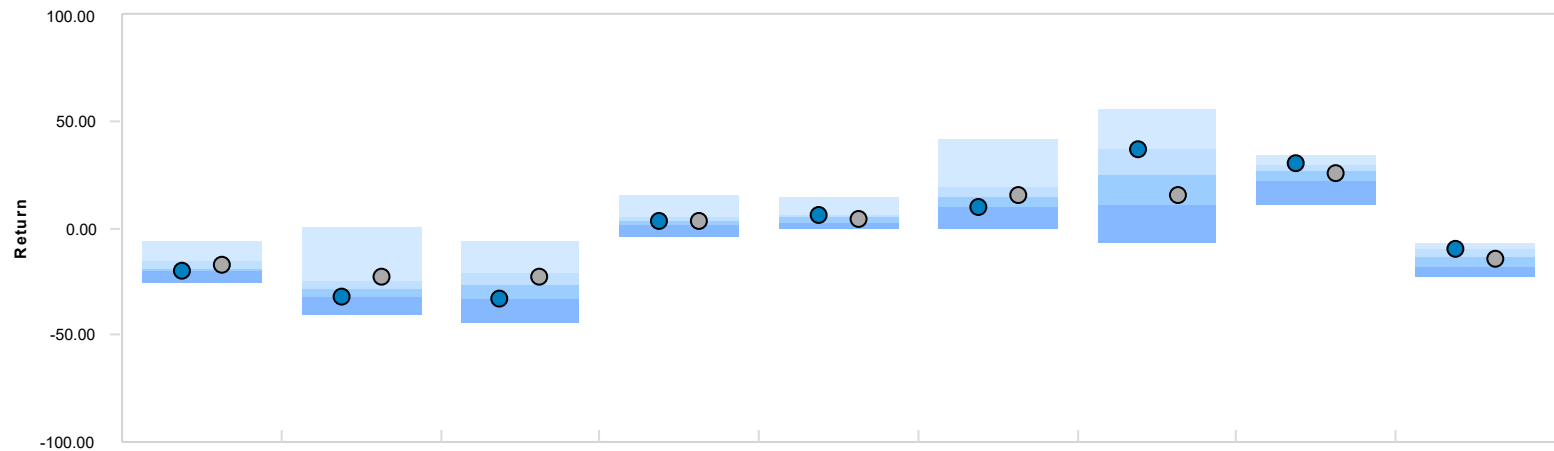
Mutual Fund Info from Lipper

Product Name : American Funds SMCP;R5E (RSLDX)
Fund Family : Capital Group/American Funds
Ticker : RSLDX
Peer Group : IM Global SMID Cap Equity (MF)
Benchmark : MSCI World Small Cap (Net)
Fund Inception : 11/20/2015
Portfolio Manager : Team Managed
Total Assets : \$142 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.80%
Net Expense : 0.80%
Turnover : 30%

Summary Description

The Fund seeks long-term growth of capital. Normally, the Fund invests at least 80% of its net assets in growth-oriented common stocks and other equity-type securities of companies with small market capitalizations. Normally, the Fund will invest a significant portion of its assets outside the United States.

Peer Group Analysis - IM Global SMID Cap Equity (MF)



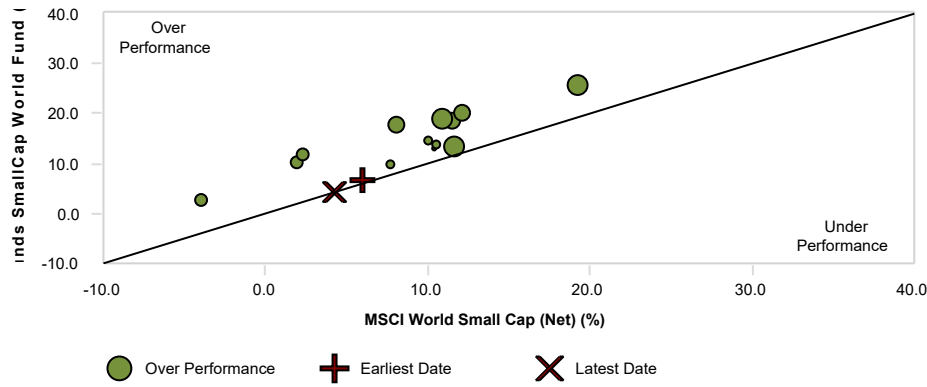
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● American Funds SmallCap World Fund (RSLDX)	-19.32 (63)	-31.84 (71)	-32.36 (76)	4.13 (43)	6.39 (33)	10.51 (77)	37.73 (27)	31.08 (17)	-9.50 (21)
● MSCI World Small Cap (Net)	-17.18 (32)	-22.56 (25)	-21.97 (28)	4.19 (41)	4.78 (63)	15.75 (44)	15.96 (63)	26.19 (53)	-13.86 (55)
Median	-18.49	-27.96	-25.86	3.54	5.68	14.81	24.84	26.84	-13.01

Comparative Performance

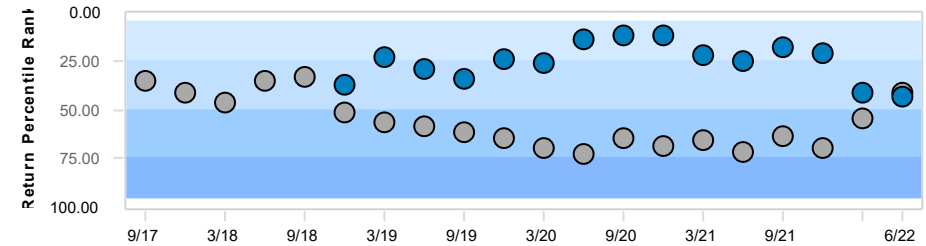
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
American Funds SmallCap World Fund (RSLDX)	-15.52 (71)	-0.48 (81)	-0.29 (33)	7.83 (31)	3.28 (62)	22.14 (46)
MSCI World Small Cap (Net)	-6.50 (23)	2.23 (59)	-1.43 (54)	4.98 (68)	9.43 (32)	23.85 (31)
IM Global SMID Cap Equity (MF) Median	-12.83	2.53	-1.28	6.16	5.63	22.00



3 Yr Rolling Under/Over Performance - 5 Years

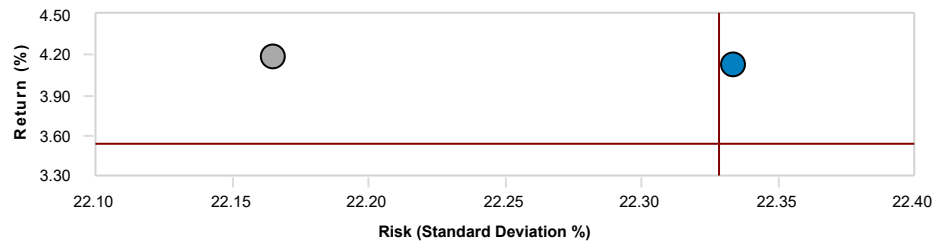


3 Yr Rolling Percentile Ranking - 5 Years



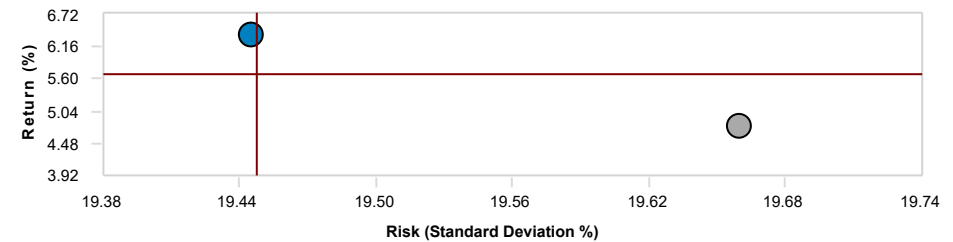
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● American Funds SmallCap World Fund (RSLDX)	15	9 (60%)	6 (40%)	0 (0%)	0 (0%)
● MSCI World Small Cap (Net)	20	0 (0%)	6 (30%)	14 (70%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● American Funds SmallCap World Fund (RSLDX)	4.13	22.33
● MSCI World Small Cap (Net)	4.19	22.17
— Median	3.54	22.33

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● American Funds SmallCap World Fund (RSLDX)	6.39	19.44
● MSCI World Small Cap (Net)	4.78	19.66
— Median	5.68	19.45

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds SmallCap World Fund (RSLDX)	7.18	96.11	95.34	0.23	-0.01	0.27	0.96	15.47
MSCI World Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.27	1.00	16.24

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds SmallCap World Fund (RSLDX)	5.98	97.69	90.01	1.85	0.24	0.36	0.94	13.55
MSCI World Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.28	1.00	14.40



Fund Information

Fund Name : DFA Investment Dimensions Group Inc: Emerging Markets Small Cap Portfolio; Institutional Class Shares
Fund Family : Dimensional
Ticker : DEMSX
Inception Date : 03/05/1998
Fund Assets : \$4,047 Million
Portfolio Turnover : 16%

Portfolio Assets : \$4,047 Million

Portfolio Manager : Team Managed

PM Tenure :

Fund Style : IM Emerging Markets Equity (MF)

Style Benchmark : MSCI Emerging Markets Small Cap (Net)

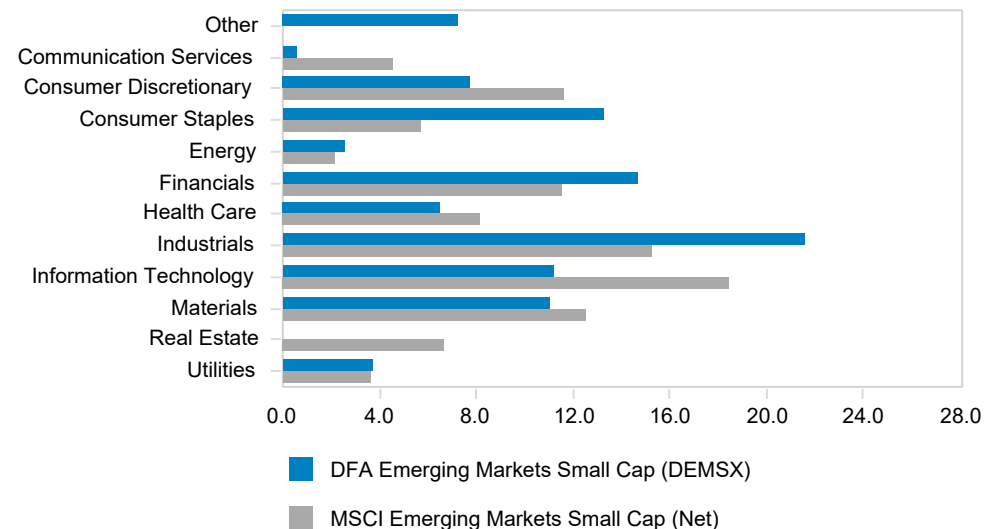
Portfolio Characteristics As of 01/31/2022

	Portfolio	Benchmark
Total Securities	5,077	1,789
Avg. Market Cap (\$)	2,044,615,637	991,527,268
Price/Earnings (P/E)	21.04	12.15
Price/Book (P/B)	2.94	2.63
Dividend Yield	2.81	2.40
Annual EPS	15.95	490.69
5 Yr EPS	11.41	18.75
3 Yr EPS Growth	9.89	N/A
Beta (5 Years, Monthly)	0.95	1.00

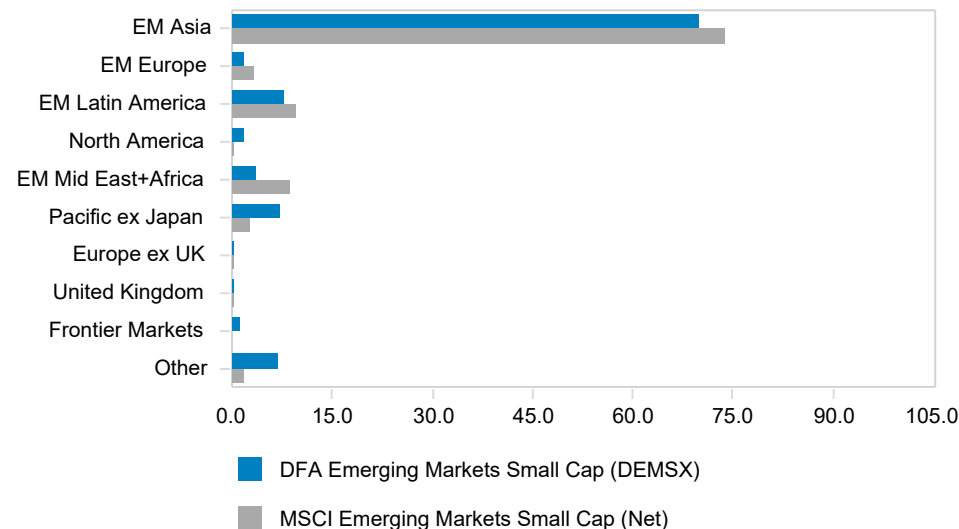
Top Ten Securities As of 01/31/2022

GCL Technology Holdings Ltd ORD	0.4 %
Industrias CH SAB de CV ORD	0.3 %
Kingsoft Corp Ltd ORD	0.3 %
Minth Group Ltd ORD	0.3 %
Tata Power Company Ltd ORD	0.3 %
Persistent Systems Ltd ORD	0.3 %
Kunlun Energy Company Ltd ORD	0.3 %
Petro Rio SA ORD	0.3 %
Kingboard Holdings Ltd ORD	0.3 %
China Conch Venture Holdings Ltd	0.2 %

Sector Weights As of 01/31/2022



Region Weights As of 01/31/2022



Statistics provided by Lipper. Most recent available data shown.



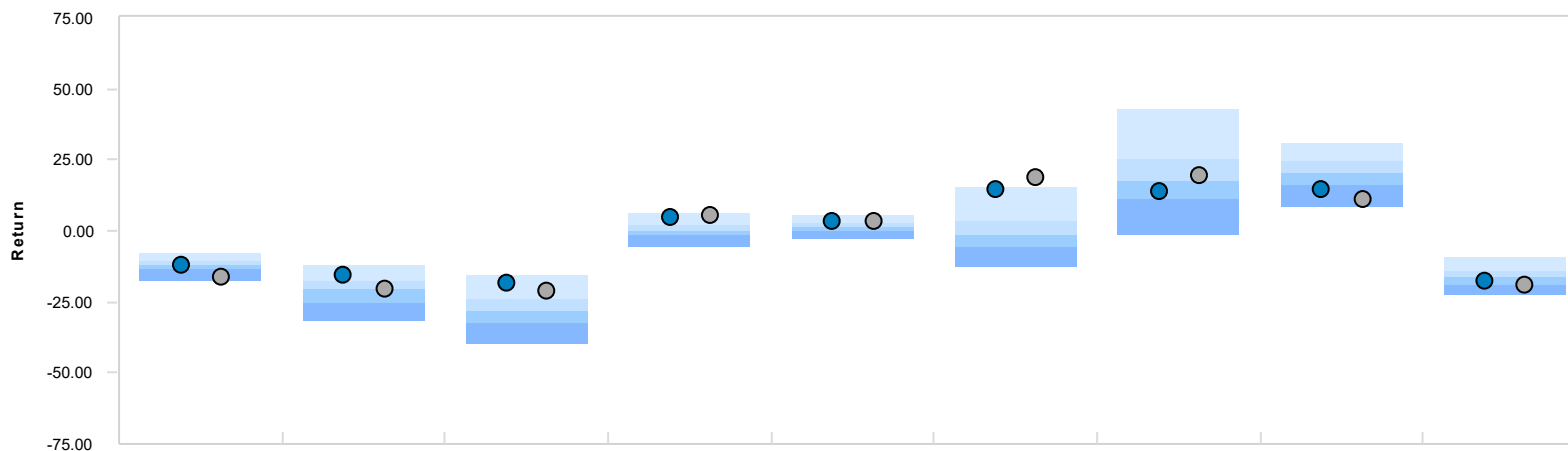
Mutual Fund Info from Lipper

Product Name : DFA Emg Mkts Sm Cap;I (DEMSX)
Fund Family : Dimensional
Ticker : DEMSX
Peer Group : IM Emerging Markets Equity (MF)
Benchmark : MSCI Emerging Markets Small Cap (Net)
Fund Inception : 03/05/1998
Portfolio Manager : Team Managed
Total Assets : \$4,047 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.80%
Net Expense : 0.60%
Turnover : 16%

Summary Description

The Fund seeks long-term capital appreciation by investing in a Master Fund that buys stocks of smaller emerging market companies.

Peer Group Analysis - IM Emerging Markets Equity (MF)

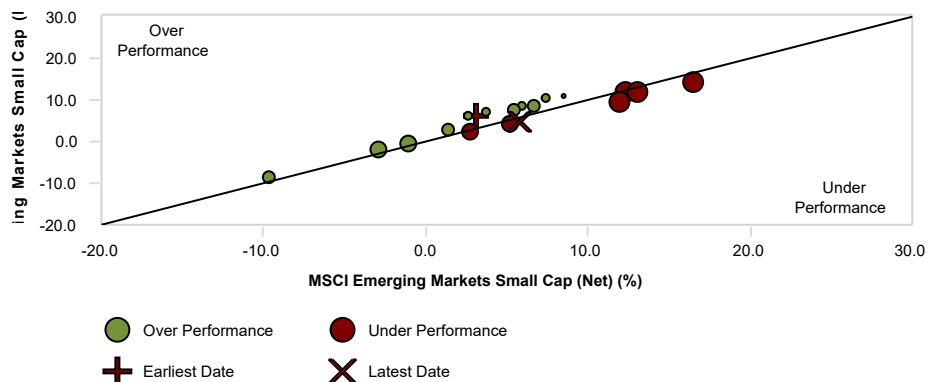


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● DFA Emerging Markets Small Cap (DEMSX)	-11.68 (46)	-15.60 (16)	-18.29 (9)	4.87 (8)	3.72 (15)	14.58 (6)	13.80 (70)	14.89 (79)	-17.56 (61)
● MSCI Emerging Markets Small Cap (Net)	-16.41 (92)	-20.03 (47)	-20.72 (15)	5.78 (6)	3.48 (17)	18.75 (4)	19.29 (43)	11.51 (89)	-18.59 (71)
Median	-11.91	-20.54	-28.03	0.13	1.56	-1.62	17.66	20.17	-16.45

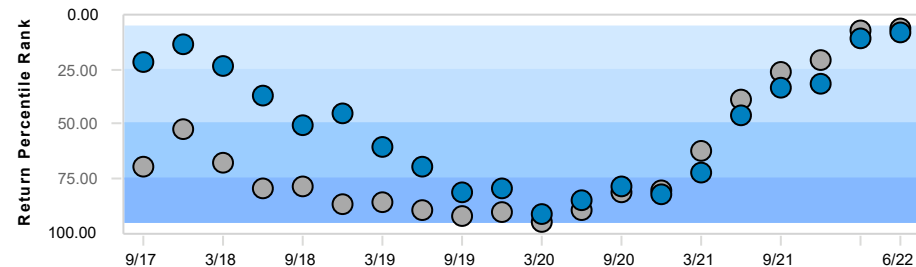
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
DFA Emerging Markets Small Cap (DEMSX)	-4.45 (15)	0.98 (13)	-4.13 (18)	10.45 (9)	7.16 (7)	19.43 (45)
MSCI Emerging Markets Small Cap (Net)	-4.33 (14)	1.33 (11)	-2.16 (8)	11.25 (6)	7.67 (6)	22.22 (17)
IM Emerging Markets Equity (MF) Median	-9.80	-1.20	-7.60	5.15	2.88	19.17

3 Yr Rolling Under/Over Performance - 5 Years

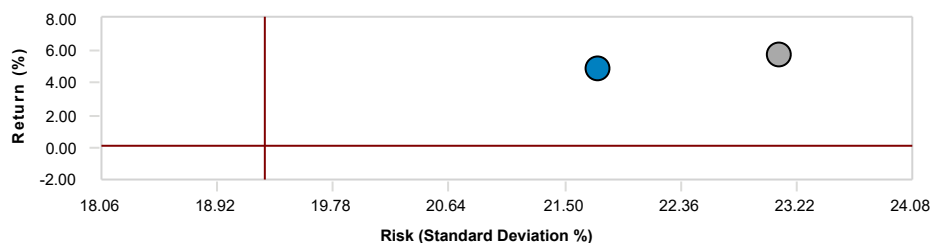


3 Yr Rolling Percentile Ranking - 5 Years



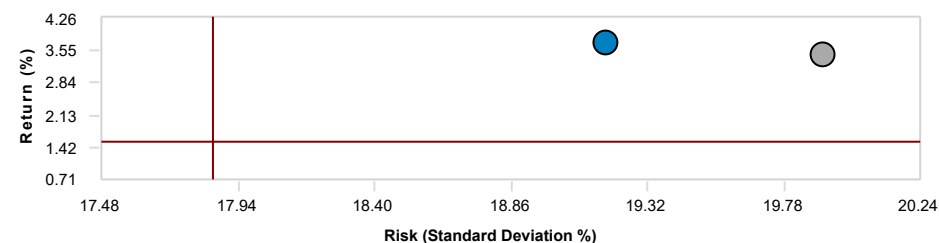
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
DFA Emerging Markets Small Cap (DEMSX)	20	5 (25%)	5 (25%)	4 (20%)	6 (30%)
MSCI Emerging Markets Small Cap (Net)	20	3 (15%)	2 (10%)	4 (20%)	11 (55%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
DFA Emerging Markets Small Cap (DEMSX)	4.87	21.75
MSCI Emerging Markets Small Cap (Net)	5.78	23.09
Median	0.13	19.27

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
DFA Emerging Markets Small Cap (DEMSX)	3.72	19.18
MSCI Emerging Markets Small Cap (Net)	3.48	19.91
Median	1.56	17.86

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Emerging Markets Small Cap (DEMSX)	3.99	90.05	91.40	-0.57	-0.29	0.30	0.93	15.73
MSCI Emerging Markets Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.34	1.00	16.41

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Emerging Markets Small Cap (DEMSX)	3.48	96.14	94.77	0.37	0.03	0.23	0.95	13.78
MSCI Emerging Markets Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.22	1.00	14.34



Fund Information

Fund Name :	Vanguard Bond Index Funds: Vanguard Total Bond Market Index Fund; Admiral Shares	Portfolio Assets :	\$290,494 Million
Fund Family :	Vanguard	Portfolio Manager :	Joshua C. Barrickman
Ticker :	VBTIX	PM Tenure :	2013
Inception Date :	11/12/2001	Fund Style :	IM U.S. Broad Market Core Fixed Income (MF)
Fund Assets :	\$102,476 Million	Style Benchmark :	Bloomberg U.S. Aggregate
Portfolio Turnover :	69%		

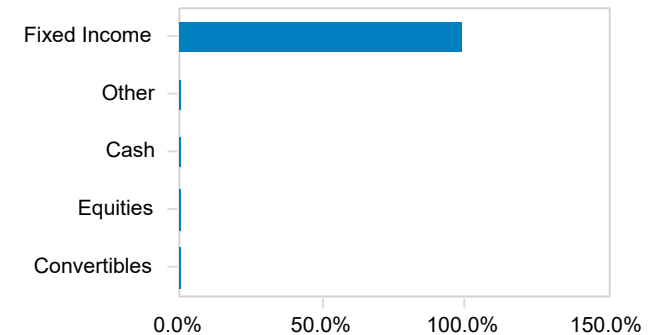
Fund Characteristics As of 09/30/2021

Avg. Coupon	2.70 %
Nominal Maturity	8.70 Years
Effective Maturity	N/A
Duration	6.80 Years
SEC 30 Day Yield	2.7
Avg. Credit Quality	AA

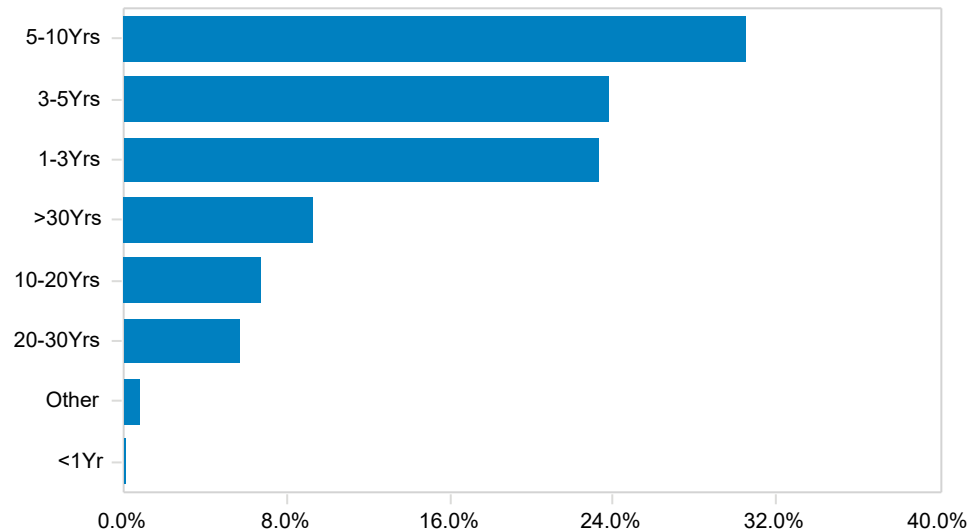
Top Ten Securities As of 09/30/2021

Corporate Notes/Bonds	28.5 %
GNMA and Other Mtg Backed	22.5 %
Government Agency Securities	22.1 %
Treasury Notes/Bonds	22.1 %
Fgn. Currency Denominated Bonds	3.7 %
Asset Backed Securities	0.4 %

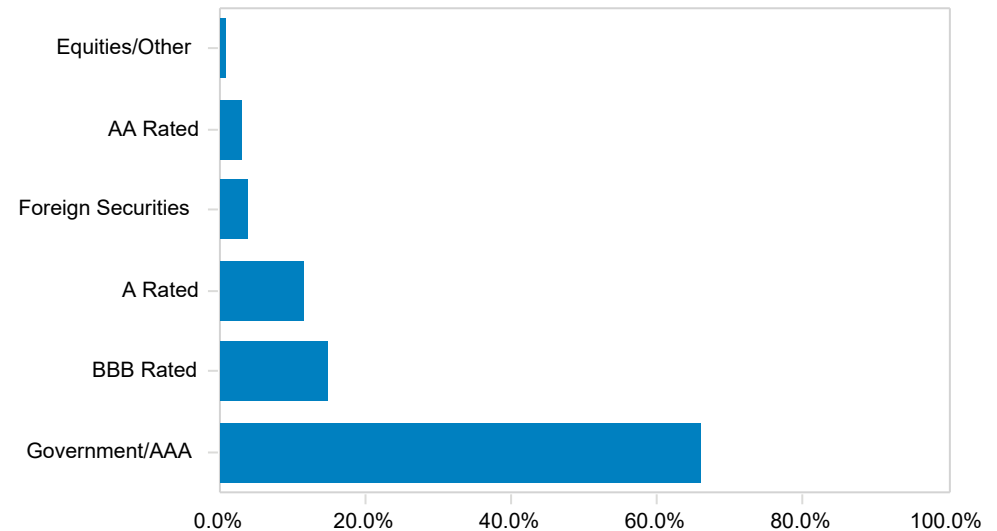
Asset Allocation As of 09/30/2021



Maturity Distribution As of 09/30/2021



Sector/Quality Allocation As of 09/30/2021



Statistics provided by Lipper. Most recent available data shown.



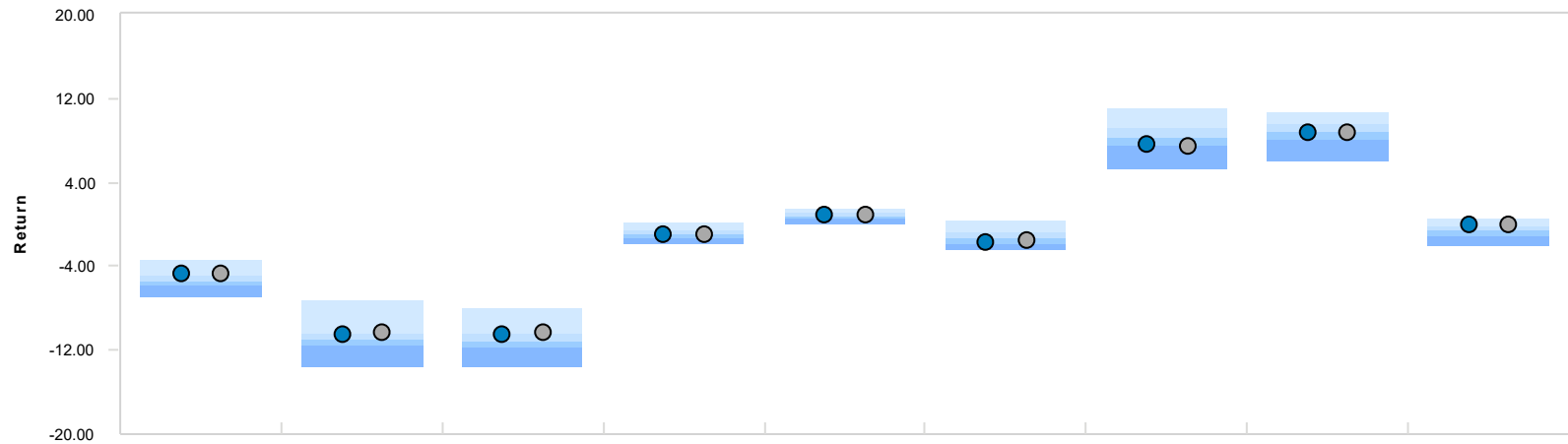
Mutual Fund Info from Lipper

Product Name : Vanguard Tot Bd;Adm (VBTLX)
Fund Family : Vanguard
Ticker : VBTLX
Peer Group : IM U.S. Broad Market Core Fixed Income (MF)
Benchmark : Blmbg. U.S. Aggregate Index
Fund Inception : 11/12/2001
Portfolio Manager : Joshua C. Barrickman
Total Assets : \$102,476 Million
Total Assets Date : 05/31/2022
Gross Expense : 0.05%
Net Expense : 0.05%
Turnover : 69%

Summary Description

The Fund seeks to track the performance of a broad, market-weighted bond index.

Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)



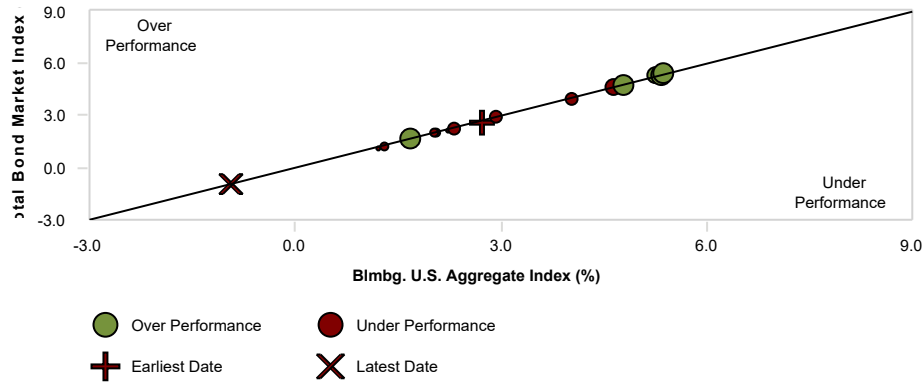
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Vanguard Total Bond Market Index (VBTLX)	-4.71 (18)	-10.42 (28)	-10.40 (24)	-0.94 (51)	0.84 (45)	-1.67 (66)	7.72 (65)	8.71 (53)	-0.03 (20)
● Blmbg. U.S. Aggregate Index	-4.69 (15)	-10.35 (23)	-10.29 (18)	-0.94 (51)	0.88 (40)	-1.55 (60)	7.51 (73)	8.72 (53)	0.01 (18)
Median	-5.35	-11.02	-11.17	-0.93	0.80	-1.33	8.15	8.76	-0.62

Comparative Performance

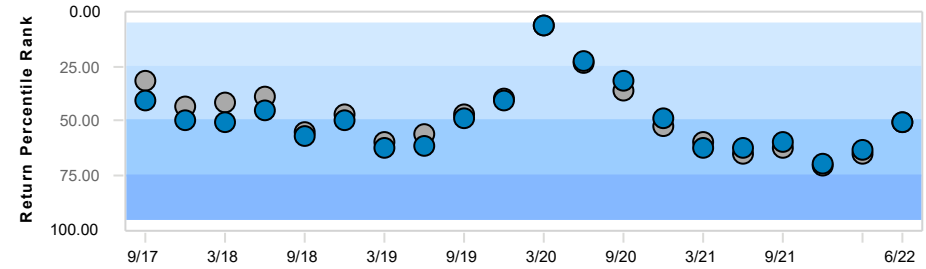
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Vanguard Total Bond Market Index (VBTLX)	-5.99 (52)	-0.09 (40)	0.11 (30)	2.00 (44)	-3.61 (88)	0.67 (89)
Blmbg. U.S. Aggregate Index	-5.93 (47)	0.01 (21)	0.05 (45)	1.83 (64)	-3.38 (73)	0.67 (89)
IM U.S. Broad Market Core Fixed Income (MF) Median	-5.98	-0.14	0.03	1.94	-3.07	1.36



3 Yr Rolling Under/Over Performance - 5 Years

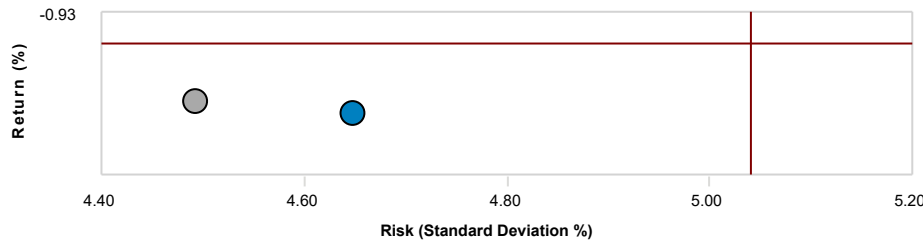


3 Yr Rolling Percentile Ranking - 5 Years



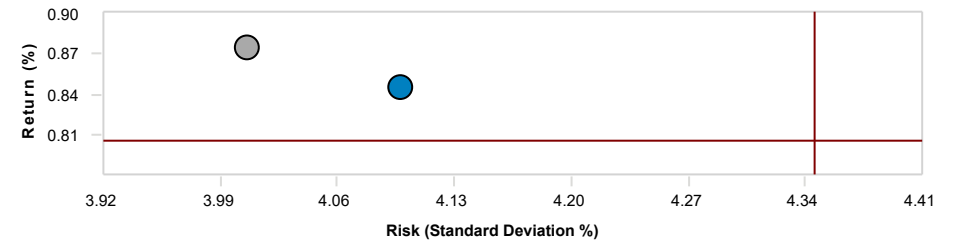
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Vanguard Total Bond Market Index (VBTLX)	20	2 (10%)	8 (40%)	10 (50%)	0 (0%)
● Blmbg. U.S. Aggregate Index	20	2 (10%)	8 (40%)	10 (50%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Vanguard Total Bond Market Index (VBTLX)	-0.94	4.65
● Blmbg. U.S. Aggregate Index	-0.94	4.49
— Median	-0.93	5.04

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Vanguard Total Bond Market Index (VBTLX)	0.84	4.10
● Blmbg. U.S. Aggregate Index	0.88	4.01
— Median	0.80	4.35

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Bond Market Index (VBTLX)	0.34	104.97	104.20	0.03	0.02	-0.32	1.03	3.59
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	-0.33	1.00	3.51

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Bond Market Index (VBTLX)	0.30	101.70	102.60	-0.05	-0.09	-0.04	1.02	2.92
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	-0.04	1.00	2.87

Fund Information

Fund Name :	Metropolitan West Funds: MetWest Total Return Bond Fund; Class I Shares	Portfolio Assets :	\$68,832 Million
Fund Family :	Metropolitan West Asset Management	Portfolio Manager :	Landmann/Kane/Whlen
Ticker :	MWTIX	PM Tenure :	2021--2021--2021
Inception Date :	03/31/2000	Fund Style :	IM U.S. Broad Market Core+ Fixed Income (MF)
Fund Assets :	\$41,802 Million	Style Benchmark :	Bloomberg U.S. Aggregate
Portfolio Turnover :	467%		

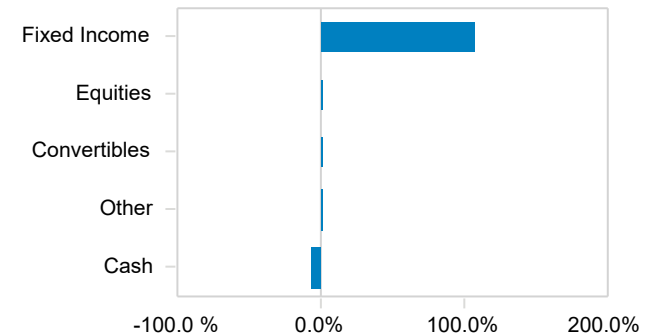
Fund Characteristics As of 03/31/2022

Avg. Coupon	N/A
Nominal Maturity	8.98 Years
Effective Maturity	N/A
Duration	6.48 Years
SEC 30 Day Yield	3.9
Avg. Credit Quality	AA

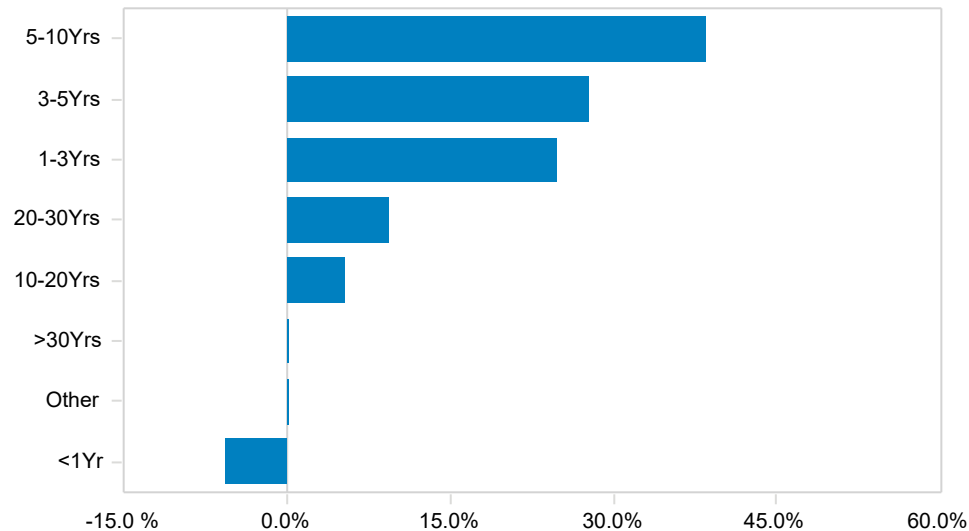
Top Ten Securities As of 03/31/2022

GNMA and Other Mtg Backed	41.6 %
Corporate Notes/Bonds	33.0 %
Government Agency Securities	28.7 %
Asset Backed Securities	4.3 %

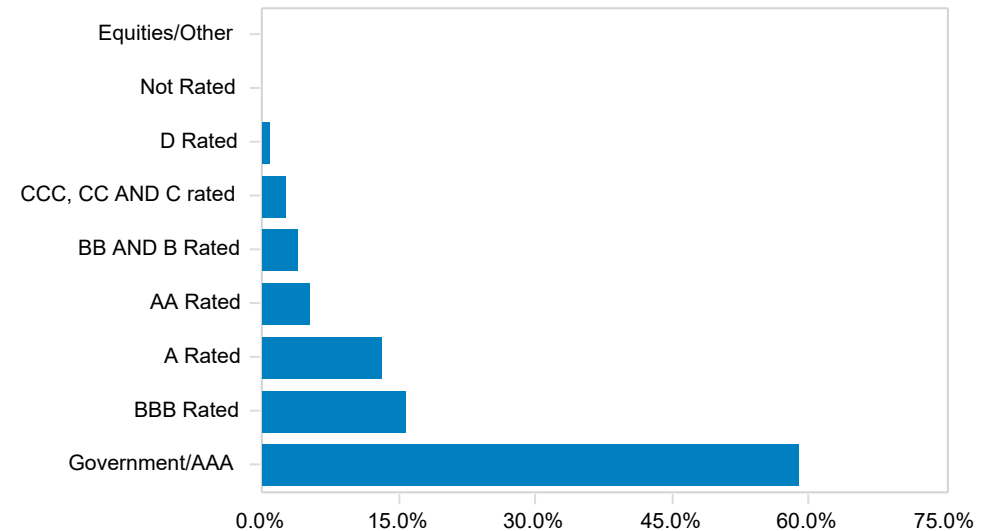
Asset Allocation As of 03/31/2022



Maturity Distribution As of 12/31/2021



Sector/Quality Allocation As of 03/31/2022



Statistics provided by Lipper. Most recent available data shown.



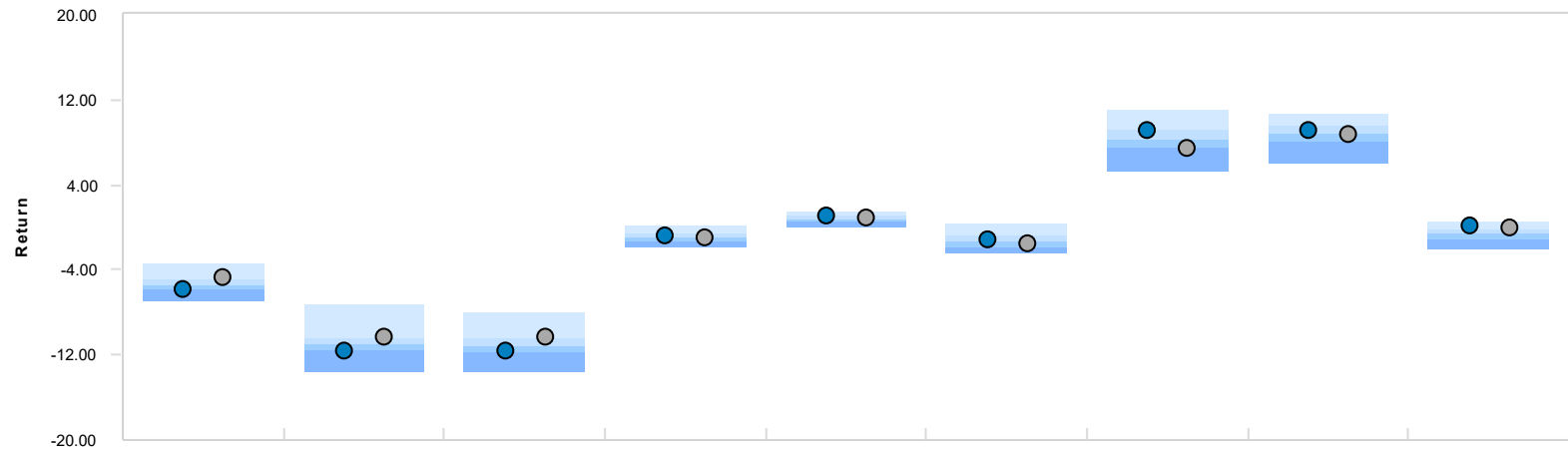
Mutual Fund Info from Lipper

Product Name : MetWest:Total Rtn:I (MWTIX)
Fund Family : Metropolitan West Asset Management
Ticker : MWTIX
Peer Group : IM U.S. Broad Market Core Fixed Income (MF)
Benchmark : Blmbg. U.S. Aggregate Index
Fund Inception : 03/31/2000
Portfolio Manager : Landmann/Kane/Whlen
Total Assets : \$41,802 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.45%
Net Expense : 0.45%
Turnover : 467%

Summary Description

The Fund seeks to maximize long-term total return. The Fund invests at least 80% of its net assets in investment grade fixed income securities or unrated securities that are determined by the Adviser to be of similar quality. Up to 20% of the Funds net assets may be invested in securities rated below investment grade.

Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)



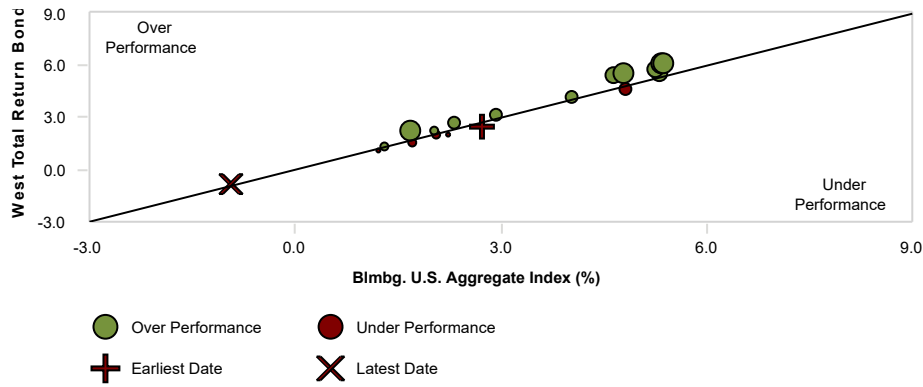
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● Metropolitan West Total Return Bond (MWTIX)	-5.73 (73)	-11.67 (76)	-11.64 (69)	-0.80 (43)	1.05 (28)	-1.13 (40)	9.12 (24)	9.09 (38)	0.16 (11)
● Blmbg. U.S. Aggregate Index	-4.69 (15)	-10.35 (23)	-10.29 (18)	-0.94 (51)	0.88 (40)	-1.55 (60)	7.51 (73)	8.72 (53)	0.01 (18)
Median	-5.35	-11.02	-11.17	-0.93	0.80	-1.33	8.15	8.76	-0.62

Comparative Performance

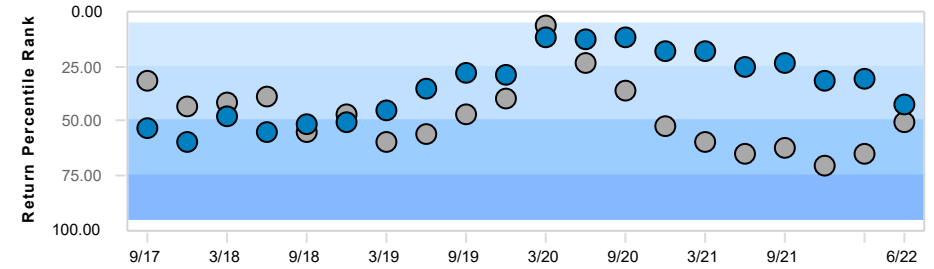
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
Metropolitan West Total Return Bond (MWTIX)	-6.30 (73)	-0.09 (41)	0.13 (26)	1.80 (68)	-2.91 (38)	1.20 (62)
Blmbg. U.S. Aggregate Index	-5.93 (47)	0.01 (21)	0.05 (45)	1.83 (64)	-3.38 (73)	0.67 (89)
IM U.S. Broad Market Core Fixed Income (MF) Median	-5.98	-0.14	0.03	1.94	-3.07	1.36



3 Yr Rolling Under/Over Performance - 5 Years

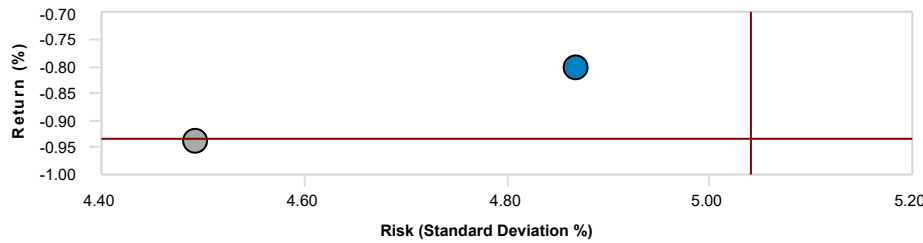


3 Yr Rolling Percentile Ranking - 5 Years



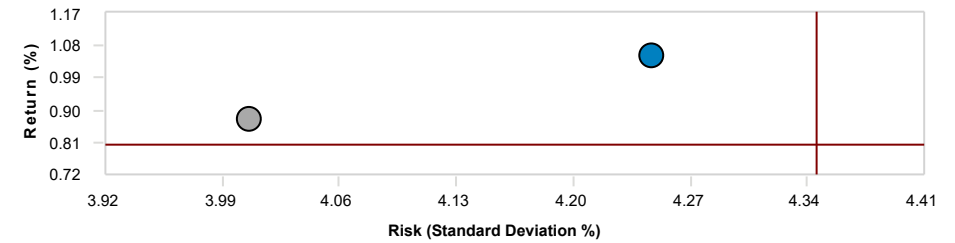
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Metropolitan West Total Return Bond (MWTIX)	20	7 (35%)	8 (40%)	5 (25%)	0 (0%)
Blmbg. U.S. Aggregate Index	20	2 (10%)	8 (40%)	10 (50%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Metropolitan West Total Return Bond (MWTIX)	-0.80	4.87
Blmbg. U.S. Aggregate Index	-0.94	4.49
Median	-0.93	5.04

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Metropolitan West Total Return Bond (MWTIX)	1.05	4.25
Blmbg. U.S. Aggregate Index	0.88	4.01
Median	0.80	4.35

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Metropolitan West Total Return Bond (MWTIX)	0.84	108.15	104.59	0.21	0.18	-0.27	1.07	3.81
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	-0.33	1.00	3.51

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Metropolitan West Total Return Bond (MWTIX)	0.67	104.60	101.63	0.14	0.28	0.01	1.05	3.07
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	-0.04	1.00	2.87



Fund Information

Fund Name :	BlackRock Funds V: BlackRock High Yield Bond Portfolio; Institutional Shares	Portfolio Assets :	\$17,821 Million
Fund Family :	BlackRock	Portfolio Manager :	Team Managed
Ticker :	BHYIX	PM Tenure :	
Inception Date :	11/19/1998	Fund Style :	IM U.S. High Yield Bonds (MF)
Fund Assets :	\$10,302 Million	Style Benchmark :	FTSE High Yield Market Index
Portfolio Turnover :	76%		

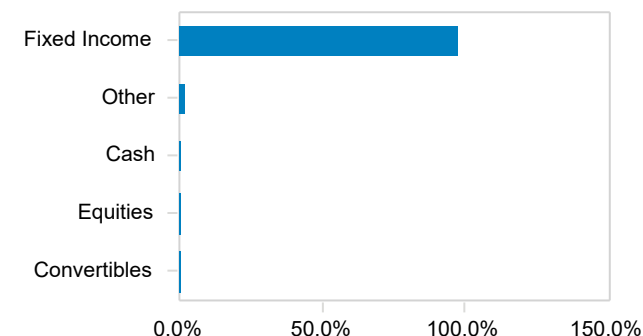
Fund Characteristics As of 06/30/2021

Avg. Coupon	4.63 %
Nominal Maturity	N/A
Effective Maturity	7.45 Years
Duration	1.45 Years
SEC 30 Day Yield	7.0
Avg. Credit Quality	CCC

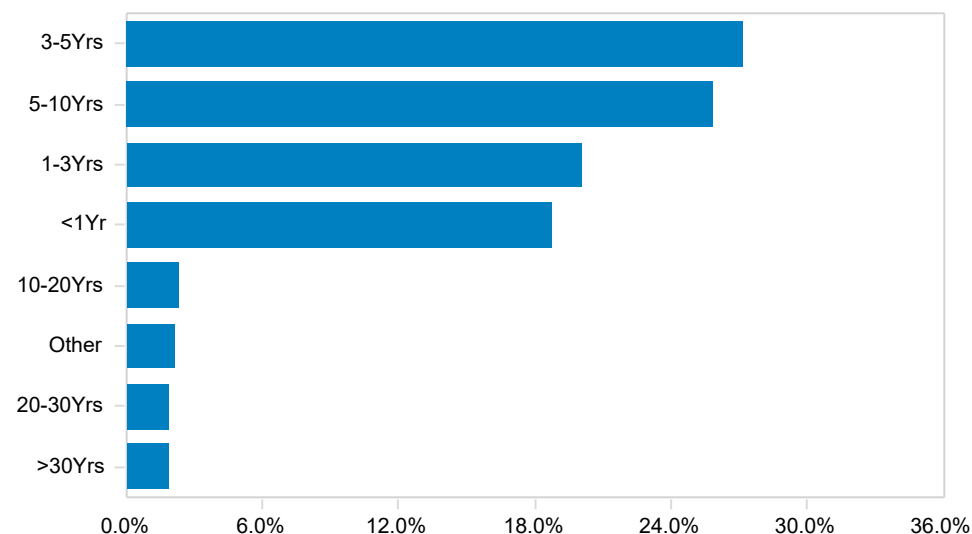
Top Ten Securities As of 06/30/2021

Corporate Notes/Bonds	97.5 %
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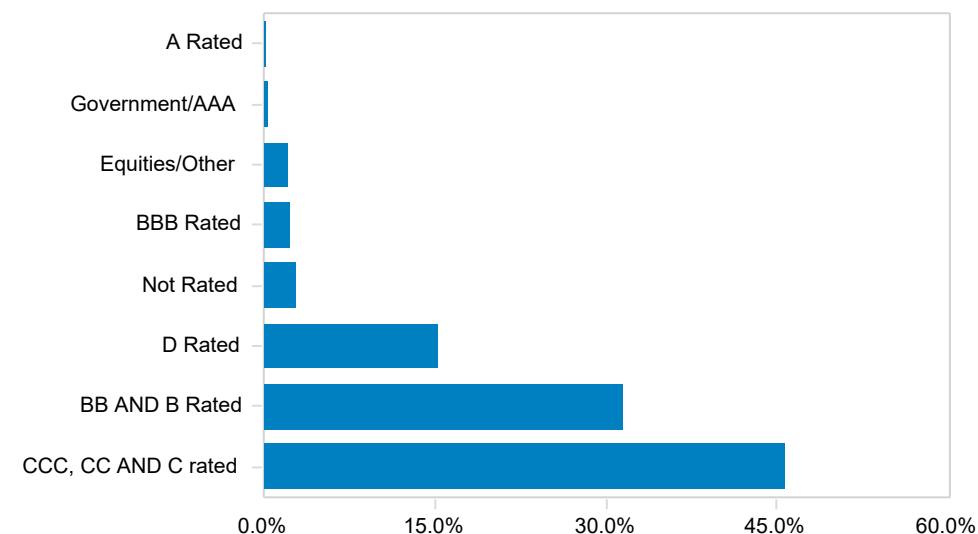
Asset Allocation As of 06/30/2021



Maturity Distribution As of 06/30/2021



Sector/Quality Allocation As of 06/30/2021



Statistics provided by Lipper. Most recent available data shown.



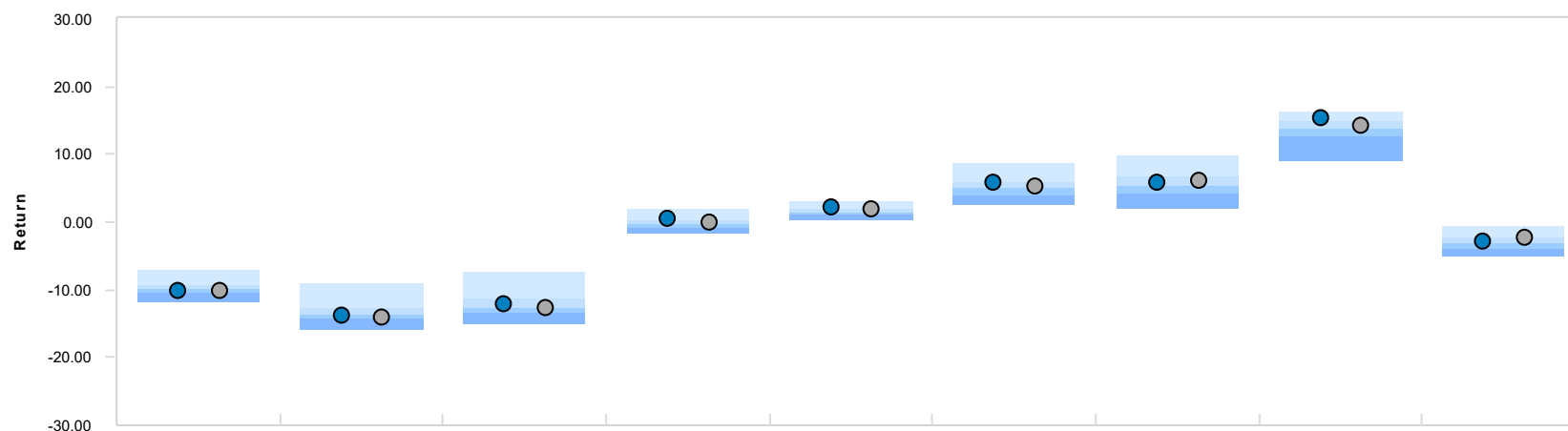
Mutual Fund Info from Lipper

Product Name : BlackRock:HY Bd:I (BHYIX)
Fund Family : BlackRock
Ticker : BHYIX
Peer Group : IM U.S. High Yield Bonds (MF)
Benchmark : ICE BofA U.S. High Yield Index
Fund Inception : 11/19/1998
Portfolio Manager : Team Managed
Total Assets : \$10,302 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.59%
Net Expense : 0.58%
Turnover : 76%

Summary Description

The Fund seeks to maximize total return, consistent with income generation and prudent investment management. The High Yield Fund invests primarily in non-investment grade bonds with maturities of ten years or less. The High Yield Fund normally invests at least 80% of its assets in high yield bonds.

Peer Group Analysis - IM U.S. High Yield Bonds (MF)

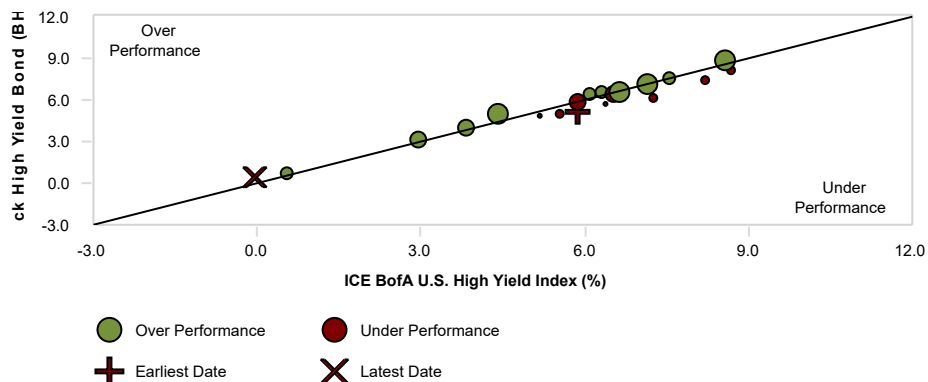


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● BlackRock High Yield Bond (BHYIX)	-10.08 (64)	-13.65 (47)	-12.19 (43)	0.43 (25)	2.29 (17)	5.88 (27)	5.82 (42)	15.30 (16)	-2.86 (46)
● ICE BofA U.S. High Yield Index	-9.99 (60)	-14.05 (65)	-12.69 (55)	-0.05 (42)	1.95 (28)	5.35 (40)	6.17 (34)	14.41 (36)	-2.27 (27)
Median	-9.83	-13.77	-12.48	-0.26	1.49	4.93	5.43	13.83	-2.97

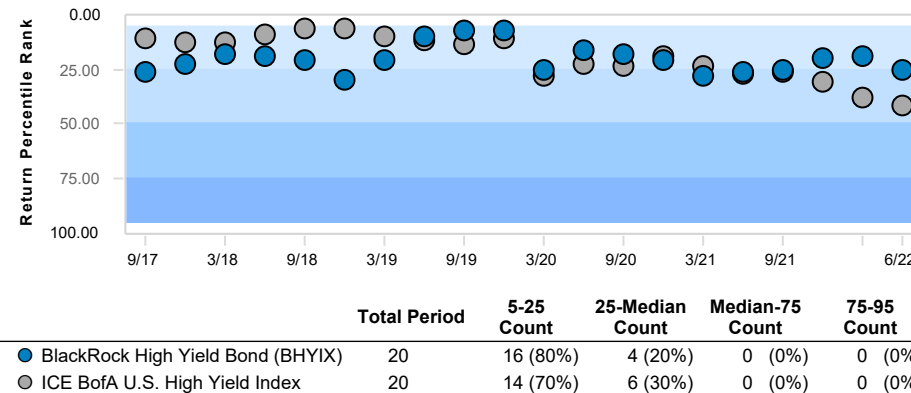
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
BlackRock High Yield Bond (BHYIX)	-3.97 (38)	0.90 (14)	0.78 (40)	3.16 (14)	0.93 (50)	6.32 (42)
ICE BofA U.S. High Yield Index	-4.51 (70)	0.64 (42)	0.94 (19)	2.77 (37)	0.90 (52)	6.48 (35)
IM U.S. High Yield Bonds (MF) Median	-4.20	0.59	0.71	2.65	0.92	6.03

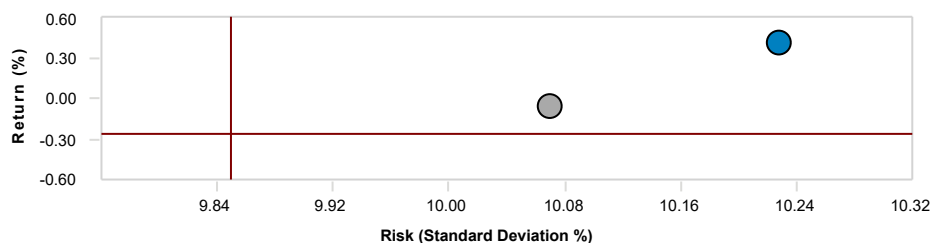
3 Yr Rolling Under/Over Performance - 5 Years



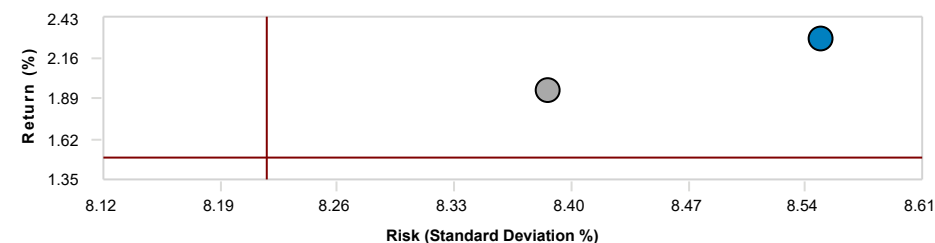
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
BlackRock High Yield Bond (BHYIX)	0.89	102.76	98.03	0.49	0.56	0.03	1.01	8.47
ICE BofA U.S. High Yield Index	0.00	100.00	100.00	0.00	N/A	-0.02	1.00	8.40

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
BlackRock High Yield Bond (BHYIX)	0.79	103.24	99.63	0.32	0.44	0.18	1.02	6.77
ICE BofA U.S. High Yield Index	0.00	100.00	100.00	0.00	N/A	0.14	1.00	6.68



Fund Information

Fund Name : DFA Investment Dimensions Group Inc: DFA Real Estate Securities Portfolio; Institutional Class Shares

Fund Family : Dimensional

Ticker : DFREX

Inception Date : 01/05/1993

Fund Assets : \$8,932 Million

Portfolio Turnover : 5%

Portfolio Assets : \$8,932 Million

Portfolio Manager : Fogdall/Schneider

PM Tenure : 2012--2019

Fund Style : IM Real Estate Sector (MF)

Style Benchmark : FTSE NAREIT All Equity REITs

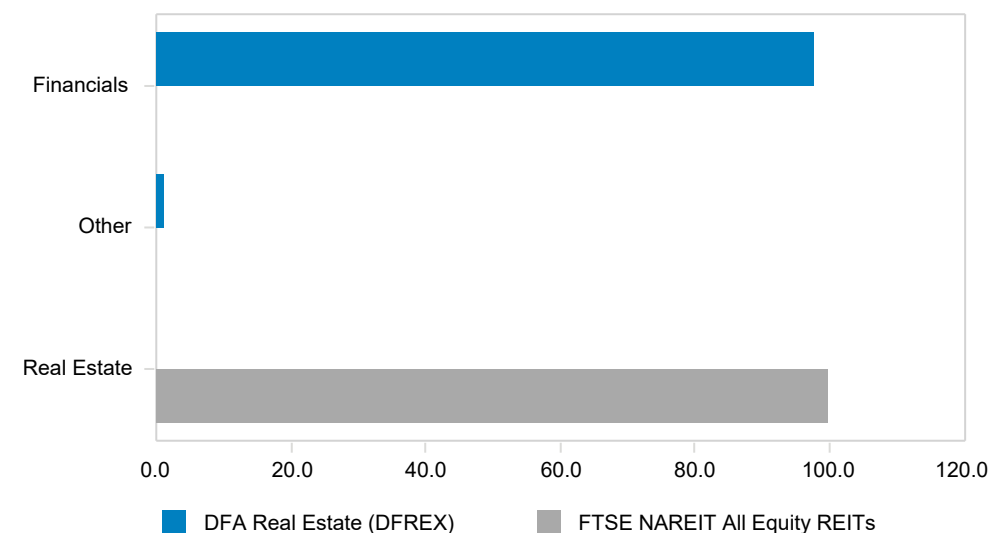
Portfolio Characteristics As of 01/31/2022

	Portfolio	Benchmark
Total Securities	160	158
Avg. Market Cap (\$)	42,317,582,621	3,556,021,475
Price/Earnings (P/E)	45.58	39.84
Price/Book (P/B)	6.02	3.15
Dividend Yield	2.76	2.81
Annual EPS	-2.17	2.25
5 Yr EPS	6.99	10.63
3 Yr EPS Growth	8.67	N/A
Beta (5 Years, Monthly)	1.00	1.00

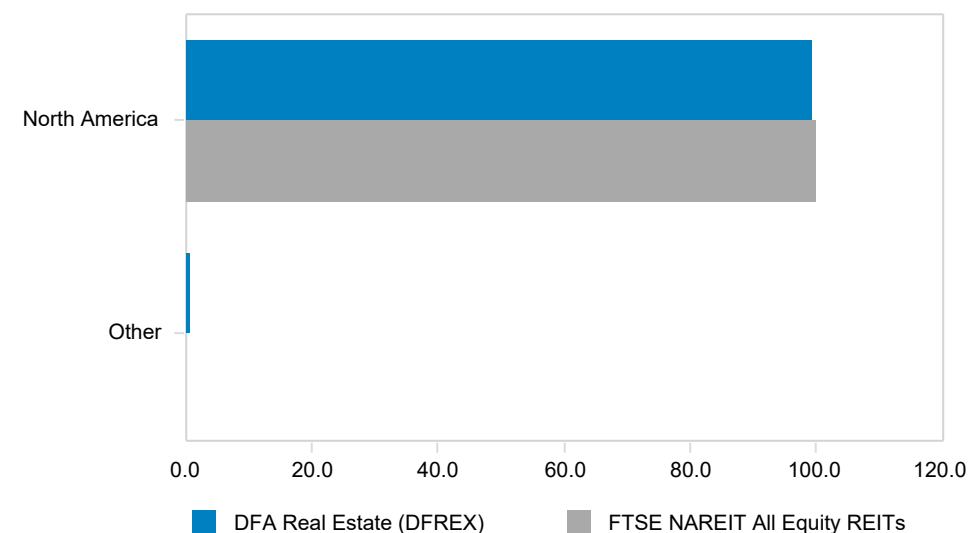
Top Ten Securities As of 01/31/2022

Prologis Inc ORD	8.0 %
American Tower Corp ORD	7.9 %
Crown Castle International Corp	5.4 %
Equinix Inc ORD	4.2 %
Public Storage ORD	3.9 %
Simon Property Group Inc ORD	3.4 %
Digital Realty Trust Inc ORD	2.9 %
Realty Income Corp ORD	2.7 %
Welltower Inc ORD	2.6 %
SBA Communications Corp ORD	2.5 %

Sector Weights As of 01/31/2022



Region Weights As of 01/31/2022



Statistics provided by Lipper. Most recent available data shown.



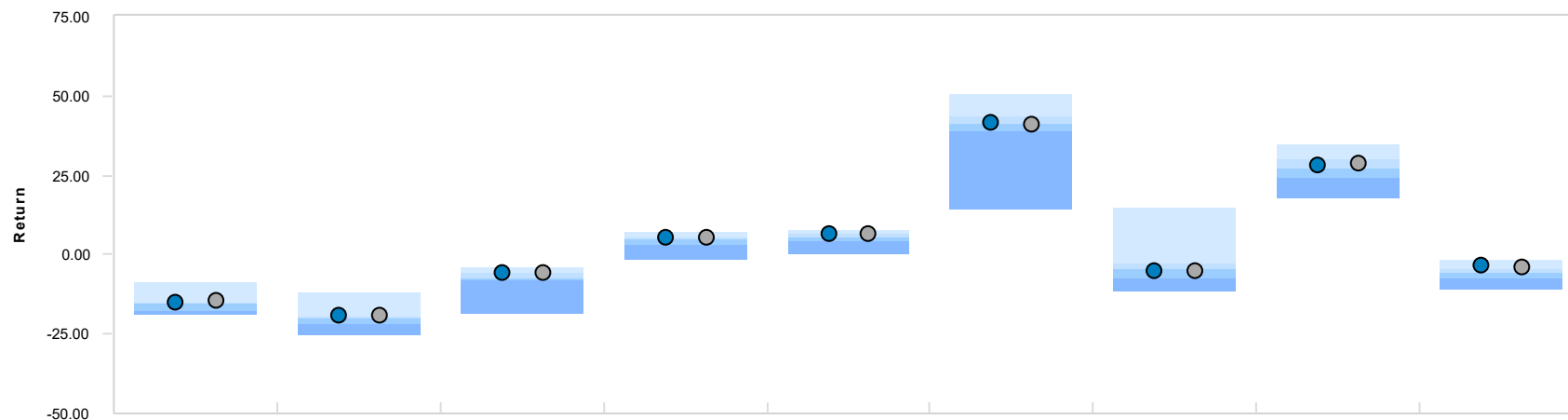
Mutual Fund Info from Lipper

Product Name : DFA Real Estate;I (DFREX)
Fund Family : Dimensional
Ticker : DFREX
Peer Group : IM Real Estate Sector (MF)
Benchmark : FTSE NAREIT All Equity REITs
Fund Inception : 01/05/1993
Portfolio Manager : Fogdall/Schneider
Total Assets : \$8,932 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.20%
Net Expense : 0.18%
Turnover : 5%

Summary Description

The Fund seeks to achieve long-term capital appreciation. The Fund will primarily invest its assets in publicly traded real estate invest trusts on a market capitalization weighted basis.

Peer Group Analysis - IM Real Estate Sector (MF)

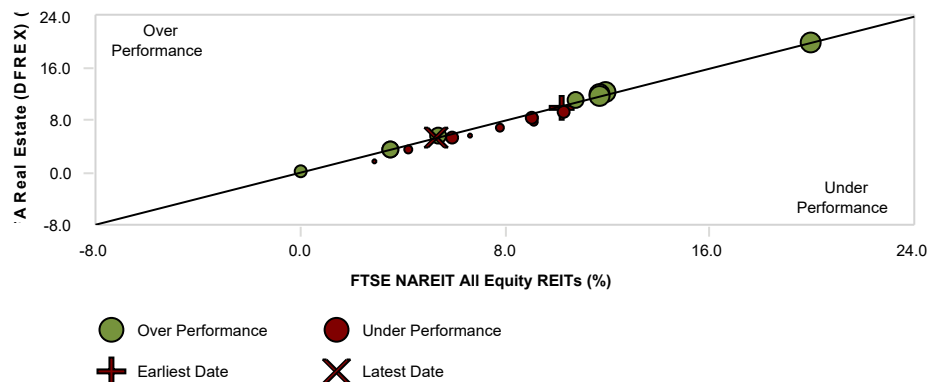


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● DFA Real Estate (DFREX)	-14.75 (27)	-19.19 (24)	-5.86 (29)	5.40 (36)	6.89 (22)	41.85 (41)	-5.04 (58)	28.10 (42)	-2.99 (8)
● FTSE NAREIT All Equity REITs	-14.66 (24)	-19.17 (23)	-5.89 (29)	5.34 (37)	6.75 (25)	41.30 (51)	-5.12 (60)	28.66 (37)	-4.04 (18)
Median	-15.81	-20.42	-7.15	4.80	5.73	41.32	-4.31	27.32	-5.71

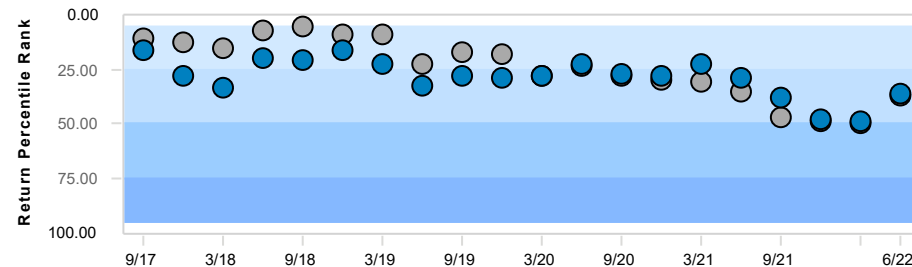
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
DFA Real Estate (DFREX)	-5.21 (47)	16.06 (40)	0.38 (75)	12.37 (36)	8.36 (39)	8.36 (73)
FTSE NAREIT All Equity REITs	-5.29 (50)	16.17 (37)	0.23 (80)	12.03 (54)	8.32 (40)	8.15 (76)
IM Real Estate Sector (MF) Median	-5.29	15.66	1.07	12.08	7.84	9.23

3 Yr Rolling Under/Over Performance - 5 Years

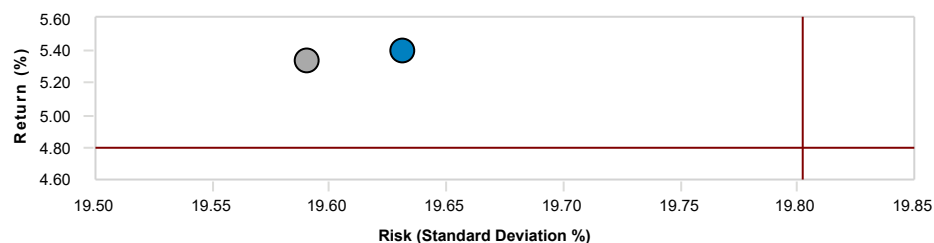


3 Yr Rolling Percentile Ranking - 5 Years



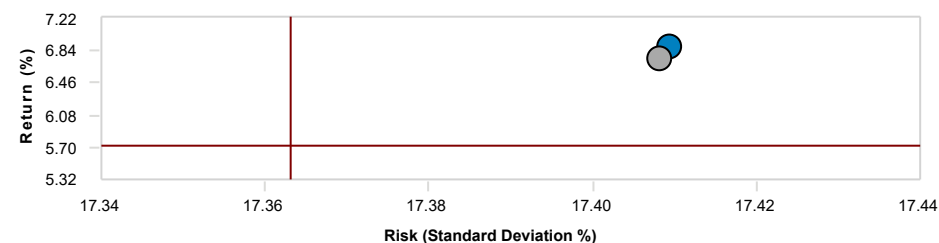
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
DFA Real Estate (DFREX)	20	7 (35%)	13 (65%)	0 (0%)	0 (0%)
FTSE NAREIT All Equity REITs	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
DFA Real Estate (DFREX)	5.40	19.63
FTSE NAREIT All Equity REITs	5.34	19.59
Median	4.80	19.80

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
DFA Real Estate (DFREX)	6.89	17.41
FTSE NAREIT All Equity REITs	6.75	17.41
Median	5.73	17.36

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Real Estate (DFREX)	0.68	100.34	100.16	0.05	0.09	0.34	1.00	14.27
FTSE NAREIT All Equity REITs	0.00	100.00	100.00	0.00	N/A	0.33	1.00	14.36

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Real Estate (DFREX)	0.82	100.01	99.32	0.14	0.16	0.41	1.00	12.21
FTSE NAREIT All Equity REITs	0.00	100.00	100.00	0.00	N/A	0.40	1.00	12.30

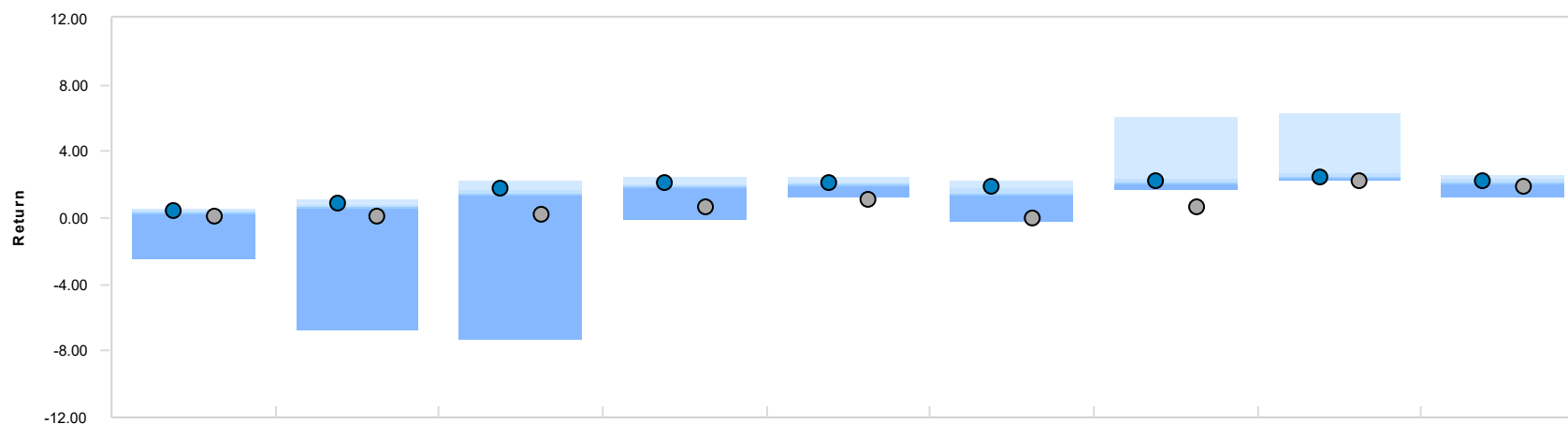
Mutual Fund Info from Lipper

No data found.

Summary Description

No data found.

Peer Group Analysis - IM U.S. GIC/Stable Value (SA+CF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● MissionSquare PLUS Fund R10	0.47 (14)	0.91 (15)	1.85 (16)	2.09 (21)	2.17 (24)	1.89 (17)	2.22 (36)	2.45 (66)	2.27 (31)
● ICE BofAML 3 Month U.S. T-Bill	0.11 (87)	0.15 (87)	0.17 (87)	0.63 (92)	1.11 (97)	0.05 (95)	0.67 (100)	2.28 (96)	1.87 (87)
Median	0.38	0.73	1.43	1.94	1.99	1.50	2.11	2.51	2.13

Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
MissionSquare PLUS Fund R10	0.44 (16)	0.46 (17)	0.47 (15)	0.47 (24)	0.48 (20)	0.52 (27)
ICE BofAML 3 Month U.S. T-Bill	0.04 (87)	0.01 (88)	0.02 (99)	0.00 (100)	0.02 (92)	0.03 (100)
IM U.S. GIC/Stable Value (SA+CF) Median	0.34	0.35	0.37	0.43	0.43	0.46



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle Retirement Income Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TPILX
Inception Date : 09/30/2009
Fund Assets : \$17 Million
Portfolio Turnover : 41%

Portfolio Assets : \$500 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target Today (MF)
Style Benchmark : Dow Jones Global Conservative Index

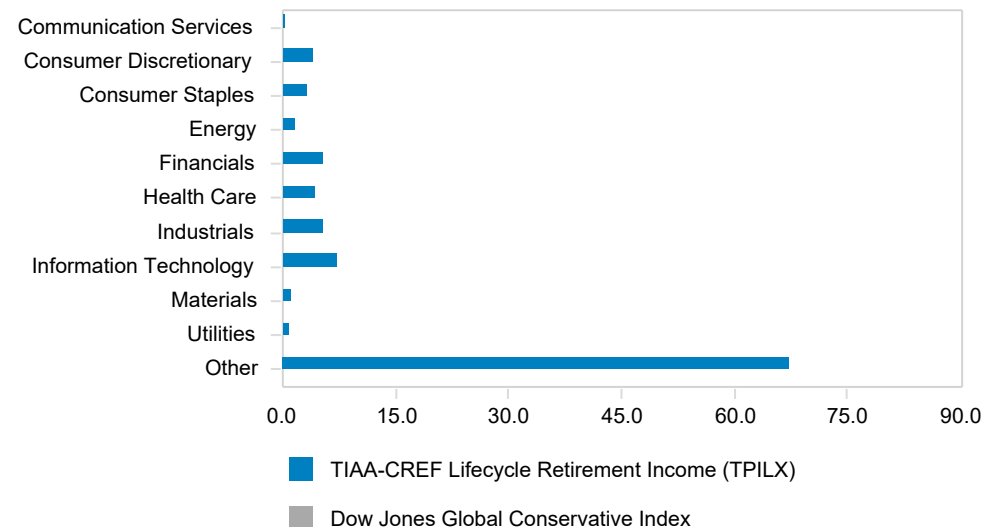
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	109,910,625,749	-
Price/Earnings (P/E)	10.06	N/A
Price/Book (P/B)	2.60	N/A
Dividend Yield	0.61	N/A
Annual EPS	16.15	N/A
5 Yr EPS	5.79	N/A
3 Yr EPS Growth	5.43	N/A
Beta (5 Years, Monthly)	1.50	1.00

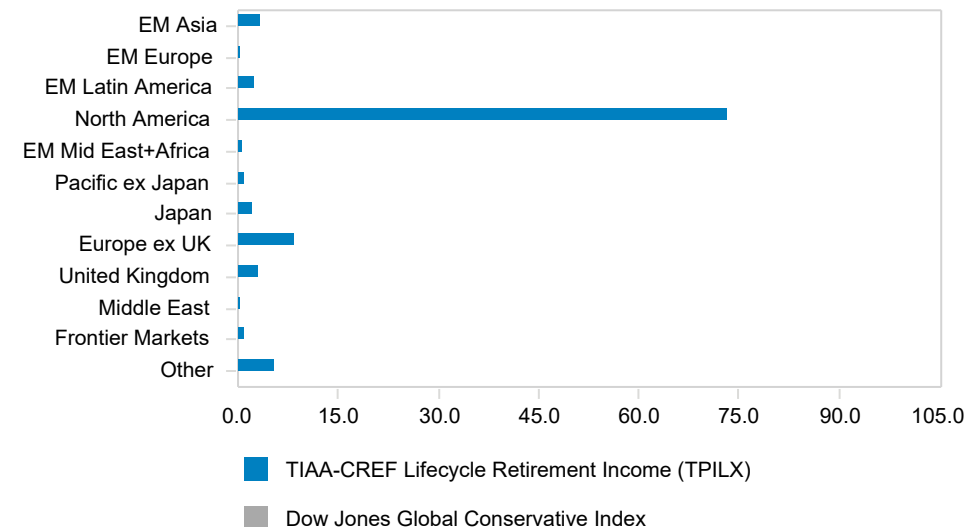
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	21.0 %
TIAA-CREF Core Plus Bond Fund;W	13.1 %
TIAA-CREF Short-Term Bond Fund;W	10.3 %
TIAA-CREF Inflation-Linked Bond	10.2 %
TIAA-CREF International Equity	3.7 %
Nuveen Dividend Value Fund;R6	3.5 %
TIAA-CREF Large-Cap Value Fund;W	3.5 %
Nuveen Growth Opportunities ETF	3.4 %
TIAA-CREF Large-Cap Growth Fund;W	3.3 %
Nuveen Dividend Growth Fund;R6	3.1 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



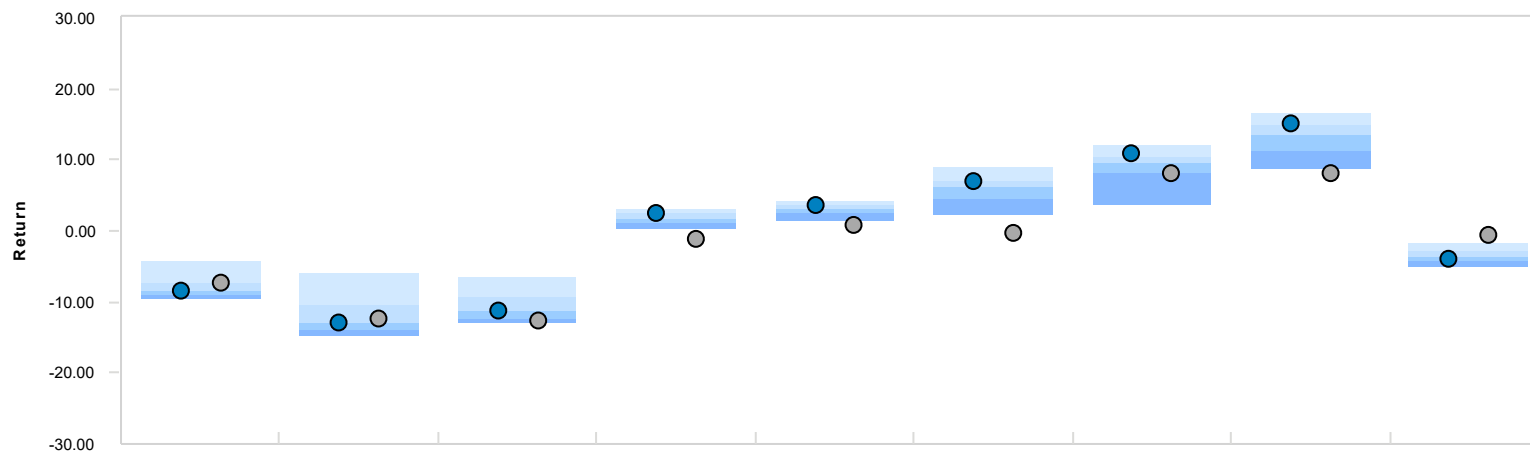
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy Ret;Pmr (TPILX)
Fund Family : TIAA
Ticker : TPILX
Peer Group : IM Mixed-Asset Target Today (MF)
Benchmark : Dow Jones Global Conservative Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$17 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.68%
Net Expense : 0.52%
Turnover : 41%

Summary Description

The Fund seeks high total return over time consistent with an emphasis on both capital growth and income. The Fund seeks to invest in a diversified portfolio consisting of about 40% stocks and 60% bonds.

Peer Group Analysis - IM Mixed-Asset Target Today (MF)

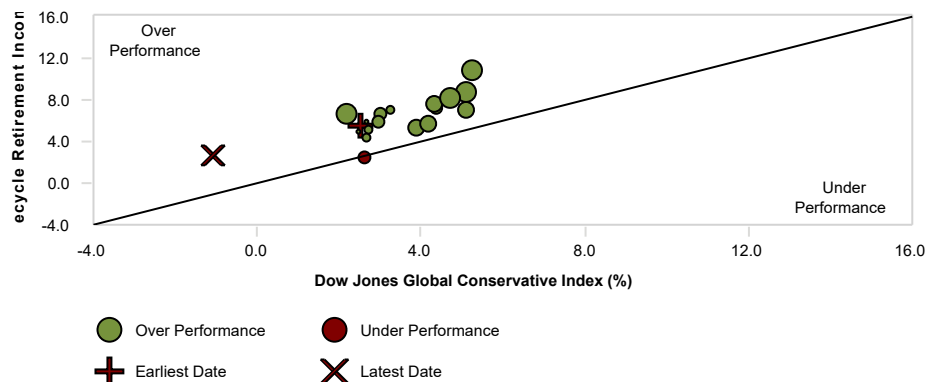


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle Retirement Income (TPILX)	-8.45 (58)	-12.95 (52)	-11.35 (57)	2.60 (22)	3.78 (23)	6.92 (29)	10.93 (15)	15.03 (24)	-3.90 (65)
● Dow Jones Global Conservative Index	-7.32 (27)	-12.34 (41)	-12.53 (86)	-1.06 (99)	0.85 (98)	-0.17 (100)	8.05 (78)	8.13 (99)	-0.62 (2)
Median	-8.34	-12.90	-11.13	1.61	2.96	6.16	9.50	13.34	-3.57

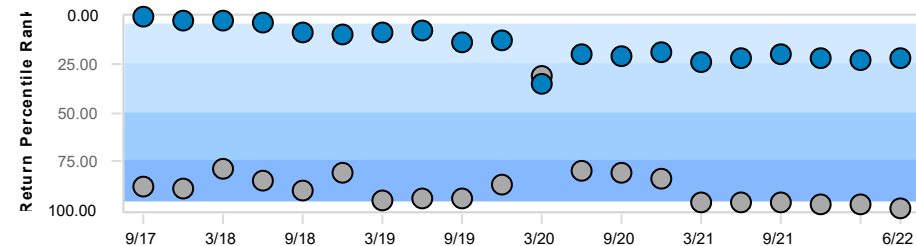
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle Retirement Income (TPILX)	-4.92 (52)	2.16 (56)	-0.31 (63)	3.92 (19)	1.03 (13)	6.60 (32)
Dow Jones Global Conservative Index	-5.42 (75)	0.29 (100)	-0.51 (88)	2.10 (95)	-2.00 (100)	4.02 (92)
IM Mixed-Asset Target Today (MF) Median	-4.88	2.20	-0.23	3.46	0.43	5.57

3 Yr Rolling Under/Over Performance - 5 Years

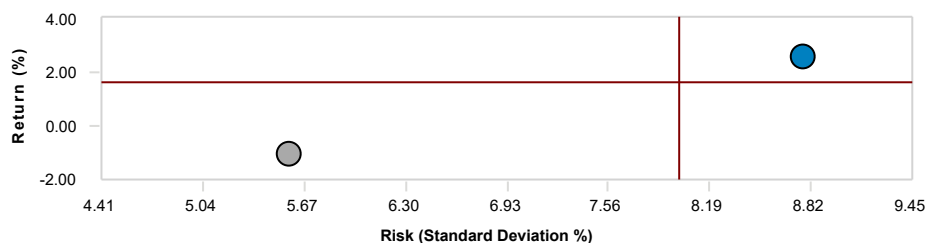


3 Yr Rolling Percentile Ranking - 5 Years



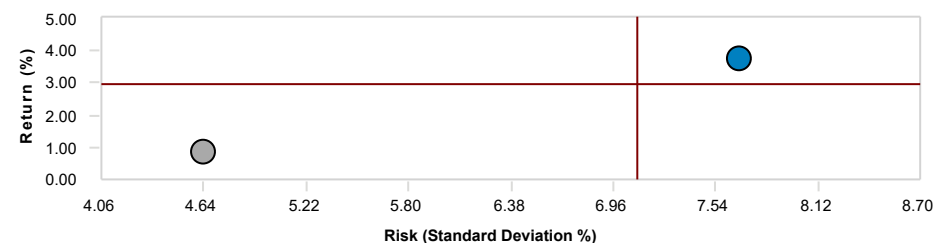
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
TIAA-CREF Lifecycle Retirement Income (TPILX)	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)
Dow Jones Global Conservative Index	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle Retirement Income (TPILX)	2.60	8.76
Dow Jones Global Conservative Index	-1.06	5.57
Median	1.61	8.00

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle Retirement Income (TPILX)	3.78	7.68
Dow Jones Global Conservative Index	0.85	4.63
Median	2.96	7.09

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle Retirement Income (TPILX)	4.34	188.60	125.58	4.35	0.89	0.26	1.43	6.49
Dow Jones Global Conservative Index	0.00	100.00	100.00	0.00	N/A	-0.27	1.00	4.48

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle Retirement Income (TPILX)	4.01	190.64	147.81	2.62	0.76	0.38	1.50	5.50
Dow Jones Global Conservative Index	0.00	100.00	100.00	0.00	N/A	-0.03	1.00	3.56



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2010 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCTPX
Inception Date : 09/30/2009
Fund Assets : \$47 Million
Portfolio Turnover : 38%

Portfolio Assets : \$987 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2010 (MF)
Style Benchmark : Dow Jones Global Target 2010 Index

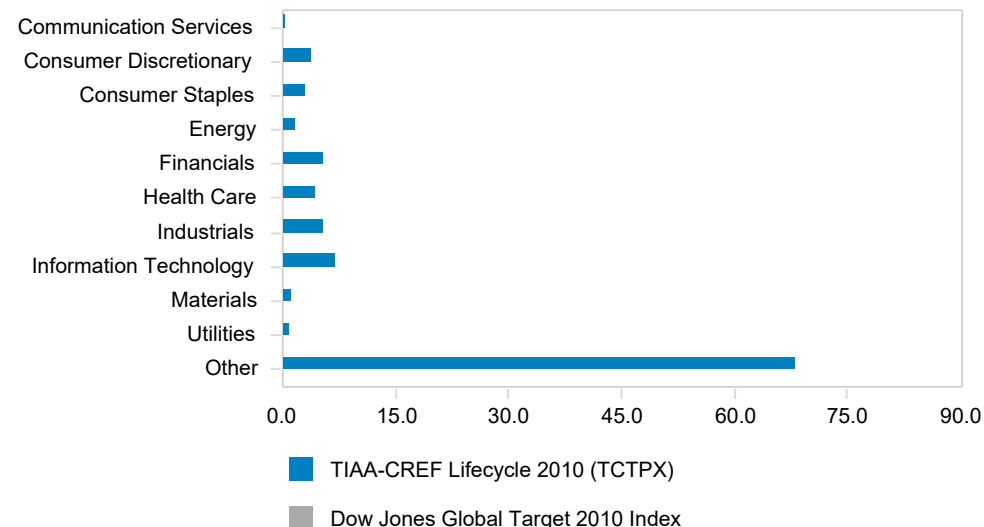
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	107,269,946,079	-
Price/Earnings (P/E)	9.82	N/A
Price/Book (P/B)	2.54	N/A
Dividend Yield	0.59	N/A
Annual EPS	15.76	N/A
5 Yr EPS	5.65	N/A
3 Yr EPS Growth	5.30	N/A
Beta (5 Years, Monthly)	1.50	1.00

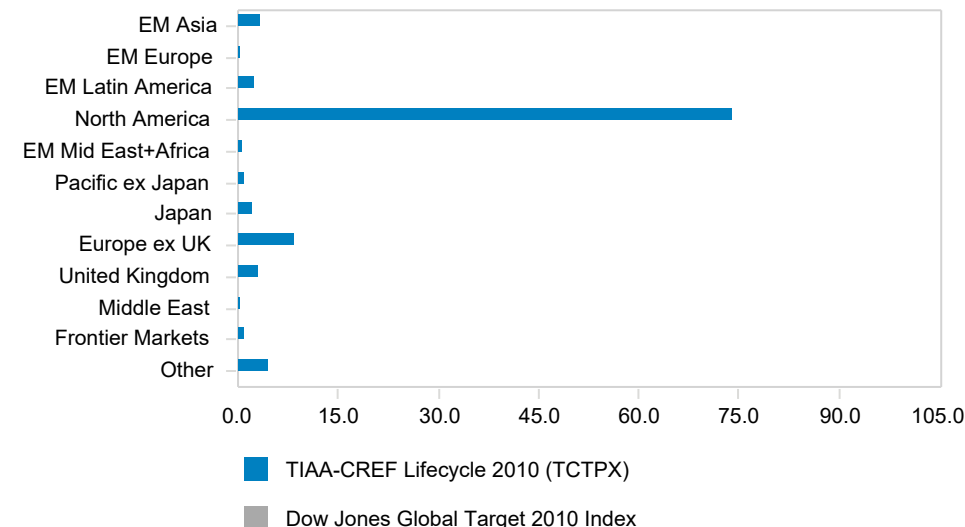
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	21.0 %
TIAA-CREF Core Plus Bond Fund;W	13.1 %
TIAA-CREF Short-Term Bond Fund;W	12.1 %
TIAA-CREF Inflation-Linked Bond	10.2 %
TIAA-CREF International Equity	3.6 %
Nuveen Dividend Value Fund;R6	3.4 %
TIAA-CREF Large-Cap Value Fund;W	3.4 %
Nuveen Growth Opportunities ETF	3.3 %
TIAA-CREF Large-Cap Growth Fund;W	3.3 %
Nuveen Dividend Growth Fund;R6	3.0 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



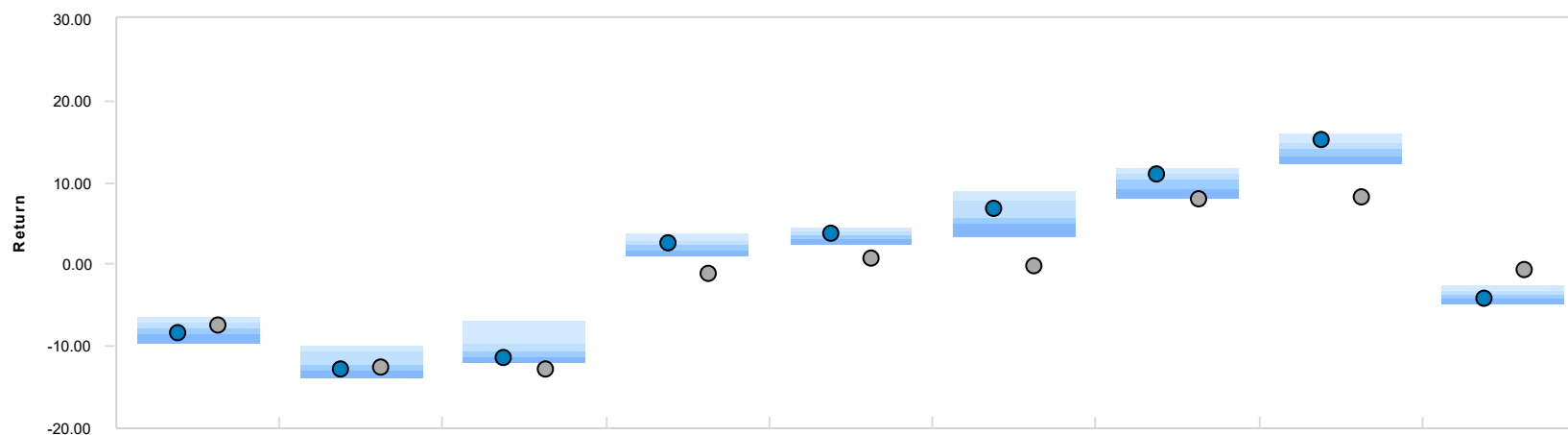
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2010;Prmr (TCTPX)
Fund Family : TIAA
Ticker : TCTPX
Peer Group : IM Mixed-Asset Target 2010 (MF)
Benchmark : Dow Jones Global Target 2010 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$47 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.67%
Net Expense : 0.52%
Turnover : 38%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income by investing in Underlying Funds according to an asset allocation strategy designed for investors planning to retire in or within a few years of 2010.

Peer Group Analysis - IM Mixed-Asset Target 2010 (MF)

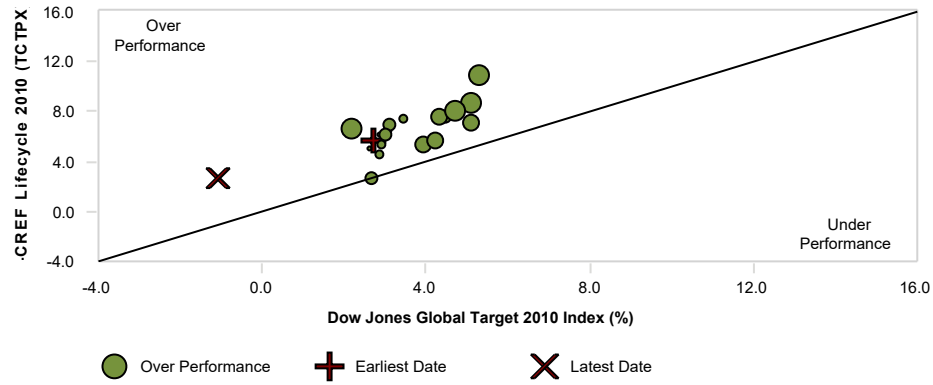


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2010 (TCTPX)	-8.31 (65)	-12.87 (73)	-11.28 (69)	2.64 (41)	3.88 (33)	6.78 (47)	11.01 (24)	15.36 (14)	-4.09 (73)
● Dow Jones Global Target 2010 Index	-7.40 (29)	-12.47 (61)	-12.67 (100)	-1.10 (100)	0.84 (100)	-0.20 (100)	8.07 (96)	8.22 (100)	-0.68 (1)
Median	-7.95	-12.33	-10.66	2.44	3.69	5.80	10.43	14.19	-3.58

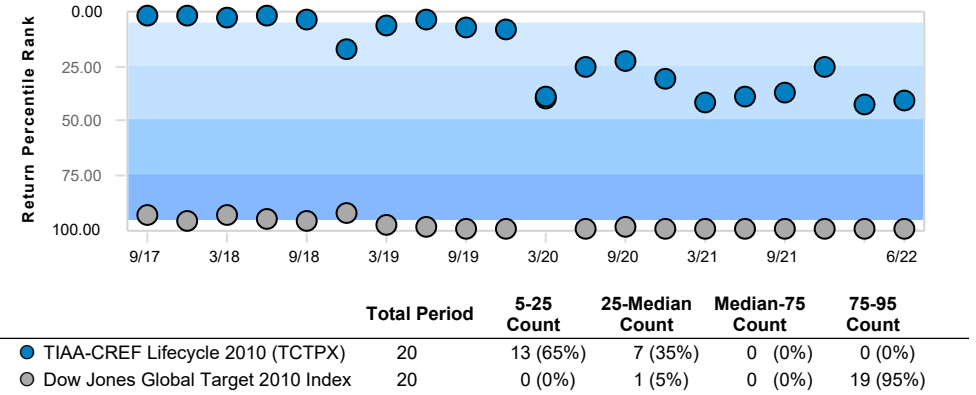
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2010 (TCTPX)	-4.97 (83)	2.07 (54)	-0.24 (46)	3.90 (15)	0.94 (38)	6.72 (36)
Dow Jones Global Target 2010 Index	-5.47 (100)	0.29 (100)	-0.51 (96)	2.11 (100)	-2.04 (100)	4.04 (99)
IM Mixed-Asset Target 2010 (MF) Median	-4.58	2.10	-0.26	3.49	0.55	6.42

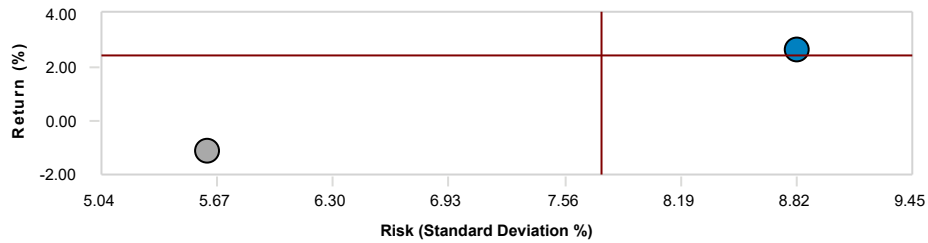
3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years

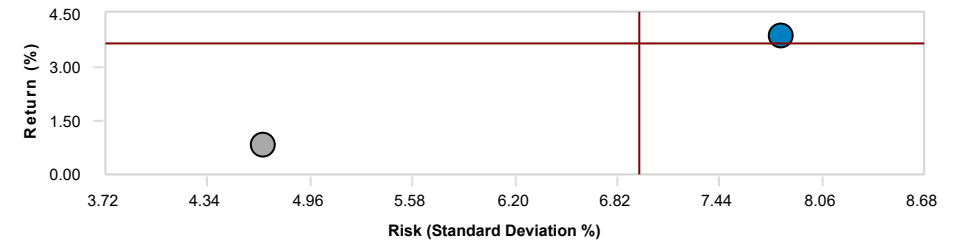


Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2010 (TCTPX)	2.64	8.82
Dow Jones Global Target 2010 Index	-1.10	5.61
Median	2.44	7.75

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2010 (TCTPX)	3.88	7.81
Dow Jones Global Target 2010 Index	0.84	4.68
Median	3.69	6.96

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2010 (TCTPX)	4.38	189.24	125.08	4.45	0.90	0.27	1.43	6.48
Dow Jones Global Target 2010 Index	0.00	100.00	100.00	0.00	N/A	-0.28	1.00	4.52

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2010 (TCTPX)	4.14	192.45	148.46	2.72	0.77	0.38	1.50	5.56
Dow Jones Global Target 2010 Index	0.00	100.00	100.00	0.00	N/A	-0.03	1.00	3.59

Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2015 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCFPX
Inception Date : 09/30/2009
Fund Assets : \$67 Million
Portfolio Turnover : 36%

Portfolio Assets : \$1,390 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2015 (MF)
Style Benchmark : Dow Jones Global Target 2015 Index

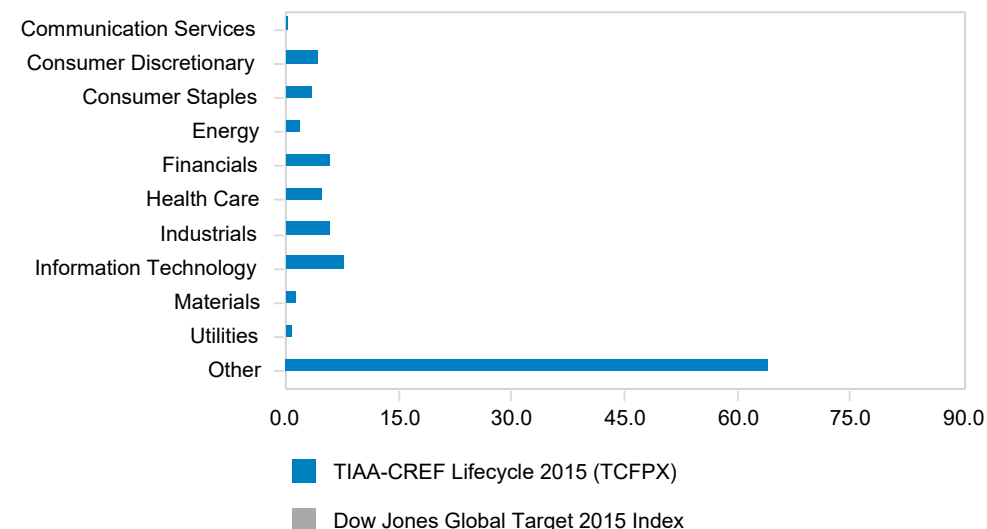
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	120,417,869,613	-
Price/Earnings (P/E)	11.02	N/A
Price/Book (P/B)	2.85	N/A
Dividend Yield	0.67	N/A
Annual EPS	17.68	N/A
5 Yr EPS	6.34	N/A
3 Yr EPS Growth	5.95	N/A
Beta (5 Years, Monthly)	1.52	1.00

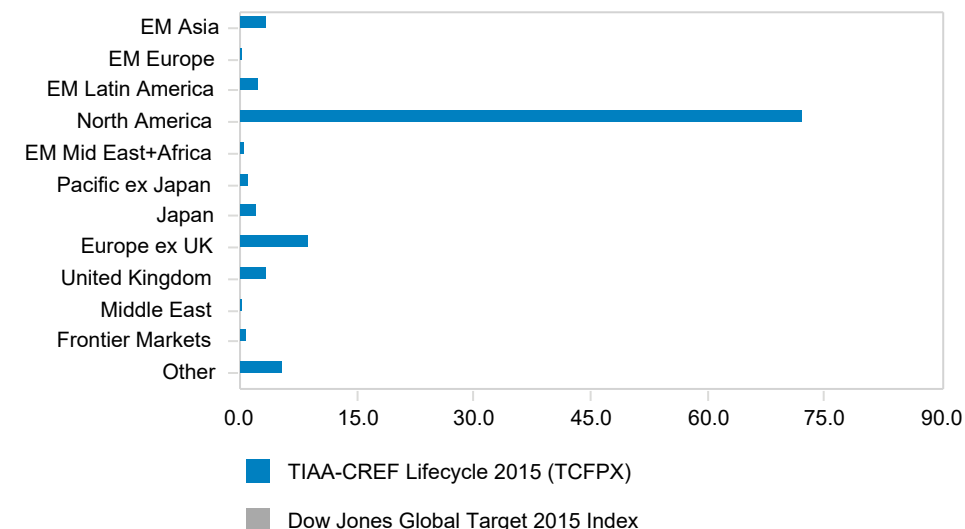
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	20.7 %
TIAA-CREF Core Plus Bond Fund;W	12.9 %
TIAA-CREF Short-Term Bond Fund;W	9.0 %
TIAA-CREF Inflation-Linked Bond	8.9 %
TIAA-CREF International Equity	4.0 %
Nuveen Dividend Value Fund;R6	3.8 %
TIAA-CREF Large-Cap Value Fund;W	3.8 %
Nuveen Growth Opportunities ETF	3.7 %
TIAA-CREF Large-Cap Growth Fund;W	3.6 %
Nuveen Dividend Growth Fund;R6	3.4 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



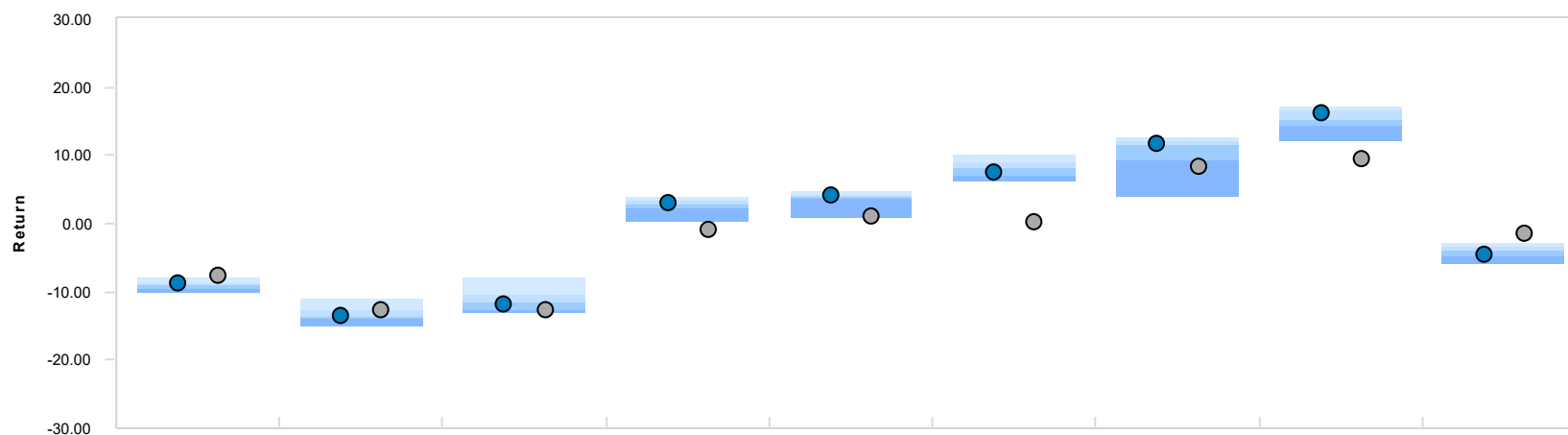
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2015;Prmr (TCFPX)
Fund Family : TIAA
Ticker : TCFPX
Peer Group : IM Mixed-Asset Target 2015 (MF)
Benchmark : Dow Jones Global Target 2015 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$67 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.68%
Net Expense : 0.53%
Turnover : 36%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income by investing in Underlying Funds according to an asset allocation strategy designed for investors planning to retire in or within a few years of 2015.

Peer Group Analysis - IM Mixed-Asset Target 2015 (MF)

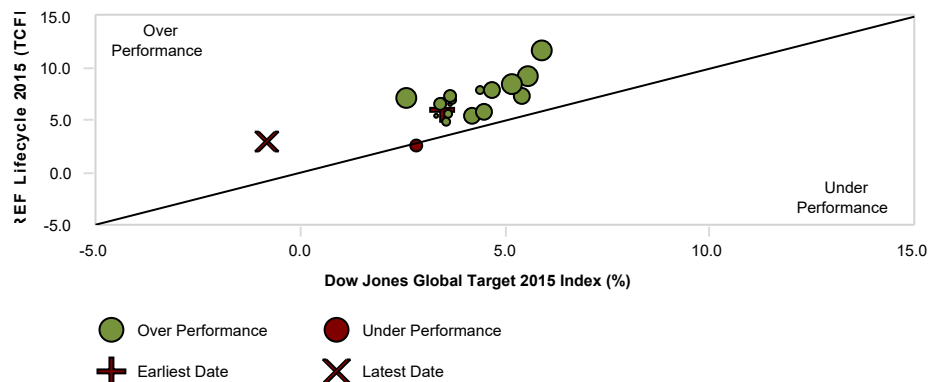


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2015 (TCFPX)	-8.80 (38)	-13.51 (45)	-11.76 (57)	2.95 (50)	4.19 (37)	7.56 (61)	11.68 (38)	16.36 (33)	-4.60 (71)
● Dow Jones Global Target 2015 Index	-7.48 (1)	-12.54 (24)	-12.68 (83)	-0.83 (100)	1.19 (94)	0.17 (100)	8.30 (86)	9.54 (100)	-1.28 (1)
Median	-8.97	-13.65	-11.63	2.89	4.07	8.00	11.37	15.22	-3.91

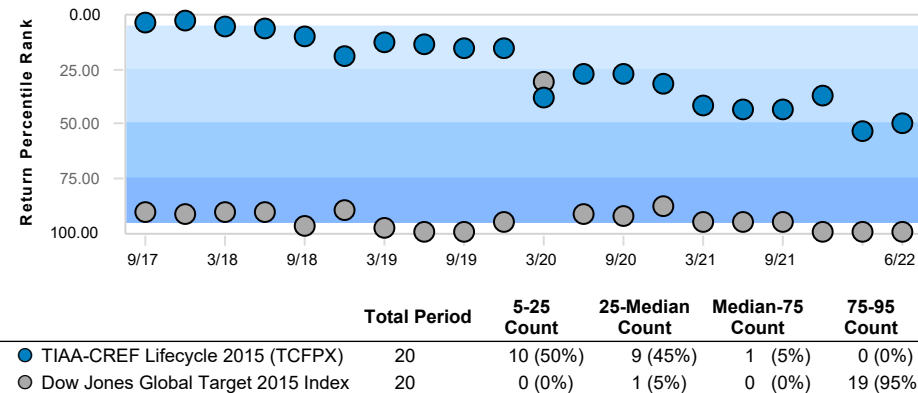
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2015 (TCFPX)	-5.16 (62)	2.40 (70)	-0.37 (56)	4.12 (31)	1.26 (54)	7.41 (45)
Dow Jones Global Target 2015 Index	-5.47 (91)	0.37 (100)	-0.52 (83)	2.21 (100)	-1.84 (100)	4.38 (100)
IM Mixed-Asset Target 2015 (MF) Median	-4.98	2.67	-0.35	3.94	1.29	7.17

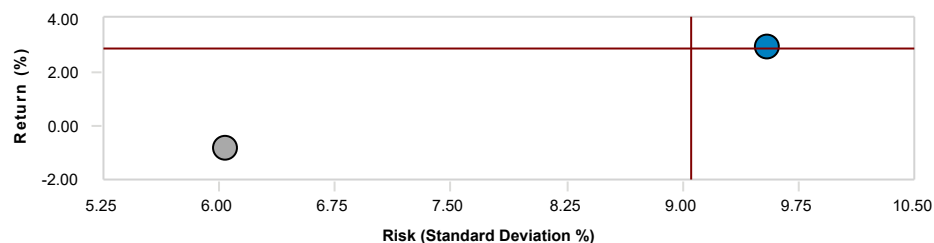
3 Yr Rolling Under/Over Performance - 5 Years



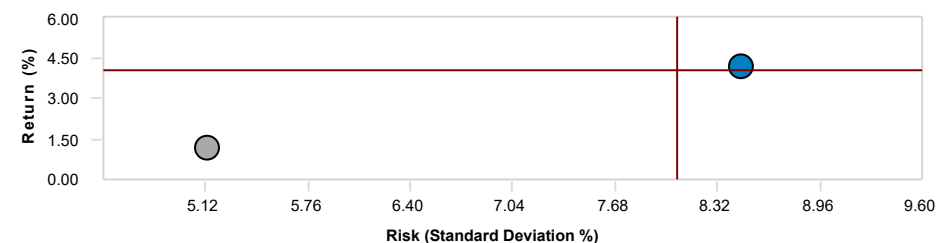
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2015 (TCFPX)	4.56	184.63	126.59	4.41	0.88	0.28	1.46	6.98
Dow Jones Global Target 2015 Index	0.00	100.00	100.00	0.00	N/A	-0.21	1.00	4.79

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2015 (TCFPX)	4.29	182.92	146.64	2.50	0.74	0.39	1.52	6.01
Dow Jones Global Target 2015 Index	0.00	100.00	100.00	0.00	N/A	0.04	1.00	3.85

Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2020 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCWPX
Inception Date : 09/30/2009
Fund Assets : \$153 Million
Portfolio Turnover : 38%

Portfolio Assets : \$3,039 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2020 (MF)
Style Benchmark : Dow Jones Global Target 2020 Index

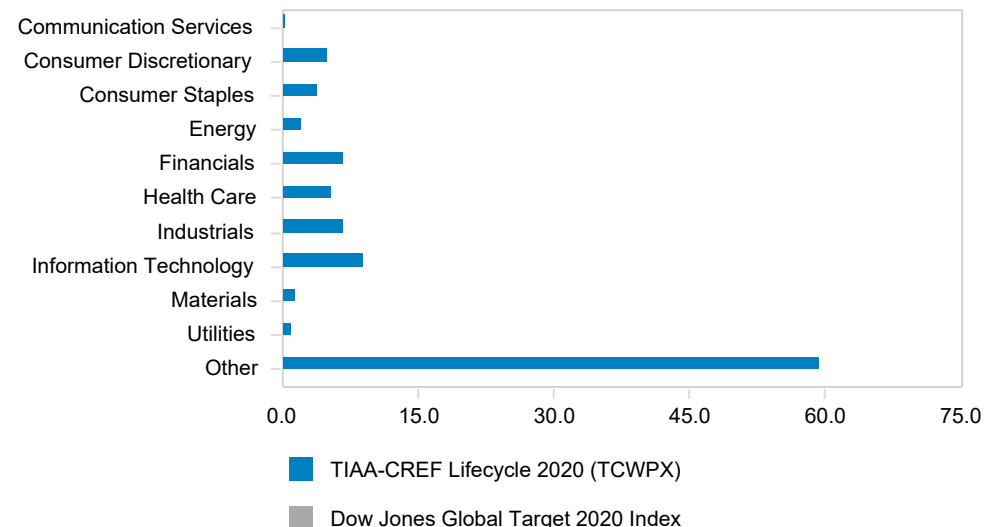
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	136,687,542,955	-
Price/Earnings (P/E)	12.51	N/A
Price/Book (P/B)	3.23	N/A
Dividend Yield	0.76	N/A
Annual EPS	20.07	N/A
5 Yr EPS	7.19	N/A
3 Yr EPS Growth	6.75	N/A
Beta (5 Years, Monthly)	1.44	1.00

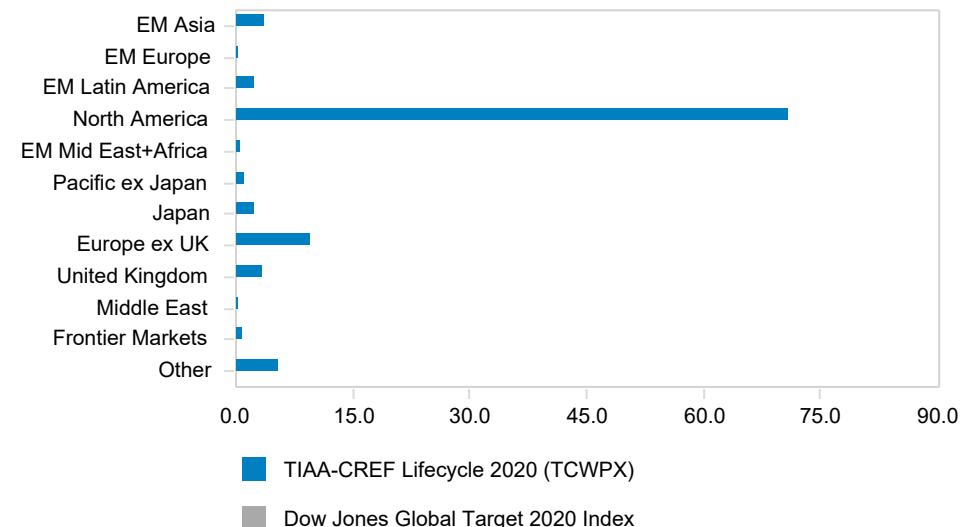
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	20.2 %
TIAA-CREF Core Plus Bond Fund;W	12.6 %
TIAA-CREF Short-Term Bond Fund;W	6.9 %
TIAA-CREF Inflation-Linked Bond	6.9 %
TIAA-CREF International Equity	4.6 %
Nuveen Dividend Value Fund;R6	4.3 %
TIAA-CREF Large-Cap Value Fund;W	4.3 %
Nuveen Growth Opportunities ETF	4.2 %
TIAA-CREF Large-Cap Growth Fund;W	4.1 %
Nuveen Dividend Growth Fund;R6	3.9 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



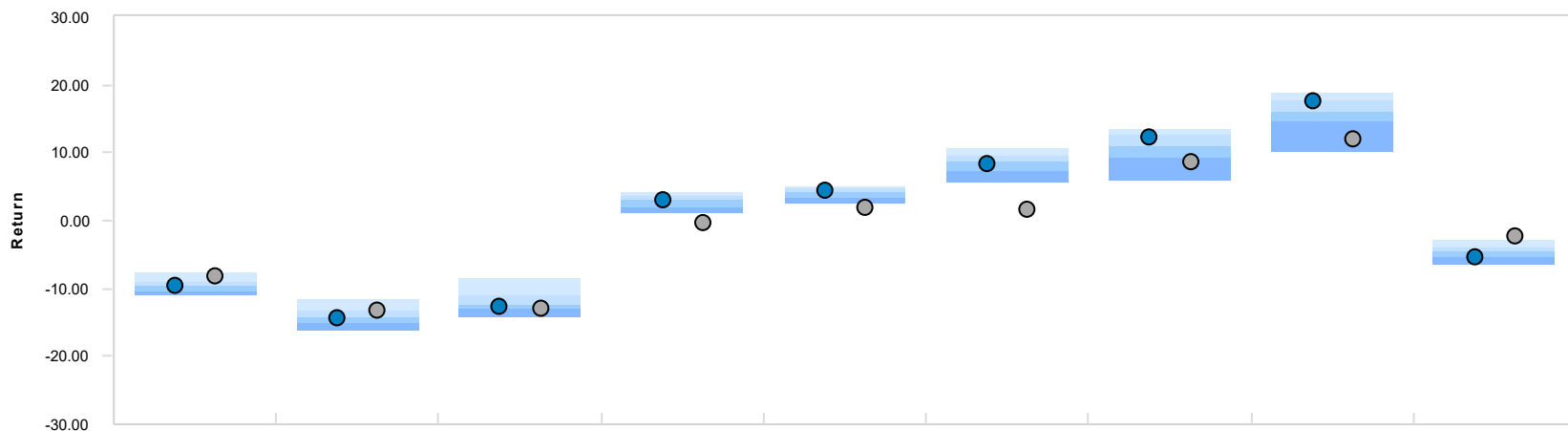
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2020;Prmr (TCWPX)
Fund Family : TIAA
Ticker : TCWPX
Peer Group : IM Mixed-Asset Target 2020 (MF)
Benchmark : Dow Jones Global Target 2020 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$153 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.68%
Net Expense : 0.54%
Turnover : 38%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income by investing in Underlying Funds according to an asset allocation strategy designed for investors planning to retire in or within a few years of 2020.

Peer Group Analysis - IM Mixed-Asset Target 2020 (MF)



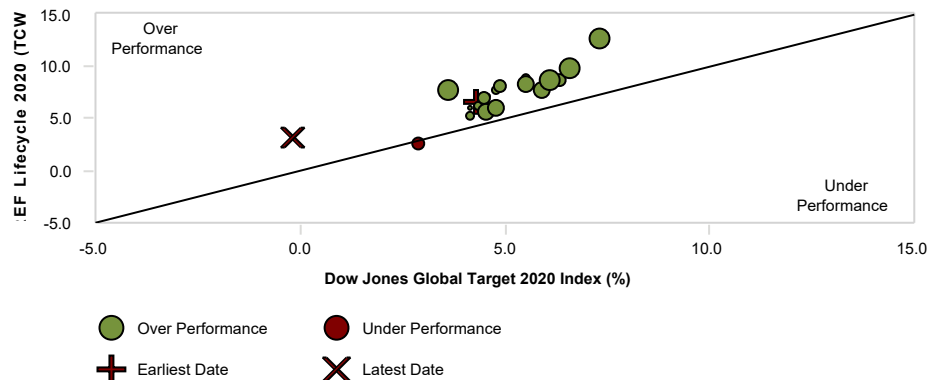
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2020 (TCWPX)	-9.48 (50)	-14.31 (47)	-12.54 (57)	3.17 (45)	4.44 (41)	8.28 (64)	12.24 (33)	17.59 (25)	-5.26 (73)
● Dow Jones Global Target 2020 Index	-8.07 (7)	-13.06 (23)	-12.93 (74)	-0.20 (99)	1.87 (99)	1.63 (100)	8.63 (83)	12.00 (91)	-2.33 (3)
Median	-9.48	-14.36	-12.35	3.03	4.25	8.70	10.90	15.97	-4.52

Comparative Performance

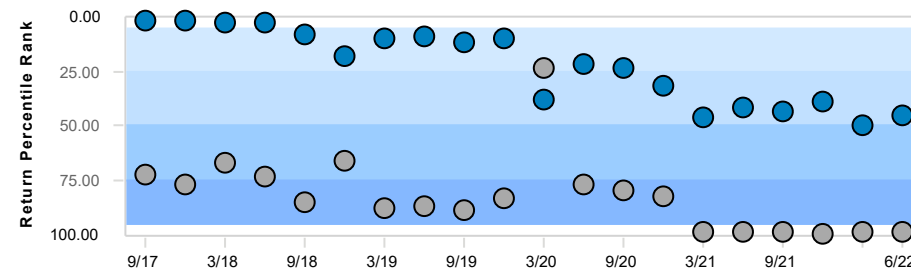
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2020 (TCWPX)	-5.34 (54)	2.62 (68)	-0.53 (64)	4.52 (30)	1.50 (56)	8.09 (38)
Dow Jones Global Target 2020 Index	-5.43 (62)	0.72 (100)	-0.57 (70)	2.64 (100)	-1.12 (100)	5.54 (94)
IM Mixed-Asset Target 2020 (MF) Median	-5.30	2.88	-0.47	4.27	1.66	7.84



3 Yr Rolling Under/Over Performance - 5 Years

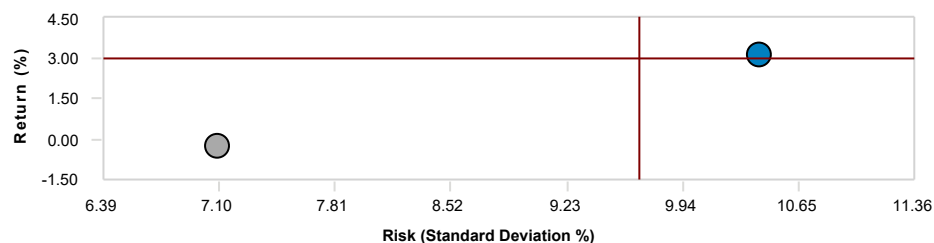


3 Yr Rolling Percentile Ranking - 5 Years



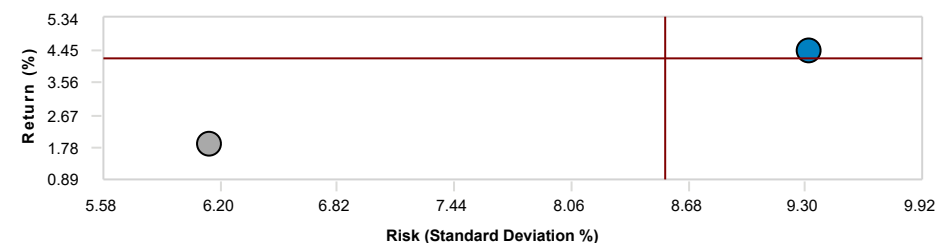
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
TIAA-CREF Lifecycle 2020 (TCWPX)	20	12 (60%)	8 (40%)	0 (0%)	0 (0%)
Dow Jones Global Target 2020 Index	20	1 (5%)	0 (0%)	4 (20%)	15 (75%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2020 (TCWPX)	3.17	10.41
Dow Jones Global Target 2020 Index	-0.20	7.09
Median	3.03	9.68

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2020 (TCWPX)	4.44	9.32
Dow Jones Global Target 2020 Index	1.87	6.13
Median	4.25	8.56

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2020 (TCWPX)	4.09	165.36	124.43	3.66	0.89	0.29	1.41	7.56
Dow Jones Global Target 2020 Index	0.00	100.00	100.00	0.00	N/A	-0.08	1.00	5.49

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2020 (TCWPX)	3.97	161.39	139.05	1.85	0.69	0.39	1.44	6.61
Dow Jones Global Target 2020 Index	0.00	100.00	100.00	0.00	N/A	0.15	1.00	4.50



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2025 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCQPX
Inception Date : 09/30/2009
Fund Assets : \$224 Million
Portfolio Turnover : 40%

Portfolio Assets : \$4,422 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2025 (MF)
Style Benchmark : Dow Jones Global Target 2025 Index

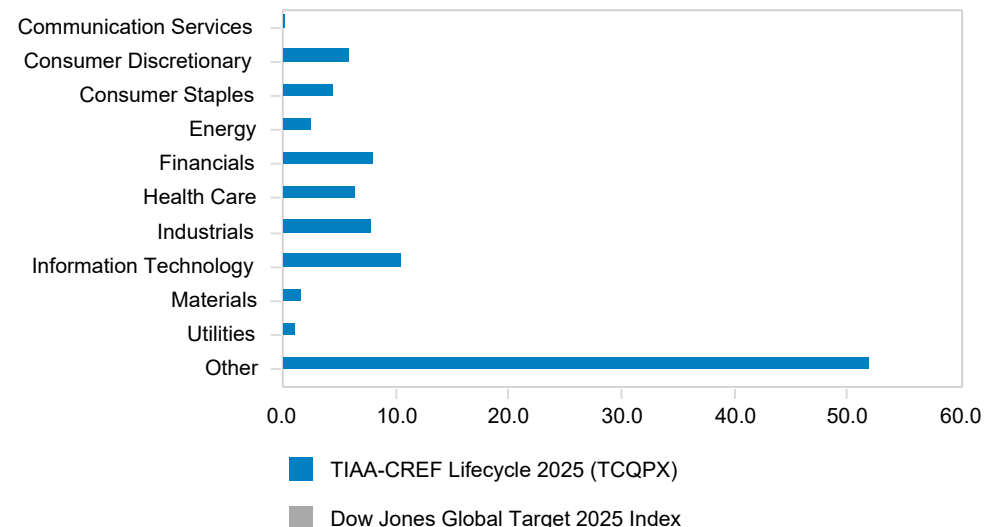
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	161,601,479,194	-
Price/Earnings (P/E)	14.79	N/A
Price/Book (P/B)	3.82	N/A
Dividend Yield	0.89	N/A
Annual EPS	23.74	N/A
5 Yr EPS	8.50	N/A
3 Yr EPS Growth	7.98	N/A
Beta (5 Years, Monthly)	1.37	1.00

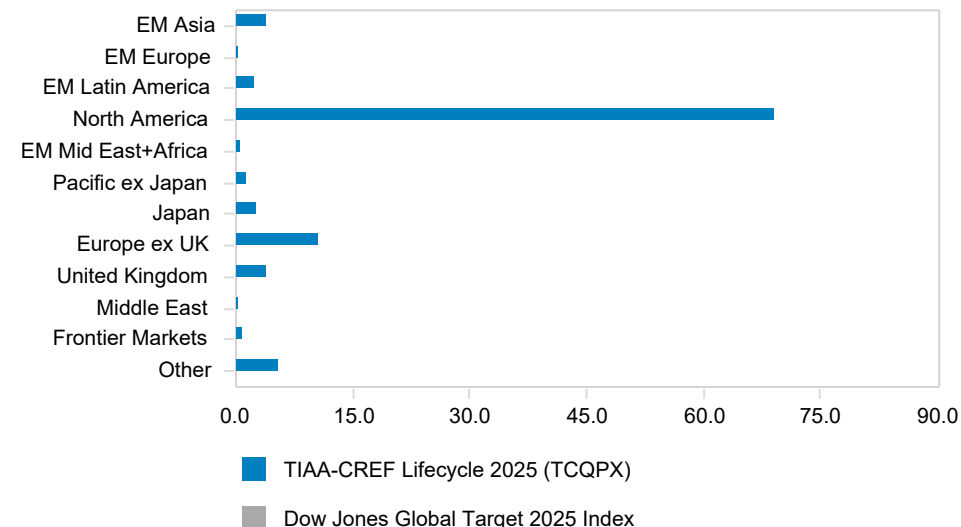
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	18.3 %
TIAA-CREF Core Plus Bond Fund;W	11.4 %
TIAA-CREF International Equity	5.4 %
Nuveen Dividend Value Fund;R6	5.1 %
TIAA-CREF Large-Cap Value Fund;W	5.1 %
Nuveen Growth Opportunities ETF	5.0 %
TIAA-CREF Large-Cap Growth Fund;W	4.9 %
TIAA-CREF Short-Term Bond Fund;W	4.9 %
TIAA-CREF Inflation-Linked Bond	4.8 %
Nuveen Dividend Growth Fund;R6	4.6 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



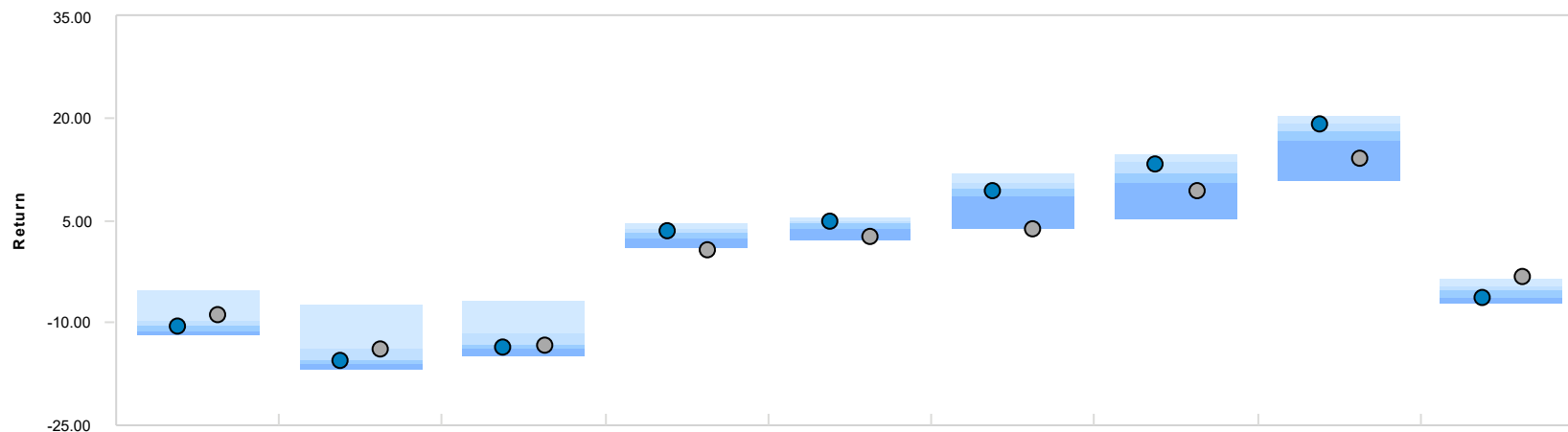
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2025;Prmr (TCQPX)
Fund Family : TIAA
Ticker : TCQPX
Peer Group : IM Mixed-Asset Target 2025 (MF)
Benchmark : Dow Jones Global Target 2025 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$224 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.71%
Net Expense : 0.56%
Turnover : 40%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income by investing in Underlying Funds according to an asset allocation strategy designed for investors planning to retire in or within a few years of 2025.

Peer Group Analysis - IM Mixed-Asset Target 2025 (MF)



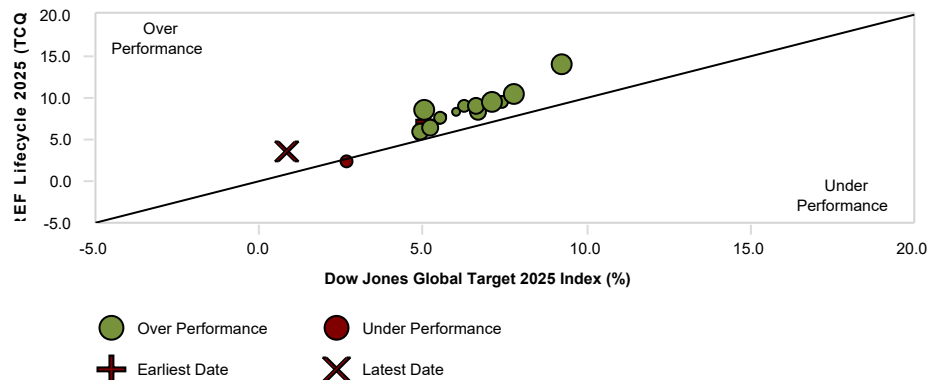
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2025 (TCQPX)	-10.36 (59)	-15.43 (47)	-13.43 (63)	3.66 (38)	4.90 (37)	9.60 (54)	13.34 (32)	19.29 (26)	-6.23 (78)
● Dow Jones Global Target 2025 Index	-8.84 (17)	-13.79 (24)	-13.20 (53)	0.84 (96)	2.81 (95)	3.91 (96)	9.62 (83)	14.38 (92)	-3.22 (4)
Median	-10.28	-15.53	-13.14	3.34	4.68	9.70	12.13	18.18	-5.23

Comparative Performance

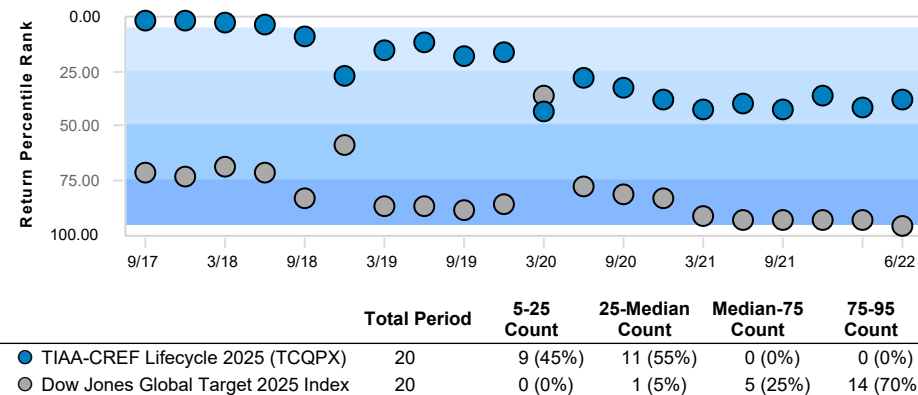
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2025 (TCQPX)	-5.66 (61)	3.07 (68)	-0.68 (66)	4.97 (23)	1.99 (39)	9.33 (40)
Dow Jones Global Target 2025 Index	-5.42 (48)	1.33 (97)	-0.64 (59)	3.23 (94)	-0.03 (94)	7.26 (81)
IM Mixed-Asset Target 2025 (MF) Median	-5.48	3.37	-0.57	4.59	1.80	9.02



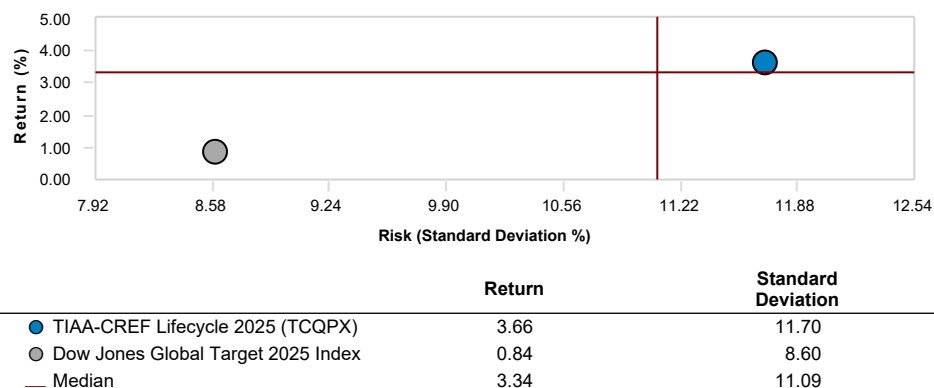
3 Yr Rolling Under/Over Performance - 5 Years



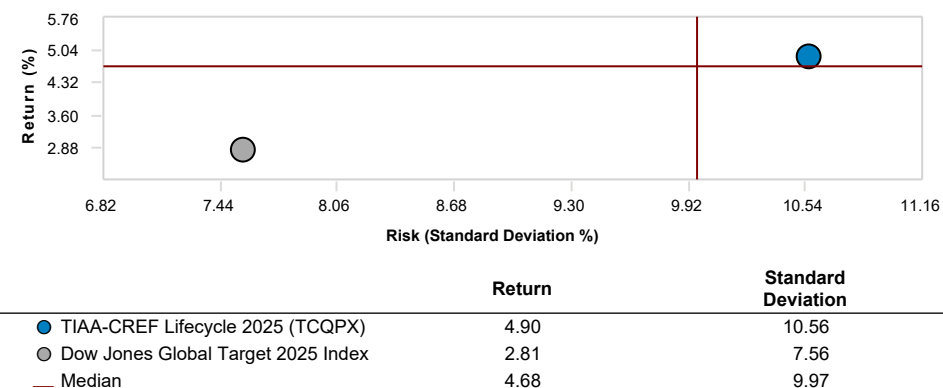
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2025 (TCQPX)	3.60	150.07	125.31	2.71	0.86	0.31	1.34	8.42
Dow Jones Global Target 2025 Index	0.00	100.00	100.00	0.00	N/A	0.07	1.00	6.47

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2025 (TCQPX)	3.53	146.85	136.04	1.18	0.65	0.40	1.37	7.47
Dow Jones Global Target 2025 Index	0.00	100.00	100.00	0.00	N/A	0.26	1.00	5.44



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2030 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCHPX
Inception Date : 09/30/2009
Fund Assets : \$248 Million
Portfolio Turnover : 41%

Portfolio Assets : \$4,832 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2030 (MF)
Style Benchmark : Dow Jones Global Target 2030 Index

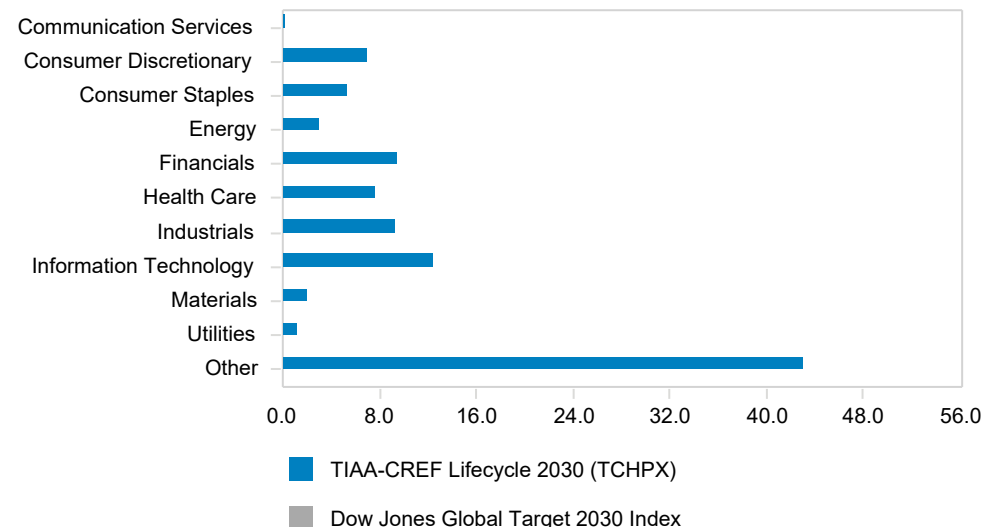
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	191,200,100,331	-
Price/Earnings (P/E)	17.50	N/A
Price/Book (P/B)	4.52	N/A
Dividend Yield	1.06	N/A
Annual EPS	28.10	N/A
5 Yr EPS	10.06	N/A
3 Yr EPS Growth	9.44	N/A
Beta (5 Years, Monthly)	1.26	1.00

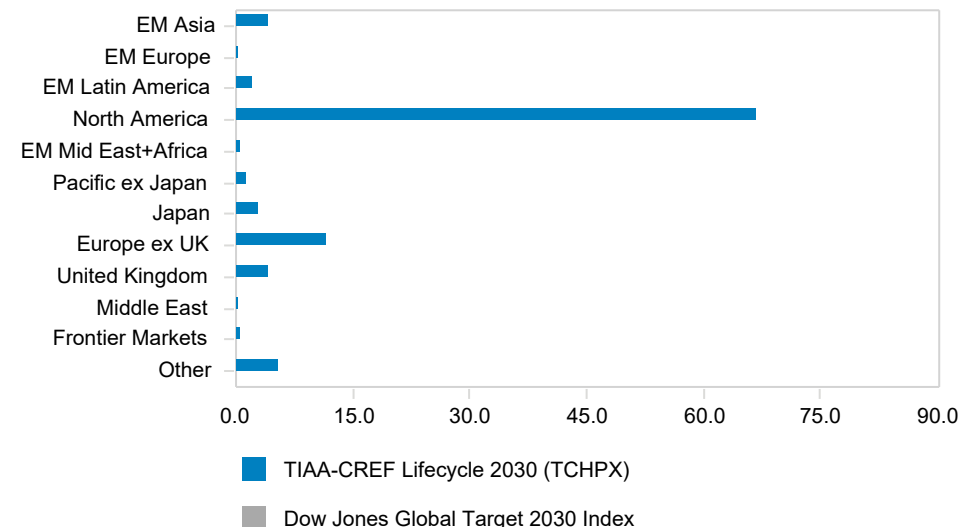
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	15.7 %
TIAA-CREF Core Plus Bond Fund;W	9.8 %
TIAA-CREF International Equity	6.4 %
Nuveen Dividend Value Fund;R6	6.0 %
TIAA-CREF Large-Cap Value Fund;W	6.0 %
Nuveen Growth Opportunities ETF	5.8 %
TIAA-CREF Large-Cap Growth Fund;W	5.8 %
Nuveen Dividend Growth Fund;R6	5.5 %
TIAA-CREF Growth & Income Fund;W	5.4 %
Nuveen International Growth Fund;R6	4.5 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



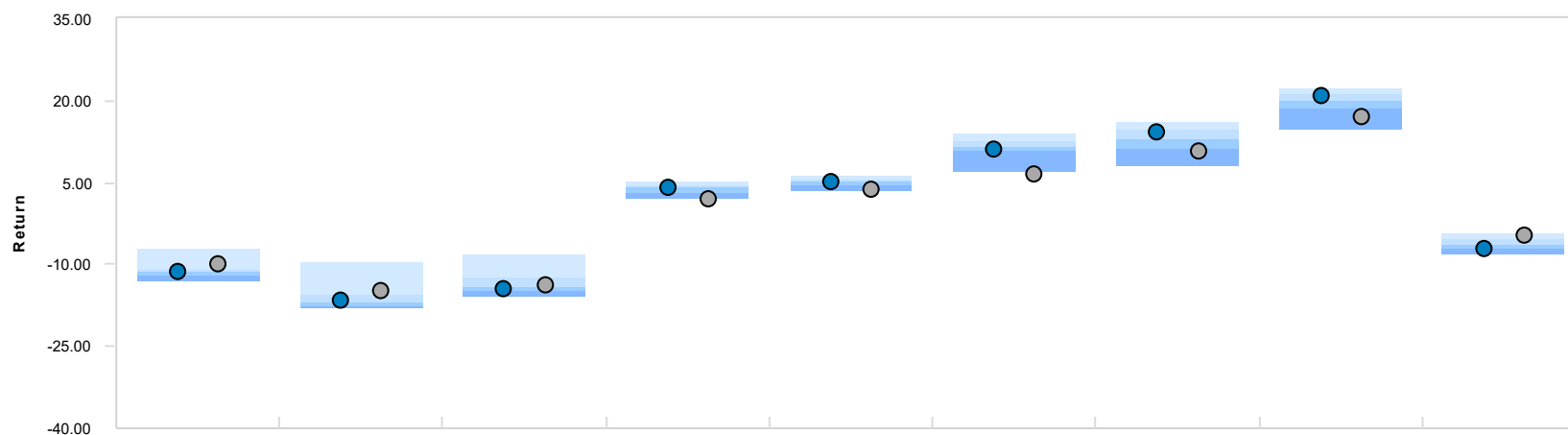
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2030;Prmr (TCHPX)
Fund Family : TIAA
Ticker : TCHPX
Peer Group : IM Mixed-Asset Target 2030 (MF)
Benchmark : Dow Jones Global Target 2030 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$248 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.73%
Net Expense : 0.57%
Turnover : 41%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income by investing in Underlying Funds according to an asset allocation strategy designed for investors planning to retire in or within a few years of 2030.

Peer Group Analysis - IM Mixed-Asset Target 2030 (MF)

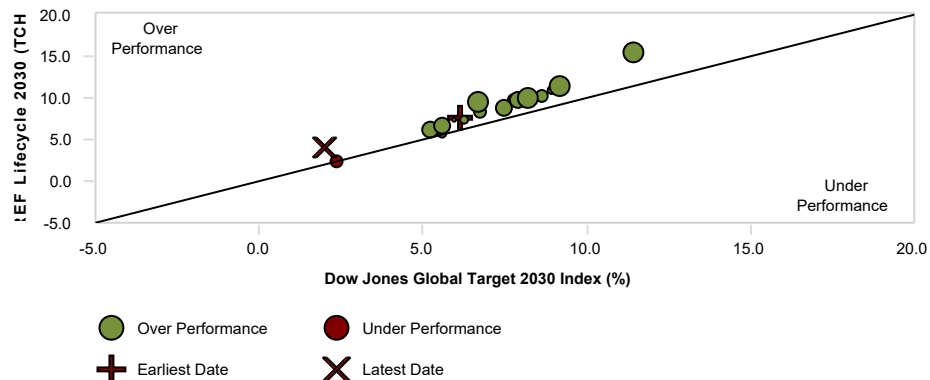


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2030 (TCHPX)	-11.43 (53)	-16.67 (48)	-14.47 (69)	4.10 (46)	5.33 (45)	11.10 (65)	14.24 (32)	21.13 (30)	-7.18 (75)
● Dow Jones Global Target 2030 Index	-9.91 (11)	-14.69 (15)	-13.58 (43)	2.00 (96)	3.83 (94)	6.56 (98)	10.88 (79)	17.06 (87)	-4.43 (9)
Median	-11.36	-16.74	-13.94	4.01	5.23	11.44	12.86	20.08	-6.32

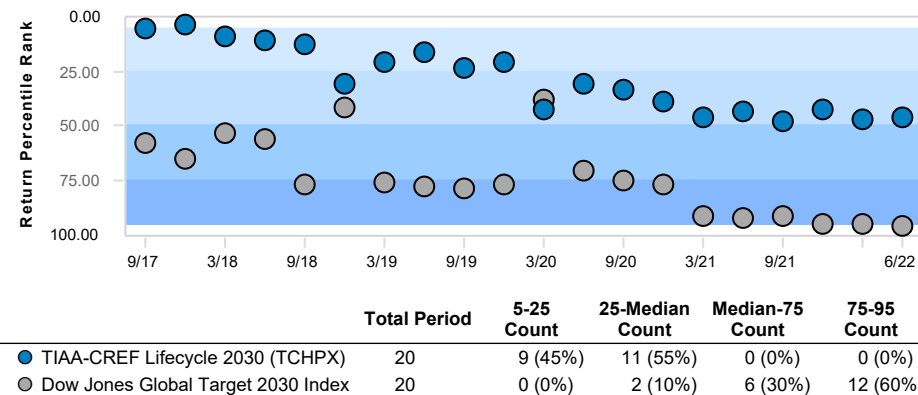
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2030 (TCHPX)	-5.91 (61)	3.50 (75)	-0.83 (64)	5.41 (31)	2.69 (44)	10.44 (45)
Dow Jones Global Target 2030 Index	-5.31 (26)	2.04 (100)	-0.73 (50)	3.92 (91)	1.23 (93)	9.26 (72)
IM Mixed-Asset Target 2030 (MF) Median	-5.74	3.99	-0.74	5.21	2.65	10.28

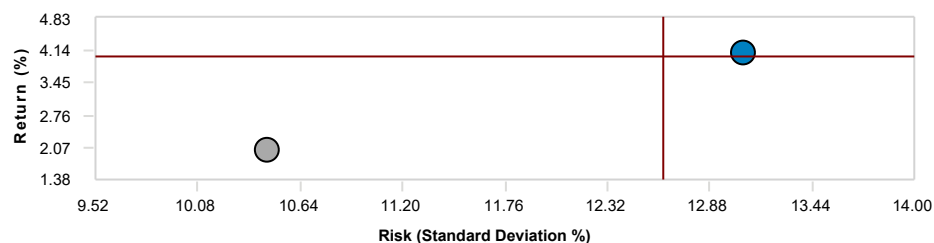
3 Yr Rolling Under/Over Performance - 5 Years



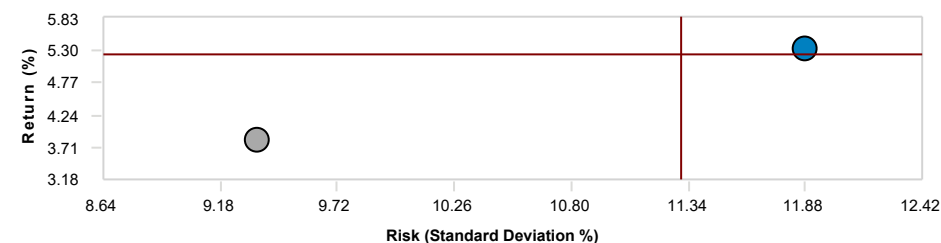
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2030 (TCHPX)	3.04	135.93	123.75	1.76	0.77	0.32	1.24	9.32
Dow Jones Global Target 2030 Index	0.00	100.00	100.00	0.00	N/A	0.18	1.00	7.69

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2030 (TCHPX)	2.94	132.08	128.43	0.63	0.58	0.40	1.26	8.35
Dow Jones Global Target 2030 Index	0.00	100.00	100.00	0.00	N/A	0.33	1.00	6.65



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2035 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCYPX
Inception Date : 09/30/2009
Fund Assets : \$256 Million
Portfolio Turnover : 44%

Portfolio Assets : \$4,951 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2035 (MF)
Style Benchmark : Dow Jones Global Target 2035 Index

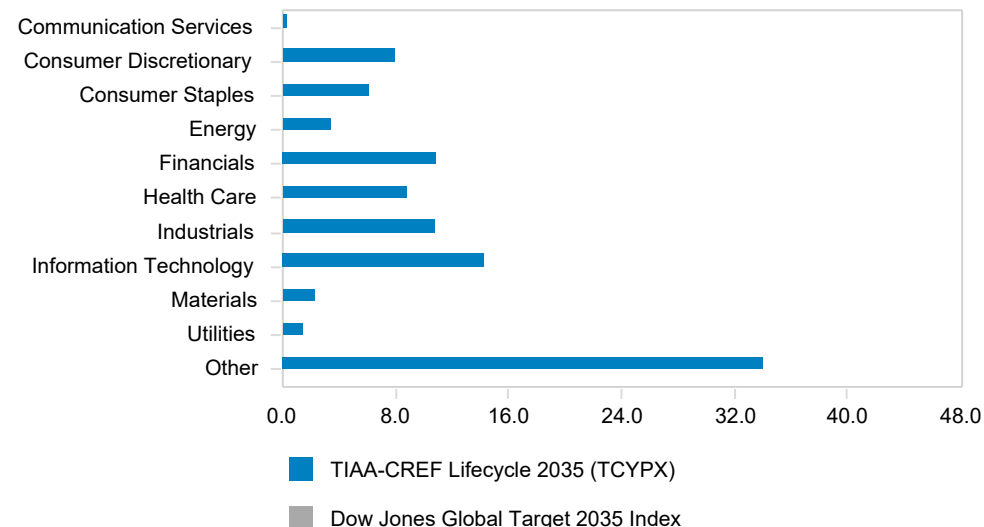
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	220,987,379,700	-
Price/Earnings (P/E)	20.23	N/A
Price/Book (P/B)	5.23	N/A
Dividend Yield	1.22	N/A
Annual EPS	32.49	N/A
5 Yr EPS	11.63	N/A
3 Yr EPS Growth	10.92	N/A
Beta (5 Years, Monthly)	1.17	1.00

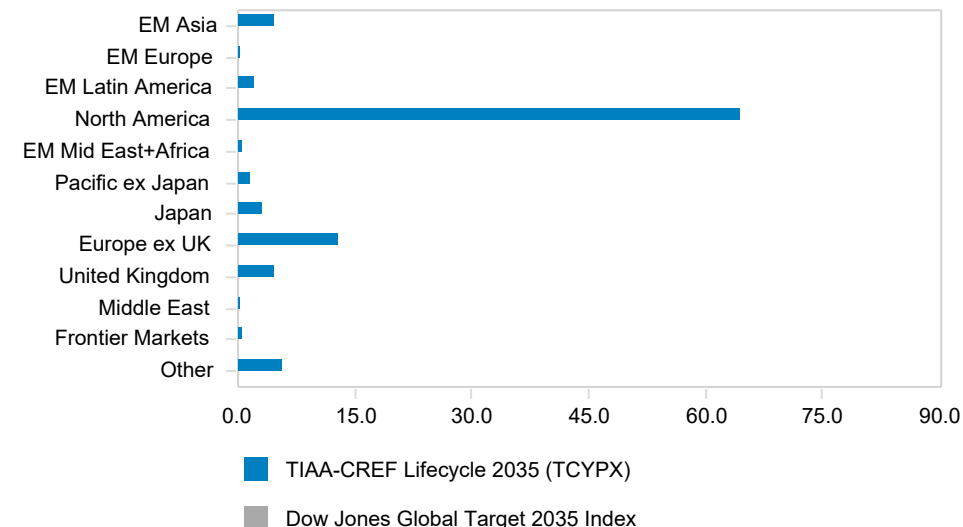
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	13.1 %
TIAA-CREF Core Plus Bond Fund;W	8.2 %
TIAA-CREF International Equity	7.4 %
Nuveen Dividend Value Fund;R6	7.0 %
TIAA-CREF Large-Cap Value Fund;W	7.0 %
Nuveen Growth Opportunities ETF	6.8 %
TIAA-CREF Large-Cap Growth Fund;W	6.7 %
Nuveen Dividend Growth Fund;R6	6.3 %
TIAA-CREF Growth & Income Fund;W	6.3 %
Nuveen International Growth Fund;R6	5.1 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



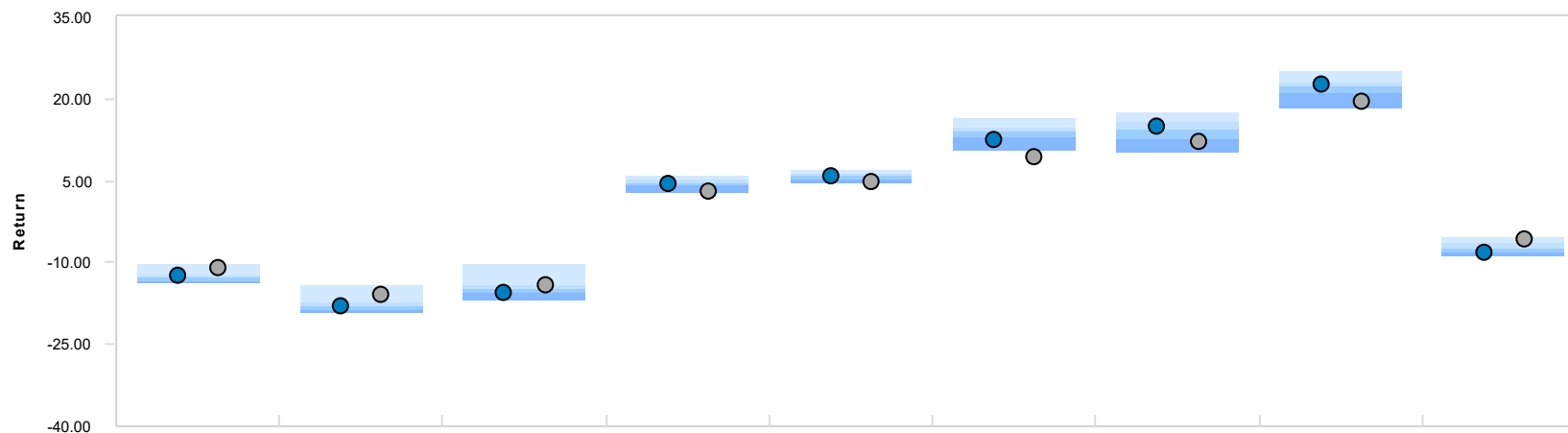
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2035;Prmr (TCYPX)
Fund Family : TIAA
Ticker : TCYPX
Peer Group : IM Mixed-Asset Target 2035 (MF)
Benchmark : Dow Jones Global Target 2035 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$256 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.75%
Net Expense : 0.58%
Turnover : 44%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income by investing in Underlying Funds according to an asset allocation strategy designed for investors planning to retire in or within a few years of 2035.

Peer Group Analysis - IM Mixed-Asset Target 2035 (MF)



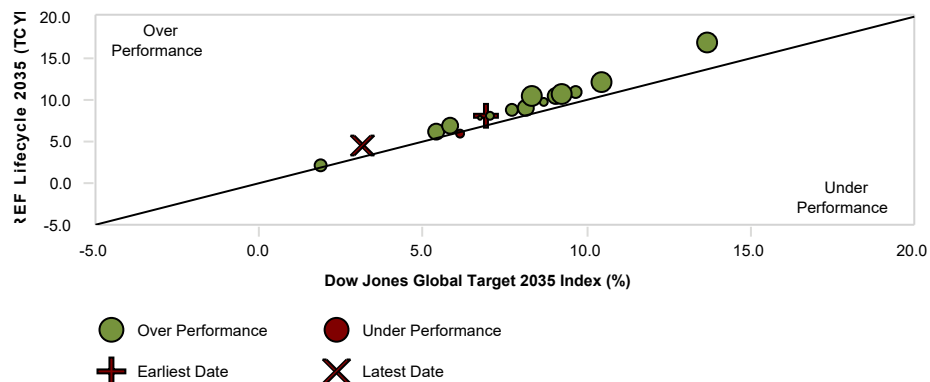
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2035 (TCYPX)	-12.37 (38)	-17.87 (42)	-15.50 (74)	4.54 (53)	5.76 (50)	12.64 (83)	15.15 (38)	22.86 (32)	-8.12 (83)
● Dow Jones Global Target 2035 Index	-11.04 (9)	-15.66 (9)	-14.03 (30)	3.16 (93)	4.77 (88)	9.38 (99)	12.15 (84)	19.70 (88)	-5.80 (15)
Median	-12.61	-18.04	-14.59	4.64	5.75	13.84	14.15	22.26	-7.26

Comparative Performance

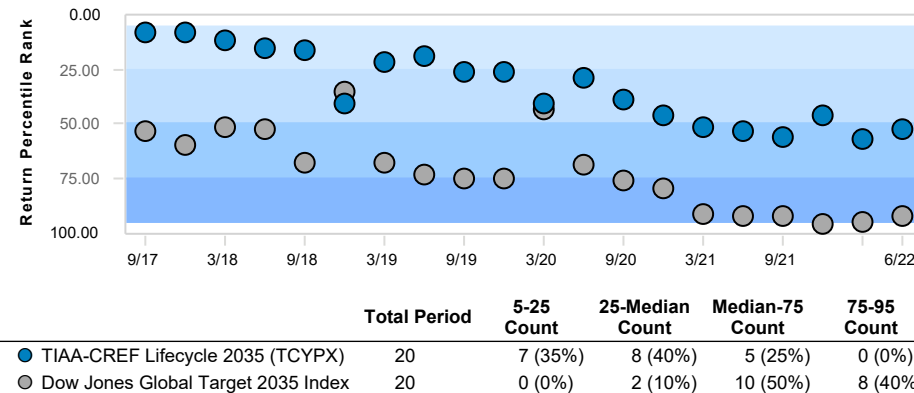
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2035 (TCYPX)	-6.28 (72)	3.98 (85)	-1.04 (68)	5.94 (36)	3.33 (68)	11.69 (56)
Dow Jones Global Target 2035 Index	-5.19 (11)	2.78 (98)	-0.82 (42)	4.63 (95)	2.55 (85)	11.33 (70)
IM Mixed-Asset Target 2035 (MF) Median	-6.09	4.72	-0.91	5.80	3.60	11.83



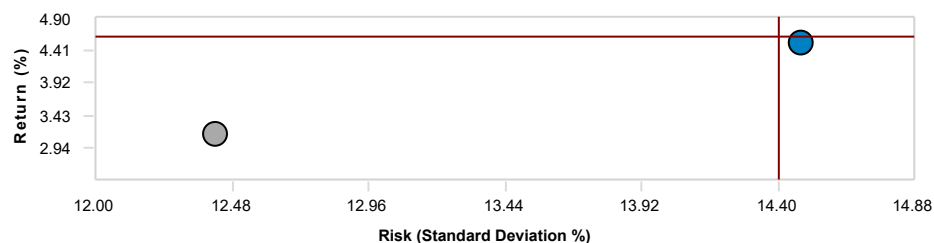
3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years

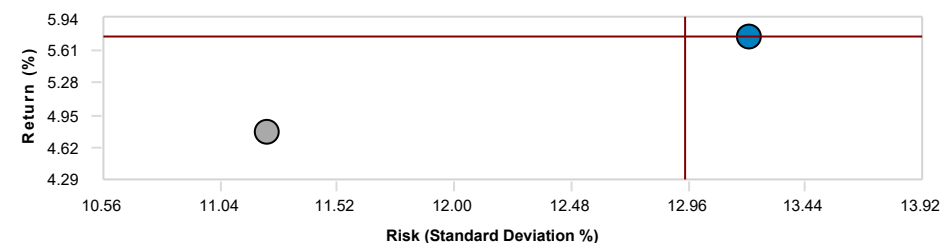


Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2035 (TCYPX)	4.54	14.48
Dow Jones Global Target 2035 Index	3.16	12.42
Median	4.64	14.40

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2035 (TCYPX)	5.76	13.21
Dow Jones Global Target 2035 Index	4.77	11.23
Median	5.75	12.95

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2035 (TCYPX)	2.51	123.05	117.87	1.00	0.64	0.33	1.16	10.29
Dow Jones Global Target 2035 Index	0.00	100.00	100.00	0.00	N/A	0.26	1.00	9.00

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2035 (TCYPX)	2.38	120.87	120.22	0.29	0.50	0.41	1.17	9.30
Dow Jones Global Target 2035 Index	0.00	100.00	100.00	0.00	N/A	0.37	1.00	7.96



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2040 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCZPX
Inception Date : 09/30/2009
Fund Assets : \$289 Million
Portfolio Turnover : 46%

Portfolio Assets : \$5,808 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2040 (MF)
Style Benchmark : Dow Jones Global Target 2040 Index

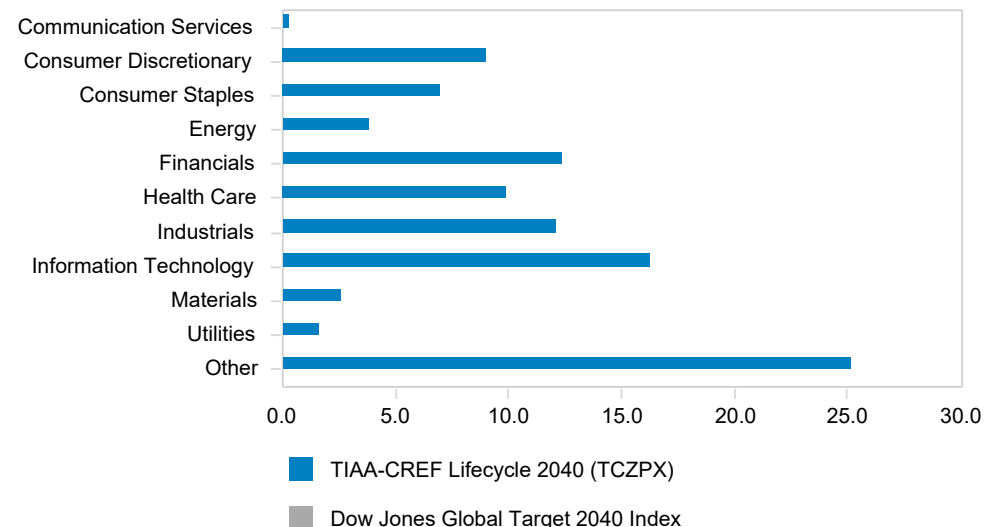
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	250,866,955,010	-
Price/Earnings (P/E)	22.97	N/A
Price/Book (P/B)	5.93	N/A
Dividend Yield	1.39	N/A
Annual EPS	36.89	N/A
5 Yr EPS	13.21	N/A
3 Yr EPS Growth	12.40	N/A
Beta (5 Years, Monthly)	1.11	1.00

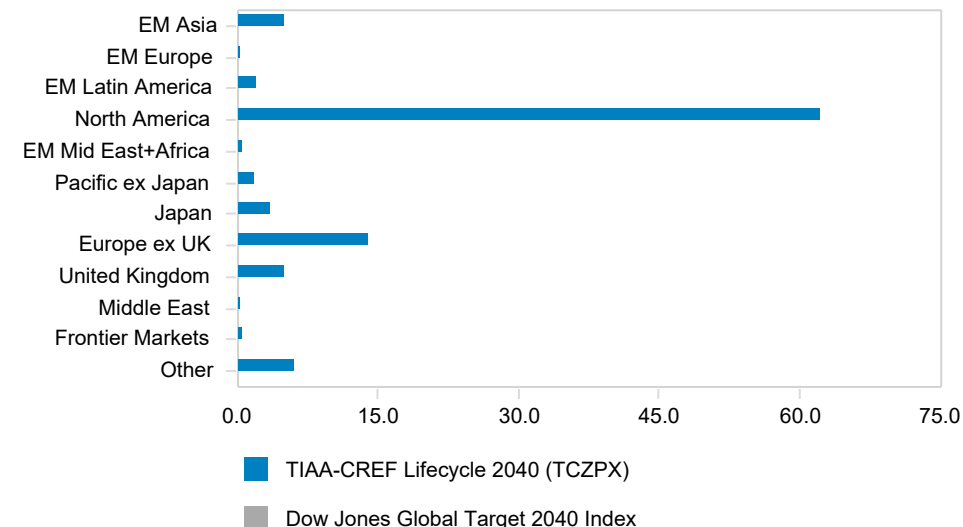
Top Ten Securities As of 04/30/2022

TIAA-CREF Core Bond Fund;W	9.0 %
TIAA-CREF International Equity	8.4 %
Nuveen Dividend Value Fund;R6	7.9 %
TIAA-CREF Large-Cap Value Fund;W	7.9 %
Nuveen Growth Opportunities ETF	7.7 %
TIAA-CREF Large-Cap Growth Fund;W	7.6 %
Nuveen Dividend Growth Fund;R6	7.2 %
TIAA-CREF Growth & Income Fund;W	7.1 %
Nuveen International Growth Fund;R6	5.8 %
TIAA-CREF International Opportunities	5.8 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



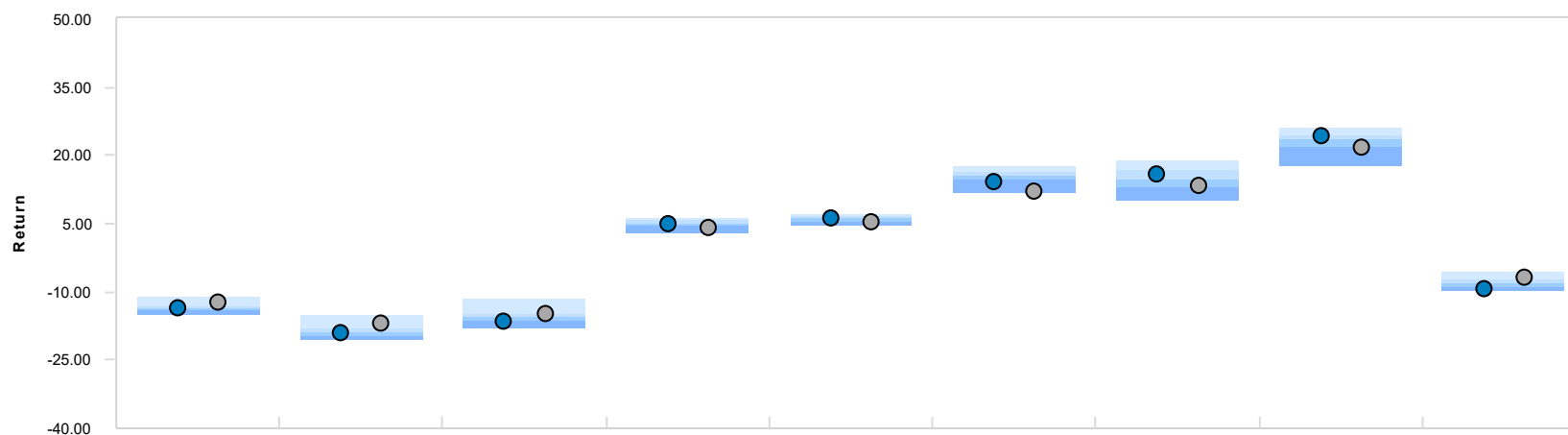
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2040;Prmr (TCZPX)
Fund Family : TIAA
Ticker : TCZPX
Peer Group : IM Mixed-Asset Target 2040 (MF)
Benchmark : Dow Jones Global Target 2040 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$289 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.77%
Net Expense : 0.59%
Turnover : 46%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income by investing in Underlying Funds according to an asset allocation strategy designed for investors planning to retire in or within a few years of 2040.

Peer Group Analysis - IM Mixed-Asset Target 2040 (MF)

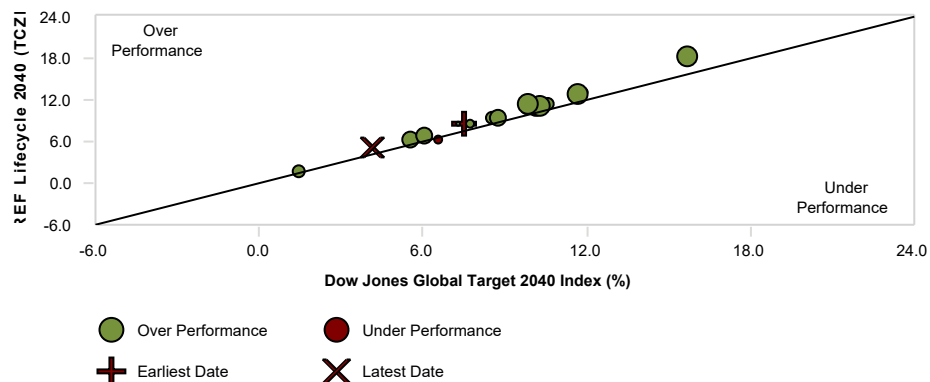


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2040 (TCZPX)	-13.35 (36)	-18.91 (45)	-16.35 (72)	5.01 (53)	6.18 (46)	14.18 (85)	16.11 (33)	24.52 (26)	-9.11 (86)
● Dow Jones Global Target 2040 Index	-12.23 (10)	-16.70 (8)	-14.59 (22)	4.15 (82)	5.57 (77)	12.05 (95)	13.28 (70)	22.03 (74)	-6.94 (23)
Median	-13.69	-19.10	-15.46	5.06	6.09	15.67	14.74	23.63	-7.97

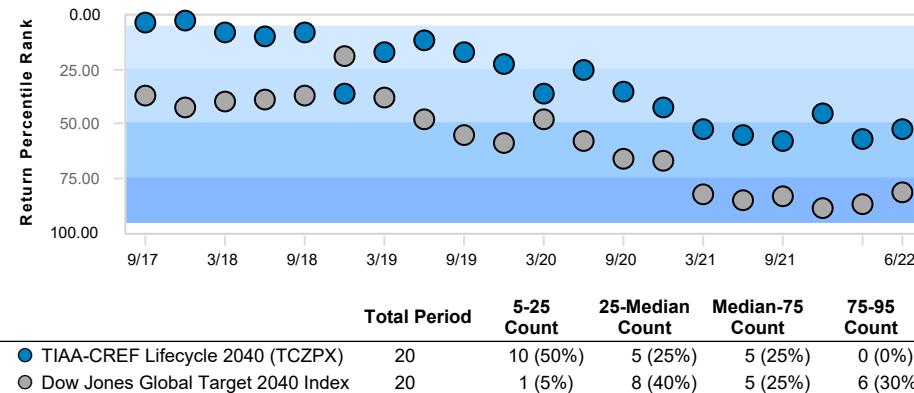
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2040 (TCZPX)	-6.42 (66)	4.48 (82)	-1.27 (79)	6.49 (29)	3.94 (70)	12.83 (56)
Dow Jones Global Target 2040 Index	-5.09 (8)	3.47 (98)	-0.91 (40)	5.30 (95)	3.78 (79)	13.25 (39)
IM Mixed-Asset Target 2040 (MF) Median	-6.25	5.21	-1.03	6.25	4.42	12.90

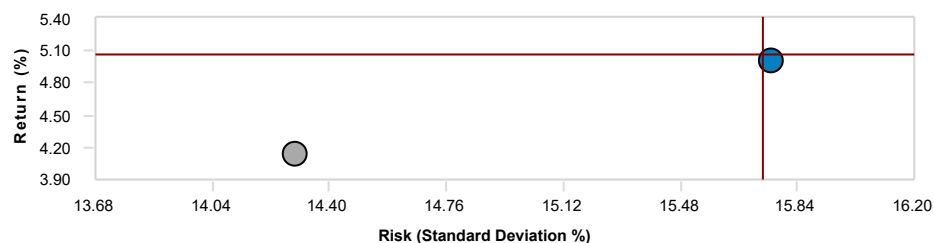
3 Yr Rolling Under/Over Performance - 5 Years



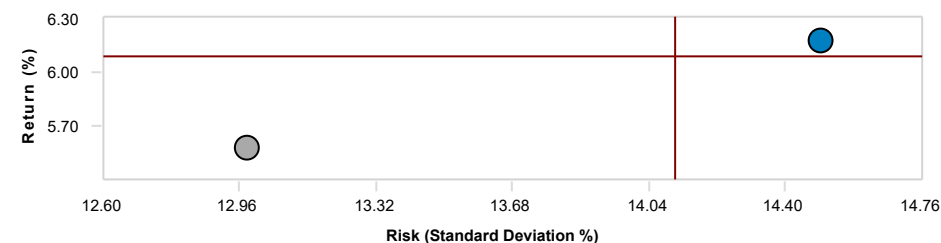
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2040 (TCZPX)	2.13	116.12	114.70	0.56	0.49	0.35	1.10	11.13
Dow Jones Global Target 2040 Index	0.00	100.00	100.00	0.00	N/A	0.31	1.00	10.27

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2040 (TCZPX)	2.06	114.92	116.05	0.09	0.38	0.41	1.11	10.18
Dow Jones Global Target 2040 Index	0.00	100.00	100.00	0.00	N/A	0.40	1.00	9.18



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2045 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TTFPX
Inception Date : 09/30/2009
Fund Assets : \$207 Million
Portfolio Turnover : 46%

Portfolio Assets : \$3,882 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2045 (MF)
Style Benchmark : Dow Jones Global Target 2045 Index

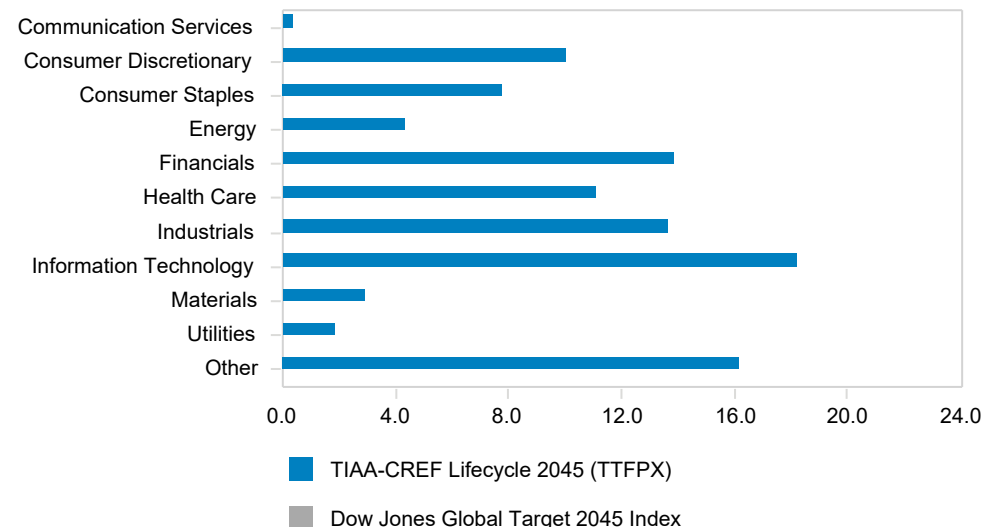
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	280,810,723,902	-
Price/Earnings (P/E)	25.72	N/A
Price/Book (P/B)	6.65	N/A
Dividend Yield	1.56	N/A
Annual EPS	41.32	N/A
5 Yr EPS	14.79	N/A
3 Yr EPS Growth	13.88	N/A
Beta (5 Years, Monthly)	1.08	1.00

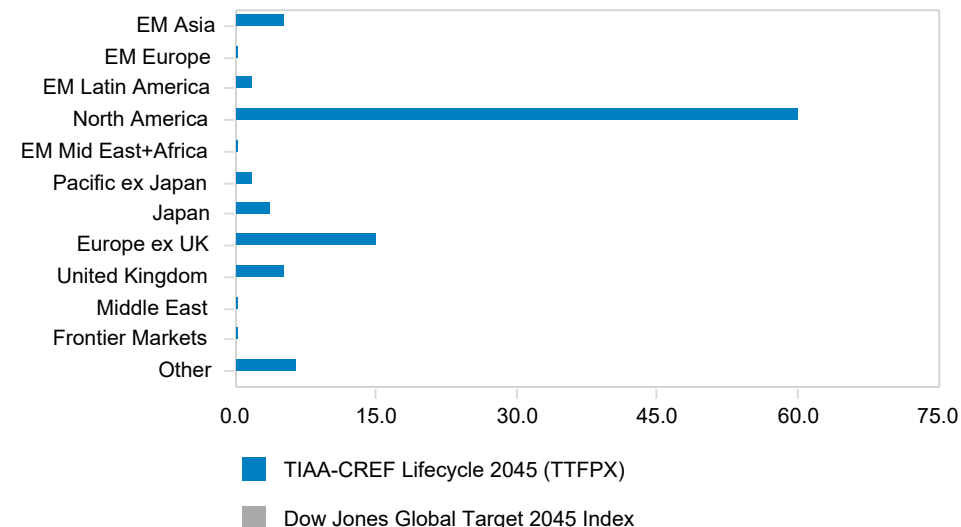
Top Ten Securities As of 04/30/2022

TIAA-CREF International Equity	9.4 %
Nuveen Dividend Value Fund;R6	8.9 %
TIAA-CREF Large-Cap Value Fund;W	8.8 %
Nuveen Growth Opportunities ETF	8.6 %
TIAA-CREF Large-Cap Growth Fund;W	8.5 %
Nuveen Dividend Growth Fund;R6	8.1 %
TIAA-CREF Growth & Income Fund;W	7.9 %
TIAA-CREF International Opportunities	6.5 %
Nuveen International Growth Fund;R6	6.5 %
TIAA-CREF Quant International Small-Cap	4.4 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



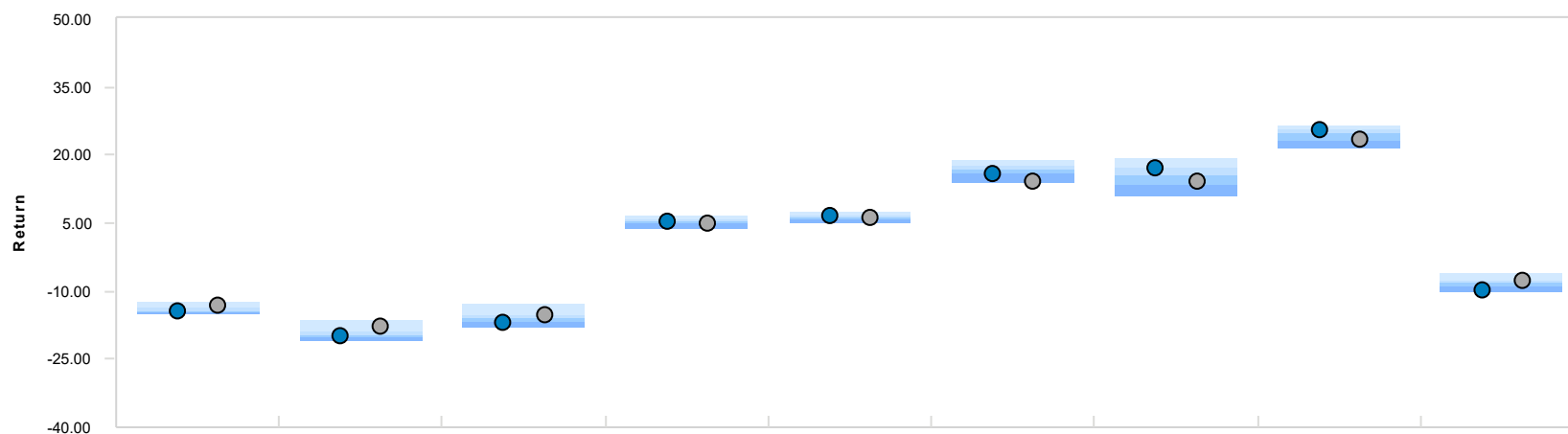
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2045;Prmr (TTFPX)
Fund Family : TIAA
Ticker : TTFPX
Peer Group : IM Mixed-Asset Target 2045 (MF)
Benchmark : Dow Jones Global Target 2045 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$207 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.79%
Net Expense : 0.60%
Turnover : 46%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income. The Fund seeks to allocate approximately 90% of its assets to equity Underlying Funds and 10% of its assets to fixed-income Underlying Funds.

Peer Group Analysis - IM Mixed-Asset Target 2045 (MF)



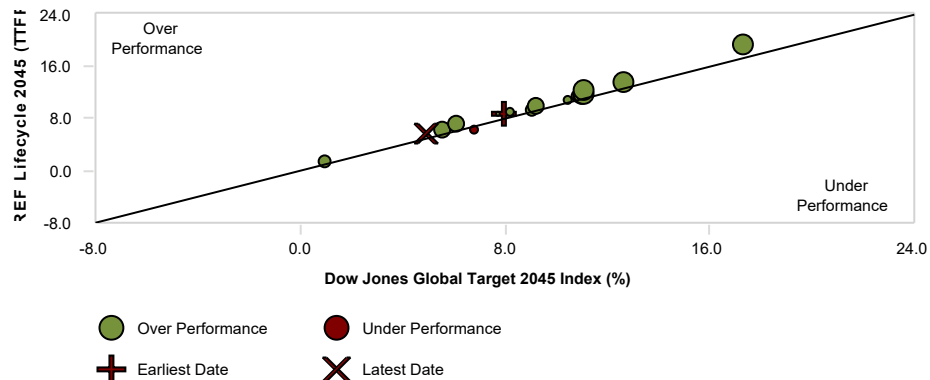
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2045 (TTFPX)	-14.18 (43)	-19.78 (55)	-17.02 (76)	5.58 (39)	6.54 (38)	15.75 (80)	17.14 (28)	25.73 (19)	-9.78 (93)
● Dow Jones Global Target 2045 Index	-13.23 (18)	-17.57 (10)	-15.08 (23)	4.93 (70)	6.17 (60)	14.28 (95)	14.18 (63)	23.71 (67)	-7.80 (38)
Median	-14.30	-19.64	-15.85	5.40	6.37	16.67	15.38	24.61	-8.19

Comparative Performance

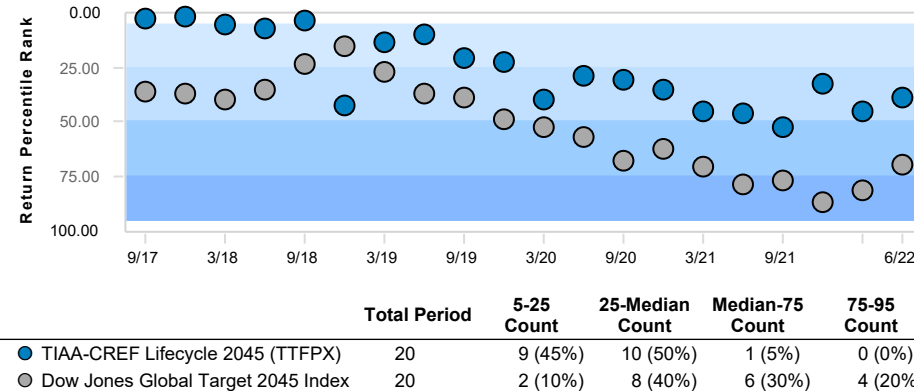
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2045 (TTFPX)	-6.52 (69)	4.90 (77)	-1.40 (82)	6.95 (14)	4.63 (67)	13.95 (48)
Dow Jones Global Target 2045 Index	-5.00 (8)	4.05 (95)	-0.99 (36)	5.85 (92)	4.80 (59)	14.81 (31)
IM Mixed-Asset Target 2045 (MF) Median	-6.26	5.74	-1.14	6.52	4.96	13.87



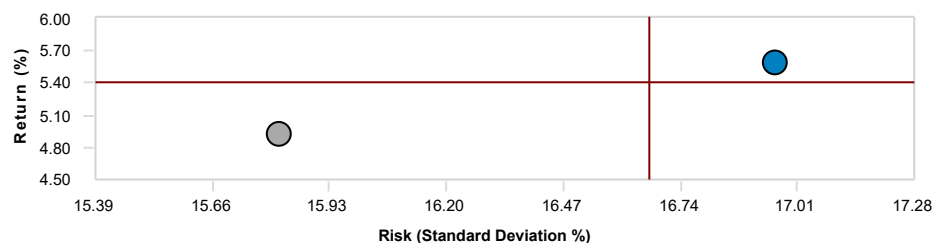
3 Yr Rolling Under/Over Performance - 5 Years



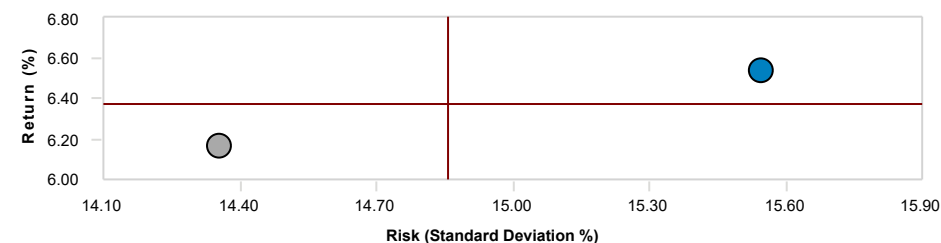
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2045 (TTFPX)	2.09	112.46	112.16	0.41	0.39	0.37	1.07	11.88
Dow Jones Global Target 2045 Index	0.00	100.00	100.00	0.00	N/A	0.34	1.00	11.29

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2045 (TTFPX)	1.94	111.03	112.65	-0.01	0.27	0.41	1.08	10.88
Dow Jones Global Target 2045 Index	0.00	100.00	100.00	0.00	N/A	0.41	1.00	10.15



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2050 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TCLPX
Inception Date : 09/30/2009
Fund Assets : \$146 Million
Portfolio Turnover : 43%

Portfolio Assets : \$2,898 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2050 (MF)
Style Benchmark : Dow Jones Global Target 2050 Index

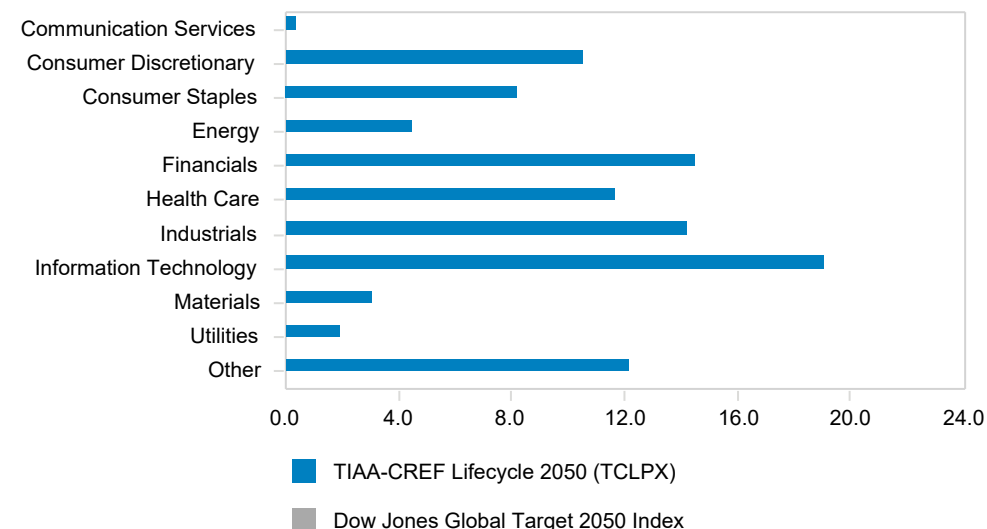
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	294,165,121,271	-
Price/Earnings (P/E)	26.96	N/A
Price/Book (P/B)	6.96	N/A
Dividend Yield	1.63	N/A
Annual EPS	43.30	N/A
5 Yr EPS	15.50	N/A
3 Yr EPS Growth	14.55	N/A
Beta (5 Years, Monthly)	1.03	1.00

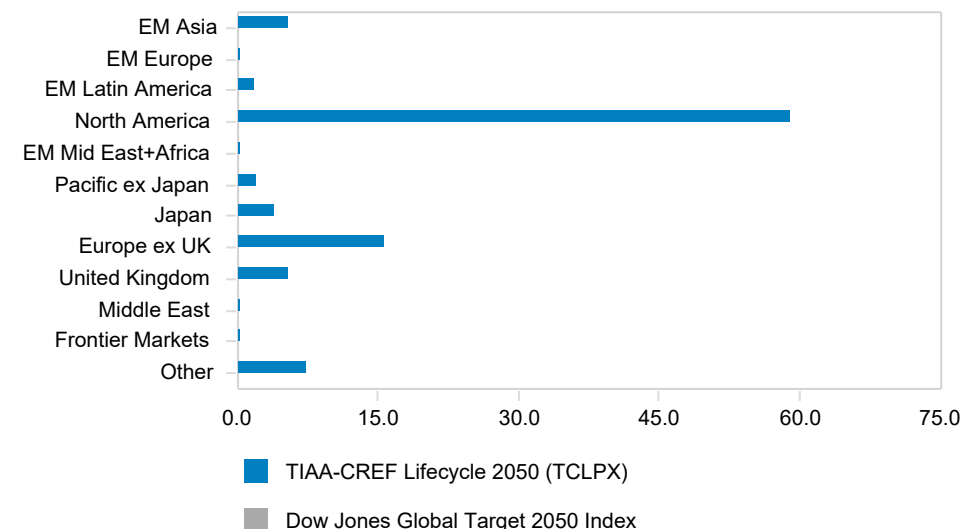
Top Ten Securities As of 04/30/2022

TIAA-CREF International Equity	9.8 %
Nuveen Dividend Value Fund;R6	9.3 %
TIAA-CREF Large-Cap Value Fund;W	9.3 %
Nuveen Growth Opportunities ETF	9.0 %
TIAA-CREF Large-Cap Growth Fund;W	8.9 %
Nuveen Dividend Growth Fund;R6	8.5 %
TIAA-CREF Growth & Income Fund;W	8.3 %
TIAA-CREF International Opportunities	6.9 %
Nuveen International Growth Fund;R6	6.8 %
TIAA-CREF Quant International Small-Cap	4.6 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



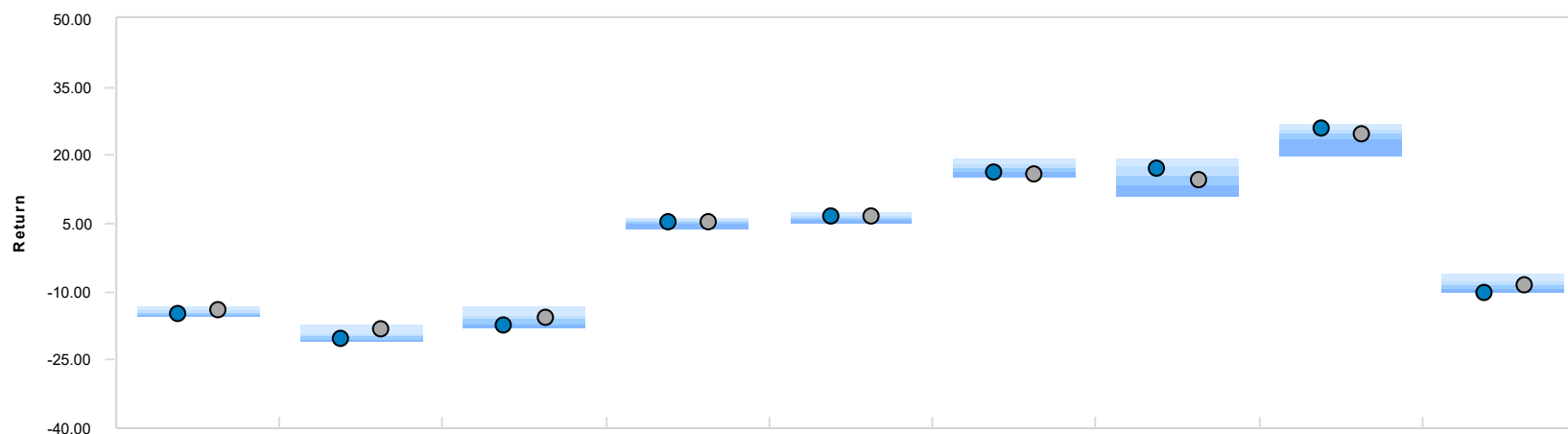
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2050;Prmr (TCLPX)
Fund Family : TIAA
Ticker : TCLPX
Peer Group : IM Mixed-Asset Target 2050 (MF)
Benchmark : Dow Jones Global Target 2050 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$146 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.80%
Net Expense : 0.60%
Turnover : 43%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income. The Fund seeks to allocate approximately 90% of its assets to equity Underlying Funds and 10% of its assets to fixed-income Underlying Funds.

Peer Group Analysis - IM Mixed-Asset Target 2050 (MF)

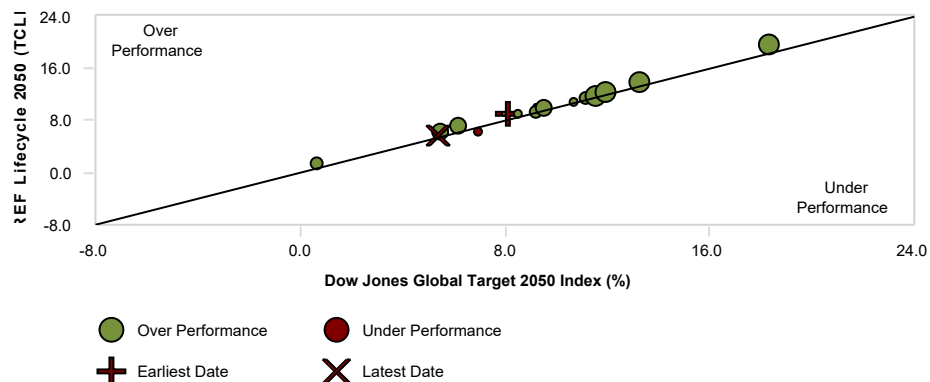


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2050 (TCLPX)	-14.57 (48)	-20.23 (61)	-17.35 (72)	5.63 (39)	6.59 (35)	16.28 (73)	17.34 (27)	25.93 (19)	-9.93 (90)
● Dow Jones Global Target 2050 Index	-13.92 (23)	-18.18 (16)	-15.43 (26)	5.42 (50)	6.52 (41)	15.78 (88)	14.78 (58)	24.69 (50)	-8.29 (44)
Median	-14.62	-19.98	-16.05	5.41	6.41	16.99	15.54	24.67	-8.54

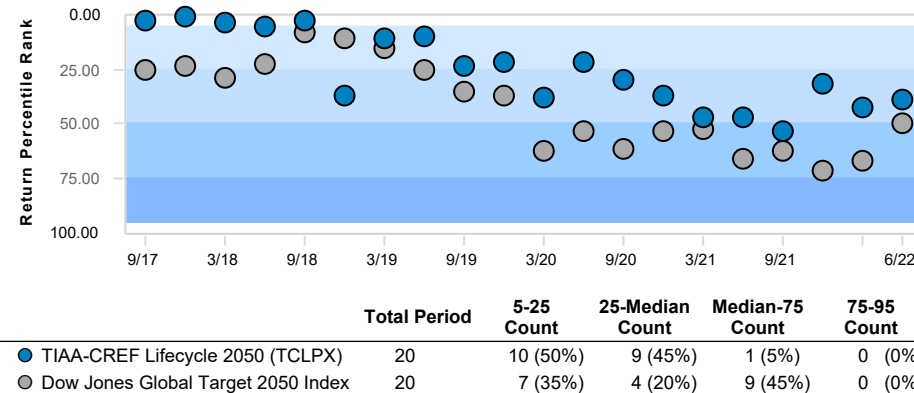
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2050 (TCLPX)	-6.63 (73)	5.13 (75)	-1.44 (80)	7.04 (18)	4.85 (67)	14.16 (54)
Dow Jones Global Target 2050 Index	-4.94 (7)	4.44 (94)	-1.04 (37)	6.22 (83)	5.46 (25)	15.83 (11)
IM Mixed-Asset Target 2050 (MF) Median	-6.32	5.88	-1.17	6.63	5.11	14.26

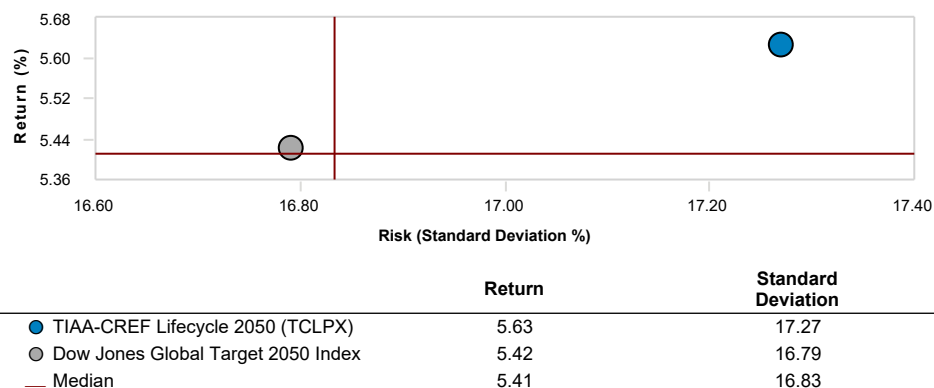
3 Yr Rolling Under/Over Performance - 5 Years



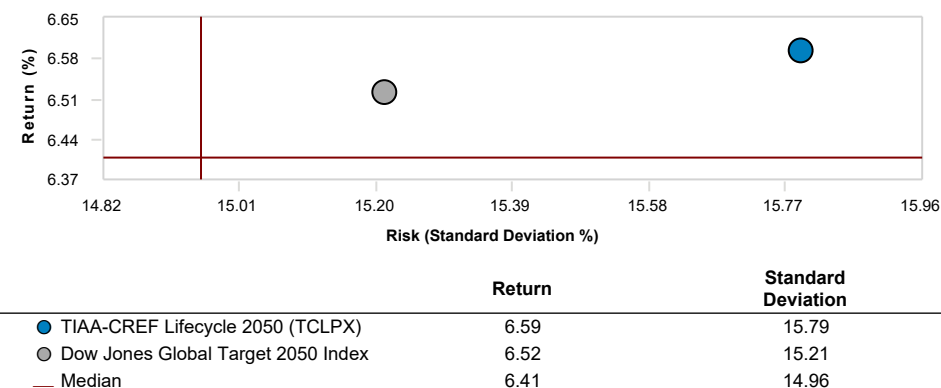
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2050 (TCLPX)	1.92	106.09	106.84	0.12	0.14	0.37	1.02	12.09
Dow Jones Global Target 2050 Index	0.00	100.00	100.00	0.00	N/A	0.36	1.00	11.95

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2050 (TCLPX)	1.71	105.64	107.29	-0.09	0.09	0.41	1.03	11.06
Dow Jones Global Target 2050 Index	0.00	100.00	100.00	0.00	N/A	0.42	1.00	10.75



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2055 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TTRPX
Inception Date : 04/29/2011
Fund Assets : \$70 Million
Portfolio Turnover : 41%

Portfolio Assets : \$1,305 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2055 (MF)
Style Benchmark : Dow Jones Global Target 2055 Index

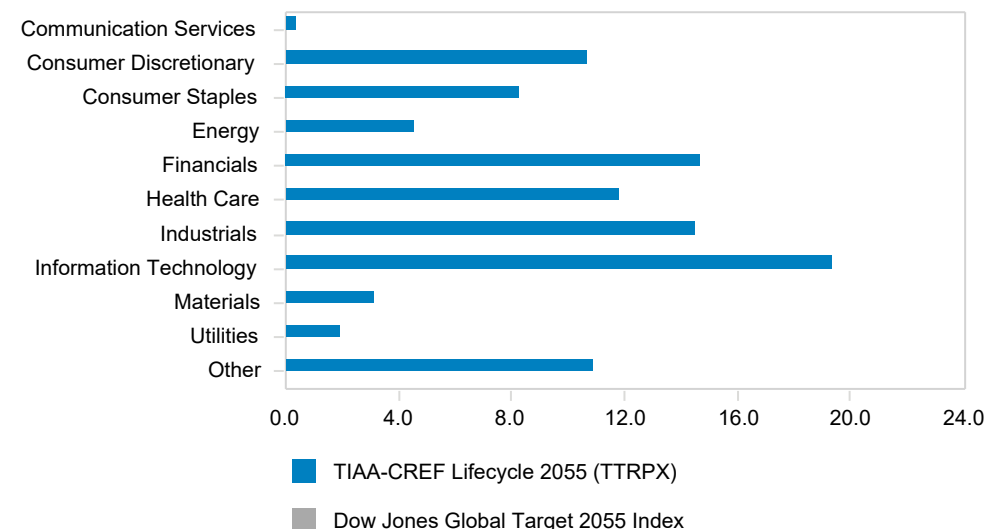
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	298,276,822,779	-
Price/Earnings (P/E)	27.34	N/A
Price/Book (P/B)	7.06	N/A
Dividend Yield	1.66	N/A
Annual EPS	43.91	N/A
5 Yr EPS	15.72	N/A
3 Yr EPS Growth	14.75	N/A
Beta (5 Years, Monthly)	1.03	1.00

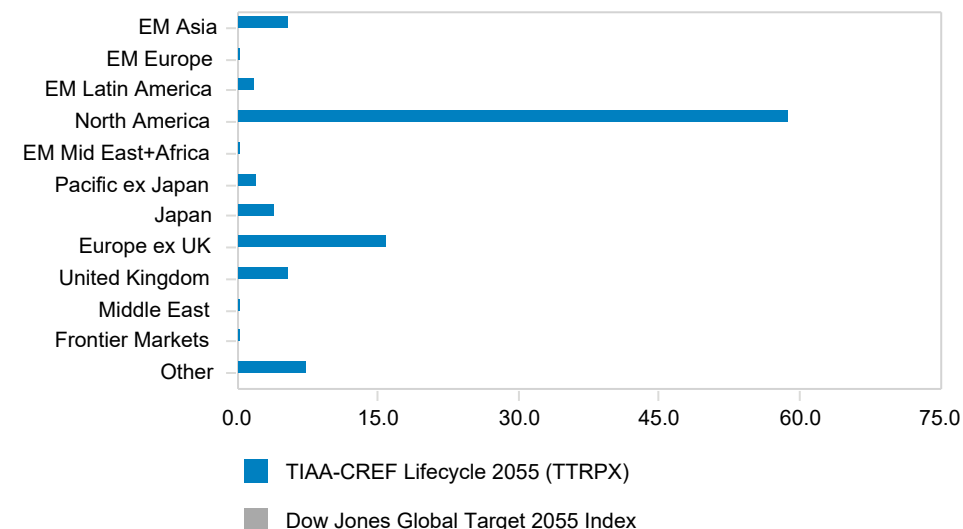
Top Ten Securities As of 04/30/2022

TIAA-CREF International Equity	10.0 %
Nuveen Dividend Value Fund;R6	9.4 %
TIAA-CREF Large-Cap Value Fund;W	9.4 %
Nuveen Growth Opportunities ETF	9.1 %
TIAA-CREF Large-Cap Growth Fund;W	9.1 %
Nuveen Dividend Growth Fund;R6	8.6 %
TIAA-CREF Growth & Income Fund;W	8.4 %
TIAA-CREF International Opportunities	7.0 %
Nuveen International Growth Fund;R6	7.0 %
TIAA-CREF Quant International Small-Cap	4.7 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



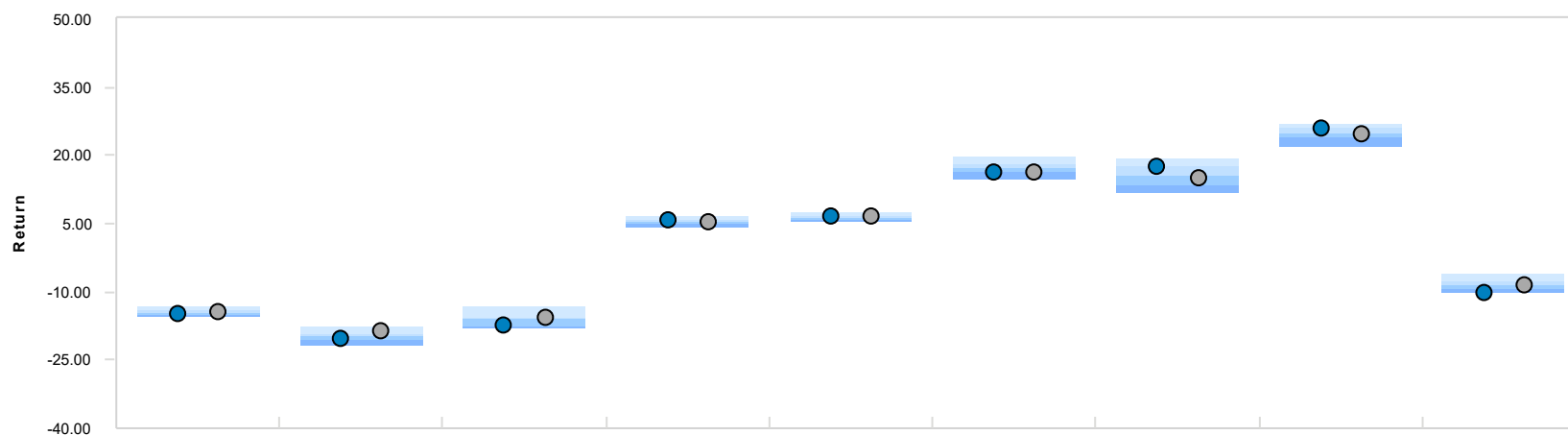
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2055;Prmr (TTRPX)
Fund Family : TIAA
Ticker : TTRPX
Peer Group : IM Mixed-Asset Target 2055 (MF)
Benchmark : Dow Jones Global Target 2055 Index
Fund Inception : 04/29/2011
Portfolio Manager : Team Managed
Total Assets : \$70 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.81%
Net Expense : 0.60%
Turnover : 41%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income. The Fund expects to allocate approximately 90% of its assets to equity Underlying Funds and 10% of its assets to fixed-income Underlying Funds.

Peer Group Analysis - IM Mixed-Asset Target 2055 (MF)



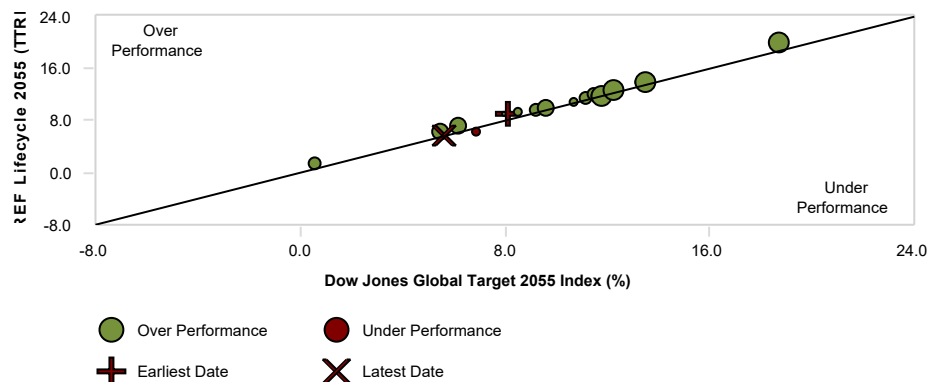
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2055 (TTRPX)	-14.69 (54)	-20.32 (63)	-17.41 (69)	5.69 (38)	6.65 (36)	16.46 (73)	17.43 (29)	26.21 (17)	-10.10 (94)
● Dow Jones Global Target 2055 Index	-14.24 (30)	-18.46 (16)	-15.61 (32)	5.59 (43)	6.62 (38)	16.36 (75)	15.03 (59)	24.89 (48)	-8.37 (46)
Median	-14.63	-20.00	-16.15	5.47	6.45	17.18	15.65	24.84	-8.48

Comparative Performance

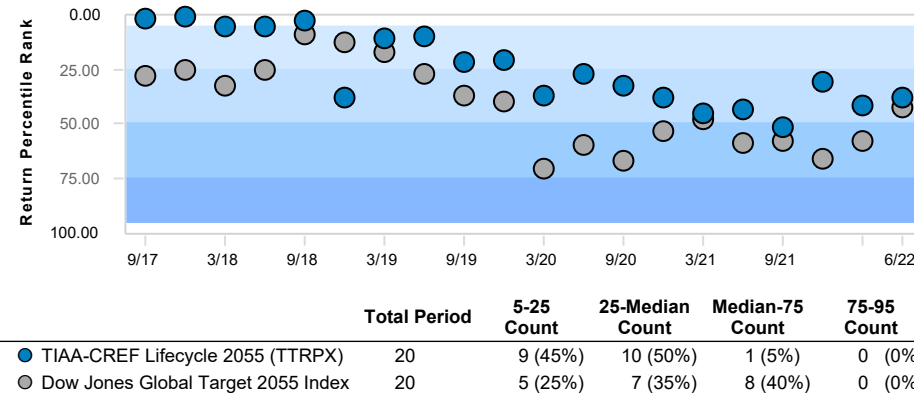
	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2055 (TTRPX)	-6.60 (73)	5.24 (74)	-1.51 (85)	7.10 (20)	4.91 (70)	14.42 (52)
Dow Jones Global Target 2055 Index	-4.92 (4)	4.60 (88)	-1.06 (35)	6.36 (79)	5.71 (20)	16.17 (5)
IM Mixed-Asset Target 2055 (MF) Median	-6.33	5.90	-1.23	6.67	5.21	14.48



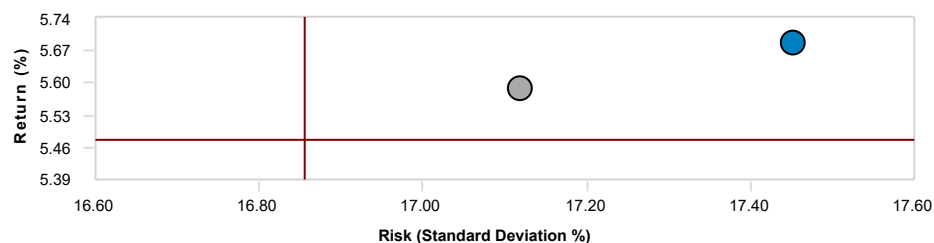
3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years

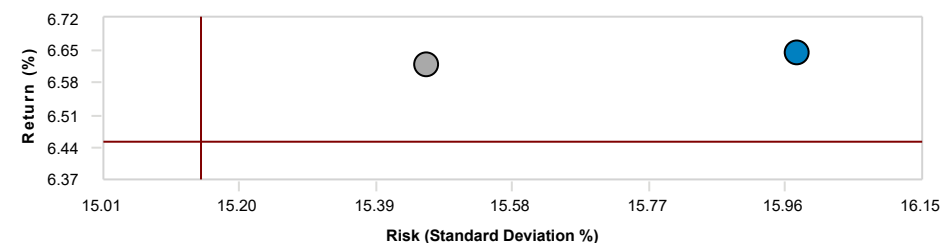


Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2055 (TTRPX)	5.69	17.45
Dow Jones Global Target 2055 Index	5.59	17.12
Median	5.47	16.86

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2055 (TTRPX)	6.65	15.97
Dow Jones Global Target 2055 Index	6.62	15.46
Median	6.45	15.15

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2055 (TTRPX)	1.91	104.92	105.94	0.05	0.08	0.37	1.01	12.22
Dow Jones Global Target 2055 Index	0.00	100.00	100.00	0.00	N/A	0.37	1.00	12.17

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2055 (TTRPX)	1.73	105.21	107.02	-0.11	0.06	0.41	1.03	11.19
Dow Jones Global Target 2055 Index	0.00	100.00	100.00	0.00	N/A	0.42	1.00	10.92



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2060 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TLXPX
Inception Date : 09/26/2014
Fund Assets : \$18 Million
Portfolio Turnover : 40%

Portfolio Assets : \$419 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2060 (MF)
Style Benchmark : Dow Jones Global Target 2060 Index

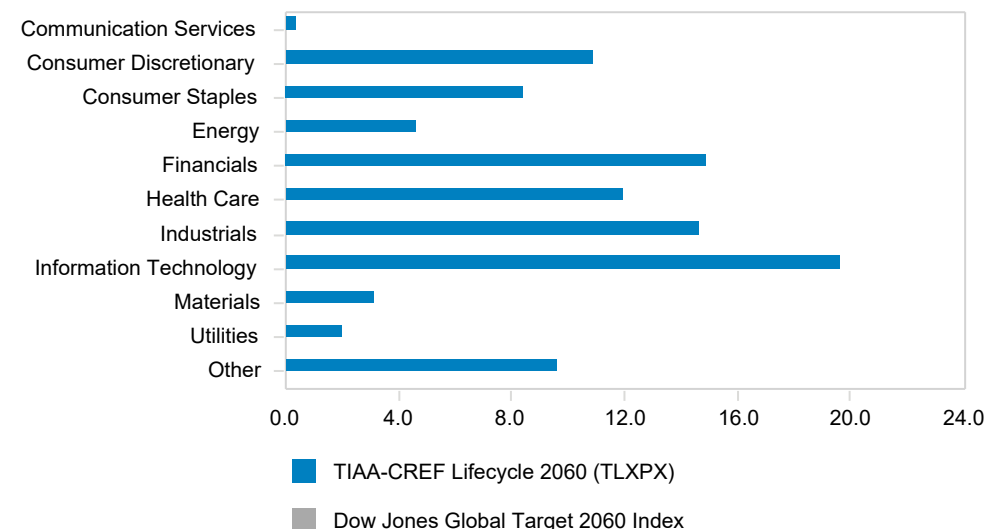
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	302,515,808,918	-
Price/Earnings (P/E)	27.72	N/A
Price/Book (P/B)	7.16	N/A
Dividend Yield	1.68	N/A
Annual EPS	44.52	N/A
5 Yr EPS	15.94	N/A
3 Yr EPS Growth	14.95	N/A
Beta (5 Years, Monthly)	1.04	1.00

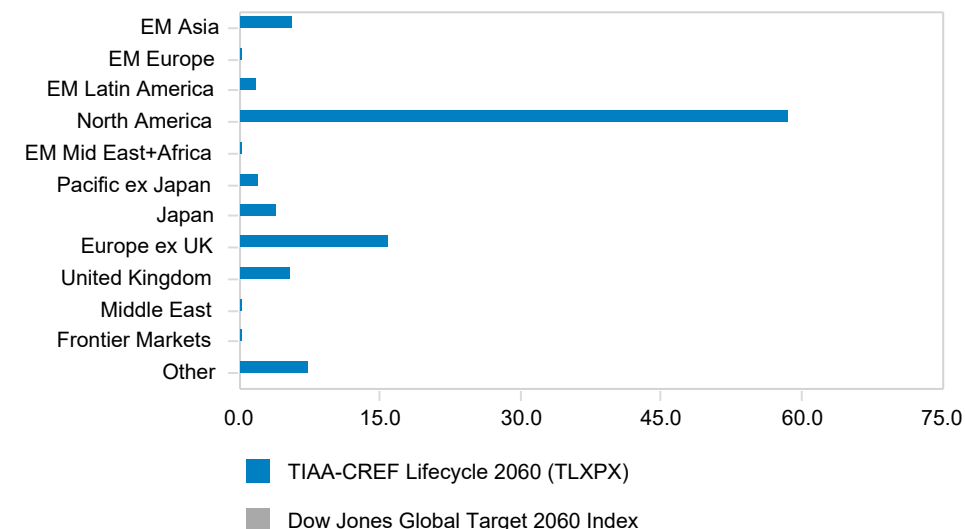
Top Ten Securities As of 04/30/2022

TIAA-CREF International Equity	10.1 %
Nuveen Dividend Value Fund;R6	9.5 %
TIAA-CREF Large-Cap Value Fund;W	9.5 %
Nuveen Growth Opportunities ETF	9.2 %
TIAA-CREF Large-Cap Growth Fund;W	9.2 %
Nuveen Dividend Growth Fund;R6	8.7 %
TIAA-CREF Growth & Income Fund;W	8.5 %
TIAA-CREF International Opportunities	7.1 %
Nuveen International Growth Fund;R6	7.1 %
TIAA-CREF Quant International Small-Cap	4.7 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



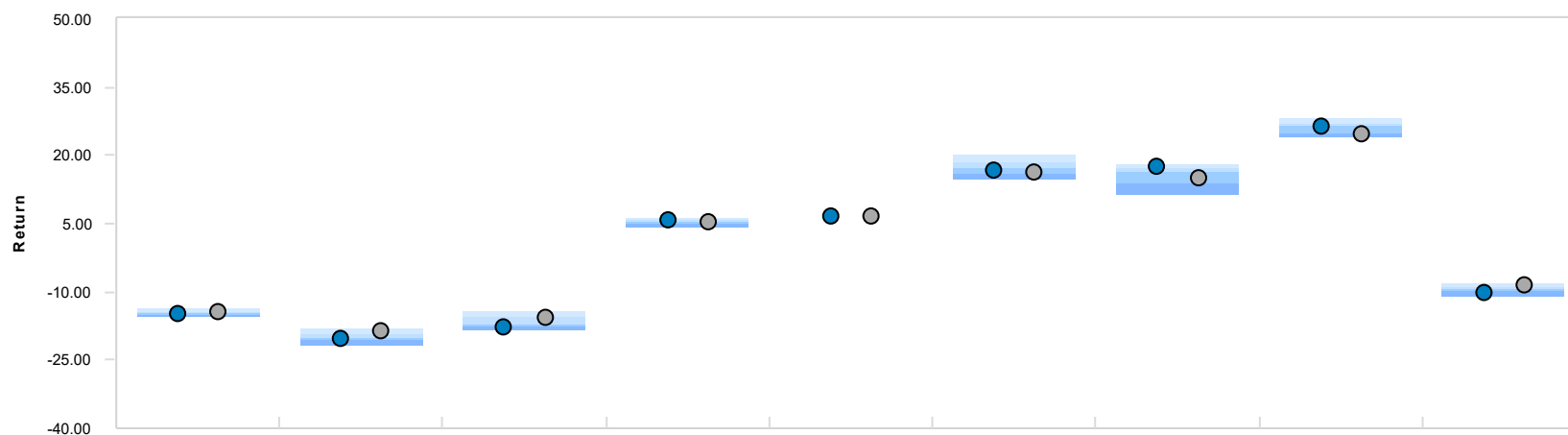
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2060;Prmr (TLXPX)
Fund Family : TIAA
Ticker : TLXPX
Peer Group : IM Mixed-Asset Target 2060+ (MF)
Benchmark : Dow Jones Global Target 2060 Index
Fund Inception : 09/26/2014
Portfolio Manager : Team Managed
Total Assets : \$18 Million
Total Assets Date : 06/30/2022
Gross Expense : 0.86%
Net Expense : 0.60%
Turnover : 40%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income. The Fund is a fund of funds that invests in the other funds of the Trust. The Fund invests in funds according to an asset allocation strategy designed for investors retiring/planning to retire within a few years of 2060.

Peer Group Analysis - IM Mixed-Asset Target 2060+ (MF)

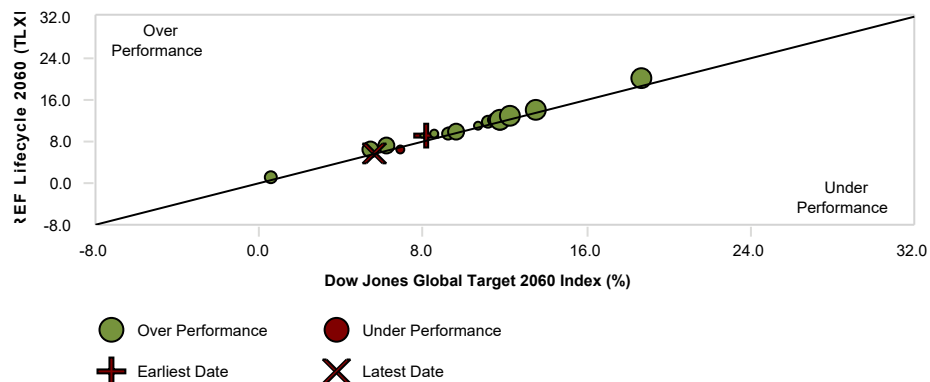


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2060 (TLXPX)	-14.80 (43)	-20.40 (53)	-17.52 (64)	5.81 (40)	6.72 (N/A)	16.68 (61)	17.57 (19)	26.47 (43)	-10.27 (94)
● Dow Jones Global Target 2060 Index	-14.26 (19)	-18.47 (10)	-15.62 (21)	5.58 (57)	6.62 (N/A)	16.36 (67)	15.03 (69)	24.89 (66)	-8.37 (16)
Median	-14.92	-20.39	-17.23	5.68	N/A	17.15	16.23	26.28	-9.37

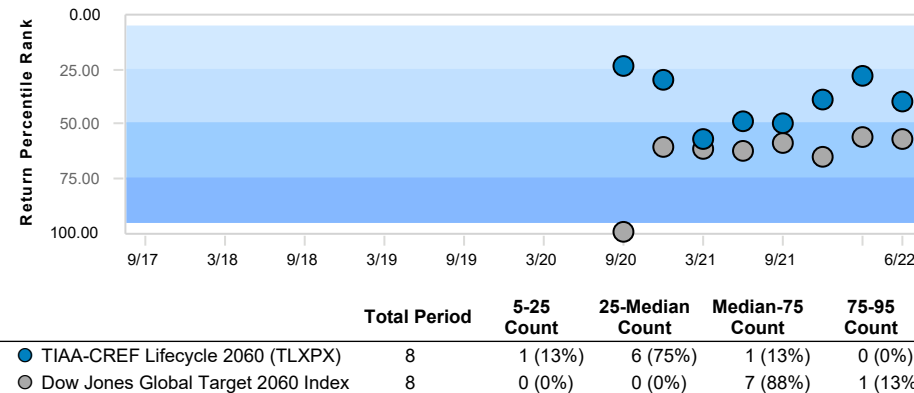
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2060 (TLXPX)	-6.58 (67)	5.24 (69)	-1.54 (91)	7.25 (17)	5.00 (69)	14.49 (71)
Dow Jones Global Target 2060 Index	-4.91 (5)	4.61 (85)	-1.06 (35)	6.36 (85)	5.71 (24)	16.17 (6)
IM Mixed-Asset Target 2060+ (MF) Median	-6.28	5.88	-1.22	6.71	5.29	14.91

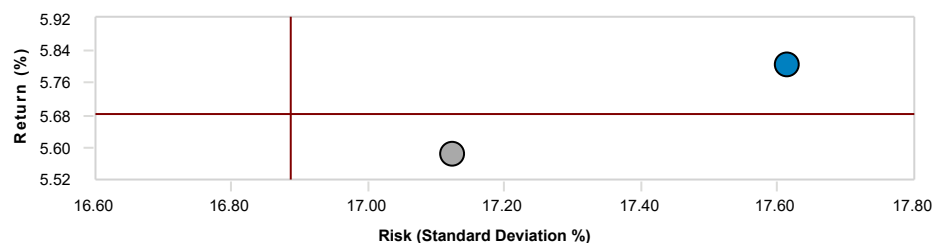
3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years

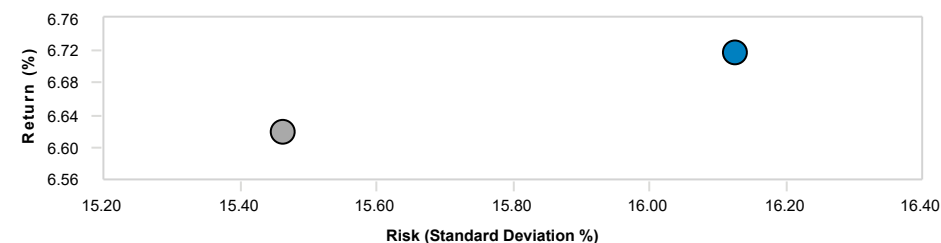


Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2060 (TLXPX)	5.81	17.61
Dow Jones Global Target 2060 Index	5.58	17.12
Median	5.68	16.88

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2060 (TLXPX)	6.72	16.13
Dow Jones Global Target 2060 Index	6.62	15.46
Median	N/A	N/A

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2060 (TLXPX)	1.96	106.20	106.93	0.14	0.15	0.37	1.02	12.31
Dow Jones Global Target 2060 Index	0.00	100.00	100.00	0.00	N/A	0.37	1.00	12.17

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2060 (TLXPX)	1.79	106.25	107.97	-0.09	0.11	0.42	1.04	11.28
Dow Jones Global Target 2060 Index	0.00	100.00	100.00	0.00	N/A	0.42	1.00	10.92



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2065 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TSFPX
Inception Date : 09/30/2020
Fund Assets : \$2 Million
Portfolio Turnover : 49%

Portfolio Assets : \$24 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2060+ (MF)
Style Benchmark : Dow Jones Global Target 2060 Index

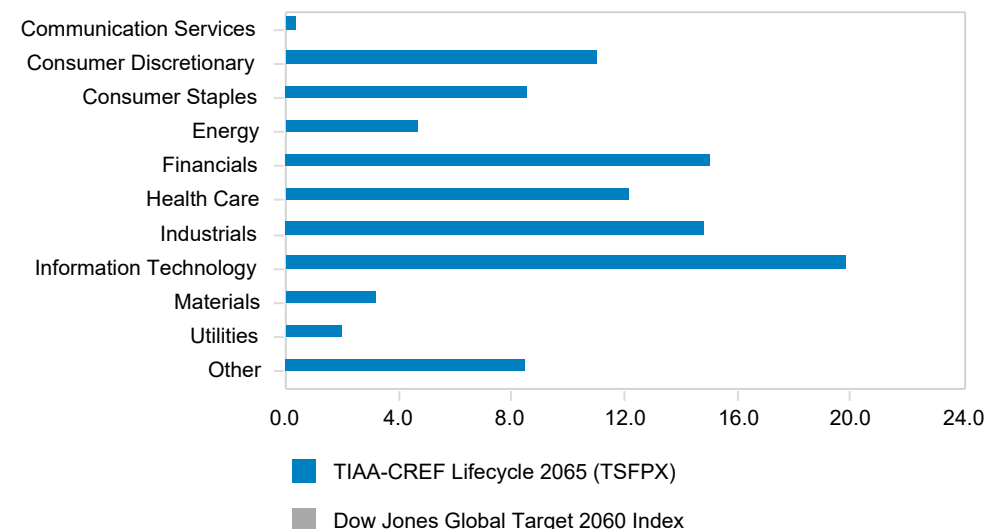
Portfolio Characteristics As of 04/30/2022

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	306,294,594,853	-
Price/Earnings (P/E)	28.09	N/A
Price/Book (P/B)	7.25	N/A
Dividend Yield	1.70	N/A
Annual EPS	45.12	N/A
5 Yr EPS	16.15	N/A
3 Yr EPS Growth	15.15	N/A
Beta	N/A	1.00

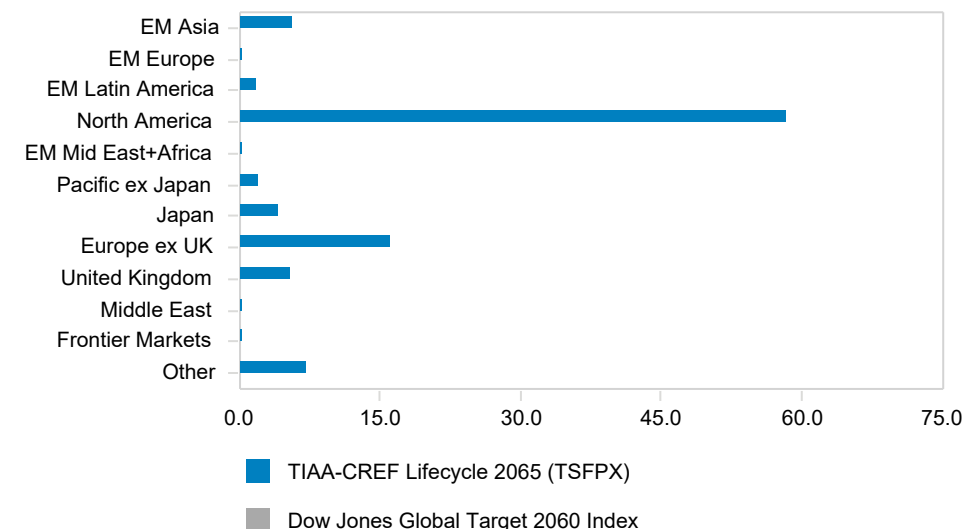
Top Ten Securities As of 04/30/2022

TIAA-CREF International Equity	10.3 %
TIAA-CREF Large-Cap Value Fund;W	9.7 %
Nuveen Dividend Value Fund;R6	9.7 %
TIAA-CREF Large-Cap Growth Fund;W	9.3 %
Nuveen Growth Opportunities ETF	9.3 %
Nuveen Dividend Growth Fund;R6	8.7 %
TIAA-CREF Growth & Income Fund;W	8.7 %
TIAA-CREF International Opportunities	7.2 %
Nuveen International Growth Fund;R6	7.2 %
TIAA-CREF Quant International Small-Cap	4.8 %

Sector Weights As of 04/30/2022



Region Weights As of 04/30/2022



Statistics provided by Lipper. Most recent available data shown.



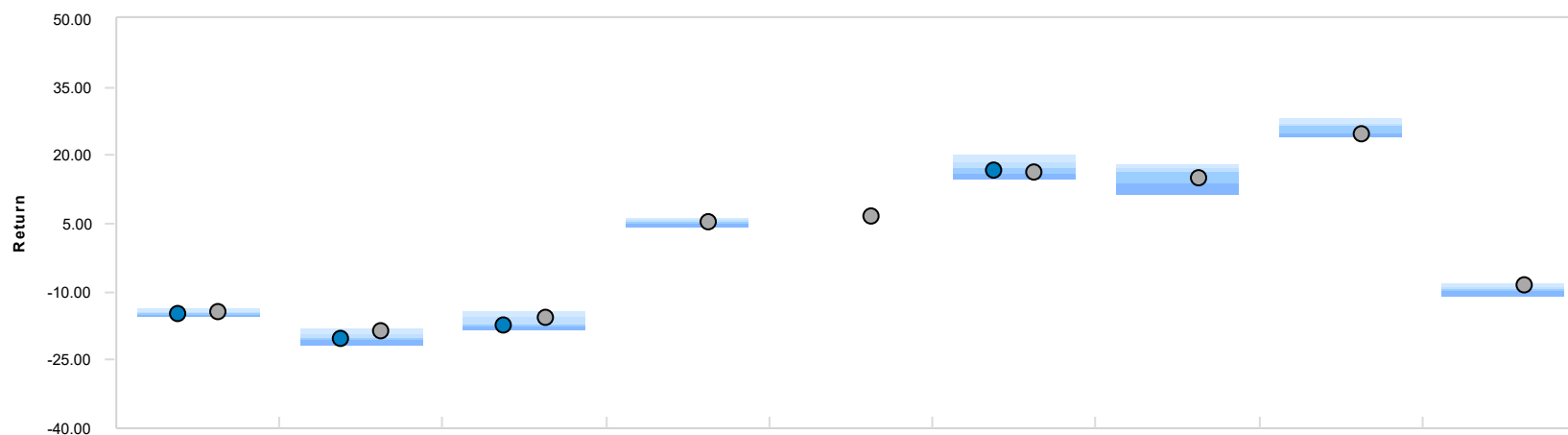
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2065;Prem (TSFPX)
Fund Family : TIAA
Ticker : TSFPX
Peer Group : IM Mixed-Asset Target 2060+ (MF)
Benchmark : Dow Jones Global Target 2060 Index
Fund Inception : 09/30/2020
Portfolio Manager : Team Managed
Total Assets : \$2 Million
Total Assets Date : 06/30/2022
Gross Expense : 3.91%
Net Expense : 0.60%
Turnover : 49%

Summary Description

The Fund seeks high total return over time through a combination of capital appreciation and income. The Fund is a fund of funds that invests in the other funds of the Trust. The Fund invests in funds according to an asset allocation strategy designed for investors retiring/planning to retire within a few years of 2065.

Peer Group Analysis - IM Mixed-Asset Target 2060+ (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
● TIAA-CREF Lifecycle 2065 (TSFPX)	-14.82 (46)	-20.41 (53)	-17.48 (64)	N/A	N/A	16.84 (55)	N/A	N/A	N/A
● Dow Jones Global Target 2060 Index	-14.26 (19)	-18.47 (10)	-15.62 (21)	5.58 (57)	6.62 (N/A)	16.36 (67)	15.03 (69)	24.89 (66)	-8.37 (16)
Median	-14.92	-20.39	-17.23	5.68	N/A	17.15	16.23	26.28	-9.37

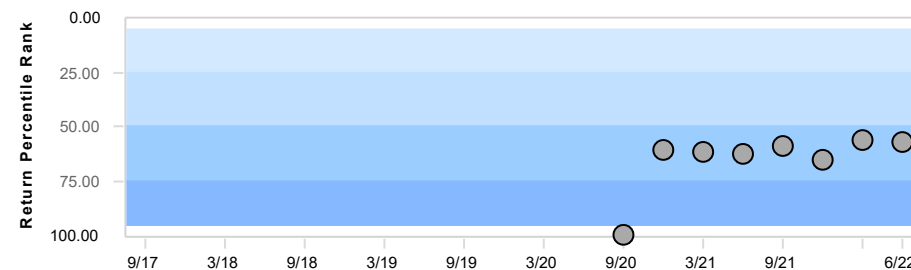
Comparative Performance

	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020
TIAA-CREF Lifecycle 2065 (TSFPX)	-6.56 (64)	5.35 (68)	-1.59 (92)	7.33 (11)	5.01 (69)	14.69 (59)
Dow Jones Global Target 2060 Index	-4.91 (5)	4.61 (85)	-1.06 (35)	6.36 (85)	5.71 (24)	16.17 (6)
IM Mixed-Asset Target 2060+ (MF) Median	-6.28	5.88	-1.22	6.71	5.29	14.91

3 Yr Rolling Under/Over Performance - 5 Years

No data found.

3 Yr Rolling Percentile Ranking - 5 Years



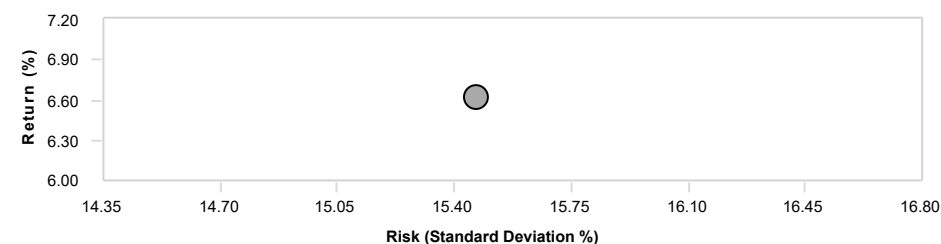
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
TIAA-CREF Lifecycle 2065 (TSFPX)	0	0	0	0	0
Dow Jones Global Target 2060 Index	8	0 (0%)	0 (0%)	7 (88%)	1 (13%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2065 (TSFPX)	N/A	N/A
Dow Jones Global Target 2060 Index	5.58	17.12
Median	5.68	16.88

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2065 (TSFPX)	N/A	N/A
Dow Jones Global Target 2060 Index	6.62	15.46
Median	N/A	N/A

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2065 (TSFPX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dow Jones Global Target 2060 Index	0.00	100.00	100.00	0.00	N/A	0.37	1.00	12.17

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2065 (TSFPX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dow Jones Global Target 2060 Index	0.00	100.00	100.00	0.00	N/A	0.42	1.00	10.92



Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

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Investment Performance Review
Period Ending June 30, 2022

City of Fort Worth 457 Deferred Compensation Plan



As you may recall from our Client Letter at the beginning of the year, AndCo remains steadfast in our belief and conviction that the best way to service our valued clients is within a model that is independent, singularly focused, customized, and passionately delivered. We continue to reinvest 100% of our net profits back into the organization to enhance our customized service model and provide the appropriate resources for all our team members to serve our valued clients at a high level.

To that end, we are thrilled to share that AndCo is the recipient of a Greenwich Quality Leader Award for mid-sized consulting firms!

Coalition Greenwich is a leading global provider of data, analytics, and insights to the financial services industry, and the Greenwich Exchange provides institutional investors with robust and actionable data to inform their decision-making. Research participants receive regional and global industry insights, as well as peers' perceptions of asset managers and investment consultants.

Outlined below are the award criteria research participants answer that determines Quality Leader Awards each year. To qualify as a research participant you must have at least \$150MM in investable assets.

2021 was the first year we launched an initiative to participate in this research opportunity and the experience helped glean key insights into what is important for our clients and how we can better serve them going forward. We deeply appreciate the client representatives that acted as research participants in the 2021 study.

While our consultants are the tip of the spear when servicing our clients, this award, and our overall client service experience, would not have been possible without the work of our entire AndCo team. We greatly appreciate their ongoing work and efforts that made this award possible.

As we have stated since our rebrand in 2017, our name, AndCo, reminds us of who we work for every day - "Our Client" &Co. You will always be first in our service model and at the forefront of each team member's efforts to serve, earn your trust, and add value.

Thank you again for your valued partnership and the opportunity to serve you. We share this award with you and will continue to work hard to earn your trust as we move forward in these challenging market environments.

GREENWICH QUALITY LEADER AWARD CRITERIA

Understanding of Client Goals and Objectives	Client Satisfaction with Manager Recommendations	Timeliness in Providing Written Reports
Advice on DC Plan Structure and Design	Communication of Philosophy and Investment Beliefs	Capability of Consultants Assigned to Clients
Credibility with Investment Committee	Advice on Long-Term Asset Allocation and Liability Issues	Usefulness of Personal Meetings
Proactive Advice and Innovative Ideas	Responsiveness and Prompt Follow-Up on Client Requests	Sufficient Professional Resources
	Usefulness of Written Investment Reviews	

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METHODOLOGY FOR THIS AWARD: Between July and October 2021, Coalition Greenwich conducted interviews with 811 individuals from 661 of the largest tax-exempt funds in the United States. These U.S.-based institutional investors are corporate and union funds, public funds, and endowment and foundation funds, with either pension or investment pool assets greater than \$150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset management and investment consulting providers, including qualitative assessments of those firms soliciting their business and detailed information on important market trends.



2nd Quarter 2022 Market Environment



The Economy

- Global economic growth continued to slow during the 2nd quarter as global central banks tightened monetary policy in order to fight persistently high inflation. Additionally, rising geopolitical concerns related to Russia's continued action in Ukraine, China's zero-Covid policy, and social unrest in emerging markets all contributed to the slowdown.
- The US Federal Reserve Bank (the Fed) increased interest rates twice during the quarter by a total of 1.25%. June's rate increase of 0.75% was the largest interest rate increase since the early 1990s. The Fed indicated that its primary focus is arresting the increase in inflation which could require additional rate increases.
- The US labor market continues to be a source of strength with the unemployment rate holding steady at 3.6% in June. The pace of job growth remains above the market's expectations with 390,000 and 372,000 new jobs created in May and June, respectfully. Despite these gains, the number of available workers entering the workforce remains significantly below the pre-pandemic high.
- The US housing market showed signs of cooling as higher mortgage rates pushed many buyers out of the market. Importantly, housing starts and new building permits continued their downward trend which suggests future new inventory may fall short of demand. Finally, home price appreciation continued to increase as measured by the Cash-Shiller Home Price Index.

Equity (Domestic and International)

- US equities declined broadly during the 2nd quarter as worries regarding inflation, sharply higher interest rates, rising recession risk, and continued geopolitical events weighed on the equity market. Large cap value was the least negative (-12.2%) segment of the domestic equity market relative to other styles and capitalizations for the second consecutive quarter. Mid-cap growth was the worst performing style, falling 21.1% for the period.
- International stocks also struggled during the 2nd quarter as the continuing conflict in Ukraine and persistently high inflation drove markets lower. Western Europe was negatively affected by rising energy prices due to continued restrictions on purchases from Russia. Additionally, both the Euro and Yen currencies fell against the US dollar (USD) because of increasing uneasiness over future economic growth.

Fixed Income

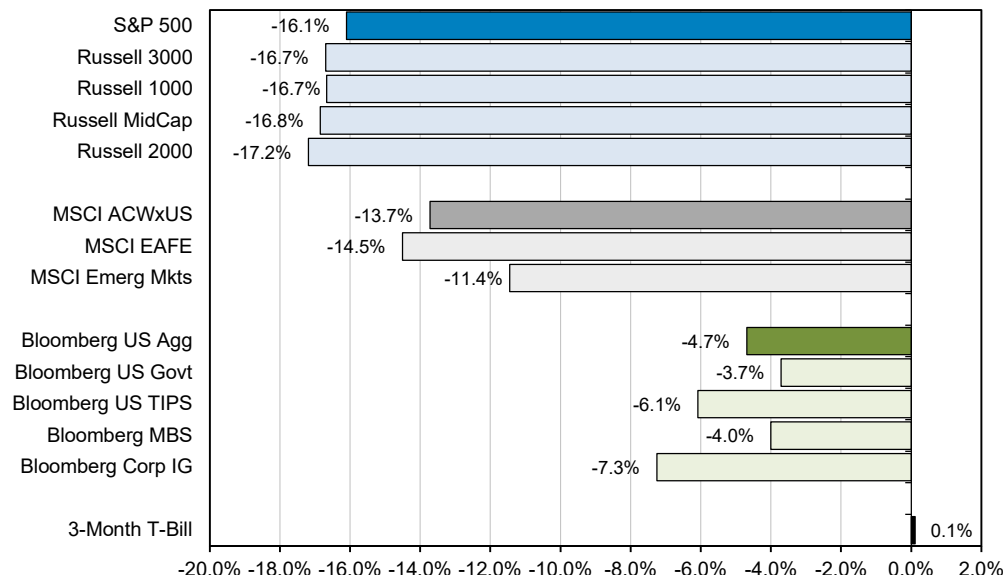
- Concerns about current inflation levels, combined with the Fed's stated commitment to continue raising interest rates, were the primary drivers of return during the 2nd quarter. US interest rates moved significantly higher during the quarter with the US 10-Year Treasury bond rising 63 basis points to close at a yield of 2.98%.
- Performance was broadly negative across all bond market sectors during the quarter with US Treasury bonds holding up the most as market volatility increased.
- Investment grade corporate bonds underperformed higher quality mortgage-backed and US Treasury bonds during the quarter. High yield bonds also lagged their peers as fears over future economic growth and weaker corporate earnings drove credit spreads wider.
- Counterintuitively, TIPS underperformed nominal US Treasury bonds during the quarter as the bond market's future expectation for inflation declined.

Market Themes

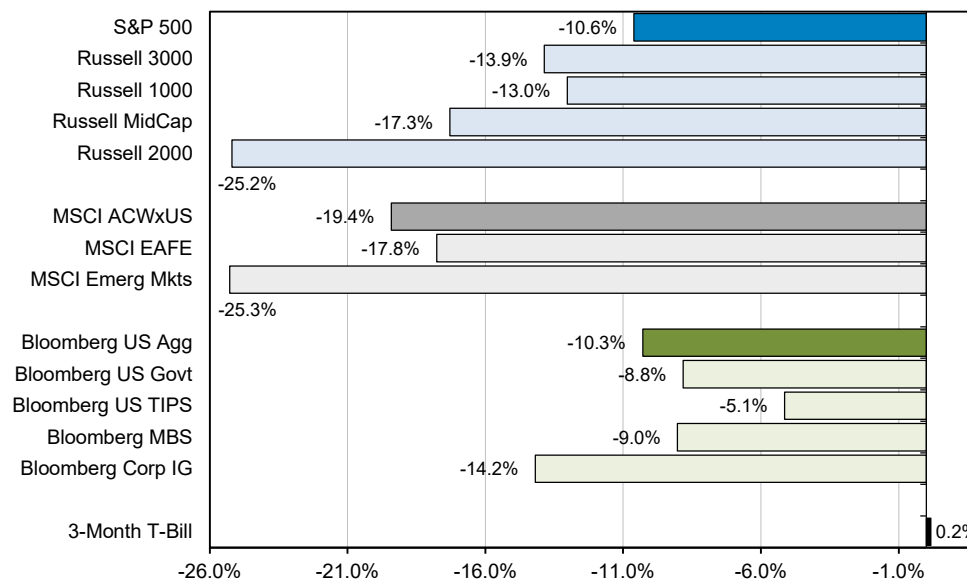
- The pace of global central bank monetary tightening increased during the quarter with the both the Fed and Bank of England raising interest rates. The European Central Bank also hinted it would begin raising rates during the 3rd quarter.
- The crisis in Ukraine continues to negatively impact global economic growth. Specifically, recently imposed restrictions will likely result in higher energy costs in Europe just as economic growth begins to slow.
- US equity markets experienced their second consecutive negative quarter of performance and their worst start to a calendar year since the 1970s. Growth-oriented stocks significantly underperformed value stocks as investors' fears about rising inflation and future economic growth carried through to asset prices. Historically, growth stocks have underperformed value stocks as the economy slows.
- Interest rates continued to rise across the Treasury yield curve during the quarter as investors believe the Fed will continue to raise interest rates to fight inflation. The shape of the yield curve remained relatively flat between two- and ten-year maturities. Historically, the yield curve has been used as a leading indicator to predict the market's expectations of a recession.

- Broad US equity markets continued their recent trend delivering negative returns during the 2nd quarter of 2022. A variety of factors contributed to performance including persistently high inflation, the potential for future interest rate increases, geopolitical events in Ukraine, and concerns related to slower economic growth. For the period, the S&P 500 large cap benchmark returned -16.1%, compared to -16.8% for mid-cap and -17.2% for small cap indices.
- Developed market international equities also suffered negative results for the 2nd quarter. Europe continues to be negatively impacted by the ongoing crisis in Ukraine. Recently, restrictions related to Russian energy imports were imposed leading to further energy cost increases. For the quarter, the MSCI EAFE Index declined by -14.5%.
- Emerging markets were also under pressure due to the continued conflict in Ukraine and China's "Zero Covid" policy. During the period, the MSCI Emerging Markets Index fell by -11.4%
- Bond market performance was broadly negative for the quarter due to rising inflation and the prospect of additional interest rate increases. The Bloomberg (BB) US Aggregate Index returned -4.7% for the period while Investment Grade Corporate bonds posted a return of -7.3%. US Treasury bonds held up the most for the period, but still declined by -3.7%.
- The quarter's negative performance added to challenged returns of developed equity markets over the trailing 1-year period. The primary drivers of returns during the period were rising inflation, the path of interest rates, and future economic growth. The S&P 500 large cap stock index led relative equity market performance for the year but still returned a disappointing -10.6%. The downside outlier was the Russell 2000 small cap index, which declined by -25.3% for the year.
- Similar to domestic equities, the developed international and emerging markets suffered negative returns over the trailing 1-year period. The developed market MSCI EAFE Index posted a return of -17.8% while the MSCI Emerging Markets Index pulled back by -25.3%. Economic growth slowed throughout the year as monetary stimulus wore off and it became increasingly clear that high inflation levels were not transitory.
- Bond market returns also disappointed over the trailing 1-year period with the BB US Aggregate Index dropping by -10.3%.

Quarter Performance



1-Year Performance

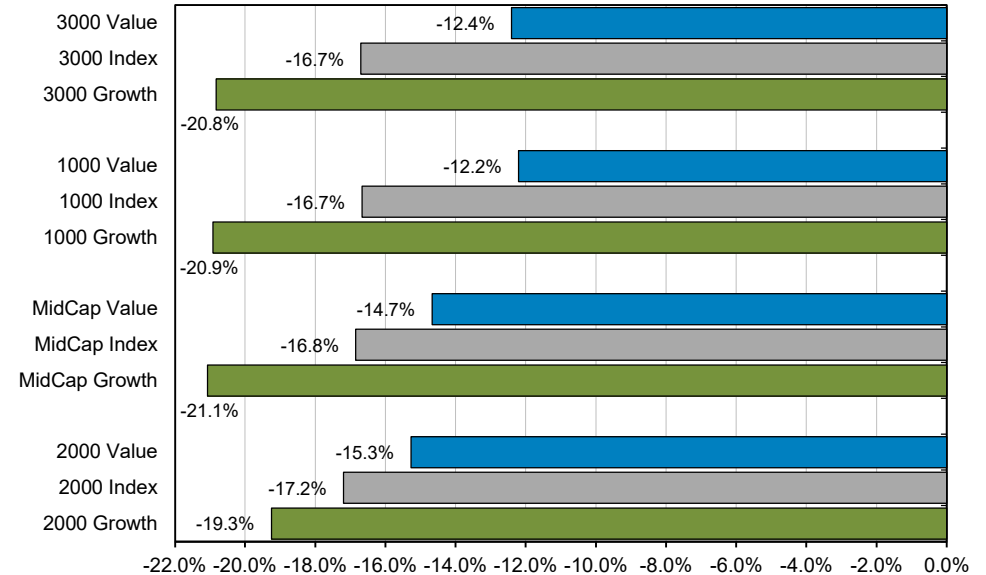


Source: Investment Metrics

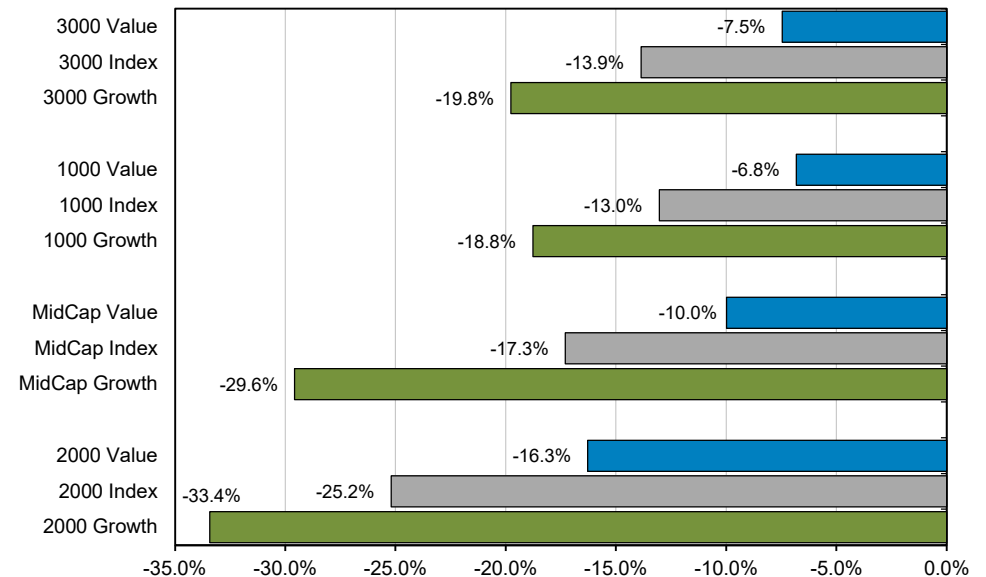


- Volatility increased during the 2nd quarter as each broad US equity benchmark posted negative results across both the style and market capitalization spectrums. Large cap stocks continued their leadership, followed by mid and small cap issues. The Russell 1000 Index declined by -16.7% for the quarter while the Russell Mid Cap Index and the Russell 2000 Index fell by -16.8% and -17.2%, respectively.
- Performance across styles and market capitalizations was disparate during the quarter. Value stocks handily outpaced their growth counterparts across market capitalizations. For the period, the Russell 1000 Value Index was the least negative performing style index, posting a weak return of -12.2%. Mid cap and large cap growth stocks fell even further with the Mid Cap Growth Index declining by -21.1% and the Russell 1000 Growth Index posting a return of -20.9%.
- Performance across all market capitalizations and styles were also negative over the trailing 1-year period. Much like the 2nd quarter, large cap stocks were down less than mid and small cap stocks for the 1-year period. The Russell 1000 Index returned -13.0% for the year but was down significantly less than both its mid and small cap growth index counterparts. The downside outlier during the period was the Russell 2000 Index which fell by -25.2%.
- The return dispersion across market styles was also wide for the trailing 1-year period and value stocks were down less than growth stocks by a two-to-one margin across large, mid and small style-based indexes. The return dispersion was extreme with the Russell 1000 Value Index returning -6.8%, and at the other end of the spectrum, the Russell 2000 Growth Index posting a return of -33.4%.

Quarter Performance - Russell Style Series



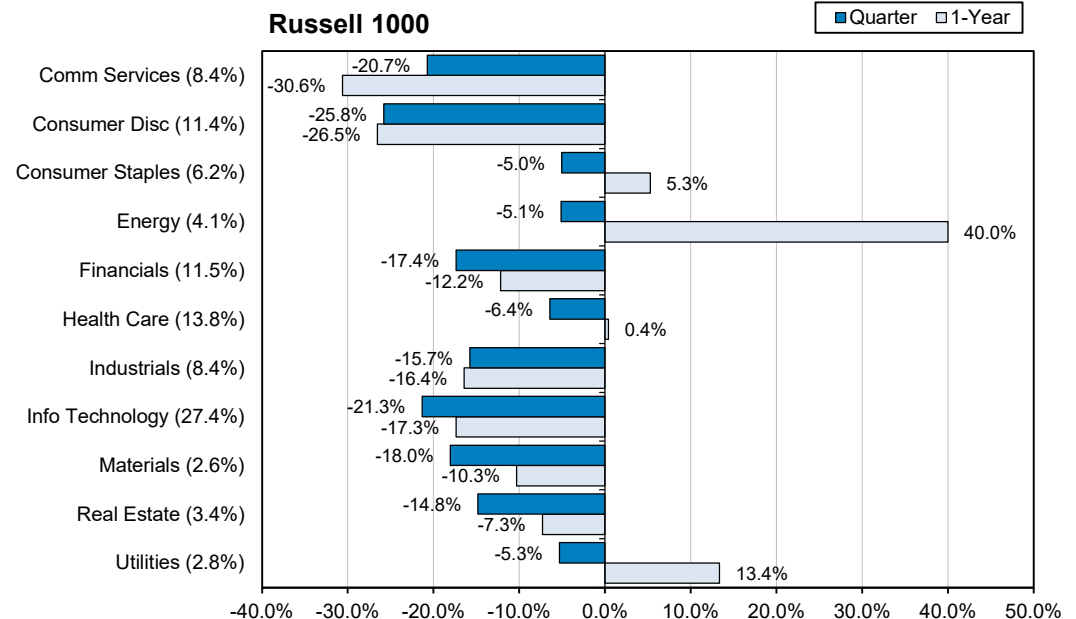
1-Year Performance - Russell Style Series



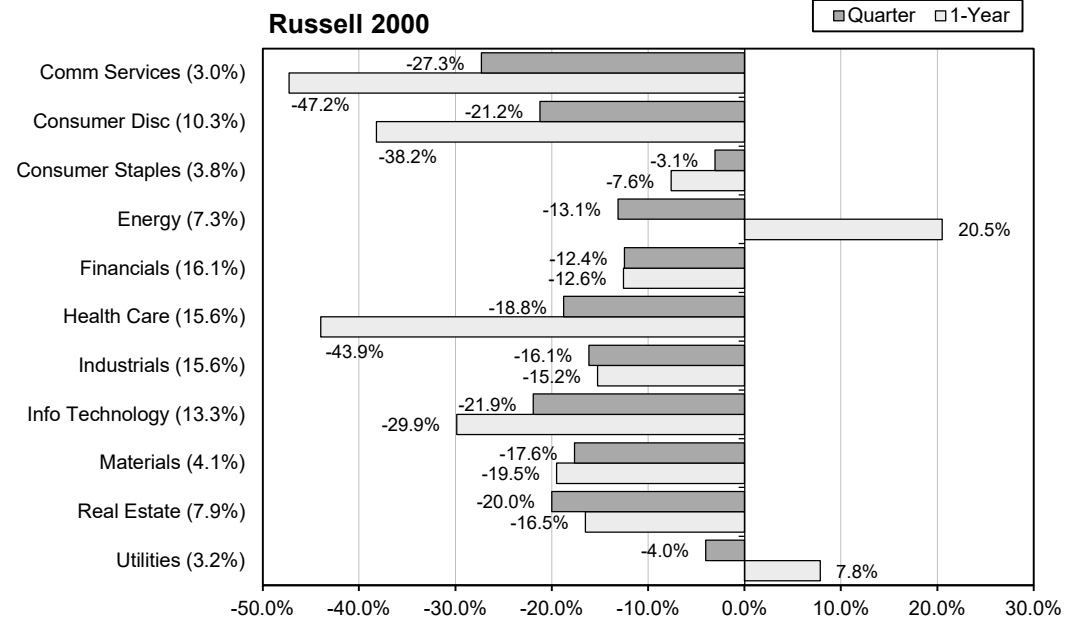
Source: Investment Metrics



- Economic sector performance was negative across all eleven large cap economic sectors for the 2nd quarter. Only four sectors were down less than the return of the broader Russell 1000 Index (-16.7%) on a relative basis during the period.
- Defensive sectors including consumer staples (-5.0%) energy (-5.1%), and utilities (-5.3%) were the least negative performing sectors for the quarter. Concerns about a potential economic slowdown drove the performance of consumer staples during the period. Energy prices remained elevated which acted as a tailwind for the sector. Economically sensitive sectors such as consumer discretionary (-25.8%), information technology (-21.3%), and communication services (-20.7%), significantly underperformed the broader index for the quarter.
- For the full year, seven sectors exceeded the return of the broad large cap benchmark: energy (40.0%), utilities (13.4%), consumer staples (5.3%), health care (0.4%), real estate (-7.3%), materials (-10.3%), and financials (-12.2%). The weakest economic sector performance in the Russell 1000 for the year was communication services (-30.6%).



- Small cap sector performance was also broadly negative for the 2nd quarter with all sectors posting negative performance. Five sectors were down less than the return of the broader Russell 2000 Index (-17.2%) on a relative basis. The consumer staples (-3.1%) sector held up the most for the quarter and the communication services (-27.3%) sector the was the weakest.
- For the trailing 1-year period, seven of the eleven small sectors outpaced the broad benchmark's return (-25.2%). However, only two defensive sectors posted positive performance for the year: energy (20.5%) and utilities (7.8%). The weakest sector over the trailing year was communication services (-47.2%).



Source: Morningstar Direct
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



The Market Environment
Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000
As of June 30, 2022

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	5.92%	-21.6%	0.4%	Information Technology
Microsoft Corp	5.44%	-16.5%	-4.4%	Information Technology
Amazon.com Inc	2.67%	-34.8%	-38.3%	Consumer Discretionary
Alphabet Inc Class A	1.85%	-21.6%	-10.8%	Communication Services
Alphabet Inc Class C	1.70%	-21.7%	-12.7%	Communication Services
Tesla Inc	1.62%	-37.5%	-0.9%	Consumer Discretionary
Berkshire Hathaway Inc Class B	1.39%	-22.6%	-1.8%	Financials
UnitedHealth Group Inc	1.36%	1.1%	30.0%	Health Care
Johnson & Johnson	1.32%	0.8%	10.5%	Health Care
Meta Platforms Inc Class A	1.05%	-27.5%	-53.6%	Communication Services

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Ollie's Bargain Outlet Holdings Inc	0.01%	36.8%	-30.2%	Consumer Discretionary
H&R Block Inc	0.02%	36.6%	56.7%	Consumer Discretionary
United Therapeutics Corp	0.03%	31.3%	31.3%	Health Care
Grocery Outlet Holding Corp	0.01%	30.0%	23.0%	Consumer Staples
Pilgrims Pride Corp	0.00%	24.4%	40.8%	Consumer Staples
Seagen Inc Ordinary Shares	0.07%	22.8%	12.1%	Health Care
Lamb Weston Holdings Inc	0.03%	19.7%	-10.0%	Consumer Staples
Post Holdings Inc	0.01%	18.9%	14.1%	Consumer Staples
Monster Beverage Corp	0.10%	16.0%	1.5%	Consumer Staples
American Campus Communities Inc	0.03%	15.2%	41.8%	Real Estate

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Carvana Co Class A	0.01%	-81.1%	-92.5%	Consumer Discretionary
Coinbase Global Inc Ord Shrs - Class A	0.02%	-75.2%	-81.4%	Financials
Upstart Holdings Inc Ordinary Shares	0.01%	-71.0%	-74.7%	Financials
Lyft Inc Class A	0.01%	-65.4%	-78.0%	Industrials
Peloton Interactive Inc	0.01%	-65.3%	-92.6%	Consumer Discretionary
Cloudflare Inc	0.03%	-63.5%	-58.7%	Information Technology
Unity Software Inc Ordinary Shares	0.02%	-62.9%	-66.5%	Information Technology
Affirm Holdings Inc Ord Shrs - Class A	0.01%	-61.0%	-73.2%	Information Technology
Wayfair Inc Class A	0.01%	-60.7%	-86.2%	Consumer Discretionary
Royal Caribbean Group	0.02%	-58.3%	-59.1%	Consumer Discretionary

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Biohaven Pharmaceutical Hldg Co Ltd	0.40%	22.9%	50.1%	Health Care
ShockWave Medical Inc	0.30%	-7.8%	0.8%	Health Care
Chart Industries Inc	0.27%	-2.6%	14.4%	Industrials
Halozyme Therapeutics Inc	0.26%	10.3%	-3.1%	Health Care
SailPoint Technologies Holdings Inc	0.26%	22.5%	22.7%	Information Technology
SouthState Corp	0.25%	-4.8%	-3.3%	Financials
Southwest Gas Holdings Inc	0.25%	12.0%	35.9%	Utilities
Stag Industrial Inc	0.24%	-24.5%	-14.5%	Real Estate
Agree Realty Corp	0.24%	9.8%	6.4%	Real Estate
RBC Bearings Inc	0.23%	-4.6%	-7.3%	Industrials

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Redbox Entertainment Inc Class A	0.00%	213.6%	N/A	Communication Services
Turning Point Therapeutics Inc	0.15%	180.3%	-3.6%	Health Care
Veru Inc	0.03%	134.0%	40.0%	Consumer Staples
GTY Technology Holdings Inc Class A	0.01%	93.8%	-12.0%	Information Technology
Day One Biopharmaceuticals Inc	0.02%	80.4%	-21.4%	Health Care
SIGA Technologies Inc	0.02%	73.3%	95.7%	Health Care
Sierra Oncology Inc	0.04%	71.6%	182.4%	Health Care
Scorpio Tankers Inc	0.08%	62.0%	60.1%	Energy
Lulus Fashion Lounge Holdings Inc	0.00%	60.0%	N/A	Consumer Discretionary
Convey Health Solutions Hldg Ord Shrs	0.01%	59.0%	-8.6%	Health Care

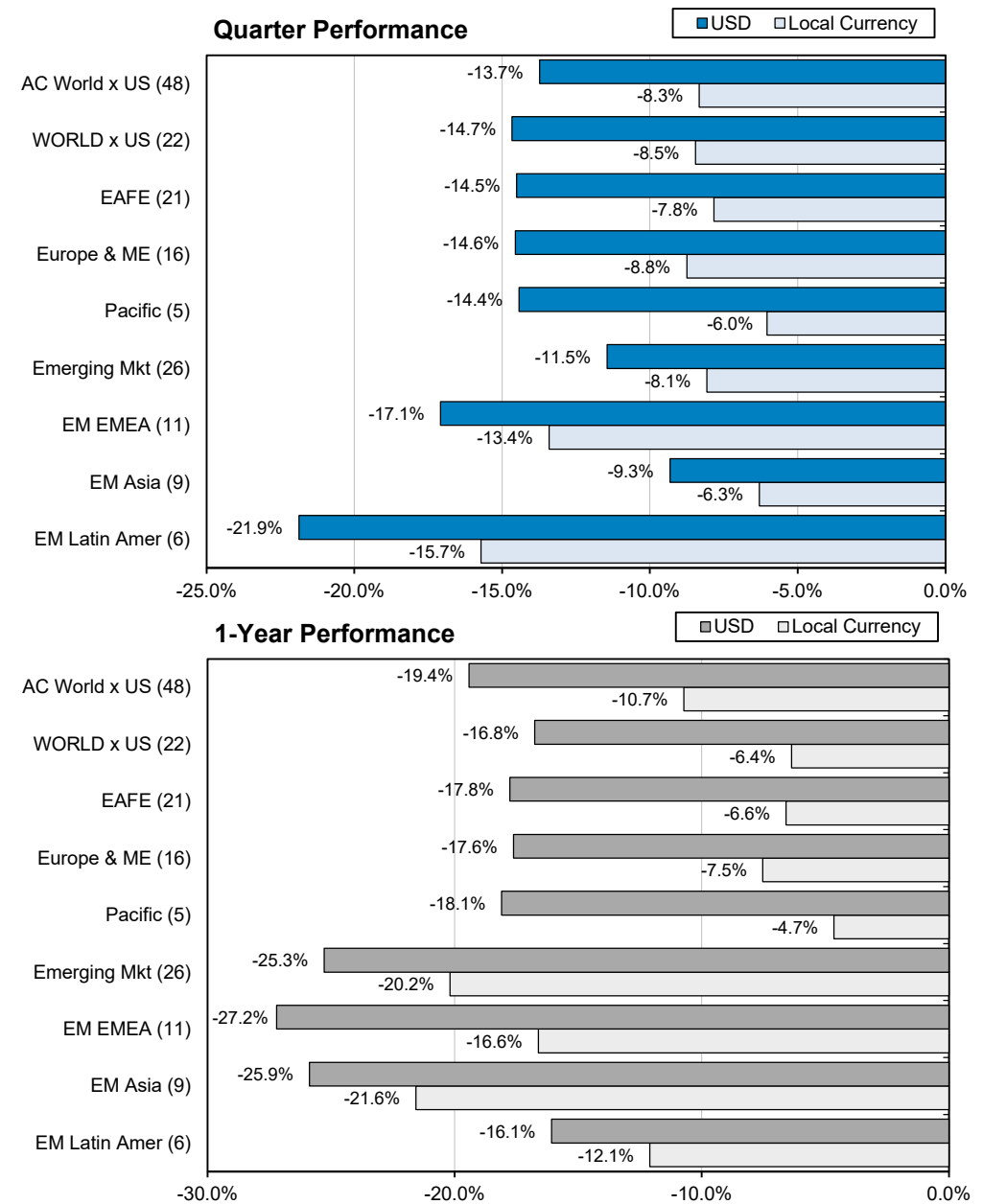
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Applied Blockchain Inc	0.00%	-93.3%	-90.1%	Information Technology
TeraWulf Inc	0.00%	-85.7%	N/A	Information Technology
Velo3D Inc	0.00%	-85.2%	N/A	Industrials
Avaya Holdings Corp	0.01%	-82.3%	-91.7%	Information Technology
Bird Global Inc Class A	0.00%	-82.2%	N/A	Industrials
Core Scientific Inc Ord Shares - Class A	0.01%	-81.9%	N/A	Information Technology
Boxed Inc	0.00%	-81.8%	N/A	Consumer Discretionary
Marathon Digital Holdings Inc	0.02%	-80.9%	-83.0%	Information Technology
Riot Blockchain Inc	0.02%	-80.2%	-88.9%	Information Technology
Endo International PLC	0.00%	-79.8%	-90.0%	Health Care

Source: Morningstar Direct



- Performance across all developed and emerging international equity indexes tracked in the chart were negative during the quarter in both US dollar (USD) and local currency (LC) terms. The developed market MSCI EAFE Index returned -14.5% in USD and -7.8% in LC terms for the period, while the MSCI Emerging Markets Index declined by -11.5% in USD and -8.1% in LC terms. Developed markets were negatively impacted by rising inflation and tighter monetary policy. Emerging markets, especially those that export commodities, held up better.

- The trailing 1-year results for both international developed and emerging markets were broadly negative across all regions and currencies. The MSCI EAFE Index returned -17.8% in USD for the year and -6.6% in LC terms. Similarly, returns across emerging markets were broadly lower with the MSCI Emerging Markets Index falling by -25.3% in USD and -20.2% in LC terms. Within emerging markets, the EMEA region was the worst performing, declining by -27.2% in USD and -16.6% in LC terms. The region was negatively affected by the conflict in Ukraine.



Source: MSCI Global Index Monitor (Returns are Net)

The Market Environment
US Dollar International Index Attribution & Country Detail
As of June 30, 2022

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.0%	-10.9%	-20.7%
Consumer Discretionary	11.3%	-15.5%	-27.6%
Consumer Staples	10.9%	-8.4%	-14.0%
Energy	4.8%	-4.1%	21.4%
Financials	17.7%	-13.9%	-12.3%
Health Care	13.9%	-9.5%	-9.9%
Industrials	14.9%	-18.5%	-24.4%
Information Technology	7.8%	-23.5%	-30.0%
Materials	7.5%	-21.0%	-18.6%
Real Estate	2.9%	-15.8%	-20.9%
Utilities	3.5%	-11.8%	-12.2%
Total	100.0%	-14.5%	-17.8%

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.5%	-10.7%	-26.6%
Consumer Discretionary	11.7%	-8.4%	-31.1%
Consumer Staples	8.9%	-7.6%	-14.0%
Energy	6.0%	-4.7%	8.2%
Financials	20.3%	-14.3%	-10.4%
Health Care	9.8%	-9.6%	-15.8%
Industrials	11.8%	-17.1%	-22.1%
Information Technology	11.0%	-22.6%	-31.6%
Materials	8.0%	-21.4%	-19.1%
Real Estate	2.5%	-13.5%	-22.5%
Utilities	3.4%	-9.5%	-7.5%
Total	100.0%	-13.7%	-19.4%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	10.6%	-10.5%	-32.9%
Consumer Discretionary	14.9%	6.3%	-37.2%
Consumer Staples	6.1%	-4.6%	-17.7%
Energy	5.0%	-5.9%	-21.7%
Financials	21.2%	-14.1%	-8.7%
Health Care	4.0%	-8.8%	-42.3%
Industrials	5.6%	-9.5%	-17.8%
Information Technology	19.2%	-20.8%	-28.9%
Materials	8.4%	-20.6%	-24.2%
Real Estate	2.1%	-6.1%	-27.6%
Utilities	2.9%	-4.4%	3.3%
Total	100.0%	-11.5%	-25.3%

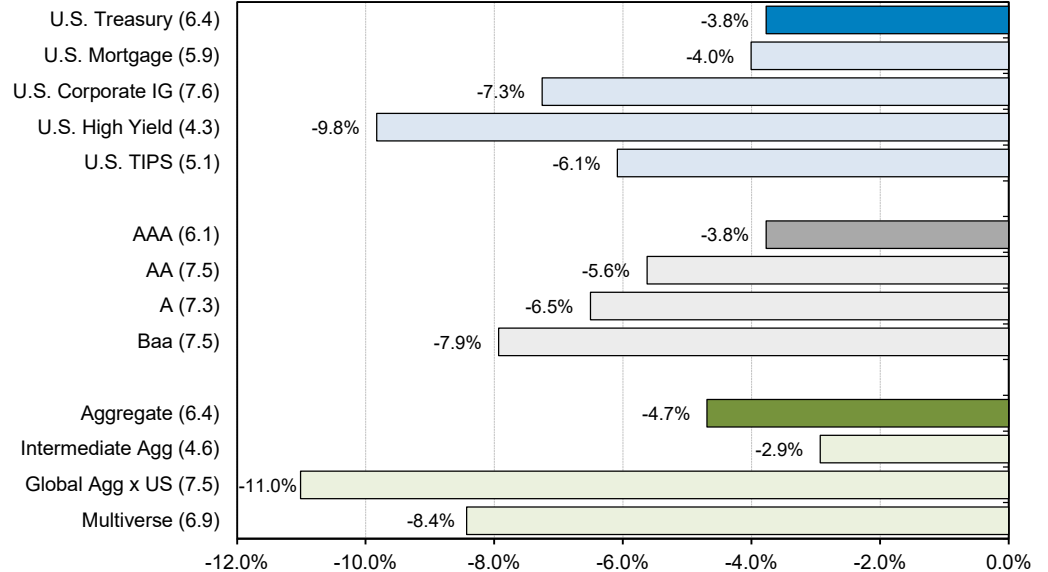
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.3%	13.8%	-14.6%	-19.9%
United Kingdom	15.9%	9.9%	-10.5%	-4.0%
France	11.2%	7.0%	-14.8%	-18.3%
Switzerland	10.5%	6.5%	-14.5%	-12.7%
Australia	7.8%	4.9%	-18.1%	-13.1%
Germany	7.8%	4.8%	-18.1%	-31.2%
Netherlands	4.1%	2.6%	-19.0%	-28.4%
Sweden	3.4%	2.1%	-21.4%	-31.0%
Hong Kong	3.3%	2.1%	-1.1%	-15.2%
Denmark	2.8%	1.7%	-12.0%	-10.5%
Spain	2.5%	1.6%	-8.4%	-16.3%
Italy	2.3%	1.4%	-17.7%	-22.7%
Singapore	1.5%	0.9%	-16.8%	-21.0%
Belgium	1.0%	0.6%	-13.4%	-21.0%
Finland	1.0%	0.6%	-10.9%	-21.7%
Norway	0.8%	0.5%	-14.8%	-1.6%
Israel	0.8%	0.5%	-20.0%	-18.1%
Ireland	0.6%	0.4%	-19.6%	-35.4%
Portugal	0.2%	0.1%	-6.1%	1.4%
Austria	0.2%	0.1%	-17.2%	-23.1%
New Zealand	0.2%	0.1%	-16.9%	-25.8%
Total EAFE Countries	100.0%	62.2%	-14.5%	-17.8%
Canada		8.1%	-15.8%	-8.0%
Total Developed Countries		71.4%	-4.8%	3.0%
China		10.5%	3.4%	-31.8%
Taiwan		4.3%	-19.8%	-20.4%
India		3.8%	-13.7%	-4.8%
Korea		3.4%	-20.9%	-38.5%
Brazil		1.4%	-24.4%	-23.3%
Saudi Arabia		1.3%	-12.5%	10.3%
South Africa		1.1%	-23.0%	-13.2%
Mexico		0.6%	-15.2%	-0.7%
Thailand		0.6%	-10.6%	-7.5%
Indonesia		0.5%	-9.0%	16.1%
Malaysia		0.4%	-12.8%	-9.3%
United Arab Emirates		0.4%	-19.4%	14.7%
Qatar		0.3%	-10.8%	17.4%
Kuwait		0.2%	-7.7%	22.8%
Philippines		0.2%	-19.5%	-17.8%
Poland		0.2%	-27.1%	-35.1%
Chile		0.2%	-15.9%	-10.1%
Turkey		0.1%	-10.9%	-9.0%
Peru		0.1%	-30.2%	-7.5%
Greece		0.1%	-17.0%	-17.5%
Colombia		0.1%	-28.0%	3.3%
Czech Republic		0.1%	-3.7%	27.4%
Hungary		0.1%	-26.3%	-42.2%
Egypt		0.0%	-20.4%	-24.8%
Total Emerging Countries		29.7%	-11.5%	-25.3%
Total ACWixUS Countries		100.0%	-13.7%	-19.4%

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

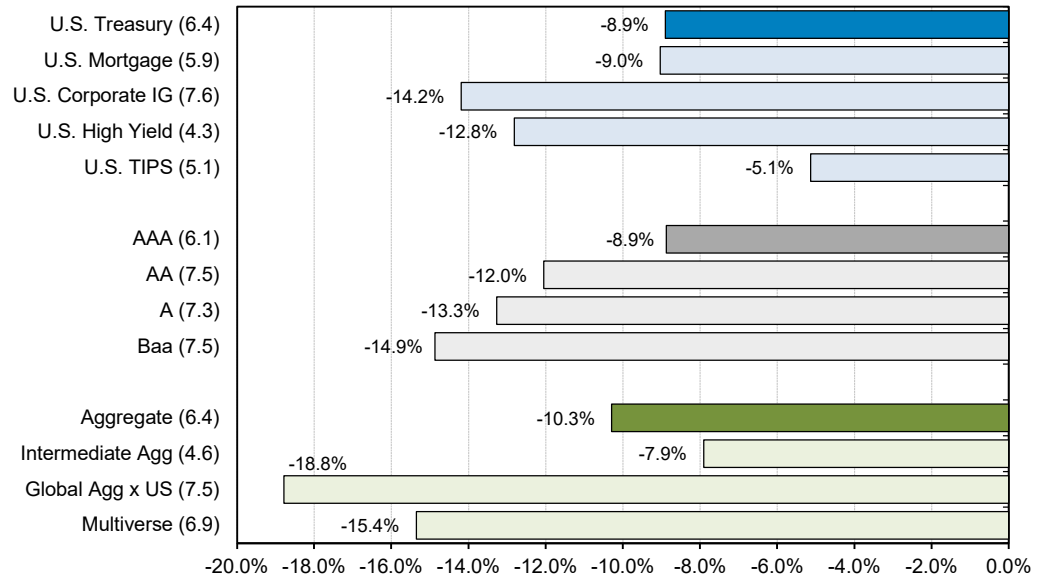


- Fixed income markets were broadly negative during the 2nd quarter. Investors remained focused on rising inflation and the potential of future Fed rate increases to combat it. As a result, US Treasury bond yields were higher across the maturity curve during the quarter.
- The return for the BB US Aggregate Bond Index, the bellwether investment grade benchmark, was down -4.7% for the period.
- Performance across the investment grade index's segments was also negative during the period with the US Corporate Investment Grade bonds declining -7.3% and the US Mortgage index component posting a return of -4.0%.
- US Treasury bonds were the quarter's least negative segment, returning -3.8% and high yield bonds were the worst performing, declining by -9.8%.
- Outside of domestic markets, the BB Global Aggregate ex US Index fell by -11.0% for the quarter. Like international stocks, global bond index performance was negatively impacted by the strengthening USD, which acted as a drag on USD index returns. Additionally, yields in both German and Japan, two of the largest issuers in the benchmark, moved markedly higher during the period.
- Over the trailing 1-year period, domestic investment grade benchmark performance was negative and led lower by investment grade corporate (-14.2%) and mortgage (-9.0%) bonds. US TIPS (-5.1%) were down less than nominal US Treasury bonds (-8.9%). The bellwether BB US Aggregate Bond Index declined by -10.3% for the year.
- Primarily due to their shorter maturity profile, lower quality high yield corporate bonds fell by less than their investment grade counterparts with the BB US High Yield Index returning -12.8% for the period.
- Non-US bonds have been under significant pressure over the past year with the developed market BB Global Aggregate ex US Index falling by -18.8%. The combination of rising inflation, higher interest rates, a longer maturity profile, and USD strength contributed to weak index performance for the year.

Quarter Performance



1-Year Performance

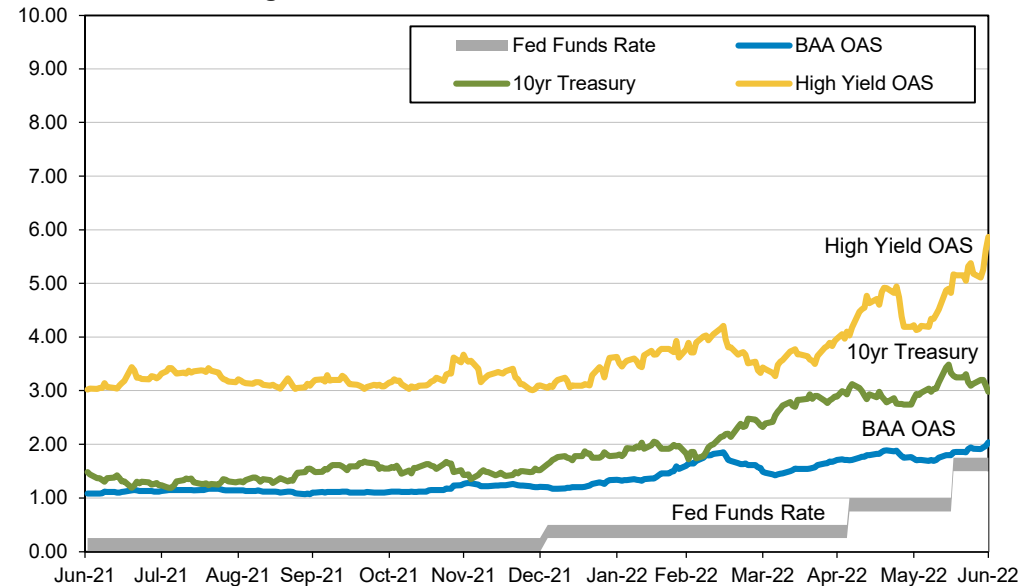


Source: Bloomberg

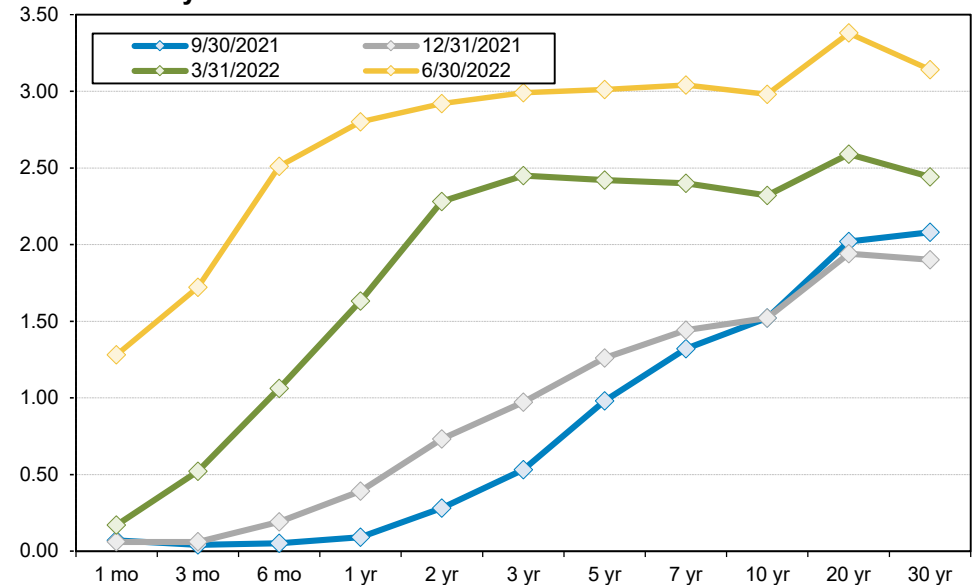


- The gray band across the graph illustrates the range of the current Fed Funds Rate. In the 2nd quarter this year, the Fed raised the upper end of its target rate range from 0.50% to 1.75%. During its recent June meeting, the Federal Open Market Committee (FOMC) stated that it remains committed to fighting higher inflation and will consider future interest rate increases. Importantly, the FOMC stated that it will begin lowering the size of the balance sheet by not reinvesting proceeds from maturing bonds.
- The yield on the US 10-year Treasury (green line) ended the period higher as concerns over the pace of inflation, combined with the Fed's announced rate increase, drove yields higher. After reaching a high of nearly 3.50% during June, interest rates traded fell for the remainder of the quarter. The yield on the US 10-year Treasury was 2.98% on June 30th.
- The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury investment grade issues. For the full year, the spread widened to 2.04% from 1.07%. High Yield OAS moved significantly higher over the latter part of the year as spreads rose from 3.04% to 5.87%. High Yield spreads began moving wider during the year on concerns over slowing economic growth which raises the specter of a potential increase in defaults.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. The yield curve shifted significantly higher across all maturities during the 2nd quarter of 2022 following the Fed's decision to raise interest rates by 1.25%. The shape of the yield curve normalized during the quarter as longer-term interest rates moved above short-term rates. As of the end of the quarter, the spread between 2-year and 10-year rates was positive. Historically, market expectations for recession increase when longer-term interest rates trade below their short-term peers.

1-Year Trailing Market Rates



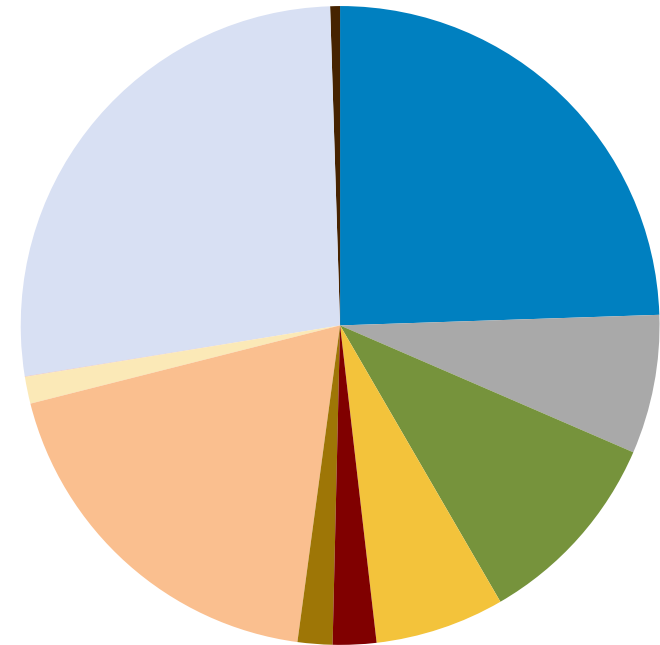
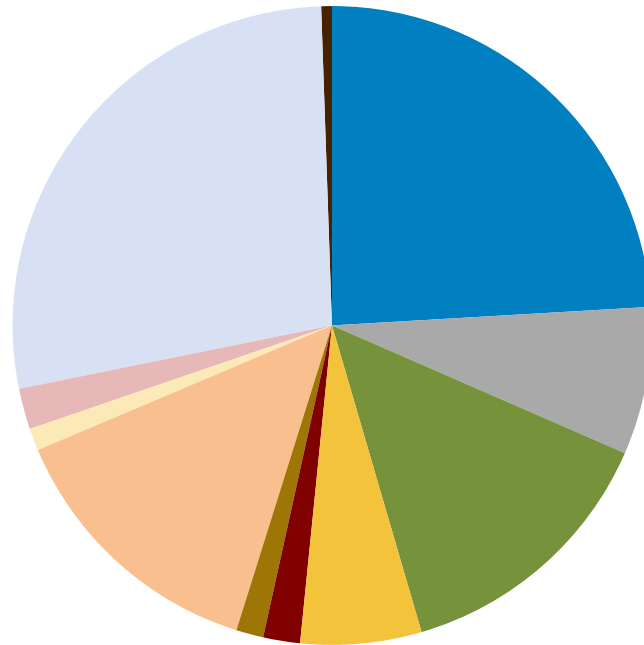
Treasury Yield Curve



Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)

June 30, 2021 : \$328,087,131

June 30, 2022 : \$290,115,416



Asset Allocation by Segment

Segments	Market Value	Allocation
Domestic Equity	78,971,898	24.1
International Equity	24,532,576	7.5
Global Equity	45,708,158	13.9
Domestic Fixed Income	20,074,521	6.1
Loans	6,116,742	1.9
Other Fixed Income	4,512,255	1.4
VT Plus	45,220,804	13.8
Real Estate	3,703,743	1.1
Cash	6,777,656	2.1
Balanced	90,678,839	27.6
Brokerage	1,789,939	0.5

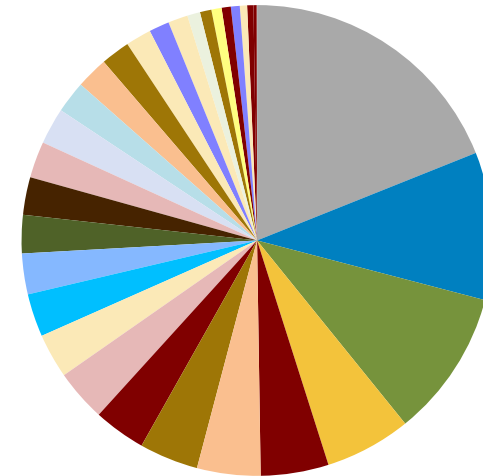
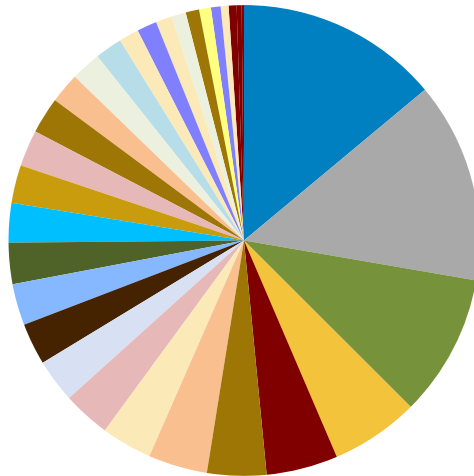
Asset Allocation by Segment

Segments	Market Value	Allocation
Domestic Equity	70,983,067	24.5
International Equity	20,394,289	7.0
Global Equity	29,418,900	10.1
Domestic Fixed Income	18,964,974	6.5
Loans	6,383,765	2.2
Other Fixed Income	5,100,347	1.8
VT Plus	54,933,760	18.9
Real Estate	3,941,343	1.4
Cash	68,208	0.0
Balanced	78,470,981	27.0
Brokerage	1,455,783	0.5



June 30, 2021 : \$328,087,131

June 30, 2022 : \$290,115,416



Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
American Funds The New Economy Fund (RNGHX)	45,708,158	13.9	MissionSquare PLUS Fund R10	54,933,760	18.9
MissionSquare PLUS Fund R10	45,220,804	13.8	American Funds The New Economy Fund (RNGHX)	29,418,900	10.1
Vanguard Institutional Index (VINIX)	32,075,751	9.8	Vanguard Institutional Index (VINIX)	29,332,901	10.1
TIAA-CREF Lifecycle 2035 (TCYPX)	19,891,231	6.1	TIAA-CREF Lifecycle 2035 (TCYPX)	17,176,037	5.9
TIAA-CREF Lifecycle 2030 (TCHPX)	16,116,754	4.9	TIAA-CREF Lifecycle 2030 (TCHPX)	13,505,559	4.7
TIAA-CREF Lifecycle 2040 (TCZPX)	13,325,854	4.1	Metropolitan West Total Return Bond (MWTIX)	12,610,704	4.3
Metropolitan West Total Return Bond (MWTIX)	13,277,555	4.0	TIAA-CREF Lifecycle 2040 (TCZPX)	11,752,135	4.1
Carillon Scout Mid Cap (UMBMX)	11,427,985	3.5	Vanguard Equity-Income (VEIRX)	10,372,362	3.6
TIAA-CREF Lifecycle 2025 (TCQPX)	10,723,920	3.3	TIAA-CREF Lifecycle 2025 (TCQPX)	10,351,539	3.6
American Funds SmallCap World Fund (RSLDX)	9,767,341	3.0	Carillon Scout Mid Cap (UMBMX)	8,895,578	3.1
Goldman Sachs Small Cap Value (GSSIX)	9,412,355	2.9	TIAA-CREF International Equity Index (TRIPX)	8,574,401	3.0
TIAA-CREF Lifecycle 2045 (TTFPX)	9,350,388	2.8	TIAA-CREF Lifecycle 2045 (TTFPX)	8,096,957	2.8
Vanguard Small-Cap Index Fund (VSMAX)	9,290,963	2.8	Vanguard Small-Cap Index Fund (VSMAX)	7,634,981	2.6
TIAA-CREF International Equity Index (TRIPX)	8,870,119	2.7	Goldman Sachs Small Cap Value (GSSIX)	7,483,921	2.6
Invesco Diversified Dividend (DDFIX)	8,554,786	2.6	Vanguard Mid-Cap Index Fund (VIMAX)	7,263,324	2.5
Vanguard Mid-Cap Index Fund (VIMAX)	8,210,057	2.5	American Funds SmallCap World Fund (RSLDX)	7,238,120	2.5
TIAA-CREF Lifecycle 2020 (TCWPX)	8,202,147	2.5	Loan Fund	6,383,765	2.2
Vanguard Total Bond Market Index (VBTIX)	6,796,967	2.1	Vanguard Total Bond Market Index (VBTIX)	6,354,270	2.2
Vanguard Treasury Money Market (VUSXX)	6,777,656	2.1	TIAA-CREF Lifecycle 2020 (TCWPX)	5,774,467	2.0
Loan Fund	6,116,742	1.9	BlackRock High Yield Bond (BHYIX)	5,100,347	1.8



Asset Allocation By Manager

457 Total Fund

As of June 30, 2022

	Market Value	Allocation		Market Value	Allocation
BlackRock High Yield Bond (BHYIX)	4,512,255	1.4	TIAA-CREF Lifecycle 2050 (TCLPX)	4,041,807	1.4
TIAA-CREF Lifecycle 2050 (TCLPX)	4,449,666	1.4	DFA Real Estate (DFREX)	3,941,343	1.4
DFA Real Estate (DFREX)	3,703,743	1.1	DFA Emerging Markets Small Cap (DEMSX)	2,547,514	0.9
DFA Emerging Markets Small Cap (DEMSX)	3,224,469	1.0	TIAA-CREF Lifecycle 2015 (TCFPX)	2,279,250	0.8
TIAA-CREF Lifecycle 2015 (TCFPX)	3,010,343	0.9	Lazard International Equity R6 (LZIEX)	2,034,253	0.7
Lazard International Equity R6 (LZIEX)	2,670,647	0.8	TIAA-CREF Lifecycle 2055 (TTRPX)	1,839,426	0.6
TIAA-CREF Lifecycle 2010 (TCTPX)	2,170,433	0.7	TIAA-CREF Lifecycle 2010 (TCTPX)	1,760,207	0.6
TIAA-CREF Self Directed	1,789,939	0.5	TIAA-CREF Self Directed	1,455,783	0.5
TIAA-CREF Lifecycle 2055 (TTRPX)	1,789,209	0.5	TIAA-CREF Lifecycle Retirement Income (TPILX)	1,230,521	0.4
TIAA-CREF Lifecycle Retirement Income (TPILX)	1,113,242	0.3	TIAA-CREF Lifecycle 2060 (TLXPX)	648,349	0.2
TIAA-CREF Lifecycle 2060 (TLXPX)	535,652	0.2	Vanguard Treasury Money Market (VUSXX)	68,208	0.0
Vanguard Equity-Income (VEIRX)	-	0.0	TIAA-CREF Lifecycle 2065 (TSFPX)	14,726	0.0
TIAA-CREF Lifecycle 2065 (TSFPX)	-	0.0	Invesco Diversified Dividend (DDFIX)	-	0.0



**City of Fort Worth 457 Deferred Compensation Plan
Investment Option Performance Review**

As of June 30, 2022

Domestic Equity Funds	Manager Tenure	5 & 10 Year Return > Index		5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Positive 5 & 10 Year Alpha		Watch List
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Vanguard Equity-Income (VEIRX)	1.5	Yes	Yes	21	21	14	8	3.06	2.41	No
Carillon Scout Mid Cap (UMBMX)	15.8	Yes	Yes	11	11	20	22	0.56	0.36	No
Goldman Sachs Small Cap Value (GSSIX)	15.7	No (5)	Yes	70 (2)	40	75 (2)	23	-0.30 (2)	0.63	No

International Equity Funds	Manager Tenure	5 & 10 Year Return > Index		5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Positive 5 & 10 Year Alpha		Watch List
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American Funds The New Economy Fund (RNGHX)	31.6	Yes	Yes	29	N/A (5)	38	N/A (5)	0.42	N/A	No
Lazard International Equity R6 (LZIEY)	30.6	No (5)	No (4)	56 (5)	55 (3)	59 (5)	46	-0.35 (5)	-0.36 (3)	No
American Funds SmallCap World Fund (RSLDX)	22.7	Yes	Yes	33	N/A (5)	38	N/A (5)	1.66	N/A	No
DFA Emerging Markets Small Cap (DEMSX)	12.5	Yes	Yes	15	10	14	10	0.32	1.10	No

Fixed Income & Other Funds	Manager Tenure	5 & 10 Year Return > Index		5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Positive 5 & 10 Year Alpha		Watch List
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Metropolitan West Total Return Bond (MWTIX)	25.4	Yes	Yes	28	6	28	4	0.13	0.68	No
BlackRock High Yield Bond (BHYIX)	14.7	Yes	Yes	17	9	18	13	0.33	0.30	No
DFA Real Estate (DFREX)	10.5	Yes	No (5)	22	15	21	17	0.16	-0.30 (5)	No

Fund meets criteria
Fund does not currently meet criteria
Fund has not met criteria for more than 4 quarters

"More than 4 quarters" evaluation criteria excludes Index Funds



Index Funds	Manager Tenure	5 & 10 Year Track. Error Rank		Watch List
Vanguard Institutional Index (VINIX)	21.7	1	1	No
Vanguard Mid-Cap Index (VIMAX)	24.3	1	1	No
Vanguard Small-Cap Index (VSMAX)	6.3	1	1	No
TIAA-CREF International Equity Index (TRIPX)	17.0	7	9	No
Vanguard Total Bond Market Index (VBTIX)	9.5	6	6	No

Lifecycle Funds	Manager Tenure	5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Heightened Scrutiny
TIAA-CREF Lifecycle Retirement Income (TPILX)	14.8	23	5	31	9	No
TIAA-CREF Lifecycle 2010 (TCTPX)	16.4	33	15	51 (2)	36	No
TIAA-CREF Lifecycle 2015 (TCFPX)	16.4	37	24	49	34	No
TIAA-CREF Lifecycle 2020 (TCWPX)	16.4	41	23	45	32	No
TIAA-CREF Lifecycle 2025 (TCQPX)	16.4	37	20	49	24	No
TIAA-CREF Lifecycle 2030 (TCHPX)	16.4	45	26	54 (4)	26	No
TIAA-CREF Lifecycle 2035 (TCYPX)	16.4	50 (2)	27	56 (4)	23	No
TIAA-CREF Lifecycle 2040 (TCZPX)	16.4	46	22	55 (4)	27	No
TIAA-CREF Lifecycle 2045 (TTFPX)	14.8	38	17	51 (3)	32	No
TIAA-CREF Lifecycle 2050 (TCLPX)	14.8	35	21	50 (3)	35	No
TIAA-CREF Lifecycle 2055 (TTRPX)	11.3	36	21	50 (3)	39	No
TIAA-CREF Lifecycle 2060 (TLXPX)	7.9	N/A (5)	N/A (5)	N/A (5)	N/A (5)	No
TIAA-CREF Lifecycle 2065 (TSFPX)	1.9	N/A (5)	N/A (5)	N/A (5)	N/A (5)	No

Fund meets criteria

Fund does not currently meet criteria

Fund has not met criteria for more than 4 quarters

"More than 4 quarters" evaluation criteria excludes Index Funds



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	2 nd Quarter 2022	1 st Quarter 2022	4 th Quarter 2021	3 rd Quarter 2021	2 nd Quarter 2021
Total Assets (\$M)	\$290.1	\$325.2	\$343.4	\$328.7	\$328.1
Contributions	\$3,898,789	\$3,503,533	\$3,698,206	\$3,221,184	\$3,605,479
Transfers In	\$2,391,281	\$2,551,865	\$1,662,086	\$2,432,632	\$1,284,748
Distributions	\$4,367,283	\$5,044,591	\$3,387,974	\$3,332,868	\$5,099,363
Rollovers Out	N/A*	\$2,116,480	\$1,278,270	\$1,197,830	\$3,069,840
Transfers Out	\$0	\$0	\$0	\$0	\$0
New Loans	\$755,293	\$537,506	\$706,991	\$775,063	\$814,733
No. of Loans	51	44	49	54	55
Excess Plan Revenue Acct	\$68,208	\$69,130	\$69,130	\$69,130	\$68,838
Participants Contributing	3,015	3,028	2,999	2,999	2,994

Estimated amounts provided by TIAA

**TIAA was not able to provide information in time for completion of the report*

Asset Allocation & Performance

	Allocation		Performance(%)													
	Market Value \$	%	QTR		YTD		1 YR		3 YR		5 YR		7 YR		10 YR	
457 Total Fund	290,115,416	100.0														
Domestic Equity																
Vanguard Equity-Income (VEIRX)	10,372,362	3.6	-8.36	(5)	-7.31	(7)	0.51	(7)	9.42	(26)	9.56	(21)	10.06	(11)	11.56	(21)
Russell 1000 Value Index			-12.21	(63)	-12.86	(54)	-6.82	(66)	6.87	(73)	7.17	(74)	7.69	(61)	10.50	(52)
IM U.S. Large Cap Value Equity (MF) Median			-11.35		-12.36		-5.22		8.13		8.07		8.06		10.52	
Vanguard Institutional Index (VINIX)	29,332,901	10.1	-16.11	(58)	-19.97	(43)	-10.65	(34)	10.58	(26)	11.28	(26)	11.11	(14)	12.93	(18)
S&P 500 Index			-16.10	(58)	-19.96	(42)	-10.62	(33)	10.60	(26)	11.31	(24)	11.14	(13)	12.96	(17)
IM U.S. Large Cap Core Equity (MF) Median			-15.79		-20.40		-12.54		9.58		10.51		10.10		12.13	
Vanguard Mid-Cap Index Fund (VIMAX)	7,263,324	2.5	-16.96	(93)	-22.21	(94)	-16.00	(87)	7.19	(35)	8.28	(17)	8.14	(17)	11.48	(12)
Vanguard Spliced Mid Cap Index			-16.95	(93)	-22.19	(94)	-15.98	(87)	7.20	(35)	8.30	(17)	8.17	(17)	11.52	(11)
IM U.S. Mid Cap Core Equity (MF) Median			-13.63		-17.27		-10.76		6.62		6.73		6.60		9.95	
Carillon Scout Mid Cap (UMBMX)	8,895,578	3.1	-16.99	(93)	-17.53	(56)	-14.90	(83)	8.24	(21)	8.53	(11)	9.61	(2)	11.52	(11)
Russell Midcap Index			-16.85	(91)	-21.57	(91)	-17.30	(93)	6.59	(53)	7.96	(23)	8.04	(20)	11.29	(16)
IM U.S. Mid Cap Core Equity (MF) Median			-13.63		-17.27		-10.76		6.62		6.73		6.60		9.95	
Goldman Sachs Small Cap Value (GSSIX)	7,483,921	2.6	-15.20	(81)	-17.91	(96)	-13.30	(67)	4.03	(98)	4.39	(70)	5.49	(61)	9.25	(40)
Russell 2000 Value Index			-15.28	(83)	-17.31	(88)	-16.28	(87)	6.18	(82)	4.89	(55)	6.40	(32)	9.05	(46)
IM U.S. Small Cap Value Equity (MF) Median			-13.89		-15.31		-11.77		7.60		4.99		5.82		8.98	
Vanguard Small-Cap Index Fund (VSMAX)	7,634,981	2.6	-16.88	(79)	-21.65	(76)	-20.75	(80)	5.40	(56)	6.88	(21)	7.07	(26)	10.45	(21)
Vanguard Spliced Small Cap Index			-16.88	(79)	-21.65	(76)	-20.75	(80)	5.37	(56)	6.87	(21)	7.06	(26)	10.43	(21)
IM U.S. Small Cap Core Equity (MF) Median			-14.56		-19.23		-15.84		5.77		5.49		6.01		9.30	
International Equity/Global Equity																
TIAA-CREF International Equity Index (TRIPX)	8,574,401	3.0	-13.16	(46)	-19.12	(43)	-17.44	(38)	1.19	(60)	2.21	(40)	2.72	(34)	5.39	(29)
MSCI EAFE (Net) Index			-14.51	(82)	-19.57	(58)	-17.77	(51)	1.07	(62)	2.20	(40)	2.70	(37)	5.40	(28)
IM International Large Cap Core Equity (MF) Median			-13.27		-19.35		-17.76		1.58		1.90		2.16		4.87	
American Funds The New Economy Fund (RNGHX)	29,418,900	10.1	-19.49	(81)	-30.76	(82)	-28.52	(82)	4.05	(66)	7.65	(29)	N/A		N/A	
MSCI AC World Index (Net)			-15.66	(55)	-20.18	(44)	-15.75	(44)	6.21	(35)	7.00	(37)	6.98	(31)	8.76	(48)
IM Global Equity (MF) Median			-15.25		-21.44		-17.51		4.98		6.19		6.02		8.57	
Lazard International Equity R6 (LZIEIX)	2,034,253	0.7	-11.23	(12)	-17.35	(27)	-16.92	(30)	-0.03	(90)	1.78	(56)	1.43	(73)	4.68	(55)
MSCI EAFE (Net) Index			-14.51	(82)	-19.57	(58)	-17.77	(51)	1.07	(62)	2.20	(40)	2.70	(37)	5.40	(28)
IM International Large Cap Core Equity (MF) Median			-13.27		-19.35		-17.76		1.58		1.90		2.16		4.87	



	Allocation		Performance(%)													
	Market Value \$	%	QTR		YTD		1 YR		3 YR		5 YR		7 YR		10 YR	
American Funds SmallCap World Fund (RSLDX)	7,238,120	2.5	-19.32	(63)	-31.84	(71)	-32.36	(76)	4.13	(43)	6.39	(33)	N/A		N/A	
MSCI World Small Cap (Net)			-17.18	(32)	-22.56	(25)	-21.97	(28)	4.19	(41)	4.78	(63)	5.65	(56)	8.79	(38)
IM Global SMID Cap Equity (MF) Median			-18.49		-27.96		-25.86		3.54		5.68		5.87		8.42	
DFA Emerging Markets Small Cap (DEMSX)	2,547,514	0.9	-11.68	(46)	-15.60	(16)	-18.29	(9)	4.87	(8)	3.72	(15)	4.42	(12)	5.28	(10)
MSCI Emerging Markets Small Cap (Net)			-16.41	(92)	-20.03	(47)	-20.72	(15)	5.78	(6)	3.48	(17)	2.78	(39)	4.31	(21)
IM Emerging Markets Equity (MF) Median			-11.91		-20.54		-28.03		0.13		1.56		2.40		2.75	
Fixed Income & Other																
Vanguard Total Bond Market Index (VBT LX)	6,354,270	2.2	-4.71	(18)	-10.42	(28)	-10.40	(24)	-0.94	(51)	0.84	(45)	1.40	(48)	1.49	(59)
Blmbg. U.S. Aggregate Index			-4.69	(15)	-10.35	(23)	-10.29	(18)	-0.94	(51)	0.88	(40)	1.42	(45)	1.54	(53)
IM U.S. Broad Market Core Fixed Income (MF) Median			-5.35		-11.02		-11.17		-0.93		0.80		1.37		1.60	
Metropolitan West Total Return Bond (MWTIX)	12,610,704	4.3	-5.73	(73)	-11.67	(76)	-11.64	(69)	-0.80	(43)	1.05	(28)	1.45	(41)	2.26	(6)
Blmbg. U.S. Aggregate Index			-4.69	(15)	-10.35	(23)	-10.29	(18)	-0.94	(51)	0.88	(40)	1.42	(45)	1.54	(53)
IM U.S. Broad Market Core Fixed Income (MF) Median			-5.35		-11.02		-11.17		-0.93		0.80		1.37		1.60	
BlackRock High Yield Bond (BHYIX)	5,100,347	1.8	-10.08	(64)	-13.65	(47)	-12.19	(43)	0.43	(25)	2.29	(17)	3.27	(18)	4.65	(9)
ICE BofA U.S. High Yield Index			-9.99	(60)	-14.05	(65)	-12.69	(55)	-0.05	(42)	1.95	(28)	3.39	(14)	4.40	(14)
IM U.S. High Yield Bonds (MF) Median			-9.83		-13.77		-12.48		-0.26		1.49		2.57		3.63	
DFA Real Estate (DFREX)	3,941,343	1.4	-14.75	(27)	-19.19	(24)	-5.86	(29)	5.40	(36)	6.89	(22)	7.89	(17)	8.10	(15)
FTSE NAREIT All Equity REITs			-14.66	(24)	-19.17	(23)	-5.89	(29)	5.34	(37)	6.75	(25)	8.03	(13)	8.34	(9)
IM Real Estate Sector (MF) Median			-15.81		-20.42		-7.15		4.80		5.73		6.81		7.01	
Vanguard Treasury Money Market (VUSXX)	68,208	0.0	0.15	(25)	0.17	(16)	0.17	(16)	0.54	(12)	1.01	(12)	0.80	(12)	0.57	(13)
90 Day U.S. Treasury Bill			0.11	(49)	0.15	(29)	0.17	(18)	0.63	(2)	1.11	(6)	0.87	(9)	0.63	(8)
IM U.S. Taxable Money Market (MF) Median			0.10		0.11		0.11		0.42		0.85		0.63		0.45	
MissionSquare PLUS Fund R10	54,933,760	18.9	0.47	(14)	0.91	(15)	1.85	(16)	2.09	(21)	2.17	(24)	2.12	(21)	2.16	(20)
ICE BofAML 3 Month U.S. T-Bill			0.11	(87)	0.15	(87)	0.17	(87)	0.63	(92)	1.11	(97)	0.89	(100)	0.64	(100)
IM U.S. GIC/Stable Value (SA+CF) Median			0.38		0.73		1.43		1.94		1.99		1.88		1.78	
Target Date Funds																
TIAA-CREF Lifecycle Retirement Income (TPILX)	1,230,521	0.4	-8.45	(58)	-12.95	(52)	-11.35	(57)	2.60	(22)	3.78	(23)	4.11	(15)	5.06	(5)
Dow Jones Global Conservative Index			-7.32	(27)	-12.34	(41)	-12.53	(86)	-1.06	(99)	0.85	(98)	1.39	(96)	1.76	(97)
IM Mixed-Asset Target Today (MF) Median			-8.34		-12.90		-11.13		1.61		2.96		3.16		3.88	
TIAA-CREF Lifecycle 2010 (TCTPX)	1,760,207	0.6	-8.31	(65)	-12.87	(73)	-11.28	(69)	2.64	(41)	3.88	(33)	4.22	(27)	5.44	(15)
Dow Jones Global Target 2010 Index			-7.40	(29)	-12.47	(61)	-12.67	(100)	-1.10	(100)	0.84	(100)	1.45	(100)	2.04	(99)
IM Mixed-Asset Target 2010 (MF) Median			-7.95		-12.33		-10.66		2.44		3.69		3.94		4.84	



Asset Allocation & Performance

457 Total Fund

As of June 30, 2022

	Allocation		Performance(%)									
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR			
TIAA-CREF Lifecycle 2015 (TCFPX)	2,279,250	0.8	-8.80 (38)	-13.51 (45)	-11.76 (57)	2.95 (50)	4.19 (37)	4.51 (34)	5.91 (24)			
Dow Jones Global Target 2015 Index			-7.48 (1)	-12.54 (24)	-12.68 (83)	-0.83 (100)	1.19 (94)	1.93 (100)	2.74 (100)			
IM Mixed-Asset Target 2015 (MF) Median			-8.97	-13.65	-11.63	2.89	4.07	4.40	5.61			
TIAA-CREF Lifecycle 2020 (TCWPX)	5,774,467	2.0	-9.48 (50)	-14.31 (47)	-12.54 (57)	3.17 (45)	4.44 (41)	4.80 (32)	6.45 (23)			
Dow Jones Global Target 2020 Index			-8.07 (7)	-13.06 (23)	-12.93 (74)	-0.20 (99)	1.87 (99)	2.61 (95)	3.73 (99)			
IM Mixed-Asset Target 2020 (MF) Median			-9.48	-14.36	-12.35	3.03	4.25	4.34	5.91			
TIAA-CREF Lifecycle 2025 (TCQPX)	10,351,539	3.6	-10.36 (59)	-15.43 (47)	-13.43 (63)	3.66 (38)	4.90 (37)	5.22 (29)	7.10 (20)			
Dow Jones Global Target 2025 Index			-8.84 (17)	-13.79 (24)	-13.20 (53)	0.84 (96)	2.81 (95)	3.45 (90)	4.87 (93)			
IM Mixed-Asset Target 2025 (MF) Median			-10.28	-15.53	-13.14	3.34	4.68	4.78	6.35			
TIAA-CREF Lifecycle 2030 (TCHPX)	13,505,559	4.7	-11.43 (53)	-16.67 (48)	-14.47 (69)	4.10 (46)	5.33 (45)	5.62 (36)	7.70 (26)			
Dow Jones Global Target 2030 Index			-9.91 (11)	-14.69 (15)	-13.58 (43)	2.00 (96)	3.83 (94)	4.37 (86)	6.07 (85)			
IM Mixed-Asset Target 2030 (MF) Median			-11.36	-16.74	-13.94	4.01	5.23	5.31	7.01			
TIAA-CREF Lifecycle 2035 (TCYPX)	17,176,037	5.9	-12.37 (38)	-17.87 (42)	-15.50 (74)	4.54 (53)	5.76 (50)	6.01 (43)	8.27 (27)			
Dow Jones Global Target 2035 Index			-11.04 (9)	-15.66 (9)	-14.03 (30)	3.16 (93)	4.77 (88)	5.17 (79)	7.11 (72)			
IM Mixed-Asset Target 2035 (MF) Median			-12.61	-18.04	-14.59	4.64	5.75	5.87	7.65			
TIAA-CREF Lifecycle 2040 (TCZPX)	11,752,135	4.1	-13.35 (36)	-18.91 (45)	-16.35 (72)	5.01 (53)	6.18 (46)	6.37 (41)	8.72 (22)			
Dow Jones Global Target 2040 Index			-12.23 (10)	-16.70 (8)	-14.59 (22)	4.15 (82)	5.57 (77)	5.85 (66)	7.94 (55)			
IM Mixed-Asset Target 2040 (MF) Median			-13.69	-19.10	-15.46	5.06	6.09	6.20	8.13			
TIAA-CREF Lifecycle 2045 (TTFPX)	8,096,957	2.8	-14.18 (43)	-19.78 (55)	-17.02 (76)	5.58 (39)	6.54 (38)	6.72 (32)	8.96 (17)			
Dow Jones Global Target 2045 Index			-13.23 (18)	-17.57 (10)	-15.08 (23)	4.93 (70)	6.17 (60)	6.35 (53)	8.49 (35)			
IM Mixed-Asset Target 2045 (MF) Median			-14.30	-19.64	-15.85	5.40	6.37	6.39	8.27			
TIAA-CREF Lifecycle 2050 (TCLPX)	4,041,807	1.4	-14.57 (48)	-20.23 (61)	-17.35 (72)	5.63 (39)	6.59 (35)	6.78 (31)	9.00 (21)			
Dow Jones Global Target 2050 Index			-13.92 (23)	-18.18 (16)	-15.43 (26)	5.42 (50)	6.52 (41)	6.65 (38)	8.73 (29)			
IM Mixed-Asset Target 2050 (MF) Median			-14.62	-19.98	-16.05	5.41	6.41	6.47	8.34			
TIAA-CREF Lifecycle 2055 (TTTPX)	1,839,426	0.6	-14.69 (54)	-20.32 (63)	-17.41 (69)	5.69 (38)	6.65 (36)	6.85 (30)	9.06 (21)			
Dow Jones Global Target 2055 Index			-14.24 (30)	-18.46 (16)	-15.61 (32)	5.59 (43)	6.62 (38)	6.73 (36)	8.78 (35)			
IM Mixed-Asset Target 2055 (MF) Median			-14.63	-20.00	-16.15	5.47	6.45	6.46	8.52			
TIAA-CREF Lifecycle 2060 (TLXPX)	648,349	0.2	-14.80 (43)	-20.40 (53)	-17.52 (64)	5.81 (40)	6.72 (N/A)	6.94 (N/A)	N/A			
Dow Jones Global Target 2060 Index			-14.26 (19)	-18.47 (10)	-15.62 (21)	5.58 (57)	6.62 (N/A)	6.72 (N/A)	8.77 (N/A)			
IM Mixed-Asset Target 2060+ (MF) Median			-14.92	-20.39	-17.23	5.68	N/A	N/A	N/A			
TIAA-CREF Lifecycle 2065 (TSFPX)	14,726	0.0	-14.82 (46)	-20.41 (53)	-17.48 (64)	N/A	N/A	N/A	N/A			
Dow Jones Global Target 2060 Index			-14.26 (19)	-18.47 (10)	-15.62 (21)	5.58 (57)	6.62 (N/A)	6.72 (N/A)	8.77 (N/A)			
IM Mixed-Asset Target 2060+ (MF) Median			-14.92	-20.39	-17.23	5.68	N/A	N/A	N/A			



	Allocation		Performance(%)						
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Brokerage & Loan Fund									
TIAA-CREF Self Directed	1,455,783	0.5							
Loan Fund	6,383,765	2.2							

Asset Allocation & Performance

	Allocation		Performance(%)									
	Market Value \$	%	YTD	2021	2020	2019	2018	2017	2016	2015	2014	
457 Total Fund	290,115,416	100.0										
Domestic Equity												
Vanguard Equity-Income (VEIRX)	10,372,362	3.6	-7.31 (7)	25.64 (56)	3.13 (58)	25.35 (67)	-5.65 (24)	18.49 (28)	14.82 (38)	0.86 (6)	11.38 (39)	
Russell 1000 Value Index			-12.86 (54)	25.16 (63)	2.80 (61)	26.54 (50)	-8.27 (45)	13.66 (82)	17.34 (17)	-3.83 (69)	13.45 (8)	
IM U.S. Large Cap Value Equity (MF) Median			-12.36	25.96	3.82	26.50	-8.61	16.95	13.85	-3.00	10.82	
Vanguard Institutional Index (VINIX)	29,332,901	10.1	-19.97 (43)	28.67 (26)	18.39 (50)	31.46 (37)	-4.42 (32)	21.79 (45)	11.93 (20)	1.37 (35)	13.65 (18)	
S&P 500 Index			-19.96 (42)	28.71 (25)	18.40 (50)	31.49 (36)	-4.38 (32)	21.83 (45)	11.96 (20)	1.38 (35)	13.69 (18)	
IM U.S. Large Cap Core Equity (MF) Median			-20.40	26.95	18.39	30.64	-5.45	21.45	9.70	0.53	11.51	
Vanguard Mid-Cap Index Fund (VIMAX)	7,263,324	2.5	-22.21 (94)	24.51 (60)	18.24 (15)	31.03 (27)	-9.23 (22)	19.25 (19)	11.22 (76)	-1.34 (23)	13.76 (6)	
Vanguard Spliced Mid Cap Index			-22.19 (94)	24.52 (60)	18.24 (15)	31.09 (27)	-9.22 (22)	19.30 (19)	11.25 (76)	-1.28 (23)	13.83 (6)	
IM U.S. Mid Cap Core Equity (MF) Median			-17.27	25.73	8.44	28.59	-11.64	14.94	14.51	-3.74	8.88	
Carillon Scout Mid Cap (UMBMX)	8,895,578	3.1	-17.53 (56)	15.90 (91)	27.27 (5)	20.76 (95)	-9.74 (24)	24.02 (3)	18.31 (25)	1.41 (7)	4.09 (91)	
Russell Midcap Index			-21.57 (91)	22.58 (68)	17.10 (17)	30.54 (31)	-9.06 (21)	18.52 (25)	13.80 (57)	-2.44 (31)	13.22 (9)	
IM U.S. Mid Cap Core Equity (MF) Median			-17.27	25.73	8.44	28.59	-11.64	14.94	14.51	-3.74	8.88	
Goldman Sachs Small Cap Value (GSSIX)	7,483,921	2.6	-17.91 (96)	26.71 (86)	2.06 (63)	23.14 (19)	-14.02 (33)	12.34 (18)	24.65 (71)	-5.39 (27)	7.28 (10)	
Russell 2000 Value Index			-17.31 (88)	28.27 (73)	4.63 (35)	22.39 (28)	-12.86 (23)	7.84 (60)	31.74 (17)	-7.47 (57)	4.22 (35)	
IM U.S. Small Cap Value Equity (MF) Median			-15.31	31.97	3.57	21.05	-16.08	8.46	26.70	-7.05	3.41	
Vanguard Small-Cap Index Fund (VSMAX)	7,634,981	2.6	-21.65 (76)	17.73 (84)	19.11 (17)	27.37 (16)	-9.31 (18)	16.24 (14)	18.30 (79)	-3.64 (39)	7.50 (13)	
Vanguard Spliced Small Cap Index			-21.65 (76)	17.71 (84)	19.07 (17)	27.35 (17)	-9.33 (18)	16.24 (14)	18.26 (80)	-3.68 (40)	7.54 (13)	
IM U.S. Small Cap Core Equity (MF) Median			-19.23	25.12	9.89	23.94	-12.71	12.09	21.66	-4.35	4.71	
International Equity/Global Equity												
TIAA-CREF International Equity Index (TRIPX)	8,574,401	3.0	-19.12 (43)	11.16 (40)	8.01 (64)	21.59 (60)	-13.39 (14)	25.14 (49)	1.08 (37)	-0.69 (26)	-5.60 (39)	
MSCI EAFE (Net) Index			-19.57 (58)	11.26 (39)	7.82 (67)	22.01 (52)	-13.79 (25)	25.03 (50)	1.00 (37)	-0.81 (29)	-4.90 (27)	
IM International Large Cap Core Equity (MF) Median			-19.35	10.74	9.07	22.06	-15.00	25.00	-0.04	-1.95	-6.01	
American Funds The New Economy Fund (RNGHX)	29,418,900	10.1	-30.76 (82)	12.12 (77)	33.72 (19)	26.69 (48)	-4.04 (13)	34.71 (8)	2.32 (79)	N/A	N/A	
MSCI AC World Index (Net)			-20.18 (44)	18.54 (34)	16.25 (46)	26.60 (49)	-9.42 (48)	23.97 (43)	7.86 (36)	-2.36 (60)	4.16 (39)	
IM Global Equity (MF) Median			-21.44	16.55	15.37	26.38	-9.55	22.45	6.49	-1.42	2.82	
Lazard International Equity R6 (LZIEIX)	2,034,253	0.7	-17.35 (27)	6.00 (81)	8.76 (56)	21.19 (67)	-13.61 (20)	22.81 (83)	-4.18 (86)	1.62 (5)	-4.29 (21)	
MSCI EAFE (Net) Index			-19.57 (58)	11.26 (39)	7.82 (67)	22.01 (52)	-13.79 (25)	25.03 (50)	1.00 (37)	-0.81 (29)	-4.90 (27)	
IM International Large Cap Core Equity (MF) Median			-19.35	10.74	9.07	22.06	-15.00	25.00	-0.04	-1.95	-6.01	



	Allocation		Performance(%)									
	Market Value \$	%	YTD	2021	2020	2019	2018	2017	2016	2015	2014	
American Funds SmallCap World Fund (RSLDX)	7,238,120	2.5	-31.84 (71)	10.51 (77)	37.73 (27)	31.08 (17)	-9.50 (21)	27.09 (37)	5.90 (70)	N/A	N/A	
MSCI World Small Cap (Net)			-22.56 (25)	15.75 (44)	15.96 (63)	26.19 (53)	-13.86 (55)	22.66 (69)	12.71 (32)	-0.31 (52)	1.90 (27)	
IM Global SMID Cap Equity (MF) Median			-27.96	14.81	24.84	26.84	-13.01	25.88	8.53	-0.21	-1.26	
DFA Emerging Markets Small Cap (DEMSX)	2,547,514	0.9	-15.60 (16)	14.58 (6)	13.80 (70)	14.89 (79)	-17.56 (61)	35.26 (53)	10.92 (32)	-8.70 (17)	3.00 (9)	
MSCI Emerging Markets Small Cap (Net)			-20.03 (47)	18.75 (4)	19.29 (43)	11.51 (89)	-18.59 (71)	33.84 (60)	2.28 (85)	-6.85 (10)	1.01 (17)	
IM Emerging Markets Equity (MF) Median			-20.54	-1.63	17.67	20.15	-16.45	35.66	8.25	-13.73	-3.01	
Fixed Income & Other												
Vanguard Total Bond Market Index (VBTIX)	6,354,270	2.2	-10.42 (28)	-1.67 (66)	7.72 (65)	8.71 (53)	-0.03 (20)	3.56 (54)	2.60 (64)	0.40 (30)	5.89 (32)	
Blmbg. U.S. Aggregate Index			-10.35 (23)	-1.55 (60)	7.51 (73)	8.72 (53)	0.01 (18)	3.54 (54)	2.65 (62)	0.55 (20)	5.97 (27)	
IM U.S. Broad Market Core Fixed Income (MF) Median			-11.02	-1.33	8.15	8.76	-0.62	3.60	2.90	0.04	5.55	
Metropolitan West Total Return Bond (MWTIX)	12,610,704	4.3	-11.67 (76)	-1.13 (40)	9.12 (24)	9.09 (38)	0.16 (11)	3.43 (60)	2.46 (71)	0.29 (37)	5.99 (26)	
Blmbg. U.S. Aggregate Index			-10.35 (23)	-1.55 (60)	7.51 (73)	8.72 (53)	0.01 (18)	3.54 (54)	2.65 (62)	0.55 (20)	5.97 (27)	
IM U.S. Broad Market Core Fixed Income (MF) Median			-11.02	-1.33	8.15	8.76	-0.62	3.60	2.90	0.04	5.55	
BlackRock High Yield Bond (BHYIX)	5,100,347	1.8	-13.65 (47)	5.88 (27)	5.82 (42)	15.30 (16)	-2.86 (46)	8.20 (10)	13.93 (47)	-4.04 (51)	3.38 (12)	
ICE BofA U.S. High Yield Index			-14.05 (65)	5.35 (40)	6.17 (34)	14.41 (36)	-2.27 (27)	7.48 (21)	17.49 (5)	-4.64 (61)	2.50 (23)	
IM U.S. High Yield Bonds (MF) Median			-13.77	4.93	5.43	13.83	-2.97	6.63	13.80	-3.96	1.50	
DFA Real Estate (DFREX)	3,941,343	1.4	-19.19 (24)	41.85 (41)	-5.04 (58)	28.10 (42)	-2.99 (8)	5.71 (44)	8.38 (22)	3.24 (41)	31.11 (20)	
FTSE NAREIT All Equity REITs			-19.17 (23)	41.30 (51)	-5.12 (60)	28.66 (37)	-4.04 (18)	8.67 (16)	8.63 (20)	2.83 (52)	28.03 (70)	
IM Real Estate Sector (MF) Median			-20.42	41.32	-4.31	27.32	-5.71	5.32	6.34	2.91	29.47	
MissionSquare PLUS Fund R10	54,933,760	18.9	0.91 (15)	1.89 (17)	2.22 (36)	2.45 (66)	2.27 (31)	2.12 (21)	1.98 (28)	2.03 (15)	2.07 (25)	
ICE BofAML 3 Month U.S. T-Bill			0.15 (87)	0.05 (95)	0.67 (100)	2.28 (96)	1.87 (87)	0.86 (100)	0.33 (100)	0.05 (100)	0.04 (100)	
IM U.S. GIC/Stable Value (SA+CF) Median			0.73	1.50	2.11	2.51	2.13	1.82	1.79	1.69	1.52	
Target Date Funds												
TIAA-CREF Lifecycle Retirement Income (TPILX)	1,230,521	0.4	-12.95 (52)	6.92 (29)	10.93 (15)	15.03 (24)	-3.90 (65)	11.84 (6)	5.89 (26)	0.10 (3)	4.38 (30)	
Dow Jones Global Conservative Index			-12.34 (41)	-0.17 (100)	8.05 (78)	8.13 (99)	-0.62 (2)	5.73 (95)	3.01 (92)	-0.63 (21)	3.86 (51)	
IM Mixed-Asset Target Today (MF) Median			-12.90	6.16	9.50	13.34	-3.57	8.92	5.13	-1.42	3.87	
TIAA-CREF Lifecycle 2010 (TCTPX)	1,760,207	0.6	-12.87 (73)	6.78 (47)	11.01 (24)	15.36 (14)	-4.09 (73)	12.52 (2)	6.06 (50)	0.24 (3)	4.44 (38)	
Dow Jones Global Target 2010 Index			-12.47 (61)	-0.20 (100)	8.07 (96)	8.22 (100)	-0.68 (1)	6.07 (100)	3.33 (95)	-0.72 (21)	4.20 (47)	
IM Mixed-Asset Target 2010 (MF) Median			-12.33	5.80	10.43	14.19	-3.58	10.24	6.06	-1.20	4.11	
TIAA-CREF Lifecycle 2015 (TCFPX)	2,279,250	0.8	-13.51 (45)	7.56 (61)	11.68 (38)	16.36 (33)	-4.60 (71)	13.75 (5)	6.28 (56)	0.18 (4)	4.63 (48)	
Dow Jones Global Target 2015 Index			-12.54 (24)	0.17 (100)	8.30 (86)	9.54 (100)	-1.28 (1)	7.59 (95)	4.51 (91)	-0.97 (34)	4.48 (51)	
IM Mixed-Asset Target 2015 (MF) Median			-13.65	8.00	11.37	15.22	-3.91	11.30	6.39	-1.30	4.49	



Asset Allocation & Performance
457 Total Fund
As of June 30, 2022

	Allocation		Performance(%)									
	Market Value \$	%	YTD	2021	2020	2019	2018	2017	2016	2015	2014	
TIAA-CREF Lifecycle 2020 (TCWPX)	5,774,467	2.0	-14.31 (47)	8.28 (64)	12.24 (33)	17.59 (25)	-5.26 (73)	15.35 (4)	6.52 (45)	0.27 (1)	4.62 (53)	
Dow Jones Global Target 2020 Index			-13.06 (23)	1.63 (100)	8.63 (83)	12.00 (91)	-2.33 (3)	9.88 (82)	5.27 (81)	-1.04 (36)	4.81 (46)	
IM Mixed-Asset Target 2020 (MF) Median			-14.36	8.70	10.90	15.97	-4.52	12.69	6.36	-1.44	4.72	
TIAA-CREF Lifecycle 2025 (TCQPX)	10,351,539	3.6	-15.43 (47)	9.60 (54)	13.34 (32)	19.29 (26)	-6.23 (78)	17.19 (3)	6.87 (50)	0.22 (1)	4.73 (66)	
Dow Jones Global Target 2025 Index			-13.79 (24)	3.91 (96)	9.62 (83)	14.38 (92)	-3.22 (4)	12.02 (83)	6.39 (68)	-1.11 (38)	5.14 (52)	
IM Mixed-Asset Target 2025 (MF) Median			-15.53	9.70	12.13	18.18	-5.23	14.95	6.87	-1.37	5.19	
TIAA-CREF Lifecycle 2030 (TCHPX)	13,505,559	4.7	-16.67 (48)	11.10 (65)	14.24 (32)	21.13 (30)	-7.18 (75)	19.02 (4)	7.22 (54)	0.13 (4)	4.68 (65)	
Dow Jones Global Target 2030 Index			-14.69 (15)	6.56 (98)	10.88 (79)	17.06 (87)	-4.43 (9)	14.64 (78)	7.50 (41)	-1.21 (41)	5.50 (42)	
IM Mixed-Asset Target 2030 (MF) Median			-16.74	11.44	12.86	20.08	-6.32	16.92	7.30	-1.47	5.18	
TIAA-CREF Lifecycle 2035 (TCYPX)	17,176,037	5.9	-17.87 (42)	12.64 (83)	15.15 (38)	22.86 (32)	-8.12 (83)	20.88 (6)	7.40 (61)	0.10 (6)	4.53 (71)	
Dow Jones Global Target 2035 Index			-15.66 (9)	9.38 (99)	12.15 (84)	19.70 (88)	-5.80 (15)	16.99 (78)	8.49 (25)	-1.61 (52)	5.80 (38)	
IM Mixed-Asset Target 2035 (MF) Median			-18.04	13.84	14.15	22.26	-7.26	18.72	7.75	-1.53	5.40	
TIAA-CREF Lifecycle 2040 (TCZPX)	11,752,135	4.1	-18.91 (45)	14.18 (85)	16.11 (33)	24.52 (26)	-9.11 (86)	22.69 (1)	7.65 (58)	-0.06 (8)	4.49 (70)	
Dow Jones Global Target 2040 Index			-16.70 (8)	12.05 (95)	13.28 (70)	22.03 (74)	-6.94 (23)	18.97 (65)	9.30 (15)	-1.94 (60)	6.03 (32)	
IM Mixed-Asset Target 2040 (MF) Median			-19.10	15.67	14.74	23.63	-7.97	19.74	7.95	-1.66	5.38	
TIAA-CREF Lifecycle 2045 (TTFPX)	8,096,957	2.8	-19.78 (55)	15.75 (80)	17.14 (28)	25.73 (19)	-9.78 (93)	23.45 (2)	7.85 (61)	-0.01 (8)	4.48 (71)	
Dow Jones Global Target 2045 Index			-17.57 (10)	14.28 (95)	14.18 (63)	23.71 (67)	-7.80 (38)	20.36 (59)	9.85 (7)	-2.15 (71)	6.16 (30)	
IM Mixed-Asset Target 2045 (MF) Median			-19.64	16.67	15.38	24.61	-8.19	20.65	8.15	-1.65	5.55	
TIAA-CREF Lifecycle 2050 (TCLPX)	4,041,807	1.4	-20.23 (61)	16.28 (73)	17.34 (27)	25.93 (19)	-9.93 (90)	23.76 (2)	7.99 (54)	0.05 (7)	4.47 (74)	
Dow Jones Global Target 2050 Index			-18.18 (16)	15.78 (88)	14.78 (58)	24.69 (50)	-8.29 (44)	21.02 (46)	10.10 (10)	-2.23 (67)	6.19 (31)	
IM Mixed-Asset Target 2050 (MF) Median			-19.98	16.99	15.54	24.67	-8.54	20.80	8.10	-1.63	5.61	
TIAA-CREF Lifecycle 2055 (TTRPX)	1,839,426	0.6	-20.32 (63)	16.46 (73)	17.43 (29)	26.21 (17)	-10.10 (94)	24.07 (3)	8.16 (53)	0.00 (9)	4.39 (71)	
Dow Jones Global Target 2055 Index			-18.46 (16)	16.36 (75)	15.03 (59)	24.89 (48)	-8.37 (46)	21.06 (52)	10.11 (6)	-2.23 (71)	6.19 (35)	
IM Mixed-Asset Target 2055 (MF) Median			-20.00	17.18	15.65	24.84	-8.48	21.12	8.25	-1.67	5.43	
TIAA-CREF Lifecycle 2060 (TLXPX)	648,349	0.2	-20.40 (53)	16.68 (61)	17.57 (19)	26.47 (43)	-10.27 (94)	24.29 (N/A)	8.27 (N/A)	0.03 (N/A)	N/A	
Dow Jones Global Target 2060 Index			-18.47 (10)	16.36 (67)	15.03 (69)	24.89 (66)	-8.37 (16)	21.06 (N/A)	10.11 (N/A)	-2.23 (N/A)	6.11 (N/A)	
IM Mixed-Asset Target 2060+ (MF) Median			-20.39	17.15	16.23	26.28	-9.37	N/A	N/A	N/A	N/A	
TIAA-CREF Lifecycle 2065 (TSFPX)	14,726	0.0	-20.41 (53)	16.84 (55)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dow Jones Global Target 2060 Index			-18.47 (10)	16.36 (67)	15.03 (69)	24.89 (66)	-8.37 (16)	21.06 (N/A)	10.11 (N/A)	-2.23 (N/A)	6.11 (N/A)	
IM Mixed-Asset Target 2060+ (MF) Median			-20.39	17.15	16.23	26.28	-9.37	N/A	N/A	N/A	N/A	



	Allocation		Performance(%)								
	Market Value \$	%	YTD	2021	2020	2019	2018	2017	2016	2015	2014
Brokerage & Loan Fund											
TIAA-CREF Self Directed	1,455,783	0.5									
Loan Fund	6,383,765	2.2									

Asset Class	2060+	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Retirement
Equity Range												
Maximum	100%	100%	100%	95%	95%	90%	85%	75%	65%	55%	45%	45%
Minimum	50%	50%	50%	45%	45%	40%	35%	25%	15%	10%	5%	5%
Fixed Income Range												
Maximum	20%	20%	30%	35%	40%	50%	55%	65%	70%	75%	80%	85%
Minimum	0%	0%	0%	5%	5%	10%	15%	20%	25%	35%	40%	45%
Cash Range												
Maximum	20%	20%	30%	30%	30%	30%	30%	30%	35%	35%	35%	35%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Range												
Maximum	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Target Date Universe	61	54	55	52	54	54	51	56	54	37	38	39

Morningstar Definitions:

1. Cash - The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
2. Other - The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
3. Target Date Universe - Based on the number of unique glide paths in the Morningstar Target Date Universe. Only one share class is selected to represent the fund manager.



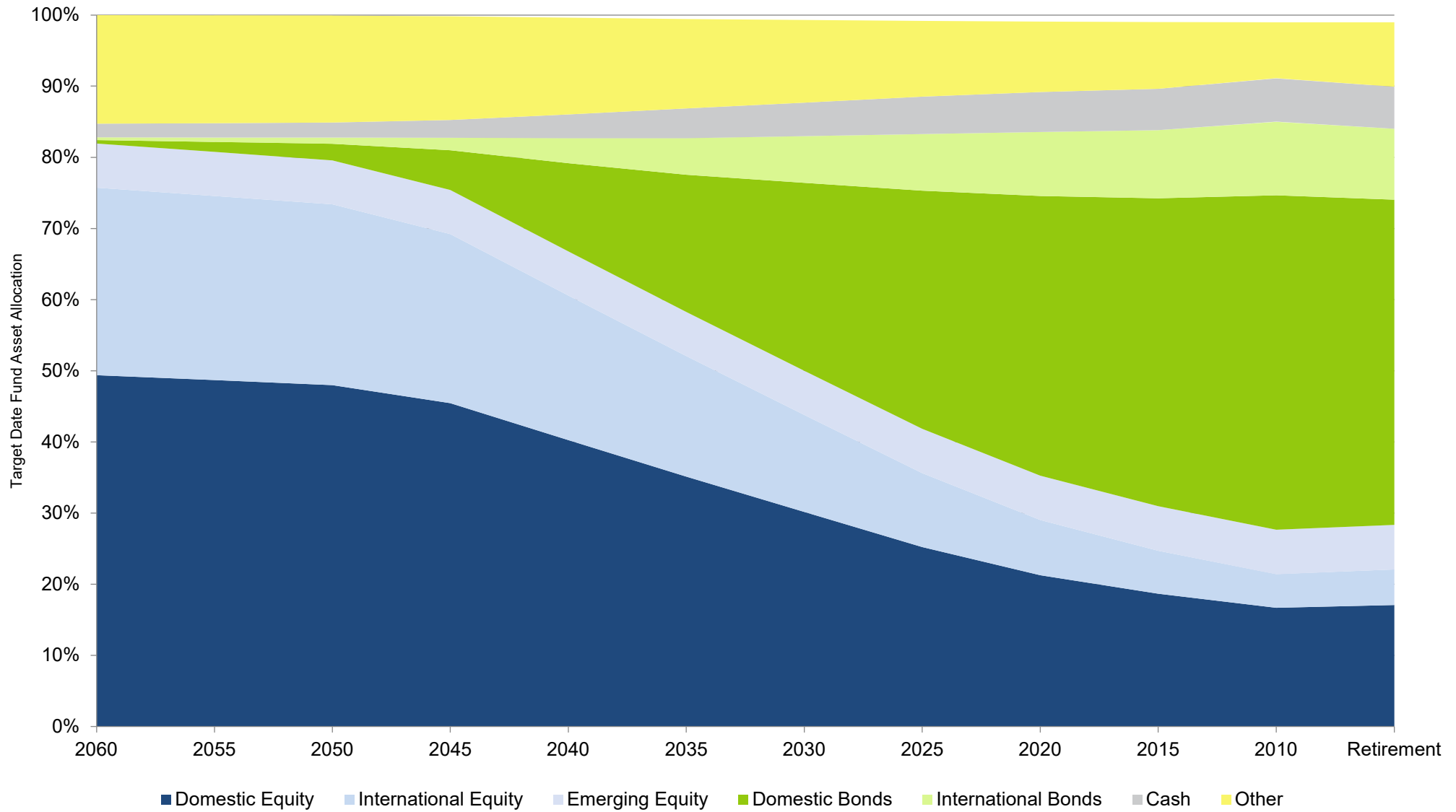
Asset Class	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Retirement
Total Equity	82%	81%	80%	75%	67%	58%	50%	42%	35%	31%	28%	28%
Domestic Equity	49%	49%	48%	45%	40%	35%	30%	25%	21%	19%	17%	17%
International Equity	26%	26%	25%	24%	20%	17%	14%	10%	8%	6%	5%	5%
Emerging Equity	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Total Fixed Income	1%	2%	3%	7%	16%	24%	33%	41%	48%	53%	57%	56%
Domestic Bonds	0%	1%	2%	6%	12%	19%	26%	33%	39%	43%	47%	46%
International Bonds	0%	1%	1%	2%	4%	5%	7%	8%	9%	10%	10%	10%
Cash	2%	2%	2%	3%	3%	4%	5%	5%	6%	6%	6%	6%
Other	15%	15%	15%	15%	14%	13%	12%	11%	10%	9%	8%	9%
Total	100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	99%

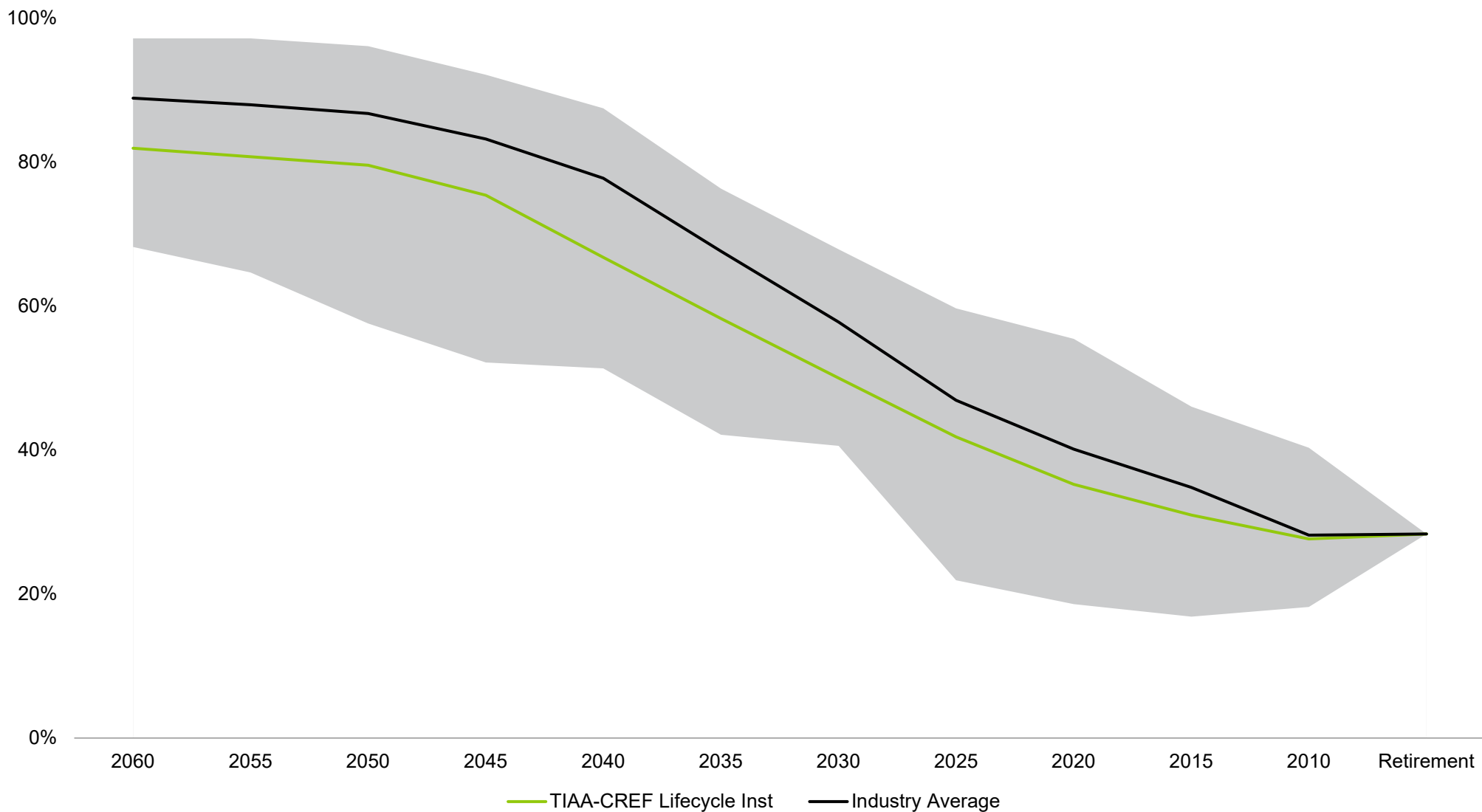
Terminal Equity Date:	30 years after Retirement
Active/Passive/Blend Allocation:	Active

Morningstar Definitions:

1. Cash - The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
2. Other - The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.







1. Industry Range (Gray Bar) - Represents the equity allocation range of the Target Date Funds in the universe.

2. Industry Average - The average equity allocation of the investments included in the universe.

Quarterly	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Review of plan investments and compliance with investment policy statement	✓	✓		
Follow required procedures, including documentation of all meetings and decisions	✓	✓		
Review performance of providers	✓	✓		
Periodically				
Review QDIA selection				
Allocation fund (Target Date or Risk-based) analysis				
Investment policy statement review	Completed in 2021			
Employee education review	✓	✓		
Plan recordkeeping & administration services review	✓	✓		
Fee analysis				
Other Projects				
Fiduciary Module	✓	✓		
Committee Charter and Handbook Revisions	✓			
Small Balance Cash out				

At least once each year retirement plan sponsors should meet with their recordkeeper to review the plan's health. An Annual Plan Review provides insight into the plan utilization, participant demographics and trends, and identifies where communication and educational efforts are working and areas for improvement. This can help to identify areas to focus on participant education for the year ahead.

The Annual Plan Review is also an opportunity to review plan features, client service, regulatory developments, data and cybersecurity, and identify administrative or back-office issues (payroll, enrollment forms, SPDs, Plan Document updates, etc.).

The following metrics are useful to review to determine how effectively the plan is being utilized by participants:

- Participation rates
- Contribution rates
- Participant demographics
- Investment diversification
- Retirement readiness



Participation Rate – is the plan being used by a majority of participants across demographics to reach retirement goals?

- Number of participants enrolled / new enrollments
- Online account usage
- Beneficiary designations on file
- Retirement readiness

Contribution Rates – what portion of employee salaries are being contributed?

- Average account balance by age group
- Average contribution rates – have participants increased contribution rates?
- Contribution type – are participants taking full advantage of the opportunities the plan offers? (i.e., Roth, Rollovers)

Demographics – age groups, gender, and active/retiree metrics and trends

- Is the investment line-up appropriate for the participants?
- Is utilization of plan investments as expected based on demographics?
- Are education and communication aligned with demographics?

Investment Diversification – are participants invested appropriately and well diversified?

- Number of investments held
- Age-appropriate mix of stock and bonds
- Managed account service usage

❖ Peer Benchmarking of the above metrics can provide important insight



Fiduciary Considerations:

- Are engagement, education, enrollment, retirement readiness/outcomes, and investment choices in line with peer plans?
- Is the plan experiencing increased utilization of services that generate additional fees for the recordkeeper and how is the additional value of these services measured (e.g., managed accounts, guaranteed lifetime income, stable value, etc.)?
- Are fees and potential conflicts of interest periodically disclosed and reviewed?
- Are relevant regulatory developments and changes outlined?
- Are demographics aligned with investment option allocations?
- Does your service provider's annual communications calendar make sense for your plan?
- Does your service provider measure the success of the communications outreach?
- Are plan administration issues placing a strain on staff?
- Is there a "culture of compliance"?

Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

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