

State of Wisconsin Deferred Compensation Plan

# Investment Performance and Expense Ratio Review

Performance as of June 30, 2022

**Bill Thornton, CIMA®**

Investment Director, Empower Investments

303-737-1514

[william.thornton@greatwest.com](mailto:william.thornton@greatwest.com)



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# Executive Summary



# Wisconsin Deferred Compensation Program – Asset Class Coverage

Core "Doers"							
Stable Value/ Money Market	Fixed Income	Large Cap Value	Large Cap Core	Large Cap Growth	Mid Cap	Small Cap	Global/ International
FDIC Bank Option, Vanguard Treasury Money Market, Stable Value Fund	BlackRock US Debt Index, Vanguard Long-Term Investment Grade, Dodge & Cox Income	JP Morgan US Value	Vanguard Institutional 500 Trust Index	Fidelity Contrafund Commingled Pool, Calvert U.S. Core Large Cap Resp Idx	BlackRock Mid Cap Equity Index, T.Rowe Price Instl Mid-Cap Equity	BlackRock Russell 2000 Index, DFA US Micro Cap	American Funds Europacific Growth, Blackrock EAFE Equity Index
Asset Allocation "Delegators"							
Balanced/Lifestyle/Lifecycle				Managed Accounts			
Vanguard Target Retirement Trusts, Vanguard Wellington				Professional Management Program - Ibbotson			
Specialty "Sophisticates"							
Brokerage		Other			Company Stock		
Schwab							

This graph is intended to show generally the anticipated relationship between various asset classes and the corresponding funds within each asset class available through your plan. Please note this is not intended to predict an actual level of return or risk for these funds. The historical returns and risk for these funds may vary significantly from the linear relationship represented above. Please refer to the funds' prospectuses and shareholder reports for actual return information.

Generally, the asset allocation of each target date fund will change on an annual basis with the asset allocation becoming more conservative as the fund nears the target retirement date. The target date is the approximate date when investors plan to start withdrawing their money.

The principal value of the fund(s) in a plan's lineup is not guaranteed at any time, including at the time of target date and/or withdrawal.

Name	Total Ret 3 Mth	Total Ret 1 Yr	Total Ret 3 Yr	Total Ret 5 Yr	Total Ret 10 Yr	Total Net Assets \$M	Expense Ratio
American Funds EuroPacific Gr R6	-14.65	-27.68	1.49	3.10	6.30	140,903	0.46
Morningstar Foreign Large Growth Avg	-16.58	-27.25	1.72	3.56	6.13	-	1.05
MSCI EAFE Index	-14.51	-17.77	1.07	2.20	5.40	-	-
MSCI ACWI ex U.S.	-13.73	-19.42	1.35	2.50	4.83	-	-
Blackrock EAFE Equity Index Coll T	-13.07	-17.08	1.59	2.68	5.80	-	0.06
MSCI EAFE Index	-14.51	-17.77	1.07	2.20	5.40	-	-
DFA US Micro Cap I	-13.82	-13.47	7.85	6.43	10.61	6,574	0.41
Morningstar Small Cap Blend Avg	-14.72	-17.27	5.65	5.58	9.40	-	0.99
Russell 2000 Index	-17.20	-25.20	4.21	5.17	9.35	-	-
Blackrock Russell 2000 Index Coll M	-17.19	-25.14	4.28	5.27	9.51	-	0.03
Russell 2000 Index	-17.20	-25.20	4.21	5.17	9.35	-	-
T. Rowe Price Instl Mid-Cap Equity Gr	-16.48	-22.49	3.90	8.51	12.69	5,330	0.61
Morningstar Mid Cap Growth Avg	-20.56	-28.58	5.04	8.69	10.82	-	1.05
Russell Mid Cap Growth Index	-21.07	-29.57	4.25	8.88	11.50	-	-
S&P Midcap 400 Index	-15.42	-14.64	6.87	7.02	10.90	-	-
Blackrock Midcap Equity Index Coll F	-15.42	-14.73	6.87	7.03	10.92	-	0.03
S&P MidCap 400 Index	-15.42	-14.64	6.87	7.02	10.90	-	-
Calvert US Large Cap Core Rspnb Idx R6	-17.44	-15.23	10.64	11.37	13.18	5,274	0.19
S&P 500 Index	-16.10	-10.62	10.60	11.31	12.96	-	-
Morningstar Socially Resp Large Cap Avg**	-16.11	-14.61	9.61	10.48	11.92	-	0.90
Morningstar Large Cap Growth Avg	-20.82	-23.86	8.10	11.01	12.51	-	0.97
Fidelity Contrafund Commingled Pool Cl 3	-20.09	-21.27	8.56	11.63	-	-	0.35
Morningstar Large Cap Growth Avg	-20.82	-23.86	8.10	11.01	12.51	-	0.97
Russell 1000 Growth Index	-20.92	-18.77	12.58	14.29	14.80	-	-
S&P 500 Index	-16.10	-10.62	10.60	11.31	12.96	-	-

\*\*This index is a compilation of all Large Cap Socially Conscious Funds in the Morningstar Database

Past performance is no guarantee of future results. Rankings provided based on total returns. Performance quoted for mutual funds may include performance of a predecessor fund/share class prior to the share class commencement of operations.

Name	Total Ret	Total Net Assets \$M	Expense Ratio				
	3 Mth	1 Yr	3 Yr	5 Yr	10 Yr		
JP Morgan US Value R6	-9.65	-3.56	10.23	10.08	12.10	3,047	0.44
Morningstar Large Cap Value Avg	-12.21	-6.82	6.87	7.17	10.50	-	-
Russell 1000 Value Index	-11.24	-4.84	7.95	7.84	10.26	-	-
Vanguard Institutional 500 Index Trust**	-16.10	-10.63	10.60	11.31	12.95		0.01
S&P 500 Index	-16.10	-10.62	10.60	11.31	12.96	-	-
Vanguard Wellington Adm	-10.39	-9.19	6.30	7.23	8.83	103,794	0.16
Morningstar Moderate Allocation Avg	-10.58	-11.07	4.54	5.29	6.69	-	1.03
Composite 65% S&P 500 / 35% Barclay's Aggregate	-12.11	-10.50	6.56	7.66	8.96	-	-
Composite 65% S&P 500 / 35% Barclay's U.S. Credit A or Better Idx	-12.75	-11.56	6.54	7.75	9.27	-	-
Vanguard Long-Term Investment-Grade Adm	-12.04	-20.51	-2.15	1.16	3.40	16,304	0.12
Barclay's LT Corporate A	-6.53	-13.30	-0.99	1.13	2.43	-	-
Morningstar Long Term Bond	-11.57	-19.51	-1.89	1.22	3.09	-	0.48
Dodge & Cox Income	-4.70	-9.95	0.29	1.72	2.58	60,584	0.41
Morningstar Interm Core-Plus Bond Avg	-5.51	-11.10	-0.73	0.94	1.91	-	-
BarCap US Agg Bond TR USD	-4.69	-10.29	-0.93	0.88	1.54	-	-
Blackrock US Debt Index Fund Coll W	-4.67	-10.22	-0.89	0.92	1.48	-	0.03
BarCap US Agg Bond TR USD	-4.69	-10.29	-0.93	0.88	1.54	-	-
Vanguard Admiral Treasury Money Mkt Inv	0.15	0.17	0.54	1.01	0.57	34,903	0.09
Morningstar Taxable Money Mkt Avg	0.09	0.11	0.40	0.80	0.43	-	0.43
U.S. Treasury 90-Day T-Bill	0.27	0.37	0.55	1.06	0.62	-	-
iMoney Net Average Treasury MM	0.08	0.09	0.36	0.71	0.37	-	-
Stable Value Fund	0.41	1.61	2.03	2.12	2.04	784	0.28
5 Yr. Constant Maturity Treasury Yield	0.74	1.68	1.13	1.65	1.52	-	-

\*\* Italicized returns are taken from mutual fund share class..

Past performance is no guarantee of future results. Rankings provided based on total returns. Performance quoted for mutual funds may include performance of a predecessor fund/share class prior to the share class commencement of operations.

	Plan Inception Date	Fund Net Assets	WDC Assets in Fund	WDC as a Percentage of Fund Assets	Fund as a Percentage of WDC Assets	Number of Participants	Percentage of WDC Participants Utilizing Fund
American Funds EuroPacific Gr R6	1/28/2005	\$140,902,780,589	\$144,892,820	0.10%	2.43%	13,239	19.39%
BlackRock EAFE Equity Index Fund W	2/1/2001	\$47,287,300,000	\$272,921,105	0.58%	4.57%	25,161	36.86%
DFA U.S. Micro Cap	2/1/1997	\$6,573,514,243	\$208,164,854	3.17%	3.49%	14,008	20.52%
BlackRock Russell 2000 Index Fd	2/20/2004	\$978,660,000	\$94,817,499	9.69%	1.59%	21,171	31.01%
T. Rowe Price Instl Mid-Cap Equity Gr	2/1/1998	\$5,329,867,607	\$475,493,325	8.92%	7.97%	32,371	47.42%
BlackRock Mid Cap Equity Index Fund W	2/1/2001	\$6,301,090,000	\$277,660,498	4.41%	4.65%	26,615	38.99%
Calvert US Large Cap Core Rspnb Idx R6	4/18/2003	\$5,274,019,357	\$79,596,254	1.51%	1.33%	3,535	5.18%
Fidelity Contrafund Commingled Pool CI 3	1/31/1994	\$97,040,105,588	\$689,297,764	0.71%	11.55%	15,787	23.13%
Vanguard Institutional 500 Index Trust	9/9/1990	\$99,400,000,000	\$645,600,496	0.65%	10.82%	32,575	47.72%
JP Morgan US Value R6	1/6/2022	\$3,046,521,651	\$37,422,747	1.23%	0.63%	18,682	27.37%
Vanguard Wellington Adm	10/26/2001	\$103,794,394,254	\$607,063,873	0.58%	10.17%	29,290	42.91%
Vanguard Long-Term Invt-Grade Adm	10/26/2001	\$16,304,329,391	\$130,406,720	0.80%	2.19%	15,829	23.19%
BlackRock US Debt Index	2/1/2001	\$2,610,350,000	\$248,615,852	9.52%	4.17%	23,420	34.31%
Dodge & Cox Income	9/20/2019	\$60,584,127,620	\$42,408,260	0.07%	0.71%	6,968	10.21%
Vanguard Target Retire Trust Plus Income	7/29/2005	\$13,700,000,000	\$62,271,498	0.45%	1.04%	1,844	2.70%
Vanguard Target Retire Trust Plus 2015	7/29/2005	\$11,900,000,000	\$111,813,293	0.94%	1.87%	2,507	3.67%
Vanguard Target Retire Trust Plus 2025	7/29/2005	\$65,700,000,000	\$312,275,080	0.48%	5.23%	6,152	9.01%
Vanguard Target Retire Trust Plus 2035	7/29/2005	\$73,100,000,000	\$248,957,268	0.34%	4.17%	7,094	10.39%
Vanguard Target Retire Trust Plus 2045	7/29/2005	\$60,800,000,000	\$160,489,292	0.26%	2.69%	6,857	10.04%
Vanguard Target Retire Trust Plus 2055	8/18/2010	\$33,200,000,000	\$63,585,242	0.19%	1.07%	4,947	7.25%
Vanguard Adm Money Market	10/1/1993	\$34,903,456,517	\$44,406,994	0.13%	0.74%	6,015	8.81%
Stable Value Fund	9/1/1996	N/A	\$783,505,468	N/A	13.13%	29,299	42.92%
Schwab PCRA	2/17/2000	N/A	\$76,697,620	N/A	1.29%	1,226	1.80%
FDIC Option	12/31/1996	N/A	\$149,321,920	N/A	2.50%	12,331	18.06%

# 3-Year Percentile Ranks

6/30/2022

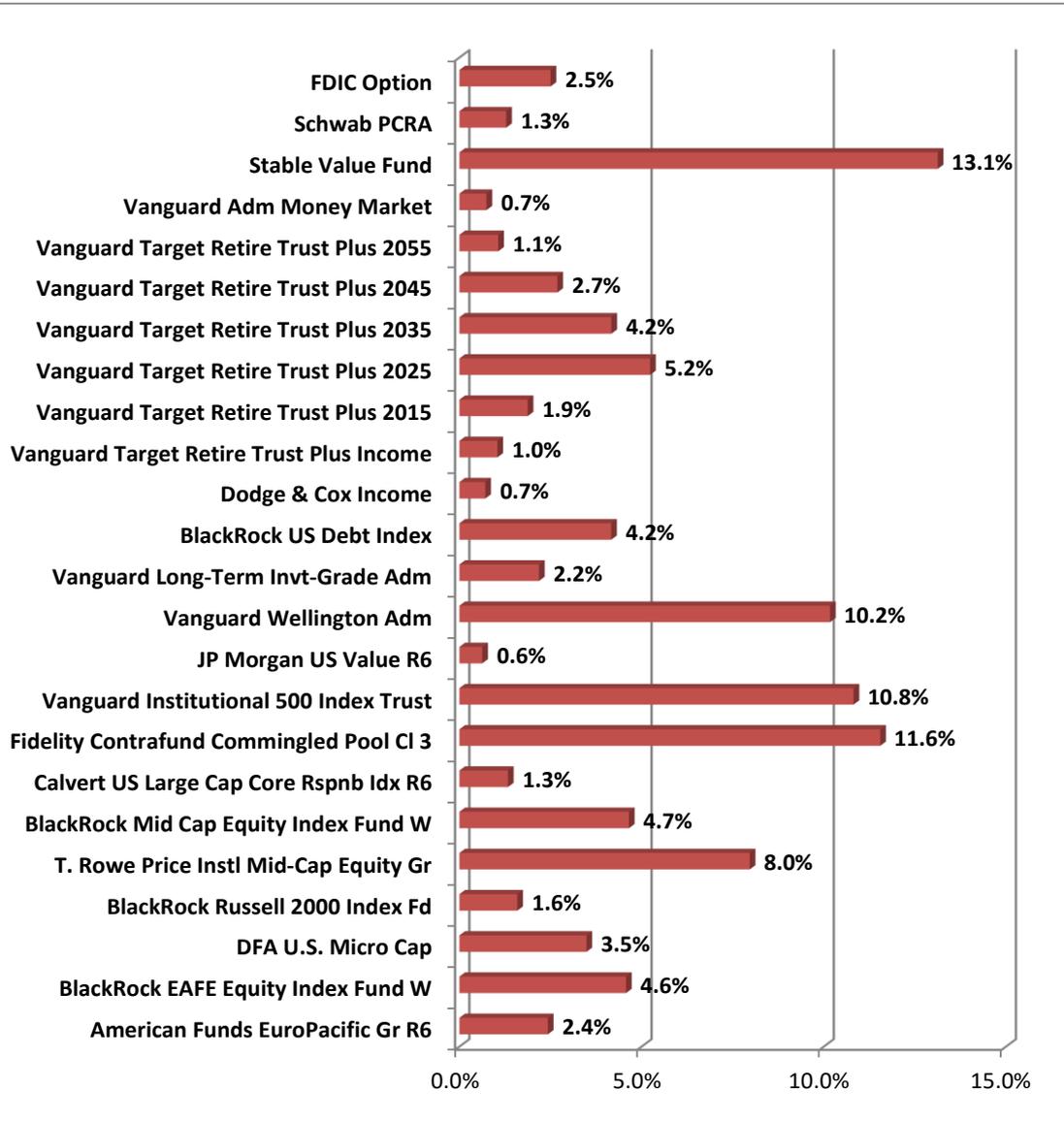
Group/Investment	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
	2022	2022	2021	2021	2021	2021	2020	2020	2020	2020	2019	2019
	% of Peer Group Beaten											
American Funds Europacific Grth R6	41	30	30	63	58	46	57	40	42	31	53	61
BlackRock EAFE® Equity Index F	56	61	58	57	53	56	57	56	69	74	72	87
Blackrock Mid Cap Eq Idx Fund CF	57	50	50	50	50	50	50	50	45	52	52	61
BlackRock Russell 2000® Index F	27	39	54	69	80	84	88	82	84	81	81	69
Blackrock US Debt Idx Fund CF	65	60	55	59	59	63	70	76	83	95	78	73
Calvert US Lrg Cap Core Rspnb Idx I	81	92	94	94	97	97	99	97	96	90	87	83
DFA US Micro Cap I	83	68	45	28	32	40	25	17	23	31	31	46
Dodge & Cox Income	90	80	69	74	79	82	83	78	82	69	75	83
Fidelity Contrafund Commingled PI 3	48	55	35	9	7	11	9	20	29	33	29	29
JP Morgan US Value R6	87	81	78	84	81	77	78	78	80	79	81	88
T. Rowe Price Instl Mid-Cap Equity Gr	33	20	24	39	34	37	38	37	36	45	66	71
Vanguard Instl 500 Index Trust	80	82	77	73	74	76	78	82	84	81	83	82
Vanguard Long-Term Inv-Grade Adm	50	46	42	50	49	54	47	60	72	77	54	63
Vanguard Target Ret Trust Plus 2015	38	23	20	23	21	25	46	74	74	87	69	66
Vanguard Target Ret Trust Plus 2025	64	68	69	72	73	77	79	89	85	80	92	85
Vanguard Target Ret Trust Plus 2035	58	55	54	63	67	60	70	80	80	79	76	71
Vanguard Target Ret Trust Plus 2045	76	68	57	66	67	70	73	83	80	73	79	79
Vanguard Target Ret Trust Plus 2055	75	65	41	63	64	59	68	78	81	78	71	65
Vanguard Target Ret Trust Plus Inc	73	60	56	69	66	71	78	86	84	90	72	67
Vanguard Wellington™ Admiral™	81	79	82	87	84	77	73	80	81	87	91	94

1<sup>st</sup> Quartile
  2<sup>nd</sup> Quartile
  3<sup>rd</sup> Quartile
  4<sup>th</sup> Quartile

\* Percentile ranks shown for Calvert US Large Cap Responsible Index are taken from oldest share class of the respective mutual fund.



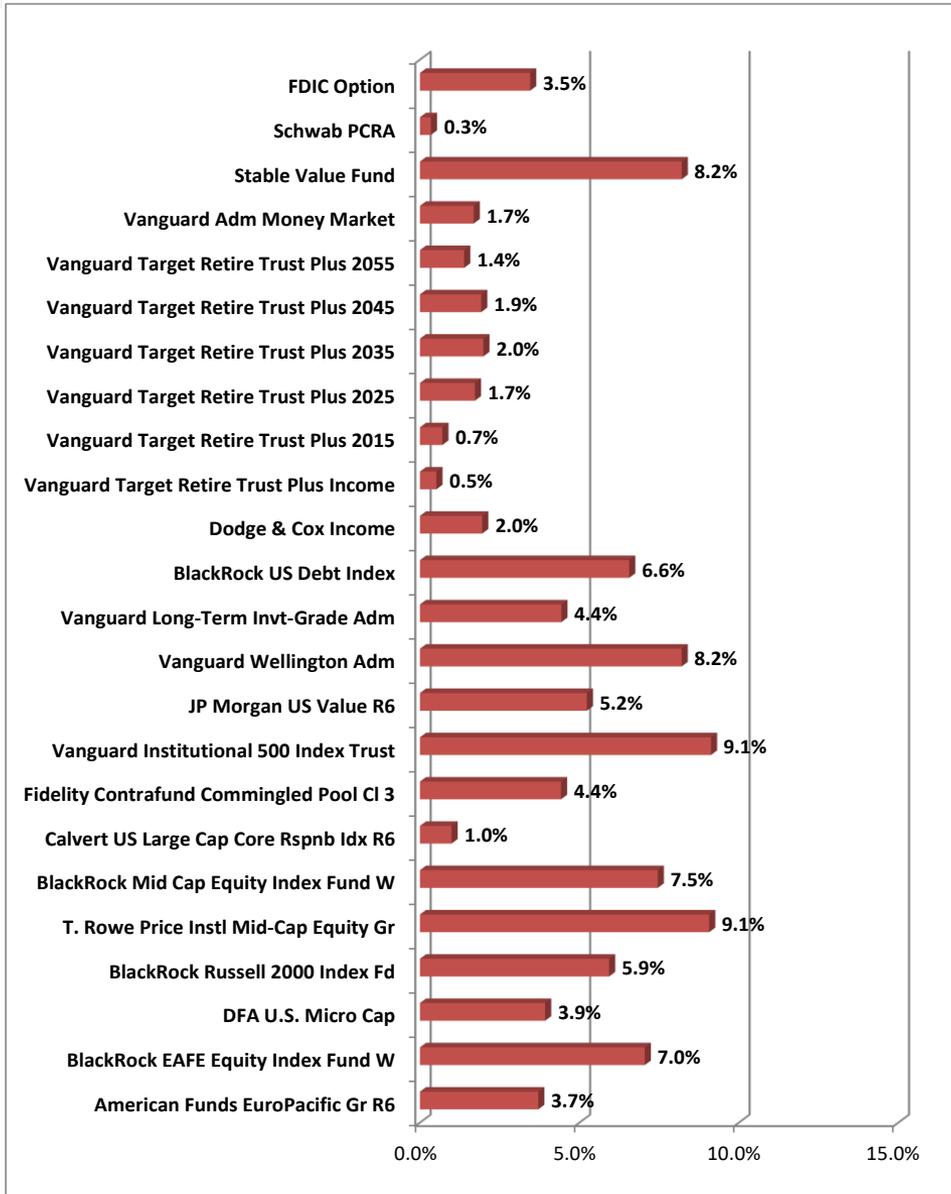
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## Total WDC Assets

**\$5,967,685,743**

Domestic Equity	\$2,508,053,437	42%
Intl Equity	\$417,813,925	7%
Asset Allocation	\$1,566,455,546	26%
Fixed Income	\$421,430,833	7%
Cash Equiv.	\$977,234,383	16%
Self-Directed Brok.	\$76,697,620	1%



Total WDC Participants  
68,264

Name	Expense Ratio	Annual Expense per \$1000
American Funds EuroPacific Gr R6	0.46	\$4.60
Cat: Foreign Large Growth	1.05	
Blackrock EAFE Equity Index Fund W	0.06	\$0.60
Cat: Foreign Large Blend Index	0.38	
DFA U.S. Micro Cap	0.41	\$4.10
Cat: Small Blend	0.99	
Blackrock Russell 2000 Index Fd	0.03	\$0.30
Cat: Small Cap Blend Index	0.38	
T. Rowe Price Instl Mid-Cap Equity Gr	0.61	\$6.10
Cat: Mid Growth	1.05	
Blackrock Mid Cap Equity Index Fund W	0.03	\$0.30
Cat: Mid Cap Blend Index	0.47	
Calvert US Large Cap Core Rspnb Idx R6	0.19	\$1.90
Cat: Socially Resp Large Cap	0.91	
Fidelity Contrafund Commingled Pool CI 3	0.35	\$3.50
Cat: Large Growth	0.97	
Vanguard Institutional 500 Index Trust	0.01	\$0.10
Cat: Large Cap Blend Index	0.43	
JP Morgan US Value R6	0.44	\$4.40
Cat: Large Value	0.91	
Stable Value Fund	0.28	\$2.80
Cat: Stable Value	0.65	
Dodge & Cox Income	0.41	\$4.10
Cat: Intern. Core-Plus Bond	0.74	

**Asset-Weighted Average Expense Ratio: 0.20%**

Name	Expense Ratio	Annual Expense per \$1000
Vanguard Wellington Adm	0.16	\$1.60
Cat: Moderate Allocation	1.03	
Vanguard Target Retire Trust Plus 2055	0.06	\$0.60
Cat: Target Date 2050+	0.71	
Vanguard Target Retire Trust Plus 2045	0.06	\$0.60
Cat: Target Date 2041-2045	0.70	
Vanguard Target Retire Trust Plus 2035	0.06	\$0.60
Cat: Target Date 2031-2035	0.69	
Vanguard Target Retire Trust Plus 2025	0.06	\$0.60
Cat: Target Date 2021-2025	0.67	
Vanguard Target Retire Trust Plus 2015	0.06	\$0.60
Cat: Target Date 2011-2015	0.59	
Vanguard Target Retire Trust Plus Income	0.06	\$0.60
Cat: Retirement Income	0.68	
Vanguard Long-Term Invmt-Grade Adm	0.12	\$1.20
Cat: Long Term Bond	0.48	
Blackrock US Debt Index	0.03	\$0.30
Cat: Intermediate Bond Index	0.28	
Vanguard Adm Money Market	0.09	\$0.90
Average US Taxable Money Market Fund	0.43	

\* The Dodge & Cox Income Fund shares revenue back to the plan's participants, which is not reflected in the expense ratios above. The expense ratio of the fund including this reimbursement would be 0.32% annually.

# Target Date Fund Summary



# Target Date Performance

6/30/2022

Name	Total Ret 3 Mth	Total Ret 1 Yr	Total Ret 3 Yr	Total Ret 5 Yr	Total Ret 10 Yr	Total Net Assets \$M	Expense Ratio	% Short- Term	% US Stocks	% Non US Stocks	% Inv Grade Bond	% High Yield Bond
<b>Vanguard Target RetireTrust Plus Income</b>	<b>-7.36</b>	<b>-10.05</b>	<b>2.15</b>	<b>3.41</b>	<b>4.20</b>	<b>13,700</b>	<b>0.06</b>	<b>1</b>	<b>18</b>	<b>12</b>	<b>68</b>	<b>0</b>
S&P Target Date Retirement Income TR USD	-7.29	-9.75	1.87	3.13	3.94	-	-	-	-	-	-	-
Composite Returns*	-8.02	-11.86	0.97	2.46	3.60	-	-	-	-	-	-	-
<b>Vanguard Target RetireTrust Plus 2015</b>	<b>-7.40</b>	<b>-10.05</b>	<b>2.57</b>	<b>3.92</b>	<b>5.64</b>	<b>11,900</b>	<b>0.06</b>	<b>1</b>	<b>19</b>	<b>13</b>	<b>66</b>	<b>0</b>
S&P Target Date 2015 TR USD	-8.62	-10.27	2.94	4.02	5.49	-	-	-	-	-	-	-
Composite Returns*	-8.34	-12.03	1.13	2.59	3.79	-	-	-	-	-	-	-
<b>Vanguard Target RetireTrust Plus 2025</b>	<b>-10.63</b>	<b>-13.04</b>	<b>3.88</b>	<b>5.20</b>	<b>7.23</b>	<b>65,700</b>	<b>0.06</b>	<b>1</b>	<b>35</b>	<b>23</b>	<b>41</b>	<b>0</b>
S&P Target Date 2025 TR USD	-10.05	-11.40	3.77	4.87	6.76	-	-	-	-	-	-	-
Composite Returns*	-11.29	-13.60	2.73	3.95	5.58	-	-	-	-	-	-	-
<b>Vanguard Target RetireTrust Plus 2035</b>	<b>-12.37</b>	<b>-14.23</b>	<b>4.92</b>	<b>6.08</b>	<b>8.39</b>	<b>73,100</b>	<b>0.06</b>	<b>0</b>	<b>45</b>	<b>29</b>	<b>26</b>	<b>0</b>
S&P Target Date 2035 TR USD	-12.55	-13.15	4.95	5.92	7.96	-	-	-	-	-	-	-
Composite Returns*	-13.06	-14.50	3.73	4.80	6.68	-	-	-	-	-	-	-
<b>Vanguard Target RetireTrust Plus 2045</b>	<b>-13.92</b>	<b>-15.16</b>	<b>5.98</b>	<b>6.89</b>	<b>9.08</b>	<b>60,800</b>	<b>0.06</b>	<b>0</b>	<b>54</b>	<b>35</b>	<b>11</b>	<b>0</b>
S&P Target Date 2045 TR USD	-14.12	-14.15	5.59	6.47	8.63	-	-	-	-	-	-	-
Composite Returns*	-14.80	-15.41	4.68	5.60	7.74	-	-	-	-	-	-	-
<b>Vanguard Target RetireTrust Plus 2055</b>	<b>-14.21</b>	<b>-15.37</b>	<b>5.99</b>	<b>6.90</b>	<b>9.06</b>	<b>33,200</b>	<b>0.06</b>	<b>0</b>	<b>55</b>	<b>36</b>	<b>9</b>	<b>0</b>
S&P Target Date 2055+ TR USD	-14.47	-14.40	5.77	6.64	8.99	-	-	-	-	-	-	-
Composite Returns*	-14.98	-15.51	4.77	5.68	7.84	-	-	-	-	-	-	-

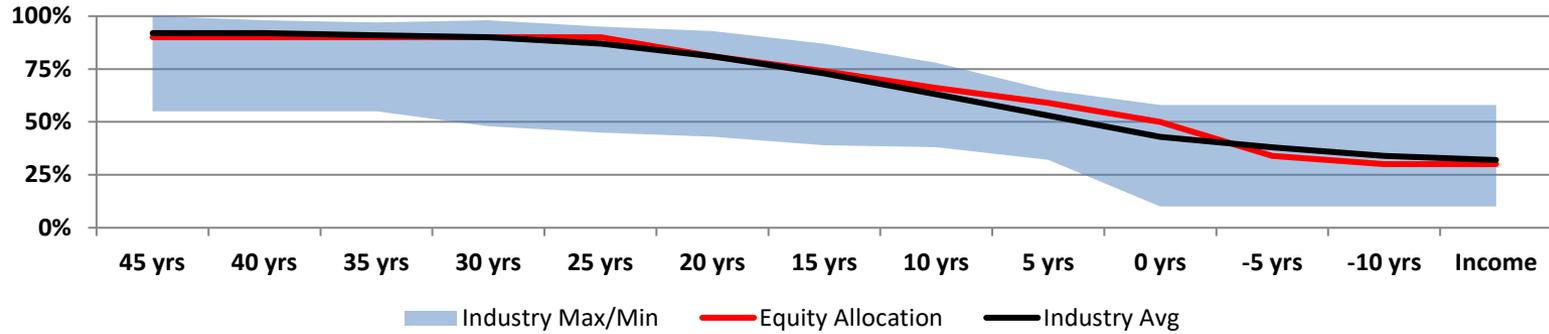
\*Composite benchmark consists of the following indices weighted to match the allocation of the specific target date fund:  
MSCI Broad Market, MSCI EAFE, Barclays Aggregate Bond, and Barclays US Treasury 1-3 Month

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# Glide Path Summary

6/30/2022

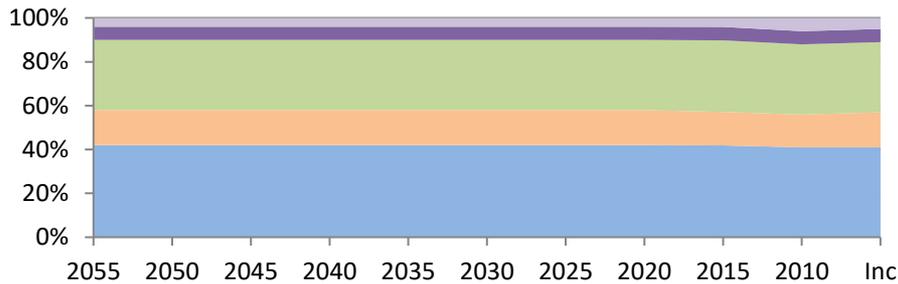
Data as of June 30, 2022



	45 yrs	40 yrs	35 yrs	30 yrs	25 yrs	20 yrs	15 yrs	10 yrs	5 yrs	0 yrs	-5 yrs	-10 yrs	Income
Equity %	90%	90%	90%	90%	90%	81%	74%	66%	59%	50%	34%	30%	30%
Industry Avg	89%	88%	85%	79%	71%	62%	53%	63%	53%	43%	38%	34%	32%

## Equity Diversification

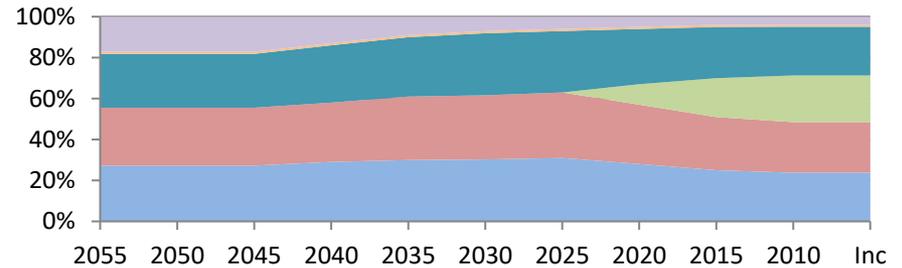
US Large Cap US Mid/Small Non-US - Dev Non-US - Emrg Other



	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Inc
US Large Cap	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
US Mid/Small	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
Non-US - Dev	31%	31%	31%	31%	31%	31%	31%	31%	31%	31%	31%
Non-US - Emrg	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Other	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%

## Fixed Income Diversification

US Govt US Inv Grade US High Yield TIPS Foreign Other Cash



	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Inc
US Govt	27%	27%	27%	29%	30%	30%	31%	28%	25%	24%	24%
US Inv Grade	28%	28%	28%	29%	31%	31%	32%	29%	26%	25%	25%
US High Yield	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
TIPS	0%	0%	0%	0%	0%	0%	0%	10%	19%	23%	23%
Foreign	26%	26%	26%	28%	29%	30%	30%	27%	25%	24%	24%
Other	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Cash	17%	17%	17%	13%	9%	7%	6%	5%	4%	4%	4%

# Expense Ratio Information



	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
<b>Cash Equiv</b>				
<b>Stable Value</b>				
Stable Value (Wisconsin)	0.28		0.28	
<b>Fixed Income</b>				
<b>Money Market-Taxable</b>				
Vanguard Treasury Money Market Investor	0.09	2	0.09	1
Money Market-Taxable Median	0.47		0.57	
<b>Intermediate Core Bond</b>				
BlackRock US Debt Index Fund M	0.03	3	0.03	2
Intermediate Core Bond Median	0.78		0.94	
<b>Intermediate Core-Plus Bond</b>				
Dodge & Cox Income I	0.41	16	0.41	10
Intermediate Core-Plus Bond Median	0.65		0.76	
<b>Long-term Bond</b>				
Vanguard Long-Term Investment-Grade Adm	0.12	18	0.12	15
Long-Term Bond Median	0.65		0.83	
<b>Balanced</b>				
<b>Allocation--50% to 70% Equity</b>				
Vanguard Wellington Admiral	0.16	1	0.16	1
Allocation--50% to 70% Equity Median	1.12		1.26	
<b>Target-Date Retirement</b>				
The Vanguard Target Retire Inc Trust I	0.06	1	0.06	1
Target-Date Retirement Median	0.79		1.10	
<b>Target-Date 2015</b>				
The Vanguard Target Retire 2015 Trust I	0.06	1	0.06	1
Target-Date 2015 Median	0.81		1.16	
<b>Target-Date 2025</b>				
The Vanguard Target Retire 2025 Trust I	0.06	1	0.06	1
Target-Date 2025 Median	0.75		1.02	
<b>Target-Date 2035</b>				
The Vanguard Target Retire 2035 Trust I	0.06	1	0.06	1
Target-Date 2035 Median	0.77		1.09	

Past performance is no guarantee of future results. Rankings provided based on total returns. Performance quoted for mutual funds may include performance of a predecessor fund/share class prior to the share class commencement of operations.

	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
<b>Target-Date 2045</b>				
<b>The Vanguard Target Retire 2045 Trust I</b>	<b>0.06</b>	<b>1</b>	<b>0.06</b>	<b>1</b>
<i>Target-Date 2045 Median</i>	<i>0.75</i>		<i>1.12</i>	
<b>Target-Date 2055</b>				
<b>The Vanguard Target Retire 2055 Trust I</b>	<b>0.06</b>	<b>1</b>	<b>0.06</b>	<b>1</b>
<i>Target-Date 2055 Median</i>	<i>0.75</i>		<i>1.17</i>	
<b>Equity</b>				
<b>Large Value</b>				
<b>JPMorgan US Value R6</b>	<b>0.44</b>	<b>9</b>	<b>0.50</b>	<b>9</b>
<i>Large Value Median</i>	<i>1.00</i>		<i>1.16</i>	
<b>Large Blend</b>				
<b>Vanguard Institutional Index Instl PI</b>	<b>0.01</b>	<b>1</b>	<b>0.01</b>	<b>1</b>
<b>Calvert US Large Cap Core Rspnb Idx R6</b>	<b>0.19</b>	<b>7</b>	<b>0.29</b>	<b>9</b>
<i>Large Blend Median</i>	<i>0.98</i>		<i>1.14</i>	
<b>Large Growth</b>				
<b>Fidelity Contrafund Commingled Pool CI 2</b>	<b>0.35</b>	<b>5</b>	<b>0.35</b>	<b>4</b>
<i>Large Growth Median</i>	<i>1.09</i>		<i>1.23</i>	
<b>Mid-Cap Blend</b>				
<b>BlackRock Mid Cap Equity Index- F</b>	<b>0.03</b>	<b>1</b>		
<i>Mid-Cap Blend Median</i>	<i>1.06</i>		<i>1.23</i>	
<b>Mid-Cap Growth</b>				
<b>T. Rowe Price Instl Mid-Cap Equity Gr</b>	<b>0.61</b>	<b>6</b>	<b>0.61</b>	<b>5</b>
<i>Mid-Cap Growth Median</i>	<i>1.20</i>		<i>1.39</i>	
<b>Small Blend</b>				
<b>DFA US Micro Cap I</b>	<b>0.41</b>	<b>10</b>	<b>0.41</b>	<b>8</b>
<b>BlackRock Russell 2000 Index-T</b>	<b>0.06</b>	<b>3</b>	<b>0.06</b>	<b>2</b>
<i>Small Blend Median</i>	<i>1.13</i>		<i>1.27</i>	
<b>International</b>				
<b>Foreign Large Blend</b>				
<b>BlackRock EAFE Equity Index-T</b>	<b>0.06</b>	<b>3</b>	<b>0.08</b>	<b>4</b>
<i>Foreign Large Blend Median</i>	<i>1.05</i>		<i>1.26</i>	

Past performance is no guarantee of future results. Rankings provided based on total returns. Performance quoted for mutual funds may include performance of a predecessor fund/share class prior to the share class commencement of operations.

Net Expense Ratio

Peer Rank

Gross Expense Ratio

Peer Rank

**Foreign Large Growth****American Funds Europacific Growth R6****0.46****5****0.46****3***Foreign Large Growth Median**1.11**1.29*

Past performance is no guarantee of future results. Rankings provided based on total returns. Performance quoted for mutual funds may include performance of a predecessor fund/share class prior to the share class commencement of operations.

# Fund Analysis

*Please consider the investment objectives, risks, fees and expenses carefully before investing. The prospectus contains this and other information about the investment options. Depending on the investment options offered in your Plan, your registered representative can provide you with prospectuses for any mutual funds; any applicable annuity contracts and the annuity's underlying funds; and/or disclosure documents for investment options exempt from SEC registration. Please read them carefully before investing.*

*Past performance is not indicative of future results. Performance includes the reinvestment of any income. Returns will fluctuate; and an investment upon redemption may be worth more or less than its original value. Current performance may be higher or lower than the performance data shown. For up-to-date month end performance information please call 800-345-2345.*

*Rankings provided based on total return.*

*Sources: MPI Stylus Web, Morningstar, individual investment managers*



In order to present the most complete information possible, mutual fund share classes are used as a proxy in the following pages for the commingled trusts included in the Deferred Compensation Plan. To indicate these pages, the fund name at the top of the page has been italicized.

# Stable Value (Wisconsin)

6/30/2022

<b>Fund Incep Date:</b> 07/01/1998	<b>Benchmark:</b> ML 3-month T-Bill	<b>Category:</b> Stable Value	<b>Net Assets:</b> \$783.31M	<b>Manager Name:</b> Team Managed	<b>Manager Start Date:</b> 06/30/1998	<b>Expense Ratio:</b> 0.27%	<b>Expense Rank:</b> NA
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## PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

#### Sensitive

Communication Services	0.00%
Industrials	0.00%
Technology	0.00%
Energy	0.00%

#### Cyclical

Basic Materials	0.00%
Consumer Cyclical	0.00%
Real Estate	0.00%
Financial Services	0.00%

#### Defensive

Consumer Defensive	0.00%
Healthcare	0.00%
Utilities	0.00%

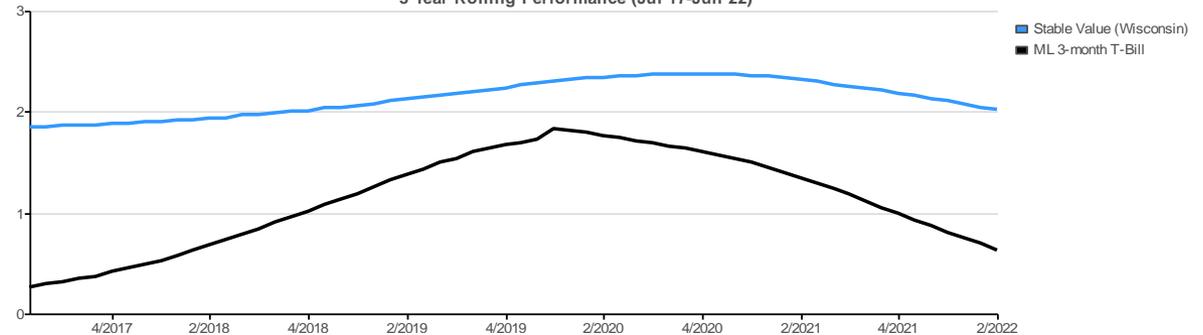
### TOP 10 HOLDINGS

## INVESTMENT OVERVIEW

To provide safety of principal and a stable crediting rate, while generating a competitive return.

## PERFORMANCE

### 3 Year Rolling Performance (Jul 17-Jun 22)

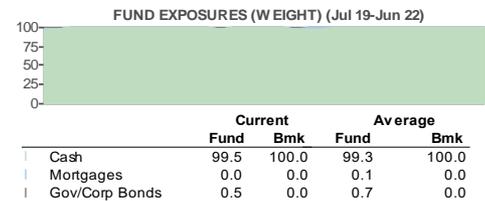


	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	0.41	0.78	1.60 / NA	2.03 / NA	2.12 / NA	2.05 / NA	2.04 / NA	3.83
Benchmark	0.10	0.14	0.17 / NA	0.63 / NA	1.11 / NA	0.89 / NA	0.64 / NA	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	1.69	2.31	2.56	2.25	1.89	1.89	1.85	1.73	2.10
Benchmark	0.05	0.67	2.28	1.87	0.86	0.33	0.05	0.03	0.07

Total: NA%

## ASSET LOADINGS (Returns-based)



## RISK & PERFORMANCE STATISTICS

	Fund	Benchmark
3 Yr		
Alpha	1.39	0.00
Beta	0.00	0.00
R-Squared	0.00	0.00
Sharpe Ratio	11.59	0.00
Up Market Capture	299.76	100.00
Down Market Capture	-3256.29	100.00
5 Yr		
Alpha	1.00	0.00
Beta	0.00	0.00
R-Squared	0.00	0.00
Sharpe Ratio	9.23	0.00
Up Market Capture	183.34	100.00
Down Market Capture	-3255.39	100.00

## NOTES

<b>Fund Incep Date:</b> 12/14/1992	<b>Benchmark:</b> FTSE Treasury Bill 3 Mon	<b>Category:</b> Money Market-Taxable	<b>Net Assets:</b> \$34,681.00M	<b>Manager Name:</b> Nafis T. Smith	<b>Manager Start Date:</b> 12/22/2017	<b>Expense Ratio:</b> 0.09%	<b>Expense Rank:</b> 2
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### PORTFOLIO COMPOSITION (Holdings-based)

#### Assets



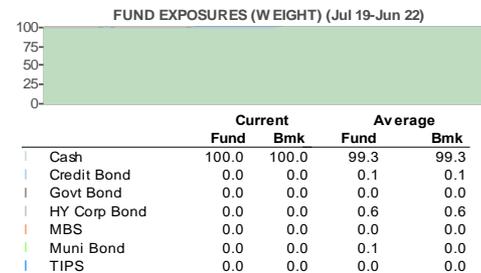
#### Credit Quality (%)

AAA	
AA	
A	
BBB	
BB	
B	
Below B	
NR/NA	
<b>Total:</b>	<b>0.00%</b>

#### Sector (%)

% Government	18.56%
% Municipal	0.00%
% Corporate	0.00%
% Securitized	0.00%
% Cash and Equivalent	81.44%
% Derivative	0.00%
<b>Total:</b>	<b>100.00%</b>

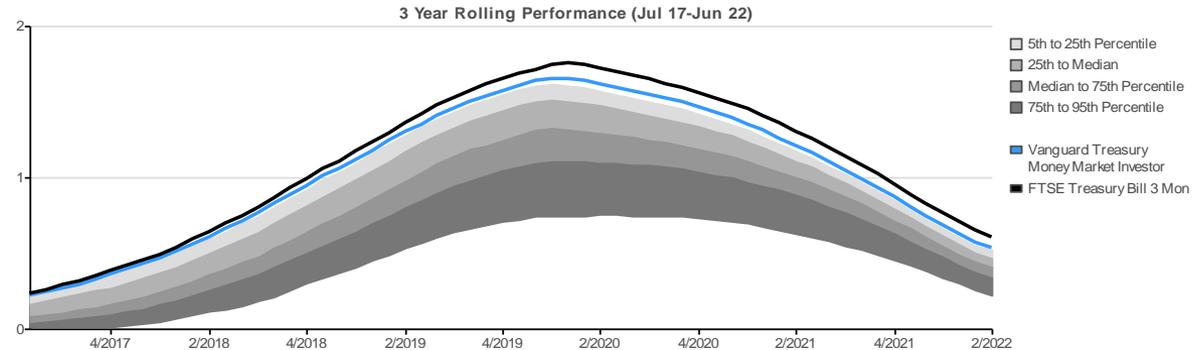
### ASSET LOADINGS (Returns-based)



### INVESTMENT OVERVIEW

The investment seeks to provide current income while maintaining liquidity and a stable share price of \$1. The fund invests solely in high-quality, short-term money market instruments whose interest and principal payments are backed by the full faith and credit of the U.S. government. At least 80% of the fund's assets will be invested in U.S. Treasury securities and in repurchase agreements fully collateralized by U.S. Treasury securities; the remainder of the assets will also be invested in U.S. Treasury securities and in repurchase agreements fully collateralized by U.S. Treasury securities.

### PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	0.15	0.17	0.17 / 12	0.54 / 4	1.01 / 2	0.80 / 2	0.57 / 2	2.27
Benchmark	0.14	0.17	0.19 / 4	0.61 / 2	1.09 / 2	0.86 / 1	0.62 / 1	
Peer Group Median	0.10	0.10	0.11 / 50	0.41 / 50	0.81 / 50	0.60 / 50	0.42 / 50	
Number of Funds			563	516	477	418	391	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	0.01	0.47	2.14	1.80	0.79	0.25	0.02	0.01	0.01
Benchmark	0.05	0.58	2.25	1.86	0.84	0.27	0.03	0.03	0.05
Peer Group Median	0.01	0.28	1.83	1.47	0.46	0.03	0.01	0.01	0.01

### RISK & PERFORMANCE STATISTICS

	Fund	Benchmark	Peer Group Median
3 Yr			
Alpha	-0.07	0.00	-0.20
Beta	1.03	1.00	1.12
R-Squared	95.91	100.00	79.47
Sharpe Ratio	-0.43	-0.09	-1.16
Up Market Capture	88.10	100.00	66.91
Down Market Capture	NA	NA	NA
5 Yr			
Alpha	-0.07	0.00	-0.27
Beta	1.03	1.00	1.11
R-Squared	96.01	100.00	75.20
Sharpe Ratio	-0.37	-0.09	-1.31
Up Market Capture	93.19	100.00	74.32
Down Market Capture	NA	NA	NA

### NOTES

<b>Fund Incep Date:</b> 07/02/1993	<b>Benchmark:</b> BBgBarc US Aggregate Bond Index	<b>Category:</b> Intermediate Core Bond	<b>Net Assets:</b> \$2,161.00M	<b>Manager Name:</b> James J. Mauro	<b>Manager Start Date:</b> 04/29/2011	<b>Expense Ratio:</b> 0.05%	<b>Expense Rank:</b> 4
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### PORTFOLIO COMPOSITION (Holdings-based)



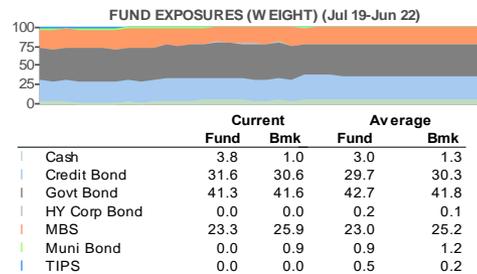
### Credit Quality (%)

AAA	71.31%
AA	2.55%
A	11.67%
BBB	14.48%
BB	0.00%
B	0.00%
Below B	0.00%
NR/NA	0.00%
<b>Total:</b>	<b>100.01%</b>

### Sector (%)

% Government	41.39%
% Municipal	0.57%
% Corporate	23.59%
% Securitized	22.92%
% Cash and Equivalent	11.53%
% Derivative	0.00%
<b>Total:</b>	<b>100.00%</b>

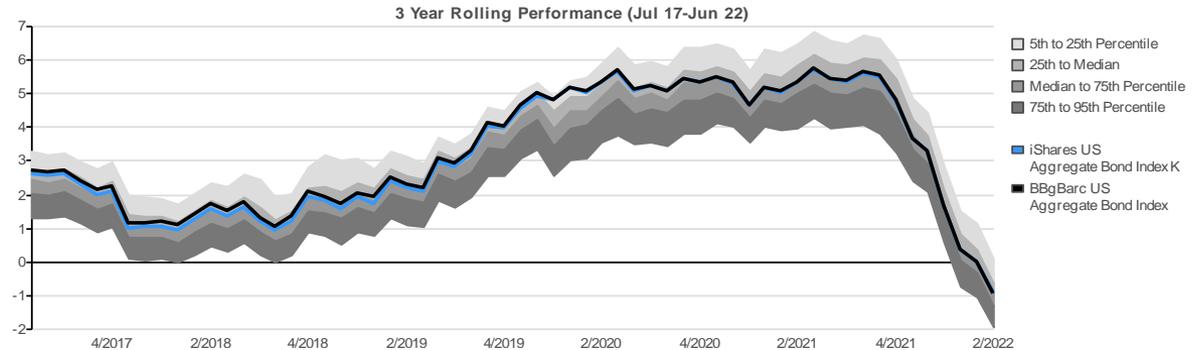
### ASSET LOADINGS (Returns-based)



### INVESTMENT OVERVIEW

The investment seeks to provide investment results that correspond to the total return performance of fixed-income securities in the aggregate, as represented by the Bloomberg U.S. Aggregate Bond Index. The fund is a "feeder" fund that invests all of its assets in the Master Portfolio of MIP, which has the same investment objective and strategies as the fund. Under normal circumstances, at least 90% of the value of the fund's assets, plus the amount of any borrowing for investment purposes, is invested in securities comprising the Bloomberg U.S. Aggregate Index.

### PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-4.62	-10.17	-10.21 / 21	-0.92 / 45	0.85 / 40	1.36 / 47	1.44 / 57	4.40
Benchmark	-4.69	-10.35	-10.29 / 25	-0.93 / 46	0.88 / 36	1.42 / 39	1.54 / 47	
Peer Group Median	-5.04	-10.61	-10.80 / 50	-0.98 / 50	0.78 / 50	1.32 / 50	1.50 / 50	
Number of Funds			451	421	396	374	361	

	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	-1.80	7.64	8.71	-0.08	3.39	2.53	0.38	5.93	-2.35
Benchmark	-1.54	7.51	8.72	0.01	3.54	2.65	0.55	5.97	-2.02
Peer Group Median	-1.59	7.84	8.46	-0.41	3.37	2.58	0.15	5.44	-2.08

### RISK & PERFORMANCE STATISTICS

	Fund	Benchmark	Peer Group Median
<b>3 Yr</b>			
Alpha	0.00	0.00	0.01
Beta	0.99	1.00	1.03
R-Squared	99.79	100.00	93.22
Sharpe Ratio	-0.32	-0.32	-0.30
Up Market Capture	98.74	100.00	107.19
Down Market Capture	98.70	100.00	105.21
<b>5 Yr</b>			
Alpha	-0.03	0.00	-0.09
Beta	0.99	1.00	1.01
R-Squared	99.78	100.00	93.55
Sharpe Ratio	-0.04	-0.04	-0.06
Up Market Capture	98.68	100.00	101.12
Down Market Capture	99.07	100.00	103.35

### NOTES

<b>Fund Incep Date:</b> 01/03/1989	<b>Benchmark:</b> BBgBarc US Aggregate Bond Index	<b>Category:</b> Intermediate Core-Plus Bond	<b>Net Assets:</b> \$60,584.00M	<b>Manager Name:</b> Dana M. Emery	<b>Manager Start Date:</b> 01/03/1989	<b>Expense Ratio:</b> 0.41%	<b>Expense Rank:</b> 16
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### PORTFOLIO COMPOSITION (Holdings-based)

#### Assets



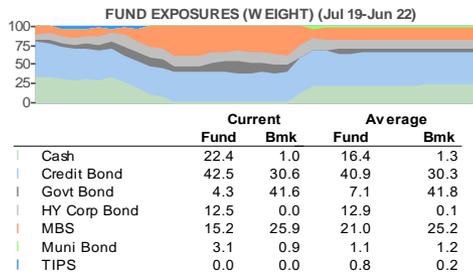
#### Credit Quality (%)

AAA	51.30%
AA	4.70%
A	6.70%
BBB	27.20%
BB	10.10%
B	0.00%
Below B	0.01%
NR/NA	0.00%
<b>Total:</b>	<b>100.01%</b>

#### Sector (%)

% Government	15.35%
% Municipal	1.96%
% Corporate	37.95%
% Securitized	41.82%
% Cash and Equivalent	2.91%
% Derivative	0.00%
<b>Total:</b>	<b>99.99%</b>

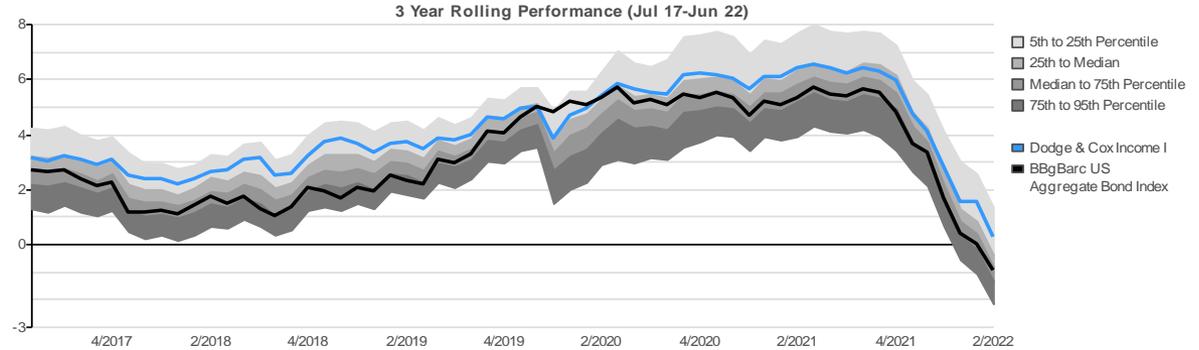
### ASSET LOADINGS (Returns-based)



### INVESTMENT OVERVIEW

The investment seeks a high and stable rate of current income, consistent with long-term preservation of capital; a secondary objective is capital appreciation. The fund invests in a diversified portfolio of bonds and other debt securities. The fund will invest at least 80% of its total assets in (1) investment-grade debt securities and (2) cash equivalents. "Investment grade" means securities rated Baa3 or higher by Moody's Investors Service, or BBB- or higher by Standard & Poor's Ratings Group or Fitch Ratings, or equivalently rated by any nationally recognized statistical rating organization, or, if unrated, deemed to be of similar quality by Dodge & Cox.

### PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-4.70	-9.65	-9.95 / 15	0.29 / 11	1.72 / 11	2.31 / 8	2.58 / 10	6.08
Benchmark	-4.69	-10.35	-10.29 / 21	-0.93 / 56	0.88 / 50	1.42 / 58	1.54 / 76	
Peer Group Median	-5.78	-11.41	-11.40 / 50	-0.83 / 50	0.87 / 50	1.52 / 50	1.91 / 50	
Number of Funds			612	590	560	510	484	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	-0.91	9.45	9.73	-0.31	4.36	5.61	-0.59	5.48	0.64
Benchmark	-1.54	7.51	8.72	0.01	3.54	2.65	0.55	5.97	-2.02
Peer Group Median	-0.82	8.31	9.26	-0.80	4.23	3.79	-0.30	5.59	-1.07

### RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	1.17	0.00	0.29
Beta	0.95	1.00	1.07
R-Squared	77.18	100.00	76.13
Sharpe Ratio	-0.05	-0.32	-0.24
Up Market Capture	116.22	100.00	119.37
Down Market Capture	94.05	100.00	111.92

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.82	0.00	0.03
Beta	0.87	1.00	1.02
R-Squared	74.32	100.00	77.31
Sharpe Ratio	0.17	-0.04	-0.03
Up Market Capture	100.17	100.00	105.84
Down Market Capture	83.09	100.00	105.13

### NOTES

# Vanguard Long-Term Investment-Grade Adm VWETX

6/30/2022

<b>Fund Incep Date:</b> 02/12/2001	<b>Benchmark:</b> BBgBarc US Credit A+ Long TR USD	<b>Category:</b> Long-term Bond	<b>Net Assets:</b> \$16,304.00M	<b>Manager Name:</b> Scott I. St. John	<b>Manager Start Date:</b> 05/28/2014	<b>Expense Ratio:</b> 0.12%	<b>Expense Rank:</b> 18
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## PORTFOLIO COMPOSITION (Holdings-based)

### Assets



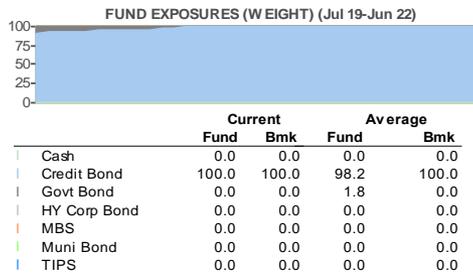
### Credit Quality (%)

AAA	11.32%
AA	20.74%
A	60.06%
BBB	5.78%
BB	0.00%
B	0.00%
Below B	0.32%
NR/NA	1.78%
<b>Total:</b>	<b>100.00%</b>

### Sector (%)

% Government	7.99%
% Municipal	8.91%
% Corporate	78.19%
% Securitized	0.57%
% Cash and Equivalent	4.34%
% Derivative	0.00%
<b>Total:</b>	<b>100.00%</b>

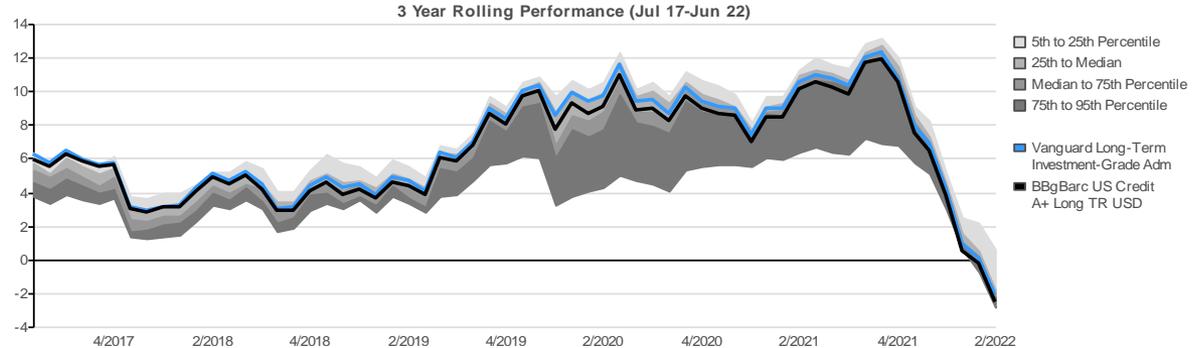
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to provide a high and sustainable level of current income. The fund invests in a variety of high-quality and, to a lesser extent, medium-quality fixed income securities, at least 80% of which will be intermediate- and long-term investment-grade securities. High-quality fixed income securities are those rated the equivalent of A3 or better; medium-quality fixed income securities are those rated the equivalent of Baa1, Baa2, or Baa3. The fund's dollar-weighted average maturity is expected to fall within a range that is five years shorter than or five years longer than that of its benchmark index.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-12.04	-21.44	-20.51 / 38	-2.15 / 46	1.16 / 33	3.24 / 23	3.40 / 17	5.89
Benchmark	-12.00	-21.79	-20.80 / 55	-2.56 / 87	0.82 / 85	2.88 / 52	2.93 / 61	
Peer Group Median	-12.73	-22.10	-20.65 / 50	-2.22 / 50	1.03 / 50	2.95 / 50	3.10 / 50	
Number of Funds			33	32	32	32	31	

	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	-2.29	15.47	20.52	-5.86	12.04	7.92	-2.11	18.28	-5.77
Benchmark	-2.36	14.46	20.85	-6.32	11.49	7.88	-1.95	17.22	-6.79
Peer Group Median	-1.58	14.59	20.16	-5.08	11.63	6.75	-3.41	16.73	-5.87

## RISK & PERFORMANCE STATISTICS

	Fund	Benchmark	Peer Group Median
3 Yr			
Alpha	0.40	0.00	0.46
Beta	1.00	1.00	0.98
R-Squared	99.21	100.00	94.71
Sharpe Ratio	-0.17	-0.20	-0.16
Up Market Capture	102.15	100.00	101.39
Down Market Capture	99.39	100.00	97.56
5 Yr			
Alpha	0.33	0.00	0.24
Beta	0.99	1.00	0.99
R-Squared	99.21	100.00	94.36
Sharpe Ratio	0.06	0.02	0.05
Up Market Capture	101.01	100.00	99.45
Down Market Capture	98.59	100.00	98.10

## NOTES

<b>Fund Incep Date:</b> 05/14/2001	<b>Benchmark:</b> S&P 500 Index	<b>Category:</b> Allocation--50% to 70% Equity	<b>Net Assets:</b> \$103,794.00M	<b>Manager Name:</b> Loren L. Moran	<b>Manager Start Date:</b> 01/27/2017	<b>Expense Ratio:</b> 0.16%	<b>Expense Rank:</b> 1
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### PORTFOLIO COMPOSITION (Holdings-based)



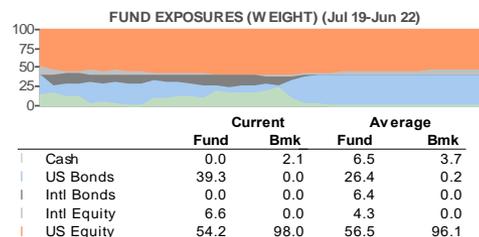
### Sector Breakdown

Sensitive	
Communication Services	9.14%
Industrials	9.81%
Technology	20.04%
Energy	3.87%
Cyclical	
Basic Materials	0.25%
Consumer Cyclical	9.92%
Real Estate	2.75%
Financial Services	17.14%
Defensive	
Consumer Defensive	7.81%
Healthcare	15.35%
Utilities	3.92%

### TOP 10 HOLDINGS

Microsoft Corp	5.08%
Alphabet Inc Class A	3.51%
Apple Inc	2.65%
Charles Schwab Corp	2.60%
Meta Platforms Inc Class A	1.85%
Amazon.com Inc	1.80%
McDonald's Corp	1.69%
Procter & Gamble Co	1.56%
UnitedHealth Group Inc	1.51%
Pfizer Inc	1.49%
<b>Total:</b>	<b>23.75%</b>

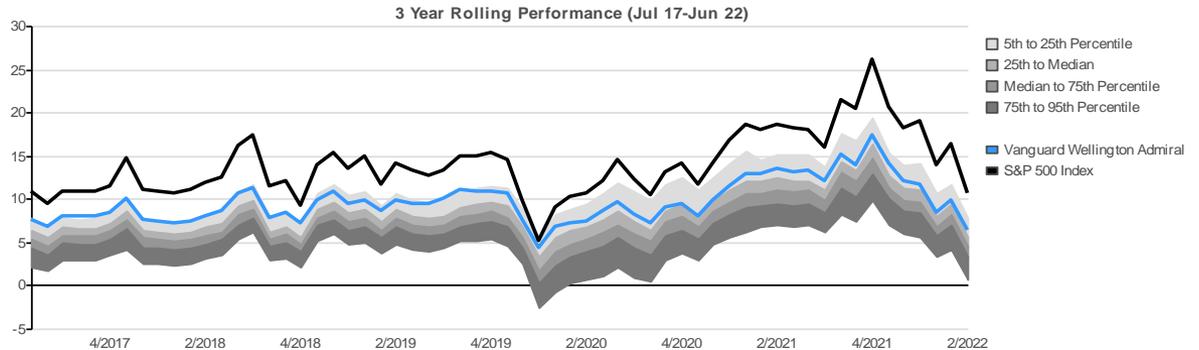
### ASSET LOADINGS (Returns-based)



### INVESTMENT OVERVIEW

The investment seeks to provide long-term capital appreciation and moderate current income. The fund invests 60% to 70% of its assets in dividend-paying and, to a lesser extent, non-dividend-paying common stocks of established large companies. The remaining 30% to 40% of the fund's assets are invested mainly in fixed income securities that the advisor believes will generate a moderate level of current income. These securities include investment-grade corporate bonds, with some exposure to U.S. Treasury and government agency bonds, and mortgage-backed securities.

### PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-10.39	-16.09	-9.19 / 22	6.30 / 15	7.23 / 11	7.59 / 5	8.83 / 7	7.49
Benchmark	-16.10	-19.96	-10.62 / 32	10.60 / 1	11.31 / 1	11.14 / 1	12.96 / 1	
Peer Group Median	-11.18	-15.83	-12.21 / 50	4.48 / 50	5.17 / 50	5.28 / 50	6.77 / 50	
Number of Funds			763	736	701	653	612	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	19.12	10.68	22.61	-3.35	14.82	11.09	0.14	9.90	19.76
Benchmark	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39
Peer Group Median	13.12	12.32	19.28	-5.91	13.90	6.78	-1.35	5.85	17.11

### RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-1.20	0.00	-2.59
Beta	0.67	1.00	0.66
R-Squared	96.24	100.00	93.55
Sharpe Ratio	0.50	0.60	0.37
Up Market Capture	62.27	100.00	55.94
Down Market Capture	70.51	100.00	69.33

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.62	0.00	-2.34
Beta	0.64	1.00	0.64
R-Squared	95.31	100.00	93.50
Sharpe Ratio	0.58	0.65	0.42
Up Market Capture	61.34	100.00	55.16
Down Market Capture	66.55	100.00	66.34

### NOTES

# Vanguard Target Retirement Income Fund VTINX (Proxy for Vanguard Tgt Ret Tr Plus Income) 6/30/2022

<b>Fund Incep Date:</b> 10/27/2003	<b>Benchmark:</b> S&P Target Date Retirement Income	<b>Category:</b> Target-Date Retirement	<b>Net Assets:</b> \$21,943.00M	<b>Manager Name:</b> William A. Coleman	<b>Manager Start Date:</b> 02/22/2013	<b>Expense Ratio:</b> 0.08%	<b>Expense Rank:</b> 1
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## PORTFOLIO COMPOSITION (Holdings-based)



## Sector Breakdown

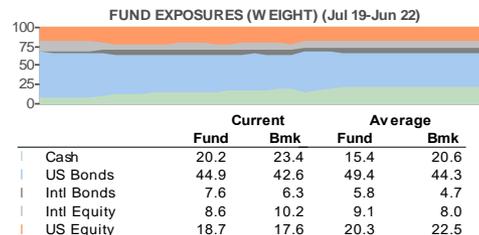
Sensitive	
Communication Services	7.35%
Industrials	10.78%
Technology	18.98%
Energy	5.27%
Cyclical	
Basic Materials	5.21%
Consumer Cyclical	10.67%
Real Estate	3.76%
Financial Services	15.85%
Defensive	
Consumer Defensive	6.94%
Healthcare	12.12%
Utilities	3.06%

## TOP 10 HOLDINGS

Vanguard Total Bond Market II Idx Inv	36.70%
Vanguard Total Stock Mkt Idx Instl Pls	17.16%
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	16.93%
Vanguard Total Intl Bd II Idx Instl	16.09%
Vanguard Total Intl Stock Index Inv	11.87%

**Total:** 98.75%

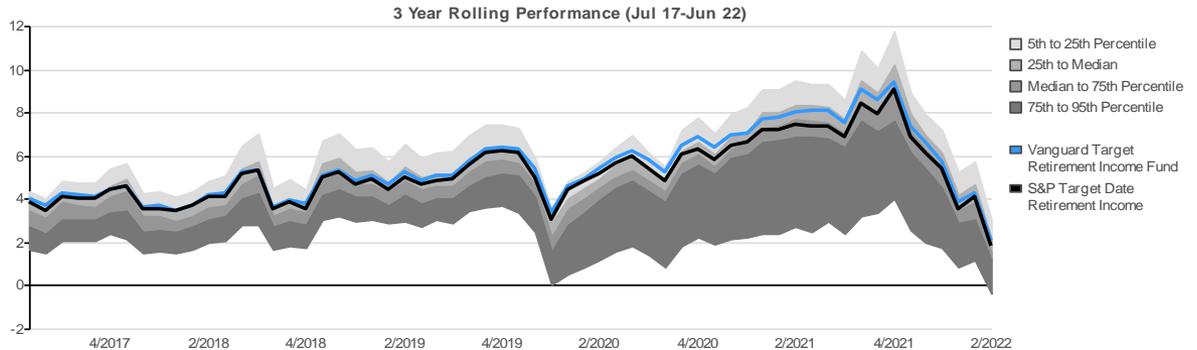
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to provide current income and some capital appreciation. The fund invests in a mix of Vanguard mutual funds according to an asset allocation strategy designed for investors currently in retirement. Its indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI	
Fund	-7.37	-11.79	-10.14 / 42	2.09 / 28	3.34 / 27	3.60 / 20	4.12 / 29	4.76	
Benchmark	-7.29	-11.48	-9.75 / 37	1.87 / 33	3.13 / 32	3.38 / 30	3.94 / 43		
Peer Group Median	-8.25	-12.74	-11.01 / 50	1.50 / 50	2.74 / 50	3.03 / 50	3.78 / 50		
Number of Funds			169	158	142	130	108		
CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	5.25	10.02	13.16	-1.99	8.47	5.25	-0.17	5.54	5.87
Benchmark	5.11	8.81	13.33	-2.54	8.54	5.01	-0.18	4.86	6.28
Peer Group Median	5.80	9.06	12.90	-3.38	8.56	5.04	-1.25	4.04	5.58

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.23	0.00	-0.31
Beta	0.98	1.00	1.07
R-Squared	99.10	100.00	96.60
Sharpe Ratio	0.24	0.21	0.16
Up Market Capture	101.34	100.00	109.14
Down Market Capture	98.92	100.00	110.61
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.26	0.00	-0.41
Beta	0.97	1.00	1.04
R-Squared	98.85	100.00	96.70
Sharpe Ratio	0.40	0.35	0.29
Up Market Capture	98.10	100.00	104.16
Down Market Capture	94.42	100.00	106.46

## NOTES

# Vanguard Target Retirement 2015 Fund VTXVX (Proxy for Vanguard Tgt Ret Tr Plus 2015) 6/30/2022

<b>Fund Incep Date:</b> 10/27/2003	<b>Benchmark:</b> S&P Target Date 2015	<b>Category:</b> Target-Date 2015	<b>Net Assets:</b> \$17,340.00M	<b>Manager Name:</b> William A. Coleman	<b>Manager Start Date:</b> 02/22/2013	<b>Expense Ratio:</b> 0.08%	<b>Expense Rank:</b> 1
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## PORTFOLIO COMPOSITION (Holdings-based)



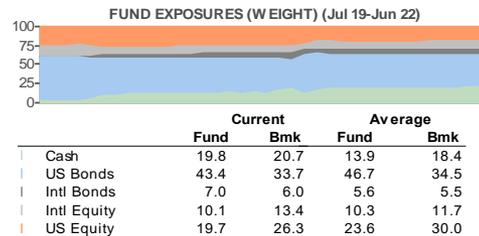
## Sector Breakdown

<b>Sensitive</b>	
Communication Services	7.35%
Industrials	10.78%
Technology	18.93%
Energy	5.27%
<b>Cyclical</b>	
Basic Materials	5.23%
Consumer Cyclical	10.69%
Real Estate	3.76%
Financial Services	15.87%
<b>Defensive</b>	
Consumer Defensive	6.95%
Healthcare	12.11%
Utilities	3.07%

<b>TOP 10 HOLDINGS</b>	
Vanguard Total Bond Market II Idx Inv	36.53%
Vanguard Total Stock Mkt Idx Instl Pls	17.49%
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	16.61%
Vanguard Total Intl Bd II Idx Instl	15.88%
Vanguard Total Intl Stock Index Inv	12.31%

**Total:** 98.82%

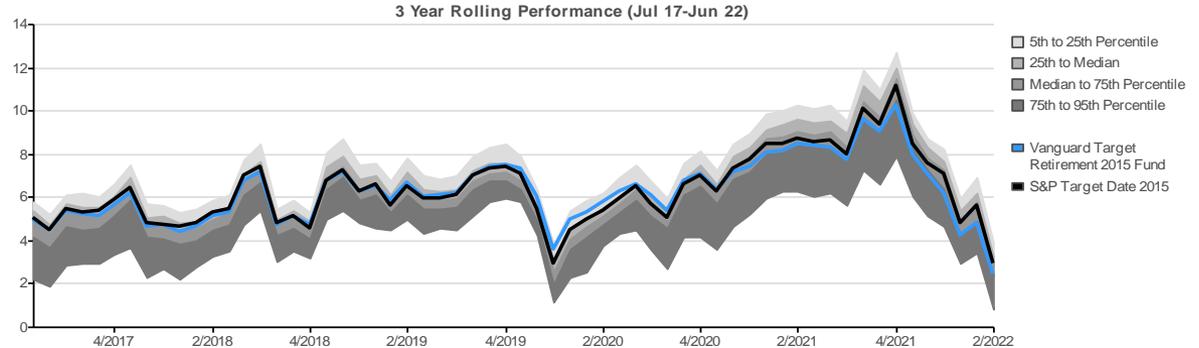
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in a mix of Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2015 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-7.40	-11.84	-10.12 / 23	2.48 / 69	3.85 / 60	4.18 / 60	5.55 / 64	5.56
Benchmark	-8.62	-12.81	-10.27 / 23	2.94 / 45	4.02 / 50	4.36 / 50	5.49 / 66	
Peer Group Median	-8.94	-13.58	-11.53 / 50	2.83 / 50	4.00 / 50	4.34 / 50	5.68 / 50	
Number of Funds			128	123	103	82	69	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	5.78	10.32	14.81	-2.97	11.50	6.16	-0.46	6.56	13.00
Benchmark	8.01	10.28	15.40	-3.67	11.39	6.56	-0.16	5.49	12.16
Peer Group Median	7.85	11.14	15.18	-3.90	11.49	6.44	-1.13	4.87	11.56

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.17	0.00	-0.19
Beta	0.86	1.00	1.04
R-Squared	98.49	100.00	97.98
Sharpe Ratio	0.28	0.30	0.28
Up Market Capture	85.95	100.00	103.56
Down Market Capture	87.83	100.00	105.69

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.19	0.00	-0.12
Beta	0.87	1.00	1.01
R-Squared	98.46	100.00	97.80
Sharpe Ratio	0.43	0.40	0.38
Up Market Capture	88.35	100.00	102.19
Down Market Capture	86.17	100.00	101.17

## NOTES

# Vanguard Target Retirement 2025 Fund VTTVX (Proxy for Vanguard Tgt Ret Tr Plus 2025) 6/30/2022

<b>Fund Incep Date:</b> 10/27/2003	<b>Benchmark:</b> S&P Target Date 2025	<b>Category:</b> Target-Date 2025	<b>Net Assets:</b> \$74,493.00M	<b>Manager Name:</b> William A. Coleman	<b>Manager Start Date:</b> 02/22/2013	<b>Expense Ratio:</b> 0.08%	<b>Expense Rank:</b> 1
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## PORTFOLIO COMPOSITION (Holdings-based)



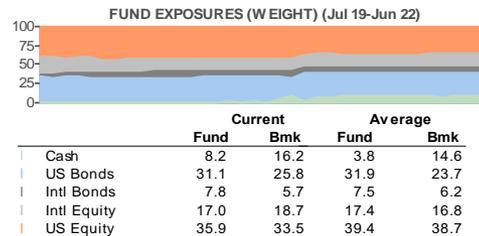
## Sector Breakdown

<b>Sensitive</b>	
Communication Services	7.36%
Industrials	10.77%
Technology	19.01%
Energy	5.27%
<b>Cyclical</b>	
Basic Materials	5.20%
Consumer Cyclical	10.67%
Real Estate	3.76%
Financial Services	15.84%
<b>Defensive</b>	
Consumer Defensive	6.94%
Healthcare	12.13%
Utilities	3.06%

<b>TOP 10 HOLDINGS</b>	
Vanguard Total Stock Mkt Idx Inst Pls	32.33%
Vanguard Total Bond Market II Idx Inv	28.58%
Vanguard Total Intl Stock Index Inv	22.17%
Vanguard Total Intl Bd II Idx Inst	12.67%
Vanguard Sht-Term Infl-Prot Sec Idx Adm	3.15%

Total: 98.89%

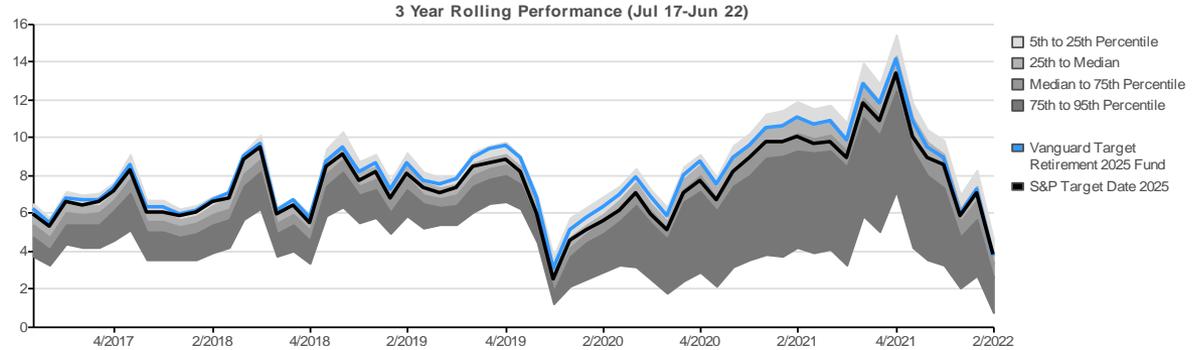
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in a mix of Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2025 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-10.72	-15.63	-13.21 / 51	3.74 / 34	5.07 / 25	5.40 / 20	7.10 / 19	6.29
Benchmark	-10.05	-14.40	-11.40 / 21	3.77 / 33	4.87 / 38	5.25 / 30	6.76 / 36	
Peer Group Median	-10.29	-15.54	-13.18 / 50	3.36 / 50	4.62 / 50	4.79 / 50	6.49 / 50	
Number of Funds			230	213	191	169	131	

	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	9.80	13.30	19.63	-5.15	15.94	7.48	-0.85	7.17	18.14
Benchmark	10.67	11.22	18.38	-5.02	14.55	7.82	-0.25	5.56	17.03
Peer Group Median	9.74	12.46	18.29	-5.39	14.95	6.96	-1.27	5.42	16.50

## RISK & PERFORMANCE STATISTICS

	3 Yr	Fund	Benchmark	Peer Group Median
Alpha		-0.12	0.00	-0.33
Beta		1.04	1.00	1.01
R-Squared		99.51	100.00	98.44
Sharpe Ratio		0.32	0.33	0.30
Up Market Capture		103.09	100.00	98.66
Down Market Capture		103.70	100.00	101.46

	5 Yr	Fund	Benchmark	Peer Group Median
Alpha		0.09	0.00	-0.23
Beta		1.03	1.00	1.00
R-Squared		99.48	100.00	98.28
Sharpe Ratio		0.42	0.42	0.39
Up Market Capture		103.47	100.00	98.07
Down Market Capture		102.70	100.00	100.30

## NOTES

# Vanguard Target Retirement 2035 Fund VTTHX (Proxy for Vanguard Tgt Ret Tr Plus 2035) 6/30/2022

<b>Fund Incep Date:</b> 10/27/2003	<b>Benchmark:</b> S&P Target Date 2035	<b>Category:</b> Target-Date 2035	<b>Net Assets:</b> \$74,223.00M	<b>Manager Name:</b> William A. Coleman	<b>Manager Start Date:</b> 02/22/2013	<b>Expense Ratio:</b> 0.08%	<b>Expense Rank:</b> 1
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## PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

#### Sensitive

Communication Services	7.36%
Industrials	10.77%
Technology	19.01%
Energy	5.27%

#### Cyclical

Basic Materials	5.20%
Consumer Cyclical	10.67%
Real Estate	3.76%
Financial Services	15.84%

#### Defensive

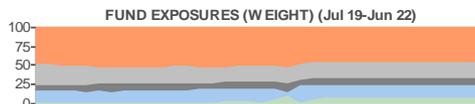
Consumer Defensive	6.94%
Healthcare	12.13%
Utilities	3.06%

### TOP 10 HOLDINGS

Vanguard Total Stock Mkt Idx Instl Pls	41.70%
Vanguard Total Intl Stock Index Inv	28.59%
Vanguard Total Bond Market II Idx Inv	19.78%
Vanguard Total Intl Bd II Idx Instl	8.74%

Total: 98.80%

### ASSET LOADINGS (Returns-based)



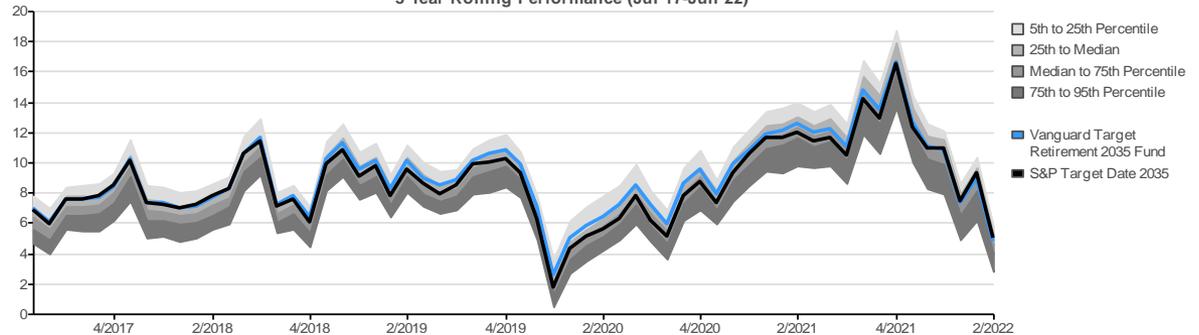
	Current		Average	
	Fund	Bmk	Fund	Bmk
Cash	6.4	13.3	3.3	11.9
US Bonds	17.2	6.3	15.8	4.4
Intl Bonds	8.9	8.3	9.5	8.6
Intl Equity	22.1	26.6	22.0	24.2
US Equity	45.4	45.5	49.5	50.9

## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in a mix of Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2035 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

## PERFORMANCE

### 3 Year Rolling Performance (Jul 17-Jun 22)



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-12.41	-17.37	-14.36 / 37	4.80 / 42	5.96 / 39	6.22 / 34	8.27 / 28	6.97
Benchmark	-12.55	-16.94	-13.15 / 13	4.95 / 36	5.92 / 40	6.24 / 33	7.96 / 39	
Peer Group Median	-12.66	-18.08	-14.66 / 50	4.59 / 50	5.72 / 50	5.87 / 50	7.64 / 50	
Number of Funds			223	207	185	163	125	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	12.96	14.79	22.44	-6.58	19.12	8.26	-1.26	7.24	22.82
Benchmark	14.93	12.79	22.18	-6.88	17.78	8.85	-0.35	5.69	20.84
Peer Group Median	13.85	14.04	22.24	-7.29	18.69	7.84	-1.50	5.58	21.11

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.03	0.00	-0.33
Beta	0.97	1.00	1.01
R-Squared	99.45	100.00	98.86
Sharpe Ratio	0.36	0.36	0.34
Up Market Capture	96.08	100.00	99.69
Down Market Capture	96.59	100.00	101.89

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.16	0.00	-0.17
Beta	0.97	1.00	1.00
R-Squared	99.46	100.00	98.85
Sharpe Ratio	0.43	0.42	0.41
Up Market Capture	97.02	100.00	99.34
Down Market Capture	96.25	100.00	100.47

## NOTES

# Vanguard Target Retirement 2045 Fund VTIVX (Proxy for Vanguard Tgt Ret Tr Plus 2045) 6/30/2022

<b>Fund Incep Date:</b> 10/27/2003	<b>Benchmark:</b> S&P Target Date 2045	<b>Category:</b> Target-Date 2045	<b>Net Assets:</b> \$59,082.00M	<b>Manager Name:</b> William A. Coleman	<b>Manager Start Date:</b> 02/22/2013	<b>Expense Ratio:</b> 0.08%	<b>Expense Rank:</b> 1
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## PORTFOLIO COMPOSITION (Holdings-based)



## Sector Breakdown

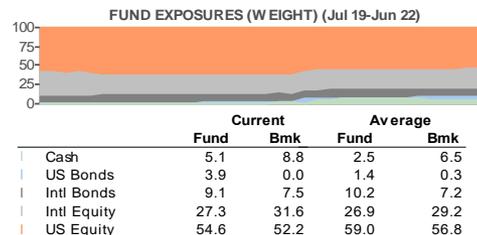
<b>Sensitive</b>	
Communication Services	7.36%
Industrials	10.76%
Technology	19.02%
Energy	5.26%
<b>Cyclical</b>	
Basic Materials	5.19%
Consumer Cyclical	10.67%
Real Estate	3.76%
Financial Services	15.83%
<b>Defensive</b>	
Consumer Defensive	6.94%
Healthcare	12.14%
Utilities	3.06%

## TOP 10 HOLDINGS

Vanguard Total Stock Mkt Idx Instl Pls	50.76%
Vanguard Total Intl Stock Index Inv	34.68%
Vanguard Total Bond Market II Idx Inv	9.15%
Vanguard Total Intl Bd II Idx Instl	4.06%

Total: 98.64%

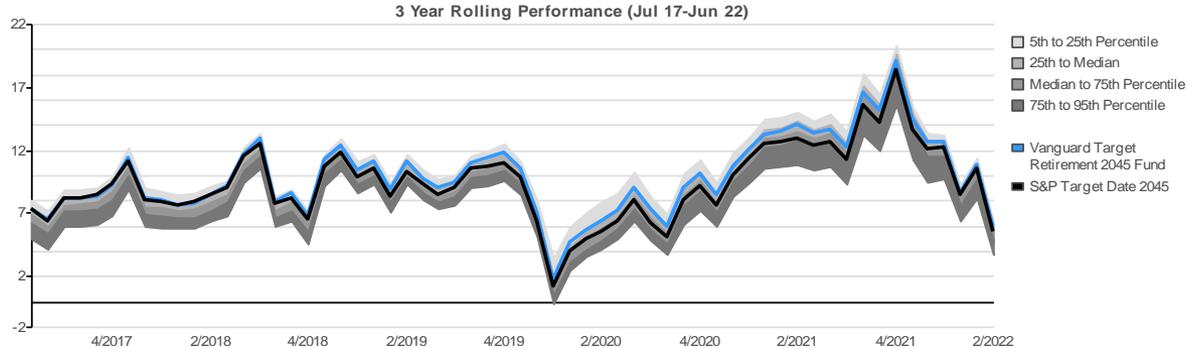
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in a mix of Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2045 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-13.93	-18.82	-15.29 / 30	5.89 / 24	6.80 / 22	6.96 / 20	8.97 / 16	7.51
Benchmark	-14.12	-18.43	-14.15 / 14	5.59 / 38	6.47 / 42	6.77 / 33	8.63 / 32	
Peer Group Median	-14.32	-19.64	-15.81 / 50	5.40 / 50	6.35 / 50	6.41 / 50	8.31 / 50	
Number of Funds			223	207	185	163	124	

	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	16.16	16.30	24.94	-7.90	21.42	8.87	-1.57	7.16	24.37
Benchmark	17.51	13.66	24.02	-7.74	19.56	9.54	-0.46	5.67	23.14
Peer Group Median	16.73	15.35	24.56	-8.31	20.58	8.20	-1.60	5.67	23.17

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.27	0.00	-0.22
Beta	1.01	1.00	1.03
R-Squared	99.51	100.00	98.90
Sharpe Ratio	0.39	0.37	0.36
Up Market Capture	101.55	100.00	102.31
Down Market Capture	100.23	100.00	102.93

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.27	0.00	-0.16
Beta	1.01	1.00	1.02
R-Squared	99.54	100.00	98.97
Sharpe Ratio	0.44	0.43	0.41
Up Market Capture	102.10	100.00	101.59
Down Market Capture	100.66	100.00	101.35

## NOTES

# Vanguard Target Retirement 2055 Fund VFFVX (Proxy for Vanguard Tgt Ret Tr Plus 2055) 6/30/2022

<b>Fund Incep Date:</b> 08/18/2010	<b>Benchmark:</b> S&P Target Date 2055	<b>Category:</b> Target-Date 2055	<b>Net Assets:</b> \$28,555.00M	<b>Manager Name:</b> William A. Coleman	<b>Manager Start Date:</b> 02/22/2013	<b>Expense Ratio:</b> 0.08%	<b>Expense Rank:</b> 1
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## PORTFOLIO COMPOSITION (Holdings-based)



## Sector Breakdown

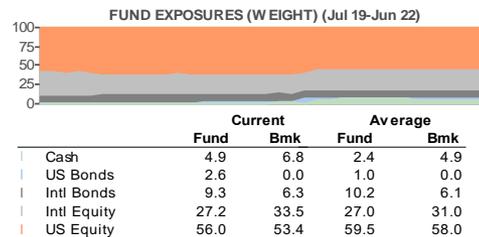
<b>Sensitive</b>	
Communication Services	7.36%
Industrials	10.76%
Technology	19.04%
Energy	5.26%
<b>Cyclical</b>	
Basic Materials	5.18%
Consumer Cyclical	10.67%
Real Estate	3.76%
Financial Services	15.82%
<b>Defensive</b>	
Consumer Defensive	6.94%
Healthcare	12.15%
Utilities	3.06%

## TOP 10 HOLDINGS

Vanguard Total Stock Mkt Idx Instl Pls	52.76%
Vanguard Total Intl Stock Index Inv	35.79%
Vanguard Total Bond Market II Idx Inv	6.99%
Vanguard Total Intl Bd II Idx Instl	3.16%

Total: 98.70%

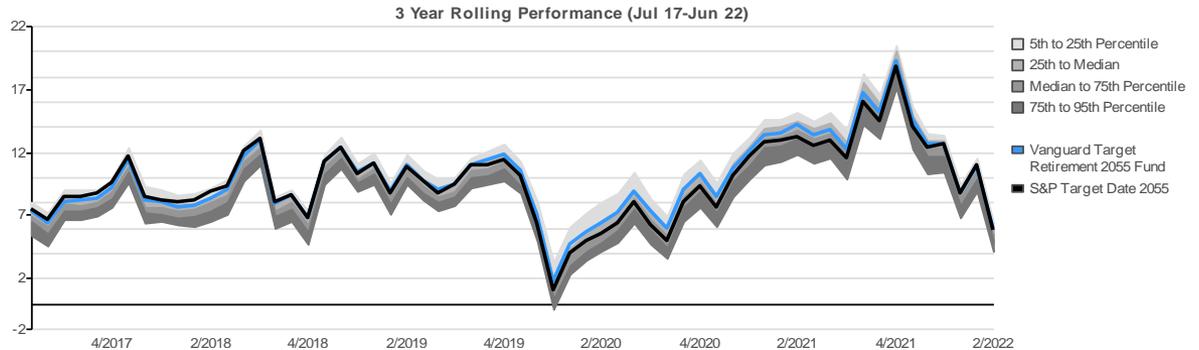
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in a mix of Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2055 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-14.19	-19.07	-15.45 / 26	5.89 / 24	6.80 / 25	6.94 / 27	8.95 / 22	9.19
Benchmark	-14.47	-18.75	-14.40 / 12	5.77 / 32	6.64 / 36	6.98 / 24	8.99 / 21	
Peer Group Median	-14.64	-20.00	-16.15 / 50	5.43 / 50	6.44 / 50	6.48 / 50	8.53 / 50	
Number of Funds			223	207	182	159	99	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	16.44	16.32	24.98	-7.89	21.38	8.88	-1.72	7.19	24.33
Benchmark	18.19	13.86	24.48	-7.97	20.48	9.94	-0.54	5.64	24.96
Peer Group Median	17.19	15.69	24.79	-8.60	21.09	8.26	-1.62	5.75	23.31

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.18	0.00	-0.29
Beta	0.98	1.00	1.00
R-Squared	99.50	100.00	98.93
Sharpe Ratio	0.39	0.38	0.36
Up Market Capture	98.71	100.00	100.48
Down Market Capture	98.15	100.00	101.55

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.22	0.00	-0.20
Beta	0.98	1.00	1.01
R-Squared	99.53	100.00	98.96
Sharpe Ratio	0.44	0.43	0.41
Up Market Capture	99.20	100.00	100.06
Down Market Capture	98.28	100.00	100.65

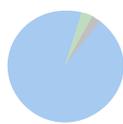
## NOTES



<b>Fund Incep Date:</b> 11/02/2015	<b>Benchmark:</b> Russell 1000 Value Index	<b>Category:</b> Large Value	<b>Net Assets:</b> \$2,805.00M	<b>Manager Name:</b> Clare A. Hart	<b>Manager Start Date:</b> 03/01/2004	<b>Expense Ratio:</b> 0.44%	<b>Expense Rank:</b> 9
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### PORTFOLIO COMPOSITION (Holdings-based)

#### Assets



Cash	2.83%
US Stocks	94.99%
US Bonds	0.00%
Non-US Stocks	2.18%
Preferred Stocks	0.00%
Convertible Bonds	0.00%
Other	0.00%
Non-US Bonds	0.00%

#### Sector Breakdown

##### Sensitive

Communication Services	4.61%
Industrials	12.14%
Technology	7.38%
Energy	8.75%

##### Cyclical

Basic Materials	3.57%
Consumer Cyclical	8.00%
Real Estate	1.52%
Financial Services	25.41%

##### Defensive

Consumer Defensive	6.86%
Healthcare	18.44%
Utilities	3.32%

#### TOP 10 HOLDINGS

ConocoPhillips	3.05%
JPMorgan Prime Money Market IM	2.83%
Wells Fargo & Co	2.38%
UnitedHealth Group Inc	2.33%
Bristol-Myers Squibb Co	2.19%
EOG Resources Inc	2.08%
Exxon Mobil Corp	1.95%
Berkshire Hathaway Inc Class B	1.89%
Johnson & Johnson	1.80%
BlackRock Inc	1.74%
<b>Total:</b>	<b>22.24%</b>

#### ASSET LOADINGS (Returns-based)



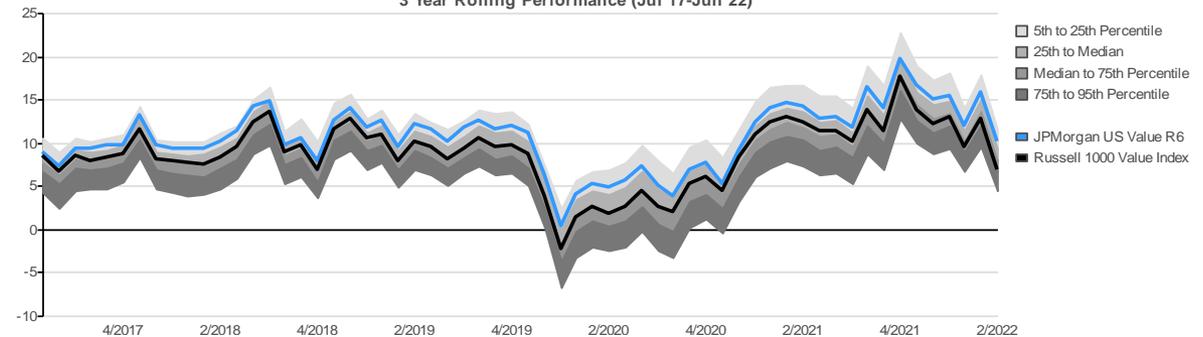
	Current		Average	
	Fund	Bmk	Fund	Bmk
Cash	0.9	0.0	0.3	0.0
Top Value	86.3	65.3	72.5	66.1
Top Growth	0.0	0.1	2.7	0.0
Mid Value	12.8	34.7	22.7	33.7
Mid Growth	0.0	0.0	0.0	0.0
Sm Value	0.0	0.0	1.6	0.1
Sm Growth	0.0	0.0	0.2	0.0

### INVESTMENT OVERVIEW

The investment seeks to provide capital growth over the long-term. Under normal circumstances, the fund invests at least 80% of its assets in common stocks issued by U.S. companies. "Assets" means net assets, plus the amount of borrowings for investment purposes. The fund's adviser applies an active equity management style focused on identifying attractively valued securities given their growth potential over a long-term time horizon.

### PERFORMANCE

#### 3 Year Rolling Performance (Jul 17-Jun 22)



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-9.65	-9.96	-3.56 / 37	10.23 / 12	10.08 / 9	9.72 / 11	12.10 / 7	10.05
Benchmark	-12.21	-12.86	-6.82 / 72	6.87 / 69	7.17 / 66	7.69 / 54	10.50 / 41	
Peer Group Median	-11.29	-11.55	-5.09 / 50	7.83 / 50	7.73 / 50	7.80 / 50	10.31 / 50	
Number of Funds			1239	1194	1159	1100	1017	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	27.50	4.80	28.48	-7.25	17.71	15.35	-2.48	14.10	33.96
Benchmark	25.16	2.80	26.54	-8.27	13.66	17.34	-3.83	13.45	32.53
Peer Group Median	26.08	2.76	25.50	-8.80	16.24	14.29	-3.49	10.91	31.62

### RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	3.19	0.00	1.05
Beta	0.98	1.00	0.98
R-Squared	99.09	100.00	96.45
Sharpe Ratio	0.57	0.41	0.45
Up Market Capture	106.79	100.00	99.87
Down Market Capture	94.25	100.00	96.35

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	2.76	0.00	0.66
Beta	0.99	1.00	0.99
R-Squared	98.72	100.00	96.17
Sharpe Ratio	0.58	0.42	0.45
Up Market Capture	107.89	100.00	100.54
Down Market Capture	95.82	100.00	98.28

### NOTES

# Vanguard 500 Index Institutional Select VFFSX (Proxy for Vanguard Institutional 500 Index Trust) 6/30/2022

<b>Fund Inception Date:</b> 06/24/2016	<b>Benchmark:</b> S&P 500 Index	<b>Category:</b> Large Blend	<b>Net Assets:</b> \$709,796.00M	<b>Manager Name:</b> Donald M. Butler	<b>Manager Start Date:</b> 04/27/2016	<b>Expense Ratio:</b> 0.01%	<b>Expense Rank:</b> 1
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## PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

#### Sensitive

Communication Services	8.87%
Industrials	8.31%
Technology	24.27%
Energy	4.36%

#### Cyclical

Basic Materials	2.28%
Consumer Cyclical	10.31%
Real Estate	2.92%
Financial Services	12.93%

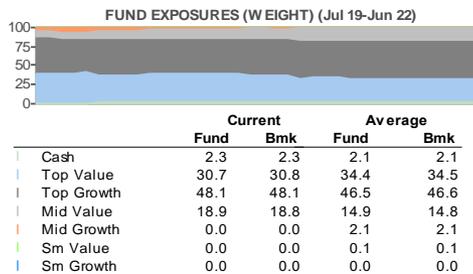
#### Defensive

Consumer Defensive	7.41%
Healthcare	15.24%
Utilities	3.11%

### TOP 10 HOLDINGS

Apple Inc	6.55%
Microsoft Corp	5.98%
Amazon.com Inc	2.90%
Alphabet Inc Class A	2.04%
Alphabet Inc Class C	1.88%
Tesla Inc	1.76%
Berkshire Hathaway Inc Class B	1.54%
UnitedHealth Group Inc	1.50%
Johnson & Johnson	1.46%
NVIDIA Corp	1.18%
<b>Total:</b>	<b>26.79%</b>

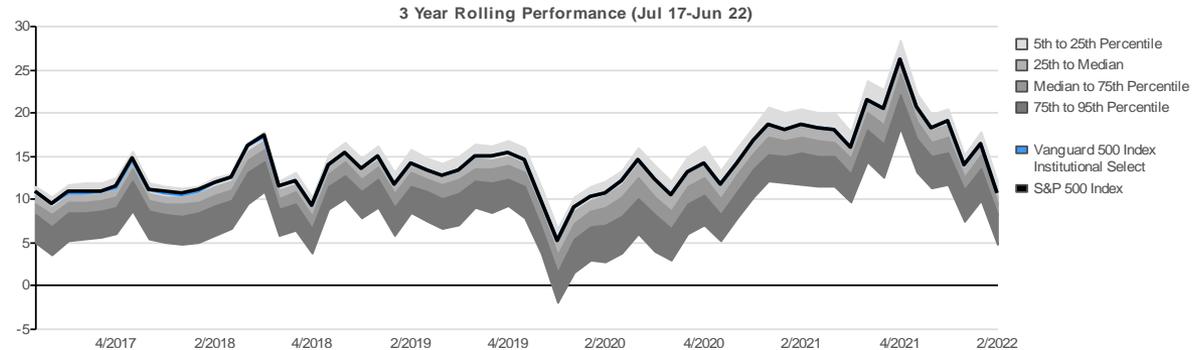
### ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to track the performance of the Standard & Poor's 500 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 & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-16.10	-19.97	-10.63 / 35	10.60 / 18	11.31 / 14	11.12 / 9	12.89 / 14	12.91
Benchmark	-16.10	-19.96	-10.62 / 35	10.60 / 18	11.31 / 14	11.14 / 8	12.96 / 11	
Peer Group Median	-15.76	-20.03	-11.69 / 50	9.47 / 50	10.16 / 50	9.87 / 50	11.95 / 50	
Number of Funds			1372	1270	1197	1107	1020	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	28.70	18.40	31.49	-4.40	21.83	11.89	1.25	13.51	32.18
Benchmark	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39
Peer Group Median	26.70	17.10	29.81	-5.65	21.14	10.47	0.01	11.86	32.00

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.00	0.00	-0.93
Beta	1.00	1.00	0.99
R-Squared	100.00	100.00	97.29
Sharpe Ratio	0.60	0.60	0.54
Up Market Capture	99.98	100.00	96.95
Down Market Capture	99.99	100.00	100.48

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.00	0.00	-0.91
Beta	1.00	1.00	1.00
R-Squared	100.00	100.00	97.29
Sharpe Ratio	0.65	0.65	0.59
Up Market Capture	99.98	100.00	96.43
Down Market Capture	99.99	100.00	100.60

## NOTES

# Calvert US Large Cap Core Rspnb Idx R6 CSXR

6/30/2022

<b>Fund Incep Date:</b> 10/03/2017	<b>Benchmark:</b> S&P 500 Index	<b>Category:</b> Large Blend	<b>Net Assets:</b> \$3,743.00M	<b>Manager Name:</b> Thomas C. Seto	<b>Manager Start Date:</b> 12/31/2016	<b>Expense Ratio:</b> 0.19%	<b>Expense Rank:</b> 7
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## PORTFOLIO COMPOSITION (Holdings-based)

### Assets



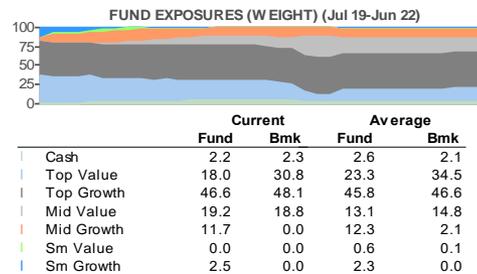
### Sector Breakdown

<b>Sensitive</b>	
Communication Services	8.01%
Industrials	9.80%
Technology	27.54%
Energy	0.27%
<b>Cyclical</b>	
Basic Materials	2.45%
Consumer Cyclical	11.99%
Real Estate	0.33%
Financial Services	14.78%
<b>Defensive</b>	
Consumer Defensive	7.10%
Healthcare	15.50%
Utilities	2.24%

### TOP 10 HOLDINGS

Apple Inc	6.77%
Microsoft Corp	5.63%
Alphabet Inc Class A	3.71%
Amazon.com Inc	3.02%
Tesla Inc	1.87%
NVIDIA Corp	1.35%
JPMorgan Chase & Co	1.21%
Visa Inc Class A	1.12%
Procter & Gamble Co	1.07%
Mastercard Inc Class A	1.01%
<b>Total:</b>	<b>26.78%</b>

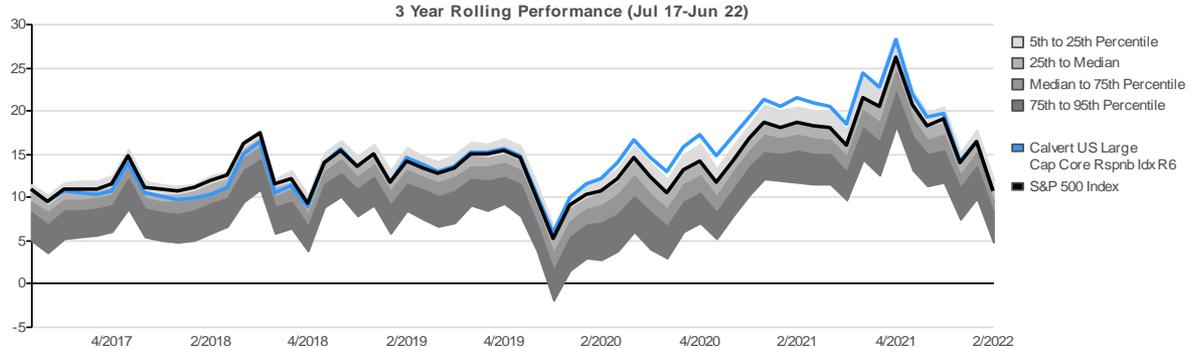
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to track the performance of the Calvert US Large-Cap Core Responsible Index, which measures the investment return of large-capitalization stocks. The fund normally invests at least 95% of its net assets, including borrowings for investment purposes, in securities contained in the index. The index is composed of the common stocks of large companies that operate their businesses in a manner consistent with the Calvert Principles for Responsible Investment.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-17.44	-23.24	-15.23 / 87	10.64 / 18	11.37 / 13	10.73 / 21	13.18 / 7	10.94
Benchmark	-16.10	-19.96	-10.62 / 35	10.60 / 18	11.31 / 14	11.14 / 8	12.96 / 11	
Peer Group Median	-15.76	-20.03	-11.69 / 50	9.47 / 50	10.16 / 50	9.87 / 50	11.95 / 50	
Number of Funds			1372	1270	1197	1107	1020	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	25.70	26.18	32.85	-4.06	21.12	10.71	1.14	14.41	35.04
Benchmark	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39
Peer Group Median	26.70	17.10	29.81	-5.65	21.14	10.47	0.01	11.86	32.00

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.02	0.00	-0.93
Beta	1.01	1.00	0.99
R-Squared	98.72	100.00	97.29
Sharpe Ratio	0.60	0.60	0.54
Up Market Capture	100.65	100.00	96.95
Down Market Capture	100.59	100.00	100.48

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.05	0.00	-0.91
Beta	1.01	1.00	1.00
R-Squared	98.83	100.00	97.29
Sharpe Ratio	0.65	0.65	0.59
Up Market Capture	100.59	100.00	96.43
Down Market Capture	100.45	100.00	100.60

## NOTES

<b>Fund Incep Date:</b> 05/17/1967	<b>Benchmark:</b> Russell 1000 Growth Index	<b>Category:</b> Large Growth	<b>Net Assets:</b> \$97,040.00M	<b>Manager Name:</b> William Danoff	<b>Manager Start Date:</b> 09/17/1990	<b>Expense Ratio:</b> 0.81%	<b>Expense Rank:</b> 27
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### PORTFOLIO COMPOSITION (Holdings-based)



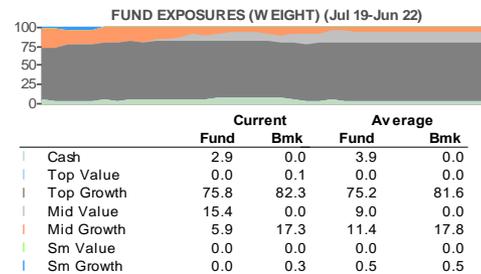
### Sector Breakdown

Sensitive	
Communication Services	15.93%
Industrials	3.64%
Technology	24.09%
Energy	4.37%
Cyclical	
Basic Materials	3.51%
Consumer Cyclical	11.52%
Real Estate	0.34%
Financial Services	17.90%
Defensive	
Consumer Defensive	3.38%
Healthcare	15.04%
Utilities	0.27%

### TOP 10 HOLDINGS

Berkshire Hathaway Inc Class A	8.34%
Meta Platforms Inc Class A	7.51%
Amazon.com Inc	6.80%
Microsoft Corp	6.56%
UnitedHealth Group Inc	4.87%
Apple Inc	4.16%
Alphabet Inc Class A	3.31%
Alphabet Inc Class C	2.99%
Fidelity Revere Str Tr	2.75%
NVIDIA Corp	2.42%
<b>Total:</b>	<b>49.71%</b>

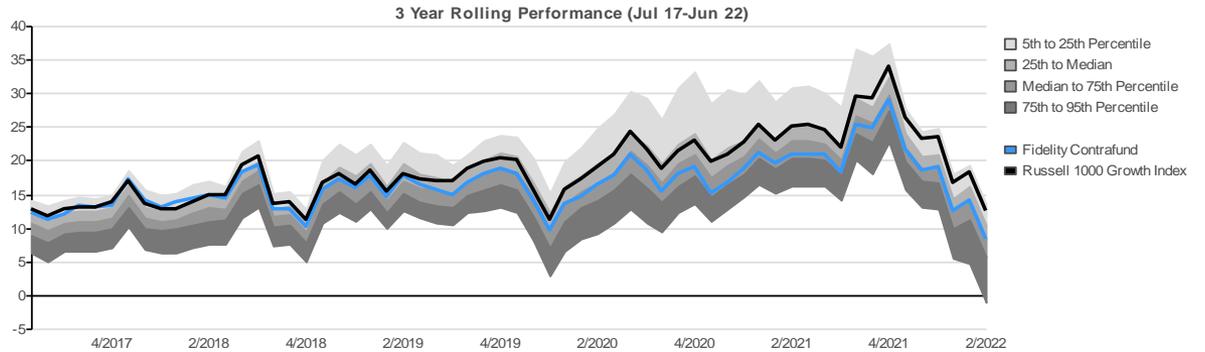
### ASSET LOADINGS (Returns-based)



### INVESTMENT OVERVIEW

The investment seeks capital appreciation. The fund normally invests primarily in common stocks. It invests in securities of companies whose value the advisor believes is not fully recognized by the public. The fund invests in domestic and foreign issuers. It invests in either "growth" stocks or "value" stocks or both. The advisor uses fundamental analysis of factors such as each issuer's financial condition and industry position, as well as market and economic conditions to select investments.

### PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI		
Fund	-20.36	-28.19	-21.97 / 44	8.41 / 51	11.26 / 49	11.07 / 38	12.94 / 45	12.32		
Benchmark	-20.92	-28.07	-18.77 / 29	12.58 / 9	14.29 / 11	13.45 / 7	14.80 / 8			
Peer Group Median	-21.03	-29.49	-23.15 / 50	8.47 / 50	11.21 / 50	10.52 / 50	12.75 / 50			
Number of Funds			1264	1191	1147	1094	1052			
CALENDAR		2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund		24.36	32.58	29.98	-2.13	32.21	3.36	6.46	9.56	34.15
Benchmark		27.60	38.49	36.39	-1.51	30.21	7.08	5.67	13.05	33.48
Peer Group Median		22.02	34.82	32.73	-1.68	28.65	2.94	4.08	10.39	34.26

### RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-3.26	0.00	-3.19
Beta	0.95	1.00	0.97
R-Squared	97.96	100.00	94.51
Sharpe Ratio	0.47	0.64	0.46
Up Market Capture	84.97	100.00	84.35
Down Market Capture	96.88	100.00	98.48
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-2.28	0.00	-2.32
Beta	0.96	1.00	0.98
R-Squared	97.47	100.00	94.81
Sharpe Ratio	0.61	0.74	0.60
Up Market Capture	88.96	100.00	89.17
Down Market Capture	97.68	100.00	98.54

### NOTES

<b>Fund Incep Date:</b> 05/13/2015	<b>Benchmark:</b> Russell Mid-Cap Index	<b>Category:</b> Mid-Cap Blend	<b>Net Assets:</b> \$1,512.00M	<b>Manager Name:</b> Alan Mason	<b>Manager Start Date:</b> 05/13/2015	<b>Expense Ratio:</b> 0.06%	<b>Expense Rank:</b> 3
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### PORTFOLIO COMPOSITION (Holdings-based)



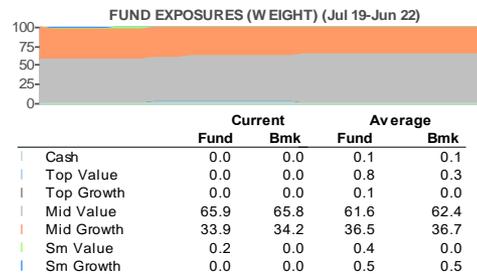
### Sector Breakdown

Sensitive	
Communication Services	3.65%
Industrials	13.67%
Technology	18.32%
Energy	5.78%
Cyclical	
Basic Materials	4.69%
Consumer Cyclical	12.28%
Real Estate	8.89%
Financial Services	12.54%
Defensive	
Consumer Defensive	4.23%
Healthcare	10.76%
Utilities	5.18%

**TOP 10 HOLDINGS**

iShares Russell Mid-Cap ETF	0.84%
Marvell Technology Inc	0.55%
Palo Alto Networks Inc	0.55%
Pioneer Natural Resources Co	0.50%
Marathon Petroleum Corp	0.48%
Synopsys Inc	0.47%
Archer-Daniels Midland Co	0.46%
DexCom Inc	0.45%
Occidental Petroleum Corp	0.44%
IDEXX Laboratories Inc	0.42%
<b>Total:</b>	<b>5.17%</b>

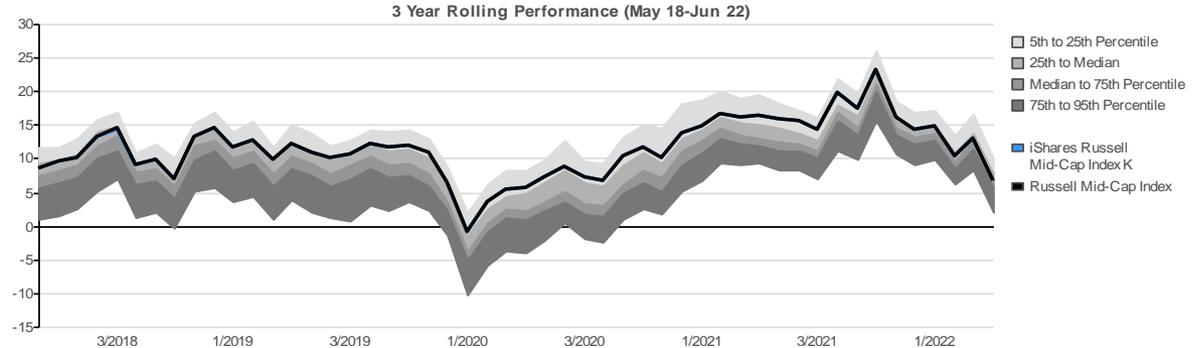
### ASSET LOADINGS (Returns-based)



### INVESTMENT OVERVIEW

The investment seeks to track the investment results of the Russell Midcap® Index (the "underlying index"), which measures the performance of the mid-capitalization sector of the U.S. equity market. The fund generally invests at least 90% of its assets, plus the amount of any borrowing for investment purposes, in securities of the underlying index. The underlying index is a float-adjusted, capitalization-weighted index of equity securities issued by approximately 800 of the smallest issuers in the Russell 1000® Index.

### PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI	
Fund	-16.81	-21.50	-17.22 / 78	6.59 / 54	7.97 / 28	8.08 / 19		7.73	
Benchmark	-16.85	-21.57	-17.30 / 80	6.59 / 54	7.96 / 28	8.04 / 21	11.29 / 18		
Peer Group Median	-15.26	-19.60	-14.62 / 50	6.65 / 50	6.82 / 50	7.06 / 50	10.33 / 50		
Number of Funds			410	378	348	300	283		
CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	22.57	17.12	30.43	-9.05	18.40	13.76			
Benchmark	22.58	17.10	30.54	-9.06	18.52	13.80	-2.44	13.22	34.76
Peer Group Median	24.16	12.93	26.75	-11.31	15.86	15.36	-3.32	9.16	34.20

### RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.01	0.00	0.40
Beta	1.00	1.00	0.97
R-Squared	100.00	100.00	95.27
Sharpe Ratio	0.38	0.38	0.38
Up Market Capture	99.74	100.00	98.54
Down Market Capture	99.75	100.00	97.01
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.02	0.00	-0.92
Beta	1.00	1.00	0.98
R-Squared	100.00	100.00	95.48
Sharpe Ratio	0.44	0.44	0.38
Up Market Capture	99.86	100.00	96.67
Down Market Capture	99.83	100.00	98.76

### NOTES

# T. Rowe Price Instl Mid-Cap Equity Gr PMEGX

6/30/2022

<b>Fund Incep Date:</b> 07/31/1996	<b>Benchmark:</b> Russell Mid-Cap Growth Index	<b>Category:</b> Mid-Cap Growth	<b>Net Assets:</b> \$4,852.00M	<b>Manager Name:</b> Brian W.H. Berghuis	<b>Manager Start Date:</b> 07/31/1996	<b>Expense Ratio:</b> 0.61%	<b>Expense Rank:</b> 6
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## PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

#### Sensitive

Communication Services	2.38%
Industrials	16.26%
Technology	23.98%
Energy	1.57%

#### Cyclical

Basic Materials	3.47%
Consumer Cyclical	15.53%
Real Estate	0.96%
Financial Services	6.29%

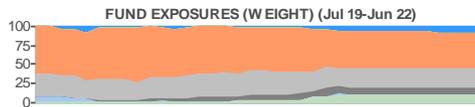
#### Defensive

Consumer Defensive	3.46%
Healthcare	26.10%
Utilities	0.00%

### TOP 10 HOLDINGS

Hologic Inc	3.06%
Catalent Inc	2.79%
Textron Inc	2.66%
Microchip Technology Inc	2.44%
Ball Corp	2.24%
Ingersoll Rand Inc	2.17%
Agilent Technologies Inc	2.10%
Teleflex Inc	2.08%
Reserve Invt Fds	1.86%
Fortinet Inc	1.78%
<b>Total:</b>	<b>23.18%</b>

## ASSET LOADINGS (Returns-based)

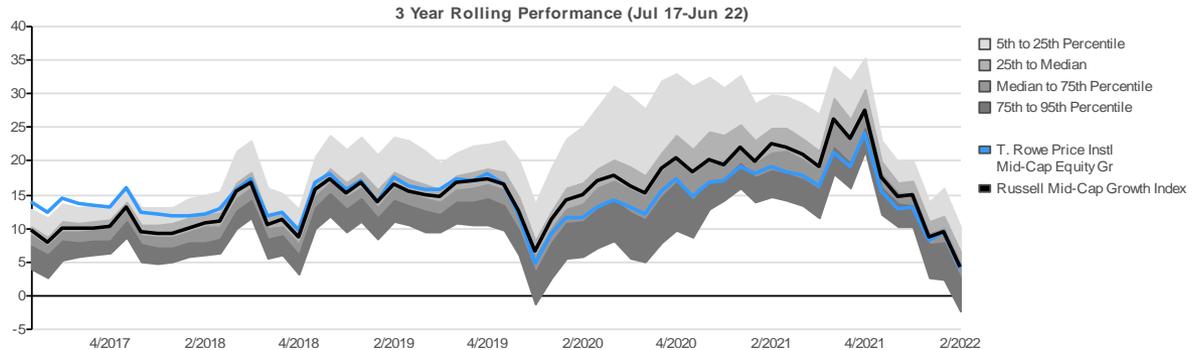


	Current		Average	
	Fund	Bmk	Fund	Bmk
Cash	10.1	0.0	4.1	0.0
Top Value	0.3	0.0	0.9	0.0
Top Growth	9.3	0.0	6.0	0.0
Mid Value	23.7	0.0	27.3	0.0
Mid Growth	48.1	100.0	57.5	100.0
Sm Value	0.0	0.0	0.0	0.0
Sm Growth	8.6	0.0	4.2	0.0

## INVESTMENT OVERVIEW

The investment seeks to provide long-term capital appreciation. The fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in a diversified portfolio of common stocks of mid-cap companies whose earnings T. Rowe Price expects to grow at a faster rate than the average company. The advisor defines mid-cap companies as those whose market capitalization (number of shares outstanding multiplied by share price) falls within the range of either the S&P MidCap 400® Index or the Russell Midcap® Growth Index.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-16.48	-26.15	-22.49 / 21	3.90 / 62	8.51 / 55	9.03 / 30	12.69 / 14	11.50
Benchmark	-21.07	-31.00	-29.57 / 56	4.25 / 57	8.88 / 47	8.35 / 41	11.50 / 36	
Peer Group Median	-20.83	-30.94	-29.05 / 50	4.68 / 50	8.66 / 50	7.79 / 50	10.82 / 50	
Number of Funds			598	555	532	515	491	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	15.52	23.87	33.09	-2.23	26.02	6.94	6.94	13.79	37.89
Benchmark	12.73	35.59	35.47	-4.75	25.27	7.33	-0.20	11.90	35.74
Peer Group Median	12.26	35.40	33.40	-5.59	24.80	5.40	-0.52	7.45	35.52

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.10	0.00	0.65
Beta	0.91	1.00	0.98
R-Squared	94.65	100.00	93.69
Sharpe Ratio	0.26	0.27	0.29
Up Market Capture	85.86	100.00	100.96
Down Market Capture	88.39	100.00	99.95

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.26	0.00	0.11
Beta	0.91	1.00	0.98
R-Squared	94.89	100.00	94.02
Sharpe Ratio	0.47	0.47	0.46
Up Market Capture	87.52	100.00	97.41
Down Market Capture	87.65	100.00	99.54

## NOTES



<b>Fund Incep Date:</b> 12/23/1981	<b>Benchmark:</b> Russell 2000 Index	<b>Category:</b> Small Blend	<b>Net Assets:</b> \$5,989.00M	<b>Manager Name:</b> Jed S. Fogdall	<b>Manager Start Date:</b> 02/28/2012	<b>Expense Ratio:</b> 0.41%	<b>Expense Rank:</b> 10
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## PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

#### Sensitive

Communication Services	3.42%
Industrials	17.35%
Technology	11.84%
Energy	8.27%

#### Cyclical

Basic Materials	5.20%
Consumer Cyclical	12.13%
Real Estate	1.07%
Financial Services	22.61%

#### Defensive

Consumer Defensive	5.67%
Healthcare	10.05%
Utilities	2.40%

### TOP 10 HOLDINGS

S+p500 Emini Fut Jun22 Xcme 20220617	0.90%
Matador Resources Co	0.44%
CorVel Corp	0.42%
CNX Resources Corp	0.41%
Veritiv Corp	0.39%
First BanCorp	0.36%
Comfort Systems USA Inc	0.35%
Boise Cascade Co	0.33%
BancFirst Corp	0.33%
The St. Joe Co	0.32%
<b>Total:</b>	<b>4.25%</b>

### ASSET LOADINGS (Returns-based)

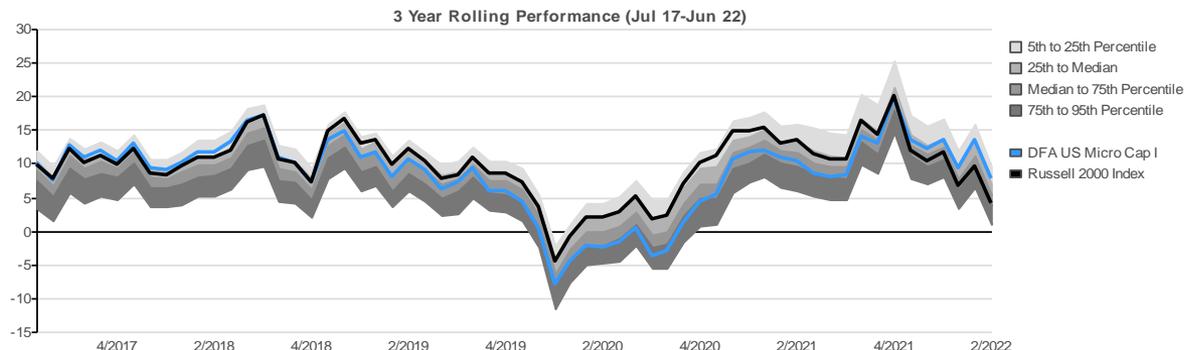


	Current		Average	
	Fund	Bmk	Fund	Bmk
Cash	7.9	0.0	3.6	0.0
Top Value	0.0	0.0	0.0	0.0
Top Growth	0.7	0.0	0.2	0.0
Mid Value	0.0	0.8	5.4	0.4
Mid Growth	0.0	0.0	0.8	0.0
Sm Value	85.1	50.0	81.8	48.6
Sm Growth	6.4	49.3	8.2	50.9

## INVESTMENT OVERVIEW

The investment seeks long-term capital appreciation. The fund, using a market capitalization weighted approach, purchases a broad and diverse group of the securities of U.S. micro cap companies. It may purchase or sell futures contracts and options on futures contracts for U.S. equity securities and indices, to increase or decrease equity market exposure based on actual or expected cash inflows to or outflows from the fund.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-13.82	-17.77	-13.47 / 22	7.85 / 14	6.43 / 30	7.07 / 24	10.61 / 17	11.29
Benchmark	-17.20	-23.43	-25.20 / 92	4.21 / 69	5.17 / 62	5.91 / 54	9.35 / 56	
Peer Group Median	-15.20	-20.33	-17.71 / 50	5.53 / 50	5.63 / 50	6.03 / 50	9.52 / 50	
Number of Funds			608	592	573	526	470	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	33.50	6.59	20.66	-11.60	11.18	25.63	-3.62	2.92	45.06
Benchmark	14.82	19.96	25.52	-11.01	14.65	21.31	-4.41	4.89	38.82
Peer Group Median	23.28	12.13	24.38	-12.12	13.04	20.67	-4.41	4.97	37.77

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	3.68	0.00	1.54
Beta	0.98	1.00	0.96
R-Squared	94.10	100.00	94.84
Sharpe Ratio	0.41	0.27	0.32
Up Market Capture	109.85	100.00	98.63
Down Market Capture	97.76	100.00	95.17

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	1.37	0.00	0.66
Beta	0.99	1.00	0.96
R-Squared	95.09	100.00	95.47
Sharpe Ratio	0.34	0.29	0.31
Up Market Capture	106.30	100.00	97.91
Down Market Capture	101.53	100.00	98.14

## NOTES

# iShares Russell 2000 Small-Cap Idx K BDBKX (Proxy for Blackrock Russell 2000 Index) 6/30/2022

<b>Fund Incep Date:</b> 03/31/2011	<b>Benchmark:</b> Russell 2000 Index	<b>Category:</b> Small Blend	<b>Net Assets:</b> \$2,595.00M	<b>Manager Name:</b> Jennifer Hsui	<b>Manager Start Date:</b> 04/08/2016	<b>Expense Ratio:</b> 0.07%	<b>Expense Rank:</b> 3
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## PORTFOLIO COMPOSITION (Holdings-based)



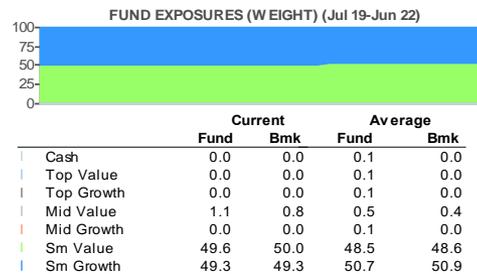
## Sector Breakdown

Sensitive	
Communication Services	3.63%
Industrials	15.28%
Technology	13.87%
Energy	6.54%
Cyclical	
Basic Materials	3.76%
Consumer Cyclical	9.64%
Real Estate	9.15%
Financial Services	14.47%
Defensive	
Consumer Defensive	4.07%
Healthcare	16.62%
Utilities	2.95%

## TOP 10 HOLDINGS

BlackRock Cash Funds Treasury SL Agency	0.78%
iShares Russell 2000 ETF	0.64%
Ovintiv Inc	0.51%
AMC Entertainment Holdings Inc Class A	0.46%
AvisBudget Group Inc	0.39%
BJ's Wholesale Club Holdings Inc	0.33%
Chesapeake Energy Corp Ordinary Shares - Nev	0.33%
Tenet Healthcare Corp	0.33%
Tetra Tech Inc	0.32%
Antero Resources Corp	0.32%
<b>Total:</b>	<b>4.42%</b>

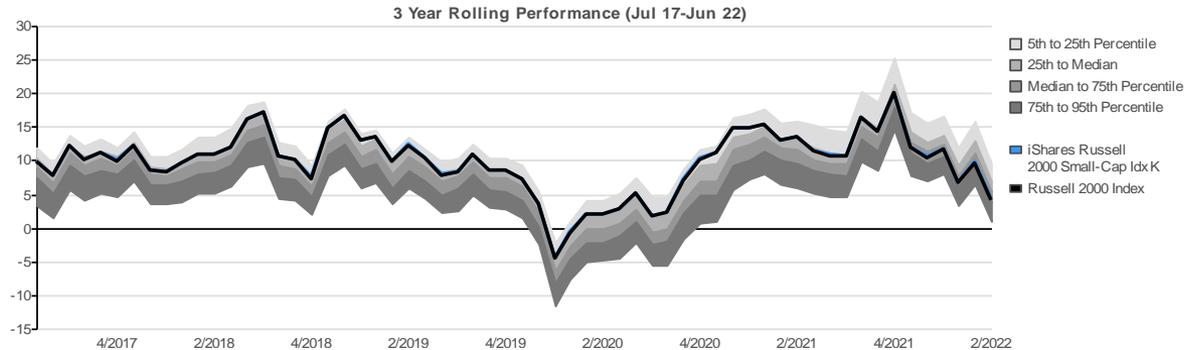
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks to match the performance of the Russell 2000® Index as closely as possible before the deduction of fund expenses. The fund is a "feeder" fund that invests all of its assets in the Series, a series of the Master LLC, which has the same investment objective and strategies as the fund. It will be substantially invested in securities in the Russell 2000, and will invest, under normal circumstances, at least 80% of its assets in securities or other financial instruments that are components of or have economic characteristics similar to the securities included in the Russell 2000.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI
Fund	-17.19	-23.37	-25.13 / 91	4.25 / 68	5.22 / 60	5.94 / 53	9.40 / 54	7.94
Benchmark	-17.20	-23.43	-25.20 / 92	4.21 / 69	5.17 / 62	5.91 / 54	9.35 / 56	
Peer Group Median	-15.20	-20.33	-17.71 / 50	5.53 / 50	5.63 / 50	6.03 / 50	9.52 / 50	
Number of Funds			608	592	573	526	470	

CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	14.78	20.00	25.62	-10.93	14.69	21.40	-4.41	4.86	39.13
Benchmark	14.82	19.96	25.52	-11.01	14.65	21.31	-4.41	4.89	38.82
Peer Group Median	23.28	12.13	24.38	-12.12	13.04	20.67	-4.41	4.97	37.77

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.04	0.00	1.54
Beta	1.00	1.00	0.96
R-Squared	100.00	100.00	94.84
Sharpe Ratio	0.27	0.27	0.32
Up Market Capture	99.94	100.00	98.63
Down Market Capture	99.84	100.00	95.17

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.05	0.00	0.66
Beta	1.00	1.00	0.96
R-Squared	100.00	100.00	95.47
Sharpe Ratio	0.29	0.29	0.31
Up Market Capture	100.05	100.00	97.91
Down Market Capture	99.87	100.00	98.14

## NOTES

<b>Fund Incep Date:</b> 03/31/2011	<b>Benchmark:</b> MSCI EAFE	<b>Category:</b> Foreign Large Blend	<b>Net Assets:</b> \$7,457.00M	<b>Manager Name:</b> Jennifer Hsui	<b>Manager Start Date:</b> 04/08/2016	<b>Expense Ratio:</b> 0.04%	<b>Expense Rank:</b> 2
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### PORTFOLIO COMPOSITION (Holdings-based)



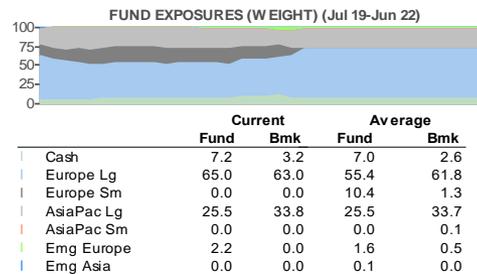
### Sector Breakdown

Sensitive	
Communication Services	5.20%
Industrials	15.08%
Technology	8.94%
Energy	4.27%
Cyclical	
Basic Materials	8.33%
Consumer Cyclical	10.74%
Real Estate	2.88%
Financial Services	17.72%
Defensive	
Consumer Defensive	10.24%
Healthcare	13.38%
Utilities	3.22%

### TOP 10 HOLDINGS

SGX Nikkei 225 Index Future June 22	41.58%
Nestle SA	2.25%
Roche Holding AG	1.71%
ASML Holding NV	1.70%
Shell PLC	1.30%
AstraZeneca PLC	1.27%
LVMH Moet Hennessy Louis Vuitton SE	1.22%
BHP Group Ltd	1.20%
Novartis AG	1.18%
Toyota Motor Corp	1.18%
<b>Total:</b>	<b>54.60%</b>

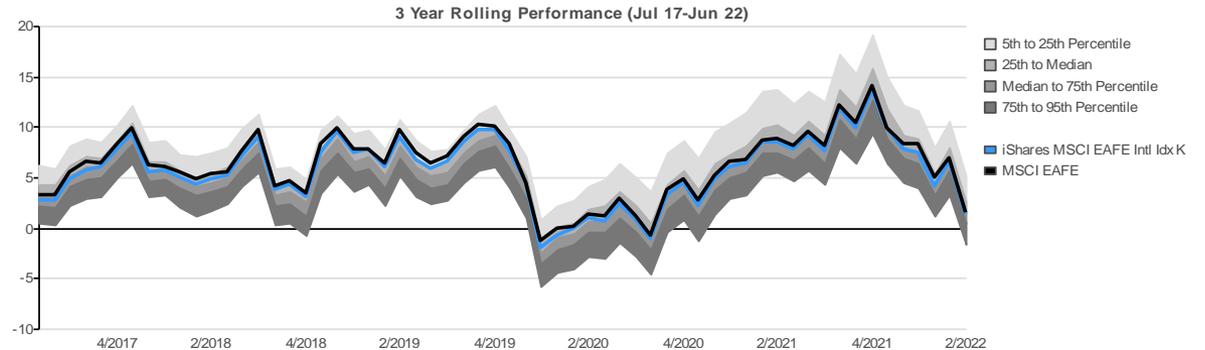
### ASSET LOADINGS (Returns-based)



### INVESTMENT OVERVIEW

The investment seeks to match the performance of the MSCI EAFE Index (Europe, Australasia, Far East) in U.S. dollars with net dividends as closely as possible before the deduction of fund expenses. The fund will be substantially invested in securities in the MSCI EAFE Index, and will invest at least 80% of its assets in securities or other financial instruments that are components of or have economic characteristics similar to the securities included in the MSCI EAFE Index.

### PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI	
Fund	-13.13	-19.00	-17.20 / 24	1.34 / 56	2.38 / 45	2.83 / 44	5.36 / 38	3.55	
Benchmark	-14.29	-19.25	-17.33 / 26	1.54 / 50	2.69 / 33	3.19 / 29	5.89 / 17		
Peer Group Median	-13.19	-19.36	-19.06 / 50	1.54 / 50	2.19 / 50	2.69 / 50	5.14 / 50		
Number of Funds			765	724	676	603	555		
CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	11.33	8.07	21.94	-13.33	25.17	1.03	-0.81	-6.12	21.57
Benchmark	11.78	8.28	22.66	-13.36	25.62	1.51	-0.39	-4.48	23.29
Peer Group Median	10.14	9.28	21.96	-15.06	25.42	0.74	-1.00	-5.33	20.02

### RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.17	0.00	0.14
Beta	1.00	1.00	0.98
R-Squared	98.58	100.00	93.73
Sharpe Ratio	0.13	0.14	0.14
Up Market Capture	101.22	100.00	100.20
Down Market Capture	101.79	100.00	100.69
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.29	0.00	-0.37
Beta	1.00	1.00	0.99
R-Squared	98.69	100.00	93.90
Sharpe Ratio	0.16	0.18	0.15
Up Market Capture	99.89	100.00	98.42
Down Market Capture	101.31	100.00	101.16

### NOTES

# American Funds Europacific Growth R6 RERGX

6/30/2022

<b>Fund Incep Date:</b> 05/01/2009	<b>Benchmark:</b> MSCI ACWI ex USA GDP NR USD	<b>Category:</b> Foreign Large Growth	<b>Net Assets:</b> \$135,198.00M	<b>Manager Name:</b> Carl M. Kawaja	<b>Manager Start Date:</b> 06/01/2001	<b>Expense Ratio:</b> 0.46%	<b>Expense Rank:</b> 5
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## PORTFOLIO COMPOSITION (Holdings-based)



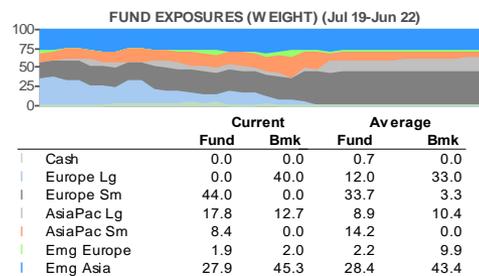
## Sector Breakdown

Sensitive	
Communication Services	2.94%
Industrials	12.93%
Technology	16.78%
Energy	10.23%
Cyclical	
Basic Materials	8.53%
Consumer Cyclical	11.47%
Real Estate	0.68%
Financial Services	13.56%
Defensive	
Consumer Defensive	7.11%
Healthcare	14.54%
Utilities	1.23%

## TOP 10 HOLDINGS

Reliance Industries Ltd	3.15%
ASML Holding NV	2.65%
Taiwan Semiconductor Manufacturing Co Ltd	2.43%
LVMH Moet Hennessy Louis Vuitton SE	2.24%
Canadian Natural Resources Ltd	2.02%
Novo Nordisk A/S Class B	1.99%
AIA Group Ltd	1.94%
Daiichi Sankyo Co Ltd	1.78%
Airbus SE	1.65%
WuXi Biologics (Cayman) Inc	1.35%
<b>Total:</b>	<b>21.18%</b>

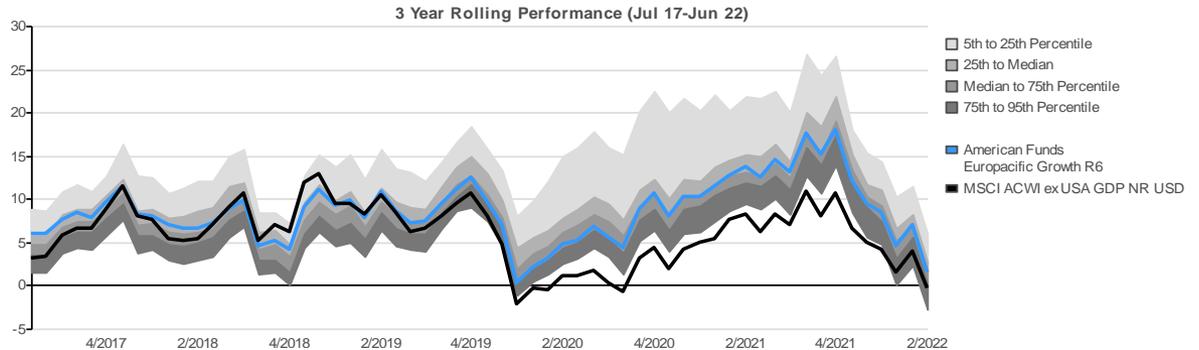
## ASSET LOADINGS (Returns-based)



## INVESTMENT OVERVIEW

The investment seeks long-term growth of capital. The fund invests primarily in common stocks of issuers in Europe and the Pacific Basin that the investment adviser believes have the potential for growth. Growth stocks are stocks that the investment adviser believes have the potential for above-average capital appreciation. It normally will invest at least 80% of its net assets in securities of issuers in Europe and the Pacific Basin. The fund may invest a portion of its assets in common stocks and other securities of companies in emerging markets.

## PERFORMANCE



	3M	YTD	1Y	3Y	5Y	7Y	10Y	SI	
Fund	-14.65	-25.10	-27.68 / 56	1.49 / 56	3.10 / 55	3.67 / 47	6.30 / 31	7.28	
Benchmark	-10.59	-17.20	-21.26 / 15	-0.30 / 79	1.71 / 81	2.28 / 88	4.33 / 98		
Peer Group Median	-16.18	-27.08	-26.79 / 50	1.74 / 50	3.27 / 50	3.56 / 50	5.87 / 50		
Number of Funds			459	429	405	361	331		
CALENDAR	2021	2020	2019	2018	2017	2016	2015	2014	2013
Fund	2.84	25.27	27.40	-14.91	31.17	1.01	-0.48	-2.29	20.58
Benchmark	1.89	10.58	20.09	-14.51	31.95	5.95	-7.66	-3.48	11.29
Peer Group Median	8.59	22.25	27.97	-14.34	30.93	-2.29	0.46	-4.16	20.15

## RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	1.99	0.00	2.10
Beta	1.04	1.00	0.93
R-Squared	92.70	100.00	79.84
Sharpe Ratio	0.14	0.04	0.15
Up Market Capture	111.10	100.00	103.93
Down Market Capture	101.87	100.00	95.89
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	1.47	0.00	1.77
Beta	1.00	1.00	0.93
R-Squared	92.84	100.00	81.12
Sharpe Ratio	0.20	0.12	0.21
Up Market Capture	104.32	100.00	98.57
Down Market Capture	97.94	100.00	91.81

## NOTES

# Capital Markets Overview

Second Quarter 2022

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# Macroeconomic Summary

Global Growth continues to face significant headwinds with inflation being the dominant theme driving markets

- The war in Ukraine as well as Covid continue to have far reaching impacts on inflation and growth
- Inflation levels remain high and are evident across most sectors of the economy, prompting **strong hawkish policy responses** from Central Banks
- The IMF continues to revise its global growth outlook down in light of these uncertainties and now has projected +3.6% 2022 growth, a downward revision from 4.4% at the beginning of the year

The Fed remains in a challenging position as it looks to keep inflation under control amidst a weakening economic backdrop

- The **labor market remains tight** with unemployment at 3.6% and robust job creation in the economy leading to stronger wage inflation
- Oil and gas prices remain high with WTI crude oil trading above \$100 per barrel for most of Q2
  - A shortage of refining capacity has led to the **highest gas prices in many years**
- Inflation remains extremely high but should peak in the summer and recede over the rest of the year
- Still, **the Fed's tone continues to be more hawkish**, voting to raise the FFR by 50bps in April and another 75bps in June, with several 50+bp hikes likely over the summer and into the fall

# Market Summary

## US Markets

- Equities continued to fall in 2Q22 with the **S&P 500 ending the quarter in bear market territory**
- **Bonds were no safe-haven** with negative returns across all sectors and the Agg losing -4.7% during the quarter
- Commodities were positive with energy prices leading the way
- **Corporate earnings remain healthy**, however, with slower economic activity, geopolitical risks, and multiple compression serving as the primary drivers of underperformance for most stocks
- **Inflation remains the critical factor**, as the Fed will be forced to hike rates into a recessionary environment should prices remain high

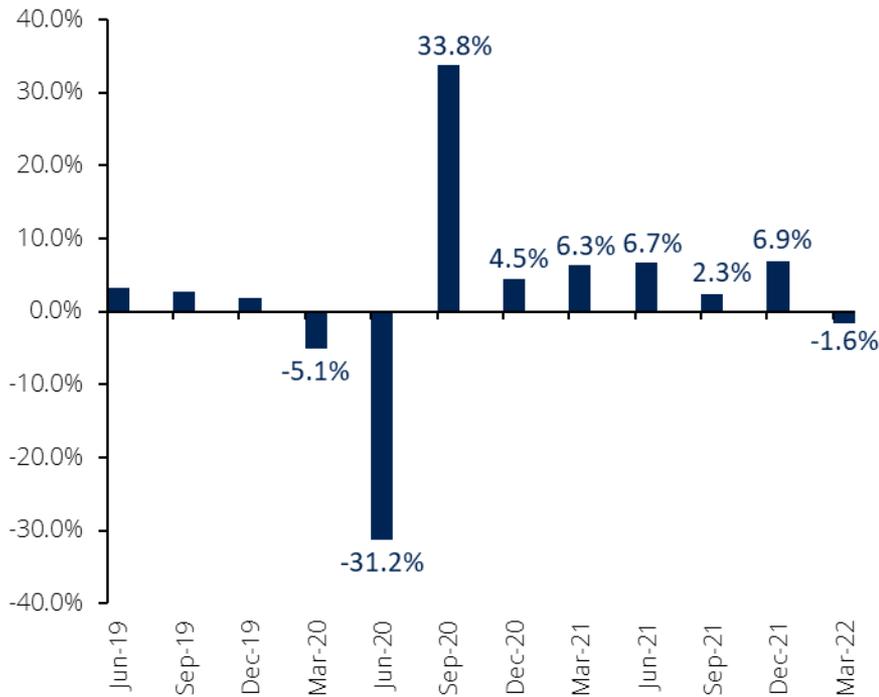
## Global Markets

- **Similar trends existed ex-US** with the EAFE (“developed markets”) and EM (“emerging markets”) indices both **down double digits during the quarter**
- Global Bonds also continued to sell off sharply amid elevated inflation data, hawkish central banks, and rising interest rates
- Like the US, inflation remains a critical factor across global markets

# State of the U.S. Economy

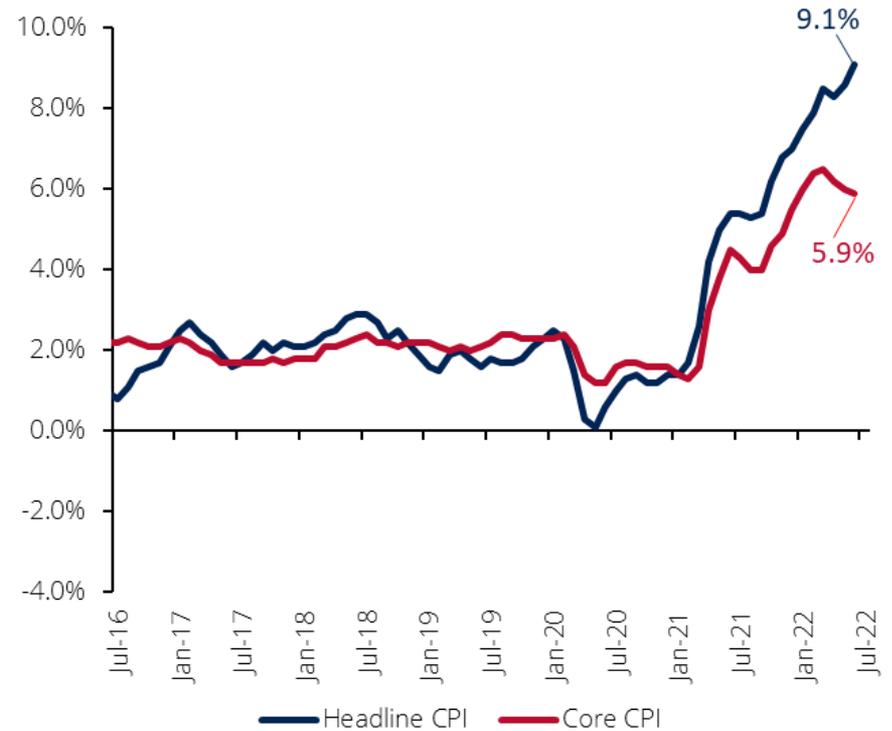
## Real GDP Growth

quarter over quarter annualized, through March 2022



## US Consumer Price Index

annual percent change, through June 2022



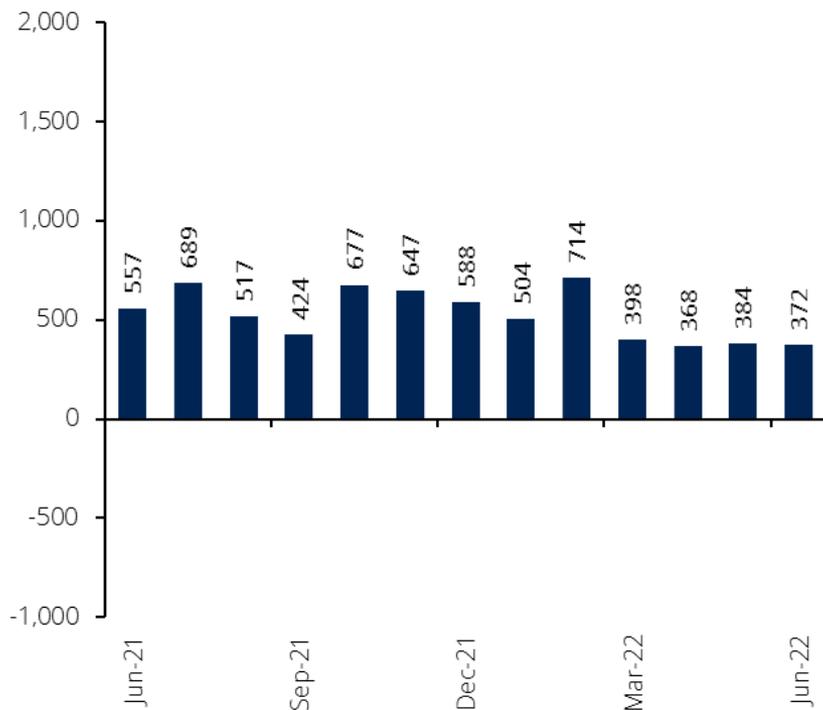
Source: Bloomberg; GWCM Analysis

The core measure of inflation excludes food and energy prices while the headline measure of inflation does not. GDP estimates presented reflect the median estimate provided by Bloomberg.

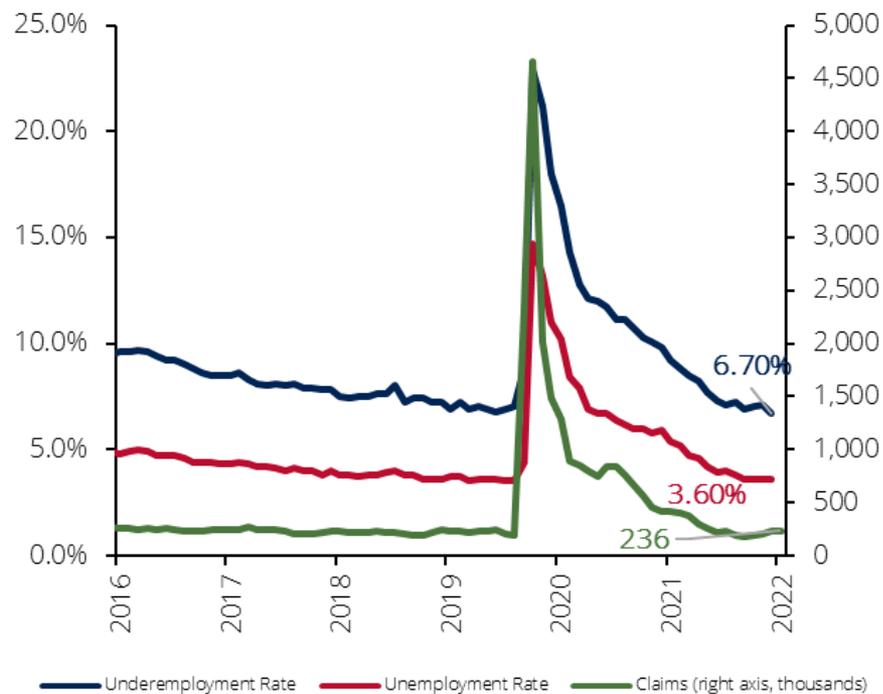
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# U.S. Labor Market Trends

Number of Jobs Created Per Month  
thousands, through June 2022



Unemployment and Underemployment  
Rates and Claims  
through June 2022



Source: Bloomberg; Bureau of Labor Statistics; GWCM Analysis

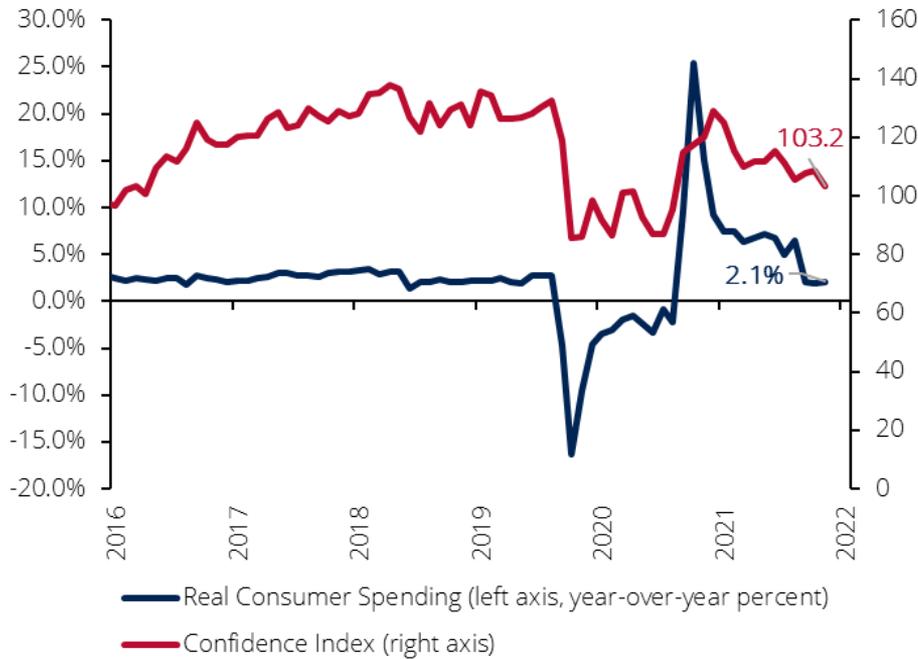
The Unemployment Rate represents total unemployed, as a percent of the civilian labor force

The Underemployment Rate represents total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers

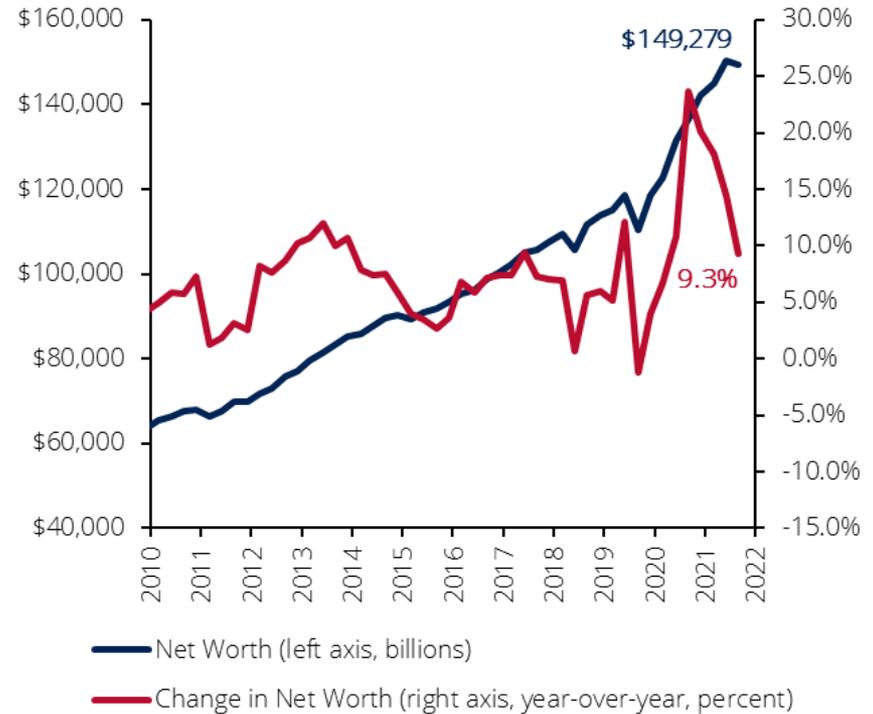
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# U.S. Consumer Confidence, Spending and Net Worth

Consumer Confidence and Spending through June 2022

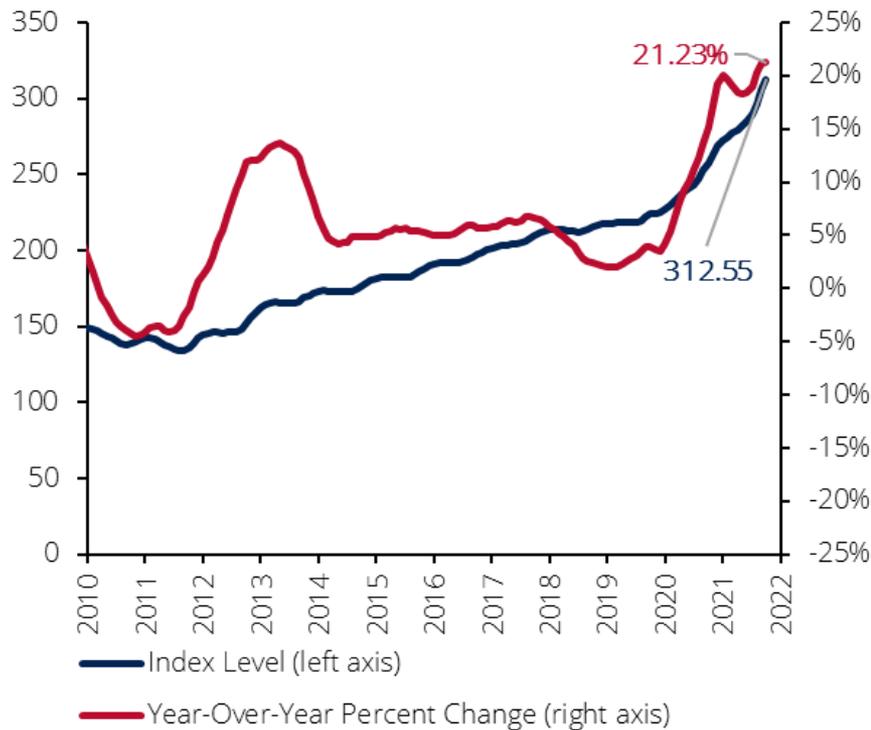


Consumer Net Worth through March 2022

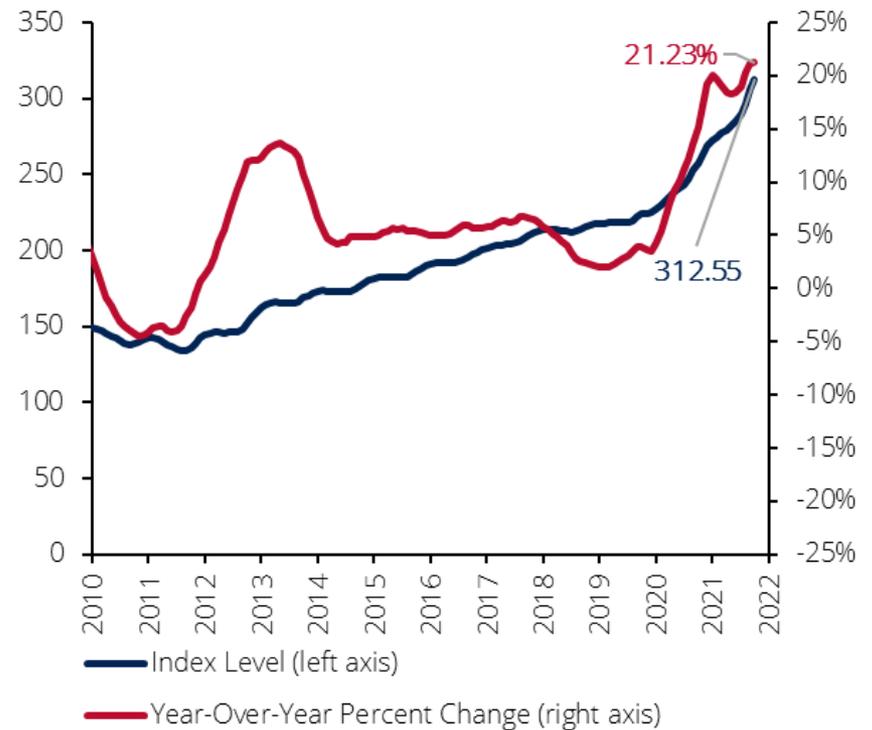


# U.S Housing Market Trends

Case Shiller 20 City Home Price Index through April 2022



Case Shiller 20 City Home Price Index through April 2022



# Energy Inflation and Oil

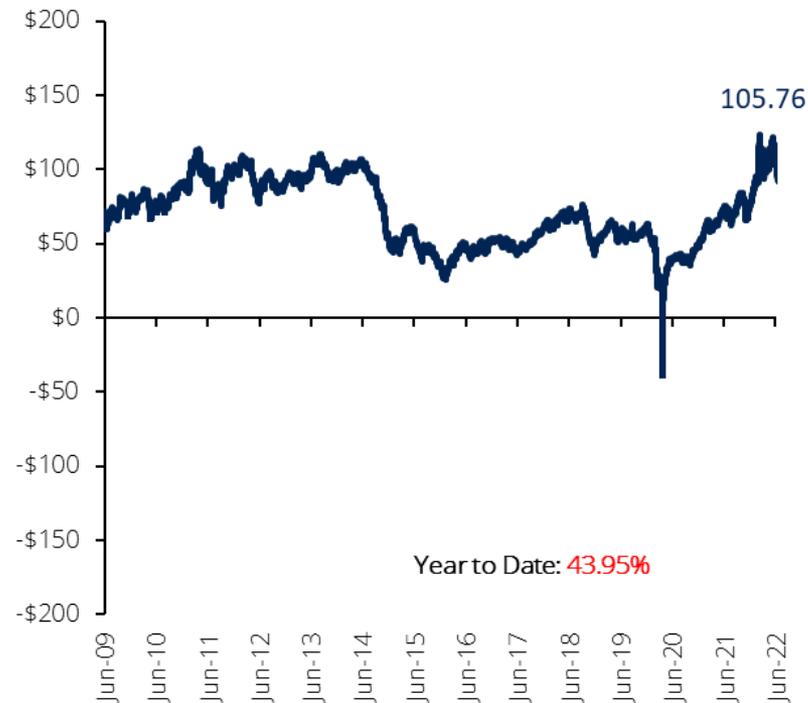
## Energy Inflation

year-over-year percent change, through June 2022



## Oil Price

\$/Barrel, through June 2022

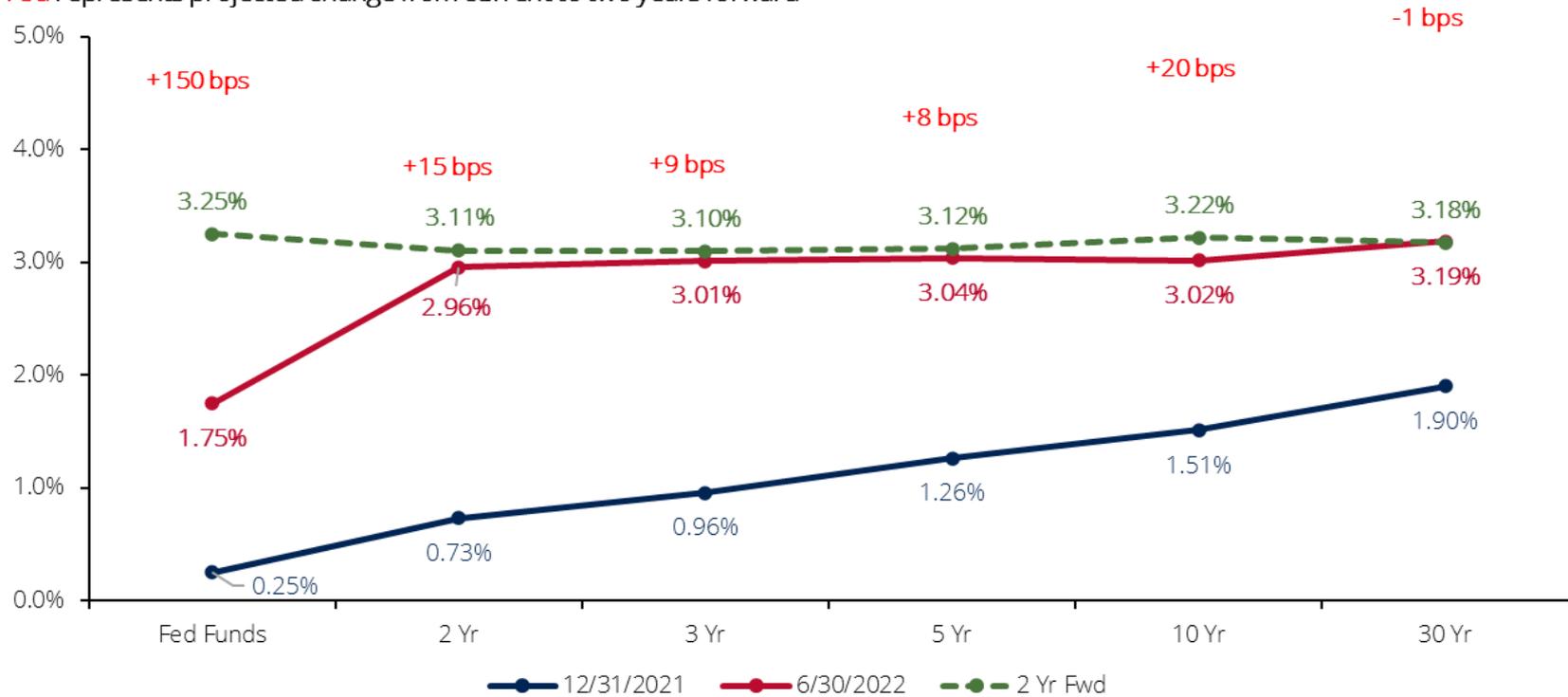


Source: Bloomberg; GWCM Analysis  
Oil prices shown for West Texas Intermediate (WTI) Crude  
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# Historical, Current and Forward Rates

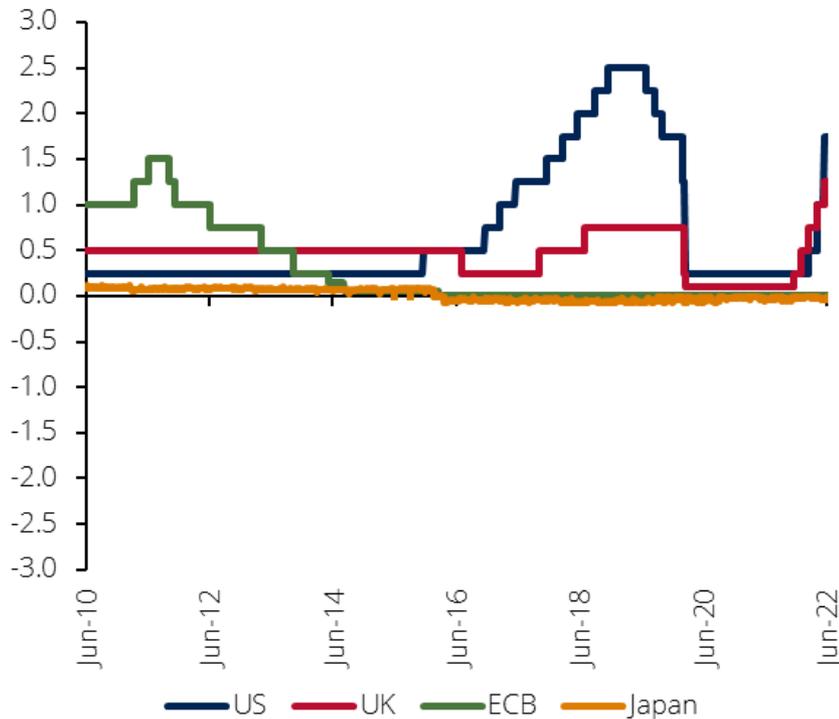
## U.S. Yield Curve

red represents projected change from current to two years forward

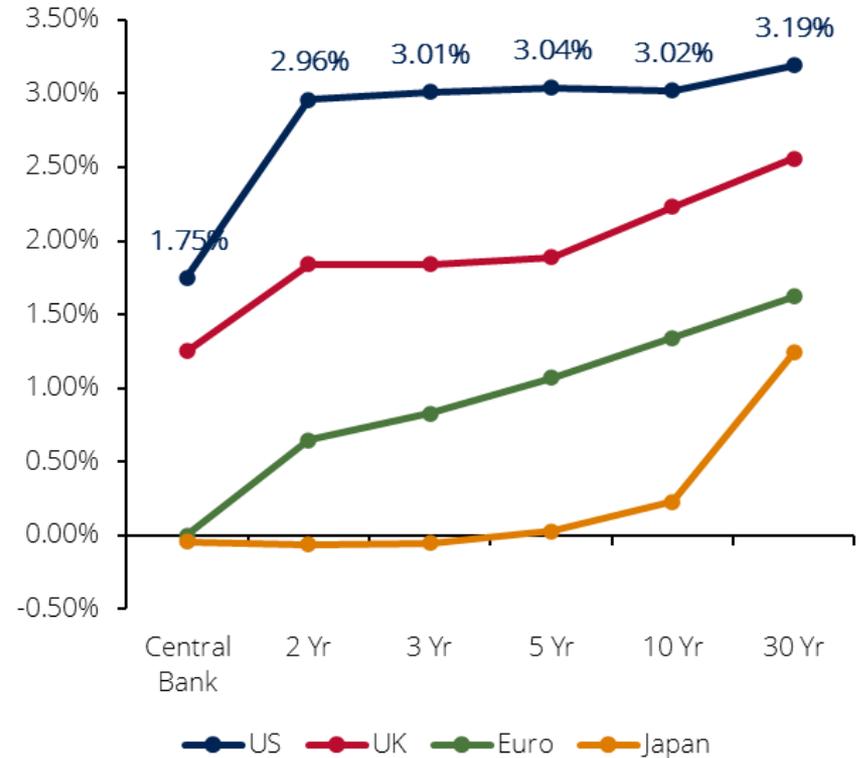


# Global Monetary Policies and Interest Rates

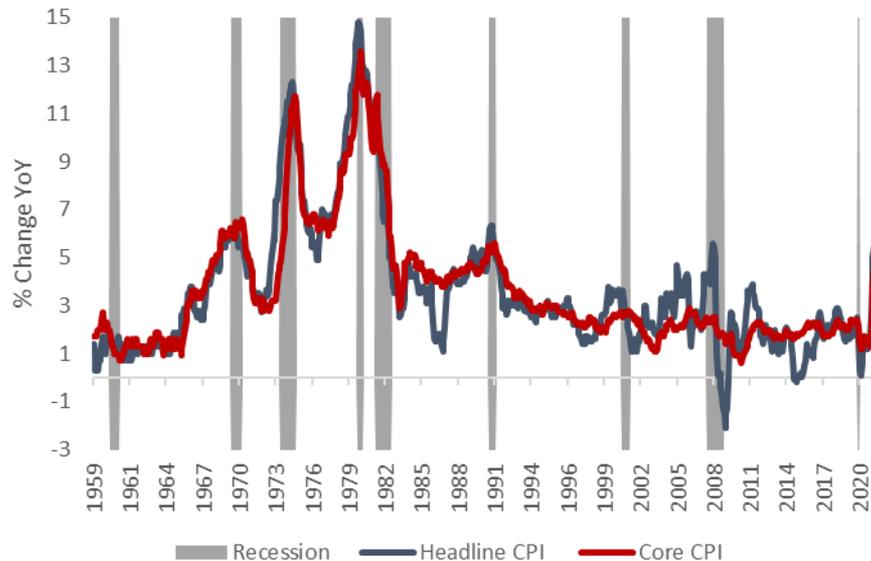
Global Central Bank Rates  
through June 2022



Sovereign Yield Curve  
as of June 2022



# Where are consumers being hit the hardest when it comes to inflation?



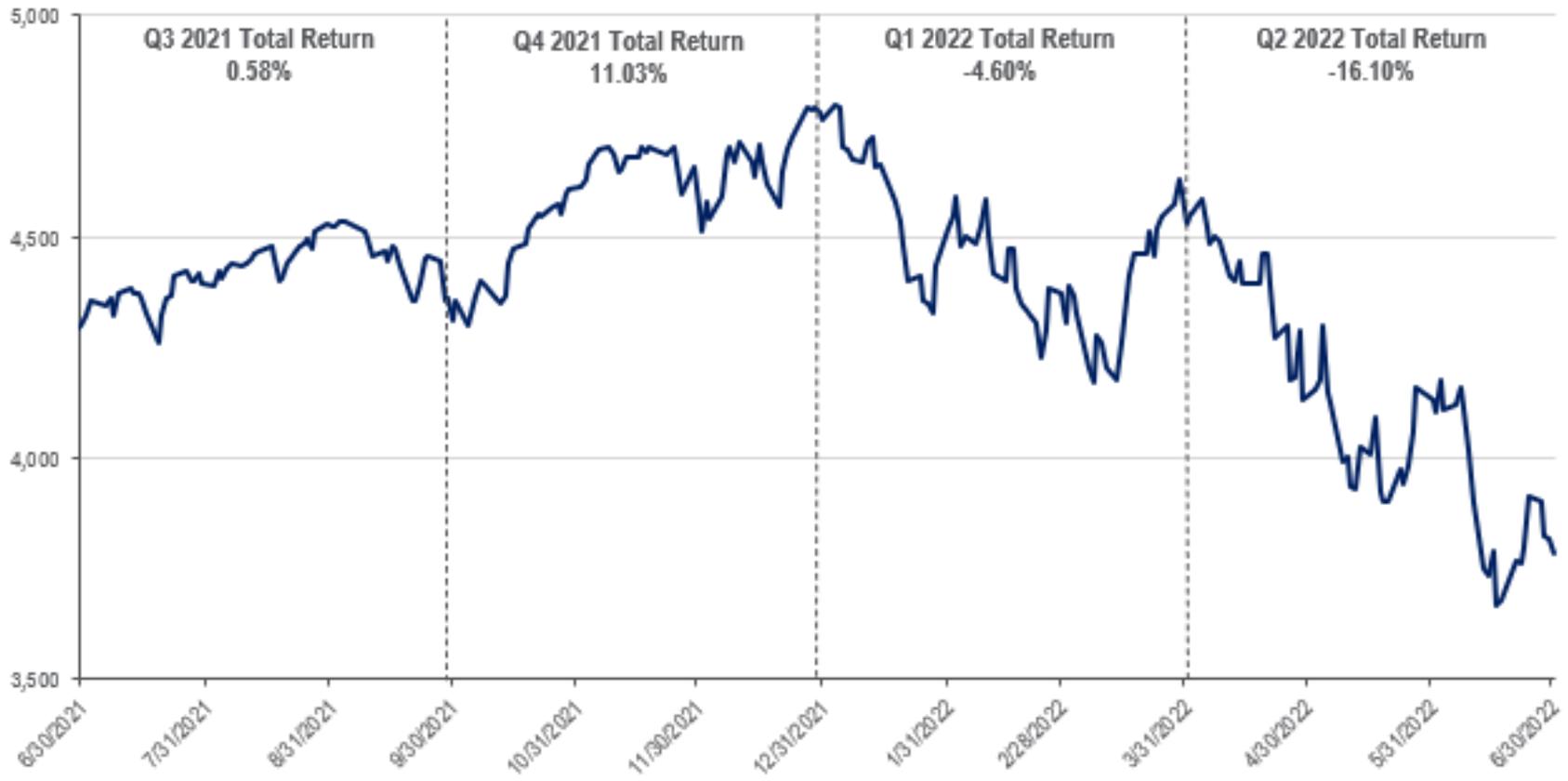
The consumer price index (CPI) experienced its highest increase since December 1981

Both food and energy rose with energy experiencing the largest increase since 2005

Shelter costs rose at the fastest 12-month pace in 30 years

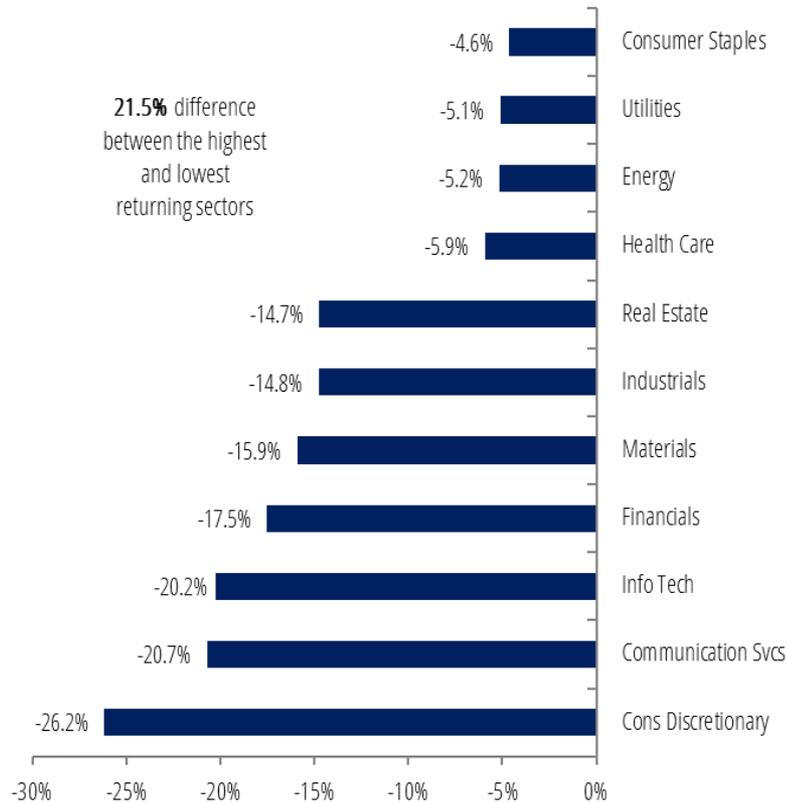
# The S&P<sup>®</sup> ended the quarter in bear market territory amidst high inflation and weakening growth

S&P 500 Index

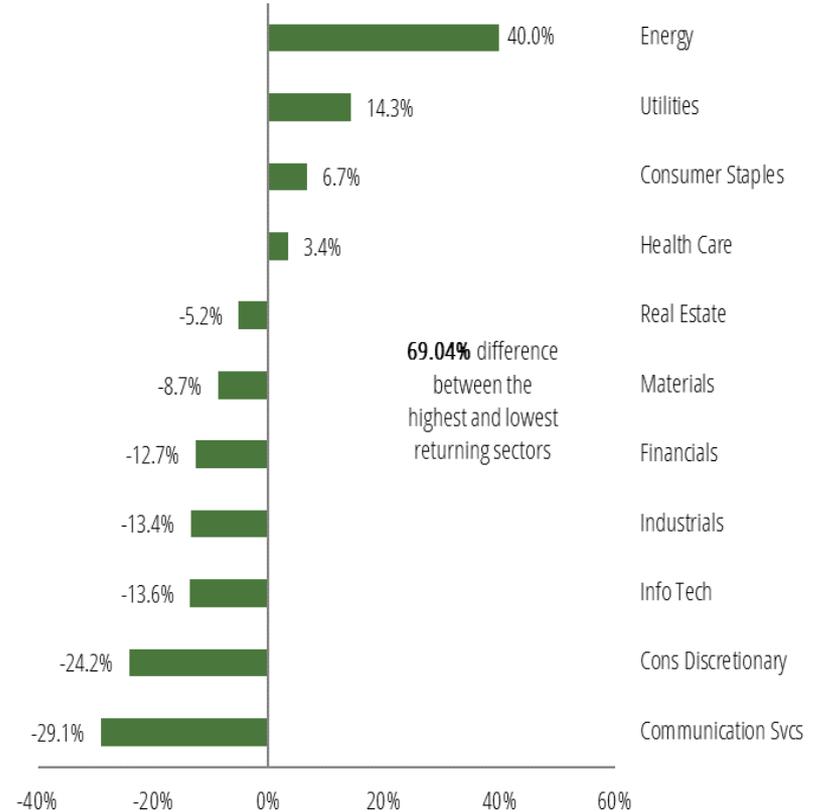


# S&P<sup>®</sup> 500 Sector Returns

QTD Returns  
as of June 30, 2022



1 Year Trailing Returns  
as of June 30, 2022



# Equity Market Returns

(as of June 30, 2022)		QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2021	2020	2019	2018	2017	2016	2015
<b>Domestic Equity</b>														
Large Cap	S&P 500	-16.1%	-20.0%	-10.6%	10.6%	11.3%	13.0%	28.7%	18.4%	31.5%	-4.4%	21.8%	12.0%	1.4%
	Russell 1000 Value	-12.2%	-12.9%	-6.8%	6.9%	7.2%	10.5%	25.2%	2.8%	26.5%	-8.3%	13.7%	17.3%	-3.8%
	Russell 1000 Growth	-20.9%	-28.1%	-18.8%	12.6%	14.3%	14.8%	27.6%	38.5%	36.4%	-1.5%	30.2%	7.1%	5.7%
Mid Cap	Russell Mid Cap	-16.8%	-21.6%	-17.3%	6.6%	8.0%	11.3%	22.6%	17.1%	30.5%	-9.1%	18.5%	13.8%	-2.4%
	Russell Mid Cap Value	-14.7%	-16.2%	-10.0%	6.7%	6.3%	10.6%	28.3%	5.0%	27.1%	-12.3%	13.3%	20.0%	-4.8%
	Russell Mid Cap Growth	-21.1%	-31.0%	-29.6%	4.3%	8.9%	11.5%	12.7%	35.6%	35.5%	-4.8%	25.3%	7.3%	-0.2%
Small Cap	Russell 2000	-17.2%	-23.4%	-25.2%	4.2%	5.2%	9.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%
	Russell 2000 Value	-15.3%	-17.3%	-16.3%	6.2%	4.9%	9.1%	28.3%	4.6%	22.4%	-12.9%	7.8%	31.7%	-7.5%
	Russell 2000 Growth	-19.3%	-29.5%	-33.4%	1.4%	4.8%	9.3%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%
<b>International Equity</b>														
Developed Markets	MSCI EAFE	-14.5%	-19.6%	-17.8%	1.1%	2.2%	5.4%	11.3%	7.8%	22.0%	-13.8%	25.0%	1.0%	-0.8%
	Australia	-18.1%	-12.2%	-13.0%	2.4%	4.5%	4.9%	9.4%	8.7%	22.9%	-12.0%	19.9%	11.4%	-10.0%
	Canada	-15.7%	-11.9%	-8.0%	7.2%	6.8%	4.9%	26.0%	5.3%	27.5%	-17.2%	16.1%	24.6%	-24.2%
	France	-14.8%	-22.2%	-18.3%	1.1%	3.2%	6.8%	19.5%	4.1%	25.7%	-12.8%	28.7%	4.9%	-0.1%
	Germany	-18.1%	-28.7%	-31.2%	-4.0%	-2.7%	4.0%	5.3%	11.5%	20.8%	-22.2%	27.7%	2.8%	-1.9%
	Japan	-14.6%	-20.3%	-19.9%	1.0%	1.8%	5.6%	1.7%	14.5%	19.6%	-12.9%	24.0%	2.4%	9.6%
	Switzerland	-14.5%	-20.0%	-12.7%	4.8%	5.9%	8.3%	19.3%	11.6%	32.3%	-9.1%	22.5%	-4.9%	0.4%
	UK	-10.5%	-8.8%	-4.0%	1.2%	2.2%	3.7%	18.5%	-10.5%	21.0%	-14.2%	22.3%	-0.1%	-7.6%
Emerging Markets	MSCI Emerging Markets	-11.4%	-17.6%	-25.3%	0.6%	2.2%	3.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%
	Brazil	-24.4%	2.8%	-23.3%	-9.2%	0.8%	-2.0%	-17.4%	-19.0%	26.3%	-0.5%	24.1%	66.2%	-41.4%
	China	3.4%	-11.3%	-31.8%	-0.6%	2.1%	5.5%	-21.7%	29.5%	23.5%	-18.9%	54.1%	0.9%	-7.8%
	India	-13.6%	-15.2%	-4.8%	7.3%	7.3%	8.1%	26.2%	15.6%	7.6%	-7.3%	38.8%	-1.4%	-6.1%
	Indonesia	-9.0%	-0.3%	16.1%	-1.7%	-0.2%	1.3%	2.1%	-8.1%	9.1%	-9.2%	24.2%	17.0%	-19.5%
	Korea	-20.9%	-28.5%	-38.5%	0.9%	-0.7%	3.0%	-8.4%	44.6%	12.5%	-20.9%	47.3%	8.7%	-6.7%
	Mexico	-15.2%	-7.9%	-0.7%	5.0%	-0.6%	-0.4%	22.5%	-1.9%	11.4%	-15.5%	16.0%	-9.2%	-14.4%
	Russia	0.0%	-100.0%	-100.0%	-98.9%	-92.7%	-73.5%	19.0%	-12.5%	50.9%	-0.4%	5.2%	54.8%	4.2%

Source: Morningstar Direct; GWCM Analysis

Individual country returns are represented by MSCI indices and shown as USD returns

\*Canada is not part of the EAFE Index

Past performance is not a guarantee or prediction of future results.

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# Returns by Style

## 3 Months

	Value	Blend	Growth
Large	-12.2%	-16.1%	-20.9%
Mid	-14.7%	-16.8%	-21.1%
Small	-15.3%	-17.2%	-19.3%

## 1 Year

	Value	Blend	Growth
Large	-6.8%	-10.6%	-18.8%
Mid	-10.0%	-17.3%	-29.6%
Small	-16.3%	-25.2%	-33.4%

## Since Market Peak (February, 2020)

	Value	Blend	Growth
Large	11.1%	16.6%	17.1%
Mid	11.0%	8.8%	-0.8%
Small	13.8%	4.4%	-6.4%

## 3 Year

	Value	Blend	Growth
Large	6.9%	10.6%	12.6%
Mid	6.7%	6.6%	4.3%
Small	6.2%	4.2%	1.4%

## 5 Year

	Value	Blend	Growth
Large	7.2%	11.3%	14.3%
Mid	6.3%	8.0%	8.9%
Small	4.9%	5.2%	4.8%

## Since Market Low (March, 2020)

	Value	Blend	Growth
Large	71.7%	70.2%	66.6%
Mid	88.0%	75.8%	50.4%
Small	94.1%	73.0%	51.2%

performance as of June 30, 2022

Source: Morningstar Direct; GWCM Analysis; Large Blend – S&P 500 Index, Large Value – Russell 1000 Value Index, Large Growth – Russell 1000 Growth Index, Mid Blend – Russell Mid Cap Index, Mid Value – Russell Mid Cap Value Index, Mid Growth – Russell Mid Cap Growth Index, Small Blend – Russell 2000 Index, Small Value – Russell 2000 Value Index, Small Growth – Russell 2000 Growth Index

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# Fixed Income and Specialty Returns

(as of June 30, 2022)

	QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2021	2020	2019	2018	2017	2016	2015
<b>Fixed Income</b>													
Bloomberg Barclays US Aggregate	-4.7%	-10.3%	-10.3%	-0.9%	0.9%	1.5%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%
Bloomberg Barclays US Treasury	-3.8%	-9.1%	-8.9%	-0.9%	0.7%	1.0%	-2.3%	8.0%	6.9%	0.9%	2.3%	1.0%	0.8%
Bloomberg Barclays US Govt/Credit Intermediate	-2.4%	-6.8%	-7.3%	-0.2%	1.1%	1.5%	-1.4%	6.4%	6.8%	0.9%	2.1%	2.1%	1.1%
Bloomberg Barclays US Govt/Credit Long	-12.3%	-21.9%	-20.1%	-2.3%	1.0%	2.6%	-2.5%	16.1%	19.6%	-4.7%	10.7%	6.7%	-3.3%
Bloomberg Barclays US TIPS	-6.1%	-8.9%	-5.1%	3.0%	3.2%	1.7%	6.0%	11.0%	8.4%	-1.3%	3.0%	4.7%	-1.4%
Bloomberg Barclays US Corporate High Yield	-9.8%	-14.2%	-12.8%	0.2%	2.1%	4.5%	5.3%	7.1%	14.3%	-2.1%	7.5%	17.1%	-4.5%
FTSE WGBI	-8.9%	-14.8%	-16.8%	-4.3%	-1.2%	-0.7%	-7.0%	10.1%	5.9%	-0.8%	7.5%	1.6%	-3.6%
JPM EMBI Global Diversified	-11.4%	-20.3%	-21.2%	-5.2%	-1.2%	2.2%	-1.8%	5.3%	15.0%	-4.3%	10.3%	10.2%	1.2%
FTSE Treasury Bill 3 Month	0.1%	0.2%	0.2%	0.6%	1.1%	0.6%	0.0%	0.6%	2.3%	1.9%	0.8%	0.3%	0.0%
<b>Specialty</b>													
Bloomberg Commodity	-5.7%	18.4%	24.3%	14.3%	8.4%	-0.8%	27.1%	-3.1%	7.7%	-11.2%	1.7%	11.8%	-24.7%
DJ US Select REIT	-18.1%	-21.1%	-6.4%	2.5%	4.3%	6.6%	45.9%	-11.2%	23.1%	-4.2%	3.8%	6.7%	4.5%
FTSE EPRA/NAREIT Developed Ex US	-17.5%	-20.1%	-20.6%	-4.5%	0.4%	3.9%	8.8%	-6.5%	21.8%	-5.8%	20.8%	2.0%	-3.2%

Source: Morningstar Direct; GWCM Analysis  
 Past performance is not a guarantee or prediction of future results.  
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# Calendar Year Returns by Asset Class

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 YTD	Cumulative Return*
Mid Value 18.5	Sm Growth 43.3	Mid Value 14.7	Lg Growth 5.7	Sm Value 31.7	Emrg Mkt 37.3	Agg Bond 0.0	Lg Growth 36.4	Lg Growth 38.5	Sm Value 28.3	Agg Bond -10.35	Lg Growth 337.50
Emrg Mkt 18.2	Mid Growth 35.7	Lg Value 13.5	Balanced 1.3	Mid Value 20.0	Lg Growth 30.2	Lg Growth -1.5	Mid Growth 35.5	Mid Growth 35.6	Mid Value 28.3	Lg Value -12.86	Mid Growth 221.19
Sm Value 18.1	Sm Value 34.5	Lg Growth 13.0	Agg Bond 0.5	Lg Value 17.3	Mid Growth 25.3	Balanced -2.4	Sm Growth 28.5	Sm Growth 34.6	Lg Growth 27.6	Balanced -16.11	Mid Value 195.59
Lg Value 17.5	Lg Growth 33.5	Mid Growth 11.9	Mid Growth -0.2	Sm Growth 11.3	International 25.0	Mid Growth -4.8	Mid Value 27.1	Emrg Mkt 18.3	Lg Value 25.2	Mid Value -16.23	Lg Value 194.94
International 17.3	Mid Value 33.5	Balanced 10.6	International -0.8	Emrg Mkt 11.2	Sm Growth 22.2	Lg Value -8.3	Lg Value 26.5	Balanced 14.7	Balanced 15.9	Sm Value -17.31	Sm Growth 164.69
Mid Growth 15.8	Lg Value 32.5	Agg Bond 6.0	Sm Growth -1.4	Balanced 8.3	Balanced 14.2	Sm Growth -9.3	Sm Value 22.4	International 7.8	Mid Growth 12.7	Emrg Mkt -17.63	Sm Value 157.51
Lg Growth 15.3	International 22.8	Sm Growth 5.6	Lg Value -3.8	Mid Growth 7.3	Lg Value 13.7	Mid Value -12.3	Balanced 22.2	Agg Bond 7.5	International 11.3	International -19.57	Balanced 141.26
Sm Growth 14.6	Balanced 17.6	Sm Value 4.2	Mid Value -4.8	Lg Growth 7.1	Mid Value 13.3	Sm Value -12.9	International 22.0	Mid Value 5.0	Sm Growth 2.8	Lg Growth -28.07	International 74.14
Balanced 11.3	Agg Bond -2.0	Emrg Mkt -2.2	Sm Value -7.5	Agg Bond 2.6	Sm Value 7.8	International -13.8	Emrg Mkt 18.4	Sm Value 4.6	Agg Bond -1.5	Sm Growth -29.45	Emrg Mkt 40.55
Agg Bond 4.2	Emrg Mkt -2.6	International -4.9	Emrg Mkt -14.9	International 1.0	Agg Bond 3.5	Emrg Mkt -14.6	Agg Bond 8.7	Lg Value 2.8	Emrg Mkt -2.5	Mid Growth -31.0	Agg Bond 19.30

\*Cumulative return is for the time period 1/1/2012 – 6/30/2022

Source: Morningstar Direct; GWCM Analysis; Lg Growth – Russell 1000 Growth Index, Lg Value – Russell 1000 Value Index, Mid Growth – Russell Mid Cap Growth Index, Mid Value – Russell Mid Cap Value Index, Sm Growth – Russell 2000 Growth Index, Sm Value – Russell 2000 Value Index, International – MSCI EAFE NR Index, Emrg Mkt – MSCI EM NR Index, Agg Bond – Bloomberg Barclays US Aggregate Bond Index, Balanced – 60% S&P 500 Index and 40% Bloomberg Barclays US Aggregate Bond Index.

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- The MSCI Emerging Markets Index represents the performance of stocks in 26 emerging market countries in Europe, Latin America and the Pacific Basin.
- The Bloomberg Barclays Capital US Aggregate Bond Index includes fixed rate debt issues rated investment grade or higher by Moody's Investors Service, Standard and Poor's, or Fitch Investor's Service, in that order. All issues must have at least 1 year left to maturity and have an outstanding par value of at least \$100 million. The Aggregate Index is comprised of the Government/Corporate, the Mortgage-Backed Securities, and the Asset-Backed Securities indices.
- The Standard & Poor's 500 is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market. Standard and Poor's chooses the member companies for the 500 based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid-1989, this composition has been more flexible and the number of issues in each sector has varied. The returns presented for the S&P 500 are total returns, including the reinvestment of dividends each month.
- The Russell 1000 Value - Market capitalization-weighted index of those firms in the Russell 1000 with lower price-to-book ratios and lower forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable U.S. equity market.
- The Russell 1000 Growth - Market capitalization-weighted index of those firms in the Russell 1000 with higher price-to-book ratios and higher forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable U.S. equity market.

# Disclosures and Benchmark Definitions

- The Russell 2000 - Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization. Returns include reinvestment of dividends.
- The Russell 2000 Value - Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having lower price-to-book ratios and lower forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations.
- The Russell 2000 Growth - Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having higher price-to-book ratios and higher forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations.
- The Russell Mid-Cap - Measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 24% of the total market capitalization of the Russell 1000 Index.
- The Russell Mid-Cap Value - Market-weighted total return index that measures the performance of companies within the Russell Mid-Cap Index having lower price-to-book ratios and lower forecasted growth values. The Russell Mid-Cap Index includes firms 201 through 1000, based on market capitalization, from the Russell 3000 Index.
- The Russell Mid-Cap Growth - Market-weighted total return index that measures the performance of companies within the Russell Mid-Cap Index having higher price-to-book ratios and higher forecasted growth values. The Russell Mid-Cap Index includes firms 201 through 1000, based on market capitalization, from the Russell 3000 Index.
- The Bloomberg Barclays U.S. Treasury Index includes public obligations of the U.S. Treasury with a remaining maturity of one year or more.
- The Bloomberg Barclays US Corporate High Yield Index measures the US corporate market of non-investment grade, fixed-rate corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below.
- The Bloomberg Commodity Index measures price movements of the commodities included in the appropriate sub index. It does not account for effects of rolling futures contracts or costs associated with holding the physical commodity.
- The Bloomberg Barclays US Government/Credit Intermediate Index measures the performance of U.S. Dollar denominated U.S. Treasuries, government-related and investment grade U.S. corporate securities that have a remaining maturity of greater than one year and less than ten years.

# Disclosures and Benchmark Definitions

- The Bloomberg Barclays US Government/Credit Long Index includes publicly issued U.S. Treasury debt, U.S. government agency debt, taxable debt issued by U.S. states and territories and their political subdivisions, debt issued by U.S. and non-U.S. corporations, non-U.S. government debt and supranational debt.
- The Citi World Government Bond Index is an index of bonds issued by governments in the U.S., Europe and Asia.
- The Citigroup 3-Month T-Bill Index – The Citigroup 3-Month T-Bill Index is an unmanaged index that is generally representative of 3-month Treasury bills and consists of an average of the last 3-month U.S. Treasury Bill issues.
- The JPMorgan Emerging Markets Bond Index Global tracks total returns for traded external debt instruments in the emerging markets, and is an expanded version of the JPMorgan EMBI+. As with the EMBI+, the EMBI Global includes U.S. dollar-denominated Brady bonds, loans, and Eurobonds with an outstanding face value of at least \$500 million. It covers more of the eligible instruments than the EMBI+ by relaxing somewhat the strict EMBI+ limits on secondary market trading liquidity.
- The Bloomberg Barclays US TIPS Index includes all publicly issued, U.S. Treasury inflation-protected securities that have at least one year remaining to maturity, are rated investment grade, and have \$250 million or more of outstanding face value.
- The Dow Jones U.S. Select REIT Index intends to measure the performance of publicly traded REITs and REIT-like securities. The index is a subset of the Dow Jones U.S. Select Real Estate Securities Index (RESI), which represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the U.S.
- The FTSE EPRA/NAREIT Developed ex US Index is a subset of the FTSE EPRA/NAREIT Developed Index and is designed to track the performance of listed real estate companies and REITs.

Source: Morningstar Direct.

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# Disclosures

*Carefully consider the investment objectives, risks, fees and expenses of the annuity and/or the investment options. Contact us for a prospectus, a summary prospectus and disclosure document, as available, containing this information. Read them carefully before investing.*

*You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.*

*The performance data contained herein represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that shares or units when redeemed may be worth less than their original cost. Current performance may be lower or higher than the return data quoted herein. For more current fund performance, including the most recent completed calendar month, please call 800-345-2345.*

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GWFS Equities, Inc., or one or more of its affiliates, may receive a fee from the investment option provider for providing certain recordkeeping, distribution and administrative services.

Although data is gathered from reliable sources, the completeness or accuracy of the data shown cannot be guaranteed.

Cash alternatives are not federally guaranteed and may lose value. Cash alternative portfolios have interest rate, inflation, and credit risks that are associated with the underlying assets owned by the portfolio.

Compared to higher rated securities, high yield bond investment options are subject to greater risk, including the risk of default.

Capital preservation funds are not federally guaranteed and may lose value. They have interest rate, inflation and credit risks that are associated with the underlying assets owned by the portfolio or fund.

Certain underlying funds invest in inflation protected bonds ("TIPS"). Unlike conventional bonds, the principal or interest of TIPS is adjusted periodically to a specified rate of inflation (e.g., Consumer Price Index for all Urban Consumers [CPI-U]). There can be no assurance that the inflation index used will accurately measure the actual rate of inflation.

Separately managed accounts are not registered investment products but separate accounts created specifically for the plan. Separately managed funds are not required to file a prospectus or registration statement with the SEC and, accordingly, neither is available.

A collective fund is not a mutual fund and is exempt from SEC registration. Designed for and exclusively sold to qualified retirement plans and their participants, the funds are not available to individual retail investors.

Foreign investments involve special risks, including currency fluctuations, taxation differences and political developments.

Equity securities of companies located in emerging markets involve greater risks than investing in more established markets, including currency fluctuations, political developments and share illiquidity.

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The quoted mutual fund performance may include performance of a predecessor fund/share class prior to the share class commencement of operations. Please refer to the current prospectus for further information.

Funds may impose redemption fees and/or transfer restrictions if assets are held for less than the published holding period. For more information, see the fund's prospectus and/or disclosure documents.

Putnam funds are managed by Putnam Investment Management. Putnam mutual funds are distributed by Putnam Retail Management. Putnam is affiliated with GWL&A and GWL&A of NY and its subsidiaries.

Gross expense ratios are the funds' total annual operating costs expressed as a percentage of the funds' average net assets over a given time period. They are gross of any fee waivers or expense reimbursements. Net expense ratios are the expense ratios after the application of any voluntary or contractual waivers or reimbursements and are the actual ratios that investors paid during the funds' most recent fiscal year. Expense ratios are subject to change.

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Morningstar rankings are based on total return and do not reflect of sales charges, which, if reflected, would reduce returns.

The date in a target date fund's name represents an approximate date when an investor is expected to retire (which is assumed to be at age 65) and/or begins withdrawing money. The principal value of the funds is not guaranteed at any time, including the target date. For more information, please refer to the fund prospectus and/or disclosure document. A target date fund will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date (which is the assumed retirement date for an investor).

Asset allocation and balanced investment options and models are subject to the risks of the underlying investments, which can be a mix of stocks/stock funds and bonds/bond funds. For more information, see the prospectus and/or disclosure documents.

The value of commodity-linked investments may be affected by financial factors, political developments and natural disasters. As such, investment options that invest primarily in commodities may experience greater volatility than investments in traditional securities.

Equity securities of small and mid-sized companies may be more volatile than securities of larger, more established companies.

Real estate securities and trusts involve greater risks than other non-diversified investments, including but not limited to: declining property values, varying economic conditions, changes in zoning laws, or losses from casualty. Real estate securities that invest in foreign real estate involve additional risk, including currency fluctuations and political developments.

Investment return and principal value of a variable investment will fluctuate so that an investor's shares when redeemed, may be worth more or less than the original cost.

There is no guarantee that companies that can issue dividends will declare, continue to pay, or increase dividends.

The JPMCB SmartRetirement Funds indirectly bear their proportionate share of the operating expenses of any underlying funds in which they may invest (excluding management fees and service fees).

The Trustee of the JPMCB SmartRetirement Funds agrees to reimburse the Fund for such fund operating expenses, and/or to waive a portion of the Trustee's management fee, to the extent that the fund's total annual operating expenses (excluding management fees, service fees, underlying fund fees attributable to dividend and interest expenses on short sales, interest, expenses related to litigation and potential litigation, and extraordinary expenses not incurred in the ordinary course of the Fund's business) exceeds 0.04% of the Fund's average daily new assets through the expense cap expiration date.

The price of equity securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries selected for the Fund's portfolio or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to "stock market risk" meaning that stock prices in general (or in particular, the prices of the types of securities in which a fund invests) may decline over short or extended periods of time. When the value of a fund's securities goes down, an investment in a fund decreases in value.

Some of the data may have been obtained from Standard & Poor's ("S&P") © 2015 The McGraw-Hill Companies, Inc. S&P is a division of The McGraw-Hill Companies, Inc.

A benchmark index is not actively managed, does not have a defined investment objective, and does not incur fees or expenses. Therefore, performance of a fund will generally be less than its benchmark index. You cannot invest directly in a benchmark index.

Services offered by Advised Assets Group, LLC, a registered investment adviser.

Empower Retirement is not acting as an investment advisor for the plan. The information, analyses and fund alternatives described in this material are intended to provide assistance to the plan sponsor or other fiduciary responsible for plan investments and should not be relied upon as the sole basis for any investment decision. GWFS Equities, LLC and its affiliates may receive compensation with respect to proprietary investments and may receive compensation with respect to other plan investments. Other share classes may be available for the investment products described, and the plan sponsor is welcome to request more information on the options available.

Shares of Great-West Funds, Inc. are not sold directly to the general public but are offered to permitted accounts as defined in the prospectus. Asset allocation funds of Great-West Funds may invest in funds that are advised by Great-West Capital Management, LLC or are sub-advised by affiliates of GWCM. Asset allocation funds may also invest in a fixed-interest contract issued by GWL&A. While certain sub-advised funds may be managed similar to or modeled after other mutual funds with similar names and investment objectives, the Great-West Funds are not directly related to them. Consequently, the investment performance and other features of other mutual funds and any similarly named Great-West Fund may differ substantially.

The principal underwriter of Great-West Funds, Inc. is its affiliate GWFS Equities, Inc., Member FINRA/SIPC. Great-West Capital Management, LLC is the investment adviser.

advised by Great-West Capital Management, LLC (GWCM), funds that are sub-advised by affiliated and unaffiliated sub-advisers retained by GWCM or funds that are advised by affiliated and unaffiliated investment advisers of GWCM or in a fixed-interest contract issued and guaranteed by Great-West Life & Annuity Insurance Company.

The guaranteed fund is a general account group annuity contract issued by Great-West Life & Annuity Insurance Company or, in New York, by Great-West Life & Annuity Insurance Company of New York that guarantees principal and credited interest for eligible participant-initiated withdrawals and transfers. The guarantee is backed by the general assets of the insurance company issuing the contract. The strength of the guarantee is dependent on the financial strength of the insurance company issuing the contract. Depending on the terms of the contract and/or the contract form, there may also be investment risks associated with certain plan sponsor actions, including but not limited to a termination of the contract that could result in a negative market value adjustment to the proceeds paid to the plan sponsor or an extended payment period. For more information, please contact Empower Retirement or refer to the contract.