# State of Wisconsin Deferred Compensation Plan

# Investment Performance and Expense Ratio Review

Performance as of March 31, 2020

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# Table of Contents

- 1) Executive Summary
- 2) Target Date Summary
- 3) Expense Ratio Information
- 4) Fund Analysis
- 5) Capital Markets Overview
- 6) Appendix

# 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, Federated US Gov Securities, Vanguard Long-Term Investment Grade, Dodge & Cox Income		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.

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# Performance Benchmarking

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	-22.43	-12.70	0.28	0.91	3.97	135,022	0.49
Morningstar Foreign Large Growth Avg	-19.08	-8.32	2.03	1.79	4.46	-	1.13
MSCI EAFE Index	-22.83	-14.38	-1.82	-0.62	2.72	-	-
MSCI ACWI ex U.S.	-23.36	-15.57	-1.96	-0.64	2.05	-	-
Blackrock EAFE Equity Index Coll T	-22.73	-14.02	-1.45	-0.25	3.07	-	0.04
MSCI EAFE Index	-22.83	-14.38	-1.82	-0.62	2.72	-	-
DFA US Micro Cap I	-34.75	-29.46	-8.01	-1.90	6.73	4,366	0.51
Morningstar Small Cap Blend Avg	-32.37	-26.41	-6.82	-1.76	5.96	-	1.12
Russell 2000 Index	-30.61	-23.99	-4.64	-0.25	6.90	-	-
Blackrock Russell 2000 Index Coll M	-30.33	-23.96	-4.53	-0.09	-	-	0.03
Russell 2000 Index	-30.61	-23.99	-4.64	-0.25	6.90	-	-
T. Rowe Price Instl Mid-Cap Equity Gr	-24.14	-13.65	4.69	5.92	11.61	6,761	0.61
Morningstar Mid Cap Growth Avg	-20.64	-11.17	4.66	4.33	9.46	-	1.17
Russell Mid Cap Growth Index	-20.04	-9.45	6.53	5.61	10.89	-	-
S&P Midcap 400 Index	-29.70	-22.51	-4.09	0.56	7.88	-	-
Blackrock Midcap Equity Index Coll F	-29.64	-22.40	-4.00	0.64	7.95	-	0.02
S&P MidCap 400 Index	-29.70	-22.51	-4.09	0.56	7.88	-	-
Calvert US Large Cap Core Rspnb ldx R6	-18.25	-4.91	5.80	6.77	10.70	3,578	0.19
S&P 500 Index	-19.60	-6.98	5.10	6.73	10.53	-	-
Morningstar Socially Resp Large Cap Avg**	-19.57	-8.28	4.65	5.52	9.43	-	0.96
Morningstar Large Cap Growth Avg	-15.48	-3.72	8.65	7.64	10.99	-	1.07
Fidelity Contrafund Commingled Pool Cl 2	-13.67	-1.50	10.32	9.38	-		0.38
Morningstar Large Cap Growth Avg	-15.48	-3.72	8.65	7.64	10.99	-	1.07
Russell 1000 Growth Index	-14.10	0.91	11.32	10.36	12.97	-	-
S&P 500 Index	-19.60	-6.98	5.10	6.73	10.53	-	-
American Beacon Bridgeway Lg Cap Value I CIT*	-31.19	-23.44	-5.47	-0.73	7.29	2,026	0.55
Morningstar Large Cap Value Avg	-26.73	-17.17	-2.18	1.90	7.67	-	-
Russell 1000 Value Index	-26.77	-17.73	-2.11	1.42	6.89	-	-

<sup>\*</sup> The American Beacon CIT returns presented in italics are linked to mutual fund performance.



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

# Performance Benchmarking

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
Vanguard Institutional 500 Index Trust*	-19.60	-6.99	5.10	6.72	10.52		0.01
S&P 500 Index	-19.60	-6.98	5.10	6.73	10.53	-	-
Vanguard Wellington Adm	-13.79	-2.73	4.28	5.29	7.97	93,760	0.17
Morningstar Moderate Allocation Avg	-14.74	-7.01	1.48	2.40	5.75	-	1.10
Composite 65% S&P 500 / 35% Barclay's Aggregate	-11.64	-1.41	5.01	5.55	8.20	-	-
Composite 65% S&P 500 / 35% Barclay's U.S. Credit A or Better ldx	-12.91	-1.93	5.01	5.66	8.60	-	-
Vanguard Long-Term Investment-Grade Adm	2.06	14.88	8.58	5.86	8.13	18,813	0.12
Barclay's LT Corporate A	-0.50	7.46	4.83	3.68	5.03	-	-
Morningstar Corp Bond	-4.74	2.64	2.96	2.77	4.36	-	0.81
Dodge & Cox Income	-0.70	5.08	3.86	3.28	4.12	60,977	0.42
Morningstar Interm Core-Plus Bond Avg	-1.10	4.24	3.27	2.57	3.87	-	-
BarCap US Agg Bond TR USD	3.15	8.93	4.82	3.36	3.88	-	-
Blackrock US Debt Index Fund Coll W	3.13	8.90	4.86	3.40	-	-	0.03
BarCap US Agg Bond TR USD	3.15	8.93	4.82	3.36	3.88	-	-
Federated US Govt 2-5 Yr Instl	4.92	8.17	3.40	2.09	1.94	280	0.60
Morningstar Short Government Avg	2.15	4.40	2.26	1.48	1.48	-	0.73
Barclay's US Treas/Agency 3-5 Yr	5.37	9.19	4.18	2.88	2.95	-	-
BofA Merrill Lynch US Treas 3-5 Yr	5.36	9.13	4.14	2.87	2.91	-	-
Vanguard Admiral Treasury Money Mkt Inv	0.35	1.91	1.65	1.07	0.54	40,582	0.09
Morningstar Taxable Money Mkt Avg	0.25	1.54	1.30	0.81	0.41	-	0.46
U.S. Treasury 90-Day T-Bill	0.28	1.74	1.69	1.11	0.59	-	-
iMoney Net Average Treasury MM	0.24	1.40	1.17	0.71	0.35	-	-
Stable Value Fund	0.61	2.56	2.30	2.13	2.36	709	0.29
5 Yr. Constant Maturity Treasury Yield	0.29	1.63	2.14	1.88	1.62	-	-

<sup>\*</sup> Italicized returns are taken from mutual fund share class..

3-Year Percentile Ranks 3/31/2020

	Q1 2020	Q4 2019	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017
Group/Investment	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten					
A : B B: L O VIII :	40		10	21	4.5	21	۱		=0	0.4
American Beacon Bridgeway Lg Cp Val Inst	10	15	16	21	15	21	62	68	78	84
American Funds Europacific Growth R6	31	53	61	73	72	69	56	59	66	68
BlackRock EAFE® Equity Index F	74	72	87	79	59	59	56	58	46	68
Blackrock Mid Cap Eq Idx Fund CF	52	52	61	61	68	90	73	90	90	93
BlackRock Russell 2000® Index F	81	81	69	81	85	73	85	81	82	75
Blackrock US Debt Idx Fund CF	95	78	73	63	61	66	64	70	73	66
Calvert US Large Cap Core Rspnb Idx I	90	87	83	90	88	74	70	54	69	68
DFA US Micro Cap I	31	31	46	54	60	71	83	82	79	73
Dodge & Cox Income	69	75	83	85	87	87	86	91	87	89
Federated US Govt 2-5 Yr Instl	95	81	49	48	33	40	16	24	23	45
Fidelity Contrafund Commingled Pl 2	58	63	68	63	43	53	46	70	71	59
T. Rowe Price Mid-Cap Growth	45	66	71	62	57	72	55	68	86	89
Vanguard Institutional Index Instl Pl	81	83	82	84	87	89	92	93	91	89
Vanguard Long-Term Investment-Grade Adm	77	54	63	55	68	67	69	81	76	83
Vanguard Target Retire 2015 Trust I	87	69	66	67	65	65	62	64	65	63
Vanguard Target Retire 2025 Trust I	80	92	85	81	76	87	85	87	85	82
Vanguard Target Retire 2035 Trust I	79	76	71	81	78	77	74	75	76	67
Vanguard Target Retire 2045 Trust I	73	79	79	79	76	79	82	83	88	81
Vanguard Target Retire 2055 Trust I	78	71	65	72	69	80	69	67	75	63
Vanguard Target Retire Inc Trust I	90	72	67	58	51	68	57	67	75	67
Vanguard Wellington™ Admiral™	87	91	94	90	92	95	92	93	97	97
Vanguard Wellington™ Admiral™  1st Quartile		91 Quartile		90 Quartile	92	95 4 <sup>th</sup> Quartile	-	93	97	97

<sup>\*</sup> Percentile ranks shown for American Beacon Bridgeway and Calvert US Large Cap Responsible Index are taken from oldest share class of their respective mutual funds.

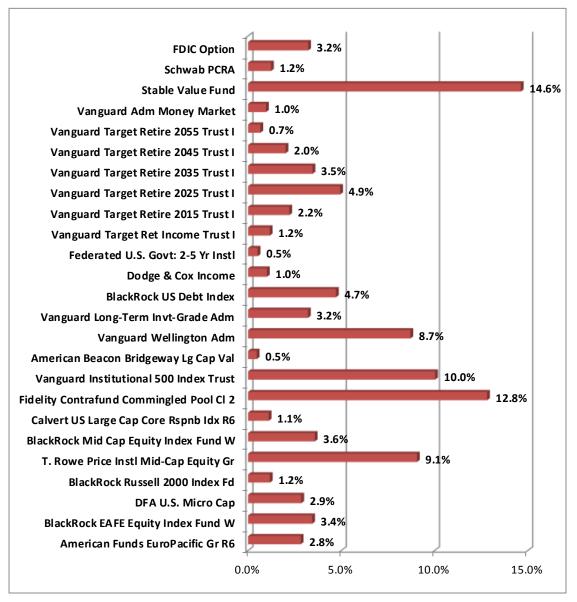
Past performance is no guarantee of future results. Rankings provided based on total returns. Performance quoted for mutual funds may include performance of a predecessor fund/share class prior to the share class commencement of operations.

Asset Summary 3/31/2020

	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	\$135,022,197,970	\$137,007,613	0.10%	2.82%	24,494	36.90%
BlackRock EAFE Equity Index Fund W	2/1/2001	\$34,907,322,784	\$166,946,096	0.48%	3.44%	22,776	34.31%
DFA U.S. Micro Cap	2/1/1997	\$4,365,957,343	\$138,482,207	3.17%	2.85%	11,403	17.18%
BlackRock Russell 2000 Index Fd	2/20/2004	\$525,854,323	\$56,870,693	10.81%	1.17%	15,932	24.00%
T. Rowe Price Instl Mid-Cap Equity Gr	2/1/1998	\$6,760,688,072	\$439,288,699	6.50%	9.06%	33,035	49.77%
BlackRock Mid Cap Equity Index Fund W	2/1/2001	\$4,511,602,653	\$173,404,703	3.84%	3.57%	24,424	36.80%
Calvert US Large Cap Core Rspnb ldx R6	4/18/2003	\$3,577,526,661	\$53,754,435	1.50%	1.11%	3,370	5.08%
Fidelity Contrafund Commingled Pool CI 2	1/31/1994	\$98,380,970,210	\$621,527,750	0.63%	12.81%	31,697	47.75%
Vanguard Institutional 500 Index Trust	9/9/1990	\$64,900,000,000	\$486,623,063	0.75%	10.03%	30,359	45.74%
American Beacon Bridgeway Lg Cap Val	11/1/2017	\$181,838,149	\$22,780,254	12.53%	0.47%	18,038	27.17%
Vanguard Wellington Adm	10/26/2001	\$93,760,239,644	\$422,396,177	0.45%	8.71%	24,599	37.06%
Vanguard Long-Term Invt-Grade Adm	10/26/2001	\$18,813,043,698	\$155,776,892	0.83%	3.21%	15,535	23.40%
BlackRock US Debt Index	2/1/2001	\$13,466,914,041	\$228,609,442	1.70%	4.71%	21,102	31.79%
Dodge & Cox Income	1/2/1989	\$60,977,180,031	\$49,188,037	0.08%	1.01%	13,625	20.53%
Federated U.S. Govt: 2-5 Yr Instl	2/3/1992	\$279,563,278	\$25,228,303	9.02%	0.52%	5,516	8.31%
Vanguard Target Ret Income Trust I	7/29/2005	\$10,200,000,000	\$56,426,793	0.55%	1.16%	1,900	2.86%
Vanguard Target Retire 2015 Trust I	7/29/2005	\$10,700,000,000	\$107,473,165	1.00%	2.22%	2,813	4.24%
Vanguard Target Retire 2025 Trust I	7/29/2005	\$47,500,000,000	\$239,592,844	0.50%	4.94%	6,418	9.67%
Vanguard Target Retire 2035 Trust I	7/29/2005	\$42,700,000,000	\$167,636,968	0.39%	3.46%	6,849	10.32%
Vanguard Target Retire 2045 Trust I	7/29/2005	\$31,600,000,000	\$97,536,558	0.31%	2.01%	6,495	9.78%
Vanguard Target Retire 2055 Trust I	8/18/2010	\$14,200,000,000	\$32,170,863	0.23%	0.66%	4,128	6.22%
Vanguard Adm Money Market	10/1/1993	\$40,581,800,000	\$46,580,845	0.11%	0.96%	6,446	9.71%
Stable Value Fund	9/1/1996	N/A	\$709,407,680	N/A	14.62%	28,417	42.81%
Schwab PCRA	2/17/2000	N/A	\$59,820,000	N/A	1.23%	1,198	1.80%
FDIC Option	12/31/1996	N/A	\$156,514,910	N/A	3.23%	11,782	17.75%



Asset Summary 3/31/2020



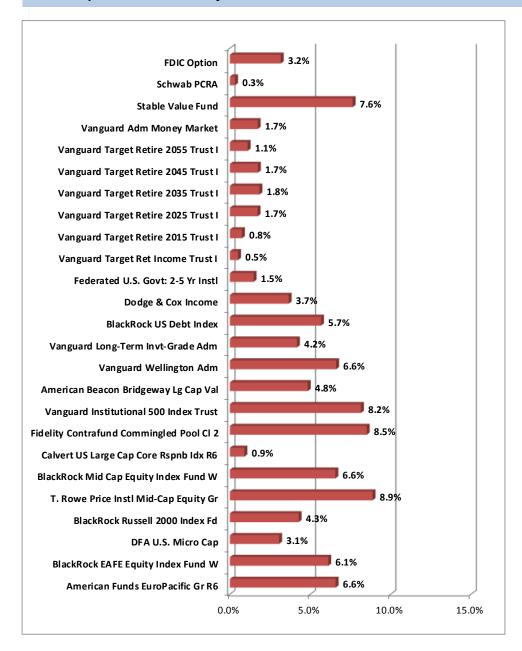
### **Total WDC Assets**

# \$4,851,044,990

Domestic Equity	\$1,992,731,804	41%
Intl Equity	\$303,953,709	6%
Asset Allocation	\$1,123,233,367	23%
Fixed Income	\$458,802,674	9%
Cash Equiv.	\$912,503,436	19%
Self-Directed Brok.	\$59,820,000	1%



# **Participant Summary**



# Total WDC Participants 66,378

Expense Summary 3/31/2020

Name	Expense Ratio	Annual Expense per \$1000
American Funds EuroPacific Gr R6	0.49	\$4.90
Cat: Foreign Large Growth	1.13	
Blackrock EAFE Equity Index Fund W	0.04	\$0.40
Cat: Foreign Large Blend Index	0.42	
DFA U.S. Micro Cap	0.51	\$5.10
Cat: Small Blend	1.12	
Blackrock Russell 2000 Index Fd	0.03	\$0.30
Cat: Small Cap Blend Index	0.42	
T. Rowe Price Instl Mid-Cap Equity Gr	0.61	\$6.10
Cat: Mid Growth	1.17	
Blackrock Mid Cap Equity Index Fund W	0.02	\$0.20
Cat: Mid Cap Blend Index	0.49	
Calvert US Large Cap Core Rspnb ldx R6	0.19	\$1.90
Cat: Socially Resp Large Cap	0.98	
Fidelity Contrafund Commingled Pool Cl 2	0.38	\$3.80
Cat: Large Growth	1.07	
Vanguard Institutional 500 Index Trust	0.01	\$0.10
Cat: Large Cap Blend Index	0.45	
American Beacon Bridgeway Lg Cap Val	0.55	\$5.50
Cat: Large Value	1.00	
Stable Value Fund	0.32	\$3.20
Cat: Stable Value	0.70	
Dodge & Cox Income	0.42	\$4.20
Cat: Interm. Core-Plus Bond	0.79	

Asset-Weighted Average Expense Ratio: 0.18%

Name	Expense Ratio	Annual Expense per \$1000
Vanguard Wellington Adm	0.17	\$1.70
Cat: Moderate Allocation	1.10	
Vanguard Target Retirement 2055 Inv	0.07	\$0.70
Cat: Target Date 2050+	0.76	
Vanguard Target Retirement 2045 Inv	0.07	\$0.70
Cat: Target Date 2041-2045	0.76	
Vanguard Target Retirement 2035 Inv	0.07	\$0.70
Cat: Target Date 2031-2035	0.75	
Vanguard Target Retirement 2025 Inv	0.07	\$0.70
Cat: Target Date 2021-2025	0.73	
Vanguard Target Retirement 2015 Inv	0.07	\$0.70
Cat: Target Date 2011-2015	0.66	
Vanguard Target Retirement Income Inv	0.07	\$0.70
Cat: Retirement Income	0.76	
Vanguard Long-Term Invmt-Grade Adm	0.12	\$1.20
Cat: Corporate Bond	0.81	
Blackrock US Debt Index	0.03	\$0.30
Cat: Intermediate Bond Index	0.32	
Federated U.S. Govt: 2-5 Yr Instl*	0.60	\$6.00
Cat: Short Government	0.73	
Vanguard Adm Money Market	0.09	\$0.90
Average US Taxable Money Market Fund	0.46	

<sup>\*</sup> The Federated U.S. Govt. 2-5 Yr Fund and 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 0.44 for the Federated fund and 0.10 for the Dodge & Cox fund.



# Target Date Fund Summary



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
Vanguard Target Retire Inc Trust I	-5.90	0.96	3.38	3.17	4.92	10,200	0.07	2	18	12	68	0
S&P Target Date Retirement Income TR USD	-6.69	0.17	3.06	2.89	4.52	-	-	-	-	-	-	-
Composite Returns*	-4.45	2.40	3.45	2.90	4.43	-	-	-	-	-	-	-
Vanguard Target Retire 2015 Trust I	-7.40	-0.09	3.61	3.55	6.03	10,700	0.07	2	23	14	61	0
S&P Target Date 2015 TR USD	-9.16	-1.93	2.90	3.21	5.54	-	-	-	-	-	-	-
Composite Returns*	-6.19	0.94	3.17	2.83	4.61	-	-	-	-	-	-	-
Vanguard Target Retire 2025 Trust I	-12.92	-4.17	3.07	3.60	6.65	47,500	0.07	2	37	23	38	0
S&P Target Date 2025 TR USD	-12.93	-4.89	2.52	3.32	6.20	-	-	-	-	-	-	-
Composite Returns*	-11.97	-3.96	2.18	2.52	5.08	-	-	-	-	-	-	-
Vanguard Target Retire 2035 Trust I	-16.47	-7.16	2.53	3.51	7.07	42,700	0.07	1	47	29	23	0
S&P Target Date 2035 TR USD	-17.69	-8.81	1.71	3.10	6.53	-	-	-	-	-	-	-
Composite Returns*	-15.97	-7.30	1.52	2.33	5.46	-	-	-	-	-	-	-
Vanguard Target Retire 2045 Trust I	-19.84	-10.08	1.77	3.21	7.07	31,600	0.07	1	54	35	10	0
S&P Target Date 2045 TR USD	-20.15	-10.86	1.23	2.98	6.73	-	-	-	-	-	-	-
Composite Returns*	-19.25	-10.11	0.91	2.11	5.67	-	-	-	-	-	-	-
Vanguard Target Retire 2055 Trust I	-19.83	-10.09	1.78	3.19	-	14,200	0.07	1	54	35	10	0
S&P Target Date 2055+ TR USD	-20.84	-11.47	1.12	3.02	-	-	-	-	-	-	-	-
Composite Returns*	-19.24	-10.09	0.92	2.12	5.68	-	-	-	-	-	-	-

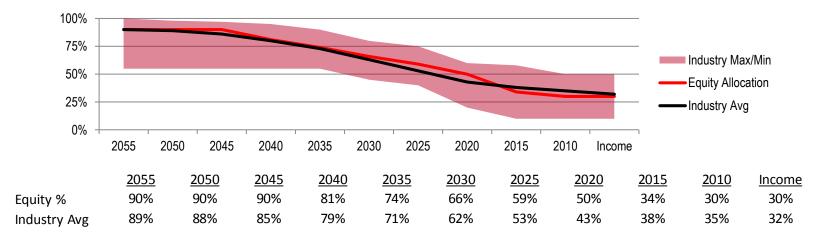
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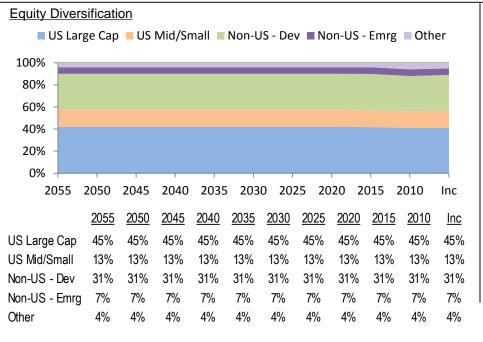


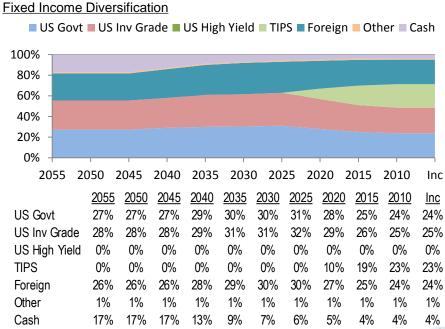
<sup>\*</sup>Composite benchmark consists of the following indices weighted to match the allocation of the specific target date fund: MSCI Broad Market, MSCI EAFE, Barclays Aggregate Bond, and Barclays US Treasury 1-3 Month

# Glide Path Summary

Data as of March 31, 2020







# Expense Ratio Information



# **Expense Summary**

	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
Cash Equiv				
Stable Value				
Stable Value (Wisconsin)	0.29		0.29	
Fixed Income				
Money Market-Taxable				
Vanguard Treasury Money Market Investor	0.09	1	0.09	1
Money Market-Taxable Median	0.50		0.59	
Short Government				
Federated US Govt 2-5 Yr Instl	0.60	35	0.93	51
Short Government Median	0.76		0.92	
Intermediate Core Bond				
BlackRock US Debt Index-W	0.03	3	0.03	2
Intermediate Core Bond Median	0.80		0.98	
Intermediate Core-Plus Bond				
Dodge & Cox Income	0.42	13	0.42	7
Intermediate Core-Plus Bond Median	0.70		0.83	
Long-term Bond				
Vanguard Long-Term Investment-Grade Adm	0.12	15	0.12	15
Long-Term Bond Median	0.73		0.87	
Balanced				
Allocation50% to 70% Equity				
Vanguard Wellington Admiral	0.17	1	0.17	1
Allocation50% to 70% Equity Median	1.15		1.30	
Target-Date Retirement				
The Vanguard Target Retire Inc Trust I	0.07	1	0.07	1
Target-Date Retirement Median	0.81		1.11	
Target-Date 2015				
The Vanguard Target Retire 2015 Trust I	0.07	1	0.07	1
Target-Date 2015 Median	0.84		1.16	
Target-Date 2025				
The Vanguard Target Retire 2025 Trust I	0.07	1	0.07	1
Target-Date 2025 Median	0.79		1.04	



# **Expense Summary**

	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
Target-Date 2035				
The Vanguard Target Retire 2035 Trust I	0.07	1	0.07	1
Target-Date 2035 Median	0.82		1.11	
Target-Date 2045				
The Vanguard Target Retire 2045 Trust I	0.07	1	0.07	1
Target-Date 2045 Median	0.81		1.15	
Target-Date 2055				
The Vanguard Target Retire 2055 Trust I	0.07	1	0.07	1
Target-Date 2055 Median	0.78		1.21	
Equity				
Large Value				
Bridgeway Large Cap Value CIT Class I	0.55	12	0.55	10
Large Value Median	1.02		1.20	
Large Blend				
Vanguard Institutional Index Instl PI	0.01	1	0.01	1
Calvert US Large Cap Core Rspnb ldx R6	0.19	6	0.32	9
Large Blend Median	1.00		1.18	
Large Growth				
Fidelity Contrafund Commingled Pool Cl 2	0.38	4	0.38	4
Large Growth Median	1.12		1.27	
Mid-Cap Blend				
BlackRock Mid Cap Equity Index- F	0.02	1	0.02	1
Mid-Cap Blend Median	1.10		1.27	
Mid-Cap Growth				
T. Rowe Price Instl Mid-Cap Equity Gr	0.61	5	0.61	4
Mid-Cap Growth Median	1.24		1.44	
Small Blend				
DFA US Micro Cap I	0.51	11	0.51	9
BlackRock Russell 2000 Index-T	0.03	2	0.03	2
Small Blend Median	1.16		1.30	



# **Expense Summary**

	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
International				
Foreign Large Blend				
BlackRock EAFE Equity Index-T	0.04	2	0.04	3
Foreign Large Blend Median	1.09		1.29	
Foreign Large Growth				
American Funds Europacific Growth R6	0.49	4	0.49	3
Foreign Large Growth Median	1.15		1.30	



# 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)

Fund Incep Date: 07/01/1998

Benchmark:

ML 3-month T-Bill

Category: Stable Value Net Assets: \$710.14M

Manager Name: Team Managed

Manager Start Date: 06/30/1998

Expense Ratio: 0.29% Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



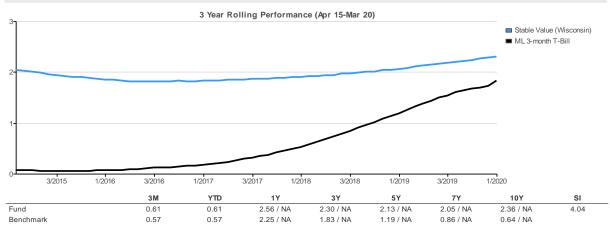
### Sector Breakdown

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**



CALENDAR	2019	2018	2017	2016	2015	2014	2013	2012	2011
Fund	2.56	2.25	1.89	1.89	1.85	1.73	2.10	2.63	3.13
Benchmark	2.28	1.87	0.86	0.33	0.05	0.03	0.07	0.11	0.10

### Total: NA%

### ASSET LOADINGS (Returns-based)

100-	FUND EXPOSURES (W EIGHT) (Apr 17-Mar 20)
100-	
75-	
50-	
25-	
0-	

		Current		Average	
		Fund	Bmk	Fund	Bmk
T	Cash	99.4	100.0	99.8	100.0
-1	Mortgages	0.0	0.0	0.0	0.0
- 1	Gov/Corp Bonds	0.6	0.0	0.2	0.0

### **RISK & PERFORMANCE STATISTICS**

3 Yr	Fund	Benchmark
Alpha	0.46	0.00
Beta	0.00	0.00
R-Squared	0.00	0.00
Sharpe Ratio	5.45	0.00
Up Market Capture	125.59	100.00
Down Market Capture	NA	NA

5 Yr	Fund	Benchmark
Alpha	0.92	0.00
Beta	0.00	0.00
R-Squared	0.00	0.00
Sharpe Ratio	10.25	0.00
Up Market Capture	172.81	100.00
Down Market Capture	-2787.19	100.00

### NOTES

# Vanguard Treasury Money Market Investor VUSXX

0.00%

100.00%

3/31/2020

Fund Incep Date: 12/14/1992 Benchmark:

FTSE Treasury Bill 3 Mon

Category: Money Market-Taxable Net Assets: \$39,498.00M Manager Name:

Manager Start Date:

Expense Ratio: 0.09%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Credit Quality (%)

AAA AA

A BBB

ВВ

B Below B

NR/NA Total:

Total:

Sector (%)	
% Government	11.73%
% Municipal	0.00%
% Corporate	0.00%
% Securitized	0.00%
% Cash and Equivalent	88.27%
% Derivative	0.00%

### ASSET LOADINGS (Returns-based)

100	FUND EXPOSURES (W EIGHT) (Apr 17-Mar 20)
100-	
75-	
EΩ	

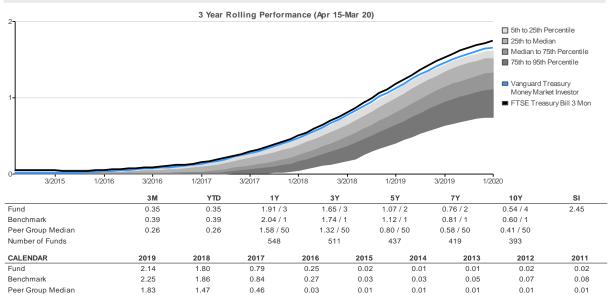


0		Current		Average	
		Fund	Bmk	Fund	Bmk
Т	Cash	98.2	98.4	99.4	99.5
	Credit Bond	0.0	0.0	0.0	0.0
1	Govt Bond	0.0	0.0	0.0	0.0
	HY Corp Bond	1.0	1.0	0.3	0.3
L	MBS	0.0	0.0	0.0	0.0
i.	Muni Bond	0.8	0.7	0.3	0.2
T.	TIPS	0.0	0.0	0.0	0.0

### 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 securities 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; the remainder of the assets may be invested in securities issued by U.S. governmental agencies. The fund maintains a dollar-weighted average maturity of 60 days or less and a dollar-weighted average life of 120 days or less.

### PERFORMANCE



### **RISK & PERFORMANCE STATISTICS**

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.08	0.00	-0.40
Beta	1.09	1.00	1.19
R-Squared	98.96	100.00	97.42
Sharpe Ratio	-1.09	-0.53	-3.08
Up Market Capture	94.99	100.00	75.85
Down Market Capture	NA	NA	NA

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.05	0.00	-0.30
Beta	1.09	1.00	1.23
R-Squared	97.80	100.00	81.64
Sharpe Ratio	-0.50	-0.26	-1.71
Up Market Capture	94.90	100.00	71.52
Down Market Capture	NA	NA	NA

### NOTES



## Federated US Govt 2-5 Yr Instl FIGTX

Fund Incep Date: 02/18/1983

Benchmark:

BofAML US Treasuries 3-5 Yr TR USD

Category: Short Government Net Assets: \$269.00M Manager Name: J. Andrew Kirschler Manager Start Date: 07/05/2013

Expense Ratio: 0.60%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



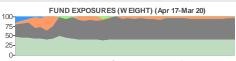
### Credit Quality (%)

Total:	100.00%
NR/NA	0.00%
Below B	0.00%
В	0.00%
BB	0.00%
BBB	0.00%
A	0.00%
AA	0.00%
AAA	100.00%

### Sector (%)

000101 (70)	
% Government	88.15%
% Municipal	0.00%
% Corporate	0.00%
% Securitized	10.71%
% Cash and Equivalent	1.14%
% Derivative	0.00%
Total:	100.00%

### ASSET LOADINGS (Returns-based)

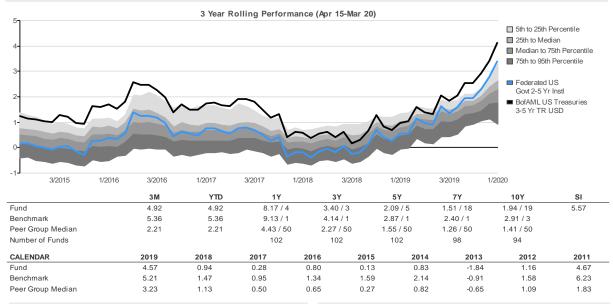


0		Current		Average	
		Fund	Bmk	Fund	Bmk
Т	Cash	38.9	33.7	40.4	33.0
L	Credit Bond	0.0	0.0	0.0	0.0
1	Govt Bond	55.6	55.5	49.5	52.2
	HY Corp Bond	0.0	0.0	0.0	0.0
I.	MBS	5.5	10.8	8.3	13.3
i.	Muni Bond	0.0	0.0	0.6	1.1
T.	TIPS	0.0	0.0	1.1	0.4

### INVESTMENT OVERVIEW

The investment seeks current income. The fund buys and sells portfolio securities based primarily on the Adviser's market outlook and analysis of how securities may perform under different market conditions. It may also use derivative contracts and/or hybrid instruments to implement elements of its strategies, particularly to manage duration and hedge against potential losses. The fund may also invest in government securities that are supported by the full faith and credit of the U.S. government.

### PERFORMANCE



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.59	0.00	-0.43
Beta	0.94	1.00	0.39
R-Squared	99.09	100.00	83.78
Sharpe Ratio	0.62	0.86	0.40
Up Market Capture	87.99	100.00	46.44
Down Market Capture	102.68	100.00	29.87
5 Yr	Fund	Benchmark	Peer Grou Median
Alpha	-0.60	0.00	-0.37

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.60	0.00	-0.37
Beta	0.90	1.00	0.38
R-Squared	97.33	100.00	82.78
Sharpe Ratio	0.39	0.67	0.28
Up Market Capture	83.14	100.00	45.03
Down Market Capture	99.87	100.00	33.81



# Dodge & Cox Income DODIX

Fund Incep Date: Bench 01/03/1989 BBqBa

Benchmark: BBgBarc US Aggregate Bond Index Category: Intermediate Core-Plus Bond Net Assets: Ma \$66,023.00M Da

Manager Name: Dana M. Emery Manager Start Date: 01/03/1989

Expense Ratio: 0.42%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Credit Quality (%)

NR/NA Total:	0.00% 100.01%
Below B	0.01%
В	0.00%
BB	5.20%
BBB	27.50%
A	5.40%
AA	4.70%
AAA	57.20%

### Sector (%)

000101 (70)	
% Government	19.29%
% Municipal	2.84%
% Corporate	35.66%
% Securitized	40.73%
% Cash and Equivalent	1.49%
% Derivative	0.00%
Total:	100.01%

### ASSET LOADINGS (Returns-based)

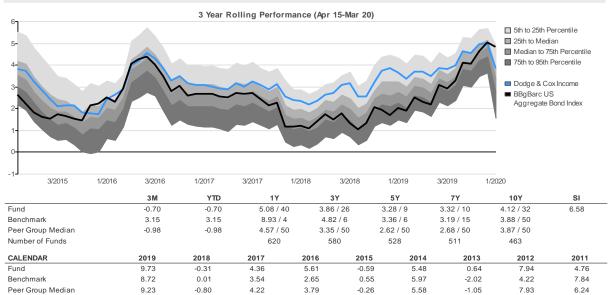


0		Current		Average	
		Fund	Bmk	Fund	Bmk
	Cash	36.1	0.6	34.8	0.6
П	Credit Bond	46.8	30.2	47.8	30.3
1	Govt Bond	2.6	41.7	0.7	41.2
	HY Corp Bond	4.0	0.0	7.6	0.1
L	MBS	10.5	26.2	7.5	27.1
	Muni Bond	0.0	1.3	1.3	0.7
r.	TIPS	0.0	0.0	0.3	0.0

### INVESTMENT OVERVIEW

The investment seeks a high and stable rate of current income, consistent with long-term preservation of capital. The fund invests in a diversified portfolio of bonds and other debt securities. Under normal circumstances, 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.07	0.00	-1.40
Beta	0.71	1.00	0.99
R-Squared	56.04	100.00	64.53
Sharpe Ratio	0.68	0.92	0.40
Up Market Capture	78.11	100.00	90.20
Down Market Capture	75.06	100.00	133.94
5 Yr	Fund	Benchmark	Peer Grou

Down manor captaro	. 0.00	100.00	.00.0
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.55	0.00	-0.58
Beta	0.71	1.00	0.96
R-Squared	52.53	100.00	68.91
Sharpe Ratio	0.70	0.70	0.41
Up Market Capture	86.30	100.00	94.91
Down Market Capture	71.97	100.00	117.53



# Vanguard Long-Term Investment-Grade Adm VWETX

3/31/2020

Fund Incep Date: 02/12/2001

Benchmark:

BBgBarc US Credit A+ Long TR USD

Category: Long-term Bond Net Assets: \$18,813.00M Manager Name: Scott I. St. John Manager Start Date: 05/28/2014

Expense Ratio: 0.12%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



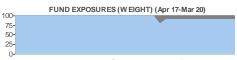
### Credit Quality (%)

orount quanty (70)	
AAA	15.44%
AA	18.59%
A	59.96%
BBB	4.53%
BB	0.08%
В	0.03%
Below B	0.00%
NR/NA	1.37%
Total:	100.00%

### Sector (%)

Total:	100 00%
% Derivative	0.00%
% Cash and Equivalent	5.75%
% Securitized	2.74%
% Corporate	74.54%
% Municipal	10.14%
% Government	6.83%

### ASSET LOADINGS (Returns-based)

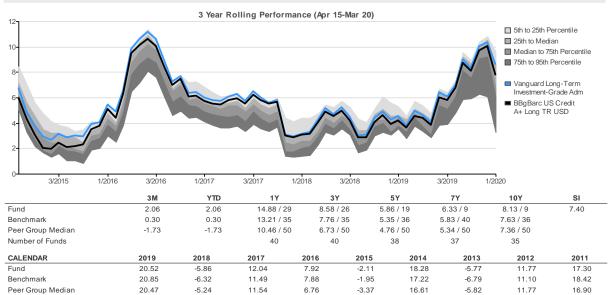


		Current		Avei	rage
		Fund	Bmk	Fund	Bmk
	Cash	0.0	0.0	0.0	0.0
1	Credit Bond	90.2	100.0	96.1	99.7
- 1	Govt Bond	9.8	0.0	4.0	0.3
- 1	HY Corp Bond	0.0	0.0	0.0	0.0
-1	MBS	0.0	0.0	0.0	0.0
-1	Muni Bond	0.0	0.0	0.0	0.0
-1	TIPS	0.0	0.0	0.0	0.0

### 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.87	0.00	-0.67
Beta	0.98	1.00	0.96
R-Squared	98.61	100.00	92.07
Sharpe Ratio	0.80	0.70	0.62
Up Market Capture	101.62	100.00	93.06
Down Market Capture	93.38	100.00	90.91
5 Vr	Fund	Renchmark	Peer Group

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.47	0.00	-0.13
Beta	1.01	1.00	1.01
R-Squared	98.46	100.00	92.40
Sharpe Ratio	0.59	0.54	0.49
Up Market Capture	103.15	100.00	98.33
Down Market Capture	98.99	100.00	99.22



# Vanguard Wellington Admiral VWENX

Fund Incep Date: 05/14/2001

Benchmark: S&P 500 Index Category: Allocation--50% to 70% Equity Net Assets: \$93,760.00M Manager Name: Edward P. Bousa Manager Start Date: 12/31/2002

Expense Ratio: 0.17%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

10.12% 9.55%
9.55%
14.02%
6.74%

Cyclical	
Basic Materials	0.36%
Consumer Cyclical	6.15%
Real Estate	2.59%
Financial Services	22.95%

Defensive	
Consumer Defensive	7.43%
Healthcare	15.56%
Utilities	4.52%

TOP 10 HOLDINGS	
Microsoft Corp	3.59%
JPMorgan Chase & Co	2.68%
Bank of America Corp	2.54%
Verizon Communications Inc	2.50%
Alphabet Inc A	2.21%
Comcast Corp Class A	1.59%
Chevron Corp	1.57%
Apple Inc	1.48%
Pfizer Inc	1.48%
AstraZeneca PLC ADR	1.29%

### ASSET LOADINGS (Returns-based)

Total:



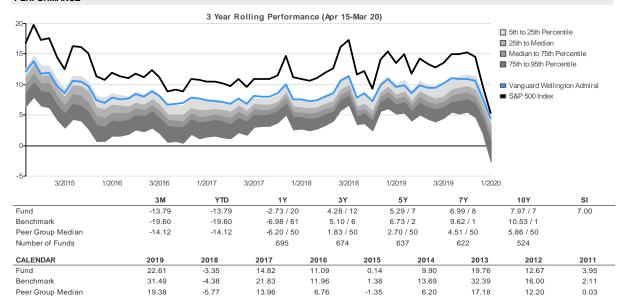
20.91%

		Current		Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	8.9	4.7	15.6	1.8
1	US Bonds	26.5	0.0	20.5	0.0
1	Intl Bonds	0.7	0.0	0.1	0.6
	Intl Equity	20.0	2.5	16.7	4.0
1	US Equity	44.0	92.8	47.2	93.6

### 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**



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.15	0.00	-2.24
Beta	0.62	1.00	0.65
R-Squared	94.75	100.00	93.36
Sharpe Ratio	0.29	0.29	0.05
Up Market Capture	61.75	100.00	55.13
Down Market Capture	60.89	100.00	65.14
5 Yr	Fund	Benchmark	Peer Group Median
<b>5 Yr</b> Alpha	<b>Fund</b> 0.37	Benchmark 0.00	
			Median
Alpha	0.37	0.00	Median -2.18
Alpha Beta	0.37 0.64	0.00	<b>Median</b> -2.18 0.64
Alpha Beta R-Squared	0.37 0.64 94.91	0.00 1.00 100.00	Median -2.18 0.64 92.73



# Vanguard Institutional Index Instl PI VIIIX

0.20%

98.40%

0.00%

1.40%

0.00%

0.00%

0.00%

0.00%

1.27%

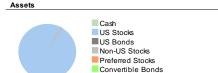
23.85%

3/31/2020

 Fund Incep Date:
 Benchmark:
 Category:
 Net Assets:
 Manager Name:
 Manager Start Date:
 Expense Ratio:
 Expense Ratio:
 Donald M. Butter

 07/07/1997
 S&P 500 Index
 Large Blend
 \$190,756.00M
 Donald M. Butter
 12/31/2000
 0.02%
 1

### PORTFOLIO COMPOSITION (Holdings-based)



Other

Non-US Bonds

### Sector Breakdown

Sensitive	
Communication Services	10.73%
Industrials	9.29%
Technology	21.10%
Energy	3.58%
Cyclical	
Basic Materials	2.15%
Consumer Cyclical	9.75%
Real Estate	3.08%
Financial Services	15.05%
Defensive	
Consumer Defensive	7.59%
Healthcare	14.20%
Utilities	3.48%
TOP 10 HOLDINGS	
Microsoft Corp	5.04%
Apple Inc	4.66%
Amazon.com Inc	3.20%
Facebook Inc A	1.89%
Berkshire Hathaway Inc B	1.65%
Alphabet Inc A	1.64%
Alphabet Inc Class C	1.63%
Johnson & Johnson	1.44%
JPMorgan Chase & Co	1.43%

### ASSET LOADINGS (Returns-based)

Visa Inc Class A

Total:

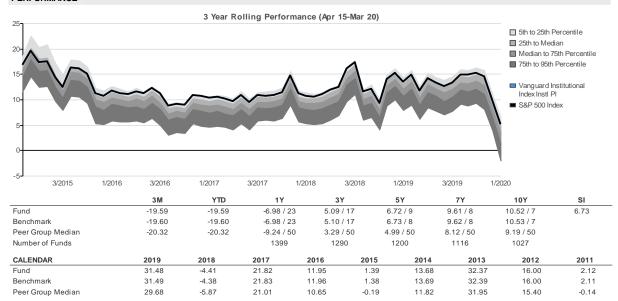


		Current		Avei	rage
		Fund	Bmk	Fund	Bmk
T	Cash	0.3	0.3	0.1	0.1
	Top Value	42.1	42.0	40.7	40.7
- 1	Top Growth	44.9	44.8	43.2	43.2
	Mid Value	8.7	8.8	10.4	10.4
-1	Mid Growth	4.1	4.1	5.6	5.6
1	Sm Value	0.0	0.0	0.0	0.0
1	Sm Growth	0.0	0.0	0.0	0.0

### INVESTMENT OVERVIEW

The investment seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the Standard & 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



NOTES

### **RISK & PERFORMANCE STATISTICS**

Down Market Capture

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.01	0.00	-1.68
Beta	1.00	1.00	1.00
R-Squared	100.00	100.00	97.24
Sharpe Ratio	0.28	0.29	0.17
Up Market Capture	99.96	100.00	94.87
Down Market Capture	100.01	100.00	101.84
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.01	0.00	-1.55
Beta	1.00	1.00	1.00
R-Squared	100.00	400.00	96.50
it oqualou	100.00	100.00	30.30
Sharpe Ratio	0.46	0.46	0.34

100.00

102.74

100.01



# Calvert US Large Cap Core Rspnb Idx R6 CSXRX

0.00%

23.39%

Fund Incep Date: Benchmark: 10/03/2017 S&P 500 Index

Category: Large Blend Net Assets: \$1,947.00M Manager Name: Thomas C. Seto Manager Start Date: 12/31/2016

Expense Ratio: 0.19%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)



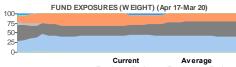
Non-US Bonds

### Sector Breakdown

Sensitive	
Communication Services	9.64%
Industrials	10.20%
Technology	24.22%
Energy	0.23%
Cyclical	
Basic Materials	2.11%
Consumer Cyclical	11.04%
Real Estate	0.35%
Financial Services	16.97%
Defensive	
Consumer Defensive	7.63%
Healthcare	14.38%
Utilities	3.23%
TOP 10 HOLDINGS	
Apple Inc	4.93%
Microsoft Corp	4.60%
Amazon.com Inc	3.21%
Alphabet Inc A	3.13%
JPMorgan Chase & Co	1.57%
Visa Inc Class A	1.34%
Procter & Gamble Co	1.21%
Bank of America Corp	1.17%
Mastercard Inc A	1.12%
Intel Corp	1.12%

### ASSET LOADINGS (Returns-based)

Total:

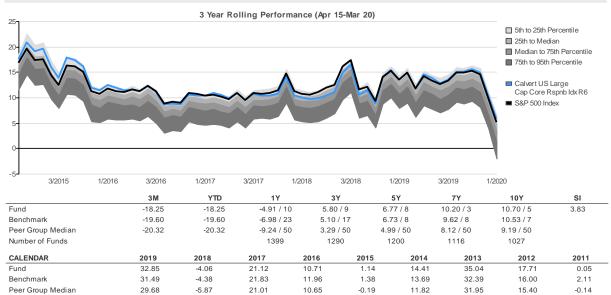


		Current		Average	
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.3	0.2	0.1
1	Top Value	40.5	42.0	40.4	40.7
1	Top Growth	39.1	44.8	31.7	43.2
	Mid Value	0.0	8.8	0.8	10.4
1	Mid Growth	20.1	4.1	25.5	5.6
	Sm Value	0.0	0.0	0.1	0.0
1	Sm Growth	0.4	0.0	1.3	0.0

### 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 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.67	0.00	-1.68
Beta	1.00	1.00	1.00
R-Squared	99.17	100.00	97.24
Sharpe Ratio	0.33	0.29	0.17
Up Market Capture	101.43	100.00	94.87
Down Market Capture	98.05	100.00	101.84
5 Yr	Fund	Benchmark	Peer Group Median
<b>5 Yr</b> Alpha	<b>Fund</b> 0.02	Benchmark 0.00	
			Median
Alpha	0.02	0.00	Median -1.55
Alpha Beta	0.02	0.00	<b>Median</b> -1.55 1.00
Alpha Beta R-Squared	0.02 1.01 98.85	0.00 1.00 100.00	Median -1.55 1.00 96.50



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

18.22%

Fund Incep Date: 07/31/1996

Benchmark:

Russell Mid-Cap Growth Index

Category: Mid-Cap Growth Net Assets: \$5,900.00M Manager Name: Brian W.H. Berghuis Manager Start Date: 07/31/1996

Expense Ratio: 0.61%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

2.26%
17.20%
21.36%
2.58%

Cyclical	
Basic Materials	3.02%
Consumer Cyclical	14.84%
Real Estate	0.91%
Financial Services	10.40%

Defensive	
Consumer Defensive	4.62%
Healthcare	20.65%
Utilities	2.17%

TOP 10 HOLDINGS	
Teleflex Inc	2.61%
Hologic Inc	2.12%
The Cooper Companies Inc	2.09%
Microchip Technology Inc	1.80%
Ball Corp	1.78%
IAC/InterActiveCorp	1.70%
Agilent Technologies Inc	1.65%
Willis Towers Watson PLC	1.50%
Global Payments Inc	1.49%
Dollar General Corp	1.48%

### ASSET LOADINGS (Returns-based)

Total:

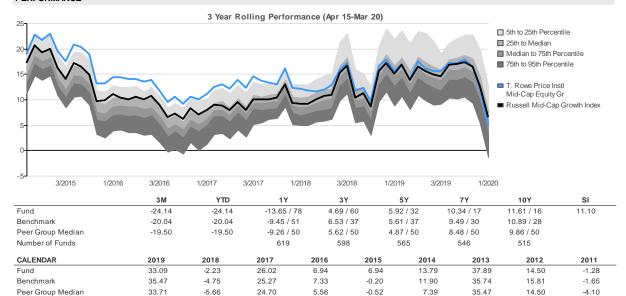


0					
		Current		Average	
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.0	1.9	0.0
1	Top Value	15.6	0.0	19.1	0.0
1	Top Growth	0.0	0.0	0.6	0.0
	Mid Value	27.6	0.0	10.5	0.0
1	Mid Growth	56.8	100.0	67.5	100.0
1	Sm Value	0.0	0.0	0.0	0.0
1	Sm Growth	0.0	0.0	0.4	0.0

### 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**



NOTES

### **RISK & PERFORMANCE STATISTICS**

Sharpe Ratio

Up Market Capture

Down Market Capture

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-1.61	0.00	-0.69
Beta	0.98	1.00	0.99
R-Squared	95.49	100.00	95.01
Sharpe Ratio	0.25	0.35	0.30
Up Market Capture	90.30	100.00	95.07
Down Market Capture	97.85	100.00	99.42
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.40	0.00	-0.57
Beta	0.99	1.00	1.00
R-Squared	95.68	100.00	93.44

0.35

100.00

100.00

0.31

96.87

101.45

0.37

98.03

96.22



# DFA US Micro Cap I DFSCX

Fund Incep Date: 12/23/1981

Benchmark:

Russell 2000 Index

Category: Small Blend Net Assets: \$4,300.00M Manager Name: Jed S. Fogdall

Manager Start Date: 02/28/2012

Expense Ratio: 0.51% Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

2.91%
19.72%
13.27%
4.83%

Cyclical	
Basic Materials	4.91%
Consumer Cyclical	13.59%
Real Estate	0.75%
Financial Services	23.06%

Defensive	
Consumer Defensive	4.15%
Healthcare	10.65%
Utilities	2.15%

## **TOP 10 HOLDINGS**

101 10 HOLDINGS	
E-mini S&P 500 Futures Mar20	0.81%
Casella Waste Systems Inc Class A	0.39%
Walker & Dunlop Inc	0.38%
Innospec Inc	0.37%
Fabrinet	0.37%
AAON Inc	0.36%
Ensign Group Inc	0.36%
Badger Meter Inc	0.35%
Shenandoah Telecommunications Co	0.35%
Conmed Corp	0.34%
Total:	4.09%

### ASSET LOADINGS (Returns-based)

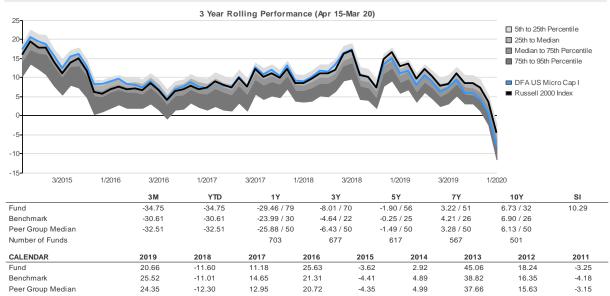


		Cu	rrent	Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.1	0.0	0.0
1	Top Value	0.0	0.0	0.0	0.0
1	Top Growth	0.0	0.3	0.0	0.1
1	Mid Value	0.0	0.0	0.0	0.0
1	Mid Growth	0.0	0.0	0.0	0.0
1	Sm Value	79.9	48.6	78.9	49.1
1	Sm Growth	20.1	51.0	21.1	50.8

### 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 adjust market exposure based on actual or expected cash inflows to or outflows from the fund.

### PERFORMANCE



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-3.03	0.00	-1.89
Beta	1.05	1.00	1.00
R-Squared	98.19	100.00	97.17
Sharpe Ratio	-0.33	-0.20	-0.28
Up Market Capture	103.34	100.00	93.64
Down Market Capture	112.68	100.00	102.61

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-1.52	0.00	-1.34
Beta	1.02	1.00	0.99
R-Squared	96.93	100.00	96.14
Sharpe Ratio	-0.05	0.02	-0.05
Up Market Capture	98.23	100.00	91.29
Down Market Capture	104.71	100.00	99.07



# BlackRock EAFE Equity Index-T

Fund Incep Date: 06/30/1999

Benchmark: MSCI EAFE Category: Foreign Large Blend Net Assets: NA Manager Name: Team Managed Manager Start Date: 06/30/1999

Expense Ratio: 0.06%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

Assets

Cash	0.00%
US Stocks	0.00%
US Bonds	0.00%
Non-US Stocks	0.00%
Preferred Stocks	0.00%
Convertible Bonds	0.00%
Other	0.00%
Non-US Bonds	0.00%

### Sector Breakdown

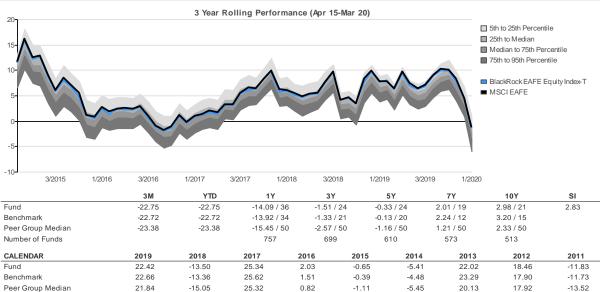
**TOP 10 HOLDINGS** 

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%

### INVESTMENT OVERVIEW

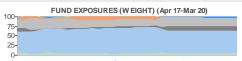
The Fund is an "index fund" that seeks investment results that correspond generally to the price and yield performance, before fees and expenses, of the MSCI EAFE Net Dividend Return Index.

### PERFORMANCE



### Total: NA%

### ASSET LOADINGS (Returns-based)



		Current		A۱	/erage
		Fund	Bmk	Fund	Bmk
Ca	ash	5.7	3.3	4.7	3.2
I E	urope Lg	56.6	63.0	61.5	60.6
l E	urope Sm	12.4	3.7	6.2	4.1
⊢ As	siaPac Lg	21.1	24.4	22.0	27.5
l As	iaPac Sm	0.0	4.4	3.8	3.3
l Er	ng Europe	0.0	1.2	0.2	1.3
l Er	ng Asia	4.3	0.0	1.7	0.0

### **RISK & PERFORMANCE STATISTICS**

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.20	0.00	-1.07
Beta	1.00	1.00	1.03
R-Squared	99.19	100.00	95.36
Sharpe Ratio	-0.16	-0.14	-0.21
Jp Market Capture	98.83	100.00	96.44
Down Market Capture	99.96	100.00	102.78

•			
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.24	0.00	-0.97
Beta	0.98	1.00	0.98
R-Squared	98.75	100.00	93.55
Sharpe Ratio	-0.04	-0.02	-0.09
Up Market Capture	97.03	100.00	92.79
Down Market Capture	98.51	100.00	98.77

### NOTES



# American Funds Europacific Growth R6 RERGX

0.07%

1.51%

1.39%

1.39%

1.38%

19.75%

4.8

0.0

16.9

38.6

Fund Incep Date: Benchmark: 05/01/2009 MSCI ACWI ex USA GDP NR USD Category: Foreign Large Growth

Net Assets: \$130,333.00M Manager Name: Carl M. Kawaja

Manager Start Date: 06/01/2001

Expense Ratio: 0.49% Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets Cash 8.17% US Stocks 0.93% US Bonds 0.06% Non-US Stocks 90.67% Preferred Stocks 0.00% Convertible Bonds 0.00% Other 0.10%

Non-US Bonds

Sector Breakdown	
Sensitive	
Communication Services	6.18%
Industrials	11.85%
Technology	14.09%
Energy	6.24%
Cyclical	
Basic Materials	7.74%
Consumer Cyclical	14.65%
Real Estate	1.33%
Financial Services	17.21%
Defensive	
Consumer Defensive	5.13%
Healthcare	12.38%
Utilities	3.19%
TOP 10 HOLDINGS	
Reliance Industries Ltd	2.72%
Airbus SE	2.66%
HDFC Bank Ltd	2.20%
AIA Group Ltd	2.19%
Nintendo Co Ltd	2.16%
ASML Holding NV	2.16%

### ASSET LOADINGS (Returns-based)

Taiwan Semiconductor Manufacturing Co Ltd

Daiichi Sankyo Co Ltd

Recruit Holdings Co Ltd

AsiaPac Lg

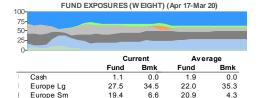
AsiaPac Sm

Emg Europe

Emg Asia

Keyence Corp

Total:



1.4

0.0

18.2

39.3

14.8

0.6

4.5

35.4

10.1

0.0

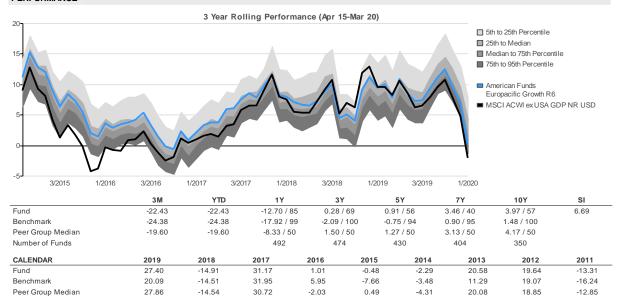
4.7

37.3

### 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	2.04	0.00	3.02
Beta	0.92	1.00	0.86
R-Squared	96.28	100.00	86.90
Sharpe Ratio	-0.02	-0.15	0.06
Up Market Capture	97.81	100.00	93.03
Down Market Capture	88.84	100.00	80.03
5 Yr	Fund	Benchmark	Peer Group Median
<b>5 Yr</b> Alpha	<b>Fund</b> 1.28	Benchmark 0.00	
* **			Median
Alpha	1.28	0.00	Median 1.62
Alpha Beta	1.28	0.00	<b>Median</b> 1.62 0.81
Alpha Beta R-Squared	1.28 0.85 91.77	0.00 1.00 100.00	Median 1.62 0.81 82.61



# iShares US Aggregate Bond Index K WFBIX

3/31/2020

Fund Incep Date: 07/02/1993

Benchmark :

BBgBarc US Aggregate Bond Index

Category : Intermediate Core Bond Net Assets : \$2.109.00M Manager Name Scott Radell Manager Start Date : 05/01/2009 Expense Ratio : 0.05%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



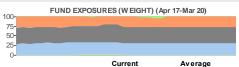
### Credit Quality (%)

AAA	73.24%
AA	2.62%
A	10.78%
BBB	13.36%
BB	0.00%
В	0.00%
Below B	0.00%
NR/NA	0.00%
Total:	100.00%

### Sector (%)

Total:	100 01%
% Derivative	0.00%
% Cash and Equivalent	10.21%
% Securitized	23.43%
% Corporate	23.91%
% Municipal	0.68%
% Government	41.78%

### ASSET LOADINGS (Returns-based)

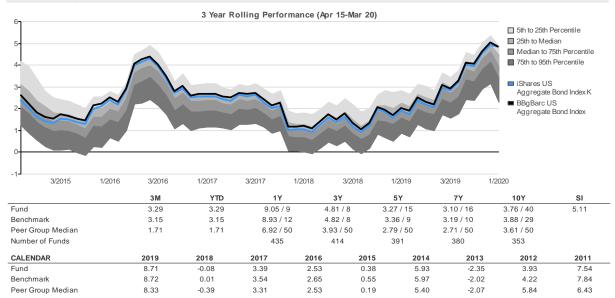


		Cu	rrent	Ave	rage
		Fund	Bmk	Fund	Bmk
	Cash	0.9	0.6	0.8	0.6
1	Credit Bond	28.6	30.2	29.8	30.3
-1	Govt Bond	42.7	41.7	42.3	41.2
	HY Corp Bond	0.0	0.0	0.1	0.1
-1	MBS	27.0	26.2	26.2	27.1
1.	Muni Bond	0.7	1.3	0.8	0.7
1	TIPS	0.0	0.0	0.0	0.0

### 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 Barclays 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 Barclays U.S. Aggregate Index.

### PERFORMANCE



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.01	0.00	-0.76
Beta	0.99	1.00	1.00
R-Squared	99.68	100.00	90.75
Sharpe Ratio	0.93	0.92	0.64
Up Market Capture	98.86	100.00	93.74
Down Market Capture	97.08	100.00	114.19

•			
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.08	0.00	-0.41
Beta	1.00	1.00	0.99
R-Squared	99.69	100.00	89.34
Sharpe Ratio	0.67	0.70	0.53
Up Market Capture	98.76	100.00	94.33
Down Market Capture	100.64	100.00	108.18



# Vanguard Target Retirement Income Inv VTINX

16.05%

11.83%

3/31/2020

Fund Incep Date: 10/27/2003 Benchmark:

S&P Target Date Retirement Income

Category : Target-Date Retirement Net Assets: \$15,737,00M Manager Name: William A. Coleman Manager Start Date : 02/22/2013

Expense Ratio : 0.12%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

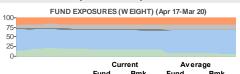
Sector Breakdown	
Sensitive	
Communication Services	8.66%
Industrials	11.35%
Technology	16.12%
Energy	4.58%
Cyclical	
Basic Materials	4.35%
Consumer Cyclical	10.36%
Real Estate	4.23%
Financial Services	17.11%
Defensive	
Consumer Defensive	7.75%
Healthcare	12.07%
Utilities	3.42%
TOP 10 HOLDINGS	
Vanguard Total Bond Market II ldx Inv	37.39%
Vanguard Total Stock Mkt Idx Inv	17.83%
Vanguard Shrt-Term Infl-Prot Sec Idx Inv	16.89%

Total: 100.00%

### ASSET LOADINGS (Returns-based)

Vanguard Total Intl Bd Idx Investor

Vanguard Total Intl Stock Index Inv

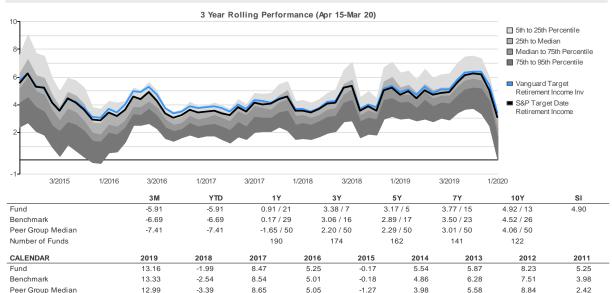


-		Cı	ırrent	Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	4.9	16.9	13.5	20.0
1	US Bonds	61.9	46.2	53.5	45.0
1	Intl Bonds	0.7	1.9	2.7	1.5
	Intl Equity	12.8	11.7	11.3	10.8
1	US Equity	19.7	23.4	18.9	22.7

### INVESTMENT OVERVIEW

The investment seeks to provide current income and some capital appreciation. The fund invests in other 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



NOTES

### **RISK & PERFORMANCE STATISTICS**

Sharpe Ratio

Up Market Capture

Down Market Capture

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.39	0.00	-0.93
Beta	0.93	1.00	1.05
R-Squared	98.49	100.00	96.27
Sharpe Ratio	0.33	0.25	0.09
Up Market Capture	94.70	100.00	94.48
Down Market Capture	86.39	100.00	101.65
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.35	0.00	-0.82
Beta	0.95	1.00	1.03
R-Squared	98.41	100.00	95.84

0.45

97.42

90.45

0.38

100.00

100.00

0.22

96.66

106.59

# Vanguard Target Retirement 2015 Inv VTXVX

12.08%

3.42%

Fund Incep Date: 10/27/2003 Benchmark:

S&P Target Date 2015

Category : Target-Date 2015 Net Assets: \$13,960.00M Manager Name: William A. Coleman Manager Start Date : 02/22/2013

Expense Ratio : 0.13%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

Sensitive	
Communication Services	8.66%
Industrials	11.35%
Technology	16.14%
Energy	4.58%
Cyclical	
Basic Materials	4.34%
Consumer Cyclical	10.36%
Real Estate	4.24%
Financial Services	17.10%
Defensive	
Consumer Defensive	7.74%

TOP	10	HOL	DIN	JGS.

Cash

US Bonds

Intl Bonds

Intl Equity

US Equity

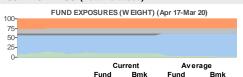
Healthcare

Utilities

101 10 HOLDINGS	
Vanguard Total Bond Market II ldx Inv	34.75%
Vanguard Total Stock Mkt Idx Inv	21.78%
Vanguard Total Intl Bd Idx Investor	15.16%
Vanguard Total Intl Stock Index Inv	14.35%
Vanguard Shrt-Term Infl-Prot Sec Idx Inv	13.96%

Total: 100.00%

### ASSET LOADINGS (Returns-based)



12.0

42.2

0.0

14.0

31.8

6.9

2.8

14.0

26.0

50.3

13.6

40.8

0.2

13.7

31.7

0.5

59.5

0.0

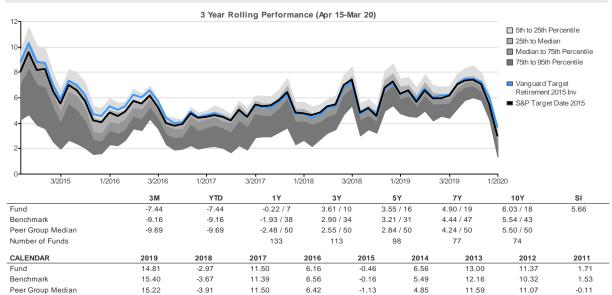
14.0

26.1

## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.78	0.00	-0.33
Beta	0.88	1.00	1.02
R-Squared	98.58	100.00	97.73
Sharpe Ratio	0.31	0.19	0.14
Up Market Capture	94.27	100.00	95.06
Down Market Capture	83.54	100.00	99.33
5 Yr	Fund	Benchmark	Peer Group Median
<b>5 Yr</b> Alpha	<b>Fund</b> 0.49	Benchmark 0.00	
			Median
Alpha	0.49	0.00	Median -0.39
Alpha Beta	0.49	0.00	Median -0.39 1.02
Alpha Beta R-Squared	0.49 0.91 98.46	0.00 1.00 100.00	Median -0.39 1.02 97.54



# Vanguard Target Retirement 2025 Inv VTTVX

Fund Incep Date: 10/27/2003 Benchmark:

S&P Target Date 2025

Category : Target-Date 2025 Net Assets: \$39.701.00M Manager Name: William A. Coleman Manager Start Date : 02/22/2013

Expense Ratio : 0.13%

Expense Rank:

### PORTFOLIO COMPOSITION (Holdings-based)

### Assets



### Sector Breakdown

Sensitive	
Communication Services	8.66%
Industrials	11.35%
Technology	16.11%
Energy	4.58%
- 37	

Cyclical	
Basic Materials	4.36%
Consumer Cyclical	10.37%
Real Estate	4.23%
Financial Services	17.11%

Defensive	
Consumer Defensive	7.75%
Healthcare	12.06%
Utilities	3.42%

### **TOP 10 HOLDINGS**

Vanguard Total Stock Mkt Idx Inv	36.04%
Vanguard Total Bond Market II ldx Inv	27.78%
Vanguard Total Intl Stock Index Inv	24.03%
Vanguard Total Intl Bd Idx Investor	12.15%

Total: 100.00%

### ASSET LOADINGS (Returns-based)

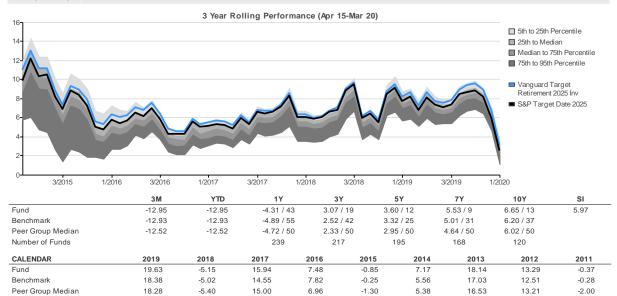


		Current		Average	
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	5.1	0.1	7.2
1	US Bonds	32.5	33.8	32.8	31.8
- 1	Intl Bonds	5.5	0.0	5.4	0.5
- 1	Intl Equity	20.7	20.1	21.5	18.9
1	US Equity	41.2	41.0	40.2	41.6

### INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other 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



NOTES

Benchmark	Peer Group Median
0.00	-0.14
1.00	0.99
100.00	98.20
0.12	0.10
100.00	95.37
100.00	97.14
	0.00 1.00 100.00 0.12 100.00

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.24	0.00	-0.38
Beta	1.03	1.00	1.00
R-Squared	99.44	100.00	98.20
Sharpe Ratio	0.32	0.29	0.24
Up Market Capture	103.19	100.00	96.23
Down Market Capture	100.98	100.00	99.79



# Vanguard Target Retirement 2035 Inv VTTHX

44.92%

30.06%

17.47%

7.53%

Fund Incep Date: 10/27/2003 Benchmark:

S&P Target Date 2035

Category: Target-Date 2035 Net Assets: \$33,211,00M Manager Name: William A. Coleman Manager Start Date : 02/22/2013

Expense Ratio : 0.14%

Expense Rank:

# PORTFOLIO COMPOSITION (Holdings-based)

#### Assets



#### Sector Breakdown

**TOP 10 HOLDINGS** 

Vanguard Total Stock Mkt Idx Inv

Vanguard Total Intl Stock Index Inv

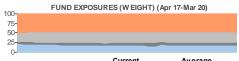
Vanguard Total Intl Bd Idx Investor

Vanguard Total Bond Market II Idx Inv

Sensitive	
Communication Services	8.65%
Industrials	11.36%
Technology	16.10%
Energy	4.59%
Cyclical	
Basic Materials	4.36%
Consumer Cyclical	10.37%
Real Estate	4.23%
Financial Services	17.11%
Defensive	
Consumer Defensive	7.75%
Healthcare	12.06%
Utilities	3 42%

Total: 99.97%

## ASSET LOADINGS (Returns-based)

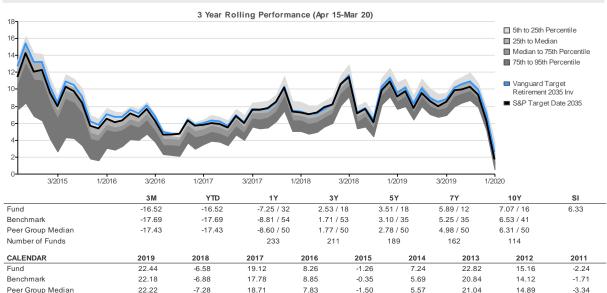


		Current		Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.0	0.0	1.8
1	US Bonds	16.2	17.3	17.0	17.9
1	Intl Bonds	7.1	2.0	6.3	1.4
	Intl Equity	26.7	27.4	27.7	25.2
1	US Equity	50.1	53.3	49.1	53.8

## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.78	0.00	0.04
Beta	0.96	1.00	0.99
R-Squared	99.55	100.00	98.95
Sharpe Ratio	0.12	0.05	0.05
Up Market Capture	98.90	100.00	98.13
Down Market Capture	93.69	100.00	98.16
5 Yr	Fund	Benchmark	Peer Gro

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.42	0.00	-0.26
Beta	0.99	1.00	1.01
R-Squared	99.26	100.00	98.68
Sharpe Ratio	0.27	0.23	0.20
Up Market Capture	100.26	100.00	98.92
Down Market Capture	97.22	100.00	101.40



# Vanguard Target Retirement 2045 Inv VTIVX

7.75%

12.05%

3.42%

Fund Incep Date: 10/27/2003 Benchmark:

S&P Target Date 2045

Category : Target-Date 2045 Net Assets: \$23.599.00M Manager Name: William A. Coleman Manager Start Date : 02/22/2013

Expense Ratio : 0.15%

Expense Rank:

# PORTFOLIO COMPOSITION (Holdings-based)

#### Assets



#### Sector Breakdown

Sensitive	
Communication Services	8.65%
Industrials	11.36%
Technology	16.09%
Energy	4.59%
Cyclical	
Basic Materials	4.37%
Consumer Cyclical	10.37%
Real Estate	4.23%
Financial Services	17.12%
Defensive	

TOP	10	HOL	.DINGS

Consumer Defensive

Healthcare

Utilities

Vanguard Total Stock Mkt Idx Inv	53.52%
Vanguard Total Intl Stock Index Inv	35.97%
Vanguard Total Bond Market II ldx Inv	7.44%
Vanguard Total Intl Bd Idx Investor	3.07%

Total: 100.00%

## ASSET LOADINGS (Returns-based)

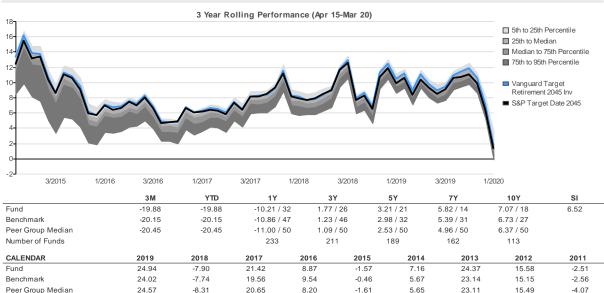


		Current		Ave	rage
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	0.0	0.0	0.9
- 1	US Bonds	0.0	3.9	2.7	8.6
- 1	Intl Bonds	9.7	5.8	8.2	2.7
- 1	Intl Equity	32.1	31.4	32.1	28.5
- 1	US Equity	58.2	59.0	57.1	59.3

## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other 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



3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.55	0.00	-0.08
Beta	1.01	1.00	1.02
R-Squared	99.68	100.00	99.15
Sharpe Ratio	0.07	0.03	0.02
Up Market Capture	103.09	100.00	99.66
Down Market Capture	99.80	100.00	100.77

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.21	0.00	-0.40
Beta	1.02	1.00	1.02
R-Squared	99.48	100.00	98.96
Sharpe Ratio	0.22	0.21	0.17
Up Market Capture	102.92	100.00	99.50
Down Market Capture	101.47	100.00	102.10





# Vanguard Target Retirement 2055 Inv VFFVX

7.47%

3.04%

Fund Incep Date: 08/18/2010

Benchmark:

S&P Target Date 2055

Category : Target-Date 2055 Net Assets: \$9.615.00M Manager Name : William A. Coleman Manager Start Date : 02/22/2013

Expense Ratio : 0.15%

Expense Rank:

# PORTFOLIO COMPOSITION (Holdings-based)

#### Assets



#### Sector Breakdown

Occioi bicardowii	
Sensitive	
Communication Services	8.65%
Industrials	11.36%
Technology	16.08%
Energy	4.59%
Cyclical	
Basic Materials	4.37%
Consumer Cyclical	10.37%
Real Estate	4.23%
Financial Services	17.12%
Defensive	
Consumer Defensive	7.75%
Healthcare	12.05%
Utilities	3.42%
TOP 10 HOLDINGS	
Vanguard Total Stock Mkt Idx Inv	53.44%
Vanguard Total Intl Stock Index Inv	35.98%

Total: 99.94%

## ASSET LOADINGS (Returns-based)

Vanguard Total Bond Market II Idx Inv

Vanguard Total Intl Bd Idx Investor

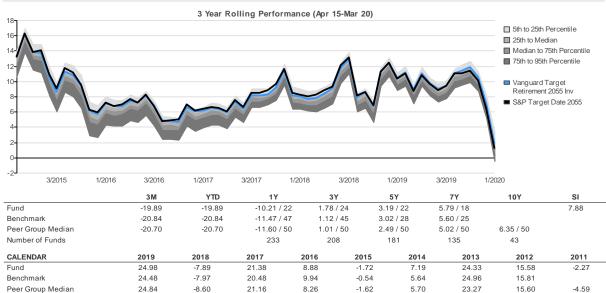


		Current		Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.0	0.0	0.8
1	US Bonds	0.0	0.3	2.7	5.5
1	Intl Bonds	9.7	6.7	8.3	3.0
1	Intl Equity	31.9	32.5	31.9	29.6
1	US Equity	58.4	60.5	57.2	61.1

## INVESTMENT OVERVIEW

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.62	0.00	-0.08
Beta	0.98	1.00	1.01
R-Squared	99.66	100.00	99.16
Sharpe Ratio	0.07	0.02	0.02
Up Market Capture	100.04	100.00	98.84
Down Market Capture	96.52	100.00	99.81

Down Market Capture	90.52	100.00	99.01
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.19	0.00	-0.50
Beta	0.98	1.00	1.01
R-Squared	99.47	100.00	98.91
Sharpe Ratio	0.22	0.21	0.17
Up Market Capture	98.53	100.00	97.39
Down Market Capture	97.41	100.00	101.31



# American Beacon Bridgeway Lg Cp Val Y BWLYX

0.00%

14.81%

3/31/2020

Fund Incep Date: 02/03/2012

Benchmark :

Russell 1000 Value Index

Category: Large Value Net Assets : \$2.019.00M Manager Name: John N.R. Montgomery Manager Start Date : 10/31/2003

Expense Ratio : 0.79%

Expense Rank:

# PORTFOLIO COMPOSITION (Holdings-based)



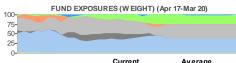
Non-US Bonds

## Sector Breakdown

Sensitive	
Communication Services	8.34%
Industrials	10.75%
Technology	8.91%
Energy	6.67%
Cyclical	
Basic Materials	4.54%
Consumer Cyclical	8.93%
Real Estate	4.65%
Financial Services	26.34%
Defensive	
Consumer Defensive	7.30%
Healthcare	11.86%
Utilities	1.71%
TOP 10 HOLDINGS	
Pfizer Inc	1.63%
The Walt Disney Co	1.59%
Bank of America Corp	1.58%
Citigroup Inc	1.50%
Regions Financial Corp	1.48%
Biogen Inc	1.42%
Procter & Gamble Co	1.41%
ConocoPhillips	1.41%
Western Digital Corp	1.40%
Micron Technology Inc	1.39%

# ASSET LOADINGS (Returns-based)

Total:

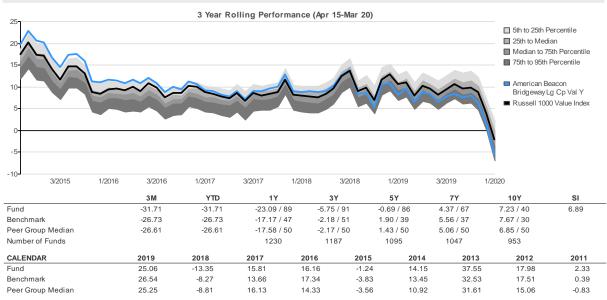


		Current		Average	
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.0	0.3	0.0
1	Top Value	36.4	66.7	41.0	67.6
1	Top Growth	0.0	0.0	5.5	0.1
1	Mid Value	37.8	33.2	34.7	32.3
1	Mid Growth	0.0	0.0	2.8	0.0
1	Sm Value	24.6	0.0	14.8	0.0
1	Sm Growth	1.2	0.0	1.0	0.0

## INVESTMENT OVERVIEW

The investment seeks to provide long-term total return on capital, primarily through capital appreciation and some income. The fund invests in a diversified portfolio of stocks of large capitalization companies that are listed on the New York Stock Exchange, NYSE American, or NASDAQ. Under normal market conditions, at least 80% of Fund net assets (plus borrowings for investment purposes) are invested in stocks from among those in the large-cap value category at the time of purchase.

## PERFORMANCE



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-2.83	0.00	-0.04
Beta	1.14	1.00	0.99
R-Squared	97.93	100.00	97.22
Sharpe Ratio	-0.30	-0.15	-0.15
Up Market Capture	101.23	100.00	99.78
Down Market Capture	116.17	100.00	99.66
5 Yr	Fund	Benchmark	Peer Group Median
<b>5 Yr</b> Alpha	<b>Fund</b> -2.46	Benchmark 0.00	
			Median
Alpha	-2.46	0.00	Median -0.41
Alpha Beta	-2.46 1.10	0.00	<b>Median</b> -0.41 0.99
Alpha Beta R-Squared	-2.46 1.10 96.82	0.00 1.00 100.00	<b>Median</b> -0.41 0.99 96.10



# Fidelity Contrafund FCNTX

Fund Incep Date: 05/17/1967

Benchmark:

Russell 1000 Growth Index

Category: Large Growth Net Assets: \$98.381.00M Manager Name William Danoff Manager Start Date : 09/17/1990 Expense Ratio : 0.85%

Expense Rank:

# PORTFOLIO COMPOSITION (Holdings-based)

#### Assets



#### Sector Breakdown

Sensitive Communication Services	18.46%
Industrials	2.88%
Technology	25.85%
Energy	0.78%

Cyclical	
Basic Materials	2.04%
Consumer Cyclical	11.59%
Real Estate	0.87%
Financial Services	20.41%

Defensive	
Consumer Defensive	3.59%
Healthcare	13.38%
Utilities	0.13%

TOP 10 HOLDINGS	
Facebook Inc A	7.49%
Amazon.com Inc	7.07%
Microsoft Corp	5.97%
Berkshire Hathaway Inc A	5.41%
Salesforce.com Inc	4.10%
Visa Inc Class A	3.97%
Adobe Inc	3.22%
Alphabet Inc A	2.96%
UnitedHealth Group Inc	2.84%
Alphabet Inc Class C	2.67%
Total:	45.69%

## ASSET LOADINGS (Returns-based)

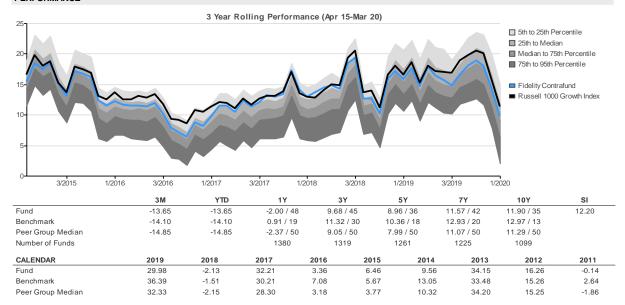


		Current		Average	
		Fund	Bmk	Fund	Bmk
Т	Cash	6.2	0.1	2.1	0.1
1	Top Value	0.0	0.0	0.0	0.0
1	Top Growth	67.6	78.4	85.0	76.9
	Mid Value	0.0	0.0	0.0	0.0
1	Mid Growth	16.3	21.5	9.5	22.9
1	Sm Value	0.0	0.0	0.0	0.0
1	Sm Growth	9.9	0.0	3.4	0.1

## 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 fund 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



NOTES

## **RISK & PERFORMANCE STATISTICS**

Down Market Capture

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-1.51	0.00	-1.94
Beta	1.01	1.00	1.00
R-Squared	96.77	100.00	94.81
Sharpe Ratio	0.55	0.66	0.52
Up Market Capture	94.37	100.00	92.17
Down Market Capture	100.83	100.00	100.88
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-1.05	0.00	-2.18
Beta	0.97	1.00	1.00
R-Squared	95.76	100.00	93.42
Sharpe Ratio	0.60	0.69	0.52
Up Market Capture	92.29	100.00	93.34

100.00

105.06

97.46



# iShares Russell Mid-Cap Index K BRMKX

Fund Incep Date: 05/13/2015

Benchmark:

Russell Mid-Cap Index

Category: Mid-Cap Blend Net Assets: \$884.00M Manager Name : Alan Mason Manager Start Date : 05/13/2015 Expense Ratio : 0.07%

Expense Rank:

# PORTFOLIO COMPOSITION (Holdings-based)

# Assets



#### Sector Breakdown

Sensitive	
Communication Services	4.45%
Industrials	13.55%
Technology	18.08%
Energy	3.35%

Cyclical	
Basic Materials	3.67%
Consumer Cyclical	11.50%
Real Estate	10.72%
Financial Services	12.09%

Defensive	
Consumer Defensive	5.06%
Healthcare	10.62%
Utilities	6.90%

TOP 10 HOLDINGS	
Fiserv Inc	0.85%
Global Payments Inc	0.75%
Advanced Micro Devices Inc	0.64%
L3Harris Technologies Inc	0.60%
Lam Research Corp	0.58%
Sempra Energy	0.54%
Dollar General Corp	0.54%
Newmont Corp	0.50%
Xcel Energy Inc	0.45%
Trane Tech	0.43%
Total:	5.89%

# ASSET LOADINGS (Returns-based)

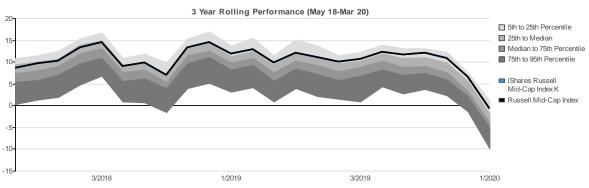


		Current		Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	0.1	0.1	0.1	0.1
1	Top Value	1.5	0.1	0.5	0.0
1	Top Growth	0.0	0.3	0.0	0.4
	Mid Value	56.7	58.6	57.4	57.8
1	Mid Growth	41.1	40.4	41.5	41.3
1	Sm Value	0.7	0.7	0.3	0.4
T.	Sm Growth	0.0	0.0	0.1	0.0

## 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



	3/2018		3/2018 1/2019 3/2019 1/2020		/2020	1				
		3M	YTD	1Y	3Y		5Y	7Y	10Y	SI
Fund		-26.93	-26.93	-18.21 / 31	-0.78 / 14					2.02
Benchmark		-27.07	-27.07	-18.31 / 33	-0.81 / 15		1.85 / 12	6.35 / 9	8.77 / 6	
Peer Group Median		-28.47	-28.47	-20.91 / 50	-3.96 / 50		-0.39 / 50	4.23 / 50	6.38 / 50	
Number of Funds				406	386		337	320	292	
CALENDAR		2019	2018	2017	2016	2015	2014	2013	2012	2011
Fund		30.43	-9.05	18.40	13.76					
Benchmark		30.54	-9.06	18.52	13.80	-2.44	13.22	34.76	17.28	-1.55
Peer Group Median		26.82	-11.41	15.98	15.22	-3.48	9.09	34.20	17.04	-2.65

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.01	0.00	-3.07
Beta	1.00	1.00	1.02
R-Squared	99.99	100.00	96.85
Sharpe Ratio	-0.05	-0.05	-0.21
Up Market Capture	99.91	100.00	93.75
Down Market Capture	99.82	100.00	104.43

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	NA	0.00	-2.16
Beta	NA	1.00	1.03
R-Squared	NA	100.00	95.44
Sharpe Ratio	NA	0.12	-0.01
Up Market Capture	NA	100.00	94.72
Down Market Capture	NA	100.00	106.67





# iShares Russell 2000 Small-Cap Idx K BDBKX

3.39%

3/31/2020

Fund Incep Date: Benchmark : 03/31/2011 Russell 2000 Index

Category: Small Blend Net Assets : \$1.648.00M Manager Name Alan Mason Manager Start Date : 02/04/2014

Expense Ratio : 0.07%

Expense Rank:

# PORTFOLIO COMPOSITION (Holdings-based)

# Assets



#### Sector Breakdown

Sensitive	
Communication Services	2.69%
Industrials	16.59%
Technology	13.88%
Energy	2.29%
Cyclical	
Basic Materials	3 2/1%

Defensive	
Financial Services	15.84%
Real Estate	9.47%
Consumer Cyclical	9.54%
Dasic Materials	3.24%

Defensive	
Consumer Defensive	3.79%
Healthcare	18.82%
Utilities	3.85%

TOP 10 HOLDINGS	
iShares Russell 2000 ETF	0.48%
Teladoc Health Inc	0.48%
NovoCure Ltd	0.34%
Generac Holdings Inc	0.34%
Lumentum Holdings Inc	0.32%
Trex Co Inc	0.30%
Haemonetics Corp	0.30%
Amedisys Inc	0.29%
Rexford Industrial Realty Inc	0.28%
Tech Data Corp	0.27%

# ASSET LOADINGS (Returns-based)

Total:

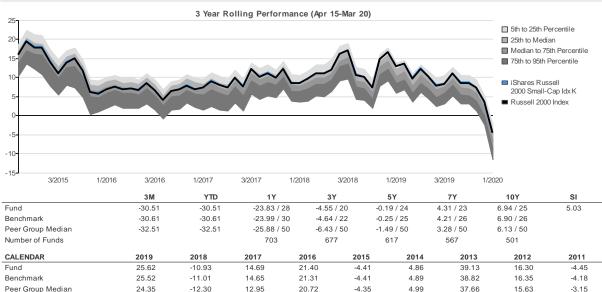


0		Current		Average	
		Fund	Bmk	Fund	Bmk
П	Cash	0.0	0.1	0.0	0.0
	Top Value	0.1	0.0	0.3	0.0
	Top Growth	1.0	0.3	0.3	0.1
	Mid Value	0.0	0.0	0.0	0.0
	Mid Growth	0.0	0.0	0.0	0.0
l.	Sm Value	48.1	48.6	48.3	49.1
100	Sm Growth	50.8	51.0	51.1	50.8

## 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



NOTES

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.08	0.00	-1.89
Beta	1.00	1.00	1.00
R-Squared	100.00	100.00	97.17
Sharpe Ratio	-0.19	-0.20	-0.28
Up Market Capture	100.10	100.00	93.64
Down Market Capture	99.77	100.00	102.61
5 Yr	Fund	Benchmark	Peer Group

•			
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.05	0.00	-1.34
Beta	1.00	1.00	0.99
R-Squared	100.00	100.00	96.14
Sharpe Ratio	0.03	0.02	-0.05
Up Market Capture	100.03	100.00	91.29
Down Market Capture	99.81	100.00	99.07



# iShares MSCI EAFE Intl Idx K BTMKX

# 3/31/2020

Expense Rank:

Expense Ratio :

0.06%

 Fund Incep Date:
 Benchmark :
 Category :
 Net Assets :
 Manager Name :
 Manager Start Date :

 03/31/2011
 MSCI EAFE
 Foreign Large Blend
 \$5,080.00M
 Alan Mason
 02/04/2014

# PORTFOLIO COMPOSITION (Holdings-based)

# Assets



#### Sector Breakdown

Sensitive	
Communication Services	4.13%
Industrials	13.74%
Technology	8.02%
Energy	5.16%
Cyclical	
Basic Materials	7.70%
Consumer Cyclical	11.74%
Real Estate	3.71%
Financial Services	19.73%
Defensive	
Consumer Defensive	12.23%
Healthcare	10.23%
Utilities	3.61%
TOP 10 HOLDINGS	
Nestle SA	2.24%
November A.C.	4 400/

#### Novartis AG 1.40% Roche Holding AG 1.39% HSBC Holdings PLC 1.18% Royal Dutch Shell PLC Class A 1.04% Toyota Motor Corp 1.00% BP PLC 0.99% SAP SE 0.95% Total SA 0.94% AIA Group Ltd 0.92% Total: 12.03%

## ASSET LOADINGS (Returns-based)

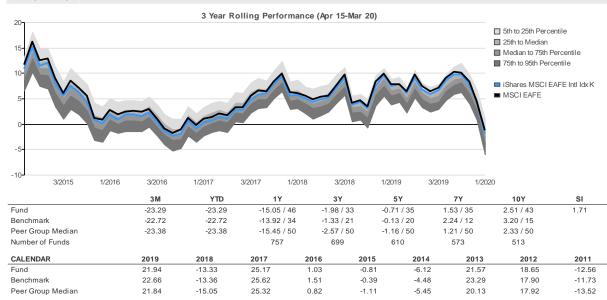


		Cu	rrent	Avei	rage
		Fund	Bmk	Fund	Bmk
T	Cash	4.9	3.3	4.5	3.2
1	Europe Lg	53.5	63.0	60.3	60.6
- 1	Europe Sm	15.5	3.7	5.2	4.1
	AsiaPac Lg	15.3	24.4	19.4	27.5
-1	AsiaPac Sm	0.0	4.4	2.7	3.3
1	Emg Europe	2.1	1.2	1.4	1.3
1	Emg Asia	8.8	0.0	6.4	0.0

## 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



NOTES

## **RISK & PERFORMANCE STATISTICS**

Sharpe Ratio

Up Market Capture

Down Market Capture

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.58	0.00	-1.07
Beta	1.01	1.00	1.03
R-Squared	98.59	100.00	95.36
Sharpe Ratio	-0.18	-0.14	-0.21
Up Market Capture	97.18	100.00	96.44
Down Market Capture	100.83	100.00	102.78
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.61	0.00	-0.97
Beta	0.98	1.00	0.98
R-Squared	98.07	100.00	93.55

-0.07

94.83

98.47

-0.02

100.00

100.00

-0.09

92.79

98.77



# Capital Markets Overview

First Quarter 2020

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# Macroeconomic Summary

# COVID-19 Impacts to Global Economies -

- Broad optimism in the US to start 2020 was completely reversed by March as a global pandemic, COVID-19, swept through the world
- Governments globally have enacted extreme measures to counteract its spread, forcing closures of non-essential businesses and enacting country/state-wide stay-at-home orders
- This has simultaneously crippled both supply and demand, causing massive disruption to global economies
- To make matters worse, members of OPEC+, primarily led by Russia and Saudi Arabia, proceeded to flood global markets with oil, causing dramatic decreases in the price of oil
- The IMF is projecting global growth to drop to -3.0% for 2020

# Monetary and Fiscal Responses –

- Policy responses were extreme, both in swiftness and magnitude
- The Fed cut rates twice off-cycle to the zero bound, and enacted aggressive market operations to provide liquidity to seizing markets
- Fiscal response surpassed the total policy response to the GFC in passing the CARES Act which pledged \$2.2 trillion in economic relief
  - It provided relief to small business, payroll relief, direct payments to taxpayers, expanded unemployment, among other things
  - Additional stimulus is currently being considered
- Similar policies and responses were echoed globally, as economies remain in mandated shut down and people remain unable to work



47

# Market Summary

# **US Markets**

- The S&P entered bear market territory in 15-days, the shortest drop to bear market on record, with a max drawdown of over 30%; S&P 500 1Q20 recouped some losses to end -19.7%
- Volatility as measured by the **VIX closed at an all-time high** of 82.69 on March 16, eclipsing records set during the GFC in 2008
- Risk assets of every type sold off and extreme stresses were reported in trading activity, including lack of liquidity
  - Even traditionally safe investment grade bonds were reporting temporary losses though remain positive through the first quarter; US Aggregate Bond 1Q20 performance +3.1%
  - **High yield bonds**, as expected, struggled mightily with the US Corporate High Yield Index returning -12.7% through the quarter

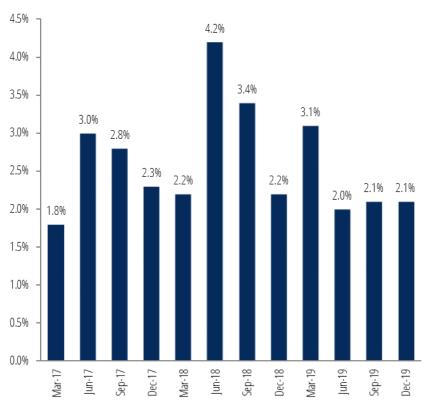
# Global Markets

- Global equity markets were hit even harder than the US
  - MSCI EAFE (Developed Markets) performance was -22.8%
  - MSCI EM (Emerging Markets) performance was -23.6%
- Large dispersions between countries showed **weaknesses in manufacturing** (Germany -27.0%), or **commodities** (Russia, -36.4%)
- This is a **stark contrast relative to countries with "save haven" status**, such as Japan (-16.8%) or Switzerland (-11.5%), **that held up markedly better**
- Winners and losers are also reflected in the debt markets, with Developed Markets (FTSE WGBI Index +2.0%) vs Emerging Markets (IPM EMBI Index -13.4%)



# State of the U.S. Economy

Real GDP Growth quarter over quarter annualized, through Dec. 2019



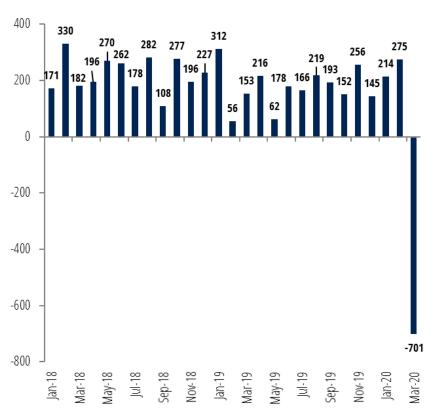
U.S. Consumer Price Index annual percent change, through March 2020



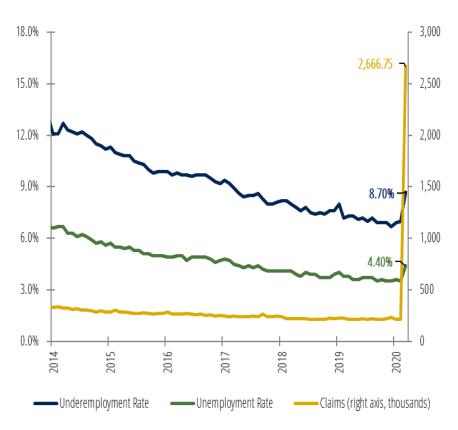








# Unemployment and Underemployment Rates and Claims through March 2020



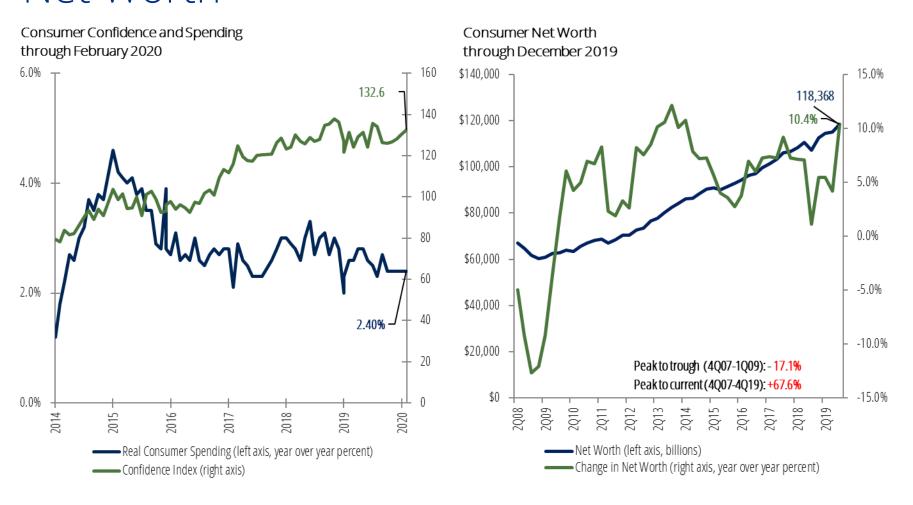
The Unemployment Rate represents total unemployed, as a percent of the civilian labor force

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

49

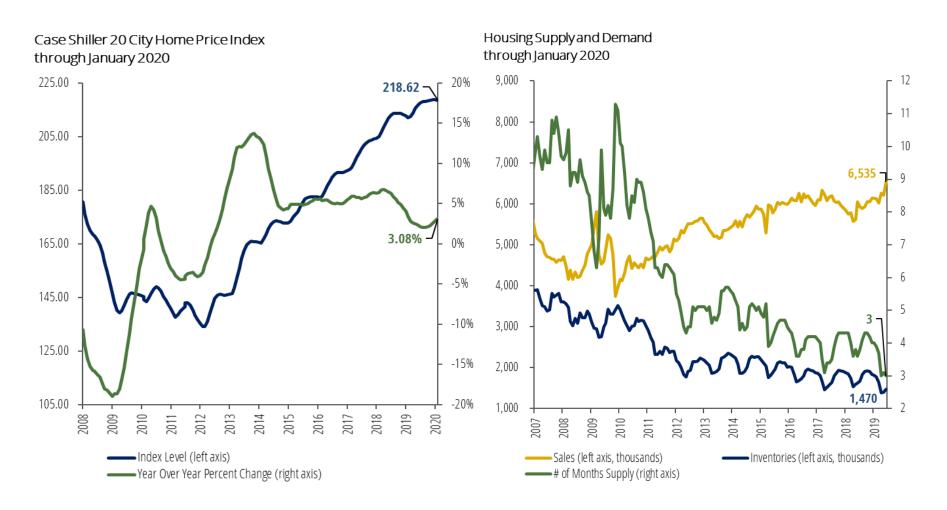


# U.S. Consumer Confidence, Spending and Net Worth





# U.S Housing Market Trends



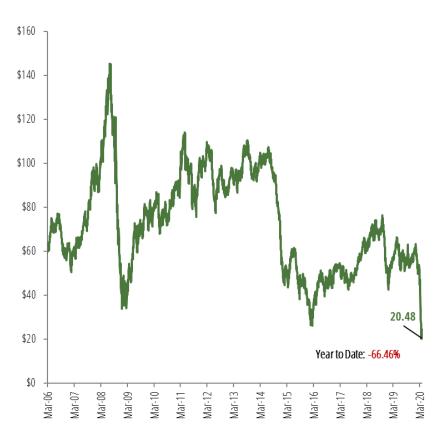




Energy Inflation year-over-year percent change, through March 2020



Oil Price \$/Barrel, through March 2020

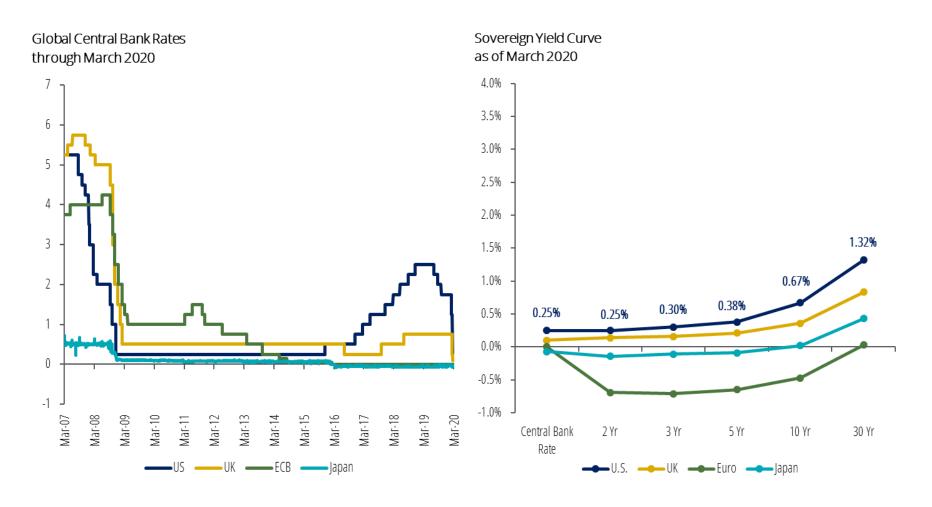




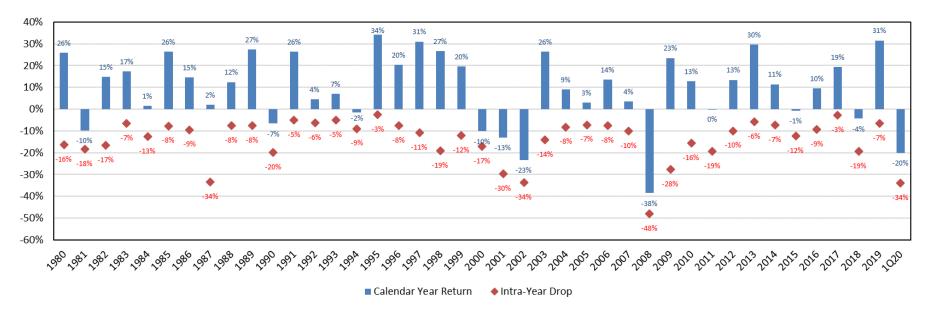
# Historical, Current and Forward Rates



# Global Monetary Policies and Interest Rates



# Investors who sell in panic are often missing powerful bounce backs and locking in losses



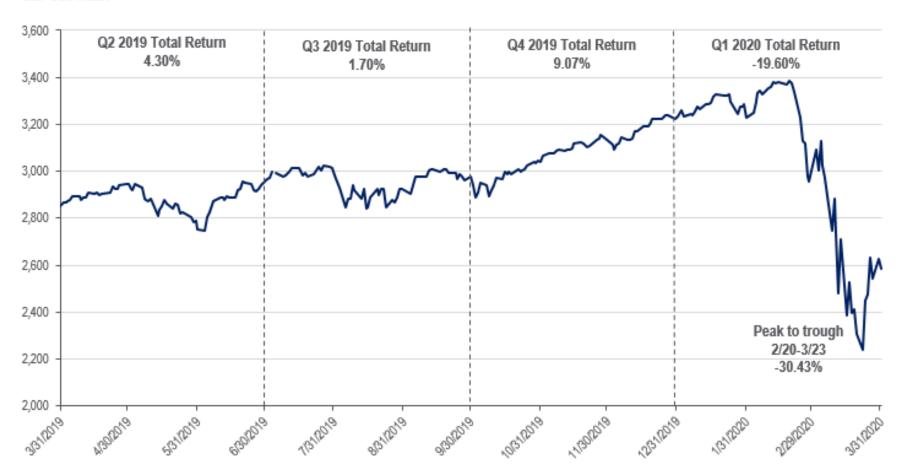
S&P 500 data going back 40 years demonstrates how frequently large drawdowns in the equity market exist

It also highlights that full year performance does not tend to be defined by the presence of a large drawdown and can often finish the year positive



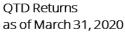
# COVID-19 fear and an oil glut/price war gripped the first quarter of the new decade

# S&P 500 Index



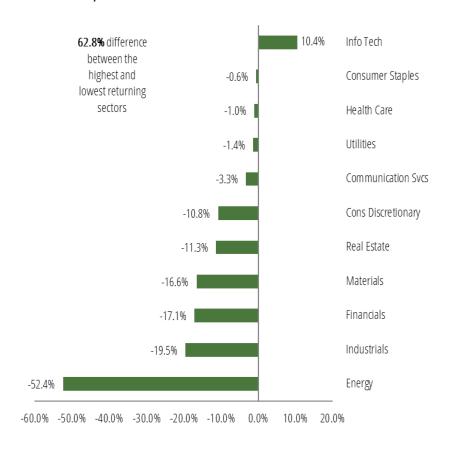


# S&P 500 Sector Returns





# 1 Year Trailing Returns as of March 31, 2020





# Equity Market Returns

(as o	f March 31, 2020)	QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2019	2018	2017	2016	2015	2014	2013
Don	nestic Equity													
ab	S&P 500	-19.6%	-19.6%	-7.0%	5.1%	6.7%	10.5%	31.5%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%
Large Cap	Russell 1000 Value	-26.7%	-26.7%	-17.2%	-2.2%	1.9%	7.7%	26.5%	-8.3%	13.7%	17.3%	-3.8%	13.5%	32.5%
Fal	Russell 1000 Growth	-14.1%	-14.1%	0.9%	11.3%	10.4%	13.0%	36.4%	-1.5%	30.2%	7.1%	5.7%	13.0%	33.5%
_	Russell Mid Cap	-27.1%	-27.1%	-18.3%	-0.8%	1.8%	8.8%	30.5%	-9.1%	18.5%	13.8%	-2.4%	13.2%	34.8%
Mid Cap	Russell Mid Cap Value	-31.7%	-31.7%	-24.1%	-6.0%	-0.8%	7.2%	27.1%	-12.3%	13.3%	20.0%	-4.8%	14.7%	33.5%
ĕ	·													
	Russell Mid Cap Growth	-20.0%	-20.0%	-9.4%	6.5%	5.6%	10.9%	35.5%	-4.8%	25.3%	7.3%	-0.2%	11.9%	35.7%
de	Russell 2000	-30.6%	-30.6%	-24.0%	-4.6%	-0.2%	6.9%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%
Small Cap	Russell 2000 Value	-35.7%	-35.7%	-29.6%	-9.5%	-2.4%	4.8%	22.4%	-12.9%	7.8%	31.7%	-7.5%	4.2%	34.5%
S	Russell 2000 Growth	-25.8%	-25.8%	-18.6%	0.1%	1.7%	8.9%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%
Inte	ernational Equity													
	MSCI EAFE	-22.8%	-22.8%	-14.4%	-1.8%	-0.6%	2.7%	22.0%	-13.8%	25.0%	1.0%	-0.8%	-4.9%	22.8%
t	Australia	-33.2%	-33.2%	-26.3%	-7.9%	-3.4%	0.4%	22.9%	-12.0%	19.9%	11.4%	-10.0%	-3.4%	4.2%
Developed Markets	Canada	-27.5%	-27.5%	-19.9%	-4.7%	-2.2%	-0.3%	27.5%	-17.2%	16.1%	24.6%	-24.2%	1.5%	5.6%
Ž	France	-27.6%	-27.6%	-17.7%	-1.6%	0.5%	2.1%	25.7%	-12.8%	28.7%	4.9%	-0.1%	-9.9%	26.3%
obec	Germany	-27.0%	-27.0%	-17.5%	-6.8%	-4.0%	2.2%	20.8%	-22.2%	27.7%	2.8%	-1.9%	-10.4%	31.4%
velo	Japan	-16.8%	-16.8%	-6.7%	1.0%	1.8%	3.8%	19.6%	-12.9%	24.0%	2.4%	9.6%	-4.0%	27.2%
Ď	Switzerland	-11.5%	-11.5%	3.5%	6.4%	3.5%	6.6%	32.3%	-9.1%	22.5%	-4.9%	0.4%	-0.1%	26.6%
	UK	-28.8%	-28.8%	-23.0%	-4.9%	-3.3%	1.6%	21.0%	-14.2%	22.3%	-0.1%	-7.6%	-5.4%	20.7%
	MSCI Emerging Markets	-23.6%	-23.6%	-17.7%	-1.6%	-0.4%	0.7%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%
ts	Brazil	-50.2%	-50.2%	-41.9%	-11.1%	-2.4%	-7.6%	26.3%	-0.5%	24.1%	66.2%	-41.4%	-14.0%	-16.0%
rke	China	-10.2%	-10.2%	-5.8%	7.1%	3.6%	4.4%	23.5%	-18.9%	54.1%	0.9%	-7.8%	8.0%	3.6%
N N	India	-31.1%	-31.1%	-30.9%	-6.6%	-3.5%	-0.4%	7.6%	-7.3%	38.8%	-1.4%	-6.1%	23.9%	-3.8%
Emerging Markets	Indonesia	-39.6%	-39.6%	-36.8%	-11.4%	-7.3%	-0.9%	9.1%	-9.2%	24.2%	17.0%	-19.5%	26.6%	-23.5%
mer	Korea	-22.4%	-22.4%	-16.8%	-4.6%	-0.2%	2.2%	12.5%	-20.9%	47.3%	8.7%	-6.7%	-11.1%	3.9%
Ξ	Mexico	-35.5%	-35.5%	-31.9%	-15.3%	-11.0%	-4.0%	11.4%	-15.5%	16.0%	-9.2%	-14.4%	-9.3%	0.2%
	Russia	-36.4%	-36.4%	-14.4%	1.8%	6.5%	-1.1%	50.9%	-0.4%	5.2%	54.8%	4.2%	-46.3%	0.8%

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.

58

# Returns by Style



		3 Months				1 Year		Since Market Peak (October, 2007					
	Value	Blend	Growth		Value	Blend	Growth		Value	Blend	Growth		
Large	-26.7%	-19.6%	-14.1%	Large	-17.2%	-7.0%	0.9%	Large	55.1%	115.3%	189.1%		
Mid	-31.7%	-27.1%	-20.0%	Ρip	-24.1%	-18.3%	-9.4%	Mid	66.0%	93.7%	134.7%		
Small	-35.7%	-30.6%	-25.8%	Small	-29.6%	-24.0%	-18.6%	Small	33.6%	62.4%	93.3%		
		3 Year				5 Year			Since Mark	et Low (Ma	arch, 2009)		
	Value	Blend	Growth		Value	Blend	Growth		Value	Blend	Growth		
Large	-2.2%	5.1%	11.3%	Large	1.9%	6.7%	10.4%	Large	286.6%	381.2%	489.7%		
Mid	-6.0%	-0.8%	6.5%	ΡiΑ	-0.8%	1.8%	5.6%	Mid	324.0%	367.5%	442.7%		
Small	-9.5%	-4.6%	0.1%	Small	-2.4%	-0.2%	1.7%	Small	230.3%	291.5%	356.3%		

performance as of March 31, 2020

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



# Fixed Income and Specialty Returns

(as of March 31, 2020)	QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2019	2018	2017	2016	2015	2014	2013
Fixed Income													
Bloomberg Barclays US Aggregate	3.1%	3.1%	8.9%	4.8%	3.4%	3.9%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%
Bloomberg Barclays US Treasury	8.2%	8.2%	13.2%	5.8%	3.6%	3.8%	6.9%	0.9%	2.3%	1.0%	0.8%	5.1%	-2.7%
Bloomberg Barclays US Govt/Credit Intermedia	2.4%	2.4%	6.9%	3.8%	2.8%	3.1%	6.8%	0.9%	2.1%	2.1%	1.1%	3.1%	-0.9%
Bloomberg Barclays US Govt/Credit Long	6.2%	6.2%	19.3%	9.7%	6.0%	8.1%	19.6%	-4.7%	10.7%	6.7%	-3.3%	19.3%	-8.8%
Bloomberg Barclays US TIPS	1.7%	1.7%	6.8%	3.5%	2.7%	3.5%	8.4%	-1.3%	3.0%	4.7%	-1.4%	3.6%	-8.6%
Bloomberg Barclays US Corporate High Yield	-12.7%	-12.7%	-6.9%	0.8%	2.8%	5.6%	14.3%	-2.1%	7.5%	17.1%	-4.5%	2.5%	7.4%
FTSE WGBI	2.0%	2.0%	6.2%	4.3%	3.0%	2.2%	5.9%	-0.8%	7.5%	1.6%	-3.6%	-0.5%	-4.0%
JPM EMBI Global Diversified	-13.4%	-13.4%	-6.8%	0.4%	2.8%	4.9%	15.0%	-4.3%	10.3%	10.2%	1.2%	7.4%	-5.3%
FTSE Treasury Bill 3 Month	0.4%	0.4%	2.0%	1.7%	1.1%	0.6%	2.3%	1.9%	0.8%	0.3%	0.0%	0.0%	0.1%
Specialty													
Bloomberg Commodity	-23.3%	-23.3%	-22.3%	-8.6%	-7.8%	-6.7%	7.7%	-11.2%	1.7%	11.8%	-24.7%	-17.0%	-9.5%
DJ US Select REIT	-28.5%	-28.5%	-24.0%	-4.3%	-1.4%	6.9%	23.1%	-4.2%	3.8%	6.7%	4.5%	32.0%	1.2%
FTSE EPRA/NAREIT Developed Ex US	-27.6%	-27.6%	-22.4%	-1.4%	-0.9%	3.9%	21.8%	-5.8%	20.8%	2.0%	-3.2%	3.2%	6.1%



# Calendar Year Returns by Asset Class

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Cumulative Return*
Sm Growth	Agg Bond	Mid Value	Sm Growth	Mid Value	Lg Growth	Sm Value	Emrg Mkt	Agg Bond	Lg Growth	Lg Growth
29.1	7.8	18.5	43.3	14.7	5.7	31.7	37.3	0.01	36.39	254.20
Mid Growth	Balanced	Emrg Mkt	Mid Growth	Lg Value	Balanced	Mid Value	Lg Growth	Lg Growth	Mid Growth	Mid Growth
26.4	4.7	18.2	35.7	13.5	1.3	20.0	30.2	-1.51	35.47	202.70
Mid Yalue	Lg Growth	Sm Value	Sm Value	Lg Growth	Agg Bond	Lg Value	Mid Growth	Balanced	Sm Growth	Sm Growth
24.8	2.6	18.1	34.5	13.0	0.5	17.3	25.3	-2.35	28.48	152.14
Sm Value	Lg Value	Lg Value	Lg Growth	Mid Growth	Mid Growth	Sm Growth	International	Mid Growth	Mid Value	Balanced
24.5	0.4	17.5	33.5	11.9	-0.2	11.3	25.0	-4.75	27.06	126.34
Emrg Mkt	Mid Value	International	Mid Value	Balanced	International	Emrg Mkt	Sm Growth	Lg Value	Lg Value	Sm Value
18.9	-1.4	17.3	33.5	10.6	-0.8	11.2	22.2	-8.27	26.54	75.64
Lg Growth	Mid Growth	Mid Growth	Lg Value	Agg Bond	Sm Growth	Balanced	Balanced	Sm Growth	Sm Value	Lg Value
16.7	-1.7	15.8	32.5	6.0	-1.4	8.3	14.2	-9.31	22.39	123.51
Lg Value	Sm Growth	Lg Growth	International	Sm Growth	Lg Value	Mid Growth	Lg Value	Mid Yalue	Balanced	Mid Yalue
15.5	-2.9	15.3	22.8	5.6	-3.8	7.3	13.7	-12.29	22.18	120.08
Balanced	Sm Value	Sm Growth	Balanced	Sm Value	Mid Yalue	Lg Growth	Mid Yalue	Sm Value	International	Agg Bond
12.1	-5.5	14.6	17.6	4.2	-4.8	7.1	13.3	-12.86	22.01	49.00
International	International	Balanced	Agg Bond	Emrg Mkt	Sm Value	Agg Bond	Sm Value	International	Emrg Mkt	International
7.8	-12.1	11.3	-2.0	-2.2	-7.5	2.6	7.8	-13.79	18.42	31.85
Agg Bond	Emrg Mkt	Agg Bond	Emrg Mkt	International	Emrg Mkt	International	Agg Bond	Emrg Mkt	Agg Bond	Emrg Mkt
6.5	-18.4	4.2	-2.6	-4.9	-14.9	1.0	3.5	-14.58	8.72	9.64

<sup>\*</sup>Cumulative return is for the time period 1/1/2010 - 3/31/2019

Source: Morningstar Direct; GWCM Analysis; Lg Growth – Russell 1000 Growth Index, Lg Value – Russell 1000 Value Index, Mid Growth – Russell Mid Cap 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 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.



64

# 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.



# 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.

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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.

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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.

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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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# Disclosures

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.

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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.

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