State of Wisconsin



Investment Performance and Expense Ratio Review

Performance as of December 31, 2018

Bill Thornton

Investment Director, Great-West Investments 303-737-1514 william.thornton@greatwest.com

Table of Contents

- 1) Executive Summary
- 2) Target Date Summary
- 3) Expense Ratio Information
- 4) Fund Analysis
- 5) 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	American Beacon Bridgeway Large Cap Value	Vanguard Institutional 500 Trust Index	Fidelity Contrafund Commingled Pool, Calvert U.S. Core Large Cap Resp Idx	BlackRock Mid Cap Equity Index, T.Rowe Price Instl Mid-Cap Equity	BlackRock Russell 2000 Index, DFA US Micro Cap	American Funds Europacific Growth, Blackrock EAFE Equity Index					

	Asset Allocation "Delegators"
Balanced/Lifestyle/Lifecycle	Managed Accounts

Vanguard Target Retirement Trusts, Vanguard Wellington

Professional Management Program - Ibbotson

	Specialty "Sophisticates"	
Brokerage	Other	Company Stock

Schwab

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

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

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



Name	Total Ret 3 Mth	Total Ret 1 Yr	Total Ret 3 Yr	Total Ret 5 Yr	Total Ret 10 Yr	Total Net Assets \$M	Expense Ratio
American Funds EuroPacific Gr R6	-12.59	-14.91	4.08	1.86	7.69	145,258	0.49
Morningstar Foreign Large Growth Avg	-13.87	-14.08	3.21	1.38	7.43	-	1.15
MSCI EAFE Index	-12.54	-13.79	2.87	0.53	6.32	-	-
MSCI ACWI ex U.S.	-11.46	-14.20	4.48	0.68	6.57	-	-
Blackrock EAFE Equity Index Coll T	-12.55	-13.50	3.42	0.78	6.40	-	0.08
MSCI EAFE Index	-12.54	-13.79	2.87	0.53	6.32	-	-
DFA US Micro Cap I	-20.56	-11.60	7.28	4.14	13.08	6,176	0.52
Morningstar Small Cap Blend Avg	-19.38	-12.72	5.90	3.20	11.60	-	1.17
Russell 2000 Index	-20.20	-11.01	7.36	4.41	11.97	-	-
Blackrock Russell 2000 Index Coll T	-20.18	-10.89	7.56	4.61	12.13	-	0.07
Russell 2000 Index	-20.20	-11.01	7.36	4.41	11.97	-	-
T. Rowe Price Mid-Cap Growth		-2.04	9.14	9.41	16.23	28,927	0.76
Morningstar Mid Cap Growth Avg	-17.57	-6.65	7.27	5.61	13.16	-	1.20
Russell Mid Cap Growth Index	-15.99	-4.75	8.59	7.42	15.12	-	-
S&P Midcap 400 Index	-17.28	-11.08	7.66	6.03	13.68	-	-
Blackrock Midcap Equity Index Coll F	-17.26	-11.05	7.69	6.07	13.70	-	0.04
S&P MidCap 400 Index	-17.28	-11.08	7.66	6.03	13.68	-	-
Calvert US Large Cap Core Rspnb ldx R6	-13.73	-4.06	8.76	8.28	13.76	2,226	0.19
S&P 500 Index	-13.52	-4.38	9.26	8.49	13.12	-	-
Morningstar Socially Resp Large Cap Avg**	-13.81	-5.18	7.99	6.94	12.19	-	0.93
Morningstar Large Cap Growth Avg	-15.43	-2.09	8.98	8.16	13.74	-	1.09
Fidelity Contrafund Commingled Pool Cl 2	-16.29	-1.89	10.54	-	-		0.38
Morningstar Large Cap Growth Avg	-15.43	-2.09	8.98	8.16	13.74	-	1.09
Russell 1000 Growth Index	-15.89	-1.51	11.15	10.40	15.29	-	-
S&P 500 Index	-13.52	-4.38	9.26	8.49	13.12	-	-
American Beacon Bridgeway Lg Cap Value I CIT*	-15.13	-12.24	5.31	5.66	12.10	4,373	0.55
Morningstar Large Cap Value Avg	-11.72	-8.27	6.95	5.95	11.18	-	-
Russell 1000 Value Index	-12.49	-8.53	6.85	5.37	10.91	-	-

^{*} The American Beacon CIT is newly established. Returns presented in italics are linked to mutual fund performance.

^{**}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*	-13.52	-4.41	9.24	8.48	13.13		0.01
S&P 500 Index	-13.52	-4.38	9.26	8.49	13.12	-	-
Vanguard Wellington Adm	-6.75	-3.35	7.23	6.29	9.96	96,215	0.17
Morningstar Moderate Allocation Avg	-8.64	-5.76	4.71	3.67	8.33	-	1.13
Composite 65% S&P 500 / 35% Barclay's Aggregate	-8.22	-2.85	6.74	6.40	9.74	-	-
Composite 65% S&P 500 / 35% Barclay's U.S. Credit A or Better ldx	-8.67	-3.67	6.96	6.65	10.44	-	-
Vanguard Long-Term Investment-Grade Adm	-0.02	-5.86	4.41	5.68	6.99	16,218	0.12
Barclay's LT Corporate A	0.35	-2.35	2.70	3.23	5.46	-	-
Morningstar Corp Bond	-0.47	-2.49	3.27	3.20	5.81	-	0.83
Blackrock US Debt Index Fund Coll W		0.03	2.11	2.60	3.53	-	0.04
BarCap US Agg Bond TR USD	1.64	0.01	2.06	2.52	3.48	-	-
Federated US Govt 2-5 Yr Instl	2.02	0.94	0.67	0.60	1.13	253	0.59
Morningstar Short Government Avg	1.12	1.14	0.75	0.71	1.15	-	0.74
Barclay's US Treas/Agency 3-5 Yr	2.42	1.49	1.27	1.52	1.94	-	-
BofA Merrill Lynch US Treas 3-5 Yr	2.38	1.47	1.25	1.50	1.92	-	-
Vanguard Admiral Treasury Money Mkt Inv	0.54	1.80	0.95	0.57	0.32	23,490	0.09
Morningstar Taxable Money Mkt Avg	0.44	1.41	0.66	0.40	0.22	-	0.49
U.S. Treasury 90-Day T-Bill	0.57	1.94	1.06	0.65	0.38	-	-
iMoney Net Average Treasury MM	0.45	1.30	0.56	0.33	0.17	-	-
Stable Value Fund	0.61	2.26	2.02	1.93	2.57	666	0.32
5 Yr. Constant Maturity Treasury Yield	0.72	2.75	2.00	1.83	1.67	-	-

^{* **} The Vanguard Institutional 500 Index Trust has an inception date of August, 17, 2018. Performance shown is taken from the Vanguard Institutional Index PL.



Name

American Funds EuroPacific Gr R6
Calvert U.S. Lrg Cap Core Resp Idx*
DFA U.S. Micro Cap
Federated U.S. Govt: 2-5 Yr Instl
Fidelity Contrafund
T. Rowe Price Mid-Cap Growth
Vanguard Institutional Index Instl PI
Vanguard Long-Term Inv Grade Adm
Vanguard Wellington Adm

<u>2018</u>	<u>2018</u>	2018	<u>2018</u>	2017	<u>2017</u>	2017	2017	<u>2016</u>	<u>2016</u>	2016	<u>2016</u>
<u>Q4</u>	<u>Q3</u>	<u>Q2</u>	<u>Q1</u>	<u>Q4</u>	<u>Q3</u>	<u>Q2</u>	<u>Q1</u>	<u>Q4</u>	<u>Q3</u>	<u>Q2</u>	<u>Q1</u>
67	54	56	66	68	69	79	77	80	80	66	66
66	60	35	46	38	44	52	44	52	71	62	61
81	83	83	80	75	82	77	61	71	63	61	82
30	15	14	14	30	55	47	60	45	63	70	38
67	66	79	79	80	71	75	69	59	63	60	63
74	57	71	88	92	96	97	96	95	98	98	99
85	90	89	88	87	87	91	94	95	95	90	89
88	88	98	86	96	99	99	99	99	100	100	100
93	92	93	97	97	97	96	96	97	94	94	92

1st Quartile	76-100
2nd Quartile	51-75
3rd Quartile	26-50
4th Quartile	1-25



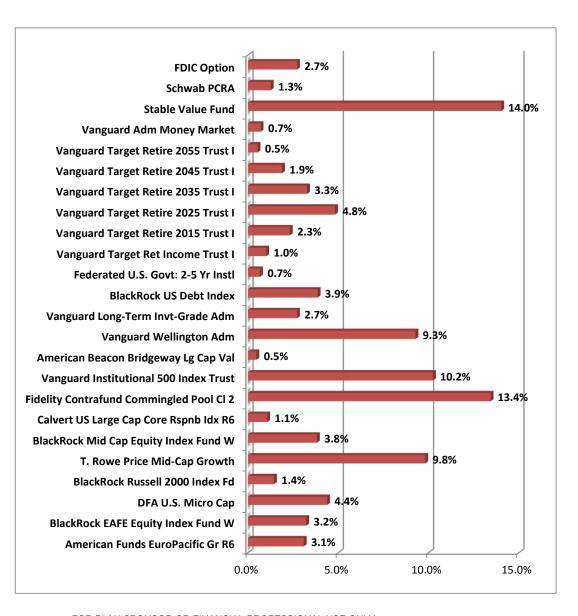
^{*} Percentile ranks shown for time periods prior to Q3 2018 for the Calvert U.S. Large Cap Core Resp ldx are taken from the Calvert Equity Fund.

Asset Summary 12/31/2018

							Percentage of WDC
				WDC as a	Fund as a		Participants
	Plan Inception		WDC Assets in	Percentage of	Percentage of	Number of	Utilizing
	Date	Fund Net Assets	Fund	Fund Assets	WDC Assets	Participants	Fund
American Funds EuroPacific Gr R6	1/28/2005	\$145,257,793,739	\$146,615,657	0.10%	3.09%	15,698	24.59%
BlackRock EAFE Equity Index Fund W	2/1/2001	\$260,670,000	\$153,093,008	58.73%	3.22%	19,579	30.67%
DFA U.S. Micro Cap	2/1/1997	\$6,175,925,126	\$208,008,339	3.37%	4.38%	18,168	28.46%
BlackRock Russell 2000 Index Fd	2/20/2004	\$318,650,000	\$68,346,092	21.45%	1.44%	14,124	22.12%
T. Rowe Price Mid-Cap Growth	2/1/1998	\$28,926,964,674	\$465,863,200	1.61%	9.81%	30,438	47.67%
BlackRock Mid Cap Equity Index Fund W	2/1/2001	\$4,743,350,000	\$181,217,181	3.82%	3.82%	21,334	33.41%
Calvert US Large Cap Core Rspnb ldx R6	4/18/2003	\$2,226,458,316	\$50,456,401	2.27%	1.06%	3,064	4.80%
Fidelity Contrafund Commingled Pool CI 2	1/31/1994	\$108,262,835,390	\$637,534,849	0.59%	13.43%	32,261	50.53%
Vanguard Institutional 500 Index Trust	9/9/1990	N/A	\$486,161,275	NA	10.24%	27,388	42.90%
American Beacon Bridgeway Lg Cap Val	11/1/2017	\$181,838,149	\$22,047,485	12.12%	0.46%	14,282	22.37%
Vanguard Wellington Adm	10/26/2001	\$96,215,459,123	\$440,281,968	0.46%	9.27%	24,704	38.69%
Vanguard Long-Term Invt-Grade Adm	10/26/2001	\$16,218,309,259	\$128,894,223	0.79%	2.72%	16,335	25.58%
BlackRock US Debt Index	2/1/2001	\$1,136,500,000	\$183,089,746	16.11%	3.86%	17,557	27.50%
Federated U.S. Govt: 2-5 Yr Instl	2/3/1992	\$252,540,409	\$31,578,475	12.50%	0.67%	5,946	9.31%
Vanguard Target Ret Income Trust I	7/29/2005	\$1,723,252,578	\$47,748,271	2.77%	1.01%	1,859	2.91%
Vanguard Target Retire 2015 Trust I	7/29/2005	\$2,139,066,198	\$109,893,018	5.14%	2.31%	3,001	4.70%
Vanguard Target Retire 2025 Trust I	7/29/2005	\$8,253,528,613	\$228,779,693	2.77%	4.82%	6,602	10.34%
Vanguard Target Retire 2035 Trust I	7/29/2005	\$6,574,062,922	\$155,243,866	2.36%	3.27%	6,762	10.59%
Vanguard Target Retire 2045 Trust I	7/29/2005	\$4,546,378,488	\$89,508,568	1.97%	1.89%	6,283	9.84%
Vanguard Target Retire 2055 Trust I	8/18/2010	\$1,521,798,994	\$25,088,946	1.65%	0.53%	3,601	5.64%
Vanguard Adm Money Market	10/1/1993	\$23,490,300,000	\$33,186,336	0.14%	0.70%	6,558	10.27%
Stable Value Fund	9/1/1996	N/A	\$665,617,953	N/A	14.02%	25,206	39.48%
Schwab PCRA	2/17/2000	N/A	\$59,897,228	N/A	1.26%	1,216	1.90%
FDIC Option	12/31/1996	N/A	\$129,108,178	N/A	2.72%	9,948	15.58%



Asset Summary 12/31/2018

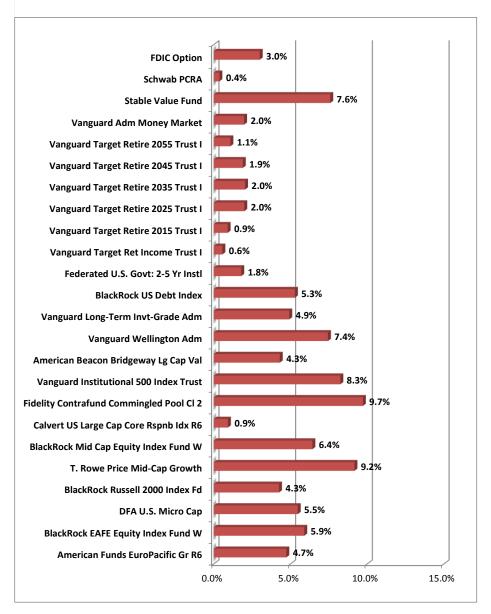


Total WDC Assets

\$4,747,259,955

Domestic Equity	\$2,119,634,821	45%
Intl Equity	\$299,708,664	6%
Asset Allocation	\$1,096,544,329	23%
Fixed Income	\$343,562,444	7%
Cash Equiv.	\$827,912,467	17%
Self-Directed Brok.	\$59,897,228	1%

Participant Summary



Total WDC Participants 63,847

Expense Summary

Name	Expense Ratio
American Funds EuroPacific Gr R6	0.49
Cat: Foreign Large Growth	1.15
Blackrock EAFE Equity Index Fund W	0.08
Cat: Foreign Large Blend Index	0.42
DFA U.S. Micro Cap	0.52
Cat: Small Blend	1.17
Blackrock Russell 2000 Index Fd	0.07
Cat: Small Cap Blend Index	0.42
T. Rowe Price Mid-Cap Growth	0.76
Cat: Mid Growth	1.20
Blackrock Mid Cap Equity Index Fund W	0.04
Cat: Mid Cap Blend Index	0.49
Calvert US Large Cap Core Rspnb ldx R6	0.19
Cat: Socially Resp Large Cap	0.93
Fidelity Contrafund Commingled Pool Cl 2	0.38
Cat: Large Growth	1.09
Vanguard Institutional 500 Index Trust	0.02
Cat: Large Cap Blend Index	0.45
American Beacon Bridgeway Lg Cap Val	0.55
Cat: Large Value	1.01
Stable Value Fund	0.32
Cat: Stable Value	0.70

Asset-Weighted Average Expense Ratio: 0.21%

Name Name	Expense Ratio
Vanguard Wellington Adm	0.17
Cat: Moderate Allocation	1.13
Vanguard Target Retirement 2055 Inv	0.07
Cat: Target Date 2050+	0.79
Vanguard Target Retirement 2045 Inv	0.07
Cat: Target Date 2041-2045	0.79
Vanguard Target Retirement 2035 Inv	0.07
Cat: Target Date 2031-2035	0.78
Vanguard Target Retirement 2025 Inv	0.07
Cat: Target Date 2021-2025	0.77
Vanguard Target Retirement 2015 Inv	0.07
Cat: Target Date 2011-2015	0.73
Vanguard Target Retirement Income Inv	0.07
Cat: Retirement Income	0.77
Vanguard Long-Term Invmt-Grade Adm	0.12
Cat: Corporate Bond	0.83
Blackrock US Debt Index	0.04
Cat: Intermediate Bond Index	0.34
Federated U.S. Govt: 2-5 Yr Instl*	0.59
Cat: Short Government	0.74
Vanguard Adm Money Market	0.09
Average US Taxable Money Market Fund	0.49

^{*} The Federated U.S. Govt. 2-5 Yr Fund shares revenue back to the plan's participants, which is not reflected in the expense ratios above. The expense ratios of the funds including this reimbursement would be 0.43 for the Federated 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	-3.20	-1.99	3.82	3.35	5.92	1,723	0.07	4	18	11	67	0
S&P Target Date Retirement Income TR USD	-3.92	-2.54	3.57	3.06	5.31	-	-	-	-	-	-	-
Composite Returns*	-2.97	-2.76	2.98	2.83	5.05	-	-	-	-	-	-	-
Vanguard Target Retire 2015 Trust I	-4.69	-2.94	4.72	4.03	7.84	2,139	0.07	3	25	16	56	0
S&P Target Date 2015 TR USD	-5.72	-3.67	4.57	3.79	7.11	-	-	-	-	-	-	-
Composite Returns*	-4.77	-3.90	3.35	2.98	5.73	-	-	-	-	-	-	-
Vanguard Target Retire 2025 Trust I	-7.74	-5.06	5.73	4.66	9.06	8,254	0.07	2	38	24	36	0
S&P Target Date 2025 TR USD	-7.81	-5.02	5.46	4.31	8.46	-	-	-	-	-	-	-
Composite Returns*	-8.03	-5.95	4.05	3.27	6.97	-	-	-	-	-	-	-
Vanguard Target Retire 2035 Trust I	-9.92	-6.52	6.41	4.99	10.04	6,574	0.07	2	46	30	22	0
S&P Target Date 2035 TR USD	-10.55	-6.88	6.08	4.69	9.38	-	-	-	-	-	-	-
Composite Returns*	-10.20	-7.34	4.48	3.41	7.74	-	-	-	-	-	-	-
Vanguard Target Retire 2045 Trust I	-11.77	-7.86	6.78	5.13	10.26	4,546	0.07	2	53	35	10	0
S&P Target Date 2045 TR USD	-11.75	-7.74	6.51	4.91	9.88	-	-	-	-	-	-	-
Composite Returns*	-12.06	-8.52	4.85	3.54	8.41	-	-	-	-	-	-	-
Vanguard Target Retire 2055 Trust I	-11.77	-7.83	6.77	5.10	-	1,522	0.07	2	54	34	10	0
S&P Target Date 2055+ TR USD	-12.10	-7.97	6.82	5.07	-	-	-	-	-	-	-	-
Composite Returns*	-12.08	-8.46	4.88	3.59	8.45	-	-	-	-	-	-	-

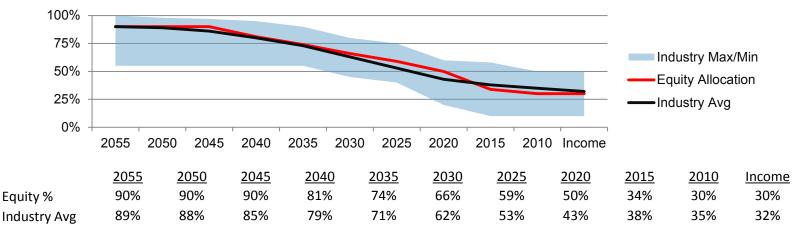
^{*}Composite benchmark consists of the following indices weighted to match the allocation of the specific target date fund: MSCI Broad Market, MSCI EAFE, Barclays Aggregate Bond, and Barclays US Treasury 1-3 Month

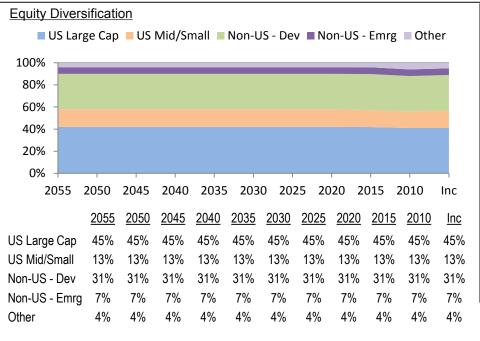


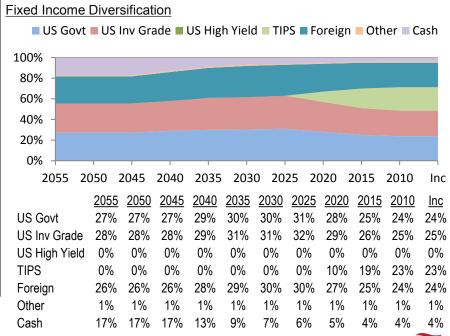
12/31/2018

Glide Path Summary











Expense Ratio Information

Expense Summary 12/31/2018

	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
Cash Equiv				
Stable Value				
Stable Value (Wisconsin)	0.32		0.32	
Fixed Income				
Money Market-Taxable				
Vanguard Treasury Money Market Investor	0.09	1	0.09	1
Money Market-Taxable Median	0.50		0.61	
Short Government				
Federated US Govt 2-5 Yr Instl	0.59	32	0.88	46
Short Government Median	0.75		0.90	
ntermediate-term Bond				
BlackRock US Debt Index-W	0.04	2	0.04	1
Intermediate-Term Bond Median	0.77		0.93	
Corporate Bond				
Vanguard Long-Term Investment-Grade Adm	0.12	15	0.12	14
Corporate Bond Median	0.64		0.80	
Balanced				
Allocation50% to 70% Equity				
Vanguard Wellington Admiral	0.17	1	0.17	1
Allocation50% to 70% Equity Median	1.16		1.31	
Target-Date Retirement				
The Vanguard Target Retire Inc Trust I	0.07	1	0.07	1
Target-Date Retirement Median	0.80		1.10	
Target-Date 2015				
The Vanguard Target Retire 2015 Trust I	0.07	1	0.07	1
Target-Date 2015 Median	0.85		1.19	
Target-Date 2025				
The Vanguard Target Retire 2025 Trust I	0.07	1	0.07	1
Target-Date 2025 Median	0.83		1.10	
Target-Date 2035				
The Vanguard Target Retire 2035 Trust I	0.07	1	0.07	1
Target-Date 2035 Median	0.83		1.15	



12/31/2018

Expense Summary

	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
Target-Date 2045				
The Vanguard Target Retire 2045 Trust I	0.07	1	0.07	1
Target-Date 2045 Median	0.81		1.17	
Target-Date 2055				
The Vanguard Target Retire 2055 Trust I	0.07	1	0.07	1
Target-Date 2055 Median	0.79		1.29	
Equity				
Large Value				
Bridgeway Large Cap Value CIT Class I	0.55	15	0.55	13
Large Value Median	1.05		1.21	
Large Blend				
Vanguard Institutional Index Instl PI	0.02	1	0.02	1
Calvert US Large Cap Core Rspnb ldx R6	0.19	6	0.35	9
Large Blend Median	1.04		1.19	
Large Growth				
Fidelity Contrafund Commingled Pool CI 2	0.38	4	0.38	3
Large Growth Median	1.14		1.28	
Mid-Cap Blend				
BlackRock Mid Cap Equity Index- F	0.04	1	0.04	1
Mid-Cap Blend Median	1.10		1.25	
Mid-Cap Growth				
T. Rowe Price Instl Mid-Cap Equity Gr	0.61	4	0.61	3
Mid-Cap Growth Median	1.25		1.46	
Small Blend				
DFA US Micro Cap I	0.52	11	0.52	9
BlackRock Russell 2000 Index-T	0.07	2	0.07	2
Small Blend Median	1.19		1.33	
International				
Foreign Large Blend				
BlackRock EAFE Equity Index-T	0.08	2	0.08	3
Foreign Large Blend Median	1.12		1.32	



Expense Summary 12/31/2018

	Net Expense Ratio	Peer Rank	Gross Expense Ratio	Peer Rank
Foreign Large Growth				
American Funds Europacific Growth R6	0.49	4	0.49	3
Foreign Large Growth Median	1.17		1.36	



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

Stable Value (Wisconsin)

12/31/2018

Fund Incep Date: 07/01/1998

Benchmark:

Citi Treasury Bill 3 Mon USD

Category: Stable Value Net Assets: \$665.70M Manager Name: Galliard Capital Management Manager Start Date: 06/30/1998

Expense Ratio: 0.32%

Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)

Assets



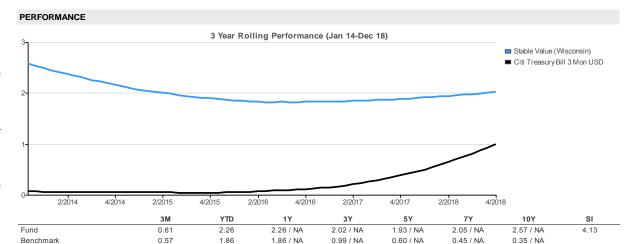
Sector Breakdown

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

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



CALENDAR	2018	2017	2016	2015	2014	2013	2012	2011	2010
Fund	2.26	1.90	1.90	1.85	1.73	2.10	2.63	3.13	3.93
Benchmark	1.86	0.84	0.27	0.03	0.03	0.05	0.07	0.08	0.13

Total: NA%

ASSET LOADINGS (Returns-based)

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)
755025-

		Current		Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	99.8	100.0	99.8	100.0
1	Mortgages	0.0	0.0	0.0	0.0
- 1	Gov/Corp Bonds	0.3	0.0	0.2	0.0

3 Yr	Fund	Benchmark
Alpha	1.00	0.00
Beta	0.38	1.00
R-Squared	1.13	100.00
Sharpe Ratio	14.88	-0.13
Up Market Capture	203.93	100.00
Down Market Capture	NA	NA

RISK & PERFORMANCE STATISTICS

5 Yr	Fund	Benchmark
Alpha	1.30	0.00
Beta	0.60	1.00
R-Squared	1.73	100.00
Sharpe Ratio	19.63	-0.10
Up Market Capture	318.64	100.00
Down Market Capture	NA	NA

NOTES



Vanguard Treasury Money Market Investor VUSXX

0.00%

0.00%

12/31/2018

Fund Incep Date: 12/14/1992

Benchmark:

FTSE Treasury Bill 3 Mon

Category: Money Market-Taxable

Net Assets: \$23,262.00M Manager Name:

Manager Start Date:

Expense Ratio: 0.09% Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



Non-US Bonds

Credit Quality (%)		
AAA			
AA			
Α			
BBB			
BB			
В			

Sector (%)

100-75-50-25-

Below B

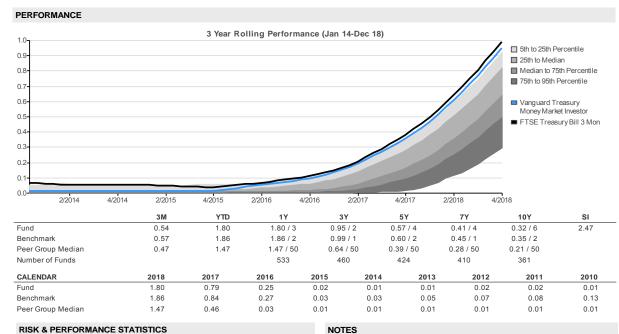
NR/NA Total:

Total:	100.00%
% Derivative	0.00%
% Cash and Equivalent	88.03%
% Securitized	0.00%
% Corporate	0.00%
% Municipal	0.00%
% Government	11.97%

ASSET LOADINGS (Returns-based)

INVESTMENT OVERVIEW

The investment seeks to provide current income while maintaining liquidity and a stable share price of \$1. The fund invests solely in high-quality, short-term money market 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.



RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.04	0.00	-0.35
Beta	0.99	1.00	0.93
R-Squared	95.43	100.00	60.13
Sharpe Ratio	-0.36	-0.13	-1.99
Up Market Capture	95.61	100.00	64.85
Down Market Capture	NA	NA	NA
5 Yr	Fund	Benchmark	Peer Group Median

		Current		Ave	rage
		Fund	Bmk	Fund	Bmk
Т	Cash	100.0	100.0	100.0	100.0
1	Credit Bond	0.0	0.0	0.0	0.0
1	Govt Bond	0.0	0.0	0.0	0.0
	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

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.03	0.00	-0.21
Beta	0.99	1.00	1.03
R-Squared	94.40	100.00	32.07
Sharpe Ratio	-0.27	-0.10	-1.39
Up Market Capture	94.67	100.00	64.35
Down Market Capture	NA	NA	NA

Federated US Govt 2-5 Yr Instl FIGTX

12/31/2018

Fund Incep Date: 02/18/1983

Benchmark:

BofAML US Treasuries 3-5 Yr TR USD

Category: Short Government Net Assets: \$254.00M Manager Name: J. Andrew Kirschler Manager Start Date: 07/05/2013

Expense Ratio: 0.59%

Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



Credit Quality (%)

100.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
100.00%

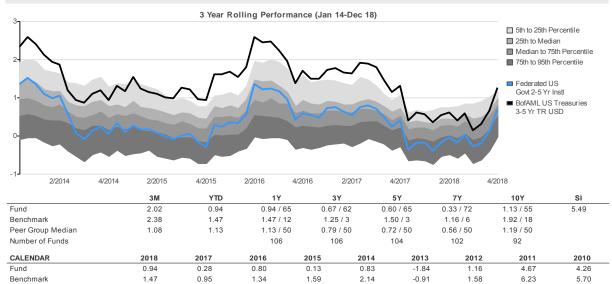
Sector (%)

84.00%
0.00%
0.00%
7.10%
8.90%
0.00%
100.00%

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



0.24

NOTES

0.78

-0.64

1.04

1.82

RISK & PERFORMANCE STATISTICS

Peer Group Median

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.54	0.00	-0.31
Beta	0.84	1.00	0.37
R-Squared	97.47	100.00	90.47
Sharpe Ratio	-0.17	0.11	-0.19
Up Market Capture	80.03	100.00	43.84
Down Market Capture	94.91	100.00	35.76
5 Yr	Fund	Benchmark	Peer Group Median
5 Yr Alpha	Fund -0.73	Benchmark 0.00	
			Median
Alpha	-0.73	0.00	Median -0.24
Alpha Beta	-0.73 0.82	0.00	Median -0.24 0.35
Alpha Beta R-Squared	-0.73 0.82 96.27	0.00 1.00 100.00	Median -0.24 0.35 89.19

1.13

0.47

0.62

ASSET LOADINGS (Returns-based)

100-	FUND EXPOSURES (W EIGHT)	(Jan 16-Dec	18)
75- 50-				
25- 0-				
0	Cu	rrent	Avei	rage
	Fund	Bmk	Fund	Bmk
Cash	41.0	33.7	42.6	30.6

		Fund	Bmk	Fund	Bmk
Т	Cash	41.0	33.7	42.6	30.6
1	Credit Bond	0.0	0.0	0.0	0.0
1	Govt Bond	59.0	66.3	43.5	54.6
	HY Corp Bond	0.0	0.0	0.0	0.0
1	MBS	0.0	0.0	5.5	10.8
1	Muni Bond	0.0	0.0	0.4	1.1
1	TIPS	0.0	0.0	7.9	2.8

2.81

BlackRock US Debt Index-W

12/31/2018

Fund Incep Date: 02/01/2001

Benchmark:

BBgBarc US Aggregate Bond Index

Category: Intermediate-term Bond

0.00%

0.00%

Net Assets: NA Manager Name: Team Managed Manager Start Date: 02/01/2001

Expense Ratio: 0.04%

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%

Credit Quality (%)

AAA AA

Α

BBB BB

B Below B

NR/NA
Total:

Sector (%)

% Government

% Municipal

% Corporate

% Securitized

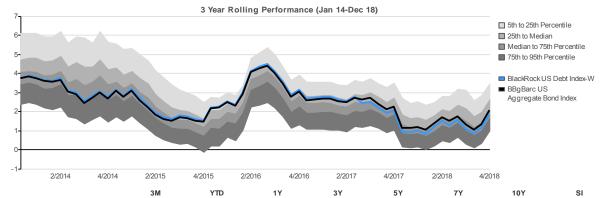
% Cash and Equivalent

% Derivative
Total:

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 Barclays U.S. Aggregate Bond Index.

PERFORMANCE



Fund	1.62	0.04	0.04 / 24	1.85 / 60	ь	2.44 / 41	2.05 / / 0	3.45 / 82	5.16
Benchmark	1.64	0.01	0.01 / 24	2.06 / 53	3	2.52 / 35	2.10 / 67	3.48 / 82	
Peer Group Median	0.97	-0.58	-0.58 / 50	2.09 / 50	0	2.30 / 50	2.38 / 50	4.46 / 50	
Number of Funds			1045	966		916	883	807	
CALENDAR	2018	2017	2016	2015	2014	2013	2012	2011	2010
Fund	0.04	2.83	2.72	0.56	6.19	-1.99	4.24	7.82	6.67
Benchmark	0.01	3.54	2.65	0.55	5.97	-2.02	4.22	7.84	6.54
Peer Group Median	-0.58	3 77	3.00	-0.03	5 49	-1 64	6.67	6.35	7 48

RISK & PERFORMANCE STATISTICS

Ν	О	Т	Е	

ASSET L	_OADINGS (Returns-based)	
100-	FUND EXPOSURES (W EIGHT)	(Jan 16-Dec 18)
75		
50- 25-		
0-		
	Current	Average

	Cu	rrent	Av erage	
	Fund	Bmk	Fund	Bmk
Cash	0.7	0.4	2.5	0.4
Credit Bond	27.9	30.5	28.9	30.4
Govt Bond	21.5	40.7	30.1	40.8
HY Corp Bond	0.0	0.1	1.3	0.2
MBS	48.4	28.0	33.9	28.1
Muni Bond	1.5	0.4	3.3	0.2
TIPS	0.0	0.0	0.1	0.0

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.18	0.00	0.16
Beta	0.98	1.00	0.89
R-Squared	97.44	100.00	89.85
Sharpe Ratio	0.30	0.37	0.41
Up Market Capture	95.53	100.00	93.73
Down Market Capture	99.53	100.00	87.08

bown maner ouptaic	55.55	100.00	07.00
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.05	0.00	-0.03
Beta	0.99	1.00	0.90
R-Squared	98.31	100.00	89.56
Sharpe Ratio	0.66	0.68	0.63
Up Market Capture	97.98	100.00	91.24
Down Market Capture	99.06	100.00	92.37



Vanguard Long-Term Investment-Grade Adm VWETX

12/31/2018

Fund Incep Date: 02/12/2001

Benchmark:

BBgBarc US Credit A+ Long TR USD

Category: Corporate Bond Net Assets: \$16,218.00M Manager Name: Scott I. St. John Manager Start Date: 05/28/2014

Expense Ratio: 0.12% Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)

Assets



edit Quality (%

11.06%
30.30%
50.40%
6.25%
0.02%
0.00%
0.00%
1.97%
100.00%

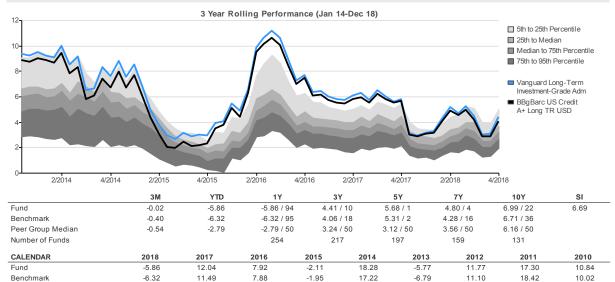
ctor (%)

Sector (%)	
% Government	8.11%
% Municipal	10.51%
% Corporate	78.08%
% Securitized	1.20%
% Cash and Equivalent	2.10%
% Derivative	0.00%
Total:	100.00%

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



-0.96

NOTES

7.07

-0.91

10.72

6.53

RISK & PERFORMANCE STATISTICS

Peer Group Median

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.28	0.00	0.63
Beta	1.02	1.00	0.50
R-Squared	98.97	100.00	84.10
Sharpe Ratio	0.51	0.47	0.59
Up Market Capture	100.87	100.00	50.58
Down Market Capture	96.85	100.00	38.57

-2.79

6.06

6.44

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.23	0.00	0.26
Beta	1.03	1.00	0.47
R-Squared	98.97	100.00	80.56
Sharpe Ratio	0.71	0.68	0.69
Up Market Capture	103.88	100.00	46.54
Down Market Capture	101.36	100.00	41.68

ASSET LOADINGS (Returns-based)

100-75-

75-50-25-

		Current		Av erage	
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	0.0	0.0	0.0
	Credit Bond	100.0	100.0	100.0	100.0
-	Govt Bond	0.0	0.0	0.0	0.0
	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

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)



9.81

Vanguard Wellington Admiral VWENX

4.22%

53.02%

24.49%

12.12%

0.00%

0.07%

0.00%

6.08%

1.41%

1.41%

1.40%

1.31%

18.48%

1.7

0.6

4.3

93.5

12/31/2018

Fund Incep Date: 05/14/2001

Benchmark: S&P 500 Index Category:

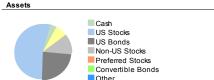
Net Assets: \$96,215.00M Manager Name:

Manager Start Date:

Expense Ratio:

Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



Non-US Bonds

Sector Proakdown

Sector Breakdown	
Sensitive	
Communication Services	6.95%
Industrials	9.42%
Technology	15.68%
Energy	9.33%
Cyclical	
Basic Materials	2.79%
Consumer Cyclical	5.57%
Real Estate	1.15%
Financial Services	22.84%
Defensive	
Consumer Defensive	6.91%
Healthcare	14.93%
Utilities	4.41%
TOP 10 HOLDINGS	
Microsoft Corp	2.90%
JPMorgan Chase & Co	2.28%
Verizon Communications Inc	2.15%
Bank of America Corporation	2.11%
Alphabet Inc A	1.80%
Chevron Corp	1.72%

ASSET LOADINGS (Returns-based)

Bristol-Myers Squibb Company

Comcast Corp Class A

US Bonds

Intl Bonds

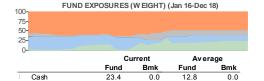
Intl Equity

US Equity

Chubb Ltd

Total:

United States Treasury Notes 2.25%



0.0

0.4

4.5

95.1

13.6

0.0

15.0

48.0

Allocation--50% to 70% Equity

Edward P. Bousa

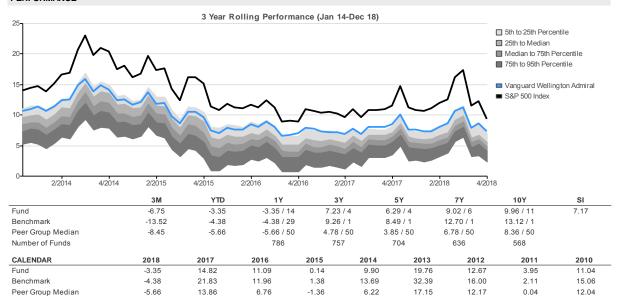
12/31/2002

0.17%

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

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	1.03	0.00	-1.25
Beta	0.61	1.00	0.61
R-Squared	92.24	100.00	90.39
Sharpe Ratio	0.89	0.77	0.56
Up Market Capture	66.78	100.00	56.43
Down Market Capture	61.15	100.00	65.68
5 Yr	Fund	Benchmark	Peer Group Median
5 Yr Alpha	Fund 0.63	Benchmark 0.00	
* **			Median
Alpha	0.63	0.00	Median -1.60
Alpha Beta	0.63 0.63	0.00	Median -1.60 0.61
Alpha Beta R-Squared	0.63 0.63 94.00	0.00 1.00 100.00	Median -1.60 0.61 90.01



21.8

0.0

10.0

55.4

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%

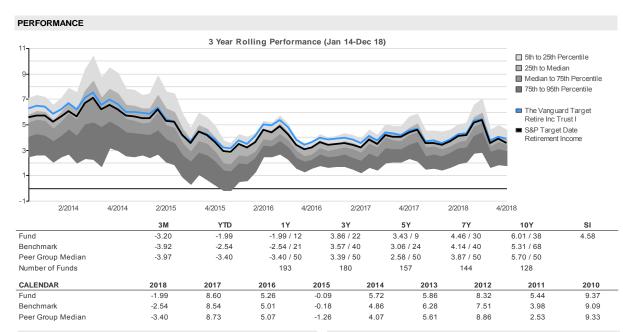
Sector Breakdown

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

Simple fund of funds structure seeks to build appropriate asset allocation from preselected stock and bond portfolios.



ASSET LOADINGS (Returns-based) FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18) 7550250

0-	Current		Average	
	Fund	Bmk	Fund	Bmk
Cash	19.6	22.1	13.1	18.6
US Bonds	48.1	44.2	55.4	49.0
Intl Bonds	2.8	0.2	2.5	1.3
Intl Equity	10.7	10.7	8.9	8.6
US Equity	18.9	22.8	20.3	22.5

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.41	0.00	-0.27
Beta	0.95	1.00	1.04
R-Squared	97.79	100.00	94.39
Sharpe Ratio	0.84	0.72	0.63
Up Market Capture	99.00	100.00	98.90
Down Market Capture	89.11	100.00	105.45

bown maner ouptaic	00.11	100.00	100.40
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.44	0.00	-0.59
Beta	0.96	1.00	1.13
R-Squared	98.33	100.00	94.39
Sharpe Ratio	0.81	0.69	0.51
Up Market Capture	100.09	100.00	101.66
Down Market Capture	90.41	100.00	115.67





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%

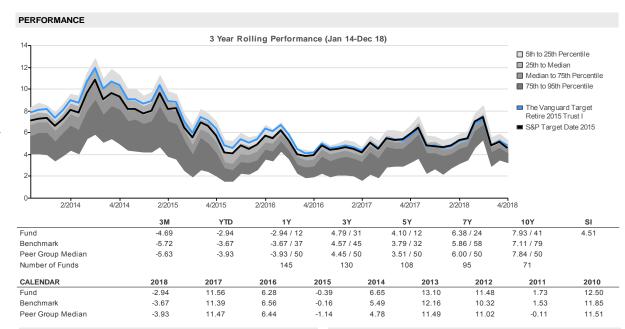
Sector Breakdown

TOP 10 HOLDINGS

0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%

INVESTMENT OVERVIEW

Simple fund of funds structure seeks to build appropriate asset allocation from preselected stock and bond portfolios.



Total: NA%

ASSET LOADINGS (Returns-based)

-		Current		Average	
		Fund	Bmk	Fund	Bmk
T	Cash	11.3	13.6	6.5	9.1
-1	US Bonds	43.3	40.5	47.1	44.3
- 1	Intl Bonds	4.2	0.0	3.3	0.3
	Intl Equity	15.6	14.4	14.3	12.5
-1	US Equity	25.5	31.6	28.8	33.9

RISK & PERFORMANCE STATISTICS

Peer Group 3 Yr Fund Benchmark Median Alpha 0.45 0.00 -0.10 Beta 0.93 1.00 1.04 100.00 R-Squared 98.30 96.83 Sharpe Ratio 0.81 0.72 0.69 Up Market Capture 96.16 100.00 100.10 Down Market Capture 88.01 100.00 103.12

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.43	0.00	-0.44
Beta	0.96	1.00	1.06
R-Squared	98.70	100.00	96.99
Sharpe Ratio	0.70	0.62	0.53
Up Market Capture	98.49	100.00	101.01
Down Market Capture	91.98	100.00	108.48





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%

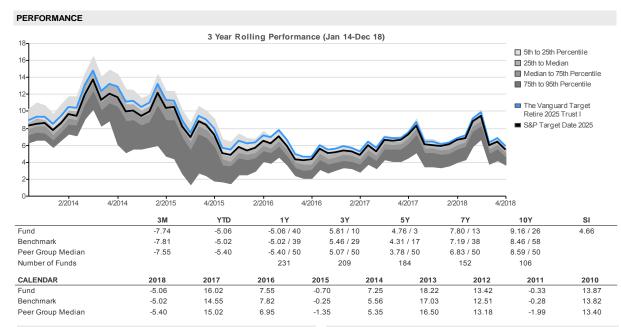
Sector Breakdown

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

Simple fund of funds structure seeks to build appropriate asset allocation from preselected stock and bond portfolios.



Total: NA%

ASSET LOADINGS (Returns-based)

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)
7550250

-		Current		Average	
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	5.6	0.1	4.1
- 1	US Bonds	31.8	33.6	32.3	34.2
- 1	Intl Bonds	5.6	0.0	5.1	0.4
	Intl Equity	23.2	19.5	21.3	16.8
- 1	US Equity	39.5	41.4	41.3	44.6

RISK & PERFORMANCE STATISTICS

Peer Group

NOTES

3 Yr	Fund	Benchmark	Median
Alpha	0.21	0.00	-0.37
Beta	1.03	1.00	1.01
R-Squared	99.03	100.00	97.60
Sharpe Ratio	0.72	0.69	0.62
Up Market Capture	104.08	100.00	97.93
Down Market Capture	101.72	100.00	102.15
5 Yr	Fund	Benchmark	Peer Group Median
5 Yr Alpha	Fund 0.35	Benchmark 0.00	
			Median
Alpha	0.35	0.00	Median -0.43
Alpha Beta	0.35 1.02	0.00	Median -0.43 1.01
Alpha Beta R-Squared	0.35 1.02 99.21	0.00 1.00 100.00	Median -0.43 1.01 97.75



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

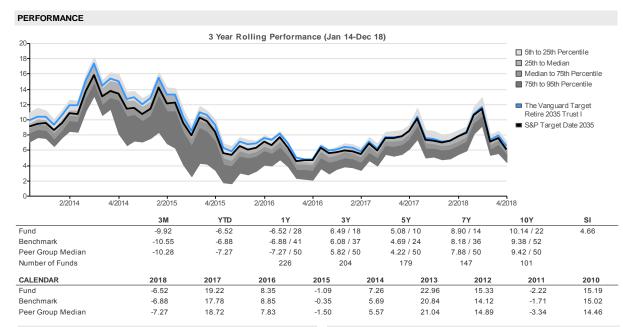
TOP 10 HOLDINGS

Total:

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

Simple fund of funds structure seeks to build appropriate asset allocation from preselected stock and bond portfolios.



NA%

ASSET LOADINGS (Returns-based)

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)
7550250

-		Current		Average	
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.0	0.0	1.1
11	US Bonds	16.3	21.0	17.1	21.7
- 1	Intl Bonds	6.3	0.0	5.8	0.7
- 1	Intl Equity	28.7	25.0	26.6	21.1
-1	US Equity	48.8	54.0	50.5	55.4

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.37	0.00	-0.32
Beta	1.00	1.00	1.03
R-Squared	98.90	100.00	98.23
Sharpe Ratio	0.67	0.63	0.59
Up Market Capture	102.44	100.00	100.98
Down Market Capture	99.16	100.00	103.62

Down Market Capture	99.16	100.00	103.62
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.30	0.00	-0.60
Beta	1.02	1.00	1.05
R-Squared	99.08	100.00	98.33
Sharpe Ratio	0.55	0.52	0.45
Up Market Capture	103.54	100.00	100.88
Down Market Capture	100.77	100.00	104.10





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%

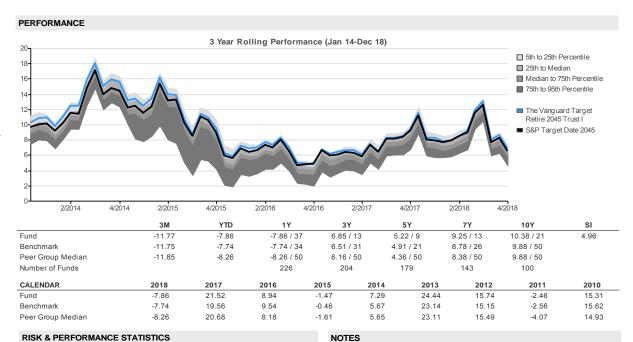
Sector Breakdown

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

Simple fund of funds structure seeks to build appropriate asset allocation from preselected stock and bond portfolios.



Daar C.....

3 Yr	Fund	Benchmark	Median
Alpha	0.14	0.00	-0.53
Beta	1.04	1.00	1.04
R-Squared	99.14	100.00	98.49
Sharpe Ratio	0.64	0.62	0.56
Up Market Capture	104.80	100.00	100.41
Down Market Conture	102 02	100.00	105.62

Down Market Capture	103.83	100.00	105.63
5 Yr	Fund	Benchmark	Peer Grou Median
Alpha	0.16	0.00	-0.66
Beta	1.04	1.00	1.04
R-Squared	99.20	100.00	98.44
Sharpe Ratio	0.51	0.50	0.42
Up Market Capture	104.26	100.00	100.04
Down Market Capture	102.78	100.00	104.84

Total: NA%

ASSET LOADINGS (Returns-based)

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18) 100-75-50-

		Current		Average	
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	0.0	0.0	0.7
-1	US Bonds	3.7	12.7	6.2	14.0
- 1	Intl Bonds	6.7	0.0	6.4	0.7
- 1	Intl Equity	32.9	28.1	30.2	23.6
-1	US Equity	56.7	59.2	57.2	61.0



Assets

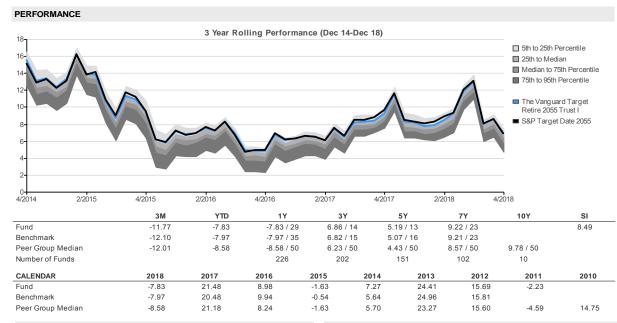
Cash	0.00%
US Stocks	0.00%
US Bonds	0.00%
Non-US Stocks	0.00%
Preferred Stocks	0.00%
Convertible Bonds	0.00%
Other	0.00%
Non-US Bonds	0.00%

Sector Breakdown

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

Simple fund of funds structure seeks to build appropriate asset allocation from preselected stock and bond portfolios.



Total: NA% ASSET LOADINGS (Returns-based)

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18) 755025-

-		Current		Av erage	
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	0.0	0.0	0.7
-1	US Bonds	3.5	9.9	6.1	10.2
- 1	Intl Bonds	6.8	0.1	6.5	0.6
	Intl Equity	33.1	29.3	30.4	24.7
-1	US Equity	56.6	60.6	57.1	63.9

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.07	0.00	-0.66
Beta	0.99	1.00	1.01
R-Squared	99.10	100.00	98.41
Sharpe Ratio	0.64	0.63	0.56
Up Market Capture	100.04	100.00	97.59
Down Market Capture	99.65	100.00	103.86

Down Market Capture	99.65	100.00	103.86
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.18	0.00	-0.63
Beta	0.98	1.00	1.00
R-Squared	99.12	100.00	98.30
Sharpe Ratio	0.51	0.49	0.42
Up Market Capture	98.91	100.00	96.23
Down Market Capture	97.59	100.00	100.48





Bridgeway Large Cap Value CIT Class I

12/31/2018

Fund Incep Date: 12/15/2016 Benchmark:

Russell 1000 Value Index

Category: Large Value Net Assets:

Manager Name Team Managed Manager Start Date : 12/15/2016

Expense Ratio : 0.55%

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%

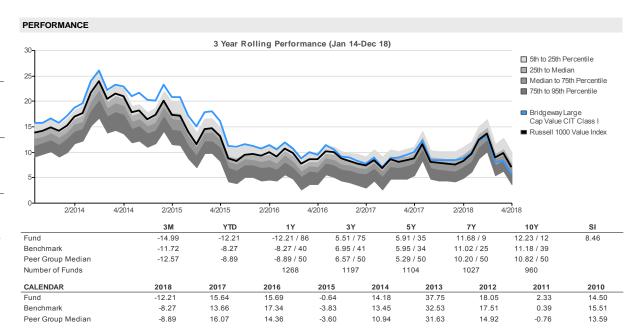
Sector Breakdown

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 seeks to provide long-term total return on capital, primarily through capital appreciation and, to a lesser extent, income.



Total: NA%

ASSET LOADINGS (Returns-based)



		Current		Avei	rage
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	0.0	3.0	0.1
	Top Value	39.8	67.8	42.9	68.4
-	Top Growth	14.1	0.1	6.6	0.1
	Mid Value	40.6	31.9	24.7	31.3
-1	Mid Growth	0.0	0.0	13.6	0.0
1	Sm Value	5.5	0.0	9.3	0.0
1	Sm Growth	0.0	0.1	0.0	0.1

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-1.40	0.00	-0.32
Beta	1.02	1.00	1.00
R-Squared	93.52	100.00	93.43
Sharpe Ratio	0.44	0.58	0.52
Up Market Capture	89.12	100.00	97.60
Down Market Capture	96.57	100.00	99.85

5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.04	0.00	-0.54
Beta	1.01	1.00	1.00
R-Squared	94.00	100.00	94.06
Sharpe Ratio	0.51	0.53	0.46
Up Market Capture	96.46	100.00	96.55
Down Market Capture	95.68	100.00	99.88

NOTES



Vanguard Institutional Index Instl PI VIIIX

12/31/2018

Fund Incep Date: 07/07/1997

Benchmark: S&P 500 Index Category: Large Blend Net Assets: \$200,004.00M Manager Name: Donald M. Butler Manager Start Date: 12/31/2000

Expense Ratio: 0.02% Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



Sector Breakdown

Sector Breakdown	
Sensitive	
Communication Services	3.56%
Industrials	10.13%
Technology	21.71%
Energy	5.51%
Cyclical	
Basic Materials	2.43%
Consumer Cyclical	11.70%
Real Estate	2.37%
Financial Services	16.14%
Defensive	
Consumer Defensive	7.83%
Healthcare	15.49%
Utilities	3.14%
TOP 10 HOLDINGS	
Microsoft Corp	3.63%
Apple Inc	3.49%
Amazon.com Inc	2.95%
Berkshire Hathaway Inc B	1.77%
Johnson & Johnson	1.68%
JPMorgan Chase & Co	1.59%
Facebook Inc A	1.45%

ASSET LOADINGS (Returns-based)

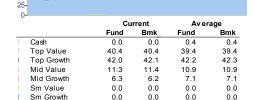
Alphabet Inc Class C

Exxon Mobil Corp

Alphabet Inc A

Total:

100-75-50-

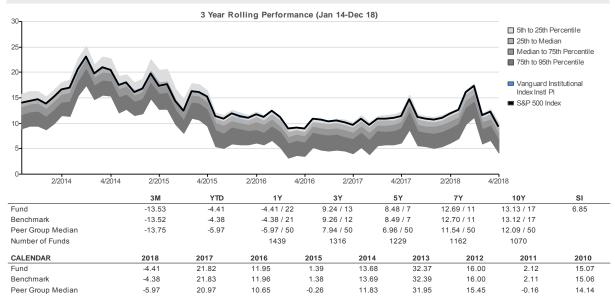


FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)

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

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.02	0.00	-1.16
Beta	1.00	1.00	1.00
R-Squared	100.00	100.00	94.79
Sharpe Ratio	0.77	0.77	0.65
Up Market Capture	99.93	100.00	93.91
Down Market Capture	100.03	100.00	102.09
5 Yr	Fund	Benchmark	Peer Group Median
5 Yr Alpha	Fund -0.01	Benchmark 0.00	
*			Median
Alpha	-0.01	0.00	Median -1.33
Alpha Beta	-0.01 1.00	0.00	Median -1.33 1.00
Alpha Beta R-Squared	-0.01 1.00 100.00	0.00 1.00 100.00	Median -1.33 1.00 95.04

EMPOWER

1.44%

1.44%

1.41%

20.85%

Calvert US Large Cap Core Rspnb Idx R6 CSXRX

12/31/2018

Fund Incep Date: 10/03/2017

Benchmark: S&P 500 Index Category: Large Blend Net Assets: \$1,326.00M Manager Name: Thomas C. Seto Manager Start Date: 12/31/2016

Expense Ratio: 0.19% Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



Sector Breakdown

Visa Inc Class A

Verizon Communications Inc

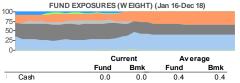
Pfizer Inc

Intel Corp

Total:

Sector Breakdown	
Sensitive	
Communication Services	3.37%
Industrials	11.33%
Technology	25.32%
Energy	0.33%
Cyclical	
Basic Materials	2.42%
Consumer Cyclical	13.54%
Real Estate	0.34%
Financial Services	18.25%
Defensive	
Consumer Defensive	7.53%
Healthcare	15.34%
Utilities	2.23%
TOP 10 HOLDINGS	
Apple Inc	4.46%
Microsoft Corp	3.35%
Alphabet Inc A	3.09%
Amazon.com Inc	2.80%
JPMorgan Chase & Co	1.63%
Bank of America Corporation	1.27%

ASSET LOADINGS (Returns-based)

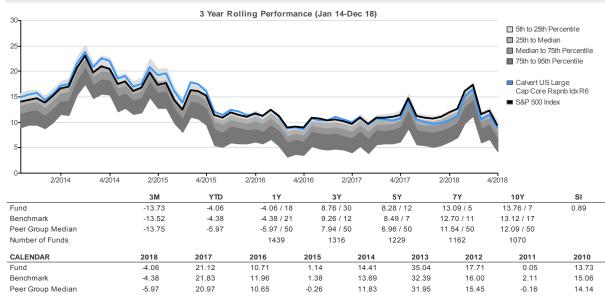


		Current		Av erage	
		Fund	Bmk	Fund	Bmk
Т	Cash	0.0	0.0	0.4	0.4
1	Top Value	40.1	40.4	33.8	39.4
1	Top Growth	24.9	42.1	33.1	42.3
1	Mid Value	0.0	11.4	3.9	10.9
1	Mid Growth	35.0	6.2	24.9	7.1
1	Sm Value	0.0	0.0	1.3	0.0
T.	Sm Growth	0.0	0.0	2.6	0.0

INVESTMENT OVERVIEW

The investment seeks to track the performance of the Calvert U.S. 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

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.74	0.00	-1.16
Beta	1.04	1.00	1.00
R-Squared	98.65	100.00	94.79
Sharpe Ratio	0.70	0.77	0.65
Up Market Capture	99.70	100.00	93.91
Down Market Capture	103.86	100.00	102.09
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.41	0.00	-1.33
Beta	1.03	1.00	1.00
R-Squared	98.07	100.00	95.04
Sharpe Ratio	0.70	0.74	0.60
Up Market Capture	100.25	100.00	94.24
Down Market Capture	102.11	100.00	103.21

EMPOWER

1.26%

1.13%

1.11%

1.09%

21.18%

Fidelity Contrafund Commingled Pool CI 2

12/31/2018

Fund Incep Date: 01/17/2014

Benchmark:

Russell 1000 Growth Index

Category: Large Growth Net Assets: NA Manager Name: William Danoff Manager Start Date: 01/17/2014

Expense Ratio: 0.38%

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

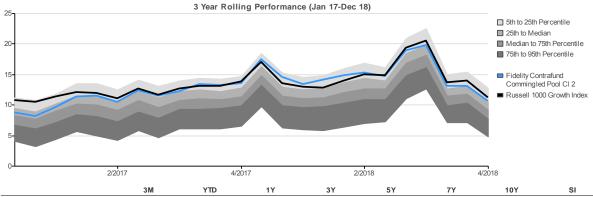
TOP 10 HOLDINGS

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%
Litilities	0.00%

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



	3W	YID	11	3 Y		5 Y	/ Y	10 Y	SI
Fund	-16.30	-1.89	-1.89 / 49	10.56 / 2	23				10.13
Benchmark	-15.89	-1.51	-1.51 / 44	11.15 / 1	7	10.40 / 14	14.14 / 22	15.29 / 18	
Peer Group Median	-15.65	-2.07	-2.07 / 50	9.19 / 50	0	8.55 / 50	13.00 / 50	13.90 / 50	
Number of Funds			1441	1372		1321	1251	1130	
CALENDAR	2018	2017	2016	2015	2014	2013	2012	2011	2010
Fund	-1.89	32.97	3.59	6.27					
Benchmark	-1.51	30.21	7.08	5.67	13.05	33.48	15.26	2.64	16.71
Peer Group Median	-2.07	28.36	3.07	3.88	10.35	34.15	15.23	-1.81	15.61

Total: NA%

ASSET LOADINGS (Returns-based)



U		Cu	rrent	Average		
		Fund	Bmk	Fund	Bmk	
	Cash	0.0	0.1	3.3	0.1	
	Top Value	0.0	0.0	0.0	0.0	
	Top Growth	100.0	76.2	93.2	74.6	
	Mid Value	0.0	0.0	0.0	0.0	
L	Mid Growth	0.0	23.6	1.6	25.3	
L	Sm Value	0.0	0.1	0.0	0.0	
r.	Sm Growth	0.0	0.0	1.8	0.0	

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.56	0.00	-1.63
Beta	1.01	1.00	1.00
R-Squared	94.65	100.00	91.19
Sharpe Ratio	0.77	0.84	0.68
Up Market Capture	97.55	100.00	93.53
Down Market Capture	100.41	100.00	104.66

Down Market Capture	100.41	100.00	104.00
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	NA	0.00	-1.56
Beta	NA	1.00	1.00
R-Squared	NA	100.00	91.15
Sharpe Ratio	NA	0.84	0.68
Up Market Capture	NA	100.00	94.33
Down Market Capture	NA	100.00	104.76

NOTES



BlackRock Mid Cap Equity Index- F

12/31/2018

Fund Incep Date: 06/16/1997

Benchmark :

Russell Mid-Cap Index

Category : Mid-Cap Blend Net Assets:

Manager Name : Amy Whitelaw, Alan Mason Manager Start Date : 06/16/1997 Expense Ratio : 0.04%

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

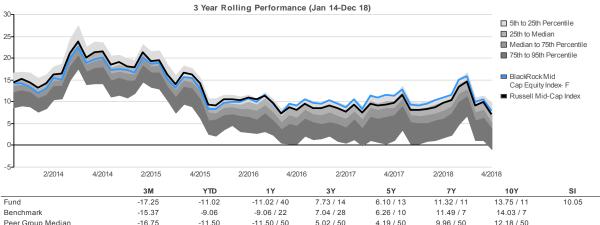
TOP 10 HOLDINGS

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 a particular index (its "Underlying Index"). The Fund is a collective investment trust maintained and managed by BlackRock Institutional Trust Company, N.A.

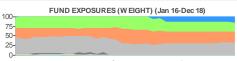
PERFORMANCE



Peer Group Median	-16.75	-11.50	-11.50 / 50	5.02 / 50	0 4	1.19 / 50	9.96 / 50	12.18 / 50	
Number of Funds			472	426		392	365	335	
CALENDAR	2018	2017	2016	2015	2014	2013	2012	2011	2010
Fund	-11.02	16.32	20.79	-2.07	9.84	33.61	17.86	-1.67	26.70
Benchmark	-9.06	18.52	13.80	-2.44	13.22	34.76	17.28	-1.55	25.48
Peer Group Median	-11.50	15.67	14.71	-3.23	9.07	34.20	17.13	-2.67	23.48

Total: NA%

ASSET LOADINGS (Returns-based)



		Cu	rrent	Average		
		Fund	Bmk	Fund	Bmk	
Т	Cash	0.0	0.0	0.4	0.1	
1	Top Value	0.0	0.0	0.2	0.3	
1	Top Growth	0.0	0.8	1.2	0.3	
	Mid Value	31.9	58.0	35.9	54.8	
T.	Mid Growth	28.1	41.1	28.2	44.2	
T.	Sm Value	24.8	0.0	29.1	0.3	
I.	Sm Growth	15.2	0.0	5.1	0.1	

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.25	0.00	-1.61
Beta	1.09	1.00	1.02
R-Squared	95.60	100.00	93.13
Sharpe Ratio	0.55	0.54	0.38
Up Market Capture	108.78	100.00	90.93
Down Market Capture	106.69	100.00	101.79

bown maner oupture	100.00		100.00		101.70
5 Yr	Fund	Benchmark	Peer Group Median		
Alpha	-0.40	0.00	-1.99		
Beta	1.06	1.00	1.03		
R-Squared	95.05	100.00	92.66		
Sharpe Ratio	0.48	0.53	0.34		
Up Market Capture	106.89	100.00	91.79		
Down Market Capture	109.90	100.00	106.82		

NOTES



T. Rowe Price Instl Mid-Cap Equity Gr PMEGX

12/31/2018

Fund Incep Date: 07/31/1996

Benchmark:

Russell Mid-Cap Growth Index

Category: Mid-Cap Growth Net Assets: \$6,354.00M Manager Name: Brian W.H. Berghuis Manager Start Date: 07/31/1996

Expense Ratio: 0.61% Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



Sector Breakdown

ocotor Breakdown	
Sensitive	
Communication Services	0.00%
Industrials	22.64%
Technology	22.78%
Energy	2.75%
Cyclical	
Basic Materials	2.82%
Consumer Cyclical	15.44%
Real Estate	0.99%
Financial Services	8.99%
Defensive	
Consumer Defensive	5.82%
Healthcare	16.82%
Utilities	0.95%
TOP 10 HOLDINGS	
Textron Inc	2.42%
Teleflex Inc	2.36%
The Cooper Companies Inc	2.01%
Tapestry Inc	1.94%
Microchip Technology Inc	1.84%
Keysight Technologies Inc	1.81%
Harris Corp	1.77%

ASSET LOADINGS (Returns-based)

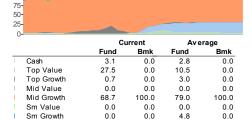
Hologic Inc

Total:

100-

Worldpay Inc Class A

IAC/InterActiveCorp

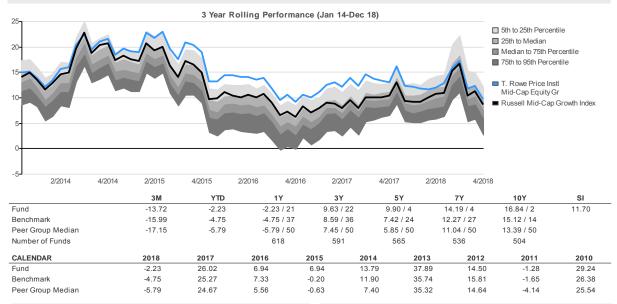


FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)

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

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	1.36	0.00	-1.14
Beta	0.94	1.00	1.02
R-Squared	94.73	100.00	91.92
Sharpe Ratio	0.71	0.62	0.52
Up Market Capture	101.16	100.00	95.85
Down Market Capture	94.40	100.00	101.49
5 Yr	Fund	Benchmark	Peer Group Median
5 Yr Alpha	Fund 2.70	Benchmark 0.00	
			Median
Alpha	2.70	0.00	Median -1.37
Alpha Beta	2.70 0.94	0.00	Median -1.37 1.01
Alpha Beta R-Squared	2.70 0.94 94.35	0.00 1.00 100.00	Median -1.37 1.01 90.39

EMPOWER

1.68%

1.63%

1.61%

19.07%

DFA US Micro Cap I DFSCX

12/31/2018

Fund Incep Date: 12/23/1981

Benchmark:

Russell 2000 Index

0.00%

0.33%

0.33%

0.32%

4.14%

50.1

Category: Small Blend Net Assets: \$5,660.00M Manager Name: Joseph H. Chi

Manager Start Date: 02/28/2012

Expense Ratio: 0.52% Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



Non-US Bonds

Sector Breakdown

Sensitive	
Communication Services	1.57%
Industrials	16.97%
Technology	13.35%
Energy	5.45%
Cyclical	
Basic Materials	6.69%
Consumer Cyclical	16.31%
Real Estate	1.08%
Financial Services	22.34%
Defensive	
Consumer Defensive	4.37%
Healthcare	9.65%
Utilities	2.21%
TOP 10 HOLDINGS	
S+p500 Emini Fut Dec18 Xcme 20181221	0.96%
Sonic Corp	0.40%
Shenandoah Telecommunications Co	0.38%
Integer Holdings Corp	0.36%
BioTelemetry Inc	0.36%
Ensign Group Inc	0.35%
WD-40 Co	0.34%

ASSET LOADINGS (Returns-based)

US Silica Holdings Inc

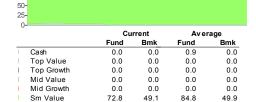
Strategic Education Inc

Sm Growth

Total:

100-75-

American States Water Co



50.9

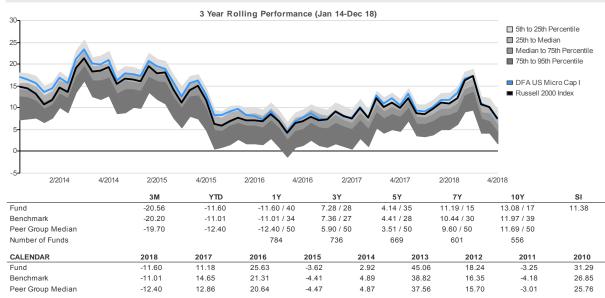
27.2

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)

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

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.01	0.00	-0.95
Beta	0.99	1.00	0.93
R-Squared	95.95	100.00	94.87
Sharpe Ratio	0.45	0.46	0.39
Up Market Capture	96.45	100.00	87.93
Down Market Capture	96.20	100.00	94.45
5 Yr	Fund	Benchmark	Peer Group Median
5 Yr Alpha	Fund -0.16	Benchmark 0.00	
			Median
Alpha	-0.16	0.00	Median -0.55
Alpha Beta	-0.16 0.98	0.00	Median -0.55 0.92
Alpha Beta R-Squared	-0.16 0.98 95.72	0.00 1.00 100.00	Median -0.55 0.92 94.47

BlackRock Russell 2000 Index-T

12/31/2018

Fund Incep Date: 01/02/2001

Benchmark: Russell 2000 Index Category: Small Blend Net Assets:

Manager Name Team Managed

Manager Start Date : 01/02/2001

Expense Ratio: 0.07%

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

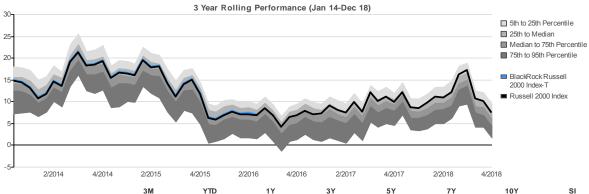
TOP 10 HOLDINGS

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 Russell 2000 Index.

PERFORMANCE



	3M	YTD	1Y	3Y		5Y	7Y	10Y	SI
Fund	-20.19	-10.89	-10.89 / 32						6.92
Benchmark	-20.20	-11.01	-11.01 / 34	7.36 / 27		4.41 / 28	10.44 / 30	11.97 / 39	
Peer Group Median	-19.70	-12.40	-12.40 / 50	5.90 / 50		3.51 / 50	9.60 / 50	11.69 / 50	
Number of Funds			784	736		669	601	556	
CALENDAR	2018	2017	2016	2015	2014	2013	2012	2011	2010
Fund	-10.89	14.88		-4.21	5.09	39.10	16.54	-4.16	26.83
Benchmark	-11.01	14.65	21.31	-4.41	4.89	38.82	16.35	-4.18	26.85

Peer Group Median -12.40 12.86 20.64 -4.47 4.87 37.56 15.70 -3.01 25.76

Total: NA%

ASSET LOADINGS (Returns-based)

FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18) 100-75-50-25-

		Current		Avei	rage
		Fund	Bmk	Fund	Bmk
T	Cash	0.0	0.0	0.0	0.0
-1	Top Value	0.0	0.0	0.0	0.0
- 1	Top Growth	0.0	0.0	0.0	0.0
- 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	48.7	49.1	49.8	49.9
- 1	Sm Growth	51.3	50.9	50.2	50.1

RISK & PERFORMANCE STATISTICS

Peer Group 3 Yr Fund Benchmark Median 0.00 -0.95 Alpha NA Beta NA 1.00 0.93 100.00 94.87 R-Squared NA Sharpe Ratio NA 0.46 0.39 87.93 Up Market Capture NA 100.00

Down Market Capture	NA	100.00	94.45
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	NA	0.00	-0.55
Beta	NA	1.00	0.92
R-Squared	NA	100.00	94.47
Sharpe Ratio	NA	0.32	0.27
Up Market Capture	NA	100.00	86.70
Down Market Capture	NA	100.00	92.54

NOTES



BlackRock EAFE Equity Index-T

12/31/2018

Fund Incep Date: 06/30/1999

Benchmark : MSCI EAFE Category : Foreign Large Blend Net Assets:

Manager Name Team Managed Manager Start Date : 06/30/1999

Expense Ratio : 0.08%

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

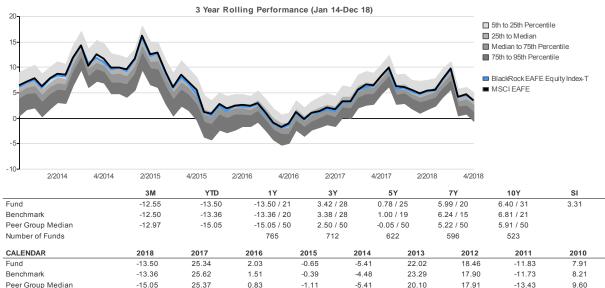
TOP 10 HOLDINGS

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



NOTES

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	0.11	0.00	-0.73
Beta	0.96	1.00	0.96
R-Squared	98.15	100.00	92.09
Sharpe Ratio	0.27	0.26	0.19
Up Market Capture	96.47	100.00	91.41
Down Market Capture	95.99	100.00	96.71

bown maner ouptare	00.00	100.00	30.71
5 Yr	Fund	Benchmark	Peer Group Median
Alpha	-0.22	0.00	-1.01
Beta	0.97	1.00	0.95
R-Squared	98.40	100.00	91.52
Sharpe Ratio	0.07	0.09	0.00
Up Market Capture	96.43	100.00	89.04
Down Market Capture	98.06	100.00	96.00

Total: NA%

ASSET LOADINGS (Returns-based)

100-	FUND EXPOSURES (W EIGHT) (Jan 16-Dec 18)
75- 50-	
25-	
0-	

		Cu	rrent	Avei	rage
		Fund	Bmk	Fund	Bmk
T	Cash	3.7	3.1	5.3	2.2
-1	Europe Lg	63.3	57.8	61.6	58.5
- 1	Europe Sm	3.0	5.4	3.5	3.9
	AsiaPac Lg	22.5	31.4	25.0	34.0
- 1	AsiaPac Sm	6.7	0.8	3.4	0.6
- 1	Emg Europe	8.0	1.6	0.4	0.9
- 1	Emg Asia	0.0	0.0	0.9	0.0

American Funds Europacific Growth R6 RERGX

0.00%

12/31/2018

Fund Incep Date: 05/01/2009

Benchmark:

MSCI ACWI ex USA GDP NR USD

Category: Foreign Large Growth

Net Assets: \$138,711.00M Manager Name: Mark E. Denning Manager Start Date: 12/31/1991

Expense Ratio: 0.49% Expense Rank:

PORTFOLIO COMPOSITION (Holdings-based)



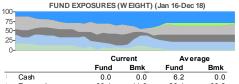
Non-US Bonds

Sector Breakdown

Occioi Bicardowii	
Sensitive	
Communication Services	2.87%
Industrials	11.07%
Technology	20.14%
Energy	6.67%
Cyclical	
Basic Materials	8.73%
Consumer Cyclical	12.97%
Real Estate	0.99%
Financial Services	18.28%
Defensive	
Consumer Defensive	7.46%
Healthcare	8.11%
Utilities	2.70%

TOP 10 HOLDINGS	
AIA Group Ltd	2.70%
Airbus SE	2.49%
Nintendo Co Ltd	2.35%
Samsung Electronics Co Ltd	2.34%
Reliance Industries Ltd	2.32%
HDFC Bank Ltd	1.95%
Alibaba Group Holding Ltd ADR	1.81%
Sony Corp	1.66%
ASML Holding NV	1.59%
Taiwan Semiconductor Manufacturing Co Ltd	1.58%
Total:	20.79%

ASSET LOADINGS (Returns-based)

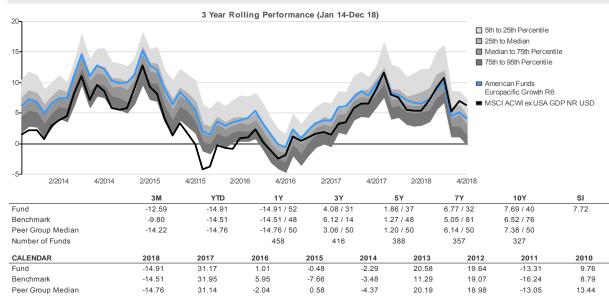


Europe Lg 20.4 41.6 20.4 28.2 Europe Sm 19.5 0.0 18.6 1.3 AsiaPac Lg 24.2 6.2 22.4 16.0 AsiaPac Sm 0.0 0.0 0.0 0.0 Emg Europe 6.1 15.3 2.1 16.7 29.9 Emg Asia 36.9 30.2 37.9

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

RISK & PERFORMANCE STATISTICS

3 Yr	Fund	Benchmark	Peer Group Median
Alpha	-1.28	0.00	-1.93
Beta	0.86	1.00	0.83
R-Squared	89.22	100.00	76.60
Sharpe Ratio	0.31	0.44	0.23
Up Market Capture	83.52	100.00	75.91
Down Market Capture	92.47	100.00	91.20
5 Yr	Fund	Benchmark	Peer Group Median
5 Yr Alpha	Fund 0.66	Benchmark 0.00	
			Median
Alpha	0.66	0.00	Median 0.07
Alpha Beta	0.66	0.00	Median 0.07 0.79
Alpha Beta R-Squared	0.66 0.80 86.18	0.00 1.00 100.00	Median 0.07 0.79 76.26



Capital Markets Overview

Fourth Quarter 2018

Circulation, disclosure, or dissemination of all or any part of this material to any unauthorized persons is prohibited. This material is being offered as informational and educational material provided to a Plan Sponsor or a Representative, duly authorized and acting on behalf of a Plan Sponsor, to assist the Plan Sponsor in understanding the general investment environment. This document is not intended as a recommendation, solicitation or offering of any particular securities.

The purpose of this document is to provide investment-related information only for the benefit of the Plan Sponsor in its role as a fiduciary to the plan, not as investment advice for plans or plan participants.

Although we believe the data contained in this report is generally from reliable sources, we cannot guarantee its completeness or accuracy. Economic data and information are derived from a variety of financial publications and economic reporting companies. All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed.

Plan fiduciaries should review the educational material provided and consult with their investment advisers if necessary to make investment decisions as the information provided herein is not legal, ERISA, or tax advice. Any discussion of these matters included or related to this document or other educational information is provided for informational purposes only. Such discussion does not purport to be complete or to cover every situation. Current tax and ERISA law are subject to interpretation and legislative change. The appropriateness of any product for any specific taxpayer may vary depending on the particular set of facts and circumstances. You should consult with and rely on your own legal and tax advisers.

Macroeconomic Summary

U.S. Economy

- U.S. economic growth decreased in the third quarter of 2018
 - The final estimate of GDP growth came in at an annualized rate of 3.4%. This reflects an decrease from 4.2% in the second quarter
- Q4 job creation remained strong, adding 274,000, 176,000 and 312,000 in October, November and December, respectively
 - The unemployment rate increased to 3.9% overall at year-end and number of unemployed ended at 6.3 million
 - Compared to year end 2017, both the unemployment rate and number of unemployed decreased by 0.2% and 300,000, respectively
- The Q4 2018 Housing Affordability Index reached its lowest (least affordable) reading since Q3 2008
 - The Index reading dropped to 91, from 94 the previous quarter and 106 a year ago, meaning residential housing is at a 10 year low for affordability
- In December, the Fed approved another quarter-point hike, moving the Fed Funds rate to 2.50%
 - This is the fourth and final rate hike of 2018, with two more projected in 2019

Global Economy

- In the U.K. and Europe Brexit remains the focus, with divisions between Theresa May and Conservative party members over the current proposed Brexit agreement
 - The next major milestone is on January 21, 2019, when the British Government must make a statement within five days on what the U.K plans to do
- Global political uncertainty remains over the medium-term
 - Despite an agreed 90 day suspension of tariffs between China and the US, a long-term solution is still unclear
 - In December, Italy agreed a compromise with the EU over the country's budget deficit to avoid a disciplinary procedure for now
- A sharp fall in oil prices in the fourth quarter significantly impacted multiple emerging market countries
 - · For net importers of oil such as Turkey, India and Indonesia this was a significant tailwind in the fourth quarter
 - For producers such as Colombia and Russia this was a significant headwind in the fourth quarter



Market Summary

U.S. Markets

- The S&P 500 Index closed the quarter with a loss of 13.5%, ending 2018 with a calendar year return of -4.4%
 - As of December 31, 2018, three- and five-year annualized trailing returns for the S&P 500 Index were 9.3% and 8.5%, respectively
- Utilities posted the only positive performance across all sectors for the quarter, returning 1.4%
- Energy was the worst performing sector for the quarter, returning -23.8%
- Large cap stocks outperformed small and mid-caps in Q4
 - Stylistically, large value stocks had the strongest performance, returning -11.7% in Q4, 2018
 - —The Bloomberg Barclays U.S. Aggregate Bond Index posted a quarterly return of 1.6% in Q4
 - Fixed income continues to face the headwind of rising interest rates, but significantly outperformed domestic equities in Q4

Global Markets

- Emerging Market equities outperformed both domestic and developed international equities
 - The MSCI EAFE Index realized a total return of -12.5% for the quarter, trailing the S&P 500 index by 1%
 - The MSCI Emerging Markets Index realized a total return of -7.5% for the quarter, beating the S&P 500 index by 6%
- Overall, through the medium and long-term, international equities continue to lag behind domestic equities
- US debt outperformed Emerging Markets debt in Q4
 - The Bloomberg Barclays US Agg beat the JPM EMBI Global Diversified Index by 2.9%, returning 1.6% for the guarter

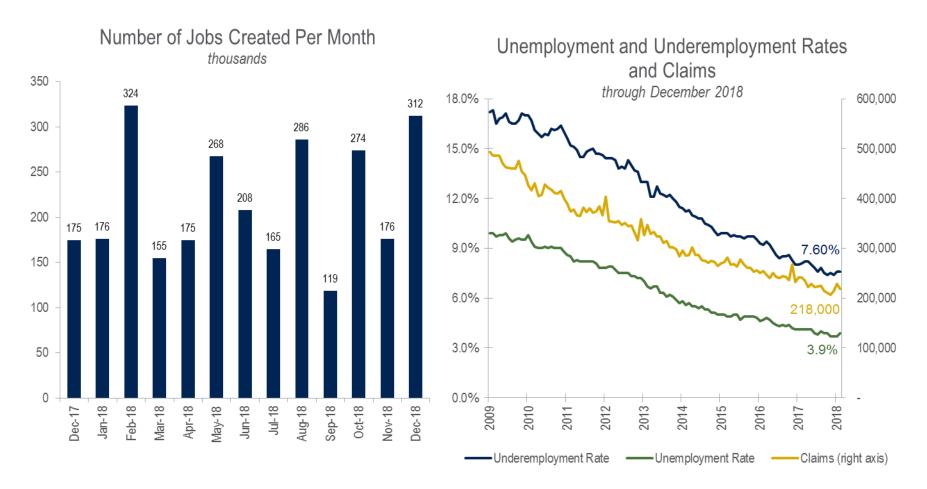
State of the U.S. Economy



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



U.S. Labor Market Trends



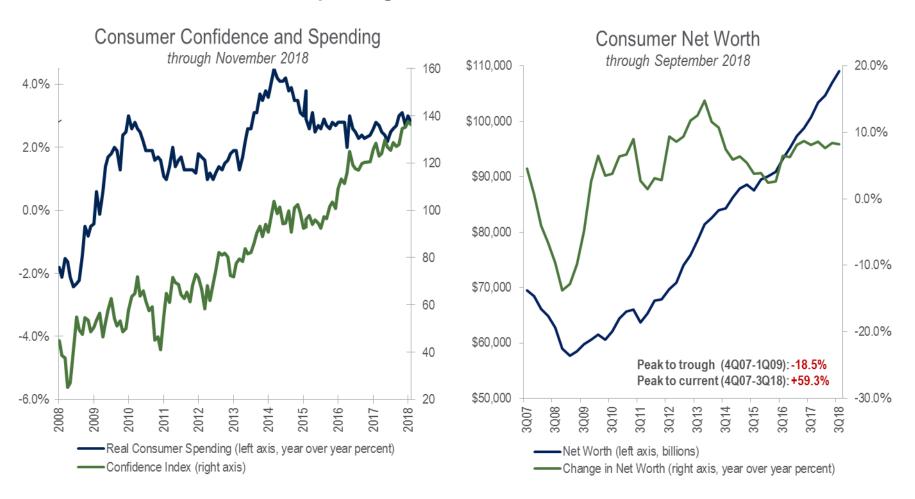
Source: Bloomberg; Bureau of Labor Statistics; GWCM Analysis

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

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

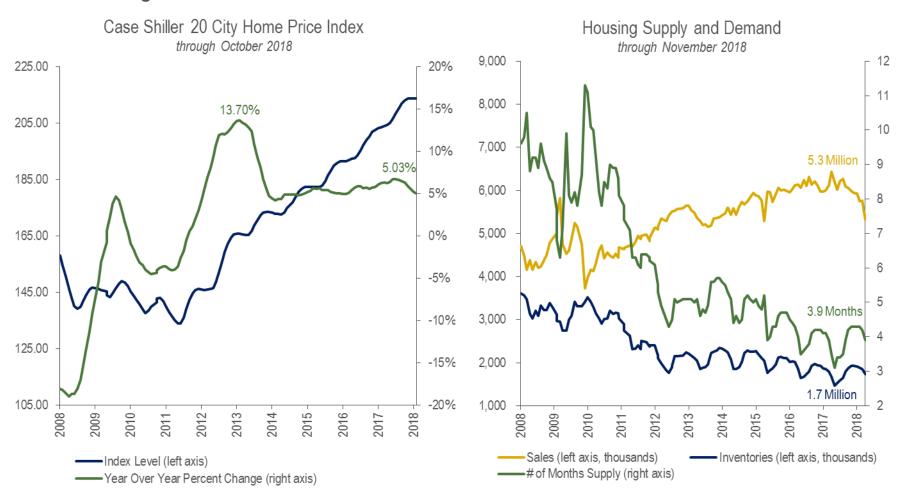


U.S. Consumer Confidence, Spending and Net Worth



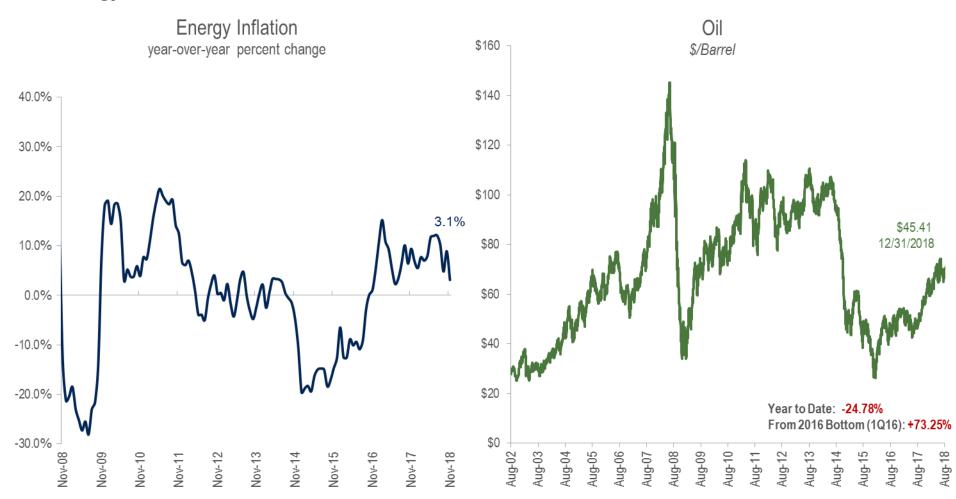
Source: Bloomberg; Federal Reserve; GWCM Analysis

U.S Housing Market Trends



Source: Bloomberg; GWCM Analysis

Energy Inflation and Oil



Source: Bloomberg; GWCM Analysis
Oil prices shown for West Texas Intermediate (WTI) Crude



Historical, Current and Forward Rates

U.S. Yield Curve red represents projected change from current to two years forward 3.5% +50 bps +7 bps +15bps 3.09% 3.00% +12 bps 3.0% 2.84% +0 bps +6 bps 2.63% 2.52% 2.49% 2.69% 2.5% 2.51% 2.50% 2.49% 2.46% 2.0% 1.5% 1.0% 0.5% 0.0% Fed Funds 3 Yr 2 Yr 5 Yr 10 Yr 30 Yr

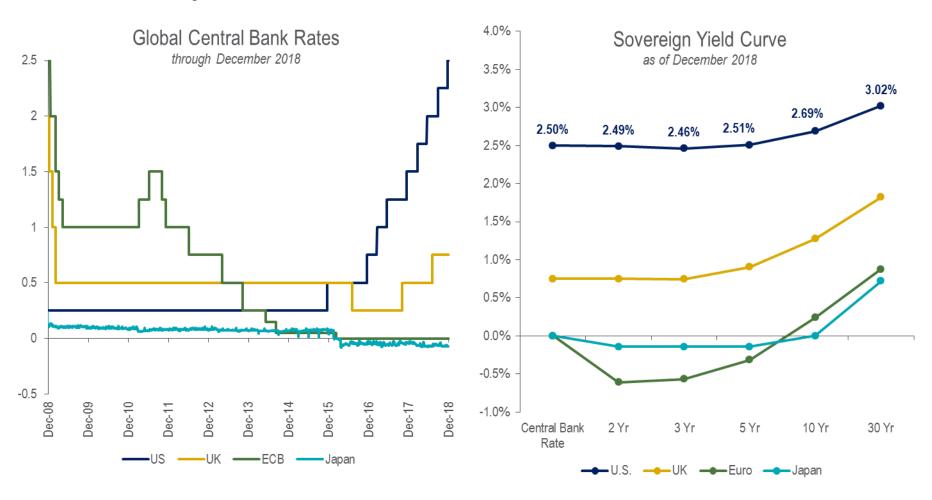
12/31/2018

----2 Yr Fwd

- 12/31/2017

Source: Bloomberg; GWCM Analysis

Global Monetary Policies and Interest Rates



Source: Bloomberg; GWCM Analysis

The S&P 500 index generated a -13.52% return during the fourth quarter

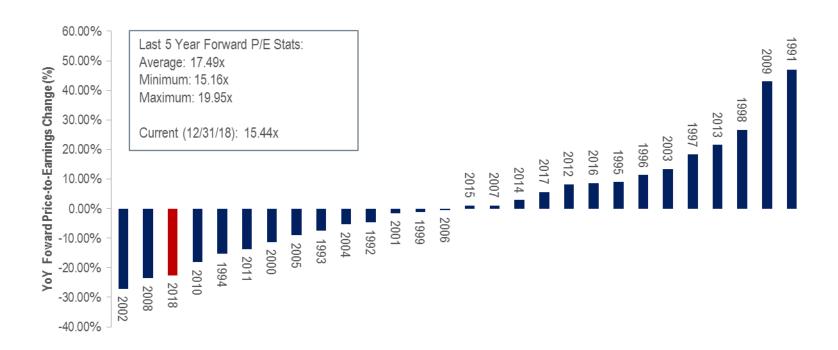
S&P 500 Index



Source: Morningstar Direct; GWCM Analysis

Are equities trading at a discount or have we seen a structural shift in valuations?

- The current market price-to-earnings multiple (measured by the S&P 500) is near five-year lows due to the market decline, despite strong earnings growth in 2018
 - 2018 was a challenging year for domestic equity markets with an abundance of uncertainty and negative news
 - . This has served to lower expectations and has been seemingly priced into the markets, which may allow for positive surprises going forward
 - Alternatively, the current multiple may be indicative of a structural shift in equity valuations as investor sentiment on future earnings continues to wane





Equity Market Returns

(as of	December, 31 2018)	QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2017	2016	2015	2014	2013	2012	2011
Don	nestic Equity													
ap	S&P 500	-13.5%	-4.4%	-4.4%	9.3%	8.5%	13.1%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%
Large Cap	Russell 1000 Value	-11.7%	-8.3%	-8.3%	7.0%	5.9%	11.2%	13.7%	17.3%	-3.8%	13.5%	32.5%	17.5%	0.4%
Lar	Russell 1000 Growth	-15.9%	-1.5%	-1.5%	11.1%	10.4%	15.3%	30.2%	7.1%	5.7%	13.0%	33.5%	15.3%	2.6%
d _E	Russell Mid Cap	-15.4%	-9.1%	-9.1%	7.0%	6.3%	14.0%	18.5%	13.8%	-2.4%	13.2%	34.8%	17.3%	-1.5%
Mid Cap	Russell Mid Cap Value	-15.0%	-12.3%	-12.3%	6.1%	5.4%	13.0%	13.3%	20.0%	-4.8%	14.7%	33.5%	18.5%	-1.4%
	Russell Mid Cap Growth	-16.0%	-4.8%	-4.8%	8.6%	7.4%	15.1%	25.3%	7.3%	-0.2%	11.9%	35.7%	15.8%	-1.7%
Small Cap	Russell 2000	-20.2%	-11.0%	-11.0%	7.4%	4.4%	12.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%	-4.2%
all C	Russell 2000 Value	-18.7%	-12.9%	-12.9%	7.4%	3.6%	10.4%	7.8%	31.7%	-7.5%	4.2%	34.5%	18.1%	-5.5%
Sm	Russell 2000 Growth	-21.7%	-9.3%	-9.3%	7.2%	5.1%	13.5%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%	-2.9%
Inte	rnational Equity													
	MSCI EAFE	-12.5%	-13.8%	-13.8%	2.9%	0.5%	6.3%	25.0%	1.0%	-0.8%	-4.9%	22.8%	17.3%	-12.1%
ι	Australia	-10.0%	-12.0%	-12.0%	5.6%	0.5%	8.9%	19.9%	11.4%	-10.0%	-3.4%	4.2%	22.1%	-11.0%
arke	Canada	-15.3%	-17.2%	-17.2%	6.2%	-1.6%	5.7%	16.1%	24.6%	-24.2%	1.5%	5.6%	9.1%	-12.7%
d Ma	France	-15.0%	-12.8%	-12.8%	5.6%	1.2%	5.5%	28.7%	4.9%	-0.1%	-9.9%	26.3%	21.3%	-16.9%
Developed Markets	Germany	-15.5%	-22.2%	-22.2%	0.7%	-2.1%	5.6%	27.7%	2.8%	-1.9%	-10.4%	31.4%	30.9%	-18.1%
evel	Japan	-14.2%	-12.9%	-12.9%	3.4%	3.1%	5.3%	24.0%	2.4%	9.6%	-4.0%	27.2%	8.2%	-14.3%
	Switzerland	-8.9%	-9.1%	-9.1%	1.9%	1.2%	7.8%	22.5%	-4.9%	0.4%	-0.1%	26.6%	20.4%	-6.8%
	UK	-11.8%	-14.2%	-14.2%	1.6%	-1.7%	6.8%	22.3%	-0.1%	-7.6%	-5.4%	20.7%	15.3%	-2.6%
	MSCI Emerging Markets	-7.5%	-14.6%	-14.6%	9.2%	1.6%	8.0%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%	-18.4%
S	Brazil	13.4%	-0.5%	-0.5%	27.1%	0.7%	5.1%	24.1%	66.2%	-41.4%	-14.0%	-16.0%	0.0%	-21.8%
rket	China	-10.7%	-18.9%	-18.9%	8.0%	4.6%	8.3%	54.1%	0.9%	-7.8%	8.0%	3.6%	22.7%	-18.4%
Ma	India	2.5%	-7.3%	-7.3%	8.2%	8.1%	10.7%	38.8%	-1.4%	-6.1%	23.9%	-3.8%	26.0%	-37.2%
Emerging Markets	Indonesia	9.7%	-9.2%	-9.2%	9.7%	6.1%	13.2%	24.2%	17.0%	-19.5%	26.6%	-23.5%	4.6%	6.0%
mer	Korea	-13.1%	-20.9%	-20.9%	8.2%	1.0%	9.7%	47.3%	8.7%	-6.7%	-11.1%	3.9%	21.2%	-12.0%
Ш	Mexico	-18.8%	-15.5%	-15.5%	-3.8%	-7.1%	4.6%	16.0%	-9.2%	-14.4%	-9.3%	0.2%	29.1%	-12.1%
	Russia	-9.0%	-0.7%	-0.7%	17.4%	-2.0%	7.3%	5.2%	54.8%	4.2%	-46.3%	0.8%	13.7%	-19.6%

Source: Morningstar Direct; GWCM Analysis

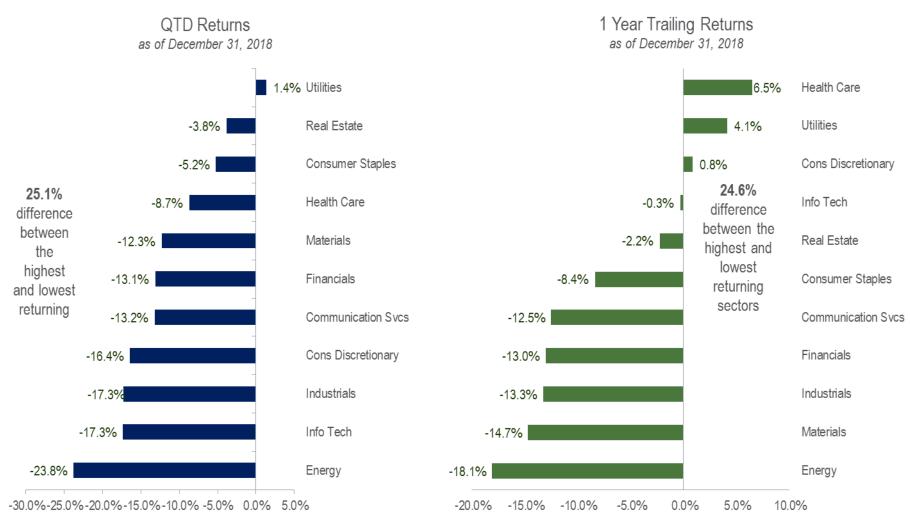
Individual country returns are represented by MSCI indices and shown as USD returns

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



^{*}Canada is not part of the EAFE Index

S&P 500 Sector Returns



Source: Morningstar Direct; GWCM Analysis

Returns by Style

		3 Months				1 Year		Since Market Peak (October, 2				
	Value	Blend	Growth		Value	Blend	Growth		Value	Blend	Growth	
Large	-11.7%	-13.5%	-15.9%	Large	-8.3%	-4.4%	-1.5%	Large	67.2%	103.7%	146.8%	
Mid	-15.0%	-15.4%	-16.0%	Mid	-12.3%	-9.1%	-4.8%	Mid	91.4%	103.5%	116.7%	
Small	-18.7%	-20.2%	-21.7%	Small	-12.9%	-11.0%	-9.3%	Small	69.6%	86.4%	102.7%	
		3 Year				5 Year			Since Mar	ket Low (Ma	rch, 2009)	
	Value	Blend	Growth		Value	Blend	Growth		Value	Blend	Growth	
Large	7.0%	9.3%	11.2%	Large	6.0%	8.5%	10.4%	Large	317.0%	355.2%	403.3%	
Mid	6.1%	7.0%	8.6%	Mid	5.4%	6.3%	7.4%	Mid	388.6%	391.0%	401.0%	
Small	7.4%	7.4%	7.2%	Small	3.6%	4.4%	5.1%	Small	319.5%	349.4%	378.4%	

performance as of 12/31/2018

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 December 31, 2018)		YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2017	2016	2015	2014	2013	2012	2011
Fixed Income													
Bloomberg Barclays US Aggregate	1.6%	0.0%	0.0%	2.1%	2.5%	3.5%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%
Bloomberg Barclays US Treasury	2.6%	0.9%	0.9%	1.4%	2.0%	2.1%	2.3%	1.0%	0.8%	5.1%	-2.7%	2.0%	9.8%
Bloomberg Barclays US Govt/Credit Intermediate	1.7%	0.9%	0.9%	1.7%	1.9%	2.9%	2.1%	2.1%	1.1%	3.1%	-0.9%	3.9%	5.8%
Bloomberg Barclays US Govt/Credit Long	0.8%	-4.7%	-4.7%	4.0%	5.4%	5.9%	10.7%	6.7%	-3.3%	19.3%	-8.8%	8.8%	22.5%
Bloomberg Barclays US TIPS	-0.4%	-1.3%	-1.3%	2.1%	1.7%	3.6%	3.0%	4.7%	-1.4%	3.6%	-8.6%	7.0%	13.6%
Bloomberg Barclays US Corporate High Yield	-4.5%	-2.1%	-2.1%	7.2%	3.8%	11.1%	7.5%	17.1%	-4.5%	2.5%	7.4%	15.8%	5.0%
Citi WGBI	1.8%	-0.8%	-0.8%	2.7%	0.8%	1.5%	7.5%	1.6%	-3.6%	-0.5%	-4.0%	1.6%	6.4%
JPM EMBI Global Diversified	-1.3%	-4.3%	-4.3%	5.2%	4.8%	8.2%	10.3%	10.2%	1.2%	7.4%	-5.3%	17.4%	7.3%
Citi Treasury Bill 3 Month	0.6%	1.9%	1.9%	1.0%	0.6%	0.4%	0.8%	0.3%	0.0%	0.0%	0.1%	0.1%	0.1%
Specialty													
Bloomberg Commodity	-9.4%	-11.2%	-11.2%	0.3%	-8.8%	-3.8%	1.7%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%
DJ US Select REIT	-6.6%	-4.2%	-4.2%	2.0%	7.9%	12.0%	3.8%	6.7%	4.5%	32.0%	1.2%	17.1%	9.4%
FTSE EPRA/NAREIT Developed Ex US	-4.9%	-5.8%	-5.8%	5.1%	3.0%	9.2%	20.8%	2.0%	-3.2%	3.2%	6.1%	38.6%	-15.3%

Source: Morningstar Direct; GWCM Analysis

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



Calendar Year Returns by Asset Class

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Cumulative Return*
Agg Bond	Emrg Mkt	Sm Growth	Agg Bond	Mid Value	Sm Growth	Mid Value	Lg Growth	Sm Value	Emrg Mkt	Agg Bond	Lg Growth
5.2	78.5	29.1	7.8	18.5	43.3	14.7	5.7	31.7	37.3	0.01	155.37
Balanced	Mid Growth	Mid Growth	Balanced	Emrg Mkt	Mid Growth	Lg Value	Balanced	Mid Value	Lg Growth	Lg Growth	Mid Growth
-22.1	46.3	26.4	4.7	18.2	35.7	13.5	1.3	20.0	30.2	-1.51	127.60
Sm Value	Lg Growth	Mid Value	Lg Growth	Sm Value	Sm Value	Lg Growth	Agg Bond	Lg Value	Mid Growth	Balanced	Sm Growth
-28.9	37.2	24.8	2.6	18.1	34.5	13.0	0.5	17.3	25.3	-2.35	118.47
Lg Value	Sm Growth	Sm Value	Lg Value	Lg Value	Lg Growth	Mid Growth	Mid Growth	Sm Growth	International 25.0	Mid Growth	Mid Value
-36.8	34.5	24.5	0.4	17.5	33.5	11.9	-0.2	11.3		-4.75	109.52
Lg Growth -38.4	Mid Value 34.2	Emrg Mkt 18.9	Mid Value -1.4	International 17.3	Mid Value 33.5	Balanced 10.6	International -0.8	Emrg Mkt 11.2	Sm Growth 22.2	Lg Value -8.27	Balanced 91.81
Mid Value	International 31.8	Lg Growth	Mid Growth	Mid Growth	Lg Value	Agg Bond	Sm Growth	Balanced	Balanced	Sm Growth	Sm Value
-38.4		16.7	-1.7	15.8	32.5	6.0	-1.4	8.3	14.2	-9.31	91.15
Sm Growth	Sm Value	Lg Value	Sm Growth	Lg Growth	International 22.8	Sm Growth	Lg Value	Mid Growth	Lg Value	Mid Value	Lg Value
-38.5	20.6	15.5	-2.9	15.3		5.6	-3.8	7.3	13.7	-12.29	82.21
International -43.4	Lg Value	Balanced	Sm Value	Sm Growth	Balanced	Sm Value	Mid Value	Lg Growth	Mid Value	Sm Value	Agg Bond
	19.7	12.1	-5.5	14.6	17.6	4.2	-4.8	7.1	13.3	-12.86	48.12
Mid Growth	Balanced	International 7.8	International	Balanced	Agg Bond	Emrg Mkt	Sm Value	Agg Bond	Sm Value	International	International
-44.3	18.4		-12.1	11.3	-2.0	-2.2	-7.5	2.6	7.8	-13.79	4.48
Emrg Mkt	Agg Bond	Agg Bond	Emrg Mkt	Agg Bond	Emrg Mkt	International	Emrg Mkt	International	Agg Bond	Emrg Mkt	Emrg Mkt
-53.3	5.9	6.5	-18.4	4.2	-2.6	-4.9	-14.9	1.0	3.5	-14.58	0.94

*Cumulative return is for the time period 1/1/2008-12/31/2018

Source: Morningstar Direct; GWCM Analysis; Lg Growth – Russell 1000 Growth Index, Lg Value – Russell 1000 Value Index, Mid Growth – Russell Mid Cap Growth Index, Mid Value – Russell Mid Cap Value Index, Sm Growth – Russell 2000 Growth Index, Sm Value – Russell 2000 Value Index, International – MSCI EAFE NR Index, Emrg Mkt – MSCI EM NR Index, Agg Bond – Bloomberg Barclays US Aggregate Bond Index.

1000 Value Index, Mid Growth – Russell 2000 Growth Index, Mid Value – Russell 2000 Value Index, International – MSCI EAFE NR Index, Emrg Mkt – MSCI EM NR Index, Agg Bond – Bloomberg Barclays US Aggregate Bond Index.



Disclosures and Benchmark Definitions

The opinions expressed herein are subject to change. The opinions are not investment advice, and should not be relied on as such. The information presented in this report was developed internally and/or obtained from sources believed to be reliable; however, GWFS Equities, Inc., and its parent company, Great-West Life & Annuity Insurance Company (GWL&A), do not guarantee the accuracy, adequacy, or completeness of such information. Predictions, opinions, and other information contained in this report are subject to change continually and without notice of any kind and may no longer be true after the date indicated.

Any forward-looking statements speak only as of the date they are made. GWFS Equities, Inc. assumes no duty to and does not undertake to update forward-looking statements. Forward looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Actual results could differ materially from those anticipated in forward-looking statements. No forecast is guaranteed.

Past performance, where discussed in this material, is not a quarantee of future results. As with any investment, there is a potential for profit as well as the possibility of loss.

MSCI EAFE® Index is a registered trademark of Morgan Stanley Capital International. Inc. and is an unmanaged index considered indicative of the International equity market. S&P 500® Index is an unmanaged index considered indicative of the domestic Large-Cap equity market. S&P MidCap 400® Index is an unmanaged index considered indicative of the domestic Mid-Cap equity market. S&P Small Cap 600® Index is an unmanaged index considered indicative of the domestic Small-Cap equity market. S&P 500® Index, S&P MidCap 400® Index, and S&P Small Cap 600® Index are registered trademarks of Standard & Poor's Financial Services LLC and have been licensed for use by Great-West Life & Annuity Insurance Company.

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 MSCI Emerging Markets Index represents the performance of stocks in 26 emerging market countries in Europe, Latin America and the Pacific Basin.

The Bloomberg Barclays Capital US Aggregate Bond Index includes fixed rate debt issues rated investment grade or higher by Moody's Investors Service, Standard and Poor's, or Fitch Investor's Service, in that order. All issues must have at least 1 year left to maturity and have an outstanding par value of at least \$100 million. The Aggregate Index is comprised of the Government/Corporate, the Mortgage-Backed Securities, and the Asset-Backed Securities indices.

The Standard & Poor's 500 is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market. Standard and Poor's chooses the member companies for the 500 based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid-1989, this composition has been more flexible and the number of issues in each sector has varied. The returns presented for the S&P 500 are total returns, including the reinvestment of dividends each month.

The Russell 1000 Value - Market capitalization-weighted index of those firms in the Russell 1000 with lower price-to-book ratios and lower forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable U.S. equity market.

The Russell 1000 Growth - Market capitalization-weighted index of those firms in the Russell 1000 with higher price-to-book ratios and higher forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable U.S. equity market.

Disclosures and Benchmark Definitions

The Russell 2000 - Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization. Returns include reinvestment of dividends.

The Russell 2000 Value - Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having lower price-to-book ratios and lower forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations.

The Russell 2000 Growth - Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having higher price-to-book ratios and higher forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations.

The Russell Mid-Cap - Measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 24% of the total market capitalization of the Russell 1000 Index.

The Russell Mid-Cap Value - Market-weighted total return index that measures the performance of companies within the Russell Mid-Cap Index having lower price-to-book ratios and lower forecasted growth values. The Russell Mid-Cap Index includes firms 201 through 1000, based on market capitalization, from the Russell 3000 Index.

The Russell Mid-Cap Growth - Market-weighted total return index that measures the performance of companies within the Russell Mid-Cap Index having higher price-to-book ratios and higher forecasted growth values. The Russell Mid-Cap Index includes firms 201 through 1000, based on market capitalization, from the Russell 3000 Index.

The Bloomberg Barclays U.S. Treasury Index includes public obligations of the U.S. Treasury with a remaining maturity of one year or more.

The Bloomberg Barclays US Corporate High Yield Index measures the US corporate market of non-investment grade, fixed-rate corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below.

The Bloomberg Commodity Index measures price movements of the commodities included in the appropriate sub index. It does not account for effects of rolling futures contracts or costs associated with holding the physical commodity.

The Bloomberg Barclays US Government/Credit Intermediate Index measures the performance of U.S. Dollar denominated U.S. Treasuries, government-related and investment grade U.S. corporate securities that have a remaining maturity of greater than one year and less than ten years.

Disclosures and Benchmark Definitions

The Bloomberg Barclays US Government/Credit Long Index includes publicly issued U.S. Treasury debt, U.S. government agency debt, taxable debt issued by U.S. states and territories and their political subdivisions, debt issued by U.S. and non-U.S. 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.

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

Great-West Financial®, Empower Retirement and Great-West Investments™ are the marketing names of Great-West Life & Annuity Insurance Company, Corporate Headquarters: Greenwood Village, CO; Great-West Life & Annuity Insurance Company of New York, Home Office: New York, NY, and their subsidiaries and affiliates, including registered investment advisers Advised Assets Group, LLC and Great-West Capital Management, LLC.

Securities offered or distributed through GWFS Equities, Inc., Member FINRA/SIPC and a subsidiary of Great-West Life & Annuity Insurance Company.

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

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

This material has been prepared for informational and educational purposes only. It is not intended to provide, and should not be relied upon for, investment, accounting, legal or tax advice.

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

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

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

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

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

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

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

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

Copyright ©2018 Citigroup Index LLC ("Citi Index"). All rights reserved. "Citigroup" is a registered trademark and service mark of Citigroup Inc. or its affiliates, is used and registered throughout the world. Citi Index data and information is the property of Citi Index or its licensors, and reproduction in any form is prohibited except with the prior written permission of Citi Index. Because of the possibility of human or mechanical error, Citi Index does not guarantee the accuracy, adequacy, imeliness, completeness or availability of any data and information and is not responsible for any error omissions or for the results obtained from the use of such data and information. CITI INDEX GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall Citi Index be liable for damages of any kind in connection with any use of the Citi Index data and information.

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

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

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

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

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.

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

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

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

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

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

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

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

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

