

State of Wisconsin Deferred Compensation Plan

Investment Performance and Expense Ratio Review

Performance as of June 30, 2023

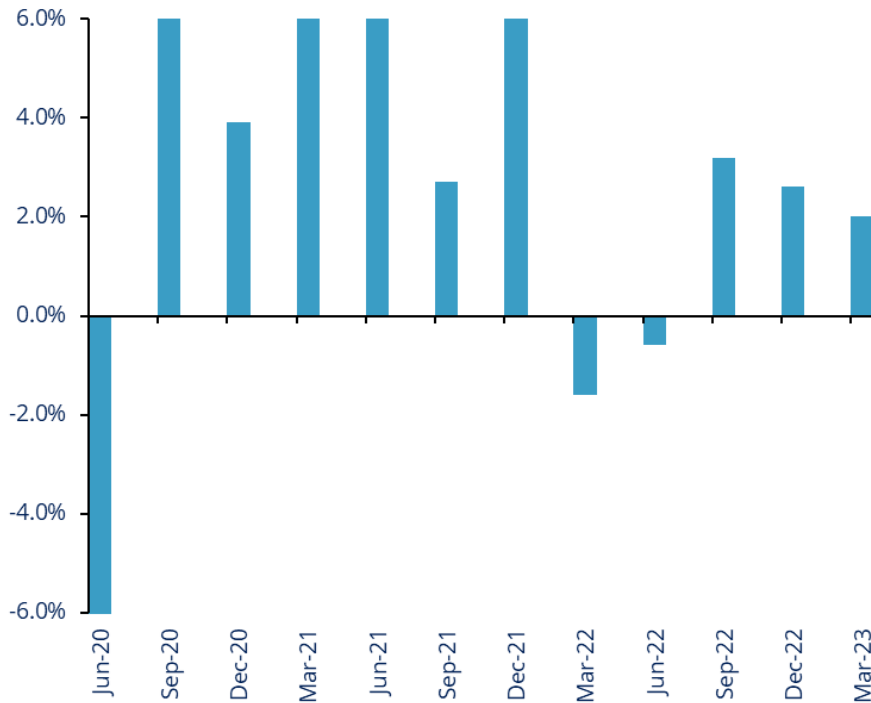
Bill Thornton, CIMA®
Investment Director, Empower Investments



State of the U.S. Economy

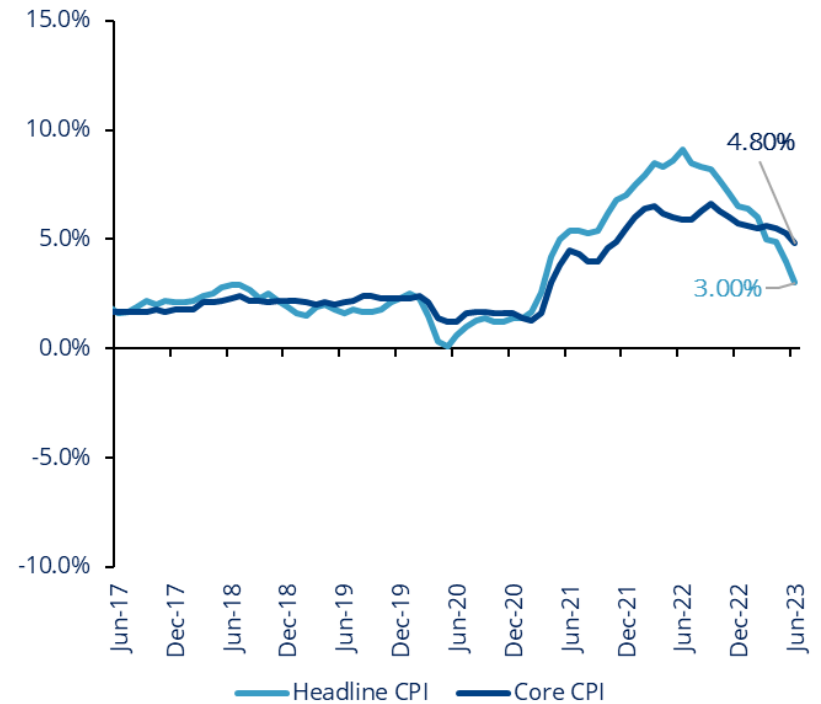
Real GDP Growth

quarter over quarter annualized, through March 2023



US Consumer Price Index

annual percent change, through June 2023



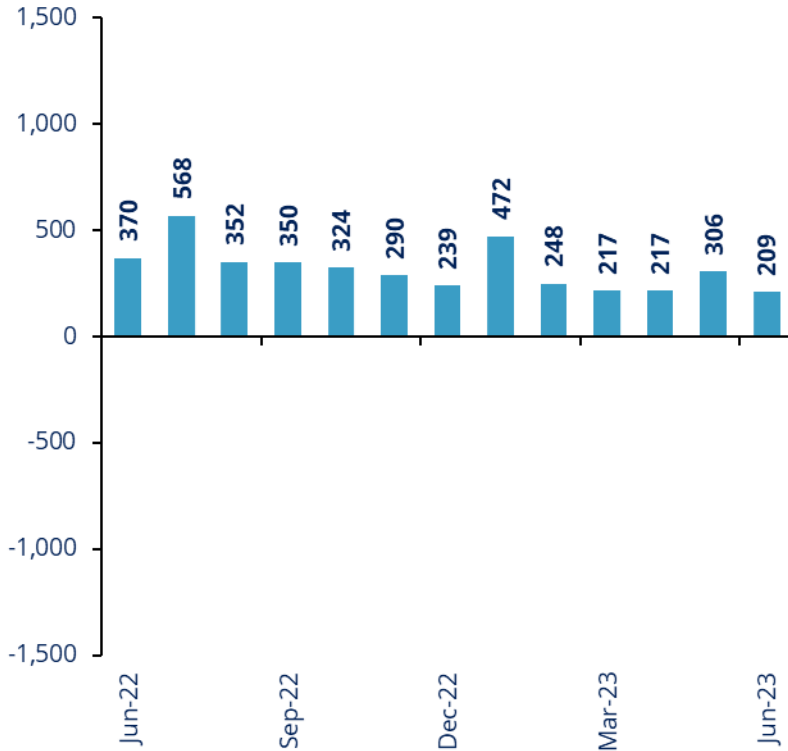
Source: Bloomberg; ECM Analysis

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

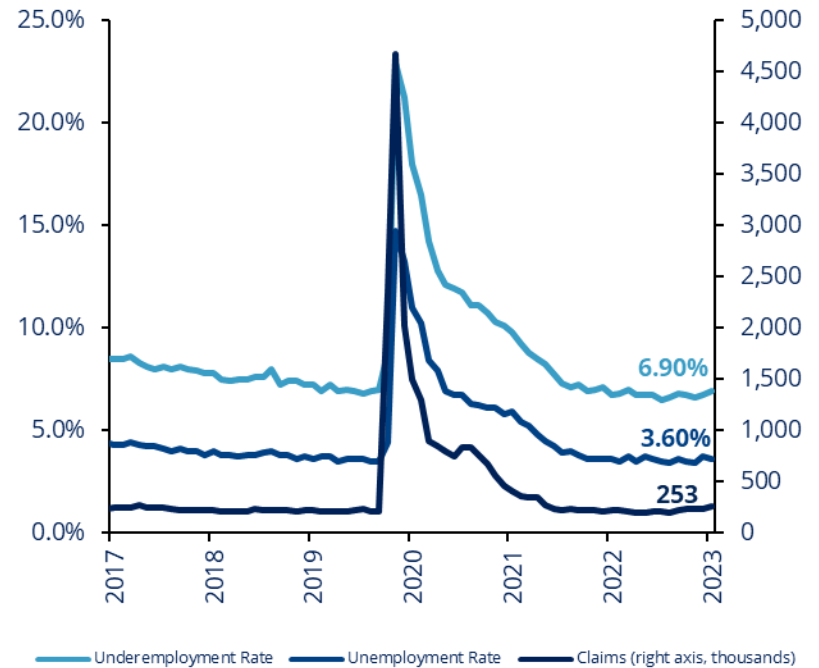
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U.S. Labor Market Trends

Number of Jobs Created Per Month
thousands, through June 2023



Unemployment and Underemployment Rates and Claims through June 2023



Source: Bloomberg; Bureau of Labor Statistics; ECM Analysis

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

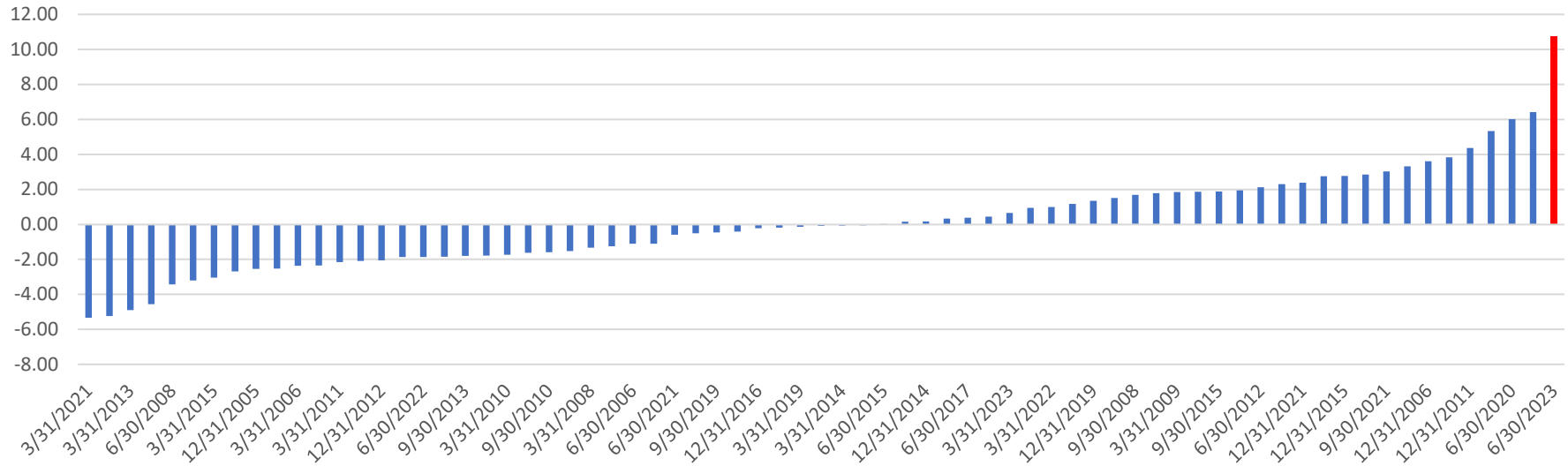
The Underemployment Rate represents total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers

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US Equity's YTD returns are led by a narrow, mega cap rally

Spread between S&P 500 Top 50 Index and S&P 500 Index



- The chart above graphically demonstrates the unusual nature of this year's market. The bars represent the difference between the 6-month performance of the broad-based S&P 500 index and the S&P 500 Top 50 Index.
- At the far right is the year to date (through 6/30/23) spread showing the S&P 500 Top 50 index outperforming the broad-based index by the single largest spread going back to 2005.
 - Since 2005 it is more common for the broad-based index to outperform (54% of the time)
 - During periods in which the largest stocks outperform, the average outperformance is 245 basis points vs 1072 basis points in 2023
- While the broad market has had a strong start to the year, it has been driven by a relatively narrow group of stocks and sectors
- Information technology has had a particularly strong start to the year (+42%) led by some of the largest companies such as Microsoft, Apple and NVIDIA
 - Some of the market gain is associated with the excitement around developments in artificial intelligence (AI)
 - Perhaps the biggest near-term beneficiary of the AI excitement has been NVIDIA which has seen its' stock price surge 189% YTD
- The communications services sector is a close second (+36%) driven primarily by Meta which has rebounded strongly after a disappointing year in 2022

Equity Market Returns

(as of June 30, 2023)

		QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2022	2021	2020	2019	2018	2017	2016
Domestic Equity														
Large Cap	S&P 500	8.7%	16.9%	19.6%	14.6%	12.3%	12.9%	-18.1%	28.7%	18.4%	31.5%	-4.4%	21.8%	12.0%
	Russell 1000 Value	4.1%	5.1%	11.5%	14.3%	8.1%	9.2%	-7.5%	25.2%	2.8%	26.5%	-8.3%	13.7%	17.3%
	Russell 1000 Growth	12.8%	29.0%	27.1%	13.7%	15.1%	15.7%	-29.1%	27.6%	38.5%	36.4%	-1.5%	30.2%	7.1%
Mid Cap	Russell Mid Cap	4.8%	9.0%	14.9%	12.5%	8.5%	10.3%	-17.3%	22.6%	17.1%	30.5%	-9.1%	18.5%	13.8%
	Russell Mid Cap Value	3.9%	5.2%	10.5%	15.0%	6.8%	9.0%	-12.0%	28.3%	5.0%	27.1%	-12.3%	13.3%	20.0%
	Russell Mid Cap Growth	6.2%	15.9%	23.1%	7.6%	9.7%	11.5%	-26.7%	12.7%	35.6%	35.5%	-4.8%	25.3%	7.3%
Small Cap	Russell 2000	5.2%	8.1%	12.3%	10.8%	4.2%	8.3%	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%
	Russell 2000 Value	3.2%	2.5%	6.0%	15.4%	3.5%	7.3%	-14.5%	28.3%	4.6%	22.4%	-12.9%	7.8%	31.7%
	Russell 2000 Growth	7.1%	13.6%	18.5%	6.1%	4.2%	8.8%	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%
International Equity														
Developed Markets	MSCI EAFE	3.0%	11.7%	18.8%	8.9%	4.4%	5.4%	-14.5%	11.3%	7.8%	22.0%	-13.8%	25.0%	1.0%
	Australia	0.3%	3.1%	11.2%	10.5%	4.9%	5.0%	-5.3%	9.4%	8.7%	22.9%	-12.0%	19.9%	11.4%
	Canada	3.7%	8.2%	7.0%	12.8%	6.4%	5.2%	-12.9%	26.0%	5.3%	27.5%	-17.2%	16.1%	24.6%
	France	3.2%	18.3%	31.7%	14.9%	7.0%	7.6%	-13.3%	19.5%	4.1%	25.7%	-12.8%	28.7%	4.9%
	Germany	2.8%	17.9%	28.4%	5.2%	1.8%	4.1%	-22.3%	5.3%	11.5%	20.8%	-22.2%	27.7%	2.8%
	Japan	6.4%	13.0%	18.1%	5.7%	3.1%	5.2%	-16.6%	1.7%	14.5%	19.6%	-12.9%	24.0%	2.4%
	Switzerland	4.0%	11.0%	13.3%	7.2%	9.3%	6.8%	-18.3%	19.3%	11.6%	32.3%	-9.1%	22.5%	-4.9%
	UK	2.2%	8.4%	13.2%	12.6%	2.8%	3.9%	-4.8%	18.5%	-10.5%	21.0%	-14.2%	22.3%	-0.1%
Emerging Markets	MSCI Emerging Markets	0.9%	4.9%	1.7%	2.3%	0.9%	3.0%	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%
	Brazil	20.7%	16.8%	29.8%	13.4%	6.3%	1.8%	14.2%	-17.4%	-19.0%	26.3%	-0.5%	24.1%	66.2%
	China	-9.7%	-5.5%	-16.8%	-10.3%	-5.3%	3.0%	-21.9%	-21.7%	29.5%	23.5%	-18.9%	54.1%	0.9%
	India	12.2%	5.1%	14.2%	19.3%	8.8%	8.9%	-8.0%	26.2%	15.6%	7.6%	-7.3%	38.8%	-1.4%
	Indonesia	2.8%	8.9%	13.2%	12.2%	5.3%	1.2%	3.6%	2.1%	-8.1%	9.1%	-9.2%	24.2%	17.0%
	Korea	4.4%	14.4%	13.0%	4.9%	1.1%	4.2%	-29.4%	-8.4%	44.6%	12.5%	-20.9%	47.3%	8.7%
	Mexico	5.6%	27.1%	35.1%	27.9%	7.7%	2.0%	-2.0%	22.5%	-1.9%	11.4%	-15.5%	16.0%	-9.2%
Russia	0.0%	-100.0%	-100.0%	-99.0%	-93.0%	-73.8%	-100.0%	19.0%	-12.5%	50.9%	-0.4%	5.2%	54.8%	

Source: Morningstar Direct; Empower Investments Analysis Individual country returns are represented by MSCI indices and shown as USD returns

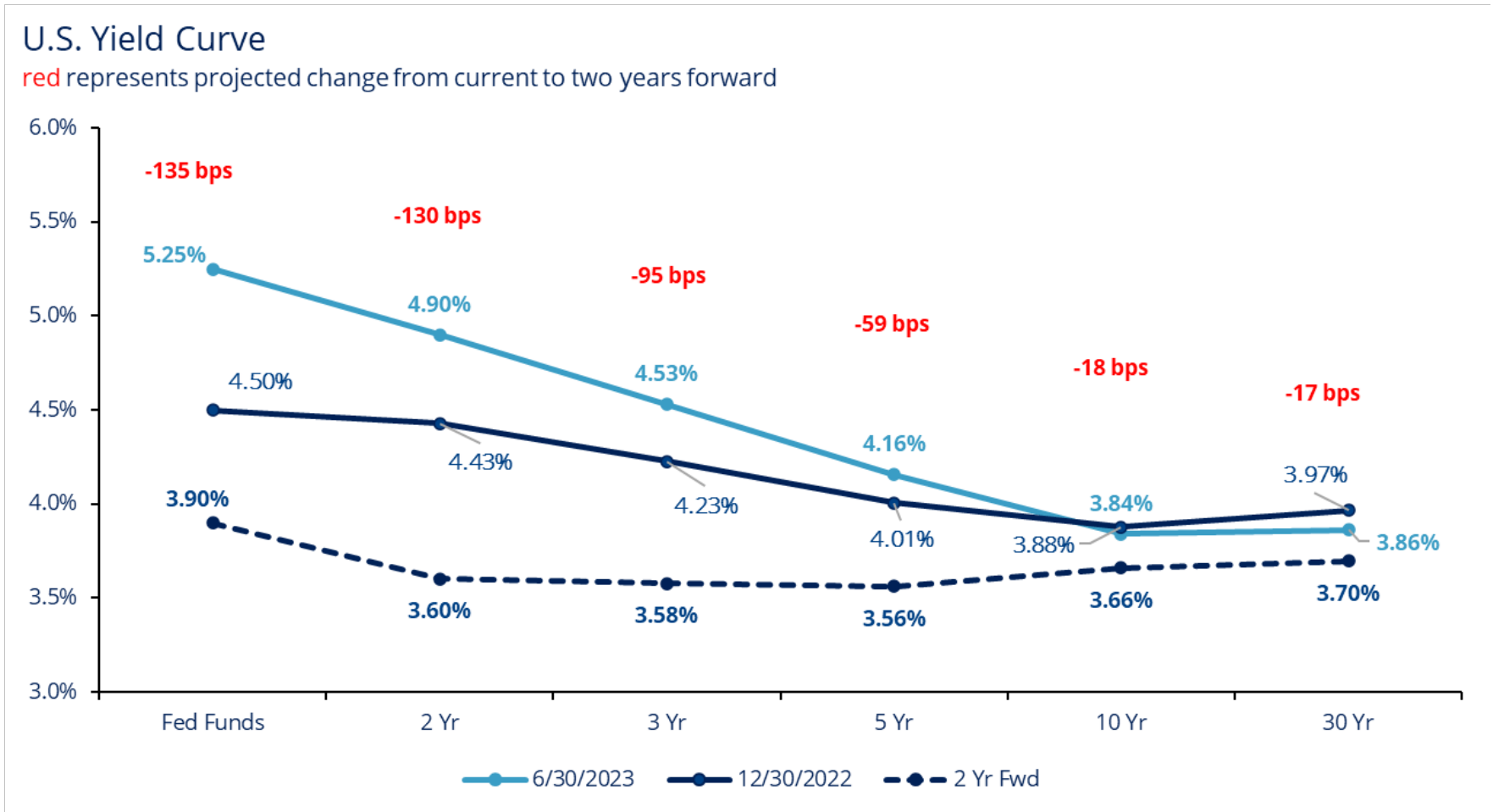
*Canada is not part of the EAFE Index

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Historical, Current and Forward Rates



Fixed Income and Specialty Returns

(as of June 30, 2023)

	QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2022	2021	2020	2019	2018	2017	2016
Fixed Income													
Bloomberg USAggregate	-0.8%	2.1%	-0.9%	-4.0%	0.8%	1.5%	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%
Bloomberg US Treasury	-1.4%	1.6%	-2.1%	-4.8%	0.4%	1.0%	-12.5%	-2.3%	8.0%	6.9%	0.9%	2.3%	1.0%
Bloomberg US Govt/ Credit Intermediate	-0.8%	1.5%	-0.1%	-2.5%	1.2%	1.4%	-8.2%	-1.4%	6.4%	6.8%	0.9%	2.1%	2.1%
Bloomberg US Govt/ Credit Long	-1.3%	4.4%	-2.6%	-8.6%	0.7%	2.9%	-27.1%	-2.5%	16.1%	19.6%	-4.7%	10.7%	6.7%
Bloomberg US TIPS	-1.4%	1.9%	-1.4%	-0.1%	2.5%	2.1%	-11.8%	6.0%	11.0%	8.4%	-1.3%	3.0%	4.7%
Bloomberg US Corporate High Yield	1.7%	5.4%	9.1%	3.1%	3.4%	4.4%	-11.2%	5.3%	7.1%	14.3%	-2.1%	7.5%	17.1%
FTSE WGBI	-1.8%	1.7%	-2.5%	-6.5%	-2.0%	-0.5%	-18.3%	-7.0%	10.1%	5.9%	-0.8%	7.5%	1.6%
JPM EMEI Global Diversified	2.2%	4.1%	7.4%	-3.1%	0.6%	2.8%	-17.8%	-1.8%	5.3%	15.0%	-4.3%	10.3%	10.2%
FTSE Treasury Bill 3 Month	1.3%	2.4%	3.7%	1.3%	1.6%	1.0%	1.5%	0.0%	0.6%	2.3%	1.9%	0.8%	0.3%
Specialty													
Bloomberg Commodity	-2.6%	-7.8%	-9.6%	17.8%	4.7%	-1.0%	16.1%	27.1%	-3.1%	7.7%	-11.2%	1.7%	11.8%
DJUS Select REIT	2.9%	5.8%	-0.7%	9.2%	3.3%	5.8%	-26.0%	45.9%	-11.2%	23.1%	-4.2%	3.8%	6.7%
FTSE EPRA/ NAREIT Developed Ex US	-2.8%	-4.3%	-8.7%	-2.0%	-3.2%	1.2%	-23.8%	8.8%	-6.5%	21.8%	-5.8%	20.8%	2.0%

Source: Morningstar Direct; Empower Investments Analysis *Past performance is not a guarantee or prediction of future results.*

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Name	Total Ret	Total Ret	Total Ret	Total Ret	Total Ret	Total Net Assets \$M	Expense Ratio
	3 Mth	1 Yr	3 Yr	5 Yr	10 Yr		
American Funds EuroPacific Gr R6	2.16	15.80	5.47	4.29	6.30	140,651	0.47
Morningstar Foreign Large Growth Avg	2.54	15.91	4.32	4.54	6.20	-	1.05
MSCI EAFE Index	2.95	18.77	8.93	4.39	5.41	-	-
MSCI ACWI ex U.S.	2.44	12.72	7.22	3.52	4.75	-	-
Blackrock EAFE Equity Index Coll F	3.26	19.13	9.46	4.85	5.82	-	0.06
MSCI EAFE Index	2.95	18.77	8.93	4.39	5.41	-	-
DFA US Micro Cap I	3.75	13.50	18.72	5.66	9.26	6,948	0.40
Morningstar Small Cap Blend Avg	4.08	12.53	14.13	5.24	8.28	-	0.99
Russell 2000 Index	5.21	12.31	10.82	4.21	8.26	-	-
Blackrock Russell 2000 Index Coll M	5.23	12.49	10.96	4.31	8.42	-	0.03
Russell 2000 Index	5.21	12.31	10.82	4.21	8.26	-	-
T. Rowe Price Instl Mid-Cap Equity Gr	5.40	17.77	8.45	9.03	12.25	5,204	0.61
Morningstar Mid Cap Growth Avg	5.82	17.25	6.99	8.35	10.61	-	1.07
Russell Mid Cap Growth Index	6.23	23.13	7.63	9.71	11.53	-	-
S&P Midcap 400 Index	4.85	17.61	15.44	7.79	10.21	-	-
Blackrock Midcap Equity Index Coll F	4.81	17.56	15.41	7.81	10.26	-	0.03
S&P MidCap 400 Index	4.85	17.61	15.44	7.79	10.21	-	-
Calvert US Large Cap Core Rspnb Idx R6	8.67	19.99	13.34	12.75	13.01	4,462	0.19
S&P 500 Index	8.74	19.59	14.60	12.31	12.86	-	-
Morningstar Socially Resp Large Cap Avg**	7.02	16.88	12.41	11.33	11.55	-	0.89
Morningstar Large Cap Blend Avg	7.18	16.88	13.43	10.72	11.38	-	0.79
Fidelity Contrafund Commingled Pool Cl 3	11.78	25.10	10.72	11.67	-	-	0.35
Morningstar Large Cap Growth Avg	10.97	22.89	9.53	11.37	13.02	-	0.96
Russell 1000 Growth Index	12.81	27.11	13.73	15.14	15.74	-	-
S&P 500 Index	8.74	19.59	14.60	12.31	12.86	-	-

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

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



	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
JP Morgan US Value R6	4.34	13.00	16.63	10.16	10.91	4,906	0.44
Morningstar Large Cap Value Avg	4.07	11.54	14.30	8.11	9.22	-	-
Russell 1000 Value Index	3.64	10.83	14.59	8.12	9.11	-	-
Vanguard Institutional 500 Index Trust**	8.74	19.58	14.59	12.30	<i>12.85</i>		0.01
S&P 500 Index	8.74	19.59	14.60	12.31	12.86	-	-
Vanguard Wellington Adm	4.16	10.00	8.01	7.84	8.35	104,961	0.17
Morningstar Moderate Allocation Avg	3.44	8.56	6.44	5.68	6.45	-	1.03
Composite 65% S&P 500 / 35% Bloomberg Aggregate	5.39	12.41	8.10	8.27	8.89	-	-
Composite 65% S&P 500 / 35% Bloomberg US Credit A or Better Idx	5.54	13.00	8.10	8.52	9.21	-	-
Vanguard Long-Term Investment-Grade Adm	-0.69	-0.52	-7.27	1.36	3.53	16,272	0.12
Bloomberg US Long Credit A	-0.39	0.77	-3.97	1.49	2.43	-	-
Morningstar Long Term Bond	-0.76	-0.39	-6.24	1.28	3.21	-	0.49
Dodge & Cox Income X	0.02	1.88	-1.75	2.03	2.56	64,416	0.33
Morningstar Interim Core-Plus Bond Avg	-0.61	-0.29	-2.99	0.91	1.69	-	-
Bloomberg US Aggregate Bond Index	-0.84	-0.94	-3.96	0.77	1.52	-	-
Blackrock US Debt Index Fund Coll W	-0.83	-0.90	-3.92	0.83	1.60	-	0.03
Bloomberg US Aggregate Bond Index	-0.84	-0.94	-3.96	0.77	1.52	-	-
Vanguard Admiral Treasury Money Mkt Inv	1.22	3.69	1.29	1.49	0.93	56,506	0.09
Morningstar Taxable Money Mkt Avg	1.13	3.40	1.16	1.29	0.77	-	0.41
U.S. Treasury 90-Day T-Bill	1.24	4.10	1.50	1.59	1.01	-	-
iMoney Net Average Treasury MM	1.10	3.31	1.13	1.21	0.69	-	-
Stable Value Fund	0.62	2.21	1.94	2.15	2.02	-	0.27
5 Yr. Constant Maturity Treasury Yield	0.92	3.67	1.96	1.92	1.81	-	-

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

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Target Date Performance

6/30/2023

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 Retirement Plus Income	1.37	4.54	1.75	3.51	4.19	22,926	0.06	3	17	12	68	0
S&P Target Date Retirement Income TR USD	1.59	5.87	2.02	3.46	4.01	-	-	-	-	-	-	-
Composite Returns*	1.17	4.65	0.52	2.73	3.48	-	-	-	-	-	-	-
Vanguard Target Retirement Plus 2020	2.14	6.61	3.90	4.69	6.11	32,277	0.06	3	25	16	56	0
S&P Target Date Retirement Income TR USD	2.25	7.86	4.12	4.49	5.70	-	-	-	-	-	-	-
Composite Returns*	2.03	6.89	2.34	3.59	4.34	-	-	-	-	-	-	-
Vanguard Target Retirement Plus 2025	2.99	8.60	5.07	5.37	6.79	70,717	0.06	3	32	22	43	0
S&P Target Date 2025 TR USD	2.52	8.95	5.51	5.17	6.38	-	-	-	-	-	-	-
Composite Returns*	2.87	9.35	4.26	4.43	5.20	-	-	-	-	-	-	-
Vanguard Target Retirement Plus 2030	3.60	10.03	6.14	5.90	7.35	88,197	0.06	3	37	25	35	0
S&P Target Date Retirement Income TR USD	3.19	10.63	6.87	5.80	7.02	-	-	-	-	-	-	-
Composite Returns*	3.43	10.85	5.47	4.98	5.76	-	-	-	-	-	-	-
Vanguard Target Retirement Plus 2035	4.10	11.34	7.32	6.46	7.93	89,779	0.06	3	41	28	28	0
S&P Target Date 2035 TR USD	3.88	12.37	8.35	6.48	7.67	-	-	-	-	-	-	-
Composite Returns*	3.89	12.16	6.51	5.44	6.23	-	-	-	-	-	-	-
Vanguard Target Retirement Plus 2040	4.62	12.67	8.45	6.99	8.44	81,406	0.06	3	46	31	20	0
S&P Target Date Retirement Income TR USD	4.47	13.92	9.48	7.00	8.15	-	-	-	-	-	-	-
Composite Returns*	4.45	13.66	7.71	6.00	6.79	-	-	-	-	-	-	-

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

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Target Date Performance

6/30/2023

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 RetireTrust Plus 2045	5.13	14.01	9.61	7.54	8.80	78,954	0.06	3	50	34	13	0
S&P Target Date 2045 TR USD	4.87	15.04	10.20	7.33	8.45	-	-	-	-	-	-	-
Composite Returns*	4.91	14.98	8.75	6.46	7.26	-	-	-	-	-	-	-
Vanguard Target RetireTrust Plus 2050	5.42	14.68	9.83	7.67	8.86	69,023	0.06	3	53	35	9	0
S&P Target Date Retirement Income TR USD	5.06	15.51	10.54	7.47	8.67	-	-	-	-	-	-	-
Composite Returns*	5.22	15.72	9.37	6.76	7.57	-	-	-	-	-	-	-
Vanguard Target RetireTrust Plus 2055	5.42	14.70	9.84	7.68	8.85	47,815	0.06	3	53	35	9	0
S&P Target Date 2055 TR USD	5.06	15.64	10.69	7.52	8.78	-	-	-	-	-	-	-
Composite Returns*	5.22	15.72	9.37	6.76	7.57	-	-	-	-	-	-	-
Vanguard Target RetireTrust Plus 2060	5.42	14.71	9.84	7.70	8.86	24,693	0.06	3	53	35	9	0
S&P Target Date Retirement Income TR USD	5.12	15.73	10.66	7.56	8.84	-	-	-	-	-	-	-
Composite Returns*	5.22	15.72	9.37	6.76	7.57	-	-	-	-	-	-	-
Vanguard Target RetireTrust Plus 2065	5.38	14.70	9.84	7.70	-	6,823	0.06	3	53	35	9	0
S&P Target Date Retirement Income TR USD	5.19	15.71	10.73	7.60	-	-	-	-	-	-	-	-
Composite Returns*	5.22	15.72	9.37	6.76	7.57	-	-	-	-	-	-	-

*Composite benchmark consists of the following indices weighted to match the allocation of the specific target date fund:

MSCI Broad Market, MSCI EAFE, Barclays Aggregate Bond, and Barclays US Treasury 1-3 Month

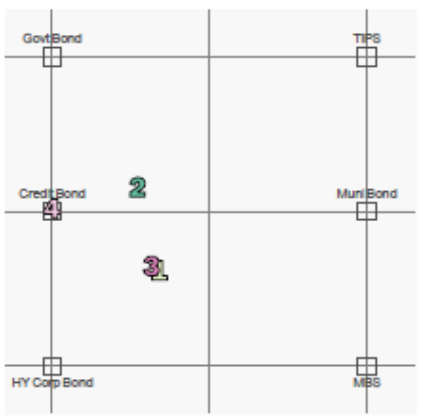
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Asset Class: Fixed Income

Style Drift	Cash	Credit Bond	Govt Bond	HY Corp Bond	MBS	Muni Bond	TIPS	Style Exposure
	■	■	■	■	■	■	■	

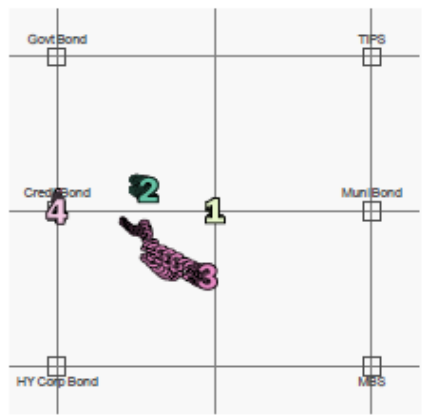
AVERAGE STYLE (5-Year)



Fixed Income

	Style Drift	Cash	Credit Bond	Govt Bond	HY Corp Bond	MBS	Muni Bond	TIPS	Style Exposure
1 Vanguard Treasury Money Market Investor FTSE Treasury Bill 3 Mon	0.78	99.29	0.03	0.00	0.43	0.01	0.06	0.17	
2 BlackRock US Debt Index Fund M BBgBarc US Aggregate Bond Index	2.31	0.22	28.70	43.18	0.80	26.73	0.37	0.00	
3 Dodge & Cox Income X BBgBarc US Aggregate Bond Index	19.94	19.11	42.95	3.63	8.84	23.79	1.21	0.48	
4 Vanguard Long-Term Investment-Grade Adm BBgBarc US Credit A+ Long TR USD	5.56	0.00	98.09	1.91	0.00	0.00	0.00	0.00	

STYLE DRIFT (5-Year)



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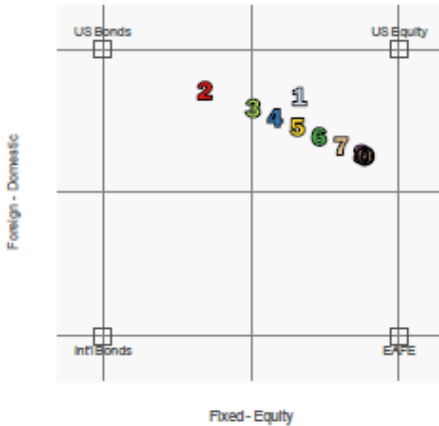


Style Analysis (5Yr)

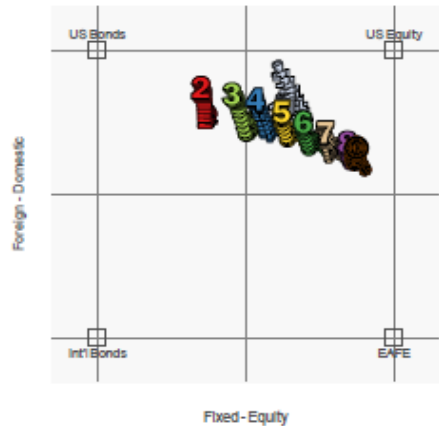
6/30/2023

Asset Class: **Balanced**

AVERAGE STYLE (5-Year)



STYLE DRIFT (5-Year)



Balanced

	Style Drift	Cash	US Bonds	Int'l Bonds	EAFE	US Equity	Style Exposure
1 Vanguard Wellington Admiral S&P 500 Index	14.72 3.35	8.89 2.26	24.81 0.22	5.76 0.80	9.36 0.71	51.20 96.00	
2 The Vanguard Target Retire Inc Trust I S&P Target Date Retirement Income	6.89 6.17	13.24 21.08	53.18 44.87	3.73 2.31	8.87 9.84	20.99 21.90	
3 The Vanguard Target Retire 2020 Trust I S&P Target Date 2020	9.69 7.23	6.40 15.49	42.00 34.22	4.17 2.38	15.20 14.94	32.23 32.98	
4 The Vanguard Target Retire 2025 Trust I S&P Target Date 2025	9.06 9.10	1.64 14.02	36.25 26.73	4.89 3.10	18.65 18.19	38.58 37.96	
5 The Vanguard Target Retire 2030 Trust I S&P Target Date 2030	8.89 10.79	1.01 11.33	28.76 19.05	5.24 3.64	21.70 21.93	43.28 44.05	
6 The Vanguard Target Retire 2035 Trust I S&P Target Date 2035	9.66 11.52	0.99 8.47	20.92 10.93	5.78 4.37	24.40 26.03	47.92 50.19	
7 The Vanguard Target Retire 2040 Trust I S&P Target Date 2040	10.36 9.71	0.90 6.05	13.20 6.45	6.25 4.17	27.21 29.18	52.44 54.15	
8 The Vanguard Target Retire 2045 Trust I S&P Target Date 2045	10.20 8.07	0.73 4.57	6.31 3.72	6.41 4.02	29.87 31.22	56.67 56.46	
9 The Vanguard Target Retire 2050 Trust I S&P Target Date 2050	9.19 7.33	0.70 4.11	5.11 2.46	6.43 3.55	30.52 32.28	57.24 57.60	
10 The Vanguard Target Retire 2055 Trust I S&P Target Date 2055	9.25 7.10	0.73 3.83	5.11 1.94	6.41 3.54	30.58 32.89	57.16 57.81	

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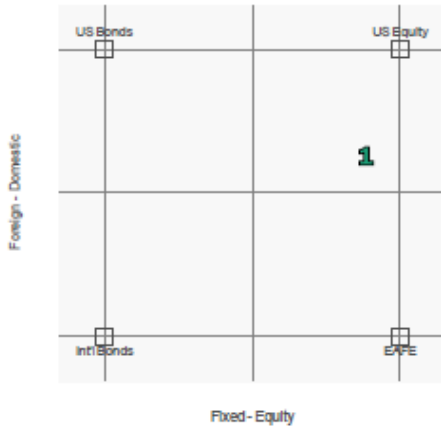


Style Analysis (5Yr)

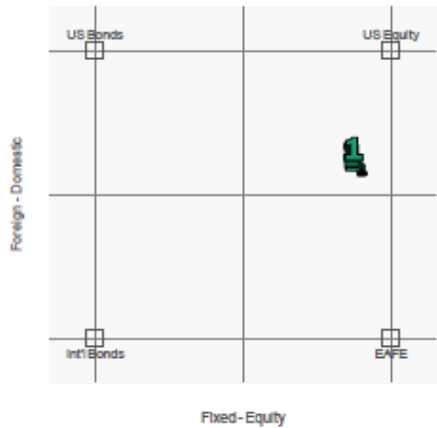
6/30/2023

Asset Class: **Balanced**

AVERAGE STYLE (5-Year)



STYLE DRIFT (5-Year)



Balanced

1 The Vanguard Target Retire 2060 Trust I
S&P Target Date 2060

	Style Drift	Cash	US Bonds	Int'l Bonds	EAFE	US Equity	Style Exposure
1 The Vanguard Target Retire 2060 Trust I	9.25	0.81	5.07	6.35	30.53	57.25	
S&P Target Date 2060	7.20	3.76	1.81	3.44	32.80	58.18	

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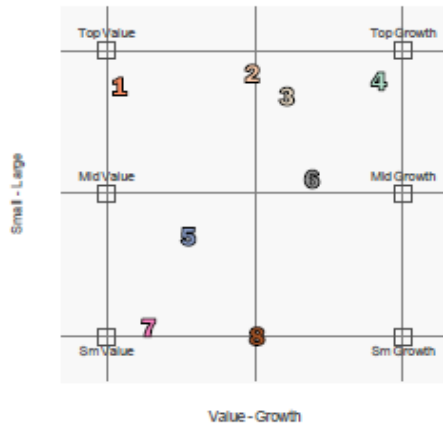


Style Analysis (5Yr)

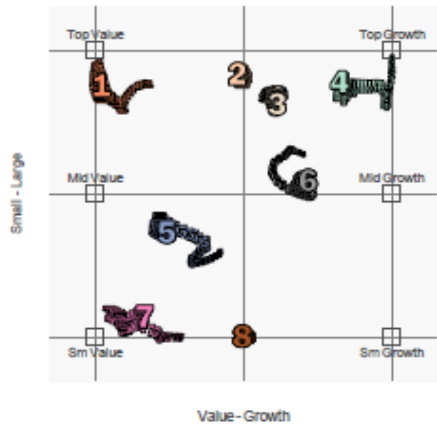
6/30/2023

Asset Class: Equity

AVERAGE STYLE (5-Year)



STYLE DRIFT (5-Year)



Equity

	Style Drift	Cash	Top Value	Top Growth	Mid Value	Mid Growth	Sm Value	Sm Growth	Style Exposure
1 JPMorgan US Value R6 Russell 1000 Value Index	15.36 1.06	1.49 0.03	73.44 66.43	4.15 0.02	16.73 33.43	0.21 0.02	3.84 0.07	0.14 0.01	
2 Vanguard Institutional Index Instl PI S&P 500 Index	4.69 4.68	0.93 0.94	36.87 36.88	46.09 46.07	13.60 13.60	2.48 2.49	0.03 0.03	0.00 0.00	
3 Calvert US Large Cap Core Rspnb Idx R6 S&P 500 Index	15.19 4.68	1.33 0.94	27.71 36.88	41.45 46.07	10.37 13.60	16.74 2.49	0.69 0.03	1.70 0.00	
4 Fidelity Contrafund Commingled Pool CI 2 Russell 1000 Growth Index	12.32 2.77	5.33 0.03	3.77 0.02	71.50 80.73	3.92 0.03	14.45 18.79	0.00 0.09	1.02 0.32	
5 BlackRock Mid-Cap Equity Index F Russell Mid-Cap Index	22.89 4.11	0.15 0.04	0.99 0.17	0.10 0.17	50.49 62.17	17.33 37.04	20.86 0.13	10.09 0.28	
6 T. Rowe Price Instl Mid-Cap Equity Gr Russell Mid-Cap Growth Index	15.58 0.00	3.96 0.00	5.54 0.00	5.53 0.00	23.91 0.00	59.59 100.00	0.00 0.00	1.48 0.00	
7 DFA US Micro Cap I Russell 2000 Index	12.22 1.64	2.83 0.01	0.12 0.01	0.15 0.05	3.12 0.31	2.49 0.01	80.13 48.98	11.15 50.62	
8 BlackRock Russell 2000 Index-T Russell 2000 Index	1.59 1.64	0.00 0.01	0.00 0.01	0.07 0.05	0.28 0.31	0.01 0.01	49.04 48.98	50.60 50.62	

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Style Analysis (5Yr)

6/30/2023

Asset Class: International

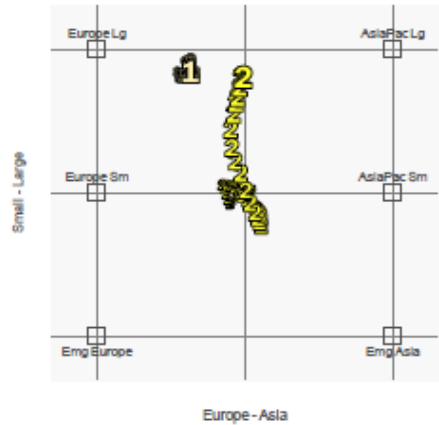
AVERAGE STYLE (5-Year)



International

	Style Drift	Cash	Europe Lg	Europe Sm	AsiaPac Lg	AsiaPac Sm	Emg Europe	Emg Asia	Style Exposure
1 BlackRock EAFE Equity Index-T MSCI EAFE	9.55	3.46	62.04	4.97	25.53	1.00	0.94	2.07	
2 American Funds Europacific Growth R6 MSCI ACWI ex USA GDP NR USD	29.58	0.65	26.18	21.29	18.31	7.93	3.18	22.45	
	13.99	0.02	34.43	3.88	5.71	0.00	9.70	46.26	

STYLE DRIFT (5-Year)



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3-Year Percentile Ranks – Actively Managed Funds

6/30/2023

Group/Investment	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
	2023	2023	2022	2022	2022	2022	2021	2021	2021	2021	2020	2020	2020	2020
	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten
American Funds Europacific Grth R6	57	69	42	45	41	30	30	63	58	46	57	40	42	31
DFA US Micro Cap I	93	88	83	86	83	68	45	28	32	40	25	17	23	31
Dodge & Cox Income	89	87	92	88	90	80	69	74	79	82	83	78	82	69
Fidelity Contrafund Commingled PI 3	55	50	58	62	48	55	35	9	7	11	9	20	29	33
JP Morgan US Value R6	78	71	87	89	87	81	78	84	81	77	78	78	80	79
T. Rowe Price Instl Mid-Cap Equity Gr	59	58	34	25	33	20	24	39	34	37	38	37	36	45
Vanguard Long-Term Inv-Grade Adm	28	31	58	49	50	46	42	50	49	54	47	60	72	77
Vanguard Target Retire Trust Plus 2020	48	51	35	36	41	34	47	55	58	61	65	69	79	83
Vanguard Target Retire Trust Plus 2025	69	65	61	60	64	68	69	72	73	77	79	89	85	80
Vanguard Target Retire Trust Plus 2030	60	55	33	36	41	46	50	62	64	62	67	70	72	79
Vanguard Target Retire Trust Plus 2035	47	47	52	57	58	55	54	63	67	60	70	80	80	79
Vanguard Target Retire Trust Plus 2040	39	43	40	44	48	38	42	54	62	56	67	66	74	73
Vanguard Target Retire Trust Plus 2045	58	58	66	70	76	68	57	66	67	70	73	83	80	73
Vanguard Target Retire Trust Plus 2050	56	56	53	53	53	49	42	49	59	52	60	65	70	69
Vanguard Target Retire Trust Plus 2055	52	46	68	69	75	65	41	63	64	59	68	78	81	78
Vanguard Target Retire Trust Plus 2060	49	42	50	48	48	41	28	45	49	41	55	60	65	68
Vanguard Target Retire Trust Plus 2065	45	37	50	43	45	32	26	90	90	52	80	80	-	-
Vanguard Target Retire Trust Plus Income	52	50	69	75	73	60	56	69	66	71	78	86	84	90
Vanguard Wellington™ Adm	81	70	77	69	81	79	82	87	84	77	73	80	81	87

1st Quartile
 2nd Quartile
 3rd Quartile
 4th Quartile



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3-Year Percentile Ranks – Passively Managed Funds

6/30/2023

Group/Investment	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
	2023	2022	2022	2022	2022	2021	2021	2021	2021	2020	2020	2020	2020
	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten	% of Peer Group Beaten
BlackRock EAFE® Equity Index F	79	69	54	56	61	58	57	53	56	57	56	69	74
Blackrock Mid Cap Eq Idx Fund CF	79	83	75	72	68	60	60	60	62	60	61	60	61
BlackRock Russell 2000® Index F	17	18	41	27	39	54	69	80	84	88	82	84	81
Blackrock US Debt Idx Fund CF	51	33	59	65	60	55	59	59	63	70	76	83	95
Calvert US Lrg Cap Core Rspnb Idx I	37	48	84	81	92	94	94	97	97	99	97	96	90
Vanguard Instl 500 Index Trust	74	71	78	80	82	77	73	74	76	78	82	84	81

1st Quartile
 2nd Quartile
 3rd Quartile
 4th Quartile

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

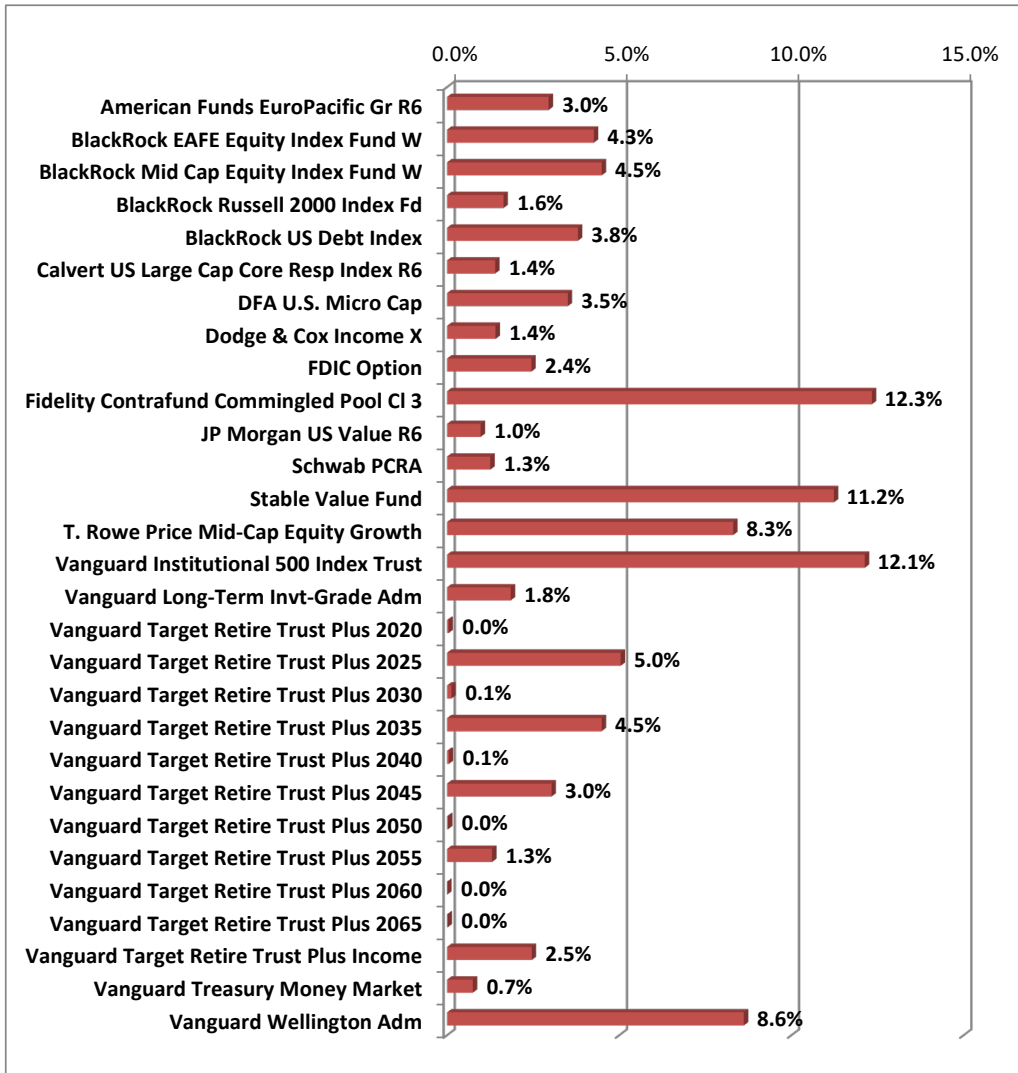


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Asset Summary

6/30/2023

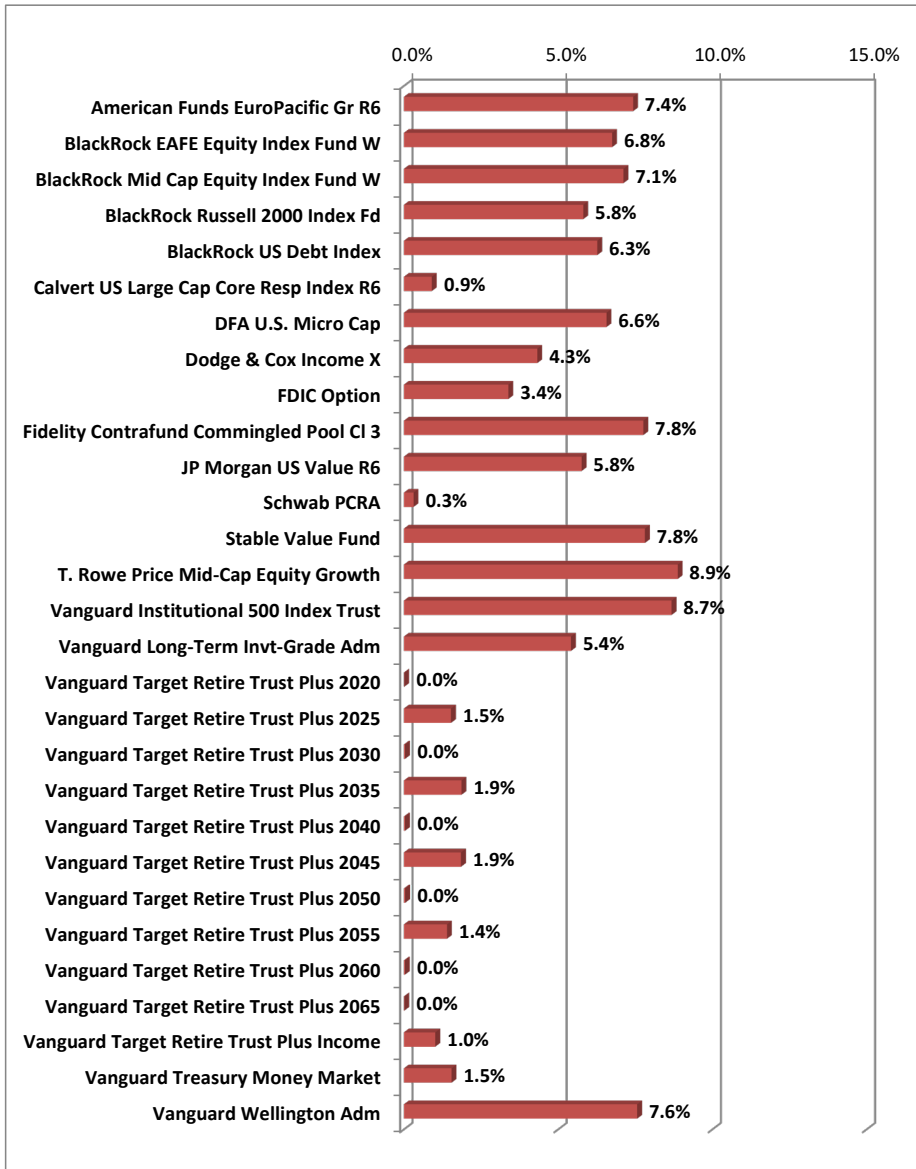
	Plan Inception Date	Fund Net Assets	WDC Assets in Fund	WDC as a Percentage of Fund Assets	Fund as a Percentage of WDC Assets	Number of Participants	Percentage of WDC Participants Utilizing Fund
American Funds EuroPacific Gr R6	1/28/2005	\$140,650,502,011	\$194,043,334	0.14%	2.95%	28,417	41.14%
BlackRock EAFE Equity Index Fund F	2/1/2001	\$61,849,170,419	\$280,346,337	0.45%	4.26%	25,812	37.37%
BlackRock Mid Cap Equity Index Fund F	2/1/2001	\$7,147,103,024	\$295,292,407	4.13%	4.49%	27,220	39.41%
BlackRock Russell 2000 Index Fd M	2/20/2004	\$7,929,189,025	\$107,886,884	1.36%	1.64%	22,239	32.20%
BlackRock US Debt Index M	2/1/2001	\$29,546,447,580	\$249,966,813	0.85%	3.80%	23,974	34.71%
Calvert US Large Cap Core Rspnb Idx R6	4/18/2003	\$6,951,682,204	\$92,039,761	1.32%	1.40%	3,465	5.02%
DFA U.S. Micro Cap	2/1/1997	\$6,947,819,970	\$230,563,333	3.32%	3.51%	25,114	36.36%
Dodge & Cox Income X	9/20/2019	\$64,415,611,615	\$92,823,243	0.14%	1.41%	16,537	23.94%
FDIC Option	12/31/1996	N/A	\$161,033,761	N/A	2.45%	12,947	18.74%
Fidelity Contrafund Commingled Pool CI 3	1/31/1994	\$107,887,810,840	\$811,519,394	0.75%	12.34%	29,690	42.98%
JP Morgan US Value R6	1/6/2022	\$4,906,321,596	\$64,101,948	1.31%	0.97%	22,038	31.90%
Schwab PCRA	2/17/2000	N/A	\$82,691,335	N/A	1.26%	1,200	1.74%
Stable Value Fund	9/1/1996	N/A	\$738,937,114	N/A	11.24%	29,879	43.26%
T. Rowe Price Instl Mid-Cap Equity Gr	2/1/1998	\$5,204,259,447	\$546,536,733	10.50%	8.31%	33,945	49.14%
Vanguard Institutional 500 Index Trust	9/9/1990	\$132,700,000,000	\$797,943,797	0.60%	12.13%	33,190	48.05%
Vanguard Long-Term Invt-Grade Adm	10/26/2001	\$16,272,096,316	\$121,658,470	0.75%	1.85%	20,723	30.00%
Vanguard Target Retire Trust Plus 2020	1/6/2023	\$32,276,906,892	\$2,921,118	0.01%	0.04%	32	0.05%
Vanguard Target Retire Trust Plus 2025	7/29/2005	\$70,716,986,700	\$331,730,511	0.47%	5.04%	5,846	8.46%
Vanguard Target Retire Trust Plus 2030	1/6/2023	\$88,197,471,049	\$8,703,540	0.01%	0.13%	151	0.22%
Vanguard Target Retire Trust Plus 2035	7/29/2005	\$89,778,631,298	\$295,341,636	0.33%	4.49%	7,137	10.33%
Vanguard Target Retire Trust Plus 2040	1/6/2023	\$81,406,324,575	\$3,500,768	0.00%	0.05%	146	0.21%
Vanguard Target Retire Trust Plus 2045	7/29/2005	\$78,953,605,336	\$199,489,775	0.25%	3.03%	7,084	10.26%
Vanguard Target Retire Trust Plus 2050	1/6/2023	\$69,023,432,921	\$1,873,279	0.00%	0.03%	166	0.24%
Vanguard Target Retire Trust Plus 2055	8/18/2010	\$47,815,195,749	\$86,081,449	0.18%	1.31%	5,351	7.75%
Vanguard Target Retire Trust Plus 2060	1/6/2023	\$24,692,936,893	\$305,842	0.00%	0.00%	132	0.19%
Vanguard Target Retire Trust Plus 2065	1/6/2023	\$6,822,648,140	\$1,032,107	0.02%	0.02%	48	0.07%
Vanguard Target Retire Trust Plus Income	7/29/2005	\$22,926,441,202	\$161,808,277	0.71%	2.46%	3,899	5.64%
Vanguard Treasury Money Market	10/1/1993	\$56,506,341,962	\$49,158,672	0.09%	0.75%	5,914	8.56%
Vanguard Wellington Adm	10/26/2001	\$104,961,044,750	\$566,974,750	0.54%	8.62%	28,920	41.87%



Total WDC Assets

\$6,576,306,388

Domestic Equity	\$2,945,884,256	45%
Intl Equity	\$474,389,671	7%
Balanced Funds	\$566,974,750	9%
Target Date Funds	\$1,092,788,302	17%
Fixed Income	\$464,448,526	7%
Cash Equiv.	\$949,129,548	14%
Self-Directed Brok.	\$82,691,335	1%



Total WDC Participants
69,075

Expense Summary

6/30/2023

Name	Expense Ratio	Annual Expense per \$1000
American Funds EuroPacific Gr R6	0.47%	\$4.70
Cat: Foreign Large Growth	1.05%	
Blackrock EAFE Equity Index Fund W	0.06%	\$0.60
Cat: Foreign Large Blend Index	0.37%	
DFA U.S. Micro Cap	0.40%	\$4.00
Cat: Small Blend	0.99%	
Blackrock Russell 2000 Index Fd	0.03%	\$0.30
Cat: Small Cap Blend Index	0.37%	
T. Rowe Price Instl Mid-Cap Equity Gr	0.61%	\$6.10
Cat: Mid Growth	1.07%	
Blackrock Mid Cap Equity Index Fund W	0.03%	\$0.30
Cat: Mid Cap Blend Index	0.40%	
Calvert US Large Cap Core Rspnb Idx R6	0.19%	\$1.90
Cat: Socially Resp Large Cap	0.89%	
Fidelity Contrafund Commingled Pool Cl 3	0.35%	\$3.50
Cat: Large Growth	0.96%	
Vanguard Institutional 500 Index Trust	0.01%	\$0.10
Cat: Large Cap Blend Index	0.43%	
JP Morgan US Value R6	0.44%	\$4.40
Cat: Large Value	0.90%	
Vanguard Wellington Adm	0.17%	\$1.70
Cat: Moderate Allocation	1.03%	
Vanguard Long-Term Invmt-Grade Adm	0.12%	\$1.20
Cat: Long Term Bond	0.49%	
Dodge & Cox Income X	0.33%	\$3.30
Cat: Interm. Core-Plus Bond	0.74%	
Stable Value Fund	0.27%	\$2.70
Cat: Interm. Stable Value	0.62%	

Name	Expense Ratio	Annual Expense per \$1000
Blackrock US Debt Index	0.03%	\$0.30
Cat: Intermediate Bond Index	0.28%	
Vanguard Adm Money Market	0.09%	\$0.90
Average US Taxable Money Market Fund	0.41%	
Vanguard Target Retire Trust Plus Income	0.06%	\$0.60
Cat: Retirement Income	0.66%	
Vanguard Target Retire Trust Plus 2020	0.06%	\$0.60
Cat: Target Date 2020	0.61%	
Vanguard Target Retire Trust Plus 2025	0.06%	\$0.60
Cat: Target Date 2025	0.66%	
Vanguard Target Retire Trust Plus 2030	0.06%	\$0.60
Cat: Target Date 2030	0.67%	
Vanguard Target Retire Trust Plus 2035	0.06%	\$0.60
Cat: Target Date 2035	0.68%	
Vanguard Target Retire Trust Plus 2040	0.06%	\$0.60
Cat: Target Date 2040	0.69%	
Vanguard Target Retire Trust Plus 2045	0.06%	\$0.60
Cat: Target Date 2045	0.70%	
Vanguard Target Retire Trust Plus 2050	0.06%	\$0.60
Cat: Target Date 2050	0.70%	
Vanguard Target Retire Trust Plus 2055	0.06%	\$0.60
Cat: Target Date 2055	0.70%	
Vanguard Target Retire Trust Plus 2060	0.06%	\$0.60
Cat: Target Date 2060	0.70%	
Vanguard Target Retire Trust Plus 2065	0.06%	\$0.60
Cat: Target Date 2065+	0.69%	

Asset-Weighted Average Expense Ratio: 0.20%





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