

Episcopal Foundation of Dallas

August 2019



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Agenda

- I. Financial Market Review
- II. Asset Allocation and Performance
- III. Fees and Expenses
- IV. Active vs. Passive
- V. Economic and Market Outlook
- VI. Appendix

Presented by:

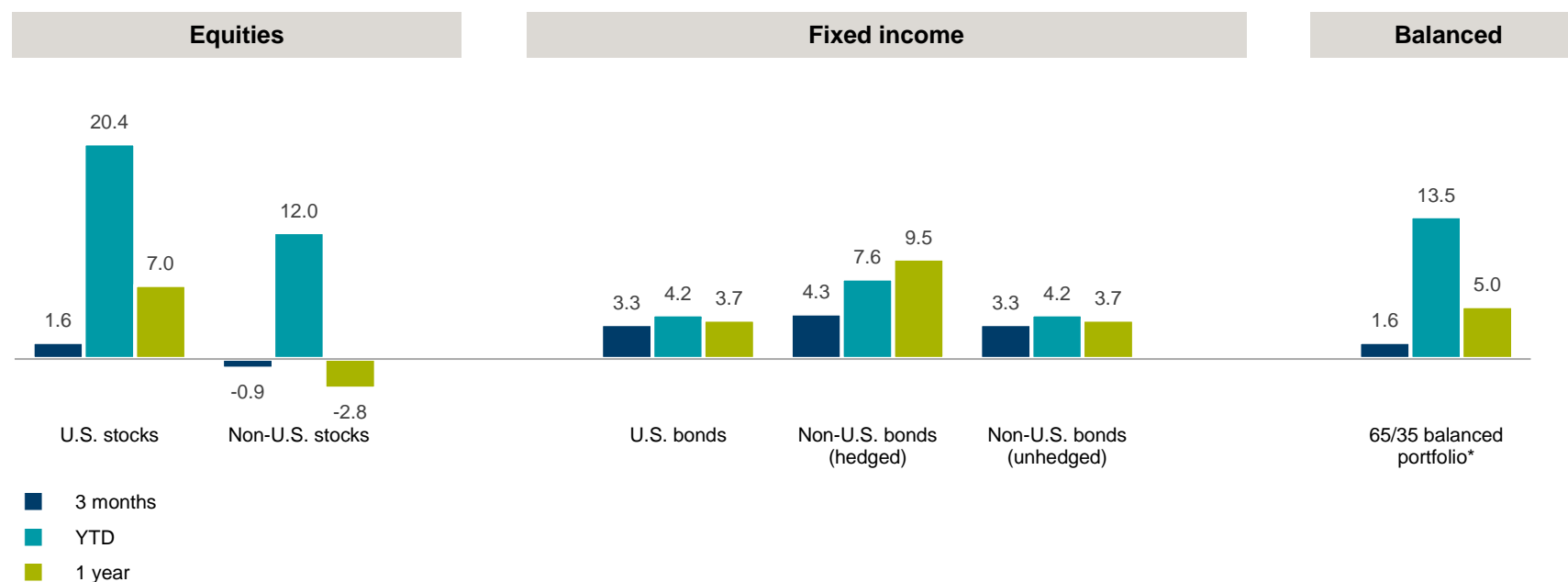
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Financial Market Review

Global markets continue to deliver strong results in 2019

- Despite weaker economic data and ongoing uncertainty regarding trade relations, central bank easing helped to maintain upward market momentum
- U.S. equity and fixed income returns were mainly positive for July and remain strong year-to-date
- Global equities lagged their U.S. counterparts

Global market returns as of July 31, 2019 (%)



Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Sources: Bloomberg Barclays, CRSP, and FTSE.

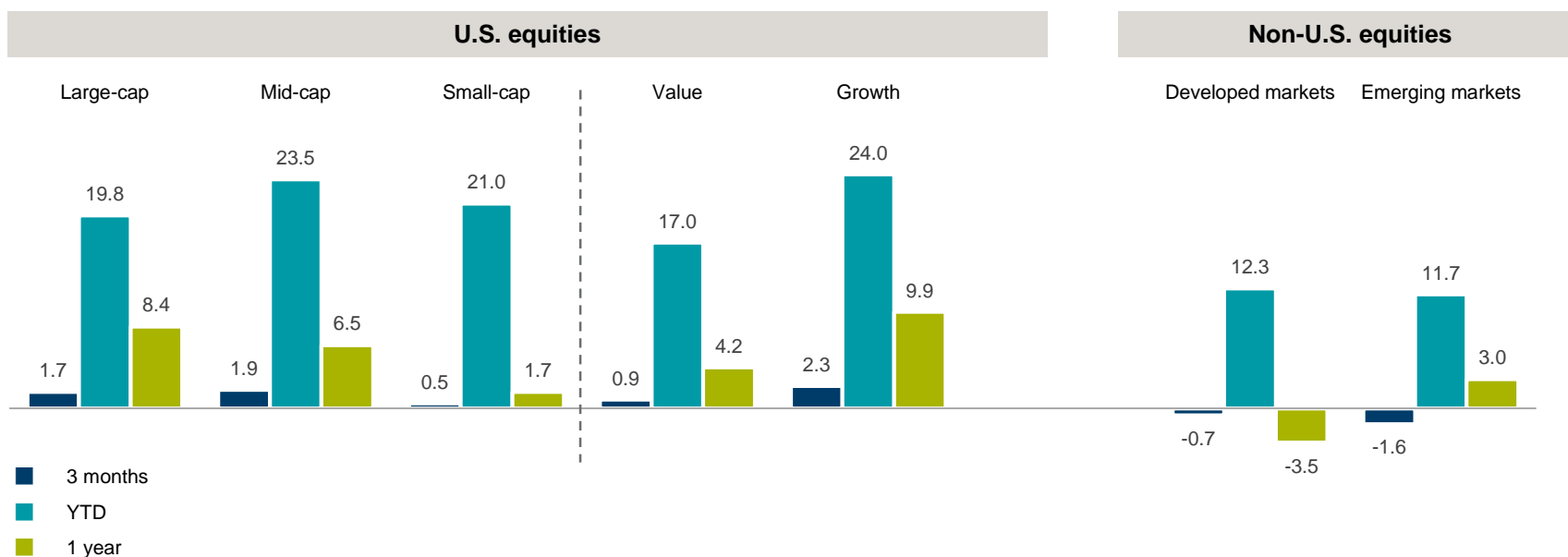
U.S. Stocks (CRSP U.S. Total Market Index), Non-U.S. Stocks (FTSE Global All-Cap ex-US Index), U.S. Bonds (Bloomberg Barclays U.S. Aggregate Float Adjusted Index), Non-U.S. Bonds hedged (Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index hedged), Non-U.S. Bonds unhedged (Bloomberg Barclays Global Aggregate Index ex USD).

* 65/35 balanced portfolio Static Composite (39% U.S. stocks, 26% International stocks, and 24.5% Investment-grade U.S. bonds, 10.5% Investment-grade international bonds).

Stocks across styles maintained their trend upward

- Large, mid, and small-cap U.S. stocks posted positive returns for July
- U.S. growth continue to outperform value stocks, extending growth's recent run of higher returns
- Non-U.S. stocks lagged domestic equities, with developed markets struggling on economic concerns

Global equity market returns as of July 31, 2019 (%)



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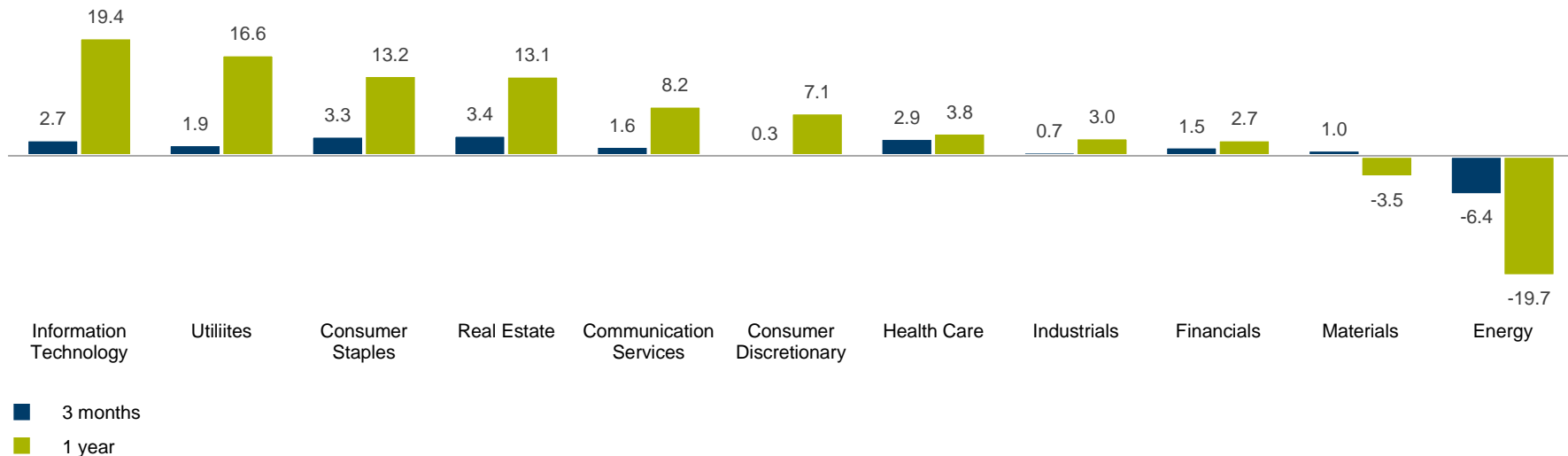
Sources: CRSP, FTSE, and Russell.

Large-cap (CRSP U.S. Mega Cap Index), Mid-cap (CRSP U.S. Mid Cap Index), Small-cap (CRSP U.S. Small Cap Index); Value (Russell 3000 Value Index), Growth (Russell 3000 Growth Index); Developed markets (FTSE Developed All Cap ex-U.S. Index), Emerging markets (FTSE Emerging Markets All Cap China A Inclusion Index).

U.S. sector performance – Solid results with more balance across styles

- Information Technology has been the top performer over the last 12 months despite periods of shakiness due to trade tensions between U.S. and China
- Defensive sectors such as Utilities and Consumer Staples have also had strong 12 month performance as economic concerns mount
- The Energy sector has been the worst performer due to falling oil prices

U.S. equity sector returns as of July 31, 2019 (%)



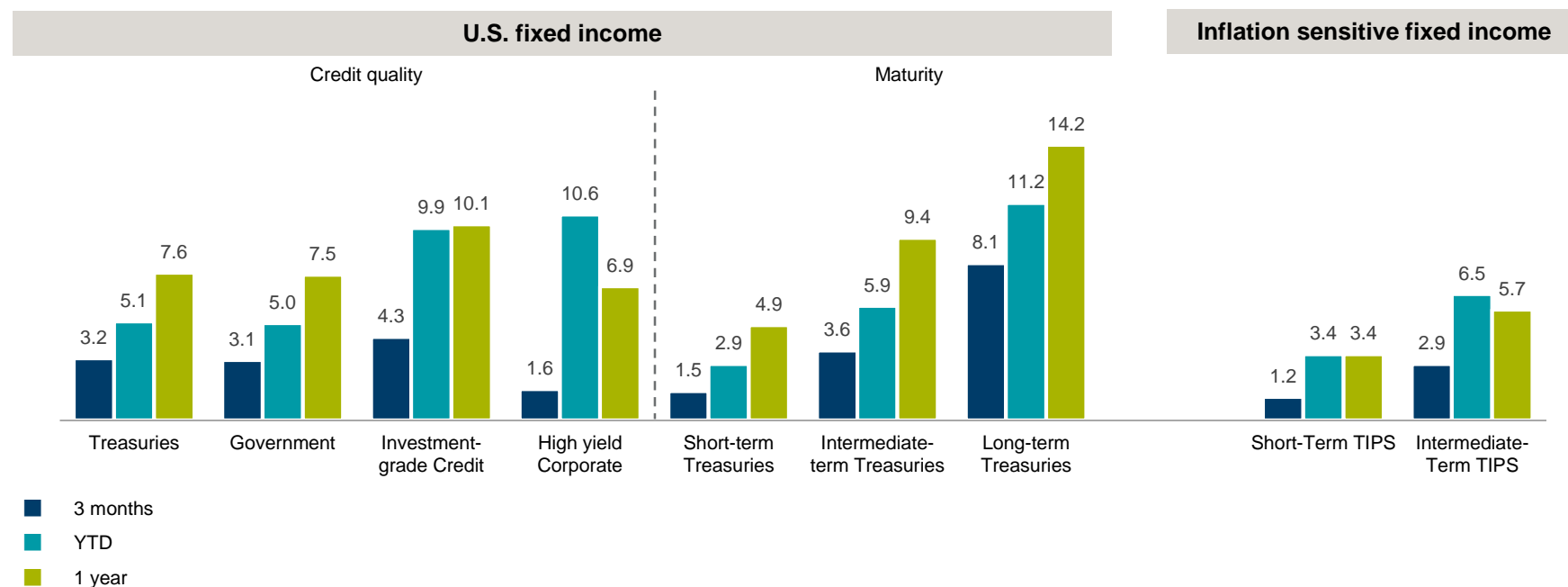
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Source: FactSet.
 U.S. markets measured by CRSP U.S. Total Market Index. Past performance is no guarantee of future returns.

Bonds extend positive results amid tame inflation

- Bond performance has been strong as interest rates fell across the yield curve and the bond market began to price in rate cuts from central banks
- Credit spreads have narrowed, bolstering investment grade credit performance
- Long-term treasuries have had strong performance given muted economic growth and inflation expectations

Domestic fixed income market returns as of July 31, 2019 (%)



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Sources: Bloomberg Barclays.

Treasuries-Government-Investment Grade Credit-High Yield (Bloomberg Barclays U.S. Treasury/Government/Credit/Corporate High Yield Indices); Short-Inter-Long-term Treasuries (Bloomberg Barclays U.S. 1-5/5-10/Long Treasury Indices); Short-term TIPS (Bloomberg Barclays U.S. Treasury 0-5 Year Inflation Protected Index), Intermediate-Term TIPS (Bloomberg Barclays U.S. Treasury Inflation Protected Index).

Market leadership changes

- Emerging markets equities appeared at both the top and bottom multiple times, demonstrating the relatively high volatility level of single-asset classes
- The balanced portfolio generally falls near the middle, demonstrating the volatility dampening effect of high-grade fixed income

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	10-Year Average
Emg 85.2	REIT 28.5	REIT 8.7	Emg 18.1	Sml 38.8	REIT 30.4	Grw 5.1	Sml 21.3	Emg 31.1	IB 3.2	Grw 15.2
HY 58.2	Sml 26.9	Bnd 7.8	REIT 17.8	Grw 34.2	Lrg 13.2	REIT 2.5	Val 18.4	Grw 29.6	T-Bill 1.9	Lrg 13.3
Grw 37.0	Emg 19.8	HY 5.0	Val 17.5	Lrg 33.1	Val 12.7	IB 1.4	HY 17.1	Dev 26.3	Bnd 0.0	REIT 12.2
Dev 36.7	Grw 17.6	IB 3.9	Dev 17.4	Val 32.7	Grw 12.4	Lrg 0.9	Lrg 12.1	Lrg 21.7	HY -2.1	Sml 12.0
REIT 28.6	Cmd 16.7	Grw 2.2	Lrg 16.4	Dev 20.5	IB 8.8	Bnd 0.5	Cmd 11.4	Bal 16.5	Grw -2.1	HY 11.1
Lrg 28.4	Val 16.2	Lrg 1.5	Sml 16.4	Bal 16.8	Bal 6.4	T-Bill 0.0	Emg 10.3	Sml 14.6	REIT -4.6	Val 11.1
Sml 27.2	Lrg 16.1	T-Bill 0.1	HY 15.8	HY 7.4	Bnd 6.0	Bal -0.6	REIT 8.6	Val 13.2	Lrg -4.8	Bal 8.6
Bal 24.7	HY 15.1	Val -0.1	Grw 15.2	HF 6.7	Sml 4.9	Dev -1.8	Grw 7.4	HY 7.5	Bal -5.5	Emg 8.3
Val 19.8	Bal 12.1	Bal -0.9	Bal 12.7	REIT 2.5	Emg 2.6	HF -3.6	Bal 7.3	HF 6.0	HF -6.7	Dev 6.9
Cmd 18.7	Dev 11.2	Sml -4.2	IB 6.5	IB 1.2	HY 2.5	Val -4.1	IB 4.9	REIT 5.1	Val -8.6	IB 4.0
HF 13.4	Bnd 6.5	HF -8.9	Bnd 4.2	T-Bill 0.1	T-Bill 0.0	Sml -4.4	Dev 3.1	Bnd 3.5	Sml -11.0	Bnd 3.5
Bnd 5.9	HF 5.2	Dev -12.7	HF 3.5	Bnd -2.0	HF -0.6	HY -4.5	Bnd 2.6	IB 2.5	Cmd -13.0	HF 1.5
IB 4.4	IB 3.3	Cmd -13.4	T-Bill 0.1	Emg -3.2	Dev -4.4	Emg -13.5	HF 2.5	T-Bill 0.8	Emg -14.8	T-Bill 0.4
T-Bill 0.2	T-Bill 0.1	Emg -20.0	Cmd -1.1	Cmd -9.6	Cmd -17.0	Cmd -24.7	T-Bill 0.3	Cmd 0.7	Dev -14.8	Cmd -4.2
Val	Grw	Lrg	Sml	Dev	Emg	Bnd	HY	IB	T-Bill	Cmd
Value oriented U.S.-based stocks (Russell 3000 Value Index)	Growth oriented U.S.-based stocks (Russell 3000 Growth Index)	Large U.S.-based stocks (Russell 1000 Index)	Small U.S.-based stocks (Russell 2000 Index)	International stocks from developed countries (FTSE Developed All Cap ex U.S. Index)	International stocks from emerging countries (FTSE Emerging ACap CN A Includ Idx)	Investment-grade U.S. bonds (BloomBarc U.S. Aggregate Bond Index)	High-yield U.S. bonds (BloomBarc U.S. Corp High Yield Index)	Investment-grade international bonds (BloomBarc GA ex-U.S.D Index Hedged)	Short-term Treasury rates (Citigroup 3-Month U.S. T-Bill Index)	U.S. public equity real estate (REIT) (MSCI U.S. REIT Index)
Cmd	HF	Bal								
Commodities (Bloomberg Commodity Index)	Hedge funds (HFRX Global Hedge Fund Index*)	Balanced Static Composite (39% U.S. stocks**, 26% Int'l stocks†, 24.5% Invest-grade U.S. bonds††, 10.5% Invest-grade Int'l bonds††)								

Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Source: Vanguard. Last observation: December 31, 2018; 10-year average performance from December 31, 2009 through December 31, 2018.

* Source: Hedge Fund Research, Inc.

** U.S. stocks: MSCI U.S. Broad Market Index.

† International stocks: FTSE Global All Cap ex-U.S. Index.

†† Bonds: BloomBarc U.S. Aggregate Bond Index and BloomBarc GA ex-U.S.D Index Hedged.

Market Performance as of June 30, 2019

Name	Jun-19	Last 3 Months	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
US Equity							
CRSP US Total Market TR USD	7.0	4.1	18.7	9.0	14.0	10.2	14.7
S&P 500	7.0	4.3	18.5	10.4	14.2	10.7	14.7
S&P 400 MidCap	7.6	3.0	18.0	1.4	10.9	8.0	14.6
S&P 600 SmallCap	7.4	1.9	13.7	-4.9	12.0	8.4	15.0
International Equity							
MSCI Emerging Markets	6.2	0.6	10.6	1.2	10.7	2.5	5.8
MSCI Emerging Markets NR LCL	4.6	7.4	18.2	9.4	13.8	7.6	8.6
MSCI EAFE	5.9	3.7	14.0	1.1	9.1	2.2	6.9
MSCI EAFE NR LCL	4.3	2.8	13.7	2.2	9.8	5.9	8.3
MSCI ACWI ex USA	6.0	3.0	13.6	1.3	9.4	2.2	6.5
Fixed Income Domestic							
BBgBarc US Aggregate TR	1.3	3.1	6.1	7.9	2.3	2.9	3.9
BBgBarc US Corporate 1-5 Years TR	1.0	2.1	4.8	6.3	2.6	2.5	3.8
BBgBarc US Credit/Corp 5-10 Yr TR	2.4	4.5	10.1	11.5	3.9	4.3	6.7
BBgBarc US Corporate Long TR	4.1	7.2	15.8	15.2	5.4	5.8	8.5
BBgBarc US Govt/Credit Long TR	2.8	6.6	13.5	13.8	3.8	5.7	7.6
BBgBarc US Treasury Strips 20-30 Yr Equal Parity TR	1.4	7.8	14.4	14.0	1.1	7.8	8.8
BBgBarc US High Yield TR	2.3	2.5	9.9	7.5	7.5	4.7	9.2
BBgBarc US Govt TR	0.9	3.0	5.2	7.2	1.4	2.5	3.0
BBgBarc US Credit TR	2.3	4.3	9.4	10.3	3.7	3.9	5.8
BBgBarc US Treasury 1-5 Yr TR	0.7	1.9	3.1	5.0	1.3	1.5	1.7
BBgBarc US Treasury 5-10 Yr TR	1.2	3.5	6.1	9.1	1.4	3.0	4.0
BBgBarc US Treasury Long TR	1.3	6.0	11.0	12.3	1.3	5.7	6.5
BBgBarc US Treasury TIPS 0-5 Yr TR	0.7	1.6	3.3	3.2	1.6	0.9	1.9
BBgBarc US TIPS TR	0.9	2.9	6.2	4.8	2.1	1.8	3.6
Fixed Income International							
BBgBarc Global Aggregate ex US Tres Hedged TR	1.5	2.7	5.8	7.6	3.3	4.4	4.4
BBgBarc Emerging Markets TR	2.7	3.8	9.4	11.0	5.0	4.6	7.7
REIT							
MSCI US REIT Gross	1.3	1.3	17.8	11.1	4.1	7.8	15.5

Important information

IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model® (VCMM) regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More importantly, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model® is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

The Vanguard Lifecycle Model (VLCM) is designed to identify the product design that represents the best investment solution for a theoretical, representative investor who uses the target-date funds to accumulate wealth for retirement. The VLCM generates an optimal custom glide path for a participant population by assessing the trade-offs between the expected (median) wealth accumulation and the uncertainty about that wealth outcome, for thousands of potential glide paths. The VLCM does this by combining two set of inputs: the asset class return projections from the VCMM and the average characteristics of the participant population. Along with the optimal custom glide path, the VLCM generates a wide range of portfolio metrics such as a distribution of potential wealth accumulation outcomes, risk and return distributions for the asset allocation, and probability of ruin, such as the odds of participants depleting their wealth by age 95.

The VLCM inherits the distributional forecasting framework of the VCMM and applies to it the calculation of wealth outcomes from any given portfolio.

The most impactful drivers of glide path changes within the VLCM tend to be risk aversion, the presence of a defined benefit plan, retirement age, savings rate and starting compensation. The VLCM chooses among glide paths by scoring them according to the utility function described and choosing the one with the highest score. The VLCM does not optimize the levels of spending and contribution rates. Rather, the VLCM optimizes the glide path for a given customizable level of spending, growth rate of contributions and other plan sponsor characteristics.

A full dynamic stochastic life-cycle model, including optimization of a savings strategy and dynamic spending in retirement is beyond the scope of this framework.

Asset Allocation and Performance

PREPARED FOR

EPISCOPAL FOUNDATION OF DALLAS

Monthly Performance Report

Period Ending June 30, 2019

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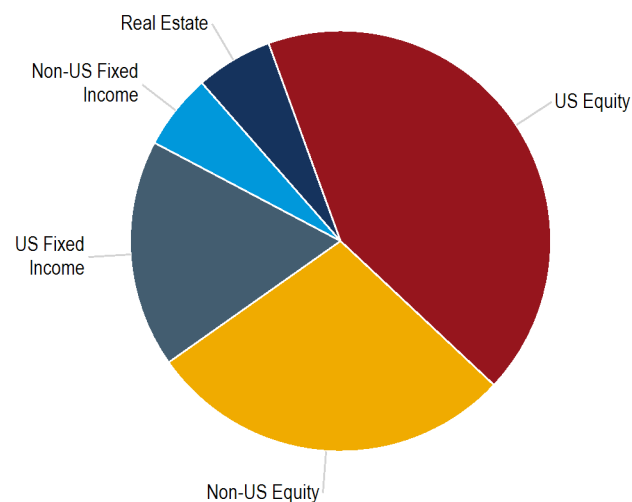
Total Portfolio Performance & Asset Allocation

Performance Summary ending June 30, 2019

	Market Value (\$)	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EPISCOPAL FOUNDATION OF DALLAS	37,777,604	5.25	3.11	13.58	5.49	9.89	--	--	7.30	Jun-15
EPISCOPAL FOUNDATION OF DALLAS (Net)		5.25	3.08	13.52	5.38	9.77	--	--	7.19	
Composite Benchmark		4.99	3.47	14.33	6.88	9.47	--	--	7.36	Jun-15

- Composite Benchmark = 6% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged / 6% Real Estate Spliced Index / 18% Spliced Bloomberg Barclays US Aggregate Float Adjusted Index / 28% Spliced Total International Stock Index / 42% Spliced Total Stock Market Index

Current Allocation as of June 30, 2019



	Current \$	Current %	Policy	Difference*
US Equity	\$16,072,207	42.5%	42.0%	0.5%
Non-US Equity	\$10,650,155	28.2%	28.0%	0.2%
US Fixed Income	\$6,629,319	17.5%	18.0%	-0.5%
Non-US Fixed Income	\$2,202,995	5.8%	6.0%	-0.2%
Real Estate	\$2,222,928	5.9%	6.0%	-0.1%
Total	\$37,777,604	100.0%	100.0%	

*Difference between Policy and Current Allocation

Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any purchase or redemption fees.

Net of Fee returns reflect the deduction of fund expense ratios, any purchase or redemption fees, and VIAS advisory fee applied to the client portfolio.

Returns greater than one year represent annualized returns. Returns less than one year represent cumulative returns.

Performance Summary (Gross of Advisory Fees) ending June 30, 2019

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EPISCOPAL FOUNDATION OF DALLAS	37,777,604	100.00	5.25	3.11	13.58	5.49	9.89	--	--	7.30	Jun-15
EPISCOPAL FOUNDATION OF DALLAS (Net)			5.25	3.08	13.52	5.38	9.77	--	--	7.19	
Composite Benchmark			4.99	3.47	14.33	6.88	9.47	--	--	7.36	Jun-15
Total Equity	26,722,362	70.74	6.92	3.22	15.69	3.97	12.73	--	--	8.25	Jun-15
Equity Domestic	16,072,207	42.54	7.27	3.48	16.59	6.51	14.15	--	--	10.31	Jun-15
Spliced Total Stock Market Index			6.99	4.08	18.71	9.00	14.04	10.18	14.72	10.94	Jun-15
Equity International	10,650,155	28.19	6.38	2.82	14.30	0.14	10.51	--	--	5.12	Jun-15
Spliced Total International Stock Index			5.79	2.85	13.35	0.50	9.19	2.40	6.66	4.20	Jun-15
Total Fixed Income	8,832,314	23.38	1.37	3.01	6.14	7.81	2.78	--	--	3.60	Jun-15
Fixed Income Domestic	6,629,319	17.55	1.28	3.04	6.15	7.81	2.59	--	--	3.31	Jun-15
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			1.29	3.15	6.25	7.97	2.32	2.96	3.92	3.26	Jun-15
Fixed Income International	2,202,995	5.83	1.65	2.93	6.12	7.81	3.37	--	--	4.49	Jun-15
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			1.63	2.97	6.19	8.02	3.54	4.54	--	4.74	Jun-15
Total Real Estate	2,222,928	5.88	1.72	1.73	19.31	12.21	4.03	--	--	8.68	Jun-15
Real Estate Domestic	2,222,928	5.88	1.72	1.73	19.31	12.21	4.03	--	--	8.68	Jun-15
Real Estate Spliced Index			1.72	1.76	19.34	12.20	4.12	7.80	15.54	8.79	Jun-15

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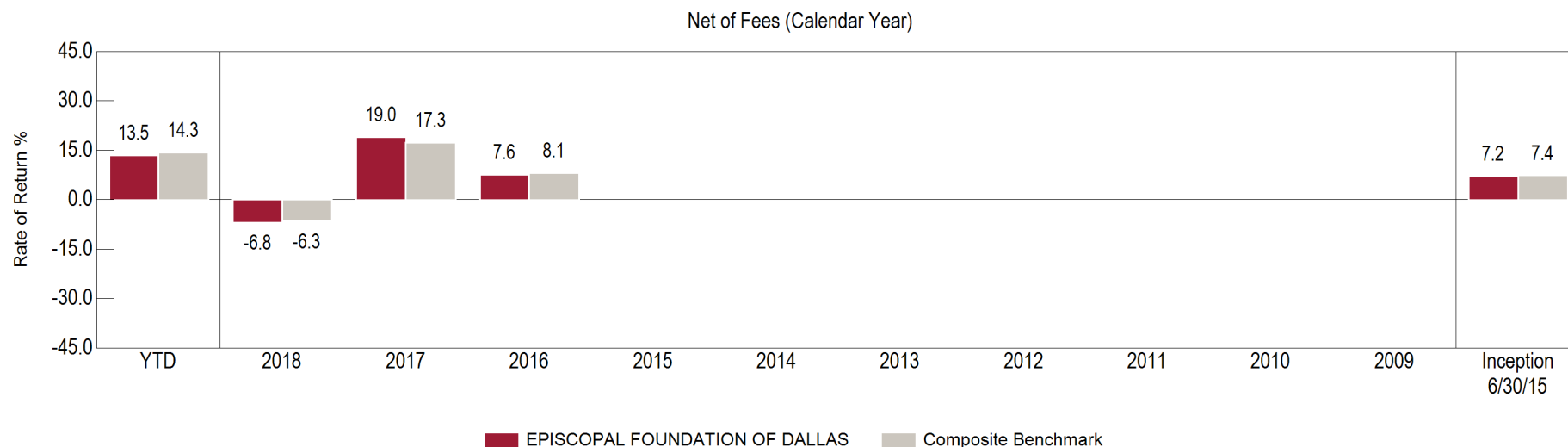
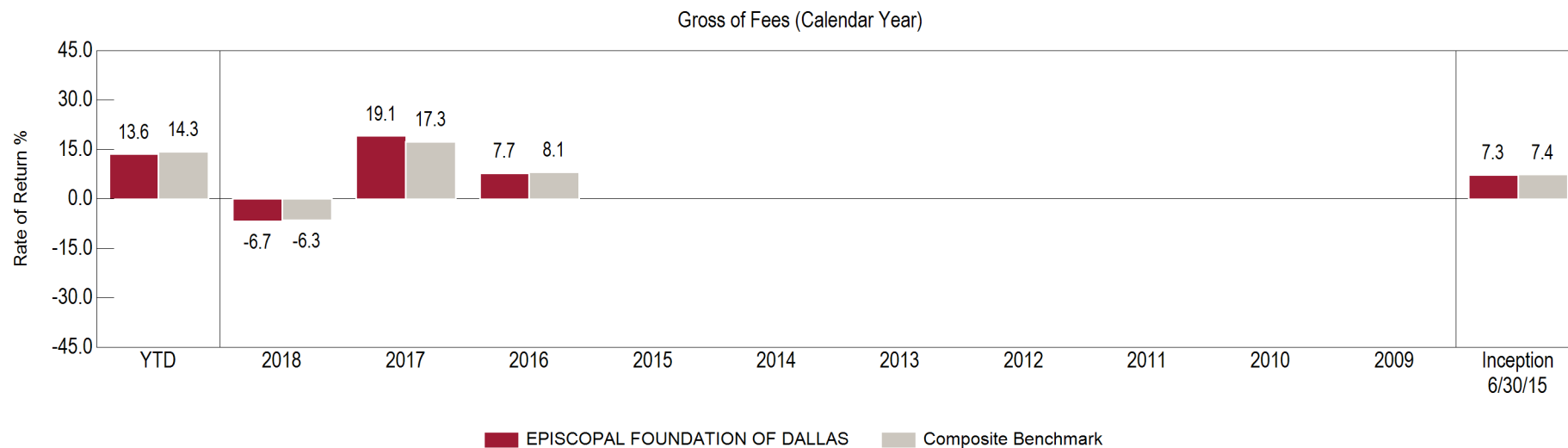
Performance Summary (Gross of Advisory Fees) ending June 30, 2019

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EPISCOPAL FOUNDATION OF DALLAS	37,777,604	100.00	5.25	3.11	13.58	5.49	9.89	--	--	7.30	Jun-15
Composite Benchmark			4.99	3.47	14.33	6.88	9.47	--	--	7.36	Jun-15
Total Equity	26,722,362	70.74	6.92	3.22	15.69	3.97	12.73	--	--	8.25	Jun-15
Equity Domestic	16,072,207	42.54	7.27	3.48	16.59	6.51	14.15	--	--	10.31	Jun-15
Spliced Total Stock Market Index			6.99	4.08	18.71	9.00	14.04	10.18	14.72	10.94	Jun-15
Vanguard® Total Stock Market Index Fund Institutional Shares	8,048,220	21.30	6.99	4.09	18.71	9.00	14.04	10.18	14.71	10.94	Jun-15
Spliced Total Stock Market Index			6.99	4.08	18.71	9.00	14.04	10.18	14.72	10.94	Jun-15
Multi-Cap Core Funds Average			6.75	3.71	17.29	6.08	11.72	7.40	12.24	8.01	Jun-15
Vanguard® Windsor™ Fund Admiral™ Shares	4,030,148	10.67	7.67	3.56	15.75	1.81	11.04	6.24	12.94	6.42	Jun-15
Russell 1000 Value			7.18	3.84	16.24	8.46	10.19	7.46	13.19	8.31	Jun-15
Multi-Cap Value Funds Average			7.10	2.94	15.48	3.51	9.75	5.85	11.72	6.69	Jun-15
Vanguard® PRIMECAP Fund Admiral™ Shares	3,993,839	10.57	7.44	2.19	13.20	6.19	17.44	12.06	15.80	12.87	Jun-15
Russell 1000 Growth			6.87	4.64	21.49	11.56	18.07	13.39	16.28	14.11	Jun-15
Multi-Cap Growth Funds Average			6.64	4.85	22.60	10.32	16.68	10.72	14.11	11.07	Jun-15
Equity International	10,650,155	28.19	6.38	2.82	14.30	0.14	10.51	--	--	5.12	Jun-15
Spliced Total International Stock Index			5.79	2.85	13.35	0.50	9.19	2.40	6.66	4.20	Jun-15
Vanguard® Total International Stock Index Fund Inst Shares	5,347,967	14.16	5.90	2.81	13.36	0.68	9.00	2.36	6.63	4.16	Jun-15
Spliced Total International Stock Index			5.79	2.85	13.35	0.50	9.19	2.40	6.66	4.20	Jun-15
International Funds Average			5.89	3.24	14.44	-0.65	8.16	2.05	6.62	3.49	Jun-15
Vanguard® International Value Fund	2,656,375	7.03	5.61	2.42	12.09	-0.39	8.74	1.27	6.34	3.24	Jun-15
Spliced International Index			6.02	2.98	13.60	1.29	9.39	2.16	6.07	4.11	Jun-15
International Funds Average			5.89	3.24	14.44	-0.65	8.16	2.05	6.62	3.49	Jun-15
Vanguard® International Growth Fund Admiral™ Shares	2,645,812	7.00	8.18	3.23	18.63	-0.40	15.36	6.78	10.10	8.95	Jun-15
Spliced International Index			6.02	2.98	13.60	1.29	9.39	2.16	6.07	4.11	Jun-15
International Funds Average			5.89	3.24	14.44	-0.65	8.16	2.05	6.62	3.49	Jun-15

Performance Summary (Gross of Advisory Fees) ending June 30, 2019

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fixed Income	8,832,314	23.38	1.37	3.01	6.14	7.81	2.78	--	--	3.60	Jun-15
Fixed Income Domestic	6,629,319	17.55	1.28	3.04	6.15	7.81	2.59	--	--	3.31	Jun-15
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			1.29	3.15	6.25	7.97	2.32	2.96	3.92	3.26	Jun-15
Vanguard® Total Bond Market Index Fund Admiral™ Shares	3,313,915	8.77	1.16	3.07	6.11	7.85	2.22	2.89	3.82	3.18	Jun-15
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			1.29	3.15	6.25	7.97	2.32	2.96	3.92	3.26	Jun-15
Spliced Intermediate-Term Investment-Grade Debt Funds Average			1.28	2.99	6.26	7.35	2.34	2.61	4.28	2.99	Jun-15
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	2,217,840	5.87	1.70	3.64	7.74	9.62	3.07	3.64	5.77	4.06	Jun-15
BBgBarc US Credit 5-10 Yr TR			2.27	4.36	9.85	11.35	3.79	4.15	6.46	4.74	Jun-15
Spliced Core Bond Funds Average			1.28	2.99	6.26	7.35	2.34	2.61	4.28	2.99	Jun-15
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	1,097,564	2.91	0.82	1.92	4.14	5.48	2.31	2.26	3.15	2.55	Jun-15
BBgBarc US Credit 1-5 Yr TR			0.95	2.06	4.50	6.13	2.47	2.36	3.44	2.63	Jun-15
1-5 Year Investment-Grade Debt Funds Average			0.62	1.53	3.32	4.34	1.97	1.62	2.49	1.90	Jun-15
Fixed Income International	2,202,995	5.83	1.65	2.93	6.12	7.81	3.37	--	--	4.49	Jun-15
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			1.63	2.97	6.19	8.02	3.54	4.54	--	4.74	Jun-15
Vanguard® Total International Bond Index Fund Adm™ Shares	2,202,995	5.83	1.65	2.93	6.12	7.81	3.37	4.30	--	4.49	Jun-15
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			1.63	2.97	6.19	8.02	3.54	4.54	--	4.74	Jun-15
International Income Funds Average			2.50	2.88	5.67	5.63	2.59	1.01	3.06	3.16	Jun-15
Total Real Estate	2,222,928	5.88	1.72	1.73	19.31	12.21	4.03	--	--	8.68	Jun-15
Real Estate Domestic	2,222,928	5.88	1.72	1.73	19.31	12.21	4.03	--	--	8.68	Jun-15
Real Estate Spliced Index			1.72	1.76	19.34	12.20	4.12	7.80	15.54	8.79	Jun-15
Vanguard® Real Estate Index Fund Admiral™ Shares	2,222,928	5.88	1.72	1.73	19.31	12.21	4.03	7.69	15.46	8.68	Jun-15
Real Estate Spliced Index			1.72	1.76	19.34	12.20	4.12	7.80	15.54	8.79	Jun-15
Real Estate Funds Average			1.53	1.96	17.96	10.23	4.26	6.98	14.48	7.73	Jun-15

Total Portfolio Performance



Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any purchase or redemption fees.

Net of Fee returns reflect the deduction of fund expense ratios, any purchase or redemption fees, and VIAS advisory fee applied to the client portfolio.

Returns greater than one year represent annualized returns. Returns less than one year represent cumulative returns.

Cash Flow Summary

	Last Month	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$35,916,891	\$37,168,980	\$34,586,939	\$37,965,499
Net Cash Flow	-\$22,303	-\$526,977	-\$1,452,660	-\$2,152,473
Capital Appreciation	\$1,717,582	\$931,925	\$4,305,549	\$1,055,427
Income	\$165,434	\$203,675	\$337,776	\$909,150
Ending Market Value	\$37,777,604	\$37,777,604	\$37,777,604	\$37,777,604

Month Ending June 30, 2019

	Beginning Market Value	Net Cash Flow	Capital Appreciation	Income	Ending Market Value
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	\$2,180,788	\$0	\$31,122	\$5,930	\$2,217,840
Vanguard® International Growth Fund Admiral™ Shares	\$2,445,645	\$0	\$200,167	\$0	\$2,645,812
Vanguard® International Value Fund	\$2,515,362	\$0	\$141,014	\$0	\$2,656,375
Vanguard® PRIMECAP Fund Admiral™ Shares	\$3,717,316	\$0	\$276,524	\$0	\$3,993,839
Vanguard® Real Estate Index Fund Admiral™ Shares	\$2,185,352	\$61	\$16,690	\$20,824	\$2,222,928
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	\$1,087,735	\$919	\$6,128	\$2,781	\$1,097,564
Vanguard® Total Bond Market Index Fund Admiral™ Shares	\$3,275,865	\$0	\$30,248	\$7,803	\$3,313,915
Vanguard® Total International Bond Index Fund Adm™ Shares	\$2,168,198	\$61	\$32,706	\$2,030	\$2,202,995
Vanguard® Total International Stock Index Fund Inst Shares	\$5,059,494	-\$6,583	\$233,713	\$61,344	\$5,347,967
Vanguard® Total Stock Market Index Fund Institutional Shares	\$7,538,006	-\$16,761	\$497,661	\$29,314	\$8,048,220
Vanguard® Windsor™ Fund Admiral™ Shares	\$3,743,131	\$0	\$251,608	\$35,408	\$4,030,148
Total	\$35,916,891	-\$22,303	\$1,717,582	\$165,434	\$37,777,604

Benchmark History as of June 30, 2019

EPISCOPAL FOUNDATION OF DALLAS		
2/1/2018	Present	6% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged / 6% Real Estate Spliced Index / 18% Spliced Bloomberg Barclays US Aggregate Float Adjusted Index / 28% Spliced Total International Stock Index / 42% Spliced Total Stock Market Index
7/1/2015	1/31/2018	6% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged / 6% REIT Spliced Index / 18% Spliced Bloomberg Barclays US Aggregate Float Adjusted Index / 28% Spliced Total International Stock Index / 42% Spliced Total Stock Market Index
Total Equity		
N/A		
Equity Domestic		
6/30/2015	Present	100% CRSP US Total Market TR USD
Vanguard® Total Stock Market Index Fund Institutional Shares		
6/30/2015	Present	100% CRSP US Total Market TR USD
Vanguard® Windsor™ Fund Admiral™ Shares		
6/30/2015	Present	Russell 1000 Value
Vanguard® PRIMECAP Fund Admiral™ Shares		
6/30/2015	Present	Russell 1000 Growth
Equity International		
6/30/2015	Present	100% FTSE Global All-Cap ex-US Index
Vanguard® International Value Fund		
6/30/2015	Present	100% MSCI ACWI ex USA
Vanguard® International Growth Fund Admiral™ Shares		
6/30/2015	Present	100% MSCI ACWI ex USA
Vanguard® Total International Stock Index Fund Inst Shares		
6/30/2015	Present	100% FTSE Global All-Cap ex-US Index
Total Fixed Income		
N/A		
Fixed Income Domestic		

Benchmark History as of June 30, 2019

6/30/2015	Present	100% BBgBarc US Aggregate Float Adjusted TR
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares		
6/30/2015	Present	BBgBarc US Credit 1-5 Yr TR
Vanguard® Total Bond Market Index Fund Admiral™ Shares		
6/30/2015	Present	100% BBgBarc US Aggregate Float Adjusted TR
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares		
6/30/2015	Present	BBgBarc US Credit 5-10 Yr TR
Fixed Income International		
6/30/2015	Present	Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged
Vanguard® Total International Bond Index Fund Adm™ Shares		
6/30/2015	Present	Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged
Total Real Estate		
N/A		
Real Estate Domestic		
7/25/2018	Present	100% MSCI US IM Real Estate 25/50 Index
1/26/2018	7/24/2018	100% MSCI US IM Real Estate 25/50 Tran Index
6/30/2015	1/25/2018	100% MSCI US REIT Gross
Vanguard® Real Estate Index Fund Admiral™ Shares		
7/25/2018	Present	100% MSCI US IM Real Estate 25/50 Index
1/26/2018	7/24/2018	100% MSCI US IM Real Estate 25/50 Tran Index
6/30/2015	1/25/2018	100% MSCI US REIT Gross

Legal

For more information about Vanguard funds or non-Vanguard funds offered through Vanguard Brokerage Services, visit vanguard.com or call your Investment Consultant or Relationship Manager to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing. Total Portfolio Net of Fees returns reflect the deduction of fund expense ratios, purchase or redemption fees, and any advisory service fee applied to the client portfolio.

Total Portfolio returns represent client-specific time-weighted returns (TWR) are presented gross of any applicable service fees with the exception of mutual fund expense ratios and other security-level expenses.

Client performance inception date is generally the first month-end after initial funding. Mutual funds and all investments are subject to risk, including the possible loss of the money you invest. Diversification does not ensure a profit or protect against a loss.

Performance figures assume the reinvestment of dividends and capital gains distributions. The fund performance percentages are based on fund total return data, adjusted for expenses, obtained from Lipper, a Thomson Reuters Company. The total return data was not adjusted for fees and loads.

Benchmark comparative indexes represent unmanaged or average returns on various financial assets, which can be compared with funds' total returns for the purpose of measuring relative performance.

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The performance data shown represents past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. For performance data current to the most recent quarter-end, visit our website at www.vanguard.com/performance.

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Fees and Expenses

VIAS management fee structure

VIAS charges a management fee based on assets under management

Annual fee schedule

Asset level	Management fee
First \$10 million	0.15%
Next \$10 million	0.12%
Next \$30 million	0.08%

Total estimated expenses

Assets under management	Fee %	\$37.7 million
Management fee	0.110%	\$41,722
Fund expenses*	0.149%	\$56,289
Commingled funds/partnership expense	0.00%	\$0
Incentive fees	0.00%	\$0
Custodial fees	0.00%	\$0
Additional travel fees	0.00%	\$0
Total all-in fee	0.259%	\$98,011

* These costs are estimated. Actual weighted annual expense ratio is determined by the actual funds chosen for the portfolio. Importantly, there are no sales commissions or 12b-1 fees for Vanguard funds. The cost of our investment management services (i.e., custodial fees, manager costs, trading costs) are reflected in the expense ratios of our funds and are deducted from each fund's earnings before they are distributed to shareholders. Vanguard is committed to maintaining operating expenses at the lowest possible level, without sacrificing premier quality service.

Investment Expense Analysis as of June 30, 2019

Name	Market Value	% of Portfolio	Expense Ratio
Total Equity	\$26,722,362	70.7%	
Equity Domestic	\$16,072,207	42.5%	
Vanguard® Total Stock Market Index Fund Institutional Shares	\$8,048,220	21.3%	0.030%
Vanguard® Windsor™ Fund Admiral™ Shares	\$4,030,148	10.7%	0.210%
Vanguard® PRIMECAP Fund Admiral™ Shares	\$3,993,839	10.6%	0.310%
Equity International	\$10,650,155	28.2%	
Vanguard® International Value Fund	\$2,656,375	7.0%	0.380%
Vanguard® International Growth Fund Admiral™ Shares	\$2,645,812	7.0%	0.320%
Vanguard® Total International Stock Index Fund Inst Shares	\$5,347,967	14.2%	0.080%
Total Fixed Income	\$8,832,314	23.4%	
Fixed Income Domestic	\$6,629,319	17.5%	
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	\$1,097,564	2.9%	0.100%
Vanguard® Total Bond Market Index Fund Admiral™ Shares	\$3,313,915	8.8%	0.050%
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	\$2,217,840	5.9%	0.100%
Fixed Income International	\$2,202,995	5.8%	
Vanguard® Total International Bond Index Fund Adm™ Shares	\$2,202,995	5.8%	0.110%
Total Real Estate	\$2,222,928	5.9%	
Real Estate Domestic	\$2,222,928	5.9%	
Vanguard® Real Estate Index Fund Admiral™ Shares	\$2,222,928	5.9%	0.120%
Total	\$37,777,604	100.0%	0.149%

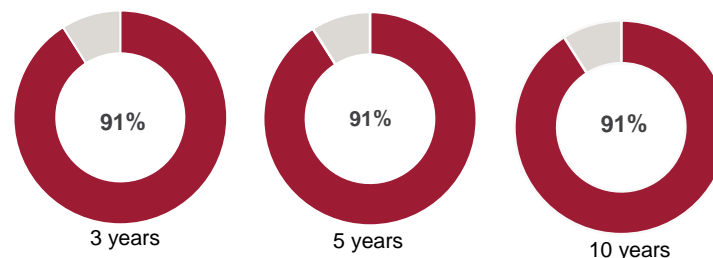
Active vs. Passive

Vanguard believes in active management

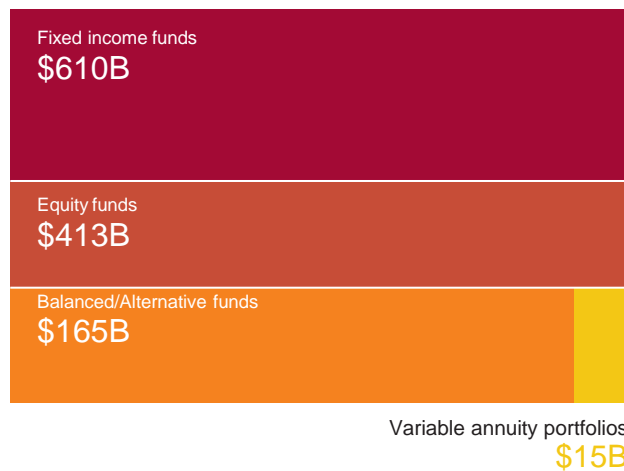
Vanguard has offered actively managed funds since it began operations in 1975

Performance

Percentage of Vanguard active funds whose returns beat their peer-group averages, periods ended June 30, 2018.*

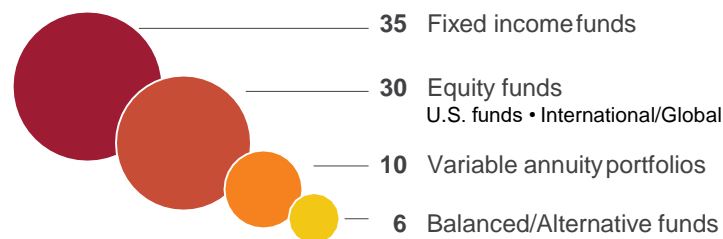


Active assets account for roughly 30% of all Vanguard assets



Invested in active funds

More than **\$1 trillion** in assets under management are invested in **81 active funds** across a wide range of categories.**



* For the three-year period, 9 of 9 Vanguard money market funds, 43 of 48 bond funds, 31 of 32 balanced funds, and 38 of 44 stock funds, or 121 of 133 Vanguard funds outperformed their peer group averages. For the five-year period, 9 of 9 Vanguard money market funds, 41 of 44 bond funds, 19 of 21 balanced funds, and 37 of 42 stock funds, or 106 of 116 Vanguard funds outperformed their peer group averages. For the ten-year period, 9 of 9 Vanguard money market funds, 40 of 44 bond funds, 17 of 19 balanced funds, and 36 of 40 stock funds, or 102 of 112 Vanguard funds outperformed their peer group averages. Results will vary for other time periods. Only funds with a minimum, three-, five-, or ten-year history, respectively, were included in the comparison. (Source: Lipper, a Thomson Reuters Company.) Note that the competitive performance data shown represent past performance, which is not a guarantee of future results, and that all investments are subject to risks. For the most recent performance, visit our website at vanguard.com/performance.

** Sources: Vanguard and Morningstar, based on data as of December 31, 2017.

↑ Talent

Vanguard's culture, scale, and long-term pay structure have allowed for adept hiring of external advisors. The Wellington™ Fund originated in 1929.



Active assets

(including money market funds):

\$584B

internally managed

\$618B

externally managed

27
external
advisors

We look for these drivers of performance

- Firm
- People
- Philosophy
- Process

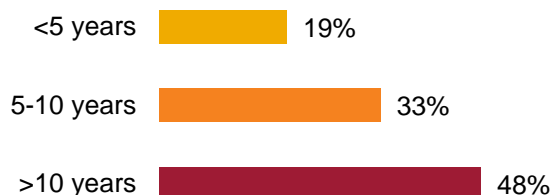
→ Patience

Patience is necessary: Even the most successful funds can experience frequent or extended periods of underperformance

99% of successful funds experienced at least four years underperformance*

Just as investors need to be patient with their investments, Vanguard is patient with our external managers.

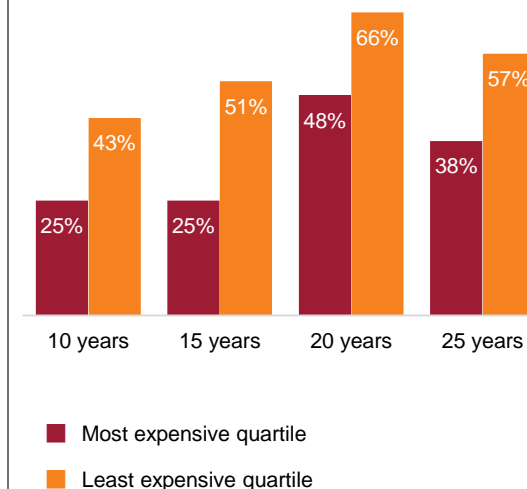
Tenure of external managers**



↓ Cost

Some argue higher costs indicate more skilled management. Our results suggest otherwise. We find no relationship between cost and gross alpha, but there is a clear negative relationship between cost and net alpha because alpha consistently decreases as the expense ratio increases.***

Percentage of actively managed equity funds that outperformed their benchmarks, periods ended June 30, 2018.†



* Successful funds are those that survived for the 15 years and also outperformed their prospectus benchmarks. Data are as of December 31, 2017. Our analysis was based on expenses and fund returns for active equity funds available to U.S. investors at the start of the period. The oldest and lowest-cost share class was used to represent a fund when multiple share classes existed. Each fund's performance was compared with that of its prospectus benchmark. Funds that were merged or liquidated were considered underperformers for the purpose of this analysis. The following fund categories were included: small-cap value, small-cap growth, small-cap blend, mid-cap value, mid-cap growth, mid-cap blend, large-cap value, large-cap growth, and large-cap blend. Sources: Vanguard calculations, based on data from Morningstar, Inc.

** Vanguard, as of August 1, 2018.

*** Rowley Jr., James J., Garrett L. Harbron, and Matthew C. Tufano, 2017. *In pursuit of alpha: Evaluating active and passive strategies*. Valley Forge, Pa.: The Vanguard Group

† Because of expenses, most index funds also underperform their benchmarks. Our analysis was based on expenses and fund returns for active equity funds available to U.S. investors at the start of each period. Each fund's performance was compared with that of its prospectus benchmark. Data includes funds from all share classes. Sources: Vanguard calculations, based on data from Lipper, a Thomson Reuters Company, as of June 30, 2018.

Headwinds for active equity mutual fund managers

Percentage of actively managed funds underperforming their style benchmarks

Ten-year: December 31, 2018

	Value	Blend	Growth
Large	93%	95%	89%
Mid	97%	97%	89%
Small	94%	96%	86%

International

80%	83%	76%
Developed	Emerging markets	Global

Key

≥ 75%	≥ 50%	≥25%	< 25%
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Vanguard active equity funds

Ten-year: December 31, 2018

	Below benchmark	Above benchmark
Above peer-group average	44%	46%
Below peer-group average	5%	5%

Note: Performance data reflect periods ending December 31, 2018. Sources: Vanguard calculations, using data from Morningstar, Inc. Equity benchmarks are represented by the following indexes—Large blend: MSCI U.S. Prime Market 750 Index through January 30, 2013, CRSP U.S. Large Cap Index thereafter; Large growth: S&P 500/Barra Growth Index through May 16, 2003, MSCI U.S. Prime Market Growth Index through April 16, 2013, CRSP U.S. Large Cap Growth Index thereafter; Large value: S&P 500/Barra Value Index through May 16, 2003, MSCI U.S. Prime Market Value Index through April 16, 2013, CRSP U.S. Large Cap Value Index thereafter; Mid blend: S&P MidCap 400 Index through May 16, 2003, MSCI U.S. Mid Cap 450 Index through January 30, 2013, CRSP U.S. Mid Cap Index thereafter; Mid growth: MSCI U.S. Mid Cap Growth Index through April 16, 2013, CRSP U.S. Mid Cap Growth Index thereafter; Mid value: MSCI U.S. Mid Cap Value Index through April 16, 2013, CRSP U.S. Mid Cap Value Index thereafter; Small blend: Russell 2000 Index through May 16, 2003, MSCI U.S. Small Cap 1750 Index through January 30, 2013, CRSP U.S. Small Cap Index thereafter; Small growth: S&P SmallCap 600/Barra Growth Index through May 16, 2003, MSCI U.S. Small Cap Growth Index through April 16, 2013, CRSP U.S. Small Cap Growth Index thereafter; Small value: S&P SmallCap 600/Barra Value Index through May 16, 2003, MSCI U.S. Small Cap Value Index through April 16, 2013, CRSP U.S. Small Cap Value Index thereafter. International and global benchmarks are represented by the following indexes: Global—Total International Composite Index through August 31, 2006, MSCI EAFE + Emerging Markets Index through December 15, 2010, MSCI ACWI ex U.S.A IMI Index through June 2, 2013, FTSE Global All Cap ex U.S. Index thereafter; Developed—MSCI World ex U.S.A Index; Emerging markets: MSCI Emerging Markets Index.

Timeless principles that guide our investment philosophy



Goals

Create clear, appropriate investment goals



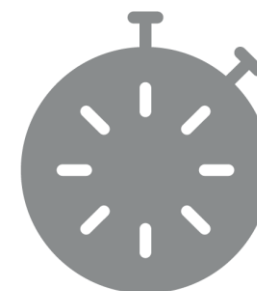
Balance

Develop a suitable asset allocation using broadly diversified funds



Cost

Minimize cost



Discipline

Maintain perspective and long-term discipline

Active management is part of our history

40⁺
YEARS

We have managed active funds
since our beginning in 1975



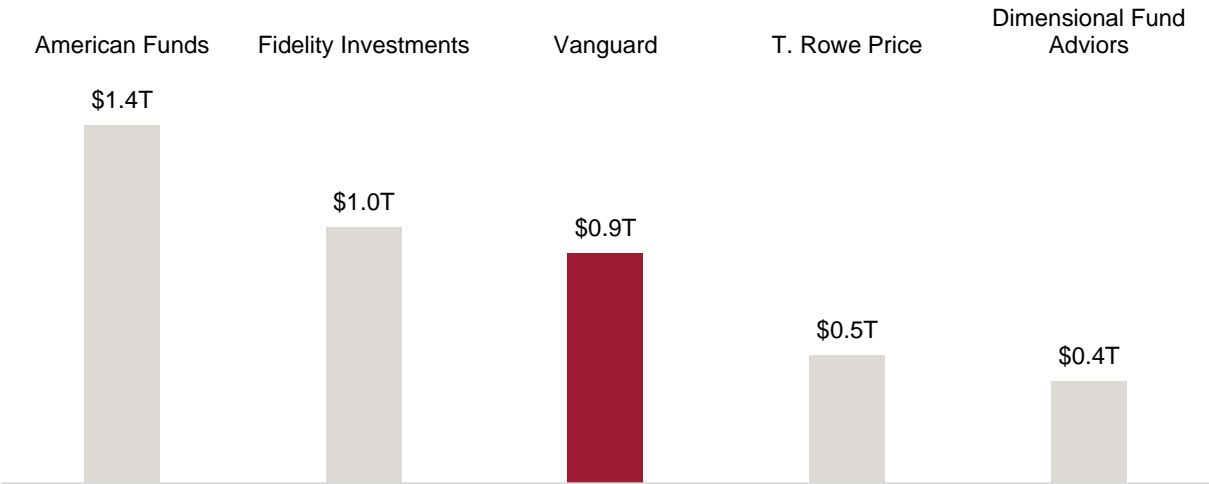
Our first 11 funds were
actively managed



Active management accounts
for approximately 30% of
Vanguard's global assets

Our strong presence in active management

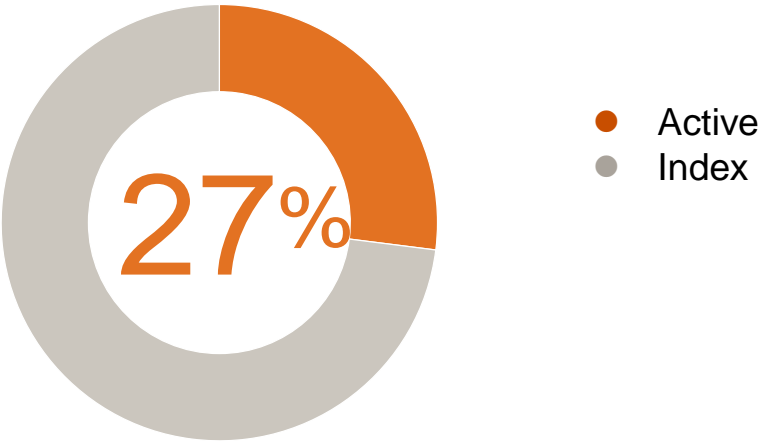
Actively managed assets under management*



* Morningstar, Inc., as of December 31, 2018. Excludes money markets and fund of funds.

A diverse and deep history in active management

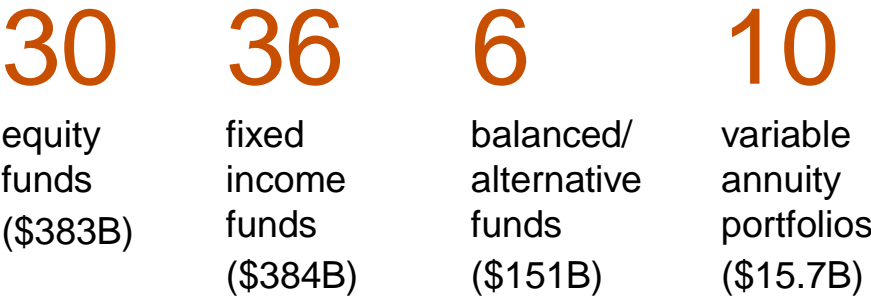
Nearly 30% of our global assets are actively managed . . .



. . . are evenly split between internal and external managers . . .



and are spread across a range of funds.



Sources: Vanguard and Morningstar, Inc., as of December 31, 2018.

Patience has paid off

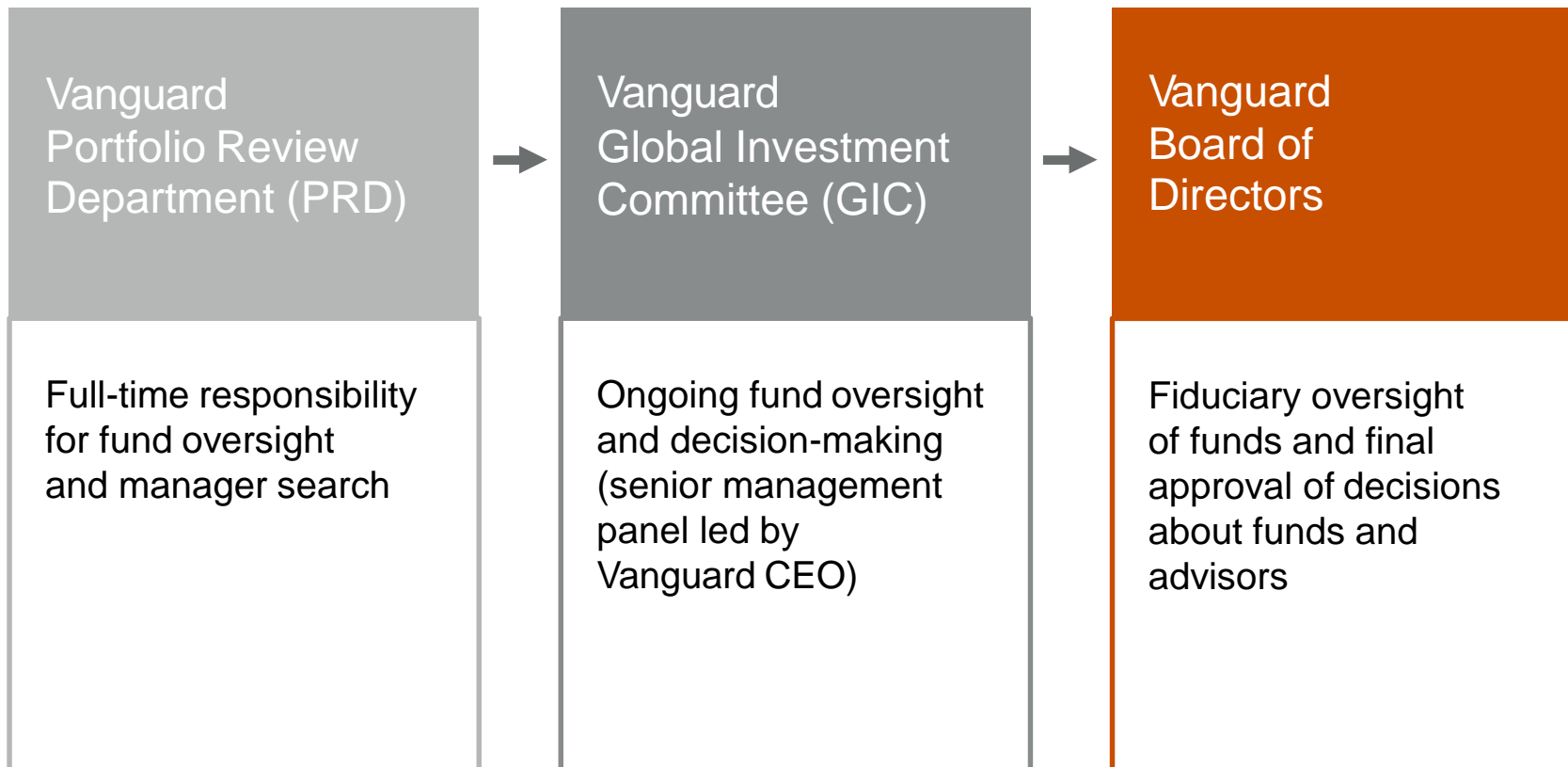
Annualized excess returns of Vanguard and non-Vanguard active equity funds over the returns of their stated benchmarks, net of fees

	Periods ended December 31, 2018		
	Past 10 years	Past 20 years	Past 30 years
Equal-weighted (median)			
Vanguard funds	-0.07%	0.71%	0.29%
Non-Vanguard funds	-0.82%	-0.24%	-0.03%
Asset-weighted			
Vanguard funds	0.91%	1.55%	0.55%
Non-Vanguard funds	-0.22%	0.44%	0.05%

Source: Vanguard.

Notes: The performance of each Vanguard and non-Vanguard fund was compared with that of its stated benchmark using monthly return data ended December 31, 2018. The returns for all non U.S., global, and domestic large-, mid-, small-cap, and sector Vanguard active equity funds, including those that were merged or liquidated during the period, were included in the performance calculations. The active equity portions of our balanced funds were excluded. In our calculations, the portfolios of Vanguard and non-Vanguard active equity funds were assumed to be rebalanced monthly to their target weights (as determined by the equal-weighting or asset-weighting) across all the Vanguard or non-Vanguard active equity funds alive in a given month. All fund performance data are net of fees. See Appendix for a full list of Vanguard funds.

Oversight and manager search are a priority at the top levels of Vanguard



We go to great lengths to identify and select talented external managers

200

Meetings Vanguard conducts with prospective external managers each year

22

Team members on Vanguard's oversight and manager search team

44

Active managers hired by Vanguard since 2008

Sourcing of talented managers

New ideas:

Identified through our continual work of meeting with prospective subadvisors

Spinouts:

Key managers and/or teams who leave firms to join or start a new firm

Extensions of existing relationships:

A deepening of our relationships with firms we already partner with that have demonstrated strong capabilities managing other types of strategies

Talent

Our framework for evaluating current and prospective managers emphasizes qualitative criteria, not short-term performance.

Drivers

Firm

- Ethics
- Stability
- Ownership structure
- Account and asset trends
- Diverse client base
- Incentives

People

- Deep investment team
- Succession/contingency
- Limited turnover of key professionals
- Tenure and experience
- Proven expertise in subject matter
- Demonstrated ability to handle large mandates

Philosophy

- Shared by investment professionals
- Enduring
- Easily articulated

Process

- Understandable
- Stable/proven
- Repeatable

Outcomes

Portfolio

- Clear reflection of philosophy and process
- Characteristics consistent with expectations
- Risk profile is aligned with investment strategy

Performance

- Long-term history of competitive results versus benchmarks and peers
- Performance consistent with investment approach

Manager patience: Average tenure is 15 years

Partner	Number of mandates	Start date	Duration (years)	Vanguard assets (\$B)
Wellington Management Co.	25	1975	44	335.8
Schroder Investment Management North America	3	1981	38	15.6
PRIMECAP Management Co.	4	1984	35	85.1
Barrow, Hanley, Mewhinney, & Strauss	3	1985	34	22.5
Marathon Asset Management	1	1995	24	2.4
Oaktree Capital Management	2	1996	23	1.0
Baillie Gifford Overseas	5	2003	16	24.0
Hotchkis and Wiley Capital Management	1	2003	16	6.7
Pzena Investment Management	3	2005	14	7.0
Donald Smith & Co.	1	2005	14	1.3
Lazard Asset Management	2	2006	13	13.3
Jennison Associates	2	2007	12	6.2
Edinburgh Partners	1	2008	11	3.1
Frontier Capital Management	2	2008	11	2.0
Sanders Capital	1	2010	9	7.1
Jackson Square Partners	2	2010	9	3.7
Cardinal Capital Management	1	2010	9	0.3
Los Angeles Capital	1	2011	8	3.2
D. E. Shaw Investment Management	1	2011	8	3.2
ARGA Investment Management	1	2012	7	2.1
Stephens Investment Management Group	1	2013	6	2.1
ArrowMark Partners	2	2014	5	2.7
RS Investments	1	2016	3	1.8
ClearBridge Investments	1	2017	2	2.3
TimesSquare Capital Management	1	2017	2	0.5

95%
of total assets
>10 years tenure

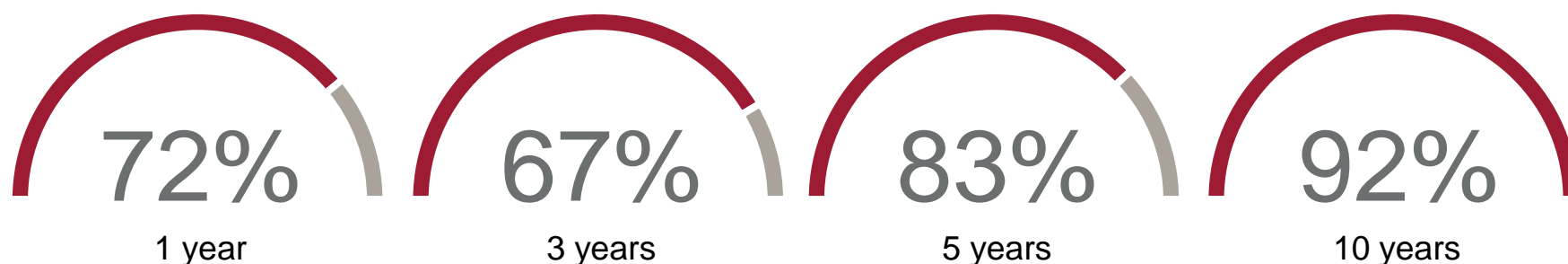
4%
of total assets
5–10 years tenure

1%
of total assets
< 5 years tenure

Source: Vanguard, as of December 31, 2018.

Focus on low cost and rigorous oversight has led to competitive performance

Percentage of Vanguard **multimanager** funds outperforming their Lipper peer-group averages (periods ended December 31, 2018)



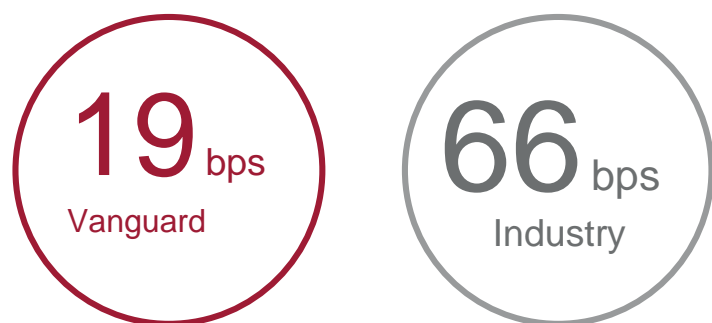
Source: Lipper, a Thomson Reuters Company.

Number of Vanguard multi-manager funds that outperformed their Lipper peer-group averages for periods ended December 31, 2018: For the one-year period, 14 of 18 Vanguard multi-manager funds outperformed their Lipper averages. For the three-year period, 15 of 18 Vanguard multi-manager funds outperformed their Lipper averages. For the five-year period, 13 of 17 Vanguard multi-manager funds outperformed their Lipper averages. For the ten-year period, 12 of 12 Vanguard multi-manager funds outperformed their Lipper averages. Results will vary for other time periods. Only funds that used a multi-manager structure for the entire respective time period and are US domiciled, were included in the comparison. Investor share classes were used for all Vanguard funds.

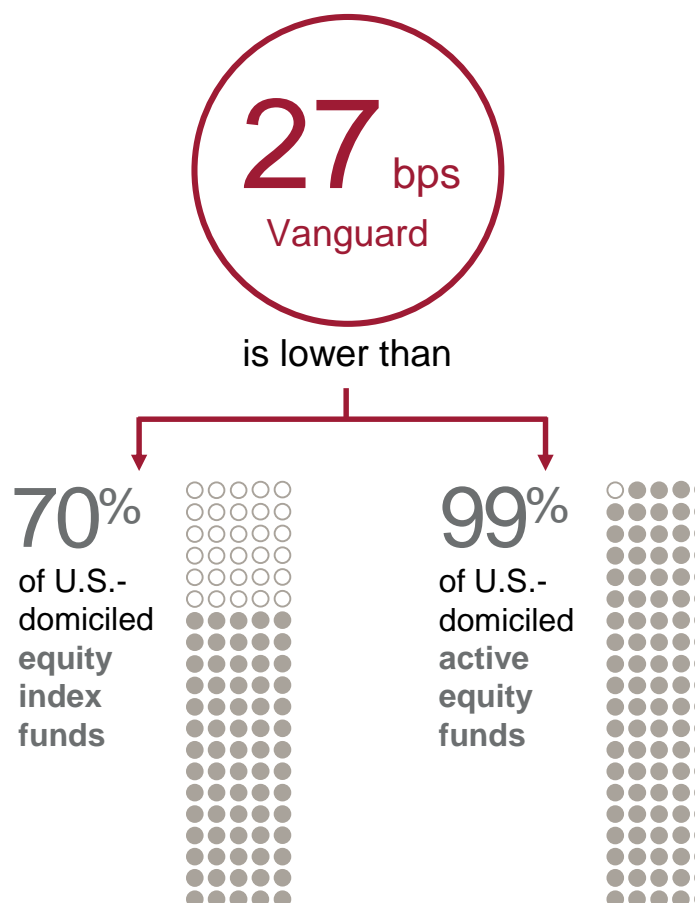
Note that the competitive performance data shown represent past performance, which is not a guarantee of future results, and that all investments are subject to risks. For the most recent performance, visit our website at www.vanguard.com/performance.

Low cost is key

Average active fund expense ratio*



Average active equity fund**



Sources: Vanguard and Morningstar, Inc., as of December 31, 2018.

* Average Vanguard asset-weighted active fund and the average industry asset-weighted active fund.

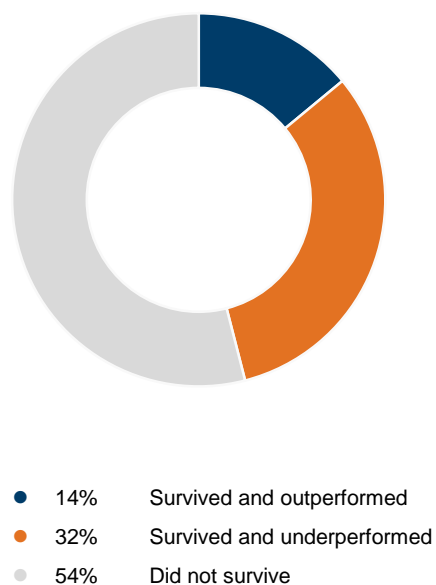
** Average asset-weighted active equity expense ratio.

Notes: The average Vanguard fund expense ratio calculation is an equal-weighted average of all share classes. The average index fund and active fund expense ratio calculations are equal-weighted averages of all share classes of non-Vanguard index funds and active funds domiciled in the United States. Vanguard calculations, based on data from Morningstar, Inc.; bps = basis points.

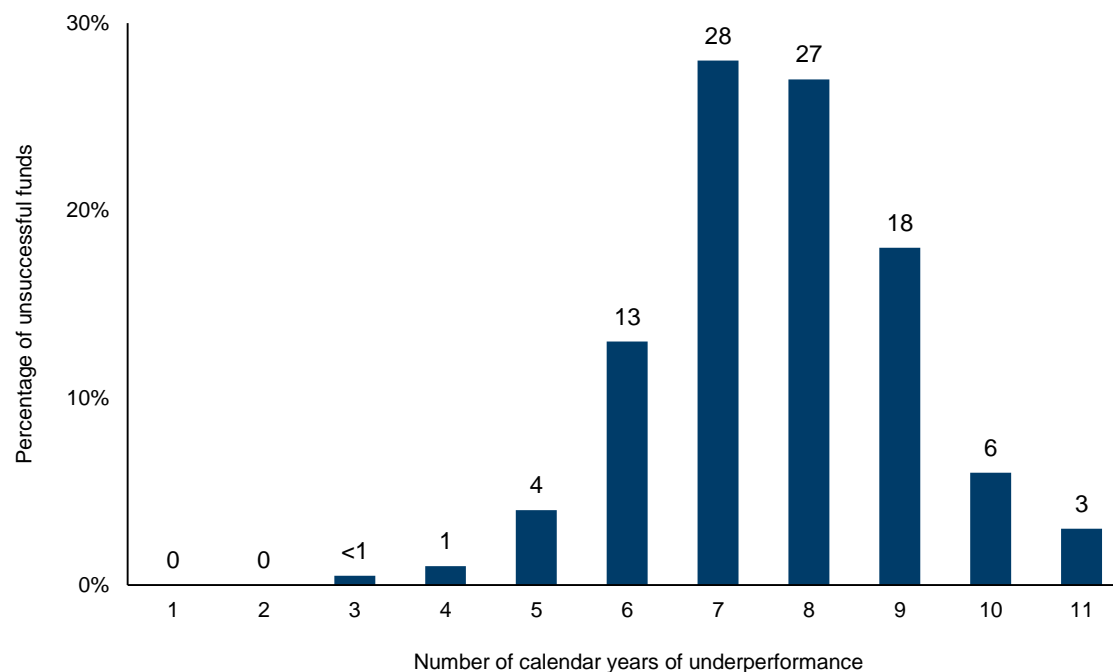
The odds of a consistent winner are, on average, modest

Distribution of active equity funds by total calendar years of underperformance

Out of 2,224 initial funds . . .



. . . of those that survived and outperformed, almost 100% underperformed in at least four years



Sources: Vanguard calculations, based on data from Morningstar, Inc.

Notes: Successful funds are those that survived for the 15 years and also outperformed their prospectus benchmarks for the period ended December 31, 2016.

Our analysis used expenses and fund returns for active equity funds available to U.S. investors and that were alive at the start of each analysis period. The initial number of funds at the start of the analysis was 2,224 funds. Of these initial 2,224 funds, 1,020 (46%) survived and 319 (14%) outperformed over the 15-year period. The oldest and lowest-cost single share class was used to represent a given fund where multiple share classes existed. Their performance was compared with their prospectus benchmarks. Funds that were merged or liquidated are considered underperformers for the purposes of this analysis. The following fund categories were included: small value, small growth, small blend, mid-cap value, mid-cap growth, mid-cap blend, large value, large growth, and large blend.

Past performance is no guarantee of future results.

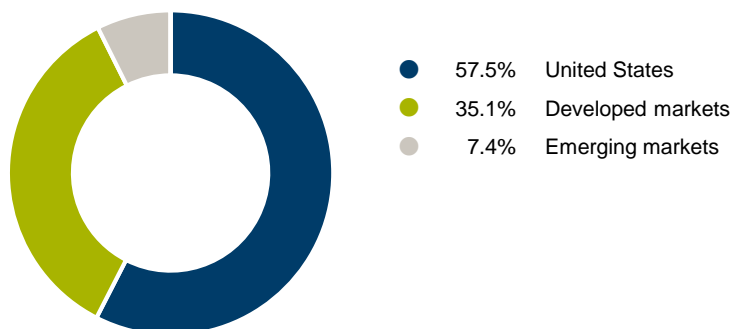
Global active equity portfolio

Vanguard Institutional Advisory Services®

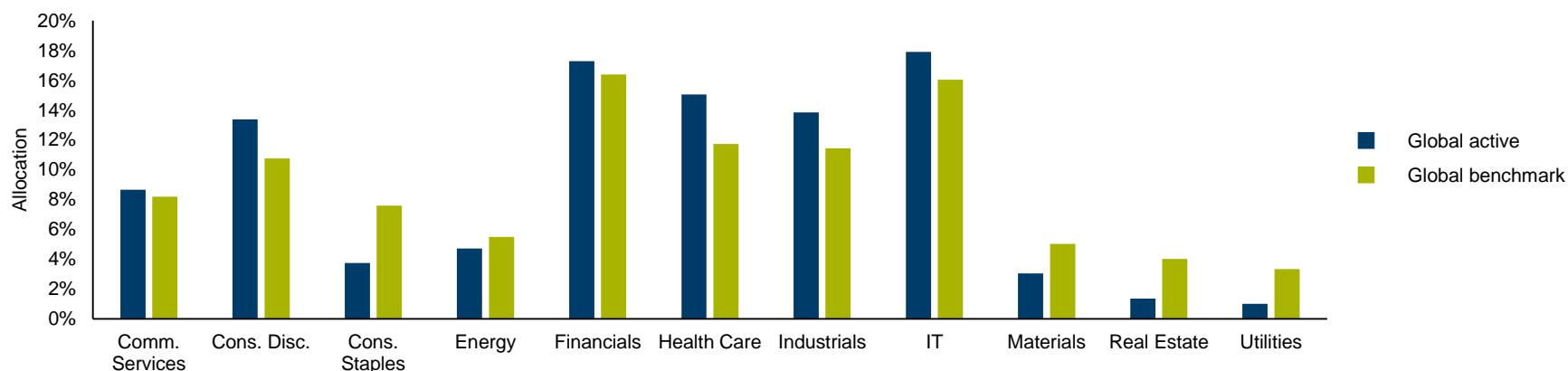
History and evolution

- VIAS active equity strategies were originally developed to meet the needs of clients based on varying preferences toward ability to tolerate deviation from benchmark.
- Traditionally, investors have approached active management by focusing on diversification within the popular Morningstar Style Box matrix.
 - Matrix is plotted on a 3-by-3 chart covering:
 - Investment style: Value, blend, growth
 - Market capitalization: Large, mid, small
- Further diversification was achieved through evaluation of sectors, regions, and style quintiles.
- Portfolios were monitored and evaluated based on return and risk-based statistics such as excess return, standard deviation, Sharpe ratio, and Brinson attribution.
- As client needs have become increasingly complex and our thought leadership in the active space has evolved, our analysis includes a factor-driven approach.
- The trend of factor-driven investing has led us to conduct additional research to potentially identify better risk-adjusted portfolios within our active equity portfolios.
 - Research and analysis of supporting data is an ongoing process.

VIAS global active equity approach: Portfolio overview



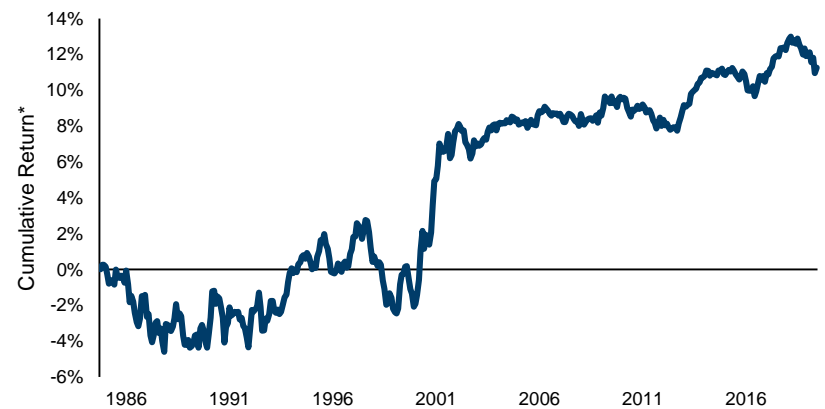
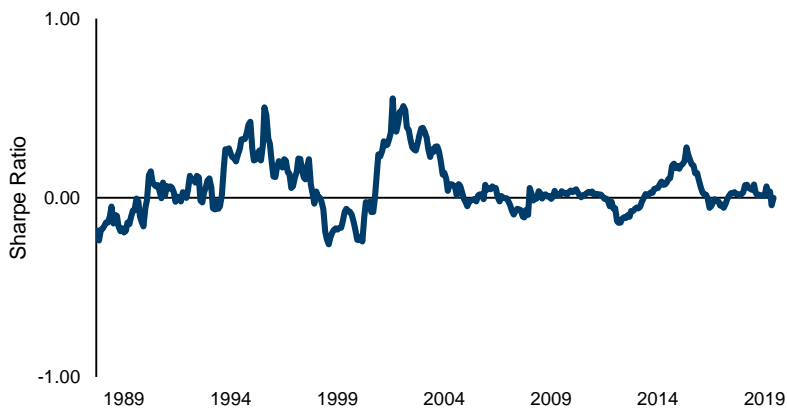
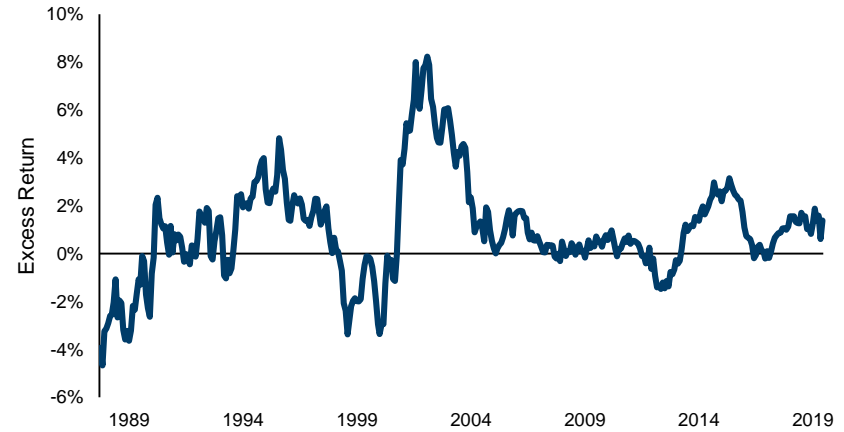
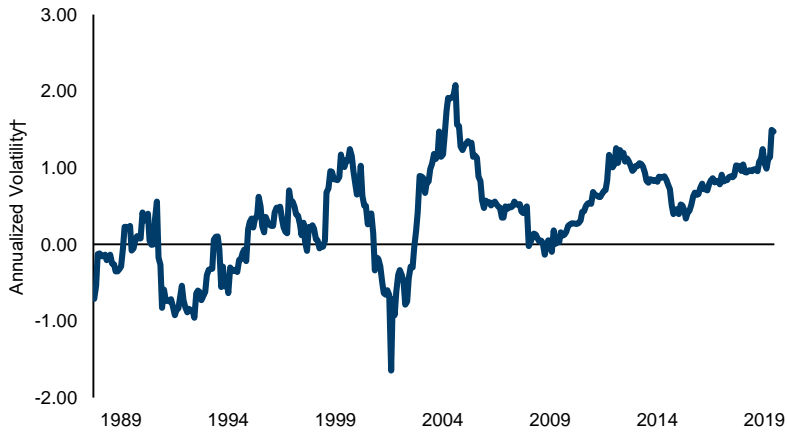
	Global active	Benchmark	Difference
Market capitalization	\$122,547M	\$145,483M	-\$22,936M
Number of Securities	474	10,658	-10,184
Price/Earnings	16.8	17.4	-0.6
Price/Book	2.2	2.2	0.0
Active share	67.2	0.0	67.2
Hist. EPS growth (3-yr)	10.7	10.3	0.3
Est. EPS growth (3-5 yr)	11.5	10.9	0.7
ROE	17.6	17.0	0.6
Large-cap (%)	80.2	70.8	9.4
Mid-cap (%)	19.2	21.0	-1.8
Small-cap (%)	0.6	8.1	-7.5



Source: FactSet.

Notes: Data as of June 30, 2019. FTSE methodology used for market capitalization. Global Active represented by 20% International Value, 20% International Growth, 30% PRIMECAP, and 30% Windsor™. Benchmark represented by 60% U.S. Benchmark and 40% International Benchmark, which can be found in the appendix.

Risk and return metrics relative to benchmark (since inception)



Source: FactSet.

Notes: Data is from November 1, 1984 until June 30, 2019, and is shown in rolling 36-month increments except for cumulative return. Global Active represented by 20% International Value, 20% International Growth, 30% PRIMECAP, and 30% Windsor™. Benchmark represented by 60% U.S. Benchmark and 40% International Benchmark which can be found in the appendix.

*Cumulative return was calculated using the logarithmic return relative to the benchmark.

†Volatility measured using standard deviation.

Evaluating the VIAS global active approach

	One-year		Three-year		Five-year		Since inception*	
	Global active	Global benchmark	Global active	Global benchmark	Global active	Global benchmark	Global active	Global benchmark
Sharpe ratio	−0.14	0.08	1.03	1.01	0.57	0.60	0.52	0.47
Sortino ratio	−0.01	0.30	1.69	1.65	0.96	1.01	1.11	1.04
Jensen's alpha	−3.43	–	0.47	–	−0.23	–	0.93	–
Information ratio	−1.38	–	0.57	–	0.11	–	0.24	–
R-squared	0.98	1.00	0.96	1.00	0.97	1.00	0.94	1.00

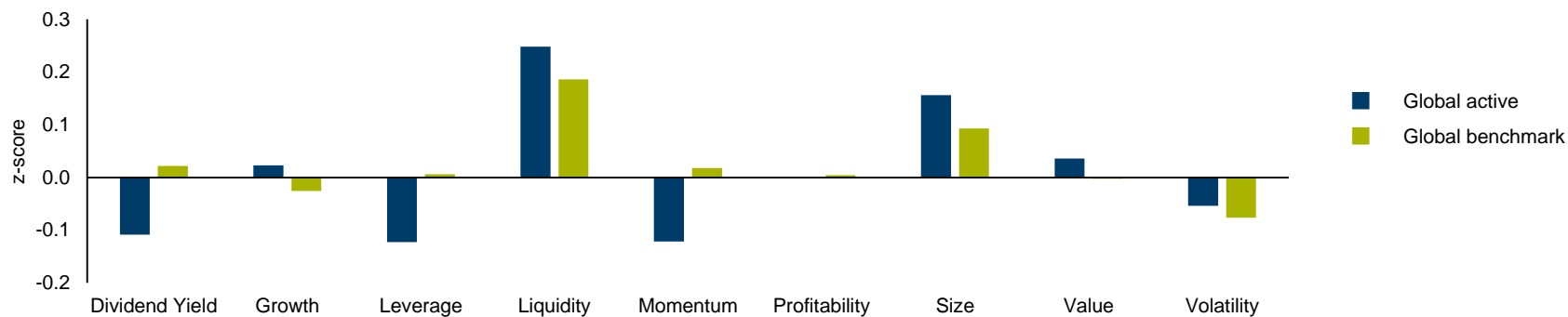
Trailing 12-month attribution

	Commercial services	Consumer discretionary	Consumer staples	Energy	Financials	Health care	Industrials	IT	Materials	Real estate	Utilities	Total
Allocation effect	0.01	−0.07	−0.10	0.13	0.00	0.08	−0.01	0.21	0.10	−0.10	−0.15	0.10
Selection effect	−0.67	−0.63	−0.49	−0.28	0.03	0.13	−0.22	−0.73	−0.21	0.05	−0.01	−3.03
Total effect	−0.66	−0.70	−0.59	−0.15	0.03	0.21	−0.23	−0.52	−0.11	−0.05	−0.16	−2.93

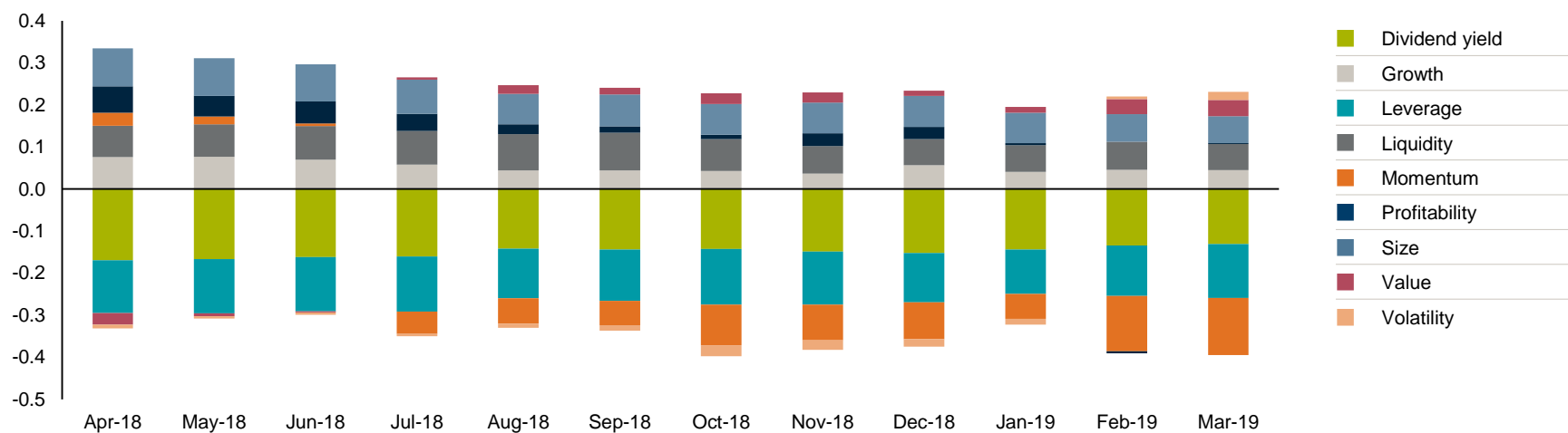
Source: FactSet.

Notes: Attribution data as of June 30, 2019. Inception date is November 1, 1984. Global Active represented by 20% International Value, 20% International Growth, 30% PRIMECAP, and 30% Windsor™. Benchmark represented by 60% U.S. Benchmark and 40% International Benchmark which can be found in the appendix.

Factor exposure



Factor exposure over time—Relative to the benchmark



Sources: FactSet and Axioma.

Notes: Factor Impact data as of June 30, 2019. Global Active represented by 20% International Value, 20% International Growth, 30% PRIMECAP, and 30% Windsor™. Benchmark represented by 60% U.S. Benchmark and 40% International Benchmark which can be found in the appendix.

VIAS global active equity approach: Managers and strategy

Fund	Manager(s)	Manager strategy
PRIMECAP (30%)		
	PRIMECAP Management (100%)	PRIMECAP management tends to favor growth industries where companies invest heavily in R&D, such as information technology and health care; it typically offers less exposure to defensive sectors. It can be described as growth at a reasonable price.
Windsor (30%)		
	Wellington Management (70%)	Wellington manages the portfolio via a bottom-up, fundamental, relative value approach. The portfolio is opportunistic and contrarian in nature; the advisor is willing to prudently concentrate positions in stocks with the greatest appreciation potential when the conviction level is high and risks are manageable.
	Pzena Investment Management (30%)	Pzena follows a deep-value philosophy. Research focuses on identifying stocks meeting three criteria: (1) problems are judged to be temporary, (2) management has a viable plan to generate an earnings recovery, and (3) there is meaningful downside protection in case earnings do not recover.
International Value (20%)		
	Lazard Asset Management (40%)	Lazard employs a research-driven, bottom-up, relative-value approach in selecting stocks. The portfolio managers and analysts seek to identify stocks that offer an appropriate trade-off between low relative valuation and high financial productivity.
	Edinburgh Partners (35%)	Edinburgh Partners employs a concentrated, low-turnover, value-oriented investment approach that results in a portfolio of companies with good long-term prospects and below-market price-to-earnings ratios.
	ARGA Investment Management (25%)	ARGA invests in businesses that it believes are undervalued based on long-term earnings power and dividend-paying capability. The portfolio generally will have a strong value orientation; most valuation metrics will often be at discounts relative to its index.
International Growth (20%)		
	Baillie Gifford (60%)	Baillie Gifford believes that superior growth leads to share-price outperformance in the long term and that one must be willing to invest with conviction, sometimes in unfashionable opportunities, to deliver outperformance. The advisor seeks to identify companies with long-term, sustainable competitive advantages by developing deep industry and company knowledge.
	Schroder Investment Management (40%)	Schroders believes that quality growth companies with a sustainable competitive advantage selling at a reasonable price produce superior long-term returns. They leverage fundamental research to identify quality-growth stocks selling at attractive valuations with sustainable competitive advantages.

Definitions

Active share—Measures the degree of active management by a portfolio manager.

Information ratio—A measure of consistency in excess return. The annualized excess return over a benchmark divided by the annualized standard deviation of excess return.

Logarithmic annualized return—Logarithmic annualized return will take an exponential return series and create a straighter distribution.

Jensen's alpha—A risk-adjusted performance measure that is the excess return of a portfolio over and above that predicted by the CAPM, given the portfolio's beta and the average market return. Jensen Alpha measures the value added of an active strategy.

R-squared—Returns the fraction of the portfolio's variance that can be explained by the benchmark.

Sharpe ratio—A risk-adjusted measure that measures reward per unit of risk.

Sortino ratio—The Sortino ratio is similar to the Sharpe ratio except the Sortino ratio uses annualized downside deviation for the denominator, whereas Sharpe uses annualized standard deviation. The numerator is the difference between the portfolio's annualized return and the minimum acceptable return (MAR). The denominator is the portfolio's annualized downside deviation.

Z-score—The number of standard deviations above or below the population mean a value falls.

Benchmark data

U.S. benchmark—Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.

International benchmark—MSCI EAFE through January 30, 2001, MSCI EAFE + EMF through December 15, 2010, MSCI AC World ex USA IMI through February 27, 2014, and FTSE All Cap ex US thereafter. FTSE All Cap ex US data in Factset only available after February 27, 2014.

Factor definitions

Dividend yield—Measure of how much a company pays out in dividends each year.

Growth—Measure of a company's growth rate. Companies that are expected to grow at an above-average rate are considered to be growth stocks.

Leverage—Measure of how much debt a company uses to finance its assets. A company with significantly more debt relative to its assets is considered highly leveraged.

Liquidity—Measure of a stock's trading activity. Stocks with higher trading volume are more liquid than stocks that trade infrequently.

Momentum—Measure of a stock's recent performance. Momentum is the belief that a stock's price is more likely to continue to move in the same direction than it is to move in the opposite direction

Profitability—Measure of a company's profitability. Companies with higher returns on equity are often associated with being higher quality.

Size—Measure to differentiate between small and large companies.

Value—Measure of how fairly a stock is priced within the market. Stocks that are believed to be undervalued by based on the company's fundamentals are considered value stocks.

Volatility—Measure of the dispersion of a stock's returns regardless of market movement; can be thought of as idiosyncratic (stock-specific) volatility.

Economic and Market Outlook

Economic and market overview

Global growth: Outlook downgraded amid escalating trade tensions and modest deterioration in economic fundamentals

Inflation: Unlikely to accelerate as price expectations remain anchored

Policy and interest rates: Dovish sentiment growing as downside risks escalate

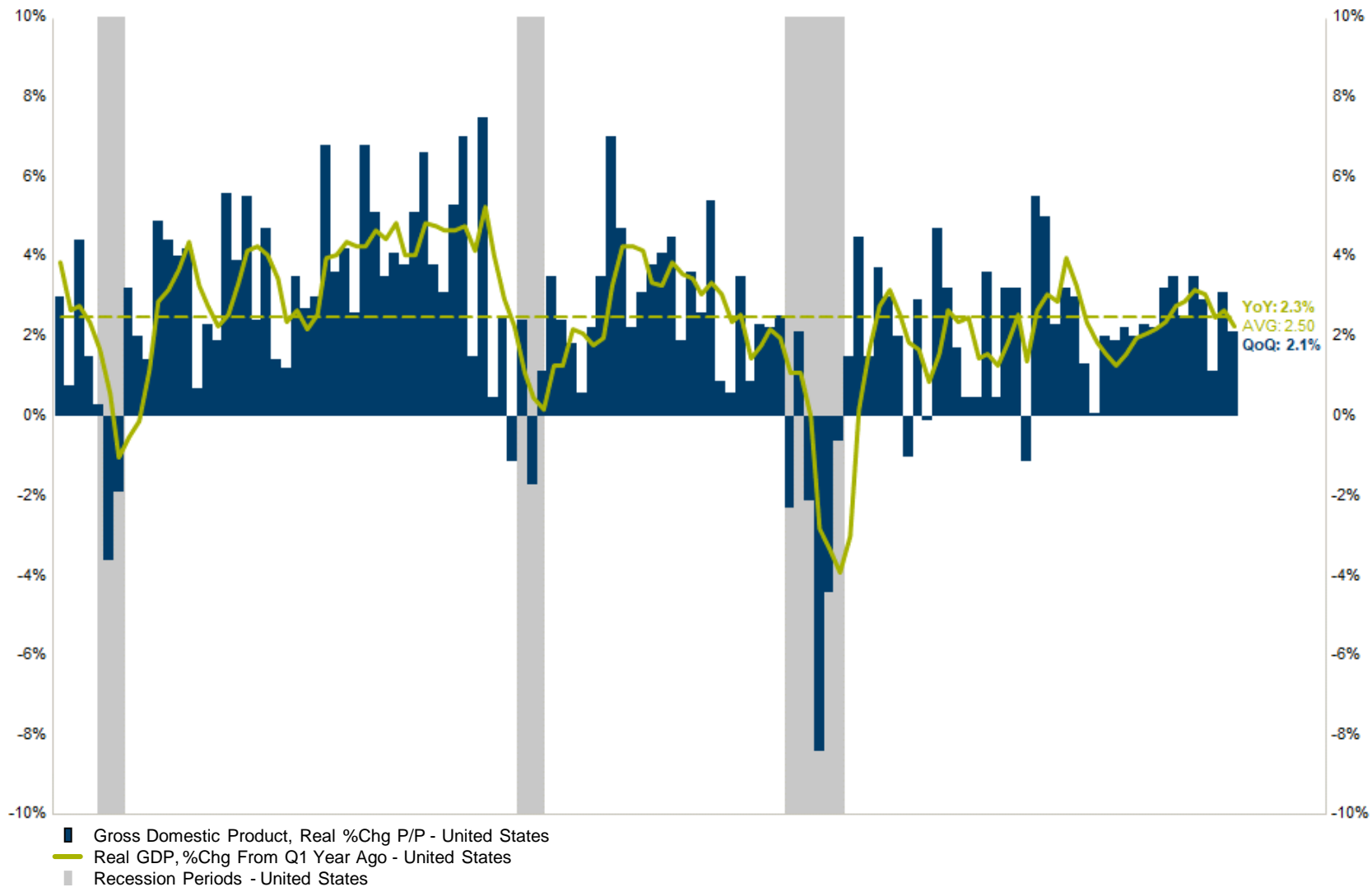
Global asset returns: Expect higher risks and lower returns

Themes and outlook

	Global	United States	Europe	Asia
Growth	<p>We have downgraded our global growth outlook amid an escalation in global trade tensions and a modest deterioration in economic fundamentals. We now expect 2% growth in 2019 for the U.S., 1% in the euro area, 6.2% in China and a technical recession in Japan beginning in Q419.</p>	<p>In 2019, U.S. economic growth should decline from current levels toward trend growth of about 2%.</p> <p>The chances of a U.S. recession occurring in the next 12 months and thereby derailing growth in the global economy are roughly 40% as we enter the third quarter.</p>	<p>Euro area growth is likely to be below trend in 2019, with growth of about 1%. The sharp slowdown has been driven by: a deterioration in global growth, tighter financial conditions, elevated policy uncertainty and temporary/idiosyncratic factors (e.g., autos).</p> <p>Our forecast for the United Kingdom for growth at slightly below trend in 2019. However, tail risks are elevated due to uncertainty about Brexit.</p>	<p>In China, Real GDP growth prospects for 2019, 6.2%, with risks tilting toward the downside. We expect growth to gradually slow in the second half of 2019.</p> <p>We expect Japan to grow just below potential, 0.6% in 2019 as domestic demand offsets global export slowdown, with technical recession starting in Q4 due to VAT tax hikes.</p>
Inflation	<p>We expect global labor markets to remain relatively tight, with unemployment rates, wage growth, and inflation to remain broadly stable.</p> <p>The sensitivity of core inflation to labor markets is likely weaker than in past cycles, due to increasing labor market competition from low wage offshore workers, and the substitution of technology in place of labor.</p>	<p>Core PCE likely to remain below 2% in 2H 2019 given structural factors (technology, globalization).</p> <p>Odds of inflation above 2% vs falling below by year end 2019 are 25/75.</p>	<p>In the euro area, we expect a gradual strengthening in price pressures as labor market slack erodes. Nonetheless, we see a low likelihood of a surprise surge in core inflation, due to structural factors the labor market.</p> <p>In the United Kingdom, we expect core inflation to remain close to 2% in 2019, given tight labour markets. Brexit, and associated exchange rate volatility, is a key risk to this view.</p>	<p>In China, CPI to be around 2.0–2.5% in 2019. Supply constraints in pork pose an upside risk, but still unlikely for CPI to breach 3%.</p> <p>In Japan, narrowing output gap and strong bump in non-regular workers' wages should support a gradual increase in CPI excluding fresh food and energy. 1% core-core inflation is likely achievable in 2020.</p>
Policy and interest rates	<p>Our outlook for global monetary policy has become more dovish. We downgraded our Fed call and we have also shifted our ECB and BOE view from “one rate hike” over the next 12 months to “no policy change,” with risks skewed towards further easing.</p>	<p>We’re downgrading our Fed call from a pause in 2019 to 50 bps in cuts. This reflects our best assessment of what the Fed will do to counter an inverted yield curve and soft inflation, rather than what economic fundamentals would justify (a 2019 pause).</p>	<p>We do not anticipate the European Central Bank to raise interest rates until 2020.</p> <p>In the United Kingdom, we expect the Bank of England to keep rates on hold until there is more clarity around Brexit.</p>	<p>Policymakers have to balance multiple goals, such as near-term growth stability and medium-term financial stability.</p> <p>BOJ faces a dilemma between inflation and financial stability.</p>
	Balanced	Equities	Bonds	
Global asset returns	<p>Our outlook for global stocks and bonds has gradually improved due to a decline in stock valuations and higher bond yields. The market’s efficient frontier of expected returns for a unit of portfolio risk is still in a lower return orbit. More important, common asset-return-centric portfolio tilts, seeking higher return or yield, are unlikely to escape the strong gravity of low-return forces in play.</p>	<p>Based on our “fair-value” stock valuation metrics, the medium-run outlook for global equities has improved somewhat and is now in the 4.5%–6.5% range.</p> <p>Expected returns for the U.S. stock market are lower than those for international developed markets, underscoring the benefits of global equity strategies in the face of lower returns.</p>	<p>Despite the risk of a short-term acceleration in the pace of monetary normalization, the potential for a material rise in long-term interest rates remains modest.</p> <p>Fair-value estimate for the benchmark 10-year U.S. Treasury 2.75-3.25 given market (SPF) Federal Funds Rate expectations and reasonable term premium.</p>	

Source: Vanguard.

Real GDP Growth (USA)



Source: FactSet, as of July 31, 2019.

Trade war scenarios

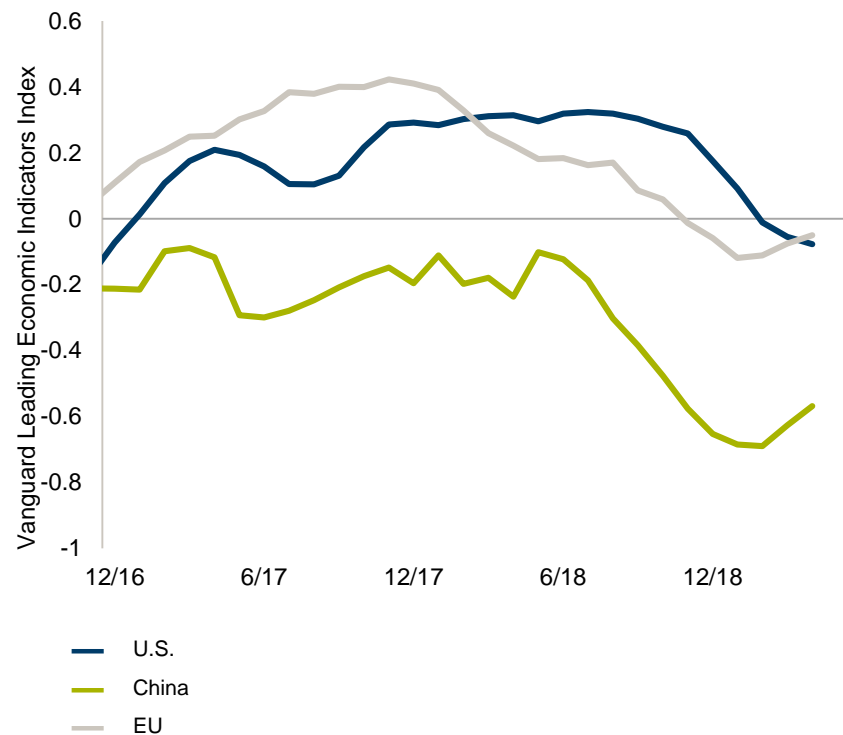
The likely conclusion is marginal changes to U.S. trade relationships and a prolonged U.S.China negotiation

		Pessimistic	Baseline	Optimistic
Current likelihood (as of Nov 2018)		25% (20%)	65% (50%)	10% (30%)
Description		<ul style="list-style-type: none"> Sharp escalation in tariff rates and coverage as well as nontariff restrictions (e.g., quotas) Substantial spillovers to global trade and financial conditions, with third-party countries forced to use protectionist measures Deadlock reached in bilateral negotiations leave measures in place indefinitely 	<ul style="list-style-type: none"> Moderate escalation in tariffs and retaliation between the U.S. and its trading partners, namely China Modest volatility and spillovers to global trade, sentiment, and financial conditions The U.S. achieves minor concessions in several bilateral agreements 	<ul style="list-style-type: none"> The U.S. and China reach a bilateral agreement and tariffs are rolled back The U.S. initiates negotiations with Japan, the E.U., and the U.K. without new tariffs Steel and aluminum tariffs are rolled back to begin multilateral reform of WTO
12-month impact	U.S.	-0.5% to -0.6%	-0.1% to -0.2%	0.1% to 0.2%
	China	-0.6% to -0.8%	-0.2% to -0.3%	0.2% to 0.3%

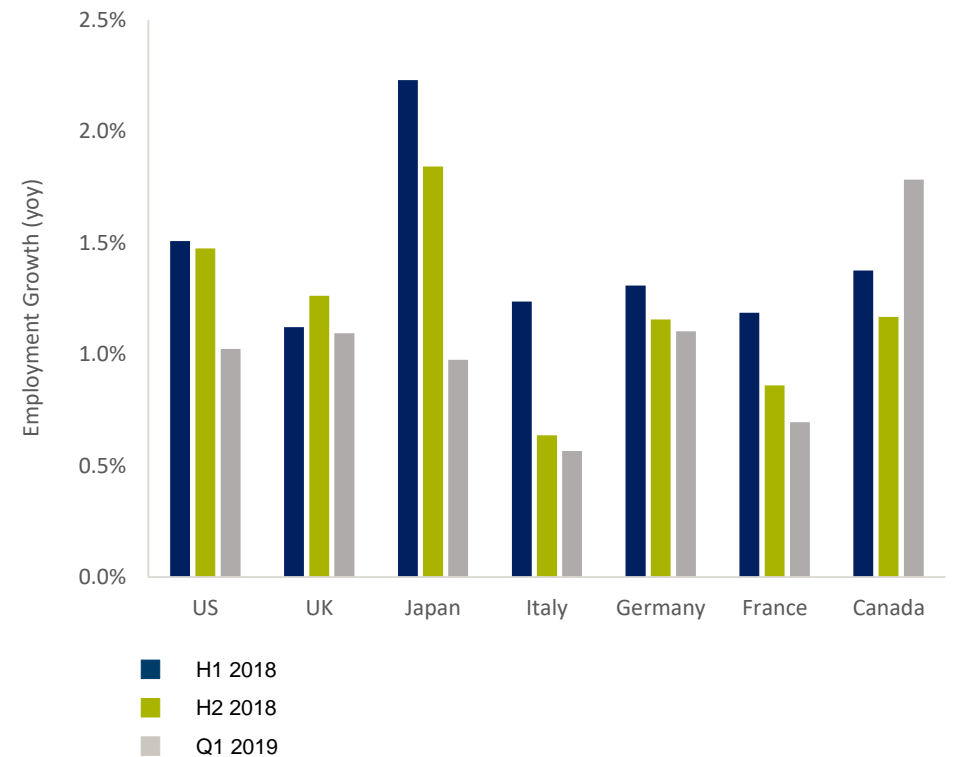
Sources: Vanguard estimates. Vanguard calculations using data from Thomson Reuters Datastream.

Global growth will moderate in second half, but 2019 recession remains unlikely

A noticeable downward shift in the world's largest economies



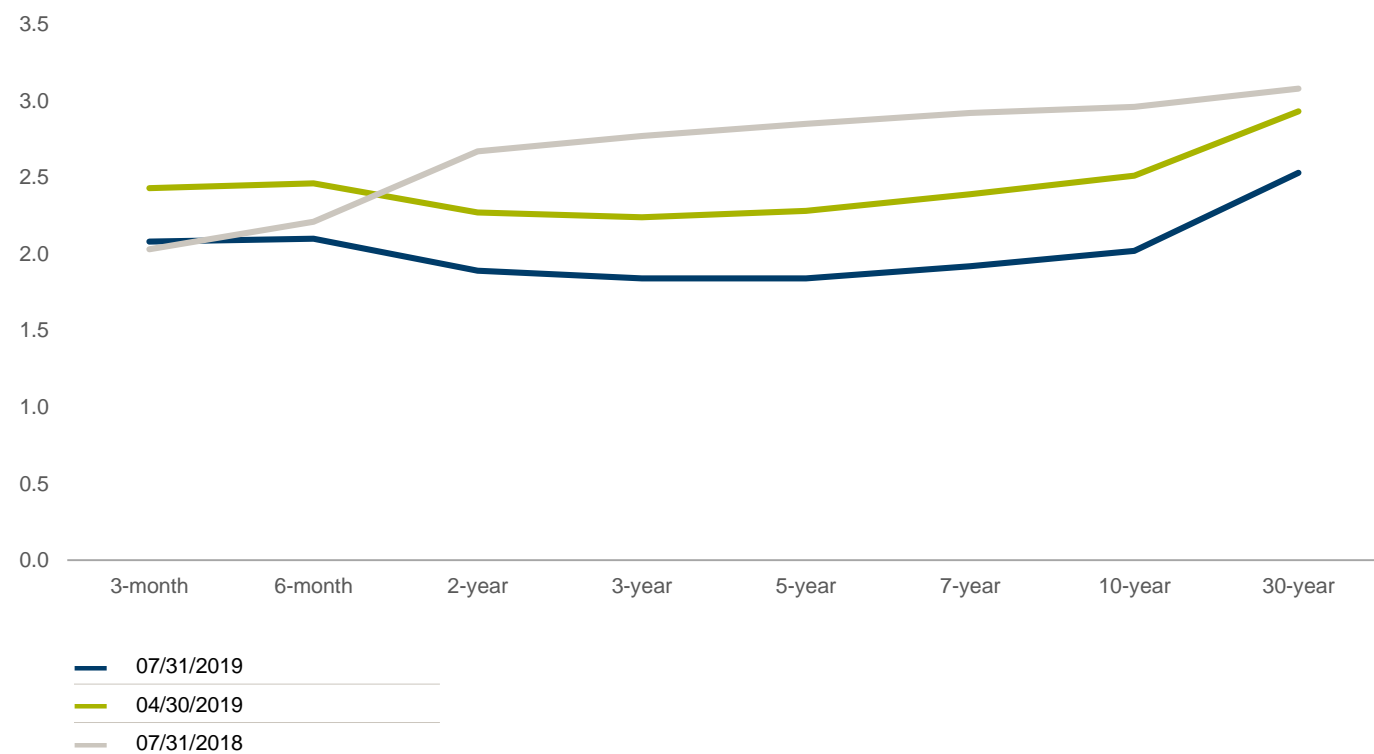
Employment growth is slowing around the globe



Sources: Vanguard calculations using data from Thomson Reuters Datastream

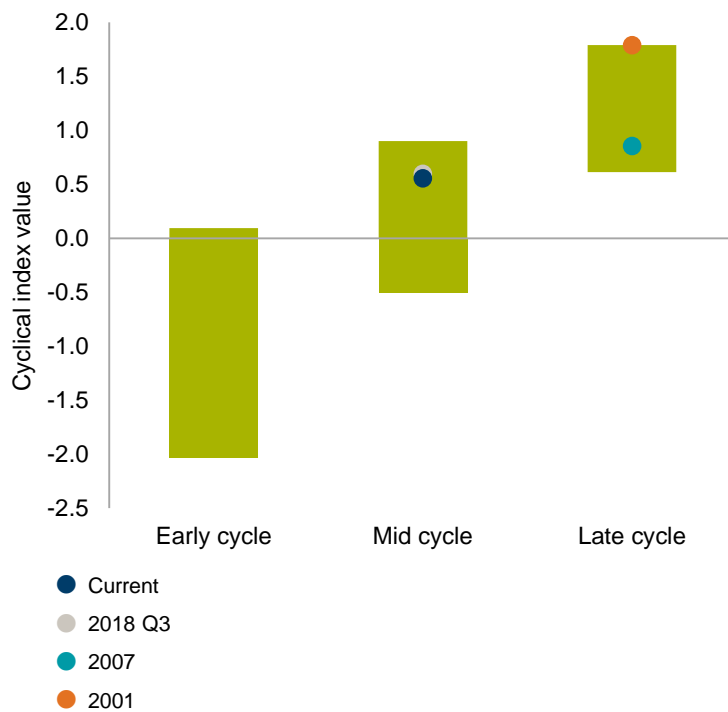
U.S. Treasury yield curve—Overall shift lower with mild inversion

Yield (%) and change (bps)	3-month	6-month	2-year	3-year	5-year	7-year	10-year	30-year
Current yield (%)	2.08	2.10	1.89	1.84	1.84	1.92	2.02	2.53
3 mo. Δ	-35	-36	-38	-40	-44	-47	-49	-40
12 mo. Δ	5	-11	-78	-93	-101	-100	-94	-55

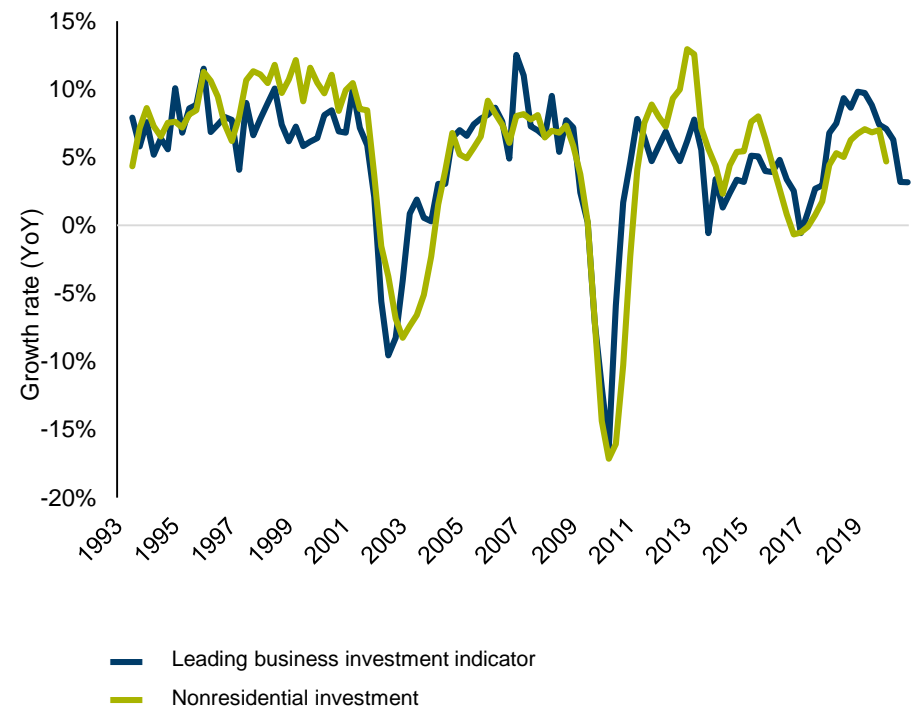


Modest movement across range of U.S. cyclical indicators since late 2018

Cyclical indicators still suggest middle stage of business cycle



Leading indicator points to further moderation in business investment



Notes: Left-hand figure displays the historical ranges of a cyclical index at various points in the business cycle. Index is shown as a z-score and weighted by first principal components of 25 cyclic indicators. The business cycle is determined by historical observations of the output gap. Data range is 1980 Q1-present. Right-hand figure: The leading business investment indicator models investment activity in the nonresidential sector in order to produce a forward looking signal of capital expenditures by U.S. businesses. Activity is modeled as a function of four general activity categories: 1) Business equipment and capital goods activity 2) Business capital expenditure plans 3) Demand for commercial and industrial loans and 4) Energy prices. Indicators are initially summarized into common series using first principal components and then expressed in units consistent with nonresidential investment growth using OLS regression. The leading business investment index as displayed is advanced three months forward; between 3 and 6 months forward is the indexes lead time associated with the strongest fit to historical nonresidential investment growth.

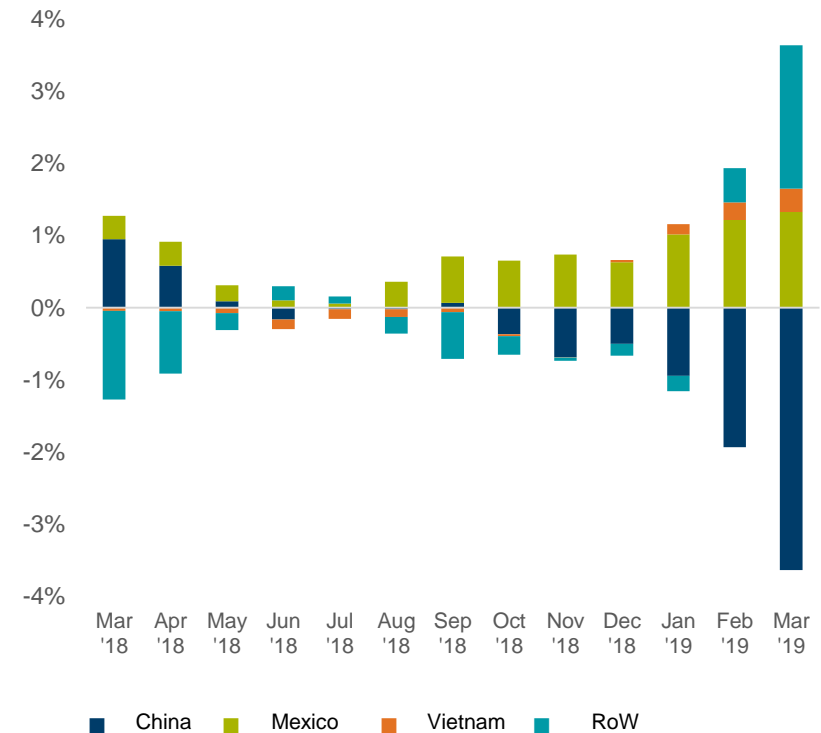
Sources: Vanguard calculations based on data from Moody's Analytics Data Buffet, Thomson Reuters DataStream, and Federal Reserve Bank of St. Louis, Laubach-Williams (2003).

Downside risks to trade remain elevated

Deceleration in global trade to persist into second half



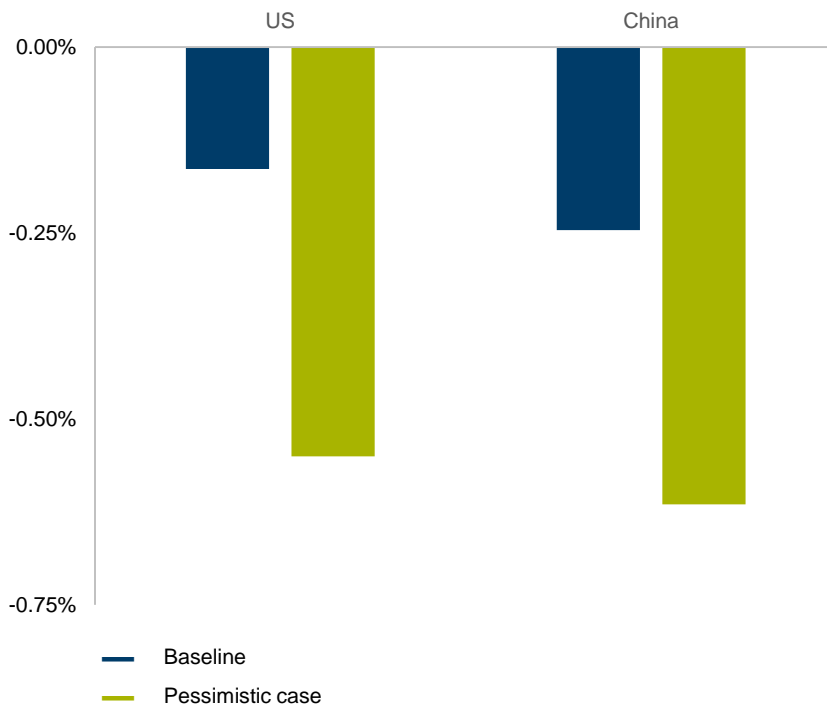
Market share of Chinese imports in decline



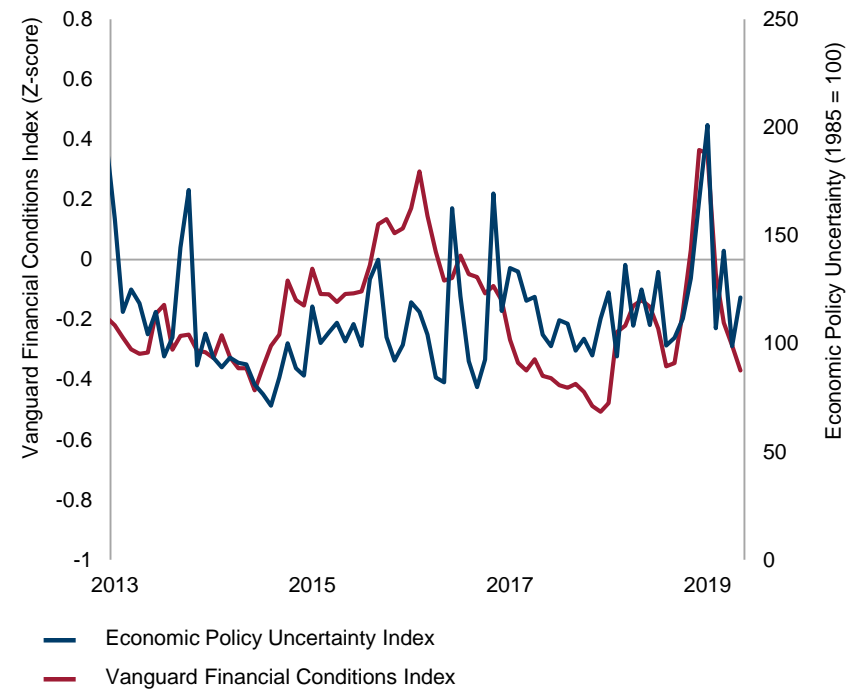
Sources: Vanguard calculations using data from Thomson Reuters Datastream.

Trade, policy, and financial market uncertainty may prompt growth scares

Trade war impact on 2019 GDP



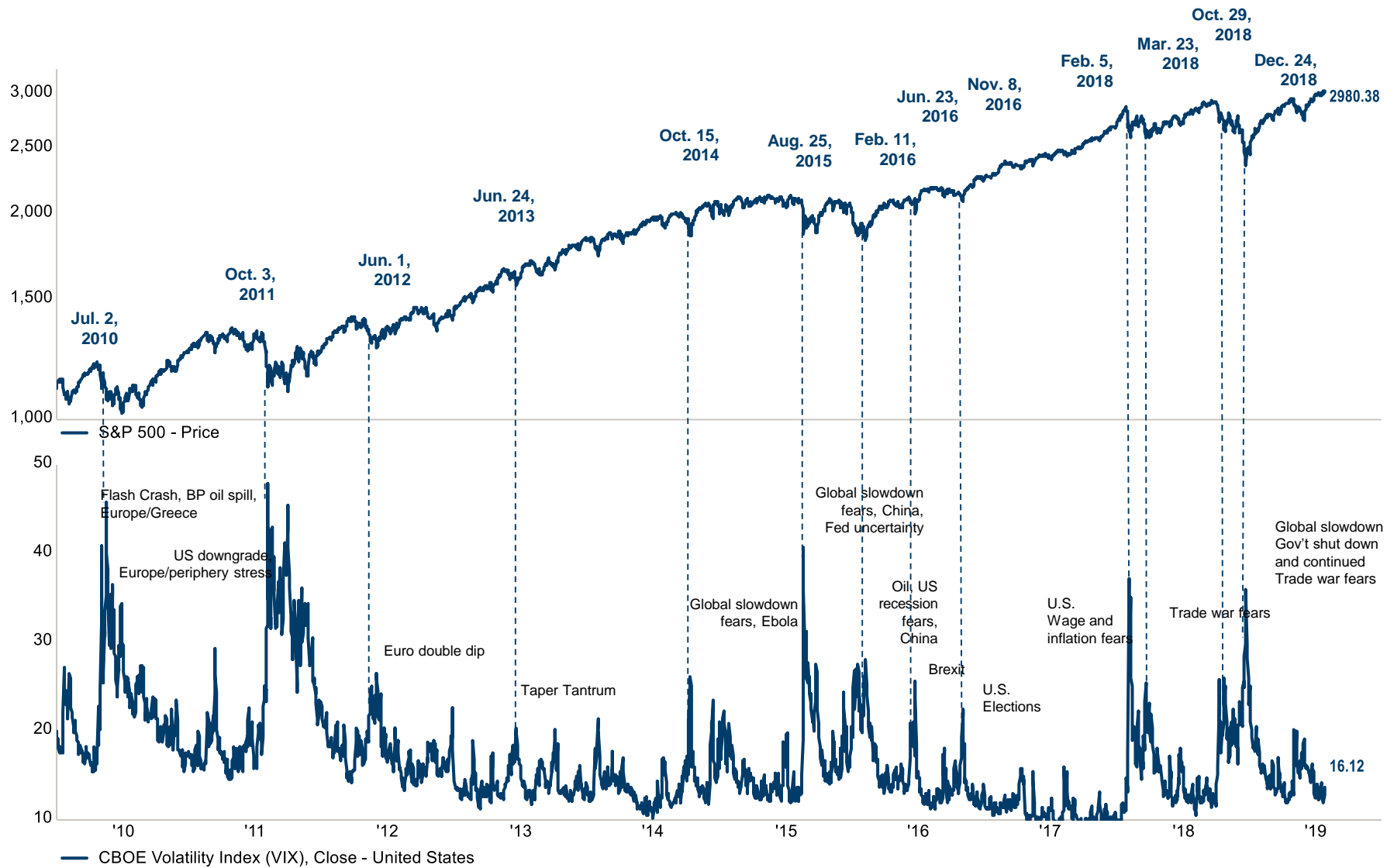
Twin shocks: Financial conditions and policy uncertainty



Sources: Vanguard, using data from Bloomberg and St. Louis Federal Reserve.

Notes: The solid lines represent Central Bank policy rates as defined as the Federal Funds Target Rate, Bank of Japan Unsecured Overnight Call Rate, UK Bank of England Official Bank Rate, Euro Overnight Index Average. Dotted lines represent expected future rates calculated via the futures market. Data as of March 31st, 2019. (RHS) Vanguard calculations, based on data from Thomson Reuters Datastream and Moody's Analytics Data Buffet; Federal Reserve Bank of New York.

Market Volatility



Source: FactSet, as of July 31, 2019.

Important information

IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model® (VCMM) regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More importantly, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model® is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

The Vanguard Lifecycle Model (VLCM) is designed to identify the product design that represents the best investment solution for a theoretical, representative investor who uses the target-date funds to accumulate wealth for retirement. The VLCM generates an optimal custom glide path for a participant population by assessing the trade-offs between the expected (median) wealth accumulation and the uncertainty about that wealth outcome, for thousands of potential glide paths. The VLCM does this by combining two set of inputs: the asset class return projections from the VCMM and the average characteristics of the participant population. Along with the optimal custom glide path, the VLCM generates a wide range of portfolio metrics such as a distribution of potential wealth accumulation outcomes, risk and return distributions for the asset allocation, and probability of ruin, such as the odds of participants depleting their wealth by age 95.

The VLCM inherits the distributional forecasting framework of the VCMM and applies to it the calculation of wealth outcomes from any given portfolio.

The most impactful drivers of glide path changes within the VLCM tend to be risk aversion, the presence of a defined benefit plan, retirement age, savings rate and starting compensation. The VLCM chooses among glide paths by scoring them according to the utility function described and choosing the one with the highest score. The VLCM does not optimize the levels of spending and contribution rates. Rather, the VLCM optimizes the glide path for a given customizable level of spending, growth rate of contributions and other plan sponsor characteristics.

A full dynamic stochastic life-cycle model, including optimization of a savings strategy and dynamic spending in retirement is beyond the scope of this framework.

Appendix

Vanguard PRIMECAP Fund (VPMAX)

Investment approach

- Multi-cap growth equity, emphasizing large- and mid-cap issues.
- Seeks long-term capital appreciation.
- Invests in out-of-favor growth companies at attractive valuations.
- Fundamental stock selection process.
- The managers develop separate subportfolios.
- Portfolio may be concentrated by sector and holdings.

Fund advisors



- 100% PRIMECAP Management Company

Key facts

Expense ratio as of 01/28/2019 31 bps

As reported in the most recent prospectus.

Designation Domestic large-cap growth

Fund inception date 11/01/1984

Admiral Shares™ inception date 11/12/2001

Total net assets as of 06/30/2019 (\$M) \$64,289

Net fund assets for VPMAX as of 06/30/2019 (\$M) \$58,036

Holdings 140

Benchmarked to S&P 500 Index (SPTR)

Turnover rate (fiscal year-end 09/30/2018) 8.3%

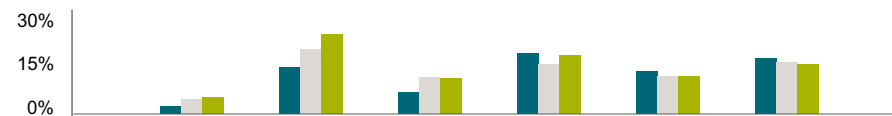
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Risk and volatility

	R ²	Beta
Primary benchmark	0.92	1.13
Broad-based benchmark	0.93	1.10

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark.
Broad-based benchmark: Dow Jones U.S. Total Stock Market Float Adjusted Index.

Performance



	Quarter-end	Year-to-date	Annualized			
			1-year	3-year	5-year	10-year
Fund	2.19%	13.20%	6.19%	17.44%	12.06%	15.80%
Benchmark	4.30%	18.54%	10.42%	14.19%	10.71%	14.70%
Multi-Cap Growth Funds Average	4.85%	22.60%	10.32%	16.68%	10.72%	14.11%

Performance versus competitors

Percentage of Multi-Cap Growth Funds outperformed by VPMAX



Source: Lipper, a Thomson Reuters Company. Based on total returns as of June 30, 2019. Number of funds in category: 1-year, 527; 3-year, 475; 5-year, 421; 10-year, 308. Results will vary for other time periods.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

PRIMECAP—Firm overview

Key facts

- Founded in 1983, Headquartered in Pasadena, California.
- AUM of \$127.1 billion as of December 31, 2018.

Portfolio management

Theo A. Kolokotronis, Chairman

- Portfolio manager.
- Advised the fund since 1984.
- Worked in investment management since 1970.
- B.A., University of Chicago.
- M.B.A., Harvard Business School.

Joel P. Fried, President

- Portfolio manager.
- Advised the fund since 1993.
- Worked in investment management since 1985.
- B.S., University of California, Los Angeles.
- M.B.A., Anderson Graduate School of Business, University of California, Los Angeles.

Alfred W. Mordecai, Executive Vice President

- Portfolio manager.
- Advised the fund since 1997.
- Worked in investment management since 1997.
- B.S.E., Duke University.
- M.E.A., Virginia Polytechnic Institute and State University.
- M.B.A., Harvard Business School.

M. Mohsin Ansari, Executive Vice President

- Portfolio manager.
- Advised the fund since 2007.
- Worked in investment management since 2000.
- B.A., Colgate University.
- B.S., Washington University.
- M.B.A., Harvard Business School.

James M. Marchetti, Senior Vice President

- Portfolio manager.
- Advised the fund since 2015.
- Worked in investment management since 2005.
- B.A., Massachusetts Institute of Technology.
- M.B.A., MIT Sloan School of Management.

Manager highlights

- Invests in out-of-favor growth companies at attractive valuations.
- Process typically results in a portfolio that is concentrated by sector and holdings.
- The portfolio management team is supported by 11 equity analysts.

Investment focus

Asset class	Investment style	Portfolio turnover (target range)	Number of holdings (target range)	Investment theme
U.S. equity multi-cap	GARP	5%–20%	Approximately 120	The portfolio tends to favor growth industries where companies invest heavily in R&D, such as information technology and health care; it typically offers less exposure to defensive sectors.

Investment philosophy/process

Long-term horizon

- Invest for the long term.
- Recognize value early, develop conviction, and have patience.

Fundamental research

- Use a bottom-up stock-picking approach to develop opinions independent of “sell side” research or index weights.
- Have one-on-one contact with company management, competitors, suppliers, and major customers.

Individual decision making

- The multiple portfolio manager system gives each PM discretion over a distinct portion of the portfolio.
- The portfolio is often concentrated by sector and across specific holdings.

Value discipline

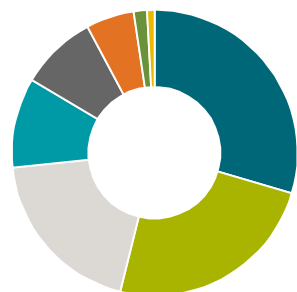
- A good company is a good investment only if purchased at the right price.
- Search for companies where sales and earnings will develop significantly better than consensus expectations or what is implied by current valuations.
- The search often starts with companies and industries that are out of favor; the approach to buying and selling is opposite that of momentum investing.

Vanguard PRIMECAP Fund (VPMAX)

Equity characteristics

	VPMAX	Benchmark
Number of stocks	140	505
Median market cap	\$104.7B	\$113.2B
P/E ratio (trailing earnings)	17.9x	20.5x
P/B ratio	1.9x	1.5x
Return on equity (5-year average)	15.9%	16.8%
Earnings growth rate (5-year)	14.7%	10.5%
Equity yield (dividend)	1.6%	1.9%
Foreign holdings	14.9%	—
Turnover (fiscal year end)	8.3%	—
Short-term reserves	3.1%	N/A

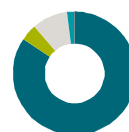
Sector diversification as a % of common stock



Sector	VPMAX	Benchmark
Information Technology	29.6%	21.5%
Health Care	24.3	14.2
Industrials	19.4	9.4
Consumer Discretionary	10.2	10.2
Financials	8.7	13.1
Communication Services	5.4	10.2
Energy	1.5	5.0
Materials	0.9	2.8
Consumer Staples	0.0	7.3
Real Estate	0.0	3.0
Utilities	0.0	3.3

Sector categories are based on the Global Industry Classification Standard ("GICS"), except for the "Other" category (if applicable), which includes securities that have not been provided a GICS classification as of the effective reporting period.

Market-cap breakdown



Market capitalization	VPMAX	Benchmark
More than \$26	84.3%	83.9%
\$21 to \$26	4.4	4.1
\$7 to \$21	9.2	11.1
\$4 to \$7	1.8	0.8
Below \$4	0.3	0.1

Risk and volatility

	R-squared	Beta	Alpha	Standard deviation	Sharpe ratio
VPMAX	N/A	N/A	0.13	14.31	1.12
Primary benchmark	0.92	1.13	N/A	12.19	1.05
Broad-based benchmark	0.93	1.10	N/A	12.55	1.01

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark.
Broad-based benchmark: Dow Jones U.S. Total Stock Market Float Adjusted Index.

Ten largest holdings

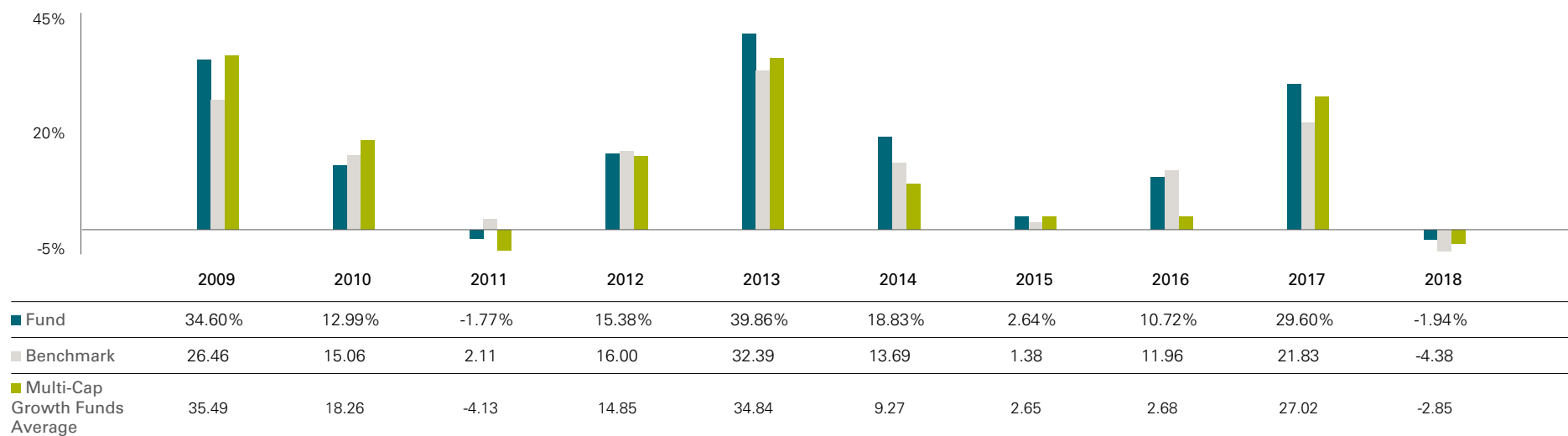
	% of total net assets
Adobe Inc.	5.1%
Microsoft Corp.	4.7
Alphabet Inc.	4.0
Eli Lilly & Co.	3.9
Texas Instruments Inc.	3.6
Biogen Inc.	3.4
Amgen Inc.	3.0
Southwest Airlines Co.	2.8
FedEx Corp.	2.4
Airbus SE	2.2
Top ten as a % of total net assets	35.1%

The holdings listed exclude any temporary cash investments and equity index products.

Vanguard PRIMECAP Fund (VPMAX)

Total returns: Admiral Shares

Calendar-year performance



The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance.

Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Vanguard PRIMECAP Fund (VPMAX)

Investment commentary as of 6/30/2019

- U.S. equity markets rose for the quarter ended June 30. After a sharp rally in the prior quarter, the Standard & Poor's 500 Index posted a modest gain—setting a record high in the process—as the market shrugged off geopolitical tensions. Despite mixed economic indicators and trade-talk uncertainty that led to a midquarter decline, investors ultimately benefited from continued Federal Reserve dovishness and indications of progress in U.S. trade negotiations with China and Mexico. U.S. Treasuries finished stronger against the yield curve, gold rallied to post its best quarter since 2016, and crude oil fell, with energy the only sector to finish the quarter in the red. In this environment, small-capitalization U.S. stocks, as measured by the Russell 2000 Index (+2.10%), underperformed large-caps for the quarter, as measured by the Russell 1000 Index (+4.25%). The Russell 3000 Growth Index (+4.50%) outpaced the Russell 3000 Value Index (+3.68%).
- For the quarter, Vanguard PRIMECAP Fund trailed its benchmark, the Standard & Poor's 500 Index (+4.30%), and the average return of its peers (+4.85%). Unfavorable security selection in health care (+1.4%) and communication services (+4.5%) weighed on performance. Given the advisor's low-turnover approach, positioning did not change materially; information technology, health care, and industrials constituted more than 70% of the portfolio at the end of June.
- In health care, poor selection and an overweight allocation to pharmaceuticals (+0.1%) detracted from returns. Eli Lilly (–14%), the fund's largest detractor for the quarter, declined amid concerns over the company's drug sales growth. In communication services, the advisor's decision not to own benchmark holding Facebook (+16%) also dragged on results. On the positive side, an underweight allocation to energy (–2.8%), the worst-performing sector, boosted relative returns.
- For the 12 months ended June 30, the fund lagged its benchmark (+10.42%) and the average return of its peers (+10.32%). Poor selection in industrials (+10.5%), information technology (+18.1%) and consumer services (+11.3%) drove the underperformance. Poor selection in freight & logistics (–8.7%) and airlines (+8.7%), the two largest weightings in industrials, also detracted. FedEx (–27%) hurt the most for the 12 months amid concerns about increased competition from Amazon. In IT, poor selection and an overweight allocation to semiconductors overshadowed strong results from Adobe Systems (+21%) and QUALCOMM (+41%). Biogen (–19%), the fund's largest holding, also declined after announcing it would discontinue trials of its Alzheimer's treatment.

Vanguard Windsor™ Fund (VWNEX)

Investment approach

- Large- and mid-cap value equity.
- Seeks long-term capital appreciation and growth of income.
- Diversified, multimanager structure.
- Fundamental research approach.
- Opportunistic, contrarian stock selection style.

Fund advisors



69%	Wellington Management Company LLP
30	Pzena Investment Management, LLC
1	Cash investments

Key facts

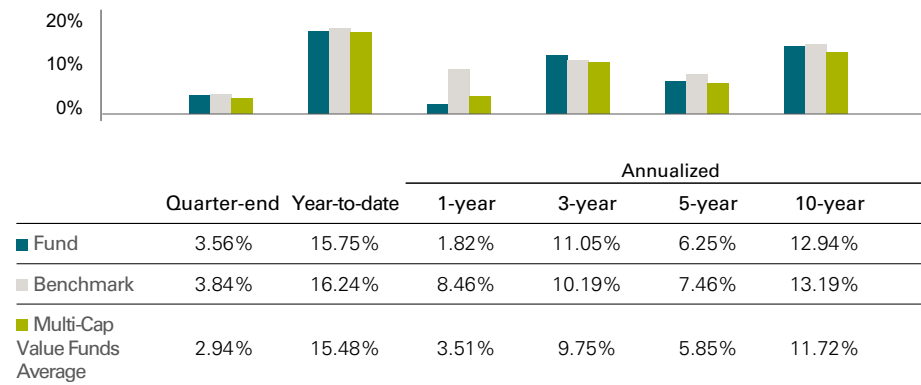
Expense ratio as of 02/27/2019	21 bps
As reported in the most recent prospectus.	
Designation	Domestic large-cap value
Fund inception date	10/23/1958
Admiral Shares™ inception date	11/12/2001
Total net assets as of 06/30/2019 (\$M)	\$18,870
Net fund assets for VWNEX as of 06/30/2019 (\$M)	\$14,280
Holdings	130
Benchmarked to	Russell 1000 Value Index (RU10VATR)
Turnover rate (fiscal year-end 10/31/2018)	33.1%
CUSIP	922018403

Risk and volatility

	R ²	Beta
Primary benchmark	0.95	1.10
Broad-based benchmark	0.93	1.05

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark.
Broad-based benchmark: Dow Jones U.S. Total Stock Market Float Adjusted Index.

Performance



Performance versus competitors

Percentage of Multi-Cap Value Funds outperformed by VWNEX



Source: Lipper, a Thomson Reuters Company. Based on total returns as of June 30, 2019. Number of funds in category: 1-year, 381; 3-year, 338; 5-year, 303; 10-year, 228. Results will vary for other time periods.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Vanguard Windsor™ Fund—Managers

The fund employs a multimanager approach. By combining high-caliber managers who have differentiated strategies, the fund seeks to reduce portfolio volatility while preserving the potential for long-run outperformance.

Fund managers

	Pzena Investment Management, LLC	Wellington Management Company LLP
Manager start date	2012	1958
Portfolio manager (start date)	Richard S. Pzena (2012) Benjamin S. Silver (2015) John J. Flynn (2017)	David W. Palmer (2018)
Current allocation (as of June 30, 2019)	30%	69%
Investment focus	Mid- and large-cap equity	Mid- and large-cap equity
Investment style	Deep value	Relative value
Characteristics	<ul style="list-style-type: none"> Pzena's deep-value philosophy is supported by thorough fundamental, bottom-up research. The portfolio management team is supported by a deep, experienced, and stable team of research analysts. Research focuses on identifying stocks meeting three criteria: (1) problems are judged to be temporary, (2) management has a viable plan to generate an earnings recovery, and (3) there is meaningful downside protection in case earnings do not recover. 	<ul style="list-style-type: none"> Wellington seeks to provide long-term total returns above those of both the S&P 500 and value-oriented indexes over a complete market cycle through bottom-up, fundamentally driven stock selection focused on deeply undervalued securities. The portfolio is opportunistic and contrarian in nature; the advisor is willing to prudently concentrate positions in stocks with the greatest appreciation potential when the conviction level is high and risks are manageable. The process is supported by a dedicated eight-person analyst team and WMC's deep global industry analysts, macroeconomists, portfolio managers, and traders.

Pzena Investment Management—Firm overview

Key facts

- Founded in 1996.
- Headquartered in New York, New York.
- \$33.4 billion in assets under management as of December 31, 2018.

Portfolio management

Richard S. Pzena, Founder, Chief Executive Officer, and Co-Chief Investment Officer

- Portfolio manager.
- Advised the fund since 2012.
- Worked in investment management since 1984.
- B.S. and M.B.A., The Wharton School at the University of Pennsylvania.

Benjamin S. Silver, CFA, CPA

- Portfolio manager.
- Advised the fund since 2015.
- Worked in investment management since 1988.
- B.S., Yeshiva University.

John J. Flynn, Principal

- Portfolio manager.
- Advised the fund since 2017.
- Worked in investment management since 2000.
- B.A., Yale University.
- M.B.A., Harvard Business School.

Manager highlights

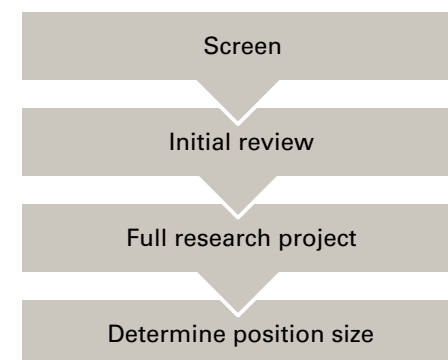
- Pzena's deep-value philosophy is supported by thorough, fundamental research.
- The three-person portfolio management team is supported by a deep, experienced, and stable team of research analysts.

Investment focus

Asset class	Investment style	Portfolio turnover (target range)	Number of holdings (target range)	Investment theme
Mid- and large-cap equity	Deep value	30%–50%	40–80	The approach results in a fairly concentrated portfolio of undervalued stocks, with meaningful differences in sector and industry positioning versus the index.

Investment philosophy/process

- Screen:
 - Review cheapest quintile.
- Initial review:
 - Analyze industry.
 - Company financial and two-week research review.
- Full research project:
 - Construct detailed financial model.
 - Management discussion/ on-site visit.
 - Bull and bear analysis.
 - Finalize normal earnings power.
- Position size:
 - Valuation.
 - Risk.
 - Diversification.



Wellington Management Company LLP—Firm overview

Key facts

- Founded in 1928.
- Headquartered in Boston, Massachusetts.
- More than \$1 trillion in assets under management as of December 31, 2018.
- More than 2,500 employees worldwide.
- Serves as an investment advisor to nearly 2,000 institutions.
- Investment strategies offered include equity, fixed income, and multistrategy/alternative asset classes.

Portfolio management

David W. Palmer, CFA, Senior Managing Director

- Portfolio manager.
- Advised the fund since 2018.
- Worked in investment management since 1993.
- B.A., Stanford University.
- M.B.A., The Wharton School of the University of Pennsylvania.

Manager highlights

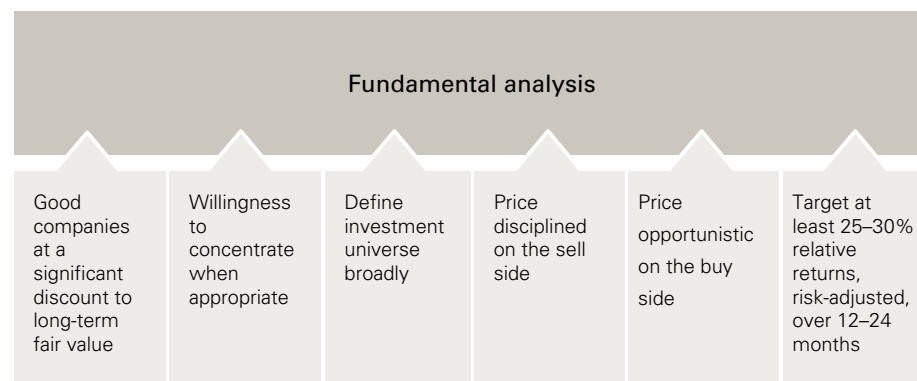
- Seeks to outperform both the S&P 500 and value-oriented indexes over a complete market cycle through bottom-up, fundamentally-driven stock selection focused on undervalued securities.
- Opportunistic and contrarian approach; the advisor is willing to concentrate on stocks with the greatest appreciation potential when the conviction level is high and risks are manageable.
- The process is supported by a dedicated eight-person analyst team.

Investment focus

Asset class	Investment style	Portfolio turnover (target range)	Number of holdings (target range)	Investment theme
U.S. equity mid- and large-cap	Traditional value	30%–60%	60–90	The portfolio typically offers a prospective total return (growth plus dividend yield) comparable to the index, but at a valuation discount. Sector weightings and the distribution of market capitalization frequently differ from the index.

Investment philosophy/process

- Markets are highly efficient over the long-term but tend to overreact to short and intermediate trends.
- Opportunistically take advantage of price dislocations through rigorous analysis.
- Determine fair valuation of securities based on long-term fundamental factors.
- Contrarian, low relative P/E investing provides an opportunity for asymmetrical returns over time.

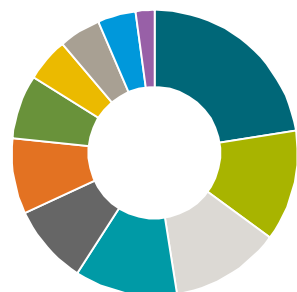


Vanguard Windsor™ Fund (VWNEX)

Equity characteristics

	VWNEX	Benchmark
Number of stocks	130	761
Median market cap	\$36.1B	\$56.2B
P/E ratio (trailing earnings)	15.1x	16.6x
P/B ratio	1.7x	0.9x
Return on equity (5-year average)	11.4%	11.7%
Earnings growth rate (5-year)	12.9%	5.9%
Equity yield (dividend)	2.2%	2.5%
Foreign holdings	5.7%	—
Turnover (fiscal year end)	33.1%	—
Short-term reserves	3.3%	N/A

Sector diversification as a % of common stock



Sector	VWNEX	Benchmark
Financials	22.5%	23.5%
Health Care	12.6	12.9
Information Technology	12.4	5.9
Industrials	11.6	9.7
Energy	9.0	9.3
Consumer Discretionary	8.6	5.9
Communication Services	7.2	8.0
Materials	4.9	4.5
Consumer Staples	4.7	8.7
Real Estate	4.3	5.1
Utilities	2.2	6.5

Sector categories are based on the Global Industry Classification Standard ("GICS"), except for the "Other" category (if applicable), which includes securities that have not been provided a GICS classification as of the effective reporting period.

Market-cap breakdown



Market capitalization	VWNEX	Benchmark
More than \$26	56.0%	69.5%
\$21 to \$26	7.3	4.6
\$7 to \$21	29.6	17.5
\$4 to \$7	7.0	6.6
Below \$4	0.1	1.9

Risk and volatility

	R-squared	Beta	Alpha	Standard deviation	Sharpe ratio
VWNEX	N/A	N/A	0.00	13.68	0.71
Primary benchmark	0.95	1.10	N/A	12.11	0.73
Broad-based benchmark	0.93	1.05	N/A	12.55	1.01

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark. Broad-based benchmark: Dow Jones U.S. Total Stock Market Float Adjusted Index.

Ten largest holdings

	% of total net assets
Bank of America Corp.	2.5%
MetLife Inc.	2.1
Citigroup Inc.	2.0
Comcast Corp.	1.8
Broadcom Inc.	1.7
CVS Health Corp.	1.6
Verizon Communications Inc.	1.6
Expedia Group Inc.	1.5
American International Group Inc.	1.5
Equinix Inc.	1.5

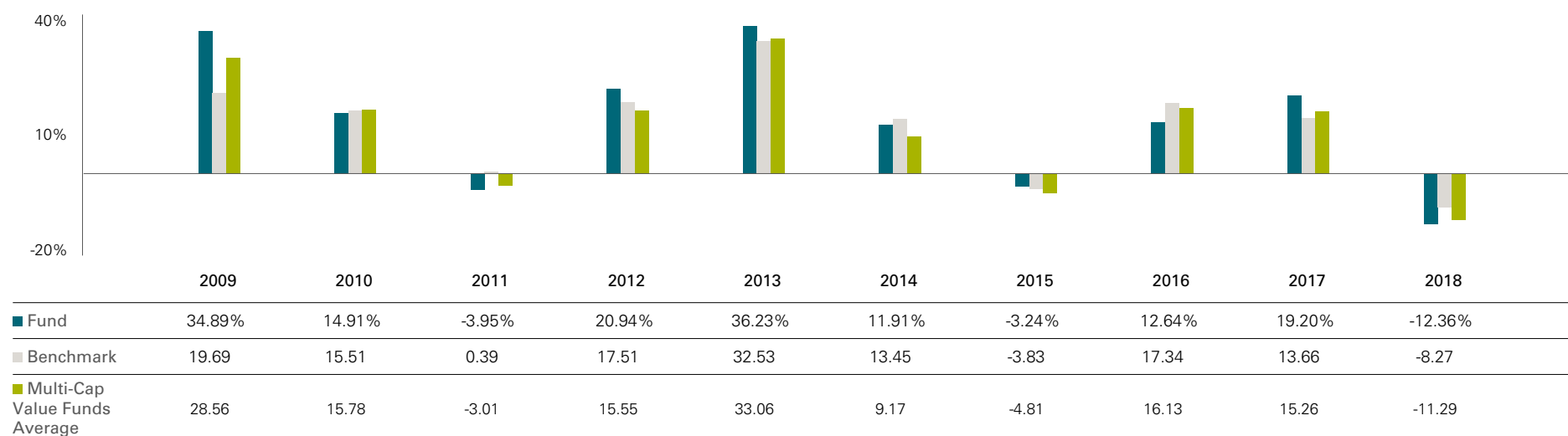
Top ten as a % of total net assets 17.8%

The holdings listed exclude any temporary cash investments and equity index products.

Vanguard Windsor™ Fund (VWNEX)

Total returns: Admiral Shares

Calendar-year performance



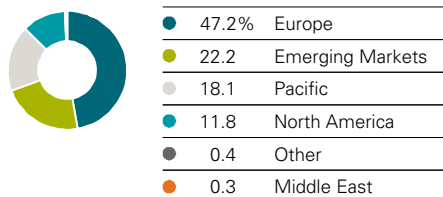
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Vanguard International Growth Fund (VWILX)

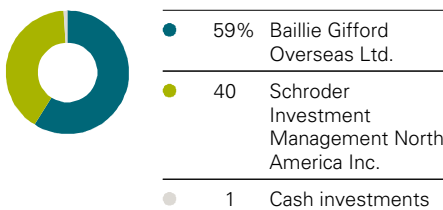
Investment approach

- Large-, mid-, and small-cap international equity.
- Seeks long-term capital appreciation.
- Broadly diversified in international developed and emerging markets.
- Fundamental, growth-oriented investment process.
- Diversified, multi-manager structure.

Regional diversification



Fund advisors



Key facts

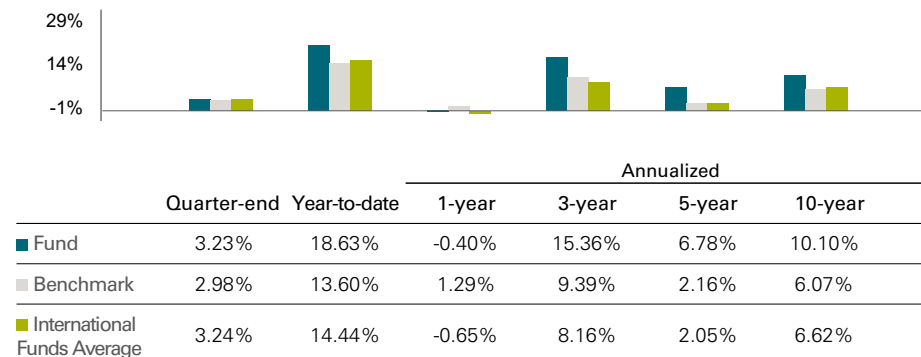
Expense ratio as of 12/03/2018	32 bps
As reported in the most recent prospectus.	
Designation	International/global growth
Fund inception date	09/30/1981
Admiral Shares™ inception date	08/13/2001
Total net assets as of 06/30/2019 (\$M)	\$37,113
Net fund assets for VWILX as of 06/30/2019 (\$M)	\$29,686
Holdings	124
Benchmarked to	MSCI All Country World Index ex USA (NDUEACWZ)
Turnover rate (fiscal year-end 08/31/2018)	15.7%
CUSIP	921910501

Risk and volatility

	R ²	Beta
Primary benchmark	0.87	1.27
Broad-based benchmark	0.87	1.27

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark. Broad-based benchmark: MSCI All Country World Index ex USA.

Performance



Spliced International Index: MSCI EAFE Index through May 31, 2010; MSCI All Country World Index ex USA thereafter.

Performance versus competitors

Percentage of International Funds outperformed by VWILX



Source: Lipper, a Thomson Reuters Company. Based on total returns as of June 30, 2019. Number of funds in category: 1-year, 1482; 3-year, 1275; 5-year, 1038; 10-year, 767. Results will vary for other time periods.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Vanguard International Growth Fund—Managers

The multimanager structure provides broad diversification and the potential for less volatility than in similar single-manager funds, while allowing individual managers the opportunity to generate superior returns.

Fund managers

	Baillie Gifford Overseas Ltd.	Schroder Investment Management North America Inc.
Manager start date	2003	1981
Portfolio manager (start date)	James K. Anderson (2003) Thomas Coutts (2016)	Simon Webber (2009)
Current Allocation (as of June 30, 2019)	59%	40%
Investment focus	Large- and mid-cap international equity	Large- and mid-cap international equity
Investment style	Growth	Growth at a reasonable price (GARP)
Characteristics	<ul style="list-style-type: none"> Baillie Gifford believes that superior growth leads to share-price outperformance in the long term and that one must be willing to invest with conviction to deliver outperformance. It believes that patience turns time and volatility to an investor's advantage. The portfolio maintains a strong growth orientation as measured by revenue and earnings growth. The advisor is willing to pay a premium for companies it believes will deliver higher sustainable growth, which results in a portfolio that typically trades at a valuation premium. In general, the firm is the most growth-oriented of the fund's managers. 	<ul style="list-style-type: none"> Schroders believes that quality growth companies with a sustainable competitive advantage selling at a reasonable price produce superior long-term returns. Schroders leverages fundamental research to identify quality-growth stocks selling at attractive valuations with sustainable competitive advantages. The team conducts its bottom-up research within the context of key structural trends that will influence a company's future growth potential, seeking to identify a 'growth-gap' between what the market expects and what the team believes the company can achieve. The portfolio balances growth, quality, and valuation metrics. The advisor invests in core growth stocks (i.e., stable, longer-term holdings) and opportunistic stocks (i.e., more volatile, often cyclical, shorter-term holdings).

Baillie Gifford—Firm overview

Key facts

- Founded in 1908.
- Headquartered in Edinburgh, Scotland.
- Approximately \$221 billion in assets under management as of December 31, 2018.
- More than 100 investment professionals.
- Private partnership that is among the largest independently owned investment management firms in the United Kingdom.

Portfolio management

James K. Anderson, Head of Global Equities

- Portfolio manager.
- Advised the fund since 2003.
- Worked in investment management since 1983.
- B.A., University College, Oxford.
- Diploma, Bologna Center of Johns Hopkins University.
- M.A., Carleton University.

Thomas Coutts

- Portfolio manager.
- Advised the fund since 2016.
- Worked in investment management since 1999.
- B.A., Oxford University.

Manager highlights

- Baillie Gifford's long-term investment approach is employed by a deep and experienced team of investors who are willing to think differently than the market.
- The Portfolio Construction Group (PCG) is responsible for stock selection; it takes advantage of the insights of other specialist investment teams at Baillie Gifford.

Investment focus

Asset class	Investment style	Annual turnover (target range)	Number of holdings (target range)	Investment themes
International growth	Growth	15%–30%	60–80	The advisor seeks special cultures and management, competitive strength in underestimated technological shifts, and global industrial growth companies with competitive advantages.

Investment philosophy/process

- Baillie Gifford believes that superior growth leads to share-price outperformance in the long term and that one must be willing to invest with conviction, sometimes in unfashionable opportunities, to deliver outperformance.
- It believes that patience turns time and volatility to an investor's advantage.
- The advisor seeks to identify companies with long-term, sustainable competitive advantages by developing deep industry and company knowledge.
- Baillie Gifford is willing to pay a valuation premium for exceptional long-term growth companies.

Opportunity	Execution	Valuation
<ul style="list-style-type: none"> • Market background. <ul style="list-style-type: none"> – Industrial growth rate. – Pricing structure. • Competitive advantages. <ul style="list-style-type: none"> – Barriers to entry. – Uniqueness of products. – Cost advantages. 	<ul style="list-style-type: none"> • Ability to capitalize on the market opportunity. • Financial structure. • Management. <ul style="list-style-type: none"> – Shareholder-orientation. – Long-term focus. – Capital allocation. 	<ul style="list-style-type: none"> • Determine the extent to which the market already appreciates the strengths. • Markets often underestimate the time horizon of the growth opportunity for great companies.

Schroders—Firm overview

Key facts

- Unit of Schroders, plc, which was founded in 1804.
- Headquartered in London, England.
- More than \$463 billion in assets under management as of December 31, 2018.
- More than 500 investment professionals worldwide.

Portfolio management

Simon Webber, CFA

- Portfolio manager.
- Advised the fund since 2009.
- Worked in investment management since 1999.
- B.Sc., University of Manchester.

Manager highlights

- The portfolio manager leverages the support of dedicated global sector specialists who work closely with Schroders' extensive global research network of more than 70 local equity analysts located around the globe.
- Schroders' balanced growth portfolio combines investments in core and opportunistic stocks.

Investment focus

Asset class	Investment style	Portfolio turnover (target range)	Number of holdings (target range)	Investment theme
International equity	GARP	40%–60%	60–70	The portfolio focuses on future earnings growth resulting from sustainable competitive advantages and key structural trends within a company's industry or the global economy, and seeks to purchase these companies at reasonable valuations.

Investment philosophy/process

- Schroders believes quality growth companies with a sustainable competitive advantage selling at a reasonable price produce superior long-term returns.
- Schroders leverages fundamental research to identify quality-growth stocks selling at attractive valuations with sustainable competitive advantages. The team conducts its bottom-up research within the context of key structural trends that will influence a company's future growth potential, seeking to identify a "growth gap" between what the market expects and what the team believes the company can achieve.

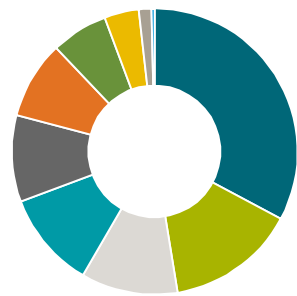


Vanguard International Growth Fund (VWILX)

Equity characteristics

	VWILX	Benchmark
Number of stocks	124	2,205
Median market cap	\$52.3B	\$35.0B
P/E ratio (trailing earnings)	22.3x	14.6x
P/B ratio	3.1x	1.6x
Return on equity (5-year average)	15.5%	12.8%
Earnings growth rate (5-year)	18.9%	9.5%
Equity yield (dividend)	1.5%	3.1%
Turnover (fiscal year end)	15.7%	—
Short-term reserves	1.7%	N/A

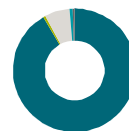
Sector diversification as a % of common stock



Sector	VWILX	Benchmark
Consumer Discretionary	32.8%	11.3%
Financials	14.6	21.9
Communication Services	11.0	6.9
Health Care	10.9	8.3
Industrials	9.8	12.0
Information Technology	8.8	8.5
Consumer Staples	6.4	9.8
Materials	3.9	7.6
Energy	1.4	7.1
Other	0.4	0.0
Real Estate	0.0	3.2

Sector categories are based on the Global Industry Classification Standard ("GICS"), except for the "Other" category (if applicable), which includes securities that have not been provided a GICS classification as of the effective reporting period.

Market-cap breakdown



Market capitalization	VWILX	Benchmark
More than \$10	91.5%	81.3%
\$9 to \$10	0.6	4.2
\$4 to \$9	6.5	12.1
\$2 to \$4	0.9	2.1
Below \$2	0.5	0.3

Risk and volatility

	R-squared	Beta	Alpha	Standard deviation	Sharpe ratio
VWILX	N/A	N/A	0.30	15.53	0.90
Primary benchmark	0.87	1.27	N/A	11.40	0.70
Broad-based benchmark	0.87	1.27	N/A	11.40	0.75

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark. Broad-based benchmark: MSCI All Country World Index ex USA.

Market allocation

	% of common stock	
	VWILX	Benchmark
China	17.5%	8.3%
Japan	10.8	15.8
United States	10.7	0.0
France	8.1	7.6
United Kingdom	7.5	11.2
Germany	6.8	5.9
Switzerland	5.1	6.2
Hong Kong	4.7	2.7
Sweden	4.6	1.8
Netherlands	4.5	2.4
Other	19.7	38.1

Ten largest holdings

	% of total net assets
Tencent Holdings Ltd.	5.0%
Alibaba Group Holding Ltd.	4.8
ASML Holding NV	4.4
AIA Group Ltd.	3.6
Amazon.com Inc.	3.4
Illumina Inc.	2.7
MercadoLibre Inc.	2.6
Kering SA	2.2
Ferrari NV	2.1
TAL Education Group	1.9

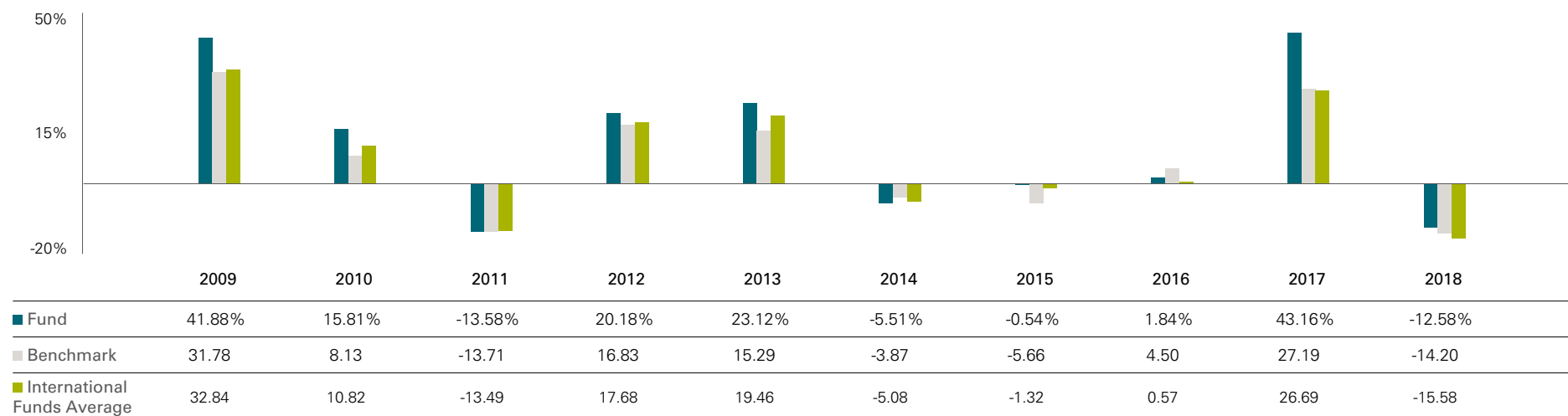
Top ten as a % of total net assets **32.7%**

The holdings listed exclude any temporary cash investments and equity index products.

Vanguard International Growth Fund (VWILX)

Total returns: Admiral Shares

Calendar-year performance



Spliced International Index: MSCI EAFE Index through May 31, 2010; MSCI All Country World Index ex USA thereafter.

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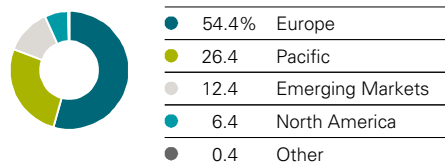
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Vanguard International Value Fund (VTRIX)

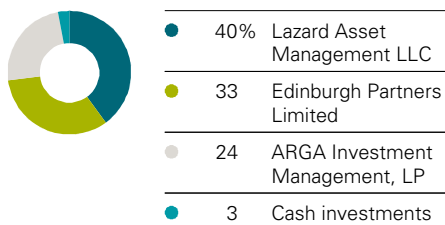
Investment approach

- Large-, mid-, and small-cap international equity.
- Seeks long-term capital appreciation.
- Broadly diversified in international developed and emerging markets.
- Fundamental, value-oriented investment process.
- Diversified, multi-manager structure.

Regional diversification



Fund advisors



Key facts

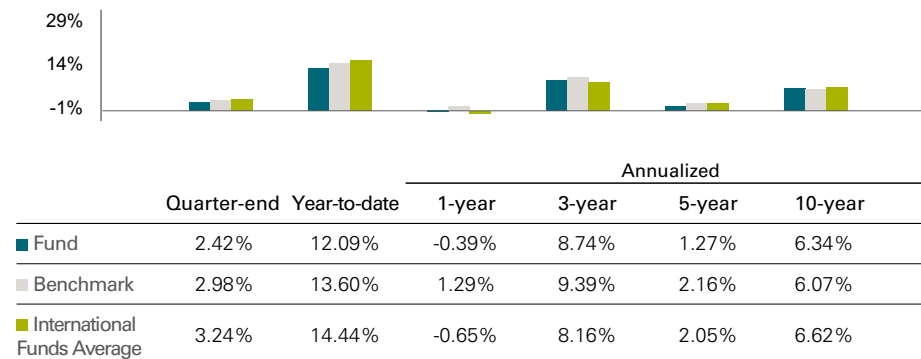
Expense ratio as of 02/27/2019	38 bps
As reported in the most recent prospectus.	
Designation	International/global value
Fund inception date	05/16/1983
Investor Shares inception date	05/16/1983
Total net assets as of 06/30/2019 (\$M)	\$10,204
Net fund assets for VTRIX as of 06/30/2019 (\$M)	\$10,204
Holdings	149
Benchmarked to	MSCI All Country World Index ex USA (NDUEACWZ)
Turnover rate (fiscal year-end 10/31/2018)	27.8%
CUSIP	921939203

Risk and volatility

	R ²	Beta
Primary benchmark	0.96	0.96
Broad-based benchmark	0.96	0.96

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark. Broad-based benchmark: MSCI All Country World Index ex USA.

Performance



Spliced International Index: MSCI EAFE Index through May 31, 2010; MSCI All Country World Index ex USA thereafter.

Performance versus competitors

Percentage of International Funds outperformed by VTRIX



Source: Lipper, a Thomson Reuters Company. Based on total returns as of June 30, 2019. Number of funds in category: 1-year, 1482; 3-year, 1275; 5-year, 1038; 10-year, 767. Results will vary for other time periods.

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The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Vanguard International Value Fund—Managers

The multimanager structure provides broad diversification and the potential for less volatility than in similar single-manager funds, while allowing individual managers the opportunity to generate superior returns.

Fund managers

	ARGA Investment Management, LP	Edinburgh Partners Limited	Lazard Asset Management LLC
Manager start date	2012	2008	2006
Portfolio manager (start date)	A. Rama Krishna (2012) Steven Morrow (2012)	Sandy Nairn (2008)	Michael G. Fry (2010) Michael A. Bennett (2010)
Current allocation (as of June 30, 2019)	24%	33%	40%
Investment focus	International equity	International equity	International equity
Investment style	Deep value	Value	Relative value
Characteristics	<ul style="list-style-type: none"> • ARGA invests in businesses that it believes are undervalued based on long-term earnings power and dividend-paying capability. • The portfolio generally will have a strong value orientation; most valuation metrics will often be at discounts relative to its index. • The portfolio will consist of holdings across the capitalization spectrum, generally resulting in a capitalization profile smaller than that of the index. 	<ul style="list-style-type: none"> • The firm employs a concentrated, low-turnover, value-oriented investment approach that results in a portfolio of companies with good long-term prospects and below-market price-to-earnings ratios. • The longer-term investment horizon leads to a low -turnover portfolio. • The investment approach is benchmark agnostic, resulting in a high active share. 	<ul style="list-style-type: none"> • Lazard employs a research-driven, bottom-up, relative-value approach in selecting stocks. The portfolio managers and analysts seek to identify stocks that offer an appropriate trade-off between low relative valuation and high financial productivity. • The portfolio generally maintains a bias toward companies with higher return on equity, return on assets, and operating margins. • In general, the portfolio will tend to have more of a core orientation than the other managers in the fund.

ARGA—Firm overview

Key facts

- Founded in 2010.
- Headquartered in Stamford, Connecticut.
- AUM of \$3.6 billion as of December 31, 2018.
- Independent investment management firm focused on global value equities.

Portfolio management

A. Rama Krishna, Founder and Chief Investment Officer

- Portfolio manager.
- Advised the fund since 2012.
- Worked in investment management since 1987.
- B.A., Saint Stephen's College, University of Delhi.
- M.B.A. and M.A., University of Michigan.

Steven Morrow, Director of Research

- Portfolio manager.
- Advised the fund since 2012.
- Worked in investment management since 1993.
- B.S., University of New Hampshire.
- M.B.A., Cornell University.

Manager highlights

- The portfolio managers are experienced and insightful and have managed both developed and emerging market equity strategies.
- The portfolio managers are supported by a deep and talented investment team whose members average over ten years of industry experience.

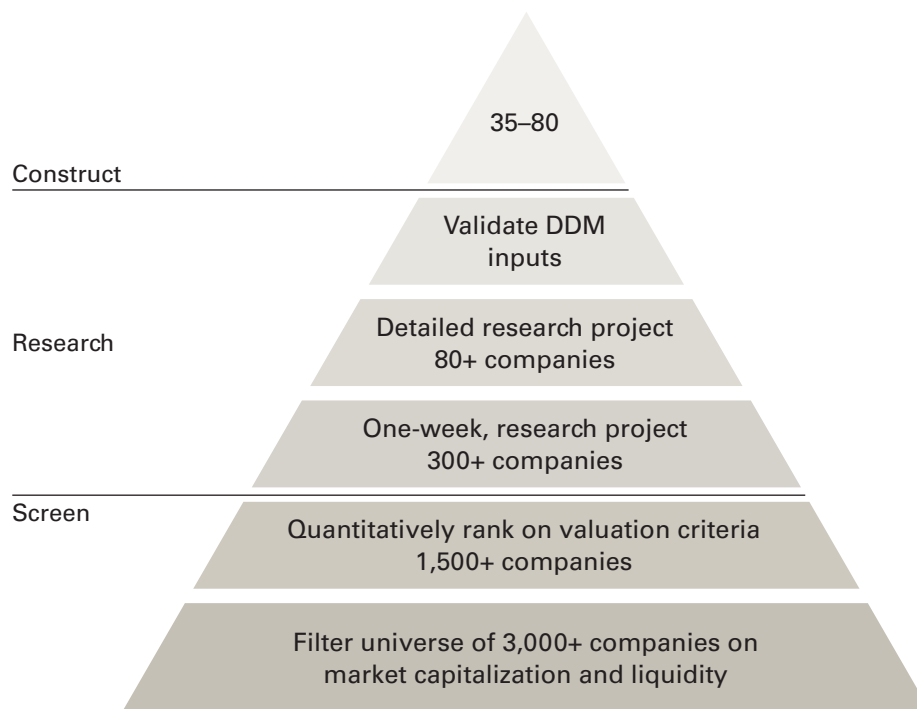
Investment focus

Asset class	Investment style	Annual turnover (target range)	Number of holdings (target range)
International value	Deep value	30%–50%	35–80

Investment philosophy

ARGA's investment philosophy is based on the belief that investors overreact to short-term developments, leading to opportunities to generate gains from investing in "good businesses at great prices." Its value-oriented process uses a dividend discount model to select stocks that trade at a discount to intrinsic value based on the company's long-term earnings power and dividend-paying capability.

Investment process



Edinburgh—Firm overview

Key facts

- Founded in 2003.
- Headquartered in Edinburgh, Scotland.
- AUM of \$7.8 billion as of December 31, 2018.
- Wholly owned subsidiary of Franklin Templeton Investments.

Portfolio management

Sandy Nairn, Director and CEO of Edinburgh Partners

- Portfolio manager.
- Advised the fund since 2008.
- Worked in investment management since 1985.
- B.Sc., University of Strathclyde, Glasgow.
- Ph.D., Strathclyde Business School, Glasgow.

Manager highlights

- The portfolio manager is an experienced investor with both portfolio management and analyst responsibilities.
- The portfolio manager is supported by a deep and tenured investment team whose members average more than 20 years of industry experience. Unlike at many firms, the senior investors conduct company analysis.

Investment focus

Investment focus	Investment style	Annual turnover (target range)	Number of holdings (target range)
International equity	Value	25%–40%	30–60

Investment philosophy/process

- Edinburgh's investment philosophy is based on the belief that time horizon is the key market imperfection and that a portfolio of companies with below-average valuations should outperform the market over the long run.
- Edinburgh's investment process begins with a qualitative assessment that limits the research universe by eliminating overvalued companies. Edinburgh does this by comparing the P/E ratio with historical levels while considering the likely growth rates in profits.
- The next stage is the firm's in-depth fundamental research, through which it seeks to accurately forecast earnings over a longer-term, five-year horizon.
- When assessing valuation, Edinburgh uses a scenario-based approach. Each company is valued using three scenarios: central, best, and worst. This is an important part of the process as it helps the team understand the full range of likely outcomes.

Lazard—Firm overview

Key facts

- Wholly owned subsidiary of Lazard Ltd.
- Located in New York, New York.
- AUM of \$192.8 billion as of December 31, 2018.
- Investment strategies offered across equity, fixed income, and multistrategy/alternative asset classes.

Portfolio management

Michael G. Fry, Managing Director

- Portfolio manager.
- Advised the fund since 2010.
- Worked in investment management since 1981.
- B.Sc, Flinders University, Adelaide, Australia.

Michael A. Bennett, CPA, Managing Director

- Portfolio manager.
- Advised the fund since 2010.
- Worked in investment management since 1987.
- B.S., New York University.
- M.B.A., University of Chicago.

Manager highlights

- The portfolio management team is led by Michael Fry, who is an experienced, thoughtful investor.
- The portfolio management team is supported by the firm's global research platform composed of global sector specialists in local markets.

Investment focus

Investment focus	Investment style	Annual turnover (target range)	Number of holdings (target range)
International equity	Relative value	30%–50%	40–70

Investment philosophy/process

- The firm employs a research-driven, bottom-up, relative value approach in selecting stocks. Lazard seeks to identify individual stocks that offer an appropriate trade-off between low relative valuation and high financial productivity.
- The cross-border portfolio management team uses return on equity as the primary measure of financial productivity; while secondary measures include return on assets, cash return on equity, and operating margin. Lazard's research analysts utilize a global sector approach to fundamental analysis.

Analytical
framework

Accounting
validation

Fundamental
analysis

Portfolio
construction

- Investment universe.
- Investment network.
- Database screening.
- Valuation drivers.

- Proprietary fundamental research.
- Financial statement analysis.
- Management assessment.
- Sustainable returns catalyst.

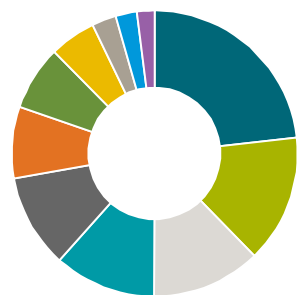
- Team approach.
- Sell discipline.
- Risk management.
- Client guidelines.

Vanguard International Value Fund (VTRIX)

Equity characteristics

	VTRIX	Benchmark
Number of stocks	149	2,205
Median market cap	\$37.2B	\$35.0B
P/E ratio (trailing earnings)	14.0x	14.6x
P/B ratio	1.4x	1.6x
Return on equity (5-year average)	11.2%	12.8%
Earnings growth rate (5-year)	5.0%	9.5%
Equity yield (dividend)	3.3%	3.1%
Turnover (fiscal year end)	27.8%	—
Short-term reserves	6.9%	N/A

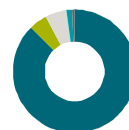
Sector diversification as a % of common stock



Sector	VTRIX	Benchmark
Financials	23.2%	21.9%
Information Technology	14.5	8.5
Health Care	12.4	8.3
Industrials	11.5	12.0
Communication Services	10.6	6.9
Consumer Discretionary	8.1	11.3
Energy	7.3	7.1
Consumer Staples	5.2	9.8
Materials	2.8	7.6
Utilities	2.4	3.4
Real Estate	2.0	3.2

Sector categories are based on the Global Industry Classification Standard ("GICS"), except for the "Other" category (if applicable), which includes securities that have not been provided a GICS classification as of the effective reporting period.

Market-cap breakdown



Market capitalization	VTRIX	Benchmark
More than \$10	87.4%	81.3%
\$9 to \$10	4.8	4.2
\$4 to \$9	5.5	12.1
\$2 to \$4	1.4	2.1
Below \$2	0.8	0.3

Risk and volatility

	R-squared	Beta	Alpha	Standard deviation	Sharpe ratio
VTRIX	N/A	N/A	-0.02	11.12	0.66
Primary benchmark	0.96	0.96	N/A	11.40	0.70
Broad-based benchmark	0.96	0.96	N/A	11.40	0.75

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark. Broad-based benchmark: MSCI All Country World Index ex USA.

Market allocation

	% of common stock	
	VTRIX	Benchmark
Japan	16.2%	15.8%
United Kingdom	15.5	11.2
France	11.6	7.6
Switzerland	8.2	6.2
Germany	5.1	5.9
China	4.2	8.3
Korea	3.9	3.3
United States	3.7	0.0
Netherlands	3.1	2.4
Hong Kong	2.9	2.7
Other	25.6	36.6

Ten largest holdings

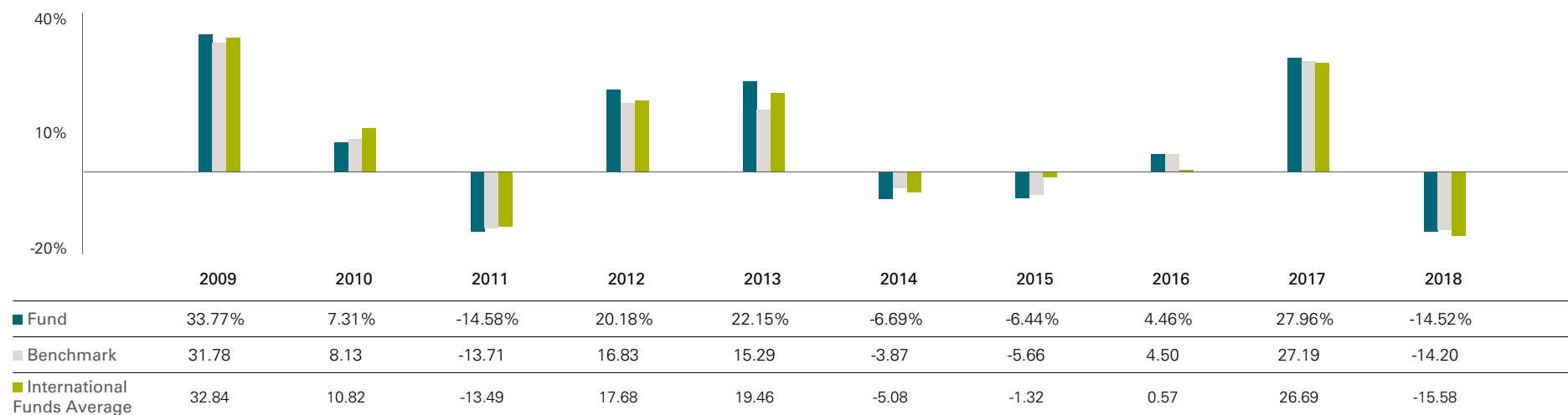
	% of total net assets
Novartis AG	2.3%
Royal Dutch Shell plc	2.2
Sanofi	2.2
Roche Holding AG	1.7
Samsung Electronics Co. Ltd.	1.6
DBS Group Holdings Ltd.	1.5
SAP SE	1.4
Sumitomo Mitsui Financial Group Inc.	1.3
AstraZeneca plc	1.3
Taiwan Semiconductor Manufacturing Co. Ltd.	1.3
Top ten as a % of total net assets	16.8%

The holdings listed exclude any temporary cash investments and equity index products.

Vanguard International Value Fund (VTRIX)

Total returns: Investor Shares

Calendar-year performance



Spliced International Index: MSCI EAFE Index through May 31, 2010; MSCI All Country World Index ex USA thereafter.

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The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Important disclosures



When used as supplemental sales literature, the Investment Profile must be preceded or accompanied by the fund's current prospectus as well as this disclosure statement. The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares when redeemed may be worth more or less than the original investment. Fund portfolio statistics change over time. The fund is not FDIC-insured, may lose value and is not guaranteed by a bank or other financial institution.

Performance

Total return reflects performance without adjusting for sales charges or the effects of taxation, but is adjusted to reflect all actual ongoing fund expenses and assumes reinvestment of dividends and capital gains. If adjusted, sales charges would reduce the performance quoted.

Standardized Total Return is total return adjusted for sales charges. The sales charge adjusted for may not necessarily be consistent with the prospectus.

The fund's performance is compared with that of an index. The index is an unmanaged portfolio of specified securities and the index does not reflect any initial or ongoing expenses. The Best Fit Index is the index that the fund has the highest correlation with. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Morningstar Return

This statistic is a measurement of a fund's excess return over a risk-free rate (the return of the 90-day Treasury bill), after adjusting for all applicable loads and sales charges. In each Morningstar Category, the top 10% of funds earn a High Morningstar Return, the next 22.5% Above Average, the middle 35% Average, the next 22.5% Below Average, and the bottom 10% Low. Morningstar Return is measured for up to three time periods (three-, five-, and 10-years). These separate measures are then weighted and averaged to produce an overall measure for the fund. Funds with less than three years of performance history are not rated.

Morningstar Risk

This statistic evaluates the variations in a fund's monthly returns, with an emphasis on downside variations. In each Morningstar Category, the 10% of funds with the lowest measured risk are described as Low Risk, the next 22.5% Below Average, the middle 35% Average, the next 22.5% Above Average, and the top 10% High. Morningstar Risk is measured for up to three time periods (three-, five-, and 10-years). These separate measures are then weighted and averaged to produce an overall measure for the fund. Funds with less than three years of performance history are not rated.

Risk Measures

R-squared reflects the percentage of a fund's movements that are explained by movements in its benchmark index, showing the degree of correlation between the fund and the benchmark.

Beta is a measure of a fund's sensitivity to market movements. A portfolio with a beta greater than 1 is more volatile than the market, and a portfolio with a beta less than 1 is less volatile than the market.

Alpha measures the difference between a fund's actual returns and its expected performance, given its level of risk (as measured by beta).

The Sharpe ratio uses standard deviation and excess return to determine reward per unit of risk.

Standard deviation is a statistical measure of the volatility of the fund's returns. Mean represents the annualized three-year geometric return.

Morningstar Style Box™

The Morningstar Style Box reveals a fund's investment strategy as of the date noted on this report. For equity funds the vertical axis shows the market capitalization of the long stocks owned and the horizontal axis shows investment style (value, blend, or growth).

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's effective duration.

Morningstar seeks credit rating information from fund companies on a periodic basis (e.g., quarterly). In compiling credit rating information Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations (NRSROs). For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating, and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings. PLEASE NOTE: Morningstar, Inc. is not itself an NRSRO nor does it issue a credit rating on the fund. An NRSRO or rating agency ratings can change from time-to-time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low", "medium", or "high" based on their average credit quality. Funds with a low credit quality are those whose weighted average credit quality is determined to be less than "BBB-"; medium are those less than "AA-", but greater or equal to "BBB-"; and high are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index (MCBI), which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCBI's average effective duration; funds whose average effective duration is between 75% to 125% of the MCBI will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCBI will be classified as Extensive.

For municipal bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases static breakpoints are utilized. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-US taxable and non-US domiciled fixed income funds static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: greater than 3.5 and less than equal to 6 years; (iii) Extensive: greater than 6 years.

Investment Risk

Foreign Securities Funds/Emerging Market Funds: The investor should note that funds that invest in foreign securities involve special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Specialty/Sector Funds: The investor should note that funds that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks. Non-Diversified Funds: The investor should note that funds that invest more of their assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Funds: The investor should note that funds that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average and may be less liquid than larger companies.

Mid Cap Funds: The investor should note that funds that invest in companies with market capitalizations below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bond Funds: The investor should note that funds that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bond Funds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Additional Information

For more information on Vanguard or Non-Vanguard funds offered, visit www.vanguard.com or call 800-523-1188 to obtain a prospectus. Investment objectives, risks, charges, expenses, and other important information about a fund are contained in the prospectus; read and consider it carefully before investing.

Important information

For more information about any fund, visit vanguard.com or call 866-499-8473 to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

Vanguard ETF® Shares are not redeemable with the issuing Fund other than in very large aggregations worth millions of dollars. Instead, investors must buy or sell Vanguard ETF Shares in the secondary market and hold those shares in a brokerage account. In doing so, the investor may incur brokerage commissions and may pay more than net asset value when buying and receive less than net asset value when selling.

Mutual funds and all investments are subject to risk, including the possible loss of the money you invest. Prices of mid- and small-cap stocks often fluctuate more than those of large-company stocks. Investments in stocks or bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk. These risks are especially high in emerging markets. Funds that concentrate on a relatively narrow sector face the risk of higher share-price volatility. It is possible that tax-managed funds will not meet their objective of being tax-efficient. Because company stock funds concentrate on a single stock they are considered riskier than diversified stock funds.

Investments in bond funds are subject to the risk that an issuer will fail to make payments on time, and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments. High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings. Although the income from a municipal bond fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax. Diversification does not ensure a profit or protect against a loss.

Investments in Target Retirement Funds or Trusts are subject to the risks of their underlying funds. The year in the fund name refers to the approximate year (the target date) when an investor in the fund or trust would retire and leave the workforce. The fund or trust will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in the Target Retirement Fund or Trust is not guaranteed at any time, including on or after the target date.

Vanguard collective trusts are not mutual funds. They are collective trusts available only to tax-qualified plans and their eligible participants. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing. The collective trust mandates are managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc.

A stable value investment is neither insured nor guaranteed by the U.S. government. There is no assurance that the investment will be able to maintain a stable net asset value, and it is possible to lose money in such an investment.

Factor funds are subject to investment style risk, which is the chance that returns from the types of stocks in which the fund invests will trail returns from U.S. stock markets. Factor funds are subject to manager risk, which is the chance that poor security selection will cause the fund to underperform relevant benchmarks or other funds with a similar investment objective.

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