



Episcopal Foundation of Dallas

November 2020

Agenda

- I. Financial Market Overview
- II. Portfolio Performance
- III. Fees and Expenses
- IV. Domestic Equity Positioning
- V. Real Estate Review
- VI. Economic and Market Outlook
- VII. Appendix

Presented by:

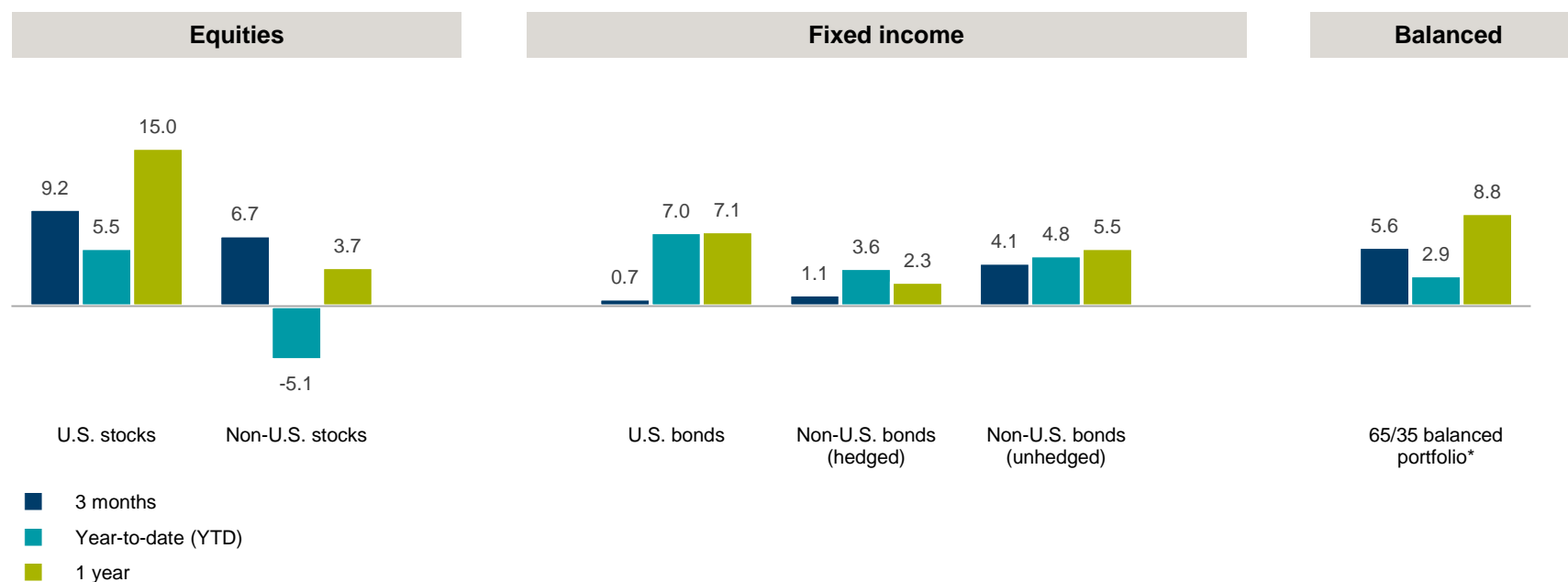
Geoffrey Hall, CFA, CAIA
Senior Investment Consultant
Vanguard Institutional Advisory Services®

Financial Market Overview

Global markets stabilize amid continued pandemic uncertainty

- As the coronavirus pandemic continues to impact global economies, markets are assessing length and shape of recovery in progress
- Global equities sold off sharply during the first quarter, driving markets briefly into bear market territory, yet have recovered significantly over the last several months
- Fixed income delivered positive returns as Treasury yields reached record lows and credit bonds weathered the impact of the uncertainty

Global market returns as of September 30, 2020 (%)



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.

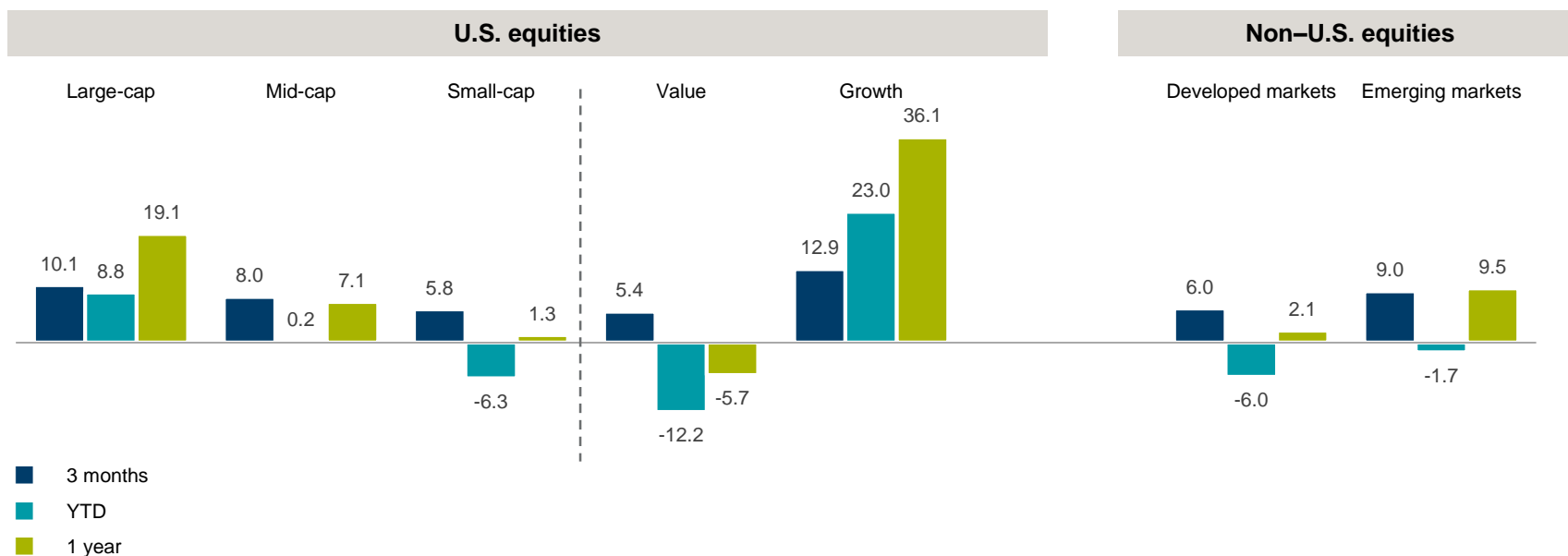
U.S. stocks (CRSP U.S. Total Market Index), non-U.S. stocks (FTSE Global All-Cap ex-US Index), U.S. bonds (Bloomberg Barclays U.S. Aggregate Float Adjusted Index), non-U.S. bonds hedged (Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index hedged), non-U.S. bonds unhedged (Bloomberg 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 market cap and style see significant divergence

- Large-cap stocks have led returns by market cap year-to-date (YTD) and during the trailing 12 months
- Growth stocks, led by a select group of mega-cap companies, have significantly outperformed value stocks, extending their recent performance advantage of the last couple years
- In non-U.S. equity markets, emerging markets have outperformed developed markets recently, yet both have fallen short of U.S. market returns

Global equity market returns as of September 30, 2020 (%)



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.

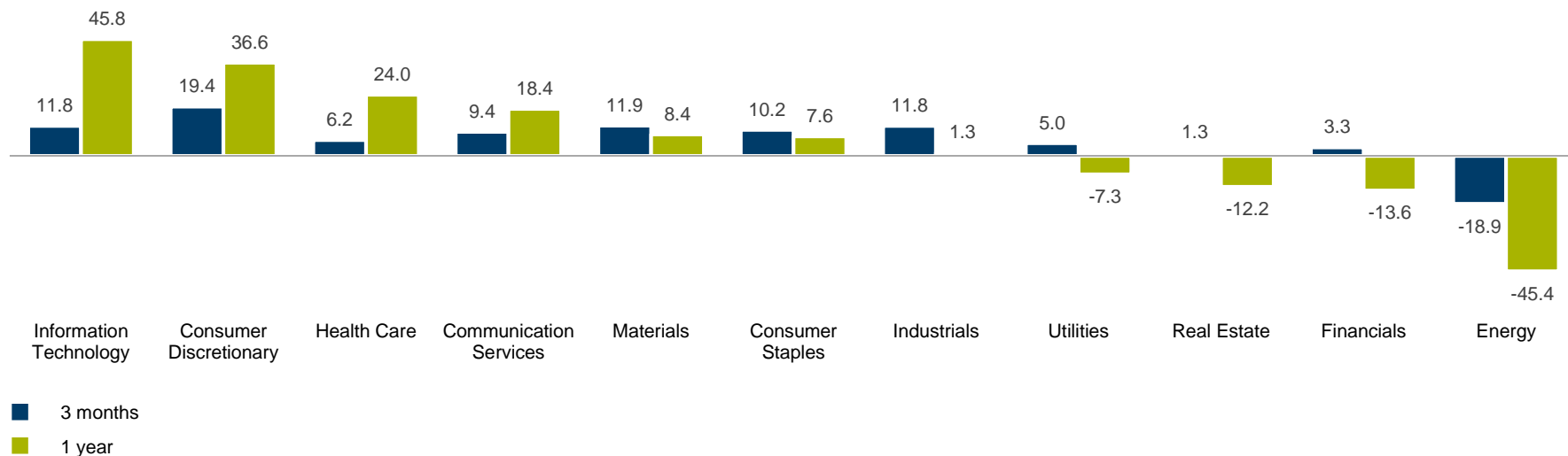
Sources: CRSP, FTSE, and Russell.

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—Recovery present in many industries

- No sector escaped the sell-off in the first quarter as steep losses were booked across industries, yet growth-oriented companies have led the recovery over the past several months
- Wide divergence in 12-month returns between the top and bottom sectors illustrates the benefit of diversification
- Energy has posted the deepest loss over the trailing 12 months, impacted by a severe demand shock from the COVID-19 pandemic

U.S. equity sector returns as of September 30, 2020 (%)



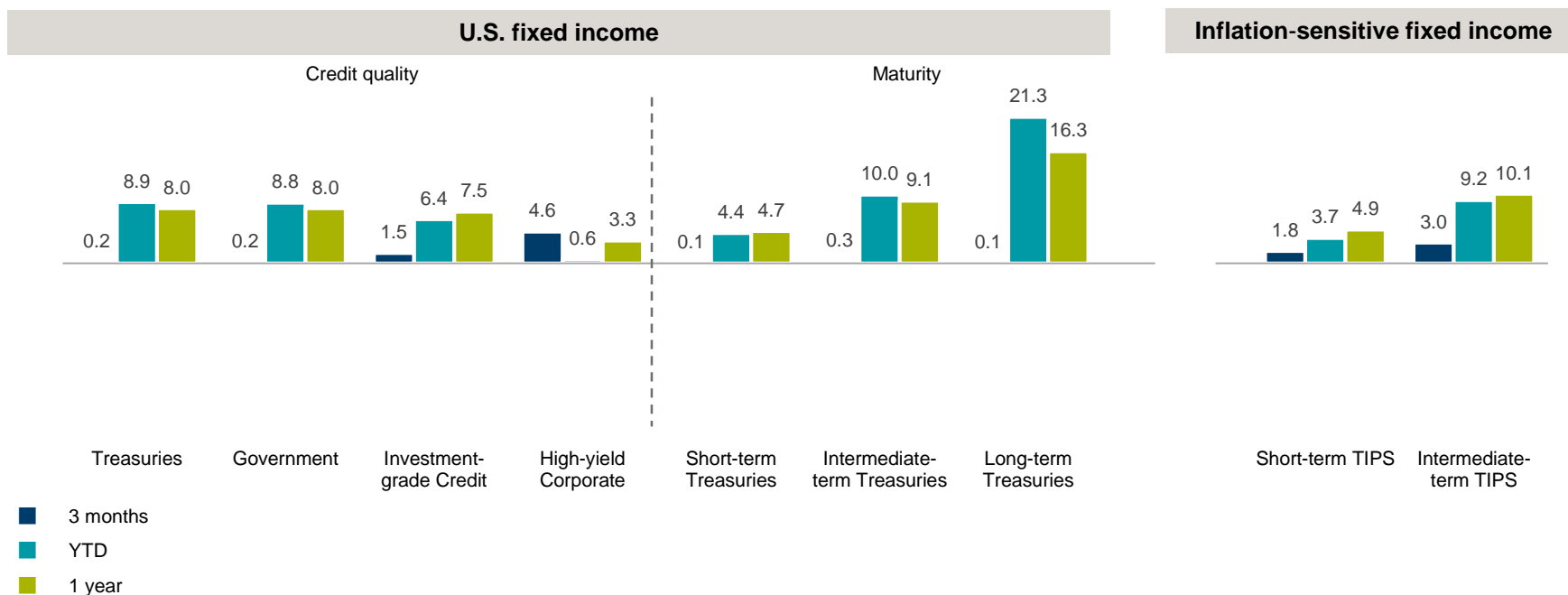
Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Source: FactSet.
U.S. markets measured by CRSP U.S. Total Market Index.

Bonds post positive returns during crisis

- Treasury yields hit record lows across the curve as investors fled risky assets and the Federal Reserve cut short-term rates to near zero
- Credit spreads widened sharply during the initial outbreak and market reaction, yet both investment-grade and high-yield bonds have recovered during the past several months
- Treasuries have had exceptionally strong performance as economic activity and expectations have fallen dramatically

Domestic fixed income market returns as of September 30, 2020 (%)



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: 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).

Appendix

Notes on asset-return distributions

The asset-return distributions shown here represent Vanguard's view on the potential range of risk premiums that may occur over the next ten years; such long-term projections are not intended to be extrapolated into a short-term view. These potential outcomes for long-term investment returns are generated by the Vanguard Capital Markets Model® (VCMM) and reflect the collective perspective of our Investment Strategy Group. The expected risk premiums—and the uncertainty surrounding those expectations—are among a number of qualitative and quantitative inputs used in Vanguard's investment methodology and portfolio construction process.

Notes on risk

All investing is subject to risk, including the possible loss of the money you invest. Past performance is no guarantee of future returns. Investments in bond funds are subject to interest rate, credit, and inflation risk. Foreign investing involves additional risks, including currency fluctuations and political uncertainty. Diversification does not ensure a profit or protect against a loss in a declining market. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Stocks of companies in emerging markets are generally more risky than stocks of companies in developed countries. U.S. government backing of Treasury or agency securities applies only to the underlying securities and does not prevent price fluctuations. Investments that concentrate on a relatively narrow market sector face the risk of higher price volatility. Investments in stocks issued by non-U.S. companies are subject to risks including country/regional risk and currency risk.

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 U.S. Treasury obligations held in the fund is subject to federal income tax, some or all of that income may be exempt from state and local taxes.

The primary value of the VCMM is in its application to analyzing potential client portfolios. VCMM asset-class forecasts—comprising distributions of expected returns, volatilities, and correlations—are key to the evaluation of potential downside risks, various risk–return trade-offs, and the diversification benefits of various asset classes. Although central tendencies are generated in any return distribution, Vanguard stresses that focusing on the full range of potential outcomes for the assets considered, such as the data presented in this paper, is the most effective way to use VCMM output.

The VCMM seeks to represent the uncertainty in the forecast by generating a wide range of potential outcomes. It is important to recognize that the VCMM does not impose “normality” on the return distributions, but rather is influenced by the so-called fat tails and skewness in the empirical distribution of modeled asset-class returns. Within the range of outcomes, individual experiences can be quite different, underscoring the varied nature of potential future paths. Indeed, this is a key reason why we approach asset-return outlooks in a distributional framework.

Index simulations

The long-term returns of our hypothetical portfolios are based on data for the appropriate market indexes through June 2020. We chose these benchmarks to provide the most complete history possible, and we apportioned the global allocations to align with Vanguard's guidance in constructing diversified portfolios. Asset classes and their representative forecast indexes are as follows:

- **U.S. equities:** MSCI US Broad Market Index.
- **Global ex-U.S. equities:** MSCI All Country World ex USA Index.
- **U.S. REITs:** FTSE/NAREIT US Real Estate Index.
- **U.S. cash:** U.S. 3-Month Treasury—constant maturity.
- **U.S. Treasury bonds:** Bloomberg Barclays U.S. Treasury Index.
- **U.S. short-term Treasury bonds:** Bloomberg Barclays U.S. 1–5 Year Treasury Bond Index.
- **U.S. long-term Treasury bonds:** Bloomberg Barclays U.S. Long Treasury Bond Index.
- **U.S. credit bonds:** Bloomberg Barclays U.S. Credit Bond Index.
- **U.S. short-term credit bonds:** Bloomberg Barclays U.S. 1–3 Year Credit Bond Index.
- **U.S. high-yield corporate bonds:** Bloomberg Barclays U.S. High Yield Corporate Bond Index.
- **U.S. bonds:** Bloomberg Barclays U.S. Aggregate Bond Index.
- **Global ex-U.S. bonds:** Bloomberg Barclays Global Aggregate ex-USD Index.
- **U.S. TIPS:** Bloomberg Barclays U.S. Treasury Inflation Protected Securities Index.
- **U.S. short-term TIPS:** Bloomberg Barclays U.S. 1–5 Year Treasury Inflation Protected Securities Index.

Portfolio Performance

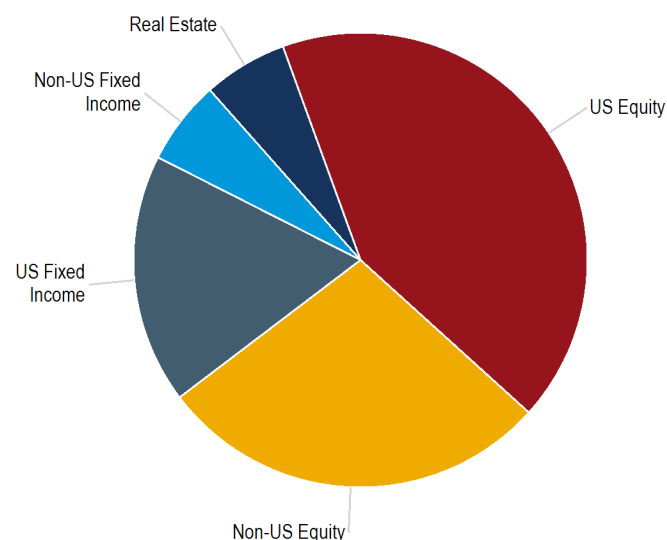
Total Portfolio Performance & Asset Allocation

Performance Summary ending September 30, 2020

	Market Value (\$)	2020 Q3 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EPISCOPAL FOUNDATION OF DALLAS	39,253,650	5.99	1.55	8.80	6.67	9.24	--	7.42	Jun-15
EPISCOPAL FOUNDATION OF DALLAS (Net)		5.96	1.47	8.69	6.55	9.12	--	7.31	
Composite Benchmark		6.02	1.93	8.37	6.98	9.13	--	7.41	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 September 30, 2020



	Current \$	Current %	Policy	Difference*
US Equity	\$16,596,777	42.3%	42.0%	0.3%
Non-US Equity	\$10,989,111	28.0%	28.0%	0.0%
US Fixed Income	\$6,972,189	17.8%	18.0%	-0.2%
Non-US Fixed Income	\$2,350,959	6.0%	6.0%	0.0%
Real Estate	\$2,344,614	6.0%	6.0%	0.0%
Total	\$39,253,650	100.0%	100.0%	

*Difference between Policy and Current Allocation

Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any other security-level expenses.

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 September 30, 2020

	Market Value (\$)	% of Portfolio	2020 Q3 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EPISCOPAL FOUNDATION OF DALLAS	39,253,650	100.00	5.99	1.55	8.80	6.67	9.24	--	7.42	Jun-15
EPISCOPAL FOUNDATION OF DALLAS (Net)			5.96	1.47	8.69	6.55	9.12	--	7.31	
Composite Benchmark			6.02	1.93	8.37	6.98	9.13	--	7.41	Jun-15
Total Equity	27,585,888	70.28	8.04	0.62	10.90	7.13	10.99	--	8.33	Jun-15
Equity Domestic	16,596,777	42.28	7.84	0.06	10.24	9.09	12.35	--	10.04	Jun-15
Spliced Total Stock Market Index			9.20	5.49	14.99	11.65	13.69	13.50	11.38	Jun-15
Equity International	10,989,111	28.00	8.33	1.46	11.87	4.17	8.88	--	5.74	Jun-15
Spliced Total International Stock Index			6.70	-5.09	3.69	1.31	6.41	4.23	3.57	Jun-15
Total Fixed Income	9,323,148	23.75	1.00	6.13	6.05	5.24	4.33	--	4.33	Jun-15
Fixed Income Domestic	6,972,189	17.76	0.96	7.02	7.38	5.27	4.33	--	4.30	Jun-15
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			0.65	6.99	7.14	5.33	4.26	3.67	4.29	Jun-15
Fixed Income International	2,350,959	5.99	1.10	3.47	2.15	5.11	4.34	--	4.41	Jun-15
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			1.07	3.63	2.33	5.33	4.57	--	4.64	Jun-15
Total Real Estate	2,344,614	5.97	1.33	-12.74	-12.19	2.37	5.22	--	5.37	Jun-15
Real Estate Domestic	2,344,614	5.97	1.33	-12.74	-12.19	2.37	5.22	--	5.37	Jun-15
Real Estate Spliced Index			1.35	-12.66	-12.10	2.46	5.32	8.59	5.47	Jun-15

Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any other security-level expenses.

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.

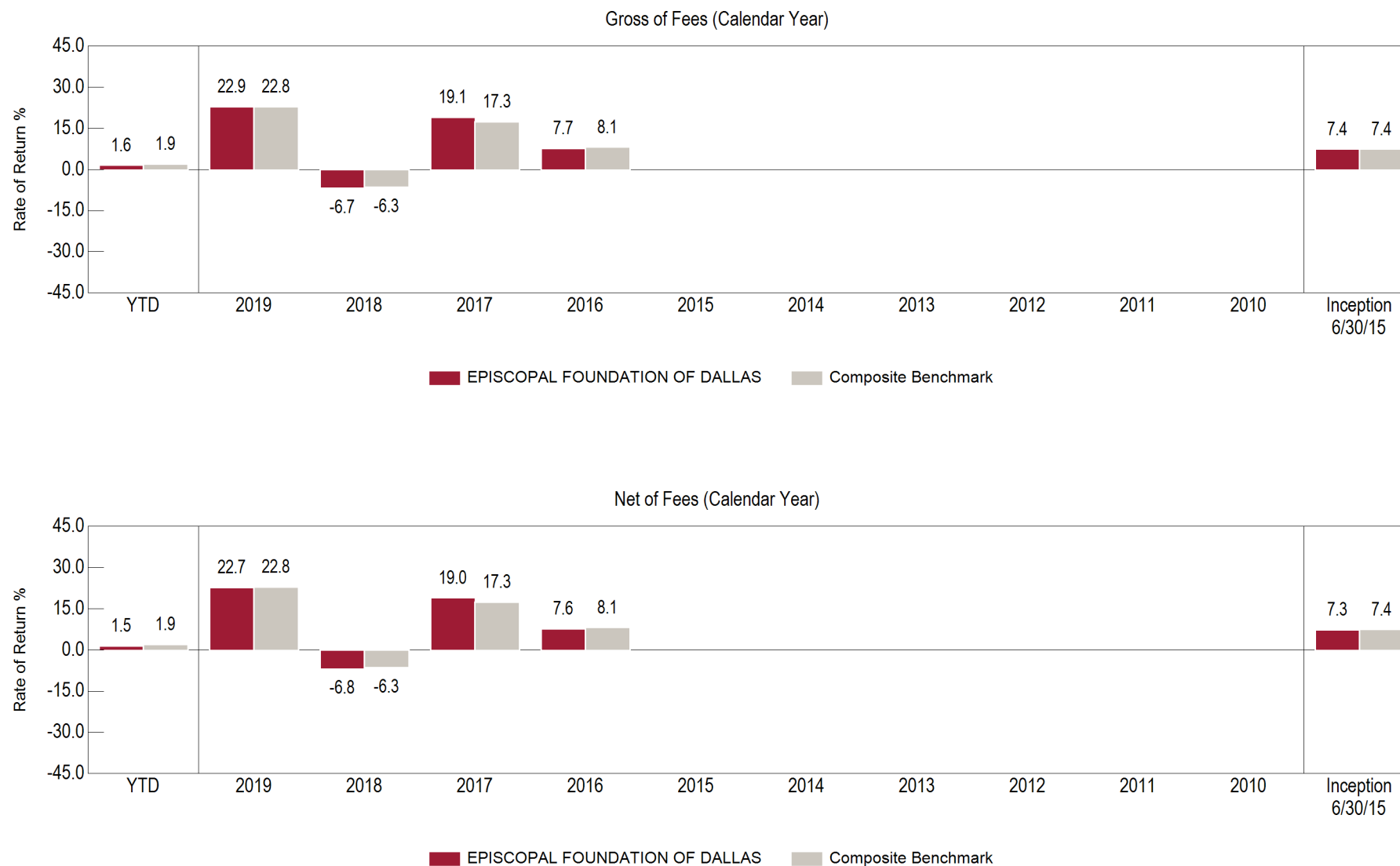
Performance Summary (Gross of Advisory Fees) ending September 30, 2020

	Market Value (\$)	% of Portfolio	2020 Q3 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EPISCOPAL FOUNDATION OF DALLAS	39,253,650	100.00	5.99	1.55	8.80	6.67	9.24	--	7.42	Jun-15
Composite Benchmark			6.02	1.93	8.37	6.98	9.13	--	7.41	Jun-15
Total Equity	27,585,888	70.28	8.04	0.62	10.90	7.13	10.99	--	8.33	Jun-15
Equity Domestic	16,596,777	42.28	7.84	0.06	10.24	9.09	12.35	--	10.04	Jun-15
Spliced Total Stock Market Index			9.20	5.49	14.99	11.65	13.69	13.50	11.38	Jun-15
Vanguard® Total Stock Market Index Fund Institutional Shares	8,353,562	21.28	9.19	5.50	15.01	11.65	13.68	13.49	11.38	Jun-15
Spliced Total Stock Market Index			9.20	5.49	14.99	11.65	13.69	13.50	11.38	Jun-15
Multi-Cap Core Funds Average			8.18	1.90	10.05	8.23	10.44	10.69	8.17	Jun-15
Vanguard® PRIMECAP Fund Admiral™ Shares	4,172,407	10.63	9.73	2.74	15.13	11.40	15.00	14.80	12.82	Jun-15
Russell 1000 Growth			13.22	24.33	37.53	21.67	20.10	17.25	17.83	Jun-15
Multi-Cap Growth Funds Average			11.81	22.14	33.15	18.39	16.60	14.29	14.09	Jun-15
Vanguard® Windsor™ Fund Admiral™ Shares	4,070,808	10.37	3.24	-12.64	-3.34	1.78	7.00	9.98	4.55	Jun-15
Russell 1000 Value			5.59	-11.58	-5.03	2.63	7.66	9.95	5.50	Jun-15
Multi-Cap Value Funds Average			4.79	-13.42	-6.94	0.45	5.86	8.25	3.74	Jun-15
Equity International	10,989,111	28.00	8.33	1.46	11.87	4.17	8.88	--	5.74	Jun-15
Spliced Total International Stock Index			6.70	-5.09	3.69	1.31	6.41	4.23	3.57	Jun-15
Vanguard® Total International Stock Index Fund Inst Shares	5,501,698	14.02	6.48	-4.80	3.82	1.28	6.33	4.23	3.56	Jun-15
Spliced Total International Stock Index			6.70	-5.09	3.69	1.31	6.41	4.23	3.57	Jun-15
International Funds Average			6.82	-3.21	5.52	1.51	5.82	4.59	3.42	Jun-15
Vanguard® International Growth Fund Admiral™ Shares	2,788,668	7.10	16.27	30.65	49.32	16.07	18.58	10.93	14.55	Jun-15
Spliced International Index			6.25	-5.44	3.00	1.16	6.23	4.00	3.34	Jun-15
International Funds Average			6.82	-3.21	5.52	1.51	5.82	4.59	3.42	Jun-15
Vanguard® International Value Fund	2,698,745	6.88	3.99	-11.80	-4.07	-1.62	4.45	3.54	1.41	Jun-15
Spliced International Index			6.25	-5.44	3.00	1.16	6.23	4.00	3.34	Jun-15
International Funds Average			6.82	-3.21	5.52	1.51	5.82	4.59	3.42	Jun-15

Performance Summary (Gross of Advisory Fees) ending September 30, 2020

	Market Value (\$)	% of Portfolio	2020 Q3 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fixed Income	9,323,148	23.75	1.00	6.13	6.05	5.24	4.33	--	4.33	Jun-15
Fixed Income Domestic	6,972,189	17.76	0.96	7.02	7.38	5.27	4.33	--	4.30	Jun-15
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			0.65	6.99	7.14	5.33	4.26	3.67	4.29	Jun-15
Vanguard® Total Bond Market Index Fund Admiral™ Shares	3,474,906	8.85	0.61	7.00	7.03	5.30	4.20	3.59	4.22	Jun-15
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			0.65	6.99	7.14	5.33	4.26	3.67	4.29	Jun-15
Spliced Intermediate-Term Investment-Grade Debt Funds Average			1.25	6.67	6.90	4.93	4.08	3.60	3.99	Jun-15
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	2,335,862	5.95	1.48	8.37	9.07	6.09	5.21	4.73	5.17	Jun-15
BBgBarc US Credit 5-10 Yr TR			1.76	7.05	8.31	6.43	5.82	5.24	5.67	Jun-15
Spliced Core Bond Funds Average			1.25	6.67	6.90	4.93	4.08	3.60	3.99	Jun-15
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	1,161,421	2.96	0.93	4.23	4.89	3.64	3.13	2.65	3.06	Jun-15
BBgBarc US Credit 1-5 Yr TR			0.82	4.20	5.07	3.89	3.26	2.88	3.18	Jun-15
1-5 Year Investment-Grade Debt Funds Average			1.03	2.98	3.57	2.82	2.39	1.96	2.27	Jun-15
Fixed Income International	2,350,959	5.99	1.10	3.47	2.15	5.11	4.34	--	4.41	Jun-15
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			1.07	3.63	2.33	5.33	4.57	--	4.64	Jun-15
Vanguard® Total International Bond Index Fund Adm™ Shares	2,350,959	5.99	1.10	3.47	2.15	5.11	4.34	--	4.41	Jun-15
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			1.07	3.63	2.33	5.33	4.57	--	4.64	Jun-15
International Income Funds Average			2.73	1.60	2.62	2.23	3.36	1.76	2.84	Jun-15
Total Real Estate	2,344,614	5.97	1.33	-12.74	-12.19	2.37	5.22	--	5.37	Jun-15
Real Estate Domestic	2,344,614	5.97	1.33	-12.74	-12.19	2.37	5.22	--	5.37	Jun-15
Real Estate Spliced Index			1.35	-12.66	-12.10	2.46	5.32	8.59	5.47	Jun-15
Vanguard® Real Estate Index Fund Admiral™ Shares	2,344,614	5.97	1.33	-12.74	-12.19	2.37	5.22	8.50	5.36	Jun-15
Real Estate Spliced Index			1.35	-12.66	-12.10	2.46	5.32	8.59	5.47	Jun-15
Real Estate Funds Average			2.54	-12.46	-12.08	2.02	4.57	7.77	4.59	Jun-15

Total Portfolio Performance



Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any other security-level expenses.

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

	Third Quarter	Year-To-Date	One Year
Beginning Market Value	\$37,330,792	\$39,302,262	\$37,345,696
Net Cash Flow	-\$353,224	-\$859,706	-\$1,556,490
Capital Appreciation	\$2,146,891	\$406,861	\$2,611,580
Income	\$129,191	\$404,233	\$852,864
Ending Market Value	\$39,253,650	\$39,253,650	\$39,253,650

Quarter Ending September 30, 2020

	Beginning Market Value	Net Cash Flow	Capital Appreciation	Income	Ending Market Value
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	\$1,922,426	\$384,996	\$14,610	\$13,830	\$2,335,862
Vanguard® International Growth Fund Admiral™ Shares	\$3,077,192	-\$748,192	\$459,668	\$0	\$2,788,668
Vanguard® International Value Fund	\$2,676,041	-\$83,631	\$106,334	\$0	\$2,698,745
Vanguard® PRIMECAP Fund Admiral™ Shares	\$4,063,816	-\$277,281	\$385,872	\$0	\$4,172,407
Vanguard® Real Estate Index Fund Admiral™ Shares	\$2,181,377	\$132,147	\$13,707	\$17,382	\$2,344,614
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	\$928,696	\$223,093	\$3,414	\$6,218	\$1,161,421
Vanguard® Total Bond Market Index Fund Admiral™ Shares	\$2,801,000	\$661,427	-\$4,980	\$17,460	\$3,474,906
Vanguard® Total International Bond Index Fund Adm™ Shares	\$1,851,900	\$477,278	\$16,297	\$5,484	\$2,350,959
Vanguard® Total International Stock Index Fund Inst Shares	\$5,461,477	-\$309,772	\$314,552	\$35,440	\$5,501,698
Vanguard® Total Stock Market Index Fund Institutional Shares	\$8,322,647	-\$708,051	\$705,589	\$33,376	\$8,353,562
Vanguard® Windsor™ Fund Admiral™ Shares	\$4,044,219	-\$105,238	\$131,828	\$0	\$4,070,808
Total	\$37,330,792	-\$353,224	\$2,146,891	\$129,191	\$39,253,650

Episcopal Foundation of Dallas - Aggregated Performance Summary								
as-of September 30, 2020								
	Market Value*	Portfolio Allocation	Three-Month	Year-to-Date	One-Year	Three-Year	Five-Year	Since Inception
Vanguard	\$39,253,650	100.00%	5.96%	1.47%	8.69%	6.55%	9.12%	7.31%
Vanguard Composite Benchmark			6.02%	1.93%	8.37%	6.98%	9.13%	7.41%
Aggregate Portfolio (net of EFD fee)*	\$39,253,650	100.00%	5.83%	1.08%	8.13%	5.99%	8.53%	7.82%
Aggregate Composite Benchmark*			6.02%	1.93%	8.37%	6.98%	9.30%	8.79%
<p>Notes: Return data achieved before February 2016 provided by client. All returns are net of fund-level fees and the Vanguard advisory fee. Aggregate portfolio returns are net of the EFD administrative fee. Vanguard Composite provides a comparison for Vanguard portfolio return and constitutes 42% Spliced Total Stock Market Index/28% Spliced Total International Stock Index/18% Spliced Barclays U.S. Agg Flt-Adj. Index/6% Barclays GA ex-USD Flt-Adj. RIC Capped Index Hedged/6% REIT Spliced Index and has been calculated as-of September 30, 2020. Performance effective date for Vanguard Composite as-of September 30, 2015. Aggregate Composite provides a comparison for Episcopal Foundation of Dallas portfolio and constitutes a weighted average of the Vanguard Composite and HFRI Fund of Funds Composite. Since inception date is January 1, 2010.</p> <p>*Aggregate portfolio performance and Aggregate composite performance include hedge fund and HFRI performance, respectively, through February 29, 2016 for the Five-Year and Since Inception time periods.</p>								

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 %	\$39.3 million
Management fee	0.108%	\$42,403
Fund expenses*	0.147%	\$57,703
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	0.255%	\$100,106

* 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 September 30, 2020

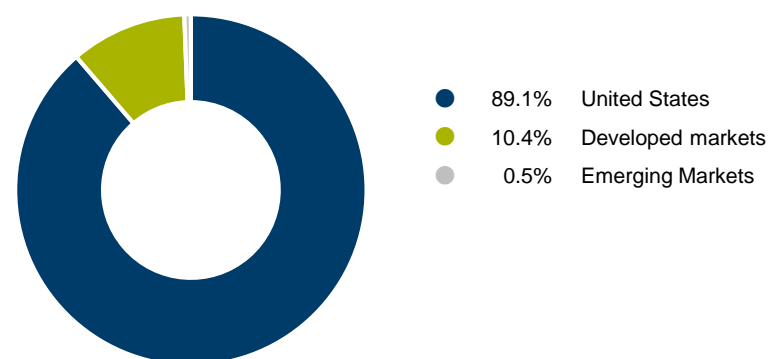
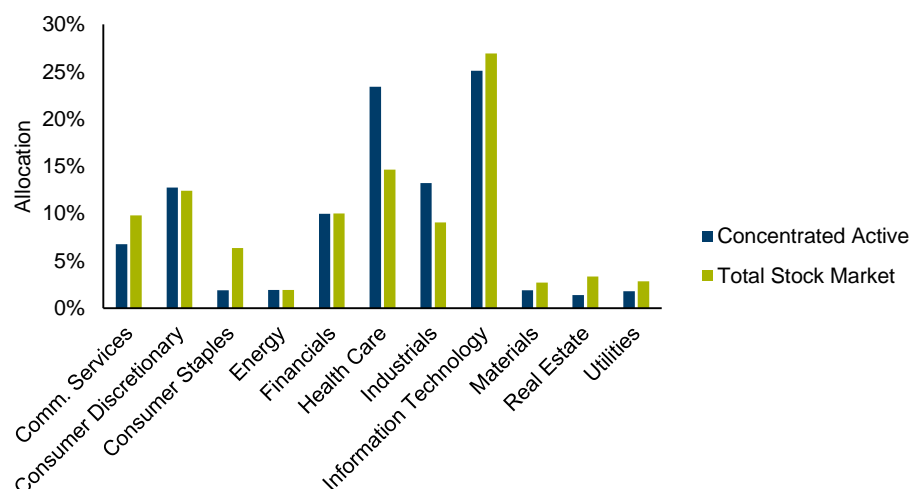
Name	Market Value	% of Portfolio	Expense Ratio
Total Equity	\$27,585,888	70.3%	
Equity Domestic	\$16,596,777	42.3%	
Vanguard® Total Stock Market Index Fund Institutional Shares	\$8,353,562	21.3%	0.030%
Vanguard® Windsor™ Fund Admiral™ Shares	\$4,070,808	10.4%	0.200%
Vanguard® PRIMECAP Fund Admiral™ Shares	\$4,172,407	10.6%	0.310%
Equity International	\$10,989,111	28.0%	
Vanguard® International Value Fund	\$2,698,745	6.9%	0.380%
Vanguard® International Growth Fund Admiral™ Shares	\$2,788,668	7.1%	0.320%
Vanguard® Total International Stock Index Fund Inst Shares	\$5,501,698	14.0%	0.080%
Total Fixed Income	\$9,323,148	23.8%	
Fixed Income Domestic	\$6,972,189	17.8%	
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	\$1,161,421	3.0%	0.100%
Vanguard® Total Bond Market Index Fund Admiral™ Shares	\$3,474,906	8.9%	0.050%
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	\$2,335,862	6.0%	0.100%
Fixed Income International	\$2,350,959	6.0%	
Vanguard® Total International Bond Index Fund Adm™ Shares	\$2,350,959	6.0%	0.110%
Total Real Estate	\$2,344,614	6.0%	
Real Estate Domestic	\$2,344,614	6.0%	
Vanguard® Real Estate Index Fund Admiral™ Shares	\$2,344,614	6.0%	0.120%
Total	\$39,253,650	100.0%	0.147%

Domestic Equity Positioning

VIAS concentrated active equity approach: Portfolio overview

	Concentrated active	Benchmark	Difference
Large-cap growth	23.6	28.8	-5.2
Large-cap blend	22.2	21.0	1.2
Large-cap value	27.5	21.3	6.2
Mid-cap growth	2.3	5.0	-2.7
Mid-cap blend	5.6	6.6	-1.0
Mid-cap value	18.6	11.8	6.8
Small-cap growth	0.0	2.2	-2.2
Small-cap blend	0.1	1.5	-1.4
Small-cap value	0.0	1.8	-1.8

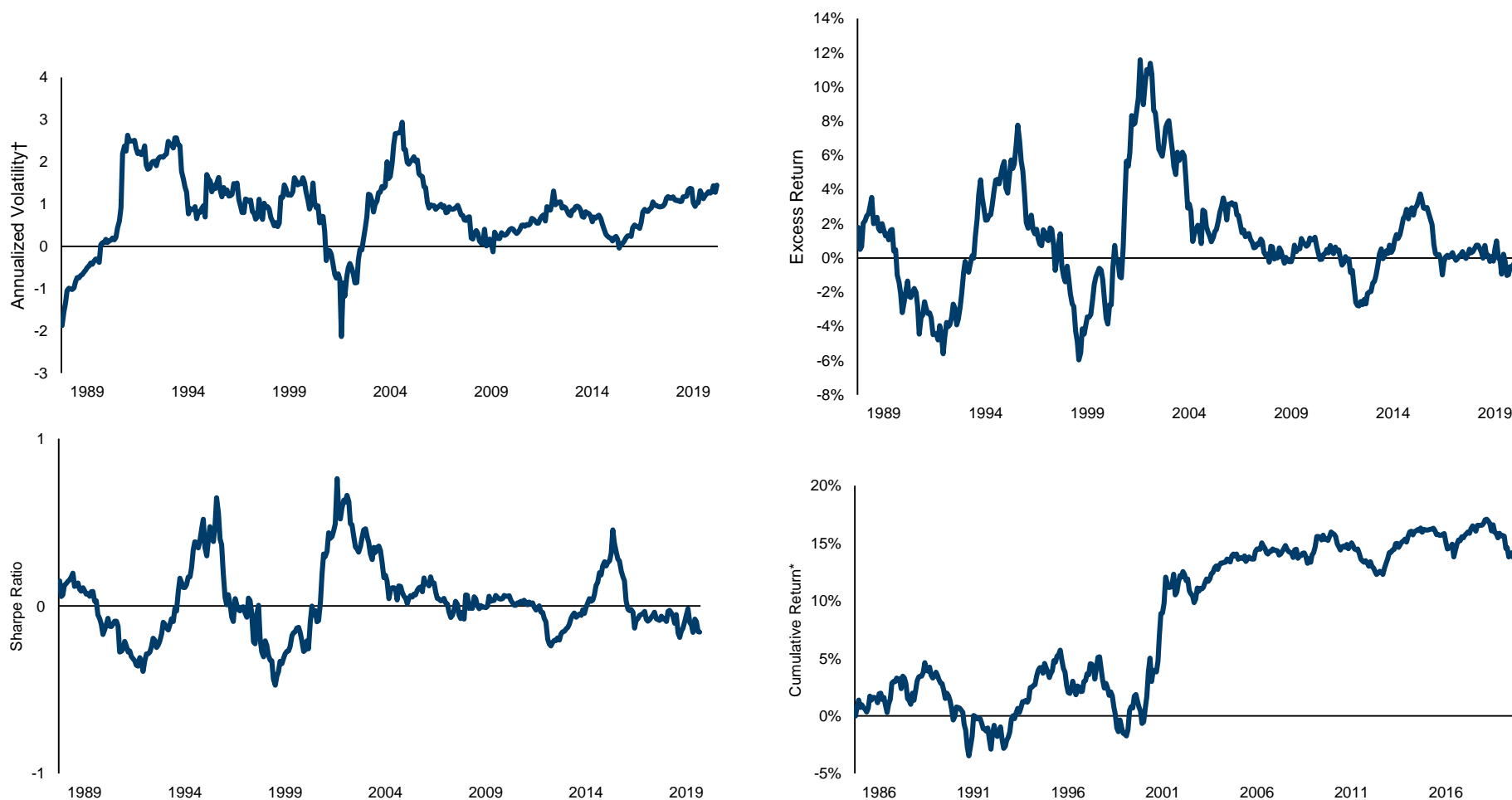
	Concentrated active	Benchmark
Market capitalization	\$212,496M	\$379,455M
Number of securities	252	3,543
Price/Earnings	22.0	26.0
Price/Book	2.7	3.5
Active share	72.2	0.0
Hist. EPS growth (3-yr)	13.6	14.7
Est. EPS growth (3–5 yr)	9.8	12.8
ROE	23.5	20.4



Source: FactSet.

Notes: Data as of September 30, 2020. Size and style methodology uses the Russell 9 box which excludes micro-cap companies that make up about 0.6% of the U.S. stock market. Concentrated active represented by 50% PRIMECAP and 50% Windsor. Benchmark represented by 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.

Risk and return metrics relative to benchmark (since inception)



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: FactSet.

Notes: Data is from November 1, 1984, September 30, 2020, and is shown in rolling 36-month increments except for cumulative return. Concentrated active represented by 50% PRIMECAP and 50% Windsor™. Investor Shares used through November 11, 2001, and Admiral™ Shares thereafter for both funds. Benchmark represented by 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.

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

† Volatility measured using standard deviation.

VIAS concentrated active equity approach: Managers and strategy

Fund	Manager(s)	Manager strategy
PRIMECAP (50%)	PRIMECAP Management (100%)	PRIMECAP 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 (50%)	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.

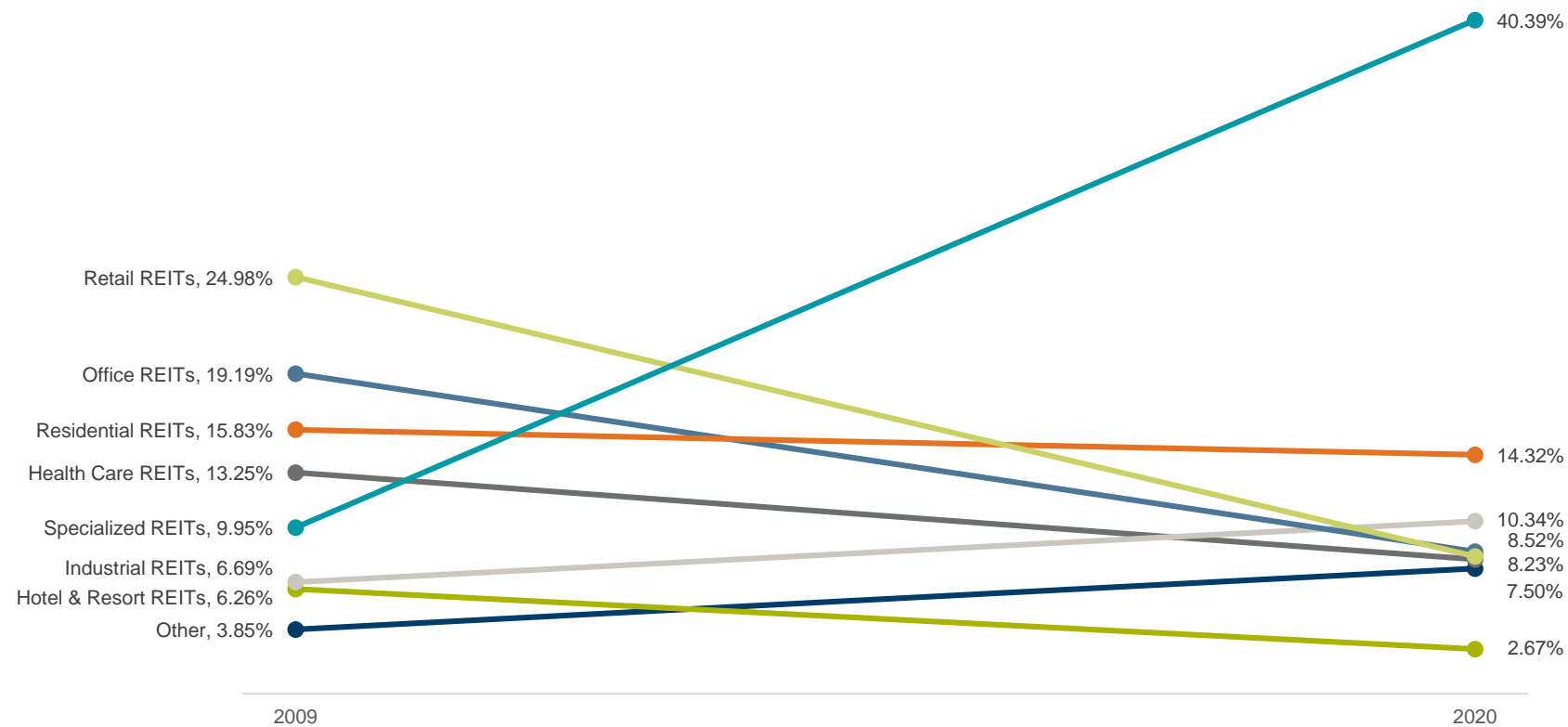
Real Estate Review

What is a REIT?

- A real estate investment trust or REIT is a company that owns or manages real estate.
- Rather than directly owning properties—which can be costly and difficult to convert into cash when needed—some investors buy shares of REIT securities or mutual funds.
- REITs are unique in that, unlike other corporations, REITs do not generally have to pay corporate income taxes if they meet certain tax code requirements.
- To qualify as a REIT, such a company must, among other requirements, distribute at least 90% of its taxable income to its shareholders and receive at least 75% of that income from rents, mortgages, and sales of property.
- REITs are separated into three types:
 - An equity REIT* generally owns properties directly. Equity REITs typically generate income from rental and lease payments and offer the potential for growth through property appreciation as well as the occasional capital gain through the sale of property.
 - A mortgage REIT makes loans to commercial real estate developers.
 - A hybrid REIT holds both properties and mortgages.

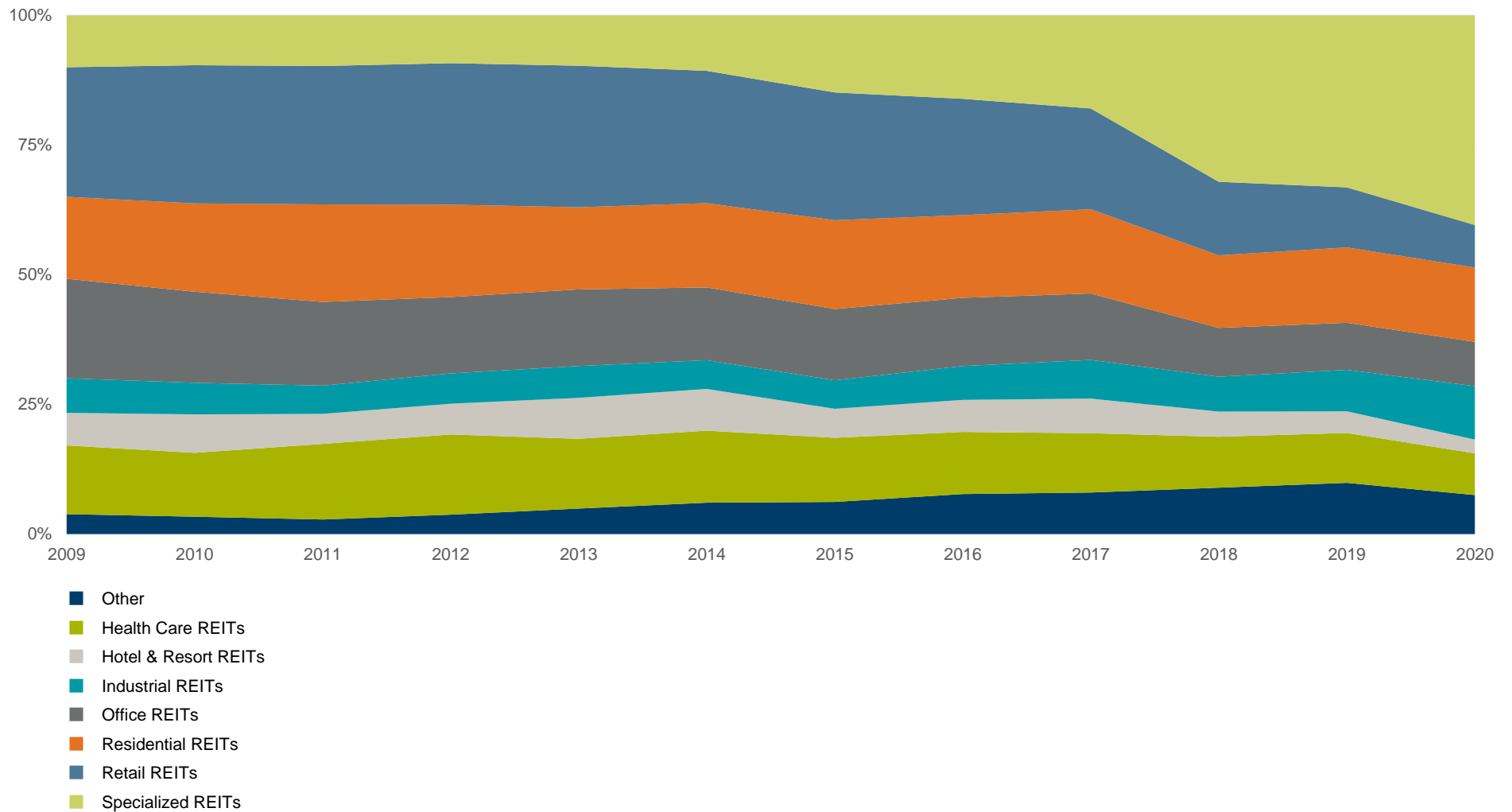
* Vanguard REIT Index Fund and Vanguard REIT II Index Fund invest in equity REITs only, not in mortgage or hybrid REITs.

Vanguard Real Estate Index Fund sector exposure



Sources: FactSet
Data from December 30, 2009 to April 30, 2020.
Other is composed of Diversified REITs, Mortgage REITs, Real Estate Development, REOCs, Real Estate Services, and Diversified Real Estate Activities.

Vanguard Real Estate Index Fund sector exposure



Sources: FactSet
 Data from December 2009 to April 2020.
 Other is composed of Diversified REITs, Mortgage REITs, Real Estate Development, REOCs, Real Estate Services, and Diversified Real Estate Activities.

REITs GICS sector definitions

Diversified REITs 60101010	Companies or trusts with significantly diversified operations across two or more property types.
Industrial REITs 60101020	Companies or trusts engaged in the acquisition, development, ownership, leasing, management and operation of industrial properties. Includes companies operating industrial warehouses and distribution properties.
Hotel & Resort REITs 60101030	Companies or trusts engaged in the acquisition, development, ownership, leasing, management and operation of hotel and resort properties.
Office REITs 60101040	Companies or trusts engaged in the acquisition, development, ownership, leasing, management and operation of office properties.
Health Care REITs 60101050	Companies or trusts engaged in the acquisition, development, ownership, leasing, management and operation of properties serving the health care industry, including hospitals, nursing homes, and assisted living properties.
Residential REITs 60101060	Companies or trusts engaged in the acquisition, development, ownership, leasing, management and operation of residential properties including multi-family homes, apartments, manufactured homes and student housing properties.
Retail REITs 60101070	Companies or trusts engaged in the acquisition, development, ownership, leasing, management and operation of shopping malls, outlet malls, neighborhood and community shopping centers.
Specialized REITs 60101080	Companies or trusts engaged in the acquisition, development, ownership, leasing, management and operation of properties not classified elsewhere. Includes trusts that operate and invest in storage properties. It also includes REITs that do not generate a majority of their revenues and income from real estate rental and leasing operations.
Diversified Real Estate Activities 60102010	Companies engaged in a diverse spectrum of real estate activities including real estate development & sales, real estate management, or real estate services, but with no dominant business line.
Real Estate Operating Companies 60102020	Companies engaged in operating real estate properties for the purpose of leasing & management.
Real Estate Development 60102030	Companies that develop real estate and sell the properties after development. Excludes companies classified in the Homebuilding sub-industry.
Real Estate Services 60102040	Real estate service providers such as real estate agents, brokers & real estate appraisers.

Source: GICS® Global Industry Classification Standard Mapbook.

The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of, Standard & Poor's Financial Services LLC (S&P) and MSCI. "GICS" is the trademark of Standard & Poor's Financial Services LLC (S&P) and MSCI. "Global Industry Classification Standard (GICS)" and "GICS Direct" are service marks of Standard & Poor's Financial Services LLC (S&P) and MSCI. GICS Direct is a joint product of Standard & Poor's Financial Services LLC (S&P) and MSCI, which provides the current, company-level GICS classification codes for over 40,000 companies worldwide.

Vanguard Real Estate Index Fund (VGSLX)

Investment approach

- Seeks to track the performance of the MSCI US Investable Market Real Estate 25/50 Index.
- Equity real estate investment trusts.
- Passively managed, full-replication approach.
- Low expenses minimize net tracking error.

Key facts

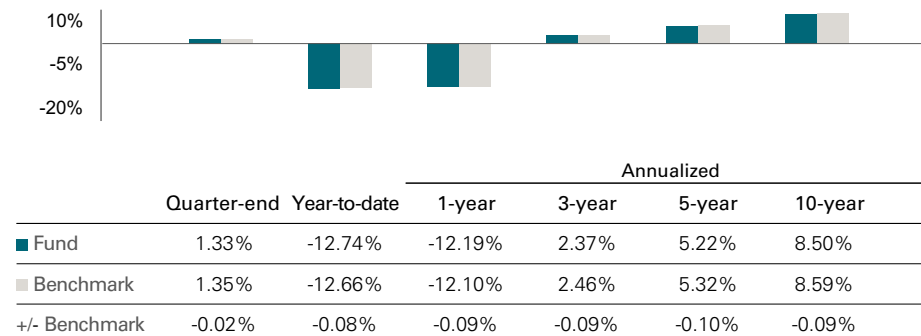
Expense ratio as of 05/29/2020	12 bps
As reported in the most recent prospectus.	
Designation	Sector/specialized
Fund inception date	05/13/1996
Admiral™ Shares inception date	11/12/2001
Total net assets as of 09/30/2020 (\$M)	\$55,163
Net fund assets for VGSLX as of 09/30/2020 (\$M)	\$18,476
Holdings	181
Indexed to	MSCI US Investable Market Real Estate 25/50 Index (M2CXVGD)
Turnover rate (fiscal year-end 01/31/2020)	5.8%
CUSIP	921908877
Investment manager	Vanguard Equity Index Group

Risk and volatility

	R ²	Beta
Primary benchmark	1.00	1.00
Broad-based benchmark	0.57	0.73

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



Real Estate Spliced Index: MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through February 1, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

Performance versus competitors

Percentage of Real Estate Funds outperformed by VGSLX



Source: Lipper, a Thomson Reuters Company. Based on total returns as of September 30, 2020. Number of funds in category: 1-year, 227; 3-year, 205; 5-year, 180; 10-year, 129. Only funds with a minimum one-, three-, five-, or ten-year history, respectively, were included in the comparison. 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.

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

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.

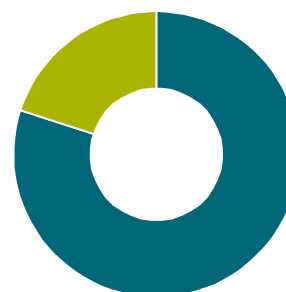
Vanguard Equity Index Group—Firm overview

Vanguard Equity Index Group (EIG) manages assets with high fiduciary and professional standards.

Key facts

- Assets under management: \$3.85 trillion.
- More than 300 portfolios tracking over 70 indexes.
- Benchmarks: Standard & Poor's, Russell, MSCI, FTSE, CRSP, Nasdaq, and Dow Jones.
- 59 investment professionals.
- Average portfolio manager tenure: 11 years.
- Average expense ratio: 0.10%.*

Equity index asset distribution



- 80% Domestic
- 20% International

Portfolio management

Gerard C. O'Reilly, Principal

- Portfolio manager.
- Advised the fund since 1996.
- Worked in investment management since 1992.
- B.S., Villanova University.

Walter Nejman

- Portfolio manager.
- Advised the fund since 2016.
- Worked in investment management since 2008.
- B.A., Arcadia University.
- M.B.A., Villanova University.

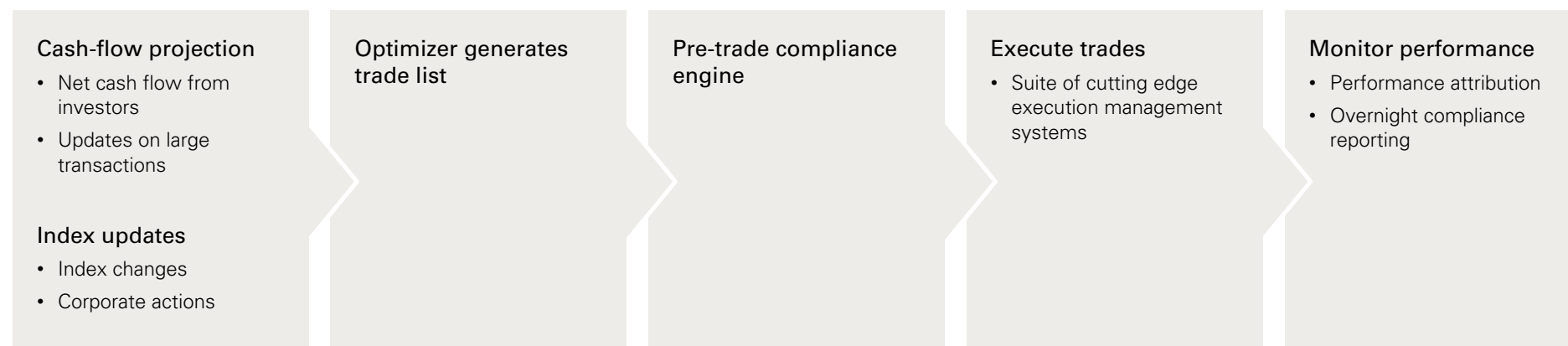
Source: Vanguard, as of September 30, 2020.

* Asset-weighted expense ratio for all Vanguard equity index funds.

FOR FINANCIAL ADVISORS AND INSTITUTIONS ONLY. NOT FOR PUBLIC DISTRIBUTION.

Vanguard's equity indexing process

A day in the life of a Vanguard portfolio manager



Tracking differences

The fund seeks to track its benchmark, but tracking differences can occur. The main sources of these differences are:

Expense ratio

- The fund's expense ratio is an ongoing contributor to tracking differences.

Securities lending

- Vanguard operates a very conservative securities lending program.
- Funds selectively lend "specials," not general collateral.
- All net revenue (net of broker rebates, direct operating expenses, and agent fees) is returned to portfolios.
- Program has rigorous risk controls and invests collateral in a high quality money market fund.

Other

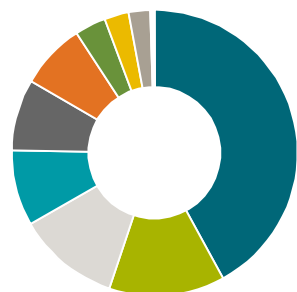
- Index sampling differences.
- Use of futures.
- Index change management.
- Trading costs.
- Impact of NAV penny rounding.

Vanguard Real Estate Index Fund (VGSLX)

Equity characteristics

	VGSLX	Benchmark
Number of stocks	181	178
Median market cap	\$19.1B	\$19.1B
P/E ratio (trailing earnings)	31.3x	31.6x
P/B ratio	2.3x	2.3x
Return on equity (5-year average)	6.4%	6.1%
Earnings growth rate (5-year)	12.1%	12.0%
Equity yield (dividend)	3.9%	3.9%
Foreign holdings	0.0%	—
Turnover (fiscal year end)	5.8%	—
Short-term reserves	0.0%	N/A

Subindustry diversification as a % of common stock



Sector	VGSLX	Benchmark
Specialized REITs	42.0%	42.2%
Residential REITs	13.2	13.1
Industrial REITs	11.5	11.5
Health Care REITs	8.6	8.5
Retail REITs	8.1	8.1
Office REITs	7.4	7.3
Diversified REITs	3.5	3.5
Real Estate Services	2.7	2.8
Hotel & Resort REITs	2.5	2.4
Real Estate Development	0.2	0.2
Real Estate Operating Companies	0.2	0.2
Diversified Real Estate Activities	0.1	0.1

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	VGSLX	Benchmark
More than \$35	38.4%	38.5%
\$28 to \$35	0.0	0.0
\$11 to \$28	28.7	28.7
\$5 to \$11	16.6	16.6
Below \$5	16.2	16.2

Risk and volatility

	R-squared	Beta	Alpha	Standard deviation	Sharpe ratio
VGSLX	N/A	N/A	-0.01	18.01	0.04
Primary benchmark	1.00	1.00	N/A	18.01	0.05
Broad-based benchmark	0.57	0.73	N/A	18.47	0.54

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
Vanguard Real Estate II Index Fund	12.3%
American Tower Corp.	8.5
Prologis Inc.	5.9
Crown Castle International Corp.	5.5
Equinix Inc.	5.3
Digital Realty Trust Inc.	2.9
SBA Communications Corp.	2.8
Public Storage	2.7
Welltower Inc.	1.8
Weyerhaeuser Co.	1.7
Top ten as a % of total net assets	49.4%

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

All data as of September 30, 2020, unless otherwise noted.

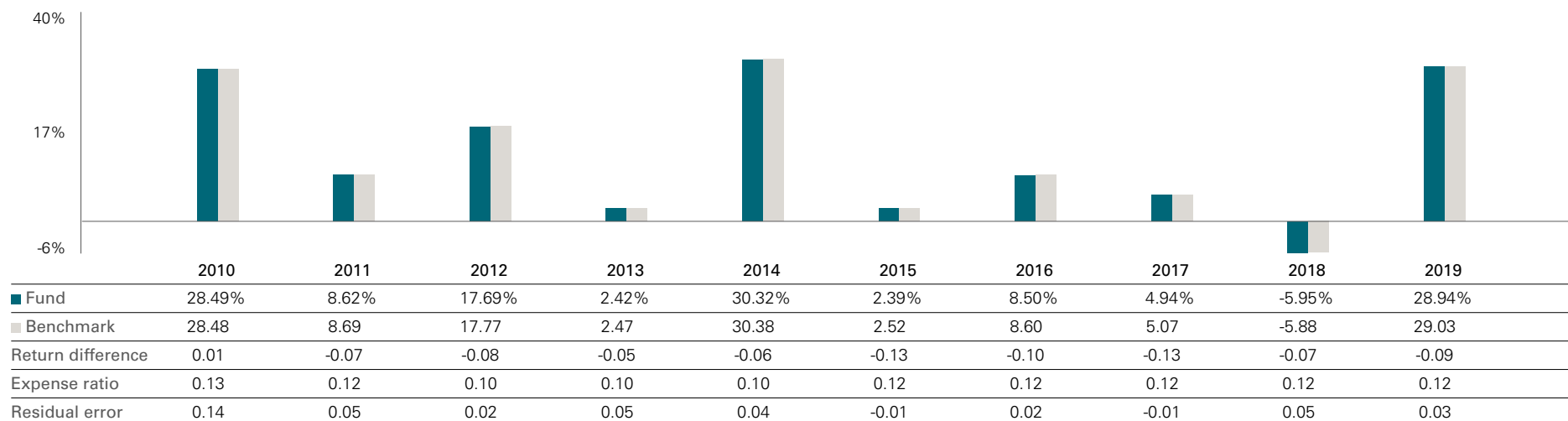
FOR FINANCIAL ADVISORS AND INSTITUTIONS ONLY. NOT FOR PUBLIC DISTRIBUTION.

Vanguard Real Estate Index Fund (VGSLX)

Performance and tracking differences

As of September 30, 2020	Quarter-end	Year-to-date	Annualized			
			1-year	3-year	5-year	10-year
VGSLX	1.33%	-12.74%	-12.19%	2.37%	5.22%	8.50%
Benchmark	1.35	-12.66	-12.10	2.46	5.32	8.59
Return difference	-0.02	-0.08	-0.09	-0.09	-0.10	-0.09
Expense ratio	0.03	0.09	0.11	0.12	0.12	0.11
Residual error	0.01	0.01	0.01	0.03	0.02	0.03

Calendar-year performance



Real Estate Spliced Index: MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through February 1, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

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.

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

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.

Note: Except for the most recent quarter, the expense ratios presented are the funds' actual operating expenses and they exclude any acquired fees and expenses, which result from the funds' holdings in business development companies (BDCs). BDC expenses are not direct costs paid by fund shareholders and are not used to calculate the fund's net asset value.

Vanguard Real Estate Index Fund (VGSLX)

Investment commentary as of 9/30/2020

- The rebound in global stocks that began in March continued in the third quarter. Massive fiscal and monetary support from governments and central banks, signs of economic healing, and reported progress toward a COVID-19 vaccine all buoyed the markets.
- Investor sentiment soured and volatility returned in September, though, amid stretched valuations in the technology sector, a resurgence in coronavirus infections in some regions, and dimmer chances of a new government aid package in the United States.
- In the global bond market, the pandemic led to a wave of issuance, which drove up supply, but demand held up fairly well. Yields ended the quarter little changed.
- The Real Estate Spliced Index returned 1.35% for the third quarter ended September 30. The Russell 3000 Index, which measures the broad U.S. stock market, returned 9.21%.
- Specialized REITs (+4.1%), industrial REITs (+7.5%), and health care REITs (+3.8%) were the top contributors.
- Office REITs (–8.1%), retail REITs (–6.1%), and residential REITs (–3.4%) were the biggest detractors.
- For the 12-month period ended September 30, 2020, the Real Estate Spliced Index returned –12.10%. Retail REITs (–43.0%), residential REITs (–21.8%), and office REITs (–26.3%) detracted most from results. Specialized REITs (+10.8%) and industrial REITs (+15.5%) made the only positive contributions.

Economic and Market Outlook

Vanguard November 2020 market and economic outlook at a glance

Key takeaways:

- In the U.S. expect a full-year 2020 GDP contraction of around –4% and 2021 GDP growth around 4%.
- China is on course to have fully recovered from the COVID-19 pandemic by year's end.
- Inflation may experience some volatility in the near-to-medium term as a resumption in economic activity across sectors pushes prices higher.
- We continue to see the U.S. unemployment rate in a range of 7% to 9% by year's end.

Asset-class return outlooks

Our ten-year, annualized, nominal return projections, as of June 30, 2020, are shown below. Please note that the figures are based on a 1.0-point range around the rounded 50th percentile of the distribution of return outcomes for equities and a 0.5-point range around the rounded 50th percentile for fixed income.

Equities	Return projection	Median volatility
U.S. equities	3.9%–5.9%	17.9%
U.S. value	5.0%–7.0%	19.9%
U.S. growth	1.6%–3.6%	19.5%
U.S. large-cap	3.7%–5.7%	19.4%
U.S. small-cap	4.0%–6.0%	23.5%
U.S. real estate investment trusts	3.4%–5.4%	19.9%
Global equities ex-U.S. (unhedged)	7.4%–9.4%	18.6%
U.S. inflation	0.5%–1.5%	2.4%

Fixed income	Return projection	Median volatility
U.S. aggregate bonds	0.7%–1.7%	4.0%
U.S. Treasury bonds	0.3%–1.3%	4.2%
U.S. credit bonds	1.4%–2.4%	5.7%
U.S. high-yield corporate bonds	3.2%–4.2%	10.7%
U.S. Treasury inflation-protected securities	0.4%–1.4%	6.4%
U.S. cash	0.5%–1.5%	0.9%
Global bonds ex-U.S. (hedged)	0.5%–1.5%	2.5%
Emerging market sovereign	3.1%–4.1%	11.1%

These probabilistic return assumptions depend on current market conditions and, as such, may change over time.

IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model® regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modeled asset class. Simulations are as of June 30, 2020. Results from the model may vary with each use and over time. For more information, see Important information page.

Source: Vanguard Investment Strategy Group.

Vanguard November 2020 market and economic outlook at a glance



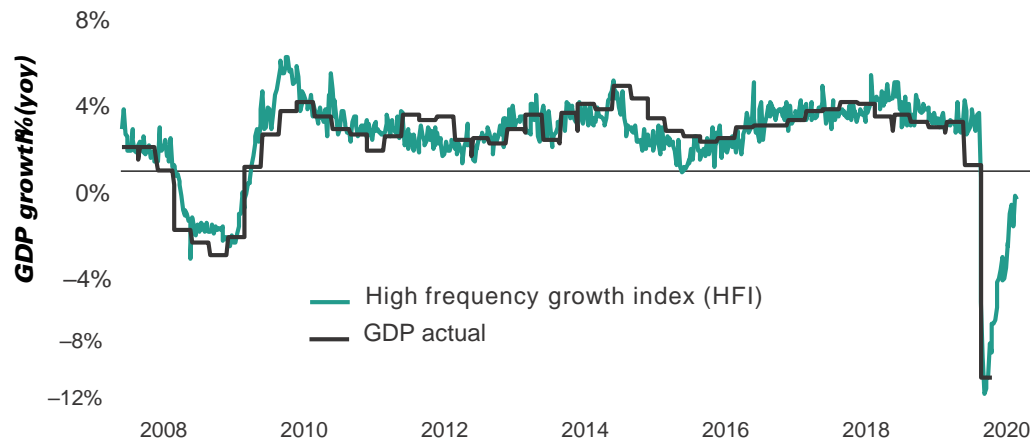
Region-by-region outlook

China leads the way on growth, while the U.S. will need more time

United States. Vanguard expects the first estimate of third-quarter GDP, to be released Thursday, October 29, to show a recovery well under way. We foresee reported third-quarter growth around 22%, and fourth-quarter growth in the neighborhood of 7%.

- Our outlook assumes an additional \$1 trillion in COVID-related fiscal support in the fourth quarter. Should no fiscal support be forthcoming, we'd foresee revising down slightly our growth expectations for the fourth quarter and perhaps the first half of 2021.
- We continue to foresee a full-year 2020 GDP contraction of around -4% and 2021 GDP growth around 4%. We continue to anticipate a challenge in getting back to a pre-pandemic growth trajectory owing to some permanent losses of jobs and businesses and consumer reluctance in some face-to-face sectors.
- Absent a widely accessible and administered vaccine or treatments that could moderate those effects, we see at least a 24-month period to reach a pre-COVID trajectory of activity

Vanguard High Frequency Index versus U.S. GDP growth



Sources: Vanguard and Refinitive, as of October 2, 2020.

Notes: High frequency activity measure uses weekly data to estimate current activity on a more timely basis than traditional economic releases. Series included: Weekly raw steel production, weekly energy consumption (motor vehicle, jet fuel, diesel), weekly continuing unemployment claims, weekly retail sales, and bi-weekly consumer sentiment.

Vanguard November 2020 market and economic outlook at a glance

China. With a still-robust export sector and a quicker-than-expected resumption in domestic activity, the economy in China is on course to have fully recovered from the COVID-19 pandemic by year's end, Vanguard believes.

- We've become more optimistic about China's third-quarter GDP growth, which we foresee around 5.5% to 6.0%, higher than the 5.2% consensus of economists surveyed by Bloomberg. Vanguard continues to foresee China's full-year GDP growth in a range of 1.0% to 3.0%.
- The coronavirus affected China first among the world's largest economies, and China dealt with the economic fallout first. So when the worst of the outbreak was over, China's exporters were able to take global market share.
- Vanguard foresees China's economy reaching its pre-pandemic trajectory before the end of 2020, a full year or more before other major economies reach the same milestone.
- In the longer term, Vanguard sees room for both caution and optimism about China. Challenges include an aging population, a fading catch-up effect as the country becomes wealthier, and an external environment that may look less kindly on globalization. Reasons for optimism include the vast domestic market and a growing educated workforce.



Region-by-region
outlook *(continued)*

Euro area. Rising cases of COVID-19 in the euro area have led to tactical, localized restrictions on activity. We foresee only modest overall fourth-quarter growth, with contraction likely in face-to-face sectors such as leisure, hospitality, and tourism, while recovery is likely to continue in sectors such as agriculture, manufacturing, and construction.

- We expect the pace of recovery to differ by geography as well, with Germany and Italy likely to fare better than Spain and France, the latter two for which virus transmission has been higher lately and the services sector contributes more to the economies.
- Vanguard continues to foresee full-year 2020 GDP contraction in a range of –8% to –10%.

Emerging markets. Vanguard foresees emerging markets contracting by around –3% for 2020.

- The outlook for Latin America, under assault from COVID-19, is particularly pessimistic.
- Emerging markets will be watching developments in U.S.-China relations, which have implications for supply chains and trade-related growth.

Vanguard November 2020 market and economic outlook at a glance

Fed maintains current target range

Federal Reserve. The Fed said it expects to maintain the current target range of 0%–0.25% until it assesses that inflation “is on track to moderately exceed 2% for some time.”

- U.S. Federal Open Market Committee (FOMC) members broadly expect the Fed will keep the current federal funds target rate at today's level through 2023, even as they expect inflation to then finally reach 2%.

European Central Bank. The ECB said it would keep its main rates at their current level or take them still lower until it sees the inflation outlook “robustly converge to a level sufficiently close to, but below, 2%.”

China. With China's better-than-expected recovery to date from the pandemic, the People's Bank of China has little reason to add fuel to the economic tank, Vanguard believes. China's quicker recovery relative to other major economies gives policymakers an opportunity to wait and see what might be required next.

- We expect any moves to be targeted, aimed at sectors where recovery has been slower than in other sectors, rather than broad stimulus measures.



Inflation should
be tame

Expect U.S. inflation to be below 2% by the end of 2021

Vanguard expects some volatility in U.S. inflation in the near-to-medium term as a resumption in economic activity across sectors pushes prices higher, perhaps above 2%, momentarily, in the first half of 2021.

- We expect such a firming trend to be short-lived and foresee inflation below 2% by the end of 2021, though virus-related supply shocks, fiscal support and/or monetary stimulus, and willingness by the Federal Reserve to tolerate above-target inflation may serve as potential spurs to higher prices.



Unemployment rate
improves

Slower pace for job gains

The unemployment rate in the United States fell to 7.9% in September, its fifth straight month of decline, but also the third straight month of a slowing in the pace of job gains, and the fewest gains since the job market's recovery began in May. Vanguard expects a continued slowing in the pace of recovery in the medium term.

- The potential for increases in virus transmission and any resulting targeted disruptions to economic activity could create volatility in jobs numbers in the months ahead.
- We continue to see the U.S. unemployment rate in a range of 7% to 9% by year's end.

Important information

IMPORTANT: The projections and other information generated by the Vanguard Capital Markets Model 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 important, 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.

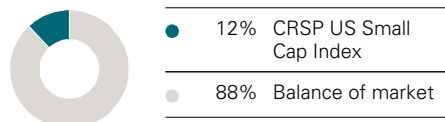
Appendix

Vanguard Small-Cap Index Fund (VSMAX)

Investment approach

- Seeks to track the performance of the CRSP US Small Cap Index.
- Small-cap equity diversified across growth and value styles.
- Passively managed, full-replication approach.
- Fund remains fully invested.
- Low expenses minimize net tracking error.

Share of U.S. stock market (%)



As measured by the MSCI US Broad Market Index.

Key facts

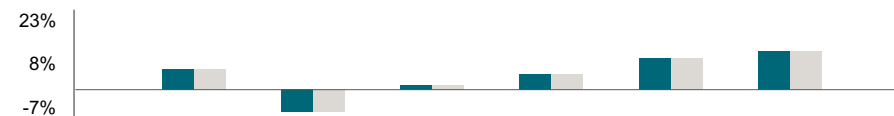
Expense ratio as of 04/28/2020	5 bps
As reported in the most recent prospectus.	
Designation	Domestic small-cap blend
Fund inception date	10/03/1960
Admiral™ Shares inception date	11/13/2000
Total net assets as of 09/30/2020 (\$M)	\$89,849
Net fund assets for VSMAX as of 09/30/2020 (\$M)	\$37,591
Holdings	1,405
Indexed to	CRSP US Small Cap Index (CRSPSCT)
Turnover rate (fiscal year-end 12/31/2019)	15.6%
CUSIP	922908686
Investment manager	Vanguard Equity Index Group

Risk and volatility

	R ²	Beta
Primary benchmark	1.00	1.00
Broad-based benchmark	0.93	1.19

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	5.79%	-6.29%	1.34%	4.39%	8.95%	10.95%
Benchmark	5.78%	-6.32%	1.29%	4.37%	8.92%	10.92%
+/- Benchmark	0.01%	0.03%	0.05%	0.02%	0.03%	0.03%

Spliced Small-Cap Index: Russell 2000 Index through May 16, 2003; MSCI US Small Cap 1750 Index through January 30, 2013; CRSP US Small Cap Index thereafter.

Performance versus competitors

Percentage of Small-Cap Core Funds outperformed by VSMAX



Source: Lipper, a Thomson Reuters Company. Based on total returns as of September 30, 2020. Number of funds in category: 1-year, 843; 3-year, 798; 5-year, 685; 10-year, 481. Only funds with a minimum one-, three-, five-, or ten-year history, respectively, were included in the comparison. 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.

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

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.

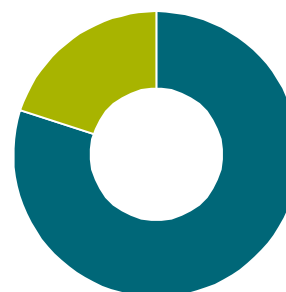
Vanguard Equity Index Group—Firm overview

Vanguard Equity Index Group (EIG) manages assets with high fiduciary and professional standards.

Key facts

- Assets under management: \$3.85 trillion.
- More than 300 portfolios tracking over 70 indexes.
- Benchmarks: Standard & Poor's, Russell, MSCI, FTSE, CRSP, Nasdaq, and Dow Jones.
- 59 investment professionals.
- Average portfolio manager tenure: 11 years.
- Average expense ratio: 0.10%.*

Equity index asset distribution



- 80% Domestic
- 20% International

Portfolio management

Gerard C. O'Reilly, Principal

- Portfolio manager.
- Advised the fund since 2016.
- Worked in investment management since 1992.
- B.S., Villanova University.

William Coleman, CFA

- Portfolio manager.
- Advised the fund since 2016.
- Worked in investment management since 2006.
- B.S., King's College.
- M.S., Saint Joseph's University.

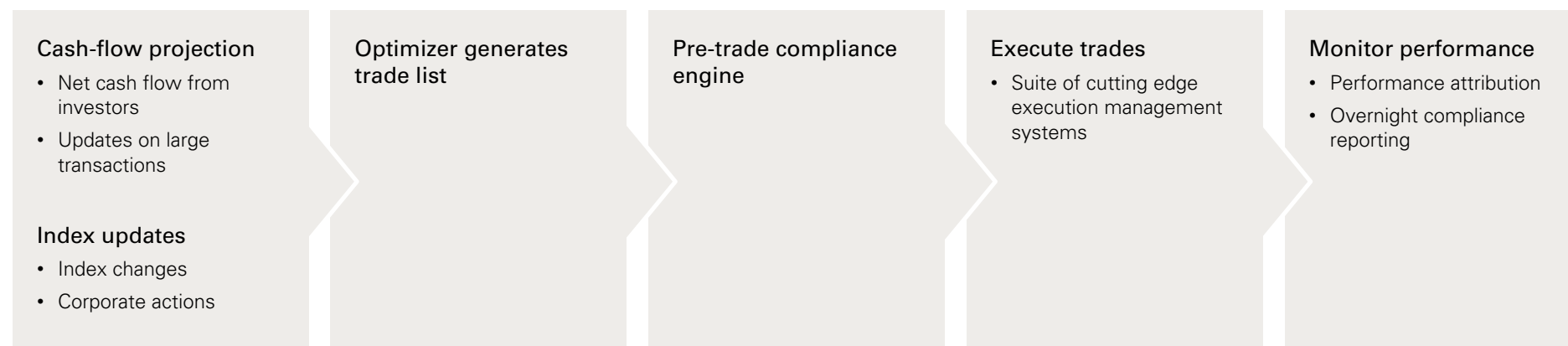
Source: Vanguard, as of September 30, 2020.

* Asset-weighted expense ratio for all Vanguard equity index funds.

FOR FINANCIAL ADVISORS AND INSTITUTIONS ONLY. NOT FOR PUBLIC DISTRIBUTION.

Vanguard's equity indexing process

A day in the life of a Vanguard portfolio manager



Tracking differences

The fund seeks to track its benchmark, but tracking differences can occur. The main sources of these differences are:

Expense ratio

- The fund's expense ratio is an ongoing contributor to tracking differences.

Securities lending

- Vanguard operates a very conservative securities lending program.
- Funds selectively lend "specials," not general collateral.
- All net revenue (net of broker rebates, direct operating expenses, and agent fees) is returned to portfolios.
- Program has rigorous risk controls and invests collateral in a high quality money market fund.

Other

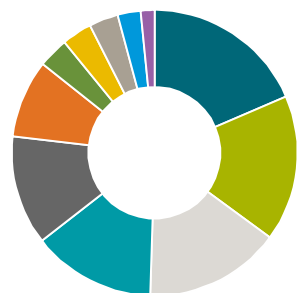
- Index sampling differences.
- Use of futures.
- Index change management.
- Trading costs.
- Impact of NAV penny rounding.

Vanguard Small-Cap Index Fund (VSMAX)

Equity characteristics

	VSMAX	Benchmark
Number of stocks	1,405	1,388
Median market cap	\$4.9B	\$4.9B
P/E ratio (trailing earnings)	20.8x	20.8x
P/B ratio	2.1x	2.1x
Return on equity (5-year average)	9.5%	9.5%
Earnings growth rate (5-year)	13.3%	13.3%
Equity yield (dividend)	1.8%	1.7%
Foreign holdings	0.0%	—
Turnover (fiscal year end)	15.6%	—
Short-term reserves	0.0%	N/A

Sector diversification as a % of common stock



Sector	VSMAX	Benchmark
Industrials	18.5%	18.5%
Health Care	16.6	16.7
Consumer Discretionary	15.4	15.3
Technology	14.0	14.2
Financials	12.4	12.2
Real Estate	8.8	8.6
Basic Materials	3.4	3.4
Utilities	3.4	3.4
Consumer Staples	3.3	3.3
Energy	2.6	2.6
Telecommunications	1.6	1.6
Other	0.0	0.2

Sector categories are based on the Industry Classification Benchmark system ("ICB"), except for the "Other" category (if applicable), which includes securities that have not been provided an ICB classification as of the effective reporting period. Beginning September 2020, FTSE Russell is enhancing the ICB structures to provide additional granularity from the industry through subsector levels. Please note that there may be differences in sector names and classifications as these changes are implemented across the industry through March 2021.

All data as of September 30, 2020, unless otherwise noted.

FOR FINANCIAL ADVISORS AND INSTITUTIONS ONLY. NOT FOR PUBLIC DISTRIBUTION.

Market-cap breakdown



Market capitalization	VSMAX	Benchmark
More than \$35	0.0%	0.0%
\$28 to \$35	0.3	0.3
\$11 to \$28	14.4	14.4
\$5 to \$11	35.7	35.9
Below \$5	49.7	49.4

Risk and volatility

	R-squared	Beta	Alpha	Standard deviation	Sharpe ratio
VSMAX	N/A	N/A	0.00	22.78	0.12
Primary benchmark	1.00	1.00	N/A	22.78	0.12
Broad-based benchmark	0.93	1.19	N/A	18.47	0.54

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
Immunomedics Inc.	0.5%
Horizon Therapeutics plc	0.4
Insulet Corp.	0.4
STERIS plc	0.4
Etsy Inc.	0.4
PerkinElmer Inc.	0.4
Catalent Inc.	0.4
IDEX Corp.	0.4
Zebra Technologies Corp.	0.3
Teradyne Inc.	0.3
Top ten as a % of total net assets	3.9%

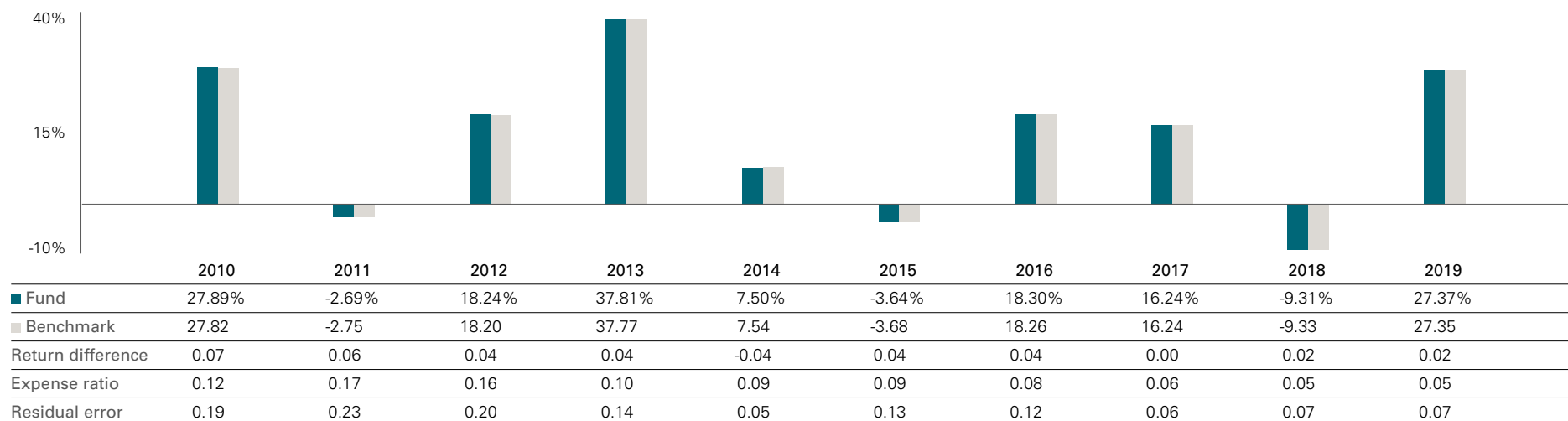
The holdings listed exclude any temporary cash investments and equity index products.

Vanguard Small-Cap Index Fund (VSMAX)

Performance and tracking differences

As of September 30, 2020	Quarter-end	Year-to-date	Annualized			
			1-year	3-year	5-year	10-year
VSMAX	5.79%	-6.29%	1.34%	4.39%	8.95%	10.95%
Benchmark	5.78	-6.32	1.29	4.37	8.92	10.92
Return difference	0.01	0.03	0.05	0.02	0.03	0.03
Expense ratio	0.01	0.04	0.05	0.05	0.06	0.08
Residual error	0.03	0.07	0.10	0.07	0.08	0.11

Calendar-year performance



Spliced Small-Cap Index: Russell 2000 Index through May 16, 2003; MSCI US Small Cap 1750 Index through January 30, 2013; CRSP US Small Cap Index thereafter.

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.

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

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.

Note: Except for the most recent quarter, the expense ratios presented are the funds' actual operating expenses and they exclude any acquired fees and expenses, which result from the funds' holdings in business development companies (BDCs). BDC expenses are not direct costs paid by fund shareholders and are not used to calculate the fund's net asset value.

Vanguard Small-Cap Index Fund (VSMAX)

Investment commentary as of 9/30/2020

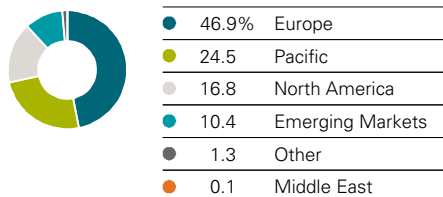
- The rebound in global stocks that began in March continued in the third quarter. Massive fiscal and monetary support from governments and central banks, signs of economic healing, and reported progress toward a COVID-19 vaccine all buoyed the markets.
- Investor sentiment soured and volatility returned in September, though, amid stretched valuations in the technology sector, a resurgence in coronavirus infections in some regions, and dimmer chances of a new government aid package in the United States.
- In the global bond market, the pandemic led to a wave of issuance, which drove up supply, but demand held up fairly well. Yields ended the quarter little changed.
- The CRSP US Small Cap Index returned 5.78% for the quarter ended September 30. Its large-capitalization counterpart, the CRSP US Large Cap Index, returned 9.73%.
- The top contributors were consumer discretionary (+13.6%), health care (+11.0%), and industrials (+7.0%).
- Financials (–1.0%), telecommunications (–4.0%), and energy (–1.3%) detracted most from performance.
- For the 12-month period ended September 30, 2020, the CRSP US Small Cap Index returned 1.29%. The largest contributors were health care (+40.6%), technology (+31.3%), and consumer goods (+3.7%). Financials (–21.5%), oil & gas (–40.7%), and utilities (–15.7%) were the biggest detractors.

Vanguard International Value Fund (VTRIX)

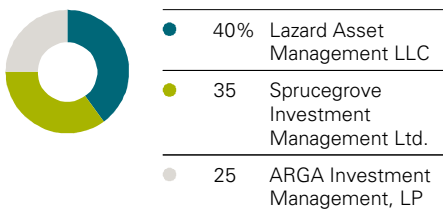
Investment approach

- 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 10/12/2020 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 09/30/2020 (\$M) \$9,517

Net fund assets for VTRIX as of 09/30/2020 (\$M) \$9,517

Holdings 224

Benchmarked to MSCI All Country World Index ex USA (NDUEACWZ)

Turnover rate (fiscal year-end 10/31/2019) 38.4%

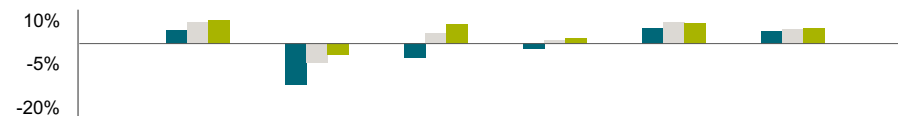
CUSIP 921939203

Risk and volatility

	R ²	Beta
Primary benchmark	0.97	1.03
Broad-based benchmark	0.97	1.03

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



	Quarter-end	Year-to-date	Annualized			
			1-year	3-year	5-year	10-year
Fund	3.99%	-11.80%	-4.07%	-1.62%	4.45%	3.54%
Benchmark	6.25%	-5.44%	3.00%	1.16%	6.23%	4.00%
International Funds Average	6.82%	-3.21%	5.52%	1.51%	5.82%	4.59%

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 September 30, 2020. Number of funds in category: 1-year, 1503; 3-year, 1333; 5-year, 1131; 10-year, 775. Only funds with a minimum one-, three-, five-, or ten-year history, respectively, were included in the comparison. 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.

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

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.

All data as of September 30, 2020, unless otherwise noted.

FOR FINANCIAL ADVISORS AND INSTITUTIONS ONLY. NOT FOR PUBLIC DISTRIBUTION.

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	Lazard Asset Management LLC	Sprucegrove Investment Management Ltd.
Manager start date	2012	2006	2020
Portfolio manager (start date)	A. Rama Krishna (2012) Steven Morrow (2012)	Michael G. Fry (2010) Michael A. Bennett (2010)	Shirley Woo (2020) Arjun Kumar (2020)
Current allocation (as of September 30, 2020)	25%	40%	35%
Investment focus	International equity	International equity	International equity
Investment style	Deep value	Relative value	Quality 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"> • 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. 	<ul style="list-style-type: none"> • Sprucegrove believes that the short-term focus of many investors allows high-quality companies to trade at a discount, enabling the firm to be patient and wait for exploitable valuation opportunities. • The advisor seeks to identify high-quality businesses at a substantial discount relative to their long-term value. Quality is measured against five criteria: consistent profitability, sustainable competitive advantages, financial strength, opportunity for growth, and capable management. • The team utilizes a disciplined, multi-step approach, looking at a decade's worth of data to assess fundamentals of companies and their competitors, as well as meeting with management to assess capital allocation decisions.

ARGA—Firm overview

Key facts

- Founded in 2010.
- Headquartered in Stamford, Connecticut.
- AUM of \$4.9 billion as of December 31, 2019.
- 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.

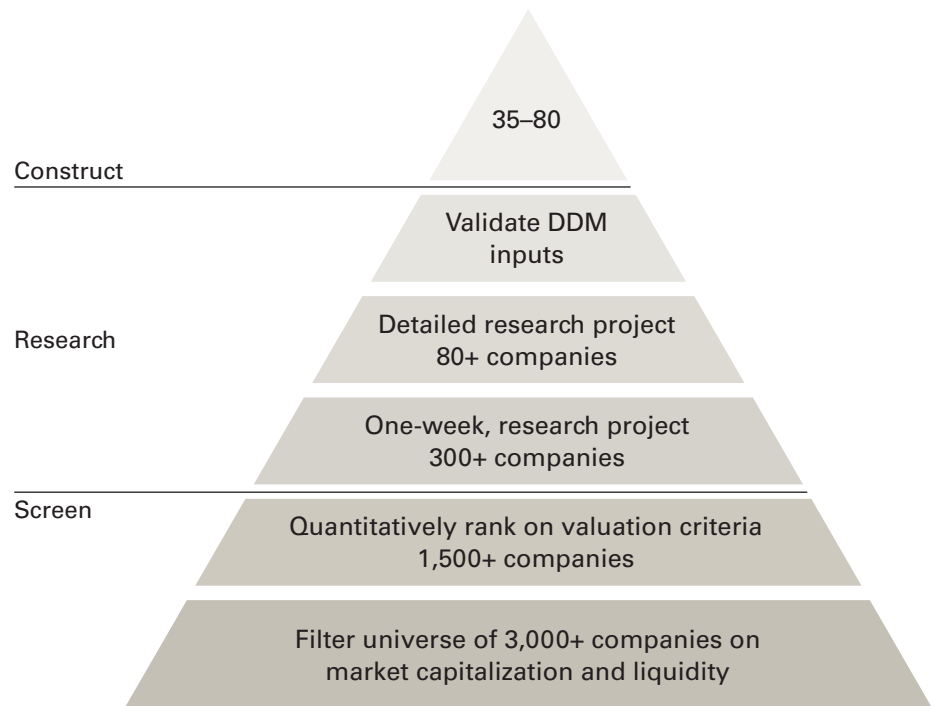
Investment focus

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



Lazard—Firm overview

Key facts

- Wholly owned subsidiary of Lazard Ltd.
- Located in New York, New York.
- AUM of \$223 billion as of December 31, 2019.
- 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.

Sprucegrove—Firm overview

Key facts

- Founded in 1993.
- Located in Toronto Canada.
- Approximately \$13.8 billion in assets under management as of August 31, 2020.
- The firm is 100% employee-owned.
- Boutique asset manager specializing in international and global strategies.

Portfolio management

Shirley Woo, CFA, Sprucegrove Board Director

- Portfolio manager.
- Advised the fund since 2020.
- Worked in investment management since 1987.
- B.A., University of Toronto.

Arjun Kumar, CFA, Sprucegrove Board Director

- Portfolio manager.
- Advised the fund since 2020.
- Worked in investment management since 2002.
- B.A., University of Toronto.
- M.B.A., University of Toronto.

Manager highlights

- Sprucegrove's long-term approach is employed by a deeply experienced team of investors that are well diverse in their backgrounds and thoughts.
- The team implements a value-orientated approach with a focus on return on equity.

Investment focus

Asset class	Investment style	Annual turnover (target range)	Number of holdings (target range)
International equity	Quality Value	Long-term investment horizon, between 5–10%	75–100

Investment philosophy/process

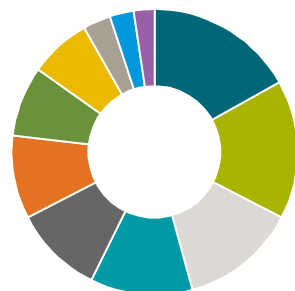
- Sprucegrove believes that the short-term focus of many investors allows high-quality companies to trade at a discount, enabling the firm to be patient and wait for exploitable valuation opportunities.
- The advisor seeks to identify high-quality businesses at a substantial discount relative to their long-term value. Quality is measured against five criteria: consistent profitability, sustainable competitive advantages, financial strength, opportunity for growth, and capable management.
- The team utilizes a disciplined, multi-step approach, looking at a decade's worth of data to assess fundamentals of companies and their competitors, as well as meeting with management to assess capital allocation decisions.

Vanguard International Value Fund (VTRIX)

Equity characteristics

	VTRIX	Benchmark
Number of stocks	224	2,375
Median market cap	\$28.0B	\$36.1B
P/E ratio (trailing earnings)	17.1x	18.3x
P/B ratio	1.2x	1.6x
Return on equity (5-year average)	11.7%	13.7%
Earnings growth rate (5-year)	8.2%	10.1%
Equity yield (dividend)	3.2%	2.8%
Turnover (fiscal year end)	38.4%	—
Short-term reserves	7.4%	N/A

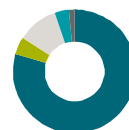
Sector diversification as a % of common stock



Sector	VTRIX	Benchmark
Financials	16.9%	16.9%
Industrials	15.7	11.7
Information Technology	13.1	11.7
Consumer Discretionary	11.6	13.8
Materials	10.1	7.9
Communication Services	9.5	7.5
Health Care	7.9	10.5
Consumer Staples	7.0	9.7
Utilities	3.1	3.4
Energy	2.7	4.2
Real Estate	2.4	2.7

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 \$11	79.6%	79.7%
\$9 to \$11	4.5	4.8
\$4 to \$9	10.8	12.7
\$2 to \$4	3.7	2.4
Below \$2	1.5	0.4

Risk and volatility

	R-squared	Beta	Alpha	Standard deviation	Sharpe ratio
VTRIX	N/A	N/A	-0.22	16.89	-0.19
Primary benchmark	0.97	1.03	N/A	16.23	-0.03
Broad-based benchmark	0.97	1.03	N/A	16.22	—

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	14.6%	16.5%
United States	14.3	0.0
United Kingdom	11.6	8.5
France	9.7	6.8
Germany	7.4	6.1
Switzerland	6.8	6.6
Korea	6.0	3.6
China	5.8	12.5
Canada	2.4	6.5
Netherlands	2.4	2.8
Other	19.0	30.1

Ten largest holdings

	% of total net assets
Samsung Electronics Co. Ltd.	2.2%
Novartis AG	1.8
SAP SE	1.7
Tesco plc	1.6
Panasonic Corp.	1.3
Tencent Holdings Ltd.	1.2
Nintendo Co. Ltd.	1.2
POSCO	1.2
LafargeHolcim Ltd.	1.1
Vivendi SA	1.1

Top ten as a % of total net assets **14.4%**

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

All data as of September 30, 2020, unless otherwise noted.

FOR FINANCIAL ADVISORS AND INSTITUTIONS ONLY. NOT FOR PUBLIC DISTRIBUTION.

Vanguard International Value Fund (VTRIX)

3-month attribution

	Portfolio			Benchmark			Attribution		
	Average weight	3-month return	Contribution to return	Average weight	3-month return	Contribution to return	Allocation effect	Select effect	Total effect
Financials	15.1%	-0.4%	-0.1%	17.8%	0.0%	0.1%	0.1%	0.0%	0.1%
Real Estate	1.9	5.7	0.1	2.8	2.4	0.1	0.0	0.0	0.1
Materials	6.5	12.1	0.7	7.8	11.2	0.8	-0.1	0.0	0.0
Consumer Staples	5.9	2.2	0.1	9.8	4.7	0.5	0.1	-0.2	-0.1
Energy	3.4	-13.8	-0.5	4.6	-7.4	-0.3	0.1	-0.2	-0.1
Utilities	3.6	0.5	0.0	3.4	2.1	0.1	0.0	-0.1	-0.1
Health Care	12.2	1.5	0.2	10.4	2.7	0.3	-0.1	-0.1	-0.2
Information Technology	13.7	10.1	1.3	11.4	13.5	1.4	0.1	-0.4	-0.3
Cash	3.8	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	-0.4
Communication Services	9.9	0.5	0.1	7.5	3.4	0.3	-0.1	-0.3	-0.4
Industrials	14.2	6.4	0.9	11.4	10.0	1.1	0.1	-0.4	-0.4
Consumer Discretionary	9.7	12.5	1.1	13.1	16.6	2.0	-0.3	-0.3	-0.7
Total	100.0%	3.8%	3.8%	100.0%	6.3%	6.3%	-0.4%	-2.1%	-2.5%

The portfolio attribution data shown above is provided by FactSet based on information provided by Vanguard about the fund's daily portfolio holdings as of the market close. Because the fund buys and sells stocks throughout the trading day and not necessarily at the market close, the attribution data shown above is an estimate and may not precisely reflect actual attribution information. Information noted above does not reflect fair-value adjustments to prices of foreign securities held in the portfolio.

Top contributors—3 month

	3-month return	Total effect	Ending weight	Benchmark weight
Kingfisher plc	40.6%	0.3%	0.7%	0.0%
Samsung SDI Co. Ltd	18.3	0.2	0.9	0.1
Vestas Wind Systems A/S	59.4	0.1	0.6	0.2
Royal Dutch Shell Plc	-1.0	0.1	0.2	0.5
Nintendo Co. Ltd.	27.7	0.1	1.3	0.3

Top detractors—3 month

	3-month return	Total effect	Ending weight	Benchmark weight
Alibaba Group Holding Ltd.	7.9%	-0.5%	0.5%	2.6%
Telefonica SA	-27.8	-0.2	0.4	0.1
Vodafone Group Plc	-16.6	-0.2	0.7	0.2
Taiwan Semiconductor Manufacturing Co. Ltd.	43.4	-0.2	0.4	1.7
Nokia Oyj	-10.1	-0.2	0.8	0.1

Vanguard International Value Fund (VTRIX)

12-month attribution

	Portfolio			Benchmark			Attribution		
	Average weight	12-month return	Contribution to return	Average weight	12-month return	Contribution to return	Allocation effect	Select effect	Total effect
Health Care	13.3%	16.2%	2.5%	9.8%	22.9%	2.4%	0.8%	-0.7%	0.2%
Information Technology	13.5	27.2	3.6	10.2	35.1	3.3	0.8	-0.7	0.2
Real Estate	1.7	-23.4	-0.5	3.0	-13.7	-0.7	0.3	-0.2	0.1
Cash	4.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Utilities	3.1	3.2	-0.1	3.5	0.6	-0.1	0.0	0.0	0.0
Materials	4.8	10.3	1.0	7.4	12.4	1.2	-0.2	-0.1	-0.3
Consumer Staples	5.6	-6.0	-0.4	9.9	0.5	0.2	0.1	-0.5	-0.4
Financials	17.7	-22.2	-5.3	19.7	-16.6	-4.5	0.6	-1.2	-0.6
Energy	4.9	-43.9	-3.2	5.6	-32.9	-2.0	-0.1	-0.8	-0.9
Industrials	12.2	-3.3	-0.2	11.6	4.7	0.5	0.1	-1.1	-1.0
Consumer Discretionary	9.0	1.1	0.2	12.2	18.2	2.3	-0.5	-1.4	-1.9
Communication Services	9.7	-12.1	-0.9	7.2	12.0	1.0	0.2	-2.3	-2.2
Total	100.0%	-3.3%	-3.3%	100.0%	3.4%	3.4%	2.2%	-8.9%	-6.7%

The portfolio attribution data shown above is provided by FactSet based on information provided by Vanguard about the fund's daily portfolio holdings as of the market close. Because the fund buys and sells stocks throughout the trading day and not necessarily at the market close, the attribution data shown above is an estimate and may not precisely reflect actual attribution information. Information noted above does not reflect fair-value adjustments to prices of foreign securities held in the portfolio.

Top contributors—12 month

	12-month return	Total effect	Ending weight	Benchmark weight
Samsung SDI Co. Ltd	92.6%	0.7%	0.9%	0.1%
Fresenius Medical Care AG & Co. KGaA	27.7	0.4	1.2	0.1
Kingfisher plc	53.2	0.4	0.7	0.0
STMicroelectronics NV	56.4	0.3	0.0	0.1
Nintendo Co. Ltd.	51.5	0.3	1.3	0.3

Top detractors—12 month

	12-month return	Total effect	Ending weight	Benchmark weight
Alibaba Group Holding Ltd.	7.9%	-1.0%	0.5%	2.6%
Capri Holdings Limited	-45.7	-0.6	1.0	0.0
CK Hutchison Holdings Ltd.	-28.2	-0.5	0.7	0.1
Telefonica SA	-52.2	-0.4	0.4	0.1
Safran SA	-37.1	-0.4	0.9	0.2

Vanguard International Value Fund (VTRIX)

3-month regional attribution

	Portfolio			Benchmark			Attribution		
	Average weight	3-month return	Contribution to return	Average weight	3-month return	Contribution to return	Allocation effect	Select effect	Total effect
Middle East	0.0%	0.0%	0.0%	0.2%	-6.0%	0.0%	0.0%	0.0%	0.0%
Other	0.0	0.0	0.0	0.8	8.9	0.1	0.0	0.0	0.0
Pacific	26.1	6.0	1.4	27.0	6.3	1.6	0.0	-0.1	-0.1
North America	7.5	3.6	0.2	6.9	6.3	0.4	0.0	-0.2	-0.2
CASH	3.8	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	-0.5
Emerging Markets	10.1	7.0	0.7	24.9	9.4	2.3	-0.5	-0.2	-0.7
Europe	52.5	2.7	1.5	40.2	4.6	1.9	-0.2	-0.9	-1.1
TOTAL	100.0%	3.8%	3.8%	100.0%	6.3%	6.3%	-1.1%	-1.4%	-2.5%

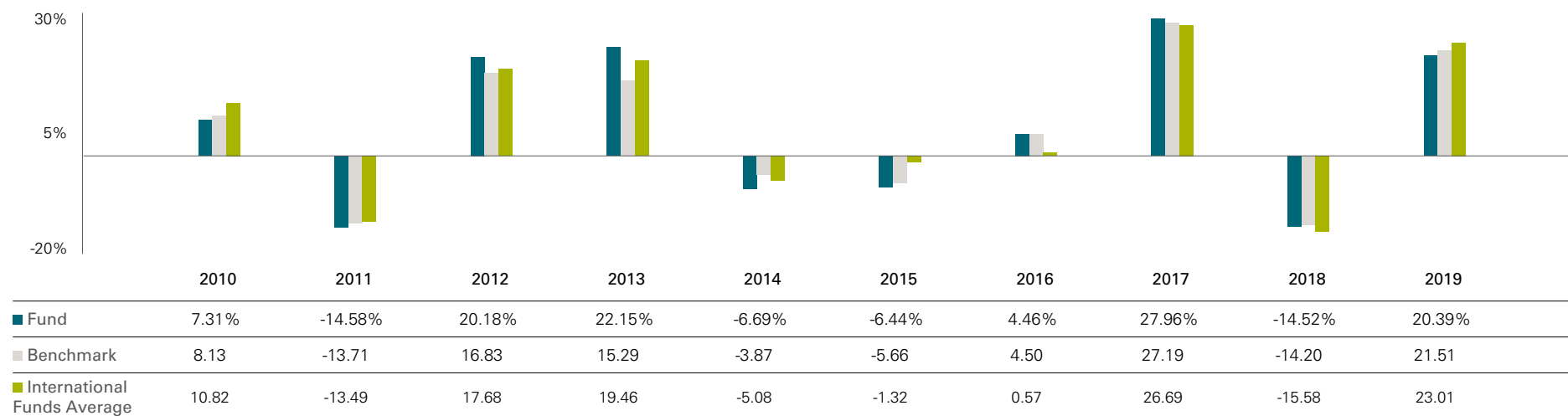
12-month regional attribution

	Portfolio			Benchmark			Attribution		
	Average weight	12-month return	Contribution to return	Average weight	12-month return	Contribution to return	Allocation effect	Select effect	Total effect
CASH	4.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Middle East	0.0	0.0	0.0	0.3	-9.6	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.7	-4.1	0.0	0.0	0.0	0.0
Pacific	27.1	3.1	0.5	27.5	4.6	1.1	0.0	-0.5	-0.5
North America	6.9	-20.4	-1.6	7.1	-1.9	-0.1	-0.1	-1.4	-1.5
Emerging Markets	9.8	-5.2	-0.6	23.6	10.6	1.9	-0.7	-1.6	-2.2
Europe	51.5	-4.9	-1.6	40.8	-0.2	0.6	-0.2	-2.4	-2.6
TOTAL	100.0%	-3.3%	-3.3%	100.0%	3.4%	3.4%	-0.9%	-5.8%	-6.7%

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.

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.

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

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.

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.

Important information

For more information about any fund, visit institutional.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.

While U.S. Treasury or government agency securities provide substantial protection against credit risk, they do not protect investors against price changes due to changing interest rates. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

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.

The information contained herein does not constitute tax advice and cannot be used by any person to avoid tax penalties that may be imposed under the Internal Revenue Code. We recommend that you consult a tax or financial advisor about your individual situation.

Advice services are provided by Vanguard Advisers, Inc., a registered investment advisor.

Brokerage services are plan-specific and may be provided by TD Ameritrade, Inc., member FINRA/SIPC or Vanguard Brokerage Services®, a division of Vanguard Marketing Corporation, member FINRA/SIPC. Refer to Vanguard's plan documents for information on the applicable brokerage services provider. TD Ameritrade and Vanguard are separate and unaffiliated firms, and are not responsible for each other's services or policies. TD Ameritrade is a trademark jointly owned by TD Ameritrade IP Company, Inc., and the Toronto-Dominion Bank. Used with permission.

CFA® and Chartered Financial Analyst® are trademarks owned by CFA Institute.

Financial Engines is a trademark of Financial Engines, Inc. All rights reserved. Used with permission. The Vanguard Group has partnered with Financial Engines Advisors, L.L.C., to provide subadvisory services to the Vanguard Managed Account Program and Personal Online Advisor. Financial Engines Advisors, L.L.C., is an independent, federally registered investment advisor that does not sell investments or receive commission for the investments it recommends. Advice is provided by Vanguard Advisers, Inc. (VAI), a federally registered investment advisor and an affiliate of The Vanguard Group, Inc. (Vanguard). Eligibility restrictions may apply. Vanguard is owned by the Vanguard funds, which are distributed by Vanguard Marketing Corporation, a registered broker-dealer affiliated with VAI and Vanguard. Neither Vanguard, Financial Engines, nor their respective affiliates guarantee future results.

Vanguard Marketing Corporation, Distributor of the Vanguard Funds. U.S. Patent Nos. 6,879,964; 7,337,138; 7,720,749; 7,925,573; 8,090,646; 8,417,623; and 8,626,636.

Important information

CGS identifiers have been provided by CUSIP Global Services, managed on behalf of the American Bankers Association by Standard & Poor's Financial Services, LLC, and are not for use or dissemination in a manner that would serve as a substitute for any CUSIP service. The CUSIP Database, © 2020 American Bankers Association. "CUSIP" is a registered trademark of the American Bankers Association.

BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. BARCLAYS® is a trademark and service mark of Barclays Bank Plc, used under license. Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited ("BISL") (collectively, "Bloomberg"), or Bloomberg's licensors own all proprietary rights in the Bloomberg Barclays Indices.

The products are not sponsored, endorsed, issued, sold, or promoted by "Bloomberg or Barclays." Bloomberg and Barclays make no representation or warranty, express or implied, to the owners or purchasers of the products or any member of the public regarding the advisability of investing in securities generally or in the products particularly or the ability of the Bloomberg Barclays Indices to track general bond market performance. Neither Bloomberg nor Barclays has passed on the legality or suitability of the products with respect to any person or entity. Bloomberg's only relationship to Vanguard and the products are the licensing of the Bloomberg Barclays Indices, which are determined, composed, and calculated by BISL without regard to Vanguard or the products or any owners or purchasers of the products. Bloomberg has no obligation to take the needs of the products or the owners of the products into consideration in determining, composing, or calculating the Bloomberg Barclays Indices. Neither Bloomberg nor Barclays is responsible for and has not participated in the determination of the timing of, prices for, or quantities of the products to be issued. Neither Bloomberg nor Barclays has any obligation or liability in connection with the administration, marketing, or trading of the products.

London Stock Exchange Group companies include FTSE International Limited ("FTSE"), Frank Russell Company ("Russell"), MTS Next Limited ("MTS"), and FTSE TMX Global Debt Capital Markets Inc. ("FTSE TMX"). All rights reserved. "FTSE®," "Russell®," "MTS®," "FTSE TMX®," and "FTSE Russell," and other service marks and trademarks related to the FTSE or Russell Indexes are trademarks of the London Stock Exchange Group companies and are used by FTSE, MTS, FTSE TMX, and Russell under license. All information is provided for information purposes only. No responsibility or liability can be accepted by the London Stock Exchange Group companies nor its licensors for any errors or for any loss from use of this publication. Neither the London Stock Exchange Group companies nor any of its licensors make any claim, prediction, warranty, or representation whatsoever, expressly or impliedly, either as to the results to be obtained from the use of the FTSE Indexes or the fitness or suitability of the indexes for any particular purpose to which they might be put.

The index is a product of S&P Dow Jones Indices LLC ("SPDJI") and has been licensed for use by Vanguard. Standard & Poor's® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); S&P® and S&P 500® are trademarks of S&P; and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by Vanguard. Vanguard product(s) are not sponsored, endorsed, sold, or promoted by SPDJI, Dow Jones, S&P, or their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the index.

Morningstar data © 2020 Morningstar, Inc. All rights reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete, or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is no guarantee of future results.

The Russell Indexes and Russell® are registered trademarks of Russell Investments and have been licensed for use by The Vanguard Group. The products are not sponsored, endorsed, sold, or promoted by Russell Investments, and Russell Investments makes no representation regarding the advisability of investing in the products.

"Dividend Achievers" is a trademark of The NASDAQ OMX Group, Inc. (collectively, with its affiliates, "NASDAQ OMX") and has been licensed for use by The Vanguard Group, Inc. Vanguard mutual funds are not sponsored, endorsed, sold, or promoted by NASDAQ OMX, and NASDAQ OMX makes no representation regarding the advisability of investing in the funds. NASDAQ OMX MAKES NO WARRANTIES AND BEARS NO LIABILITY WITH RESPECT TO THE VANGUARD MUTUAL FUNDS.

The funds or securities referred to herein are not sponsored, endorsed, or promoted by MSCI, and MSCI bears no liability with respect to any such funds or securities. The prospectus or the Statement of Additional Information contains a more detailed description of the limited relationship MSCI has with Vanguard and any related funds.

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard and Poor's, a division of McGraw-Hill Companies, Inc. ("S&P") and is licensed for use by Vanguard. Neither MSCI, S&P, nor any third party involved in making or compiling the GICS or any GICS classification makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of its affiliates, or any third party involved in making or compiling the GICS or any GICS classification have any liability for any direct, indirect, special, punitive, consequential, or any other damages (including lost profits) even if notified of the possibility of such damages.

Apple®, iPhone®, and iPad® are trademarks of Apple Inc., registered in the United States and other countries. App Store is a service mark of Apple Inc. Android™ is a trademark of Google Inc.