Vanguard

Annual Report | December 31, 2022

Vanguard Variable Insurance Funds

Diversified Value Portfolio

Contents

Please note: The opinions expressed in this report are just that—informed opinions. They should not be considered promises or advice. Also, please keep in mind that the information and opinions cover the period through the date on the front of this report. Of course, the risks of investing in your portfolio are spelled out in the prospectus.

Your Portfolio's Performance at a Glance

- Despite some relief in midsummer and late fall, the 12 months ended December 31, 2022, were a volatile, challenging period for financial markets. The Diversified Value Portfolio returned –11.49%, trailing the –7.54% return of its benchmark, the Russell 1000 Value Index.

- Overall, the economic backdrop deteriorated as inflation soared to multidecade highs, driven by government spending during the pandemic as well as higher energy and food prices in the wake of Russia's invasion of Ukraine. That prompted aggressive tightening by many central banks to bring inflation back in check, which increased fears of recession.

- Value stocks outperformed growth stocks by a wide margin for the 12 months. The broad U.S. stock market, as measured by the CRSP US Total Market Index, returned –19.49%.

- The advisor's holdings in energy contributed most to results. An overweight allocation to information technology and underweight allocation to health care detracted from relative performance, as did holdings in the communication services and consumer discretionary sectors.

- Please note that the portfolio's returns are different from those in Vanguard Variable Annuity (and other plans that invest in the portfolio), which take into account insurance-related expenses.

Market Barometer

	Average Annual Total Returns Periods Ended December 31, 2022		
	One Year	Three Years	Five Years
Stocks			
Russell 1000 Index (Large-caps)	-19.13%	7.35%	9.13%
Russell 2000 Index (Small-caps)	-20.44	3.10	4.13
Russell 3000 Index (Broad U.S. market)	-19.21	7.07	8.79
FTSE All-World ex US Index (International)	-15.49	0.61	1.28
Bonds			
Bloomberg U.S. Aggregate Float Adjusted Index (Broad taxable market)	-13.07%	-2.67%	0.06%
Bloomberg Municipal Bond Index (Broad tax-exempt market)	-8.53	-0.77	1.25
FTSE Three-Month U.S. Treasury Bill Index	1.50	0.70	1.24
CPI			
Consumer Price Index	6.45%	4.92%	3.78%

Advisors' Report

The Diversified Value Portfolio returned –11.49% for the 12 months ended December 31, 2022. It trailed the –7.54% return of its benchmark, the Russell 1000 Value Index.

The portfolio is overseen by two independent advisors, a strategy that enhances its diversification by providing exposure to distinct yet complementary investment approaches. It is not uncommon for different advisors to have different views about individual securities or the broader investment environment.

The advisors, the amount and percentage of the portfolio's assets each manages, and brief descriptions of their investment strategies are presented in the accompanying table. Each advisor has also prepared a discussion of the investment environment that existed during the period and of the effect it had on the portfolio's positioning. These reports were prepared on January 13, 2023.

Lazard Asset Management LLC

Portfolio Managers:

Andrew Lacey, Deputy Chairman

Our U.S. Equity Select strategy is based on the relationship between valuation and financial productivity. We seek to identify and empirically review two sources of alpha, which we focus on exclusively:

• Compounders: Our analysis indicates these companies can sustain very high levels of financial productivity for longer than the market expects, and their share price does not reflect this sustainability. We typically invest 60% to 80% of our capital in Compounders.

• Improvers: We believe companies can improve returns, but investors often are too optimistic about the probability of success. Our research indicates that companies that improve their returns on capital materially outperform the broad market. We typically invest 20% to 40% of our capital in Improvers.

Over the past year, equity markets have been difficult, with both the broad benchmark (Standard & Poor's 500 Index) and the value-based benchmark (Russell 1000 Value Index) declining significantly. During this time, our strategy outperformed the broad benchmark and lagged the value-based benchmark. Results over the past year were largely driven by the Compounder component of the portfolio, as the highest-quality companies in the market continued to expand their competitive advantages. Several of the Compounders in the portfolio across various sectors had positive returns—which was notable, given that the S&P 500 Index decreased –18.1%.

Over the past 12 months, we moderately reduced capital in our strategy's consumer discretionary, health care, and industrial holdings as some stocks moved toward their base-case scenarios. Conversely, we added capital to both Compounders and Improvers in communications services, financials, and information technology. The portfolio's weight in Compounders remained in the middle of the target range of 60% to 80% of our strategy's capital throughout the year. We believe this remains appropriate in light of the continued economic uncertainty.

Looking forward, we view the macroeconomic outlook as more constructive but not without risk. We believe the key questions for 2023 are:

• Will inflation continue to subside from its late-2022 levels?

• When and at what level will the U.S. Federal Reserve pause its rate-hike cycle?

• For how long will the Fed keep rates high?

• If the U.S. economy enters a recession, how deep will that recession be?

• What do the answers to these questions mean to corporate earnings and discount rates on future cash flows?

As the global economy is adjusting to monetary policy normalization amid an uneven recovery from the pandemic and ongoing geopolitical strife, we expect to see continued volatility in 2023 as markets weigh these factors. As active stock pickers, we believe there will be opportunities to add capital to high-quality companies whose long-term potential is underappreciated. We continue to focus on company fundamentals and on making sure our strategy invests in companies that are prepared for a range of economic scenarios.

Hotchkis and Wiley Capital Management, LLC

Portfolio Managers:

George H. Davis, Jr.,
Executive Chairman

Scott McBride, CFA,
Chief Executive Officer

In 2022, the economy and capital markets experienced milestones that had not been observed for quite some time. The Standard & Poor's 500 Index declined –18.1%. Since the Great Depression, only three years have been worse: 1974 (oil crisis), 2002 (tech bubble burst), and 2008 (financial crisis). Value stocks declined but held up much better than growth stocks. The Russell 1000 Value Index returned –7.5% compared to the Russell 1000 Growth Index's –29.1%. The difference of more than 21 percentage points represented value's largest advantage since 2000. Despite the outperformance, the price/earnings gap between growth and value remains almost a full standard deviation wider than average. Considering the still-wide valuation gap and value's significant outperformance in periods of elevated or rising inflation and interest rates, we are optimistic that value's outperformance can persist.

Inflation peaked midyear at 9.1%, the highest reading in more than 40 years. To combat rising prices, the Federal Open Market Committee increased the federal funds rate by more than 400 basis points over the course of 2022, from 0.25% to 4.5% (upper bounds). This was the largest rate hike in any calendar year since 1973, and the current 4.5% level is the highest in more than 15 years. Other interest rates followed suit: 10-year Treasury yields peaked above 4% for the first time in more than a decade; 30-year mortgage rates peaked above 7% for the first time in more than two decades. Yields on corporate credit also increased significantly. The Treasury yield curve remains significantly inverted, which has historically been a harbinger of recessions. The tight labor market exhibited strong contrasting signals, however, with the unemployment rate reaching a 50-year low. Expectations for future corporate earnings are roughly flat; thus, the stock market's decline was entirely caused by a compression in valuation multiples, as opposed to an actual or expected decline in earnings.

Forecasting economic growth and/or predicting recessions is not our area of expertise. We do, however, fully acknowledge current warning signs, such as continued monetary tightening from the U.S. Federal Reserve and the direction of the yield curve. Two things providing solace in the event of an economic slowdown are modest financial leverage and attractive valuations. There are fewer excesses in the system compared to prior recessionary periods like 2008. Unlike then, balance sheets of both consumers and financial institutions are quite strong. Further, equity valuations are reasonable; in select market segments, they are unusually attractive. A strong argument could be made that a recession is already priced into equity markets, at least in certain market segments, which is different compared to recessionary periods like 2002. While several signs point to an economic slowdown, several others suggest that the severity would be manageable and/or much of the pain has already been felt.

The portfolio's overweight allocation to energy helped its performance. The underweight exposure to real estate, which was among the worst-performing sectors in the year, also helped, as did selection within financials and information technology. The overweight allocation to information technology and the underweight to health care detracted from performance; so, too, did stock selection within communication services and consumer discretionary.

Diversified Value Portfolio Investment Advisors

	Portfolio Assets Managed		
Investment Advisor	%	$ Million	Investment Strategy
Lazard Asset Management LLC	57	606	Employs a relative-value approach that seeks a combination of attractive valuation and high financial productivity. The process is research-driven, relying upon bottom-up stock analysis performed by the firm's global sector analysts.
Hotchkis and Wiley Capital Management LLC	41	441	Uses a disciplined investment approach, focusing on such investment parameters as a company's tangible assets, sustainable cash flow, and potential for improving business performance.
Cash Investments	2	23	These short-term reserves are invested by Vanguard in equity index products to simulate investment in stocks. Each advisor may also maintain a modest cash position.

About Your Portfolio’s Expenses

As a shareholder of the portfolio, you incur ongoing costs, which include costs for portfolio management, administrative services, and shareholder reports (like this one), among others. Operating expenses, which are deducted from a portfolio's gross income, directly reduce the investment return of the portfolio.

A portfolio's expenses are expressed as a percentage of its average net assets. This figure is known as the expense ratio. The following examples are intended to help you understand the ongoing costs (in dollars) of investing in your portfolio and to compare these costs with those of other mutual funds. The examples are based on an investment of $1,000 made at the beginning of the period shown and held for the entire period.

The accompanying table illustrates your portfolio's costs in two ways:

• **Based on actual portfolio return.** This section helps you to estimate the actual expenses that you paid over the period. The ”Ending Account Value“ shown is derived from the portfolio's actual return, and the third column shows the dollar amount that would have been paid by an investor who started with $1,000 in the portfolio. You may use the information here, together with the amount you invested, to estimate the expenses that you paid over the period.

To do so, simply divide your account value by $1,000 (for example, an $8,600 account value divided by $1,000 = 8.6), then multiply the result by the number given for your portfolio under the heading ”Expenses Paid During Period.“

• **Based on hypothetical 5% yearly return.** This section is intended to help you compare your portfolio's costs with those of other mutual funds. It assumes that the portfolio had a yearly return of 5% before expenses, but that the expense ratio is unchanged. In this case—because the return used is not the portfolio's actual return—the results do not apply to your investment. The example is useful in making comparisons because the Securities and Exchange Commission requires all mutual funds to calculate expenses based on a 5% return. You can assess your portfolio's costs by comparing this hypothetical example with the hypothetical examples that appear in shareholder reports of other funds.

Note that the expenses shown in the table are meant to highlight and help you compare *ongoing* costs only and do not reflect transaction costs incurred by the portfolio for buying and selling securities. The portfolio’s expense ratio does not reflect additional fees and expenses associated with the annuity or life insurance program through which you invest.

The calculations assume no shares were bought or sold during the period. Your actual costs may have been higher or lower, depending on the amount of your investment and the timing of any purchases or redemptions.

You can find more information about the portfolio's expenses, including annual expense ratios, in the Financial Statements section of this report. For additional information on operating expenses and other shareholder costs, please refer to your portfolio's current prospectus.

Six Months Ended December 31, 2022

Diversified Value Portfolio	Beginning Account Value 6/30/2022	Ending Account Value 12/31/2022	Expenses Paid During Period
Based on Actual Portfolio Return	$1,000.00	$1,052.60	$1.50
Based on Hypothetical 5% Yearly Return	1,000.00	1,023.74	1.48

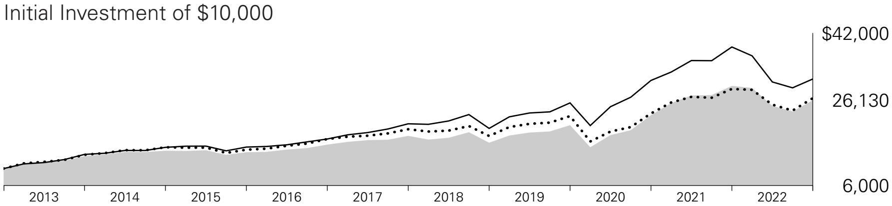
The calculations are based on expenses incurred in the most recent six-month period. The portfolio’s annualized six-month expense ratio for that period is 0.29%. The dollar amounts shown as “Expenses Paid” are equal to the annualized expense ratio multiplied by the average account value over the period, multiplied by the number of days in the most recent six-month period, then divided by the number of days in the most recent 12-month period (184/365).

Diversified Value Portfolio

Performance Summary

All of the returns in this report represent past performance, which is not a guarantee of future results that may be achieved by the portfolio. (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.) Note, too, that both investment returns and principal value can fluctuate widely, so an investor's shares, when sold, could be worth more or less than their original cost. The returns shown do not reflect taxes that a shareholder would pay on portfolio distributions or on the sale of portfolio shares. Nor do the returns reflect fees and expenses associated with the annuity or life insurance program through which a shareholder invests. If these fees and expenses were included, the portfolio's returns would be lower.

Cumulative Performance: December 31, 2012, Through December 31, 2022
Initial Investment of $10,000



	Average Annual Total Returns Periods Ended December 31, 2022			
	One Year	Five Years	Ten Years	Final Value of a $10,000 Investment
Diversified Value Portfolio	-11.49%	8.08%	10.08%	$26,130
Russell 1000 Value Index	-7.54	6.67	10.29	26,632
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

See Financial Highlights for dividend and capital gains information.

Portfolio Allocation

As of December 31, 2022

Communication Services	7.9%
Consumer Discretionary	9.1
Consumer Staples	5.9
Energy	8.0
Financials	19.3
Health Care	14.7
Industrials	11.4
Information Technology	20.0
Materials	1.4
Real Estate	1.3
Utilities	1.0

The table reflects the portfolio's investments, except for short-term investments and derivatives. 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.

Financial Statements

Schedule of Investments
As of December 31, 2022

The portfolio files its complete schedule of portfolio holdings with the Securities and Exchange Commission (SEC) for the first and third quarters of each fiscal year as an exhibit to its reports on Form N-PORT. The portfolio's Form N-PORT reports are available on the SEC's website at www.sec.gov.

	Shares	Market Value• ($000)
Common Stocks (94.5%)		
Communication Services (7.5%)		
* Alphabet Inc. Class A	444,670	39,233
Comcast Corp. Class A	242,238	8,471
* Walt Disney Co.	90,074	7,826
* Warner Bros Discovery Inc.	606,979	5,754
* Meta Platforms Inc. Class A	46,473	5,593
News Corp. Class A	252,544	4,596
Vodafone Group plc ADR	366,849	3,713
Paramount Global Inc. Class B	143,800	2,427
Omnicom Group Inc.	29,391	2,397
		80,010
Consumer Discretionary (8.6%)		
* Amazon.com Inc.	253,891	21,327
McDonald's Corp.	54,251	14,297
General Motors Co.	324,983	10,932
Home Depot Inc.	26,725	8,441
Magna International Inc.	142,575	8,010
Dollar General Corp.	32,495	8,002
* Aptiv plc	80,725	7,518
NIKE Inc. Class B	63,703	7,454
* Booking Holdings Inc.	1,800	3,627
* Adient plc	41,837	1,451
* Goodyear Tire & Rubber Co.	109,808	1,115
		92,174
Consumer Staples (5.6%)		
Procter & Gamble Co.	92,970	14,090
Coca-Cola Co.	216,386	13,764
Mondelez International Inc. Class A	122,830	8,187
Unilever plc ADR	159,693	8,041
Estee Lauder Cos. Inc. Class A	32,332	8,022
Sysco Corp.	97,988	7,491
		59,595
Energy (7.6%)		
ConocoPhillips	119,827	14,140
APA Corp.	231,253	10,795
Chevron Corp.	53,565	9,614
Shell plc ADR	141,036	8,032
NOV Inc.	332,415	6,944
Marathon Oil Corp.	236,887	6,413
Ovintiv Inc. (XNYS)	107,000	5,426
Halliburton Co.	126,479	4,977
Murphy Oil Corp.	105,040	4,518
Hess Corp.	22,812	3,235
Cenovus Energy Inc.	143,100	2,778
Schlumberger Ltd.	42,300	2,261
Baker Hughes Co. Class A	67,300	1,987
		81,120
Financials (18.3%)		
Wells Fargo & Co.	641,685	26,495
Bank of America Corp.	633,529	20,983
Citigroup Inc.	441,353	19,962
Intercontinental Exchange Inc.	176,420	18,099
American Express Co.	113,599	16,784
American International Group Inc.	239,602	15,152
Marsh & McLennan Cos. Inc.	74,233	12,284
PNC Financial Services Group Inc.	69,607	10,994
Goldman Sachs Group Inc.	26,590	9,131
Bank of New York Mellon Corp.	196,934	8,965
Hartford Financial Services Group Inc.	106,400	8,068
Citizens Financial Group Inc.	172,561	6,794
Commerce Bancshares Inc.	83,467	5,682
US Bancorp	129,600	5,652
First Citizens BancShares Inc. Class A	3,872	2,936
Corebridge Financial Inc.	102,500	2,056
Capital One Financial Corp.	20,500	1,906
Equitable Holdings Inc.	65,264	1,873
State Street Corp.	23,210	1,800
		195,616
Health Care (13.9%)		
Johnson & Johnson	147,634	26,080
Thermo Fisher Scientific Inc.	26,488	14,587
Medtronic plc	178,253	13,854
Danaher Corp.	50,439	13,388
Humana Inc.	22,382	11,464
* Boston Scientific Corp.	225,613	10,439
UnitedHealth Group Inc.	18,643	9,884
Elevance Health Inc.	16,081	8,249
* IQVIA Holdings Inc.	32,325	6,623
Zoetis Inc.	42,834	6,277
CVS Health Corp.	63,300	5,899
* Centene Corp.	66,160	5,426
HCA Healthcare Inc.	22,200	5,327
Cigna Corp.	10,000	3,313
Zimmer Biomet Holdings Inc.	24,011	3,061
Sanofi ADR	54,264	2,628
GSK plc ADR	60,732	2,134
		148,633
Industrials (10.7%)		
General Electric Co.	315,952	26,473
Honeywell International Inc.	88,832	19,037
Norfolk Southern Corp.	47,719	11,759
FedEx Corp.	63,933	11,073
Waste Management Inc.	57,355	8,998
Cummins Inc.	24,651	5,973
* Boeing Co.	30,100	5,734
Caterpillar Inc.	23,738	5,687
Raytheon Technologies Corp.	49,900	5,036
HEICO Corp.	29,671	4,558
CNH Industrial NV	271,534	4,361
PACCAR Inc.	42,920	4,248
* Fluor Corp.	64,750	2,244
		115,181
Information Technology (18.9%)		
Microsoft Corp.	235,701	56,526
Visa Inc. Class A	90,735	18,851
Analog Devices Inc.	82,344	13,507
Oracle Corp.	156,064	12,757
* Workday Inc. Class A	74,300	12,433
* F5 Inc.	71,000	10,189
Amphenol Corp. Class A	125,604	9,563
* Salesforce Inc.	66,845	8,863
Cisco Systems Inc.	180,483	8,598
Applied Materials Inc.	76,913	7,490
* Adobe Inc.	20,635	6,944
Accenture plc Class A	25,319	6,756
Telefonaktiebolaget LM Ericsson ADR	783,115	4,573
Corning Inc.	129,730	4,144
TE Connectivity Ltd.	35,960	4,128
Micron Technology Inc.	73,600	3,678
Fidelity National Information Services Inc.	46,500	3,155
Cognex Corp.	61,194	2,883
* PayPal Holdings Inc.	36,707	2,614
* Fiserv Inc.	24,000	2,426
Cognizant Technology Solutions Corp. Class A	33,200	1,899
		201,977
Materials (1.3%)		
Avery Dennison Corp.	37,363	6,763
Olin Corp.	111,600	5,908
International Paper Co.	37,197	1,288
		13,959
Real Estate (1.2%)		
Prologis Inc.	119,403	13,460
Utilities (0.9%)		
PPL Corp.	330,155	9,647
Total Common Stocks (Cost $960,044)		1,011,372
Temporary Cash Investments (5.1%)		
Money Market Fund (5.1%)		
1 Vanguard Market Liquidity Fund, 4.334% (Cost $54,304)	543,071	54,302
Total Investments (99.6%) (Cost $1,014,348)		1,065,674
Other Assets and Liabilities—Net (0.4%)		4,199
Net Assets (100%)		1,069,873

Cost is in $000.

- • See Note A in Notes to Financial Statements.
- * Non-income-producing security.
- 1 Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

ADR—American Depositary Receipt.

Derivative Financial Instruments Outstanding as of Period End

Futures Contracts

			($000)	
	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation)
Long Futures Contracts				
E-Mini S&P 500 Index	March 2023	116	22,394	(628)

See accompanying Notes, which are an integral part of the Financial Statements.

Statement of Assets and Liabilities

As of December 31, 2022

($000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value	
Unaffiliated Issuers (Cost $960,044)	1,011,372
Affiliated Issuers (Cost $54,304)	54,302
Total Investments in Securities	1,065,674
Investment in Vanguard	41
Cash	1,351
Cash Collateral Pledged—Futures Contracts	1,231
Receivables for Accrued Income	1,332
Receivables for Capital Shares Issued	1,110
Total Assets	**1,070,739**
Liabilities	
Payables for Investment Securities Purchased	216
Payables to Investment Advisor	353
Payables for Capital Shares Redeemed	160
Payables to Vanguard	75
Variation Margin Payable—Futures Contracts	62
Total Liabilities	**866**
Net Assets	**1,069,873**

At December 31, 2022, net assets consisted of:

Paid-in Capital	945,171
Total Distributable Earnings (Loss)	124,702
Net Assets	**1,069,873**

Net Assets	
Applicable to 76,369,157 outstanding $.001 par value shares of beneficial interest (unlimited authorization)	1,069,873
Net Asset Value Per Share	**$14.01**

See accompanying Notes, which are an integral part of the Financial Statements.

Statement of Operations

	Year Ended December 31, 2022 ($000)
Investment Income	
Income	
Dividends[1]	17,640
Interest[2]	1,039
Securities Lending—Net	5
Total Income	18,684
Expenses	
Investment Advisory Fees—Note B	
Basic Fee	1,306
Performance Adjustment	110
The Vanguard Group—Note C	
Management and Administrative	1,661
Marketing and Distribution	67
Custodian Fees	11
Auditing Fees	27
Shareholders' Reports	19
Trustees' Fees and Expenses	—
Other Expenses	8
Total Expenses	3,209
Net Investment Income	**15,475**
Realized Net Gain (Loss)	
Investment Securities Sold[2]	67,229
Futures Contracts	(7,466)
Foreign Currencies	(9)
Realized Net Gain (Loss)	**59,754**
Change in Unrealized Appreciation (Depreciation)	
Investment Securities[2]	(217,547)
Futures Contracts	(1,241)
Change in Unrealized Appreciation (Depreciation)	**(218,788)**
Net Increase (Decrease) in Net Assets Resulting from Operations	**(143,559)**

1 Dividends are net of foreign withholding taxes of $93,000.

2 Interest income, realized net gain (loss), capital gain distributions received, and change in unrealized appreciation (depreciation) from an affiliated company of the portfolio were $1,019,000, ($6,000), less than $1,000, and $4,000, respectively. Purchases and sales are for temporary cash investment purposes.

Statement of Changes in Net Assets

	Year Ended December 31, 2022 ($000)	2021 ($000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	15,475	12,799
Realized Net Gain (Loss)	59,754	101,666
Change in Unrealized Appreciation (Depreciation)	(218,788)	169,248
Net Increase (Decrease) in Net Assets Resulting from Operations	(143,559)	283,713
Distributions		
Total Distributions	(114,358)	(28,403)
Capital Share Transactions		
Issued	137,508	192,120
Issued in Lieu of Cash Distributions	114,358	28,402
Redeemed	(152,810)	(198,338)
Net Increase (Decrease) from Capital Share Transactions	99,056	22,184
Total Increase (Decrease)	(158,861)	277,494
Net Assets		
Beginning of Period	**1,228,734**	**951,240**
End of Period	**1,069,873**	**1,228,734**

See accompanying Notes, which are an integral part of the Financial Statements.

Financial Highlights

For a Share Outstanding Throughout Each Period	Year Ended December 31, 2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	$17.45	$13.74	$16.45	$14.33	$17.04
Investment Operations					
Net Investment Income[1]	.204	.183	.209	.364	.412
Net Realized and Unrealized Gain (Loss) on Investments	(2.034)	3.940	.133	3.135	(1.872)
Total from Investment Operations	(1.830)	4.123	.342	3.499	(1.460)
Distributions					
Dividends from Net Investment Income	(.181)	(.174)	(.409)	(.462)	(.423)
Distributions from Realized Capital Gains	(1.429)	(.239)	(2.643)	(.917)	(.827)
Total Distributions	(1.610)	(.413)	(3.052)	(1.379)	(1.250)
Net Asset Value, End of Period	$14.01	$17.45	$13.74	$16.45	$14.33
Total Return	-11.49%	30.47%	11.78%	25.70%	-9.12%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	$1,070	$1,229	$951	$974	$887
Ratio of Total Expenses to Average Net Assets[2]	0.29%	0.28%	0.28%	0.24%	0.25%
Ratio of Net Investment Income to Average Net Assets	1.38%	1.14%	1.70%	2.39%	2.58%
Portfolio Turnover Rate	25%	25%	34%	117%	18%

1 Calculated based on average shares outstanding.
2 Includes performance-based investment advisory fee increases (decreases) of 0.01%, 0.01%, 0.00%, (0.03%), and (0.03%).

See accompanying Notes, which are an integral part of the Financial Statements.

Notes to Financial Statements

The Diversified Value Portfolio, a portfolio of Vanguard Variable Insurance Funds, is registered under the Investment Company Act of 1940 as an open-end investment company. The portfolio's shares are only available for purchase by separate accounts of insurance companies as investments for variable annuity plans, variable life insurance contracts, or other variable benefit insurance contracts. Significant market disruptions, such as those caused by pandemics (e.g., COVID-19 pandemic), natural or environmental disasters, war (e.g., Russia's invasion of Ukraine), acts of terrorism, or other events, can adversely affect local and global markets and normal market operations. Any such disruptions could have an adverse impact on the value of the portfolio's investments and portfolio performance.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The portfolio consistently follows such policies in preparing its financial statements.

1. Security Valuation: Securities are valued as of the close of trading on the New York Stock Exchange (generally 4 p.m., Eastern time) on the valuation date. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. Securities for which market quotations are not readily available, or whose values have been affected by events occurring before the portfolio's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. Foreign Currency: Securities and other assets and liabilities denominated in foreign currencies are translated into U.S. dollars using exchange rates obtained from an independent third party as of the portfolio's pricing time on the valuation date. Realized gains (losses) and unrealized appreciation (depreciation) on investment securities include the effects of changes in exchange rates since the securities were purchased, combined with the effects of changes in security prices. Fluctuations in the value of other assets and liabilities resulting from changes in exchange rates are recorded as unrealized foreign currency gains (losses) until the assets or liabilities are settled in cash, at which time they are recorded as realized foreign currency gains (losses).

3. Futures Contracts: The portfolio uses index futures contracts to a limited extent, with the objective of maintaining full exposure to the stock market while maintaining liquidity. The portfolio may purchase or sell futures contracts to achieve a desired level of investment, whether to accommodate portfolio turnover or cash flows from capital share transactions. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the portfolio and the prices of futures contracts, and the possibility of an illiquid market. Counterparty risk involving futures is mitigated because a regulated clearinghouse is the counterparty instead of the clearing broker. To further mitigate counterparty risk, the portfolio trades futures contracts on an exchange, monitors the financial strength of its clearing brokers and clearinghouse, and has entered into clearing agreements with its clearing brokers. The clearinghouse imposes initial margin requirements to secure the portfolio's performance and requires daily settlement of variation margin representing changes in the market value of each contract. Any securities pledged as initial margin for open contracts are noted in the Schedule of Investments.

Futures contracts are valued at their quoted daily settlement prices. The notional amounts of the contracts are not recorded in the Statement of Assets and Liabilities. Fluctuations in the value of the contracts are recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until the contracts are closed, when they are recorded as realized gains (losses) on futures contracts.

During the year ended December 31, 2022, the portfolio's average investments in long and short futures contracts represented 3% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

4. Federal Income Taxes: The portfolio intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The portfolio's tax returns are open to examination by the relevant tax authorities until expiration of the applicable statute of limitations, which is generally three years after the filing of the tax return. Management has analyzed the portfolio's tax positions taken for all open federal and state income tax years, and has concluded that no provision for income tax is required in the portfolio's financial statements.

5. Distributions: Distributions to shareholders are recorded on the ex-dividend date. Distributions are determined on a tax basis at the fiscal year-end and may differ from net investment income and realized capital gains for financial reporting purposes.

6. Securities Lending: To earn additional income, the portfolio lends its securities to qualified institutional borrowers. Security loans are subject to termination by the portfolio at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The portfolio further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of prequalified counterparties, monitoring their financial strength, and entering into master securities lending agreements with its counterparties. The master securities lending agreements provide that, in the event of a counterparty's default (including bankruptcy), the portfolio may terminate any loans with that borrower, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the portfolio; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the portfolio may experience delays and costs in recovering the securities loaned. The portfolio invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability in the Statement of Assets and Liabilities for the return of the collateral, during the period the securities are on loan. Collateral investments in Vanguard Market Liquidity Fund are subject to market appreciation or depreciation. Securities lending income represents fees charged to borrowers plus income earned on invested cash collateral, less expenses associated with the loan. During the term of the loan, the portfolio is entitled to all distributions made on or in respect of the loaned securities.

7. Credit Facilities and Interfund Lending Program: The portfolio and certain other funds managed by The Vanguard Group ("Vanguard") participate in a $4.4 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the portfolio's regulatory and contractual borrowing restrictions. With respect to the committed credit facility, the participating funds are charged administrative fees and an annual commitment fee of 0.10% of the undrawn committed amount of the facility, which are allocated to the funds based on a method approved by the portfolio's board of trustees and included in Management and Administrative expenses on the portfolio's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the portfolio and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the portfolio may participate in a joint lending and borrowing program that allows registered open-end Vanguard funds to borrow money from and lend money to each other for temporary or emergency purposes (the "Interfund Lending Program"), subject to compliance with the terms and conditions of the Order, and to the extent permitted by the portfolio's investment objective and investment policies. Interfund loans and borrowings normally extend overnight but can have a maximum duration of seven days. Loans may be called on one business day's notice. The interest rate to be charged is governed by the conditions of the Order and internal procedures adopted by the board of trustees. The board of trustees is responsible for overseeing the Interfund Lending Program.

For the year ended December 31, 2022, the portfolio did not utilize the credit facilities or the Interfund Lending Program.

8. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

B. The investment advisory firms Lazard Asset Management LLC and Hotchkis and Wiley Capital Management, LLC, each provide investment advisory services to a portion of the portfolio for a fee calculated at an annual percentage rate of average net assets managed by the advisor. The basic fees of Lazard Asset Management LLC and Hotchkis and Wiley Capital Management, LLC, are subject to quarterly adjustments based on performance relative to the S&P 500 Index and the Russell 1000 Value Index, respectively, since December 31, 2019.

Vanguard manages the cash reserves of the portfolio as described below.

For the year ended December 31, 2022, the aggregate investment advisory fee paid to all advisors represented an effective annual basic rate of 0.12% of the portfolio's average net assets, before a net increase of $110,000 (0.01%) based on performance.

C. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the portfolio, Vanguard furnishes to the portfolio corporate management, administrative, marketing, distribution and cash management services at Vanguard's cost of operations (as defined by the FSA). These costs of operations are allocated to the portfolio based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the portfolio may invest up to 0.40% of its net assets as capital in Vanguard. At December 31, 2022, the portfolio had contributed to Vanguard capital in the amount of $41,000, representing less than 0.01% of the portfolio's net assets and 0.02% of Vanguard's capital received pursuant to the FSA. The portfolio's trustees and officers are also directors and employees, respectively, of Vanguard.

D. Various inputs may be used to determine the value of the portfolio's investments and derivatives. These inputs are summarized in three broad levels for financial statement purposes. The inputs or methodologies used to value securities are not necessarily an indication of the risk associated with investing in those securities.

Level 1—Quoted prices in active markets for identical securities.
Level 2—Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).
Level 3—Significant unobservable inputs (including the portfolio's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.

At December 31, 2022, 100% of the market value of the portfolio's investments and derivatives was determined based on Level 1 inputs.

E. Permanent differences between book-basis and tax-basis components of net assets are reclassified among capital accounts in the financial statements to reflect their tax character. These reclassifications have no effect on net assets or net asset value per share. As of period end, permanent differences primarily attributable to the accounting for applicable foreign currency transactions were reclassified between the individual components of total distributable earnings (loss).

Temporary differences between book-basis and tax-basis components of total distributable earnings (loss) arise when certain items of income, gain, or loss are recognized in different periods for financial statement and tax purposes; these differences will reverse at some time in the future. The differences are primarily related to the deferral of losses from wash sales; and the recognition of unrealized gains or losses from certain derivative contracts. As of period end, the tax-basis components of total distributable earnings (loss) are detailed in the table as follows:

	Amount ($000)
Undistributed Ordinary Income	15,641
Undistributed Long-Term Gains	58,548
Capital Loss Carryforwards	—
Qualified Late-Year Losses	—
Net Unrealized Gains (Losses)	50,513

The tax character of distributions paid was as follows:

	Year Ended December 31,	
	2022 Amount ($000)	2021 Amount ($000)
Ordinary Income*	41,617	11,958
Long-Term Capital Gains	72,741	16,445
Total	114,358	28,403

* Includes short-term capital gains, if any.

As of December 31, 2022, gross unrealized appreciation and depreciation for investments and derivatives based on cost for U.S. federal income tax purposes were as follows:

	Amount ($000)
Tax Cost	1,015,162
Gross Unrealized Appreciation	159,486
Gross Unrealized Depreciation	(108,973)
Net Unrealized Appreciation (Depreciation)	50,513

F. During the year ended December 31, 2022, the portfolio purchased $265,141,000 of investment securities and sold $265,723,000 of investment securities, other than temporary cash investments.

G. Capital shares issued and redeemed were:

	Year Ended December 31,	
	2022 Shares (000)	2021 Shares (000)
Issued	8,931	12,190
Issued in Lieu of Cash Distributions	7,279	1,880
Redeemed	(10,246)	(12,901)
Net Increase (Decrease) in Shares Outstanding	5,964	1,169

At December 31, 2022, two shareholders (insurance company separate accounts whose holdings in the portfolio represent the indirect investment of Vanguard Variable Annuity contract holders) were each a record or beneficial owner of at least 25% or more of the portfolio's net assets, with a combined ownership of 78%. If any of these shareholders were to redeem their investment in the portfolio, the redemption might result in an increase in the portfolio's expense ratio, cause the portfolio to incur higher transaction costs or lead to the realization of taxable capital gains.

H. Management has determined that no events or transactions occurred subsequent to December 31, 2022, that would require recognition or disclosure in these financial statements.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Vanguard Variable Insurance Funds and Shareholders of Diversified Value Portfolio

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Diversified Value Portfolio (one of the portfolios constituting Vanguard Variable Insurance Funds, referred to hereafter as the "Portfolio") as of December 31, 2022, the related statement of operations for the year ended December 31, 2022, the statement of changes in net assets for each of the two years in the period ended December 31, 2022, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2022 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Portfolio as of December 31, 2022, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2022 and the financial highlights for each of the five years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Portfolio's management. Our responsibility is to express an opinion on the Portfolio's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Portfolio in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2022 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

/s/PricewaterhouseCoopers LLP
Philadelphia, Pennsylvania
February 16, 2023

We have served as the auditor of one or more investment companies in The Vanguard Group of Funds since 1975.

Tax information (unaudited)

For corporate shareholders, 90.2%, or if subsequently determined to be different, the maximum percentage allowable by law, of ordinary income (dividend income plus short-term gains, if any) for the fiscal year qualified for the dividends-received deduction.

The portfolio hereby designates $249,000, or if subsequently determined to be different, the maximum amount allowable by law, of interest earned from obligations of the U.S. government which is generally exempt from state income tax.

The portfolio distributed $72,741,000 as capital gain dividends (20% rate gain distributions) to shareholders during the fiscal year.

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The People Who Govern Your Fund

The trustees of your mutual fund are there to see that the fund is operated and managed in your best interests since, as a shareholder, you are a part owner of the fund. Your fund's trustees also serve on the board of directors of The Vanguard Group, Inc., which is owned by the Vanguard funds and provides services to them.

A majority of Vanguard's board members are independent, meaning that they have no affiliation with Vanguard or the funds they oversee, apart from the sizable personal investments they have made as private individuals. The independent board members have distinguished backgrounds in business, academia, and public service. Each of the trustees and executive officers oversees 206 Vanguard funds.

Information for each trustee and executive officer of the fund appears below. That information, as well as the Vanguard fund count, is as of the date on the cover of this fund report. The mailing address of the trustees and officers is P.O. Box 876, Valley Forge, PA 19482. More information about the trustees is in the *Statement of Additional Information*, which can be obtained, without charge, by contacting Vanguard at 800-662-7447, or online at vanguard.com.

Interested Trustee[1]

Mortimer J. Buckley
Born in 1969. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chairman of the board (2019–present) of Vanguard and of each of the investment companies served by Vanguard; chief executive officer (2018–present) of Vanguard; chief executive officer, president, and trustee (2018–present) of each of the investment companies served by Vanguard; president and director (2017–present) of Vanguard; and president (2018–present) of Vanguard Marketing Corporation. Chief investment officer (2013–2017), managing director (2002–2017), head of the Retail Investor Group (2006–2012), and chief information officer (2001–2006) of Vanguard. Member of the board of governors of the Investment Company Institute and the board of governors of FINRA. Trustee and vice chair of The Shipley School.

Independent Trustees

Tara Bunch
Born in 1962. Trustee since November 2021. Principal occupation(s) during the past five years and other experience: head of global operations at Airbnb (2020–present). Vice president of AppleCare (2012–2020). Member of the board of directors of Out & Equal (2002–2006), the advisory board of the University of California, Berkeley School of Engineering (2020–present), and the advisory board of Santa Clara University's Leavey School of Business (2018–present).

Emerson U. Fullwood
Born in 1948. Trustee since January 2008. Principal occupation(s) during the past five years and other experience: executive chief staff and marketing officer for North America and corporate vice president (retired 2008) of Xerox Corporation (document management products and services). Former president of the Worldwide Channels Group, Latin America, and Worldwide Customer Service and executive chief staff officer of Developing Markets of Xerox. Executive in residence and 2009–2010 Distinguished Minett Professor at the Rochester Institute of Technology. Member of the board of directors of the University of Rochester Medical Center, the Monroe Community College Foundation, the United Way of Rochester, North Carolina A&T University, Roberts Wesleyan College, and the Rochester Philharmonic Orchestra. Trustee of the University of Rochester.

F. Joseph Loughrey
Born in 1949. Trustee since October 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2009) and vice chairman of the board (2008–2009) of Cummins Inc. (industrial machinery). Chairman of the board of Hillenbrand, Inc. (specialized consumer services). Director of the V Foundation. Member of the advisory council for the College of Arts and Letters at the University of Notre Dame. Chairman of the board of Saint Anselm College.

Mark Loughridge
Born in 1953. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: senior vice president and chief financial officer (retired 2013) of IBM (information technology services). Fiduciary member of IBM's Retirement Plan Committee (2004–2013), senior vice president and general manager (2002–2004) of IBM Global Financing, vice president and controller (1998–2002) of IBM, and a variety of other prior management roles at IBM. Member of the Council on Chicago Booth.

Scott C. Malpass
Born in 1962. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: adjunct professor of finance at the University of Notre Dame (2020–present). Chief investment officer (retired 2020) and vice president (retired 2020) of the University of Notre Dame. Assistant professor (retired June 2020) of finance at the Mendoza College of Business, University of Notre Dame, and member of the Notre Dame 403(b) Investment Committee. Member of the board of Catholic Investment Services, Inc. (investment advisors), the board of superintendence of the Institute for the Works of Religion, and the board of directors of Paxos Trust Company (finance).

Deanna Mulligan
Born in 1963. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chief executive officer of Purposeful (advisory firm for CEOs and C-level executives; 2021–present). Board chair (2020), chief executive officer (2011–2020), and president (2010–2019) of The Guardian Life Insurance Company of America. Chief operating officer (2010–2011) and executive vice president (2008–2010) of Individual Life and Disability of the Guardian Life Insurance Company of America. Member of the board of the Economic Club of New York. Trustee of the Partnership for New York City (business leadership), Chief Executives for Corporate Purpose, and the NewYork-Presbyterian Hospital.

André F. Perold
Born in 1952. Trustee since December 2004. Principal occupation(s) during the past five years and other experience: George Gund Professor of Finance and Banking, Emeritus at the Harvard Business School (retired 2011). Chief investment officer and co-managing partner of HighVista Strategies (private investment firm). Member of the board (2018–present) of RIT Capital Partners (investment firm). Member of the investment committee of Partners Health Care System.

Sarah Bloom Raskin
Born in 1961. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: deputy secretary (2014–2017) of the United States Department of the Treasury. Governor (2010–2014) of the Federal Reserve Board. Commissioner (2007–2010) of financial regulation for the State of Maryland. Colin W. Brown Distinguished Professor of the Practice of Law (2021–present), professor (2020–present), Distinguished Fellow of the Global Financial Markets Center (2020–present), and Rubenstein Fellow (2017–2020) at Duke University. Trustee (2017–present) of Amherst College and member of Amherst College Investment Committee (2019–present). Member of the Regenerative Crisis Response Committee (2020–present).

David A. Thomas
Born in 1956. Trustee since July 2021. Principal occupation(s) during the past five years and other experience: president of Morehouse College (2018–present). Professor of business administration, emeritus at Harvard University (2017–2018). Dean (2011–2016) and professor of management (2016–2017) at the Georgetown University McDonough School of Business. Director of DTE Energy Company (2013–present). Trustee of Common Fund (2019–present).

Peter F. Volanakis
Born in 1955. Trustee since July 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2010) of Corning Incorporated (communications equipment) and director of Corning Incorporated (2000–2010) and Dow Corning (2001–2010). Director (2012) of SPX Corporation (multi-industry manufacturing). Overseer of the Amos Tuck School of Business Administration, Dartmouth College (2001–2013). Member of the BMW Group Mobility Council.

1 Mr. Buckley is considered an "interested person," as defined in the Investment Company Act of 1940, because he is an officer of the Vanguard funds.

Executive Officers

Jacqueline Angell
Born in 1974. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief compliance officer (November 2022–present) of Vanguard and of each of the investment companies served by Vanguard. Chief compliance officer (2018–2022) and deputy chief compliance officer (2017–2019) of State Street Corporation.

Christine M. Buchanan
Born in 1970. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief financial officer (2021–present) and treasurer (2017–2022) of each of the investment companies served by Vanguard. Partner (2005–2017) at KPMG (audit, tax, and advisory services).

John Galloway
Born in 1973. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Investment stewardship officer (September 2020–present) of each of the investment companies served by Vanguard. Head of Investor Advocacy (February 2020–present) and head of Marketing Strategy and Planning (2017–2020) at Vanguard. Special assistant to the President of the United States (2015).

Ashley Grim
Born in 1984. Principal occupation(s) during the past five years and other experience: treasurer (February 2022–present) of each of the investment companies served by Vanguard. Fund transfer agent controller (2019–2022) and director of Audit Services (2017–2019) at Vanguard. Senior manager (2015–2017) at PriceWaterhouseCoopers (audit and assurance, consulting, and tax services).

Peter Mahoney
Born in 1974. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Controller (2015–present) of each of the investment companies served by Vanguard. Head of International Fund Services (2008–2014) at Vanguard.

Anne E. Robinson
Born in 1970. Principal occupation(s) during the past five years and other experience: general counsel (2016–present) of Vanguard. Secretary (2016–present) of Vanguard and of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Managing director and general counsel of Global Cards and Consumer Services (2014–2016) at Citigroup. Counsel (2003–2014) at American Express. Nonexecutive director of the board of National Grid (energy).

Michael Rollings
Born in 1963. Principal occupation(s) during the past five years and other experience: finance director (2017–present) and treasurer (2017) of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Chief financial officer (2016–present) of Vanguard. Director (2016–present) of Vanguard Marketing Corporation. Executive vice president and chief financial officer (2006–2016) of MassMutual Financial Group.

Vanguard Senior Management Team

Matthew Benchener	Thomas M. Rampulla
Joseph Brennan	Karin A. Risi
Mortimer J. Buckley	Anne E. Robinson
Gregory Davis	Michael Rollings
John James	Nitin Tandon
Chris D. McIsaac	Lauren Valente

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This material may be used in conjunction with the offering of shares of any Vanguard fund only if preceded or accompanied by the fund's current prospectus.

All comparative mutual fund data are from Morningstar, Inc., unless otherwise noted.

You can obtain a free copy of Vanguard's proxy voting guidelines by visiting vanguard.com/proxyreporting or by calling Vanguard at 800-662-2739. The guidelines are also available from the SEC's website, www.sec.gov. In addition, you may obtain a free report on how your fund voted the proxies for securities it owned during the 12 months ended June 30. To get the report, visit either vanguard.com/proxyreporting or www.sec.gov.

You can review information about your fund on the SEC's website, and you can receive copies of this information, for a fee, by sending a request via email addressed to publicinfo@sec.gov.

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