Vanguard®

Annual Report | December 31, 2018

Vanguard Variable Insurance Fund

Growth Portfolio

See the inside front cover for important information about access to your fund's annual and semiannual shareholder reports.

Important information about access to shareholder reports

Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, paper copies of your fund's annual and semiannual shareholder reports will no longer be sent to you by mail, unless you specifically request them. Instead, you will be notified by mail each time a report is posted on the website and will be provided with a link to access the report.

If you have already elected to receive shareholder reports electronically, you will not be affected by this change and do not need to take any action. You may elect to receive shareholder reports and other communications from the fund electronically by contacting your financial intermediary (such as a broker-dealer or bank) or, if you invest directly with the fund, by calling Vanguard at one of the phone numbers on the back cover of this report or by logging on to vanguard.com.

You may elect to receive paper copies of all future shareholder reports free of charge. If you invest through a financial intermediary, you can contact the intermediary to request that you continue to receive paper copies. If you invest directly with the fund, you can call Vanguard at one of the phone numbers on the back cover of this report or log on to vanguard.com. Your election to receive paper copies will apply to all the funds you hold through an intermediary or directly with Vanguard.

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 fund are spelled out in the prospectus.

CEO’s Perspective

Tim Buckley
Chairman and Chief Executive Officer

Dear Planholder,

Over the years, I’ve found that prudent investors exhibit a common trait: discipline. No matter how the markets move or what new investing fad hits the headlines, those who stay focused on their goals and tune out the noise are set up for long-term success.

The prime gateway to investing is saving, and you don’t usually become a saver without a healthy dose of discipline. Savers make the decision to sock away part of their income, which means spending less and delaying gratification, no matter how difficult that may be.

Of course, disciplined investing extends beyond diligent saving. The financial markets, in the short term especially, are unpredictable; I have yet to meet the investor who can time them perfectly. It takes discipline to resist the urge to go all-in when markets are frothy or to retreat when things look bleak.

Staying put with your investments is one strategy for handling volatility. Another, rebalancing, requires even more discipline because it means steering your money away from strong performers and toward poorer performers.

Patience—a form of discipline—is also the friend of long-term investors. Higher returns are the potential reward for weathering the market’s turbulence and uncertainty.

It’s important to be prepared for that turbulence, whenever it appears. Don’t panic. Don’t chase returns or look for answers outside the asset classes you trust. And be sure to rebalance periodically, even when there’s turmoil.

Whether you’re a master of self-control, get a boost from technology, or work with a professional advisor, know that discipline is necessary to get the most out of your investment portfolio. And know that Vanguard is with you for the entire ride.

Thank you for your continued loyalty.

Sincerely,

Mortimer J. Buckley
Chairman and Chief Executive Officer
January 17, 2019

Market Perspective

Stocks slide and volatility climbs

After a strong start, global stock markets fell, and volatility rose substantially at the end of the year. The spike in volatility resulted primarily from concerns over slowing global growth, rising U.S. interest rates, and heightened geopolitical uncertainty. These factors led to sharp declines across major equity markets for the 12-month period.

The CRSP US Total Market Index, the benchmark for Vanguard Total Stock Market Index Fund, returned –5.17% for the 12 months ended December 31, 2018. Seven of the fund's ten industry sectors declined, with only health care, utilities, and consumer services gaining ground. Financials and industrials were the sectors that detracted the most.

In the United States, technology stocks were hurt by concerns about slowing sales and high valuations. Manufacturers lost ground in part because of continued trade tensions between the United States and China. And stocks in the energy sector retreated amid declining oil prices.

Stocks outside the United States were also in negative territory. The U.K., for example, continued to be challenged by the Brexit negotiations. And European stocks lagged because of concerns about Italy's debt and Europe's economic dependence on emerging markets, which were hurt throughout much of the year by a rising dollar and trade protectionism.

Mixed results for bonds

Despite a solid macroeconomic backdrop throughout the year, bond markets also experienced bouts of volatility, as bond investors shared some of the same concerns that affected equity investors.

In the final quarter of the year, fixed income investors shied away from risky assets, including U.S. high-yield and investment-grade corporate bonds, which underperformed as credit spreads with U.S. Treasuries widened significantly. The impending partial shutdown of the U.S. government also weighed on investor sentiment and contributed to the relative strength of safe-haven assets as the year drew to a close.

For the year, the return for the bond market was essentially flat. The Bloomberg Barclays U.S. Aggregate Bond Index returned 0.01%. Bonds with shorter durations tended to perform the best. Mortgage-backed securities outperformed both U.S. Treasuries and corporate bonds for the year.

Treasury yields generally fell over the final quarter but finished the year higher. The yield of the 2-year Treasury note climbed 61 basis points to close the year at 2.49%. The yield of the 10-year Treasury increased 27 basis points to 2.68%.

The 12-month rise in yields was encouraged by the U.S. Federal Reserve. In December, the Fed lifted its target for short-term interest rates for the fourth time in 2018, to a range of 2.25%–2.5%. The central bank maintained that U.S. growth fundamentals and labor market conditions remain solid despite the recent market volatility, and lowered its long-term neutral target range to 2.75%–3%, signaling the likelihood for two more rate increases in 2019.

Bonds outside the United States, as measured by the Bloomberg Barclays Global Aggregate Index ex USD, returned –2.15% for the period. In general, higher-quality bonds with longer maturities tended to perform the best.

Market Barometer

	Average Annual Total Returns Periods Ended December 31, 2018		
	One Year	Three Years	Five Years
Stocks			
Russell 1000 Index (Large-caps)	-4.78%	9.09%	8.21%
Russell 2000 Index (Small-caps)	-11.01	7.36	4.41
Russell 3000 Index (Broad U.S. market)	-5.24	8.97	7.91
FTSE All-World ex US Index (International)	-14.13	4.58	1.05
Bonds			
Bloomberg Barclays U.S. Aggregate Bond Index (Broad taxable market)	0.01%	2.06%	2.52%
Bloomberg Barclays Municipal Bond Index (Broad tax-exempt market)	1.28	2.30	3.82
FTSE Three-Month U.S. Treasury Bill Index	1.86	0.98	0.59
CPI			
Consumer Price Index	1.91%	2.03%	1.51%

Growth Portfolio

Advisors' Report

The Growth Portfolio returned 0.20% for the 12 months ended December 31, 2018, and its benchmark, the Russell 1000 Growth Index, returned –1.51%. Please note that the returns for Vanguard Variable Insurance Fund are different from those of Vanguard Variable Annuity (and other plans that invest in the fund), which take into account insurance-related expenses.

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. William Blair Investment Management, LLC, no longer serves as an advisor to the portfolio.

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 14, 2019.

Wellington Management Company LLP

Portfolio Manager:

Andrew J. Shilling, CFA
Senior Managing Director

Our portion of the portfolio seeks to outperform growth indexes and, over the longer term, the broader market. We employ proprietary fundamental research and a rigorous valuation discipline to invest in large-capitalization companies with attractive growth characteristics. Our investment approach is based on identifying companies that possess a clear competitive advantage that will enable them to sustain above-average growth.

U.S. equities, as measured by the Standard & Poor's 500 Index, returned –4.38% over the period. Growth stocks outperformed value stocks, and large-cap companies led their smaller-cap peers.

Notable contributors to performance included ServiceNow, a provider of cloud-based services that continues to grow rapidly and gain market share; Dexcom, a provider of continuous glucose monitoring devices offering noninvasive care for diabetics; and Workday, the cloud-based financial management and HR management software vendor that has been benefiting as businesses transform digitally. In addition, our position in MasterCard continued to benefit from the long-term shift away from cash and checks and toward electronic payments.

Detractors included eBay, a multinational e-commerce company that facilitates consumer-to-consumer and business-to-consumer sales. It came under pressure after results indicated lower organic revenue growth driven by a weaker outlook for its online marketplace. Constellation Brands, a producer and marketer of beer, wine, and spirits, struggled as political conflicts arose over the development of a new production facility in Mexico. The portfolio's biggest detractors also included Alliance Data Systems, a provider of private-label credit cards and loyalty products, which struggled after missing revenue expectations, and 2U, a digital education company whose shares fell on lower near-term profitability as margins were pressured by the development costs of new online course offerings.

Given solid U.S. economic growth combined with geopolitical uncertainty, we have maintained the portfolio's exposure to quality growth companies benefiting from secular trends and long-cycle growth. We believe that these companies, supported by strong barriers to entry, can outgrow the broader market through the coming years. We remain true to our process, seeking to invest in companies with competitive advantages, strong balance sheets, experienced and proven management, and the ability to sustain above-average growth. We are confident that this time-tested process continues to yield a portfolio of stocks that is well-positioned to outperform.

Jackson Square Partners, LLC

Portfolio Managers:

Jeffrey S. Van Harte, CFA
Chairman and Chief Investment Officer

Christopher J. Bonavico, CFA

Christopher M. Ericksen, CFA

Daniel J. Prislin, CFA

For the 12 months ended December 31, 2018, our portion of the portfolio's performance was largely driven by our sector exposure. Consumer discretionary was the largest detractor, and information technology was the largest contributor.

Our largest relative contributor to performance was TripAdvisor. Its earnings reports during the year were positive, which management attributed to the stabilization of the company's core business and lower online acquisition costs. TripAdvisor has seen accelerated growth in its non-hotel segment, and it has integrated third-party networks, such as delivery.com, into TripAdvisor's website and mobile app—an integration that we believe could drive synergies over the longer term. We believe that the company, which attracts almost 500 million unique visitors to its website and app every month, is worth more than recognized at its current valuation.

Liberty Global was the largest detractor. Weaker-than-expected video subscriptions for U.S. cable companies and Comcast's pursuit of Sky pushed investors to focus unduly on long-term trends against cable in the U.S. market, despite significant differences in how the European market operates. Compared with the U.S., average revenue per user in Europe is 50% to 80% less expensive because of lower content cost inflation. In addition, the European Commission has opened an in-depth investigation into Vodafone's acquisition of Liberty Global's businesses in the Czech Republic, Germany, Hungary, and Romania. Although we believe this deal will add economic value, the duration of the approval process has created short-term uncertainty and pressured the stock. We do not believe this pressure will persist, and we continue to believe that Liberty Global has an advantaged network with sustainable pricing power in an industry that continues to consolidate.

After significant positive returns in the equity market over the past several years, sporadic volatility emerged during 2018. The volatility appeared to be both technical and fundamental. Investors struggled to predict the pace of global economic activity and assess the external factors that threatened economic fundamentals, such as central bank actions and fiscal policy debates. During the fourth quarter, the equity markets reflected such uncertainty, resulting in a significant correction.

Previous market corrections over recent years tended to be relatively quick, only to reverse before reaching any material level of investor risk aversion. As 2019 begins, investors are focused on the interplay between technical and fundamental factors to determine whether the long economic and equity market recovery since the global financial crisis has ended or whether the recent sell-off will prove transitory.

Adding to investor uncertainty is President Trump's unconventional style as a head of state and controversies surrounding his administration that may hamper significant policy change. In the short term, we are mindful of the potential macroeconomic implications of policy shifts on economic growth, higher corporate and personal incomes from lower tax rates, and other indicators. President Trump's comments and public positioning on global trade have created more investor concerns about how a potential global trade war might affect growth. We believe it is too early to determine the long-term magnitude of such events, but we will closely monitor his tenure with a keen eye on the execution of significant policy shifts.

Regardless of policy outcomes and of oscillating investor sentiment in any given period, we remain consistent in our long-term investment philosophy. We want to own what we view as strong secular-growth companies with solid business models and competitive positions that we believe can grow market share and have the potential to deliver shareholder value in a variety of market environments.

Growth Portfolio Investment Advisors

	Portfolio Assets Managed		
Investment Advisor	%	$ Million	Investment Strategy
Wellington Management Company LLP	49	292	Employs proprietary fundamental research and a rigorous valuation discipline in an effort to invest in high-quality, large-capitalization, sustainable-growth companies. The firm's philosophy is based on the belief that stock prices often overreact to short-term trends and that bottom-up, intensive research focused on longer-term fundamentals can be used to identify stocks that will outperform the market over time.
Jackson Square Partners, LLC	48	286	Uses a bottom-up approach, seeking companies that have large end-market potential, dominant business models, and strong free-cash-flow generation that is attractively priced compared with the intrinsic value of the securities.
Cash Investments	3	20	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 table below 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 in the Financial Statements section. For additional information on operating expenses and other shareholder costs, please refer to the prospectus.

Six Months Ended December 31, 2018

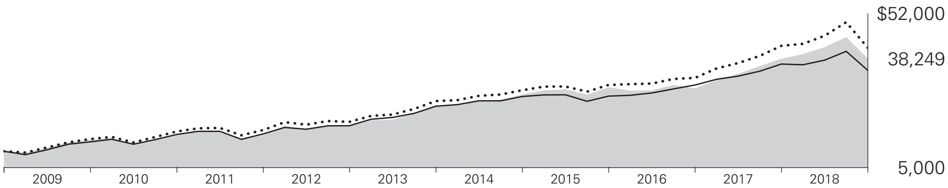
Growth Portfolio	Beginning Account Value 6/30/2018	Ending Account Value 12/31/2018	Expenses Paid During Period[1]
Based on Actual Portfolio Return	$1,000.00	$917.20	$1.79
Based on Hypothetical 5% Yearly Return	1,000.00	1,023.34	1.89

1 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 0.37%. 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).

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, 2008–December 31, 2018
Initial Investment of $10,000



	Average Annual Total Returns Periods Ended December 31, 2018			Final Value of a $10,000 Investment
	One Year	Five Years	Ten Years	
Growth Portfolio	0.20%	9.78%	14.36%	$38,249
Russell 1000 Growth Index	-1.51	10.40	15.29	41,481
Dow Jones U.S. Total Stock Market Float Adjusted Index	-5.30	7.86	13.22	34,625

See Financial Highlights for dividend and capital gains information.

Sector Diversification

As of December 31, 2018

Communication Services	15.1%
Consumer Discretionary	15.4
Consumer Staples	1.8
Energy	0.2
Financials	11.6
Health Care	12.1
Industrials	6.1
Information Technology	33.9
Materials	0.5
Other	1.2
Real Estate	2.0
Utilities	0.1

The table reflects the portfolio's equity exposure, based on its investments in stocks and stock index futures. Any holdings in short-term reserves are excluded. 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

Statement of Net Assets

As of December 31, 2018

The portfolio reports a complete list of its holdings in regulatory filings four times in each fiscal year, at the quarter-ends. For the second and fourth fiscal quarters, the lists appear in the portfolio's semiannual and annual reports to shareholders. For the first and third fiscal quarters, the portfolio files the lists with the Securities and Exchange Commission on Form N-Q. Shareholders can look up the portfolio's Forms N-Q on the SEC's website at sec.gov.

		Shares	Market Value• ($000)
	Common Stocks (93.8%)[1]		
	Communication Services (14.5%)		
*	Alphabet Inc. Class C	21,105	21,856
*	TripAdvisor Inc.	220,813	11,911
*	Take-Two Interactive Software Inc.	109,011	11,222
*	Alphabet Inc. Class A	10,351	10,816
*	Liberty Global plc	431,382	8,904
*	Charter Communications Inc. Class A	19,210	5,474
*	Facebook Inc. Class A	34,618	4,538
*	Netflix Inc.	13,523	3,620
	Activision Blizzard Inc.	55,584	2,588
*	Spotify Technology SA	18,792	2,133
	Tencent Holdings Ltd. ADR	49,271	1,945
*	Liberty Global plc Class A	77,695	1,658
			86,665
	Consumer Discretionary (14.8%)		
*	Amazon.com Inc.	11,742	17,636
	Dollar General Corp.	111,442	12,045
	Hasbro Inc.	146,093	11,870
*	Dollar Tree Inc.	108,114	9,765
	Home Depot Inc.	45,919	7,890
*	Alibaba Group Holding Ltd. ADR	50,557	6,930
	Hilton Worldwide Holdings Inc.	57,005	4,093
*	Booking Holdings Inc.	2,269	3,908
*	O'Reilly Automotive Inc.	10,087	3,473
^,*	Under Armour Inc. Class A	145,062	2,563
	Ross Stores Inc.	27,776	2,311
*	eBay Inc.	64,975	1,824
	TJX Cos. Inc.	34,231	1,532
*	Wayfair Inc.	16,340	1,472
	NIKE Inc. Class B	17,552	1,301
			88,613
	Consumer Staples (1.6%)		
	Constellation Brands Inc. Class A	30,168	4,851
*	Monster Beverage Corp.	90,567	4,458
			9,309
	Financials (11.0%)		
	Intercontinental Exchange Inc.	195,352	14,716
	KKR & Co. Inc. Class A	629,500	12,357
	Charles Schwab Corp.	234,833	9,753
	CME Group Inc.	43,929	8,264
	Progressive Corp.	63,787	3,848
*	Markel Corp.	3,474	3,606
	Marsh & McLennan Cos. Inc.	39,568	3,155
	MSCI Inc. Class A	19,860	2,928
	S&P Global Inc.	15,052	2,558
	TD Ameritrade Holding Corp.	50,706	2,483
	MarketAxess Holdings Inc.	9,730	2,056
			65,724
	Health Care (11.4%)		
	UnitedHealth Group Inc.	70,548	17,575
*	IQVIA Holdings Inc.	131,651	15,294
*	Biogen Inc.	42,099	12,668
*	Illumina Inc.	29,612	8,882
*	Edwards Lifesciences Corp.	40,451	6,196
	Thermo Fisher Scientific Inc.	14,613	3,270
*	DexCom Inc.	20,114	2,410
	Danaher Corp.	14,898	1,536
*	Elanco Animal Health Inc.	10,541	332
			68,163
	Industrials (5.6%)		
	FedEx Corp.	49,481	7,983
	TransUnion	91,520	5,198
	Lockheed Martin Corp.	17,802	4,661
*	IHS Markit Ltd.	93,751	4,497
	Equifax Inc.	36,170	3,369
	Northrop Grumman Corp.	13,068	3,200
	AMETEK Inc.	37,706	2,553
	Fortune Brands Home & Security Inc.	30,086	1,143
	Canadian National Railway Co. (New York Shares)	10,087	748
*	CoStar Group Inc.	1,272	429
			33,781
	Information Technology (32.6%)		
	Microsoft Corp.	462,052	46,931
	Mastercard Inc. Class A	104,149	19,648
	Visa Inc. Class A	137,209	18,103
*	PayPal Holdings Inc.	209,197	17,591
*	Autodesk Inc.	116,445	14,976
	Applied Materials Inc.	272,494	8,921
	Apple Inc.	55,002	8,676
*	Arista Networks Inc.	37,079	7,813
*	ServiceNow Inc.	37,111	6,608
*	FleetCor Technologies Inc.	33,568	6,234
*	Adobe Inc.	26,010	5,885
*	salesforce.com Inc.	36,801	5,041
*	Workday Inc. Class A	27,595	4,406
	Global Payments Inc.	39,943	4,119
	CDW Corp.	47,965	3,888
	SS&C Technologies Holdings Inc.	85,030	3,836
^	Microchip Technology Inc.	50,222	3,612
*	Advanced Micro Devices Inc.	121,585	2,244
*	Gartner Inc.	16,304	2,084
*	2U Inc.	34,212	1,701
	Cognex Corp.	33,172	1,283
*	DocuSign Inc. Class A	25,601	1,026
	Alliance Data Systems Corp.	4,334	650
			195,276
	Materials (0.4%)		
	Sherwin-Williams Co.	5,585	2,197
	Other (0.0%)		
§,*,2	WeWork Class A PP	1,460	91
	Real Estate (1.9%)		
	Crown Castle International Corp.	52,436	5,696
	American Tower Corp.	34,361	5,436
			11,132
	Total Common Stocks (Cost $479,418)		560,951
	Preferred Stocks (1.2%)		
§,*,2,3	Uber Technologies PP, 8.00%	74,490	3,237
§,*,2,3	WeWork Pfd. D1 PP	19,954	1,237
§,*,2,3	Airbnb Inc., 8.00%	9,972	1,093
§,*,2,3	WeWork Pfd. D2 PP	15,678	972
§,*,2,3	Pinterest Prf G PP, 8.00%	124,325	605
	Total Preferred Stocks (Cost $3,570)		7,144
	Temporary Cash Investments (5.1%)[1]		
	Money Market Fund (4.7%)		
4,5	Vanguard Market Liquidity Fund, 2.530%	279,801	27,980

		Face Amount ($000)	Market Value• ($000)
	Repurchase Agreement (0.2%)		
	Bank of America Securities, LLC 3.000%, 1/2/19 (Dated 12/31/18, Repurchase Value $1,400,000, collateralized by Government National Mortgage Assn. 4.000%, 11/20/48, with a value of $1,428,000)	1,400	1,400
	U.S. Government and Agency Obligations (0.2%)		
	United States Treasury Bill, 2.077%, 1/3/19	500	500
6	United States Treasury Bill, 2.314%, 2/28/19	450	448
			948
	Total Temporary Cash Investments (Cost $30,332)		30,328
	Total Investments (100.1%) (Cost $513,320)		598,423

	Amount ($000)
Other Assets and Liabilities (-0.1%)	
Other Assets	
Investment in Vanguard	34
Receivables for Accrued Income	247
Receivables for Capital Shares Issued	717
Variation Margin Receivable— Futures Contracts	147
Other Assets[6]	756
Total Other Assets	1,901
Liabilities	
Payables for Investment Securities Purchased	(57)
Payables to Investment Advisor	(174)
Collateral for Securities on Loan	(1,066)
Payables for Capital Shares Redeemed	(341)
Payables to Vanguard	(643)
Total Liabilities	(2,281)
Net Assets (100%)	
Applicable to 26,210,704 outstanding $.001 par value shares of beneficial interest (unlimited authorization)	598,043
Net Asset Value Per Share	$22.82

At December 31, 2018, net assets consisted of:

	Amount ($000)
Paid-in Capital	433,303
Total Distributable Earnings (Loss)	164,740
Net Assets	598,043

• See Note A in Notes to Financial Statements.

* Non-income-producing security.

^ Includes partial security positions on loan to broker-dealers. The total value of securities on loan is $1,039,000.

§ Security value determined using significant unobservable inputs.

1 The portfolio invests a portion of its cash reserves in equity markets through the use of index futures contracts. After giving effect to futures investments, the portfolio's effective common stock and temporary cash investment positions represent 97.0% and 1.9%, respectively, of net assets.

2 Restricted securities totaling $7,235,000 representing 1.2% of net assets. See Restricted Security table for additional information.

3 Perpetual security with no stated maturity date.

4 Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

5 Includes $1,066,000 of collateral received for securities on loan.

6 Securities with a value of $448,000 and cash of $509,000 have been segregated as initial margin for open futures contracts.

ADR—American Depositary Receipt.

PP—Private Placement.

Restricted Securities as of Period End

Security Name	Acquisition Date	Acquisition Cost ($000)
Uber Technologies PP	June 2014	1,156
WeWork Pfd. D1 PP	December 2014	332
WeWork Pfd. D2 PP	December 2014	261
WeWork Class A PP	December 2014	24
Pinterest Prf G PP	March 2015	893
Airbnb Inc.	June 2015	928

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 2019	153	19,165	(845)

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

Statement of Operations

	Year Ended December 31, 2018 ($000)
Investment Income	
Income	
Dividends[1]	4,715
Interest[2]	611
Securities Lending—Net	3
Total Income	5,329
Expenses	
Investment Advisory Fees—Note B	
Basic Fee	893
Performance Adjustment	(19)
The Vanguard Group—Note C	
Management and Administrative	1,446
Marketing and Distribution	79
Custodian Fees	17
Auditing Fees	35
Shareholders' Reports	16
Trustees' Fees and Expenses	1
Total Expenses	2,468
Expenses Paid Indirectly	(22)
Net Expenses	2,446
Net Investment Income	**2,883**
Realized Net Gain (Loss)	
Investment Securities Sold[2]	80,468
Futures Contracts	(1,934)
Realized Net Gain (Loss)	**78,534**
Change in Unrealized Appreciation (Depreciation)	
Investment Securities[2]	(84,053)
Futures Contracts	(996)
Change in Unrealized Appreciation (Depreciation)	**(85,049)**
Net Increase (Decrease) in Net Assets Resulting from Operations	**(3,632)**

1 Dividends are net of foreign withholding taxes of $7,000.

2 Interest income, realized net gain (loss), and change in unrealized appreciation (depreciation) from an affiliated company of the portfolio were $537,000, $1,000, and ($1,000). Purchases and sales are for temporary cash investment purposes.

Statement of Changes in Net Assets

	Year Ended December 31,	
	2018 ($000)	2017 ($000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	2,883	2,113
Realized Net Gain (Loss)	78,534	29,433
Change in Unrealized Appreciation (Depreciation)	(85,049)	97,873
Net Increase (Decrease) in Net Assets Resulting from Operations	(3,632)	129,419
Distributions		
Net Investment Income	(1,913)	(2,437)
Realized Capital Gain[1]	(29,602)	(28,841)
Total Distributions	(31,515)	(31,278)
Capital Share Transactions		
Issued	115,244	63,195
Issued in Lieu of Cash Distributions	31,515	31,278
Redeemed	(71,586)	(49,852)
Net Increase (Decrease) from Capital Share Transactions	75,173	44,621
Total Increase (Decrease)	40,026	142,762
Net Assets		
Beginning of Period	**558,017**	**415,255**
End of Period	**598,043**	**558,017**

1 Includes fiscal 2018 and 2017 short-term gain distributions totaling $3,387,000 and $44,000, respectively. Short-term gain distributions are treated as ordinary income dividends for tax purposes.

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, 2018	2017	2016	2015	2014
Net Asset Value, Beginning of Period	**$23.99**	**$19.70**	**$22.58**	**$23.24**	**$20.62**
Investment Operations					
Net Investment Income	.113[1]	.094[1]	.115	.127	.140
Net Realized and Unrealized Gain (Loss) on Investments	.038	5.685	(.465)	1.632	2.676
Total from Investment Operations	.151	5.779	(.350)	1.759	2.816
Distributions					
Dividends from Net Investment Income	(.080)	(.116)	(.126)	(.141)	(.090)
Distributions from Realized Capital Gains	(1.241)	(1.373)	(2.404)	(2.278)	(.106)
Total Distributions	(1.321)	(1.489)	(2.530)	(2.419)	(.196)
Net Asset Value, End of Period	**$22.82**	**$23.99**	**$19.70**	**$22.58**	**$23.24**
Total Return	**0.20%**	**30.92%**	**-1.08%**	**7.98%**	**13.79%**
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	$598	$558	$415	$506	$446
Ratio of Total Expenses to Average Net Assets[2]	0.39%	0.40%	0.42%	0.44%	0.43%
Ratio of Net Investment Income to Average Net Assets	0.45%	0.43%	0.53%	0.57%	0.65%
Portfolio Turnover Rate	47%	28%	28%	38%	39%

1 Calculated based on average shares outstanding.

2 Includes performance-based investment advisory fee increases (decreases) of 0.00%, (0.01%), 0.00%, 0.03% and 0.01%.

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

Notes to Financial Statements

Growth 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.

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 at their fair values calculated according to procedures adopted by the board of trustees. These procedures include obtaining quotations from an independent pricing service, monitoring news to identify significant market- or security-specific events, and evaluating changes in the values of foreign market proxies (for example, ADRs, futures contracts, or exchange-traded funds), between the time the foreign markets close and the portfolio's pricing time. When fair-value pricing is employed, the prices of securities used by a portfolio to calculate its net asset value may differ from quoted or published prices for the same securities. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value. Temporary cash investments are valued using the latest bid prices or using valuations based on a matrix system (which considers such factors as security prices, yields, maturities, and ratings), both as furnished by independent pricing services.

2. 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 assets pledged as initial margin for open contracts are noted in the Statement of Net Assets.

Futures contracts are valued at their quoted daily settlement prices. The notional amounts of the contracts are not recorded in the Statement of Net Assets. Fluctuations in the value of the contracts are recorded in the Statement of Net Assets 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 futures gains (losses).

During the year ended December 31, 2018, the portfolio's average investments in long and short futures contracts represented 4% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. Repurchase Agreements: The portfolio enters into repurchase agreements with institutional counterparties. Securities pledged as collateral to the portfolio under repurchase agreements are held by a custodian bank until the agreements mature, and in the absence of a default, such collateral cannot be repledged, resold, or rehypothecated. Each agreement requires that the market value of the collateral be sufficient to cover payments of interest and principal. The portfolio further mitigates its counterparty risk by entering into repurchase agreements only with a diverse group of prequalified counterparties, monitoring their financial strength, and entering into master repurchase agreements with its counterparties. The master repurchase agreements provide that, in the event of a counterparty's default (including bankruptcy), the portfolio may terminate any repurchase agreements with that counterparty, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the portfolio. Such action may be subject to legal proceedings, which may delay or limit the disposition of collateral.

4. Federal Income Taxes: The portfolio intends to continue to qualify as a regulated investment company and distribute all of its taxable income. Management has analyzed the portfolio's tax positions taken for all open federal income tax years (December 31, 2015–2018), and has concluded that no provision for federal 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 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 Net Assets for the return of the collateral, during the period the securities are on loan. 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 Facility: The portfolio and certain other funds managed by The Vanguard Group ("Vanguard") participate in a $3.1 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement that may be renewed annually; each fund is individually liable for its borrowings, if any, under the credit facility. Borrowings may be utilized for temporary and emergency purposes, and are subject to the portfolio's regulatory and contractual borrowing restrictions. The participating funds are charged administrative fees and an annual commitment fee of 0.10% of the undrawn amount of the facility; these fees 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 this facility bear interest at a rate based upon the higher of the one-month London Interbank Offered Rate, federal funds effective rate, or overnight bank funding rate plus an agreed-upon spread.

The portfolio had no borrowings outstanding at December 31, 2018, or at any time during the period then ended.

8. Other: Dividend income is recorded on the ex-dividend date. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Premiums and discounts on debt securities purchased are amortized and accreted, respectively, to interest income over the lives of the respective securities. 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 Wellington Management Company LLP and Jackson Square Partners, 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 Wellington Management Company LLP and Jackson Square Partners, LLC, are subject to quarterly adjustments based on performance relative to the Russell 1000 Growth Index for the preceding three years. Until November 2018, a portion of the portfolio was managed by William Blair Investment Management, LLC. The basic fee paid to William Blair Investment Management, LLC, was subject to quarterly adjustments based on performance relative to the Russell 1000 Growth Index for the preceding five years.

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

For the year ended December 31, 2018, the aggregate investment advisory fee represented an effective annual basic rate of 0.14% of the portfolio's average net assets, before a decrease of $19,000 (0.00%) 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. Vanguard does not require reimbursement in the current period for certain costs of operations (such as deferred compensation/benefits and risk/insurance costs); the portfolio's liability for these costs of operations is included in Payables to Vanguard on the Statement of Net Assets. All other costs of operations payable to Vanguard 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, 2018, the portfolio had contributed to Vanguard capital in the amount of $34,000, representing 0.01% of the portfolio's net assets and 0.01% of Vanguard's capitalization. The portfolio's trustees and officers are also directors and employees, respectively, of Vanguard.

D. The portfolio has asked its investment advisors to direct certain security trades, subject to obtaining the best price and execution, to brokers who have agreed to rebate to the portfolio part of the commissions generated. Such rebates are used solely to reduce the portfolio's management and administrative expenses. The portfolio's custodian bank has also agreed to reduce its fees when the portfolio maintains cash on deposit in the non-interest-bearing custody account. For the year ended December 31, 2018, these arrangements reduced the portfolio's management and administrative expenses by $21,000 and custodian fees by $1,000. The total expense reduction represented an effective annual rate of 0.00% of the portfolio's average net assets.

E. Various inputs may be used to determine the value of the portfolio's investments. 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 valued with significant unobservable inputs are noted on the Statement of Net Assets.

The following table summarizes the market value of the portfolio's investments as of December 31, 2018, based on the inputs used to value them:

Investments	Level 1 ($000)	Level 2 ($000)	Level 3 ($000)
Common Stocks	560,860	—	91
Preferred Stocks	—	—	7,144
Temporary Cash Investments	27,980	2,348	—
Futures Contracts—Assets[1]	147	—	—
Total	588,987	2,348	7,235

1 Represents variation margin on the last day of the reporting period.

The determination of Level 3 fair value measurements is governed by documented policies and procedures adopted by the board of trustees. The board has designated a pricing review committee, as an agent of the board, to ensure the timely analysis and valuation of Level 3 securities held by the portfolio in accordance with established policies and procedures. The pricing review committee employs various methods for calibrating valuation approaches, including a regular review of key inputs and assumptions, transactional back-testing or disposition analysis, and reviews of any related market activity. All valuation decisions made by the pricing review committee are reported to the board on a quarterly basis for review and ratification. The board reviews the adequacy of the fair value measurement policies and procedures in place on an annual basis.

The following table summarizes changes in investments valued based on Level 3 inputs during the year ended December 31, 2018. Transfers into or out of Level 3 are recognized based on values as of the date of transfer.

Amount Valued Based on Level 3 Inputs	Investments in Common Stocks ($000)	Investments in Preferred Stocks ($000)
Balance as of December 31, 2017	76	7,413
Sales	—	(1,005)
Net Realized Gain (Loss)	—	532
Change in Unrealized Appreciation (Depreciation)	15	204
Balance as of December 31, 2018	91	7,144

Net change in unrealized appreciation (depreciation) from investments still held as of December 31, 2018, was $219,000.

The following table provides quantitative information about the significant unobservable inputs used in fair value measurement as of December 31, 2018:

Security Type	Fair Value at 12/31/2018 ($000)	Valuation Technique	Unobservable Input	Amount or Range/ Weighted Avg.
Common Stocks	91	Target Event[1]	Weighted Average Price/ Weighted IPO Probability	50% at $60.54
				50% at $63.48
Preferred Stocks	3,237	Last Bid Price[2]	Average Secondary Market Bids	$43.45
	2,209	Target Event[1]	Weighted Average Price/ Weighted IPO Probability	50% at $60.54
				50% at $63.48
	1,093	Comparable Companies Approach[3]	Enterprise Value/Forward Revenue Multiple	5.5x–6.5x
			Liquidity Discount	10%
			Weighted IPO Probability	40%/60%
	605	Comparable Companies Approach	Enterprise Value/Forward Revenue Multiple	4.6x
			Liquidity Discount	10%
			IPO/M&A Probability	75%/25%

1 During the period ended December 31, 2018, the valuation technique was changed from Recent Market Transaction to Target Event. This was considered to be a more relevant measure of fair value for this investment.

2 During the period ended December 31, 2018, the valuation technique was changed from Target Event to Last Bid Price. This was considered to be a more relevant measure of fair value for this investment.

3 During the period ended December 31, 2018, the valuation technique was changed from Recent Market Transaction to Comparable Companies Approach. This was considered to be a more relevant measure of fair value for this investment.

F. 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.

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 tax deferral of losses on wash sales and the realization of unrealized gains or losses on certain futures 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	2,682
Undistributed Long-Term Gains	77,555
Capital Loss Carryforwards (Non-expiring)	—
Net Unrealized Gains (Losses)	85,077

As of December 31, 2018, 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	513,346
Gross Unrealized Appreciation	128,294
Gross Unrealized Depreciation	(43,217)
Net Unrealized Appreciation (Depreciation)	85,077

G. During the year ended December 31, 2018, the portfolio purchased $319,896,000 of investment securities and sold $281,157,000 of investment securities, other than temporary cash investments.

H. Capital shares issued and redeemed were:

	Year Ended December 31,	
	2018 Shares (000)	2017 Shares (000)
Issued	4,586	2,923
Issued in Lieu of Cash Distributions	1,273	1,576
Redeemed	(2,913)	(2,308)
Net Increase (Decrease) in Shares Outstanding	2,946	2,191

At December 31, 2018, one shareholder, an insurance company separate account whose holdings in the portfolio represent the indirect investment of Vanguard Variable Annuity contract holders, was the record or beneficial owner of 77% of the portfolio's net assets. If the shareholder were to redeem its investment in the portfolio, the redemption might result in an increase in the portfolio's expense ratio or cause the portfolio to incur higher transaction costs.

I. Management has determined that no events or transactions occurred subsequent to December 31, 2018, 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 Growth Portfolio

Opinion on the Financial Statements

We have audited the accompanying statement of net assets of Growth Portfolio (one of the portfolios constituting Vanguard Variable Insurance Funds, referred to hereafter as the "Portfolio") as of December 31, 2018, the related statement of operations for the year ended December 31, 2018, the statement of changes in net assets for each of the two years in the period ended December 31, 2018, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2018 (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, 2018, 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, 2018 and the financial highlights for each of the five years in the period ended December 31, 2018 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, 2018 by correspondence with the custodians and brokers and by agreement to the underlying ownership records of the transfer agent; 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 13, 2019

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

Special 2018 tax information (unaudited) for corporate shareholders only for Vanguard Growth Portfolio, a portfolio of Vanguard Variable Insurance Funds

This information for the fiscal year ended December 31, 2018, is included pursuant to provisions of the Internal Revenue Code for corporate shareholders only.

The portfolio distributed $26,215,000 as capital gain dividends (20% rate gain distributions) to shareholders during the fiscal year.

For corporate shareholders, 100% of investment income (dividend income plus short-term gains, if any) qualifies for the dividends-received deduction.

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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 212 Vanguard funds.

Information for each trustee and executive officer of the fund appears below. 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.

1 Mr. McNabb and Mr. Buckley are considered "interested persons," as defined in the Investment Company Act of 1940, because they are officers of the Vanguard funds.

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). Chairman of the board of trustees of Colby-Sawyer College. Member of the Board of Hypertherm Inc. (industrial cutting systems, software, and consumables).

Executive Officers

Glenn Booraem
Born in 1967. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Investment stewardship officer (2017–present), treasurer (2015–2017), controller (2010–2015), and assistant controller (2001–2010) of each of the investment companies served by Vanguard.

Christine M. Buchanan
Born in 1970. Principal occupation(s) during the past five years and other experience: principal of Vanguard and global head of Fund Administration at Vanguard. Treasurer (2017–present) of each of the investment companies served by Vanguard. Partner (2005–2017) at KPMG LLP (audit, tax, and advisory services).

Brian Dvorak
Born in 1973. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief compliance officer (2017–present) of Vanguard and each of the investment companies served by Vanguard. Assistant vice president (2017–present) of Vanguard Marketing Corporation. Vice president and director of Enterprise Risk Management (2011–2013) at Oppenheimer Funds, Inc.

Thomas J. Higgins
Born in 1957. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief financial officer (2008–present) and treasurer (1998–2008) of each of the investment companies served by Vanguard.

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. Director and senior vice president (2016–2018) of Vanguard Marketing Corporation. Managing director and general counsel of Global Cards and Consumer Services (2014–2016) at Citigroup. Counsel (2003–2014) at American Express.

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

Joseph Brennan	Chris D. McIsaac
Mortimer J. Buckley	James M. Norris
Gregory Davis	Thomas M. Rampulla
John James	Karin A. Risi
Martha G. King	Anne E. Robinson
John T. Marcante	Michael Rollings

Chairman Emeritus and Senior Advisor

John J. Brennan
Chairman, 1996–2009
Chief Executive Officer and President, 1996–2008

Founder

John C. Bogle
Chairman and Chief Executive Officer, 1974–1996

P.O. Box 2600
Valley Forge, PA 19482-2600

Connect with Vanguard® > vanguard.com

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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.

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, 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 sec.gov.

All comparative mutual fund data are from Lipper, a Thomson Reuters Company, or Morningstar, Inc., unless otherwise noted.

You can review information about your portfolio 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.

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

Vanguard Marketing Corporation, Distributor.

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