



**Semiannual Report** | June 30, 2018

# Vanguard Variable Insurance Fund

Equity Income Portfolio

## Vanguard's Principles for Investing Success

We want to give you the best chance of investment success. These principles, grounded in Vanguard's research and experience, can put you on the right path.

**Goals.** Create clear, appropriate investment goals.

**Balance.** Develop a suitable asset allocation using broadly diversified funds.

**Cost.** Minimize cost.

**Discipline.** Maintain perspective and long-term discipline.

A single theme unites these principles: Focus on the things you can control. We believe there is no wiser course for any investor.

### Contents

CEO's Perspective	1
Market Perspective	2
Equity Income Portfolio	3

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.

See the Glossary for definitions of investment terms used in this report.

About the cover: Nautical images have been part of Vanguard's rich heritage since its start in 1975. For an incoming ship, a lighthouse offers a beacon and safe path to shore. You can similarly depend on Vanguard to put you first—and light the way—as you strive to meet your financial goals. Our client focus and low costs, stemming from our unique ownership structure, assure that your interests are paramount.

## CEO's Perspective



**Tim Buckley**  
President and Chief Executive Officer

Dear Planholder,

I feel extremely fortunate to have the chance to lead a company filled with people who come to work every day passionate about Vanguard's core purpose: to take a stand for all investors, to treat them fairly, and to give them the best chance for investment success.

When I joined Vanguard in 1991, I found a mission-driven team focused on improving lives—helping people retire more comfortably, put their children through college, and achieve financial security. I also found a company with purpose in an industry ripe for improvement.

It was clear, even early in my career, that the cards were stacked against most investors. Hidden fees, performance-chasing, and poor advice were relentlessly eroding investors' dreams.

We knew Vanguard could be different and, as a result, could make a real difference. We have lowered the costs of investing for our shareholders significantly. And we're proud of the performance of our funds.

Vanguard is built for Vanguard investors—we focus solely on you, our fund shareholders. Everything we do is designed to give our clients the best chance for investment success. In my role as CEO,

I'll keep this priority front and center. We're proud of what we've achieved, but we're even more excited about what's to come.

### **Steady, time-tested guidance**

Our guidance for investors, as always, is to stay the course, tune out the hyperbolic headlines, and focus on your goals and what you can control, such as costs and how much you save. This time-tested advice has served our clients well over the decades.

Regardless of how the markets perform in the short term, I'm incredibly optimistic about the future for our investors. We have a dedicated team serving you, and we will never stop striving to make Vanguard the best place for you to invest through our high-quality funds and services, advice and guidance to help you meet your financial goals, and an experience that makes you feel good about entrusting us with your hard-earned savings.

Thank you for your continued loyalty.

Sincerely,

A handwritten signature in black ink, appearing to read "Mortimer J. Buckley".

Mortimer J. Buckley  
President and Chief Executive Officer  
July 13, 2018

## Market Perspective

### U.S. stocks continued to climb, even with periods of volatility

U.S. stocks advanced over the six months ended June 30, 2018, although their path forward was marked by significant bouts of volatility. Corporate earnings remained strong and the U.S. economy continued to indicate growth. Investors worried, however, about high stock valuations, the possibility of inflation, and continued tightening of monetary policy by the Federal Reserve.

The Fed's June increase in the federal funds target rate by a quarter percentage point, to 1.75%–2%, was its second in 2018. In announcing it, Fed Chair Jerome Powell offered a positive assessment of the U.S. economy. The Fed has also continued to shrink the \$4.5 trillion balance sheet it had amassed since it began providing monetary stimulus in the wake of the 2007–2009 recession.

For the six months, the broad U.S. stock market returned 3.22%. U.S. large- and mid-capitalization stocks trailed small-caps, while growth stocks exceeded value. Among sectors, information technology, consumer discretionary, and energy posted the strongest returns. Consumer staples, communication services, and industrials fared the worst.

For U.S. investors, a stronger dollar hurt international stocks, which returned –3.83%. Developed European and Pacific markets declined, as did emerging markets.

### Bond returns were down as inflation concerns heightened

Bond yields rose and prices fell over the six months as inflation expectations rose, the labor market improved, and the Fed suggested that more rate hikes were in store for 2018. (Bond prices and yields move in opposite directions.)

The yield of the benchmark 10-year Treasury note closed the period at 2.86%, up from 2.41% at the end of December 2017. The broad U.S. bond market returned –1.62% for the period. U.S. Treasuries and mortgage-backed securities generally outpaced investment-grade corporate bonds.

International bonds returned –1.31%, as measured by the Barclays Global Aggregate Index ex USD. U.S. investors were hampered by the dollar's strengthening against many currencies. Without this currency impact, international bonds were up more than 1%.

### Market Barometer

	Total Returns Periods Ended June 30, 2018		
	Six Months	One Year	Five Years <sup>1</sup>
<b>Stocks</b>			
Russell 1000 Index (Large-caps)	2.85%	14.54%	13.37%
Russell 2000 Index (Small-caps)	7.66	17.57	12.46
Russell 3000 Index (Broad U.S. market)	3.22	14.78	13.29
FTSE All-World ex US Index (International)	–3.83	7.28	6.35
<b>Bonds</b>			
Bloomberg Barclays U.S. Aggregate Bond Index (Broad taxable market)	–1.62%	–0.40%	2.27%
Bloomberg Barclays Municipal Bond Index (Broad tax-exempt market)	–0.25	1.56	3.53
FTSE Three-Month U.S. Treasury Bill Index	0.78	1.33	0.38
<b>CPI</b>			
Consumer Price Index	2.22%	2.87%	1.54%

<sup>1</sup> Annualized.

# Equity Income Portfolio

## Advisors' Report

The Equity Income Portfolio returned -1.36% for the six months ended June 30, 2018. Its benchmark, the FTSE High Dividend Yield Index, returned -1.48%, and the average return of its peers was -1.24%. 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 managed by two independent advisors, a strategy that enhances 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 provided a discussion of the investment environment that existed during the first half of 2018 and its effect on the portfolio's positioning. These reports were prepared on July 19, 2018.

### Wellington Management Company LLP

Portfolio Manager:

W. Michael Reckmeyer, III, CFA,  
Senior Managing Director

#### Market environment

Following an impressive rally in 2017, U.S. equities started the new year on shaky footing. A sharp decline at the end of January was accompanied by a substantial rise in volatility. The changes appeared to be triggered by investors' concerns about lofty valuations and potential upside risks to inflation, bond yields, and Federal Reserve policy stemming from pro-growth deregulation, tax cuts, and increased government spending. At the end of March, U.S. equity markets, as measured by the S&P 500 Index, posted negative returns for the first time in several quarters.

On the geopolitical front, fears of a global trade war rose as President Trump announced plans to impose tariffs on billions of dollars' worth of Chinese steel and aluminum. Nevertheless, U.S. economic data during the first quarter was healthy, including robust job growth and sustained low unemployment. Capital

expenditures increased in February as durable goods orders beat expectations and shipments accelerated broadly. Consumer and business confidence also remained high.

The positive U.S. economic story continued into the second quarter, resulting in an upswing in equities. Strong corporate earnings growth, as measured by the S&P 500 Index, reached levels not seen since 2010. Companies were largely upbeat about domestic growth prospects but cited rising wages, commodity prices, and logistics costs as potential headwinds. As widely anticipated, the Federal Reserve raised its benchmark interest rate by 25 basis points in June—the second hike in 2018—and signaled the potential for two more raises this year.

Despite underlying strength in the U.S., concerns remained about the sustainability of growth in light of broader macroeconomic risks. The possible effects of rising interest rates, slowing global growth, ongoing trade tensions, and Eurozone political disruptions prompted us to take a more defensive position. In particular, we sold names with higher valuations that hit our price targets and reallocated to stocks that we believe will fare better if the economy worsens.

#### Total Returns

	Six Months Ended June 30, 2018
Equity Income Portfolio	-1.36%
FTSE High Dividend Yield Index	-1.48
Variable Insurance Equity Income Funds Average <sup>1</sup>	-1.24

#### Expense Ratios<sup>2</sup>

Your Portfolio Compared With Its Peer Group

	Portfolio	Variable Insurance Equity Income Funds Average
Equity Income Portfolio	0.31 %	0.83%

#### Investment review

Individual security selection weighed most on returns for our portion of the fund. Holdings in consumer discretionary, financials, and energy detracted from relative performance. Sector allocation, a residual of our bottom-up process, contributed modestly but was not enough to offset our stock selection. An underweight to information technology also hurt, as did exposure to consumer staples

<sup>1</sup> Derived from data provided by Lipper, a Thomson Reuters Company.

<sup>2</sup> The portfolio expense ratio shown is from the prospectus dated April 26, 2018, and represents estimated costs for the current fiscal year. For the six months ended June 30, 2018, the Equity Income Portfolio's annualized expense ratio was 0.30%. The peer-group expense ratio is derived from data provided by Lipper, a Thomson Reuters Company, and captures information through year-end 2017.

companies British American Tobacco and Philip Morris International. Both companies struggled with increased pressure related to product innovation and regulation. While we continue to hold these stocks, we have trimmed our positions as we evaluate the companies' advancements in next-generation products. We also reduced our once-largest position, Microsoft, which hit insufficient yield levels as shares neared our target price. The stock continued to trend higher during the period, helped by better-than-expected revenue, growth in the cloud computing business, and solid earnings reports.

Stock selection in information technology, health care, and industrials boosted relative returns, as did overweights to the energy and utilities sectors and an underweight to industrials. The top contributor during the period was Suncor Energy, an out-of-benchmark holding. An underweight to poor performer Procter & Gamble and our decision to sell out of General Electric also helped. Our conviction in General Electric weakened after the company announced disappointing earnings at the end of 2017, lowered its guidance,

conveyed an intention to sell some of its legacy businesses, and announced the dividend would be cut in half.

Our allocation to the energy sector—our largest overweight—grew during the six months. We are positioned favorably to pipeline companies, which typically have a more defensive business model because their assets are largely regulated. We believe the oil markets will tighten over the next couple of years because of a lack of new projects and our belief that shale production cannot meet all of the incremental demand.

In addition to energy, we are also overweighted in health care, real estate, and utilities. We are most underweighted in consumer discretionary, information technology, and industrials.

New positions during the period included Comcast, Koninklijke Philips, Lockheed Martin, and American Electric Power. We also added to Johnson & Johnson and Chevron. We eliminated our stakes in VF Corporation, Raytheon, Abbott

Laboratories, and Diageo and trimmed our exposure to Cisco Systems, Phillips 66, and BlackRock.

We remain true to our philosophy and approach, focused on finding investment opportunities in quality dividend-paying companies with superior total return potential at discounted valuations.

### Vanguard Quantitative Equity Group

Portfolio Managers:

James P. Stetler

Binbin Guo, Principal, Head of Alpha Equity Investments

#### The investment environment

GDP growth was 2.0% in the first quarter of 2018, a decrease from the previous quarter's 2.9%. Contributions came from nonresidential fixed investment, personal consumption, and exports, as well as government spending at the federal, state, and local levels. These were partly offset by negative results from residential fixed income and private inventory investment, along with an increase in imports.

Unemployment rose to 4.0% in June versus expectations that it would hold steady at 3.8% from May. In its June meeting, the Federal Reserve raised its target interest rate to 1.75–2.00%, noting a still-strengthening labor market and steadily rising economic activity. The Fed also noted that inflation has moved closer to 2% and expressed concerns over the uncertainty of trade policy. U.S. stock market performance for the period was mixed; 5 of the 11 industry sectors advanced, led by information technology, consumer discretionary, and energy. Consumer staples, telecommunication services, and industrials had the worst

#### Equity Income Portfolio Investment Advisors

Investment Advisor	Portfolio Assets Managed		Investment Strategy
	%	\$ Million	
Wellington Management Company LLP	62	\$869	Employs a fundamental approach to identify desirable individual stocks, seeking those that typically offer above-average dividend yields, below-average valuations, and the potential for dividend increases in the future.
Vanguard Quantitative Equity Group	34	464	Employs a quantitative fundamental management approach, using models that assess valuation, growth prospects, management decisions, market sentiment, and earnings and balance-sheet quality of companies as compared with their peers.
Cash Investments	4	61	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.

results. Growth stocks exceeded value, and small-capitalization stocks outpaced large- and mid-caps.

**Investment objective and strategy**

Although our overall performance is affected by the macroeconomic factors we've described, our approach to investing focuses on specific stock fundamentals that we believe are more likely to produce outperformance over the long run. Those fundamentals include high quality, management decisions, consistent earnings growth, strong market sentiment, and reasonable valuation.

Using these five themes, we generate a daily composite stock ranking, seeking to capitalize on investor biases. We then monitor our portfolio based on those rankings and adjust when appropriate to maximize expected return while minimizing exposure to risks that our research indicates do not improve returns (such as industry selection and other risks relative to the benchmark).

**Our successes and shortfalls**

Over the six months, our growth model produced the largest gains; management decisions and valuations helped as well. However, our quality model detracted significantly, and the momentum model also hurt. Results exceeded the benchmark in 6 of 11 sectors and were strongest in consumer discretionary, utilities, and consumer staples. Financials, materials, and telecommunication services were the weakest relative performers.

The portfolio benefited from Ralph Lauren and Tailored Brands in consumer discretionary and First Energy and Public Service Enterprise Group in utilities, as well as an underweighted allocation to Altria Group in consumer staples. The greatest shortfalls came from Ferroglobe and Greif in materials, Federated Investors in financials, and AT&T in telecommunication services, along with an underweighted allocation to CME Group in financials.

## Portfolio Profile

As of June 30, 2018

### Portfolio Characteristics

	Portfolio	Comparative Index <sup>1</sup>	Broad Index <sup>2</sup>
Number of Stocks	169	405	3,779
Median Market Cap	\$92.9B	\$107.6B	\$64.B
Price/Earnings Ratio	16.8x	16.4x	20.7x
Price/Book Ratio	2.5x	2.5x	3.0x
Yield <sup>3</sup>	2.8%	3.2%	1.8%
Return on Equity	15.4%	15.9%	15.0%
Earnings Growth Rate	2.3%	3.3%	8.3%
Foreign Holdings	8.6%	0.0%	0.0%
Turnover Rate <sup>4</sup>	50%	—	—
Expense Ratio <sup>5</sup>	0.31%	—	—
Short-Term Reserves	1.4%	—	—

### Volatility Measures

	Portfolio Versus Comparative Index <sup>1</sup>	Portfolio Versus Broad Index <sup>2</sup>
R-Squared	0.99	0.92
Beta	0.98	0.86

### Sector Diversification (% of equity exposure)

	Portfolio	Comparative Index <sup>1</sup>	Broad Index <sup>2</sup>
Consumer Discretionary	5.8%	8.0%	13.2%
Consumer Staples	12.9	13.0	6.2
Energy	12.1	10.1	6.1
Financials	15.8	16.2	14.3
Health Care	14.9	13.4	13.7
Industrials	9.8	10.9	10.2
Information Technology	11.3	12.2	24.7
Materials	3.8	4.0	3.1
Other	0.8	0.0	0.0
Real Estate	0.9	0.0	3.8
Telecommunication Services	4.0	4.7	1.8
Utilities	7.9	7.5	2.9

### Ten Largest Holdings<sup>6</sup> (% of total net assets)

JPMorgan Chase & Co.	Diversified Banks	3.6%
Johnson & Johnson	Pharmaceuticals	3.0
Chevron Corp.	Integrated Oil & Gas	2.7
Intel Corp.	Semiconductors	2.4
Verizon Communications Inc.	Integrated Telecommunication Services	2.4
Cisco Systems Inc.	Communications Equipment	2.3
Pfizer Inc.	Pharmaceuticals	2.1
Wells Fargo & Co.	Diversified Banks	2.1
Exxon Mobil Corp.	Integrated Oil & Gas	1.9
Philip Morris International Inc.	Tobacco	1.9
Top Ten		24.4%

### Investment Focus

Style		Value	Blend	Growth
Market Cap	Large			
	Medium			
	Small			

**30-Day SEC Yield.** A portfolio's 30-day SEC yield is derived using a formula specified by the U.S. Securities and Exchange Commission. Under the formula, data related to the portfolio's security holdings in the previous 30 days are used to calculate the portfolio's hypothetical net income for that period, which is then annualized and divided by the portfolio's estimated average net assets over the calculation period. For the purposes of this calculation, a security's income is based on its current market yield to maturity (for bonds), its actual income (for asset-backed securities), or its projected dividend yield (for stocks). Because the SEC yield represents hypothetical annualized income, it will differ—at times significantly—from the portfolio's actual experience. As a result, the portfolio's income distributions may be higher or lower than implied by the SEC yield.

**Beta.** A measure of the magnitude of a portfolio's past share-price fluctuations in relation to the ups and downs of a given market index. The index is assigned a beta of 1.00. Compared with a given index, a portfolio with a beta of 1.20 typically would have seen its share price rise or fall by 12% when the index rose or fell by 10%. For this report, beta is based on returns over the past 36 months for both the portfolio and the index.

**Equity Exposure.** A measure that reflects a portfolio's investments in stocks and stock futures. Any holdings in short-term reserves are excluded.

**R-Squared.** A measure of how much of a portfolio's past returns can be explained by the returns from the market in general, as measured by a given index. If a portfolio's total returns were precisely synchronized with an index's returns, its R-squared would be 1.00. If the portfolio's returns bore no relationship to the index's returns, its R-squared would be 0. For this report, R-squared is based on returns over the past 36 months for both the portfolio and the index.

<sup>1</sup> FTSE High Dividend Yield Index.

<sup>2</sup> Dow Jones U.S. Total Stock Market Float Adjusted Index.

<sup>3</sup> 30-day SEC yield for the portfolio; annualized dividend yield for the index.

<sup>4</sup> Annualized.

<sup>5</sup> The expense ratio shown is from the prospectus dated April 26, 2018, and represents estimated costs for the current fiscal year. For the six months ended June 30, 2018, the Equity Income Portfolio's annualized expense ratio was 0.30%.

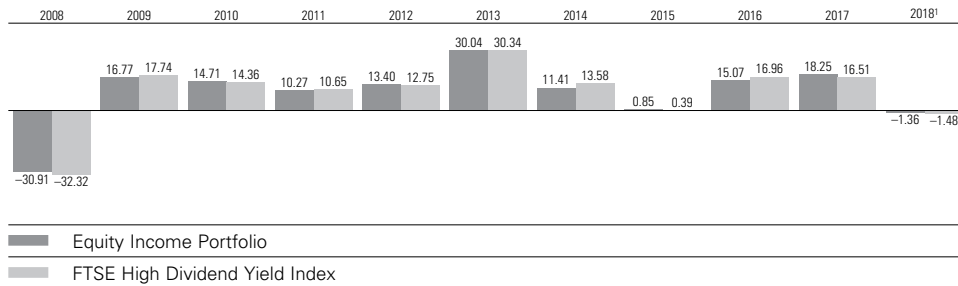
<sup>6</sup> The holdings listed exclude any temporary cash investments and equity index products.



## 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](http://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.

### Fiscal-Year Total Returns (%): December 31, 2007–June 30, 2018



### Average Annual Total Returns: Periods Ended June 30, 2018

	Inception Date	One Year	Five Years	Ten Years
Equity Income Portfolio	6/7/1993	9.83%	11.21%	10.09%

<sup>1</sup> Six months ended June 30, 2018.

See Financial Highlights for dividends and capital gains information.

## Financial Statements (unaudited)

## Statement of Net Assets

As of June 30, 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. Forms N-Q may also be reviewed and copied at the SEC's Public Reference Room (see the back cover of this report for further information).

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)	Shares	Market Value* (\$000)	
<b>Common Stocks (94.5%)<sup>1</sup></b>								
<b>Consumer Discretionary (5.2%)</b>								
Comcast Corp. Class A	559,502	18,357	^ TransCanada Corp.	249,851	10,810	CVS Health Corp.	47,928	3,084
McDonald's Corp.	67,437	10,567	Schlumberger Ltd.	155,484	10,422	Gilead Sciences Inc.	31,520	2,233
Home Depot Inc.	52,981	10,337	Kinder Morgan Inc.	489,918	8,657			<b>196,546</b>
General Motors Co.	123,571	4,869	Phillips 66	48,655	5,464	<b>Industrials (9.2%)</b>		
Cie Generale des Etablissements Michelin SCA	33,037	3,997	Valero Energy Corp.	44,178	4,896	Union Pacific Corp.	117,475	16,644
Las Vegas Sands Corp.	47,361	3,616	ConocoPhillips	41,100	2,861	Caterpillar Inc.	121,422	16,473
Dine Brands Global Inc.	37,191	2,782	^ CVR Energy Inc.	71,636	2,650	Lockheed Martin Corp.	47,980	14,175
Best Buy Co. Inc.	36,829	2,747	HollyFrontier Corp.	30,807	2,108	3M Co.	66,240	13,031
Tailored Brands Inc.	89,065	2,273	Cosan Ltd.	93,623	714	Eaton Corp. plc	153,753	11,491
Abercrombie & Fitch Co.	78,247	1,915				Boeing Co.	33,153	11,123
Polaris Industries Inc.	14,636	1,788	<b>Financials (15.0%)</b>			Honeywell International Inc.	73,843	10,637
MDC Holdings Inc.	57,515	1,770	JPMorgan Chase & Co.	480,020	50,018	United Technologies Corp.	40,625	5,079
Gannett Co. Inc.	137,151	1,467	Wells Fargo & Co.	515,822	28,597	BAE Systems plc	567,014	4,824
Ralph Lauren Corp. Class A	11,573	1,455	MetLife Inc.	408,709	17,820	General Electric Co.	236,800	3,223
John Wiley & Sons Inc. Class A	21,660	1,352	Marsh & McLennan Cos. Inc.	151,585	12,426	PACCAR Inc.	51,900	3,216
Brinker International Inc.	25,107	1,195	PNC Financial Services Group Inc.	90,541	12,232	H&E Equipment Services Inc.	71,994	2,708
Omnicom Group Inc.	9,494	724	Chubb Ltd.	75,216	9,554	Raytheon Co.	13,300	2,569
New Media Investment Group Inc.	32,766	605	M&T Bank Corp.	47,451	8,074	Copa Holdings SA Class A	23,888	2,260
Ford Motor Co.	49,037	543	American International Group Inc.	152,099	8,064	McGrath RentCorp	30,666	1,940
		<b>72,359</b>	US Bancorp	127,578	6,382	Waste Management Inc.	19,833	1,613
<b>Consumer Staples (12.3%)</b>			BlackRock Inc.	12,664	6,320	Ryder System Inc.	21,215	1,524
Philip Morris International Inc.	322,106	26,007	Travelers Cos. Inc.	46,726	5,717	United Parcel Service Inc. Class B	11,838	1,258
PepsiCo Inc.	182,462	19,865	Principal Financial Group Inc.	92,415	4,893	Norfolk Southern Corp.	7,958	1,201
Coca-Cola Co.	403,383	17,692	BB&T Corp.	80,355	4,053	Delta Air Lines Inc.	23,738	1,176
Unilever NV	311,086	17,334	Aflac Inc.	92,344	3,973	Hillenbrand Inc.	18,679	881
Procter & Gamble Co.	218,243	17,036	SunTrust Banks Inc.	55,655	3,674	Triton International Ltd.	28,534	875
Sysco Corp.	198,807	13,577	Regions Financial Corp.	184,932	3,288	Covanta Holding Corp.	52,612	868
Walmart Inc.	127,057	10,882	Fifth Third Bancorp	108,433	3,112			<b>128,789</b>
British American Tobacco plc	168,586	8,492	LPL Financial Holdings Inc.	40,448	2,651	<b>Information Technology (10.3%)</b>		
Mondelez International Inc. Class A	195,761	8,026	Lazard Ltd. Class A	50,910	2,490	Intel Corp.	683,535	33,979
Kraft Heinz Co.	99,780	6,268	Umpqua Holdings Corp.	105,999	2,395	Cisco Systems Inc.	745,795	32,092
Nestle SA	78,822	6,109	First American Financial Corp.	44,670	2,310	Analog Devices Inc.	171,621	16,462
Kellogg Co.	47,703	3,333	Prudential Financial Inc.	23,925	2,237	QUALCOMM Inc.	160,778	9,023
Clorox Co.	22,346	3,022	Kemper Corp.	29,178	2,207	Microsoft Corp.	87,408	8,619
Conagra Brands Inc.	80,815	2,888	BankUnited Inc.	50,656	2,069	Maxim Integrated Products Inc.	129,912	7,621
Altria Group Inc.	48,872	2,775	FNF Group	46,849	1,763	Texas Instruments Inc.	67,874	7,483
Nu Skin Enterprises Inc. Class A	34,431	2,692	CME Group Inc.	8,207	1,345	International Business Machines Corp.	41,322	5,773
Flowers Foods Inc.	122,843	2,559	Waddell & Reed Financial Inc. Class A	56,381	1,013	HP Inc.	186,668	4,235
General Mills Inc.	43,852	1,941	Moelis & Co. Class A	7,458	437	Broadcom Inc.	16,405	3,981
Coca-Cola European Partners plc	17,723	720	American National Insurance Co.	2,727	326	Seagate Technology plc	55,946	3,159
		<b>171,218</b>				KLA-Tencor Corp.	27,594	2,829
<b>Energy (11.7%)</b>			<b>Health Care (14.1%)</b>			Western Union Co.	129,467	2,632
Chevron Corp.	299,247	37,834	Johnson & Johnson	343,766	41,713	ManTech International Corp. Class A	39,322	2,109
Exxon Mobil Corp.	324,905	26,879	Pfizer Inc.	822,235	29,831	Cypress Semiconductor Corp.	128,042	1,995
Suncor Energy Inc.	603,828	24,564	Eli Lilly & Co.	271,035	23,127	National Instruments Corp.	28,875	1,212
Occidental Petroleum Corp.	167,071	13,981	Merck & Co. Inc.	371,187	22,531	Hewlett Packard Enterprise Co.	17,213	251
Canadian Natural Resources Ltd.	317,927	11,468	Bristol-Myers Squibb Co.	308,807	17,089			<b>143,455</b>
			Medtronic plc	178,311	15,265	<b>Materials (3.6%)</b>		
			Koninklijke Philips NV	225,634	9,560	DowDuPont Inc.	379,631	25,025
			Novartis AG	119,147	9,026	LyondellBasell Industries NV Class A	78,287	8,600
			AbbVie Inc.	89,813	8,321	International Paper Co.	151,813	7,906
			Amgen Inc.	42,721	7,886	Huntsman Corp.	87,755	2,563
			Roche Holding AG	31,013	6,880	CF Industries Holdings Inc.	52,699	2,340
						WestRock Co.	28,271	1,612
						Schnitzer Steel Industries Inc.	41,653	1,404
						Praxair Inc.	8,361	1,322
								<b>50,772</b>
						<b>Other (0.7%)</b>		
						<sup>2</sup> Vanguard High Dividend Yield ETF	119,332	9,911

Equity Income Portfolio

	Shares	Market Value* (\$000)
<b>Real Estate (0.8%)</b>		
Crown Castle International Corp.	102,572	11,059
<b>Telecommunication Services (3.9%)</b>		
Verizon Communications Inc.	664,907	33,452
AT&T Inc.	355,654	11,420
BCE Inc.	174,648	7,073
Cogent Communications Holdings Inc.	37,719	2,014
		<b>53,959</b>
<b>Utilities (7.7%)</b>		
NextEra Energy Inc.	106,837	17,845
Dominion Energy Inc.	170,896	11,652
Exelon Corp.	244,816	10,429
Sempra Energy	85,681	9,948
American Electric Power Co. Inc.	130,029	9,005
Eversource Energy	138,983	8,146
Duke Energy Corp.	87,717	6,937
Xcel Energy Inc.	141,801	6,477
Public Service Enterprise Group Inc.	72,037	3,900
FirstEnergy Corp.	97,439	3,499
Entergy Corp.	38,978	3,149
Atmos Energy Corp.	33,905	3,056
Edison International	47,718	3,019
AES Corp.	217,431	2,916
MDU Resources Group Inc.	87,618	2,513
Otter Tail Corp.	48,663	2,316
NRG Yield Inc.	56,830	978
CenterPoint Energy Inc.	21,478	595
Hawaiian Electric Industries Inc.	14,676	503
NRG Yield Inc. Class A	16,760	286
		<b>107,169</b>
<b>Total Common Stocks (Cost \$1,137,313)</b>		<b>1,317,985</b>
<b>Temporary Cash Investments (6.1%)<sup>1</sup></b>		
<b>Money Market Fund (4.5%)</b>		
<sup>3,4</sup> Vanguard Market Liquidity Fund, 2.122%	620,681	62,075

	Face Amount (\$000)	Market Value* (\$000)
<b>Repurchase Agreement (1.4%)</b>		
BNP Paribas Securities Corp. 2.120%, 7/2/18 (Dated 6/29/18, Repurchase Value \$20,204,000, collateralized by Federal Home Loan Mortgage Corp. 3.092%–3.598%, 1/1/35–8/1/47, Federal National Mortgage Assn. 2.430%–4.000%, 9/1/33–10/1/47, and Government National Mortgage Assn. 2.625%–3.375%, 2/20/42–11/20/46, with a value of \$20,604,000)	20,200	20,200
<b>U.S. Government and Agency Obligations (0.2%)</b>		
<sup>5</sup> United States Treasury Bill, 1.941%, 9/27/18	300	299
<sup>5</sup> United States Treasury Bill, 1.934%, 10/11/18	180	179
<sup>5</sup> United States Treasury Bill, 2.078%, 11/15/18	1,800	1,786
		<b>2,264</b>
<b>Total Temporary Cash Investments (Cost \$84,540)</b>		<b>84,539</b>
<b>Total Investments (100.6%) (Cost \$1,221,853)</b>		<b>1,402,524</b>
<b>Other Assets and Liabilities (-0.6%)</b>		
Other Assets		12,092
Liabilities <sup>4</sup>		(20,854)
		<b>(8,762)</b>
<b>Net Assets (100%)</b>		
Applicable to 62,562,484 outstanding \$0.01 par value shares of beneficial interest (unlimited authorization)		<b>1,393,762</b>
<b>Net Asset Value Per Share</b>		<b>\$22.28</b>

**Statement of Assets and Liabilities**

	Amount (\$000)
<b>Assets</b>	
Investments in Securities, at Value	
Unaffiliated Issuers	1,330,538
Affiliated Vanguard Issuers	71,986
Total Investments in Securities	1,402,524
Investment in Vanguard	74
Receivables for Investment Securities Sold	8,352
Receivables for Accrued Income	2,207
Receivables for Capital Shares Issued	1,159
Variation Margin Receivable—	
Futures Contracts	39
Other Assets	261
<b>Total Other Assets</b>	<b>1,414,616</b>
<b>Liabilities</b>	
Payables for Investment Securities Purchased	6,456
Collateral for Securities on Loan	12,426
Payables to Investment Advisor	211
Payables for Capital Shares Redeemed	696
Payables to Vanguard	1,065
<b>Total Liabilities</b>	<b>20,854</b>
<b>Net Assets</b>	<b>1,393,762</b>

At June 30, 2018, net assets consisted of:

	Amount (\$000)
Paid-in Capital	1,107,969
Undistributed Net Investment Income	16,831
Accumulated Net Realized Gains	89,405
Unrealized Appreciation (Depreciation)	
Investment Securities	180,671
Futures Contracts	(1,114)
Foreign Currencies	—
<b>Net Assets</b>	<b>1,393,762</b>

• See Note A in Notes to Financial Statements.

<sup>A</sup> Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$12,026,000.

<sup>1</sup> 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 98.3% and 2.3%, respectively, of net assets.

<sup>2</sup> Considered an affiliated company of the portfolio as the issuer is another member of The Vanguard Group.

<sup>3</sup> Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

<sup>4</sup> Includes \$12,426,000 of collateral received for securities on loan.

<sup>5</sup> Securities of \$2,264,000 has been segregated as initial margin for open futures contracts.

**Derivative Financial Instruments Outstanding as of Period End**

Futures Contracts				
(\$000)				
	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation)
<b>Long Futures Contracts</b>				
E-mini S&P 500 Index	Sept 2018	384	52,255	(1,114)

Unrealized appreciation (depreciation) on open futures contracts is required to be treated as realized gain (loss) for tax purposes.

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

## Statement of Operations

	Six Months Ended June 30, 2018
	(\$000)
<b>Investment Income</b>	
<b>Income</b>	
Dividends—Unaffiliated Issuers <sup>1</sup>	19,643
Dividends—Affiliated Issuers	148
Interest—Unaffiliated Issuers	176
Interest—Affiliated Issuers	379
Securities Lending—Net	58
Total Income	20,404
<b>Expenses</b>	
Investment Advisory Fees—Note B	
Basic Fee	701
Performance Adjustment	(7)
The Vanguard Group—Note C	
Management and Administrative	1,249
Marketing and Distribution	114
Custodian Fees	21
Shareholders' Reports	3
Trustees' Fees and Expenses	1
Total Expenses	2,082
<b>Net Investment Income</b>	<b>18,322</b>
<b>Realized Net Gain (Loss)</b>	
Investment Securities Sold—Unaffiliated Issuers	88,267
Investment Securities Sold—Affiliated Issuers	3
Futures Contracts	1,120
Foreign Currencies	(11)
<b>Realized Net Gain (Loss)</b>	<b>89,379</b>
<b>Change in Unrealized Appreciation (Depreciation)</b>	
Investment Securities—Unaffiliated Issuers	(125,283)
Investment Securities—Affiliated Issuers	(306)
Futures Contracts	(1,012)
Foreign Currencies	(8)
<b>Change in Unrealized Appreciation (Depreciation)</b>	<b>(126,609)</b>
<b>Net Increase (Decrease) in Net Assets Resulting from Operations</b>	<b>(18,908)</b>

<sup>1</sup> Dividends are net of foreign withholding taxes of \$330,000.

## Statement of Changes in Net Assets

	Six Months Ended June 30, 2018	Year Ended December 31, 2017
	(\$000)	(\$000)
<b>Increase (Decrease) in Net Assets</b>		
<b>Operations</b>		
Net Investment Income	18,322	31,503
Realized Net Gain (Loss)	89,379	83,246
Change in Unrealized Appreciation (Depreciation)	(126,609)	93,723
<b>Net Increase (Decrease) in Net Assets Resulting from Operations</b>	<b>(18,908)</b>	<b>208,472</b>
<b>Distributions</b>		
Net Investment Income	(31,643)	(30,286)
Realized Capital Gain <sup>1</sup>	(83,467)	(38,130)
<b>Total Distributions</b>	<b>(115,110)</b>	<b>(68,416)</b>
<b>Capital Share Transactions</b>		
Issued	146,731	185,060
Issued in Lieu of Cash Distributions	115,110	68,416
Redeemed	(106,100)	(193,435)
<b>Net Increase (Decrease) from Capital Share Transactions</b>	<b>155,741</b>	<b>60,041</b>
<b>Total Increase (Decrease)</b>	<b>21,723</b>	<b>200,097</b>
<b>Net Assets</b>		
<b>Beginning of Period</b>	<b>1,372,039</b>	<b>1,171,942</b>
<b>End of Period<sup>2</sup></b>	<b>1,393,762</b>	<b>1,372,039</b>

<sup>1</sup> Includes fiscal 2018 and 2017 short-term gain distributions totaling \$10,108,000 and \$5,782,000, respectively. Short-term gain distributions are treated as ordinary income dividends for tax purposes.

<sup>2</sup> Net Assets—End of Period includes undistributed (overdistributed) net investment income of \$16,831,000 and \$30,163,000.

## Financial Highlights

For a Share Outstanding Throughout Each Period	Six Months Ended June 30, 2018	Year Ended December 31,				
	2018	2017	2016	2015	2014	2013
<b>Net Asset Value, Beginning of Period</b>	<b>\$24.64</b>	<b>\$22.10</b>	<b>\$21.22</b>	<b>\$23.04</b>	<b>\$22.36</b>	<b>\$17.63</b>
<b>Investment Operations</b>						
Net Investment Income	.308 <sup>1</sup>	.582 <sup>1</sup>	.568	.597	.603	.532
Net Realized and Unrealized Gain (Loss) on Investments	(.625)	3.275	2.361	(.437)	1.782	4.681
Total from Investment Operations	(.317)	3.857	2.929	.160	2.385	5.213
<b>Distributions</b>						
Dividends from Net Investment Income	(.562)	(.583)	(.583)	(.596)	(.555)	(.483)
Distributions from Realized Capital Gains	(1.481)	(.734)	(1.466)	(1.384)	(1.150)	—
Total Distributions	(2.043)	(1.317)	(2.049)	(1.980)	(1.705)	(.483)
<b>Net Asset Value, End of Period</b>	<b>\$22.28</b>	<b>\$24.64</b>	<b>\$22.10</b>	<b>\$21.22</b>	<b>\$23.04</b>	<b>\$22.36</b>
<b>Total Return</b>	<b>-1.36%</b>	<b>18.25%</b>	<b>15.07%</b>	<b>0.85%</b>	<b>11.41%</b>	<b>30.04%</b>

### Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$1,394	\$1,372	\$1,172	\$940	\$978	\$911
Ratio of Total Expenses to Average Net Assets <sup>2</sup>	0.30%	0.31%	0.30%	0.31%	0.32%	0.32%
Ratio of Net Investment Income to Average Net Assets	2.67%	2.56%	2.89%	2.76%	2.69%	2.71%
Portfolio Turnover Rate	50%	38%	32%	36%	31%	34%

The expense ratio, net investment income ratio, and turnover rate for the current period have been annualized.

<sup>1</sup> Calculated based on average shares outstanding.

<sup>2</sup> Includes performance-based investment advisory fee increases (decreases) of (0.00%), (0.00%), (0.01%), (0.01%), 0.00%, and 0.00%.

## Notes to Financial Statements

Equity Income 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. 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.

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 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 futures gains (losses).

During the six months ended June 30, 2018, 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. 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.

5. 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, 2014–2017), and for the period ended June 30, 2018, and has concluded that no provision for federal income tax is required in the portfolio's financial statements.

6. Distributions: Distributions to shareholders are recorded on the ex-dividend date.

7. 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. 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.

8. 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 June 30, 2018, or at any time during the period then ended.

9. 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 firm Wellington Management Company LLP provides 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 fee of Wellington Management Company LLP is subject to quarterly adjustments based on performance relative to the FTSE High Dividend Yield Index for the preceding three years.

Vanguard provides investment advisory services to a portion of the portfolio as described below; the portfolio paid Vanguard advisory fees of \$269,000 for the six months ended June 30, 2018.

For the six months ended June 30, 2018, the aggregate investment advisory fee paid to all advisors represented an effective annual basic rate of 0.10% of the portfolio’s average net assets, before a decrease of \$7,000 (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 investment advisory, corporate management, administrative, marketing, and distribution 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 Assets and Liabilities. 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 June 30, 2018, the portfolio had contributed to Vanguard capital in the amount of \$74,000, representing 0.01% of the portfolio’s net assets and 0.03% of Vanguard’s capitalization. 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. 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.

## Equity Income Portfolio

**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 June 30, 2018, based on the inputs used to value them:

Investments	Level 1 (\$000)	Level 2 (\$000)	Level 3 (\$000)
Common Stocks	1,269,098	48,887	—
Temporary Cash Investments	62,075	22,464	—
Futures Contracts—Assets <sup>1</sup>	39	—	—
Total	1,331,212	71,351	—

<sup>1</sup> Represents variation margin on the last day of the reporting period.

E. Distributions are determined on a tax basis and may differ from net investment income and realized capital gains for financial reporting purposes. Differences may be permanent or temporary. Permanent differences are reclassified among capital accounts in the financial statements to reflect their tax character. Temporary differences arise when certain items of income, expense, gain, or loss are recognized in different periods for financial statement and tax purposes. These differences will reverse at some time in the future. Differences in classification may also result from the treatment of short-term gains as ordinary income for tax purposes. The portfolio's tax-basis capital gains and losses are determined only at the end of each fiscal year.

At June 30, 2018, the cost of investment securities for tax purposes was \$1,221,853,000. Net unrealized appreciation of investment securities for tax purposes was \$180,671,000, consisting of unrealized gains of \$219,686,000 on securities that had risen in value since their purchase and \$39,015,000 in unrealized losses on securities that had fallen in value since their purchase.

F. During the six months ended June 30, 2018, the portfolio purchased \$363,076,000 of investment securities and sold \$326,335,000 of investment securities, other than temporary cash investments.

G. Capital shares issued and redeemed were:

	Six Months Ended June 30, 2018	Year Ended December 31, 2017
	Shares (000)	Shares (000)
Issued	6,255	7,997
Issued in Lieu of Cash Distributions	5,121	3,147
Redeemed	(4,497)	(8,480)
Net Increase (Decrease) in Shares Outstanding	6,879	2,664

At June 30, 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 61% 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.



H. Transactions during the period in investments where the issuer is another member of the Vanguard Group were as follows:

	Dec. 31, 2017 Market Value (\$000)	Current Period Transactions						June 30, 2018 Market Value (\$000)
		Purchases at Cost (\$000)	Proceeds from Securities Sold (\$000)	Net Realized Gain (Loss) (\$000)	Change in Net Unrealized App. (Dep.) Income (\$000)	Capital Gain Distributions Received (\$000)		
Vanguard High Dividend Yield ETF	10,218	—	—	—	(307)	148	—	9,911
Vanguard Market Liquidity Fund	39,324	NA <sup>1</sup>	NA <sup>1</sup>	3	1	379	—	62,075
Total	49,542	—	—	3	(306)	527	—	71,986

<sup>1</sup> Not applicable—purchases and sales are for temporary cash investment purposes.

I. Management has determined that no events or transactions occurred subsequent to June 30, 2018, that would require recognition or disclosure in these financial statements.

## 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 June 30, 2018

	Beginning Account Value 12/31/2017	Ending Account Value 6/30/2018	Expenses Paid During Period <sup>1</sup>
Equity Income Portfolio			
Based on Actual Portfolio Return	\$1,000.00	\$986.40	\$1.48
Based on Hypothetical 5% Yearly Return	1,000.00	1,023.31	1.51

<sup>1</sup> 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 0.30%. 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 (181/365).

## Trustees Approve Advisory Arrangements

The board of trustees of Vanguard Variable Insurance Fund Equity Income Portfolio has renewed the portfolio's investment advisory arrangements with Wellington Management Company LLP (Wellington Management) and The Vanguard Group, Inc. (Vanguard), through its Quantitative Equity Group. The board determined that renewing the portfolio's advisory arrangements was in the best interests of the portfolio and its shareholders.

The board based its decision upon an evaluation of each advisor's investment staff, portfolio management process, and performance. This evaluation included information provided to the board by Vanguard's Portfolio Review Department, which is responsible for fund and advisor oversight and product management. The Portfolio Review Department met regularly with the advisors and made monthly presentations to the board during the fiscal year that directed the board's focus to relevant information and topics.

The board, or an investment committee made up of board members, also received information throughout the year during advisor presentations. For each advisor presentation, the board was provided with letters and reports that included information about, among other things, the advisory firm and the advisor's assessment of the investment environment, portfolio performance, and portfolio characteristics.

In addition, the board received monthly reports, which included a Market and Economic Report, a Fund Dashboard Monthly Summary, and a Fund Performance Report.

Prior to their meeting, the trustees were provided with a memo and materials that summarized the information they received over the course of the year. They also considered the factors discussed below, among others. However, no single factor determined whether the board approved the arrangements. Rather, it was the totality of the circumstances that drove the board's decision.

### **Nature, extent, and quality of services**

The board reviewed the quality of the portfolio's investment management services over both the short and long term and took into account the organizational depth and stability of each advisor. The board considered the following:

**Wellington Management.** Founded in 1928, Wellington Management is among the nation's oldest and most respected institutional investment managers. Utilizing fundamental research, Wellington Management seeks to build a portfolio with an above-market yield, superior growth rate, and more attractive valuation. While every company purchased for the portfolio will pay a dividend, the goal is to build a portfolio with an above-market yield in aggregate, allowing for individual companies with below-market yields. Normalized earnings, normalized price/earnings ratios, and improving returns on capital are key to the research process. The firm has advised a portion of the portfolio since 2003.

**Vanguard.** Vanguard has been managing investments for more than four decades. The Quantitative Equity Group adheres to a sound, disciplined investment management process; the team has considerable experience, stability, and depth. Vanguard has managed a portion of the portfolio since 2003.

The board concluded that each advisor's experience, stability, depth, and performance, among other factors, warranted continuation of the advisory arrangements.

### **Investment performance**

The board considered the short- and long-term performance of the portfolio, including any periods of outperformance or underperformance compared with a relevant benchmark index and peer group. The board concluded that the performance was such that each advisory arrangement should continue. Information about the portfolio's most recent performance can be found in the Performance Summary section of this report.

### **Cost**

The board concluded that the portfolio's expense ratio was well below the average expense ratio charged by funds in its peer group and that the portfolio's advisory expense rate was also well below the peer-group average. Information about the portfolio's expense ratio appears in the About Your Portfolio's Expenses section as well as in the Financial Statements section, which also includes information about the portfolio's advisory expense rate.

The board did not consider the profitability of Wellington Management in determining whether to approve the advisory fee because Wellington Management is independent of Vanguard and the advisory fee is the result of arm's-length negotiations. The board does not conduct a profitability analysis of Vanguard because of Vanguard's unique "at-cost" structure. Unlike most other mutual fund management companies, Vanguard is owned by the funds it oversees and produces "profits" only in the form of reduced expenses for shareholders.

**The benefit of economies of scale**

The board concluded that the portfolio realizes economies of scale that are built into the advisory fee rate negotiated with Wellington Management without any need for asset-level breakpoints. Wellington Management's advisory fee rate is very low relative to the average rate paid by funds in the portfolio's peer group. The board also concluded that the portfolio's at-cost arrangement with Vanguard ensures that the portfolio will realize economies of scale as it grows, with the cost to shareholders declining as the portfolio's assets managed by Vanguard increase.

The board will consider whether to renew the advisory arrangements again after a one-year period.

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

# 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 on an at-cost basis.

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 208 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](http://vanguard.com).

## Interested Trustees<sup>1</sup>

### F. William McNabb III

Born in 1957. Trustee since July 2009. Principal occupation(s) during the past five years and other experience: chairman of the board (January 2010–present) of Vanguard and of each of the investment companies served by Vanguard, trustee (2009–present) of each of the investment companies served by Vanguard, and director (2008–present) of Vanguard. Chief executive officer and president (2008–2017) of Vanguard and each of the investment companies served by Vanguard, managing director (1995–2008) of Vanguard, and director (1997–2018) of Vanguard Marketing Corporation. Director (2018–present) of UnitedHealth Group.

### Mortimer J. Buckley

Born in 1969. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chief executive officer (January 2018–present) of Vanguard; chief executive officer, president, and trustee (January 2018–present) of each of the investment companies served by Vanguard; president and director (2017–present) of Vanguard; and president (February 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. Chairman of the board (2011–2017) of the Children's Hospital of Philadelphia.

## Independent Trustees

### 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. Lead director of SPX FLOW, Inc. (multi-industry manufacturing). Director of the University of Rochester Medical Center, the Monroe Community College Foundation, the United Way of Rochester, North Carolina A&T University, and Roberts Wesleyan College. Trustee of the University of Rochester.

### Amy Gutmann

Born in 1949. Trustee since June 2006. Principal occupation(s) during the past five years and other experience: president (2004–present) of the University of Pennsylvania. Christopher H. Browne Distinguished Professor of Political Science, School of Arts and Sciences, and professor of communication, Annenberg School for Communication, with secondary faculty appointments in the Department of Philosophy, School of Arts and Sciences, and at the Graduate School of Education, University of Pennsylvania. Trustee of the National Constitution Center.

### JoAnn Heffernan Heisen

Born in 1950. Trustee since July 1998. Principal occupation(s) during the past five years and other experience: corporate vice president of Johnson & Johnson (pharmaceuticals/medical devices/consumer products) and member of its executive committee (1997–2008). Chief global diversity officer (retired 2008), vice president and chief information officer (1997–2006), controller (1995–1997), treasurer (1991–1995), and assistant treasurer (1989–1991) of Johnson & Johnson. Director of Skytop Lodge Corporation (hotels) and the Robert Wood Johnson Foundation. Member of the advisory board of the Institute for Women's Leadership at Rutgers University.

### 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), Oxfam America, and the Lumina Foundation for Education. Director of the V Foundation for Cancer Research. Member of the advisory council for the College of Arts and Letters and chair of the advisory board to the Kellogg Institute for International Studies, both at the University of Notre Dame.

### 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: chief investment officer (1989–present) and vice president (1996–present) of the University of Notre Dame. Assistant professor of finance at the Mendoza College of Business, University of Notre Dame, and member of the Notre Dame 403(b) Investment Committee. Chairman of the board of TIFF Advisory Services, Inc. Member of the board of Catholic Investment Services, Inc. (investment advisors), the board of advisors for Spruceview Capital Partners, and the board of superintendence of the Institute for the Works of Religion.

### Deanna Mulligan

Born in 1963. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: president (2010–present) and chief executive officer (2011–present) 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 Guardian Life Insurance Company of America, the American Council of Life Insurers, the Partnership for New York City (business leadership), and the Committee Encouraging Corporate Philanthropy. Trustee of the Economic Club of New York and the Bruce Museum (arts and science). Member of the Advisory Council for the Stanford Graduate School of Business.

### 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 LLC (private investment firm). Overseer of the Museum of Fine Arts Boston.

### 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. Member of the board of directors (2012–2014) of Neighborhood Reinvestment Corporation. Director of i(x) Investments, LLC.

<sup>1</sup> 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**

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

**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](http://vanguard.com)

**Fund Information** > 800-662-7447

**Annuity and Insurance Services** > 800-522-5555

**Institutional Investor Services** > 800-523-1036

**Text Telephone for People**

**Who Are Deaf or Hard of Hearing** > 800-749-7273

**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](http://vanguard.com/proxyreporting) or by calling Vanguard at 800-662-2739. The guidelines are also available from the SEC's website, [sec.gov](http://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](http://vanguard.com/proxyreporting) or [sec.gov](http://sec.gov).

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

You can review and copy information about your portfolio at the SEC's Public Reference Room in Washington, D.C. To find out more about this public service, call the SEC at 202-551-8090. Information about your portfolio is also available on the SEC's website, and you can receive copies of this information, for a fee, by sending a request in either of two ways: via email addressed to [publicinfo@sec.gov](mailto:publicinfo@sec.gov) or via regular mail addressed to the Public Reference Section, Securities and Exchange Commission, Washington, DC 20549-1520.

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.

Source for Bloomberg Barclays indexes: Bloomberg Index Services Limited. Copyright 2017, Bloomberg. All rights reserved.

CFA® is a trademark owned by CFA Institute.

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

© 2018 The Vanguard Group, Inc.  
All rights reserved.  
Vanguard Marketing Corporation, Distributor.

Q692Eqc 082018