

Semiannual Report | June 30, 2023

# Vanguard Variable Insurance Funds

Diversified Value Portfolio

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### About Your Portfolio's Expenses

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

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

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

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

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

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

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

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

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

#### Six Months Ended June 30, 2023

Diversified Value Portfolio	Beginning Account Value 12/31/2022	Ending Account Value 6/30/2023	Expenses Paid During Period
Based on Actual Portfolio Return	\$1,000.00	\$1,099.80	\$1.51
Based on Hypothetical 5% Yearly Return	1,000.00	1,023.36	1.45

The calculations are based on expenses incurred in the most recent six-month period. The portfolio's annualized six-month expense ratio for that period is 0.29%. The dollar amounts shown as "Expenses Paid" are equal to the annualized expense ratio multiplied by the average account value over the period, multiplied by the number of days in the most recent six-month period, then divided by the number of days in the most recent 12-month period (181/365).

#### **Diversified Value Portfolio**

### Portfolio Allocation

As of June 30, 2023

Communication Services	9.2%
Consumer Discretionary	9.8
Consumer Staples	5.2
Energy	8.0
Financials	20.9
Health Care	15.6
Industrials	9.7
Information Technology	18.2
Materials	1.2
Real Estate	1.4
Utilities	0.8

The table reflects the portfolio's investments, except for short-term investments and derivatives. Sector categories are based on the Global Industry Classification Standard ("GICS"), except for the "Other" category (if applicable), which includes securities that have not been provided a GICS classification as of the effective reporting period.

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.

### Financial Statements (unaudited)

### Schedule of Investments

As of June 30, 2023

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

	Shares	Market Value* (\$000)
Common Stocks (95.2%)		
Communication Services (8.8	1%)	
* Alphabet Inc. Class A	442,645	52,985
Comcast Corp. Class A	221,538	9,205
* Meta Platforms Inc.		
Class A	30,848	8,853
* Walt Disney Co.	81,933	7,315
Warner Bros	000 470	4.040
Discovery Inc.	386,179	4,843
News Corp. Class A	235,644	4,595
Vodafone Group plc ADR	366,849	3,467
Omnicom Group Inc.	29,391	2,796
Paramount Global Class B	136,100	2,165
D (0.00		96,224
Consumer Discretionary (9.39		00.700
* Amazon.com Inc.	282,138	36,780
McDonald's Corp.	53,072	15,837
General Motors Co.	303,083	11,687
Home Depot Inc.	32,983	10,246
Magna International Inc.	144,775	8,171
Aptiv plc	79,606	8,127
NIKE Inc. Class B	49,779	5,494
Booking Holdings Inc.	800	2,160
BorgWarner Inc. (XNYS)	43,600	2,133
Adient plc	41,837 _	1,603
		102,238
Consumer Staples (5.0%)		
Procter & Gamble Co.	91,036	13,814
Coca-Cola Co.	212,677	12,807
Mondelez International Inc.	101 E00	7404
Class A	101,502	7,404
Sysco Corp. Unilever plc ADR	95,685 133,693	7,100 6,969
Estee Lauder Cos. Inc.	133,033	0,303
Class A	31,905	6,265
		54,359
Energy (7.7%)		34,333
Chevron Corp.	93,759	14,753
ConocoPhillips	133,968	13,880
APA Corp.	337,753	11,541
Shell plc ADR	124,036	7,489
NOV Inc.	398,515	6,392
Marathon Oil Corp.	271,787	6,257
Ovintiv Inc. (XNYS)	119,700	4,557
Pioneer Natural Resources	110,700	1,007
Co.	21,526	4,460
Halliburton Co.	107,479	3,546
Murphy Oil Corp.	92,540	3,544
Cenovus Energy Inc.	196,400	3,335
Baker Hughes Co. Class A	67,300	2,127
Schlumberger NV	42,300	2,078
-	_	83,959
Financials (19.9%)		/
Wells Fargo & Co.	632,840	27,010
Bank of America Corp.	756,780	21,712
Visa Inc. Class A	89,099	21,159
Intercontinental	•	
Exchange Inc.	169,289	19,143
American Express Co.	97,021	16,901

	Shares	Market Value* (\$000)
American International		
Group Inc.	276,302	15,898
Citigroup Inc.	318,653	14,671
Marsh & McLennan Cos.	70 410	10.007
Inc.	73,410	13,807
US Bancorp Goldman Sachs Group Inc.	306,300 25,290	10,120 8,157
Citizens Financial	25,290	0,107
Group Inc.  Bank of New York Mellon	304,961	7,953
Corp.  Hartford Financial Services	177,834	7,917
Group Inc.	91,600	6,597
First Citizens BancShares Inc. Class A	4,372	5,611
Charles Schwab Corp.	96,956	5,496
Fidelity National Information	00,000	0,100
Services Inc. Commerce	97,100	5,311
Bancshares Inc.	77,284	3,764
Capital One Financial Corp.	20,500	2,242
Corebridge Financial Inc.	102,500	1,810
Equitable Holdings Inc.	65,264	1,773
State Street Corp.	23,210	1,699
	=	218,751
Health Care (14.8%)		
Johnson & Johnson	157,474	26,065
UnitedHealth Group Inc.	34,310	16,491
Medtronic plc	177,227	15,614
Thermo Fisher		
Scientific Inc.	25,955	13,542
Danaher Corp.	53,847	12,923
Elevance Health Inc.	28,281	12,565
* Boston Scientific Corp.	177,037	9,576
CVS Health Corp.	116,900	8,081
* IQVIA Holdings Inc.	32,518	7,309
Zoetis Inc.	40,482	6,972
Humana Inc.	14,421	6,448
Centene Corp.	80,460	5,427
HCA Healthcare Inc.	17,800	5,402
GE Healthcare Inc.	49,217	3,998
Cigna Group	13,800	3,872
Zimmer Biomet	0.4.011	2.406
Holdings Inc.	24,011	3,496
Sanofi ADR GSK plc ADR	50,164 60,732	2,704 2,165
dok pie ADIT		
Industrials (9.3%)		162,650
Honeywell		
International Inc.	88,131	18,287
FedEx Corp.	42,033	10,420
Norfolk Southern Corp.	43,775	9,926
General Electric Co.	90,352	9,925
Waste Management Inc.	56,171	9,741
HEICO Corp.	36,941	6,536
Cummins Inc.	25,451	6,240
Caterpillar Inc.	22,856	5,624
* Boeing Co.	25,300	5,342
PACCAR Inc.	58,980	4,934

	01	Market Value*
	Shares	(\$000)
Raytheon Technologies	44.000	4.000
Corp.	44,800	4,389
CNH Industrial NV	300,734	4,331
Timken Co.	27,700	2,535
Nordson Corp. * Fluor Corp.	8,373 51,050	2,078
Fluor Corp.	51,050	1,511
		101,819
Information Technology (17.3		70 474
Microsoft Corp.	206,068	70,174
Analog Devices Inc.  * F5 Inc.	65,469	12,754
* Workday Inc. Class A	79,900 49.100	11,686 11,091
Amphenol Corp. Class A	130,356	11,091
Cisco Systems Inc.	176,262	9,120
Telefonaktiebolaget LM	170,202	9,120
Ericsson ADR	1,660,415	9,049
* Salesforce Inc.	42,463	8,971
Applied Materials Inc.	60,163	8,696
Accenture plc Class A	24,793	7,651
* Adobe Inc.	10,475	5,122
TE Connectivity Ltd.	33,460	4,690
Corning Inc.	122,030	4,276
Oracle Corp.	34,364	4,092
Micron Technology Inc.	62,400	3,938
Cognex Corp.	55,590	3,114
International Business Machines Corp.	20,010	2,678
Cognizant Technology Solutions Corp. Class A	33,200	2,167
		190,343
Materials (1.1%)		
Avery Dennison Corp.	36,480	6,267
Olin Corp.	96,900	4,980
International Paper Co.	37,197	1,183
		12,430
Real Estate (1.3%)		
Prologis Inc.	116,991	14,347
Utilities (0.7%)	204.055	0.000
PPL Corp.	304,955	8,069
Total Common Stocks (Cost \$930,723)		1,045,189

	Shares	Market Value* (\$000)
Temporary Cash Investments (	4.6%)	
Money Market Fund (4.6%)  1 Vanguard Market Liquidity Fund, 5.150% (Cost \$50,228)	502,324	50,222
Total Investments (99.8%) (Cost \$980,951)		1,095,411
Other Assets and Liabilities — Net (0.2%)		1,990
Net Assets (100%)		1,097,401

Cost is in \$000.

- See Note A in Notes to Financial Statements.
   Non-income-producing security.
- Non-income-producing security.

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

  ADR—American Depositary Receipt.

Derivative Financial Instruments Outstanding as of Period End					
Futures Contracts					
				(\$000)	
	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation)	
Long Futures Contracts					
E-mini S&P 500 Index	September 2023	124	27,827	858	

# Statement of Assets and Liabilities As of June 30, 2023

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value	
Unaffiliated Issuers (Cost \$930,723)	1,045,189
Affiliated Issuers (Cost \$50,228)	50,222
Total Investments in Securities	1,095,411
Investment in Vanguard	37
Cash	756
Cash Collateral Pledged—Futures Contracts	1,391
Receivables for Accrued Income	1,331
Receivables for Capital Shares Issued	567
Variation Margin Receivable—Futures Contracts	326
Total Assets	1,099,819
Liabilities	
Payables for Investment Securities Purchased	1,624
Payables to Investment Advisor	346
Payables for Capital Shares Redeemed	376
Payables to Vanguard	72
Total Liabilities	2,418
Net Assets	1,097,401
At June 30, 2023, net assets consisted of:	
Paid-in Capital	944,846
Total Distributable Earnings (Loss)	152,555
Net Assets	1,097,401
Net Assets	
Applicable to 76,683,733 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	1,097,401
Net Asset Value Per Share	\$14.31

### Statement of Operations

	Six Months Ended June 30, 2023
	(\$000)
Investment Income	
Income	
Dividends <sup>1</sup>	9,265
Interest <sup>2</sup>	1,590
Securities Lending—Net	2
Total Income	10,857
Expenses	
Investment Advisory Fees—Note B	}
Basic Fee	632
Performance Adjustment	63
The Vanguard Group—Note C	
Management and Administrativ	re 805
Marketing and Distribution	31
Custodian Fees	6
Shareholders' Reports	12
Trustees' Fees and Expenses	_
Other Expenses	4
Total Expenses	1,553
Net Investment Income	9,304
Realized Net Gain (Loss)	
Investment Securities Sold <sup>2</sup>	26,613
Futures Contracts	2,225
Foreign Currencies	(1)
Realized Net Gain (Loss)	28,837
Change in Unrealized Appreciation (Depreciation)	on
Investment Securities <sup>2</sup>	63,134
Futures Contracts	1,486
Change in Unrealized Appreciation (Depreciation)	on 64,620
Net Increase (Decrease) in Net As Resulting from Operations	ssets 102,761

<sup>1</sup> Dividends are net of foreign withholding taxes of \$63,000.

### Statement of Changes in Net Assets

	Six Months Ended June 30, 2023	Year Ended December 31, 2022
	(\$000)	(\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	9,304	15,475
Realized Net Gain (Loss)	28,837	59,754
Change in Unrealized Appreciation (Depreciation)	64,620	(218,788)
Net Increase (Decrease) in Net Assets Resulting from Operations	102,761	(143,559)
Distributions		
Total Distributions	(74,908)	(114,358)
Capital Share Transactions		
Issued	29,409	137,508
Issued in Lieu of Cash Distributions	74,908	114,358
Redeemed	(104,642)	(152,810)
Net Increase (Decrease) from Capital Share Transactions	(325)	99,056
Total Increase (Decrease)	27,528	(158,861)
Net Assets		
Beginning of Period	1,069,873	1,228,734
End of Period	1,097,401	1,069,873

<sup>2</sup> Interest income, realized net gain (loss), and change in unrealized appreciation (depreciation) from an affiliated company of the portfolio were \$1,554,000, less than \$1,000, and (\$4,000), respectively. Purchases and sales are for temporary cash investment purposes.

### Financial Highlights

	Six Months Ended					
For a Share Outstanding	June 30,			Year E	inded Dece	mber 31,
Throughout Each Period	2023	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$14.01	\$17.45	\$13.74	\$16.45	\$14.33	\$17.04
Investment Operations						
Net Investment Income <sup>1</sup>	.121	.204	.183	.209	.364	.412
Net Realized and Unrealized Gain (Loss) on Investments	1.188	(2.034)	3.940	.133	3.135	(1.872)
Total from Investment Operations	1.309	(1.830)	4.123	.342	3.499	(1.460)
Distributions						
Dividends from Net Investment Income	(.210)	(.181)	(.174)	(.409)	(.462)	(.423)
Distributions from Realized Capital Gains	(.799)	(1.429)	(.239)	(2.643)	(.917)	(.827)
Total Distributions	(1.009)	(1.610)	(.413)	(3.052)	(1.379)	(1.250)
Net Asset Value, End of Period	\$14.31	\$14.01	\$17.45	\$13.74	\$16.45	\$14.33
Total Return	9.98%	-11.49%	30.47%	11.78%	25.70%	-9.12%
Ratios/Supplemental Data						
Net Assets, End of Period (Millions)	\$1,097	\$1,070	\$1,229	\$951	\$974	\$887
Ratio of Total Expenses to Average Net Assets <sup>2</sup>	0.29%	0.29%	0.28%	0.28%	0.24%	0.25%
Ratio of Net Investment Income to Average Net Assets	1.71%	1.38%	1.14%	1.70%	2.39%	2.58%
Portfolio Turnover Rate	11%	25%	25%	34%	117%	18%

The expense ratio and net investment income ratio 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 0.01%, 0.01%, 0.01%, 0.00%, (0.03%), and (0.03%).

#### Notes to Financial Statements

The Diversified Value Portfolio, a portfolio of Vanguard Variable Insurance Funds, is registered under the Investment Company Act of 1940 as an open-end investment company. The portfolio's shares are only available for purchase by separate accounts of insurance companies as investments for variable annuity plans, variable life insurance contracts, or other variable benefit insurance contracts.

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

- 1. Security Valuation: Securities are valued as of the close of trading on the New York Stock Exchange (generally 4 p.m., Eastern time) on the valuation date. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. Securities for which market quotations are not readily available, or whose values have been affected by events occurring before the portfolio's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.
- 2. Foreign Currency: Securities and other assets and liabilities denominated in foreign currencies are translated into U.S. dollars using exchange rates obtained from an independent third party as of the portfolio's pricing time on the valuation date. Realized gains (losses) and unrealized appreciation (depreciation) on investment securities include the effects of changes in exchange rates since the securities were purchased, combined with the effects of changes in security prices. Fluctuations in the value of other assets and liabilities resulting from changes in exchange rates are recorded as unrealized foreign currency gains (losses) until the assets or liabilities are settled in cash, at which time they are recorded as realized foreign currency gains (losses).
- 3. Futures Contracts: The portfolio uses index futures contracts to a limited extent, with the objective of maintaining full exposure to the stock market while maintaining liquidity. The portfolio may purchase or sell futures contracts to achieve a desired level of investment, whether to accommodate portfolio turnover or cash flows from capital share transactions. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the portfolio and the prices of futures contracts, and the possibility of an illiquid market. Counterparty risk involving futures is mitigated because a regulated clearinghouse is the counterparty instead of the clearing broker. To further mitigate counterparty risk, the portfolio trades futures contracts on an exchange, monitors the financial strength of its clearing brokers and clearinghouse, and has entered into clearing agreements with its clearing brokers. The clearinghouse imposes initial margin requirements to secure the portfolio's performance and requires daily settlement of variation margin representing changes in the market value of each contract. Any securities pledged as initial margin for open contracts are noted in the Schedule of Investments.

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

During the six months ended June 30, 2023, the portfolio's average investments in long and short futures contracts represented 2% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

- 4. Federal Income Taxes: The portfolio intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The portfolio's tax returns are open to examination by the relevant tax authorities until expiration of the applicable statute of limitations, which is generally three years after the filing of the tax return. Management has analyzed the portfolio's tax positions taken for all open federal and state income tax years, and has concluded that no provision for income tax is required in the portfolio's financial statements.
- 5. Distributions: Distributions to shareholders are recorded on the ex-dividend date. Distributions are determined on a tax basis at the fiscal year-end and may differ from net investment income and realized capital gains for financial reporting purposes.
- 6. Securities Lending: To earn additional income, the portfolio lends its securities to qualified institutional borrowers. Security loans are subject to termination by the portfolio at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or

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

7. Credit Facilities and Interfund Lending Program: The portfolio and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the portfolio's regulatory and contractual borrowing restrictions. With respect to the committed credit facility, the participating funds are charged administrative fees and an annual commitment fee of 0.10% of the undrawn committed amount of the facility, which are allocated to the funds based on a method approved by the portfolio's board of trustees and included in Management and Administrative expenses on the portfolio's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the portfolio and Vanguard.

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

For the six months ended June 30, 2023, the portfolio did not utilize the credit facilities or the Interfund Lending Program.

- 8. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.
- B. The investment advisory firms Lazard Asset Management LLC and Hotchkis and Wiley Capital Management, LLC, each provide investment advisory services to a portion of the portfolio for a fee calculated at an annual percentage rate of average net assets managed by the advisor. The basic fees of Lazard Asset Management LLC and Hotchkis and Wiley Capital Management, LLC, are subject to quarterly adjustments based on performance relative to the S&P 500 Index and the Russell 1000 Value Index, respectively, since December 31, 2019.

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

For the six months ended June 30, 2023, the aggregate investment advisory fee paid to all advisors represented an effective annual basic rate of 0.12% of the portfolio's average net assets, before a net increase of \$63,000 (0.01%) based on performance.

C. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the portfolio, Vanguard furnishes to the portfolio corporate management, administrative, marketing,

distribution and cash management services at Vanguard's cost of operations (as defined by the FSA). These costs of operations are allocated to the portfolio based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the portfolio may invest up to 0.40% of its net assets as capital in Vanguard. At June 30, 2023, the portfolio had contributed to Vanguard capital in the amount of \$37,000, representing less than 0.01% of the portfolio's net assets and 0.01% of Vanguard's capital received pursuant to the FSA. The portfolio's trustees and officers are also directors and employees, respectively, of Vanguard.

- **D.** Various inputs may be used to determine the value of the portfolio's investments and derivatives. These inputs are summarized in three broad levels for financial statement purposes. The inputs or methodologies used to value securities are not necessarily an indication of the risk associated with investing in those securities.
- Level 1—Quoted prices in active markets for identical securities.
- **Level 2**—Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).
- **Level 3**—Significant unobservable inputs (including the portfolio's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.

At June 30, 2023, 100% of the market value of the portfolio's investments and derivatives was determined based on Level 1 inputs.

E. As of June 30, 2023, 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	981,791
Gross Unrealized Appreciation	182,930
Gross Unrealized Depreciation	(68,452)
Net Unrealized Appreciation (Depreciation)	114,478

- F. During the six months ended June 30, 2023, the portfolio purchased \$109,652,000 of investment securities and sold \$165,578,000 of investment securities, other than temporary cash investments.
- G. Capital shares issued and redeemed were:

	Six Months Ended June 30, 2023	Year Ended December 31, 2022
	Shares (000)	Shares (000)
Issued	2,082	8,931
Issued in Lieu of Cash Distributions	5,696	7,279
Redeemed	(7,463)	(10,246)
Net Increase (Decrease) in Shares Outstanding	315	5,964

H. Significant market disruptions, such as those caused by pandemics (e.g., COVID-19 pandemic), natural or environmental disasters, war (e.g., Russia's invasion of Ukraine), acts of terrorism, or other events, can adversely affect local and global markets and normal market operations. Any such disruptions could have an adverse impact on the value of the portfolio's investments and portfolio performance.

To the extent the portfolio's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the portfolio may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

The use of derivatives may expose the portfolio to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions

can, therefore, increase volatility. Additional information regarding the portfolio's use of derivative(s) and the specific risks associated is described under significant accounting policies.

At June 30, 2023, two shareholders (insurance company separate accounts whose holdings in the portfolio represent the indirect investment of Vanguard Variable Annuity contract holders) were each a record or beneficial owner of at least 25% or more of the portfolio's net assets, with a combined ownership of 78%. If any of these shareholders were to redeem their investment in the portfolio, the redemption might result in an increase in the portfolio's expense ratio, cause the portfolio to incur higher transaction costs or lead to the realization of taxable capital gains.

I. Management has determined that no events or transactions occurred subsequent to June 30, 2023, that would require recognition or disclosure in these financial statements.

### Trustees Approve Advisory Arrangements

The board of trustees of Vanguard Variable Insurance Funds Diversified Value Portfolio has renewed the portfolio's investment advisory arrangement with Hotchkis and Wiley Capital Management, LLC (Hotchkis and Wiley), and Lazard Asset Management LLC (Lazard). 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 decisions 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 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 periodic reports throughout the year, which included information about the portfolio's performance relative to its peers and benchmark, as applicable, and updates, as needed, on the Portfolio Review Department's ongoing assessment of the advisor.

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 decisions.

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

The board considered the quality of the investment management services to be provided by Hotchkis and Wiley and Lazard and took into account the organizational depth and stability of each advisor. The board considered the following:

Hotchkis and Wiley. Founded in 1980, Hotchkis and Wiley is a value-oriented firm that manages various large-, mid-, and small-cap portfolios. Hotchkis and Wiley invests in companies where it believes that the present value of future cash flows exceeds the market price. The firm believes that the market frequently undervalues companies because of the extrapolation of current trends, while capital flows normally cause a company's returns and profitability to normalize over the long term. Hotchkis and Wiley seeks to identify these companies with a disciplined, bottom-up research process. The portfolio managers leverage the support of a broad analyst team, which is organized into sector teams in an effort to better understand the impact that industry dynamics and macroeconomic risk factors might have on individual companies. Hotchkis and Wiley has managed a portion of the portfolio since December 2019.

Lazard. Lazard, a subsidiary of the investment bank Lazard Ltd., provides investment management services for clients around the world in a variety of investment mandates, including international equities, domestic equities, and fixed income securities.

The investment team at Lazard employs a relative value, bottom-up stock selection process to identify stocks with sustainable financial productivity and attractive valuations. Utilizing scenario analysis, the team seeks to understand the durability and future direction of financial productivity and valuation. Lazard has managed a portion of the portfolio since December 2019.

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

#### Investment performance

The board considered the performance of each advisor, 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 the advisory arrangements should continue.

#### Cost

The board concluded that the portfolio's expense ratio was below the average expense ratio charged by funds in its peer group and that the portfolio's advisory fee rate was also below the peer-group average.

The board did not consider the profitability of Hotchkis and Wiley and Lazard in determining whether to approve the advisory fees, because the firms are independent of Vanguard and the advisory fees are the result of arm's-length negotiations.

#### The benefit of economies of scale

The board concluded that the portfolio will realize economies of scale that are built into the advisory fee rates negotiated with Hotchkis and Wiley and Lazard without any need for asset-level breakpoints. The advisory fee rates are very low relative to the average rate paid by funds in the portfolio's peer group.

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

### Liquidity Risk Management

Vanguard funds (except for the money market funds) have adopted and implemented a written liquidity risk management program (the "Program") as required by Rule 22e-4 under the Investment Company Act of 1940. Rule 22e-4 requires that each fund adopt a program that is reasonably designed to assess and manage the fund's liquidity risk, which is the risk that the fund could not meet redemption requests without significant dilution of remaining investors' interests in the fund.

Assessment and management of a fund's liquidity risk under the Program take into consideration certain factors, such as the fund's investment strategy and the liquidity of its portfolio investments during normal and reasonably foreseeable stressed conditions, its short- and long-term cash-flow projections during both normal and reasonably foreseeable stressed conditions, and its cash and cash-equivalent holdings and access to other funding sources. As required by the rule, the Program includes policies and procedures for classification of fund portfolio holdings in four liquidity categories, maintaining certain levels of highly liquid investments, and limiting holdings of illiquid investments.

The board of trustees of Vanguard Variable Insurance Funds approved the appointment of liquidity risk management program administrators responsible for administering Diversified Value Portfolio's Program and for carrying out the specific responsibilities set forth in the Program, including reporting to the board on at least an annual basis regarding the Program's operation, its adequacy, and the effectiveness of its implementation for the past year (the "Program Administrator Report"). The board has reviewed the Program Administrator Report covering the period from January 1, 2022, through December 31, 2022 (the "Review Period"). The Program Administrator Report stated that during the Review Period the Program operated and was implemented effectively to manage the portfolio's liquidity risk.

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