

**Semiannual Report** | June 30, 2022

# Vanguard Variable Insurance Funds

Mid-Cap Index 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, 2022

Mid-Cap Index Portfolio	Beginning Account Value 12/31/2021	Ending Account Value 6/30/2022	Expenses Paid During Period
Based on Actual Portfolio Return	\$1,000.00	\$ 777.20	\$0.75
Based on Hypothetical 5% Yearly Return	1,000.00	1,023.95	0.85

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 0.17%. 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).

# Mid-Cap Index Portfolio

## Portfolio Allocation

As of June 30, 2022

Basic Materials	4.1%
Consumer Discretionary	12.5
Consumer Staples	5.4
Energy	6.1
Financials	12.1
Health Care	11.0
Industrials	14.2
Real Estate	10.3
Technology	15.1
Telecommunications	1.8
Utilities	7.4

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

The portfolio may invest in derivatives (such as futures and swap contracts) for various reasons, including, but not limited to, attempting to remain fully invested and tracking its target index as closely as possible.



Mid-Cap Index Portfolio

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Phillips 66	89,700	7,355	* Hologic Inc.	92,989	6,444
Williams Cos. Inc.	227,164	7,090	Quest Diagnostics Inc.	43,792	5,823
* Plug Power Inc.	215,600	3,572	Cooper Cos. Inc.	18,407	5,764
Marathon Oil Corp.	132,100	2,970	BioMarin Pharmaceutical Inc.	69,014	5,719
Continental Resources Inc.	20,400	1,333	* Insulet Corp.	25,900	5,645
		<b>129,208</b>	* IDEXX Laboratories Inc.	15,706	5,509
<b>Financials (12.0%)</b>			Royalty Pharma plc Class A	129,804	5,457
Arthur J Gallagher & Co.	78,400	12,782	* Incyte Corp.	70,181	5,332
MSCI Inc.	28,829	11,882	Cardinal Health Inc.	101,623	5,312
M&T Bank Corp.	66,886	10,661	Viatis Inc.	453,257	4,746
Discover Financial Services	104,832	9,915	Teleflex Inc.	17,518	4,307
Ameriprise Financial Inc.	40,992	9,743	* ABIOMED Inc.	16,155	3,998
First Republic Bank	67,030	9,666	* Henry Schein Inc.	51,490	3,951
* SVB Financial Group	21,967	8,677	* Bio-Rad Laboratories Inc. Class A	7,853	3,887
Fifth Third Bancorp	255,966	8,601	* Align Technology Inc.	14,700	3,479
Willis Towers Watson plc	41,567	8,205	* Elanco Animal Health Inc.	167,940	3,297
Hartford Financial Services Group Inc.	122,712	8,029	DENTSPLY SIRONA Inc.	80,373	2,872
State Street Corp.	130,109	8,021	* Exact Sciences Corp.	65,748	2,590
American International Group Inc.	147,800	7,557	Universal Health Services Inc. Class B	23,763	2,393
Northern Trust Corp.	73,830	7,123	* Charles River Laboratories International Inc.	9,500	2,033
Cincinnati Financial Corp.	56,904	6,770	* DaVita Inc.	21,128	1,689
Citizens Financial Group Inc.	184,750	6,594	* Teladoc Health Inc.	27,100	900
Nasdaq Inc.	43,026	6,563	* agilon health Inc.	37,876	827
Regions Financial Corp.	348,493	6,534			<b>233,909</b>
Raymond James Financial Inc.	72,887	6,517	<b>Industrials (14.1%)</b>		
Huntington Bancshares Inc.	537,433	6,465	Cintas Corp.	32,481	12,133
Principal Financial Group Inc.	94,164	6,289	Carrier Global Corp.	316,405	11,283
Broadridge Financial Solutions Inc.	43,692	6,228	* TransDigm Group Inc.	19,292	10,353
* Markel Corp.	4,814	6,226	Verisk Analytics Inc.	58,921	10,199
* Arch Capital Group Ltd.	133,148	6,057	Old Dominion Freight Line Inc.	38,005	9,740
KeyCorp	347,636	5,990	* Mettler-Toledo International Inc.	8,456	9,714
Apollo Global Management Inc.	117,799	5,711	PACCAR Inc.	116,773	9,615
FactSet Research Systems Inc.	14,157	5,444	* AMETEK Inc.	86,122	9,464
W R Berkley Corp.	74,134	5,060	* Keysight Technologies Inc.	67,120	9,252
Loews Corp.	78,133	4,630	Rockwell Automation Inc.	43,374	8,645
Cboe Global Markets Inc.	39,570	4,479	Equifax Inc.	45,621	8,339
Everest Re Group Ltd.	14,724	4,127	Ball Corp.	119,242	8,200
Ally Financial Inc.	114,408	3,834	VW Grainger Inc.	17,163	7,799
Equitable Holdings Inc.	142,013	3,702	* Waters Corp.	22,428	7,423
Fidelity National Financial Inc.	99,444	3,676	Fortive Corp.	133,711	7,271
Annaly Capital Management Inc.	581,790	3,438	Vulcan Materials Co.	49,612	7,050
MarketAxess Holdings Inc.	13,326	3,412	Martin Marietta Materials Inc.	23,216	6,947
Ares Management Corp. Class A	57,500	3,269	* Teledyne Technologies Inc.	17,500	6,564
Tradeweb Markets Inc. Class A	40,100	2,737	Dover Corp.	53,843	6,532
Franklin Resources Inc.	111,747	2,605	* United Rentals Inc.	26,678	6,480
*.1 Coinbase Global Inc. Class A	51,900	2,440	Ingersoll Rand Inc.	151,312	6,367
* Allegheny Corp.	2,397	1,997	Expeditors International of Washington Inc.	62,618	6,103
Interactive Brokers Group Inc. Class A	34,750	1,912	Jacobs Engineering Group Inc.	47,980	6,100
Globe Life Inc.	16,607	1,619	Stanley Black & Decker Inc.	56,300	5,904
Lincoln National Corp.	28,736	1,344	* FleetCor Technologies Inc.	27,457	5,769
1 Rocket Cos. Inc. Class A	42,100	310	* Zebra Technologies Corp. Class A	19,560	5,750
		<b>256,841</b>	TransUnion	71,803	5,744
<b>Health Care (11.0%)</b>			Otis Worldwide Corp.	78,796	5,569
* Centene Corp.	218,160	18,458	Trimble Inc.	93,204	5,427
* IQVIA Holdings Inc.	70,573	15,314	Westinghouse Air Brake Technologies Corp.	64,755	5,315
ResMed Inc.	54,584	11,442	Xylem Inc.	67,168	5,251
* Dexcom Inc.	146,400	10,911	Synchrony Financial	187,200	5,170
* Veeva Systems Inc. Class A	52,138	10,325	* Generac Holdings Inc.	23,800	5,012
* Seagen Inc.	51,544	9,120	JB Hunt Transport Services Inc.	31,269	4,924
West Pharmaceutical Services Inc.	27,600	8,345	Textron Inc.	80,318	4,905
Zimmer Biomet Holdings Inc.	78,226	8,218	CH Robinson Worldwide Inc.	47,490	4,814
Laboratory Corp. of America Holdings	34,720	8,137	Packaging Corp. of America	34,908	4,800
STERIS plc	37,400	7,710	Masco Corp.	88,028	4,454
* Avantor Inc.	226,000	7,029	Crown Holdings Inc.	45,863	4,227
* Horizon Therapeutics plc	85,700	6,835	Bill.com Holdings Inc.	36,900	4,057
* Catalent Inc.	63,600	6,824	Snap-on Inc.	19,857	3,912
PerkinElmer Inc.	47,100	6,699	Westrock Co.	95,003	3,785
* Alnylam Pharmaceuticals Inc.	45,033	6,568	Fortune Brands Home & Security Inc.	48,776	2,921
			HEICO Corp. Class A	27,399	2,887

Mid-Cap Index Portfolio

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Jack Henry & Associates Inc.	13,560	2,441	* Western Digital Corp.	116,828	5,237
HEICO Corp.	15,369	2,015	* Tyler Technologies Inc.	15,500	5,153
Hubbell Inc. Class B	10,032	1,792	* HubSpot Inc.	17,000	5,111
Cognex Corp.	30,741	1,307	* Okta Inc.	56,177	5,078
* Mohawk Industries Inc.	10,119	1,256	* Zscaler Inc.	31,600	4,725
* Affirm Holdings Inc. Class A	33,723	609	SS&C Technologies Holdings Inc.	80,961	4,701
		<b>301,590</b>	Citrix Systems Inc.	47,253	4,592
<b>Real Estate (10.3%)</b>			NortonLifeLock Inc.	205,163	4,505
Realty Income Corp.	224,512	15,325	* DocuSign Inc.	74,568	4,279
Welltower Inc.	169,314	13,943	* GoDaddy Inc. Class A	60,397	4,201
Digital Realty Trust Inc.	106,175	13,785	* Cloudflare Inc. Class A	94,400	4,130
SBA Communications Corp.	40,205	12,868	* Pinterest Inc. Class A	214,504	3,895
VICI Properties Inc.	359,300	10,704	* Qorvo Inc.	39,578	3,733
AvalonBay Communities Inc.	52,159	10,132	* Black Knight Inc.	55,485	3,628
Equity Residential	133,236	9,622	* ZoomInfo Technologies Inc. Class A	105,188	3,496
Weyerhaeuser Co.	277,721	9,198	* DoorDash Inc. Class A	47,800	3,067
* CoStar Group Inc.	147,740	8,925	* Unity Software Inc.	77,798	2,865
Alexandria Real Estate Equities Inc.	60,883	8,830	Bentley Systems Inc. Class B	82,418	2,745
* CBRE Group Inc. Class A	115,819	8,525	Leidos Holdings Inc.	25,500	2,568
Extra Space Storage Inc.	50,092	8,522	* Snap Inc. Class A	192,900	2,533
Invitation Homes Inc.	227,674	8,101	*.1 ApplLovin Corp. Class A	67,133	2,312
Duke Realty Corp.	143,399	7,880	* IAC/InterActiveCorp	29,770	2,262
Ventas Inc.	149,200	7,673	* UiPath Inc. Class A	111,911	2,036
Mid-America Apartment Communities Inc.	43,038	7,517	* F5 Inc.	11,231	1,719
Sun Communities Inc.	45,388	7,233	* Zendesk Inc.	22,800	1,689
Essex Property Trust Inc.	24,328	6,362	* Dropbox Inc. Class A	51,686	1,085
WP Carey Inc.	71,927	5,960	* RingCentral Inc. Class A	15,790	825
Simon Property Group Inc.	61,333	5,822	* Coupa Software Inc.	14,100	805
UDR Inc.	118,750	5,467	* Toast Inc. Class A	44,880	581
Camden Property Trust	39,730	5,343	* Qualtrics International Inc. Class A	35,434	443
Iron Mountain Inc.	108,463	5,281			<b>321,165</b>
Healthpeak Properties Inc.	201,209	5,213	<b>Telecommunications (1.8%)</b>		
Boston Properties Inc.	52,574	4,678	Motorola Solutions Inc.	62,431	13,085
Host Hotels & Resorts Inc.	133,258	2,089	* Arista Networks Inc.	86,260	8,086
* Zillow Group Inc. Class C	60,500	1,921	* Liberty Broadband Corp. Class C	48,739	5,636
Regency Centers Corp.	32,199	1,910	Lumen Technologies Inc.	385,587	4,207
* Zillow Group Inc. Class A	15,600	496	* Roku Inc.	44,796	3,680
		<b>219,325</b>	* Juniper Networks Inc.	60,239	1,717
<b>Technology (15.0%)</b>			* DISH Network Corp. Class A	92,431	1,657
* Synopsys Inc.	57,061	17,329	* Liberty Broadband Corp. Class A	7,186	816
* Cadence Design Systems Inc.	102,845	15,430			<b>38,884</b>
Amphenol Corp. Class A	223,352	14,379	<b>Utilities (7.4%)</b>		
Microchip Technology Inc.	206,878	12,015	Consolidated Edison Inc.	132,139	12,566
* Palo Alto Networks Inc.	18,566	9,170	Waste Connections Inc.	95,987	11,899
* Datadog Inc. Class A	95,000	9,048	WEC Energy Group Inc.	117,663	11,842
Corning Inc.	283,545	8,935	Eversource Energy	128,584	10,862
* Twitter Inc.	228,077	8,528	American Water Works Co. Inc.	67,762	10,081
* ON Semiconductor Corp.	162,100	8,155	Edison International	142,241	8,995
CDW Corp.	50,462	7,951	Ameren Corp.	96,306	8,702
* ANSYS Inc.	32,442	7,763	Entergy Corp.	75,856	8,544
* Match Group Inc.	106,504	7,422	* PG&E Corp.	781,567	7,800
* Fortinet Inc.	127,250	7,200	DTE Energy Co.	61,396	7,782
Marvell Technology Inc.	158,638	6,906	FirstEnergy Corp.	202,278	7,765
* Gartner Inc.	28,537	6,901	PPL Corp.	274,567	7,449
Hewlett Packard Enterprise Co.	484,768	6,428	CMS Energy Corp.	108,299	7,310
Monolithic Power Systems Inc.	16,563	6,361	CenterPoint Energy Inc.	234,995	6,951
* MongoDB Inc.	24,157	6,269	Evergy Inc.	85,665	5,590
* EPAM Systems Inc.	20,300	5,984	Alliant Energy Corp.	93,498	5,480
* Palantir Technologies Inc. Class A	653,420	5,927	AES Corp.	249,223	5,236
* VeriSign Inc.	34,731	5,812	NiSource Inc.	151,293	4,462
Skyworks Solutions Inc.	60,029	5,561	Vistra Corp.	161,226	3,684
* Akamai Technologies Inc.	59,752	5,457	Constellation Energy Corp.	61,000	3,493
Seagate Technology Holdings plc	76,090	5,436	Avangrid Inc.	28,845	1,330
NetApp Inc.	83,180	5,427			<b>157,823</b>
* Twilio Inc. Class A	64,100	5,372			
* Paycom Software Inc.	19,092	5,348	<b>Total Common Stocks</b>		
Teradyne Inc.	59,700	5,346	<b>(Cost \$1,910,667)</b>		<b>2,127,814</b>
* Splunk Inc.	59,987	5,306			

Mid-Cap Index Portfolio

	Shares	Market Value* (\$000)
<b>Temporary Cash Investments (0.7%)</b>		
<b>Money Market Fund (0.7%)</b>		
<sup>2,3</sup> Vanguard Market Liquidity Fund, 1.417% (Cost \$15,576)	155,788	15,574
<b>Total Investments (100.4%)</b> (Cost \$1,926,243)		<b>2,143,388</b>
<b>Other Assets and Liabilities—Net (-0.4%)</b>		<b>(8,267)</b>
<b>Net Assets (100%)</b>		<b>2,135,121</b>

Cost is in \$000.

\* See Note A in Notes to Financial Statements.

\* Non-income-producing security.

1 Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$6,845,000.

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

3 Collateral of \$7,304,000 was received for securities on loan, of which \$7,135,000 is held in Vanguard Market Liquidity Fund and \$169,000 is held in cash.

**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 Russell 2000 Index	September 2022	34	2,904	(102)
E-mini S&P 500 Index	September 2022	22	4,168	(84)
E-mini S&P Mid-Cap 400 Index	September 2022	11	2,495	(78)
				<u>(264)</u>



# Statement of Assets and Liabilities

As of June 30, 2022

(\$000s, except shares and per-share amounts)	Amount
<b>Assets</b>	
Investments in Securities, at Value <sup>1</sup>	
Unaffiliated Issuers (Cost \$1,910,667)	2,127,814
Affiliated Issuers (Cost \$15,576)	15,574
Total Investments in Securities	2,143,388
Investment in Vanguard	85
Cash	169
Cash Collateral Pledged—Futures Contracts	360
Receivables for Investment Securities Sold	273
Receivables for Accrued Income	2,648
Receivables for Capital Shares Issued	1,066
<b>Total Assets</b>	<b>2,147,989</b>
<b>Liabilities</b>	
Due to Custodian	254
Payables for Investment Securities Purchased	4,611
Collateral for Securities on Loan	7,304
Payables for Capital Shares Redeemed	498
Payables to Vanguard	149
Variation Margin Payable—Futures Contracts	52
<b>Total Liabilities</b>	<b>12,868</b>
<b>Net Assets</b>	<b>2,135,121</b>

<sup>1</sup> Includes \$6,845 of securities on loan.

At June 30, 2022, net assets consisted of:

Paid-in Capital	1,863,478
Total Distributable Earnings (Loss)	271,643
<b>Net Assets</b>	<b>2,135,121</b>
<b>Net Assets</b>	
Applicable to 104,287,400 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	2,135,121
<b>Net Asset Value Per Share</b>	<b>\$20.47</b>

## Statement of Operations

	Six Months Ended June 30, 2022
	(\$000)
<b>Investment Income</b>	
<b>Income</b>	
Dividends <sup>1</sup>	15,590
Interest <sup>2</sup>	7
Securities Lending—Net	161
<b>Total Income</b>	<b>15,758</b>
<b>Expenses</b>	
The Vanguard Group—Note B	
Investment Advisory Services	170
Management and Administrative	1,745
Marketing and Distribution	87
Custodian Fees	25
Shareholders' Reports	37
Trustees' Fees and Expenses	1
Other Expenses	4
<b>Total Expenses</b>	<b>2,069</b>
<b>Net Investment Income</b>	<b>13,689</b>
<b>Realized Net Gain (Loss)</b>	
Investment Securities Sold <sup>2</sup>	43,858
Futures Contracts	(569)
<b>Realized Net Gain (Loss)</b>	<b>43,289</b>
<b>Change in Unrealized Appreciation (Depreciation)</b>	
Investment Securities <sup>2</sup>	(670,364)
Futures Contracts	(371)
<b>Change in Unrealized Appreciation (Depreciation)</b>	<b>(670,735)</b>
<b>Net Increase (Decrease) in Net Assets Resulting from Operations</b>	<b>(613,757)</b>

<sup>1</sup> Dividends are net of foreign withholding taxes of \$7,000.

<sup>2</sup> Interest income, realized net gain (loss), and change in unrealized appreciation (depreciation) from an affiliated company of the portfolio were \$7,000, less than \$1,000, and (\$2,000), respectively. Purchases and sales are for temporary cash investment purposes.

## Statement of Changes in Net Assets

	Six Months Ended June 30, 2022	Year Ended December 31, 2021
	(\$000)	(\$000)
<b>Increase (Decrease) in Net Assets</b>		
<b>Operations</b>		
Net Investment Income	13,689	26,207
Realized Net Gain (Loss)	43,289	249,942
Change in Unrealized Appreciation (Depreciation)	(670,735)	266,299
Net Increase (Decrease) in Net Assets Resulting from Operations	(613,757)	542,448
<b>Distributions</b>		
Total Distributions	(277,011)	(190,939)
<b>Capital Share Transactions</b>		
Issued	146,383	357,264
Issued in Lieu of Cash Distributions	277,011	190,939
Redeemed	(178,452)	(359,789)
Net Increase (Decrease) from Capital Share Transactions	244,942	188,414
Total Increase (Decrease)	(645,826)	539,923
<b>Net Assets</b>		
Beginning of Period	2,780,947	2,241,024
End of Period	2,135,121	2,780,947

## Financial Highlights

For a Share Outstanding Throughout Each Period	Six Months Ended June 30,	Year Ended December 31,				
	2022	2021	2020	2019	2018	2017
<b>Net Asset Value, Beginning of Period</b>	<b>\$29.48</b>	<b>\$25.77</b>	<b>\$24.03</b>	<b>\$20.23</b>	<b>\$23.72</b>	<b>\$21.11</b>
<b>Investment Operations</b>						
Net Investment Income <sup>1</sup>	.138	.284	.325 <sup>2</sup>	.334	.343	.292
Net Realized and Unrealized Gain (Loss) on Investments	(6.193)	5.642	3.047	5.621	(2.386)	3.575
Total from Investment Operations	(6.055)	5.926	3.372	5.955	(2.043)	3.867
<b>Distributions</b>						
Dividends from Net Investment Income	(.282)	(.318)	(.344)	(.350)	(.286)	(.270)
Distributions from Realized Capital Gains	(2.673)	(1.898)	(1.288)	(1.805)	(1.161)	(.987)
Total Distributions	(2.955)	(2.216)	(1.632)	(2.155)	(1.447)	(1.257)
<b>Net Asset Value, End of Period</b>	<b>\$20.47</b>	<b>\$29.48</b>	<b>\$25.77</b>	<b>\$24.03</b>	<b>\$20.23</b>	<b>\$23.72</b>
<b>Total Return</b>	<b>-22.28%</b>	<b>24.36%</b>	<b>18.07%</b>	<b>30.87%</b>	<b>-9.33%</b>	<b>19.08%</b>

### Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$2,135	\$2,781	\$2,241	\$2,155	\$1,621	\$1,804
Ratio of Total Expenses to Average Net Assets	0.17%	0.17%	0.17%	0.17%	0.17%	0.19%
Ratio of Net Investment Income to Average Net Assets	1.23%	1.03%	1.50% <sup>2</sup>	1.49%	1.49%	1.32%
Portfolio Turnover Rate	8%	20%	28%	21%	21%	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> Net investment income per share and the ratio of net investment income to average net assets include \$0.036 and 0.17%, respectively, resulting from a special dividend from NortonLifeLock Inc. in February 2020.

## Notes to Financial Statements

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

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

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

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

2. **Futures Contracts:** The portfolio uses index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The portfolio may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. 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, 2022, the portfolio's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. **Federal Income Taxes:** The portfolio intends to continue to qualify as a regulated investment company and distribute 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.

4. **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.

5. **Securities Lending:** To earn additional income, the portfolio lends its securities to qualified institutional borrowers. Security loans are subject to termination by the portfolio at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The portfolio further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of

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

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

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

For the six months ended June 30, 2022, the portfolio did not utilize the credit facilities or the Interfund Lending Program.

7. **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.** 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 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, 2022, the portfolio had contributed to Vanguard capital in the amount of \$85,000, representing less than 0.01% of the portfolio's net assets and 0.03% of Vanguard's capital received pursuant to the FSA. The portfolio's trustees and officers are also directors and employees, respectively, of Vanguard.

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

D. As of June 30, 2022, gross unrealized appreciation and depreciation for investments and derivatives based on cost for U.S. federal income tax purposes were as follows:

	Amount (\$000)
Tax Cost	1,926,803
Gross Unrealized Appreciation	484,354
Gross Unrealized Depreciation	(268,033)
Net Unrealized Appreciation (Depreciation)	216,321

E. During the six months ended June 30, 2022, the portfolio purchased \$205,054,000 of investment securities and sold \$224,009,000 of investment securities, other than temporary cash investments.

The portfolio purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the six months ended June 30, 2022, such purchases were \$15,062,000 and sales were \$61,119,000, resulting in net realized loss of \$29,022,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

F. Capital shares issued and redeemed were:

	Six Months Ended June 30, 2022 Shares (000)	Year Ended December 31, 2021 Shares (000)
Issued	5,853	12,978
Issued in Lieu of Cash Distributions	11,188	7,500
Redeemed	(7,095)	(13,103)
Net Increase (Decrease) in Shares Outstanding	9,946	7,375

At June 30, 2022, 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 36% of the portfolio's net assets. If this shareholder were to redeem its 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.

G. Management has determined that no events or transactions occurred subsequent to June 30, 2022, that would require recognition or disclosure in these financial statements.

# Trustees Approve Advisory Arrangement

The board of trustees of Vanguard Variable Insurance Funds Mid-Cap Index Portfolio has renewed the portfolio's investment advisory arrangement with The Vanguard Group, Inc. (Vanguard), through its Equity Index Group. The board determined that continuing the portfolio's internalized management structure was in the best interests of the portfolio and its shareholders.

The board based its decision upon an evaluation of the 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 advisor 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 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 arrangement. 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 the advisor. The board considered that Vanguard has been managing investments for more than four decades. The Equity Index Group adheres to a sound, disciplined investment management process; the team has considerable experience, stability, and depth.

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

## **Investment performance**

The board considered the short- and long-term performance of the portfolio, including any periods of outperformance or underperformance compared with its target index and peer group. The board concluded that the performance was such that the advisory arrangement 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 expenses were also below the peer-group average.

The board does not conduct a profitability analysis of Vanguard because of Vanguard's unique structure. Unlike most other mutual fund management companies, Vanguard is owned by the funds it oversees.

## **The benefit of economies of scale**

The board concluded that the portfolio's arrangement with Vanguard ensures that the portfolio will realize economies of scale as it grows, with the cost to shareholders declining as portfolio assets increase.

The board will consider whether to renew the advisory arrangement 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 the Mid-Cap Index 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, 2021, through December 31, 2021 (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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You can review information about your portfolio on the SEC's website, and you can receive copies of this information, for a fee, by sending a request via email addressed to [publicinfo@sec.gov](mailto:publicinfo@sec.gov).

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