

Semiannual Report | June 30, 2023

Vanguard Variable Insurance Funds

Moderate Allocation 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. The Moderate Allocation Portfolio has no direct expenses, but bears its proportionate share of the costs for the underlying funds in which it invests. These indirect expenses make up the acquired fund fees and expenses, also expressed as a percentage of average net assets. 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 costs were calculated using the acquired fund fees and expenses for the Moderate Allocation Portfolio.

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. 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 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

	Beginning Account Value 12/31/2022	Ending Account Value 6/30/2023	Expenses Paid During Period
Moderate Allocation Portfolio			
Based on Actual Portfolio Return	\$1,000.00	\$ 1,091.20	\$0.62
Based on Hypothetical 5% Yearly Return	1,000.00	1,024.20	0.60

The calculations are based on acquired fund fees and expenses for the most recent six-month period. The underlying portfolios' annualized expense figure for that period is 0.12%. The dollar amounts shown as "Expenses Paid" are equal to the annualized average weighted expense ratio for the underlying funds 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).

Moderate Allocation Portfolio

Underlying Vanguard Funds

As of June 30, 2023

Vanguard Variable Insurance Funds—Equity Index Portfolio	31.3%
Vanguard Variable Insurance Funds—Total Bond Market Index Portfolio	27.7
Vanguard Total International Stock Index Fund Admiral Shares	23.7
Vanguard Total International Bond Index Fund Admiral Shares	11.8
Vanguard Extended Market Index Fund Admiral Shares	5.5

The table reflects the portfolio’s investments, except for short-term investments.

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)
Investment Companies (100.0%)		
U.S. Stock Funds (36.8%)		
Vanguard Variable Insurance Funds—Equity Index Portfolio	3,306,873	186,508
Vanguard Extended Market Index Fund Admiral Shares	288,929	32,614
		219,122
International Stock Fund (23.7%)		
Vanguard Total International Stock Index Fund Admiral Shares	4,676,996	140,778
U.S. Bond Fund (27.7%)		
Vanguard Variable Insurance Funds—Total Bond Market Index Portfolio	15,990,039	164,537
International Bond Fund (11.8%)		
Vanguard Total International Bond Index Fund Admiral Shares	3,597,071	70,071
Total Investment Companies (Cost \$590,035)		594,508
Temporary Cash Investments (0.0%)		
Money Market Fund (0.0%)		
¹ Vanguard Market Liquidity Fund, 5.150% (Cost \$1)	5	1
Total Investments (100.0%) (Cost \$590,036)		594,509
Other Assets and Liabilities—Net (0.0%)		(92)
Net Assets (100%)		594,417

Cost is in \$000.

- See Note A in Notes to Financial Statements.

¹ Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

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—Affiliated Funds (Cost \$590,036)	594,509
Receivables for Investment Securities Sold	66
Receivables for Accrued Income	109
Receivables for Capital Shares Issued	61
Total Assets	594,745
Liabilities	
Due to Custodian	66
Payables for Investment Securities Purchased	110
Payables for Capital Shares Redeemed	152
Total Liabilities	328
Net Assets	594,417

At June 30, 2023, net assets consisted of:

Paid-in Capital	571,851
Total Distributable Earnings (Loss)	22,566
Net Assets	594,417

Net Assets	
Applicable to 21,626,387 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	594,417
Net Asset Value Per Share	\$27.49

Statement of Operations

	Six Months Ended June 30, 2023
	(\$000)
Investment Income	
Income	
Income Distributions Received from Affiliated Funds	9,035
Net Investment Income—Note B	9,035
Realized Net Gain (Loss)	
Capital Gain Distributions Received from Affiliated Funds	5,716
Affiliated Funds Sold	4,062
Realized Net Gain (Loss)	9,778
Change in Unrealized Appreciation (Depreciation) from Affiliated Funds	31,129
Net Increase (Decrease) in Net Assets Resulting from Operations	49,942

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

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	9,035	12,064
Realized Net Gain (Loss)	9,778	18,775
Change in Unrealized Appreciation (Depreciation)	31,129	(148,211)
Net Increase (Decrease) in Net Assets Resulting from Operations	49,942	(117,372)
Distributions		
Total Distributions	(30,799)	(44,976)
Capital Share Transactions		
Issued	28,788	60,858
Issued in Lieu of Cash Distributions	30,799	44,976
Redeemed	(34,790)	(134,521)
Net Increase (Decrease) from Capital Share Transactions	24,797	(28,687)
Total Increase (Decrease)	43,940	(191,035)
Net Assets		
Beginning of Period	550,477	741,512
End of Period	594,417	550,477

Financial Highlights

For a Share Outstanding Throughout Each Period	Six Months Ended June 30, 2023	Year Ended December 31,				
	2023	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$26.65	\$33.89	\$32.45	\$30.12	\$26.46	\$29.35
Investment Operations						
Net Investment Income ¹	.428	.533	.691	.552	.720	.634
Capital Gain Distributions Received ¹	.271	.443	.470	.184	.199	.148
Net Realized and Unrealized Gain (Loss) on Investments	1.648	(6.147)	1.977	2.976	4.106	(2.142)
Total from Investment Operations	2.347	(5.171)	3.138	3.712	5.025	(1.360)
Distributions						
Dividends from Net Investment Income	(.581)	(.723)	(.496)	(.720)	(.657)	(.577)
Distributions from Realized Capital Gains	(.926)	(1.346)	(1.202)	(.662)	(.708)	(.953)
Total Distributions	(1.507)	(2.069)	(1.698)	(1.382)	(1.365)	(1.530)
Net Asset Value, End of Period	\$27.49	\$26.65	\$33.89	\$32.45	\$30.12	\$26.46
Total Return	9.12%	-15.93%	10.07%	13.77%	19.53%	-4.94%
Ratios/Supplemental Data						
Net Assets, End of Period (Millions)	\$594	\$550	\$742	\$680	\$532	\$400
Ratio of Total Expenses to Average Net Assets	—	—	—	—	—	—
Acquired Fund Fees and Expenses	0.12%	0.12%	0.12%	0.12%	0.12%	0.12%
Ratio of Net Investment Income to Average Net Assets	2.03%	1.88%	2.09%	1.89%	2.54%	2.25%
Portfolio Turnover Rate	4%	11%	10%	26%	13%	20%

The expense ratio, acquired fund fees and expenses, and net investment income ratio for the current period have been annualized.

¹ Calculated based on average shares outstanding.

Notes to Financial Statements

The Moderate Allocation 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 follows a balanced investment strategy by investing in selected Vanguard funds and portfolios to achieve its targeted allocation of assets to U.S. and international stocks, and U.S. and international bonds. Financial statements and other information about each underlying fund and portfolio are available at www.vanguard.com. 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:** Investments are valued at the net asset value of each underlying Vanguard fund determined as of the close of the New York Stock Exchange (generally 4 p.m., Eastern time) on the valuation date.

2. **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.

3. **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.

4. **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 borne by the funds in which the portfolio invests (see Note B). 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.

5. **Other:** Income and capital gain distributions received are recorded on the ex-dividend date. 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. The FSA provides that expenses otherwise allocable to Vanguard funds-of-funds may be reduced or eliminated to the extent of savings realized by the underlying

Vanguard funds by virtue of being part of a fund-of-funds. Accordingly, all expenses for services provided by Vanguard to the portfolio and all other expenses incurred by the portfolio during the six months ended June 30, 2023, were borne by the underlying Vanguard funds in which the portfolio invests. The portfolio's trustees and officers are also trustees and officers, respectively, of the underlying Vanguard funds, as well as directors and employees, respectively, of Vanguard.

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

Level 1—Quoted prices in active markets for identical securities.

Level 2—Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3—Significant unobservable inputs (including the portfolio's own assumptions used to determine the fair value of investments). Any investments valued with significant unobservable inputs are noted on the Schedule of Investments.

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

D. As of June 30, 2023, gross unrealized appreciation and depreciation for investments based on cost for U.S. federal income tax purposes were as follows:

	Amount (\$000)
Tax Cost	590,280
Gross Unrealized Appreciation	51,249
Gross Unrealized Depreciation	(47,020)
Net Unrealized Appreciation (Depreciation)	4,229

E. Capital shares issued and redeemed were:

	Six Months Ended June 30, 2023 Shares (000)	Year Ended December 31, 2022 Shares (000)
Issued	1,064	2,128
Issued in Lieu of Cash Distributions	1,182	1,503
Redeemed	(1,277)	(4,851)
Net Increase (Decrease) in Shares Outstanding	969	(1,220)

F. Transactions during the period in affiliated underlying Vanguard funds were as follows:

	Dec. 31, 2022 Market Value (\$000)	Purchases at Cost (\$000)	Current Period Transactions					Jun. 30, 2023 Market Value (\$000)
			Proceeds from Securities Sold (\$000)	Realized Net Gain (Loss) (\$000)	Change in Unrealized App. (Dep.) (\$000)	Income (\$000)	Capital Gain Distributions Received (\$000)	
Vanguard Extended Market Index Fund	29,497	556	935	346	3,150	205	—	32,614
Vanguard Market Liquidity Fund	—	NA ¹	NA ¹	—	—	3	—	1
Vanguard Total International Bond Index Fund	65,411	3,163	375	8	1,864	568	—	70,071
Vanguard Total International Stock Index Fund	134,957	3,519	8,512	861	9,953	1,810	—	140,778
Vanguard Variable Insurance Funds—Equity Index Portfolio	165,979	11,789	10,684	2,814	16,610	2,581	5,716	186,508
Vanguard Variable Insurance Funds—Total Bond Market Index Portfolio	154,500	14,931	4,479	33	(448)	3,868	—	164,537
Total	550,344	33,958	24,985	4,062	31,129	9,035	5,716	594,509

¹ Not applicable—purchases and sales are for temporary cash investment purposes.

G. 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.

At June 30, 2023, 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 73% of the portfolio's net assets. If this shareholder were to redeem its investment in the portfolio, the redemption might lead to the realization of taxable capital gains.

H. 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 Arrangement

The board of trustees of Vanguard Variable Insurance Funds Moderate Allocation 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 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 a relevant benchmark 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 acquired fund fees and expenses were below the average expense ratio charged by funds in its peer group. The portfolio does not incur advisory expenses directly; however, the board noted that each of the underlying funds in which the portfolio invests has advisory expenses below the underlying fund's 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 Vanguard's arrangement with the portfolio 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 Moderate Allocation 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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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.

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

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