

Semiannual Report | June 30, 2019

# Vanguard Variable Insurance Fund

Total International Stock Market Index Portfolio

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

### Important information about access to shareholder reports

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

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

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

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Total International Stock Market Index Portfolio

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### Total International Stock Market Index Portfolio

### 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 typical portfolio's expenses are expressed as a percentage of its average net assets. The Total International Stock Market Index Portfolio has no direct expenses, but bears its proportionate share of the expenses of 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 Total International Stock Market Index 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 figure does not reflect additional fees and expenses associated with the annuity or life insurance program through which you invest.

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

You can find more information about the portfolio's expenses in the Financial Statements section. For additional information on operating expenses and other shareholder costs, please refer to the prospectus.

### Six Months Ended June 30, 2019

	Beginning	Ending	Expenses
	Account Value	Account Value	Paid During
Total International Stock Market Index Portfolio	12/31/2018	6/30/2019	Period
Based on Actual Portfolio Return	\$1,000.00	\$1,131.97	\$0.58
Based on Hypothetical 5% Yearly Return	1,000.00	1,024.25	0.55

The calculations are based on the Total International Stock Market Index Portfolio's acquired fund fees and expenses for the most recent six-month period. The Total International Stock Market Index Portfolio's annualized expense figure for that period is 0.11%. 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 period, then divided by the number of days in the recent 12-month period (181/365)

# Allocation to Underlying Funds As of June 30, 2019

Vanguard Developed Markets Index Fund Admiral Shares	28.0%
Vanguard FTSE All-World ex-US Index Fund Admiral Shares	28.0
Vanguard Emerging Markets Stock Index Fund Admiral Shares	14.5
Vanguard European Stock Index Fund Admiral Shares	13.4
Vanguard Pacific Stock Index Fund Admiral Shares	9.1
Vanguard FTSE All-World ex-US Small-Cap Index Fund Investor Shares	7.0

### Financial Statements (unaudited)

### Statement of Net Assets

As of June 30, 2019

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 (98.7%)		
International Stock Funds (98.7%)		
Vanguard Developed Markets Index Fund Admiral Shares	6,587,081	88,267
Vanguard FTSE All-World ex-US Index Fund Admiral Shares	2,784,183	88,203
Vanguard Emerging Markets Stock Index Fund Admiral Shares	1,295,730	45,739
Vanguard European Stock Index Fund Admiral Shares Vanguard Pacific Stock Index Fund Admiral Shares	613,904 350,255	42,188 28,710
Vanguard FTSE All-World ex-US Small-Cap Index Fund Investor Shares	547,537	21,934
Total Investment Companies (Cost \$324,108)		315,041
Temporary Cash Investments (1.4%)		
Money Market Fund (1.3%)		
<sup>1</sup> Vanguard Market Liquidity Fund, 2.499%	40,564	4,057
	Face	
	Amount	
	(\$000)	
U.S. Government and Agency Obligations (0.1%)		
<sup>2</sup> United States Treasury Bill, 2.385%, 8/1/19	200	200
Total Temporary Cash Investments (Cost \$4,257)		4,257
Total Investments (100.1%) (Cost \$328,365)		319,298
Other Assets and Liabilities (-0.1%)		
Other Assets Liabilities		1,485
Liabilities		(1,670)
Net Assets (100%)		(100)
Applicable to 16,024,040 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)		319,113
Net Asset Value Per Share		\$19.91
		Amount
Statement of Assets and Liabilities		(\$000)
Assets		
Investments in Securities, at Value		
Affiliated Funds		319,098
Unaffiliated Issuers	_	200
Total Investments in Securities		319,298
Receivables for Capital Shares Issued		1,453
Receivables for Accrued Income		8
Variation Margin Receivable—Futures Contracts		24
Total Assets		320,783
Liabilities Payables for Investment Securities Purchased		606
Payables for Capital Shares Redeemed		1,064
Total Liabilities		1,670
Net Assets		319,113
INCL ASSOCIS		313,113

#### At June 30, 2019, net assets consisted of:

	Amount (\$000)
Paid-in Capital	322,391
Total Distributable Earnings (Loss)	(3,278)
Net Assets	319,113

<sup>•</sup> See Note A in Notes to Financial Statements.

<sup>2</sup> Securities with a value of \$200,000 have been segregated as initial margin for open futures contracts.

Derivative Financial Instruments Outstanding as of Period End						
Futures Contracts						
				(\$000)		
	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation)		
Long Futures Contracts						
S&P/TSX 60 Index	September 2019	27	4,040	17		

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

### Statement of Operations

### Statement of Changes in Net Assets

	Six Months Ended June 30, 2019		
	(\$000)		
Investment Income			
Income			
Income Distributions Received from Affiliated Funds	4,257		
Interest	2		
Net Investment Income—Note B	4,259		
Realized Net Gain (Loss)			
Affiliated Funds Sold	1,377		
Futures Contracts	409		
Realized Net Gain (Loss)	1,786		
Change in Unrealized Appreciati (Depreciation)	on		
Affiliated Funds	23,753		
Futures Contracts	86		
Change in Unrealized Appreciati (Depreciation)	on 23,839		
Net Increase (Decrease) in Net Resulting from Operations	Assets 29,884		

	Six Months Ended June 30, 2019	Year Ended December 31, 2018
	(\$000)	(\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	4,259	4,759
Realized Net Gain (Loss)	1,786	(5)
Change in Unrealized Appreciation (Depreciation)	23,839	(34,587)
Net Increase (Decrease) in Net Assets Resulting from Operations	29,884	(29,833)
Distributions		
Net Investment Income	(4,990)	(635)
Realized Capital Gain <sup>1</sup>	(29)	(64)
Total Distributions	(5,019)	(699)
Capital Share Transactions		
Issued	103,926	180,119
Issued in Lieu of Cash Distributions	5,019	699
Redeemed	(14,774)	(21,027)
Net Increase (Decrease) from Capital Share Transactions	94,171	159,791
Total Increase (Decrease)	119,036	129,259
Net Assets		
Beginning of Period	200,077	70,818
End of Period	319,113	200,077

<sup>1</sup> Includes fiscal 2019 and 2018 short-term gain distributions totaling \$29,000 and \$64,000, respectively. Short-term gain distributions are treated as ordinary income dividends for tax purposes.

## Financial Highlights

For a Share Outstanding Throughout Each Period	Six Months Ended June 30, 2019	Year Ended Dec. 31, 2018	Sept. 7, 2017 <sup>1</sup> to Dec. 31, 2017
Net Asset Value, Beginning of Period	\$17.94	\$21.15	\$20.00
Investment Operations	*****	7	*=====
Net Investment Income <sup>2</sup>	.310	.646	.341
Capital Gain Distributions Received <sup>2</sup>	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	2.045	(3.716)	.809
Total from Investment Operations	2.355	(3.070)	1.150
Distributions			
Dividends from Net Investment Income	(.383)	(.127)	_
Distributions from Realized Capital Gains	(.002)	(.013)	_
Total Distributions	(.385)	(.140)	_
Net Asset Value, End of Period	\$19.91	\$17.94	\$21.15
Total Return	13.20%	-14.62%	5.75%
Ratios/Supplemental Data			
Net Assets, End of Period (Millions)	\$319	\$200	\$71
Ratio of Total Expenses to Average Net Assets	_	_	_
Acquired Fund Fees and Expenses	0.11%	0.11%	0.11%3
Ratio of Net Investment Income to Average Net Assets	3.22%	3.23%	5.20%3
Portfolio Turnover Rate	11%	6%	5%

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

<sup>1</sup> Inception.

<sup>2</sup> Calculated based on average shares outstanding.

<sup>3</sup> Annualized.

### Notes to Financial Statements

The Total International Stock Market 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 seeks to match the return of its target index by investing in selected Vanguard funds. Financial statements and other information about each underlying fund and portfolio are available on 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. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value. Temporary cash investments are valued using the latest bid prices or using valuations based on a matrix system (which considers such factors as security prices, yields, maturities, and ratings), both as furnished by independent pricing services.
- 2. Futures Contracts: The portfolio uses stock and bond futures contracts to a limited extent, with the objectives of maintaining full exposure to the market and maintaining its target asset allocation. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of investments held by the portfolio and the prices of futures contracts, and the possibility of an illiquid market. Counterparty risk involving futures is mitigated because a regulated clearinghouse is the counterparty instead of the clearing broker. To further mitigate counterparty risk, the portfolio trades futures contracts on an exchange, monitors the financial strength of its clearing brokers and clearinghouse, and has entered into clearing agreements with its clearing brokers. The clearinghouse imposes initial margin requirements to secure the portfolio's performance and requires daily settlement of variation margin representing changes in the market value of each contract. Any assets pledged as initial margin for open contracts are noted in the Statement of Net Assets.

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

During the six months ended June 30, 2019, 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. Management has analyzed the portfolio's tax positions taken for all open federal income tax years (December 31, 2017–2018), and for the period ended June 30, 2019, and has concluded that no provision for federal 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 and may differ from net investment income and realized capital gains for financial reporting purposes.
- 5. Credit Facility: 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 that may be renewed annually; each fund is individually liable for its borrowings, if any, under the credit facility. Borrowings may be utilized for temporary and emergency purposes, and are subject to the portfolio's regulatory and contractual borrowing restrictions. The participating funds are charged administrative fees and an annual commitment fee of 0.10% of the undrawn amount of the facility; these fees are allocated to the funds based on a method approved by the portfolio's board of trustees and borne by the funds in which the portfolio invests (see Note B). Any borrowings under this facility bear interest at a rate based upon the higher of the one-month London Interbank Offered Rate, federal funds effective rate, or overnight bank funding rate plus an agreed-upon spread.

The portfolio had no borrowings outstanding at June 30, 2019, or at any time during the period then ended.

- 6. 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. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Premiums and discounts on debt securities are amortized and accreted, respectively, to interest income over the lives of the respective securities, except for premiums on certain callable debt securities that are amortized to the earliest call date.
- 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 period ended June 30, 2019, 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 Statement of Net Assets.

The following table summarizes the market value of the portfolio's investments as of June 30, 2019, based on the inputs used to value them:

	Level 1	Level 2	Level 3
Investments	(\$000)	(\$000)	(\$000)
Investment Companies	315,041	_	_
Temporary Cash Investments	4,057	200	_
Futures Contracts—Assets <sup>1</sup>	24	_	_
Total	319,122	200	_

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

**D.** As of June 30, 2019, 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	328,365
Gross Unrealized Appreciation	3,410
Gross Unrealized Depreciation	(12,460)
Net Unrealized Appreciation (Depreciation)	(9,050)

### E. Capital shares issued and redeemed were:

	Six Months Ended June 30, 2019	Year Ended December 31, 2018	
	Shares (000)	Shares (000)	
Issued	5,369	8,863	
Issued in Lieu of Cash Distributions	260	33	
Redeemed	(757)	(1,092)	
Net Increase (Decrease) in Shares Outstanding	4,872	7,804	

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

			Current Period Transactions					
	Dec, 31, 2018		Proceeds from	Realized Net	Change in	(	Capital Gain	June 30, 2019
	Market Value	Purchases at Cost	Securities Sold	Gain (Loss)	Unrealized App. (Dep.)	D Income	Distributions Received	Market Value
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Vanguard Market Liquidity Fund	3,401	NA1	NA1	2	_	50	_	4,057
Vanguard Developed Markets Index Fund	54,990	29,885	3,967	361	6,998	1,242	_	88,267
Vanguard Emerging Markets Stock Index Fund	28,452	16,216	2,444	259	3,256	370	_	45,739
Vanguard European Stock Index Fund	26,881	13,998	2,455	183	3,581	912	_	42,188
Vanguard FTSE All-World ex-US Index Fund	54,711	29,732	3,348	333	6,775	1,240	_	88,203
Vanguard FTSE All-World ex-US Small-Cap Index	10.000	0.750	1 404	100	1 401	170		21.024
Fund	12,993	8,752	1,421	129	1,481	176		21,934
Vanguard Pacific Stock Index Fund	18,385	9,594	1,041	110	1,662	267	_	28,710
Total	199,813	108,177	14,676	1,377	23,753	4,257	_	319,098

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

**G.** Management has determined that no events or transactions occurred subsequent to June 30, 2019, that would require recognition or disclosure in these financial statements.

### Trustees Approve Advisory Arrangement

The board of trustees of Vanguard Variable Insurance Fund Total International Stock Market 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 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 monthly reports, which included a Market and Economic Report, a Fund Dashboard Monthly Summary, and a Fund Performance Report.

Prior to their meeting, the trustees were provided with a memo and materials that summarized the information they received over the course of the year. They also considered the factors discussed below, among others. However, no single factor determined whether the board approved the 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 investment management services provided to the portfolio since its inception in 2017 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 portfolio's performance since its inception, 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 acquired fund fees and expenses were well 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 well 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 and its underlying funds ensures that the portfolio will realize economies of scale as the assets of the underlying funds grow, with the cost to shareholders declining as assets increase.

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

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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.