Vanguard°

Annual Report | December 31, 2022

Vanguard Variable Insurance Funds

Total International Stock Market Index Portfolio

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Your Portfolio's Performance at a Glance

- Despite some relief in midsummer and late fall, the 12 months ended December 31, 2022, were a volatile, challenging period for financial markets. The Total International Stock Market Index Portfolio returned –16.01%, tracking the –16.10% return of its benchmark, the FTSE Global All Cap ex US Index.
- Overall, the economic backdrop deteriorated as inflation soared to multidecade highs, driven by government spending during the pandemic as well as higher energy and food prices in the wake of Russia's invasion of Ukraine. That prompted aggressive tightening by many central banks to bring inflation in check, which increased fears of recession.
- As a fund of funds, the portfolio seeks to track its target benchmark by investing in underlying funds that offer broad coverage of developed and emerging markets outside the U.S.
- Despite a robust resurgence in the final months of 2022, most of the underlying funds posted double-digit declines for the full year, with the steepest downturn posted by Vanguard FTSE All-World ex-US Small-Cap Index Fund.
- Please note that the portfolio's returns are different from those in Vanguard Variable Annuity (and other plans that invest in the portfolio), which take into account insurance-related expenses.

Market Barometer

	Average Annual Total Returns Periods Ended December 31, 2022			
	One Year	Three Years	Five Years	
Stocks				
Russell 1000 Index (Large-caps)	-19.13%	7.35%	9.13%	
Russell 2000 Index (Small-caps)	-20.44	3.10	4.13	
Russell 3000 Index (Broad U.S. market)	-19.21	7.07	8.79	
FTSE All-World ex US Index (International)	-15.49	0.61	1.28	
Bonds				
Bloomberg U.S. Aggregate Float Adjusted Index (Broad taxable market)	-13.07%	-2.67%	0.06%	
Bloomberg Municipal Bond Index (Broad tax-exempt market)	-8.53	-0.77	1.25	
FTSE Three-Month U.S. Treasury Bill Index	1.50	0.70	1.24	
CPI				
Consumer Price Index	6.45%	4.92%	3.78%	

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 Total International Stock Market Index 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 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 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 December 31, 2022

Total International Stock Market Index Portfolio	Account Value 6/30/2022	Account Value 12/31/2022	Expenses Paid During Period
Based on Actual Portfolio Return	\$1,000.00	\$1,026.40	\$0.56
Based on Hypothetical 5% Yearly Return	1,000.00	1,024.65	0.56

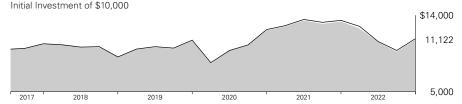
The calculations are based on acquired fund fees and expenses for the most recent six-month period. The underlying portfolios' annualized expense figure for that period is 0.11%. The dollar amounts shown as "Expenses Paid" are equal to the annualized average weighted expense ratio for the underlying funds multiplied by the average account value over the period, multiplied by the number of days in the most recent six-month period, then divided by the number of days in the most recent 12-month period (184/365).

Total International Stock Market Index Portfolio

Performance Summary

All of the returns in this report represent past performance, which is not a guarantee of future results that may be achieved by the portfolio. (Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance.) Note, too, that both investment returns and principal value can fluctuate widely, so an investor's shares, when sold, could be worth more or less than their original cost. The returns shown do not reflect taxes that a shareholder would pay on portfolio distributions or on the sale of portfolio shares. Nor do the returns reflect fees and expenses associated with the annuity or life insurance program through which a shareholder invests. If these fees and expenses were included, the portfolio's returns would be lower.

Cumulative Performance: September 7, 2017, Through December 31, 2022



Average Annual Total Returns Periods Ended December 31, 2022

	One Year	Five Years	Since Inception (9/7/2017)	Final Value of a \$10,000 Investment
Total International Stock Market Index Portfolio	-16.01%	1.01 %	2.02%	\$11,122
— FTSE Global All Cap ex US Index	-16.10	1.10	2.21	11,234

[&]quot;Since Inception" performance is calculated from the portfolio's inception date for both the portfolio and its comparative standard(s).

Underlying Vanguard Funds As of December 31, 2022

Vanguard Developed Markets Index Fund Admiral Shares	28.1%
Vanguard FTSE All-World ex-US Index Fund Admiral Shares	28.0
Vanguard Emerging Markets Stock Index Fund Admiral Shares	17.6
Vanguard European Stock Index Fund Admiral Shares	12.5
Vanguard Pacific Stock Index Fund Admiral Shares	8.5
Vanguard FTSE All-World ex-US Small-Cap Index Fund Admiral Shares	3.1
Vanguard FTSE Canada All Cap Index ETF	2.2

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

Financial Statements

Schedule of Investments

As of December 31, 2022

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 (100.1%)		
International Stock Funds (100.1%)		
Vanguard Developed Markets Index Fund Admiral Shares	25,147,541	339,995
Vanguard FTSE All-World ex-US Index Fund Admiral Shares	10,851,493	339,001
Vanguard Emerging Markets Stock Index Fund Admiral Shares	6,550,928	212,315
Vanguard European Stock Index Fund Admiral Shares	2,178,734	151,357
Vanguard Pacific Stock Index Fund Admiral Shares	1,295,511	103,382
Vanguard FTSE All-World ex-US Small-Cap Index Fund Admiral Shares	1,482,446	37,728
Vanguard FTSE Canada All Cap Index ETF	918,885	26,548
Total Investment Companies (Cost \$1,333,342)		1,210,326
Temporary Cash Investments (0.0%)		
Money Market Fund (0.0%)		
Vanguard Market Liquidity Fund, 4.334% (Cost \$648)	6,478	648
Total Investments (100.1%) (Cost \$1,333,990)		1,210,974
Other Assets and Liabilities – Net (-0.1%)		(1,718)
Net Assets (100%)		1,209,256

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 December 31, 2022

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value—Affiliated Funds (Cost \$1,333,990)	1,210,974
Foreign Currency, at Value (Cost \$8)	8
Receivables for Accrued Income	177
Receivables for Capital Shares Issued	1,225
Total Assets	1,212,384
Liabilities	
Payables for Investment Securities Purchased	656
Payables for Capital Shares Redeemed	2,472
Total Liabilities	3,128
Net Assets	1,209,256
At December 31, 2022, net assets consisted of:	
Paid-in Capital	1,291,404
Total Distributable Earnings (Loss)	(82,148)
Net Assets	1,209,256
Net Assets	
Applicable to 63,489,308 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	1,209,256
Net Asset Value Per Share	\$19.05

Statement of Operations

Year Ended December 31, 2022

	(\$000)
Investment Income	
Income	
Income Distributions Received from Affiliated Funds ¹	36,124
Net Investment Income—Note B	36,124
Realized Net Gain (Loss)	
Capital Gain Distributions Received from Affiliated Funds	_
Affiliated Funds Sold	12,307
Futures Contracts	33
Foreign Currencies	(15)
Realized Net Gain (Loss)	12,325
Change in Unrealized Appreciation (Depreciation)	
Affiliated Funds	(241,673)
Foreign Currencies	(1)
Change in Unrealized Appreciation (Depreciation)	(241,674)
Net Increase (Decrease) in Net Assets Resulting from Operations	(193,225)

¹ Dividends are net of foreign withholding taxes of \$151,000.

Statement of Changes in Net Assets

	Year Ended December 31,	
	2022 (\$000)	2021 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	36,124	31,281
Realized Net Gain (Loss)	12,325	37,266
Change in Unrealized Appreciation (Depreciation)	(241,674)	10,842
Net Increase (Decrease) in Net Assets Resulting from Operations	(193,225)	79,389
Distributions		
Total Distributions	(72,843)	(26,959)
Capital Share Transactions		
Issued	499,136	342,779
Issued in Lieu of Cash Distributions	72,843	26,959
Redeemed	(223,049)	(194,651)
Net Increase (Decrease) from Capital Share Transactions	348,930	175,087
Total Increase (Decrease)	82,862	227,517
Net Assets		
Beginning of Period	1,126,394	898,877
End of Period	1,209,256	1,126,394

Financial Highlights

For a Share Outstanding			Yea	r Ended Dec	ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$24.23	\$22.98	\$21.38	\$17.94	\$21.15
Investment Operations					
Net Investment Income ¹	.622	.730	.487	.691	.646
Capital Gain Distributions Received ¹	_	_	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	(4.351)	1.202	1.645	3.134	(3.716)
Total from Investment Operations	(3.729)	1.932	2.132	3.825	(3.070)
Distributions					
Dividends from Net Investment Income	(.709)	(.462)	(.415)	(.383)	(.127)
Distributions from Realized Capital Gains	(.742)	(.220)	(.117)	(.002)	(.013)
Total Distributions	(1.451)	(.682)	(.532)	(.385)	(.140)
Net Asset Value, End of Period	\$19.05	\$24.23	\$22.98	\$21.38	\$17.94
Total Return	-16.01%	8.53%	11.18%	21.55%	-14.62%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$1,209	\$1,126	\$899	\$402	\$200
Ratio of Total Expenses to Average Net Assets	_	_	_	_	_
Acquired Fund Fees and Expenses	0.11%	0.10%	0.10%	0.11%	0.11%
Ratio of Net Investment Income to Average Net Assets	3.16%	3.03%	2.50%	3.50%	3.23%
Portfolio Turnover Rate	15%	12%	22%	15%	6%

¹ Calculated based on average shares outstanding.

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 and portfolios. 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.

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: 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. Underlying ETFs are valued at the latest quoted sales prices or official closing prices taken from their primary market or, if not traded on the valuation date, at the mean of the latest quoted bid and asked prices.
- 2. Foreign Currency: Securities and other assets and liabilities denominated in foreign currencies are translated into U.S. dollars using exchange rates obtained from an independent third party as of the portfolio's pricing time on the valuation date. Realized gains (losses) and unrealized appreciation (depreciation) on investment securities include the effects of changes in exchange rates since the securities were purchased, combined with the effects of changes in security prices. Fluctuations in the value of other assets and liabilities resulting from changes in exchange rates are recorded as unrealized foreign currency gains (losses) until the assets or liabilities are settled in cash, at which time they are recorded as realized foreign currency gains (losses).
- 3. Futures Contracts: The portfolio uses 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 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 year ended December 31, 2022, the portfolio's average investments in long and short futures contracts represented less than 1% of net assets, based on the average of the notional amounts at each quarter-end during the period. The portfolio had no open futures contracts at December 31, 2022.

- 4. Federal Income Taxes: The portfolio intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The portfolio's tax returns are open to examination by the relevant tax authorities until expiration of the applicable statute of limitations, which is generally three years after the filing of the tax return. Management has analyzed the portfolio's tax positions taken for all open federal and state income tax years, and has concluded that no provision for income tax is required in the portfolio's financial statements.
- 5. Distributions: Distributions to shareholders are recorded on the ex-dividend date. Distributions are determined on a tax basis at the fiscal year-end and may differ from net investment income and realized capital gains for financial reporting purposes.

6. 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 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 year ended December 31, 2022, the portfolio did not utilize the credit facilities or the Interfund Lending Program.

- 7. 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.
- 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 December 31, 2022, 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 December 31, 2022, 100% of the market value of the portfolio's investments was determined based on Level 1 inputs.

D. Permanent differences between book-basis and tax-basis components of net assets are reclassified among capital accounts in the financial statements to reflect their tax character. These reclassifications have no effect on net assets or net asset value per share. As of period end, permanent differences primarily attributable to the accounting for applicable foreign currency transactions were reclassified between the individual components of total distributable earnings (loss).

Temporary differences between book-basis and tax-basis components of total distributable earnings (loss) arise when certain items of income, gain, or loss are recognized in different periods for financial statement and tax purposes; these differences will reverse at some time in the future. The differences are primarily related to the deferral of losses from wash sales; and the recognition of unrealized gains from passive foreign investment companies. As of period end, the tax-basis components of total distributable earnings (loss) are detailed in the table as follows:

	Amount (\$000)
Undistributed Ordinary Income	33,085
Undistributed Long-Term Gains	12,438
Capital Loss Carryforwards	
Qualified Late-Year Losses	_
Net Unrealized Gains (Losses)	(127,671)

The tax character of distributions paid was as follows:

	Year Ended De	Year Ended December 31,		
	2022 Amount (\$000)	2021 Amount (\$000)		
Ordinary Income*	55,448	26,702		
Long-Term Capital Gains	17,395	257		
Total	72,843	26,959		

^{*} Includes short-term capital gains, if any.

As of December 31, 2022, gross unrealized appreciation and depreciation for investments based on cost for U.S. federal income tax purposes were as follows:

	Amount (\$000)
Tax Cost	1,338,645
Gross Unrealized Appreciation	3,862
Gross Unrealized Depreciation	(131,533)
Net Unrealized Appreciation (Depreciation)	(127,671)

E. Capital shares issued and redeemed were:

	Year Ended December 31,		
	2022 Shares (000)	2021 Shares (000)	
Issued	24,649	14,261	
Issued in Lieu of Cash Distributions	3,425	1,157	
Redeemed	(11,071)	(8,044)	
Net Increase (Decrease) in Shares Outstanding	17,003	7,374	

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

		Current Period Transactions						
	Dec. 31, 2021 Market Value (\$000)	Purchases at Cost (\$000)	Proceeds from Securities Sold (\$000)	Realized Net Gain (Loss) (\$000)	Change in Unrealized App. (Dep.) (\$000)	Income (\$000)	Capital Gain Distributions Received (\$000)	Dec. 31, 2022 Market Value (\$000)
Vanguard Developed Markets Index Fund	316,551	127,468	43,077	2,859	(63,806)	9,345	_	339,995
Vanguard Emerging Markets Stock Index Fund	192,843	110,838	45,815	3,053	(48,604)	8,013	_	212,315
Vanguard European Stock Index Fund	147,662	64,614	31,850	1,734	(30,803)	4,570	_	151,357
Vanguard FTSE All-World ex-US Index Fund	316,306	114,635	29,869	3,931	(66,002)	9,883	_	339,001
Vanguard FTSE All-World ex-US Small-Cap Index Fund	36,306	14,042	3,607	294	(9,307)	802	_	37,728
Vanguard FTSE Canada All Cap Index ETF	18,545	12,268	_	_	(4,265)	788	_	26,548
Vanguard Market Liquidity Fund	1,201	NA ¹	NA ¹	_	_	21	_	648
Vanguard Pacific Stock Index Fund	97,957	37,127	13,252	436	(18,886)	2,702		103,382
Total	1,127,371	480,992	167,470	12,307	(241,673)	36,124	_	1,210,974

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

G. Management has determined that no events or transactions occurred subsequent to December 31, 2022, that would require recognition or disclosure in these financial statements.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Vanguard Variable Insurance Funds and Shareholders of Total International Stock Market Index Portfolio

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Total International Stock Market Index Portfolio (one of the portfolios constituting Vanguard Variable Insurance Funds, referred to hereafter as the "Portfolio") as of December 31, 2022, the related statement of operations for the year ended December 31, 2022, the statement of changes in net assets for each of the two years in the period ended December 31, 2022, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2022 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Portfolio as of December 31, 2022, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2022 and the financial highlights for each of the five years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Portfolio's management. Our responsibility is to express an opinion on the Portfolio's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Portfolio in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2022 by correspondence with the transfer agent. We believe that our audits provide a reasonable basis for our opinion.

/s/PricewaterhouseCoopers LLP Philadelphia, Pennsylvania February 15, 2023

We have served as the auditor of one or more investment companies in The Vanguard Group of Funds since 1975

Tax information (unaudited)

The portfolio hereby designates \$37,000, or if subsequently determined to be different, the maximum amount allowable by law, of interest earned from obligations of the U.S. government which is generally exempt from state income tax.

The portfolio distributed \$17,395,000 as capital gain dividends (20% rate gain distributions) to shareholders during the fiscal year.

The portfolio designates to shareholders foreign source income of \$37,776,000 and foreign taxes paid of \$2,778,000.



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The People Who Govern Your Fund

The trustees of your mutual fund are there to see that the fund is operated and managed in your best interests since, as a shareholder, you are a part owner of the fund. Your fund's trustees also serve on the board of directors of The Vanguard Group, Inc., which is owned by the Vanguard funds and provides services to them.

A majority of Vanguard's board members are independent, meaning that they have no affiliation with Vanguard or the funds they oversee, apart from the sizable personal investments they have made as private individuals. The independent board members have distinguished backgrounds in business, academia, and public service. Each of the trustees and executive officers oversees 206 Vanguard funds

Information for each trustee and executive officer of the fund appears below. That information, as well as the Vanguard fund count, is as of the date on the cover of this fund report. The mailing address of the trustees and officers is P.O. Box 876, Valley Forge, PA 19482. More information about the trustees is in the *Statement of Additional Information*, which can be obtained, without charge, by contacting Vanguard at 800-662-7447, or online at vanguard.com.

Interested Trustee¹

Mortimer J. Buckley

Born in 1969. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chairman of the board (2019–present) of Vanguard and of each of the investment companies served by Vanguard; chief executive officer (2018–present) of Vanguard; chief executive officer, president, and trustee (2018–present) of each of the investment companies served by Vanguard; president and director (2017–present) of Vanguard; and president (2018–present) of Vanguard Marketing Corporation. Chief investment officer (2013–2017), managing director (2002–2017), head of the Retail Investor Group (2006–2012), and chief information officer (2001–2006) of Vanguard. Member of the board of governors of the Investment Company Institute and the board of governors of FINRA. Trustee and vice chair of The Shipley School.

Independent Trustees

Tara Bunch

Born in 1962. Trustee since November 2021. Principal occupation(s) during the past five years and other experience: head of global operations at Airbnb (2020–present). Vice president of AppleCare (2012–2020). Member of the board of directors of Out & Equal (2002–2006), the advisory board of the University of California, Berkeley School of Engineering (2020–present), and the advisory board of Santa Clara University's Leavey School of Business (2018–present).

Emerson U. Fullwood

Born in 1948. Trustee since January 2008. Principal occupation(s) during the past five years and other experience: executive chief staff and marketing officer for North America and corporate vice president (retired 2008) of Xerox Corporation (document management products and services). Former president of the Worldwide Channels Group, Latin America, and Worldwide Customer Service and executive chief staff officer of Developing Markets of Xerox. Executive in residence and 2009–2010 Distinguished Minett Professor at the Rochester Institute of Technology. Member of the board of directors of the University of Rochester Medical Center, the Monroe Community College Foundation, the United Way of Rochester, North Carolina A&T University, Roberts Wesleyan College, and the Rochester Philharmonic Orchestra. Trustee of the University of Rochester.

F. Joseph Loughrey

Born in 1949. Trustee since October 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2009) and vice chairman of the board (2008–2009) of Cummins Inc. (industrial machinery). Chairman of the board of Hillenbrand, Inc. (specialized consumer services). Director of the V Foundation. Member of the advisory council for the College of Arts and Letters at the University of Notre Dame. Chairman of the board of Saint Anselm College

Mark Loughridge

Born in 1953. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: senior vice president and chief financial officer (retired 2013) of IBM (information technology services). Fiduciary member of IBM's Retirement Plan Committee (2004–2013), senior vice president and general manager (2002–2004) of IBM Global Financing, vice president and controller (1998–2002) of

 $\ensuremath{\mathsf{IBM}},$ and a variety of other prior management roles at $\ensuremath{\mathsf{IBM}}.$ Member of the Council on Chicago Booth.

Scott C. Malpass

Born in 1962. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: adjunct professor of finance at the University of Notre Dame (2020–present). Chief investment officer (retired 2020) and vice president (retired 2020) of the University of Notre Dame. Assistant professor (retired June 2020) of finance at the Mendoza College of Business, University of Notre Dame, and member of the Notre Dame 403(b) Investment Committee. Member of the board of Catholic Investment Services, Inc. (investment advisors), the board of superintendence of the Institute for the Works of Religion, and the board of directors of Paxos Trust Company (finance).

Deanna Mulligan

Born in 1963. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chief executive officer of Purposeful (advisory firm for CEOs and C-level executives; 2021–present). Board chair (2020), chief executive officer (2011–2020), and president (2010–2019) of The Guardian Life Insurance Company of America. Chief operating officer (2010–2011) and executive vice president (2008–2010) of Individual Life and Disability of the Guardian Life Insurance Company of America. Member of the board of the Economic Club of New York. Trustee of the Partnership for New York City (business leadership), Chief Executives for Corporate Purpose, and the NewYork-Presbyterian Hospital.

André F. Perold

Born in 1952. Trustee since December 2004. Principal occupation(s) during the past five years and other experience: George Gund Professor of Finance and Banking, Emeritus at the Harvard Business School (retired 2011). Chief investment officer and co-managing partner of HighVista Strategies (private investment firm). Member of the board (2018–present) of RIT Capital Partners (investment firm). Member of the investment committee of Partners Health Care System.

Sarah Bloom Raskin

Born in 1961. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: deputy secretary (2014–2017) of the United States Department of the Treasury. Governor (2010–2014) of the Federal Reserve Board. Commissioner (2007–2010) of financial regulation for the State of Maryland. Colin W. Brown Distinguished Professor of the Practice of Law (2021–present), professor (2020–present), Distinguished Fellow of the Global Financial Markets Center (2020–present), and Rubenstein Fellow (2017–2020) at Duke University. Trustee (2017–present) of Amherst College and member of Amherst College Investment Committee (2019–present). Member of the Regenerative Crisis Response Committee (2020–present).

David A. Thomas

Born in 1956. Trustee since July 2021. Principal occupation(s) during the past five years and other experience: president of Morehouse College (2018–present). Professor of business administration, emeritus at Harvard University (2017–2018). Dean (2011–2016) and professor of management (2016–2017) at the Georgetown University McDonough School of Business. Director of DTE Energy Company (2013–present). Trustee of Common Fund (2019–present).

Peter F. Volanakis

Born in 1955. Trustee since July 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2010) of Corning Incorporated (communications equipment) and director of Corning Incorporated (2000–2010) and Dow Corning (2001–2010). Director (2012) of SPX Corporation (multi-industry manufacturing). Overseer of the Amos Tuck School of Business Administration, Dartmouth College (2001–2013). Member of the BMW Group Mobility Council.

Executive Officers

Jacqueline Angell

Born in 1974. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief compliance officer (November 2022–present) of Vanguard and of each of the investment companies served by Vanguard. Chief compliance officer (2018–2022) and deputy chief compliance officer (2017–2019) of State Street Corporation.

Christine M. Buchanan

Born in 1970. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief financial officer (2021–present) and treasurer (2017–2022) of each of the investment companies served by Vanguard. Partner (2005–2017) at KPMG (audit, tax, and advisory services).

John Galloway

Born in 1973. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Investment stewardship officer (September 2020–present) of each of the investment companies served by Vanguard. Head of Investor Advocacy (February 2020–present) and head of Marketing Strategy and Planning (2017–2020) at Vanguard. Special assistant to the President of the United States (2015).

Ashley Grim

Born in 1984. Principal occupation(s) during the past five years and other experience: treasurer (February 2022–present) of each of the investment companies served by Vanguard. Fund transfer agent controller (2019–2022) and director of Audit Services

(2017–2019) at Vanguard. Senior manager (2015–2017) at PriceWaterhouseCoopers (audit and assurance, consulting, and tax services).

Peter Mahoney

Born in 1974. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Controller (2015–present) of each of the investment companies served by Vanguard. Head of International Fund Services (2008–2014) at Vanguard.

Anne E. Robinson

Born in 1970. Principal occupation(s) during the past five years and other experience: general counsel (2016–present) of Vanguard. Secretary (2016–present) of Vanguard and of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Managing director and general counsel of Global Cards and Consumer Services (2014–2016) at Citigroup. Counsel (2003–2014) at American Express. Nonexecutive director of the board of National Grid (energy).

Michael Rollings

Born in 1963. Principal occupation(s) during the past five years and other experience: finance director (2017–present) and treasurer (2017) of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Chief financial officer (2016–present) of Vanguard Marketing Corporation. Executive vice president and chief financial officer (2006–2016) of MassMutual Financial Group.

Vanguard Senior Management Team

Matthew Benchener Joseph Brennan Mortimer J. Buckley Gregory Davis John James Chris D. McIsaac Thomas M. Rampulla Karin A. Risi Anne E. Robinson Michael Rollings Nitin Tandon Lauren Valente

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