

Annual Report | December 31, 2020

Vanguard Variable Insurance Funds

Real Estate Index Portfolio

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Your Portfolio's Performance at a Glance

- For the 12 months ended December 31, 2020, the Real Estate Index Portfolio returned -4.85%, in line with its target benchmark after factoring in the portfolio's expenses.
- The emergence of COVID-19 in early 2020 turned into a global health crisis, and aggressive attempts to contain it resulted in a sharp downturn in economic activity. Unemployment spiked, and sectors where social distancing isn't possible were hit hard. Stocks initially plummeted as infections surged, but they finished the year significantly higher. The gain was thanks in part to rapid and robust monetary and fiscal action by policymakers and the rollout of COVID-19 vaccines as the year drew to a close.
- While the broad U.S. stock market returned about 21%, REITs were among the worst-performing sectors as the pandemic weighed heavily on commercial real estate. Seven of the REIT market's 12 subsectors posted negative returns. Retail REITs and hotel and resort REITs, which depend on physical movement by consumers, were among the subsectors affected most by the pandemic. Office REITs also performed poorly in the remote work environment.
- There were bright spots, however. Industrial REITs, which include warehouse and distribution sites, performed well as stay-at-home consumers shopped more online. REITs that invest in data centers also benefited from increased demand for facilities that house servers and computer equipment.
- 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.
- In January 2021, shareholders approved a Vanguard proxy proposal to reclassify the portfolio's diversification status to "non-diversified" as defined under the Investment Company Act of 1940. While this change provides the portfolio managers with increased investment flexibility and potential for better investment performance, it presents a heightened degree of investment risk due to a non-diversified portfolio's ability to make more concentrated investments.

Market Barometer

	Average Annual Total Returns Periods Ended December 31, 2020		
	One Year	Three Years	Five Years
Stocks			
Russell 1000 Index (Large-caps)	20.96%	14.82%	15.60%
Russell 2000 Index (Small-caps)	19.96	10.25	13.26
Russell 3000 Index (Broad U.S. market)	20.89	14.49	15.43
FTSE All-World ex US Index (International)	11.22	5.18	9.16
Bonds			
Bloomberg Barclays U.S. Aggregate Bond Index (Broad taxable market)	7.51%	5.34%	4.44%
Bloomberg Barclays Municipal Bond Index (Broad tax-exempt market)	5.21	4.64	3.91
FTSE Three-Month U.S. Treasury Bill Index	0.58	1.56	1.16
CPI			
Consumer Price Index	1.36%	1.85%	1.95%

About Your Portfolio's Expenses

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

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

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

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

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

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

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

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

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

Six Months Ended December 31, 2020

	Beginning Account Value 6/30/2020	Ending Account Value 12/31/2020	Expenses Paid During Period
Real Estate Index Portfolio			
Based on Actual Portfolio Return	\$1,000.00	\$1,105.90	\$1.38
Based on Hypothetical 5% Yearly Return	1,000.00	1,023.83	1.32

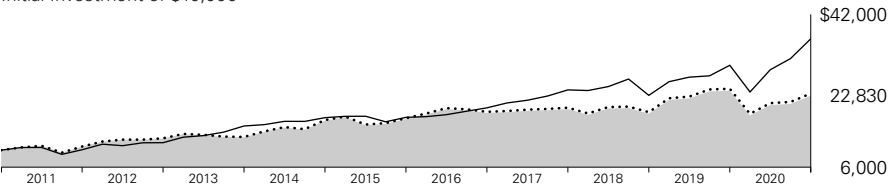
The calculations are based on expenses incurred in the most recent six-month period. The portfolio's annualized six-month expense ratio for that period is 0.26%. The dollar amounts shown as "Expenses Paid" are equal to the annualized expense ratio multiplied by the average account value over the period, multiplied by the number of days in the most recent six-month period, then divided by the number of days in the most recent 12-month period (184/366).

Real Estate 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: December 31, 2010, Through December 31, 2020
Initial Investment of \$10,000



	Average Annual Total Returns			Final Value of a \$10,000 Investment
	One Year	Five Years	Ten Years	
Real Estate Index Portfolio	-4.85%	5.66%	8.60%	\$22,830
Real Estate Spliced Index	-4.55	5.90	8.85	23,351
Dow Jones U.S. Total Stock Market Float Adjusted Index	20.79	15.36	13.74	36,240

Real Estate Spliced Index: MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; the MSCI US REIT Index through January 18, 2018; and the MSCI US Investable Market Real Estate 25/50 Index thereafter.

Real Estate Index Portfolio

Portfolio Allocation

As of December 31, 2020

Diversified Real Estate Activities	0.2%
Diversified REITs	3.9
Health Care REITs	9.2
Hotel & Resort REITs	3.3
Industrial REITs	11.1
Office REITs	7.9
Real Estate Development	0.3
Real Estate Operating Companies	0.2
Real Estate Services	3.6
Residential REITs	13.9
Retail REITs	9.1
Specialized REITs	37.3

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

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

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard and Poor's, a division of McGraw-Hill Companies, Inc. ("S&P"), and is licensed for use by Vanguard. Neither MSCI, S&P nor any third party involved in making or compiling the GICS or any GICS classification makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of its affiliates or any third party involved in making or compiling the GICS or any GICS classification have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Financial Statements

Schedule of Investments

As of December 31, 2020

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)		Shares	Market Value* (\$000)
Equity Real Estate Investment Trusts (REITs) (91.4%)					
Diversified REITs (3.7%)					
WP Carey Inc.	151,224	10,674	Rexford Industrial Realty Inc.	107,351	5,272
STORE Capital Corp.	209,373	7,115	EastGroup Properties Inc.	34,147	4,714
VEREIT Inc.	187,205	7,075	First Industrial Realty Trust Inc.	110,508	4,656
PS Business Parks Inc.	17,859	2,373	STAG Industrial Inc.	129,814	4,066
Colony Capital Inc.	418,735	2,014	Terreno Realty Corp.	59,456	3,479
Essential Properties Realty Trust Inc.	81,093	1,719	Innovative Industrial Properties Inc.	18,896	3,461
Washington REIT	72,026	1,558	Lexington Realty Trust	240,024	2,549
Global Net Lease Inc.	78,663	1,348	Monmouth Real Estate Investment Corp.	80,160	1,388
American Assets Trust Inc.	44,782	1,293	Industrial Logistics Properties Trust	57,075	1,329
Empire State Realty Trust Inc. Class A	127,877	1,192			114,353
Alexander & Baldwin Inc.	60,425	1,037	Office REITs (7.5%)		
iStar Inc.	66,123	982	Alexandria Real Estate Equities Inc.	109,567	19,527
Armada Hoffer Properties Inc.	49,399	554	Boston Properties Inc.	128,374	12,135
Gladstone Commercial Corp.	29,132	524	Vornado Realty Trust	141,040	5,267
One Liberty Properties Inc.	14,316	287	Kilroy Realty Corp.	89,932	5,162
		39,745	Douglas Emmett Inc.	152,549	4,451
			Cousins Properties Inc.	129,232	4,329
Health Care REITs (8.8%)			SL Green Realty Corp.	63,869	3,805
Welltower Inc.	362,615	23,432	Highwoods Properties Inc.	90,365	3,581
Ventas Inc.	324,244	15,901	JBG SMITH Properties	104,835	3,278
Healthpeak Properties Inc.	467,255	14,125	Hudson Pacific Properties Inc.	133,531	3,208
Medical Properties Trust Inc.	459,308	10,008	Equity Commonwealth	105,407	2,876
Omega Healthcare Investors Inc.	197,364	7,168	Corporate Office Properties Trust	97,167	2,534
Healthcare Trust of America Inc. Class A	189,745	5,226	Piedmont Office Realty Trust Inc. Class A	109,622	1,779
Healthcare Realty Trust Inc.	118,344	3,503	Brandywine Realty Trust	148,368	1,767
Physicians Realty Trust	181,298	3,227	Easterly Government Properties Inc.	69,452	1,573
Sabra Health Care REIT Inc.	178,227	3,096	Columbia Property Trust Inc.	98,705	1,416
National Health Investors Inc.	38,680	2,676	Paramount Group Inc.	155,537	1,406
CareTrust REIT Inc.	83,385	1,849	Mack-Cali Realty Corp.	78,198	974
LTC Properties Inc.	34,352	1,337	Office Properties Income Trust	42,525	966
Community Healthcare Trust Inc.	18,619	877	Franklin Street Properties Corp.	91,659	401
Diversified Healthcare Trust	204,018	841	City Office REIT Inc.	37,237	364
Universal Health Realty Income Trust	11,219	721			80,799
Global Medical REIT Inc.	38,125	498	Residential REITs (13.2%)		
New Senior Investment Group Inc.	72,012	373	AvalonBay Communities Inc.	122,312	19,623
		94,858	Equity Residential	323,514	19,178
Hotel & Resort REITs (3.2%)			Invitation Homes Inc.	487,209	14,470
Host Hotels & Resorts Inc.	613,182	8,971	Essex Property Trust Inc.	56,594	13,437
MGM Growth Properties LLC Class A	114,603	3,587	Sun Communities Inc.	85,422	12,980
Park Hotels & Resorts Inc.	203,995	3,499	Mid-America Apartment Communities Inc.	99,434	12,597
Ryman Hospitality Properties Inc.	45,525	3,085	UDR Inc.	256,550	9,859
Apple Hospitality REIT Inc.	183,688	2,371	Equity LifeStyle Properties Inc.	150,350	9,526
Pebblebrook Hotel Trust	113,456	2,133	Camden Property Trust	84,702	8,464
Sunstone Hotel Investors Inc.	187,428	2,124	American Homes 4 Rent Class A	245,145	7,354
RLJ Lodging Trust	143,599	2,032	American Campus Communities Inc.	119,574	5,114
Service Properties Trust	143,637	1,650	Apartment Income REIT Corp.	129,021	4,956
Xenia Hotels & Resorts Inc.	99,503	1,512	Independence Realty Trust Inc.	82,831	1,112
DiamondRock Hospitality Co.	174,480	1,439	Centerspace	10,999	777
Summit Hotel Properties Inc.	90,623	817	Front Yard Residential Corp.	47,848	775
Chatham Lodging Trust	40,286	435	NexPoint Residential Trust Inc.	16,671	705
CorePoint Lodging Inc.	35,596	245	Apartment Investment & Management Co. Class A	128,363	678
Hersha Hospitality Trust Class A	30,064	237	UMH Properties Inc.	31,687	469
		34,137	Preferred Apartment Communities Inc. Class A	43,270	320
Industrial REITs (10.6%)					142,394
Prologis Inc.	641,750	63,957	Retail REITs (8.7%)		
Duke Realty Corp.	322,121	12,875	Simon Property Group Inc.	282,547	24,096
Americold Realty Trust	176,986	6,607	Realty Income Corp.	299,844	18,641
			Regency Centers Corp.	147,105	6,706
			National Retail Properties Inc.	150,488	6,158

Real Estate Index Portfolio

	Shares	Market Value* (\$000)
Kimco Realty Corp.	375,149	5,631
Federal Realty Investment Trust	62,321	5,305
Brixmor Property Group Inc.	258,013	4,270
Spirit Realty Capital Inc.	89,215	3,584
Agree Realty Corp.	46,701	3,110
Weingarten Realty Investors	105,400	2,284
Retail Properties of America Inc. Class A	186,590	1,597
Retail Opportunity Investments Corp.	103,024	1,379
SITE Centers Corp.	134,718	1,363
Urban Edge Properties	100,582	1,301
Kite Realty Group Trust	72,546	1,085
Acadia Realty Trust	74,262	1,054
¹ Macerich Co.	98,465	1,051
Getty Realty Corp.	30,601	843
¹ Tanger Factory Outlet Centers Inc.	80,149	798
American Finance Trust Inc.	93,084	692
RPT Realty	69,087	598
Alexander's Inc.	1,971	547
^{*,1} Seritage Growth Properties Class A	31,477	462
Saul Centers Inc.	12,088	383
Urstadt Biddle Properties Inc. Class A	25,881	366
Whitestone REIT	32,442	259
Retail Value Inc.	14,508	216
¹ Washington Prime Group Inc.	17,526	114
^{*,2} Spirit MTA REIT	42,040	11
		93,904
Specialized REITs (35.7%)		
American Tower Corp.	385,298	86,484
Crown Castle International Corp.	374,629	59,637
Equinix Inc.	46,918	33,508
Digital Realty Trust Inc.	233,664	32,598
Public Storage	136,641	31,555
SBA Communications Corp. Class A	97,230	27,431
Weyerhaeuser Co.	648,423	21,742
Extra Space Storage Inc.	112,192	12,999
VICI Properties Inc.	463,247	11,813
Gaming & Leisure Properties Inc.	184,379	7,818
CyrusOne Inc.	101,538	7,427
Iron Mountain Inc.	250,489	7,384
Lamar Advertising Co. Class A	75,139	6,253
CubeSmart	167,984	5,646
Life Storage Inc.	40,736	4,863
CoreSite Realty Corp.	36,957	4,630
Rayonier Inc.	119,056	3,498
QTS Realty Trust Inc. Class A	53,139	3,288
PotlatchDeltic Corp.	58,347	2,919
Outfront Media Inc.	125,116	2,447
National Storage Affiliates Trust	59,689	2,151
EPR Properties	64,726	2,104
Uniti Group Inc.	160,374	1,881
Four Corners Property Trust Inc.	61,309	1,825
GEO Group Inc.	106,837	947
Safehold Inc.	10,956	794
CatchMark Timber Trust Inc. Class A	41,580	389
CoreCivic Inc.	14,850	97
		384,128
Total Equity Real Estate Investment Trusts (REITs) (Cost \$1,018,011)		984,318
Real Estate Management & Development (4.1%)		
Diversified Real Estate Activities (0.2%)		
St. Joe Co.	28,421	1,207

	Shares	Market Value* (\$000)
RMR Group Inc. Class A	13,107	506
* Tejon Ranch Co.	18,898	273
* Five Point Holdings LLC Class A	44,312	242
		2,228
Real Estate Development (0.3%)		
* Howard Hughes Corp.	35,973	2,839
* Forestar Group Inc.	14,519	293
		3,132
Real Estate Operating Companies (0.2%)		
Kennedy-Wilson Holdings Inc.	112,344	2,010
* FRP Holdings Inc.	4,715	214
		2,224
Real Estate Services (3.4%)		
* CBRE Group Inc. Class A	291,419	18,278
* Jones Lang LaSalle Inc.	44,912	6,664
* Redfin Corp.	81,948	5,624
* eXp World Holdings Inc.	23,820	1,503
* Cushman & Wakefield plc	96,522	1,431
* Realogy Holdings Corp.	99,434	1,305
Newmark Group Inc. Class A	132,089	963
* Marcus & Millichap Inc.	20,227	753
RE/MAX Holdings Inc. Class A	15,546	565
* Altisource Portfolio Solutions SA	4,880	63
		37,149
Total Real Estate Management & Development (Cost \$39,346)		44,733
Temporary Cash Investments (2.4%)		
Money Market Fund (2.4%)		
^{3,4} Vanguard Market Liquidity Fund, 0.111 %	253,909	25,391
	Face Amount (\$000)	
U.S. Government and Agency Obligations (0.0%)		
⁵ United States Treasury Bill, 0.095%, 1/28/21	189	189
Total Temporary Cash Investments (Cost \$25,582)		25,580
Total Investments (97.9%) (Cost \$1,082,939)		1,054,631
Other Assets and Liabilities—Net (2.1%)		22,476
Net Assets (100%)		1,077,107

Cost is in \$000.

• See Note A in Notes to Financial Statements.

* Non-income-producing security.

¹ Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$1,819,000.

² Security value determined using significant unobservable inputs.

³ Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

⁴ Collateral of \$1,930,000 was received for securities on loan.

⁵ Securities with a value of \$82,000 have been segregated as initial margin for open futures contracts. REIT—Real Estate Investment Trust.

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				
Dow Jones U.S. Real Estate Index	March 2021	33	1,105	29

Over-the-Counter Total Return Swaps

Reference Entity	Termination Date	Counterparty	Notional Amount (\$000)	Floating Interest Rate Received (Paid) ¹ (%)	Value and Unrealized Appreciation (\$000)	Value and Unrealized (Depreciation) (\$000)
Equinix Inc.	2/2/21	GSI	20,869	(0.153)	552	—

¹ Based on 1M USD London Interbank Offered Rate (LIBOR) as of the most recent payment date. Floating interest payment received/paid monthly.

1M—1-month

GSI—Goldman Sachs International.

At December 31, 2020, the counterparties had deposited in segregated accounts securities with a value of \$546,000 in connection with open over-the-counter swap contracts.

Statement of Assets and Liabilities

As of December 31, 2020

(\$000s, except shares and per-share amounts)	Amount
Assets	
Investments in Securities, at Value	
Unaffiliated Issuers (Cost \$1,057,546)	1,029,240
Affiliated Issuers (Cost \$25,393)	25,391
Total Investments in Securities	1,054,631
Investment in Vanguard	40
Receivables for Investment Securities Sold	702
Receivables for Accrued Income	4,329
Receivables for Capital Shares Issued	25,683
Variation Margin Receivable—Futures Contracts	11
Unrealized Appreciation—Over-the-Counter Swap Contracts	552
Total Assets	1,085,948
Liabilities	
Payables for Investment Securities Purchased	6,389
Collateral for Securities on Loan	1,930
Payables for Capital Shares Redeemed	375
Payables to Vanguard	147
Total Liabilities	8,841
Net Assets	1,077,107

At December 31, 2020, net assets consisted of:

Paid-in Capital	1,046,650
Total Distributable Earnings (Loss)	30,457
Net Assets	1,077,107

Net Assets	
Applicable to 86,649,376 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	1,077,107
Net Asset Value Per Share	\$12.43

Statement of Operations

	Year Ended December 31, 2020
	(\$000)
Investment Income	
Income	
Dividends	25,097
Interest ¹	46
Securities Lending—Net	136
Total Income	25,279
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	155
Management and Administrative	2,364
Marketing and Distribution	96
Custodian Fees	12
Auditing Fees	34
Shareholders' Reports and Proxy Fees	19
Trustees' Fees and Expenses	1
Total Expenses	2,681
Net Investment Income	22,598
Realized Net Gain (Loss)	
Capital Gain Distributions Received	9,165
Investment Securities Sold ¹	23,994
Futures Contracts	(391)
Swap Contracts	3,743
Realized Net Gain (Loss)	36,511
Change in Unrealized Appreciation (Depreciation)	
Investment Securities ¹	(133,339)
Futures Contracts	(56)
Swap Contracts	552
Change in Unrealized Appreciation (Depreciation)	(132,843)
Net Increase (Decrease) in Net Assets Resulting from Operations	(73,734)

¹ Interest income, realized net gain (loss), and change in unrealized appreciation (depreciation) from an affiliated company of the portfolio were \$45,000, \$14,000, and (\$2,000), respectively. Purchases and sales are for temporary cash investment purposes.

Statement of Changes in Net Assets

	Year Ended December 31,	
	2020 (\$000)	2019 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	22,598	29,148
Realized Net Gain (Loss)	36,511	17,588
Change in Unrealized Appreciation (Depreciation)	(132,843)	230,170
Net Increase (Decrease) in Net Assets Resulting from Operations	(73,734)	276,906
Distributions¹		
Total Distributions	(44,948)	(85,887)
Capital Share Transactions		
Issued	151,575	159,509
Issued in Lieu of Cash Distributions	44,948	85,887
Redeemed	(243,185)	(159,033)
Net Increase (Decrease) from Capital Share Transactions	(46,662)	86,363
Total Increase (Decrease)	(165,344)	277,382
Net Assets		
Beginning of Period	1,242,451	965,069
End of Period	1,077,107	1,242,451

¹ Certain prior-period numbers have been reclassified to conform with the current-period presentation.

Financial Highlights

For a Share Outstanding Throughout Each Period	Year Ended December 31,				
	2020	2019	2018	2017	2016
Net Asset Value, Beginning of Period	\$13.74	\$11.57	\$13.14	\$13.48	\$13.77
Investment Operations					
Net Investment Income	.259 ¹	.329 ¹	.367 ¹	.375 ¹	.346
Net Realized and Unrealized Gain (Loss) on Investments	(1.054)	2.874	(1.084)	.220	.734
Total from Investment Operations	(.795)	3.203	(.717)	.595	1.080
Distributions					
Dividends from Net Investment Income	(.316)	(.368)	(.383)	(.336)	(.375)
Distributions from Realized Capital Gains	(.199)	(.665)	(.470)	(.599)	(.995)
Total Distributions	(.515)	(1.033)	(.853)	(.935)	(1.370)
Net Asset Value, End of Period	\$12.43	\$13.74	\$11.57	\$13.14	\$13.48
Total Return	-4.85%	28.81%	-5.35%	4.78%	8.36%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$1,077	\$1,242	\$965	\$1,077	\$1,093
Ratio of Total Expenses to Average Net Assets	0.26%	0.26%	0.26%	0.27%	0.27%
Ratio of Net Investment Income to Average Net Assets	2.19%	2.52%	3.04%	2.87%	2.55%
Portfolio Turnover Rate	10%	7%	35%	10%	14%

¹ Calculated based on average shares outstanding.

Notes to Financial Statements

The Real Estate Index Portfolio, a portfolio of Vanguard Variable Insurance Funds, is registered under the Investment Company Act of 1940 as an open-end investment company. The portfolio's shares are only available for purchase by separate accounts of insurance companies as investments for variable annuity plans, variable life insurance contracts, or other variable benefit insurance contracts. Market disruptions associated with the COVID-19 pandemic have had a global impact, and uncertainty exists as to the long-term implications. Such disruptions can adversely affect assets of the portfolio and thus portfolio performance.

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

1. **Security Valuation:** Securities are valued as of the close of trading on the New York Stock Exchange (generally 4 p.m., Eastern time) on the valuation date. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. Securities for which market quotations are not readily available, or whose values have been materially affected by events occurring before the portfolio's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the board of trustees to represent fair value. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value. 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 index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The portfolio may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the portfolio and the prices of futures contracts, and the possibility of an illiquid market. Counterparty risk involving futures is mitigated because a regulated clearinghouse is the counterparty instead of the clearing broker. To further mitigate counterparty risk, the portfolio trades futures contracts on an exchange, monitors the financial strength of its clearing brokers and clearinghouse, and has entered into clearing agreements with its clearing brokers. The clearinghouse imposes initial margin requirements to secure the portfolio's performance and requires daily settlement of variation margin representing changes in the market value of each contract. Any securities pledged as initial margin for open contracts are noted in the Schedule of Investments.

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

During the year ended December 31, 2020, 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. **Swap Contracts:** The portfolio has entered into equity swap contracts to earn the total return on selected reference stocks in the portfolio's target index. Under the terms of the swaps, the portfolio receives the total return on the referenced stock (i.e., receiving the increase or paying the decrease in value of the selected reference stock and receiving the equivalent of any dividends in respect of the selected referenced stock) over a specified period of time, applied to a notional amount that represents the value of a designated number of shares of the selected reference stock at the beginning of the equity swap contract. The portfolio also pays a floating rate that is based on short-term interest rates, applied to the notional amount. At the same time, the portfolio generally invests an amount approximating the notional amount of the swap in high-quality temporary cash investments.

A risk associated with all types of swaps is the possibility that a counterparty may default on its obligation to pay net amounts due to the portfolio. The portfolio's maximum amount subject to counterparty risk is the unrealized appreciation on the swap contract. The portfolio mitigates its counterparty risk by entering into swaps only with a diverse group of prequalified counterparties, monitoring their financial strength, entering into master netting arrangements with its counterparties, and requiring its counterparties to transfer collateral as security for their performance. In the absence of a default, the collateral pledged or received by the portfolio cannot be repledged, resold, or

rehypothecated. In the event of a counterparty's default (including bankruptcy), the portfolio may terminate any swap contracts with that counterparty, determine the net amount owed by either party in accordance with its master netting arrangements, and sell or retain any collateral held up to the net amount owed to the portfolio under the master netting arrangements. The swap contracts contain provisions whereby a counterparty may terminate open contracts if the portfolio's net assets decline below a certain level, triggering a payment by the portfolio if the portfolio is in a net liability position at the time of the termination. The payment amount would be reduced by any collateral the portfolio has pledged. Any securities pledged as collateral for open contracts are noted in the Schedule of Investments. The value of collateral received or pledged is compared daily to the value of the swap contracts exposure with each counterparty, and any difference, if in excess of a specified minimum transfer amount, is adjusted and settled within two business days.

The notional amounts of swap contracts are not recorded in the Statement of Assets and Liabilities. Swaps are valued daily based on market quotations received from independent pricing services or recognized dealers and the change in value is recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until periodic payments are made or the termination of the swap, at which time realized gain (loss) is recorded.

During the year ended December 31, 2020, the portfolio's average amounts of investments in total return swaps represented 2% of net assets, based on the average of notional amounts at each quarter-end during the period.

4. Distributions: Distributions to shareholders are recorded on the ex-dividend date. Distributions are determined on a tax basis at the fiscal year-end and may differ from net investment income and realized capital gains for financial reporting purposes.

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

6. Credit Facilities and Interfund Lending Program: The portfolio and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 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, 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; these fees are allocated to the funds based on a method approved by the portfolio's board of trustees and included in Management and Administrative expenses on the portfolio's Statement of Operations. Any borrowings under either facility bear interest at a rate based upon the higher of the one-month London Interbank Offered Rate (or an acceptable alternate rate, if necessary), federal funds effective rate, or overnight bank funding rate plus an agreed-upon spread, except that borrowings under the uncommitted credit facility may bear interest based upon an alternative 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, 2020, the portfolio did not utilize the credit facilities or the Interfund Lending Program.

7. Other: Distributions received from investment securities are recorded on the ex-dividend date. Each investment security reports annually the tax character of its distributions. Dividend income, capital gain distributions received, and unrealized appreciation (depreciation) reflect the amounts of taxable income, capital gain, and return of capital reported by the investment securities, and management’s estimates of such amounts for investment security distributions for which actual information has not been reported. 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. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

B. In accordance with the terms of a Funds’ Service Agreement (the “FSA”) between Vanguard and the portfolio, Vanguard furnishes to the portfolio investment advisory, corporate management, administrative, marketing, and distribution services at Vanguard’s cost of operations (as defined by the FSA). These costs of operations are allocated to the portfolio based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the portfolio may invest up to 0.40% of its net assets as capital in Vanguard. At December 31, 2020, the portfolio had contributed to Vanguard capital in the amount of \$40,000, representing less than 0.01% of the portfolio’s net assets and 0.02% of Vanguard’s capital received pursuant to the FSA. The portfolio’s trustees and officers are also directors and employees, respectively, of Vanguard.

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

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

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

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

The following table summarizes the market value of the portfolio’s investments and derivatives as of December 31, 2020, based on the inputs used to value them:

	Level 1 (\$000)	Level 2 (\$000)	Level 3 (\$000)	Total (\$000)
Investments				
Assets				
Common Stocks	1,029,040	—	11	1,029,051
Temporary Cash Investments	25,391	189	—	25,580
Total	1,054,431	189	11	1,054,631
Derivative Financial Instruments				
Assets				
Futures Contracts ¹	12	—	—	12
Swap Contracts	—	552	—	552
Total	12	552	—	564

¹ Represents variation margin on the last day of the reporting period.

D. Permanent differences between book-basis and tax-basis components of net assets, if any, 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.

Temporary differences between book-basis and tax-basis components of total distributable earnings (losses) 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 or losses from certain derivative contracts. As of period end, the tax-basis components of total distributable earnings (losses) are detailed in the table as follows:

	Amount (\$000)
Undistributed Ordinary Income	24,144
Undistributed Long-Term Gains	33,530
Capital Loss Carryforwards	—
Qualified Late-Year Losses	—
Net Unrealized Gains (Losses)	(29,128)

The tax character of distributions paid was as follows:

	Year Ended December 31,	
	2020 Amount (\$000)	2019 Amount (\$000)
Ordinary Income	28,768	37,050
Long-Term Capital Gains	16,180	48,837
Total	44,948	85,887

As of December 31, 2020, gross unrealized appreciation and depreciation for investments and derivatives based on cost for U.S. federal income tax purposes were as follows:

	Amount (\$000)
Tax Cost	1,083,759
Gross Unrealized Appreciation	177,843
Gross Unrealized Depreciation	(206,971)
Net Unrealized Appreciation (Depreciation)	(29,128)

E. During the year ended December 31, 2020, the portfolio purchased \$102,182,000 of investment securities and sold \$197,857,000 of investment securities, other than temporary cash investments.

F. Capital shares issued and redeemed were:

	Year Ended December 31,	
	2020 Shares (000)	2019 Shares (000)
Issued	12,842	12,229
Issued in Lieu of Cash Distributions	4,527	7,040
Redeemed	(21,151)	(12,225)
Net Increase (Decrease) in Shares Outstanding	(3,782)	7,044

At December 31, 2020, 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 42% of the portfolio's net assets. If this shareholder were to redeem its investment in the portfolio, the redemption might result in an increase in the portfolio's expense ratio, cause the portfolio to incur higher transaction costs, or lead to the realization of taxable gains.

G. Management has determined that no events or transactions occurred subsequent to December 31, 2020, 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 Real Estate Index Portfolio

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Real Estate Index Portfolio (one of the portfolios constituting Vanguard Variable Insurance Funds, referred to hereafter as the "Portfolio") as of December 31, 2020, the related statement of operations for the year ended December 31, 2020, the statement of changes in net assets for each of the two years in the period ended December 31, 2020, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2020 (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, 2020, 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, 2020 and the financial highlights for each of the five years in the period ended December 31, 2020 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, 2020 by correspondence with the custodian and brokers and by agreement to the underlying ownership records of the transfer agent; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

/s/PricewaterhouseCoopers LLP
Philadelphia, Pennsylvania
February 18, 2021

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

Special 2020 tax information (unaudited) for corporate shareholders only for Real Estate Index Portfolio, a portfolio of Vanguard Variable Insurance Funds

This information for the fiscal year ended December 31, 2020, is included pursuant to provisions of the Internal Revenue Code for corporate shareholders only.

The portfolio distributed \$16,180,000 as capital gain dividends (from net long-term capital gains) to shareholders during the fiscal year. The portfolio designates \$13,883,000 of its capital gain dividends as 20% rate gain distributions and \$2,297,000 as unrecaptured section 1250 gain distributions (25% rate gain).

THESE FUNDS ARE NOT SPONSORED, ENDORSED, SOLD OR PROMOTED BY MSCI INC. ("MSCI"), ANY OF ITS AFFILIATES, ANY OF ITS DIRECT OR INDIRECT INFORMATION PROVIDERS OR ANY OTHER THIRD PARTY INVOLVED IN, OR RELATED TO, COMPILING, COMPUTING OR CREATING ANY MSCI INDEX (COLLECTIVELY, THE "MSCI PARTIES"). THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES ARE SERVICE MARK(S) OF MSCI OR ITS AFFILIATES AND HAVE BEEN LICENSED FOR USE FOR CERTAIN PURPOSES BY VANGUARD. NONE OF THE MSCI PARTIES MAKES ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, TO THE OWNERS OF THESE FUNDS OR ANY MEMBER OF THE PUBLIC REGARDING THE ADVISABILITY OF INVESTING IN FUNDS GENERALLY OR IN THESE FUNDS PARTICULARLY OR THE ABILITY OF ANY MSCI INDEX TO TRACK CORRESPONDING STOCK MARKET PERFORMANCE. MSCI OR ITS AFFILIATES ARE THE LICENSORS OF CERTAIN TRADEMARKS, SERVICE MARKS AND TRADE NAMES AND OF THE MSCI INDEXES WHICH ARE DETERMINED, COMPOSED AND CALCULATED BY MSCI WITHOUT REGARD TO THESE FUNDS OR THE ISSUER OR OWNER OF THESE FUNDS. NONE OF THE MSCI PARTIES HAS ANY OBLIGATION TO TAKE THE NEEDS OF THE ISSUERS OR OWNERS OF THESE FUNDS INTO CONSIDERATION IN DETERMINING, COMPOSING OR CALCULATING THE MSCI INDEXES. NONE OF THE MSCI PARTIES IS RESPONSIBLE FOR OR HAS PARTICIPATED IN THE DETERMINATION OF THE TIMING OF, PRICES AT, OR QUANTITIES OF THESE FUNDS TO BE ISSUED OR IN THE DETERMINATION OR CALCULATION OF THE CONSIDERATION INTO WHICH THESE FUNDS ARE REDEEMABLE. NONE OF THE MSCI PARTIES HAS ANY OBLIGATION OR LIABILITY TO THE OWNERS OF THESE FUNDS IN CONNECTION WITH THE ADMINISTRATION, MARKETING OR OFFERING OF THESE FUNDS.

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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 211 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. Chairman of the board (2011–2017) and trustee (2009–2017) of the Children's Hospital of Philadelphia; and trustee (2018–present) and vice chair (2019–present) of The Shipley School.

Independent Trustees

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. Director of SPX FLOW, Inc. (multi-industry manufacturing). Director of the University of Rochester Medical Center, the Monroe Community College Foundation, the United Way of Rochester, North Carolina A&T University, and Roberts Wesleyan College. Trustee of the University of Rochester.

Amy Gutmann

Born in 1949. Trustee since June 2006. Principal occupation(s) during the past five years and other experience: president (2004–present) of the University of Pennsylvania. Christopher H. Browne Distinguished Professor of Political Science, School of Arts and Sciences, and professor of communication, Annenberg School for Communication, with secondary faculty appointments in the Department of Philosophy, School of Arts and Sciences, and at the Graduate School of Education, University of Pennsylvania.

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) and the Lumina Foundation. Director of the V Foundation. Member of the advisory council for the College of Arts and Letters and chair of the advisory board to the Kellogg Institute for International Studies, both at the University of Notre Dame.

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

IBM, and a variety of other prior management roles at 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: chief investment officer (retired June 2020) and vice president (retired June 2020) of the University of Notre Dame. Assistant professor of finance at the Mendoza College of Business, University of Notre Dame, and member of the Notre Dame 403(b) Investment Committee (retired June 2020). Member of the board of Catholic Investment Services, Inc. (investment advisors) and the board of superintendence of the Institute for the Works of Religion.

Deanna Mulligan

Born in 1963. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: board chair (2020–present), 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 the individual life and disability division of Guardian Life. Member of the board of the American Council of Life Insurers and the board of the Economic Club of New York. Trustee of the Partnership for New York City (business leadership), Chief Executives for Corporate Purpose, NewYork-Presbyterian Hospital, Catalyst, and the Bruce Museum (arts and science). Member of the Advisory Council for the Stanford Graduate School of Business.

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 of advisors and member of the investment committee of the Museum of Fine Arts Boston. 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. Member of the board of directors (2012–2014) of Neighborhood Reinvestment Corporation. Director (2017–present) of i(x) Investments, LLC; director (2017–present) of Reserve Trust. Rubenstein Fellow (2017–present) of Duke University; trustee (2017–present) of Amherst College, and trustee (2019–present) of the Folger Shakespeare Library.

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). Chairman of the board of trustees of Colby-Sawyer College. Member of the board of Hypertherm Inc. (industrial cutting systems, software, and consumables).

¹ Mr. Buckley is considered "interested person," as defined in the Investment Company Act of 1940, because he is an officer of the Vanguard funds.

Executive Officers

John Bendl

Born in 1970. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief financial officer (2019–present) of each of the investment companies served by Vanguard. Chief accounting officer, treasurer, and controller of Vanguard (2017–present). Partner (2003–2016) at KPMG (audit, tax, and advisory services).

Christine M. Buchanan

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

David Cermak

Born in 1960. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Finance director (2019–present) of each of the investment companies served by Vanguard. Managing director and head (2017–present) of Vanguard Investments Singapore. Managing director and head (2017–2019) of Vanguard Investments Hong Kong. Representative director and head (2014–2017) of Vanguard Investments Japan.

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. Deputy assistant to the President of the United States (2015).

Thomas J. Higgins

Born in 1957. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Finance director (2019–present), chief financial officer (2008–2019), and treasurer (1998–2008) of each of the investment companies served by Vanguard.

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.

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. Director (2016–present) of Vanguard Marketing Corporation. Executive vice president and chief financial officer (2006–2016) of MassMutual Financial Group.

John E. Schadt

Born in 1972. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief compliance officer (2019–present) of Vanguard and of each of the investment companies served by Vanguard. Assistant vice president (2019–present) of Vanguard Marketing Corporation.

Vanguard Senior Management Team

Joseph Brennan
Mortimer J. Buckley
Gregory Davis
John James
John T. Marcante
Chris D. McIsaac

James M. Norris
Thomas M. Rampulla
Karin A. Risi
Anne E. Robinson
Michael Rollings
Lauren Valente



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