

Annual Report | November 30, 2023

Vanguard U.S. Factor ETFs

Vanguard U.S. Minimum Volatility ETF

Vanguard U.S. Momentum Factor ETF

Vanguard U.S. Multifactor ETF

Vanguard U.S. Quality Factor ETF

Vanguard U.S. Value Factor ETF

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

Important information about shareholder reports

Beginning in July 2024, amendments adopted by the Securities and Exchange Commission will substantially impact the design, content, and transmission of shareholder reports. Shareholder reports will provide key fund information in a clear and concise format and must be mailed to each shareholder that has not elected to receive the reports electronically. Financial statements will no longer be included in the shareholder report but will be available at vanguard.com, can be mailed upon request, or can be accessed on the SEC’s website at www.sec.gov.

You may elect to receive shareholder reports and other communications from the fund electronically by contacting your financial intermediary (such as a broker-dealer or bank) or, if you invest directly with the fund, by calling Vanguard at one of the phone numbers on the back cover of this report or by logging on to vanguard.com.

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Please note: The opinions expressed in this report are just that—informed opinions. They should not be considered promises or advice. Also, please keep in mind that the information and opinions cover the period through the date on the front of this report. Of course, the risks of investing in your fund are spelled out in the prospectus.

Your Fund's Performance at a Glance

- Vanguard's five U.S. Factor ETFs posted returns ranging from -0.06% to 6.84% (based on net asset value) for the 12 months ended November 30, 2023. All five ETFs underperformed the 12.61% return of their benchmark, the Russell 3000 Index.
- For much of the period, inflation continued to ease amid interest rate hikes by the Federal Reserve. Unexpected resilience in the labor market and consumer spending dialed back expectations of an imminent recession. Although the prospect of higher interest rates for longer and heightened geopolitical tensions weighed on market sentiment at times toward the close of the period, global stocks and bonds rallied in November.
- The U.S. Factor ETFs seek to provide long-term capital appreciation by investing in stocks that have lower or higher measures of certain factors relative to the broad U.S. equity market.
- Vanguard U.S. Quality Factor ETF performed best among the group. A lack of exposure to utilities, selection in industrials, and an underweight allocation to real estate contributed the most to its relative performance. Vanguard U.S. Momentum Factor ETF performed the worst.

Market Barometer

	Average Annual Total Returns Periods Ended November 30, 2023		
	One Year	Three Years	Five Years
Stocks			
Russell 1000 Index (Large-caps)	13.57%	8.72%	12.25%
Russell 2000 Index (Small-caps)	-2.56	1.13	4.78
Russell 3000 Index (Broad U.S. market)	12.61	8.26	11.77
FTSE All-World ex US Index (International)	9.64	2.12	5.49
Bonds			
Bloomberg U.S. Aggregate Float Adjusted Index (Broad taxable market)	1.32%	-4.46%	0.79%
Bloomberg Municipal Bond Index (Broad tax-exempt market)	4.28	-0.96	2.03
FTSE Three-Month U.S. Treasury Bill Index	5.12	2.08	1.85
CPI			
Consumer Price Index	3.14%	5.67%	4.03%

Advisor's Report

For the 12 months ended November 30, 2023, Vanguard's five U.S. Factor ETFs posted returns (based on net asset value) ranging from -0.06% for the U.S. Momentum Factor ETF to 6.84% for the U.S. Quality Factor ETF. All five ETFs underperformed their benchmark, the Russell 3000 Index, which returned 12.61%.

The objective of each U.S. Factor ETF is to create a portfolio that has broad exposure to large-, mid-, and small-capitalization U.S. equities and that has the potential for long-term capital appreciation, subject to rules-based screens as follows:

- Vanguard U.S. Minimum Volatility ETF seeks to build a portfolio of stocks with lower volatility relative to the broad U.S. equity market.
- Vanguard U.S. Momentum Factor ETF seeks exposure to stocks with relatively strong recent performance as identified by measures such as returns over different periods.
- Vanguard U.S. Multifactor ETF seeks exposure to stocks with relatively strong recent performance, strong fundamentals, and low prices relative to fundamentals.
- Vanguard U.S. Quality Factor ETF seeks exposure to stocks with strong fundamentals as identified by measures such as profitability, earnings, and balance-sheet strength.
- Vanguard U.S. Value Factor ETF seeks exposure to stocks with lower prices

relative to fundamental measures of value such as book/price and earnings/price ratios.

The investment environment

At the beginning of the 12 months, inflation eased off multidecade highs amid ongoing interest rate hikes by central banks. Unexpected resilience in labor markets and consumer spending helped dial back expectations of a sustained global recession. Although heightened geopolitical tensions and the prospect of higher interest rates for longer weighed on market sentiment toward the close of the period, global stocks and bonds rallied in November.

Within this environment, large-cap stocks outperformed small-caps. Growth outpaced value, and U.S. stocks outperformed their non-U.S. counterparts. Six of the benchmark's 11 industry sectors gained ground, with information technology (IT), communication services, and consumer discretionary producing the strongest results.

The ETFs' successes and shortfalls

The outperformance of large-cap stocks during the period was a significant reason for the ETFs' underperformance, as our approach to factor investing tends to favor smaller companies relative to their benchmark.

Sector exposure affected the ETFs differently based on the factor each seeks to emphasize:

- The U.S. Minimum Volatility ETF was held back the most by our positions in IT,

communication services, and financials. Materials, energy, and real estate added to performance.

- The U.S. Momentum Factor ETF was held back in particular by our positions in IT, health care, and energy. The underperformance was somewhat offset by our lack of exposure to utilities and underweight allocations to real estate and industrials.

- The U.S. Multifactor ETF was hurt the most by our positions in IT, communication services, and financials. Our lack of exposure to utilities, underweight allocation to real estate, and selection in industrials contributed to relative performance.

- The U.S. Quality Factor ETF was held back in particular by our positions in IT, communication services, and consumer staples. Our lack of exposure to utilities, selection in industrials, and underweight allocation to real estate added the most to results.

- The U.S. Value Factor ETF was hurt the most by our positions in IT, financials, and communication services. Selection in industrials, a lack of exposure to utilities, and an underweight allocation to health care benefited relative performance the most.

We expect our approach to portfolio construction to produce long-term capital appreciation that reflects the factors emphasized by each of the U.S. Factor ETF portfolios. Results will vary over different periods and across factors.

However, we believe that focusing on the risk-adjusted returns of each portfolio relative to its targeted factors and the benchmark will serve investors well over time.

We thank you for your investment and look forward to serving you in the period ahead.

John Ameriks, Ph.D.,
Principal, Global Head,
and Portfolio Manager

Scott Rodemer, CFA,
Head of Equity Factor Investments
and Portfolio Manager

Vanguard Quantitative Equity Group

December 13, 2023

About Your Fund's Expenses

As a shareholder of the fund, 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 fund's gross income, directly reduce the investment return of the fund.

A fund'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 fund 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 fund's costs in two ways:

- **Based on actual fund 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 fund'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 fund. 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 fund under the heading "Expenses Paid During Period."

- **Based on hypothetical 5% yearly return.** This section is intended to help you compare your fund's costs with those of other mutual funds. It assumes that the fund 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 fund'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 fund'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 fund for buying and selling securities. Further, the expenses do not include any purchase, redemption, or account service fees described in the fund prospectus. If such fees were applied to your account, your costs would be higher. Your fund does not carry a "sales load."

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 fund'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 fund's current prospectus.

Six Months Ended November 30, 2023

	Beginning Account Value 5/31/2023	Ending Account Value 11/30/2023	Expenses Paid During Period
Based on Actual Fund Return			
U.S. Minimum Volatility ETF	\$1,000.00	\$1,061.70	\$0.67
U.S. Momentum Factor ETF	\$1,000.00	\$1,078.10	\$0.68
U.S. Multifactor ETF	\$1,000.00	\$1,127.40	\$0.96
U.S. Quality Factor ETF	\$1,000.00	\$1,126.50	\$0.69
U.S. Value Factor ETF	\$1,000.00	\$1,141.50	\$0.70
Based on Hypothetical 5% Yearly Return			
U.S. Minimum Volatility ETF	\$1,000.00	\$1,024.42	\$0.66
U.S. Momentum Factor ETF	\$1,000.00	\$1,024.42	\$0.66
U.S. Multifactor ETF	\$1,000.00	\$1,024.17	\$0.91
U.S. Quality Factor ETF	\$1,000.00	\$1,024.42	\$0.66
U.S. Value Factor ETF	\$1,000.00	\$1,024.42	\$0.66

The calculations are based on expenses incurred in the most recent six-month period. The funds' annualized six-month expense ratios for that period are 0.13% for the U.S. Minimum Volatility ETF, 0.13% for the U.S. Momentum Factor ETF, 0.18% for the U.S. Multifactor ETF, 0.13% for the U.S. Quality Factor ETF, and 0.13% for the U.S. Value Factor ETF. 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 (183/365).

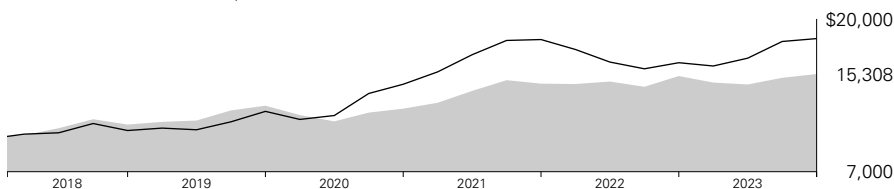
U.S. Minimum Volatility ETF

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 fund. (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 fund distributions or on the sale of fund shares.

Cumulative Performance: February 13, 2018, Through November 30, 2023

Initial Investment of \$10,000



	Average Annual Total Returns Periods Ended November 30, 2023			Final Value of a \$10,000 Investment
	One Year	Five Years	Since Inception (2/13/2018)	
■ U.S. Minimum Volatility ETF Net Asset Value	1.13%	6.82%	7.63%	\$15,308
— US Minimum Volatility ETF Market Price	1.21	6.83	7.63	15,316
— Russell 3000 Index	12.61	11.77	11.02	18,324

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

Cumulative Returns of ETF Shares: February 13, 2018, Through November 30, 2023

	One Year	Five Years	Since Inception (2/13/2018)
US Minimum Volatility ETF Market Price	1.21%	39.13%	53.16%
US Minimum Volatility ETF Net Asset Value	1.13	39.07	53.08
Russell 3000 Index	12.61	74.44	83.24

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

See Financial Highlights for dividend and capital gains information.

Fund Allocation

As of November 30, 2023

Consumer Discretionary	14.5%
Consumer Staples	11.6
Energy	2.8
Financials	11.5
Health Care	14.3
Industrials	10.0
Real Estate	1.2
Technology	21.4
Telecommunications	6.8
Utilities	5.9

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

Financial Statements

Schedule of Investments

As of November 30, 2023

The fund 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 fund's Form N-PORT reports are available on the SEC's website at www.sec.gov.

	Shares	Market Value* (\$'000)		Shares	Market Value* (\$'000)
Common Stocks (99.4%)					
Consumer Discretionary (14.5%)					
Electronic Arts Inc.	10,951	1,511	PepsiCo Inc.	363	61
* O'Reilly Automotive Inc.	1,485	1,459	Lancaster Colony Corp.	358	59
TJX Cos. Inc.	16,140	1,422	Reynolds Consumer Products Inc.	2,198	58
McDonald's Corp.	4,997	1,408	J M Smucker Co.	405	45
* Stride Inc.	18,932	1,147			10,764
Walmart Inc.	6,264	975	Energy (2.7%)		
Service Corp. International	11,850	726	Exxon Mobil Corp.	9,682	995
Murphy USA Inc.	1,791	662	Chevron Corp.	5,195	746
* Instructure Holdings Inc.	23,451	613	Williams Cos. Inc.	16,329	601
* Grand Canyon Education Inc.	4,050	554	Kinder Morgan Inc.	12,617	221
* Atlanta Braves Holdings Inc. Class C	14,532	522			2,563
Marcus Corp.	30,320	422	Financials (11.5%)		
* AutoZone Inc.	150	392	Cboe Global Markets Inc.	8,189	1,492
* Atlanta Braves Holdings Inc. Class A	7,499	303	CME Group Inc.	6,427	1,403
* QuinStreet Inc.	23,171	289	Safety Insurance Group Inc. White Mountains Insurance Group Ltd.	14,286	1,099
* Madison Square Garden Sports Corp.	1,606	272	* Enstar Group Ltd.	3,553	976
Rollins Inc.	6,185	252	First Financial Corp.	23,942	916
Laureate Education Inc.	15,944	209	AMERISAFE Inc.	12,581	606
* Adtalem Global Education Inc.	3,593	205	City Holding Co.	5,851	563
Graham Holdings Co. Class B	139	87	* Columbia Financial Inc.	27,279	449
* Cars.com Inc.	1,820	34	Travelers Cos. Inc.	2,225	402
* Daily Journal Corp.	100	33	Waterstone Financial Inc.	30,412	371
		13,497	Arthur J Gallagher & Co.	1,472	367
Consumer Staples (11.5%)					
McKesson Corp.	3,107	1,462	Progressive Corp.	1,600	262
Church & Dwight Co. Inc.	14,473	1,399	Donegal Group Inc. Class A	13,137	187
Procter & Gamble Co.	6,880	1,056	Great Southern Bancorp Inc.	3,671	187
Cencora Inc.	4,457	906	* Berkshire Hathaway Inc. Class B	334	120
Colgate-Palmolive Co.	11,422	900	Horace Mann Educators Corp.	3,515	118
General Mills Inc.	10,423	664	* Greenlight Capital Re Ltd. Class A	4,452	49
Hormel Foods Corp.	16,912	517	Intercontinental Exchange Inc.	416	47
Hershey Co.	2,612	491	* Blue Foundry Bancorp	4,591	40
Flowers Foods Inc.	22,518	469	Employers Holdings Inc.	921	35
Altria Group Inc.	9,873	415	* FVCBankcorp Inc.	2,036	23
Kimberly-Clark Corp.	3,244	401			10,692
Kellanova	7,259	381	Health Care (14.2%)		
John B Sanfilippo & Son Inc.	4,072	375	Johnson & Johnson	9,112	1,409
Mondelez International Inc. Class A	4,862	346	Merck & Co. Inc.	13,590	1,393
Universal Corp.	4,837	272	AbbVie Inc.	9,545	1,359
J & J Snack Foods Corp.	1,521	250	Eli Lilly & Co.	2,019	1,193
Oil-Dri Corp. of America	2,294	130	Gilead Sciences Inc.	14,782	1,132
Coca-Cola Co.	1,837	107	National HealthCare Corp.	14,175	1,085
			Chemed Corp.	1,674	949
			Amgen Inc.	3,457	932

U.S. Minimum Volatility ETF

	Shares	Market Value* (\$'000)		Shares	Market Value* (\$'000)
Bristol-Myers Squibb Co.	17,668	872	NVE Corp.	4,479	321
Cardinal Health Inc.	8,036	860	Analog Devices Inc.	1,412	259
HealthStream Inc.	27,965	699	* NetScout Systems Inc.	12,421	249
* Prestige Consumer Healthcare Inc.	8,014	460	* Meta Platforms Inc. Class A	718	235
* Incyte Corp.	5,552	302	Immersion Corp.	30,988	201
Becton Dickinson & Co.	1,146	271	* Veeco Instruments Inc.	6,527	186
UnitedHealth Group Inc.	186	103	* N-Able Inc.	15,202	181
* Vertex Pharmaceuticals Inc.	241	86	Sapiens International Corp. NV	5,350	138
* Merrimack Pharmaceuticals Inc.	5,466	69	PC Connection Inc.	1,297	77
* Neurocrine Biosciences Inc.	545	64	* Alphabet Inc. Class C	514	69
* Theravance Biopharma Inc.	2,954	31	* TrueCar Inc.	12,780	36
* Summit Therapeutics Inc. (XNMS)	9,144	19			19,912
		13,288	Telecommunications (6.7%)		
Industrials (9.9%)			T-Mobile US Inc.	9,607	1,445
Northrop Grumman Corp.	3,078	1,462	Verizon Communications Inc.	33,926	1,301
* Kirby Corp.	18,278	1,403	InterDigital Inc.	12,170	1,216
Lockheed Martin Corp.	3,121	1,397	Cisco Systems Inc.	17,798	861
* FTI Consulting Inc.	6,090	1,343	* IDT Corp. Class B	24,096	707
* Huron Consulting Group Inc.	9,493	989	Spok Holdings Inc.	14,519	243
* OSI Systems Inc.	7,465	920	Shenandoah Telecommunications Co.	10,649	237
Cass Information Systems Inc.	14,495	599	ATN International Inc.	4,470	136
Accenture plc Class A	789	263	Iridium Communications Inc.	2,848	109
Ennis Inc.	11,637	247	Motorola Solutions Inc.	85	28
Heartland Express Inc.	15,633	210			6,283
Powell Industries Inc.	1,210	101	Utilities (5.9%)		
* Leonardo DRS Inc.	4,645	86	Republic Services Inc.	8,602	1,392
* Overseas Shipholding Group Inc. Class A	14,556	71	Chesapeake Utilities Corp.	9,238	883
General Dynamics Corp.	218	54	Duke Energy Corp.	6,154	568
Marten Transport Ltd.	1,866	35	Consolidated Edison Inc.	6,006	541
* CPI Card Group Inc.	1,346	24	Waste Management Inc.	3,007	514
Argan Inc.	438	20	WEC Energy Group Inc.	5,189	434
United States Lime & Minerals Inc.	85	18	MGE Energy Inc.	5,374	396
* CompoSecure Inc.	3,517	18	Northwest Natural Holding Co.	9,642	353
		9,260	Northwestern Energy Group Inc.	4,609	232
Real Estate (1.2%)			Spire Inc.	1,860	114
Equity Commonwealth	59,399	1,116	DTE Energy Co.	358	37
			CMS Energy Corp.	527	30
					5,494
Technology (21.3%)			Total Common Stocks (Cost \$87,467)		92,869
International Business Machines Corp.	10,042	1,592	Temporary Cash Investments (0.2%)		
Roper Technologies Inc.	2,891	1,556	Money Market Fund (0.2%)		
* CommVault Systems Inc.	20,528	1,510	^{2,3} Vanguard Market Liquidity Fund, 5.438% (Cost \$187)	1,875	188
Apple Inc.	6,568	1,248			
NetApp Inc.	13,579	1,241	Total Investments (99.6%) (Cost \$87,654)		93,057
Amdocs Ltd.	13,840	1,159	Other Assets and Liabilities—Net (0.4%)		336
Texas Instruments Inc.	7,513	1,147	Net Assets (100%)		93,393
Dolby Laboratories Inc. Class A	12,803	1,103			
* Blackbaud Inc.	12,208	919	Cost is in \$'000.		
Microsoft Corp.	2,215	839	• See Note A in Notes to Financial Statements.		
Broadcom Inc.	901	834	* Non-income-producing security.		
* Agilysys Inc.	9,060	780	1 Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$2,000.		
* Alphabet Inc. Class A	5,454	723	2 Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.		
Hewlett Packard Enterprise Co.	41,194	697	3 Collateral of \$2,000 was received for securities on loan.		
* Insight Enterprises Inc.	4,425	670			
* Yelp Inc.	14,213	621			
* Cirrus Logic Inc.	7,683	583			
* Parsons Corp.	6,102	380			
Leidos Holdings Inc.	3,336	358			

U.S. Minimum Volatility ETF

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				
Micro E-mini S&P 500 Index	December 2023	16	366	5

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

Statement of Assets and Liabilities

As of November 30, 2023

(\$000s, except shares, footnotes, and per-share amounts) Amount

Assets	
Investments in Securities, at Value ¹	
Unaffiliated Issuers (Cost \$87,467)	92,869
Affiliated Issuers (Cost \$187)	188
Total Investments in Securities	93,057
Investment in Vanguard	3
Cash Collateral Pledged—Futures Contracts	14
Receivables for Investment Securities Sold	94
Receivables for Accrued Income	214
Receivables for Capital Shares Issued	508
Variation Margin Receivable—Futures Contracts	1
Total Assets	93,891
Liabilities	
Payables for Investment Securities Purchased	491
Collateral for Securities on Loan	2
Payables to Vanguard	5
Total Liabilities	498
Net Assets	93,393

¹ Includes \$2,000 of securities on loan.

At November 30, 2023, net assets consisted of:

Paid-in Capital	98,229
Total Distributable Earnings (Loss)	(4,836)
Net Assets	93,393
Net Assets	
Applicable to 920,000 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	93,393
Net Asset Value Per Share	\$101.51

Statement of Operations

Year Ended
November 30, 2023

(\$000)

Investment Income	
Income	
Dividends	2,160
Interest ¹	22
Securities Lending—Net	21
Total Income	2,203
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	—
Management and Administrative	44
Marketing and Distribution	—
Custodian Fees	1
Auditing Fees	28
Shareholders' Reports	25
Trustees' Fees and Expenses	—
Professional Services	16
Total Expenses	114
Expenses Paid Indirectly	(1)
Net Expenses	113
Net Investment Income	2,090
Realized Net Gain (Loss)	
Investment Securities Sold ^{1,2}	605
Futures Contracts	34
Realized Net Gain (Loss)	639
Change in Unrealized Appreciation (Depreciation)	
Investment Securities ¹	(1,774)
Futures Contracts	(3)
Change in Unrealized Appreciation (Depreciation)	(1,777)
Net Increase (Decrease) in Net Assets Resulting from Operations	952

1 Interest income, realized net gain (loss), capital gain distributions received, and change in unrealized appreciation (depreciation) from an affiliated company of the fund were \$21,000, less than \$1,000, less than \$1,000, and \$1,000, respectively. Purchases and sales are for temporary cash investment purposes.

2 Includes \$3,789,000 of net gain (loss) resulting from in-kind redemptions.

Statement of Changes in Net Assets

	Year Ended November 30,	
	2023	2022
	(\$000)	(\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	2,090	1,311
Realized Net Gain (Loss)	639	2,030
Change in Unrealized Appreciation (Depreciation)	(1,777)	(43)
Net Increase (Decrease) in Net Assets Resulting from Operations	952	3,298
Distributions		
Total Distributions	(2,061)	(1,062)
Capital Share Transactions		
Issued	31,343	42,084
Issued in Lieu of Cash Distributions	—	—
Redeemed	(17,629)	(10,661)
Net Increase (Decrease) from Capital Share Transactions	13,714	31,423
Total Increase (Decrease)	12,605	33,659
Net Assets		
Beginning of Period	80,788	47,129
End of Period	93,393	80,788

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

Financial Highlights

For a Share Outstanding Throughout Each Period	Year Ended November 30,				
	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$102.91	\$100.28	\$87.08	\$91.10	\$81.69
Investment Operations					
Net Investment Income ¹	2.373	2.160	1.374	1.779	2.632
Net Realized and Unrealized Gain (Loss) on Investments	(1.354)	2.231	13.497	(3.776)	8.996
Total from Investment Operations	1.019	4.391	14.871	(1.997)	11.628
Distributions					
Dividends from Net Investment Income	(2.419)	(1.761)	(1.671)	(2.023)	(2.218)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(2.419)	(1.761)	(1.671)	(2.023)	(2.218)
Net Asset Value, End of Period	\$101.51	\$102.91	\$100.28	\$87.08	\$91.10
Total Return	1.13%	4.46%	17.22%	-1.99%	14.58%

Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$93	\$81	\$47	\$57	\$91
Ratio of Total Expenses to Average Net Assets	0.13% ²	0.13%	0.13%	0.13%	0.13%
Ratio of Net Investment Income to Average Net Assets	2.40%	2.18%	1.43%	2.14%	3.05%
Portfolio Turnover Rate	26% ³	32% ³	46% ³	83% ³	23%

1 Calculated based on average shares outstanding.

2 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.13%.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Notes to Financial Statements

Vanguard U.S. Minimum Volatility ETF is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. ETF Shares are listed for trading on Cboe BZX Exchange, Inc.; they can be purchased and sold through a broker.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund 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 affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. **Futures Contracts:** The fund uses index futures contracts to a limited extent, with the objective of maintaining full exposure to the stock market while maintaining liquidity. The fund may purchase or sell futures contracts to achieve a desired level of investment, whether to accommodate portfolio turnover or cash flows from capital share transactions. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the fund 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 fund 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 fund'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 November 30, 2023, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The fund'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 fund'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 fund's financial statements.

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

5. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund 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 fund 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 fund 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 fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund 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 fund is entitled to all distributions made on or in respect of the loaned securities.

6. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the fund'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 fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund 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 fund'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 November 30, 2023, the fund did not utilize the credit facilities or the Interfund Lending Program.

7. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

B. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund 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 fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At November 30, 2023, the fund had contributed to Vanguard capital in the amount of \$3,000, representing less than 0.01% of the fund's net assets and less than 0.01% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

C. The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended November 30, 2023, custodian fee offset arrangements reduced the fund's expenses by \$1,000 (an annual rate of less than 0.01% of average net assets).

D. Various inputs may be used to determine the value of the fund'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 fund's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.

At November 30, 2023, 100% of the market value of the fund's investments and derivatives was determined based on Level 1 inputs.

E. 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

U.S. Minimum Volatility ETF

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 in-kind redemptions were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	3,761
Total Distributable Earnings (Loss)	(3,761)

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 capital loss carryforwards; and the recognition of unrealized gains or losses from certain derivative contracts. 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	408
Undistributed Long-Term Gains	—
Net Unrealized Gains (Losses)	5,403
Capital Loss Carryforwards	(10,647)
Qualified Late-Year Losses	—
Other Temporary Differences	—
Total	(4,836)

The tax character of distributions paid was as follows:

	Year Ended November 30,	
	2023 Amount (\$000)	2022 Amount (\$000)
Ordinary Income*	2,061	1,062
Long-Term Capital Gains	—	—
Total	2,061	1,062

* Includes short-term capital gains, if any.

As of November 30, 2023, 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	87,653
Gross Unrealized Appreciation	9,740
Gross Unrealized Depreciation	(4,337)
Net Unrealized Appreciation (Depreciation)	5,403

F. During the year ended November 30, 2023, the fund purchased \$53,740,000 of investment securities and sold \$40,012,000 of investment securities, other than temporary cash investments. Purchases and sales include \$0 and \$17,558,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended November 30, 2023, such purchases were \$440,000 and sales were \$218,000, resulting in net realized loss of \$50,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital shares issued and redeemed were:

	Year Ended November 30,	
	2023 Shares (000)	2022 Shares (000)
Issued	315	425
Issued in Lieu of Cash Distributions	—	—
Redeemed	(180)	(110)
Net Increase (Decrease) in Shares Outstanding	135	315

H. 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 fund's investments and fund performance.

To the extent the fund's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the fund may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

The use of derivatives may expose the fund to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions can, therefore, increase volatility. Additional information regarding the fund's use of derivative(s) and the specific risks associated is described under significant accounting policies.

At November 30, 2023, one shareholder was a record or beneficial owner of 40% of the fund's net assets. If this shareholder were to redeem its investment in the fund, the redemption might result in an increase in the fund's expense ratio, cause the fund to incur higher transaction costs, or lead to the realization of taxable capital gains.

I. Management has determined that no events or transactions occurred subsequent to November 30, 2023, that would require recognition or disclosure in these financial statements.

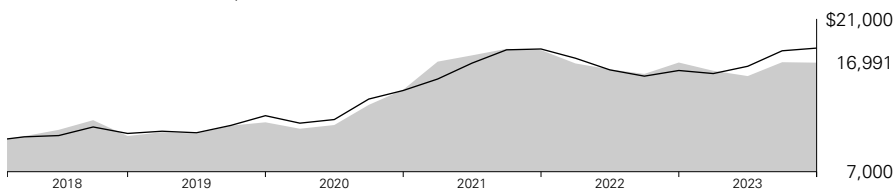
U.S. Momentum Factor ETF

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 fund. (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 fund distributions or on the sale of fund shares.

Cumulative Performance: February 13, 2018, Through November 30, 2023

Initial Investment of \$10,000



Average Annual Total Returns Periods Ended November 30, 2023

	One Year	Five Years	Since Inception (2/13/2018)	Final Value of a \$10,000 Investment
U.S. Momentum Factor ETF Net Asset Value	-0.06%	10.60%	9.58%	\$16,991
U.S. Momentum Factor ETF Market Price	0.02	10.60	9.59	17,001
Russell 3000 Index	12.61	11.77	11.02	18,324

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

Cumulative Returns of ETF Shares: February 13, 2018, Through November 30, 2023

	One Year	Five Years	Since Inception (2/13/2018)
U.S. Momentum Factor ETF Market Price	0.02%	65.53%	70.01%
U.S. Momentum Factor ETF Net Asset Value	-0.06	65.49	69.91
Russell 3000 Index	12.61	74.44	83.24

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

See Financial Highlights for dividend and capital gains information.

Fund Allocation

As of November 30, 2023

Basic Materials	2.0%
Consumer Discretionary	18.7
Consumer Staples	2.2
Energy	5.8
Financials	7.2
Health Care	10.0
Industrials	23.5
Real Estate	0.8
Technology	27.5
Telecommunications	2.0
Utilities	0.3

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

Financial Statements

Schedule of Investments

As of November 30, 2023

The fund 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 fund's Form N-PORT reports are available on the SEC's website at www.sec.gov.

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Common Stocks (99.5%)					
Basic Materials (2.0%)					
Linde plc	2,134	883			
Reliance Steel & Aluminum Co.	2,617	720			
Boise Cascade Co.	5,880	643			
Southern Copper Corp.	7,945	572			
NewMarket Corp.	1,040	552			
Carpenter Technology Corp.	5,650	400			
Mueller Industries Inc.	9,185	381			
Orion SA	13,512	322			
Olympic Steel Inc.	5,643	319			
* Uranium Energy Corp.	48,115	314			
Hawkins Inc.	4,908	302			
Worthington Industries Inc.	3,507	251			
Materion Corp.	1,987	225			
Koppers Holdings Inc.	4,421	200			
Haynes International Inc.	3,438	169			
* Ivanhoe Electric Inc.	13,312	151			
* Ecovyst Inc.	12,647	120			
* UFP Industries Inc.	897	98			
* Energy Fuels Inc.	11,360	90			
		6,712			
Consumer Discretionary (18.6%)					
* Uber Technologies Inc.	85,046	4,795	* Abercrombie & Fitch Co. Class A	9,744	740
* Netflix Inc.	6,924	3,282	PVH Corp.	7,467	730
* Booking Holdings Inc.	942	2,944	Toll Brothers Inc.	8,423	723
* DraftKings Inc. Class A	49,930	1,909	* SkyWest Inc.	15,011	710
TJX Cos. Inc.	20,607	1,816	* elf Beauty Inc.	5,808	686
* Chipotle Mexican Grill Inc.	817	1,799	* Carnival Corp.	44,338	668
Lennar Corp. Class A	13,350	1,708	* Taylor Morrison Home Corp.	14,644	660
PulteGroup Inc.	18,485	1,634	Rush Enterprises Inc. Class A	16,305	647
* Deckers Outdoor Corp.	2,454	1,629	* ACV Auctions Inc. Class A	41,046	642
O'Reilly Automotive Inc.	1,604	1,576	Meritage Homes Corp.	4,499	636
* NVR Inc.	238	1,465	* Coty Inc. Class A	51,370	586
DR Horton Inc.	10,820	1,381	* Asbury Automotive Group Inc.	2,757	579
* Amazon.com Inc.	9,133	1,334	* Green Brick Partners Inc.	12,063	572
* Spotify Technology SA	7,122	1,318	Ross Stores Inc.	4,229	551
Tempur Sealy International Inc.	31,205	1,258	Winmark Corp.	1,271	547
* Royal Caribbean Cruises Ltd.	10,375	1,115	Inter Parfums Inc.	4,280	536
* Skechers USA Inc. Class A	18,828	1,109	Wingstop Inc.	2,175	523
BorgWarner Inc. (XNYS)	27,825	937	* Trade Desk Inc. Class A	6,601	465
* M/I Homes Inc.	8,305	876	* Duolingo Inc.	2,160	459
* Wayfair Inc. Class A	14,707	821	Hyatt Hotels Corp. Class A	3,855	442
* Copart Inc.	15,885	798	* Cars.com Inc.	23,004	428
* Light & Wonder Inc.	8,541	755	* Floor & Decor Holdings Inc. Class A	4,635	425
			TKO Group Holdings Inc.	5,480	424
			* Sphere Entertainment Co.	12,320	422
			Wynn Resorts Ltd.	4,966	419
			* Arlo Technologies Inc.	44,455	404
			* Carvana Co.	12,766	400
			* Instructure Holdings Inc.	15,292	400
			* Beazer Homes USA Inc.	14,957	394
			* Dream Finders Homes Inc. Class A	15,741	383
			International Game Technology plc	14,118	377
			Steelcase Inc. Class A	29,957	369
			* Cinemark Holdings Inc.	25,656	366
			* Hovnanian Enterprises Inc. Class A	3,886	351
			* Integral Ad Science Holding Corp.	23,899	349
			* U-Haul Holding Co. (XNYS)	6,116	346
			* WW International Inc.	46,032	332
			* Life Time Group Holdings Inc.	21,698	329
			Dillard's Inc. Class A	916	318
			* Cooper-Standard Holdings Inc.	17,075	303
			* Coursera Inc.	14,960	295
			* PROG Holdings Inc.	10,734	293

U.S. Momentum Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* Skyline Champion Corp.	4,542	273	Energy (5.8%)		
* PowerSchool Holdings Inc. Class A	11,501	268	Marathon Petroleum Corp.	20,778	3,100
* Cardlytics Inc.	31,059	247	Phillips 66	12,037	1,552
Bloomin' Brands Inc.	10,122	236	TechnipFMC plc	62,347	1,292
* Tri Pointe Homes Inc.	7,823	228	Archrock Inc.	70,640	1,024
Lennar Corp. Class B	1,921	220	Schlumberger NV	18,732	975
Penske Automotive Group Inc.	1,468	219	* Helix Energy Solutions Group Inc.	100,645	938
Build-A-Bear Workshop Inc.	8,648	211	* Weatherford International plc	10,267	931
* Nerdy Inc.	73,367	191	Warrior Met Coal Inc.	11,778	659
* XPEL Inc.	4,108	188	* Tidewater Inc.	10,642	639
Alta Equipment Group Inc.	18,071	172	* Newport Resources Inc.	90,562	629
* Grand Canyon Education Inc.	1,246	170	* Gulfport Energy Corp.	4,330	593
* Ollie's Bargain Outlet Holdings Inc.	2,303	169	Noble Corp. plc	12,297	567
Century Communities Inc.	2,263	163	PBF Energy Inc. Class A	11,856	526
* OneSpaWorld Holdings Ltd.	13,515	163	* Par Pacific Holdings Inc.	14,554	499
Upbound Group Inc.	5,510	160	* Oceanenergy International Inc.	23,584	487
* Madison Square Garden Sports Corp.	892	151	ChampionX Corp.	15,929	467
HNI Corp.	3,683	144	CONSOL Energy Inc.	3,552	379
* Holley Inc.	34,050	141	* Oil States International Inc.	52,184	360
* Solo Brands Inc. Class A	26,282	137	Equitrans Midstream Corp.	36,539	343
Cavco Industries Inc.	475	134	* Expro Group Holdings NV	20,158	314
Laureate Education Inc.	10,142	133	* Fluoro Energy Inc.	12,364	310
Perdoceo Education Corp.	7,654	133	Alpha Metallurgical Resources Inc.	1,046	294
* Adtalem Global Education Inc.	2,323	132	Arcosa Inc.	3,485	259
* AutoNation Inc.	937	127	Civitas Resources Inc.	3,644	250
Haverty Furniture Cos. Inc.	3,596	113	Ramaco Resources Inc. Class A	13,301	222
Williams-Sonoma Inc.	585	110	* TETRA Technologies Inc.	45,147	213
* Red Robin Gourmet Burgers Inc.	12,355	109	* Seadrill Ltd.	4,561	202
* Chuy's Holdings Inc.	3,061	108	SunCoke Energy Inc.	20,095	187
* Kura Sushi USA Inc. Class A	1,691	106	* Centrus Energy Corp. Class A	3,459	173
Lithia Motors Inc.	381	102	Permian resources Corp.	12,654	166
Red Rock Resorts Inc. Class A	2,242	100	* Borr Drilling Ltd.	23,651	149
New York Times Co. Class A	1,586	75	* REX American Resources Corp.	2,764	136
Aaron's Co. Inc.	8,255	73	Core Laboratories Inc.	7,574	134
A-Mark Precious Metals Inc.	2,434	70	* Hallador Energy Co.	9,611	121
* Atlanta Braves Holdings Inc. Class A	1,724	70	Arch Resources Inc.	590	98
* Gannett Co. Inc.	37,522	69	Evolution Petroleum Corp.	9,923	59
* Traeger Inc.	21,935	49			19,247
* MasterCraft Boat Holdings Inc.	937	19	Financials (7.1%)		
		62,171	JPMorgan Chase & Co.	15,586	2,433
Consumer Staples (2.2%)			Arthur J Gallagher & Co.	8,118	2,021
McKesson Corp.	3,264	1,536	First Citizens BancShares Inc. Class A	889	1,305
* BellRing Brands Inc.	23,867	1,263	Unum Group	25,242	1,085
Mondelez International Inc. Class A	15,611	1,109	Kinsale Capital Group Inc.	2,406	842
* Celsius Holdings Inc.	19,299	955	Ares Management Corp. Class A	7,269	816
* Performance Food Group Co.	7,248	471	Apollo Global Management Inc.	8,797	809
Cencora Inc.	2,217	451	* Arch Capital Group Ltd.	9,558	800
* Vita Coco Co. Inc.	15,529	436	* Oscar Health Inc. Class A	84,660	720
* Sprouts Farmers Market Inc.	7,697	332	XP Inc. Class A	30,470	710
Spectrum Brands Holdings Inc.	3,857	267	* NU Holdings Ltd. Class A	86,387	703
Andersons Inc.	4,366	218	* SoFi Technologies Inc.	87,922	641
John B Sanfilippo & Son Inc.	1,553	143	RenaissanceRe Holdings Ltd.	2,956	634
Vector Group Ltd.	8,562	92	Primerica Inc.	2,832	593
Coca-Cola Consolidated Inc.	114	84	Federal Agricultural Mortgage Corp. Class C	3,426	568
		7,357	MGIC Investment Corp.	29,657	522
			* Genworth Financial Inc. Class A	87,946	518
			* Riot Platforms Inc.	41,286	518
			* Ryan Specialty Holdings Inc.	11,243	516

U.S. Momentum Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
OneMain Holdings Inc.	12,121	513	* Aurinia Pharmaceuticals Inc.	40,485	350
Interactive Brokers Group Inc. Class A	6,196	482	* Immunovant Inc.	8,855	346
* Goosehead Insurance Inc. Class A	6,434	472	* REVOLUTION Medicines Inc.	14,729	344
New York Community Bancorp Inc.	48,711	458	* Mirum Pharmaceuticals Inc.	10,720	344
* SiriusPoint Ltd.	41,927	448	* 10X Genomics Inc. Class A	7,781	339
* ¹ Upstart Holdings Inc.	15,330	410	* Roivant Sciences Ltd.	35,181	336
* UWM Holdings Corp.	74,584	406	* Exelixis Inc.	15,349	335
* Bancorp Inc.	9,839	384	* Amneal Pharmaceuticals Inc.	77,064	332
City Holding Co.	3,859	372	* Amicus Therapeutics Inc.	28,974	319
Aflac Inc.	4,455	368	* Protagonist Therapeutics Inc.	17,469	318
Radian Group Inc.	12,966	333	* Viking Therapeutics Inc.	25,328	310
HCI Group Inc.	3,466	294	* 89bio Inc.	37,680	303
Nelnet Inc. Class A	3,346	281	* ANI Pharmaceuticals Inc.	5,975	298
Pathward Financial Inc.	5,190	257	* DaVita Inc.	2,865	291
Evercore Inc. Class A	1,473	217	* PetIQ Inc.	16,091	280
* eHealth Inc.	25,449	189	* Hims & Hers Health Inc.	31,054	276
RLI Corp.	1,216	165	* EyePoint Pharmaceuticals Inc.	43,078	269
* Assetmark Financial Holdings Inc.	6,179	158	* RadNet Inc.	8,070	268
Brown & Brown Inc.	1,867	140	* SI-BONE Inc.	13,184	250
* World Acceptance Corp.	1,118	125	* Tango Therapeutics Inc.	31,995	243
Old Republic International Corp.	3,964	116	* Alphatec Holdings Inc.	19,598	233
* Mr Cooper Group Inc.	1,833	111	* Vera Therapeutics Inc.	17,199	233
Universal Insurance Holdings Inc.	6,358	108	* Haemonetics Corp.	2,872	232
Perella Weinberg Partners	9,191	108	* Align Technology Inc.	1,071	229
* Enova International Inc.	2,434	100	* ¹ PDS Biotechnology Corp.	43,145	227
		23,769	* Penumbra Inc.	1,017	226
Health Care (9.9%)			* Tactile Systems Technology Inc.	16,810	224
Eli Lilly & Co.	4,972	2,939	* Vericel Corp.	6,150	219
* Boston Scientific Corp.	36,710	2,052	* Madrigal Pharmaceuticals Inc.	1,055	214
* Intuitive Surgical Inc.	5,450	1,694	* Liquidia Corp.	29,281	210
* Vertex Pharmaceuticals Inc.	2,405	853	* Inozyme Pharma Inc.	53,040	204
Cardinal Health Inc.	7,521	805	* Kiniksa Pharmaceuticals Ltd. Class A	12,347	200
* Medpace Holdings Inc.	2,715	735	* Marinus Pharmaceuticals Inc.	29,120	196
* Regeneron Pharmaceuticals Inc.	756	623	* ¹ UroGen Pharma Ltd.	14,756	195
* Arcellx Inc.	11,866	623	* LifeStance Health Group Inc.	28,003	192
* Cymbay Therapeutics Inc.	31,542	603	* ACADIA Pharmaceuticals Inc.	8,544	190
* Exact Sciences Corp.	9,322	597	* Voyager Therapeutics Inc.	25,032	182
* Nuvalent Inc. Class A	8,814	576	* Axsome Therapeutics Inc.	2,596	175
* Cabaletta Bio Inc.	34,336	551	* Collegium Pharmaceutical Inc.	6,715	172
* Amphastar Pharmaceuticals Inc.	9,571	539	* TG Therapeutics Inc.	13,167	169
* Biohaven Ltd.	15,195	506	* Encompass Health Corp.	2,428	158
* Ideaya Biosciences Inc.	15,928	501	* Summit Therapeutics Inc. (XNMS)	76,952	156
* Bridgebio Pharma Inc.	16,741	481	* Harrow Inc.	16,154	149
* Arcturus Therapeutics Holdings Inc.	20,110	481	* Stryker Corp.	474	140
* Disc Medicine Inc.	8,419	465	* Phathom Pharmaceuticals Inc.	19,548	137
* Crinetics Pharmaceuticals Inc.	14,228	452	* Theravance Biopharma Inc.	12,696	133
* ADMA Biologics Inc.	122,063	452	* Ocular Therapeutix Inc.	51,856	129
* Tenet Healthcare Corp.	6,536	451	* Brookdale Senior Living Inc.	21,892	116
* RxSight Inc.	14,535	438	* Aldeyra Therapeutics Inc.	41,019	114
* Quanterix Corp.	18,109	434	* KalVista Pharmaceuticals Inc.	12,999	110
* MiMedx Group Inc.	54,975	427	* scPharmaceuticals Inc.	18,971	103
* Ardelyx Inc.	93,845	423	* X4 Pharmaceuticals Inc.	127,934	100
* UFP Technologies Inc.	2,400	399	* HealthEquity Inc.	1,404	94
* Biomea Fusion Inc.	25,808	389	* OraSure Technologies Inc.	12,815	94
* Vaxcyte Inc.	7,395	383	* Prestige Consumer Healthcare Inc.	1,487	85
* Krystal Biotech Inc.	3,574	373	* 4D Molecular Therapeutics Inc.	4,177	53
* Insmed Inc.	14,333	359	* Assertio Holdings Inc.	11,023	11
* NeoGenomics Inc.	19,337	351			
					33,110

U.S. Momentum Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Industrials (23.4%)					
General Electric Co.	40,734	4,961	Greenbrier Cos. Inc.	11,539	435
Eaton Corp. plc	16,257	3,702	Watsco Inc.	1,138	435
Parker-Hannifin Corp.	6,361	2,755	AAON Inc.	6,942	435
FedEx Corp.	10,495	2,716	H&E Equipment Services Inc.	9,802	434
Trane Technologies plc	9,924	2,237	* Evolv Technologies Holdings Inc.	106,927	428
Caterpillar Inc.	6,608	1,657	* Teekay Corp.	60,990	421
EMCOR Group Inc.	7,471	1,588	* Modine Manufacturing Co.	8,454	416
TransDigm Group Inc.	1,552	1,494	Primoris Services Corp.	13,623	414
Allison Transmission Holdings Inc.	26,587	1,422	* SPX Technologies Inc.	4,770	407
Simpson Manufacturing Co. Inc.	8,235	1,375	Covenant Logistics Group Inc.	9,347	398
Comfort Systems USA Inc.	6,254	1,211	Pentair plc	6,163	398
* Saia Inc.	3,077	1,201	ICF International Inc.	2,798	392
* Fair Isaac Corp.	1,058	1,151	* StoneCo. Ltd. Class A	25,106	392
* XPO Inc.	13,277	1,146	* Affirm Holdings Inc.	11,280	388
Crane NXT Co.	21,474	1,105	* Thermon Group Holdings Inc.	12,821	387
* Builders FirstSource Inc.	7,743	1,038	Standex International Corp.	2,863	383
United Rentals Inc.	2,164	1,030	* American Woodmark Corp.	5,213	377
PACCAR Inc.	10,776	989	Quanta Services Inc.	1,991	375
Badger Meter Inc.	6,112	901	* Aurora Innovation Inc.	165,894	363
Dorian LPG Ltd.	21,138	895	McGrath RentCorp.	3,497	356
Griffon Corp.	19,223	894	Watts Water Technologies Inc. Class A	1,833	353
VWV Grainger Inc.	1,109	872	* FleetCor Technologies Inc.	1,420	341
Boeing Co.	3,643	844	Encore Wire Corp.	1,812	334
Applied Industrial Technologies Inc.	4,866	779	* Joby Aviation Inc.	56,016	334
* API Group Corp.	24,687	749	* JELD-WEN Holding Inc.	20,839	333
Carrier Global Corp.	14,120	734	* PGT Innovations Inc.	10,345	333
* Axon Enterprise Inc.	3,190	733	* AAR Corp.	4,739	328
* Huron Consulting Group Inc.	7,040	733	Belden Inc.	4,870	324
Owens Corning	5,239	710	WESCO International Inc.	2,019	315
* Atkore Inc.	5,126	666	* GMS Inc.	4,439	300
* TopBuild Corp.	2,215	655	* Manitowoc Co. Inc.	20,467	293
* Trex Co. Inc.	9,291	653	Wabash National Corp.	12,458	273
Eagle Materials Inc.	3,559	644	Flex LNG Ltd.	9,387	272
nVent Electric plc	12,036	641	* Construction Partners Inc. Class A	6,283	264
* ATI Inc.	14,159	622	A O Smith Corp.	3,452	260
Hubbell Inc.	2,057	617	CSW Industrials Inc.	1,459	259
Vontier Corp.	18,184	613	CRA International Inc.	2,627	249
Teekay Tankers Ltd. Class A	12,255	609	* Leonardo DRS Inc.	13,073	241
Curtiss-Wright Corp.	2,803	600	Federal Signal Corp.	3,468	239
International Seaways Inc.	13,152	600	* TriNet Group Inc.	2,063	239
EnPro Industries Inc.	4,532	582	* Kratos Defense & Security Solutions Inc.	12,449	237
Terex Corp.	11,646	576	* Flywire Corp.	9,711	226
* Archer Aviation Inc. Class A	96,334	576	* AZEK Co. Inc.	6,190	213
Lennox International Inc.	1,405	571	Moog Inc. Class A	1,463	205
MSA Safety Inc.	3,185	555	* Gibraltar Industries Inc.	2,976	200
* Fiserv Inc.	3,924	512	* Eos Energy Enterprises Inc.	180,638	199
Schneider National Inc. Class B	22,142	510	Esab Corp.	2,577	199
Nordic American Tankers Ltd.	130,225	505	* AeroVironment Inc.	1,399	193
FTAI Aviation Ltd.	12,196	503	* Shift4 Payments Inc. Class A	2,842	187
* Limbach Holdings Inc.	13,041	497	* MYR Group Inc.	1,474	183
Booz Allen Hamilton Holding Corp.	3,937	493	Old Dominion Freight Line Inc.	414	161
* CBIZ Inc.	8,508	493	* V2X Inc.	3,751	159
* Sterling Infrastructure Inc.	7,653	486	* Mirion Technologies Inc.	17,632	157
* Blue Bird Corp.	25,318	483	Maximus Inc.	1,817	152
* Remitly Global Inc.	22,382	482	Installed Building Products Inc.	1,001	151
Powell Industries Inc.	5,721	476	* AvidXchange Holdings Inc.	13,927	149
GATX Corp.	4,362	475	Scorpio Tankers Inc.	2,645	145
* Cimpress plc	6,686	471	EnerSys	1,557	138
Woodward Inc.	3,442	465	LSI Industries Inc.	10,367	136
Hyster-Yale Materials Handling Inc.	9,588	457	* Hudson Technologies Inc.	10,892	135
			Tennant Co.	1,489	127

U.S. Momentum Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Enerpac Tool Group Corp.	4,525	124	*1 IonQ Inc.	55,179	675
Mueller Water Products Inc. Class A	9,243	123	* MicroStrategy Inc. Class A	1,275	635
* CECO Environmental Corp.	6,327	122	*1 C3.ai Inc. Class A	21,333	621
Patrick Industries Inc.	1,426	117	* Fastly Inc. Class A	31,687	526
* DXP Enterprises Inc.	3,764	110	* Navitas Semiconductor Corp.	75,519	524
AECOM	1,147	102	* Weave Communications Inc.	54,225	512
* Legalzoom.com Inc.	8,748	101	* Vertiv Holdings Co. Class A	11,677	510
* GXO Logistics Inc.	1,784	100	* Cleanspark Inc.	76,990	480
* Astronics Corp.	6,646	99	* Fabrinet	2,915	472
VSE Corp.	1,619	98	*1 Bit Digital Inc.	177,739	459
Columbus McKinnon Corp.	2,747	96	* Kyndryl Holdings Inc.	25,478	459
Verisk Analytics Inc.	392	95	* Freshworks Inc. Class A	22,686	454
Matson Inc.	982	94	* Confluent Inc. Class A	21,154	449
Ardmore Shipping Corp.	6,494	88	* Elastic NV	5,525	444
ESCO Technologies Inc.	827	87	* Lattice Semiconductor Corp.	7,177	420
ArcBest Corp.	714	85	* Manhattan Associates Inc.	1,828	408
* Vicor Corp.	2,290	84	*1 Cipher Mining Inc.	146,186	405
Preformed Line Products Co.	586	73	* Intapp Inc.	10,742	403
* OSI Systems Inc.	568	70	* Gartner Inc.	921	401
DHT Holdings Inc.	5,994	60	* AvePoint Inc.	47,504	389
			* Applied Digital Corp.	82,733	386
		78,208	* Braze Inc. Class A	6,984	384
Real Estate (0.8%)			* Schrodinger Inc.	12,010	373
* Forestar Group Inc.	16,980	518	* DoorDash Inc. Class A	3,940	370
* Zillow Group Inc. Class C	12,376	507	CTS Corp.	9,250	358
* Opendoor Technologies Inc.	141,077	425	Adeia Inc.	38,432	353
* Redfin Corp.	54,637	381	* PDF Solutions Inc.	11,465	344
St. Joe Co.	6,680	343	* Parsons Corp.	5,515	344
eXp World Holdings Inc.	14,968	181	* Procore Technologies Inc.	5,828	344
DigitalBridge Group Inc.	8,042	139	* ANSYS Inc.	1,166	342
		2,494	* Yext Inc.	49,338	327
Technology (27.4%)			* Aehr Test Systems	14,200	326
* Cadence Design Systems Inc.	17,169	4,692	* PTC Inc.	2,045	322
* Palo Alto Networks Inc.	15,269	4,506	Bentley Systems Inc. Class B	6,184	322
* Meta Platforms Inc. Class A	13,148	4,301	* Appfolio Inc. Class A	1,692	320
NVIDIA Corp.	8,822	4,126	* Innodata Inc.	46,661	315
Broadcom Inc.	3,978	3,683	* PROS Holdings Inc.	7,767	284
* Synopsys Inc.	6,736	3,659	* Terawulf Inc.	243,733	283
Oracle Corp.	30,865	3,587	* Intuit Inc.	483	276
* Advanced Micro Devices Inc.	29,373	3,559	* Sprinklr Inc. Class A	17,543	275
Lam Research Corp.	4,522	3,237	* Digimarc Corp.	8,071	270
Applied Materials Inc.	19,888	2,979	* Agilysys Inc.	3,036	261
* Adobe Inc.	4,695	2,869	* ACM Research Inc. Class A	14,642	244
* Alphabet Inc. Class C	18,993	2,544	Monolithic Power Systems Inc.	436	239
* ServiceNow Inc.	3,460	2,373	* Guidewire Software Inc.	2,383	238
* Salesforce Inc.	8,605	2,168	* LiveRamp Holdings Inc.	6,370	211
KLA Corp.	3,789	2,064	* Altair Engineering Inc. Class A	2,778	201
* Workday Inc. Class A	7,253	1,964	* Squarespace Inc. Class A	7,085	199
Jabil Inc.	15,679	1,808	* PAR Technology Corp.	4,789	176
Intel Corp.	39,118	1,749	* Dynatrace Inc.	3,069	164
* Alphabet Inc. Class A	12,633	1,674	* DoubleVerify Holdings Inc.	4,749	158
Microsoft Corp.	4,167	1,579	* Credo Technology Group Holding Ltd.	8,322	149
Marvell Technology Inc.	27,850	1,552	* Allegro MicroSystems Inc.	5,295	144
* Palantir Technologies Inc. Class A	58,290	1,169	* Cohu Inc.	4,075	129
* Nutanix Inc. Class A	25,094	1,081	* Alkami Technology Inc.	5,614	128
* Rambus Inc.	15,931	1,078	* N-Able Inc.	10,569	126
* HubSpot Inc.	1,952	964	* Magnite Inc.	13,796	111
* Insight Enterprises Inc.	5,760	872	* Okta Inc.	1,609	108
* Axcelis Technologies Inc.	6,641	825	* Western Digital Corp.	2,120	102
* Onto Innovation Inc.	5,662	798	* SMART Global Holdings Inc.	5,971	100
* Workiva Inc.	7,795	750	* Sapiens International Corp. NV	3,831	99
* ON Semiconductor Corp.	10,499	749	*1 BigBear.ai Holdings Inc.	56,872	97
* MongoDB Inc.	1,793	745	* CACI International Inc. Class A	288	92
* SPS Commerce Inc.	3,976	685			
* AppLovin Corp. Class A	18,155	680			

Statement of Assets and Liabilities

As of November 30, 2023

(\$000s, except shares, footnotes, and per-share amounts) Amount

Assets	
Investments in Securities, at Value ¹	
Unaffiliated Issuers (Cost \$291,854)	332,330
Affiliated Issuers (Cost \$4,314)	4,314
Total Investments in Securities	336,644
Investment in Vanguard	11
Cash	24
Cash Collateral Pledged—Futures Contracts	66
Receivables for Investment Securities Sold	1,199
Receivables for Accrued Income	250
Variation Margin Receivable—Futures Contracts	4
Total Assets	338,198
Liabilities	
Payables for Investment Securities Purchased	1,063
Collateral for Securities on Loan	3,281
Payables to Vanguard	17
Total Liabilities	4,361
Net Assets	333,837

¹ Includes \$2,865,000 of securities on loan.

At November 30, 2023, net assets consisted of:

Paid-in Capital	345,392
Total Distributable Earnings (Loss)	(11,555)
Net Assets	333,837
Net Assets	
Applicable to 2,775,000 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	333,837
Net Asset Value Per Share	\$120.30

Statement of Operations

Year Ended
November 30, 2023

(\$000)

Investment Income	
Income	
Dividends ¹	3,395
Interest ²	67
Securities Lending—Net	208
Total Income	3,670
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	89
Management and Administrative	215
Marketing and Distribution	17
Custodian Fees	1
Auditing Fees	28
Shareholders' Reports	34
Trustees' Fees and Expenses	—
Other Expenses	17
Total Expenses	401
Expenses Paid Indirectly	(1)
Net Expenses	400
Net Investment Income	3,270
Realized Net Gain (Loss)	
Investment Securities Sold ^{2,3}	(5,167)
Futures Contracts	103
Realized Net Gain (Loss)	(5,064)
Change in Unrealized Appreciation (Depreciation)	
Investment Securities ²	3,350
Futures Contracts	(39)
Change in Unrealized Appreciation (Depreciation)	3,311
Net Increase (Decrease) in Net Assets Resulting from Operations	1,517

1 Dividends are net of foreign withholding taxes of \$2,000.

2 Interest income, realized net gain (loss), capital gain distributions received, and change in unrealized appreciation (depreciation) from an affiliated company of the fund were \$63,000, less than \$1,000, less than \$1,000, and less than \$1,000, respectively. Purchases and sales are for temporary cash investment purposes.

3 Includes \$18,888,000 of net gain (loss) resulting from in-kind redemptions.

Statement of Changes in Net Assets

	Year Ended November 30,	
	2023	2022
	(\$000)	(\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	3,270	3,593
Realized Net Gain (Loss)	(5,064)	(14,964)
Change in Unrealized Appreciation (Depreciation)	3,311	5,322
Net Increase (Decrease) in Net Assets Resulting from Operations	1,517	(6,049)
Distributions		
Total Distributions	(3,438)	(3,256)
Capital Share Transactions		
Issued	189,620	147,546
Issued in Lieu of Cash Distributions	—	—
Redeemed	(137,717)	(45,302)
Net Increase (Decrease) from Capital Share Transactions	51,903	102,244
Total Increase (Decrease)	49,982	92,939
Net Assets		
Beginning of Period	283,855	190,916
End of Period	333,837	283,855

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

Financial Highlights

For a Share Outstanding Throughout Each Period	Year Ended November 30,				
	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$121.83	\$132.12	\$106.33	\$85.18	\$76.73
Investment Operations					
Net Investment Income ¹	1.232	2.072	1.227	.552	.985
Net Realized and Unrealized Gain (Loss) on Investments	(1.405)	(10.460)	25.325	21.279	8.336
Total from Investment Operations	(.173)	(8.388)	26.552	21.831	9.321
Distributions					
Dividends from Net Investment Income	(1.357)	(1.902)	(.762)	(.681)	(.871)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(1.357)	(1.902)	(.762)	(.681)	(.871)
Net Asset Value, End of Period	\$120.30	\$121.83	\$132.12	\$106.33	\$85.18
Total Return	-0.06%	-6.27%	25.01%	25.91%	12.25%

Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$334	\$284	\$191	\$58	\$32
Ratio of Total Expenses to Average Net Assets	0.13% ²	0.13%	0.13%	0.13%	0.13%
Ratio of Net Investment Income to Average Net Assets	1.07%	1.76%	0.95%	0.62%	1.24%
Portfolio Turnover Rate	73% ³	88% ³	103% ³	115% ³	118%

1 Calculated based on average shares outstanding.

2 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.13%.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Notes to Financial Statements

Vanguard U.S. Momentum Factor ETF is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. ETF Shares are listed for trading on Cboe BZX Exchange, Inc.; they can be purchased and sold through a broker.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund 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 affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. **Futures Contracts:** The fund uses index futures contracts to a limited extent, with the objective of maintaining full exposure to the stock market while maintaining liquidity. The fund may purchase or sell futures contracts to achieve a desired level of investment, whether to accommodate portfolio turnover or cash flows from capital share transactions. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the fund 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 fund 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 fund'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 November 30, 2023, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The fund'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 fund'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 fund's financial statements.

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

5. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund 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 fund 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 fund 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 fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund 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 fund is entitled to all distributions made on or in respect of the loaned securities.

6. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the fund'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 fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund 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 fund'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 November 30, 2023, the fund did not utilize the credit facilities or the Interfund Lending Program.

7. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

B. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund 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 fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At November 30, 2023, the fund had contributed to Vanguard capital in the amount of \$11,000, representing less than 0.01% of the fund's net assets and less than 0.01% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

C. The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended November 30, 2023, custodian fee offset arrangements reduced the fund's expenses by \$1,000 (an annual rate of less than 0.01% of average net assets).

D. Various inputs may be used to determine the value of the fund'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 fund's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.

At November 30, 2023, 100% of the market value of the fund's investments and derivatives was determined based on Level 1 inputs.

E. 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

U.S. Momentum Factor ETF

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 in-kind redemptions and passive foreign investment companies were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	18,879
Total Distributable Earnings (Loss)	(18,879)

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 capital loss carryforwards; the deferral of losses from wash sales; the recognition of unrealized gains or losses from certain derivative contracts; 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	796
Undistributed Long-Term Gains	—
Net Unrealized Gains (Losses)	40,380
Capital Loss Carryforwards	(52,731)
Qualified Late-Year Losses	—
Other Temporary Differences	—
Total	(11,555)

The tax character of distributions paid was as follows:

	Year Ended November 30,	
	2023 Amount (\$000)	2022 Amount (\$000)
Ordinary Income*	3,438	3,256
Long-Term Capital Gains	—	—
Total	3,438	3,256

* Includes short-term capital gains, if any.

As of November 30, 2023, 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	296,264
Gross Unrealized Appreciation	52,626
Gross Unrealized Depreciation	(12,246)
Net Unrealized Appreciation (Depreciation)	40,380

F. During the year ended November 30, 2023, the fund purchased \$409,738,000 of investment securities and sold \$358,165,000 of investment securities, other than temporary cash investments. Purchases and sales include \$0 and \$133,630,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended November 30, 2023, such purchases were \$4,480,000 and sales were \$7,807,000, resulting in net realized loss of \$255,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital shares issued and redeemed were:

	Year Ended November 30,	
	2023 Shares (000)	2022 Shares (000)
Issued	1,615	1,260
Issued in Lieu of Cash Distributions	—	—
Redeemed	(1,170)	(375)
Net Increase (Decrease) in Shares Outstanding	445	885

H. 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 fund's investments and fund performance.

To the extent the fund's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the fund may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

The use of derivatives may expose the fund to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions can, therefore, increase volatility. Additional information regarding the fund's use of derivative(s) and the specific risks associated is described under significant accounting policies.

At November 30, 2023, one shareholder was a record or beneficial owner of 56% of the fund's net assets. If this shareholder were to redeem its investment in the fund, the redemption might result in an increase in the fund's expense ratio, cause the fund to incur higher transaction costs, or lead to the realization of taxable capital gains.

I. Management has determined that no events or transactions occurred subsequent to November 30, 2023, that would require recognition or disclosure in these financial statements.

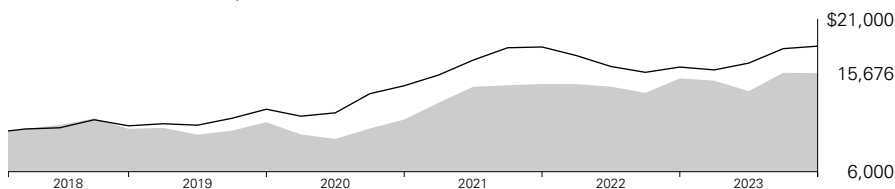
U.S. Multifactor ETF

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 fund. (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 fund distributions or on the sale of fund shares.

Cumulative Performance: February 13, 2018, Through November 30, 2023

Initial Investment of \$10,000



	Average Annual Total Returns Periods Ended November 30, 2023			Final Value of a \$10,000 Investment
	One Year	Five Years	Since Inception (2/13/2018)	
■ U.S. Multifactor ETF Net Asset Value	3.42%	8.97%	8.07%	\$15,676
— U.S. Multifactor ETF Market Price	3.49	8.97	8.08	15,686
— Russell 3000 Index	12.61	11.77	11.02	18,324

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

Cumulative Returns of ETF Shares: February 13, 2018, Through November 30, 2023

	One Year	Five Years	Since Inception (2/13/2018)
U.S. Multifactor ETF Market Price	3.49%	53.68%	56.86%
U.S. Multifactor ETF Net Asset Value	3.42	53.64	56.76
Russell 3000 Index	12.61	74.44	83.24

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

See Financial Highlights for dividend and capital gains information.

Fund Allocation

As of November 30, 2023

Basic Materials	4.2%
Consumer Discretionary	20.0
Consumer Staples	5.2
Energy	14.0
Financials	14.7
Health Care	7.6
Industrials	17.4
Real Estate	0.4
Technology	14.5
Telecommunications	2.0

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

Financial Statements

Schedule of Investments

As of November 30, 2023

The fund 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 fund's Form N-PORT reports are available on the SEC's website at www.sec.gov.

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Common Stocks (99.5%)					
Basic Materials (4.2%)					
Nucor Corp.	8,430	1,433	* Deckers Outdoor Corp.	781	519
Mueller Industries Inc.	18,712	777	DR Horton Inc.	3,979	508
UFP Industries Inc.	6,602	724	Scholastic Corp.	13,161	500
Boise Cascade Co.	6,227	681	* NVR Inc.	76	468
Reliance Steel & Aluminum Co.	1,681	463	News Corp. Class B	20,287	467
Steel Dynamics Inc.	3,567	425	Tempur Sealy International Inc.	11,227	453
CF Industries Holdings Inc.	5,473	411	Steelcase Inc. Class A	35,633	439
Olin Corp.	8,052	380	Williams-Sonoma Inc.	2,247	421
Olympic Steel Inc.	6,029	341	* Brinker International Inc.	11,490	414
LyondellBasell Industries NV			* YETI Holdings Inc.	9,177	391
Class A	3,139	299	* Cavco Industries Inc.	1,358	384
Worthington Industries Inc.	4,051	290	Lennar Corp. Class B	3,331	382
Westlake Corp.	2,161	277	* G-III Apparel Group Ltd.	13,042	375
Hawkins Inc.	4,468	274	Ralph Lauren Corp.	2,862	370
Commercial Metals Co.	5,779	262	Dick's Sporting Goods Inc.	2,805	365
Mosaic Co.	4,575	164	* Skyline Champion Corp.	6,004	361
* US Silica Holdings Inc.	13,942	157	* Expedia Group Inc.	2,631	358
AdvanSix Inc.	5,653	148	* Cars.com Inc.	18,649	347
Cabot Corp.	1,800	137	Ethan Allen Interiors Inc.	12,934	347
United States Steel Corp.	3,434	123	* Urban Outfitters Inc.	9,539	341
Timken Co.	1,097	79	* Malibu Boats Inc. Class A	7,633	338
Freeport-McMoRan Inc.	1,869	70	Boyd Gaming Corp.	5,605	331
* Clearwater Paper Corp.	1,907	67	* 1-800-Flowers.com Inc. Class A	37,170	328
* TimkenSteel Corp.	3,084	63	Murphy USA Inc.	877	324
Southern Copper Corp.	837	60	* MasterCraft Boat Holdings Inc.	16,128	323
		8,105	* AutoNation Inc.	2,365	320
			Winnebago Industries Inc.	4,699	304
			* Beazer Homes USA Inc.	11,480	302
			* Tri Pointe Homes Inc.	10,339	302
Consumer Discretionary (19.9%)			Build-A-Bear Workshop Inc.	12,351	302
PulteGroup Inc.	22,672	2,005	* Green Brick Partners Inc.	6,269	297
* Booking Holdings Inc.	472	1,475	KB Home	5,614	292
* Taylor Morrison Home Corp.	32,447	1,463	Tapestry Inc.	8,968	284
* AutoZone Inc.	405	1,057	Upbound Group Inc.	9,542	278
Walmart Inc.	6,519	1,015	Aaron's Co. Inc.	31,399	277
* O'Reilly Automotive Inc.	983	966	Oxford Industries Inc.	3,007	272
TJX Cos. Inc.	10,466	922	Genuine Parts Co.	2,026	269
PVH Corp.	9,348	914	* ODP Corp.	5,672	258
* Airbnb Inc. Class A	6,842	864	MillerKnoll Inc.	9,903	255
* M/I Homes Inc.	7,405	781	* SkyWest Inc.	5,227	247
Lennar Corp. Class A	5,299	678	Haverty Furniture Cos. Inc.	7,644	240
Academy Sports & Outdoors Inc.	12,430	632	Nexstar Media Group Inc.	1,688	240
* American Airlines Group Inc.	46,125	573	LKQ Corp.	5,102	227
H&R Block Inc.	12,607	573	* ASbury Automotive Group Inc.	1,068	224
Thor Industries Inc.	5,772	572	* Dream Finders Homes Inc. Class A	9,000	219
Meritage Homes Corp.	3,962	560	American Eagle Outfitters Inc.	11,444	218
Signet Jewelers Ltd.	6,607	543	* Royal Caribbean Cruises Ltd.	2,000	215
Perdoceo Education Corp.	30,470	531	Dana Inc.	16,208	214

U.S. Multifactor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* Adient plc	6,509	210	Ingles Markets Inc. Class A	5,274	431
* Adtalem Global Education Inc.	3,638	207	Weis Markets Inc.	6,685	404
Movado Group Inc.	7,845	205	* Performance Food Group Co.	5,529	360
Guess? Inc.	9,194	202	SpartanNash Co.	13,979	310
Monarch Casino & Resort Inc.	3,173	200	Coca-Cola Consolidated Inc.	393	289
Rush Enterprises Inc. Class A	4,960	197	Molson Coors Beverage Co. Class B	3,966	244
* Abercrombie & Fitch Co. Class A	2,588	196	Cal-Maine Foods Inc.	4,945	237
Caleres Inc.	6,372	193	John B Sanfilippo & Son Inc.	1,987	183
* Lululemon Athletica Inc.	410	183	Dole plc	11,911	137
* American Axle & Manufacturing Holdings Inc.	26,086	182	* Sprouts Farmers Market Inc.	2,571	111
La-Z-Boy Inc.	5,164	182	Casey's General Stores Inc.	183	50
Matthews International Corp. Class A	5,060	173	ACCO Brands Corp.	7,859	42
BorgWarner Inc. (XNYS)	4,986	168			9,974
PriceSmart Inc.	2,456	165	Energy (13.9%)		
Gap Inc.	8,157	164	Marathon Petroleum Corp.	14,525	2,167
* Helen of Troy Ltd.	1,474	155	EOG Resources Inc.	12,289	1,512
Bath & Body Works Inc.	4,655	152	Exxon Mobil Corp.	14,352	1,474
Century Communities Inc.	2,066	149	Chevron Corp.	9,830	1,412
* Amazon.com Inc.	1,000	146	Valero Energy Corp.	11,095	1,391
Jack in the Box Inc.	1,821	132	ConocoPhillips	12,019	1,389
Buckle Inc.	3,352	129	Phillips 66	9,004	1,160
Travel & Leisure Co.	3,581	128	Occidental Petroleum Corp.	17,162	1,015
* elf Beauty Inc.	1,076	127	Cheniere Energy Inc.	4,906	894
Penske Automotive Group Inc.	849	127	CONSOL Energy Inc.	5,924	632
Stride Inc.	2,101	127	Liberty Energy Inc.	27,563	547
Dillard's Inc. Class A	364	126	Coterra Energy Inc.	20,697	543
eBay Inc.	3,066	126	Chord Energy Corp.	3,334	541
Strategic Education Inc.	1,370	122	* Weatherford International plc	5,663	514
Lowe's Cos. Inc.	597	119	* Par Pacific Holdings Inc.	13,296	456
* Knowles Corp.	7,422	118	ChampionX Corp.	15,026	441
Best Buy Co. Inc.	1,626	115	Warrior Met Coal Inc.	7,747	434
Acushnet Holdings Corp.	1,806	102	Diamondback Energy Inc.	2,796	432
* Hovnanian Enterprises Inc. Class A	1,133	102	California Resources Corp.	8,446	432
Macy's Inc.	6,218	99	Range Resources Corp.	13,191	429
HNI Corp.	2,378	93	PBF Energy Inc. Class A	9,452	420
Bloomin' Brands Inc.	3,939	92	RPC Inc.	56,608	410
Group 1 Automotive Inc.	326	92	SunCoke Energy Inc.	44,096	410
Hibbett Inc.	1,445	90	Matador Resources Co.	6,425	372
Sonic Automotive Inc. Class A	1,684	86	Helmerich & Payne Inc.	10,000	362
* Ulta Beauty Inc.	199	85	* Gulfport Energy Corp.	2,640	362
* United Airlines Holdings Inc.	2,155	85	HF Sinclair Corp.	6,606	347
* Inspired Entertainment Inc.	10,798	85	CVR Energy Inc.	10,738	341
Visteon Corp.	709	84	Murphy Oil Corp.	7,970	341
Shoe Carnival Inc.	3,339	81	Civitas Resources Inc.	4,744	326
* Skechers USA Inc. Class A	1,245	73	* ProPetro Holding Corp.	35,629	325
A-Mark Precious Metals Inc.	2,480	71	* Southwestern Energy Co.	48,377	319
* Thryv Holdings Inc.	3,978	71	* Newpark Resources Inc.	42,333	294
International Game Technology plc	2,587	69	Arch Resources Inc.	1,761	292
Johnson Outdoors Inc. Class A	1,291	68	Permian resources Corp.	22,121	291
* SeaWorld Entertainment Inc.	1,299	64	Kinetik Holdings Inc.	7,643	278
Inter Parfums Inc.	497	62	EQT Corp.	6,683	267
* Turtle Beach Corp.	4,094	46	Northern Oil and Gas Inc.	7,107	266
* Liquidity Services Inc.	1,969	38	* NOW Inc.	25,093	250
		38,697	Patterson-UTI Energy Inc.	20,799	244
Consumer Staples (5.1%)			Select Water Solutions Inc.	32,004	239
McKesson Corp.	4,555	2,143	Baker Hughes Co.	6,791	229
Altria Group Inc.	37,558	1,579	* REX American Resources Corp.	4,493	220
Philip Morris International Inc.	10,649	994	SM Energy Co.	5,320	199
Kimberly-Clark Corp.	7,154	885	* Oil States International Inc.	27,955	193
Kroger Co.	13,716	607	Helix Energy Solutions Group Inc.	20,140	188
Vector Group Ltd.	47,001	503	* DMC Global Inc.	11,369	181
Cencora Inc.	2,285	465	SandRidge Energy Inc.	12,278	170
			TechnipFMC plc	7,839	162
			Evolution Petroleum Corp.	25,289	150

U.S. Multifactor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Magnolia Oil & Gas Corp.			LPL Financial Holdings Inc.	805	179
Class A	5,500	118	CNA Financial Corp.	4,018	169
Noble Corp. plc	2,454	113	Cathay General Bancorp	4,315	158
* Kosmos Energy Ltd.	14,637	99	RenaissanceRe Holdings Ltd.	704	151
* Expro Group Holdings NV	6,377	99	Assured Guaranty Ltd.	2,200	149
Berry Corp.	11,528	83	W R Berkley Corp.	2,037	148
* Oceaneering International Inc.	3,974	82	Central Pacific Financial Corp.	8,433	148
* MRC Global Inc.	6,800	70	Ameriprise Financial Inc.	406	144
* Tidewater Inc.	1,000	60	Cboe Global Markets Inc.	769	140
		26,987	Amalgamated Financial Corp.	6,306	132
Financials (14.6%)			HarborOne Bancorp Inc.	11,687	129
Aflac Inc.	22,718	1,879	Southside Bancshares Inc.	4,519	124
American International Group Inc.	22,990	1,513	* Texas Capital Bancshares Inc.	1,955	107
OneMain Holdings Inc.	27,015	1,143	1st Source Corp.	2,198	106
MGIC Investment Corp.	63,487	1,117	BankUnited Inc.	3,598	99
OFG Bancorp	30,492	1,023	Affiliated Managers Group Inc.	712	97
Popular Inc.	11,597	856	TrustCo Bank Corp. NY	3,526	95
Primerica Inc.	4,064	851	New York Community Bancorp Inc.	10,000	94
JPMorgan Chase & Co.	5,405	844	WSFS Financial Corp.	2,368	91
Old Republic International Corp.	27,127	795	Old Second Bancorp Inc.	5,516	78
Radian Group Inc.	28,830	741	Fulton Financial Corp.	4,880	69
CNO Financial Group Inc.	25,177	667	Hanmi Financial Corp.	3,821	64
Enact Holdings Inc.	23,485	651	Berkshire Hills Bancorp Inc.	2,915	61
First BanCorp (XNYS)	42,432	637	Great Southern Bancorp Inc.	1,111	56
* NMI Holdings Inc. Class A	22,407	616	* Encore Capital Group Inc.	1,117	50
Unum Group	14,103	606	Midland States Bancorp Inc.	1,896	43
Bank of New York Mellon Corp.	11,445	553	* Arch Capital Group Ltd.	476	40
* Genworth Financial Inc. Class A	90,852	535			28,399
International Bancshares Corp.	11,811	530	Health Care (7.5%)		
Fidelity National Financial Inc.	11,143	500	HCA Healthcare Inc.	7,296	1,827
Employers Holdings Inc.	11,942	458	Gilead Sciences Inc.	18,541	1,420
Pathward Financial Inc.	9,172	455	* Regeneron Pharmaceuticals Inc.	1,442	1,188
Apollo Global Management Inc.	4,889	450	Humana Inc.	2,402	1,165
* Enstar Group Ltd.	1,614	443	* Vertex Pharmaceuticals Inc.	2,978	1,057
* Mr Cooper Group Inc.	7,176	434	Elevance Health Inc.	1,703	817
PennyMac Financial Services Inc.	5,328	415	AbbVie Inc.	5,533	788
Jefferies Financial Group Inc.	11,544	409	Cigna Group	2,906	764
Hartford Financial Services Group Inc.	5,053	395	Merck & Co. Inc.	7,258	744
First Financial Corp.	9,951	381	Cardinal Health Inc.	6,486	694
Bank OZK	8,511	356	Bristol-Myers Squibb Co.	7,649	378
Preferred Bank	5,378	331	* Catalyst Pharmaceuticals Inc.	25,290	365
City Holding Co.	3,327	320	* OraSure Technologies Inc.	49,062	359
Principal Financial Group Inc.	4,256	314	* Amneal Pharmaceuticals Inc.	70,369	303
Victory Capital Holdings Inc. Class A	9,397	302	* Collegium Pharmaceutical Inc.	11,535	296
Navient Corp.	17,317	297	* Centene Corp.	4,000	295
State Street Corp.	3,986	290	* Lantheus Holdings Inc.	3,544	254
Bank of NT Butterfield & Son Ltd.	10,317	286	* Haemonetics Corp.	3,075	249
SLM Corp.	18,794	283	* Medpace Holdings Inc.	892	241
White Mountains Insurance Group Ltd.	185	283	* Owens & Minor Inc.	11,854	236
WaFd Inc.	9,733	260	* PetIQ Inc.	12,039	210
Equitable Holdings Inc.	8,480	260	* Inmode Ltd.	6,873	163
QCR Holdings Inc.	5,110	254	* CorVel Corp.	773	161
Discover Financial Services	2,517	234	Chemed Corp.	195	110
Globe Life Inc.	1,887	232	* Align Technology Inc.	407	87
* Axos Financial Inc.	5,875	225	* Intuitive Surgical Inc.	242	75
Federal Agricultural Mortgage Corp. Class C	1,354	225	* Jazz Pharmaceuticals plc	620	73
S&T Bancorp Inc.	7,987	224	HealthStream Inc.	2,717	68
Evercore Inc. Class A	1,476	218	* Tactile Systems Technology Inc.	4,773	64
Corebridge Financial Inc.	9,850	207	* Amphastar Pharmaceuticals Inc.	1,124	63
BOK Financial Corp.	2,510	180	* Hims & Hers Health Inc.	6,308	56
			* Henry Schein Inc.	653	44
					14,614

U.S. Multifactor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Industrials (17.4%)					
* Builders FirstSource Inc.	8,613	1,155	* Fair Isaac Corp.	234	255
* Fiserv Inc.	8,422	1,100	* Quanex Building Products Corp.	7,741	238
Caterpillar Inc.	3,643	913	SFL Corp. Ltd.	20,978	238
Allison Transmission Holdings Inc.	13,929	745	Matson Inc.	2,336	224
MSC Industrial Direct Co. Inc. Class A	7,576	738	Parker-Hannifin Corp.	500	217
Owens Corning	4,630	628	Dorian LPG Ltd.	4,857	206
* XPO Inc.	6,978	602	Eagle Materials Inc.	1,114	202
* Modine Manufacturing Co.	12,132	597	* Beacon Roofing Supply Inc.	2,469	198
American Express Co.	3,463	591	Deluxe Corp.	10,796	197
* Atkore Inc.	4,447	578	* AAR Corp.	2,656	184
FedEx Corp.	2,225	576	* MYR Group Inc.	1,384	172
Griffon Corp.	12,281	571	Greif Inc. Class A	2,442	171
* GMS Inc.	7,929	536	Apogee Enterprises Inc.	3,695	167
JELD-WEN Holding Inc.	32,178	514	Barett Business Services Inc.	1,393	153
General Electric Co.	4,139	504	Preformed Line Products Co.	1,220	152
Terex Corp.	10,169	503	Powell Industries Inc.	1,752	146
Crane NXT Co.	9,744	501	* Thermo Group Holdings Inc.	4,830	146
* Teekay Corp.	71,520	494	WESCO International Inc.	911	142
Carrier Global Corp.	9,000	468	Carlisle Cos. Inc.	494	139
International Seaways Inc.	10,237	467	* API Group Corp.	4,495	136
* American Woodmark Corp.	6,367	461	Genco Shipping & Trading Ltd.	8,607	134
Teekay Tankers Ltd. Class A	9,266	460	LSI Industries Inc.	10,070	132
Synchrony Financial	13,983	453	Brunswick Corp.	1,663	131
Ryder System Inc.	4,178	448	* Cross Country Healthcare Inc.	6,480	131
United Rentals Inc.	915	436	Kforce Inc.	1,872	131
Snap-on Inc.	1,536	422	Expeditors International of Washington Inc.	1,052	127
Acuity Brands Inc.	2,350	421	Tennant Co.	1,300	111
* TopBuild Corp.	1,400	414	Werner Enterprises Inc.	2,610	104
Encore Wire Corp.	2,233	412	REV Group Inc.	6,470	102
EMCOR Group Inc.	1,931	410	* Proto Labs Inc.	2,800	101
* Manitowoc Co. Inc.	28,205	404	H&E Equipment Services Inc.	2,206	98
Scorpio Tankers Inc.	7,098	390	Standex International Corp.	733	98
* Sterling Infrastructure Inc.	6,117	389	Franklin Electric Co. Inc.	1,049	93
Accenture plc Class A	1,154	384	JB Hunt Transport Services Inc.	484	90
Vontier Corp.	11,300	381	Berry Global Group Inc.	1,263	84
EnerSys	4,191	371	* O-I Glass Inc.	5,564	82
Applied Industrial Technologies Inc.	2,295	367	* Tutor Perini Corp.	9,676	81
* Saia Inc.	932	364	Kennametal Inc.	3,288	77
* TriNet Group Inc.	3,125	362	Pentair plc	1,100	71
Moog Inc. Class A	2,535	355	Insperty Inc.	591	67
PACCAR Inc.	3,800	349	Ennis Inc.	3,061	65
Comfort Systems USA Inc.	1,763	341	ManpowerGroup Inc.	866	64
* Gibraltar Industries Inc.	4,962	333	Robert Half Inc.	764	63
Kelly Services Inc. Class A	15,655	325	Graphic Packaging Holding Co.	2,601	59
Ardmore Shipping Corp.	23,478	319	Enerpac Tool Group Corp.	2,127	58
Covenant Logistics Group Inc.	7,396	315	Watts Water Technologies Inc. Class A	269	52
Simpson Manufacturing Co. Inc.	1,868	312	* Masonite International Corp.	532	47
Wabash National Corp.	14,111	309	nVent Electric plc	811	43
Patrick Industries Inc.	3,758	308	* FleetCor Technologies Inc.	161	39
Nordic American Tankers Ltd.	7,797	302	* AMN Healthcare Services Inc.	580	39
Belden Inc.	4,453	296	* Titan Machinery Inc.	1,669	38
Schneider National Inc. Class B	12,606	290			
AGCO Corp.	2,541	289			33,676
* WEX Inc.	1,564	276	Real Estate (0.5%)		
* Hub Group Inc. Class A	3,621	274	* Forestar Group Inc.	9,378	286
Hubbell Inc.	914	274	St. Joe Co.	5,565	286
Resources Connection Inc.	19,833	270	Newmark Group Inc. Class A	28,018	231
DHT Holdings Inc.	27,109	270	* CBRE Group Inc. Class A	853	67
Insteel Industries Inc.	7,906	269			870
ArcBest Corp.	2,177	260	Technology (14.4%)		
Landstar System Inc.	1,501	259	Microchip Technology Inc.	24,759	2,066
Marten Transport Ltd.	13,557	256	* Alphabet Inc. Class C	13,284	1,779
			* Meta Platforms Inc. Class A	5,024	1,644
			Applied Materials Inc.	10,795	1,617
			Broadcom Inc.	1,610	1,490

U.S. Multifactor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Oracle Corp.	12,153	1,412	CTS Corp.	2,183	85
* Palo Alto Networks Inc.	4,696	1,386	* Yext Inc.	12,793	85
Lam Research Corp.	1,843	1,319	* Pure Storage Inc. Class A	2,389	80
* Alphabet Inc. Class A	8,925	1,183	* Teradata Corp.	1,529	72
* Adobe Inc.	1,770	1,082	PC Connection Inc.	1,069	64
* Cadence Design Systems Inc.	3,844	1,050	* Asure Software Inc.	6,601	53
KLA Corp.	1,840	1,002	* F5 Inc.	308	53
Jabil Inc.	7,113	820	* NetScout Systems Inc.	2,399	48
* Photronics Inc.	33,576	710	* Rambus Inc.	686	46
* ON Semiconductor Corp.	9,391	670			28,012
Amkor Technology Inc.	19,607	552	Telecommunications (2.0%)		
* Salesforce Inc.	2,100	529	Cisco Systems Inc.	40,115	1,941
* Cohu Inc.	15,297	485	Comcast Corp. Class A	19,690	825
* Synopsys Inc.	879	478	Bel Fuse Inc. Class B	6,744	365
HP Inc.	15,792	463	* Charter Communications Inc. Class A	868	347
Amdocs Ltd.	5,239	439	* Extreme Networks Inc.	11,678	188
* Diodes Inc.	6,400	425	Spok Holdings Inc.	7,329	123
* Arrow Electronics Inc.	3,275	388	* IDT Corp. Class B	2,555	75
NVIDIA Corp.	829	388			3,864
* Kyndryl Holdings Inc.	20,747	374	Total Common Stocks (Cost \$170,094)		193,198
* Insight Enterprises Inc.	2,259	342	Temporary Cash Investments (0.3%)		
Cognizant Technology Solutions Corp. Class A	4,635	326	Money Market Fund (0.3%)		
* LiveRamp Holdings Inc.	9,663	320	¹ Vanguard Market Liquidity Fund, 5.438% (Cost \$535)	5,351	535
* Axcelis Technologies Inc.	2,343	291	Total Investments (99.8%)		193,733
Skyworks Solutions Inc.	2,653	257	(Cost \$170,629)		
Adeia Inc.	27,708	255	Other Assets and Liabilities – Net (0.2%)		363
* Sanmina Corp.	4,964	249	Net Assets (100%)		194,096
Kulicke & Soffa Industries Inc.	4,386	226			
Vishay Intertechnology Inc.	9,242	205			
Science Applications International Corp.	1,490	175			
* Workday Inc. Class A	639	173			
* Dropbox Inc. Class A	6,090	172			
* Mitek Systems Inc.	10,959	124			
* CACI International Inc. Class A	381	122			
A10 Networks Inc.	9,374	117			
* Super Micro Computer Inc.	403	110			
Hewlett Packard Enterprise Co.	6,277	106			
* Daktronics Inc.	10,111	105			

Cost is in \$000.

• See Note A in Notes to Financial Statements.

* Non-income-producing security.

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.

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				
Micro E-mini S&P 500 Index	December 2023	34	778	15

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

Statement of Assets and Liabilities

As of November 30, 2023

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value	
Unaffiliated Issuers (Cost \$170,094)	193,198
Affiliated Issuers (Cost \$535)	535
Total Investments in Securities	193,733
Investment in Vanguard	6
Cash Collateral Pledged—Futures Contracts	38
Receivables for Accrued Income	332
Variation Margin Receivable—Futures Contracts	3
Total Assets	194,112
Liabilities	
Payables for Investment Securities Purchased	3
Payables to Vanguard	13
Total Liabilities	16
Net Assets	194,096

At November 30, 2023, net assets consisted of:

Paid-in Capital	195,647
Total Distributable Earnings (Loss)	(1,551)
Net Assets	194,096
Net Assets	
Applicable to 1,825,000 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	194,096
Net Asset Value Per Share	\$106.35

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

Statement of Operations

Year Ended
November 30, 2023

	(\$000)
Investment Income	
Income	
Dividends ¹	3,834
Interest ²	34
Securities Lending—Net	13
Total Income	3,881
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	49
Management and Administrative	180
Marketing and Distribution	10
Auditing Fees	28
Shareholders' Reports	27
Trustees' Fees and Expenses	—
Professional Services	16
Total Expenses	310
Net Investment Income	3,571
Realized Net Gain (Loss)	
Investment Securities Sold ^{2,3}	5,381
Futures Contracts	84
Realized Net Gain (Loss)	5,465
Change in Unrealized Appreciation (Depreciation)	
Investment Securities ²	(2,490)
Futures Contracts	(39)
Change in Unrealized Appreciation (Depreciation)	(2,529)
Net Increase (Decrease) in Net Assets Resulting from Operations	6,507

1 Dividends are net of foreign withholding taxes of \$4,000.

2 Interest income, realized net gain (loss), capital gain distributions received, and change in unrealized appreciation (depreciation) from an affiliated company of the fund were \$32,000, less than \$1,000, less than \$1,000, and less than \$1,000, respectively. Purchases and sales are for temporary cash investment purposes.

3 Includes \$11,645,000 of net gain (loss) resulting from in-kind redemptions.

Statement of Changes in Net Assets

	Year Ended November 30,	
	2023	2022
	(\$000)	(\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	3,571	3,098
Realized Net Gain (Loss)	5,465	3,068
Change in Unrealized Appreciation (Depreciation)	(2,529)	1,362
Net Increase (Decrease) in Net Assets Resulting from Operations	6,507	7,528
Distributions		
Total Distributions	(3,596)	(2,850)
Capital Share Transactions		
Issued	52,488	83,650
Issued in Lieu of Cash Distributions	—	—
Redeemed	(31,560)	(28,351)
Net Increase (Decrease) from Capital Share Transactions	20,928	55,299
Total Increase (Decrease)	23,839	59,977
Net Assets		
Beginning of Period	170,257	110,280
End of Period	194,096	170,257

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

Financial Highlights

For a Share Outstanding Throughout Each Period	Year Ended November 30,				
	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$105.10	\$103.55	\$79.93	\$79.60	\$76.07
Investment Operations					
Net Investment Income ¹	2.111	2.188	1.534	1.191	1.340
Net Realized and Unrealized Gain (Loss) on Investments	1.295	1.467	23.442	.372	3.458
Total from Investment Operations	3.406	3.655	24.976	1.563	4.798
Distributions					
Dividends from Net Investment Income	(2.156)	(2.105)	(1.356)	(1.233)	(1.268)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(2.156)	(2.105)	(1.356)	(1.233)	(1.268)
Net Asset Value, End of Period	\$106.35	\$105.10	\$103.55	\$79.93	\$79.60
Total Return	3.42%	3.73%	31.43%	2.35%	6.46%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$194	\$170	\$110	\$62	\$90
Ratio of Total Expenses to Average Net Assets	0.18%	0.18% ²	0.18%	0.19% ²	0.19% ²
Ratio of Net Investment Income to Average Net Assets	2.07%	2.21%	1.56%	1.66%	1.79%
Portfolio Turnover Rate	37% ³	33% ³	75% ³	95% ³	98%

1 Calculated based on average shares outstanding.

2 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.18%.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Notes to Financial Statements

Vanguard U.S. Multifactor ETF is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. ETF Shares are listed for trading on Cboe BZX Exchange, Inc.; they can be purchased and sold through a broker.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund 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 affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. **Futures Contracts:** The fund uses index futures contracts to a limited extent, with the objective of maintaining full exposure to the stock market while maintaining liquidity. The fund may purchase or sell futures contracts to achieve a desired level of investment, whether to accommodate portfolio turnover or cash flows from capital share transactions. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the fund 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 fund 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 fund'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 November 30, 2023, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute virtually all of its income. The fund'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 fund'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 fund's financial statements.

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

5. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund 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 fund 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 fund 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 fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund 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 fund is entitled to all distributions made on or in respect of the loaned securities.

6. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the fund'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 fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund 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 fund'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 November 30, 2023, the fund did not utilize the credit facilities or the Interfund Lending Program.

7. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

B. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund 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 fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At November 30, 2023, the fund had contributed to Vanguard capital in the amount of \$6,000, representing less than 0.01% of the fund's net assets and less than 0.01% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

C. Various inputs may be used to determine the value of the fund'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 fund's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.

At November 30, 2023, 100% of the market value of the fund's investments and derivatives 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 in-kind redemptions were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	11,646
Total Distributable Earnings (Loss)	(11,646)

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 capital loss carryforwards; and the recognition of unrealized

U.S. Multifactor ETF

gains or losses from certain derivative contracts. 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	672
Undistributed Long-Term Gains	—
Net Unrealized Gains (Losses)	23,104
Capital Loss Carryforwards	(25,327)
Qualified Late-Year Losses	—
Other Temporary Differences	—
Total	(1,551)

The tax character of distributions paid was as follows:

	Year Ended November 30,	
	2023 Amount (\$000)	2022 Amount (\$000)
Ordinary Income*	3,596	2,850
Long-Term Capital Gains	—	—
Total	3,596	2,850

* Includes short-term capital gains, if any.

As of November 30, 2023, 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	170,629
Gross Unrealized Appreciation	28,794
Gross Unrealized Depreciation	(5,690)
Net Unrealized Appreciation (Depreciation)	23,104

E. During the year ended November 30, 2023, the fund purchased \$117,035,000 of investment securities and sold \$96,291,000 of investment securities, other than temporary cash investments. Purchases and sales include \$0 and \$31,538,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended November 30, 2023, such purchases were \$686,000 and sales were \$1,171,000, resulting in net realized loss of \$291,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

F. Capital shares issued and redeemed were:

	Year Ended November 30,	
	2023 Shares (000)	2022 Shares (000)
Issued	515	840
Issued in Lieu of Cash Distributions	—	—
Redeemed	(310)	(285)
Net Increase (Decrease) in Shares Outstanding	205	555

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

To the extent the fund's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the fund may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

The use of derivatives may expose the fund to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions can, therefore, increase volatility. Additional information regarding the fund's use of derivative(s) and the specific risks associated is described under significant accounting policies.

At November 30, 2023, one shareholder was a record or beneficial owner of 38% of the fund's net assets. If this shareholder were to redeem its investment in the fund, the redemption might result in an increase in the fund's expense ratio, cause the fund to incur higher transaction costs, or lead to the realization of taxable capital gains.

H. Management has determined that no events or transactions occurred subsequent to November 30, 2023, that would require recognition or disclosure in these financial statements.

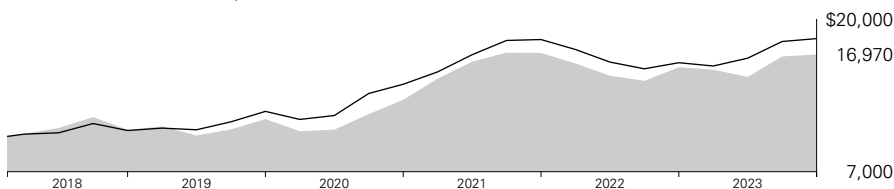
U.S. Quality Factor ETF

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 fund. (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 fund distributions or on the sale of fund shares.

Cumulative Performance: February 13, 2018, Through November 30, 2023

Initial Investment of \$10,000



	Average Annual Total Returns Periods Ended November 30, 2023			Final Value of a \$10,000 Investment
	One Year	Five Years	Since Inception (2/13/2018)	
■ U.S. Quality Factor ETF Net Asset Value	6.84%	9.97%	9.56%	\$16,970
— U.S. Quality Factor ETF Market Price	6.90	9.98	9.57	16,978
— Russell 3000 Index	12.61	11.77	11.02	18,324

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

Cumulative Returns of ETF Shares: February 13, 2018, Through November 30, 2023

	One Year	Five Years	Since Inception (2/13/2018)
U.S. Quality Factor ETF Market Price	6.90%	60.87%	69.78%
U.S. Quality Factor ETF Net Asset Value	6.84	60.83	69.70
Russell 3000 Index	12.61	74.44	83.24

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

See Financial Highlights for dividend and capital gains information.

Fund Allocation

As of November 30, 2023

Basic Materials	3.6%
Consumer Discretionary	19.7
Consumer Staples	5.5
Energy	4.9
Financials	14.2
Health Care	10.4
Industrials	19.6
Technology	20.9
Telecommunications	1.2

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

U.S. Quality Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* Hovnanter Enterprises Inc. Class A	794	72	Charles Schwab Corp.	23,129	1,418
Columbia Sportswear Co.	837	66	Discover Financial Services	14,720	1,369
* Liquidity Services Inc.	3,191	61	First BanCorp (XNYS)	90,668	1,360
Signet Jewelers Ltd.	712	59	Primerica Inc.	6,283	1,316
			SLM Corp.	83,508	1,255
		47,771	Popular Inc.	15,884	1,172
Consumer Staples (5.5%)			Principal Financial Group Inc.	14,307	1,056
PepsiCo Inc.	17,379	2,925	Zions Bancorp NA	28,170	1,004
Kroger Co.	30,164	1,335	State Street Corp.	13,160	958
Procter & Gamble Co.	5,271	809	OFG Bancorp	25,719	863
WD-40 Co.	3,099	750	Bank OZK	19,510	817
* National Beverage Corp.	13,136	624	WSFS Financial Corp.	20,759	801
Casey's General Stores Inc.	2,001	551	Bancorp Inc.	17,777	693
Kellanova	10,302	541	Pathward Financial Inc.	13,880	688
Flowers Foods Inc.	24,662	513	CNO Financial Group Inc.	25,201	668
John B Sanfilippo & Son Inc.	5,419	499	Jackson Financial Inc. Class A	13,664	652
Cencora Inc.	2,438	496	BankUnited Inc.	22,782	629
Coca-Cola Consolidated Inc.	591	434	Cathay General Bancorp	15,527	570
Medifast Inc.	6,072	403	Fidelity National Financial Inc.	12,394	556
Coca-Cola Co.	6,828	399	PJT Partners Inc. Class A	5,951	536
* Boston Beer Co. Inc. Class A	1,082	384	* Customers Bancorp Inc.	11,827	533
Hershey Co.	2,031	382	Aon plc Class A (XNYS)	1,557	511
Cal-Maine Foods Inc.	7,792	373	Berkshire Hills Bancorp Inc.	24,318	509
Lancaster Colony Corp.	2,219	368	* Brighthouse Financial Inc.	9,361	487
Nu Skin Enterprises Inc. Class A	16,439	280	Triumph Financial Inc.	6,780	460
* United Natural Foods Inc.	16,686	243	City Holding Co.	4,714	454
* USANA Health Sciences Inc.	5,089	240	Central Pacific Financial Corp.	24,782	435
SpartanNash Co.	9,475	210	Axos Financial Inc.	11,047	423
Weis Markets Inc.	3,339	202	Fulton Financial Corp.	28,971	412
Ingles Markets Inc. Class A	1,519	124	BOK Financial Corp.	5,496	394
Kimberly-Clark Corp.	973	120	* Palomar Holdings Inc.	6,571	384
* Vita Coco Co. Inc.	3,517	99	Eagle Bancorp Inc.	15,004	356
		13,304	Westamerica BanCorp	6,419	326
Energy (4.9%)			1st Source Corp.	6,613	320
ConocoPhillips	15,288	1,767	Virtus Investment Partners Inc.	1,334	261
Occidental Petroleum Corp.	29,269	1,731	SEI Investments Co.	4,387	257
EOG Resources Inc.	13,077	1,609	Moody's Corp.	568	207
Marathon Petroleum Corp.	7,634	1,139	* Mr Cooper Group Inc.	3,413	207
ChampionX Corp.	29,983	879	MGIC Investment Corp.	11,196	197
Texas Pacific Land Corp.	464	776	Radian Group Inc.	7,596	195
Coterra Energy Inc.	20,117	528	* NMI Holdings Inc. Class A	6,642	183
Alpha Metallurgical Resources Inc.	1,429	401	Southside Bancshares Inc.	5,679	156
* Enphase Energy Inc.	3,466	350	Bank of NT Butterfield & Son Ltd.	4,903	136
* ProPetro Holding Corp.	38,262	349	Trustmark Corp.	5,848	134
SM Energy Co.	8,574	321	Universal Insurance Holdings Inc.	6,169	105
RPC Inc.	35,958	261	Hanmi Financial Corp.	5,896	98
* Weatherford International plc	2,856	259	PennyMac Financial Services Inc.	1,233	96
* Gulfport Energy Corp.	1,894	259	Kearny Financial Corp.	12,017	95
Range Resources Corp.	6,771	220	Lakeland Financial Corp.	1,494	83
Valero Energy Corp.	1,541	193	Amalgamated Financial Corp.	3,425	72
Arch Resources Inc.	1,127	187	Tompkins Financial Corp.	1,154	61
CONSOL Energy Inc.	1,481	158	Artisan Partners Asset Management Inc. Class A	1,501	57
SunCo Energy Inc.	14,628	136	Preferred Bank	913	56
* Oceaneering International Inc.	4,661	96	Washington Trust Bancorp Inc.	1,928	52
PBF Energy Inc. Class A	2,041	91			
* DMC Global Inc.	4,496	72			
* NOW Inc.	5,675	57			
		11,839			
Financials (14.1%)			Health Care (10.3%)		
American International Group Inc.	40,214	2,647	Bristol-Myers Squibb Co.	76,814	3,793
Equitable Holdings Inc.	57,584	1,767	Gilead Sciences Inc.	44,644	3,420
Ameriprise Financial Inc.	4,319	1,527	Merck & Co. Inc.	21,091	2,161
Aflac Inc.	17,700	1,464	Eli Lilly & Co.	3,561	2,105
			Humana Inc.	3,356	1,627
			* IDEXX Laboratories Inc.	3,328	1,550
			Chemed Corp.	1,977	1,121

U.S. Quality Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* Medpace Holdings Inc.	3,434	930	Enerpac Tool Group Corp.	16,551	452
* Edwards Lifesciences Corp.	13,395	907	Kforce Inc.	6,478	451
* Alkermes plc	35,297	852	Comfort Systems USA Inc.	2,166	419
* Intuitive Surgical Inc.	2,715	844	EMCOR Group Inc.	1,965	418
* Johnson & Johnson	4,618	714	* Limbach Holdings Inc.	10,928	417
* Lantheus Holdings Inc.	9,304	666	* GMS Inc.	6,138	415
* Molina Healthcare Inc.	1,632	597	Apogee Enterprises Inc.	9,186	414
* CorVel Corp.	2,431	508	ManpowerGroup Inc.	5,576	414
* Haemonetics Corp.	5,167	418	Old Dominion Freight Line Inc.	984	383
* Bruker Corp.	4,346	283	* Teekay Corp.	51,069	352
* Henry Schein Inc.	4,099	274	* Franklin Covey Co.	8,969	349
* Supernus Pharmaceuticals Inc.	8,057	220	Badger Meter Inc.	2,349	346
* ANI Pharmaceuticals Inc.	4,404	219	* Proto Labs Inc.	9,564	346
* Hologic Inc.	3,052	218	Toro Co.	3,994	331
* Incyte Corp.	4,007	218	Kadant Inc.	1,236	322
* Patterson Cos. Inc.	8,446	215	Applied Industrial Technologies Inc.	1,994	319
* Corcept Therapeutics Inc.	7,299	186	Lincoln Electric Holdings Inc.	1,566	310
* Myriad Genetics Inc.	8,815	168	* Donnelley Financial Solutions Inc.	5,144	304
* OraSure Technologies Inc.	22,316	163	Graco Inc.	3,723	301
* Align Technology Inc.	732	156	* Legalzoom.com Inc.	25,436	293
* Shockwave Medical Inc.	689	120	* Cross Country Healthcare Inc.	14,186	288
* ACADIA Pharmaceuticals Inc.	5,185	115	* MYR Group Inc.	2,191	273
* Zimvie Inc.	9,528	90	Ferguson plc	1,568	269
* AtriCure Inc.	2,506	89	* Atkore Inc.	1,932	251
* Catalyst Pharmaceuticals Inc.	6,195	89	Resources Connection Inc.	18,426	251
* Tactile Systems Technology Inc.	6,485	86	Valmont Industries Inc.	1,139	250
* Mural Oncology plc	1,839	7	* TrueBlue Inc.	17,115	239
		25,129	* TriNet Group Inc.	2,048	237
Industrials (19.5%)			Napco Security Technologies Inc.	7,361	225
Cintas Corp.	5,285	2,924	Ardmore Shipping Corp.	16,081	219
Paychex Inc.	18,669	2,277	* Sterling Infrastructure Inc.	3,438	218
Visa Inc. Class A	8,434	2,165	* XPO Inc.	2,305	199
MSC Industrial Direct Co. Inc. Class A	17,489	1,704	Owens Corning	1,405	190
Automatic Data Processing Inc.	6,839	1,572	Crane Co.	1,761	186
American Express Co.	9,016	1,540	Powell Industries Inc.	2,225	185
Donaldson Co. Inc.	24,023	1,462	Encore Wire Corp.	989	182
Acuity Brands Inc.	7,676	1,376	* AeroVironment Inc.	1,271	175
* Builders FirstSource Inc.	10,055	1,348	Snap-on Inc.	566	155
* PayPal Holdings Inc.	23,316	1,343	CRA International Inc.	1,596	151
Robert Half Inc.	13,894	1,139	* Manitowoc Co. Inc.	10,538	151
Landstar System Inc.	6,452	1,114	LSI Industries Inc.	11,291	148
Insperty Inc.	9,631	1,096	Myers Industries Inc.	8,052	142
CH Robinson Worldwide Inc.	12,467	1,023	* Beacon Roofing Supply Inc.	1,758	141
* AMN Healthcare Services Inc.	14,548	986	Insteel Industries Inc.	4,007	136
Caterpillar Inc.	3,641	913	* Standex International Corp.	887	119
Accenture plc Class A	2,734	911	ExiService Holdings Inc.	3,885	110
Rockwell Automation Inc.	3,133	863	Shyft Group Inc.	9,418	104
Simpson Manufacturing Co. Inc.	4,830	806	Allison Transmission Holdings Inc.	1,884	101
RPM International Inc.	7,682	791	Kelly Services Inc. Class A	4,845	101
Expeditors International of Washington Inc.	6,356	765	Wabash National Corp.	4,291	94
* Trex Co. Inc.	10,512	739	Tennant Co.	1,082	93
Synchrony Financial	22,784	737	REV Group Inc.	5,820	92
Jack Henry & Associates Inc.	3,719	590	Crane NXT Co.	1,742	90
Watts Water Technologies Inc. Class A	2,915	561	Watsco Inc.	224	86
A O Smith Corp.	7,091	534	Fortune Brands Innovations Inc.	1,209	83
Advanced Drainage Systems Inc.	4,402	533	* Hudson Technologies Inc.	6,610	82
Barrett Business Services Inc.	4,819	530	* Keysight Technologies Inc.	526	71
Mastercard Inc. Class A	1,279	529	Forward Air Corp.	1,096	70
VWV Grainger Inc.	672	528	Nordson Corp.	286	67
* BlueLinx Holdings Inc.	5,656	497	* Titan International Inc.	4,108	54
					47,530

U.S. Quality Factor ETF

	Shares	Market Value* (\$'000)		Shares	Market Value* (\$'000)
Technology (20.8%)					
* Adobe Inc.	6,928	4,233	* Elastic NV	2,250	181
Apple Inc.	20,210	3,839	* Yext Inc.	22,759	151
* Autodesk Inc.	17,240	3,766	CSG Systems International Inc.	2,962	146
QUALCOMM Inc.	28,232	3,643	CTS Corp.	3,682	143
* Palo Alto Networks Inc.	11,199	3,305	Paycom Software Inc.	774	141
Lam Research Corp.	4,445	3,182	* Kyndryl Holdings Inc.	7,793	141
KLA Corp.	5,744	3,128	* EverQuote Inc. Class A	11,547	121
Microchip Technology Inc.	34,086	2,844	* OneSpan Inc.	11,293	113
Applied Materials Inc.	15,856	2,375	* Super Micro Computer Inc.	359	98
* Cadence Design Systems Inc.	7,561	2,066	Microsoft Corp.	171	65
Qualys Inc.	8,009	1,480	* Fortinet Inc.	1,069	56
* Meta Platforms Inc. Class A	3,158	1,033	Dolby Laboratories Inc. Class A	582	50
* Manhattan Associates Inc.	4,160	928	* ¹ Yandex NV Class A	1,459	—
* Gartner Inc.	2,009	874			50,717
* Teradata Corp.	17,063	806	Telecommunications (1.2%)		
Synopsys Inc.	1,299	706	* Cisco Systems Inc.	40,045	1,937
* SmartSheet Inc. Class A	14,891	631	* Extreme Networks Inc.	29,380	474
* Vertiv Holdings Co. Class A	14,308	625	* IDT Corp. Class B	14,274	419
* Pure Storage Inc. Class A	18,429	614	* Roku Inc.	1,584	165
Teradyne Inc.	6,269	578			2,995
* CommVault Systems Inc.	7,788	573	Total Common Stocks (Cost \$224,032) 242,394		
A10 Networks Inc.	45,631	570	Temporary Cash Investments (0.4%)		
* Photonics Inc.	25,598	541	Money Market Fund (0.4%)		
* Cirrus Logic Inc.	6,684	507	² Vanguard Market Liquidity Fund, 5.438% (Cost \$937) 9,367 937		
* Atlassian Corp. Ltd. Class A	2,650	506	Total Investments (99.8%) (Cost \$224,969) 243,331		
* Alphabet Inc. Class A	3,811	505	Other Assets and Liabilities – Net (0.2%) 395		
NetApp Inc.	5,321	486	Net Assets (100%) 243,726		
Hackett Group Inc.	21,087	471	Cost is in \$'000.		
Concentrix Corp.	4,773	449	• See Note A in Notes to Financial Statements.		
* F5 Inc.	2,617	448	* Non-income-producing security.		
* Pinterest Inc. Class A	12,693	432	¹ Security value determined using significant unobservable inputs.		
* ON Semiconductor Corp.	5,905	421	² Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.		
* MaxLinear Inc.	22,094	414			
* Axcelis Technologies Inc.	3,124	388			
Yelp Inc.	7,023	307			
* DocuSign Inc.	6,795	293			
PC Connection Inc.	4,075	243			
* Appfolio Inc. Class A	1,253	237			
* Cargurus Inc.	10,749	232			
* Lattice Semiconductor Corp.	3,756	220			
Monolithic Power Systems Inc.	388	213			
Amdocs Ltd.	2,375	199			

Derivative Financial Instruments Outstanding as of Period End

Futures Contracts

	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation)
(\$'000)				
Long Futures Contracts				
E-mini S&P 500 Index	December 2023	3	687	10
Micro E-mini S&P 500 Index	December 2023	16	366	5
				15

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

Statement of Assets and Liabilities

As of November 30, 2023

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value	
Unaffiliated Issuers (Cost \$224,032)	242,394
Affiliated Issuers (Cost \$937)	937
Total Investments in Securities	243,331
Investment in Vanguard	8
Cash Collateral Pledged—Futures Contracts	55
Receivables for Accrued Income	345
Variation Margin Receivable—Futures Contracts	4
Total Assets	243,743
Liabilities	
Payables for Investment Securities Purchased	4
Payables to Vanguard	13
Total Liabilities	17
Net Assets	243,726

At November 30, 2023, net assets consisted of:

Paid-in Capital	246,924
Total Distributable Earnings (Loss)	(3,198)
Net Assets	243,726
Net Assets	
Applicable to 2,070,000 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	243,726
Net Asset Value Per Share	\$117.74

Statement of Operations

Year Ended
November 30, 2023

(\$000)

Investment Income	
Income	
Dividends ¹	3,885
Interest ²	48
Securities Lending—Net	5
Total Income	3,938
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	64
Management and Administrative	141
Marketing and Distribution	13
Custodian Fees	4
Auditing Fees	28
Shareholders' Reports	27
Trustees' Fees and Expenses	—
Professional Services	16
Total Expenses	293
Expenses Paid Indirectly	(3)
Net Expenses	290
Net Investment Income	3,648
Realized Net Gain (Loss)	
Investment Securities Sold ^{2,3}	10,754
Futures Contracts	98
Realized Net Gain (Loss)	10,852
Change in Unrealized Appreciation (Depreciation)	
Investment Securities ²	526
Futures Contracts	(30)
Change in Unrealized Appreciation (Depreciation)	496
Net Increase (Decrease) in Net Assets Resulting from Operations	14,996

1 Dividends are net of foreign withholding taxes of \$8,000.

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

3 Includes \$14,656,000 of net gain (loss) resulting from in-kind redemptions.

Statement of Changes in Net Assets

	Year Ended November 30,	
	2023 (\$000)	2022 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	3,648	2,661
Realized Net Gain (Loss)	10,852	(6,545)
Change in Unrealized Appreciation (Depreciation)	496	(9,078)
Net Increase (Decrease) in Net Assets Resulting from Operations	14,996	(12,962)
Distributions		
Total Distributions	(3,512)	(2,385)
Capital Share Transactions		
Issued	74,318	108,666
Issued in Lieu of Cash Distributions	—	—
Redeemed	(48,124)	(30,853)
Net Increase (Decrease) from Capital Share Transactions	26,194	77,813
Total Increase (Decrease)	37,678	62,466
Net Assets		
Beginning of Period	206,048	143,582
End of Period	243,726	206,048

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

Financial Highlights

For a Share Outstanding Throughout Each Period	Year Ended November 30,				
	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$111.98	\$122.20	\$94.79	\$84.21	\$78.58
Investment Operations					
Net Investment Income ¹	1.818	1.562	1.403	1.291	1.199
Net Realized and Unrealized Gain (Loss) on Investments	5.667	(10.356)	27.292	10.428	5.559
Total from Investment Operations	7.485	(8.794)	28.695	11.719	6.758
Distributions					
Dividends from Net Investment Income	(1.725)	(1.426)	(1.285)	(1.139)	(1.128)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(1.725)	(1.426)	(1.285)	(1.139)	(1.128)
Net Asset Value, End of Period	\$117.74	\$111.98	\$122.20	\$94.79	\$84.21
Total Return	6.84%	-7.15%	30.42%	14.29%	8.75%

Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$244	\$206	\$144	\$55	\$21
Ratio of Total Expenses to Average Net Assets	0.13% ²	0.13%	0.13%	0.13%	0.13%
Ratio of Net Investment Income to Average Net Assets	1.64%	1.43%	1.21%	1.59%	1.52%
Portfolio Turnover Rate	55% ³	49% ³	56% ³	58%	80%

1 Calculated based on average shares outstanding.

2 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.13%.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Notes to Financial Statements

Vanguard U.S. Quality Factor ETF is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. ETF Shares are listed for trading on Cboe BZX Exchange, Inc.; they can be purchased and sold through a broker.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund 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 affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. **Futures Contracts:** The fund uses index futures contracts to a limited extent, with the objective of maintaining full exposure to the stock market while maintaining liquidity. The fund may purchase or sell futures contracts to achieve a desired level of investment, whether to accommodate portfolio turnover or cash flows from capital share transactions. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the fund 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 fund 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 fund'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 November 30, 2023, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The fund'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 fund'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 fund's financial statements.

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

5. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund 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 fund 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 fund 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 fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund 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 fund is entitled to all distributions made on or in respect of the loaned securities.

6. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the fund'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 fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund 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 fund'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 November 30, 2023, the fund did not utilize the credit facilities or the Interfund Lending Program.

7. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

B. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund 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 fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At November 30, 2023, the fund had contributed to Vanguard capital in the amount of \$8,000, representing less than 0.01% of the fund's net assets and less than 0.01% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

C. The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended November 30, 2023, custodian fee offset arrangements reduced the fund's expenses by \$3,000 (an annual rate of less than 0.01% of average net assets).

D. Various inputs may be used to determine the value of the fund'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 fund'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 fund's investments and derivatives as of November 30, 2023, based on the inputs used to value them:

	Level 1 (\$000)	Level 2 (\$000)	Level 3 (\$000)	Total (\$000)
Investments				
Assets				
Common Stocks	242,394	—	—	242,394
Temporary Cash Investments	937	—	—	937
Total	243,331	—	—	243,331

Derivative Financial Instruments

Assets				
Futures Contracts ¹	15	—	—	15

¹ Includes cumulative appreciation (depreciation) on futures contracts and centrally cleared swaps, if any, as reported in the Schedule of Investments. Only current day's variation margin is reported within the Statement of Assets and Liabilities.

E. 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 in-kind redemptions were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	14,656
Total Distributable Earnings (Loss)	(14,656)

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 capital loss carryforwards; 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 (loss) are detailed in the table as follows:

	Amount (\$000)
Undistributed Ordinary Income	754
Undistributed Long-Term Gains	—
Net Unrealized Gains (Losses)	18,362
Capital Loss Carryforwards	(22,314)
Qualified Late-Year Losses	—
Other Temporary Differences	—
Total	(3,198)

The tax character of distributions paid was as follows:

	Year Ended November 30,	
	2023 Amount (\$000)	2022 Amount (\$000)
Ordinary Income*	3,512	2,385
Long-Term Capital Gains	—	—
Total	3,512	2,385

* Includes short-term capital gains, if any.

As of November 30, 2023, 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	224,969
Gross Unrealized Appreciation	27,369
Gross Unrealized Depreciation	(9,007)
Net Unrealized Appreciation (Depreciation)	18,362

F. During the year ended November 30, 2023, the fund purchased \$196,075,000 of investment securities and sold \$169,941,000 of investment securities, other than temporary cash investments. Purchases and sales include \$0 and \$48,145,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended November 30, 2023, such purchases were \$2,819,000 and sales were \$84,000, resulting in net realized gain of \$25,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital shares issued and redeemed were:

	Year Ended November 30,	
	2023 Shares (000)	2022 Shares (000)
Issued	665	950
Issued in Lieu of Cash Distributions	—	—
Redeemed	(435)	(285)
Net Increase (Decrease) in Shares Outstanding	230	665

H. 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 fund's investments and fund performance.

To the extent the fund's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the fund may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

The use of derivatives may expose the fund to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions can, therefore, increase volatility. Additional information regarding the fund's use of derivative(s) and the specific risks associated is described under significant accounting policies.

At November 30, 2023, one shareholder was a record or beneficial owner of 56% of the fund's net assets. If this shareholder were to redeem its investment in the fund, the redemption might result in an increase in the fund's expense ratio, cause the fund to incur higher transaction costs, or lead to the realization of taxable capital gains.

I. Management has determined that no events or transactions occurred subsequent to November 30, 2023, that would require recognition or disclosure in these financial statements.

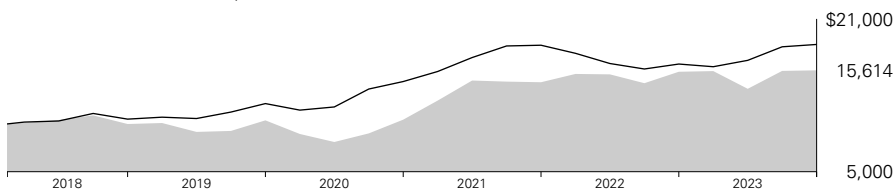
U.S. Value Factor ETF

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 fund. (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 fund distributions or on the sale of fund shares.

Cumulative Performance: February 13, 2018, Through November 30, 2023

Initial Investment of \$10,000



	Average Annual Total Returns Periods Ended November 30, 2023			Final Value of a \$10,000 Investment
	One Year	Five Years	Since Inception (2/13/2018)	
■ U.S. Value Factor ETF Net Asset Value	0.97%	9.34%	7.99%	\$15,614
— U.S. Value Factor ETF Market Price	1.02	9.33	7.99	15,612
— Russell 3000 Index	12.61	11.77	11.02	18,324

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

Cumulative Returns of ETF Shares: February 13, 2018, Through November 30, 2023

	One Year	Five Years	Since Inception (2/13/2018)
U.S. Value Factor ETF Market Price	1.02%	56.19%	56.12%
U.S. Value Factor ETF Net Asset Value	0.97	56.26	56.14
Russell 3000 Index	12.61	74.44	83.24

"Since Inception" performance is calculated from the ETF Shares' inception date for both the fund and its comparative standard(s).

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

See Financial Highlights for dividend and capital gains information.

Fund Allocation

As of November 30, 2023

Basic Materials	6.1%
Consumer Discretionary	17.8
Consumer Staples	5.6
Energy	11.9
Financials	27.5
Health Care	7.3
Industrials	13.3
Real Estate	0.3
Technology	6.1
Telecommunications	4.1

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

Financial Statements

Schedule of Investments

As of November 30, 2023

The fund 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 fund's Form N-PORT reports are available on the SEC's website at www.sec.gov.

	Shares	Market Value* (\$'000)		Shares	Market Value* (\$'000)
Common Stocks (99.5%)					
Basic Materials (6.1%)					
Nucor Corp.	16,722	2,842	* Avis Budget Group Inc.	12,701	2,322
Dow Inc.	51,660	2,673	Fox Corp. Class B	83,644	2,314
Celanese Corp.	17,308	2,400	Newell Brands Inc.	265,597	2,027
Freeport-McMoRan Inc.	62,395	2,329	Perdoceo Education Corp.	114,066	1,987
LyondellBasell Industries NV Class A	23,928	2,276	PulteGroup Inc.	20,725	1,832
* Cleveland-Cliffs Inc.	121,392	2,083	* AutoZone Inc.	663	1,730
Tronox Holdings plc	103,833	1,324	Gray Television Inc.	220,986	1,708
Mosaic Co.	36,531	1,311	* Taylor Morrison Home Corp.	36,824	1,661
Koppers Holdings Inc.	25,870	1,168	* Goodyear Tire & Rubber Co.	118,724	1,649
Ryerson Holding Corp.	36,941	1,144	Lennar Corp. Class A	12,780	1,635
* US Silica Holdings Inc.	96,984	1,094	DR Horton Inc.	12,574	1,605
Steel Dynamics Inc.	9,147	1,090	* Penn Entertainment Inc.	63,885	1,569
Olin Corp.	22,535	1,062	TEGNA Inc.	96,844	1,485
* Clearwater Paper Corp.	29,529	1,036	* Liberty Media Corp.-Liberty SiriusXM Class C	52,617	1,420
Huntsman Corp.	40,678	1,001	* Alaska Air Group Inc.	35,214	1,331
Mueller Industries Inc.	22,870	950	Bath & Body Works Inc.	39,748	1,297
Sylvamo Corp.	18,635	937	Meritage Homes Corp.	9,167	1,295
AdvanSix Inc.	30,092	786	U-Haul Holding Co.	23,684	1,282
CF Industries Holdings Inc.	10,164	764	Travel & Leisure Co.	35,649	1,271
UFP Industries Inc.	6,600	724	* Adient plc	38,889	1,252
United States Steel Corp.	19,178	688	PVH Corp.	12,752	1,247
Mativ Holdings Inc.	58,031	679	* Tri Pointe Homes Inc.	42,502	1,240
* TimkenSteel Corp.	31,614	642	* Beazer Homes USA Inc.	46,436	1,222
Schnitzer Steel Industries Inc. Class A	24,895	638	Century Communities Inc.	16,938	1,222
Timken Co.	8,578	621	Dana Inc.	90,729	1,199
Commercial Metals Co.	11,777	534	Lennar Corp. Class B	10,368	1,190
Eastman Chemical Co.	6,192	519	* Chegg Inc.	115,852	1,150
SSR Mining Inc. (XTSE)	39,654	468	Delta Air Lines Inc.	30,874	1,140
* LSB Industries Inc.	46,095	395	BorgWarner Inc. (XNYS)	33,205	1,119
Olympic Steel Inc.	6,840	387	* G-III Apparel Group Ltd.	38,600	1,111
* Intrepid Potash Inc.	14,744	303	Harley-Davidson Inc.	35,344	1,060
Chemours Co.	9,800	269	La-Z-Boy Inc.	29,606	1,042
Boise Cascade Co.	1,678	183	* Asbury Automotive Group Inc.	4,948	1,038
Reliance Steel & Aluminum Co.	608	167	* AMC Networks Inc. Class A	67,117	1,023
Element Solutions Inc.	7,626	160	H&R Block Inc.	22,502	1,022
International Paper Co.	3,818	141	Academy Sports & Outdoors Inc.	19,947	1,015
Newmont Corp. (XNYS)	3,084	124	* AutoNation Inc.	7,390	1,000
		35,912	News Corp. Class A	45,388	1,000
Consumer Discretionary (17.6%)			Lear Corp.	7,435	994
General Motors Co.	186,520	5,894	Aaron's Co. Inc.	112,033	987
Ford Motor Co.	457,599	4,695	* Sally Beauty Holdings Inc.	101,242	979
* American Airlines Group Inc.	312,078	3,879	MDC Holdings Inc.	21,901	969
Macy's Inc.	172,690	2,739	Wolverine World Wide Inc.	111,956	959
			Toll Brothers Inc.	11,095	953
			* M/I Homes Inc.	8,931	942
			* SkyWest Inc.	19,239	910

U.S. Value Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* United Airlines Holdings Inc.	23,013	907	* Fossil Group Inc.	65,584	72
* American Axle & Manufacturing Holdings Inc.	127,294	886			104,358
Advance Auto Parts Inc.	16,976	862	Consumer Staples (5.6%)		
Southwest Airlines Co.	33,124	847	Altria Group Inc.	117,971	4,959
* Aetalem Global Education Inc.	14,795	843	Mckesson Corp.	10,442	4,914
* Caesars Entertainment Inc.	18,018	806	CVS Health Corp.	57,515	3,908
KB Home	15,163	790	Archer-Daniels-Midland Co.	47,609	3,510
* Stagwell Inc.	156,985	788	Molson Coors Beverage Co. Class B	20,834	1,282
Nexstar Media Group Inc.	5,413	768	Kraft Heinz Co.	32,460	1,140
ODP Corp.	16,746	763	Tyson Foods Inc. Class A	20,679	969
Hibbett Inc.	12,057	754	Walgreens Boots Alliance Inc.	47,120	940
* Solo Brands Inc. Class A	140,363	731	J M Smucker Co.	8,483	931
* Brinker International Inc.	20,184	727	* Darling Ingredients Inc.	20,584	903
* Liberty Media Corp.-Liberty SiriusXM Class A	26,927	725	Ingles Markets Inc. Class A	10,454	853
Allegiant Travel Co.	9,685	663	* United Natural Foods Inc.	57,907	843
Scholastic Corp.	17,176	653	Philip Morris International Inc.	8,525	796
* Malibu Boats Inc. Class A	14,386	636	Conagra Brands Inc.	28,077	794
MillerKnoll Inc.	23,501	606	Andersons Inc.	15,239	760
* SeaWorld Entertainment Inc.	12,281	601	Vector Group Ltd.	69,366	743
Caleres Inc.	19,534	593	General Mills Inc.	11,547	735
Boyd Gaming Corp.	9,871	583	SpartanNash Co.	30,234	670
Dine Brands Global Inc.	13,357	581	Seaboard Corp.	187	657
Marriott Vacations Worldwide Corp.	7,951	580	Kroger Co.	12,956	574
* Green Brick Partners Inc.	12,019	570	Ingredion Inc.	4,832	495
* Hovnanian Enterprises Inc. Class A	5,676	513	ACCO Brands Corp.	76,619	412
* Tilly's Inc. Class A	58,237	482	Fresh Del Monte Produce Inc.	14,828	338
Upbound Group Inc.	16,116	469	* Pilgrim's Pride Corp.	11,187	286
* MasterCraft Boat Holdings Inc.	22,236	445	B&G Foods Inc.	29,009	268
Haverty Furniture Cos. Inc.	13,712	430	Edgewell Personal Care Co.	5,129	178
Matthews International Corp. Class A	12,602	430	Nu Skin Enterprises Inc. Class A	8,557	146
* Playtika Holding Corp.	48,462	421			33,004
* Bally's Corp.	35,604	410	Energy (11.8%)		
Rush Enterprises Inc. Class A	10,275	408	Phillips 66	35,799	4,614
* Crocs Inc.	3,625	383	Marathon Petroleum Corp.	25,860	3,858
* EVV Scripps Co. Class A	53,979	373	ConocoPhillips	32,744	3,784
* Sun Country Airlines Holdings Inc.	24,585	373	Exxon Mobil Corp.	36,614	3,762
Movado Group Inc.	13,823	361	Chevron Corp.	25,246	3,625
Target Corp.	2,485	333	Valero Energy Corp.	28,673	3,595
* Warner Bros Discovery Inc.	31,258	327	EOG Resources Inc.	23,883	2,939
Graham Holdings Co. Class B	4,990	307	Occidental Petroleum Corp.	46,657	2,760
Build-A-Bear Workshop Inc.	10,999	269	Williams Cos. Inc.	58,955	2,169
* Hilton Grand Vacations Inc.	7,424	254	* Southwestern Energy Co.	262,849	1,732
iHeartMedia Inc. Class A	91,235	239	Chord Energy Corp.	10,524	1,706
Group 1 Automotive Inc.	837	236	Liberty Energy Inc.	83,880	1,665
LKQ Corp.	5,184	231	SM Energy Co.	44,128	1,653
eBay Inc.	5,573	229	Coterra Energy Inc.	62,882	1,651
Sinclair Inc.	16,641	210	Cheniere Energy Inc.	8,776	1,599
Tapestry Inc.	6,613	209	Diamondback Energy Inc.	10,066	1,554
Jack in the Box Inc.	2,627	190	Helmerich & Payne Inc.	38,204	1,384
* Sportsman's Warehouse Holdings Inc.	33,626	162	* ProPetro Holding Corp.	144,495	1,316
Oxford Industries Inc.	1,600	145	EQT Corp.	31,996	1,279
2U Inc.	148,078	145	* Gulfport Energy Corp.	7,878	1,080
* Liberty Media Corp.-Liberty Live Class A	3,884	128	Matador Resources Co.	18,630	1,078
Shoe Carnival Inc.	4,735	115	Antero Resources Corp.	43,867	1,037
* Gannett Co. Inc.	51,336	95	Marathon Oil Corp.	40,705	1,035
1 Big 5 Sporting Goods Corp.	15,024	89	Arch Resources Inc.	6,108	1,014
			PBF Energy Inc. Class A	22,645	1,006
			HF Sinclair Corp.	18,972	996
			Berry Corp.	138,199	992
			DTE Midstream LLC	16,868	966
			Devon Energy Corp.	21,079	948
			California Resources Corp.	17,555	899
			Ovintiv Inc. (XNYS)	19,981	886
			Murphy Oil Corp.	20,507	877

U.S. Value Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* Talos Energy Inc.	55,836	777	* Customers Bancorp Inc.	30,906	1,393
Patterson-UTI Energy Inc.	62,583	733	Prosperity Bancshares Inc.	22,521	1,358
Warrior Met Coal Inc.	12,725	712	Hancock Whitney Corp.	32,314	1,333
SunCoke Energy Inc.	72,563	676	S&T Bancorp Inc.	47,242	1,322
Delek US Holdings Inc.	23,950	650	FNB Corp.	107,001	1,283
* Bristow Group Inc.	23,512	605	Affiliated Managers Group Inc.	8,999	1,220
* Nabors Industries Ltd. (XNYS)	6,929	602	Corebridge Financial Inc.	56,830	1,195
Alpha Metallurgical Resources Inc.	2,077	583	Invesco Ltd.	83,591	1,193
Golar LNG Ltd.	26,654	574	Allstate Corp.	8,534	1,177
CONSOL Energy Inc.	4,426	472	OceanFirst Financial Corp.	83,899	1,163
APA Corp.	12,616	454	Enterprise Financial Services Corp.	29,609	1,161
* REX American Resources Corp.	9,116	447	* Arch Capital Group Ltd.	13,801	1,155
SandRidge Energy Inc.	29,209	403	Jefferies Financial Group Inc.	32,534	1,153
* Kosmos Energy Ltd.	52,489	356	WaFd Inc.	42,090	1,125
Kinder Morgan Inc.	19,815	348	Renasant Corp.	39,356	1,072
RPC Inc.	42,674	309	First Financial Bancorp	52,807	1,067
VAALCO Energy Inc.	56,610	263	BankUnited Inc.	38,451	1,061
Magnolia Oil & Gas Corp. Class A	11,047	238	M&T Bank Corp.	8,113	1,040
World Kinect Corp.	10,506	221	Axis Capital Holdings Ltd.	18,291	1,031
* Oil States International Inc.	29,848	206	Heartland Financial USA Inc.	33,133	1,025
1 Ramaco Resources Inc. Class A	12,330	206	* Metropolitan Bank Holding Corp.	25,615	998
* Par Pacific Holdings Inc.	4,173	143	Cadence Bank	39,483	989
Equitrans Midstream Corp.	14,948	140	Fulton Financial Corp.	67,443	960
Ramaco Resources Inc. Class B	7,979	119	WesBanco Inc.	35,204	937
		69,696	RenaissanceRe Holdings Ltd.	4,360	935
Financials (27.4%)			Hope Bancorp Inc.	92,724	909
Bank of America Corp.	235,700	7,186	Bank OZK	21,695	908
Wells Fargo & Co.	137,355	6,125	Old Republic International Corp.	29,074	852
Citigroup Inc.	118,771	5,475	Ameris Bancorp	19,996	851
US Bancorp	136,377	5,199	Meritor Bank	31,669	832
American International Group Inc.	54,939	3,616	Associated Banc-Corp.	46,577	826
JPMorgan Chase & Co.	22,050	3,442	OneMain Holdings Inc.	19,523	826
Truist Financial Corp.	106,855	3,434	Peoples Bancorp Inc.	27,820	819
Bank of New York Mellon Corp.	66,782	3,227	Atlantic Union Bankshares Corp.	26,588	813
Travelers Cos. Inc.	15,901	2,872	New York Community Bancorp Inc.	85,786	807
Prudential Financial Inc.	29,116	2,847	Regions Financial Corp.	47,837	798
Essent Group Ltd.	57,805	2,794	First Busey Corp.	36,561	793
MetLife Inc.	42,346	2,694	Fidelity National Financial Inc.	17,659	792
Webster Financial Corp.	55,631	2,495	* Genworth Financial Inc. Class A	133,196	785
Goldman Sachs Group Inc.	7,011	2,395	Provident Financial Services Inc.	51,251	780
Unum Group	52,743	2,268	First Citizens BancShares Inc. Class A	513	753
Brighthouse Financial Inc.	38,238	1,990	Pinnacle Financial Partners Inc.	10,095	733
Lincoln National Corp.	82,233	1,956	Globe Life Inc.	5,848	720
Columbia Banking System Inc.	86,445	1,939	Charles Schwab Corp.	11,712	718
Morgan Stanley	24,123	1,914	Dime Community Bancshares Inc.	35,013	704
Synovus Financial Corp.	61,864	1,905	* Axos Financial Inc.	18,236	698
Western Alliance Bancorp	34,681	1,776	Stifel Financial Corp.	11,285	689
Chubb Ltd.	7,549	1,732	* Mr Cooper Group Inc.	11,123	673
MGIC Investment Corp.	97,280	1,711	Trustmark Corp.	29,260	670
Ally Financial Inc.	58,002	1,695	Aflac Inc.	8,032	664
Valley National Bancorp	185,962	1,692	SouthState Corp.	8,908	660
PNC Financial Services Group Inc.	12,552	1,681	Jackson Financial Inc. Class A	13,127	627
KeyCorp	134,337	1,664	Navient Corp.	36,079	618
Old National Bancorp	110,170	1,640	Cathy General Bancorp	16,808	617
Radian Group Inc.	61,665	1,585	East West Bancorp Inc.	9,802	617
Zions Bancorp NA	43,716	1,558	Stewart Information Services Corp.	12,897	609
Comerica Inc.	33,976	1,536			
* Enstar Group Ltd.	5,450	1,497			

U.S. Value Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Veritex Holdings Inc.	31,239	598	* Enova International Inc.	4,468	184
CNA Financial Corp.	14,143	596	Northfield Bancorp Inc.	18,284	174
First Financial Corp.	15,331	586	Amalgamated Financial Corp.	8,178	172
TrustCo Bank Corp. NY	21,286	571	First Bancshares Inc.	6,629	170
First American Financial Corp.	9,541	569	OCR Holdings Inc.	3,298	164
First Foundation Inc.	96,385	567	Eagle Bancorp Inc.	6,827	162
Univest Financial Corp.	29,956	566	State Street Corp.	2,122	155
Bank of NT Butterfield & Son Ltd.	19,965	554	Enact Holdings Inc.	5,535	153
United Bankshares Inc.	16,260	538	Home BancShares Inc.	6,563	146
Universal Insurance Holdings Inc.	31,715	538	Preferred Bank	2,326	143
1st Source Corp.	10,777	521	Hanmi Financial Corp.	8,302	138
NBT Bancorp Inc.	14,613	519	Employers Holdings Inc.	3,556	136
Raymond James Financial Inc.	4,921	517	Selective Insurance Group Inc.	1,269	129
Netnet Inc. Class A	6,040	507	* Berkshire Hathaway Inc. Class B	346	125
First Commonwealth Financial Corp.	37,394	500	Pathward Financial Inc.	1,844	91
Franklin Resources Inc.	19,521	484			161,942
TriCo Bancshares	13,347	459	Health Care (7.3%)		
Heritage Financial Corp.	25,451	454	* Centene Corp.	59,488	4,383
Flushing Financial Corp.	31,654	447	Cigna Group	14,689	3,862
Hartford Financial Services Group Inc.	5,653	442	HCA Healthcare Inc.	14,815	3,711
BOK Financial Corp.	6,089	437	Bristol-Myers Squibb Co.	64,168	3,169
Equitable Holdings Inc.	14,172	435	Gilead Sciences Inc.	40,238	3,082
Nicolet Bankshares Inc.	5,864	432	Pfizer Inc.	86,638	2,640
Everest Group Ltd.	1,024	420	Cardinal Health Inc.	24,359	2,608
* NMI Holdings Inc. Class A	15,035	413	Elevance Health Inc.	5,073	2,433
First Bancorp (XNGS)	12,792	401	Humana Inc.	4,542	2,202
Janus Henderson Group plc	15,233	399	* Regeneron Pharmaceuticals Inc.	1,836	1,513
Citizens Financial Group Inc.	14,607	398	* Elanco Animal Health Inc. (XNYS)	126,306	1,488
Principal Financial Group Inc.	5,379	397	* Owens & Minor Inc.	65,862	1,309
Huntington Bancshares Inc.	34,921	393	* Jazz Pharmaceuticals plc	10,523	1,244
Popular Inc.	5,316	392	* United Therapeutics Corp.	5,071	1,217
* StoneX Group Inc.	6,306	385	* QuidelOrtho Corp.	17,071	1,173
Sandy Spring Bancorp Inc.	16,940	373	Royalty Pharma plc Class A	34,739	940
Brookline Bancorp Inc.	38,374	366	Universal Health Services Inc. Class B	6,641	913
OFG Bancorp	10,729	360	* AdaptHealth Corp.	102,802	872
Premier Financial Corp.	17,379	347	Embecka Corp.	41,097	754
ConnectOne Bancorp Inc.	17,246	339	Organon & Co.	53,334	604
Pacific Premier Bancorp Inc.	14,622	329	DENTSPLY SIRONA Inc.	16,850	535
PennyMac Financial Services Inc.	4,071	317	* Amneal Pharmaceuticals Inc.	97,485	420
Eastern Bankshares Inc.	25,725	308	* Pediatrux Medical Group Inc.	42,683	358
First Horizon Corp.	23,054	295	Premier Inc. Class A	15,998	329
Carlyle Group Inc.	8,482	291	Medtronic plc	3,953	313
Berkshire Hills Bancorp Inc.	13,512	283	* Quest Diagnostics Inc.	1,990	273
Hanover Insurance Group Inc.	2,168	269	* Eagle Pharmaceuticals Inc.	34,819	204
Reinsurance Group of America Inc.	1,639	267	* Integra LifeSciences Holdings Corp.	4,680	183
* Markel Group Inc.	181	260	* Computer Programs and Systems Inc.	16,515	174
ServisFirst Bancshares Inc.	5,004	256	* Avanos Medical Inc.	6,373	137
Horizon Bancorp Inc.	22,950	250	* Zimvie Inc.	14,073	133
CNO Financial Group Inc.	9,049	240			43,176
Banner Corp.	5,160	233	Industrials (13.2%)		
Simmons First National Corp. Class A	14,056	225	FedEx Corp.	19,423	5,027
Northwest Bancshares Inc.	19,714	220	Capital One Financial Corp.	34,509	3,853
SLM Corp.	13,986	210	* Fiserv Inc.	25,142	3,284
Discover Financial Services	2,230	207	Air Lease Corp.	76,654	2,973
Cullen/Frost Bankers Inc.	2,077	204	Berry Global Group Inc.	43,749	2,893
* LendingClub Corp.	31,406	198	* Mohawk Industries Inc.	31,179	2,753
Origin Bancorp Inc.	6,062	193	Ryder System Inc.	24,165	2,589
Byline Bancorp Inc.	9,611	192	Synchrony Financial	59,139	1,914
First Merchants Corp.	6,076	186			

U.S. Value Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Fidelity National Information Services Inc.	29,147	1,709	* ASGN Inc.	4,559	407
General Dynamics Corp.	6,745	1,666	* 3M Co.	3,965	393
Matson Inc.	17,265	1,653	* Titan Machinery Inc.	16,090	368
* Gates Industrial Corp. plc	131,568	1,613	* Green Dot Corp. Class A	45,758	367
Knight-Swift Transportation Holdings Inc.	27,445	1,476	Korn Ferry	6,854	355
ManpowerGroup Inc.	19,494	1,447	ArcBest Corp.	2,957	352
* PayPal Holdings Inc.	23,976	1,381	Kelly Services Inc. Class A	16,723	348
L3Harris Technologies Inc.	7,071	1,349	SFL Corp. Ltd.	29,495	335
Global Payments Inc.	9,941	1,158	* DXP Enterprises Inc.	11,254	330
Teekay Tankers Ltd. Class A	22,726	1,129	DHT Holdings Inc.	32,563	324
* BlueLinx Holdings Inc.	12,281	1,079	* AMN Healthcare Services Inc.	4,772	324
Schneider National Inc. Class B	45,518	1,048	GATX Corp.	2,809	306
Genco Shipping & Trading Ltd.	62,969	977	Resources Connection Inc.	20,252	275
* Resideo Technologies Inc.	54,976	903	* StoneCo. Ltd. Class A	16,844	263
Bread Financial Holdings Inc.	31,133	875	* Hillman Solutions Corp.	31,837	233
* PagSeguro Digital Ltd. Class A	82,502	832	First Advantage Corp.	14,422	224
Quanex Building Products Corp.	26,390	813	Griffon Corp.	4,686	218
AGCO Corp.	7,088	805	* Covenant Logistics Group Inc.	4,270	182
Patrick Industries Inc.	9,806	804	Teekay Corp.	26,051	180
* Titan International Inc.	61,059	798	EnerSys	1,921	170
Terex Corp.	15,813	783	TTEC Holdings Inc.	8,982	168
Scorpio Tankers Inc.	13,881	762	Kronos Worldwide Inc.	16,810	147
Sensata Technologies Holding plc	23,017	748	Werner Enterprises Inc.	3,549	142
Huntington Ingalls Industries Inc.	3,089	732	Heidrick & Struggles International Inc.	4,801	130
MDU Resources Group Inc.	36,690	702	* Hub Group Inc. Class A	1,656	125
Allison Transmission Holdings Inc.	13,080	700	Greenbrier Cos. Inc.	3,286	124
Louisiana-Pacific Corp.	11,400	695	United Rentals Inc.	139	66
Herc Holdings Inc.	5,495	679	PACCAR Inc.	518	48
* Atkore Inc.	5,210	677			78,094
Ardmore Shipping Corp.	49,343	671	Real Estate (0.3%)		
Deluxe Corp.	36,339	665	Newmark Group Inc. Class A	101,637	836
Acuity Brands Inc.	3,648	654	* Jones Lang LaSalle Inc.	4,559	709
Regal Rexnord Corp.	5,453	653	* Anywhere Real Estate Inc.	51,261	276
International Seaways Inc.	14,219	649			1,821
* Air Transport Services Group Inc.	40,052	637	Technology (6.1%)		
* Conduent Inc.	209,415	637	QUALCOMM Inc.	23,838	3,076
Owens Corning	4,574	620	HP Inc.	99,273	2,913
* Manitowoc Co. Inc.	42,685	612	Concentrix Corp.	29,751	2,796
* CoreCivic Inc.	41,869	606	* DXC Technology Co.	119,734	2,770
Textron Inc.	7,766	595	* TTM Technologies Inc.	109,562	1,645
* Cross Country Healthcare Inc.	29,046	589	Hewlett Packard Enterprise Co.	88,370	1,494
* JELD-WEN Holding Inc.	36,819	588	* Coherent Corp.	35,953	1,323
Wabash National Corp.	26,756	586	* RingCentral Inc. Class A	46,126	1,313
Brunswick Corp.	7,057	557	* Ziff Davis Inc.	19,185	1,224
* Hiram Holdings Corp.	39,604	521	TD SYNnex Corp.	11,486	1,133
* BrightView Holdings Inc.	67,757	518	International Business Machines Corp.	6,260	993
* American Woodmark Corp.	7,147	517	* Synaptics Inc.	9,620	974
REV Group Inc.	32,185	508	Xerox Holdings Corp.	68,579	959
Safe Bulkers Inc.	128,333	498	* NCR Voyix Corp.	56,452	885
Costamare Inc.	48,341	489	Skyworks Solutions Inc.	8,895	862
* Tutor Perini Corp.	56,201	470	* Qorvo Inc.	8,748	844
* Alight Inc. Class A	59,193	453	* Dropbox Inc. Class A	28,288	797
MKS Instruments Inc.	5,480	452	Amkor Technology Inc.	25,036	705
Insteel Industries Inc.	13,207	449	Adea Inc.	76,195	700
Repay Holdings Corp.	59,074	443	Intel Corp.	15,133	677
Greif Inc. Class A	6,189	433	Science Applications International Corp.	5,587	656
* Dorian LPG Ltd.	9,969	422	Vishay Intertechnology Inc.	26,841	597
* Builders FirstSource Inc.	3,124	419	* Alpha & Omega Semiconductor Ltd.	27,247	583
			* ScanSource Inc.	15,204	508

U.S. Value Factor ETF

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* Consensus Cloud Solutions Inc.	24,501	451	* CommScope Holding Co. Inc.	709,490	1,185
SS&C Technologies Holdings Inc.	8,006	450	Cisco Systems Inc.	19,870	961
Microchip Technology Inc.	5,263	439	* Liberty Latin America Ltd. Class C	124,594	851
* Ultra Clean Holdings Inc.	16,036	435	Cable One Inc.	1,594	848
* Sanmina Corp.	8,404	421	Bel Fuse Inc. Class B	14,982	811
* NetScout Systems Inc.	18,519	372	* Liberty Latin America Ltd. Class A	32,631	221
Dun & Bradstreet Holdings Inc.	34,715	368			24,146
* Alphabet Inc. Class C	2,623	351	Total Common Stocks (Cost \$590,794)		588,250
* Photonics Inc.	15,383	325	Temporary Cash Investments (0.3%)		
* Verint Systems Inc.	13,136	323	Money Market Fund (0.3%)		
Cognizant Technology Solutions Corp. Class A	4,132	291	^{2,3} Vanguard Market Liquidity Fund, 5.438% (Cost \$1,887)	18,871	1,887
Methode Electronics Inc.	11,334	269	Total Investments (99.8%) (Cost \$592,681)		590,137
* E2open Parent Holdings Inc.	70,389	256	Other Assets and Liabilities – Net (0.2%)		1,246
* Cohu Inc.	7,717	245	Net Assets (100%)		591,383
* SolarWinds Corp.	17,241	200			
* Digital Turbine Inc.	42,217	196			
* Arrow Electronics Inc.	1,420	168			
Immersion Corp.	17,520	114			
		36,101			
Telecommunications (4.1%)					
Verizon Communications Inc.	142,629	5,467			
AT&T Inc.	252,526	4,184			
Comcast Corp. Class A	93,653	3,923			
* Charter Communications Inc. Class A	6,839	2,736			
T-Mobile US Inc.	10,446	1,572			
Telephone and Data Systems Inc.	70,408	1,387			

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 \$305,000.

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

3 Collateral of \$320,000 was received for securities on loan.

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				
E-mini S&P 500 Index	December 2023	10	2,288	142
Micro E-mini S&P 500 Index	December 2023	11	252	4
				146

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

Statement of Assets and Liabilities

As of November 30, 2023

(\$000s, except shares, footnotes, and per-share amounts) Amount

Assets	
Investments in Securities, at Value ¹	
Unaffiliated Issuers (Cost \$590,794)	588,250
Affiliated Issuers (Cost \$1,887)	1,887
Total Investments in Securities	590,137
Investment in Vanguard	20
Cash Collateral Pledged—Futures Contracts	128
Receivables for Investment Securities Sold	25
Receivables for Accrued Income	1,481
Variation Margin Receivable—Futures Contracts	10
Total Assets	591,801
Liabilities	
Due to Custodian	58
Payables for Investment Securities Purchased	8
Collateral for Securities on Loan	320
Payables to Vanguard	32
Total Liabilities	418
Net Assets	591,383

¹ Includes \$305,000 of securities on loan.

At November 30, 2023, net assets consisted of:

Paid-in Capital	683,111
Total Distributable Earnings (Loss)	(91,728)
Net Assets	591,383
Net Assets	
Applicable to 5,725,000 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	591,383
Net Asset Value Per Share	\$103.30

Statement of Operations

Year Ended
November 30, 2023

(\$000)

Investment Income	
Income	
Dividends ¹	16,538
Interest ²	123
Securities Lending—Net	26
Total Income	16,687
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	169
Management and Administrative	484
Marketing and Distribution	33
Custodian Fees	8
Auditing Fees	28
Shareholders' Reports	35
Trustees' Fees and Expenses	—
Other Expenses	16
Total Expenses	773
Expenses Paid Indirectly	(2)
Net Expenses	771
Net Investment Income	15,916
Realized Net Gain (Loss)	
Investment Securities Sold ^{2,3}	37,172
Futures Contracts	(102)
Realized Net Gain (Loss)	37,070
Change in Unrealized Appreciation (Depreciation)	
Investment Securities ²	(61,973)
Futures Contracts	131
Change in Unrealized Appreciation (Depreciation)	(61,842)
Net Increase (Decrease) in Net Assets Resulting from Operations	(8,856)

1 Dividends are net of foreign withholding taxes of \$5,000.

2 Interest income, realized net gain (loss), capital gain distributions received, and change in unrealized appreciation (depreciation) from an affiliated company of the fund were \$117,000, \$1,000, less than \$1,000, and less than \$1,000, respectively. Purchases and sales are for temporary cash investment purposes.

3 Includes \$69,063,000 of net gain (loss) resulting from in-kind redemptions.

Statement of Changes in Net Assets

	Year Ended November 30,	
	2023 (\$000)	2022 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	15,916	13,988
Realized Net Gain (Loss)	37,070	29,868
Change in Unrealized Appreciation (Depreciation)	(61,842)	(11,726)
Net Increase (Decrease) in Net Assets Resulting from Operations	(8,856)	32,130
Distributions		
Total Distributions	(15,929)	(12,731)
Capital Share Transactions		
Issued	221,012	413,815
Issued in Lieu of Cash Distributions	—	—
Redeemed	(275,525)	(210,797)
Net Increase (Decrease) from Capital Share Transactions	(54,513)	203,018
Total Increase (Decrease)	(79,298)	222,417
Net Assets		
Beginning of Period	670,681	448,264
End of Period	591,383	670,681

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

Financial Highlights

For a Share Outstanding Throughout Each Period	Year Ended November 30,				
	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$105.20	\$99.84	\$73.96	\$75.51	\$74.35
Investment Operations					
Net Investment Income ¹	2.689	2.220	1.923	1.689	1.671
Net Realized and Unrealized Gain (Loss) on Investments	(1.898)	5.212	25.644	(1.634)	1.053
Total from Investment Operations	.791	7.432	27.567	.055	2.724
Distributions					
Dividends from Net Investment Income	(2.691)	(2.072)	(1.687)	(1.605)	(1.564)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(2.691)	(2.072)	(1.687)	(1.605)	(1.564)
Net Asset Value, End of Period	\$103.30	\$105.20	\$99.84	\$73.96	\$75.51
Total Return	0.97%	7.63%	37.51%	0.70%	3.83%

Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$591	\$671	\$448	\$133	\$81
Ratio of Total Expenses to Average Net Assets	0.13% ²	0.13% ²	0.13%	0.14% ²	0.14% ²
Ratio of Net Investment Income to Average Net Assets	2.68%	2.22%	1.98%	2.68%	2.32%
Portfolio Turnover Rate	24% ³	64% ³	43% ³	52% ³	73%

1 Calculated based on average shares outstanding.

2 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.13%.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Notes to Financial Statements

Vanguard U.S. Value Factor ETF is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. ETF Shares are listed for trading on Cboe BZX Exchange, Inc.; they can be purchased and sold through a broker.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund 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 affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. **Futures Contracts:** The fund uses index futures contracts to a limited extent, with the objective of maintaining full exposure to the stock market while maintaining liquidity. The fund may purchase or sell futures contracts to achieve a desired level of investment, whether to accommodate portfolio turnover or cash flows from capital share transactions. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the fund 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 fund 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 fund'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 November 30, 2023, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The fund'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 fund'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 fund's financial statements.

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

5. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund 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 fund 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 fund 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 fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund 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 fund is entitled to all distributions made on or in respect of the loaned securities.

6. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the fund'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 fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund 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 fund'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 November 30, 2023, the fund did not utilize the credit facilities or the Interfund Lending Program.

7. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

B. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund 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 fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At November 30, 2023, the fund had contributed to Vanguard capital in the amount of \$20,000, representing less than 0.01% of the fund's net assets and 0.01% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

C. The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended November 30, 2023, custodian fee offset arrangements reduced the fund's expenses by \$2,000 (an annual rate of less than 0.01% of average net assets).

D. Various inputs may be used to determine the value of the fund'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 fund's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.

At November 30, 2023, 100% of the market value of the fund's investments and derivatives was determined based on Level 1 inputs.

E. 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 in-kind redemptions were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	69,063
Total Distributable Earnings (Loss)	(69,063)

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 capital loss carryforwards; 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 (loss) are detailed in the table as follows:

	Amount (\$000)
Undistributed Ordinary Income	3,053
Undistributed Long-Term Gains	—
Net Unrealized Gains (Losses)	(2,544)
Capital Loss Carryforwards	(92,237)
Qualified Late-Year Losses	—
Other Temporary Differences	—
Total	(91,728)

The tax character of distributions paid was as follows:

	Year Ended November 30,	
	2023 Amount (\$000)	2022 Amount (\$000)
Ordinary Income*	15,929	12,731
Long-Term Capital Gains	—	—
Total	15,929	12,731

* Includes short-term capital gains, if any.

As of November 30, 2023, 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	592,681
Gross Unrealized Appreciation	45,180
Gross Unrealized Depreciation	(47,724)
Net Unrealized Appreciation (Depreciation)	(2,544)

F. During the year ended November 30, 2023, the fund purchased \$361,009,000 of investment securities and sold \$415,754,000 of investment securities, other than temporary cash investments. Purchases and sales include \$0 and \$273,417,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended November 30, 2023, such purchases were \$4,005,000 and sales were \$2,190,000, resulting in net realized gain of \$28,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital shares issued and redeemed were:

	Year Ended November 30,	
	2023 Shares (000)	2022 Shares (000)
Issued	2,120	4,035
Issued in Lieu of Cash Distributions	—	—
Redeemed	(2,770)	(2,150)
Net Increase (Decrease) in Shares Outstanding	(650)	1,885

H. 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 fund's investments and fund performance.

To the extent the fund's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the fund may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

The use of derivatives may expose the fund to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions can, therefore, increase volatility. Additional information regarding the fund's use of derivative(s) and the specific risks associated is described under significant accounting policies.

At November 30, 2023, two shareholders were each a record or beneficial owner of 25% of the fund's net assets, with a combined ownership of 54%. If any of these shareholders were to redeem their investment in the fund, the redemption might result in an increase in the fund's expense ratio, cause the fund to incur higher transaction costs or lead to the realization of taxable capital gains.

I. Management has determined that no events or transactions occurred subsequent to November 30, 2023, that would require recognition or disclosure in these financial statements.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Vanguard Wellington Fund and Shareholders of Vanguard U.S. Minimum Volatility ETF, Vanguard U.S. Momentum Factor ETF, Vanguard U.S. Multifactor ETF, Vanguard U.S. Quality Factor ETF and Vanguard U.S. Value Factor ETF

Opinions on the Financial Statements

We have audited the accompanying statements of assets and liabilities, including the schedules of investments, of Vanguard U.S. Minimum Volatility ETF, Vanguard U.S. Momentum Factor ETF, Vanguard U.S. Multifactor ETF, Vanguard U.S. Quality Factor ETF and Vanguard U.S. Value Factor ETF (five of the funds constituting Vanguard Wellington Fund, hereafter collectively referred to as the "Funds") as of November 30, 2023, the related statements of operations for the year ended November 30, 2023, the statements of changes in net assets for each of the two years in the period ended November 30, 2023, including the related notes, and the financial highlights for each of the five years in the period ended November 30, 2023 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of each of the Funds as of November 30, 2023, the results of each of their operations for the year then ended, the changes in each of their net assets for each of the two years in the period ended November 30, 2023 and each of the financial highlights for each of the five years in the period ended November 30, 2023 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinions

These financial statements are the responsibility of the Funds' management. Our responsibility is to express an opinion on the Funds' 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 Funds 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 November 30, 2023 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinions.

/s/PricewaterhouseCoopers LLP
Philadelphia, Pennsylvania
January 19, 2024

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

Tax information (unaudited)

The following percentages, or if subsequently determined to be different, the maximum percentages allowable by law, of ordinary income (dividend income plus short-term gains, if any) for the fiscal year qualified for the dividends-received deduction for corporate shareholders.

Fund	Percentage
U.S. Minimum Volatility ETF	91.1%
U.S. Momentum Factor ETF	86.1
U.S. Multifactor ETF	97.5
U.S. Quality Factor ETF	100.0
U.S. Value Factor ETF	96.1

The following amounts, or if subsequently determined to be different, the maximum amounts allowable by law, are hereby designated as qualified dividend income for individual shareholders for the fiscal year.

Fund	(\$000)
U.S. Minimum Volatility ETF	1,941
U.S. Momentum Factor ETF	3,438
U.S. Multifactor ETF	3,596
U.S. Quality Factor ETF	3,513
U.S. Value Factor ETF	15,929

The following amounts, or if subsequently determined to be different, the maximum amounts allowable by law, are hereby designated as interest earned from obligations of the U.S. government which is generally exempt from state income tax.

Fund	(\$000)
U.S. Minimum Volatility ETF	6
U.S. Momentum Factor ETF	17
U.S. Multifactor ETF	9
U.S. Quality Factor ETF	12
U.S. Value Factor ETF	33

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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.

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, the advisory board of the University of California, Berkeley School of Engineering, and the advisory board of Santa Clara University's Leavey School of Business.

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). 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

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

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: co-founder and managing partner (2022–present) of Grafton Street Partners (investment advisory firm). Chief investment officer (retired 2020) and vice president (retired 2020) of the University of Notre Dame. Chair of the board of Catholic Investment Services, Inc. (investment advisors). Member of the board of superintendence of the Institute for the Works of Religion, the Notre Dame 403(b) Investment Committee, 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. Director of DuPont. 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 New York-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 partner of HighVista Strategies (private investment firm). Member of the board of RIT Capital Partners (investment firm).

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, Duke Law School (2021–present); Rubenstein Fellow, Duke University (2017–2020); Distinguished Fellow of the Global

Financial Markets Center, Duke Law School (2020–2022); and Senior Fellow, Duke Center on Risk (2020–present). Partner of Kaya Partners (climate policy advisory services). Member of the board of directors of Arcadia (energy solution technology).

Grant Reid

Born in 1959. Trustee since July 2023. Principal occupation(s) during the past five years and other experience: chief executive officer and president (2014–2022) and member of the board of directors (2015–2022) of Mars, Incorporated (multinational manufacturer). Member of the board of directors of Marriott International, Inc. Chair of Agribusiness Task Force, Sustainable Markets Initiative.

David 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. Trustee of Common Fund.

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.

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).

Jodi Miller

Born in 1980. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Finance director (2022–present) of each of the investment companies served by Vanguard. Head of Enterprise Investment Services (2020–present), head of Retail Client Services and Operations (2020–2022), and head of Retail Strategic Support (2018–2020) 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 (2022–present) 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. Director (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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Text Telephone for People Who Are Deaf or Hard of Hearing > 800-749-7273

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

All comparative mutual fund data are from Morningstar, Inc., unless otherwise noted.

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

You can review information about your fund on the SEC's website, and you can receive copies of this information, for a fee, by sending a request via email addressed to publicinfo@sec.gov.

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