Vanguard°

Annual Report | September 30, 2023

Vanguard Growth and Income Fund

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

- For the 12 months ended September 30, 2023, Vanguard Growth and Income Fund returned 19.81% for Investor Shares and 19.93% for Admiral Shares. Fund performance trailed that of its benchmark, which returned 21.62%.
- Early on, inflation began to ease off multidecade highs amid aggressive interest rate hikes by the Federal Reserve. Unexpected resilience in the labor market and consumer spending helped dial back expectations of a sustained recession, but the prospect of higher rates for longer weighed on market sentiment toward the close of the period.
- The fund's underweight to the poorly performing utilities sector was the greatest contributor to relative performance. Energy also contributed to relative performance because of a combination of security selection and a slight overweight to the sector. Real estate also contributed somewhat. The greatest detractor was information technology, due primarily to stock selection within the sector. A more moderate detractor was industrials.
- For the 10 years ended September 30, 2023, the fund's average annual return was roughly in line with its benchmark.

Market Barometer

	Perio	Periods Ended September 30, 202		
	One Year	Three Years	Five Years	
Stocks				
Russell 1000 Index (Large-caps)	21.19%	9.53%	9.63%	
Russell 2000 Index (Small-caps)	8.93	7.16	2.40	
Russell 3000 Index (Broad U.S. market)	20.46	9.38	9.14	
FTSE All-World ex US Index (International)	20.67	4.23	3.00	
Bonds				
Bloomberg U.S. Aggregate Float Adjusted Index (Broad taxable market)	0.78%	-5.18%	0.18%	
Bloomberg Municipal Bond Index (Broad tax-exempt market)	2.66	-2.30	1.05	
FTSE Three-Month U.S. Treasury Bill Index	4.71	1.78	1.74	
СРІ				
Consumer Price Index	3.70%	5.75%	4.04%	

Average Annual Total Returns

Advisors' Report

Vanguard Growth and Income Fund's Investor Shares returned 19.81% for the 12 months ended September 30, 2023. Admiral Shares returned 19.93%. The fund's benchmark, the Standard & Poor's 500 Index, returned 21.62%.

Your fund is managed by three independent advisors, a strategy that enhances the fund's diversification by providing exposure to distinct yet complementary investment approaches. It is not uncommon for different advisors to have different views about individual securities or the broader investment environment

The advisors, the percentage of fund assets each manages, and brief descriptions of their investment strategies are presented in the table on page 3. The advisors have also prepared a discussion of the investment environment that existed during the fiscal year and of how the portfolio's positioning reflects this assessment. During the period, Vanguard Quantitative Equity Group departed while Wellington Management Company LLP became an advisor for the fund; Wellington's commentary will begin with the 2024 annual report. These comments were prepared on October 18, 2023.

D. E. Shaw Investment Management, L.L.C.

Portfolio Manager:

Ruvim Breydo Managing Director and Chief Investment Officer

Market environment

U.S. equities rose despite tighter financial conditions. The Federal Reserve raised its benchmark interest rate six times during the period, for a total increase of 225 basis points. Although equities dipped in December 2022, February 2023, and September 2023, overall, the S&P 500 Index's growth was propelled by mega-cap technology companies and spurred in part by developments in generative artificial intelligence.

Portfolio performance

Our analysis indicates that stock-specific exposures were the largest detractors from our portion of the fund's relative performance during the period. Technical forecasts contributed to active returns, while fundamental and event-driven forecasts detracted. Exposures to technical risk factors—in particular overweight exposures to momentum and a risk factor that reflects or identifies factor co-movement—subtracted from active returns. Fundamental risk factors, such as overweight exposure to value, were accretive.

The three largest contributors to our portion of the portfolio were underweight positions in NextEra Energy, Walt Disney, and Bristol-Myers Squibb. The three largest detractors were underweight positions in Broadcom and NVIDIA and an overweight position in PayPal.

Market outlook

The outlook for U.S. economic growth improved during the period, as markets appeared to adjust to higher interest rates

and as sentiment about the possibility of a "soft landing" for the economy seemed to improve. Headline annual Consumer Price Index inflation receded to 3.2% in July 2023 from its modern-day peak of 9.1% in June 2022, although it remains above the Fed's target of 2.0%.

Despite the Fed's rate hikes, Fed officials' forecast of U.S. economic growth for 2023 increased from 0.4% in March 2023 to 1.0% in June. However, with interest rates at their highest levels in nearly two decades, tighter financial conditions may weigh on growth in 2024 and beyond.

U.S. equities rose over the period, propelled by mega-cap technology

companies and spurred in part by developments in generative artificial intelligence. The global economic outlook appears mixed. Geopolitical tensions and lackluster economic data from China have dampened expectations for its growth since it reopened after its COVID-19 closure. European unemployment hit an all-time low of 6.4% in July 2023, but elevated energy prices have kept euro zone inflation high and demand weak.

Although the outlook for U.S. equities improved for the period, tighter financial conditions and potential softness in global growth could alter our forecast.

Vanguard Growth And Income Fund Investment Advisors

Fund Assets Managed		s Managed	
Investment Advisor	%	\$ Million	Investment Strategy
D. E. Shaw Investment Management, L.L.C.	34	3,971	Employs quantitative models that seek to capture predominantly bottom-up stock-specific return opportunities. The portfolio's sector weights, size, and style characteristics may differ modestly from the benchmark in a risk-controlled manner.
Los Angeles Capital Management LLC	33	3,949	Employs a quantitative model that emphasizes stocks with characteristics investors are currently seeking and underweights stocks with characteristics investors are currently avoiding. The portfolio's sector weights, size, and style characteristics may differ modestly from the benchmark in a risk-controlled manner.
Wellington Management Company LLP	31	3,716	Allocates the assets in its portion of the fund to a team of global analysts who seek to add value through in-depth fundamental research and understanding of their industries. By covering the same companies over a period of many years, these investment professionals gain comprehensive insight to guide decisions for their subportfolios.
Cash Investments	2	262	These short-term reserves are invested by Vanguard in equity index products to simulate investment in stocks. Each advisor may also maintain a modest cash position.

Los Angeles Capital Management LLC

Portfolio Managers:

Hal W. Reynolds, CFA, Co-Chief Investment Officer and Principal

Kristin J. Ceglar, CFA, Senior Portfolio Manager

Amid resilient consumer spending and corporate earnings growth, global equities rose for the 12 months ended September 30. However, equities slipped in the third quarter as commodity prices spiked, interest rates rose, and central banks signaled their intent to raise rates further. With rates continuing to increase, rate-sensitive real estate investment trusts and utilities struggled, while energy stocks rallied strongly on rising oil prices, thanks to supply cuts from OPEC+ and surprisingly resilient demand for energy. Much of the increase in interest rates can be attributed to higher real rates as inflation quickly moderates. As rates rise, the cost of debt is increasing. This reduces corporate appetite for taking on debt, and leads to fewer share buybacks, which have been a support to the stock prices of many U.S. companies in recent years.

We largely seek to avoid companies with risky balance sheets and instead lean on large companies with conservative debt profiles. Larger-capitalization companies are better-positioned in terms of their debt structures because many were able to arrange excellent financing terms before the Federal Reserve began its hiking cycle.

Many of the largest U.S. companies also have positive net cash positions, and therefore are better insulated from rising rates. The market has clearly rewarded these firms.

While the performance of the "Magnificent Seven"-Apple, Amazon, Alphabet, Meta, Microsoft, NVIDIA, and Tesla-took a breather in the third quarter, they are still responsible for outsized return over the year. The portfolio's small average underweight to larger-cap companies detracted from performance for the year because of the strong performance of mega-caps.

Over the 12-month period, the portfolio shifted into consumer cyclicals and capital goods and shifted out of technology and real estate. At the end of the period, the portfolio's largest overweight allocations were to capital goods and consumer cyclicals, while the largest underweights were to utilities and health care. The portfolio shifted out of value, particularly dividend yield, as investors shifted allocations to cash instruments for yield. The portfolio is positioned toward higher-quality assets, favoring successful companies with strong management and cash flows, positive analyst sentiment, and momentum that is supported by fundamentals and earnings news (good momentum).

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 September 30, 2023

	Beginning Account Value 3/31/2023	Ending Account Value 9/30/2023	Expenses Paid During Period
Based on Actual Fund Return			
Growth and Income Fund			
Investor Shares	\$1,000.00	\$1,050.20	\$1.64
Admiral™ Shares	1,000.00	1,050.60	1.13
Based on Hypothetical 5% Yearly Return			
Growth and Income Fund			
Investor Shares	\$1,000.00	\$1,023.46	\$1.62
Admiral Shares	1,000.00	1,023.97	1.12

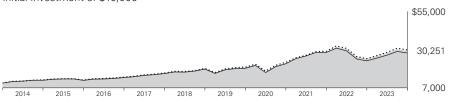
The calculations are based on expenses incurred in the most recent six-month period. The fund's annualized six-month expense ratios for that period are 0.32% for Investor Shares and 0.22% for Admiral Shares. The dollar amounts shown as "Expenses Paid" are equal to the annualized expense ratio multiplied 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).

Growth and Income Fund

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: September 30, 2013, Through September 30, 2023 Initial Investment of \$10.000



Average Annual Total Returns Periods Ended September 30, 2023

One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
19.81%	9.38%	11.71%	\$30,251
21.62	9.92	11.91	30,821
20.49	9.01	11.19	28,891
	One Year 19.81% 21.62	One Year Years 19.81% 9.38% 21.62 9.92	Year Years Years 19.81% 9.38% 11.71% 21.62 9.92 11.91

	One Year	Five Years	Ten Years	Final Value of a \$50,000 Investment
Growth and Income Fund Admiral Shares	19.93%	9.49%	11.82%	\$152,827
S&P 500 Index	21.62	9.92	11.91	154,103
Dow Jones U.S. Total Stock Market Float Adjusted Index	20.49	9.01	11.19	144,456

Fund Allocation

As of September 30, 2023

Communication Services	8.2%
Consumer Discretionary	14.6
Consumer Staples	4.2
Energy	5.2
Financials	12.5
Health Care	12.9
Industrials	9.3
Information Technology	28.7
Materials	1.5
Real Estate	1.1
Utilities	1.3
Other	0.5

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

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

Financial Statements

Schedule of Investments As of September 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)
Co	ommon Stocks (97.5%)			* Consolidated		
Co	ommunication Services (8.0%)		Communications Holdings Inc.	31,700	108
*	Alphabet Inc. Class A	2,824,925	369,670	* Lions Gate	31,700	100
*	Meta Platforms Inc. Class A	532,107	159.744	Entertainment Corp.		
*	Alphabet Inc. Class C	1,132,102	149,268	Class B	13,700	108
*	T-Mobile US Inc.	516,053	72,273	 Liberty Global plc Class A 	5.000	86
*	Spotify Technology SA	286,176	44,254	* ZoomInfo Technologies	3,000	00
	AT&T Inc.	2,636,300	39,597	Inc.	2,800	46
*	Omnicom Group Inc. Netflix Inc.	525,283 59,230	39,123	Gray Television Inc.	6,024	42
*	Live Nation	59,230	22,365	* DHI Group Inc.	10,500	32
	Entertainment Inc.	268,942	22,333	 Liberty Media Corp Liberty Live Class C 	800	26
*	Snap Inc. Class A	573,800	5,113	Entravision	000	20
*	Match Group Inc.	65,000	2,546	Communications Corp		
_	Warner Bros Discovery Inc.	212,100	2.303	Class A	5,300	19
*	Yelp Inc.	47,204	1,963	* WideOpenWest Inc.* comScore Inc.	2,479 11,898	19 7
	Fox Corp. Class A	53,200	1,660	Comcast Corp. Class A	100	4
*	Lumen Technologies Inc.	974,100	1,383	Sinclair Inc.	328	4
*	Gogo Inc.	89,800	1,071	 * TripAdvisor Inc. 	10	_
*	Sciplay Corp. Class A Charter Communications	43,123	982	*,1 Yandex NV Class A	23,500 _	
	Inc. Class A	2,200	968			944,676
	Iridium Communications	,		Consumer Discretionary (1		405 400
	Inc.	18,900	860	* Amazon.com Inc. * Tesla Inc.	3,818,702 628,945	485,433 157,375
*	Fox Corp. Class B Eventbrite Inc. Class A	25,600	739 728	* Chipotle Mexican Grill	020,040	137,373
	Paramount Global	73,800	720	Inc.	71,722	131,382
	Class B	55,400	715	* Booking Holdings Inc.	38,728	119,435
*	Vimeo Inc.	163,682	579	* AutoZone Inc.	35,577	90,365
*	AMC Networks Inc.	40.055	F70	Marriott International Inc Class A	384,750	75,626
*	Class A Liberty Media Corp	48,355	570	Ross Stores Inc.	606,676	68,524
	Liberty Formula One			McDonald's Corp.	255,629	67,343
	Class C	8,900	554	Lennar Corp. Class A	477,826	53,626
*	Lions Gate			TJX Cos. Inc.	509,870 374.042	45,317
	Entertainment Corp. Class A	47,960	407	Starbucks Corp. Home Depot Inc.	104,782	34,139 31,661
	Warner Music Group	47,000	407	Yum! Brands Inc.	245,613	30,687
	Corp. Class A	12,000	377	Lowe's Cos. Inc.	124,640	25,905
*	Liberty Media Corp			* Royal Caribbean Cruises		
	Liberty Formula One Class A	5,800	328	Ltd.	247,460	22,801
*	Globalstar Inc.	246.700	323	 * Airbnb Inc. Class A PulteGroup Inc. 	135,269 244.930	18,560 18,137
*	Altice USA Inc. Class A	96,601	316	DR Horton Inc.	149,150	16,029
*	ZipRecruiter Inc. Class A	23,574	283	NIKE Inc. Class B	159,554	15,257
*	QuinStreet Inc.	30,800	276	* Expedia Group Inc.	122,805	12,658
*	IDT Corp. Class B Gannett Co. Inc.	11,907 98,400	263 241	Ford Motor Co.	1,004,077	12,471
	Guiniett CO. IIIC.	50,400	241			

			Market				Market
		Shares	Value* (\$000)			Shares	Value* (\$000)
_	Domino's Pizza Inc.	31,343	11,872	_	Churchill Downs Inc.	1,300	151
	Darden Restaurants Inc.	76,183	10,911		Restaurant Brands	.,	
*	O'Reilly Automotive Inc.	9,430	8,571		International Inc.	2,200	147
*	CarMax Inc.	120,169	8,500		Monarch Casino &	2 212	144
	Bath & Body Works Inc.	238,080	8,047	*	Resort Inc. ODP Corp.	2,312 3,020	139
	Las Vegas Sands Corp. General Motors Co.	172,941 202,700	7,928 6,683	*	NVR Inc.	21	125
	Hilton Worldwide	202,700	0,003	*	Overstock.com Inc.	7,200	114
	Holdings Inc.	43,910	6,594	*	LL Flooring Holdings Inc.	35,100	111
	Advance Auto Parts Inc.	89,500	5,006	*	Fossil Group Inc.	50,191	103
	Penske Automotive			*	Noodles & Co.	40,200	99
	Group Inc.	29,800	4,978	*	American Public	17504	00
	Genuine Parts Co. Dick's Sporting Goods	32,500	4,692	*	Education Inc. Universal Electronics Inc.	17,594 8,200	88 74
	Inc.	42,500	4.615	*	2U Inc.	28,200	70
	VF Corp.	240,800	4,255	*	Green Brick Partners Inc.	1,500	62
*	Duolingo Inc.	23,100	3,832	*	Skyline Champion Corp.	900	57
*	Ulta Beauty Inc.	9,200	3,675	*	Under Armour Inc.		
	Williams-Sonoma Inc.	23,500	3,652		Class A	7,600	52
*	Chegg Inc.	340,400	3,036	_	Travel & Leisure Co.	1,400	51
-	Mohawk Industries Inc.	35,128	3,014		Container Store Group Inc.	17,600	40
	H&R Block Inc. Wynn Resorts Ltd.	68,000 31,100	2,928 2,874	*	G-III Apparel Group Ltd.	1,500	37
	Harley-Davidson Inc.	85,900	2,840		Signet Jewelers Ltd.	400	29
	eBay Inc.	61,000	2,689		Cato Corp. Class A	2,200	17
	LKQ Corp.	50.214	2,486	*	Duluth Holdings Inc.		
*	Figs Inc. Class A	396,700	2,341		Class B	2,768	17
*	DoorDash Inc. Class A	29,000	2,305	*	Guess? Inc.	800	17
*	Coupang Inc.	130,600	2,220		American Outdoor Brands Inc.	1 720	17
*	Coursera Inc.	111,000	2,075		El Pollo Loco Holdings	1,728	17
*	Carnival Corp. Caesars Entertainment	145,470	1,996		Inc.	1,600	14
	Inc.	40,100	1,859		Build-A-Bear Workshop Inc.	400	12
	MGM Resorts International	43,600	1,603	*	Barnes & Noble		
	Pool Corp.	3,900	1,389		Education Inc.	9,507	10
	Toll Brothers Inc.	18,400	1,361	_			1,691,734
*	Aptiv plc	12,800	1,262	C	onsumer Staples (4.1%)	E44 600	70 447
*	AutoNation Inc. Sleep Number Corp.	8,000 47,800	1,211 1,175		Procter & Gamble Co. Coca-Cola Co.	544,683 1,381,028	79,447 77,310
	Newell Brands Inc.	127,100	1,148		Walmart Inc.	425,692	68,081
	Tapestry Inc.	39,200	1,127		PepsiCo Inc.	374,267	63,416
	Yum China Holdings Inc.	19,900	1,109		Costco Wholesale Corp.	48,721	27,525
*	GoPro Inc. Class A	295,500	928	*	Monster Beverage Corp.	458,350	24,270
*	Floor & Decor Holdings	10 100	014		Colgate-Palmolive Co.	313,500	22,293
	Inc. Class A Group 1 Automotive Inc.	10,100 3,336	914 896		Constellation Brands Inc. Class A	64,108	16,112
*	Under Armour Inc.	3,330	000		Hershey Co.	74,198	14,846
	Class C	126,000	804		Kroger Co.	249,400	11,161
	Laureate Education Inc.	47,200	666		Kimberly-Clark Corp.	75,402	9,112
	Aaron's Co. Inc.	57,700	604		Clorox Ćo.	65,700	8,611
*	Playa Hotels & Resorts	00 400	E07		Sysco Corp.	110,694	7,311
*	NV Genesco Inc.	82,400 17,100	597 527		Mondelez International	01 001	0.010
	Acushnet Holdings Corp.	8,395	445		Inc. Class A Philip Morris	91,031	6,318
	Phinia Inc.	16,200	434		International Inc.	65,700	6,082
	Garmin Ltd.	3,700	389		Brown-Forman Corp.	,	-,
*	Grand Canyon Education		074		Class B	103,304	5,960
	Inc. Bloomin' Brands Inc.	3,200 14.800	374		Dollar General Corp.	54,100	5,724
	Best Buy Co. Inc.	4,700	364		Estee Lauder Cos. Inc. Class A	36,200	5,233
*	Qurate Retail Inc. Series	4,700	326		Coca-Cola Europacific	30,200	5,233
	A	458,700	278		Partners plc	74,000	4,624
*	CarParts.com Inc.	66,400	274		Molson Coors Beverage		
*	Skechers USA Inc.				Co. Class B	59,100	3,758
*	Class A	4,100	201		Tyson Foods Inc. Class A	70,100	3,539
*	Zumiez Inc. Chewy Inc. Class A	9,500 8,600	169 157	*	General Mills Inc. United Natural Foods Inc.	32,600 134,800	2,086 1,906
	Chevry Inc. Class A	0,000	157		Grittou Natural 1 0005 IIIC.	134,000	1,500

		Shares	Market Value• (\$000)	Shares	Market Value• (\$000)
_	Keurig Dr Pepper Inc. Church & Dwight Co.	53,500	1,689	* TETRA Technologies Inc. 15,100 ONEOK Inc. 1,500	96 95
*	Inc. US Foods Holding Corp.	16,800 31,900	1,539 1,266	Patterson-UTI Energy Inc. 5,700	79
	Performance Food Group Co. Vector Group Ltd.	14,900 79,600	877 847	* Diamond Offshore Drilling Inc. 2,689 Delek US Holdings Inc. 1,002	40 29
	Coca-Cola Consolidated Inc.	1,330	846		608,379
	SpartanNash Co.	22,100	486	Financials (12.2%) Visa Inc. Class A 1,026,451 2	236,094
*	Vita Coco Co. Inc. Altria Group Inc.	17,900 9,700	466 408	* Berkshire Hathaway Inc.	114,433
*	Olaplex Holdings Inc. Hain Celestial Group Inc.	184,600 14,900	360 155	Ares Management Corp.	109,512
	Reynolds Consumer Products Inc.	5,800	149	Mastercard Inc. Class A 220,130 JPMorgan Chase & Co. 534,661	87,152 77,536
	Spectrum Brands Holdings Inc.	500	39	* Arch Capital Group Ltd. 902,975	71,976
	Medifast Inc.	399	30	Wells Fargo & Co. 1,724,831 Chubb Ltd. 248,000	70,477 51,629
_	(=()	_	483,882	American Express Co. 269,790	40,250
Er	nergy (5.1%) Exxon Mobil Corp.	1,040,191	122,306	CME Group Inc. 191,520 Tradeweb Markets Inc.	38,346
	BP plc ADR	2,511,852	97,259	Class A 477,228	38,274
	Shell plc ADR Chevron Corp.	1,331,962 371,065	85,752 62,569	S&P Global Inc. 101,760 KKR & Co. Inc. 594,714	37,184 36,634
	Marathon Petroleum	371,003	02,303	American International	30,034
	Corp.	174,530	26,413	Group Inc. 453,714	27,495
	ConocoPhillips Baker Hughes Co.	186,960 611,620	22,398 21,602	Progressive Corp. 183,271 Everest Group Ltd. 68,589	25,530 25,492
	EQT Corp.	491,850	19,959	* PayPal Holdings Inc. 408,190	23,863
	APA Corp. Phillips 66	444,390 131,080	18,264 15,749	MSCI Inc. 42,240 Charles Schwab Corp. 378,160	21,672 20,761
	Valero Energy Corp.	108,714	15,406	Choe Global Markets Inc. 118,600	18,526
	Targa Resources Corp.	137,610	11,796	MetLife Inc. 293,538	18,466
	Cheniere Energy Inc. Schlumberger NV	63,500 164,380	10,538 9,583	W R Berkley Corp. 287,235 Marsh & McLennan Cos.	18,237
	Halliburton Co.	218,770	8,860	Inc. 91,860	17,481
*	Southwestern Energy Co.	1,353,500	8,730	Cincinnati Financial Corp. 152,510 Travelers Cos. Inc. 87,130	15,600 14,229
	Hess Corp.	53,800	8,231	Allstate Corp. 118,134	13,161
	Range Resources Corp. Occidental Petroleum	242,630	7,864	Moody's Corp. 36,933 Fidelity National	11,677
	Corp.	117,170	7,602	Information Services	
*	Transocean Ltd. (XNYS)	486,100	3,991	Inc. 200,200 Loews Corp. 154,897	11,065 9,806
	CNX Resources Corp. EOG Resources Inc.	154,000 23,900	3,477 3,030	Bank of America Corp. 350,700	9,602
	Equitrans Midstream			* NU Holdings Ltd. Class A 1,301,000	9,432
	Corp. Marathon Oil Corp.	278,100 88,510	2,606 2,368	Morgan Stanley 115,200 Bank of New York Mellon	9,408
	PBF Energy Inc. Class A	41,200	2,205	Corp. 216,500	9,234
*	Denbury Inc.	21,600	2,117	* FleetCorTechnologies Inc. 33,850	8,643
*,2	Antero Resources Corp. Tellurian Inc.	70,500 874,201	1,789 1,014	Zions Bancorp NA 214,890	7,497
	SM Energy Co. Comstock Resources	22,700	900	Affiliated Managers Group Inc. 54,710	7,131
	Inc.	73,500	811	MarketAxess Holdings	
*	Peabody Energy Corp. Oceaneering	22,400	582	Inc. 28,338 * Fiserv Inc. 48,600	6,054 5,490
	International Inc.	20,900	538	Assurant Inc. 33,799	4,853
*	Par Pacific Holdings Inc. California Resources	13,800	496	First Horizon Corp. 362,300 Virtu Financial Inc.	3,993
	Corp.	5,600	314	Class A 223,800	3,865
* * *	Green Plains Inc. Gevo Inc.	9,200	277	Globe Life Inc. 35,358 FS KKR Capital Corp. 184,300	3,844 3,629
*	Teekay Corp.	170,300 28,853	203 178	Western Union Co. 264,300	3,483
*	Golar LNG Ltd.	6,800	165	PNC Financial Services Group Inc. 27,300	3,352
-	US Silica Holdings Inc.	7,000	98	27,300	0,002

		Shares	Market Value*			Charas	Market Value•
_			(\$000)	_		Shares	(\$000)
	Aflac Inc.	42,800	3,285		Invesco Mortgage	44 400	
_	Truist Financial Corp.	111,600	3,193	*	Capital Inc. REIT	11,100	111
-	StoneCo. Ltd. Class A	270,000	2,881		MBIA Inc.	13,400	97
	Lincoln National Corp.	111,400	2,750		Pathward Financial Inc.	2,100	97
_	Flywire Corp.	81,300	2,593		Berkshire Hills Bancorp	4 500	00
	LPL Financial Holdings	0.100	1 005		Inc.	4,500	90 88
	Inc.	8,100	1,925		Eagle Bancorp Inc.	4,100	88
	Invesco Ltd. Discover Financial	127,800	1,856		Brighthouse Financial Inc.	1,700	83
	Services	10 000	1 70/	*	Customers Bancorp Inc.	2,135	74
	Apollo Global	19,900	1,724		AvidXchange Holdings	2,100	/4
	Management Inc.	18,400	1,652		Inc.	7,800	74
	Nasdag Inc.	27,700	1,346		Central Pacific Financial	,,000	* *
	Rithm Capital Corp.	142,600	1,325		Corp.	4,400	73
	Franklin Resources Inc.	51,700	1,271	*	Green Dot Corp. Class A	4,900	68
	BlackRock Inc.	1,800	1,164		PRA Group Inc.	3,215	62
*	UBS Group AG	.,000	.,		Repay Holdings Corp.	7,900	60
	(Registered)	43,200	1,065		EZCorp. Inc. Class A	5,670	47
	Ameriprise Financial Inc.	3,100	1,022		Two Harbors Investment	,	
	Arthur J Gallagher & Co.	4,400	1,003		Corp.	3,400	45
*	Payoneer Global Inc.	147,200	901		Banc of California Inc.	3,100	38
	Burford Capital Ltd.	62,946	881		Bank of NT Butterfield &		
	Reinsurance Group of				Son Ltd.	1,300	35
	America Inc.	5,834	847		HomeTrust Bancshares	4 400	
	Enact Holdings Inc.	29,700	809		Inc.	1,462	32
	Northern Trust Corp.	11,500	799		Greenhill & Co. Inc.	1,416	21
*	Encore Capital Group				Victory Capital Holdings	E1	2
	Inc.	15,500	740		Inc. Class A	51_	2
	Raymond James	6.260	640				1,448,010
*	Financial Inc. Ryan Specialty Holdings	6,369	040		alth Care (12.6%)	4 000 050	
	Inc.	13,100	634		Merck & Co. Inc.	1,382,359	142,314
	Federated Hermes Inc.	18,000	610		UnitedHealth Group Inc.	271,221	136,747
	American Financial	.0,000	0.0		Eli Lilly & Co. Pfizer Inc.	252,344	135,542
	Group Inc.	5,300	592		Johnson & Johnson	3,191,751 594,562	105,870
	Jefferies Financial Group				Centene Corp.	1,103,985	92,603 76,043
	Inc.	15,600	571		Vertex Pharmaceuticals	1,105,565	70,043
	BOK Financial Corp.	7,100	568		Inc.	200,930	69,871
	Hartford Financial				Humana Inc.	137,998	67,139
	Services Group Inc.	7,200	511		Boston Scientific Corp.	1,251,854	66,098
	AGNC Investment Corp.	48,200	455		Laboratory Corp. of	, - ,	,
	East West Bancorp Inc.	8,300	437		America Holdings	314,776	63,286
	MGIC Investment Corp.	25,500	426		Amgen Inc.	227,036	61,018
	Unum Group	8,000	393		AbbVie Inc.	372,537	55,530
	Fifth Third Bancorp Aon plc Class A (XNYS)	14,500 1,100	367 357	*	Edwards Lifesciences		
	SLM Corp.	21,700	296		Corp.	778,537	53,937
*	LendingClub Corp.	48,100	293		Stryker Corp.	105,130	28,729
	Live Oak Bancshares Inc.	8,927	258		Gilead Sciences Inc.	346,600	25,974
	First Foundation Inc.	40,200	244		Becton Dickinson and	02.700	24 224
	Western Alliance	,			Co. Thermo Fisher Scientific	93,700	24,224
	Bancorp	4,800	221		Inc.	47,548	24,067
	Mercury General Corp.	7,200	202	*	Intuitive Surgical Inc.	76,722	22,425
	Carlyle Secured Lending				Elevance Health Inc.	39,116	17,032
	Inc.	12,800	186		Danaher Corp.	67,900	16,846
	Ladder Capital Corp.	17,500	180		CVS Health Corp.	210,057	14,666
	Comerica Inc.	4,200	174		Align Technology Inc.	44,496	13,586
_	Donnelley Financial	2 000	100	*	Molina Healthcare Inc.	41,370	13,565
	Solutions Inc.	3,000	169		Abbott Laboratories	134,128	12,990
	Hanmi Financial Corp.	10,201	166	*	Incyte Corp.	223,030	12,884
	Stifel Financial Corp.	2,600	160	*	IQVIA Holdings Inc.	63,070	12,409
	Granite Point Mortgage Trust Inc.	27,100	132	*	Regeneron		
	Equitable Holdings Inc.	4,400	125		Pharmaceuticals Inc.	14,700	12,098
	Carlyle Group Inc.	4,000	121		Zoetis Inc.	67,890	11,812
	First Internet Bancorp	7,048	114		Bristol-Myers Squibb Co.	193,028	11,203
*	Margeta Inc. Class A	18,600	111		HCA Healthcare Inc.	31,344	7,710
	7,500 1101 01000 11	.0,000			Agilent Technologies Inc.	60,100	6,720

			Market				Market
		Shares	Value• (\$000)			Shares	Value• (\$000)
*	Baxter International Inc. DexCom Inc.	172,400 67,146	6,506 6,265	*	Pediatrix Medical Group Inc.	19,400	247
*	ACADIA Pharmaceuticals Inc.	272,208	5.673	*	Community Health Systems Inc.	84,610	245
*	Biogen Inc.	20,857	5,360	*	OmniAb Inc.	46,900	243
*	Hologic Inc. Cigna Group	54,400 12,000	3,775 3,433	*	OptimizeRx Corp. Semler Scientific Inc.	30,932 9,400	241 239
	Medtronic plc	40,900	3,205	*	Aurinia Pharmaceuticals		
*	BioMarin Pharmaceutical	20.200	0.670	*	Inc. Sotera Health Co.	28,200 13,300	219 199
	Inc. ResMed Inc.	30,200 16,500	2,672 2,440	*	Moderna Inc.	1,900	196
	McKesson Corp.	5,600	2,435	*	Revance Therapeutics		105
*	Inspire Medical Systems Inc.	11,500	2,282		Inc. Bruker Corp.	17,000 2,600	195 162
*	Mettler-Toledo			*	Novocure Ltd.	9,600	155
*	International Inc. Intercept	2,057	2,279	*	Fulcrum Therapeutics Inc.	34,300	152
	Pharmaceuticals Inc.	113,000	2,095	*	10X Genomics Inc.		
*	Veradigm Inc.	135,791	1,784	*	Class A Ideaya Biosciences Inc.	3,568 5,400	147 146
*	Patterson Cos. Inc. Neogen Corp.	56,300 89,000	1,669 1,650	*	uniQure NV	21,300	143
*	Medpace Holdings Inc.	6,800	1,647	*	CareDx Inc.	20,300	142
*	Nevro Corp. Corcept Therapeutics Inc.	79,425 55,100	1,527 1,501		Cross Country Healthcare Inc.	5,700	141
*	Alkermes plc	48,000	1,345	*	Accuray Inc.	49,600	135
*	Alnylam Pharmaceuticals	6 000	1 204	*	Coherus Biosciences Inc. Codexis Inc.	34,600 64,600	129 122
*	Inc. Vir Biotechnology Inc.	6,800 126,105	1,204 1,182	*	MiMedx Group Inc.	16,300	119
	Alcon Inc.	13,804	1,064	*	Enanta Pharmaceuticals		110
*	LivaNova plc Myriad Genetics Inc.	19,621 64,400	1,038 1,033	*	Inc. Immunovant Inc.	10,602 2.900	118 111
*	Exelixis Inc.	44,900	981	*	AngioDynamics Inc.	15,100	110
*	Embecta Corp.	60,464	910	*	OPKO Health Inc. Sage Therapeutics Inc.	66,700 5,136	107 106
*	PTC Therapeutics Inc. Sarepta Therapeutics Inc.	38,300 7,000	858 849	*	Nuvalent Inc. Class A	2,223	100
*	Bio-Rad Laboratories Inc.	·		*	Enhabit Inc.	8,302	93
*	Class A iRhythm Technologies	2,299	824	*	Stoke Therapeutics Inc. Silk Road Medical Inc.	20,000 5,200	79 78
	Inc.	8,600	811	*	ADMA Biologics Inc.	21,446	77
*	R1 RCM Inc. Lantheus Holdings Inc.	51,600 11,100	778 771	*	Avidity Biosciences Inc. C4Therapeutics Inc.	11,900 37,800	76 70
*	Quanterix Corp.	25,800	700	*	CorMedix Inc.	17,600	65
	Zimmer Biomet Holdings		000	*	Vanda Pharmaceuticals	14 100	C1
*	Inc. Amylyx Pharmaceuticals	6,200	696	*	Inc. Kodiak Sciences Inc.	14,100 30,889	61 56
	Inc.	38,000	696	*	Allakos Inc.	20,949	48
_	Integra LifeSciences Holdings Corp.	15,999	611	*	Option Care Health Inc. NanoString Technologies	1,400	45
	Revvity Inc.	5,500	609		Inc.	24,700	43
*	Maravai LifeSciences Holdings Inc. Class A	60,100	601	*	Fate Therapeutics Inc.	16,800 3,500	36 32
	DENTSPLY SIRONA Inc.	17,400	594	*	Joint Corp. Brookdale Senior Living	3,500	32
*	ImmunoGen Inc. Owens & Minor Inc.	36,800	584	*	Inc.	7,400	31
*	REVOLUTION Medicines	29,600	478		Lexicon Pharmaceuticals Inc.	27,900	30
	Inc.	16,300	451	*	Taro Pharmaceutical		10
*	Travere Therapeutics Inc. Zimvie Inc.	40,000 37,540	358 353	*	Industries Ltd. Pacific Biosciences of	500	19
*	DaVita Inc.	3,300	312		California Inc.	1,400	12
*	Henry Schein Inc. QIAGEN NV	4,100 6,700	304 271	*	Neurocrine Biosciences Inc.	100	11
*	Tandem Diabetes Care		۷/۱	*,	¹ Radius Health Inc. CVR	17,800	1
*	Inc.	12,800	266	*	Scilex Holding Co. (XNCM)	65	_
	Elanco Animal Health Inc. (XNYS)	22,854	257		MINCIVII	00_	1,500,515
*	Atara Biotherapeutics Inc.	173,130	256				., 5, 5 . 5

	Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
Industrials (0.19/)	Ondroo	(ФООО)	*	Davagna Cara		
Industrials (9.1%)	439,357	97,085		Parsons Corp. Valmont Industries Inc.	31,505 6,152	1,712 1,478
General Dynamics Corp. Caterpillar Inc.	194,188	53,013	*	Legalzoom.com Inc.	116,300	1,478
Trane Technologies plc	242,375	49,180	*	AerCap Holdings NV	18,800	1,178
Fortive Corp.	617,310	45,780		Wabash National Corp.	54,700	1,155
Automatic Data	017,510	43,700		Allegion plc	10,099	1,052
Processing Inc.	178,388	42,917	*	Atkore Inc.	7,000	1,044
Deere & Co.	113,711	42,912		Copa Holdings SA	1,000	1,011
Westinghouse Air Brake	-,	,-		Class A	11,600	1,034
Technologies Corp.	401,405	42,657		Expeditors International		•
 Builders FirstSource Inc. 	335,086	41,715		of Washington Inc.	7,800	894
Leidos Holdings Inc.	411,727	37,945		WESCO International		
Paychex Inc.	326,510	37,656		Inc.	5,900	849
Lockheed Martin Corp.	85,800	35,089	*	Gates Industrial Corp. plc	71,800	834
WW Grainger Inc.	47,237	32,680	_	KBR Inc.	14,100	831
PACCAR Inc.	364,019	30,949		Array Technologies Inc.	32,800	728
* Uber Technologies Inc.	557,100	25,621	*	Shyft Group Inc.	47,819	716
Otis Worldwide Corp.	314,186	25,232		Trex Co. Inc. Hexcel Corp.	11,190	690
Textron Inc.	304,890	23,824		REV Group Inc.	9,700 38,800	632 621
Fastenal Co.	421,131	23,011	*	Core & Main Inc. Class A	21,277	614
Cintas Corp.	42,362	20,377		Forward Air Corp.	8,517	585
Parker-Hannifin Corp. Eaton Corp. plc	50,367 84,241	19,619 17,967	*	Conduent Inc.	142,000	494
* Boeing Co.	93,560	17,934		Paycom Software Inc.	1,900	493
Johnson Controls	33,300	17,554		Allison Transmission	1,000	100
International plc	322,100	17,139		Holdings Inc.	8,200	484
* United Airlines Holdings	022,.00	.,,.00	*	Triumph Group Inc.	57,800	443
Inc.	392,640	16,609		CH Robinson Worldwide		
United Parcel Service				Inc.	4,900	422
Inc. Class B (XNYS)	106,185	16,551		Dover Corp.	2,900	405
Xylem Inc.	177,200	16,130		Pitney Bowes Inc.	122,100	369
FedEx Corp.	60,540	16,038	*	Enviri Corp.	46,443	335
Delta Air Lines Inc.	391,832	14,498	*	PGT Innovations Inc.	11,525	320
Republic Services Inc.	98,100	13,980	*	Verra Mobility Corp.	14,700	275
Union Pacific Corp.	67,600	13,765		Schneider National Inc.	0.000	074
A O Smith Corp.	197,620	13,069		Class B	9,900	274
RTX Corp.	152,895	11,004		Textainer Group Holdings Ltd.	7,100	264
Snap-on Inc. * Alaska Air Group Inc.	42,000 286,145	10,712 10,610	*	American	7, 100	204
General Electric Co.	95,500	10,558		Superconductor Corp.	33,700	254
United Rentals Inc.	23,650	10,514		Enerpac Tool Group Corp.	8,188	216
Carrier Global Corp.	182,902	10,096		Marten Transport Ltd.	10,700	211
* American Airlines Group	,	,	*	Driven Brands Holdings		
Inc.	764,200	9,789		Inc.	16,800	211
L3Harris Technologies				Rollins Inc.	5,400	202
Inc.	46,600	8,114		Jacobs Solutions Inc.	1,200	164
Verisk Analytics Inc.	31,561	7,456	*	Watsco Inc.	400	151
AMETEK Inc.	46,270	6,837	*	Fluence Energy Inc. Babcock & Wilcox	5,906	136
Waste Management Inc.	44,510	6,785		Enterprises Inc.	25,910	109
Emerson Electric Co.	61,200	5,910		BWX Technologies Inc.	1,400	105
Ingersoll Rand Inc.	96 400	5,505	*	TELUS International CDA	1,400	105
(XYNS) 3M Co.	86,400 53,645	5,022		Inc.	12,800	98
Honeywell International	33,043	3,022		Rush Enterprises Inc.	,	
Inc.	26,900	4,969		Class A	2,300	94
Illinois Tool Works Inc.	20,725	4,773		Werner Enterprises Inc.	2,400	93
* Fluor Corp.	111,600	4,096		Mueller Industries Inc.	1,200	90
* Copart Inc.	90,040	3,880	*	Upwork Inc.	7,400	84
Northrop Grumman			*	Resideo Technologies		
Corp.	8,700	3,830		Inc.	4,619	73
Pentair plc	54,900	3,555		MillerKnoll Inc.	2,900	71
Southwest Airlines Co.	127,841	3,461		Advanced Drainage	600	68
* Masterbrand Inc.	199,600	2,425	*	Systems Inc. Stericycle Inc.	1,500	67
* WillScot Mobile Mini	40.000	0.074	*	Great Lakes Dredge &	1,500	07
Holdings Corp.	49,800	2,071		Dock Corp.	8,195	65
Encore Wire Corp. Rockwell Automation	10,902	1,989	*	Northwest Pipe Co.	1,800	54
Inc.	6,100	1,744		Steelcase Inc. Class A	4,711	53
IIIG.	0,100	1,744			V	

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
_		Sildles	(\$000)	_		Sildles	(\$000)
_	Air Transport Services	0.400	Ε0		Cognizant Technology		
*	Group Inc.	2,400	50		Solutions Corp. Class A	64 200	4,361
*	IBEX Holdings Ltd.	2,700 3,068	42 41	*	Flex Ltd.	64,380 160,300	4,301
	Titan International Inc. Sensata Technologies	3,008	41		Amphenol Corp. Class A	49.363	4,323
	Holding plc	1,000	38		Amdocs Ltd.	46,796	3,954
*	Kornit Digital Ltd.	2,000	38		HP Inc.	149,600	3,845
*	Quad/Graphics Inc.	6,268	32	*	Fair Isaac Corp.	4,400	3,822
	Covenant Logistics	-,			Lam Research Corp.	5,580	3,497
	Group Inc.	700	31	*	Kyndryl Holdings Inc.	227,302	3,432
	Mueller Water Products			*	Gartner Inc.	9,290	3,192
	Inc. Class A	1,785	23	*	Lattice Semiconductor		
	GrafTech International				Corp.	31,800	2,733
	Ltd.	5,671	22		NetApp Inc.	35,110	2,664
_	Franklin Covey Co.	459_	20	*	Teradata Corp.	56,500	2,544
			1,082,150	*	Canadian Solar Inc.	97,600	2,402
In	formation Technology (28	3.0%)		*	Qorvo Inc.	24,700	2,358
	Microsoft Corp.	2,432,750	768,141		Intel Corp.	66,300	2,357
	Apple Inc.	4,087,015	699,738		Dynatrace Inc.	43,900	2,051
	NVIDIA Corp.	620,498	269,910	*	Tower Semiconductor	70.000	1 005
	Texas Instruments Inc.	692,054	110,044	*	Ltd.	78,800	1,935
*	Advanced Micro Devices			*	MaxLinear Inc. DXC Technology Co.	86,200 83,400	1,918 1,737
	Inc.	935,072	96,144	*	Box Inc. Class A	69,900	1,737
	Accenture plc Class A	299,468	91,970	*	First Solar Inc.	9.900	1,600
	Cisco Systems Inc.	1,629,698	87,613	*	Varonis Systems Inc.	51,400	1,570
	ServiceNow Inc.	146,695	81,997	*	Pure Storage Inc. Class A	35,600	1,268
	KLA Corp.	175,187	80,351		Analog Devices Inc.	7,182	1,257
	Intuit Inc.	140,901	71,992 64.286	*	NetScout Systems Inc.	41,476	1,162
*	Broadcom Inc. Synopsys Inc.	77,399	- ,		Amkor Technology Inc.	44,300	1,001
*	ON Semiconductor Corp.	130,439 609,859	59,868 56,686	*	Axcelis Technologies Inc.	6,100	995
*	Arista Networks Inc.	306,472	56,369	*	Digital Turbine Inc.	164,100	993
*	Adobe Inc.	98,269	50,303	*	Workiva Inc.	9,500	963
*	Salesforce Inc.	244,360	49,551	*	Trimble Inc.	17,300	932
*	VMware Inc. Class A	267,083	44,464	*	Photronics Inc.	41,900	847
*	MongoDB Inc.	127,182	43,987	*	Palantir Technologies Inc.		
*	ANSYS Inc.	136,384	40,581		Class A	52,900	846
	Micron Technology Inc.	594,578	40,449		Appian Corp. Class A	16,400	748
	Marvell Technology Inc.	683,605	37,004		ACI Worldwide Inc.	31,900	720
*	Autodesk Inc.	175,550	36,323		Zoom Video Communications Inc.		
*	VeriSign Inc.	150,586	30,498		Class A	9,000	629
	Applied Materials Inc.	202,460	28,031		Seagate Technology	3,000	020
*	Palo Alto Networks Inc.	118,740	27,837		Holdings plc	9,451	623
	NXP Semiconductors NV	121,640	24,318	*	Q2 Holdings Inc.	19,023	614
_	Cadence Design	100 110	00.450	*	Shopify Inc. Class A	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Systems Inc.	100,110	23,456		(XTSE)	10,991	600
	International Business Machines Corp.	159,200	22,336	*	Maxeon Solar		
*	Fortinet Inc.	377,580	22,330		Technologies Ltd.	51,200	593
*	Akamai Technologies Inc.	193,388	20,604	*	Rapid7 Inc.	12,200	559
	QUALCOMM Inc.	185,500	20,602		Sanmina Corp.	9,700	527
	Roper Technologies Inc.	28,377	13,742		Yext Inc.	82,300	521
	Vontier Corp.	403,000	12,461		Infinera Corp.	111,700	467
	Oracle Corp.	113,890	12,063	*	Nutanix Inc. Class A	13,099	457
	Microchip Technology		,		Asana Inc. Class A	23,589	432
	Inc.	119,300	9,311		Vishay Intertechnology Inc.	17,200	425
*	DocuSign Inc.	179,500	7,539	*	LiveRamp Holdings Inc.	14,500	418
*	Enphase Energy Inc.	62,100	7,461	*	Allegro MicroSystems	11,000	710
_	Gen Digital Inc. (XNGS)	369,710	6,536		Inc.	12,800	409
*	Check Point Software	00.000	E		Badger Meter Inc.	2,500	360
	Technologies Ltd.	38,800	5,171		Jabil Inc.	2,500	317
	Teradyne Inc.	50,000	5,023		Ebix Inc.	30,200	298
*	InterDigital Inc.	60,600	4,863	*	TTM Technologies Inc.	22,089	284
	Keysight Technologies Inc.	33,747	4,465	*	EPAM Systems Inc.	1,100	281
	1110.	55,747	+,+00	-	Corning Inc.	9,200	280
				*	PTC Inc.	1,800	255

			Market Value•			Market Value•
		Shares	(\$000)		Shares	(\$000)
*	CommScope Holding Co.	05.007	220	* Summit Materials Inc.	10.000	F00
*	Inc. HashiCorp Inc. Class A	65,387 9,500	220 217	Class A Warrior Met Coal Inc.	16,300 9,800	508 501
*	HubSpot Inc.	400	197	Steel Dynamics Inc.	4,400	472
*	Upland Software Inc.	41,100	190	Louisiana-Pacific Corp.	8,500	470
	AudioCodes Ltd.	18,100	183	Martin Marietta Materials		
*	MACOM Technology	0.000	470	Inc.	1,060	435
*	Solutions Holdings Inc. PDF Solutions Inc.	2,200 5,500	179 178	* ATI Inc. Huntsman Corp.	10,300 12,800	424 312
*	Verint Systems Inc.	7,300	168	Sealed Air Corp.	7,963	262
*	Everbridge Inc.	6,594	148	Orion SA	11,247	239
*	Rimini Street Inc.	64,300	141	Trinseo plc	19,700	161
*	Unisys Corp.	37,400	129	Westrock Co.	3,700	132
*	Itron Inc.	1,900	115	 Cleveland-Cliffs Inc. 	8,400	131
*	Zuora Inc. Class A	13,700	113	American Vanguard Corp.	10,700	117
*	Expensify Inc. Class A	33,516	109	PPG Industries Inc.	900	117
	Grid Dynamics Holdings Inc.	8,500	104	* Alto Ingredients Inc. SunCoke Energy Inc.	19,600 8,308	87 84
*	WM Technology Inc.	72,585	96	Alamos Gold Inc. Class A	6,539	74
*	Domo Inc. Class B	9,648	95	Wheaton Precious	0,000	, ,
*	Appfolio Inc. Class A	500	91	Metals Corp.	1,389	56
*	Cognyte Software Ltd.	18,700	90	Tronox Holdings plc	4,000	54
*	Synaptics Inc.	1,000	89	* Glatfelter Corp.	20,300	41
*	Kopin Corp.	70,100	86	* Century Aluminum Co.	4,397	32
*	Immersion Corp. Celestica Inc.	12,500 2,900	83 71	Ryerson Holding Corp. Valhi Inc.	1,100 895	32 12
*	Model N Inc.	2,700	66	* Coeur Mining Inc.	3,474	8
*	Lightspeed Commerce	2,700	00	Alcoa Corp.	200	6
	Inc. (XTSE)	4,519	63			169,345
*	Daktronics Inc.	6,300	56	Other (0.5%)		109,345
*	Viavi Solutions Inc.	5,800	53	SPDR S&P 500 ETF Trust	137,479	58,770
*	NETGEAR Inc. Zeta Global Holdings	3,900	49	*,1 Paratek Pharmaceuticals	,	,
	Corp. Class A	5,796	48	Inc. CVR	15,782	1
*	8x8 Inc.	18,533	47	*,1 Aduro Biotech Inc. CVR	67	_
*	Consensus Cloud	-,		*,1 Achillion Pharmaceuticals Inc. CVR	400	
	Solutions Inc.	1,852	47	*,1 Strongbridge Biopharm	400	_
	Logitech International SA	CCE	46	CVR	335	_
*	(Registered) Brightcove Inc.	665 12,100	46 40	*,1 GCI Liberty Inc.	100	_
*	SecureWorks Corp.	12,100	40		_	58,771
	Class A	4,850	30	Real Estate (1.0%)		00,77
*	Everspin Technologies	·		Welltower Inc.	417,192	34,176
	Inc.	2,808	28	SBA Communications		
			3,332,929	Corp.	50,950	10,199
M	aterials (1.4%)			Host Hotels & Resorts Inc.	623,350	10,017
	Celanese Corp.	270,263	33,923	Crown Castle Inc.	94,100	8,660
	Linde plc	84,533	31,476	Mid-America Apartment	- 1, 100	-,
	FMC Corp. Corteva Inc.	467,395 198,700	31,301 10,166	Communities Inc.	53,538	6,888
	Sherwin-Williams Co.	39,200	9,998	Regency Centers Corp.	115,137	6,844
	Newmont Corp.	268,700	9,928	Prologis Inc.	50,700	5,689
	Dow Inc.	144,900	7,471	* CBRE Group Inc. Class A Ventas Inc.	69,756 111,024	5,152
	Nucor Corp.	43,860	6,858	Federal Realty	111,024	4,677
	CF Industries Holdings			Investment Trust	51,417	4,660
	Inc.	49,200	4,218	 CoStar Group Inc. 	47,000	3,614
	Mosaic Co. Nutrien Ltd.	114,100 56,400	4,062 3,483	Camden Property Trust	35,743	3,381
	Southern Copper Corp.	41,100	3,463	Healthpeak Properties	100.000	
	Freeport-McMoRan Inc.	73,400	2,737	Inc.	130,600	2,398
	LyondellBasell Industries	,	_,	Iron Mountain Inc. NNN REIT Inc.	35,063 55,900	2,084 1,975
	NV Class A	22,800	2,159	Simon Property Group	33,300	1,575
*	Vulcan Materials Co.	5,500	1,111	Inc.	18,278	1,975
^	LSB Industries Inc.	80,000	818 667	Alexandria Real Estate		
*	Franco-Nevada Corp. O-I Glass Inc.	5,000 33,700	667 564	Equities Inc.	17,890	1,791
*	Intrepid Potash Inc.	21,610	544	Equity Residential	20,600	1,209
		,	· · · ·	Public Storage	3,000	791

		Shares	Market Value• (\$000)
* /	Anywhere Real Estate		-
	Inc.	119,700	770
F	Phillips Edison & Co. Inc.	22,469	754
	Newmark Group Inc.	22, 100	, , ,
	Class A	94,700	609
A	Agree Realty Corp.	11,000	608
E	Brixmor Property Group		
	Inc.	26,800	557
ŀ	Hudson Pacific	04 400	E 4.4
	Properties Inc.	81,400	541
,	Apartment Income REIT Corp.	15,503	476
١	Veris Residential Inc.	24,619	406
	Jones Lang LaSalle Inc.	2,200	311
	VICI Properties Inc.	10,500	306
	Zillow Group Inc. Class C	5,400	249
A	American Tower Corp.	1,400	230
E	Essential Properties		
	Realty Irust Inc.	9,800	212
ŀ	Kimco Realty Corp.	11,700	206
(Office Properties Income Trust	43,000	176
١	Vornado Realty Trust	6,000	136
	Ryman Hospitality	0,000	150
	Properties Inc.	1,300	108
9	Safehold Inc.	5,900	105
[Douglas Elliman Inc.	40,490	91
(CareTrust REIT Inc.	4,269	88
	Tanger Factory Outlet	0.000	00
	Centers Inc.	3,899	88
Г	First Industrial Realty Trust Inc.	1,800	86
ŀ	Hersha Hospitality Trust	1,000	00
	Class A	8,240	81
	_XP Industrial Trust	6,600	59
	Macerich Co.	4,900	53
	Pebblebrook Hotel Trust	3,700	50
F	Retail Opportunity	0.040	40
*	Investments Corp. Apartment Investment	3,840	48
,	and Management Co.		
	Class A	5,300	36
- 1	ndustrial Logistics		
	Properties Trust	11,900	34
F	Park Hotels & Resorts	2 000	24
1	Inc. National Storage	2,800	34
'	Affiliates Trust	908	29
* (Cushman & Wakefield		
	plc	800	6
* 1	Five Point Holdings LLC Class A	1 600	5
	Class A	1,622	
1.149	:tine /1 20/\		123,728
	ities (1.3%)	2 011 042	112 707
	Exelon Corp. Consolidated Edison Inc.	3,011,043 136,800	113,787 11,701
	Dominion Energy Inc.	97,600	4,360
	Constellation Energy	37,000	- ,500
	Corp.	38,600	4,211

	Shares	Market Value• (\$000)
PG&E Corp.	173,400	2,797
Sempra	40,900	2,782
Duke Energy Corp.	29,500	2,604
CenterPoint Energy Inc.	45,600	1,224
Entergy Corp.	11,700	1,082
DTE Energy Co.	8,700	864
UGI Corp.	35,700	821
AES Corp.	48,000	730
Evergy Inc.	12,800	649
National Fuel Gas Co.	11,000	571
WEC Energy Group Inc.	5,318	428
Pinnacle West Capital Corp.	5,500	405
Alliant Energy Corp.	6,800	329
Xcel Energy Inc.	5,600	320
Southern Co.	3,700	239
PPL Corp.	8,900	210
Clearway Energy Inc.	0,000	2.0
Class C	9,600	203
PNM Resources Inc.	3,400	152
Montauk Renewables		
Inc.	13,900	127
FirstEnergy Corp.	3,700	126
		150,722
otal Common Stocks		
Coct \$9 002 141)		11 50/ 9/1

(Cost \$9,002,141)		11,594,841		
Temporary Cash Investments (2.5%)				
Money Market Fund (2.5%) 3.4 Vanguard Market Liquidity Fund, 5.391% (Cost \$297,097)	2,972,267	297,197		
Total Investments (100.0%) (Cost \$9,299,238)		11,892,038		
Other Assets and Liabilities – Net (0.0%)		5,614		
Net Assets (100%)		11,897,652		

Cost is in \$000.

- . See Note A in Notes to Financial Statements.
- * Non-income-producing security.
- 1 Security value determined using significant unobservable inputs.
- 2 Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$586,000.
- 3 Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.
- 4 Collateral of \$1,009,000 was received for securities on loan, of which \$1,002,000 is held in Vanguard Market Liquidity Fund and \$7,000 is held in cash.

ADR—American Depositary Receipt. CVR—Contingent Value Rights.

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	1,217	263,207	(11,298)		

Statement of Assets and Liabilities

As of September 30, 2023

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value ¹	
Unaffiliated Issuers (Cost \$9,002,141)	11,594,841
Affiliated Issuers (Cost \$297,097)	297,197
Total Investments in Securities	11,892,038
Investment in Vanguard	418
Cash	11,199
Cash Collateral Pledged—Futures Contracts	13,942
Receivables for Investment Securities Sold	46,531
Receivables for Accrued Income	7,221
Receivables for Capital Shares Issued	3,652
Total Assets	11,975,001
Liabilities	
Payables for Investment Securities Purchased	65,519
Collateral for Securities on Loan	1,009
Payables to Investment Advisor	2,713
Payables for Capital Shares Redeemed	6,544
Payables to Vanguard	819
Variation Margin Payable—Futures Contracts	745
Total Liabilities	77,349
Net Assets	11,897,652
1 Includes \$586,000 of securities on loan.	
At September 30, 2023, net assets consisted of:	
Paid-in Capital	8,436,442
Total Distributable Earnings (Loss)	3,461,210
Net Assets	11,897,652
Investor Shares – Net Assets	
Applicable to 55,189,350 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	2,955,481
Net Asset Value Per Share—Investor Shares	\$53.55
Admiral Shares – Net Assets	
Applicable to 102,308,976 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	8,942,171
beneficial interest (uniffilted authorization)	

Statement of Operations

Year Ended September 30, 2023

	(\$000)
Investment Income	
Income	
Dividends ¹	176,907
Interest ²	14,315
Securities Lending—Net	43
Total Income	191,265
Expenses	
Investment Advisory Fees—Note B	
Basic Fee	11,309
Performance Adjustment	(1,039)
The Vanguard Group—Note C	
Management and Administrative—Investor Shares	6,366
Management and Administrative—Admiral Shares	10,868
Marketing and Distribution—Investor Shares	143
Marketing and Distribution—Admiral Shares	325
Custodian Fees	184
Auditing Fees	36
Shareholders' Reports—Investor Shares	115
Shareholders' Reports—Admiral Shares	73
Trustees' Fees and Expenses	7
Other Expenses	19
Total Expenses	28,406
Fees Waived/Expenses Reimbursed—Note B	(107)
Net Expenses	28,299
Net Investment Income	162,966
Realized Net Gain (Loss)	
Investment Securities Sold ²	1,014,165
Futures Contracts	23,930
Realized Net Gain (Loss)	1,038,095
Change in Unrealized Appreciation (Depreciation)	
Investment Securities ²	796,332
Futures Contracts	17,099
Change in Unrealized Appreciation (Depreciation)	813,431
Net Increase (Decrease) in Net Assets Resulting from Operations	2,014,492

¹ Dividends are net of foreign withholding taxes of \$155,000.

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 \$13,638,000, \$23,000, \$1,000, and \$35,000, respectively. Purchases and sales are for temporary cash investment purposes.

Statement of Changes in Net Assets

	Year Ended	September 30,
	2023 (\$000)	2022 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	162,966	165,162
Realized Net Gain (Loss)	1,038,095	869,130
Change in Unrealized Appreciation (Depreciation)	813,431	(2,647,244)
Net Increase (Decrease) in Net Assets Resulting from Operations	2,014,492	(1,612,952)
Distributions		
Investor Shares	(243,419)	(464,158)
Admiral Shares	(740,469)	(1,454,297)
Total Distributions	(983,888)	(1,918,455)
Capital Share Transactions		
Investor Shares	127,575	244,229
Admiral Shares	492,457	508,275
Net Increase (Decrease) from Capital Share Transactions	620,032	752,504
Total Increase (Decrease)	1,650,636	(2,778,903)
Net Assets		
Beginning of Period	10,247,016	13,025,919
End of Period	11,897,652	10,247,016

Financial Highlights

Investor Shares

For a Share Outstanding			Year	Ended Sept	ember 30,
Throughout Each Period	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$49.02	\$66.16	\$54.15	\$49.46	\$52.17
Investment Operations					
Net Investment Income ¹	.701	.746	.761	.787	.823
Net Realized and Unrealized Gain (Loss) on Investments	8.483	(8.155)	14.991	6.024	(.204)
Total from Investment Operations	9.184	(7.409)	15.752	6.811	.619
Distributions					
Dividends from Net Investment Income	(.775)	(.777)	(.770)	(.815)	(.766)
Distributions from Realized Capital Gains	(3.879)	(8.954)	(2.972)	(1.306)	(2.563)
Total Distributions	(4.654)	(9.731)	(3.742)	(2.121)	(3.329)
Net Asset Value, End of Period	\$53.55	\$49.02	\$66.16	\$54.15	\$49.46
Total Return ²	19.81%	-13.94%	30.22%	14.07%	2.21%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$2,955	\$2,570	\$3,205	\$2,779	\$2,860
Ratio of Total Expenses to Average Net Assets ³	0.32%4	0.32%	0.32%	0.32%	0.33%
Ratio of Net Investment Income to Average Net Assets	1.34%	1.25%	1.22%	1.57%	1.73%
Portfolio Turnover Rate	94%	62%	62%	58%	68%

¹ Calculated based on average shares outstanding.

² Total returns do not include account service fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable account service fees.

³ Includes performance-based investment advisory fee increases (decreases) of (0.01%), (0.01%), (0.00%), 0.00%, and 0.01%.

⁴ The ratio of total expenses to average net assets before basic fees waived was 0.32% for 2023. See Note B in the Notes to Financial Statements.

Financial Highlights

Admiral Shares

For a Share Outstanding			Year	Ended Sept	ember 30,
Throughout Each Period	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$80.01	\$108.01	\$88.40	\$80.74	\$85.16
Investment Operations					
Net Investment Income ¹	1.230	1.315	1.344	1.364	1.421
Net Realized and Unrealized Gain (Loss) on Investments	13.845	(13.315)	24.466	9.842	(.330)
Total from Investment Operations	15.075	(12.000)	25.810	11.206	1.091
Distributions					
Dividends from Net Investment Income	(1.353)	(1.380)	(1.347)	(1.414)	(1.326)
Distributions from Realized Capital Gains	(6.332)	(14.620)	(4.853)	(2.132)	(4.185)
Total Distributions	(7.685)	(16.000)	(6.200)	(3.546)	(5.511)
Net Asset Value, End of Period	\$87.40	\$80.01	\$108.01	\$88.40	\$80.74
Total Return ²	19.93%	-13.85%	30.34%	14.19%	2.32%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$8,942	\$7,677	\$9,821	\$9,086	\$8,412
Ratio of Total Expenses to Average Net Assets ³	0.22%4	0.22%	0.22%	0.22%	0.23%
Ratio of Net Investment Income to Average Net Assets	1.44%	1.34%	1.33%	1.66%	1.83%
Portfolio Turnover Rate	94%	62%	62%	58%	68%

¹ Calculated based on average shares outstanding.

² Total returns do not include account service fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable account service fees.

³ Includes performance-based investment advisory fee increases (decreases) of (0.01%), (0.01%), (0.00%), 0.00%, and 0.01%.

⁴ The ratio of total expenses to average net assets before basic fees waived was 0.22% for 2023. See Note B in the Notes to Financial Statements.

Notes to Financial Statements

Vanguard Growth and Income Fund is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. The fund offers two classes of shares: Investor Shares and Admiral Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors.

- 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 September 30, 2023, the fund's average investments in long and short futures contracts represented 3% 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 pregualified 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 September 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.

Each class of shares has equal rights as to assets and earnings, except that each class separately bears certain class-specific expenses related to maintenance of shareholder accounts (included in Management and Administrative expenses) and shareholder reporting. Marketing and distribution expenses are allocated to each class of shares based on a method approved by the board of trustees. Income, other non-class-specific expenses, and gains and losses on investments are allocated to each class of shares based on its relative net assets.

B. The investment advisory firms D. E. Shaw Investment Management, L.L.C., Los Angeles Capital Management LLC, and, beginning August 2023, Wellington Management Company LLP each provide investment advisory services to a portion of the fund for a fee calculated at an annual percentage rate of average net assets managed by the advisor. The basic fee of D. E. Shaw Investment Management, L.L.C., is subject to quarterly adjustments based on performance relative to the S&P 500 Index for the preceding three years. The basic fee of Los Angeles Capital Management LLC is subject to quarterly adjustments based on performance relative to the S&P 500 Index for the preceding five years. In accordance with the advisory contract entered into with Wellington Management Company LLP, beginning October 1, 2024, the investment advisory fee will be subject to quarterly adjustment based on performance relative to the S&P 500 Index since September 30, 2023.

Until August 2023, Vanguard provided investment advisory services to a portion of the fund. The fund paid Vanguard advisory fees of \$925,000 for the year ended September 30, 2023. Vanguard manages the cash reserves of the fund as described below.

For the year ended September 30, 2023, the aggregate investment advisory fee paid to all advisors represented an effective annual basic rate of 0.10% of the fund's average net assets, before a net decrease of \$1,039,000 (0.01%) based on performance.

Vanguard and Wellington Management Company LLC have agreed to temporarily waive a percentage of Wellington Management Company LLC's basic fee. For the year ended September 30, 2023, the fund's basic fees were reduced by \$107,000 (an effective annual rate of less than 0.01% of the fund's average net assets); the fund is not obligated to repay this amount to Wellington Management Company LLC.

C. In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund corporate management, administrative, marketing, distribution and cash management 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 September 30, 2023, the fund had contributed to Vanguard capital in the amount of

\$418,000, representing less than 0.01% of the fund's net assets and 0.17% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

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 September 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	11,594,839	_	2	11,594,841
Temporary Cash Investments	297,197	_	_	297,197
Total	11,892,036	_	2	11,892,038
Derivative Financial Instruments				
Liabilities				
Futures Contracts ¹	11,298	_	_	11,298

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 passive foreign investment companies, and distributions in connection with fund share redemptions were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	8,898
Total Distributable Earnings (Loss)	(8,898)

Temporary differences between book-basis and tax-basis components of total distributable earnings (loss) arise when certain items of income, gain, or loss are recognized in different periods for financial statement and tax purposes; these differences will reverse at some time in the future. The differences are primarily related to the deferral of losses from wash sales; 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	36,578
Undistributed Long-Term Gains	907,191
Net Unrealized Gains (Losses)	2,517,441
Capital Loss Carryforwards	_
Qualified Late-Year Losses	_
Other Temporary Differences	_
Total	3,461,210

The tax character of distributions paid was as follows:

	Year Ended S	Year Ended September 30,		
	2023 Amount (\$000)	2022 Amount (\$000)		
Ordinary Income*	174,913	630,157		
Long-Term Capital Gains	808,975	1,288,298		
Total	983,888	1,918,455		

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

As of September 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	9,374,597
Gross Unrealized Appreciation	2,984,673
Gross Unrealized Depreciation	(467,232)
Net Unrealized Appreciation (Depreciation)	2,517,441

F. During the year ended September 30, 2023, the fund purchased \$10,547,230,000 of investment securities and sold \$10,783,092,000 of investment securities, other than temporary cash investments.

The fund purchased securities from and sold securities to other funds or accounts managed by its investment advisors or their 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 September 30, 2023, such purchases were \$4,307,000 and sales were \$21,534,000, resulting in net realized loss of \$906,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital share transactions for each class of shares were:

	Year Ended September 30,			
		2023		2022
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)
Investor Shares				
Issued	263,616	5,018	391,145	6,383
Issued in Lieu of Cash Distributions	233,527	4,825	443,121	7,314
Redeemed	(369,568)	(7,075)	(590,037)	(9,716)
Net Increase (Decrease)—Investor Shares	127,575	2,768	244,229	3,981
Admiral Shares				
Issued	779,730	9,121	954,123	9,627
Issued in Lieu of Cash Distributions	674,540	8,535	1,336,857	13,524
Redeemed	(961,813)	(11,299)	(1,782,705)	(18,122)
Net Increase (Decrease)—Admiral Shares	492,457	6,357	508,275	5,029

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.

I. Management has determined that no events or transactions occurred subsequent to September 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 Quantitative Funds and Shareholders of Vanguard Growth and Income Fund

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Vanguard Growth and Income Fund (the "Fund") as of September 30, 2023, the related statement of operations for the year ended September 30, 2023, the statement of changes in net assets for each of the two years in the period ended September 30, 2023, including the related notes, and the financial highlights for each of the five years in the period ended September 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 the Fund as of September 30, 2023, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended September 30, 2023 and the financial highlights for each of the five years in the period ended September 30, 2023 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Fund 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 September 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 opinion.

/s/PricewaterhouseCoopers LLP Philadelphia, Pennsylvania November 16, 2023

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

Tax information (unaudited)

For corporate shareholders, 99.2%, or if subsequently determined to be different, the maximum percentage allowable by law, of ordinary income (dividend income plus short-term gains, if any) for the fiscal year qualified for the dividends-received deduction.

The fund hereby designates \$174,917,000, or if subsequently determined to be different, the maximum amount allowable by law, as qualified dividend income for individual shareholders for the fiscal year.

The fund hereby designates \$3,450,000, or if subsequently determined to be different, the maximum amount allowable by law, of interest earned from obligations of the U.S. government which is generally exempt from state income tax.

The fund distributed \$817,790,000 as capital gain dividends (20% rate gain distributions) to shareholders during the fiscal year.

Trustees Approve Advisory Arrangements

The board of trustees of Vanguard Growth and Income Fund renewed the fund's investment advisory arrangements with D. E. Shaw Investment Management, L.L.C. (DESIM); Los Angeles Capital Management LLC (LA Capital); and The Vanguard Group, Inc. (Vanguard), through its Quantitative Equity Group. The board determined that renewing each of the fund's advisory arrangements was in the best interests of the fund and its shareholders.

The board also approved a restructuring of the fund's advisory arrangements effective August 28, 2023, whereby Wellington Management Company LLP (Wellington) has been added and Vanguard has been removed as advisors to the fund. The board determined the foregoing actions were in the best interests of the fund and its shareholders. As of August 28, 2023, DESIM, LA Capital, and Wellington are advisors to the fund.

The board based its decisions upon an evaluation of each advisor's investment staff, portfolio management process, and performance. This evaluation included information provided to the board by Vanguard's Portfolio Review Department, which is responsible for fund and advisor oversight and product management. The Portfolio Review Department met regularly with the advisors and made presentations to the board during the fiscal year that directed the board's focus to relevant information and topics.

The board, or an investment committee made up of board members, also received information throughout the year during advisor presentations. For each advisor presentation, the board was provided with letters and reports that included information about, among other things, the advisory firm and the advisor's assessment of the investment environment, portfolio performance, and portfolio characteristics.

In addition, the board received periodic reports throughout the year, which included information about the fund's performance relative to its peers and benchmark, as applicable, and updates, as needed, on the Portfolio Review Department's ongoing assessment of the advisors.

Prior to their meetings, the trustees were provided with a memo and materials that summarized the information they received over the course of the year. They also considered the factors discussed below, among others. However, no single factor determined whether the board approved the arrangements. Rather, it was the totality of the circumstances that drove the board's decisions.

Nature, extent, and quality of services

The board reviewed the quality of each advisor's investment management services provided to the fund over both the short and long term, and considered the quality of the investment management services to be provided to the fund by Wellington; it also took into account the organizational depth and stability of each advisor. The board considered the following:

DESIM. Founded in 2005, DESIM is a global investment management and technology development firm. The advisor employs quantitative models that seek to capture predominantly "bottom-up" stock-specific return opportunities while aiming to control overall portfolio risk and characteristics, such as size, sector weights, and style, to be similar to those of the benchmark. DESIM focuses on return drivers that it considers "idiosyncratic," or those that other quantitative managers tend to overlook, and de-emphasizes the use of traditional factors such as value,

growth, and momentum, as these factors are more subject to crowding from other quantitative managers. DESIM has managed a portion of the fund since 2011.

LA Capital. LA Capital was formed in 2002 from the equity portion of Wilshire Asset Management. The advisor employs a controlled, dynamic investment model, gradually assigning new prices to key equity risks as market conditions evolve and investor preferences shift. The price of factor risk evolves over time in a way that can be captured in a model, similar to changes in cost of capital. The model uses more than 50 factors to actively weight stocks, including value, momentum, quality, sector, and market capitalization factors. The advisor applies statistical techniques to reduce noise in the factor returns and it looks for velocity and acceleration of the cleansed factor performance over the prior six months. LA Capital has managed a portion of the fund since 2011

Vanguard. Vanguard has been managing investments for more than four decades. The Quantitative Equity Group adheres to a sound, disciplined investment management process; the team has considerable experience, stability, and depth. Vanguard has managed a portion of the fund since 2011

Wellington. Wellington, based in Boston, Massachusetts, is among the nation's oldest and most respected institutional investment managers. The firm began managing assets in 1928 and manages \$1.2 trillion in AUM. Wellington has managed a portion of the fund since August 2023.

The board concluded that each advisor's experience, stability, depth, and performance, among other factors, warranted continuation of the advisory arrangements with DESIM, LA Capital, and Vanguard, and approval of the advisory arrangement with Wellington.

Investment performance

The board considered the short-term and long-term investment performance of DESIM, LA Capital, and Vanguard's respective subportfolios, including any periods of outperformance or underperformance compared with a relevant benchmark index and peer group. The board concluded that the performance was such that the advisory arrangements should continue.

The board also considered that Wellington, in its management of other funds and portfolios, has successfully operated the recommended strategy since 2020.

Cost

In considering the renewal of the advisory arrangements with DESIM, LA Capital, and Vanguard, the board concluded that the fund's expense ratio was below the average expense ratio charged by funds in its peer group and that the fund's advisory expense rates were also below the peer-group average. In considering the approval of the advisory arrangement with Wellington, the board considered the cost of services to be provided and competitive fee rates and concluded that the fund's advisory fee rate and expense ratio under the new advisory arrangement would remain below the average advisory fee rates and expense ratios of the fund's peers.

The board did not consider the profitability of DESIM, LA Capital, or Wellington in determining whether to approve the advisory fees, because the firms are independent of Vanguard, and the advisory fees are the result of arm's-length negotiations. The board does not conduct a profitability

analysis of Vanguard because of Vanguard's unique structure. Unlike most other mutual fund management companies, Vanguard is owned by the funds it oversees.

The benefit of economies of scale

The board concluded that the fund's shareholders benefit from economies of scale because of breakpoints in the advisory fee schedules for DESIM, LA Capital, and Wellington. The breakpoints reduce the effective rate of the fees as the fund's assets managed by each advisor increase. The board also concluded that the fund's arrangement with Vanguard ensures that the fund will realize economies of scale as it grows, with the cost to shareholders declining as fund assets managed by Vanguard increase.

The board will consider whether to renew the advisory arrangements with DESIM and LA Capital again after a one-year period, and will consider whether to renew the advisory arrangement with Wellington within a two-year period.

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 205 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 Vanquard 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: 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 NewYork-Presbyterian Hospital.

André F. Perold

Born in 1952. Trustee since December 2004. Principal occupation(s) during the past five years and other experience: George Gund Professor of Finance and Banking, Emeritus at the Harvard Business School (retired 2011). Chief investment officer and 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

Vanguard

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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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