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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number: 811-4526

Name of Registrant: Vanguard Quantitative Funds

Address of Registrant: P.O. Box 2600

Valley Forge, PA 19482

Name and address of agent for service: R. Gregory Barton, Esquire

P.O. Box 876

Valley Forge, PA 19482

Registrant's telephone number, including area code: (610) 669-1000

Date of fiscal year end: September 30

Date of reporting period: October 1, 2003 - March 31, 2004

Item 1: Reports to Shareholders

VANGUARD (R) GROWTH AND INCOME FUND

MARCH 31, 2004

SEMIANNUAL REPORT

THE VANGUARD GROUP (R)

HOW TO READ YOUR FUND REPORT

This report contains information that can help you evaluate your investment. It includes details about your fund's return and presents data and analysis that provide insight into the fund's performance and investment approach.

By reading the letter from Vanguard's chairman, John J. Brennan, together with the letter from the managers who select securities for your fund, you'll get an understanding of how the fund invests and how the market environment affected its performance. The statistical information that follows can help you understand how the fund's performance and characteristics stack up against those of similar funds and market benchmarks.

It's important to keep in mind that the opinions expressed by Vanguard's investment managers are just that: informed opinions. They should not be considered promises or advice. The opinions, like the statistics, cover the period through the date on the cover of this report. As things change—and in the financial markets you can be certain only of change—an investment manager's job is to evaluate new information and make adjustments, if necessary. Of course, the risks of investing in the fund are spelled out in the prospectus.

Frequent updates on the fund's performance and information about some of its holdings are available on Vanquard.com(R).

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SIIMMARY

- The Investor Shares of the Growth and Income Fund gained 15.4% during the first six months of the 2004 fiscal year.
- The fund outpaced both the average competitor and the S&P 500 Index.
- The advisor's emphasis on reasonably valued stocks aided the fund, as these stocks generally enjoyed stronger gains than growth-oriented shares during the period.

WANT LESS CLUTTER IN YOUR MAILBOX? JUST REGISTER WITH VANGUARD.COM AND OPT TO GET FUND REPORTS ONLINE.

LETTER FROM THE CHAIRMAN

Dear Shareholder,

Continuing gains in the stock market and the advisor's favorable stock selection in strongly performing sectors helped the Investor Shares of Vanguard Growth and Income Fund to return 15.4% in the first half of fiscal 2004. The fund's Admiral Shares returned 15.5%.

[PICTURES OF JOHN J. BRENNAN]

The returns of both share classes outpaced the 12.4% result of the average large-capitalization core fund; the 14.1% return of the Standard & Poor's 500 Index, the fund's primary benchmark; and the 15.3% return of the Wilshire 5000 Total Market Index, a measure of the overall equity market.

TOTAL RETURNS

SIX MONTHS ENDED

MARCH 31, 2004

VANGUARD GROWTH AND INCOME FUND

Investor Shares
Admiral Shares
Admiral Shares

Average Large-Cap Core Fund*

S&P 500 Index

Wilshire 5000 Index

15.3

The adjacent table presents the fund's returns for the half-year ended March 31, along with those of its comparative measures. Details of the fund's performance, including starting and ending share prices and per-share distributions, can be found on page 4.

SMALL STOCKS LED THE WAY

The U.S. stock market's nearly yearlong rally continued through the six months ended March 31. Gains were broad-based and were especially powerful among small-cap stocks. While the Wilshire 5000 Index gained 15.3% during the fiscal half-year (as mentioned above), the small stocks represented by the Russell 2000 Index returned 21.7%, a pattern of relative performance that is fairly typical of the early stages of an economic expansion. Across the market-cap spectrum, returns of value-oriented stocks, which generally trade at below-market valuations relative to their book

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values, were higher than those of their growth-oriented counterparts (those expected to produce above-average earnings growth).

Admiral(TM) Shares

A lower-cost class of shares available to many longtime shareholders and to

^{*}Derived from data provided by Lipper Inc.

Although the economy emerged from recession more than two years ago, the recovery has been halting and lopsided, with remarkable strength in housing and consumer spending, for example, but persistent weakness in corporate investment, manufacturing, and the labor market. During the past six months, however, economic reports began to validate the stock market's optimism, indicating robust economic growth, a pickup in manufacturing, and signs of improvement in employment.

International stocks also generated excellent six-month returns. Respectable gains in markets throughout Europe, Asia, and Latin America were enhanced for U.S.-based investors by the dollar's sharp decline relative to most currencies.

BONDS' RETURNS REFLECTED THEIR YIELDS

Interest rates declined toward 12-month lows, boosting bond prices, but much of the six-month return in the fixed income market was generated by income. (As of March 31, the yield of the 10-year U.S. Treasury note stood at 3.84%, down 10 basis points-0.10 percentage point--from the start of the period.) Investment-grade taxable bonds, as measured by the Lehman Brothers Aggregate Bond Index, returned 3.0%. In general, bonds issued by companies with shakier balance sheets outperformed better-quality credits as investors sought out higher-yielding securities. Short- term interest rates remained near generational lows.

MARKET BAROMETER		TOTAL	•
	SIX	ONE YEAR	FIVE
STOCKS Russell 1000 Index (Large-caps) Russell 2000 Index (Small-caps) Wilshire 5000 Index (Entire market) MSCI All Country World Index ex USA (International)	21.7 15.3	36.4% 63.8 39.4 59.9	9.7 0.2
BONDS Lehman Aggregate Bond Index (Broad taxable market) Lehman Municipal Bond Index Citigroup 3-Month Treasury Bill Index	3.1	5.4% 5.9 1.0	6.0
CPI Consumer Price Index	1.2%	1.7%	2.6%

*Annualized.

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STRONG STOCK SELECTION LED TO SOLID GAINS

On the heels of a very good performance by the Growth and Income Fund in fiscal 2003--when both of the fund's share classes advanced more than 22%--the fund got off to a resounding start in fiscal 2004, with both share classes again earning excellent returns. The fund continued to rebound from the losses it sustained during the 2000-2002 stock market downturn.

As was the case with the S&P 500 Index sectors, all of the sectors in which the fund held stocks had impressive results during the period. In particular, the financial services, consumer discretionary, and producer durables sectors—which as a group represented more than 40% of the fund's total net assets at the end of the six months—were major contributors to the fund's performance, accounting for nearly half of its overall return. Strong stock selection by the fund's advisor, Franklin Portfolio Associates, in these and other sectors gave the fund a competitive edge over the index during the period. In addition, an overweight in integrated oils, which enjoyed strong returns as a result of rising oil and gasoline prices, helped boost the fund's performance compared with the index.

Using quantitative management techniques, Franklin Portfolio Associates attempts to maintain risk characteristics for the fund that resemble those of the S&P 500 Index, while generating superior returns through stock selection. In its effort to enhance the fund's performance, Franklin uses several stock-selection models that favor reasonably valued stocks, which typically have price/earnings and price/book multiples somewhat below the averages for these measures in the index. This strategy may not always be successful, but it produced excellent results during the fiscal half-year.

For information on specific securities held by the fund, see the Report from the Advisor on page 5.

THE VIRTUE OF BALANCED INVESTING

It's hard to overstate the importance of having a sound plan when assembling your investment portfolio. To meet your long-term needs, maintain a diversified portfolio of stocks, bonds, and short-term reserves consistent with your risk tolerance. Balancing your investments in this way may enable you to more effectively weather the volatility of the financial markets--lessening the impact of a decline in one asset class, while allowing you to participate in the gains of others.

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The Growth and Income Fund can play an integral role in such a carefully crafted, diversified portfolio. You can use the fund as your core stock holding, then supplement it with index or actively managed funds that focus on other segments of the stock and bond markets.

Thank you for your commitment to Vanguard and to the Growth and Income Fund.

Sincerely,

/s/ JOHN J. BRENNAN John J. Brennan CHAIRMAN AND CHIEF EXECUTIVE OFFICER

APRIL 12, 2004

YOUR FUND'S PERFORMANCE AT A GLANCE SEPTEMBER 30, 2003-MARCH 31, 2004

			DISTRIBUTIONS	PER SHARE
	STARTING	ENDING	INCOME	CAPITAL
	SHARE PRICE	SHARE PRICE	DIVIDENDS	GAINS
Growth and Income Fund				
Investor Shares	\$24.91	\$28.55	\$0.180	\$0.000
Admiral Shares	40.70	46.65	0.329	0.000

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REPORT FROM THE ADVISOR

The Investor Shares of Vanguard Growth and Income Fund returned 15.4% during the first half of the fund's 2004 fiscal year, topping the results of both the average mutual fund peer and our primary benchmark, the S&P 500 Index.

THE INVESTMENT ENVIRONMENT

In recent months, we have become less concerned about the sustainability of the U.S. economic recovery and more focused on Federal Reserve policy and the possibility of interest rate increases. At current valuation levels, U.S. equity

prices are considered by some to be particularly vulnerable to a rise in rates. Given increasing evidence that the economy is strengthening, the question now is not so much whether rates will rise as when and how high. Complicating the environment are the U.S. presidential race and the geopolitical risks associated with terrorism and the situations in Afghanistan and Iraq. It is somewhat surprising to us that these exogenous events have not had more of a dampening effect on the U.S. markets.

On a more upbeat note, the strength of the economic recovery—including recent reports of solid job growth—has demonstrated the resiliency of U.S. businesses and their ability to remain competitive in the global economy. This has very positive implications for earnings growth and ultimately for stock—price appreciation.

Investment Philosophy

The fund reflects a belief that superior long-term investment results can be achieved by using quantitative methods to select stocks that, in the aggregate, have risk characteristics similar to the S&P 500 Index but that are currently undervalued by the market.

Our investment process has served the fund very well in a difficult environment, and we believe our reliance on a broadly diversified blend of factors to guide stock-picking has been critical to our recent success. Minimizing missteps can be as important as picking the best stocks. We believe that our disciplined process, applied uniformly across the portfolio, is a key element in the value we deliver to our shareholders.

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OUR SUCCESSES

Stock selection during the fiscal half-year was particularly good in the financial services and consumer discretionary sectors. Among individual holdings, solid returns came from Guidant (medical instruments, with a focus on cardiac and vascular surgery, pacemakers, and defibrillators); Countrywide Financial (mortgage loans); Electronic Arts (entertainment software); Disney (media and entertainment, boosted by a takeover offer from Comcast); Centex (construction, boosted by continued strength in home-building); and Monsanto (chemicals, benefiting from commodity price increases and the global economic recovery). In addition, our positions in Dell (personal computers and servers), Federated Department Stores (regional stores), and Becton, Dickinson (medical products) had a positive impact on results.

The Growth and Income Fund has small but consistent "evergreen" tilts on earnings yield (the fund will consistently exhibit a slightly lower price/earnings ratio than the S&P 500 Index) and toward positive price momentum. These attributes are embedded in our stock selection process and have been associated with positive returns over the long term. The emphasis on earnings yield augmented returns during the last six months. The focus on price momentum aided returns during the last three months, but was a slight drag on performance for the first three months of the fiscal year.

Although we intentionally minimize sector tilts (measured as the difference between the portfolio weighting and the S&P 500 Index weighting in a particular industry group), we don't seek to eliminate them. A small overweighting in the energy sector and a small underweighting in health care contributed positively to returns during the semiannual period.

OUR SHORTFALLS

Given the benefit of hindsight, it's easy to say that we wish we had not held certain stocks during the past six months. However, one benefit of a diversified portfolio is that no single holding can have an outsized impact on investment results. In general, poor performance during the half-year came from stocks in which the fund was overweighted relative to the S&P 500 Index and whose corporate issuers announced subpar results. Among these were Wyeth (drugs), AutoNation (auto retailer), and Intel (semiconductors). In terms of results relative to the S&P 500 Index, we also suffered from not owning three stocks that benefited

from high-profile takeover announcements. They were Bank One, FleetBoston Financial, and AT&T Wireless, all included in the index.

OUR POSITIONING

We remain committed to our disciplined process of stock selection, portfolio construction, and implementation, and we believe that the Growth and Income Fund is well positioned to achieve its goal of outperforming the S&P 500 Index while maintaining a similar level of investment risk. The fund will stay fully invested in the stocks we consider to be most undervalued, and portfolio risk will be focused to minimize exposure to downside characteristics. We continue to believe that the Growth and Income Fund is an excellent choice for those seeking diversified exposure to large-capitalization U.S. equities.

JOHN S. CONE, CFA, PRESIDENT AND CHIEF EXECUTIVE OFFICER

FRANKLIN PORTFOLIO ASSOCIATES, LLC

APRIL 16, 2004

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AS OF 3/31/2004 FUND PROFILE

This Profile provides a snapshot of the fund's characteristics, compared where indicated with both an appropriate market index and a broad market index. Key terms are defined on page 9.

GROWTH AND INCOME FUND

PORTFOLIO	CHARACTERISTICS
-----------	-----------------

	FUND	COMPARATIVE INDEX*	BROAD INDEX**
Number of Stocks	125	500	5,157
Median Market Cap	\$47.0B	\$51.1B	\$27.1B
Price/Earnings Ratio	17.3x	21.3x	23.7x
Price/Book Ratio	2.8x	3.1x	3.0x
Yield		1.7%	1.5%
Investor Shares	1.3%		
Admiral Shares	1.5%		
Return on Equity	20.4%	21.0%	15.7%
Earnings Growth Rate	10.9%	8.0%	5.5%
Foreign Holdings	0.0%	0.0%	0.9%
Turnover Rate	70%+		
Expense Ratio			
Investor Shares	0.43%+		
Admiral Shares	0.25%+		
Short-Term Reserves	0%		

VOLATILITY MEASURES

	COMPARATIVE			BROAD	
	FUND	INDEX*	FUND	INDEX**	
R-Squared	0.99	1.00	0.98	1.00	
Beta	0.96	1.00	0.96	1.00	

SECTOR DIVERSIFICATION (% OF PORTFOI	FUND	COMPARATIVE INDEX*	BROAL
Auto & Transportation	5%	 2%	3%
Consumer Discretionary	16	14	16
Consumer Staples	6	8	7
Financial Services	22	23	24
Health Care	12	13	13
Integrated Oils	7	4	4
Other Energy	1	2	3
Materials & Processing	3	3	4
Producer Durables	4	4	4
Technology	16	15	14
Utilities	6	7	7
Other	2	5 	1
TEN LARGEST HOLDINGS (% OF TOTAL NET Citigroup, Inc.	ASSETS)		3.9%
(banking)			3.9%
ExxonMobil Corp.			3.9
(oil)			3.9
Microsoft Corp.			3.5
(software)			3.3
Intel Corp.			3.0
(electronics)			
Home Depot, Inc.			2.2
(retail)			
Wells Fargo & Co.			2.2
(banking)			
Pfizer Inc.			2.2
(pharmaceuticals)			
The Walt Disney Co.			1.9
(entertainment)			
Bank of America Corp.			1.8
(banking)			
Cisco Systems, Inc.			1.8
(computer hardware)			
Top Ten			26.4%
"Ten Largest Holdings" excludes any products.	temporary cas	h investments and	equity index
INVESTMENT FOCUS			
MARKEE CAR	LARGE		
MARKET CAP	2111102		

*S&P 500 Index.

Visit our website at Vanguard.com for regularly updated fund information.

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GLOSSARY OF INVESTMENT TERMS

GLOSSARI OF INVESIMENT LERMS

BETA. A measure of the magnitude of a fund's past share-price fluctuations in relation to the ups and downs of a given market index. The index is assigned a beta of 1.00. Compared with a given index, a fund with a beta of 1.20 typically would have seen its share price rise or fall by 12% when the index rose or fell

^{**}Wilshire 5000 Index

⁺Annualized.

by 10%. A fund's beta should be reviewed in conjunction with its R-squared (see definition below). The lower the R-squared, the less correlation there is between the fund and the index, and the less reliable beta is as an indicator of volatility.

EARNINGS GROWTH RATE. The average annual rate of growth in earnings over the past five years for the stocks now in a fund.

EXPENSE RATIO. The percentage of a fund's average net assets used to pay its annual administrative and advisory expenses. These expenses directly reduce returns to investors.

FOREIGN HOLDINGS. The percentage of a fund's equity assets represented by stocks or depositary receipts of companies based outside the United States.

MEDIAN MARKET CAP. An indicator of the size of companies in which a fund invests; the midpoint of market capitalization (market price x shares outstanding) of a fund's stocks, weighted by the proportion of the fund's assets invested in each stock. Stocks representing half of the fund's assets have market capitalizations above the median, and the rest are below it.

PRICE/BOOK RATIO. The share price of a stock divided by its net worth, or book value, per share. For a fund, the weighted average price/book ratio of the stocks it holds.

PRICE/EARNINGS RATIO. The ratio of a stock's current price to its per-share earnings over the past year. For a fund, the weighted average P/E of the stocks it holds. P/E is an indicator of market expectations about corporate prospects; the higher the P/E, the greater the expectations for a company's future growth.

R-SQUARED. A measure of how much of a fund's past returns can be explained by the returns from the market in general, as measured by a given index. If a fund's total returns were precisely synchronized with an index's returns, its R-squared would be 1.00. If the fund's returns bore no relationship to the index's returns, its R-squared would be 0.

RETURN ON EQUITY. The annual average rate of return generated by a company during the past five years for each dollar of shareholder's equity (net income divided by shareholder's equity). For a fund, the weighted average return on equity for the companies whose stocks it holds.

SHORT-TERM RESERVES. The percentage of a fund invested in highly liquid, short-term securities that can be readily converted to cash.

TURNOVER RATE. An indication of the fund's trading activity. Funds with high turnover rates incur higher transaction costs and may be more likely to distribute capital gains (which may be taxable to investors).

YIELD. A snapshot of a fund's income from interest and dividends. The yield, expressed as a percentage of the fund's net asset value, is based on income earned over the past 30 days and is annualized, or projected forward for the coming year. The index yield is based on the current annualized rate of income provided by securities in the index.

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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. (FOR PERFORMANCE DATA CURRENT TO THE MOST RECENT MONTH-END, WHICH MAY BE HIGHER OR LOWER THAN THAT CITED, VISIT OUR WEBSITE AT WWW.VANGUARD.COM.) 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.

GROWTH AND INCOME FUND

FISCAL-YEAR TOTAL RETURNS (%) SEPTEMBER 30, 1993-MARCH 31, 2004

	GROWTH AND INCOME	S&P 500
FISCAL YEAR	FUND INVESTOR SHARES	INDEX
1994	1.2	3.7
1995	29.9	29.7
1996	17.7	20.3
1997	45.6	40.4
1998	4.5	9
1999	30.2	27.8
2000	16.2	13.3
2001	-26.9	-26.6
2002	-18	-20.5
2003	22.1	24.4
2004*	15.4	14.1

*Six months ended March 31, 2004.

Note: See Financial Highlights tables on pages 18 and 19 for dividend and capital gains information.

AVERAGE ANNUAL TOTAL RETURNS FOR PERIODS ENDED MARCH 31, 2004

				TE	N YEARS	
	INCEPTION DATE	ONE YEAR	FIVE YEARS	CAPITAL	INCOME	TOTAL
Growth and Income Fund Investor Shares Admiral Shares	12/10/1986	37.09% 37.31	0.24% -1.05*	10.30%	1.63%	11.93%

^{*}Return since inception.

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ABOUT YOUR FUND'S EXPENSES

We believe it is important for you to understand the impact of costs on your investment. All mutual funds have operating 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 table below illustrates your fund's costs in two ways:

* 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."

* HYPOTHETICAL 5% 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 return of 5% before expenses during the period shown, 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.

SIX MONTHS ENDED MARCH 31, 2004 BEGINNING ENDING EXPENSES GROWTH AND ACCOUNT VALUE ACCOUNT VALUE PAID DURING INCOME FUND 9/30/2003 3/31/2004 PERIOD* ACTUAL FUND RETURN \$1,000 \$1,154 \$1,000 \$1,155 Investor Shares \$2.37 Admiral Shares \$1.40 HYPOTHETICAL 5% RETURN \$1,000 \$1,048 \$1,000 \$1,049 Investor Shares

*Expenses are equal to the fund's annualized expense ratio multiplied by the average account value over the period, multiplied by the number of days in the most recent fiscal half-year, then divided by 366.

Please note that the expenses shown in the table are meant to highlight and help you compare ongoing costs only and do not reflect any transactional costs or account maintenance fees. They do not include your fund's low-balance fee, which is described in the prospectus. If this fee were applied to your account, your costs would be higher. Your fund does not charge transaction fees, such as purchase or redemption fees, nor does it carry a "sales load."

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ABOUT YOUR FUND'S EXPENSES (CONTINUED)

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.

ANNUALIZED EXPENSE RATIOS:

Admiral Shares

YOUR FUND COMPARED WITH ITS PEER GROUP

	INVESTOR SHARES	ADMIRAL SHARES	AVERAGE LARGE-CAP CORE FUND
Growth and Income Fund	0.43%	0.25%	1.44%*

^{*}Peer-group ratio captures data through year-end 2003.

You can find more information about the fund's expenses, including annual expense ratios for the past five years, in the Financial Statements section of this report. For additional information on operating expenses and other shareholder costs, please refer to the appropriate fund prospectus.

AS OF 3/31/2004

FINANCIAL STATEMENTS (UNAUDITED)

STATEMENT OF NET ASSETS

This Statement provides a detailed list of the fund's holdings, including each security's market value on the last day of the reporting period. Securities are grouped and subtotaled by asset type (common stocks, bonds, etc.) and by industry sector. Other assets are added to, and liabilities are subtracted from, the value of Total Investments to calculate the fund's Net Assets. Finally, Net Assets are divided by the outstanding shares of the fund to arrive at its share price, or Net Asset Value (NAV) Per Share.

At the end of the Statement of Net Assets, you will find a table displaying the composition of the fund's net assets. Because all income and any realized gains must be distributed to shareholders each year, the bulk of net assets consists of Paid-in Capital (money invested by shareholders). The amounts shown for Undistributed Net Investment Income and Accumulated Net Realized Gains usually approximate the sums the fund had available to distribute to shareholders as income dividends or capital gains as of the statement date, but may differ because certain investments or transactions may be treated differently for financial statement and tax purposes. Any Accumulated Net Realized Losses, and any cumulative excess of distributions over net income or net realized gains, will appear as negative balances. Unrealized Appreciation (Depreciation) is the difference between the market value of the fund's investments and their cost, and reflects the gains (losses) that would be realized if the fund were to sell all of its investments at their statement-date values.

GROWTH AND INCOME FUND	SHARES	MARKET VALUE* (000)
COMMON STOCKS (98.3%)(1)		
AUTO & TRANSPORTATION (4.9%)		
General Motors Corp.	2,458,000	115,772
Harley-Davidson, Inc.	1,998,100	•
United Parcel Service, Inc.	1,406,600	98,237
Burlington Northern		
Santa Fe Corp.	215,300	6 , 782
		327,370
CONSUMER DISCRETIONARY (15.8%)		
Home Depot, Inc.	3,976,900	148,577
The Walt Disney Co.	5,124,500	128,061
Kimberly-Clark Corp.	1,849,400	116,697
Federated Department	, .	,
Stores, Inc.	1,943,400	105,041
The Gap, Inc.	4,096,700	89,800
* Electronic Arts Inc.	1,393,700	75,204
Waste Management, Inc.	2,422,600	73,114
Wal-Mart Stores, Inc.	1,044,400	62,340
Black & Decker Corp.	1,029,100	58 , 597
Viacom Inc. Class B	1,187,667	46,568
McDonald's Corp.	1,384,600	39,558
* AutoNation, Inc.	1,873,900	31,950

Cendant Corp.	1,058,800	25,824
Wendy's International, Inc.	392,000	15,950
* Time Warner, Inc.	902,800	15,221
* Yum! Brands, Inc.	179,700	6 , 827
Clear Channel		
Communications, Inc.	65,500	2,774
		1,042,103
CONSUMER STAPLES (5.7%)		
The Coca-Cola Co.	1,970,300	99,106
The Procter & Gamble Co.	813,400	85,309
Altria Group, Inc.	1,092,106	59,465
Coca-Cola Enterprises, Inc.	1,828,800	44,202
Sara Lee Corp.	1,222,100	26,715
Hershey Foods Corp.	302,400	25,054
CVS Corp.	361,000	12,743
Albertson's, Inc.	466,100	10,324
Adolph Coors Co. Class B	147,100	10,216
SuperValu Inc.	232,100	7,088
		380,222
FINANCIAL SERVICES (21.8%)		
Citigroup, Inc.	5,017,100	259,384
Wells Fargo & Co.	2,546,800	144,327
Bank of America Corp.	1,511,280	122,383
American International		
Group, Inc.	1,702,358	121,463
The Goldman Sachs Group, Inc.	1,126,500	117,550
Progressive Corp. of Ohio	961,599	84,236
J.P. Morgan Chase & Co.	1,888,200	79,210
MBNA Corp.	2,596,800	71,750
-		

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GROWTH AND INCOME FUND	SHARES	MARKET VALUE* (000)
National City Corp.	1,933,700	68,801
Allstate Corp.	1,392,400	63,299
First Tennessee National Corp.	1,033,600	49,303
Lehman Brothers Holdings, Inc.	576 , 800	47,799
Washington Mutual, Inc.	988 , 271	42,209
MBIA, Inc.	536,600	33,645
Bear Stearns Co., Inc.	349,200	30,618
SLM Corp.	507,700	21,247
SouthTrust Corp.	445,600	14,776
Equity Office Properties		
Trust REIT	360,700	10,421
Ryder System, Inc.	265,000	10,263
Cincinnati Financial Corp.	229,300	9,963
Moody's Corp.	139,500	9,877
North Fork Bancorp, Inc.	228,700	9,679
Charter One Financial, Inc.	182,300	6,446
Wachovia Corp.	135,000	6,345
Merrill Lynch & Co., Inc.	102,800	6,123
AFLAC Inc.	59,100	2,372
		1,443,489
HEALTH CARE (11.7%)		
Pfizer Inc.	4,114,727	144,221
Becton, Dickinson & Co.	1,648,500	79,919
Johnson & Johnson	1,558,000	79,022
* Amgen, Inc.	1,226,400	71,340
Merck & Co., Inc.	1,495,900	66,104
Bristol-Myers Squibb Co.	2,207,600	53,490
McKesson Corp.	1,684,800	50,696
Guidant Corp.	646,300	40,956

Cardinal Health, Inc.	587 , 125	40,453
AmerisourceBergen Corp.	680,400	37,204
Aetna Inc.	377 , 800	33,896
Abbott Laboratories	545,700	22,428
Manor Care, Inc.	544,900	19,230
UnitedHealth Group Inc.	273,900	17,650
* Humana Inc.	513,500	9,767
Health Management		
Associates Class A	406,300	9,430
		775,806
INTEGRATED OILS (6.7%)		
ExxonMobil Corp.	6,222,736	258,804
Marathon Oil Corp.	1,954,800	65,818
ChevronTexaco Corp.		62,728
-	714,600	
ConocoPhillips Co.	812,200	56,700
		444,050
OTHER ENERGY (0.6%)		
Anadarko Petroleum Corp.	781,600	40,534
•		
MATERIALS & PROCESSING (2.5%)		
Alcoa Inc.	1,253,600	43,487
Sigma-Aldrich Corp.	738,700	40,880
Freeport-McMoRan Copper		
& Gold, Inc. Class B	892,400	34,884
Archer-Daniels-Midland Co.	1,018,200	17 , 177
Louisiana-Pacific Corp.	592 , 600	15,289
Sherwin-Williams Co.	300,300	11,541
PPG Industries, Inc.	58,300	3,399
,	•	
		166,657
		100,007
DDODIGED DIDADIEG (4 10)		
PRODUCER DURABLES (4.1%)		04 = 00
Centex Corp.	1,694,400	91,599
Danaher Corp.	796,600	74 , 379
Caterpillar, Inc.	439,800	34 , 775
Rockwell Collins, Inc.	636,100	20,107
* Lexmark International, Inc.	199,800	18,382
KB HOME	122,000	9,858
Pulte Homes, Inc.	168,400	9,363
United Technologies Corp.	101,600	8,768
Tektronix, Inc.	79,100	
Tektronia, inc.	79,100	2,587
		269,818
TECHNOLOGY (15.9%)		
Microsoft Corp.	9,308,526	232,434
Intel Corp.	7,222,600	196,455
* Cisco Systems, Inc.	5,188,000	122,022
QUALCOMM Inc.	1,224,100	81,305
Motorola, Inc.	4,004,031	70,471
* Computer Sciences Corp.	1,528,800	61,657
* EMC Corp.	4,278,700	58,233
1	4,270,700	30,233
Maxim Integrated		
Products, Inc.	929,500	43,770
International Business		
Machines Corp.	400,400	36 , 773
Applera CorpApplied		
Biosystems Group	1,637,000	32,380
PerkinElmer, Inc.	1,213,400	25,105
General Dynamics Corp.	244,200	21,814
* Broadcom Corp.	321,100	12,578
Rockwell Automation, Inc.	354,400	12,287
* Dell Inc.		
	306,800	10,315
Linear Technology Corp.	271,400	10,047
Analog Devices, Inc.	155,400	7,461
* Altera Corp.	329,700	6,742
Texas Instruments, Inc.	218,100	6,373
* Sanmina-SCI Corp.	105,700	1,164
-	•	

		1,049,386
UTILITIES (6.1%) * Nextel Communications, Inc.	4 545 000	112 420
BellSouth Corp. Edison International	4,545,900 2,790,000 2,965,100	112,420 77,255 72,022
Exelon Corp. Constellation Energy Group, Inc.	867,900 555,200	59,772 22,180
Public Service Enterprise Group, Inc.	438,300	20,591

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	SHARES	MARKET VALUE* (000)
Entergy Corp. AT&T Corp. Xcel Energy, Inc.	304,300 734,900 379,500	18,106 14,382 6,759
		403,487
OTHER (2.5%) General Electric Co. Textron, Inc.	3,902,100 844,900	119,092 44,906
		163,998
TOTAL COMMON STOCKS (Cost \$5,232,102)		6,506,920
	FACE AMOUNT (000)	
TEMPORARY CASH INVESTMENTS (1.7%)(1)		
U.S. TREASURY BILL (2)0.91%, 6/17/2004 REPURCHASE AGREEMENTS Collateralized by U.S. Government	\$4,905	4,895
Obligations in a Pooled Cash Account 1.04%, 4/1/2004 1.04%, 4/1/2004Note G	105 , 431 487	105 , 431 487
TOTAL TEMPORARY CASH INVESTMENTS (Cost \$110,823)		110,813
TOTAL INVESTMENTS (100.0%) (Cost \$5,342,925)		6,617,733
OTHER ASSETS AND LIABILITIES (0.0%)		
Other AssetsNote C Other Liabilities		143,938 (140,613)
		2,838
 NET ASSETS (100%)		\$6,620,571

^{*} See Note A in Notes to Financial Statements.

^{*} Non-income-producing security.

⁽¹⁾ The fund invests a portion of its cash reserves in equity markets through the use of index futures contracts. After giving effect to futures investments, the fund's effective common stock and temporary cash investment positions represents 99.6% and 0.4%, respectively, of net assets. See Note E in Notes to Financial Statements.

(2) Security segregated as initial margin for open futures contracts. REIT-Real Estate Investment Trust. ______ ______ AT MARCH 31, 2004, NET ASSETS CONSISTED OF: Paid-in Capital \$6,777,987 Undistributed Net Investment Income 13,547 Accumulated Net Realized Losses (1,446,541)Unrealized Appreciation 1,274,808 Investments Securities Futures Contracts \$6,620,571 _____ Investor Shares--Net Assets Applicable to 197,915,461 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) \$5,650,236 ______ NET ASSET VALUE PER SHARE--INVESTOR SHARES Admiral Shares--Net Assets Applicable to 20,801,454 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) \$970,335 NET ASSET VALUE PER SHARE--ADMIRAL SHARES ______ See Note E in Notes to Financial Statements for the tax-basis components of net

See Note E in Notes to Financial Statements for the tax-basis components of net assets.

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STATEMENT OF OPERATIONS

This Statement shows the types of income earned by the fund during the reporting period, and details the operating expenses charged to each class of its shares. These expenses directly reduce the amount of investment income available to pay to shareholders as income dividends. This Statement also shows any Net Gain (Loss) realized on the sale of investments, and the increase or decrease in the Unrealized Appreciation (Depreciation) of investments during the period.

Growth and Income Fund Six Months Ended March 31, 2004 (000)

INVESTMENT INCOME INCOME \$ 56,433 Dividends Interest Security Lending Total Income ______ EXPENSES Investment Advisory Fees--Note B Basic Fee 2,901 Performance Adjustment 434 The Vanguard Group--Note C Management and Administrative Investor Shares 8,662

Admiral Shares Marketing and Distribution Investor Shares Admiral Shares Custodian Fees 32	621 350 51
Shareholders' Reports Investor Shares Admiral Shares Trustees' Fees and Expenses	13 3
Total Expenses Expenses Paid IndirectlyNote D	13,067 (434)
Net Expenses	12,633
NET INVESTMENT INCOME	44,319
REALIZED NET GAIN (LOSS) Investment Securities Sold Futures Contracts	358,481 7,727
REALIZED NET GAIN (LOSS)	366,208
CHANGE IN UNREALIZED APPRECIATION (DEPRECIATION) Investment Securities Futures Contracts	493,871 2,306
CHANGE IN UNREALIZED APPRECIATION (DEPRECIATION)	496 , 177
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	•

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STATEMENT OF CHANGES IN NET ASSETS

This Statement shows how the fund's total net assets changed during the two most recent reporting periods. The Operations section summarizes information detailed in the Statement of Operations. The amounts shown as Distributions to shareholders from the fund's net income and capital gains may not match the amounts shown in the Operations section, because distributions are determined on a tax basis and may be made in a period different from the one in which the income was earned or the gains were realized on the financial statements. The Capital Share Transactions section shows the net amount shareholders invested in or redeemed from the fund. Distributions and Capital Share Transactions are shown separately for each class of shares.

<TABLE> <CAPTION>

	(GROWTH AND	INCOME	FUND
<\$>	<c></c>		<c></c>	
	S	IX MONTHS ENDED		YEAR ENDED
	MARCH	31, 2004 (000)		30, 2003 (000)
INCREASE (DECREASE) IN NET ASSETS OPERATIONS				
Net Investment Income Realized Net Gain (Loss)	\$	•		76,221 (279,162)
Change in Unrealized Appreciation (Depreciation)		•		1,273,164
Net Increase (Decrease) in Net Assets Resulting from Operations		906,704		1,070,223
DISTRIBUTIONS				
Net Investment Income Investor Shares		(37,042)		(64,832)
Admiral Shares Realized Capital Gain		(6,651)		(10,759)

Investor Shares Admiral Shares	 	
Total Distributions		(75 , 591)
CAPITAL SHARE TRANSACTIONSNote H Investor Shares Admiral Shares	(212,374) 38,199	75,504
Net Increase (Decrease) from Capital Share Transactions		(7,007)
Total Increase (Decrease)	•	987,625
NET ASSETS Beginning of Period		4,944,110
End of Period	\$ 6,620,571	\$ 5,931,735
<pre></pre>		

 | ========= |17

FINANCIAL HIGHLIGHTS

This table summarizes the fund's investment results and distributions to shareholders on a per-share basis for each class of shares. It also presents the Total Return and shows net investment income and expenses as percentages of average net assets. These data will help you assess: the variability of the fund's net income and total returns from year to year; the relative contributions of net income and capital gains to the fund's total return; how much it costs to operate the fund; and the extent to which the fund tends to distribute capital gains. The table also shows the Portfolio Turnover Rate, a measure of trading activity. A turnover rate of 100% means that the average security is held in the fund for one year.

GROWTH AND INCOME FUND INVESTOR SHARES <TABLE> <CAPTION>

			BER 30,	JAN. 1 TO SEPT. 30,		YEAR ENDED DECEMBER 3	1,
	MARCH 31, <c></c>		<c></c>			<c></c>	
THROUGHOUT EACH PERIOD	2004						
NET ASSET VALUE, BEGINNING OF PERIOD	\$24.91	\$20.68	\$25.50				
INVESTMENT OPERATIONS Net Investment Income Net Realized and Unrealized Gain (Loss)	.183			.22	.35	.33	.32
	3.637	4.227	(4.81)	(6.63)	(3.55)	7.60	5.86
Total from Investment Operations	3.820		(4.54)	(6.41)	(3.20)	7.93	6.18
DISTRIBUTIONS Dividends from Net Investment Income Distributions from Realized Capital Ga:	(.180) ins	(.315)			(1.47)	(1.28)	(1.28)
Total Distributions							
NET ASSET VALUE, END OF PERIOD	\$28.55	\$24.91 ======	\$20.68	\$25.50	\$32.06	\$37.08	\$30.76
TOTAL RETURN	15.37% =======	22.09% =======	-18.04% =======	-20.06% =======	-8.97% ======	26.04%	23.94%
RATIOS/SUPPLEMENTAL DATA Net Assets, End of Period (Millions) Ratio of Total Expenses to	\$5 , 650	\$5 , 119	\$4,338	\$6,382	\$8 , 968	\$8,816	\$5,161

Average Net Assets+	0.43%**	0.46%	0.45%	0.40%**	0.38%	0.37%	0.36%
Ratio of Net Investment Income to							
Average Net Assets	1.35%**	1.39%	1.02%	0.95%**	1.02%	1.04%	1.27%
Portfolio Turnover Rate	70%**	88%	70%	41%	65%	54%	47%

</TABLE>

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<TABLE> <CAPTION>

GROWTH AND INCOME FUND ADMIRAL SHARES

	SIX MONTHS ENDED MARCH 31,	SEPTEM		MAY 14* TO SEPT. 30,
<s> FOR A SHARE OUTSTANDING THROUGHOUT EACH PERIOD</s>		<c></c>	<c></c>	<c></c>
NET ASSET VALUE, BEGINNING OF PERIOD INVESTMENT OPERATIONS	\$40.70	\$33.78	\$41.66	\$50.00
Net Investment Income Net Realized and Unrealized Gain (Loss) on Investments		.567 6.920		
Total from Investment Operations	6.279			
DISTRIBUTIONS	(.329)			
Total Distributions	(.329)	, ,	, ,	(.25)
NET ASSET VALUE, END OF PERIOD	\$46.65	\$40.70		
TOTAL RETURN	15.46%	22.29%	-17.95%	-16.26%
RATIOS/SUPPLEMENTAL DATA				
Net Assets, End of Period (Millions)	\$970			
Ratio of Total Expenses to Average Net Assets++		0.31%		
Ratio of Net Investment Income to Average Net Assets Portfolio Turnover Rate		1.54% 88%		1.04%+ 41%

SEE ACCOMPANYING NOTES, WHICH ARE AN INTEGRAL PART OF THE FINANCIAL STATEMENTS.

^{*}The fund's fiscal year-end changed from December 31 to September 30, effective September 30, 2001.

^{**}Annualized.

⁺Includes performance-based investment advisory fee increases (decreases) of 0.01%, 0.00%, 0.03%, 0.01%, 0.01%, 0.01%), and (0.01%).

</TABLE>

^{*}Inception.

^{**}The fund's fiscal year-end changed from December 31 to September 30, effective September 30, 2001.

⁺Annualized.

⁺⁺Includes performance-based investment advisory fee increases (decreases) of 0.01%, 0.00%, 0.03%, and 0.01%.

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. Investor Shares are available to any investor who meets the fund's minimum purchase requirements. Admiral Shares are designed for investors who meet certain administrative, servicing, tenure, and account-size criteria.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. mutual funds. The fund consistently follows such policies in preparing its financial statements.

- SECURITY VALUATION: Securities are valued as of the close of trading on the New York Stock Exchange (generally 4:00 p.m. Eastern time) on the valuation date. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. Securities for which market quotations are not readily available, or whose values have been materially affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the board of trustees to represent fair value. Temporary cash investments acquired over 60 days to maturity are valued using the latest bid prices or using valuations based on a matrix system (which considers such factors as security prices, yields, maturities, and ratings), both as furnished by independent pricing services. Other temporary cash investments are valued at amortized cost, which approximates market value.
- 2. FUTURES CONTRACTS: The fund uses S&P 500 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.

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

- 3. REPURCHASE AGREEMENTS: The fund, along with other members of The Vanguard Group, transfers uninvested cash balances to a pooled cash account, which is invested in repurchase agreements secured by U.S. government securities. Securities pledged as collateral for repurchase agreements are held by a custodian bank until the agreements mature. Each agreement requires that the market value of the collateral be sufficient to cover payments of interest and principal; however, in the event of default or bankruptcy by the other party to the agreement, retention of the collateral may be subject to legal proceedings.
- 4. FEDERAL INCOME TAXES: The fund intends to continue to qualify as a regulated investment company and distribute all of its taxable income. Accordingly, no provision for federal income taxes is required in the financial statements.
- 5. DISTRIBUTIONS: Distributions to shareholders are recorded on the ex-dividend date.
- 6. OTHER: Dividend income is recorded on the ex-dividend date. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment

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. Franklin Portfolio Associates LLC provides investment advisory services to the fund for a fee calculated at an annual percentage rate of average net assets. The basic fee is subject to quarterly adjustments based on performance for the preceding three years relative to the S&P 500 Index. For the six months ended March 31, 2004, the investment advisory fee represented an effective annual basic rate of 0.09% of the fund's average net assets, before an increase of \$434,000 (0.01%) based on performance.
- C. The Vanguard Group furnishes at cost corporate management, administrative, marketing, and distribution services. The costs of such services are allocated to the fund under methods approved by the board of trustees. The fund has committed to provide up to 0.40% of its net assets in capital contributions to Vanguard. At March 31, 2004, the fund had contributed capital of \$974,000 to Vanguard (included in Other Assets), representing 0.01% of the fund's net assets and 0.97% of Vanguard's capitalization. The fund's trustees and officers are also directors and officers of Vanguard.
- D. The fund has asked its investment advisor to direct certain security trades, subject to obtaining the best price and execution, to brokers who have agreed to rebate to the fund part of the commissions generated. Such rebates are used solely to reduce the fund's management and administrative expenses. For the six months ended March 31, 2004, these arrangements reduced the fund's expenses by \$434,000 (an annual rate of 0.01% of average net assets).
- E. Distributions are determined on a tax basis and may differ from net investment income and realized capital gains for financial reporting purposes. Differences may be permanent or temporary. Permanent differences are reclassified among capital accounts in the financial statements to reflect their tax character. Temporary differences arise when certain items of income, expense, gain, or loss are recognized in different periods for financial statement and tax purposes; these differences will reverse at some time in the future. Differences in classification may also result from the treatment of short-term gains as ordinary income for tax purposes.

The fund's tax-basis capital gains and losses are determined only at the end of each fiscal year. For tax purposes, at September 30, 2003, the fund had available realized losses of \$1,811,408,000 to offset future net capital gains of \$19,126,000 through September 30, 2009, \$776,477,000 through September 30, 2010, \$741,889,000 through September 30, 2011, and \$273,916,000 through September 30, 2012. The fund will use these capital losses to offset net taxable capital gains, if any, realized during the year ending September 30, 2004; should the fund realize net capital losses for the year, the losses will be added to the loss carryforward balances above.

At March 31, 2004, net unrealized appreciation of investment securities for tax purposes was \$1,274,808,000, consisting of unrealized gains of \$1,323,640,000 on securities that had risen in value since their purchase and \$48,832,000 in unrealized losses on securities that had fallen in value since their purchase.

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NOTES TO FINANCIAL STATEMENTS (CONTINUED)

At March 31, 2004, the aggregate settlement value of open futures contracts expiring in June 2004 and the related unrealized appreciation were:

		AGGREGATE	UNREALIZED
	NUMBER OF	SETTLEMENT	APPRECIATION
FUTURES CONTRACTS	LONG CONTRACTS	VALUE	(DEPRECIATION)
S&P 500 Index	305	\$85,774	\$770

Unrealized appreciation on open futures contracts is required to be treated as realized gain for tax purposes.

- F. During the six months ended March 31, 2004, the fund purchased \$2,216,693,000 of investment securities and sold \$2,395,566,000 of investment securities, other than U.S. government securities and temporary cash investments.
- G. The market value of securities on loan to broker/dealers at March 31, 2004, was \$470,000, for which the fund held cash collateral of \$487,000. The fund invests cash collateral received in repurchase agreements, and records a liability for the return of the collateral, during the period the securities are on loan.
- H. Capital share transactions for each class of shares were:

<TABLE>

	Six Months Ended March 31, 2004				
<\$>	<c> Amount</c>	<c> Shares</c>	<c> Amount (000)</c>		
Investor Shares Issued Issued in Lieu of Cash Distributions Redeemed	35,323	1,292	\$757,232 61,500 (901,243)	2,637	
Net Increase (Decrease) Investor Shares	(212,374)	(7,600)	(82,511)	(4,268)	
Admiral Shares Issued Issued in Lieu of Cash Distributions Redeemed	5,918	132	194,161 9,832 (128,489)	258	
Net Increase (Decrease) Admiral Shares	38,199	843	75 , 504	2,002	

</TABLE>

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- Look up fund price, performance history, and distribution information--in a

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THE PEOPLE WHO GOVERN YOUR FUND

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

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.

Our independent board members bring distinguished backgrounds in business, academia, and public service to their task of working with Vanguard officers to establish the policies and oversee the activities of

<TABLE> <CAPTION>

<S> <C>

POSITION(S) HELD WITH

FUND (NUMBER OF NAME (YEAR OF BIRTH) VANGUARD FUNDS TRUSTEE/OFFICER OVERSEEN BY

TRUSTEE/OFFICER) PRINCIPAL OCCUPATION(S) DURING THE PAST FIVE YEARS SINCE

May 1987

JOHN J. BRENNAN* Chairman of the Chairman of the Board, Chief Executive Officer, and Director/Trustee (1954) Board, Chief Of The Vanguard Group, Inc., and of each of the investment companies Executive Officer, served by The Vanguard Group.

and Trustee

(129)

INDEPENDENT TRUSTEES

CHARLES D. ELLIS Trustee The Partners of '63 (pro bono ventures in education); Senior Advisor to Greenwich Associates (international business strategy consulting); (1937)(129)

January 2001		Successor Trustee of Yale University; Overseer of the Stern School of Business at New York University; Trustee of the Whitehead Institute for Biomedical Research.
RAJIV L. GUPTA (1945) December 2001	Trustee (129)	Chairman and Chief Executive Officer (since October 1999), Vice Chairman (January-September 1999), and Vice President (prior to September 1999) of Rohm and Haas Co. (chemicals); Director of Technitrol, Inc. (electronic components), and Agere Systems (communications components); Board Member of the American Chemistry Council; and Trustee of Drexel University.
JOANN HEFFERNAN HEISEN (1950) July 1998	Trustee (129)	Vice President, Chief Information Officer, and Member of the Executive Committee of Johnson & Johnson (pharmaceuticals/consumer products); Director of the Medical Center at Princeton and Women's Research and Education Institute.
BURTON G. MALKIEI (1932) May 1977	Trustee (127)	Chemical Bank Chairman's Professor of Economics, Princeton University; Director of Vanguard Investment Series plc (Irish investment fund) (since November 2001), Vanguard Group (Ireland)Limited (Irish investment management firm) (since November 2001), Prudential Insurance Co. of America, BKF Capital (investment management), The Jeffrey Co. (holding company), and NeuVis, Inc. (software company).
/ TADIE \		

</TABLE>

the funds. Among board members' responsibilities are selecting investment advisors for the funds; monitoring fund operations, performance, and costs; reviewing contracts; nominating and selecting new trustees/directors; and electing Vanquard officers.

Each trustee serves a fund until its termination; or until the trustee's retirement, resignation, or death; or otherwise as specified in the fund's organizational documents. Any trustee may be removed at a shareholders' meeting by a vote representing two-thirds of the net asset value of all shares of the fund together with shares of other Vanguard funds organized within the same trust. The table on these two pages shows information for each trustee and executive officer of the fund. The mailing address of the trustees and officers is P.O. Box 876, Valley Forge, PA 19482.

<TABLE> <CAPTION>

(YEAR OF BIRTH) VANGUARD FUNDS TRUSTEE/OFFICER OVERSEEN BY

SINCE TRUSTEE/OFFICER) PRINCIPAL OCCUPATION(S) DURING THE PAST FIVE YEARS

ALFRED M. RANKIN, JR. Trustee

(1941)

(129)

Chairman, President, Chief Executive Officer, and Director of NACCO
Industries, Inc. (forklift trucks/housewares/lignite); Director of
Goodrich Corporation (industrial products/aircraft systems and

services); Director of Standard Products Company (supplier for the automotive industry) until 1998.

J. LAWRENCE WILSON Trustee Retired Chairman and Chief Executive Officer of Rohm and Haas Co. (1936) (129) (chemicals); Director of Cummins Inc. (diesel engines), The Mead April 1985 Corp. (paper products), and AmerisourceBergen Corp. (pharmaceutical

distribution); Trustee of Vanderbilt University.

EXECUTIVE OFFICERS*

July 1998

R. GREGORY BARTON Secretary Managing Director and General Counsel of The Vanguard Group, Inc.;

(1951) (129) Secretary of The Vanguard Group and of each of the investment companies served by The Vanguard Group.

THOMAS J. HIGGINS Treasurer Principal of The Vanguard Group, Inc.; Treasurer of each of the investment companies served by The Vanguard Group.

*Officers of the funds are "interested persons" as defined in the Investment Company Act of 1940.

More information about the trustees is in the Statement of Additional Information, available from The Vanguard Group.

VANGUARD SENIOR MANAGEMENT TEAM

MORTIMER J. BUCKLEY, Information Technology.

JAMES H. GATELY, Investment Programs and Services.

KATHLEEN C. GUBANICH, Human Resources.

F. WILLIAM MCNABB, III, Client Relationship Group.

MICHAEL S. MILLER, Planning and Development. RALPH K. PACKARD, Finance. GEORGE U. SAUTER, Chief Investment Officer.

JOHN C. BOGLE, Founder; Chairman and Chief Executive Officer, 1974-1996.

</TABLE>

[SHIP]
[THE VANGUARD GROUP(R) LOGO]
Post Office Box 2600
Valley Forge, PA 19482-2600

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ABOUT OUR COVER

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FOR MORE INFORMATION

This report is intended for the fund's shareholders. It may not be distributed to prospective investors unless it is preceded or accompanied by the current fund prospectus.

To receive a free copy of the prospectus or the Statement of Additional Information, or to request additional information about the fund or other Vanguard funds, please contact us at one of the adjacent telephone numbers or by e-mail through VANGUARD.COM. Prospectuses may also be viewed online.

You can obtain a free copy of Vanguard's proxy voting guidelines by visiting our website, www.vanguard.com, and searching for "proxy voting guidelines," or by calling 1-800-662-2739. They are also available from the SEC's website, www.sec.gov.

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

WORLD WIDE WEB www.vanguard.com

FUND INFORMATION 1-800-662-7447

DIRECT INVESTOR ACCOUNT SERVICES 1-800-662-2739

INSTITUTIONAL INVESTOR SERVICES 1-800-523-1036

TEXT TELEPHONE 1-800-952-3335

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Q932 052004

Item 2: Not applicable.

Item 3: Not applicable.

Item 4: Not applicable.

Item 5: Not applicable.

Item 6: Not applicable.

Item 7: Not applicable.

Item 8: Not applicable.

Item 9: Not applicable.

Item 10: Controls and Procedures.

- (a) Disclosure Controls and Procedures. The Principal Executive and Financial Officers concluded that the Registrant's Disclosure Controls and Procedures are effective based on their evaluation of the Disclosure Controls and Procedures as of a date within 90 days of the filing date of this report.
- (b) Internal Controls. There were no significant changes in Registrant's internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Item 11: Exhibits.

(a) Certifications.

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VANGUARD QUANTITATIVE FUNDS

BY: (signature)

(HEIDI STAM) JOHN J. BRENNAN* CHIEF EXECUTIVE OFFICER

Date: May 10, 2004

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

VANGUARD QUANTITATIVE FUNDS

(signature)

______ (HEIDI STAM)

JOHN J. BRENNAN* CHIEF EXECUTIVE OFFICER

Date: May 10, 2004

VANGUARD QUANTITATIVE FUNDS

(signature)

(HEIDI STAM) THOMAS J. HIGGINS* TREASURER

Date: May 10, 2004

*By Power of Attorney. See File Number 2-57689, filed on December 26, 2002. Incorporated by Reference.

CERTIFICATIONS

- I, John J. Brennan, certify that:
- 1. I have reviewed this report on Form N-CSR of Vanguard Quantitative Funds;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, changes in net assets, and cash flows (if the financial statements are required to include a statement of cash flows) of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal half-year (the registrant's second fiscal half-year in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of

directors (or persons performing the equivalent functions):

- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2004

/S/ JOHN J. BRENNAN

John J. Brennan Chief Executive Officer

CERTIFICATIONS

- I, Thomas J. Higgins, certify that:
- 1. I have reviewed this report on Form N-CSR of Vanguard Quantitative Funds;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, changes in net assets, and cash flows (if the financial statements are required to include a statement of cash flows) of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that

material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal half-year (the registrant's second fiscal half-year in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2004

/S/ THOMAS J. HIGGINS

TREASURER

Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Name of Issuer: Vanguard Quantitative Funds

In connection with the Report on Form N-CSR of the above-named issuer that is accompanied by this certification, the undersigned hereby certifies, to his knowledge, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the issuer.

Date: May 10, 2004

/S/ JOHN J. BRENNAN CHIEF EXECUTIVE OFFICER

Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Name of Issuer: Vanguard Quantitative Funds

In connection with the Report on Form N-CSR of the above-named issuer that is accompanied by this certification, the undersigned hereby certifies, to his knowledge, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the issuer.

Date: May 10, 2004

/S/ THOMAS J. HIGGINS
----TREASURER