

Vanguard®

Vanguard® Precious Metals and Mining Fund Semiannual Report

July 31, 2008



- > For the six months ended July 31, 2008, Vanguard Precious Metals and Mining Fund posted a return of –1.6%.

- > The fund beat the returns of its benchmark by more than 2.5 percentage points and outperformed returns for the average gold-oriented fund.

- > Big contributors for the period included coal- and nickel-mining companies, while producers of platinum and gold were both weak spots.

Contents

Your Fund's Total Returns	1
Chairman's Letter	2
Advisor's Report	6
Fund Profile	8
Performance Summary	9
Financial Statements	10
About Your Fund's Expenses	19
Trustees Approve Advisory Agreement	21
Glossary	22

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 cover of this report. Of course, the risks of investing in your fund are spelled out in the prospectus.

Your Fund's Total Returns

Six Months Ended July 31, 2008

	Ticker Symbol	Total Returns
Vanguard Precious Metals and Mining Fund	VGPMX	-1.6%
S&P/Citigroup Custom Precious Metals and Mining Index		-4.2
Average Gold-Oriented Fund ¹		-10.8

Your Fund's Performance at a Glance

January 31, 2008–July 31, 2008

	Starting Share Price	Ending Share Price	Distributions Per Share	
			Income Dividends	Capital Gains
Vanguard Precious Metals and Mining Fund	\$33.45	\$31.79	\$0.220	\$1.028

¹ Derived from data provided by Lipper Inc.



Chairman's Letter

Dear Shareholder,

During the past six months, precious metals and mining stocks have been no strangers to the ongoing turbulence in world markets. For the fiscal half-year ended July 31, 2008, Vanguard Precious Metals and Mining Fund, which is broadly diversified across metal and mining companies, returned -1.6% . Although the fund posted negative results, its performance surpassed that of its target index and significantly outpaced the average gold-oriented fund.

Please note that the fund remained closed to most new investors. (The fund closure does not apply to Flagship members.)

Stocks rode a bumpy path to disappointing results

U.S. stocks struggled during the six months, a period of pronounced volatility in the financial markets. Continued weakness in the housing market, record oil prices, rising unemployment, and an uptick in inflation all weighed on stocks and set a downbeat tone.

The U.S. market performed well in April and May, but those returns were bookended by declines earlier and later in the period. June was a particularly difficult month; the broad U.S. stock market declined -8.2% , the worst single-month return in more than five years.

For the half-year, the broad U.S. stock market returned -5.9% . Investors favored small-capitalization stocks over large- and mid-caps, and growth stocks over their

value-oriented counterparts. International stocks also experienced high levels of volatility, and returned -3.8%.

Bond investors remained cautious in the wake of the subprime crisis

In the extensive fallout from the subprime-mortgage crisis, bond investors continued to prefer the safety of short-term, high-quality issues—most notably U.S. Treasury securities. During the period, bonds outpaced stocks, but registered negative returns. The broad taxable bond market returned -0.6%. Municipal bonds, which experienced a spike in volatility, returned -0.9%.

During the half-year, the Federal Reserve Board lowered its target for the federal funds rate twice, reducing it a full percentage point, to 2.0%. At its June

meeting (and again at its August meeting after the end of the fund's fiscal period), the Fed voted to leave the target rate unchanged, signaling a growing concern about near-term inflation.

Strong stock selection helped fund's overall return

Despite holding fewer than 40 stocks in its portfolio as of July 31, 2008, Vanguard Precious Metals and Mining Fund is highly diversified in comparison to its benchmark and average peer fund. The fund's holdings among coal-mining and steel recycling companies were notable contributors for the period and played a role in the fund's outperformance of its competitors. Meanwhile, the fund's gold and platinum producers were significant detractors during the six months.

Market Barometer

	Total Returns Periods Ended July 31, 2008		
	Six Months	One Year	Five Years ¹
Stocks			
Russell 1000 Index (Large-caps)	-6.6%	-10.6%	7.5%
Russell 2000 Index (Small-caps)	0.9	-6.7	9.8
Dow Jones Wilshire 5000 Index (Entire market)	-5.9	-10.2	8.1
MSCI All Country World Index ex USA (International)	-3.8	-9.3	17.9
Bonds			
Lehman U.S. Aggregate Bond Index (Broad taxable market)	-0.6%	6.2%	4.6%
Lehman Municipal Bond Index	-0.9	2.8	4.3
Citigroup 3-Month Treasury Bill Index	1.0	3.1	3.1
CPI			
Consumer Price Index	4.2%	5.6%	3.6%

¹ Annualized.

The fund's coal-mining stocks saw a boost during the period, partially due to rising power consumption in China, where energy generation is 80% reliant on coal. Eramet, the fund's largest weighting as of July 31 and one of the few independent nickel producers left in the world, benefited from the rise in price of manganese, as well as from speculation over consolidation in the nickel industry. Other fund contributors Schnitzer Steel Industries and Sims Group, both scrap metal recyclers, were good examples of the advisor's strong stock selection.

The largest detractor for the period was Centerra Gold, whose stock fell owing to ongoing concerns that the Kyrgyzstan government will nationalize the company's Kumtor mine. Platinum stocks also hurt fund returns. Early in the period, power

outages in South Africa—the world's largest supplier of platinum—shortened the supply of the precious metal, sending prices through the roof. However, weakening U.S. auto sales won out in the end, leading to an anticipated decrease in demand for the metal, which is commonly used in catalytic converters.

Sector funds can diversify a well-planned portfolio

Investors endured difficult times during the past several months as troubles continued in the U.S. economy. Volatility in the marketplace such as that of the recent fiscal period is a good reminder of why we urge shareholders to avoid reacting to short-term noise. Instead, Vanguard suggests that shareholders maintain a well-balanced portfolio with a long-term perspective.

Annualized Expense Ratios¹

Your Fund Compared With Its Peer Group

	Fund	Average Gold-Oriented Fund
Precious Metals and Mining Fund	0.32%	1.52%

¹ Fund expense ratio reflects the six months ended July 31, 2008. Peer-group expense ratio is derived from data provided by Lipper Inc. and captures information through year-end 2007.

In practice, this means building a portfolio that includes stocks, bonds, and short-term reserves. Such a well-planned investment program can provide some protection against the stock market's occasionally sharp declines, while allowing you to participate in its long-term potential for growth. As part of a well-balanced investment plan, Vanguard Precious Metals and Mining Fund can add diversification to your portfolio and help you reach your financial goals.

When I wrote to you six months ago, Vanguard's board had elected F. William McNabb III as the fund's president and designated him to succeed me as chief executive officer. The board has since announced that Bill will assume the chief executive role on August 31.

Bill and the rest of our team will serve you and our other clients extremely well in the years ahead.

Thank you for investing with Vanguard.

Sincerely,

A handwritten signature in black ink, appearing to read "John J. Brennan". The signature is fluid and cursive, with a long horizontal line extending to the right.

John J. Brennan
Chairman and Chief Executive Officer
August 14, 2008

Advisor's Report

Vanguard Precious Metals and Mining Fund produced an absolute return of -1.6% for the six-month period ended July 31. This was ahead of the customized benchmark index, which returned -4.2%, as well as the average gold-oriented fund, which returned -10.8%.

Gold bullion declined marginally from \$926 to \$914 per ounce during the period, masking high levels of volatility which saw the gold price peak above \$1,000 per ounce for the first time ever in mid-March. Investment interest in the metal has remained robust because of its defensive characteristics against a backdrop of continued instability in financial markets and heightened geopolitical tensions.

Outside gold, a wide range of metals and minerals made strong gains initially before many succumbed to declines toward the end of the period because of concerns that demand from China and other major commodities consumers would slow. Nevertheless, disruptions on the supply side remain supportive for metal and mineral prices generally, while we retain our confidence in the long-term robustness of demand from emerging and developed economies alike. Against this backdrop, mining groups endured a high degree of volatility, but broadly speaking continued to deliver decent returns.

The fund's significant holding in French nickel and manganese producer Eramet continued to perform well in spite of weakness toward the end of the period. The company profited from rising manganese prices as well as from speculation

over ongoing consolidation in the nickel industry. Holdings in U.S. coal groups Peabody Energy and CONSOL Energy and Australian coal producer Centennial Coal also had a positive impact on performance as coal prices rose to record highs. Against a backdrop of soaring crude oil prices, global energy shortages, and a range of supply-side constraints, coal is being increasingly recognized as a highly valuable source of lower-cost power generation.

The fund's holdings in U.S. metal recycling company Schnitzer Steel and its Australian counterpart Sims Group benefited from the continued robust demand for scrap metal. Demand soared as rising iron-ore prices prompted the steel industry to move away from iron-ore-intensive blast furnaces toward electric arc furnaces, which use greater concentrations of scrap.

On the negative side, our holdings in North American gold producers Centerra Gold and Barrick Gold had an unfavorable impact as the resurgent U.S. dollar and slowing demand for jewelry hampered the performance of the gold sector generally. The worst performance during the period came from Canadian-listed Centerra Gold because of concerns that the Kyrgyz Republic intends to renegotiate the company's mining license in this Central Asian country. This is becoming an increasingly commonplace scenario for mining companies with operations in developing countries.

Our positions in platinum producers turned in a mixed performance, as the extremely compelling supply/demand balance for the

metal was counterbalanced by concerns over slowing economic growth and operational problems at certain companies. The fund's position in United Kingdom producer Lonmin was among the portfolio's weakest performers following production interruptions and power shortages at the platinum miner's South African operations.

We continued to focus on metals and minerals companies with high-caliber management and strong positions in strategically important materials. We took part in the IPO of Franco-Nevada, a Canadian business that invests in precious metals royalty streams and, therefore, is exposed to price strength in precious metals rather than rising costs. We made a large addition to Lonmin in the belief that the recent decline in its share price has left the company's unique platinum assets unjustifiably undervalued. We also added to Peter Hambro Mining—a Russian-based gold miner that is increasing production and whose focus on efficiency should enable it to generate higher profits than most of the gold industry—and the United Kingdom's Johnson Matthey, which processes platinum for use in automotive catalytic converters, an area where more-stringent environmental standards should continue to boost demand.

In terms of sales from the portfolio, the most significant development was a reduction in a number of our coal holdings, including North American producers CONSOL Energy and Patriot Coal and Australian producer Centennial Coal. While we continue to believe in the compelling fundamental outlook for coal as one of

the main solutions to the world's growing energy shortages, from a valuation perspective we thought it sensible to take profits following a sharp appreciation in the shares of these companies. Similarly, we reduced the fund's position in French nickel/manganese producer Eramet, following an extremely strong run in the company's share price.

The long-term investment environment for the fund remains encouraging. Appetite for raw materials, particularly from developing economies such as China and India, remains healthy, while prices across the mining industry continue to be supported by a range of supply-side disruptions. We are increasingly mindful of valuation levels after a long period of pronounced share-price gains, however, and we remain focused on efficiently managed companies with high-quality, strategically valuable assets that are underappreciated by the market. It follows that we are avoiding companies—particularly in the gold sector—that are failing to take advantage of the favorable environment because of rising cost pressures and poor management decisions.

Portfolio Managers:
Graham E. French,
Matthew Vaight, UKSIP
M&G Investment Management Ltd.
August 30, 2008

Fund Profile

As of July 31, 2008

Portfolio Characteristics

	Fund	Comparative Index ¹	Broad Index ²
Number of Stocks	37	300	4,724
Median Market Cap	\$7.3B	\$24.5B	\$31.5B
Price/Earnings Ratio	19.3x	20.3x	16.6x
Price/Book Ratio	2.7x	3.1x	2.3x
Return on Equity	18.2%	21.2%	19.7%
Earnings Growth Rate	24.3%	37.6%	18.5%
Foreign Holdings	80.6%	0.0%	0.0%
Turnover Rate ³	15%	—	—
Expense Ratio ³	0.32%	—	—
Short-Term Reserves	0.6%	—	—

Market Diversification (% of equity exposure)

United Kingdom	21.1%
United States	18.7
Canada	17.1
France	14.8
South Africa	12.8
Australia	11.8
Norway	2.0
Peru	1.5
Indonesia	0.2

Volatility Measures⁴

	Fund Versus Comparative Index ¹	Fund Versus Broad Index ²
R-Squared	0.87	0.21
Beta	0.88	1.10

Ten Largest Holdings⁵ (% of total net assets)

Eramet SLN	10.8%
Lonmin PLC	8.5
Johnson Matthey PLC	7.5
Impala Platinum Holdings Ltd. ADR	6.8
Barrick Gold Corp.	6.0
Peabody Energy Corp.	4.9
Sims Group Ltd.	4.8
Anglo Platinum Ltd. ADR	4.4
Harry Winston Diamond Corp.	3.9
Imerys SA	3.8
Top Ten	61.4%

¹ S&P/Citigroup Custom Precious Metals and Mining Index.

² Dow Jones Wilshire 5000 Index.

³ Annualized.

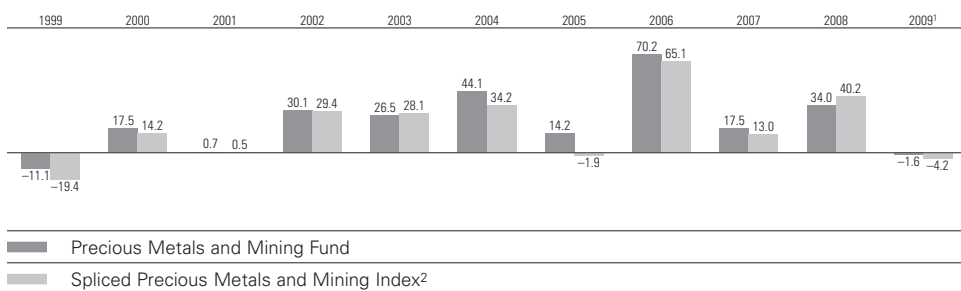
⁴ For an explanation of *R-squared*, *beta*, and other terms used here, see the *Glossary* on page 22.

⁵ The holdings listed exclude any temporary cash investments and equity index products.

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 www.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.

Fiscal-Year Total Returns (%): January 31, 1998–July 31, 2008



Average Annual Total Returns: Periods Ended June 30, 2008

This table presents average annual total returns through the latest calendar quarter—rather than through the end of the fiscal period. Securities and Exchange Commission rules require that we provide this information.

	Inception Date	One Year	Five Years	Ten Years
Precious Metals and Mining Fund ³	5/23/1984	33.55%	39.16%	26.48%

¹ Six months ended July 31, 2008.

² S&P/Citigroup World Equity Gold Index through June 30, 2005; S&P/Citigroup Custom Precious Metals and Mining Index thereafter.

³ Total return figures do not reflect the 1% fee assessed on redemptions of shares held for less than one year, nor do they include the account service fee that may be applicable to certain accounts with balances below \$10,000.

Note: See *Financial Highlights* table on page 14 for dividend and capital gains information.

	Shares	Market Value* (\$000)
Temporary Cash Investments (0.8%)		
³ Vanguard Market Liquidity Fund, 2.386%—Note F	21,357,394	21,357
³ Vanguard Market Liquidity Fund, 2.386%	16,266,229	16,266
Total Temporary Cash Investments (Cost \$37,623)		37,623
Total Investments (100.1%) (Cost \$3,172,762)		4,591,429
Other Assets and Liabilities—Net (0.1%)		(3,191)
Net Assets (100%)		
Applicable to 144,326,971 outstanding \$0.01 par value shares of beneficial interest (unlimited authorization)		
		4,588,238
Net Asset Value Per Share		\$31.79

Statement of Assets and Liabilities

Assets	
Investments in Securities, at Value	4,591,429
Receivables for Investment Securities Sold	26,878
Receivables for Capital Shares Issued	1,289
Other Assets—Note C	11,704
Total Assets	4,631,300
Liabilities	
Security Lending Collateral Payable to Brokers—Note F	21,357
Payables for Investment Securities Purchased	10,028
Payables for Capital Shares Redeemed	5,156
Other Liabilities	6,521
Total Liabilities	43,062
Net Assets	4,588,238

At July 31, 2008, net assets consisted of:⁴

	Amount (\$000)	Per Share
Paid-in Capital	2,983,814	\$20.67
Undistributed Net Investment Income	8,573	.06
Accumulated Net Realized Gains	177,050	1.23
Unrealized Appreciation Investment Securities	1,418,667	9.83
Foreign Currencies	134	—
Net Assets	4,588,238	\$31.79

• See Note A in *Notes to Financial Statements*.

* Non-income-producing security.

[^] Part of security position is on loan to broker-dealers. See Note F in *Notes to Financial Statements*.

¹ Considered an affiliated company of the fund as the fund owns more than 5% of the outstanding voting securities of such company. See Note H in *Notes to Financial Statements*.

² Security exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be sold in transactions exempt from registration, normally to qualified institutional buyers. At July 31, 2008, the value of this security represented 0.3% of net assets.

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

ADR—American Depository Receipt.

Statement of Operations

Six Months Ended
July 31, 2008

(\$'000)

Investment Income	
Income	
Dividends ^{1,2}	52,342
Interest ²	632
Security Lending	2,010
Total Income	54,984
Expenses	
Investment Advisory Fees—Note B	
Basic Fee	3,089
Performance Adjustment	822
The Vanguard Group—Note C	
Management and Administrative	3,607
Marketing and Distribution	412
Custodian Fees	332
Shareholders' Reports	27
Trustees' Fees and Expenses	4
Total Expenses	8,293
Net Investment Income	46,691
Realized Net Gain (Loss)	
Investment Securities Sold ²	205,011
Foreign Currencies	(179)
Realized Net Gain (Loss)	204,832
Change in Unrealized Appreciation (Depreciation)	
Investment Securities	(338,753)
Foreign Currencies	54
Change in Unrealized Appreciation (Depreciation)	(338,699)
Net Increase (Decrease) in Net Assets Resulting from Operations	(87,176)

1 Dividends are net of foreign withholding taxes of \$3,966,000.

2 Dividend income, interest income, and realized net gain (loss) from affiliated companies of the fund were \$11,959,000, \$604,000, and \$23,433,000, respectively.

Statement of Changes in Net Assets

	Six Months Ended July 31, 2008	Year Ended January 31, 2008
	(\$000)	(\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	46,691	110,391
Realized Net Gain (Loss)	204,832	573,391
Change in Unrealized Appreciation (Depreciation)	(338,699)	449,410
Net Increase (Decrease) in Net Assets Resulting from Operations	(87,176)	1,133,192
Distributions		
Net Investment Income	(30,914)	(83,075)
Realized Capital Gain ¹	(144,453)	(466,982)
Total Distributions	(175,367)	(550,057)
Capital Share Transactions—Note G		
Issued	505,836	783,925
Issued in Lieu of Cash Distributions	161,913	507,139
Redeemed ²	(451,896)	(682,805)
Net Increase (Decrease) from Capital Share Transactions	215,853	608,259
Total Increase (Decrease)	(46,690)	1,191,394
Net Assets		
Beginning of Period	4,634,928	3,443,534
End of Period ³	4,588,238	4,634,928

¹ Includes fiscal 2009 and 2008 short-term gain distributions totaling \$2,529,000 and \$41,392,000, respectively. Short-term gain distributions are treated as ordinary income dividends for tax purposes.

² Net of redemption fees of \$693,000 and \$739,000.

³ *Net Assets—End of Period* includes undistributed (overdistributed) net investment income of \$8,573,000 and (\$7,025,000).

Financial Highlights

For a Share Outstanding Throughout Each Period	Six Months Ended July 31, 2008	Year Ended January 31,				
	2008	2007	2006	2005	2004	
Net Asset Value, Beginning of Period	\$33.45	\$28.64	\$27.08	\$16.46	\$15.29	\$11.25
Investment Operations						
Net Investment Income	.330	.900 ¹	.560	.337 ²	.185 ²	.194
Net Realized and Unrealized Gain (Loss) on Investments ³	(.742)	8.362	4.027	11.080	1.988	4.780
Total from Investment Operations	(.412)	9.262	4.587	11.417	2.173	4.974
Distributions						
Dividends from Net Investment Income	(.220)	(.670)	(.490)	(.240)	(.144)	(.934)
Distributions from Realized Capital Gains	(1.028)	(3.782)	(2.537)	(.557)	(.859)	—
Total Distributions	(1.248)	(4.452)	(3.027)	(.797)	(1.003)	(.934)
Net Asset Value, End of Period	\$31.79	\$33.45	\$28.64	\$27.08	\$16.46	\$15.29
Total Return⁴	-1.57%	33.97%	17.48%	70.19%	14.20%	44.07%
Ratios/Supplemental Data						
Net Assets, End of Period (Millions)	\$4,588	\$4,635	\$3,444	\$3,297	\$921	\$608
Ratio of Total Expenses to Average Net Assets	0.32% ^{5,*}	0.28% ⁵	0.35% ⁵	0.40%	0.48%	0.55%
Ratio of Net Investment Income to Average Net Assets	1.79%*	2.70% ¹	1.88%	1.68%	1.32%	1.61%
Portfolio Turnover Rate	15%*	29%	24%	20%	36%	15%

1 Net investment income per share and the ratio of net investment income to average net assets include \$0.190 and 0.65% respectively, resulting from a special dividend from Centennial Coal Co., Ltd., in January 2008.

2 Calculated based on average shares outstanding.

3 Includes increases from redemption fees of \$.00, \$.00, \$.03, \$.01, \$.01, and \$.00.

4 Total returns do not reflect the 1% fee assessed on redemptions of shares held for less than one year, nor do they reflect the account service fee that may be applicable to certain accounts with balances below \$10,000.

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

* Annualized.

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

Notes to Financial Statements

Vanguard Precious Metals and Mining Fund is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. The fund files reports with the SEC under the company name Vanguard Specialized Funds. The fund invests in securities of foreign issuers, which may subject it to investment risks not normally associated with investing in securities of United States corporations.

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.

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 at their fair values calculated according to procedures adopted by the board of trustees. These procedures include obtaining quotations from an independent pricing service, monitoring news to identify significant market- or security-specific events, and evaluating changes in the values of foreign market proxies (for example, ADRs, futures contracts, or exchange-traded funds), between the time the foreign markets close and the fund's pricing time. When fair-value pricing is employed, the prices of securities used by a fund to calculate its net asset value may differ from quoted or published prices for the same securities. Precious metals are valued at the mean of the latest quoted bid and asked prices. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. **Foreign Currency:** Securities and other assets and liabilities denominated in foreign currencies are translated into U.S. dollars using exchange rates obtained from an independent third party as of the fund's pricing time on the valuation date. Realized gains (losses) and unrealized appreciation (depreciation) on investment securities include the effects of changes in exchange rates since the securities were purchased, combined with the effects of changes in security prices. Fluctuations in the value of other assets and liabilities resulting from changes in exchange rates are recorded as unrealized foreign currency gains (losses) until the assets or liabilities are settled in cash, at which time they are recorded as realized foreign currency gains (losses).

3. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute all of its taxable income. Management has analyzed the fund's tax positions taken on federal income tax returns for all open tax years (tax years ended January 31, 2005–2008) and for the period ended July 31, 2008, and has concluded that no provision for federal income tax is required in the fund's financial statements.

4. **Distributions:** Distributions to shareholders are recorded on the ex-dividend date.

5. **Security Lending:** The fund may lend its securities to qualified institutional borrowers to earn additional income. Security loans are required to be secured at all times by collateral at least equal to the market value of securities loaned. The fund invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability for the return of the collateral, during the period the securities are on loan. Security lending income represents the income earned on investing cash collateral, less expenses associated with the loan.

6. Other: Dividend income is recorded on the ex-dividend date. 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. Fees assessed on redemptions of capital shares are credited to paid-in capital.

B. M&G Investment Management Ltd. 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 the fund's performance since January 31, 2006, relative to the S&P/Citigroup Custom Precious Metals and Mining Index. For the six months ended July 31, 2008, the investment advisory fee represented an effective annual basic rate of 0.12% of the fund's average net assets before an increase of \$822,000 (0.03%) 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 July 31, 2008, the fund had contributed capital of \$486,000 to Vanguard (included in Other Assets), representing 0.01% of the fund's net assets and 0.49% of Vanguard's capitalization. The fund's trustees and officers are also directors and officers of Vanguard.

D. 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.

During the six months ended July 31, 2008, the fund realized net foreign currency losses of \$179,000, which permanently decreased distributable net income for tax purposes; accordingly, such losses have been reclassified from accumulated net realized gains to undistributed net investment income.

Certain of the fund's investments are in securities considered to be "passive foreign investment companies," for which any unrealized appreciation and/or realized gains are required to be included in distributable net income for tax purposes. Unrealized appreciation through January 31, 2008, on passive foreign investment company holdings at July 31, 2008, was \$29,874,000 all of which has been distributed and is reflected in the balance of undistributed net investment income.

During 2001, the fund elected to use a provision of the Taxpayer Relief Act of 1997 to mark to market certain appreciated securities held on January 1, 2001; such securities were treated as sold and repurchased, with unrealized gains of \$46,006,000 becoming realized, for tax purposes. The mark-to-market created a difference between the cost of investments for financial statement and tax purposes, which will reverse when the securities are sold. Through July 31, 2008, the fund realized gains on the sale of these securities of \$18,280,000 for financial statement purposes, which were included in prior year mark-to-market gains for tax purposes. The remaining difference of \$27,726,000 is reflected in the balance of accumulated net realized gains; the corresponding difference between the securities' cost for financial statement and tax purposes is reflected in unrealized appreciation.

At July 31, 2008, the cost of investment securities for tax purposes was \$3,230,362,000. Net unrealized appreciation of investment securities for tax purposes was \$1,361,067,000, consisting of unrealized gains of \$1,671,063,000 on securities that had risen in value since their purchase and \$309,996,000 in unrealized losses on securities that had fallen in value since their purchase or since being marked to market for tax purposes.

E. During the six months ended July 31, 2008, the fund purchased \$506,084,000 of investment securities and sold \$377,138,000 of investment securities other than temporary cash investments.

F. The market value of securities on loan to broker-dealers at July 31, 2008, was \$18,664,000, for which the fund received cash collateral of \$21,357,000.

G. Capital shares issued and redeemed were:

	Six Months Ended July 31, 2008	Year Ended January 31, 2008
	Shares (000)	Shares (000)
Issued	13,789	22,924
Issued in Lieu of Cash Distributions	4,635	16,414
Redeemed	(12,656)	(21,016)
Net Increase (Decrease) in Shares Outstanding	5,768	18,322

H. Certain of the fund's investments are in companies that are considered to be affiliated companies of the fund because the fund owns more than 5% of the outstanding voting securities of the company. Transactions during the period in securities of these companies were as follows:

	January 31, 2008 Market Value (\$000)	Current Period Transactions			July 31, 2008 Market Value (\$000)
		Purchases at Cost (\$000)	Proceeds from Securities Sold (\$000)	Dividend Income (\$000)	
AMCOL International Corp.	63,752	14,196	—	944	98,952
Centennial Coal Co., Ltd.	49,955	—	74,803	220	—
Centerra Gold Inc.	214,439	—	—	—	71,935
Claude Resources, Inc.	6,746	—	—	—	4,326
Franco-Nevada Corp.	NA ¹	100,260	—	702	156,087
Harry Winston Diamond Corp.	178,714	29,901	—	649	177,683
Iluka Resources Ltd.	70,228	29,126	—	—	128,337
Lonmin PLC	NA ¹	83,140	—	4,741	390,158
Minerals Technologies, Inc.	72,706	—	—	134	86,219
Peter Hambro Mining PLC	123,928	48,307	—	911	138,557
Sims Group Ltd.	182,990	—	—	3,658	NA ²
St. Barbara Ltd.	53,465	25,935	—	—	31,959
	1,016,923			11,959	1,284,213

1 At January 31, 2008, the issuer was not an affiliated company of the fund.

2 At July 31, 2008, the security is still held, but the issuer is no longer an affiliated company of the fund.

I. In September 2006, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 157 ("FAS 157"), "Fair Value Measurements." FAS 157 establishes a framework for measuring fair value and expands disclosures about fair value measurements in financial statements, effective for the fund's current fiscal period.

The various inputs that may be used to determine the value of the fund's investments are summarized in three broad levels. The inputs or methodologies used for valuing 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).

The following table summarizes the fund's investments as of July 31, 2008, based on the inputs used to value them:

Valuation Inputs	Investments in Securities (\$000)
Level 1—Quoted prices	1,726,789
Level 2—Other significant observable inputs	2,850,515
Level 3—Significant unobservable inputs	14,125
Total	4,591,429

The following table summarizes changes in investments valued based on Level 3 inputs during the six months ended July 31, 2008:

Amount Valued Based on Level 3 Inputs	Investments in Securities (\$000)
Balance as of January 31, 2008	—
Net Purchases (Sales)	17,728
Change in Unrealized Appreciation (Depreciation)	(3,603)
Balance as of July 31, 2008	14,125

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 table below 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.

Six Months Ended July 31, 2008

	Beginning Account Value 1/31/2008	Ending Account Value 7/31/2008	Expenses Paid During Period ¹
Precious Metals and Mining Fund			
Based on Actual Fund Return	\$1,000.00	\$984.33	\$1.58
Based on Hypothetical 5% Return	1,000.00	1,023.27	1.61

¹ These calculations are based on expenses incurred in the most recent six-month period. The fund's annualized six-month expense ratio for that period is 0.32%. 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.

Note that the expenses shown in the table on page 19 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 the 1% fee on redemptions of shares held for less than one year, nor do they include the account service fee described in the 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.

Trustees Approve Advisory Agreement

The board of trustees of Vanguard Precious Metals and Mining Fund has renewed the fund's investment advisory agreement with M&G Investment Management Limited. The board determined that the retention of M&G was in the best interests of the fund and its shareholders.

The board based its decision upon an evaluation of M&G's investment staff, portfolio management process, and performance. The trustees considered the factors discussed below, among others. However, no single factor determined whether the board approved the agreement. Rather, it was the totality of the circumstances that drove the board's decision.

Nature, extent, and quality of services

The board considered the quality of the fund's investment management over both the short and long term and took into account the organizational depth and stability of the advisor. The board noted that M&G, founded in 1931, specializes in managing equity and fixed income portfolios for both institutional and retail clients worldwide. The firm has advised the fund since the fund's inception in 1984. The advisor continues to employ a sound process, selecting companies that are broadly representative of the metals and mining industries and emphasizing large, stable, and diversified companies. The advisor's internal research team—comprising the portfolio manager, Graham E. French, and a team of global equity analysts—conducts intensive fundamental analysis of companies in the industry; their research includes regular company visits.

The board concluded that the advisor's experience, stability, depth, and performance, among other factors, warranted continuation of the advisory agreement.

Investment performance

The board considered the short- and long-term performance of the fund, including any periods of outperformance or underperformance of a relevant benchmark and peer group. The board concluded that the advisor has carried out the fund's investment strategy in disciplined fashion, and that performance results have allowed the fund to remain competitive versus its benchmark. The board noted that the fund is more broadly diversified than its competitors—with the ability to invest up to half of the fund's assets in non-precious metals and mining stocks—but continues to remain competitive versus the average gold-oriented peer fund. Information about the fund's most recent performance can be found in the *Performance Summary* section of this report.

Cost

The board concluded that the fund's expense ratio was far below the average expense ratio charged by peer-group funds. The board noted that the fund's advisory fee rate was also well below the peer-group average. Information about the fund's expense ratio appears in the *About Your Fund's Expenses* section of this report as well as in the *Financial Statements* section, which also includes information about the advisory fee rate.

The board did not consider profitability of M&G in determining whether to approve the advisory fee, because M&G is independent of Vanguard, and the advisory fee is the result of arm's-length negotiations.

The benefit of economies of scale

The board concluded that the fund's shareholders benefit from economies of scale because of breakpoints in the fund's advisory fee schedule. The breakpoints reduce the effective rate of the fee as the fund's assets increase.

The board will consider whether to renew the advisory agreement again after a one-year period.

Glossary

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 by 10%. For this report, beta is based on returns over the past 36 months for both the fund and the index. Note that 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.

Equity Exposure. A measure that reflects a fund's investments in stocks and stock futures. Any holdings in short-term reserves are excluded.

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 represented by stocks or depositary receipts of companies based outside the United States.

Inception Date. The date on which the assets of a fund (or one of its share classes) are first invested in accordance with the fund's investment objective. For funds with a subscription period, the inception date is the day after that period ends. Investment performance is measured from the inception date.

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. For this report, R-squared is based on returns over the past 36 months for both the fund and the index.

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). The turnover rate excludes in-kind transactions, which have minimal impact on costs.

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 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 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 Vanguard 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.

Chairman of the Board, Chief Executive Officer, and Trustee

John J. Brennan¹

Born 1954
Trustee Since May 1987;
Chairman of the Board and
Chief Executive Officer
156 Vanguard Funds Overseen

Principal Occupation(s) During the Past Five Years: Chairman of the Board, Chief Executive Officer, and Director/Trustee of The Vanguard Group, Inc., and of each of the investment companies served by The Vanguard Group; Director of Vanguard Marketing Corporation.

Independent Trustees

Charles D. Ellis

Born 1937
Trustee Since January 2001
156 Vanguard Funds Overseen

Principal Occupation(s) During the Past Five Years: Applecore Partners (pro bono ventures in education); Senior Advisor to Greenwich Associates (international business strategy consulting); Successor Trustee of Yale University; Overseer of the Stern School of Business at New York University; Trustee of the Whitehead Institute for Biomedical Research.

Emerson U. Fullwood

Born 1948
Trustee Since January 2008
156 Vanguard Funds Overseen

Principal Occupation(s) During the Past Five Years: Executive Chief Staff and Marketing Officer for North America since 2004 and Corporate Vice President of Xerox Corporation (photocopiers and printers); Director of SPX Corporation (multi-industry manufacturing), of the United Way of Rochester, and of the Boy Scouts of America.

Rajiv L. Gupta

Born 1945
Trustee Since December 2001²
156 Vanguard Funds Overseen

Principal Occupation(s) During the Past Five Years: Chairman, President, and Chief Executive Officer of Rohm and Haas Co. (chemicals); Board Member of the American Chemistry Council; Director of Tyco International, Ltd. (diversified manufacturing and services) since 2005.

Amy Gutmann

Born 1949
Trustee Since June 2006
156 Vanguard Funds Overseen

Principal Occupation(s) During the Past Five Years: President of the University of Pennsylvania since 2004; Professor in the School of Arts and Sciences, Annenberg School for Communication, and Graduate School of Education of the University of Pennsylvania since 2004; Provost (2001–2004) and Laurance S. Rockefeller Professor of Politics and the University Center for Human Values (1990–2004), Princeton University; Director of Carnegie Corporation of New York since 2005 and of Schuylkill River Development Corporation and Greater Philadelphia Chamber of Commerce since 2004; Trustee of the National Constitution Center since 2007.

JoAnn Heffernan Heisen

Born 1950 Trustee Since July 1998 156 Vanguard Funds Overseen	Principal Occupation(s) During the Past Five Years: Corporate Vice President and Chief Global Diversity Officer since 2006, Vice President and Chief Information Officer (1997–2005), and Member of the Executive Committee of Johnson & Johnson (pharmaceuticals/consumer products); Director of the University Medical Center at Princeton and Women's Research and Education Institute.
---------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

André F. Perold

Born 1952 Trustee Since December 2004 156 Vanguard Funds Overseen	Principal Occupation(s) During the Past Five Years: George Gund Professor of Finance and Banking, Harvard Business School; Senior Associate Dean and Director of Faculty Recruiting, Harvard Business School; Director and Chairman of UNX, Inc. (equities trading firm); Chair of the Investment Committee of HighVista Strategies LLC (private investment firm) since 2005.
-------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Alfred M. Rankin, Jr.

Born 1941 Trustee Since January 1993 156 Vanguard Funds Overseen	Principal Occupation(s) During the Past Five Years: 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).
------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

J. Lawrence Wilson

Born 1936 Trustee Since April 1985 156 Vanguard Funds Overseen	Principal Occupation(s) During the Past Five Years: Retired Chairman and Chief Executive Officer of Rohm and Haas Co. (chemicals); Director of Cummins Inc. (diesel engines) and AmerisourceBergen Corp. (pharmaceutical distribution); Trustee of Vanderbilt University and of Culver Educational Foundation.
----------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Executive Officers¹

Thomas J. Higgins

Born 1957 Treasurer Since July 1998 156 Vanguard Funds Overseen	Principal Occupation(s) During the Past Five Years: Principal of The Vanguard Group, Inc.; Treasurer of each of the investment companies served by The Vanguard Group.
-----------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------

F. William McNabb III

Born 1957 President Since March 2008 156 Vanguard Funds Overseen	Principal Occupation(s) During the Past Five Years: President of The Vanguard Group, Inc., and of each of the investment companies served by The Vanguard Group since 2008; Director of Vanguard Marketing Corporation; Managing Director of The Vanguard Group (1995–2008).
------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Heidi Stam

Born 1956 Secretary Since July 2005 156 Vanguard Funds Overseen	Principal Occupation(s) During the Past Five Years: Managing Director of The Vanguard Group, Inc., since 2006; General Counsel of The Vanguard Group since 2005; Secretary of The Vanguard Group, and of each of the investment companies served by The Vanguard Group, since 2005; Director and Senior Vice President of Vanguard Marketing Corporation since 2005; Principal of The Vanguard Group (1997–2006).
-----------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Vanguard Senior Management Team

R. Gregory Barton Mortimer J. Buckley	Kathleen C. Gubanich Paul A. Heller	Michael S. Miller Ralph K. Packard	Glenn W. Reed George U. Sauter
--------------------------------------------------------	------------------------------------------------------	-----------------------------------------------------	-------------------------------------------------

Founder

John C. Bogle

Chairman and Chief Executive Officer, 1974–1996

¹ Officers of the funds are "interested persons" as defined in the Investment Company Act of 1940.

² December 2002 for Vanguard Equity Income Fund, Vanguard Growth Equity Fund, the Vanguard Municipal Bond Funds, and the Vanguard State Tax-Exempt Funds.

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



Vanguard®

P.O. Box 2600
Valley Forge, PA 19482-2600

Connect with Vanguard® > www.vanguard.com

Fund Information > 800-662-7447

Direct Investor Account Services > 800-662-2739

Institutional Investor Services > 800-523-1036

Text Telephone for People

With Hearing Impairment > 800-952-3335

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.

Vanguard, Connect with Vanguard, and the ship logo are trademarks of The Vanguard Group, Inc.

All other marks are the exclusive property of their respective owners.

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

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 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 www.vanguard.com or www.sec.gov.

You can review and copy information about your fund at the SEC's Public Reference Room in Washington, D.C. To find out more about this public service, call the SEC at 202-551-8090. Information about your fund is also available on the SEC's website, and you can receive copies of this information, for a fee, by sending a request in either of two ways: via e-mail addressed to publicinfo@sec.gov or via regular mail addressed to the Public Reference Section, Securities and Exchange Commission, Washington, DC 20549-0102.

© 2008 The Vanguard Group, Inc.
All rights reserved.
Vanguard Marketing Corporation, Distributor.

Q532 092008