



## Quarterly commentary

Vanguard Global Minimum Volatility Fund/ETF

### Commentary – Factor performance and fund exposure

The market rebounded in the second quarter after steep falls during the first quarter. The overall market has seen significant volatility over the past year with divergence in factor performance.

Large-cap has dramatically outperformed small-cap over the past 12 months, notwithstanding a reversal over the June quarter. Momentum and quality continued strong run over the past year as the top performing factors for the quarter. Despite providing a positive absolute return, value underperformed the broader market over the past quarter and one year. Low volatility underperformed as investors moved from defensive equities into high beta equities.

Factor investing is inherently active and we use an actively implemented portfolio management process. Spikes in volatility (as shown in Figure 2) and market dislocations like the ones we saw recently highlight the benefits to our approach. Such sharp changes usually lead to changes in the make up of a factor which can result in factor drift. Our process allows us to use turnover and cash flows to adjust the portfolios and maintain overall exposure to the desired factor, rather than a process that is struck by an index on a set rebalancing schedule. Through this process we are able to ensure a more consistent exposure to targeted factors.

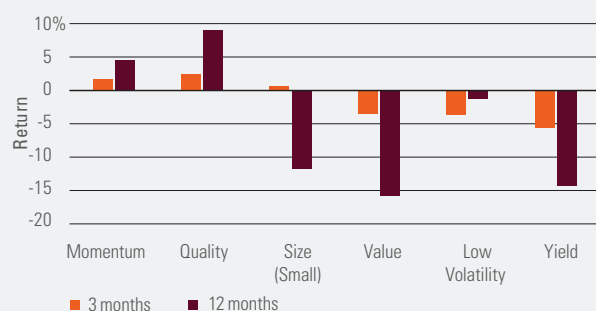
### Commentary – Fund/ETF performance

The fund/ETF has achieved its objective by realising lower volatility than the benchmark since its inception.

The fund/ETF underperformed the benchmark over the quarter and one year time periods. From a factor lens, the consistent underweight exposure to high volatility has caused underperformance over the past year, despite adding value during the first quarter when market volatility was elevated. The fund's bias towards small-cap contributed to return over the quarter, however, remains a drag on a one year basis.

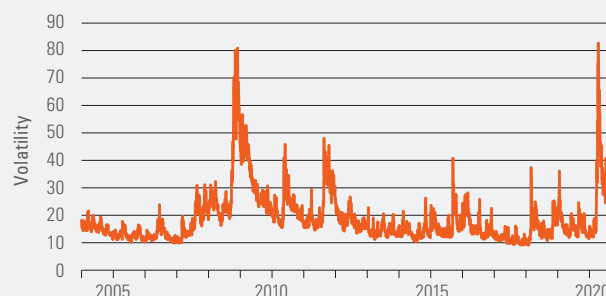
From a sector perspective, the fund's underweight to technology was the largest detractor from returns, followed by overweights to consumer services and utilities. Over one year, an underweight to oil & gas and materials added to performance while an underweight allocation to technology was the largest detractor.

### FTSE Developed Factor Indexes, return relative to the broad market



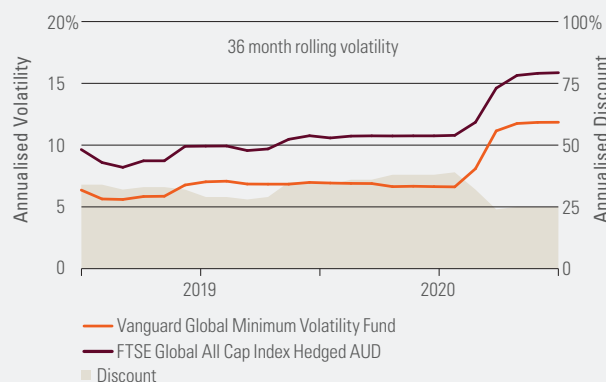
Source: Morningstar Direct, FTSE Global Factor Index Series. The FTSE Global Factor Index Series is a family of benchmarks designed to represent the performance of specific factor characteristics. FTSE's factor definitions may differ from those of the investment manager's. Past performance is not an indication of future performance.

### CBOE Volatility Index (VIX)



Source: Cboe Global Markets, Inc. (Cboe).

### Vanguard Global Minimum Volatility Fund has delivered lower volatility compared to the benchmark



Source: Vanguard. Performance of the Vanguard Global Minimum Volatility Fund/ETF may differ. Past performance is not an indication of future performance.



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# Vanguard Global Minimum Volatility Fund

Key fund facts	
Management fee	0.35% p.a.
Buy spread	0.15%
Sell spread	0.15%
Inception date	06 July 2015
Income distribution	Quarterly
Wholesale class size	\$15.1 million
Total fund size	\$27.4 million
Number of holdings	186

Trading information	
APIR code	VAN0068AU
Minimum investment	\$500,000

Benchmark information	
Benchmark (Bmk)	FTSE Global All Cap Index (AUD hedged) <sup>D</sup>
Number of holdings	8,873

## Investment objective

Vanguard Global Minimum Volatility Fund seeks to provide long-term capital appreciation with volatility lower than the FTSE Global All Cap Index (AUD Hedged), before taking into account fees, expenses and tax.

## Fund overview

The Fund invests primarily in global equities securities, including Australian equity securities, with the objective of providing lower volatility relative to the global equity market. To reduce volatility, Vanguard constructs a portfolio considering the risk and diversification characteristics of securities in the benchmark and seeks to hedge most of the currency exposure resulting from the Fund's foreign equity holdings back to Australian dollars.

## Performance return<sup>A, B</sup> (%)

	Fund gross	Bmk	Fund total	Distb'n	Growth
1 month	-0.56	2.70	-0.59	1.36	-1.95
3 months	9.82	17.89	9.73	1.50	8.23
6 months	-10.52	-7.74	-10.67	1.22	-11.89
1 year	-3.70	0.07	-4.04	2.10	-6.14
3 years (p.a.)	4.72	5.27	4.36	1.76	2.60
5 years (p.a.)	N/A	N/A	N/A	N/A	N/A
10 years (p.a.)	N/A	N/A	N/A	N/A	N/A
Inception (p.a.)	7.09	6.62	6.68	2.47	4.21

## Year to year gross return<sup>A, B</sup> (%)

	Dec - Dec		June - June	
	Fund	Bmk	Fund	Bmk
YTD	-10.52	-7.74	-3.70	0.07
2020	N/A	N/A	-3.70	0.07
2019	23.01	25.24	8.90	4.61
2018	-2.56	-8.59	9.52	11.45
2017	16.70	20.54	12.64	20.53

## Income distribution<sup>C</sup>

Quarter ended	Amount (CPU)	Reinvestment price
30 June 2020	1.7007	\$1.2284

## Notes

- <sup>A</sup> Past performance is not an indication of future performance.
- <sup>B</sup> Returns assume reinvestment of all distributions. Returns for periods longer than 1 year are annualised. Fund gross returns are before management fees and taxes, but after transaction and operational costs. Fund total return is the fund gross return less management fees. Index returns do not allow for taxes, management, transaction and operational costs.
- <sup>C</sup> Past distributions are not an indication of future distributions.
- <sup>D</sup> The Vanguard Global Minimum Volatility Fund is actively managed and does not intend to track or replicate the performance of the benchmark. Benchmark data is for reference only.

# Vanguard Global Minimum Volatility Fund

## Characteristics

	Fund	Bmk
Number of holdings	186	8,873
Median market cap	\$15.5B	\$74.2B
Price/Earnings ratio	20.7x	18.8x
Price/Book ratio	2.5x	2.1x
Return on equity ratio	15.0%	15.1%
Earnings growth rate	8.0%	12.2%
Equity yield (dividend)	2.3%	2.4%
Volatility	11.9%	15.9%

## Top 10 holdings

1. ZTO Express Cayman Inc.
2. Taiwan Semiconductor Manufacturing Co. Ltd.
3. SG Holdings Co. Ltd.
4. Dr Reddy's Laboratories Ltd.
5. Dollar General Corp.
6. Oracle Corp.
7. FP Corp.
8. Walmart Inc.
9. Quest Diagnostics Inc.
10. Alibaba Group Holding Ltd.

The top 10 holdings represent 15.4% of the total fund.

## Sector allocation (%)

	Fund	Bmk
Health Care	17.1	12.2
Industrials	16.5	12.9
Consumer Services	16.1	12.4
Technology	13.7	20.2
Financials	10.8	18.3
Consumer Goods	7.8	10.6
Telecommunications	7.5	2.5
Utilities	7.1	3.2
Basic Materials	3.1	4.1
Other	0.3	0.0

Sector categories are based on the Industry Classification Benchmark system ("ICB"), except for the "Other" category (if applicable), which includes securities that have not been provided an ICB classification as of the effective reporting period.

## Market allocation (%)

	Fund	Bmk		Fund	Bmk
United States	51.9	56.6	India	1.6	1.0
Japan	12.3	7.5	Italy	0.9	0.7
China	8.2	4.6	Denmark	0.9	0.6
Australia	3.5	2.0	Germany	0.7	2.5
Switzerland	3.2	2.7	Singapore	0.7	0.3
Canada	3.0	2.8	Finland	0.6	0.4
Taiwan	3.0	1.7	Belgium	0.4	0.3
Korea	2.7	1.5	Norway	0.4	0.2
United Kingdom	2.6	4.2	Israel	0.3	0.2
Hong Kong	2.1	1.0	Other	1.0	9.2

## Glossary

**Median market cap** is the midpoint of market capitalisation (market price multiplied by the number of shares outstanding) of the shares in the fund. Half the shares in the fund will have higher market capitalisation, half will have lower.

**Price/Earnings ratio (P/E ratio)** is a measure of the market value of a share compared to the earnings of the company. A share with a price of \$10, and earnings last year of \$1 a share, would have a P/E ratio of 10. For a fund, the ratio is the weighted average P/E ratio of the shares it holds. In general, a high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. Companies with negative earnings are excluded from the calculation.

**Price/Book ratio** is calculated by dividing the current market price of the share by the book value per share of the company.

**Return on equity ratio** is a measure of how much profit a company generates relative to its shareholders' equity. For a fund, the ratio is the weighted average return on equity ratio of the shares it holds.

**Earnings growth rate** is a measure of the trailing Earnings Per Share growth for a given company and share. For a fund, the rate is the weighted average earnings growth of the shares it holds.

**Equity yield (dividend)** is the dividend income earned by shares, expressed as a percentage of the market price of those shares. For a fund, the yield is the weighted average equity yield of the shares it holds.

### Volatility

3 year standard deviation of monthly returns.

## For more information:

Our telephone service is available from 8am to 6pm, Monday-Friday AEST.

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