

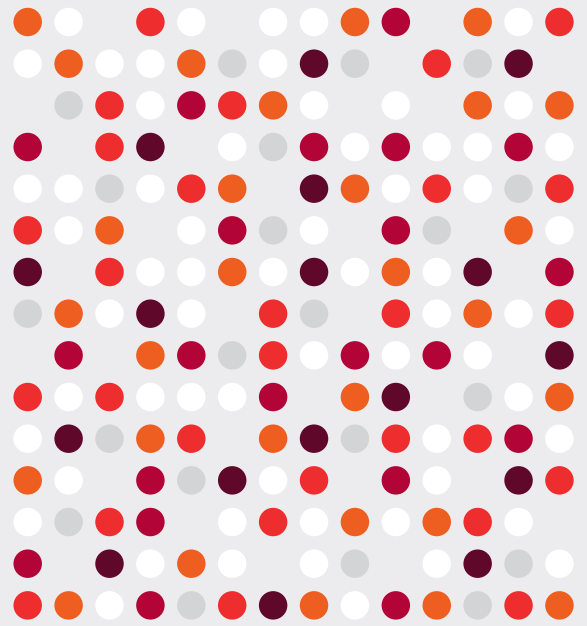
Vanguard®

Vanguard ETF quarterly report

March quarter 2019

In this edition:

- ETFs deliver strong returns, more than reversing Q4 18 losses
- ETF Industry AUM grows \$5 billion in first quarter of 2019
- Fixed interest ETFs receive a third of industry cash flows



Quarterly economic and market review

When do we know for certain that we are on a path towards recession and that what we are experiencing is not simply a reversion to trend? This question captured the minds and emotions of investors through the first quarter of 2019.

While some of the economic data released over the March quarter signalled weakness in the global economy, the deterioration in growth indicators was not unexpected. In spite of this, share markets in Australia and overseas returned over 10% for the first quarter, and are within range of all-time highs yet again.

It was hard for even the most steadfast of investors to ignore the debate around the economic cycle once the US Treasury yield curve briefly inverted in the final weeks of March. When short-term interest rates are higher than long-term rates, investors become pessimistic about what could happen in the next year but optimistic when looking five to ten years into the future.

The US Federal Reserve revised its interest rate outlook to suggest that rates would be on hold for the rest of the year, where they had previously signalled two more hikes.

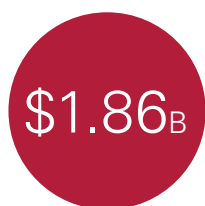
Locally, the Reserve Bank of Australia became more tentative in its official policy communications.

Inevitably, with each new development in the cycle, we are asked by investors what they can do to prepare. Talking to their financial adviser, revisiting their asset allocation and further diversifying their portfolio can be a good place to start. Attempting to time markets can backfire and lead to long-term underperformance. By remaining calm and taking a long-term approach, investors limit the effects of any market turbulence, helping them stay on target towards their goals.

Share markets in Australia and overseas returned over 10% for the first quarter, and are within range of all-time highs yet again.

Australian ETF update

The Australian ETF market attracted \$1.86 billion in the first quarter of 2019, making it the best start to a year so far (ahead of \$1.5 in Q1 2018 and \$1.3 billion in Q1 2017). After proving their defensive characteristics during the final quarter of 2018, domestic fixed interest ETFs were very popular this quarter receiving a 33% of total cash flows. This was only just behind the 35% that went to international equity ETFs during the quarter.



ETF new cash flows
for the quarter

Following a challenging final quarter of 2018, where most equity ETFs fell on average around -8 percent, investors who stayed the course and didn't sell were rewarded this quarter with returns on average around 11% this quarter. In fact, all of Vanguard's ETFs delivered investors positive returns this quarter.

The numerous headlines about the decline in house prices in Melbourne and Sydney, did not harm sentiment towards the broader property sector. Vanguard's Australian Property ETF (VAP) was the best performer last quarter returning over 14 percent.

Global infrastructure (+13.5%) and US equities (+13%) also delivered strong returns, in fact, twelve of Vanguard's 17 equity ETFs delivered returns in excess of +10%.

The strong tailwinds provided by market returns helped industry AUM grow \$5 billion over the quarter from \$40.4 billion at the end of December to \$45.8 billion. At an issuer level Vanguard received \$624 million during the first quarter which was a third of total cash flows for the quarter. For the first time VAF (Australian Fixed Interest) received the most cash flows in a quarter with \$86 million, followed by VGS (International equities, \$78 million) and VAS (Australian equities, \$67 million). The even spread of cash flows across products in all asset classes shows that investors are embracing ETFs as a tool to diversify their portfolios.

During the quarter Vanguard lowered the expense ratio on VEU (Vanguard All World ex-US Index ETF) from 0.11% to 0.09%. Investors can now get lower cost access to the same diversified portfolio of ~2800 of the world's largest companies listed in major developed and emerging markets outside the US.

Industry cash flow by asset class

| Asset class | Quarter | |
|-------------------------|--------------|-------|
| | (\$m) | % |
| Australian Equity | 330 | 17.7% |
| Global Equity | 647 | 34.7% |
| Infrastructure | 73 | 3.9% |
| Australian Fixed Income | 610 | 32.7% |
| Global Fixed Income | 70 | 3.8% |
| Australian Property | 76 | 4.1% |
| Global Property | 10 | 0.5% |
| Commodity | -1 | 0.0% |
| Currency | -14 | -0.8% |
| Mixed | 63 | 3.4% |
| TOTAL | 1,864 | |

Source: ASX Monthly Report and Vanguard.

YTD cash flow and AUM by issuer

| Issuer | Cash flow \$m | Cash flow % | AUM \$m |
|-----------------------|------------------|----------------|-----------------|
| Active X | 4.5 | 0.2% | 5.5 |
| AMP/BetaShares | -2.6 | -0.1% | 71.1 |
| Beta Shares | 403.7 | 21.7% | 6,180.8 |
| ETFS | 7.9 | 0.4% | 1,186.4 |
| Fidelity | 5.7 | 0.3% | 18.4 |
| InvestSMART | -0.1 | 0.0% | 38.7 |
| iShares | 409.3 | 22.0% | 12,087.7 |
| K2 | -1.1 | -0.1% | 31.0 |
| Legg Mason/BetaShares | 24.4 | 1.3% | 93.7 |
| Magellan | 90.2 | 4.8% | 1,689.7 |
| Montgomery | 2.2 | 0.1% | 96.4 |
| Perennial | -0.2 | 0.0% | 22.6 |
| Antipodes | 1.1 | 0.1% | 21.7 |
| Russell | 22.3 | 1.2% | 713.9 |
| Schroders | -3.4 | -0.2% | 53.7 |
| State Street | 11.8 | 0.6% | 5,936.9 |
| Switzer | 4.6 | 0.2% | 137.4 |
| The Perth Mint | 2.3 | 0.1% | 171.5 |
| Platinum | 23.6 | 1.3% | 497.2 |
| UBS | 5.3 | 0.3% | 283.9 |
| VanEck | 228.6 | 12.3% | 2,574.5 |
| Vanguard | 624.0 | 33% | 13,861.7 |
| Total | 1,863.9 | | 45,774.4 |

Source: ASX Monthly Report and Vanguard.

An introduction to equity factor-based investing

Factors are the DNA of investments. They are the underlying attributes that influence how an investment behaves.

By targeting these attributes, factor-based investments attempt to deliver an investment premium, such as market outperformance or reduced volatility.

Vanguard targets factors that are enduring and academically-proven to help investors meet a range of goals, while providing rewards that outweigh market risk once costs are taken into account.

Here are four common factors and the basis for their respective premiums:



Value

Relatively inexpensive stocks from undervalued companies historically have earned higher returns than expensive stocks.



Momentum

Stocks with strong recent performance historically have earned higher returns going forward than those with weak recent performance.



Quality

Well-established companies with strong earnings and strong balance sheet quality historically have outperformed companies with weak earnings.



Volatility

Stocks with low volatility historically have achieved higher risk-adjusted returns than those with higher volatility.

Factors can be combined to create a multi-factor investment strategy:



A combination of factors, within a single investment strategy, creates broad diversification and exposure to a range of stock attributes. This strategy may also smoothen volatility during different business cycles.

Multi-factor strategies offer diversification as factors don't perform the same way, at the same time. So, if you have one outperforming while another is underperforming, it can help to create a smoother return profile. This can be an attractive proposition for clients who may be more reactive to market cycles—although they will never avoid all the speed bumps.

Introducing the Vanguard Global Multi-Factor Active ETF (Managed Fund)

Launched on 10 April 2019, Vanguard's new global equity, multi-factor portfolio uses a disciplined, long-only approach designed to outperform the FTSE Developed All Cap Index.

With an MER of 0.33% p.a., the Vanguard Global Multi-Factor Active ETF (VGMF) offers your clients a low cost, diversified portfolio of 1000+ global equities via a rules-based, actively managed strategy.

The portfolio, which is also available as a managed fund, is constructed using a bottom-up process that filters out the most volatile shares from the investment universe, then screens the market for equities that display the attributes of the following factors: value, momentum and quality.

This strategy may be suitable for clients seeking:

- An efficient way to gain international equity exposure
- A low-cost substitute for a fundamental active strategy within their global equity sleeve
- To enhance the performance of an index portfolio yet maintain low overall costs
- Outperformance relative to broader market indexes
- To remove the task of selecting, rotating or rebalancing between single factors

For more information [visit our website](#), email adviserservices@vanguard.com.au or call 1300 655 205.

Vanguard product summary

| Asset Class | ASX Ticker | Last Price# | MER | Quarter Return | 1 Year Return | 3 Year Return (p.a.) | Quarterly Cash Flow (\$m) | FUM (\$m) |
|-------------------------------------|------------|-------------|-------|----------------|---------------|----------------------|---------------------------|-------------------|
| Australian Equity ETFs | | | | | | | | |
| Broad Market | VAS | \$79.20 | 0.14% | 10.87% | 11.58% | 11.25% | \$67.4 | \$3,458.4 |
| Property | VAP | \$89.48 | 0.23% | 14.28% | 25.67% | 10.12% | \$34.3 | \$1,279.3 |
| High Yield | VHY | \$58.12 | 0.25% | 11.02% | 9.61% | 9.12% | \$4.4 | \$1,120.7 |
| Large Companies | VLC | \$64.49 | 0.20% | 10.38% | 14.20% | 10.68% | \$0.1 | \$84.8 |
| Small Companies | VSO | \$56.49 | 0.30% | 12.71% | 6.67% | 11.69% | \$13.8 | \$237.3 |
| International Equity ETFs | | | | | | | | |
| Developed Markets | VGS | \$72.13 | 0.18% | 11.56% | 12.41% | 13.80% | \$78.4 | \$1,484.1 |
| Developed (AUD hedged) | VGAD | \$66.54 | 0.21% | 12.66% | 6.58% | 11.99% | \$50.3 | \$550.0 |
| All world Ex US | VEU | \$70.56 | 0.09% | 9.25% | 3.01% | 11.16% | \$21.4 | \$1,368.2 |
| Total US Market | VTS | \$203.22 | 0.04% | 13.02% | 17.62% | 16.58% | \$30.8 | \$1,515.3 |
| Developed Europe | VEQ | \$54.46 | 0.35% | 9.73% | 2.33% | 8.96% | \$6.1 | \$225.5 |
| Asia ex Japan | VAE | \$66.16 | 0.40% | 9.78% | 1.87% | 13.87% | \$18.9 | \$142.6 |
| Emerging Markets | VGE | \$66.75 | 0.48% | 10.63% | -0.41% | 12.04% | \$23.8 | \$278.6 |
| Global Infrastructure | VBLD | \$55.47 | 0.47% | 13.49% | n/a | n/a | \$3.3 | \$6.1 |
| International Small Companies | VISM | \$51.57 | 0.32% | 12.61% | n/a | n/a | \$4.1 | \$6.2 |
| ESG | VESG | \$49.27 | 0.18% | 10.92% | n/a | n/a | \$13.5 | \$17.2 |
| Minimum Volatility — Active | VMIN | \$54.28 | 0.28% | 9.86% | n/a | n/a | \$0.5 | \$10.0 |
| Global Value — Active | VVLU | \$48.15 | 0.28% | 9.64% | n/a | n/a | \$1.2 | \$13.5 |
| Fixed Income ETFs | | | | | | | | |
| Australian Composite | VAF | \$50.96 | 0.20% | 3.39% | 6.99% | 4.00% | \$85.7 | \$879.1 |
| Australian Government | VGB | \$51.66 | 0.20% | 3.66% | 7.47% | 3.96% | \$35.9 | \$208.9 |
| Australian Corporate | VACF | \$52.17 | 0.26% | 2.76% | 5.74% | n/a | \$24.3 | \$199.2 |
| International Treasury (AUD hedged) | VIF | \$49.06 | 0.20% | 2.38% | 4.39% | 2.72% | \$22.2 | \$263.1 |
| International Credit (AUD hedged) | VCF | \$48.36 | 0.30% | 3.80% | 4.61% | 3.79% | \$0.8 | \$87.0 |
| Global Aggregate (AUD hedged) | VBND | \$51.75 | 0.20% | 2.90% | 4.52% | n/a | \$13.0 | \$55.4 |
| ESG | VEFI | \$52.07 | 0.26% | 2.68% | n/a | n/a | \$0.5 | \$1.6 |
| Diversified ETFs | | | | | | | | |
| Conservative | VDGO | \$52.75 | 0.27% | 5.27% | 6.37% | n/a | \$8.4 | \$35.1 |
| Balanced | VDBA | \$53.19 | 0.27% | 7.13% | 7.64% | n/a | \$22.5 | \$91.8 |
| Growth | VDGR | \$53.14 | 0.27% | 8.81% | 8.56% | n/a | \$16.3 | \$97.2 |
| High Growth | VDHG | \$53.10 | 0.27% | 10.52% | 9.46% | n/a | \$22.2 | \$146.3 |
| TOTAL | | | | | | | \$624.1 | \$13,862.4 |

Returns assume that an investor purchased shares at Net Asset Value and does not reflect transaction costs imposed on the creation and redemption of ETF units, the brokerage or the bid ask spread that investors pay to buy and sell ETF securities on the Australian Securities Exchange. Total returns are after management costs.
Source: Vanguard and Bloomberg.

For more information

Personal investors can transact in Vanguard ETFs through their financial adviser or stockbroker. Our telephone service is available from 8am to 5pm, Monday-Friday AEST.

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