

Five Lessons for Investors from the COVID-19 Crisis

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Executive Summary

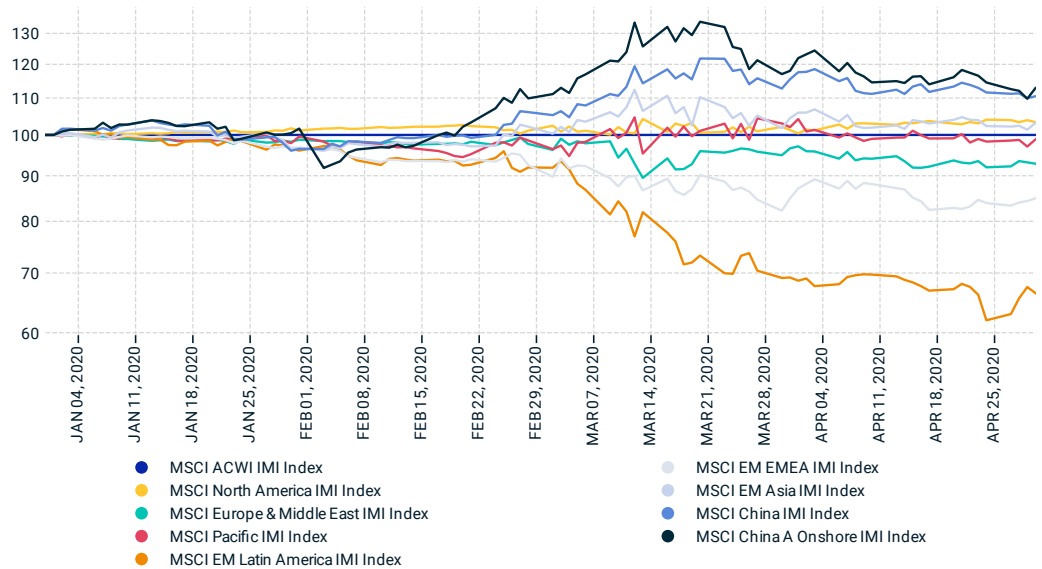
The coronavirus pandemic sparked a surge of volatility across global financial markets. What lessons could investors draw from the COVID-19 crisis? In this paper, we present and discuss empirical evidence supporting five key lessons for investors:

- Global investing provided diversification opportunities, as the crisis spread to different regions at different times and with varying intensity.
- Managing factors was more critical than picking stocks, as cross-sectional dispersion due to factors rose more sharply than stock-specific volatility.
- Markets have not been indiscriminate during the crisis; large performance variation across factors provided opportunities for active management.
- Companies with strong environmental, social and governance (ESG) characteristics suffered lower declines in relative terms during the crisis.
- Index-based strategies played a critical role in facilitating price discovery and providing tools that enabled investors to make asset allocation changes.

Global Investing Provided Diversification Opportunities

The coronavirus pandemic started in Asia and gradually spread throughout the world. Even though the crisis started in Asia, the best-performing equity markets in the first quarter were Asian,¹ as the region was also the first to start recovering from the economic slowdown.

Exhibit 1: Selected Regional MSCI IMI Indexes Relative to the MSCI ACWI IMI Index

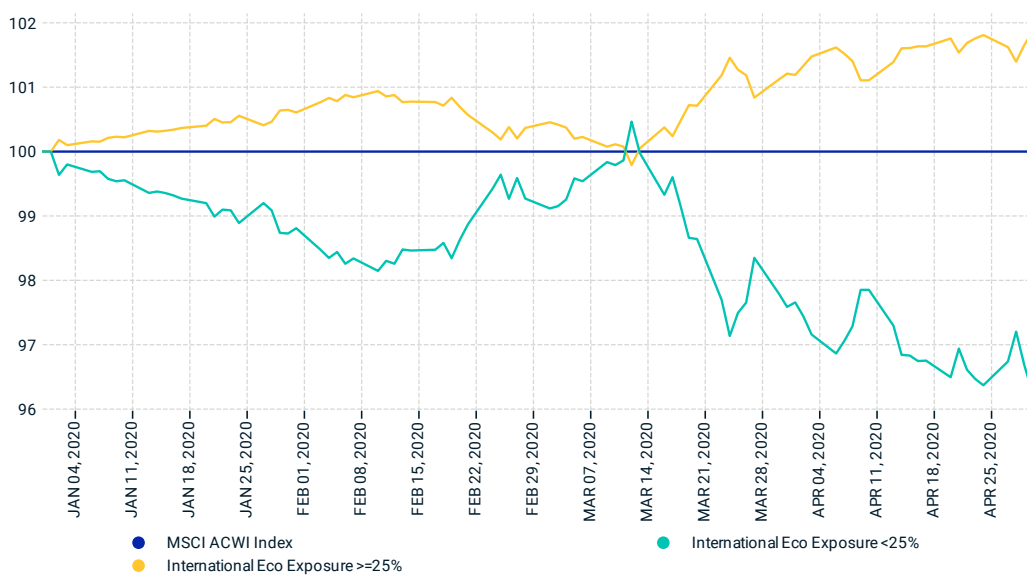


Data as of April 30, 2020.

¹ Our focus in this paper is to examine markets and strategies during the COVID-19 crisis. As a result, a number of charts focus on performance during a relatively short time period. For performance over longer periods see <https://www.msci.com/global-markets-overview>

In general, companies with assets and revenues across multiple geographies have enjoyed superior performance historically over longer time periods and have also been more resilient during the current crisis. Companies with international revenues in excess of 25% outperformed those with international revenues below this threshold in the first quarter of 2020, as the pandemic spread.

Exhibit 2: Internationally and Domestically-Oriented Companies, Relative to MSCI ACWI

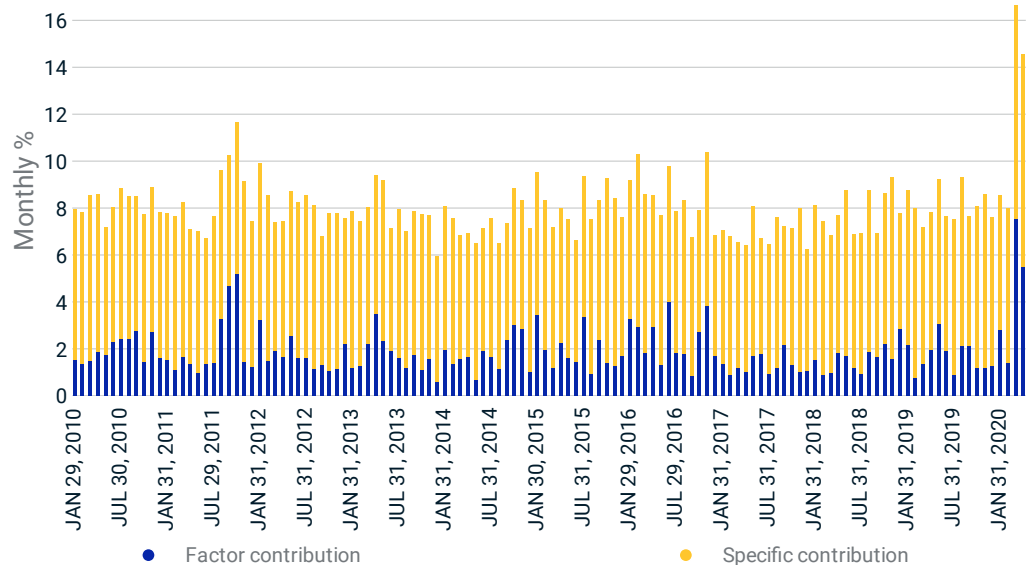


Data as of April 30, 2020.

Managing Factors was More Critical than Picking Stocks

Market volatility, a measure of return dispersion across time, increased dramatically in early March as the epidemic turned into a pandemic. Forecast volatility, based on the MSCI Global Trading Model, reached levels in excess of those seen during the global financial crisis of 2008.² Cross-sectional volatility (CSV), a measure of return dispersion across assets, also rose substantially. In fact, both factor and specific CSV soared. The sharp increase in cross-sectional volatility shows that, far from indiscriminate selling, markets adjusted prices according to each asset’s factor and specific risk.

Exhibit 3: Cross-sectional Dispersion of MSCI World IMI Stocks, Attributed to Factor and Specific Sources

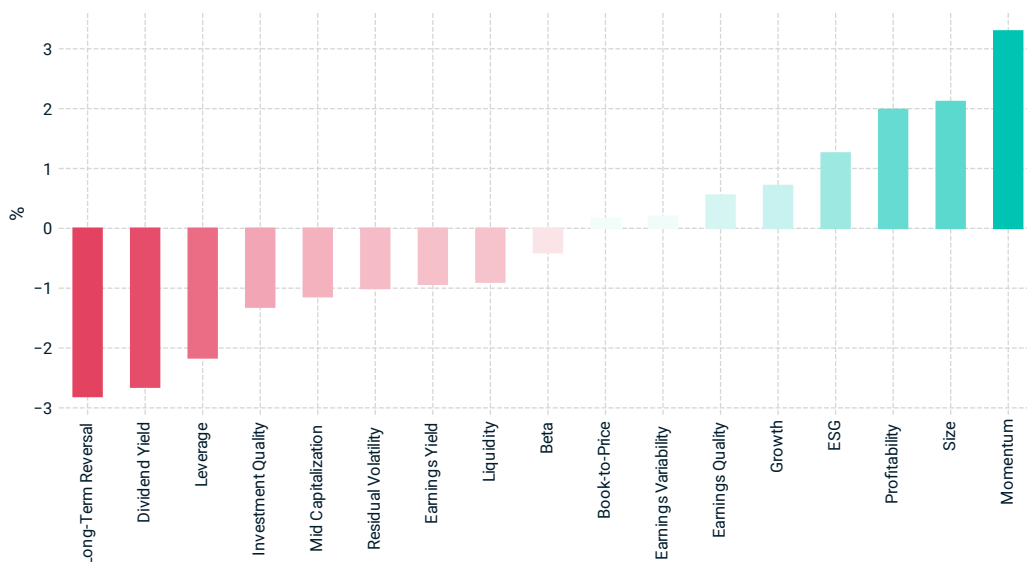


Data as of Jan. 29, 2010 to April 30, 2020, monthly data.

² “Coronavirus and oil hit equities – how low can we go?” MSCI Research Blog, March 12, 2020.

This environment was the perfect hunting ground for active managers as it provided opportunities for generating alpha from active security selection and from managing factor exposures.³ For example, factors such as momentum, size, profitability and ESG offered high positive excess returns while other factors such as yield, leverage and long-term reversal suffered sharp declines during the crisis.

Exhibit 4: MSCI Global Equity Model (GEM+ESG) Year-to-date Factor Returns



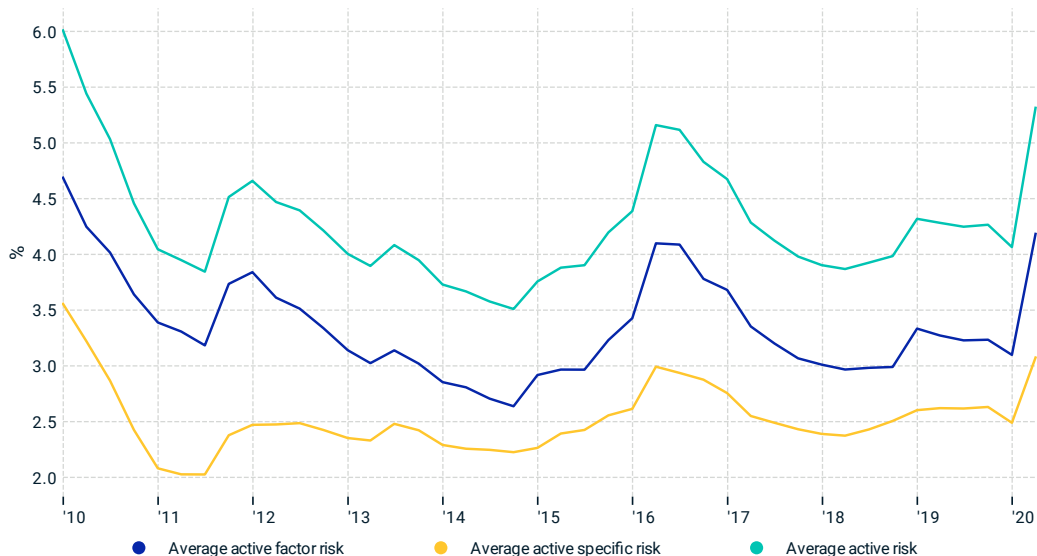
As of April 30, 2020.

We analyzed the risk and performance of a sample of actively managed global equity mutual funds.⁴ Consistent with our CSV findings, we observed that active risk (tracking error) across our sample rose substantially in Q1 2020, with factor risk rising more sharply than specific risk.

³ To learn how factor views can be efficiently integrated into actively managed portfolios, please see Melas et al., 2019. "Integrating Factors in Market Indexes and Active Portfolios." *Journal of Portfolio Management*.

⁴ We started with all global funds available in the Lipper database and selected all the funds that had at least 75% invested in equity; we filtered out any funds with AUM < \$1m or AUM > \$500B. Then we excluded 5% of funds with the largest and smallest tracking error and excluded funds with reference to index tracking in their name. As a result, we ended up with approximately 1,600 actively managed global, international and emerging market equity funds.

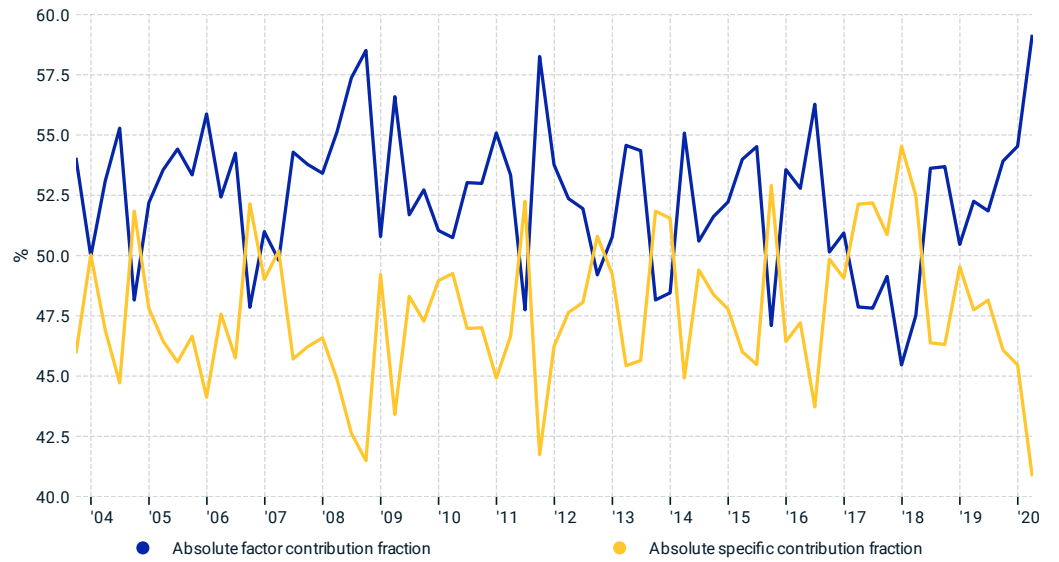
Exhibit 5: Active Risk of Actively Managed Global Equity Funds, Attributed to Factor and Specific Sources



Data from Dec. 31, 2009 to March 31, 2020, quarterly data.

We also analyzed the performance of these mutual funds relative to their benchmarks and attributed their active return to factor and specific sources. While historically factors and stocks contributed equally to performance on average, we found that active fund returns attributed to factors increased considerably in the first quarter of 2020. Common factors were the main drivers of both risk and performance for our sample of actively managed funds. Consequently, managing factor exposures became more important than picking the right stocks during the crisis.

Exhibit 6: Factor and Specific Contribution to Active Return of Actively Managed Global Equity Funds

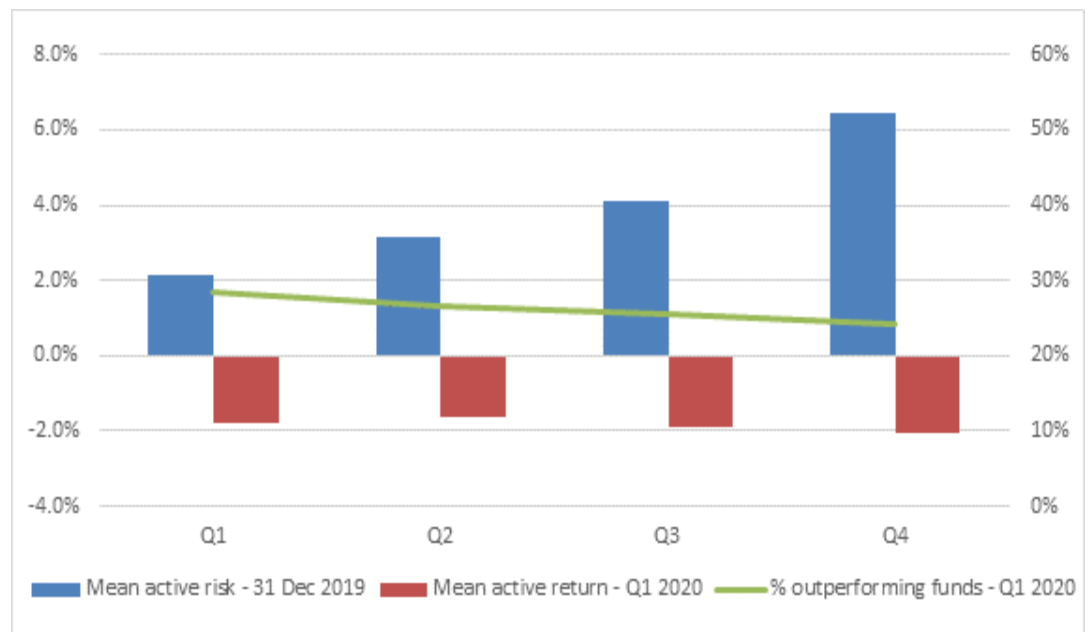


Data from Dec. 31, 2009 to March 31, 2020, quarterly data.

Rising Volatility Offered Active Investing Opportunities

Did our sample of active mutual funds capitalize on the return enhancement opportunities offered by spikes in time series and cross-sectional volatility? They did not.⁵ Only 26% of the funds in our sample outperformed their benchmarks in the first quarter of 2020, compared to 40% over the previous 10 years. We also found no evidence that high-conviction strategies, proxied by active risk, fared better.

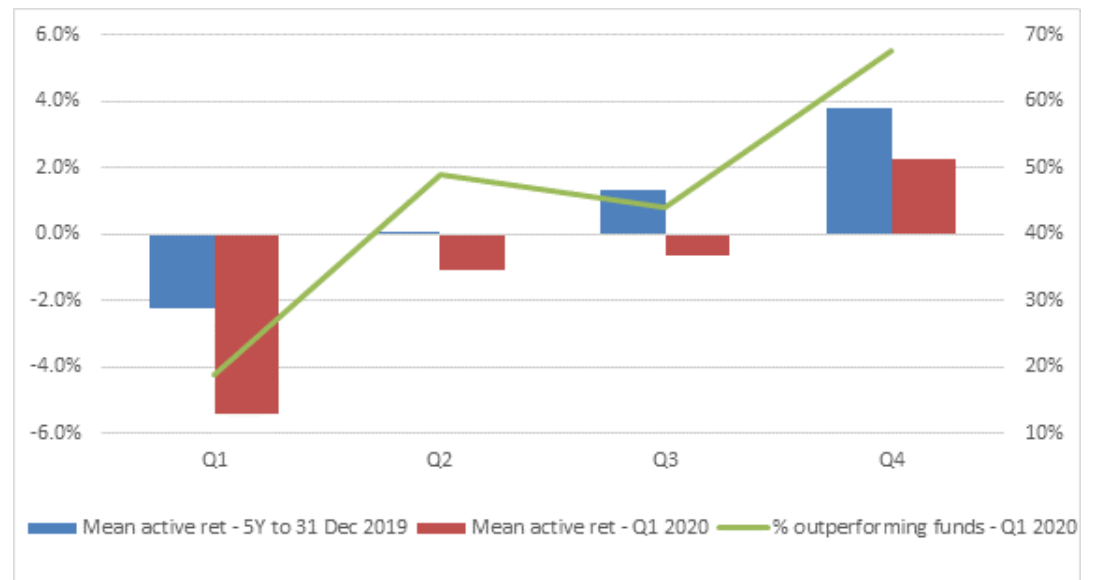
Exhibit 7: Q1 2020 Performance of Active Global Equity Funds, Ranked by Previous 5-year Active Risk



⁵ Johnson, S. "Stockpickers failed to take 'big chance' in market rout." *Financial Times*, April 21, 2020

On a more positive note, we found some evidence of persistence in performance: 67% of top quartile funds – based on their previous 5-year active return – outperformed their benchmarks in Q1 2020. Funds that had been successful in the five years to Dec. 31, 2019, were also more successful in navigating the volatile market environment of the COVID-19 crisis and capitalizing on the opportunities offered by it.

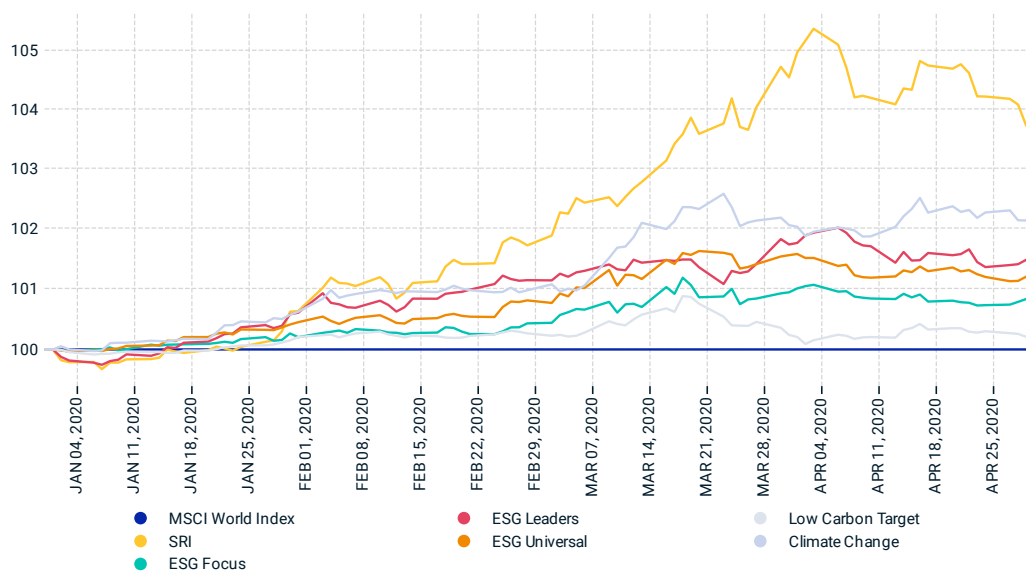
Exhibit 8: Q1 2020 Performance of Active Global Equity Funds, Ranked by Previous 5-year Active Return



Sustainable Investing Helped Mitigate Declines

We examined the performance of four MSCI indexes with explicit ESG objectives (SRI, Leaders, Focus, Universal) and two MSCI indexes with explicit climate objectives (Low Carbon Target, Climate Change). All six indexes outperformed the market (proxied by the MSCI World Index) during Q1 2020. Was this outperformance a consequence of the ESG and climate objectives of these indexes or was it a proxy for other defensive factor exposures?

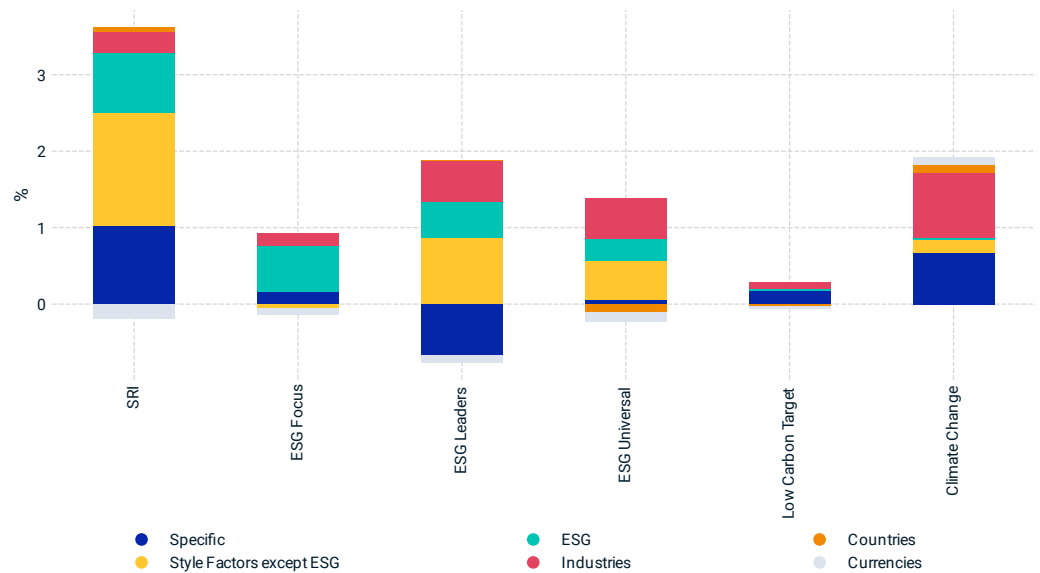
Exhibit 9: Relative Performance of Selected MSCI Indexes with ESG and Climate Objectives



Data as of April 30, 2020

Performance attribution for the first four months of 2020 using the MSCI Global Equity Model that includes an ESG factor showed that a substantial part of active return for the indexes that incorporate an explicit ESG objective was attributed to ESG (after accounting for all other country, sector and factor effects). The two indexes that had climate-related objectives also outperformed in the first four months of 2020, with part of the outperformance coming from their underweight in energy stocks.

Exhibit 10: Active Return Attribution of Selected MSCI Indexes with ESG and Climate Objectives

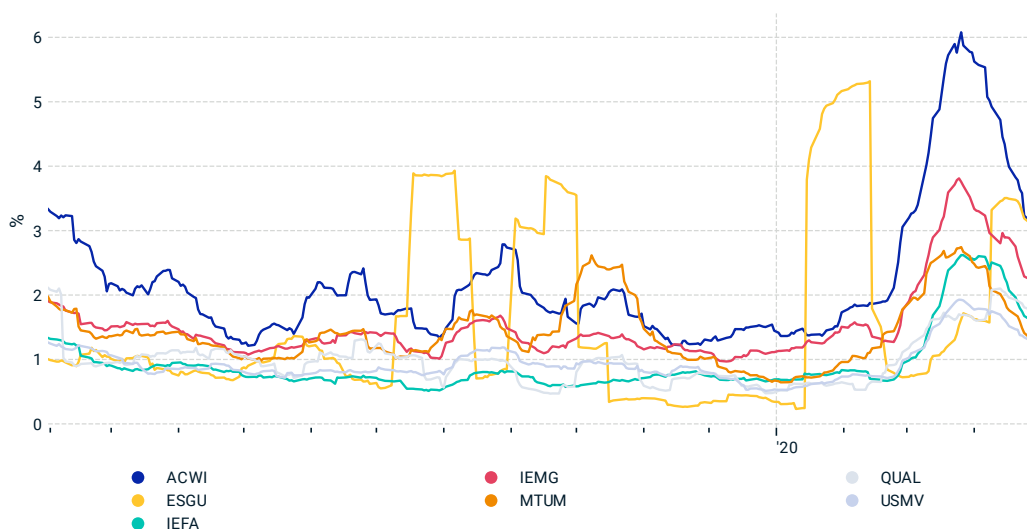


Data as of April 30, 2020.

Indexed Investing Enhanced Market Efficiency

Strategies that aim to replicate indexes (“index-based strategies”) in general remained resilient during the crisis and have continued to provide liquidity and flexibility to investors to implement their active asset allocation decisions.⁶ While many exchange-traded funds (ETFs) experienced substantial fund flows and elevated trading volume, they continued to track their underlying indexes closely, despite the significant increase in market volatility.

Exhibit 11: Rolling 21-day Average Volume as a Percentage of Shares Outstanding

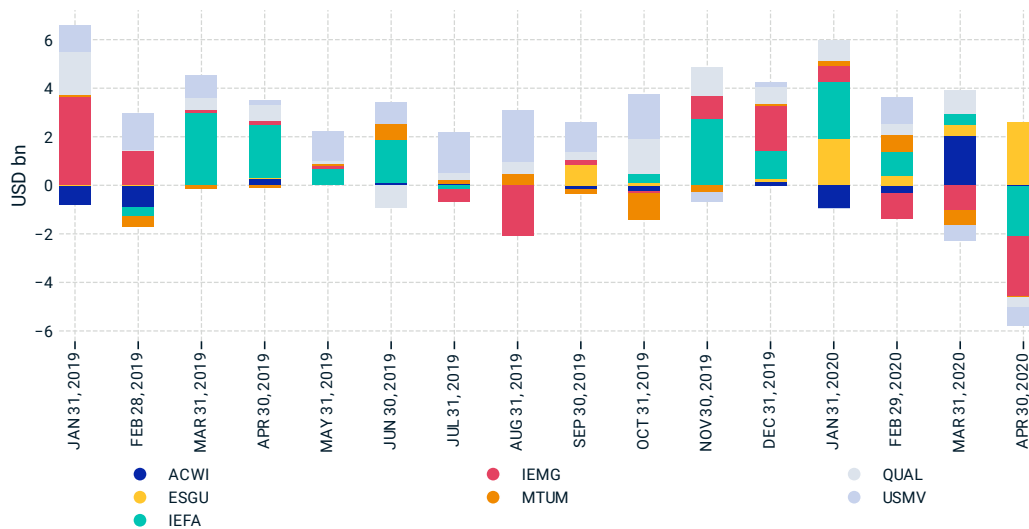


Data as of Dec. 31, 2018 to April 30, 2020 for selected large ETFs.

⁶ We focus on equity ETFs. For Fixed Income ETFs, see Wigglesworth, R. “All that drama about fixed-income ETFs was overplayed.” *Financial Times*, April 22, 2020.

Trading volume increased considerably in Q1 2020 across a sample of the largest ETFs tracking MSCI indexes⁷ as investors used these ETFs to implement active asset allocation decisions. Importantly, we saw little evidence of mass exodus from equity ETFs. Based on the sample of large ETFs we analyzed, we observed outflows from emerging-market and cyclical strategies, accompanied by inflows into developed-market and defensive strategies.

Exhibit 12: Monthly Fund Inflows and Outflows (USD) for Selected Large ETFs Tracking MSCI Indexes

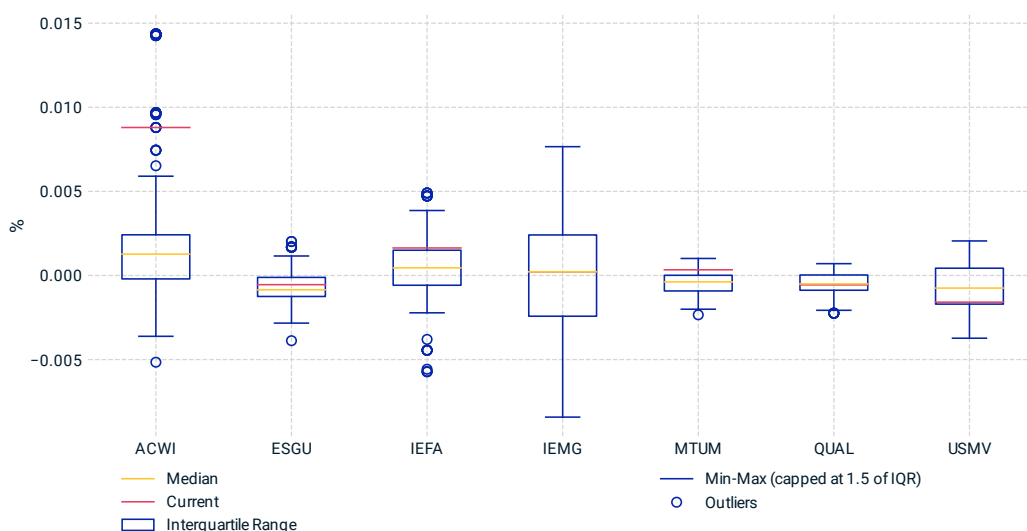


Data from Dec. 31, 2018 to April 30, 2020

⁷ We examined some of the largest iShares ETFs tracking the following MSCI standard, factor and ESG indexes: ACWI, EAFE, Emerging Markets, USA Momentum, USA Quality, USA Minimum Volatility, USA ESG Leaders

Despite the sharp rise in volume and flows, the ETFs in our sample continued to track their underlying indexes closely. Tracking difference, a measure of how closely ETF net asset values (NAV) follow their underlying indexes, has remained within the range observed during the more benign conditions of 2019.

Exhibit 13: Median 21-day Rolling Tracking Difference for Selected Large ETFs Tracking MSCI Indexes



Data from Dec. 31, 2018 to April 30, 2020.

Many long-term investors enjoyed the benefits of global diversification and made little changes to their strategic asset allocation during the volatile market conditions of the COVID-19 crisis. More active investors may have sought to take advantage of opportunities presented by the crisis through tactical asset allocation to different asset classes, regions, countries, sectors or factors. Index-based investing served the needs of both types of investors during the crisis and may continue to play an important role in promoting market efficiency and enabling strategic and tactical asset allocation in the future.

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