ESG Indexes Through the Slump and Rally of 2020

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The year 2020 was a rollercoaster ride for individuals' personal lives as well as the financial markets. In fact, during 2020 we witnessed two stock market regimes: a slump — from Jan. 1, 2020 to March 23, 2020 and a rally — between March 24, 2020 and the end of the second week of 2021.[1] The slump and rally provided a unique window to examine the performance of different ESG strategies, which have proliferated in recent years but have endured fewer market cycles than more traditional strategies.

During the worst of the pandemic's impact on equities, ESG indexes tended to outperform particularly due to positive contribution of stocks with high MSCI ESG ratings.[2] But how did these indexes fare for all of 2020, when one considers all the ups and downs? When we looked back at the whole 2020, we found that despite important differences in how MSCI's flagship ESG Indexes have been constructed, all had performed in line or better than their parent MSCI ACWI Index (Exhibit 1; the Appendix provides key index performance metrics). We took a deep dive into the common factors that were driving MSCI ACWI ESG indexes performance and found:

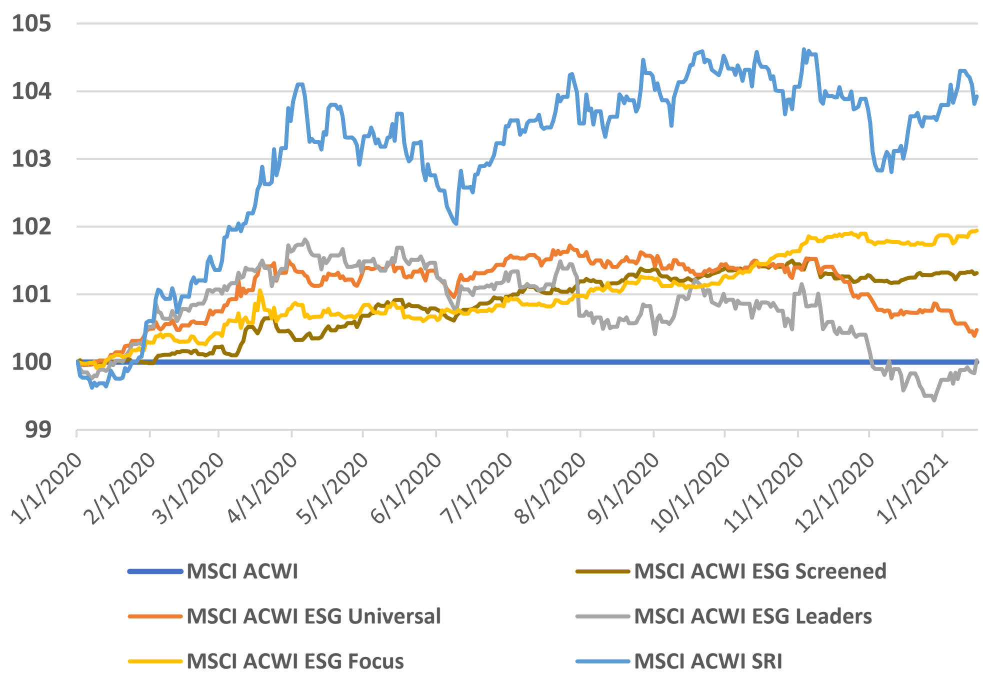
- While all MSCI ACWI ESG indexes finished the year 2020 at least as well as their parent, most of them outperformed during both the slump and rally of 2020. ESG characteristics played a leading role in outperformance during the slump, rally, and the whole year.
- Higher index concentration together with the higher average ESG index scores ('ESG scores') led to higher performance. The two most concentrated indexes with the highest index-level ESG scores, the MSCI ACWI SRI and MSCI ACWI Focus Indexes, outperformed other ESG indexes. Lower concentration led to less pronounced ESG effect and a reduction in active returns.

[1] We examine both the level of CBOE VIX® Index, which is an indicator of market uncertainty and the level of MSCI ACWI IMI Index. After a rapid increase, which started on March 3, 2020, CBOE VIX® Index experienced the new high of 82.69 on March 18, 2020, followed by the global market's slump on March 24, 2020. The highest GFC VIX® level was documented on Oct. 24 in 2008 and reached the mark of 89.53. We end the sample on Jan. 10, 2021.

[2] See MSCI ESG Indexes during the coronavirus crises.

- The negative correlation between ESG and volatility that has been found across studies provided a 'protective' effect during the slump, as expected, but impaired performance during the rally.[3]

Exhibit 1. Relative Performance of Select MSCI ESG Indexes vs MSCI ACWI Index



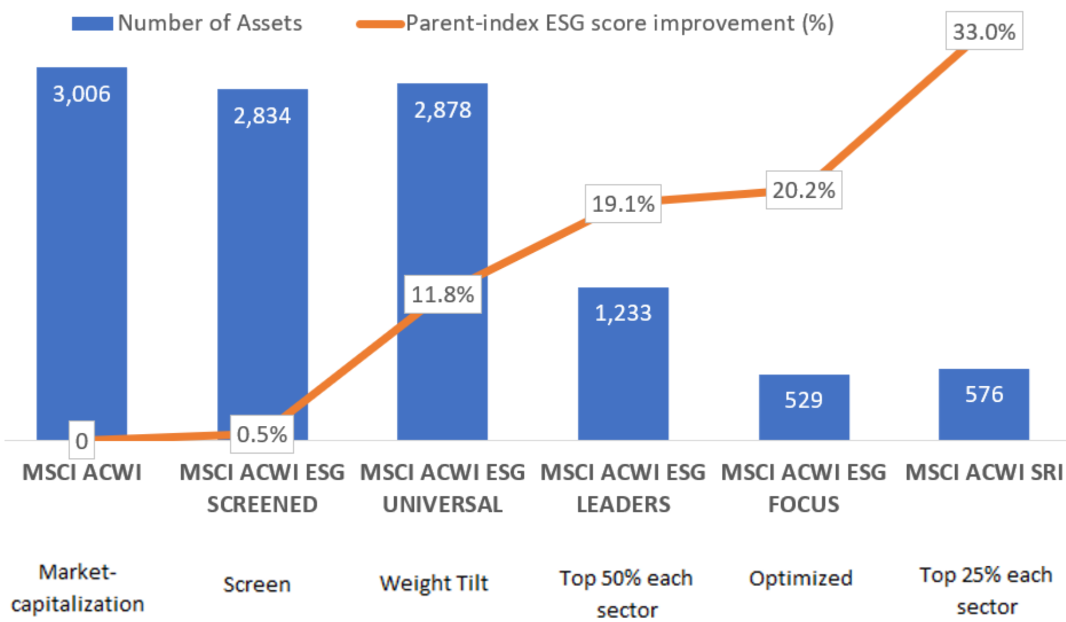
Data from Dec. 31, 2019 to Jan. 15, 2021

The five flagship MSCI ACWI ESG indexes have been constructed to help investors achieve a range of ESG and financial objectives. Some are better suited to meeting values-based objectives while others preserve a broad investment universe with minimal deviation from the benchmark. The diverse level of exclusions and asset weighting schemes are summarized in Exhibit 2. We sorted the indexes according to the improvement of their ESG scores over the parent index during 2020. The level of improvement was the smallest for MSCI ACWI ESG Screened Index, while it was the highest for MSCI ACWI SRI Index.

[3] See, for example, Giese, G., Lee, L.-E., Melas, D., Nagy, Z., and Nishikawa, L. 2019. "Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance." *The Journal of Portfolio Management*.

Exhibit 3 reveals that ESG was a main performance driver of the ESG indexes during 2020.[4] In fact, it was the largest positive contributor for three of the five indexes, with the Industry factor being a larger contributor for the broadest indexes. The ESG indexes with greater concentration and greater ESG score improvement enjoyed both strongest performance and higher active performance contribution from the ESG factor. The performance contribution from other equity style factors appears to be negligible, except for the MSCI ACWI SRI Index, where the contribution was sizable.

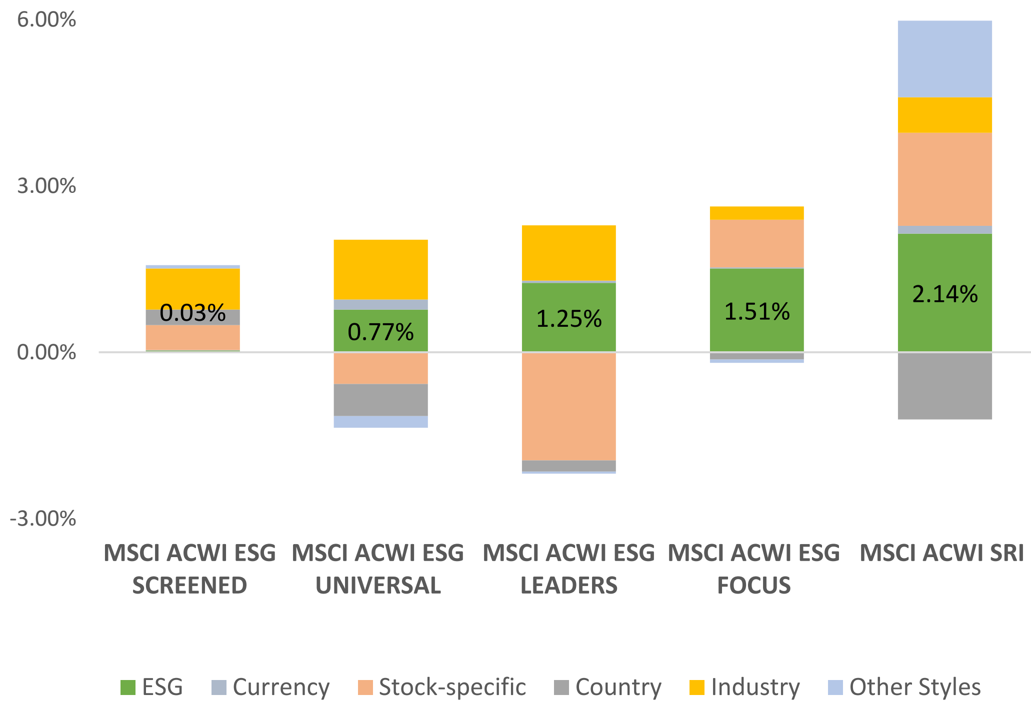
Exhibit 2. Methodology, Concentration and ESG Score Improvement During 2020



Data from Dec. 31, 2019 to Jan. 15, 2021

[4] For this study we leverage MSCI Barra Global Equity Total Market Model with ESG factor, which builds on top of the MSCI Barra Global Equity Total Market Model methodology and allows us to measure portfolio exposure to ESG factor. This factor is based on the MSCI ESG Ratings and assigns higher ESG exposure to stocks with higher MSCI ESG Ratings.

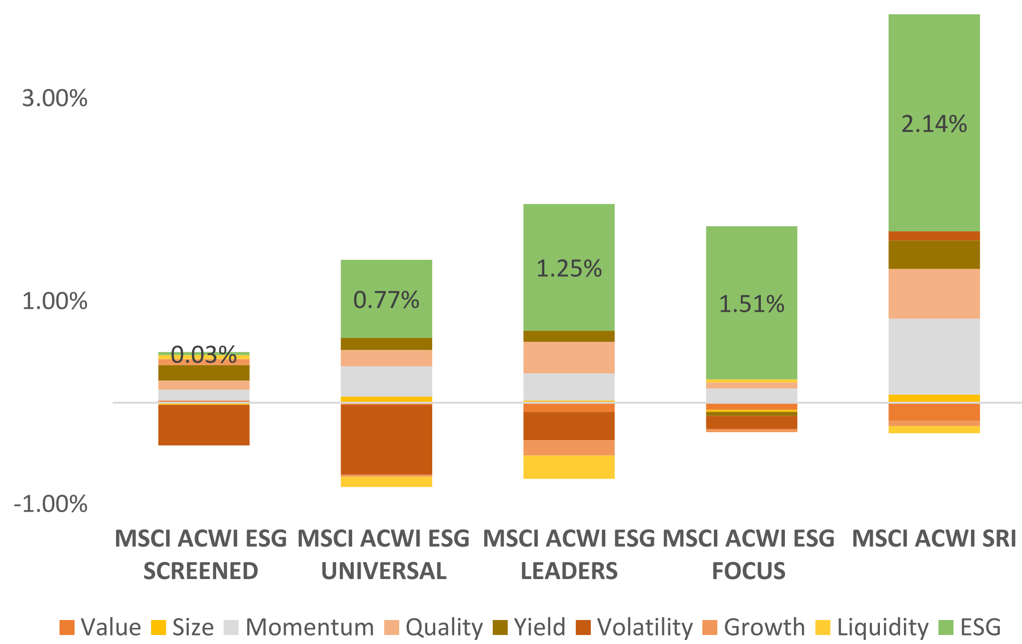
Exhibit 3. Active Factor Attribution During 2020



Data from Dec. 31, 2019 to Jan. 15, 2021

What role did style factors play throughout the highly volatile year? During the period between November 2013 and January 2021 ESG Indexes shared several commonalities with respect to their fundamental characteristics, which became paramount during 2020. Compared to the MSCI ACWI Index they had on average lower exposure to Value and Residual Volatility, and higher exposure to Momentum, Quality, and ESG factors.

Exhibit 4. Style Factors Active Performance Attribution During 2020

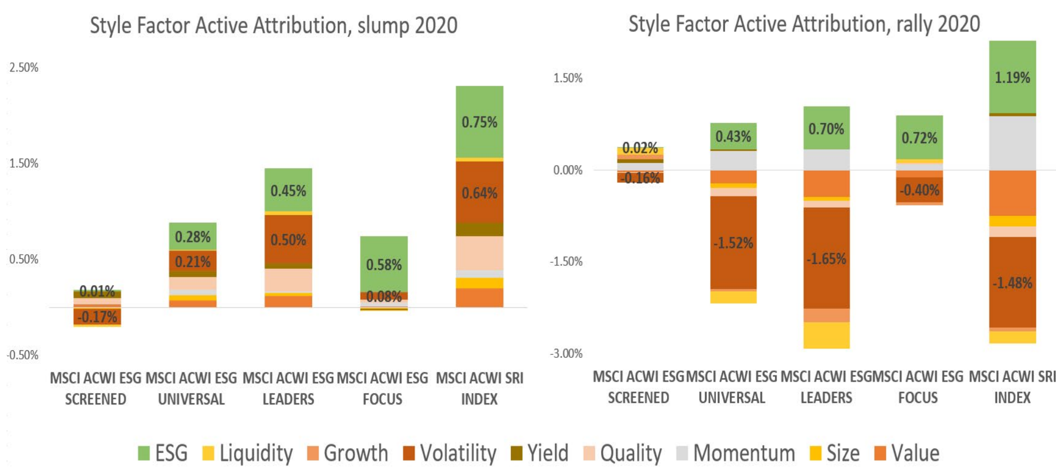


Data from Dec. 31, 2019 to Jan. 15, 2021

Exhibit 4 shows that on top of the **ESG factor**, **Quality** and **Momentum** characteristics played a positive role during the whole year. Interestingly, **Residual Volatility**'s contribution to active return was negative for most Indexes. This might be surprising, as in the long run low residual volatility stocks have tended to outperform high residual volatility stocks[5] and, as we mentioned above, all Indexes in this study have had negative active exposure to residual volatility factor. To probe further, we examined the active return contribution of the Residual Volatility factor (and all style factors) during the slump and the rally. Exhibit 5 shows that, in fact, the role of Residual Volatility throughout the two periods was reversed: it played a protective role for four out of five indexes during the slump, but negatively impact performance for all five indexes during the rally.

[5] See, for example, Ang, A., Hodrick, R. Xing, Y., and Zhang, X. 2006. "The Cross-Section of Volatility and Expected Returns." *Journal of Finance*, and references therein.

Exhibit 5. Style Factors Active Performance Attribution



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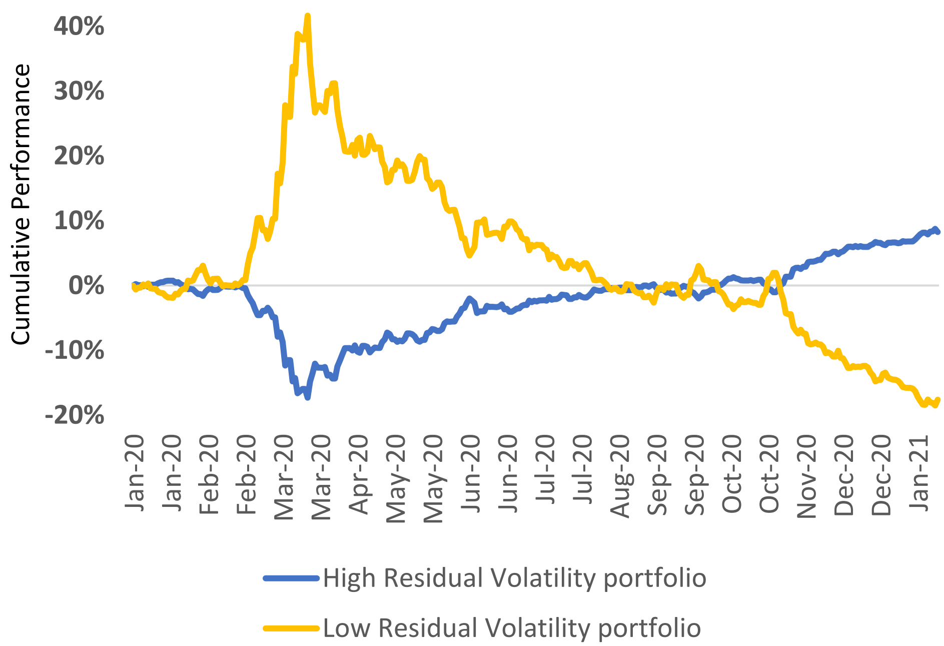
Further, to isolate the reason for a reverse contribution from Residual Volatility factor we formed two portfolios from MSCI ACWI Index stocks, one with low residual volatility stocks, another with high residual volatility stocks. The insights of the reverse contribution from Residual Volatility factor during slump and rally are demonstrated by the performance of the two portfolios in Exhibit 6: Low residual volatility stocks underperformed high residual volatility stocks during rally.

Exhibit 6. Performance of High and Low Residual Volatility Stocks Constituents



Data from Dec. 31, 2019 to Jan. 15, 2021

Though MSCI ACWI ESG indexes are different in terms of asset weighting rules and concentration, they have several features in common that helped them to stand the slump and rally of 2020. They enjoyed positive and somehow expected contribution from Industries, ESG, Quality, and, less expected from Momentum factors. An unexpected appeared small negative or weak contribution from Residual Volatility factor because during the rally low volatility stocks underperformed high volatility stocks making all low volatility strategies vulnerable during this period. And ESG stayed resilient through trough and rally of 2020.

Appendix: Key Index Performance Metrics

	MSCI ACWI Index	MSCI ACWI ESG Screened Index	MSCI ACWI ESG Universal Index	MSCI ACWI ESG Leaders Index	MSCI ACWI ESG Focus Index	MSCI ACWI SRI Index
Total return* (%)	11.1	11.6	11.6	11.6	12.1	12.6
Total risk (%)	13.5	13.6	13.3	13.1	13.6	13.0
Return / risk	0.82	0.85	0.87	0.89	0.89	0.97
Sharpe ratio	0.77	0.80	0.82	0.83	0.84	0.91
Active return (%)	0.0	0.4	0.5	0.5	0.9	1.4
Tracking error (%)	0.0	0.5	0.7	1.1	0.5	1.6
Information Ratio		0.95	0.77	0.41	1.78	0.91

*Data from Nov. 30, 2012, to Jan. 31, 2021. All metrics annualized for periods longer than a year. ACWI ESG Universal since Feb. 8, 2017; MSCI ACWI ESG Focus since June 25, 2018; and MSCI ESG Screened since Dec. 14, 2018. *Gross returns annualized in USD.*

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