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EURO STOXX 50® ESG INDEX – DELIVERING ON ITS OBJECTIVE?

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INTRODUCTION

In our paper entitled "EURO STOXX 50® ESG INDEX – Integrating Sustainability", which was published in September 2019, we noted that ESG integration is becoming increasingly popular as investment managers move beyond traditional portfolio exclusion strategies that rely on negative and norms-based screening. We also noted that it is possible to construct portfolios by applying ESG scores and ratings that reflect individual companies' exposure to sector-specific ESG risks and their relative ability to manage these risks compared to their industry peers.

We concluded that the EURO STOXX 50® ESG Index improves on the aggregate ESG score achieved by its flagship benchmark. It therefore offers a more sustainable alternative to the leading blue-chip indicator for eurozone stocks for a comparable level of liquidity. Thanks to its similar risk-return characteristics and enhanced ESG profile, the EURO STOXX 50® ESG Index may be used as the underlying for derivatives, structured products and exchange traded funds. It complements the existing STOXX ESG-X series, building on the latter's simplicity and transparent rules-based approach and helping to ensure that our range of ESG investment solutions keeps pace with current growth and demand.

In this paper, we analyze the performance of the EURO STOXX 50® ESG Index over a period starting from December 20, 2019 (the quarterly review implementation date) until August 7, 2020 spanning the turbulent market conditions caused by the COVID-19 pandemic. We also compare it with the EURO STOXX 50® ESG-X Index in order to understand and quantify the impact of product- and norms-based exclusions and the integration aspect built into the index. The results show that the EURO STOXX 50® ESG Index has markedly outperformed its benchmark over the observed period while also achieving a lower volatility.

EURO STOXX 50® ESG INDEX

METHODOLOGY OVERVIEW

The EURO STOXX 50® ESG Index was launched in May 2019 and is based on the EURO STOXX 50® Index. It uses a fully rules-based approach to produce a blue-chip representation of sustainable supersector leaders in the eurozone. In addition to applying exclusionary screening based on the STOXX ESG-X indices methodology, the EURO STOXX 50® Index eliminates the 10% of companies with the lowest ESG scores from the eligible universe. All excluded securities are replaced by companies from the same ICB supersector with higher ESG scores (Figure 2).

Exclusions of securities and subsequent inclusions based on ESG scores is carried out using data and information for the individual companies sourced from Sustainalytics, a global leader in ESG and corporate governance research and ratings. Sourcing data from an independent, multi-award winning[1] ESG data provider such as Sustainalytics allows STOXX to systematically apply objective rules for securities selection. It also maintains an appropriate level of separation and independence, avoiding any potential conflicts of interest.

[1] https://www.sustainalytics.com/about-us/#awards

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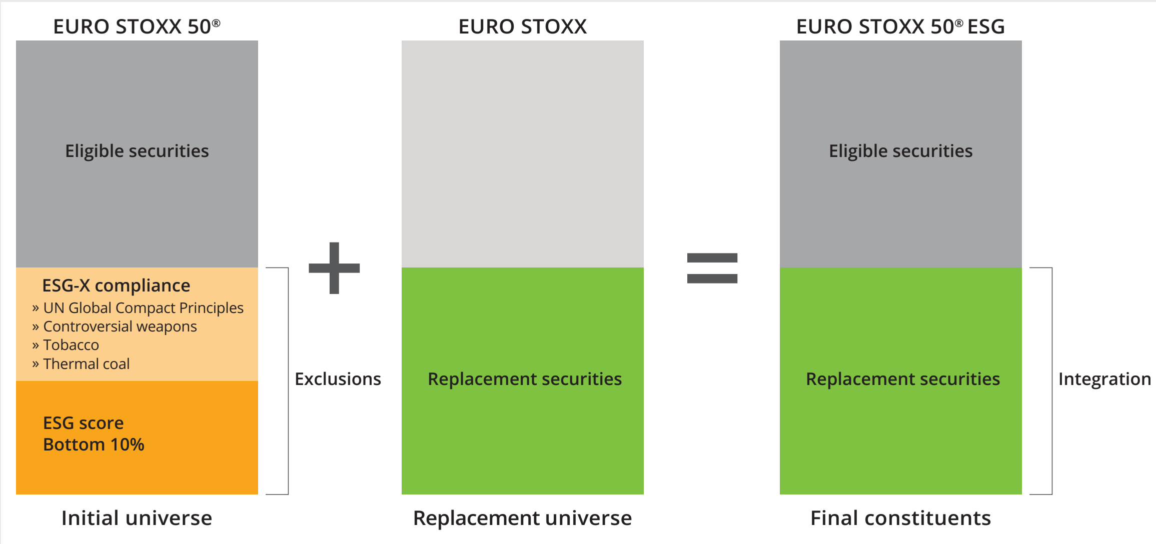
FIGURE 1: EURO STOXX 50® ESG methodology



Source: STOXX Ltd.

EXCLUSION AND REPLACEMENT CRITERIA

The EURO STOXX 50® ESG Index is produced by modifying the EURO STOXX 50® Index in the following three ways:

Exclusions:

» The least sustainable companies are excluded. These are defined as the 10% of the index constituents (based on the absolute number of holdings) with the lowest ESG scores. Index constituents that do not have an ESG score are not considered for exclusion. Where two or more potential exclusion candidates have the same ESG score, the company or companies with the smallest free float market capitalization is or are excluded.

» The same set of exclusion criteria is applied to the remaining securities as is used for the ESG-X indices – Global Standards Screening (GSS), involvement in controversial weapons, tobacco producers and thermal coal.[2] More details on the ESG-X Index methodology are available in our Index Guide.

Replacements:

» The individual companies excluded in the way described above are replaced by companies with higher ESG scores that are drawn in each case from the same ICB supersector of the EURO STOXX® universe. Where an eligible company has the same ESG score as a potential replacement, the company with the higher free float market capitalization is selected. Replacement constituents must have an ESG score of > 50.

[2] See the STOXX Index Methodology Guide for more details: https://www.stoxx.com/documents/stoxxnet/Documents/Indices/Common/Indexguide/stoxx_index_guide.pdf

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FAST EXIT RULE

The EURO STOXX 50® ESG Index rules include a fast exit rule. This allows index constituents to be deleted if their ESG Controversy Rating increases to category 5 and the constituent becomes non-compliant under the Sustainalytics Global Standards Screening assessment. Constituents are removed two dissemination days after the announcement, i.e. effective at the start of the third dissemination day. Deleted constituents' weights are distributed among the remaining constituents.

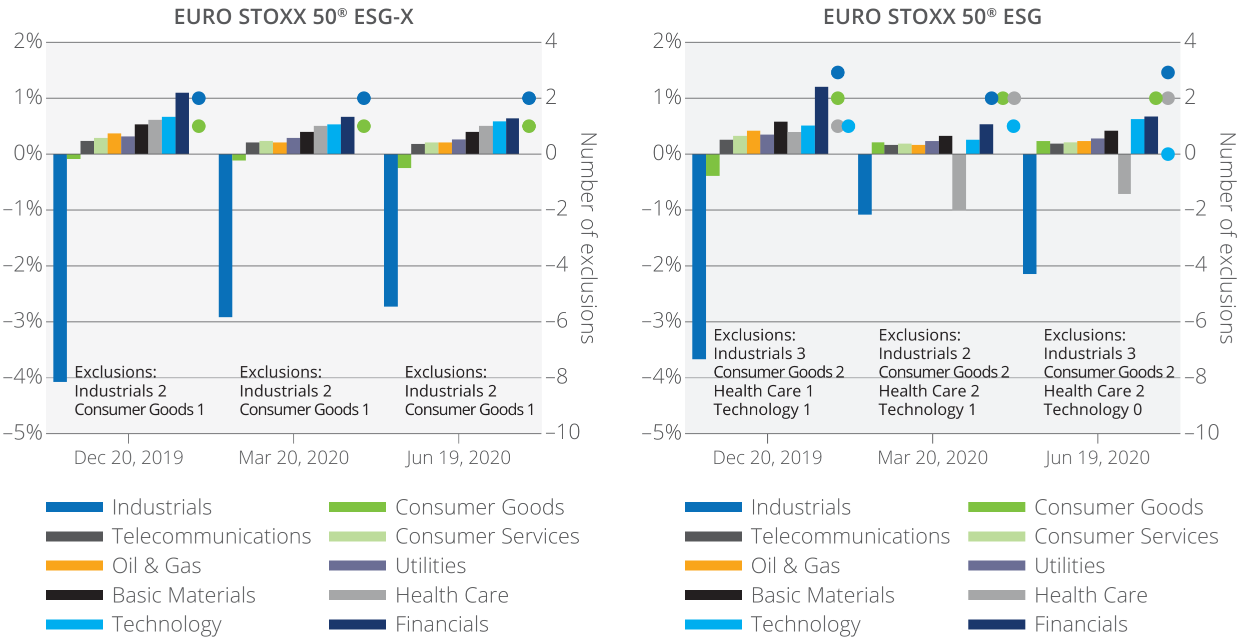
RECENT INDEX CHARACTERISTICS AND PERFORMANCE

In order to better understand the drivers of the index's profile and performance, we analyzed both the EURO STOXX 50® ESG and the EURO STOXX 50® ESG-X simultaneously. It should be noted here that the exclusion screening performed for the ESG-X Index represents a subset of the exclusion and replacement criteria used in the ESG Index variant. Details of the EURO STOXX 50® ESG-X methodology and long-term performance were discussed in our paper entitled "STOXX ESG-X Indices", which was published in August 2019.

INDEX PROFILE

We compared the ICB sectors and country composition for the EURO STOXX 50® ESG-X and EURO STOXX 50® ESG indices with the benchmark (EURO STOXX 50® Index) as at each quarterly review implementation dates (December 2019, March 2020 and June 2020) to understand any underweights and overweights.

FIGURE 2: Sector underweights & overweights as of December 20, 2019, March 20, 2020, and June 19, 2020



Source: STOXX Ltd.

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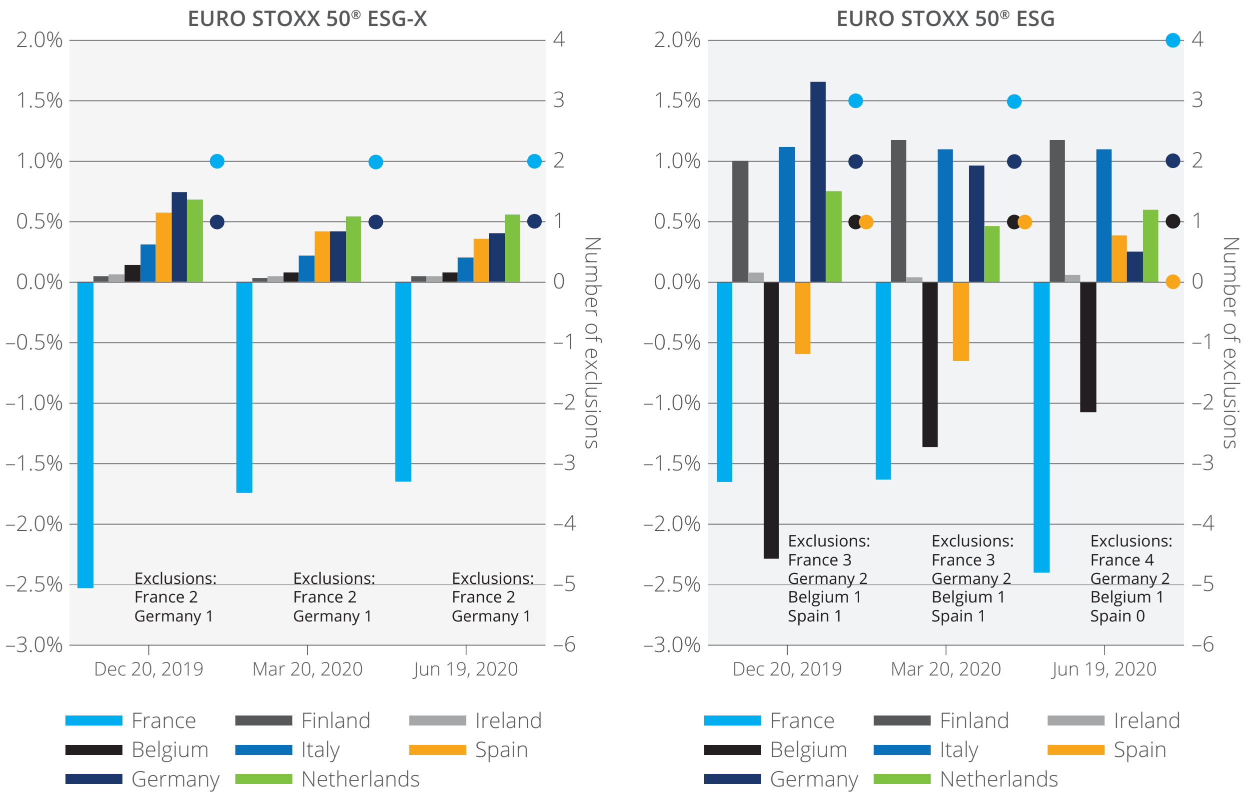
As at the quarterly index review dates, the ESG-X Index had a relatively strong underweight to the Industrials sector and a marginal underweight to Consumer Goods (Figure 2), with all other sectors being overweight due to the reallocation of the weights from excluded securities. However, the underweight to the Industrials sector is lower in the ESG Index due to the reallocation of weights from additional sectors that have exclusions as a result of securities being in the bottom 10% in relation to their ESG score e.g. Health Care.

From a regional perspective, exclusions in the ESG-X Index resulted in a net underweight to France, which was offset by corresponding net overweights to other countries. The additional exclusions based on 10% of securities with the lowest ESG scores in the ESG Index led to a net underweight to Belgium and Spain while also maintaining the underweight to France.

FIGURE 3: Country underweights & overweights as of December 20, 2019, March 20, 2020, and June 19, 2020



Source: STOXX Ltd.

Half of the eight countries represented in the EURO STOXX 50® ESG Index displayed improvements in their aggregate ESG scores, while the other half experienced small decreases over the period observed.

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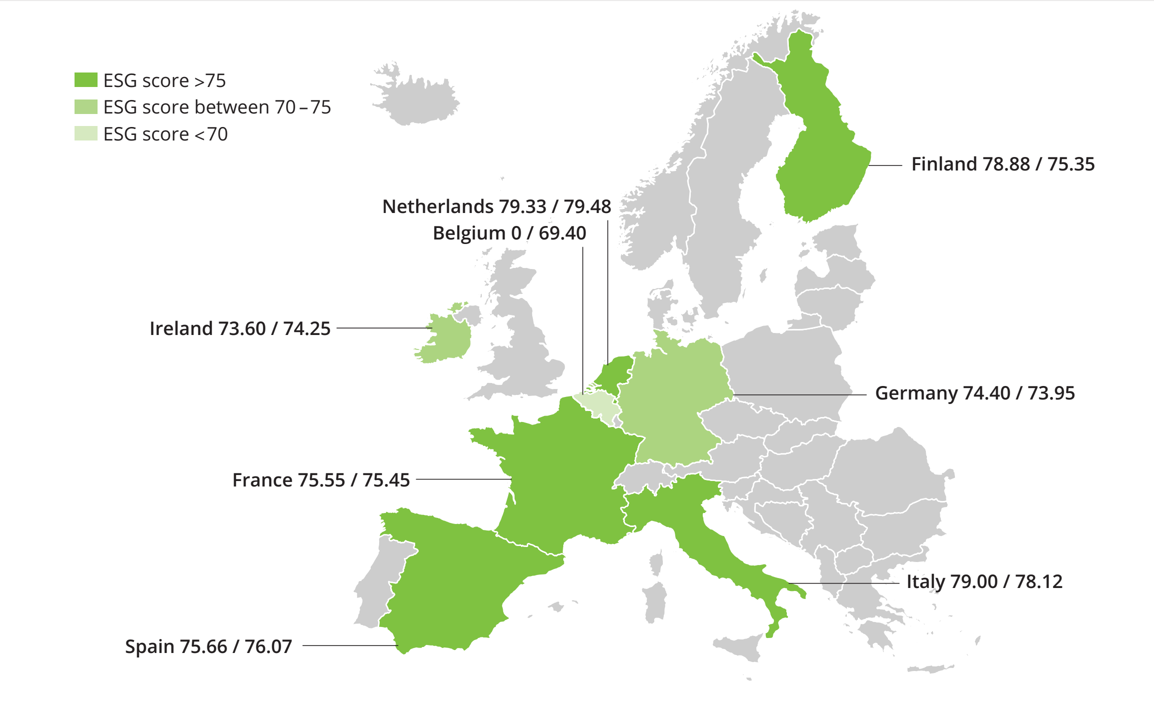
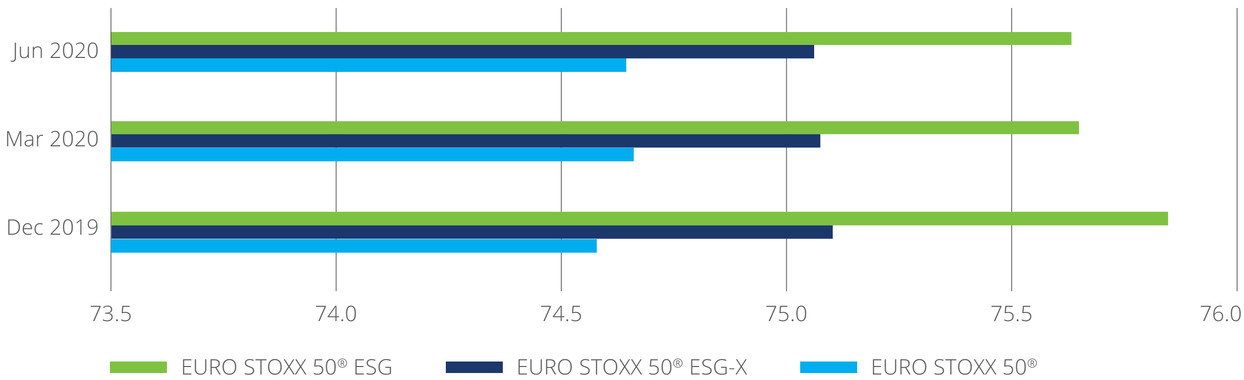
FIGURE 4: Aggregate ESG scores for companies from countries represented in the EURO STOXX 50® ESG (December 2019 review / June 2020 review)



Source: STOXX Ltd.

The positive incremental impact of applying both ESG integration and exclusion is evident from the aggregate average ESG scores. The EURO STOXX 50® ESG-X recorded a better score than the EURO STOXX 50® benchmark over the last three review periods, with the EURO STOXX 50® ESG improving on this even further (Figure 5).

FIGURE 5: Aggregate ESG scores for the EURO STOXX 50®, EURO STOXX 50® ESG and EURO STOXX 50® ESG-X indices



Source: STOXX Ltd.

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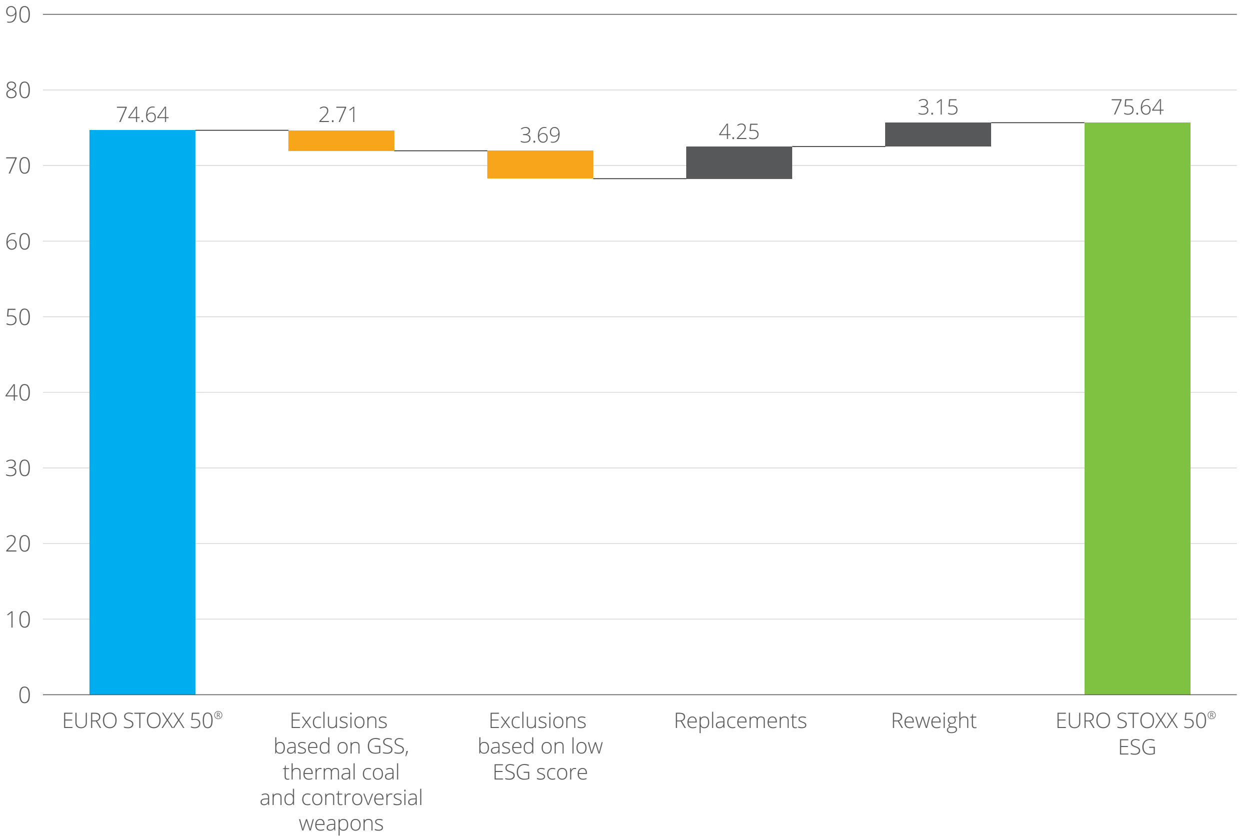
A closer look at the average ESG score for the June 2020 quarterly review reveals that the cumulative impact of exclusions shaved 6.40 points (2.71 + 3.69) off the contribution, while adding 7.40 points due to joiners and reweights. In other words, the EURO STOXX 50® ESG Index had an improved ESG profile.

FIGURE 6: Impact of exclusions, replacements and weighting redistributions on index ESG scores (June 2020 review)



STOXX Ltd. Values for exclusions, replacements and reweights represent the absolute contribution from respective securities to the aggregate average ESG score.

OVERALL INDEX PERFORMANCE

Overall, the EURO STOXX 50® ESG Index outperformed the benchmark by 3.77 percentage points during the period starting December 20, 2019 and ending August 7, 2020, measured in terms of its cumulative returns, while its annualized volatility was 1.86 percentage points lower (see Figure 10).

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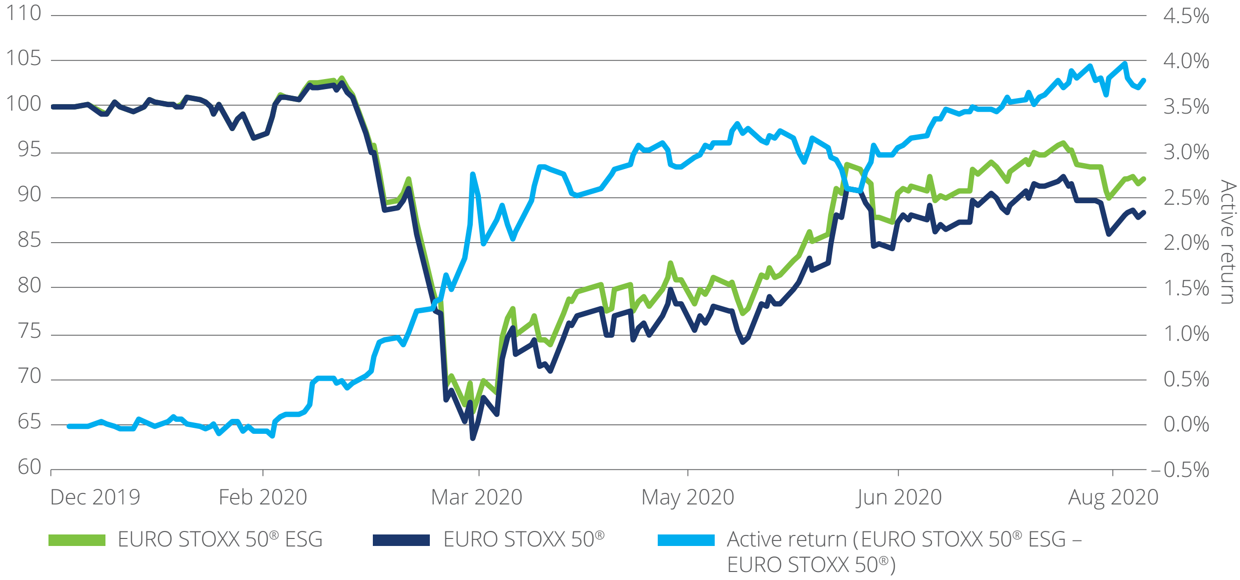
FIGURE 7: Performance of the EURO STOXX 50® ESG and EURO STOXX 50® Indices

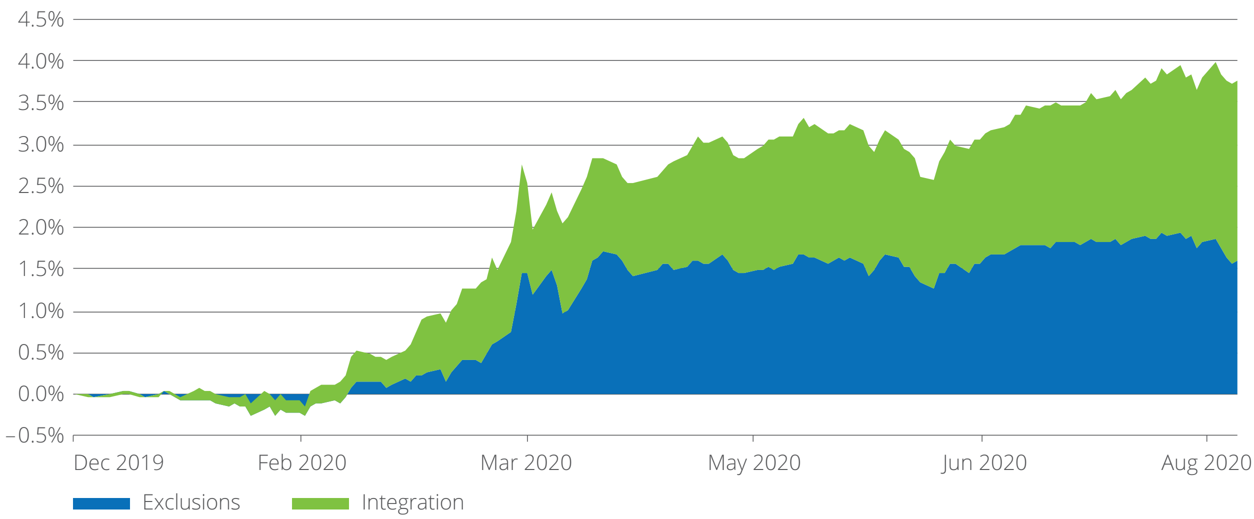


Source: STOXX Ltd.

IMPACT OF ESG EXCLUSIONS AND INTEGRATION

In a next step, the active return of 3.77 percentage points can be broken down further into contributions from exclusion and from integration. Excluding companies due to product and norms-based screening, measured using the EURO STOXX 50® ESG-X, added 1.59 percentage points to the return over the benchmark (the EURO STOXX 50® Index) during the period beginning on December 20, 2019 till August 7, 2020. The remaining 2.18 percentage points over the EURO STOXX 50® ESG-X Index during this period are attributable to integration aspects of the EURO STOXX 50® ESG index.

FIGURE 8: Cumulative active return of the EURO STOXX 50® ESG Index over the EURO STOXX 50® Index



Source: STOXX Ltd.

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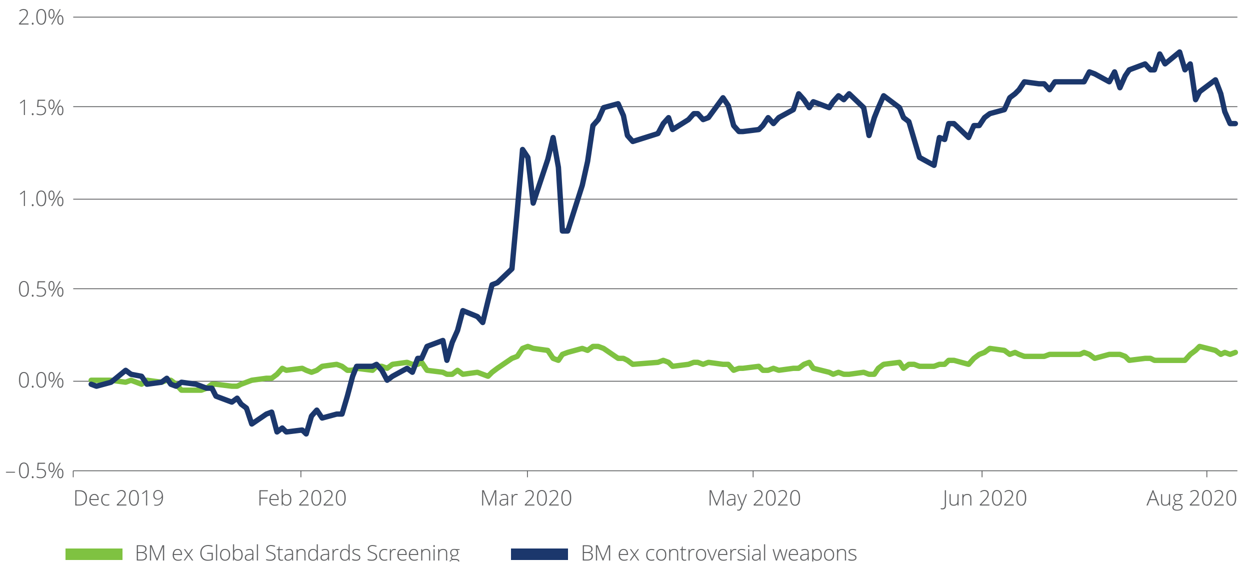
In order to understand the impact of the excluded securities, we performed a series of portfolio simulations[3] by excluding from the benchmark (BM), securities belonging to each of the exclusion categories (GSS, controversial weapons, etc.) in isolation. We then plotted the time series of the cumulative returns difference between each of the applicable portfolios and the benchmark. The results are shown in Figure 9. For the sake of clarity, the "BM ex Global Standards Screening" line in Figure 9 represents the cumulative returns difference between the portfolio that comprises the EURO STOXX 50® Index securities excluding the securities in breach of the "GSS" exclusion criteria, and the benchmark being the EURO STOXX 50® Index. Note that there were no exclusions related to tobacco or thermal coal.

FIGURE 9: Cumulative impact of exclusions on total returns in the period from December 23, 2019, to August 7, 2020



Source: STOXX Ltd.

The main driver of the 1.59 percentage points of excess return derived from the ESG-X exclusions was the omission of controversial weapons related securities, while Global Standards Screening offered marginal gains. The ESG-X exclusions also led to a reduction in index volatility (measured in terms of the standard deviation of daily returns) of 0.96 percentage points during the observation period. ESG integration further reduced the volatility by another 0.90 percentage points compared to the ESG-X Index and by nearly 1.86 percentage points compared to the benchmark.

[3] Please note that the analyses are based on simulated portfolios that incorporate individual exclusions separately and are currently not available as official indices.

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FIGURE 10: Performance analysis for the period from December 20, 2019, to August 7, 2020

EURO STOXX 50®	Benchmark (BM)	ESG	ESG-X	BM ex controversial weapons	BM ex GSS
Cumulative return*	–11.86%	–8.09%	–10.27%	–10.45%	–11.70%
Annualized volatility	37.48%	35.62%	36.52%	36.72%	37.29%
Max. drawdown	38.23%	35.83%	36.89%	37.03%	38.11%
Annualized tracking error (TE)	n/a	3.13%	2.08%	1.93%	0.36%

*Non-annualized

Source: STOXX Ltd., data calculated using gross returns in EUR as of August 7, 2020

PERFORMANCE ATTRIBUTION

We also performed factor-based performance attributions to understand the drivers of the active return. In a first step, we compared the EURO STOXX 50® ESG-X Index as the portfolio with the EURO STOXX 50® Index as the benchmark, and in a second, we considered the EURO STOXX 50® ESG Index as the portfolio and the EURO STOXX 50® ESG-X Index as the benchmark.

The performance attribution of the EURO STOXX 50® ESG-X versus the EURO STOXX 50® shows that the active return of 1.59 percentage points is largely driven by security-specific return, which is mainly due to the ESG related exclusions from the benchmark. The resulting changes to factor exposures from exclusions also added to the active returns, with the industry factor helping to offset the drag from style.

FIGURE 11: Performance attribution of the EURO STOXX 50® ESG-X versus the EURO STOXX 50® for the period from December 20, 2019 to August 7, 2020

Source of return	Return	Risk	IR	T-stat
Active	1.59%	2.03%	1.13	0.92
Specific return	1.30%	1.43%	1.31	1.06
Factor contribution	0.30%	0.90%	0.47	0.38
Style	–0.46%	0.42%	–1.58	–1.27
Dividend yield	–0.12%	0.06%	–2.96	–2.38
Market sensitivity	–0.35%	0.34%	–1.45	–1.17
Medium-term momentum	0.05%	0.13%	0.56	0.45
Volatility	–0.04%	0.02%	–2.08	–1.68
Country	0.07%	0.13%	0.83	0.67
Industry	0.68%	0.61%	1.62	1.30

Source: Axioma Portfolio Analytics, returns in EUR. Only a subset of Style sub-factors is shown.

Further analysis reveals that most of the exclusions belonged to sectors such as Aerospace & Defense, Automobiles, and Oil, Gas and Consumable Fuels that were badly affected by the COVID-19 pandemic and the market distress that followed. The incidental underperformance of these securities in the benchmark led to the ESG-X Index's outperformance.

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A similar attribution for the EURO STOXX 50® ESG versus the EURO STOXX 50® ESG-X revealed an active return of 2.18 percentage points. Once again, this was largely driven by the security-specific return resulting from the integration aspect of the security selection process. The resulting changes to style, industry and country factor exposures led to a net positive factor contribution that further boosted the active return.

FIGURE 12: Performance attribution of the EURO STOXX 50® ESG versus the EURO STOXX 50® ESG-X for the period from December 20, 2019 to August 7, 2020

Source of return	Return	Risk	IR	T-stat
Active	2.17%	1.54%	2.05	1.66
Specific return	1.58%	1.35%	1.71	1.38
Factor contribution	0.59%	0.49%	1.76	1.42
Style	–0.05%	0.30%	–0.24	–0.19
Dividend yield	0.04%	0.03%	2.01	1.62
Market sensitivity	–0.17%	0.09%	–2.89	–2.33
Medium-term momentum	0.08%	0.17%	0.70	0.56
Value	–0.10%	0.09%	–1.59	–1.28
Country	0.26%	0.20%	1.85	1.49
Industry	0.38%	0.25%	2.24	1.80

Source: Axioma Portfolio Analytics, returns in EUR. Only a subset of Style sub-factors is shown.

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CONCLUSION

The EURO STOXX 50® ESG Index enhances the ESG profile of its benchmark, as measured by the aggregate average ESG score. It therefore provides a more sustainable alternative to the leading blue-chip indicator for eurozone stocks, the EURO STOXX 50®. Although our September 2019 paper[4] concluded that the EURO STOXX 50® ESG Index's risk-return performance profile does not differ significantly from its benchmark over the long term, the ESG Index has markedly outperformed its benchmark to date in the short term during the COVID-19 pandemic while keeping volatility lower. The index therefore seems to have delivered on its intended objective of reducing higher-risk exposures by reallocating weights to securities that turned out to be relatively less risky as determined by their ESG scores.

Although the ESG Index attempts to achieve sector neutralization by selecting replacement securities from the same sector, in some instances the replacements have much lower market capitalizations than the securities that were excluded. This results in unintentional sector tilts and led to underweights in the ESG Index to some of the sectors that have been worst affected recently, such as Aerospace & Defense. This also contributed to the outperformance.

Nevertheless, as can be seen from the attribution, much of the outperformance is driven by security-specific returns resulting from the exclusion and subsequent replacement of securities during the integration stage of the index methodology. Since attribution models using ESG as a factor are not (yet) available, it would be easy to ascribe the security-specific returns to ESG driven returns. However, it is very early to draw such a conclusion and caution is advised before establishing causality between ESG and positive returns.

[4] EURO STOXX 50® ESG INDEX – Integrating Sustainability

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About STOXX Ltd.

STOXX Ltd. is a global index provide that currently calculates a global, comprehensive index family of over 10,000 strictly rules-based and transparent indices. Best known for the leading European equity indices EURO STOXX 50®, STOXX® Europe 50 and STOXX® Europe 600, STOXX Ltd. maintains and calculates the STOXX Global index family which consists of total market, broad and blue-chip indices for the Americas, Europe and Asia/Pacific regions and the Latin America and BRIC (Brazil, Russia, India and China) sub-regions, as well as global markets.

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Since September 2019 STOXX is part of Qontigo.

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Qontigo's index provider STOXX is part of Deutsche Börse Group, and the administrator of the DAX indices under the European Benchmark Regulation.

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