Insights
ESG

April 2021

STOXX Europe 600 ESG Exclusions Exposure: A Strategic Allocation

Shankar Abburu
Quantitative Research & Analysis, SPDR ETF Model Portfolio Solutions

Daniel Ung, CFA®, CAIA, FRM
Head of Quantitative Research & Analysis EMEA & APAC, SPDR ETF Model Portfolio Solutions

- The risk-return profile of the STOXX Europe 600 ESG Exclusions exposure is very similar to that of the broad European equity market indices.
- Excluding companies engaged in controversial industries or behaviour may mitigate reputational risks and promote ethical well-being for investors.

Overview

In this paper, we examine how to incorporate the STOXX Europe 600 Index into an investment portfolio where certain ESG values-based/SRI exclusion criteria have been applied. To this end, we examine the differences between using the STOXX Europe 600 ESG-X Index (the exclusions-based index) and the STOXX Europe 600 Index in a strategic investment portfolio.

As a reminder, the STOXX Europe 600 ESG-X Index utilises an ESG/SRI exclusion[1] approach, while targeting a similar risk-return profile as the broad benchmark. **It is designed to remove companies that are involved in controversial industries (namely thermal coal[1], controversial weapons[2], tobacco[3] and firearms) as well as violators of the Sustainalytics Global Standards Screening.**

How to Incorporate the Index in a Portfolio Context

The STOXX Europe 600 ESG-X Index can be used as part of strategic (core) allocation within investment portfolios to gain broad exposure to European equities. The index is designed to maintain a similar risk profile to traditional beta benchmarks while removing controversial businesses or business areas.

Rationale Behind Applying Exclusions

Exclusionary screening is by far the most adopted sustainable investing approach, and 20% of globally invested assets exclude companies involved in controversial activities.[4] These approaches avoid companies that generate revenues from potentially objectionable activities and this may help mitigate reputational risks and promote ethical well-being for investors.

As an example, we can consider the implications of excluding companies that are deemed non-compliant with the United Nations Global Compact (UNGC) Principles, one of the criteria considered in the Sustainalytics Global Screening Process. These Principles, which fall within the realm of human rights, labour, environment and anti-corruption issues, are designed to integrate sustainability into the heart of business operations, allowing for greater corporate transparency and accountability.

Divesting companies in violation of these Principles could help alleviate a potential risk faced by investors, which may arise from an insufficient focus on governance and a weak corporate culture. This is because deficiencies in internal corporate controls often foreshadow poor future behaviour. In this respect, investors can consider removals of badly managed companies as a longer-term risk management tool.

In addition to norms-based screening, the STOXX Europe 600 ESG-X Index omits companies involved in controversial industries, such as tobacco and controversial weapons. In these instances, investors may view divestments as a mechanism to drive change in business strategies, activities and practices.[5]

Assessing the Role of STOXX Europe 600 ESG-X Index in Portfolios

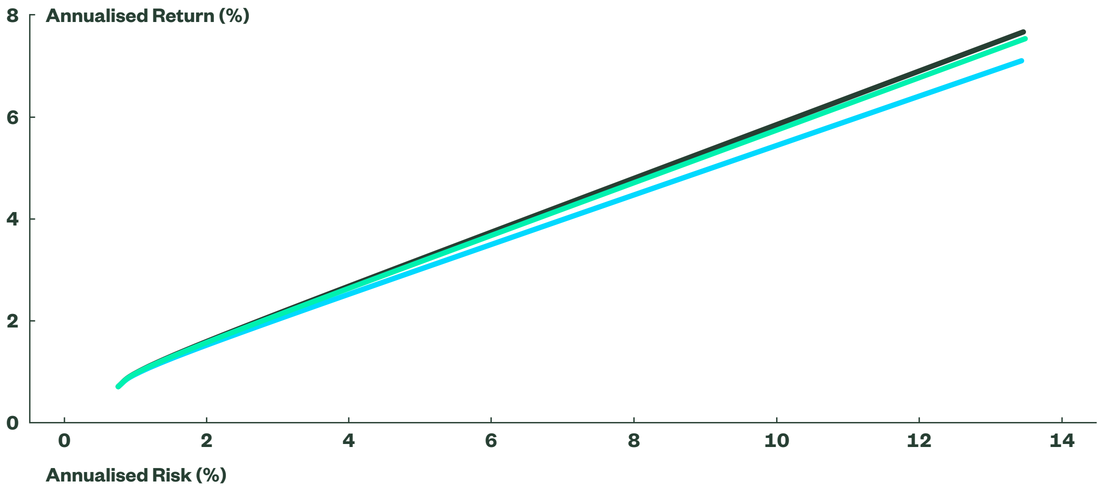
Our analysis shows that incorporating the STOXX Europe 600 ESG-X Index in investment portfolios has delivered a similar risk-return profile as the broad-based European equity indices (such as MSCI Europe or the STOXX Europe 600 Index). That result comes with the added benefit that companies engaged in controversial industries or 'objectionable' behaviour were removed from the investment universe.

Similar Risk-Return Profile as the Broad Benchmark

Here we evaluate whether replacing the STOXX Europe 600 with the STOXX Europe 600 ESG-X Index compromised the risk-return profile of investment portfolios. To do this, we analysed a portfolio of equity and fixed income indices and observed the impact on the efficient frontier. **Historically, the efficient frontier of the portfolios using the STOXX Europe 600 ESG-X Index and the one that used the STOXX Europe 600 Index were almost indistinguishable, highlighting the fact that the risk-return profile of the two indices was largely similar** (see Figure 1).

Figure 1
Efficient Frontier Analysis of Investment Portfolios with ESG-Enhanced and Conventional European Indices (Unconstrained) (Apr 2012–Feb 2021)

STOXX ESG/Euro Treasury
MSCI Europe/Euro Treasury
STOXX Europe/Euro Treasury



Source: Bloomberg Finance L.P., State Street Global Advisors, as of February 2021. Monthly Data between April 2012 to February 2021. "Euro Treasury" is represented by the Bloomberg Barclays Euro Aggregate Treasuries 1–3 Years TR Index. "STOXX ESG" is represented by the STOXX Europe 600 ESG-X Index and "MSCI Europe" is represented by the MSCI Europe Index.
Past performance is not a guarantee of future results. The inception date for the STOXX Europe 600 ESG-X index was 15 November 2018. Results prior to this date were calculated by using available data at the time in accordance with the Index's current methodology. Index returns reflect capital gains and losses, income, and the reinvestment of dividends.
BACKTESTED PERFORMANCE: This document contains index performance data based on backtesting, i.e. calculations of how the index might have performed prior to launch if it had existed using the same index methodology and based on historical constituents. Backtested performance information is purely hypothetical and is provided in this document solely for information purposes. Backtested performance does not represent actual performance and should not be interpreted as an indication of actual performance.

To further examine the difference in performance from using the STOXX Europe 600 ESG-X Index as a core building block, we created a stylised equity-fixed income portfolio, where one of the portfolios used the STOXX Europe 600 ESG-X Index building block and the other one simply used conventional broad European equity benchmarks.

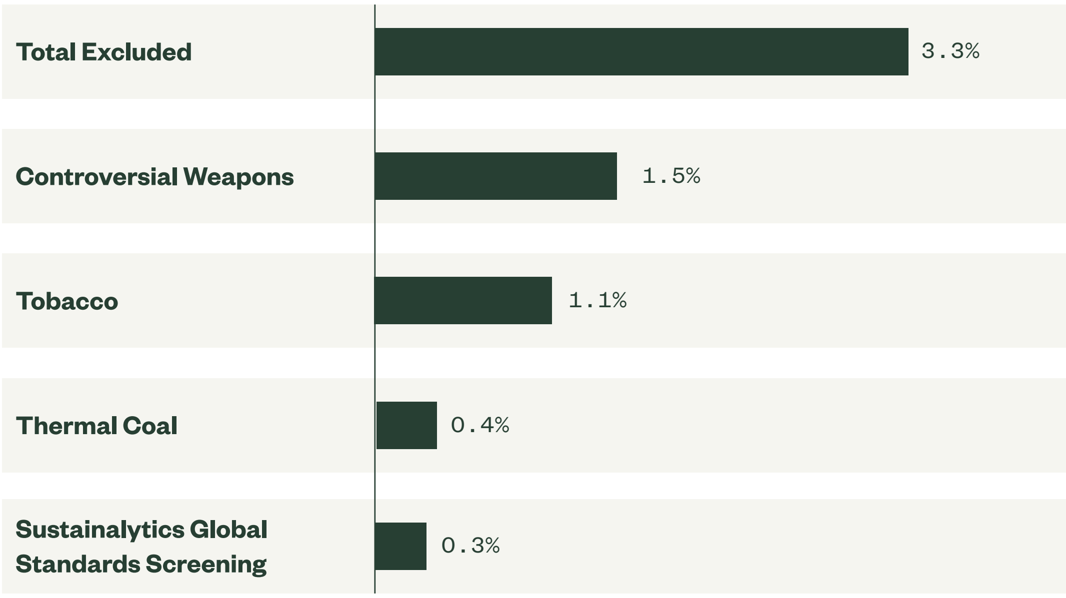
From the results (see Figure 2), it is apparent that all the portfolios delivered a similar level of return and risk, regardless of whether the STOXX Europe 600 ESG-X Index is used. This result demonstrates that there is very little performance difference over the study period, even though removing companies involved in controversial activities or behaviour may improve performance over the longer term. In any case, **only 3.3% of the companies, equivalent to 17 companies, were excluded from the STOXX Europe 600 in December 2020** (See Figure 3).

Figure 2
Selected Risk-Return Characteristics of Equity-Fixed Income Portfolio Containing Different European Equity Benchmarks (with and without exclusionary filters)

	STOXX ESG 60%/ Euro Treasury 40%	MSCI Europe 60%/ Euro Treasury 40%	STOXX Europe 600 60%/ Euro Treasury 40%
Return			
Past 1 Year	6.09	5.33	5.98
Past 3 Years	3.10	2.86	3.19
Past 5 Years	4.15	4.01	4.19
Annual Return (Full Period)	5.22	4.86	5.14
Risk			
Past 1 Year	13.56	13.58	13.71
Past 3 Years	9.88	9.90	9.96
Past 5 Years	8.30	8.27	8.34
Annual Volatility (Full Period)	8.03	8.04	8.06
Maximum Drawdown	-13.62	-13.69	-13.68
Ratio			
Return per unit Risk	0.65	0.60	0.64
Market Beta			
Market Beta	1.00	1.00	—
Excess Returns			
Up Months	0.00	-0.03	—
Down Months	0.01	-0.01	—
Drawdown Statistics Based on the 60 Equity — 40 Fixed Income Drawdown Dates (%)			
December 2019 to March 2020 (COVID-19)	-13.62	-13.69	-13.68
May 2015 to February 2016 (Second Largest Drawdown)	-9.59	-9.80	-9.46
July 2018 to December 2018 (Third Largest Drawdown)	-7.85	-7.67	-7.87

Source: State Street Global Advisors, Bloomberg Finance L.P., as of February 2021. Monthly Returns data from April 2012 to February 2021. “Euro Treasury” is represented by the Bloomberg Barclays Euro Aggregate Treasuries 1–3 Years TR Index. ”STOXX ESG” is represented by the STOXX Europe 600 ESG-X Index, “STOXX Europe 600” Index is represented by the STOXX Europe 600 Index and “MSCI Europe” is represented by the MSCI Europe Index.
BACKTESTED PERFORMANCE: This document contains index performance data based on backtesting conducted by STOXX Indices, i.e. calculations of how the index might have performed prior to launch if it had existed using the same index methodology and based on historical constituents. Backtested performance information is purely hypothetical and is provided in this document solely for information purposes. Backtested performance does not represent actual performance and should not be interpreted as an indication of actual performance.

Figure 3
Total Exposure of Companies Excluded in the STOXX Europe 600 ESG-X Index



Source: STOXX Europe 600 ESG-X Index, as of 31 December 2020. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. This information should not be considered a recommendation to invest in a particular sector or to buy or sell any security shown. It is not known whether the sectors or securities shown will be profitable in the future.

Risk Attribution of ESG Index Against Broad Based Benchmark

We conclude by conducting a risk attribution analysis of the STOXX Europe 600 ESG-X Index against the STOXX Europe 600 benchmark in order to understand the sources of tracking error. This is particularly useful when investors would like to appreciate the drivers of risk and return of the ESG-X Index against the broad benchmark. Tracking error is a benchmark-relative (active) risk that indicates by how much the STOXX Europe 600 ESG-X Index moves away from the broad-based STOXX Europe 600 Index.

To understand the biases that result from replacing the equity index with its ESG-orientated version, we compared the ESG-X Index against the STOXX Europe 600 Index. The analysis was conducted on the basis of holdings data using an MSCI Barra Multi-Asset Class Risk Model as at the end of February 2021.

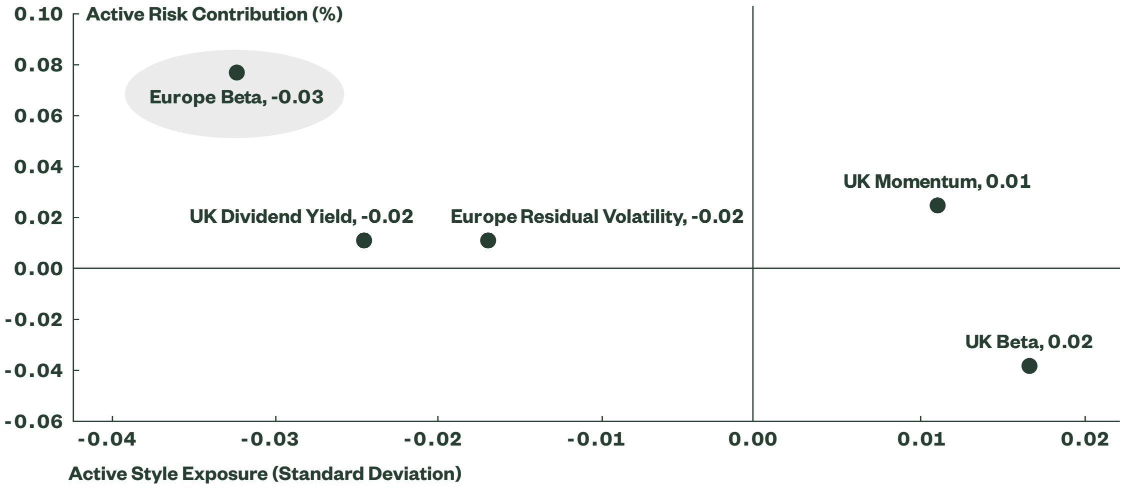
As shown in Figure 4, we observe low tracking error between the ESG-X Index and the STOXX Europe 600. The most important source of the tracking error stems from selection. These results highlight that equity selection using ESG exclusionary criteria is a relevant consideration in the outcome of this index (see Figure 5).

Figure 4
Risk Contribution to Ex-Ante Tracking Error of STOXX Europe 600 ESG-X vs. STOXX Europe 600

Factors	**STOXX ESG-X vs. STOXX Europe 600**
Market	0.04
Style	0.11
Industry	0.11
Selection Risk	0.31
Currency Risk	0.05
Total (Tracking Error)	**0.62**

Source: MSCI Barra, State Street Global Advisors, as of February 2021. “STOXX ESG-X” is represented by the STOXX Europe 600 ESG-X Index and “STOXX Europe 600” is represented by the STOXX Europe 600 Net Total Return Index.

Figure 5
Portfolio Risk Contribution — Style Risk Factors (STOXX Europe 600 ESG-X Index vs. STOXX Europe 600 Index)



Source: MSCI Barra, State Street Global Advisors, holdings data as of February 2021. The numbers next to the label in the graph represent the active style exposure in standard deviation.

Endnotes

1 More than 25% of the revenues from thermal coal extraction (including thermal coal mining and exploration) or more than 25% of the revenues from electricity generation.

2 Internal production or sale of controversial weapons or the ultimate holding company owns more than 10% of voting rights of the involved company.

3 0% revenue threshold.

4 *2018 Global Sustainable Investment Review*, Global Sustainable Investment Alliance.

5 *Demystifying negative screens: The full implication of ESG exclusions,* Schroder, December 2017.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigour
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 31 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with US $3.59 trillion* under our care.

* This figure is presented as of March 31, 2021 and includes approximately $60.33 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

ssga.com/etfs

Marketing Communication.
General Access.
For professional client use only.

State Street Global Advisors Worldwide Entities

Abu Dhabi: State Street Global Advisors Limited, ADGM Branch, Al Khatem Tower, Suite 42801, Level 28, ADGM Square, Al Maryah Island, P.O Box 76404, Abu Dhabi, United Arab Emirates. Regulated by the ADGM Financial Services Regulatory Authority. T: +971 2 245 9000. **Australia:** State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services License (AFSL Number 238276). Registered office: Level 14, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240-7600. F: +612 9240-7611. **Belgium:** State Street Global Advisors Belgium, Chaussée de La Hulpe 185, 1170 Watermael Boitsfort Belgium. T: +32 2 663 2036, F: +32 2 672 2077. SSGA Belgium is a branch office of State Street Global Advisors Ireland Limited. State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Canada:** State Street Global Advisors, Ltd., 1981 McGill College Avenue, Suite 500, Montreal, Qc, H3A 3A8, T: +514 282 2400 and 30 Adelaide Street East Suite 800, Toronto, Ontario M5C 3G6. T: +647 775 5900. **France:** State Street Global Advisors Ireland Limited, Paris branch is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Ireland Limited, Paris Branch, is registered in France with company number RCS Nanterre 832 734 602 and whose office is at Immeuble Défense Plaza, 23-25 rue Delarivière-Lefoullon, 92064 Paris La Défense Cedex, France. T: (+33) 1 44 45 40 00. F: (+33) 1 44 45 41 92. **Germany:** State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. Authorised and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"). Registered with the Register of Commerce Munich HRB 121381. T: +49 (0)89-55878-400. F: +49 (0)89-55878-440. **Hong Kong:** State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200. **Ireland:** State Street Global Advisors Ireland Limited is regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered Number: 145221. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300. **Italy:** State Street Global Advisors Ireland Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Ireland Limited, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 10495250960 - R.E.A. 2535585 and VAT number 10495250960 and whose office is at Via Ferrante Aporti, 10 - 20125 Milano, Italy. T: +39 02 32066 100. F: +39 02 32066 155. **Japan:** State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan. T: +81-3-4530-7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345), Membership: Japan Investment Advisers Association, The Investment Trust Association, Japan, Japan Securities Dealers' Association. **Netherlands:** State Street Global Advisors Netherlands, Apollo Building, 7th floor Herikerbergweg 29 1101 CN Amsterdam, Netherlands. T: 31 20 7181701. SSGA Netherlands is a branch office of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Singapore:** State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826-7555. F: +65 6826-7501. **Switzerland:** State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16. **United Kingdom:** State Street Global Advisors Limited. Authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 5776591 81. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350.

Important Risk information

The returns on a portfolio of securities which exclude companies that do not meet the portfolio's specified ESG criteria may trail the returns on a portfolio of securities which include such companies. A portfolio's ESG criteria may result in the portfolio investing in industry sectors or securities which underperform the market as a whole.

All forms of investments carry risks, including the risk of losing all of the invested amount. Such activities may not be suitable for everyone.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.
The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.
This document contains certain statements that may be deemed forward looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

The views expressed in this material are the views of the Daniel Ung and Shankar Abburu through the period ended 14 April 2021 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

Investing involves risk including the risk of loss of principal. Quantitative investing assumes that future performance of a security relative to other securities may be predicted based on historical economic and financial factors, however, any errors in a model used might not be detected until the fund has sustained a loss or reduced performance related to such errors.

ID440914-3560761.1.1.GBL.INST 0421
Exp. Date: 30/04/2022