Handbook Series
April 2019

insights

Can Passive be ESG Active?

To Exclude or not to Exclude?

European Commission changing the game with Sustainable Benchmarks

SUSTAINABLE INDEX FUNDS & ETFs

For investment professionals only
Not for public distribution

NordSIP Handbooks are published by
Big Green Tree Media AB
Kungsgatan 8
111 47 Stockholm
+46 70 9993966

Editor-in-Chief
Aline Reichenberg Gustafsson
aline@nordsip.com

Director, Strategic Relations
Kim Hansson
kim@nordsip.com

Economics Editor
Filipe Wallin Albuquerque
filipe@nordsip.com

For advertising or other sales-related enquiries
email: sales@nordsip.com

FOR INVESTMENT PROFESSIONALS ONLY
Please read important Terms & Conditions on the last page of this document

TABLE *of* CONTENTS

sustainability talk

5 the editor's word
What Comes After Decarbonization?

6 To Exclude or not toExclude?
About Nokia, Alternative Risk Premia and the Transition to a Low Carbon Economy

30 The Wind is Turning
How the European Benchmark Legislation can Change the Game of Sustainable Investing

46 Asset Owners & Fund Selectors
Can Passive be ESG Active?

50 about our partners

index funds & ETFs

12 A Short History
A Journey From ESG Ratings to Sustainable Indices

18 Weighing the Evidence
ESG and Equity Returns

24 Low-Carbon Indices
A Cost-Efficient Answer to Sustainable Investing

34 Index-Based Strategies
Building Scalable Solutions to Answer the Most Pressing Climate Change Investing Needs

38 Mitigation & Adaptation
Building Scalable Solutions to Answer the Most Pressing Climate Change Investing Needs

42 Green Bond ETFs
Why are Investors so Excited?

Photographic Credits © Shutterstock

© 2019 NordSIP all rights reserved

the editor's word

What Comes After Decarbonisation?

Aline Reichenberg Gustafsson, CFA
Editor-in-Chief
NordSIP

When I started writing about sustainable investing in 2016, I tried to interview as many influential investors I could find around me in the Nordics. One person that made a strong impression was Mats Andersson, who had just left his position as CEO of the Swedish state pension fund AP4.

"Volatility is just a poor measure of risk for a large state pension fund," Andersson told me. Instead, he suggested, we should define risk where there is a possibility of permanent capital loss in the long term. Climate change, he added, is just the type of permanent capital loss a pension should care about.

One of Andersson's most significant achievements at AP4 was the co-founding in 2014 of the Portfolio Decarbonization Coalition (PDC), which committed to decarbonising US$ 100 billion of institutional investments worldwide. The co-founding organisations were the United Nations Environemental Program Finance Initiative (UNEP FI), the Carbon Disclosure Project (CDP) and Amundi. After two years, when I met Andersson, the coalition counted 26 members, with US$ 3.2 trillion of AUM, of which US$ 600 billion were allocated to decarbonised strategies. The latest update on the PDC's website mentions 32 organisations, overseeing the gradual decarbonisation of US$ 800 billion - eight times more than initially targeted!

With such a strong start, we must wonder why we haven't received an update yet that the trillion mark was surpassed, long time ago. I believe it is hardly surprising that we haven't. Decarbonisation was always meant to be merely a starting point. Institutional investors worldwide have started looking closer at the details: what is it we measure when we divest from carbon? Is that the right thing to do? Should we stay away from fossil producers or should we influence them and be part of the energy transition?

Those questions are valid and difficult to answer. Meanwhile, the effects of climate change have become more obvious than ever. Average temperatures have never been higher, ecosystems are being destroyed, and weather-born catastrophes are more and more frequent, every year. Capital needs to shift and fast!

The European Commission is working on legislation that should motivate investors to support climate-related investments. Will it be enough? Institutional investors need to have a good look at their allocation and ask themselves if the decarbonisation target they set back in 2014 is really relevant today. In this handbook, we have decided to cover the strategies that offer the lowest possible hurdle to shift capital.

We have looked at the pros and cons of exclusion, we established a history of ESG indexes and dissected the various components the service providers and managers can offer. We gathered the opinions of asset owners and fund selectors. MSCI shared new evidence that shows how ESG factors can lower risk in equity investments. Selected index-based fund managers provided insights and explained how optimisation can best provide climate-adjusted returns at a low cost. Finally, you will read how green bond ETFs can provide a cost-effective solution to achieving climate-related impact.

Now, what's your excuse for not shifting capital to save the planet?

To Exclude or Not to Exclude

About Nokia,
Alternative Risk Premia
and the Transition to a
Low Carbon Economy

by Aline Reichenberg Gustafsson,CFA

Peter Sandahl
Head of Sustainability
Nordea Life & Pension

F

"If we look at the amount of capital that needs to be deployed in order to generate innovation and deploy new solutions, there is no way we can rely solely on niche players or new startups."

For asset owners, like for the rest of the industry, the journey into sustainable investing started to a large degree with exclusions and norms-based screenings. That was a while ago. Nowadays, at least in the Nordics, most institutions have established exclusion policies and review them on an ongoing basis. Selling off a couple of stocks here and there no longer triggers any particular debate. What has become obvious to many, however, is that exclusions may not remedy climate change, at least not fast enough, unless perhaps the majority of all asset owners and institutional investors act in concert and chase the same "villains" together.

Peter Sandahl, recently appointed Head of Sustainability at Nordea Life & Pension, is asking questions in a deliberate and relentless way. While he may not possess all the answers yet, he focuses on a series fundamental issues which, if they could be cracked, would revolutionise the investment world as we know it. While he has been working at Nordea in different capacities for more than ten year, Sandahl has also engaged personally in raising awareness of the impact of climate change in the Alps through a charity called Climb for ClimateTM. This personal commitment has increased his own sense of urgency. It boosts his energy to drive change, as well as his ability to provide a critical analysis of the situation in the financial industry.

We asked Peter Sandahl how Nordea Life & Pension approaches questions such as portfolio decarbonization and impact investing. "Do we want to ignore carbon emitters, or do we want to be part of the energy transition?" he asks. "That's the question every pension fund should find an answer to." Put in those words, the idea of participating in positive change sounds appealing, of course. The question may have subtle implications, however.

There may be (at least) three reasons to exclude fossil fuel-related or carbon-heavy investments. Ethically, an organization may want to distance itself from profiting from activities that are obviously damaging the environment. This is an idea that end-savers and future pensioners often associate with. Beyond that, businesses that are unsustainable from an ESG perspective may also prove less profitable in the future, and hence are better avoided, purely from risk/return maximization angle. The final and most

debated argument is that, if all the large asset owners in the world divest from the most polluting stocks, these companies' cost of capital will increase to a point where their business will become less profitable, providing them with an incentive to change.

"While I do believe that engagement can be incredibly effective, it cannot be the only answer,"

Meanwhile, counter-arguments to divesting from an entire industry weigh at least as much. Unlike isolating a few black sheep, excluding an entire portion of the economy such as oil majors or other carbon-heavy sectors necessarily has implications on near- and even medium-term performance. The same way investors need to "keep dancing" even when they know they are in a financial bubble, today's asset owners have a hard time turning their back on a profitable industry.

Sandahl highlights that keeping carbon in portfolios may be the only way to turn the world's carbon-equation around. "If we look at the amount of capital that needs to be deployed in order to generate innovation and deploy new solutions, there is no way we can rely solely on niche players or new startups. As asset owners, we need to get the large companies in the tent, deploying their billions, infrastructure and expertise into the transition towards a low-carbon economy. In most cases it will mean that they will have to turn their business around completely. As long-term investors, we have a duty to be involved. We shouldn't just decarbonise through exclusion and feel like we have solved our problem."

Many responsible investors believe that active ownership and corporate engagement is the appropriate way to help them find the right transition path. "While I do believe that engagement can be incredibly effective, it cannot be the only answer," Sandahl adds. "At Nordea, we have driven our fair share of engagement on our own. This is how I know that, in order to be effective, active ownership is extremely resource intensive. Investors need a lot of time, people and expertise to drive change effectively. It is also an area where it is very easy to make it sound a lot better than what you accomplish on the ground."

In a pure investment perspective, we should perhaps equate the carbon transition to an industry in disruption, where the necessity of change is not so much driven primarily by the innovation of new entrants, as it often is, but by the external pressure from our planet's ecosystem. Take the telecommunications industry as an analogy. The business conditions and competitive landscape for both carriers and phone manufacturers underwent a radical change in the last three decades. What, if anything, could we learn in hindsight from the investment cases of this period, and apply it to the carbon transition?

"We need numbers today, so that we can ask for accountability and drive an increase in transparency."

We would not be able to talk face-to-face with someone one the other side of the world, while sitting in the middle of a park, if carriers hadn't invested massively into providing the network coverage we need, and not only once. Today's players may look very different from those who provided our parents with their fixed telephone lines. The transformation wasn't painless and has certainly benefitted some more than others. In the development of mobile devices, the corpses left behind by a failed transition are even more spectacular. Think about Nokia and Research in Motion, which once qualified as the leaders and are now nearly relegated to museum pieces. If Apple can be considered as today's market winner, it would have been impossible to guess in the late 90s that it would one day take over the mobile phone market. Riding Nokia's bubble made sense, until it didn't. To benefit from the transition, an investor had to be plugged into the market, remaining vigilant and nimble. Surveying data was part of that process. The entire tech market was (and still is to a great extent) stirred by analyst projections and quarterly figures, whether they were EPS or RPU (revenue per user, a crucial metric in telecom).

"We need data," says Sandahl. "Otherwise, we have nothing to base our decisions on. We also need to make projections and scenario analysis.

"At the moment, we need fund managers to show that they do what they say they do."

The problem is that data is imperfect, and projection models even more so. For that reason, we often tend to find excuses not to use them until we can validate it to the same extent as financial performance, for example. I believe we need to work even more together as an industry rather than institution by institution and use what is currently out there, even if it only takes us halfway there. At least we would have something to improve upon, and we would all be pulling in the same direction."

Sandahl's point would resonate with any old tech investor. There is nothing less perfect than a P/E ratio to value a growing company, as it only considers the potential earnings in a discrete period, but few tech investors would consider taking a decision without it.

"We need numbers today, so that we can ask for accountability and drive an increase in transparency," Sandahl adds. "Today measuring the carbon footprint of major oil companies will not give us an accurate sense of how they are participating in the transition."

Sandahl applies the same logic to fund managers. "At the moment, we need fund managers to show that they do what they say they do. Traditional funds show us their performance figures, and we can see if they behaved the way we expected them to. It doesn't mean that we can rely on past performance, but at least we have a tool that serves as a basis for discussion. They can explain why and how they produced their financial returns, and we have an insight into their logic."

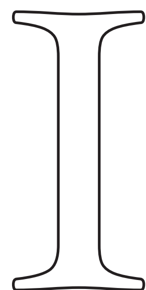
The hedge fund industry provides yet another interesting analogy to this accountability conundrum and shows why evolving data is likely to drive transparency. In the 90s, hedge funds stood out as they showed outstanding performance compared to traditional investments. In the following two decades, quantitative analysts got busy deconstructing this performance. Today, we understand well that a large part can be explained by leverage, which can represent a significant increase in downside risk, as well as alternative risk factors, that can easily be replicated at a low cost. The managers' skill represented by the elusive "alpha" is in fact much rarer than it first seemed.

In this carbon transition, systematic strategies like ETFs and Index funds definitely have a strong role to play, but, at least for Sandahl, a broad exclusion of carbon isn't the answer. Asset owners, like Nordea Life & Pension must be able to decide once and for all where they stand, so that they can demand that the bar be pushed higher. The asset managers, on the other hand, should pick up the gauntlet and drive the development of better data, to show their investors how their capital can drive change.

A Short History

A Journey From ESG Ratings to Sustainable Indices

by Filipe Wallin Albuquerque
NordSIP



Increasing cost sensitivity and fee-based advisory may push global ETF assets to US$ 12 trillion in the next five years, according to BlackRock. This trend will be supported by ESG investors using ETFs to find the liquidity, tax efficiency, low cost and transparent solutions they characteristically seek.

Filipe Wallin Albuquerque
Economics Editor
NordSIP

Increasing client awareness, transparent disclosure requirements and sophisticated research continue to facilitate the rising popularity of sustainable investment strategies. ESG analysis and its application to the construction of ESG-themed indexes and ETFs, can improve the quality of investment decisions. The integration of long-term considerations, such as climate change and human capital management, can help investors overcome the short-termism pitfalls of traditional financial analyses.

ESG-indexes provide the benchmarks necessary for fund allocators to set their investment policy and for fund managers to track their performance. By tracking these indexes, ESG-themed ETFs provide institutional investors, wealth managers and personal investors with cost-effective and standardised access to investments that may otherwise have been beyond their reach.

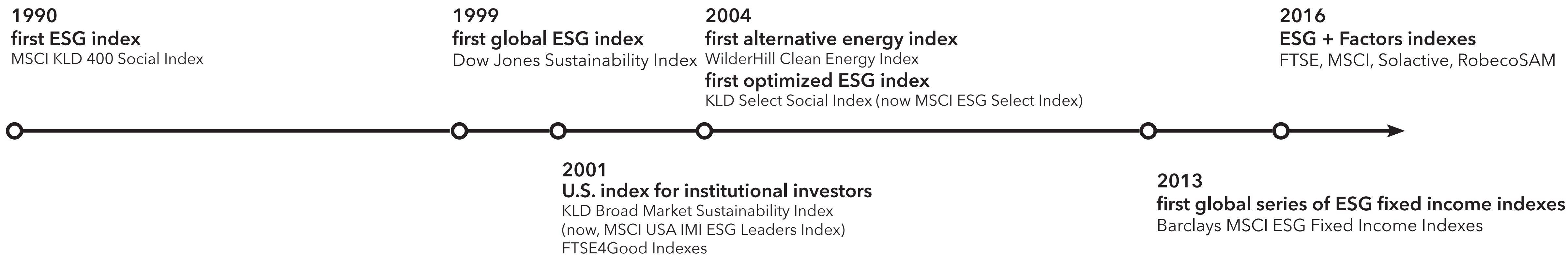
Indexed Investing and ESG

According to BlackRock, sustainable investing falls into two broad categories. The Avoid category excludes objectionable companies or industries by screening them out of a portfolio. On the other hand, investments categorised as Advance seek to align capital with a set of desired sustainable outcomes. These alignments can be done through the integration of ESG analysis and ESG scores, through a thematic focus on any of the ESG factors or by conducting a more impact-targeted investment strategy.

Investments based on ESG scores use ESG benchmarks or follow active strategies that overweight strong ESG performers. Strategies with a specific thematic focus will focus on a specific metric of any of the three ESG factors, like carbon emissions. Impact investing seeks tangible non-financial outcomes, such as promoting energy or water savings, in addition to returns. The iShares Thomson Reuters Inclusion & Diversity UCITS ETF, for example, attempts to capture this idea.

The origin of ESG Indices

Source: Blackrock



Avoid and Advance: Sustainable Investing Styles

(Source: BlackRock. The above table is for illustration purposes only. I serves as a general summary and is not exhaustive)

AVOID	ADVANCE		
Screened	ESG	Thematic	Impact
Objective			
Remove specific companies/industries associated with objectionable activities	Invest in companies based on ESG scores/ rating systems	Focus on particular E, S or G issues	Target specific non-financial outcomes along with financial returns
Applications			
Screening out producers of weapons, fossil fuels and/ or tobacco	Optimised ESG benchmarks; active strategies overweighting strong ESG performers	Environmental focus (low carbon or renewable energy); social focus (diversity)	Specific green bond or renewable power mandates
Examples			
S&P 500 Fossil Fuel Free Index	Bloomberg Barclays MSCI US Corporate ESG Focus Index	MSCI Low Carbon Target Indexes	MSCI ACWI Sustainable Impact Index

The origin of ESG Ratings

Given the initial scarcity of ESG indexes, sustainable investing was originally dominated by equity managers. However, technological improvements allowed the creation of more indexes. Together with the rising demand for passive investment conspired to fuel the rise of ESG ETFs.

While there have been subsequent milestones contributions by Dow Jones, FTSE, Solactive, and RobecoSAM, MSCI played an important role in this universe by launching the first ESG index, the MSCI KLD 400 Social Index, in 1990. To this day this index remains a dominant presence in this industry.

The governance of the KLD 400 index was initially maintained by a committee that balanced ESG, size, and sector weighting considerations. Nowadays, instead of relying on a committee, the index follows a set of transparent quantitative rules that reference ESG ratings, ESG controversy scores, targets for relative sector representation, and treatment of corporate events. The index is rebalanced, and its constituents are weighted by their capitalisation. The evolution of the methodology behind the KLD 400 index illustrates how indexes contributed to the growth of ESG research. Without the indexes the research ecosystem necessary to develop ESG ratings, scores and targets may not have been devised.

ESG Ratings

Far more sophisticated than their humble roots, ESG ratings can nowadays use artificial intelligence to find data that was simply not accessible in the past. The superabundance of data has created a fertile ground for the development of a rich ESG research ecosystem, with a plethora of standard setters, data providers and rating agencies.

All of these industries play an essential role. Standard setters help structure and prioritise ESG reporting and disclosure, facilitating the adoption of new investment approaches. Based on these priorities, data aggregators, provide extensive sets of structured data extracted from publicly available sources. In parallel, specialised data providers focus on some of the specific sustainability themes. In the 2000s, rating agencies became the norm, offering a composite ESG score that allows investors to compare and rank companies relative to their industry peers.

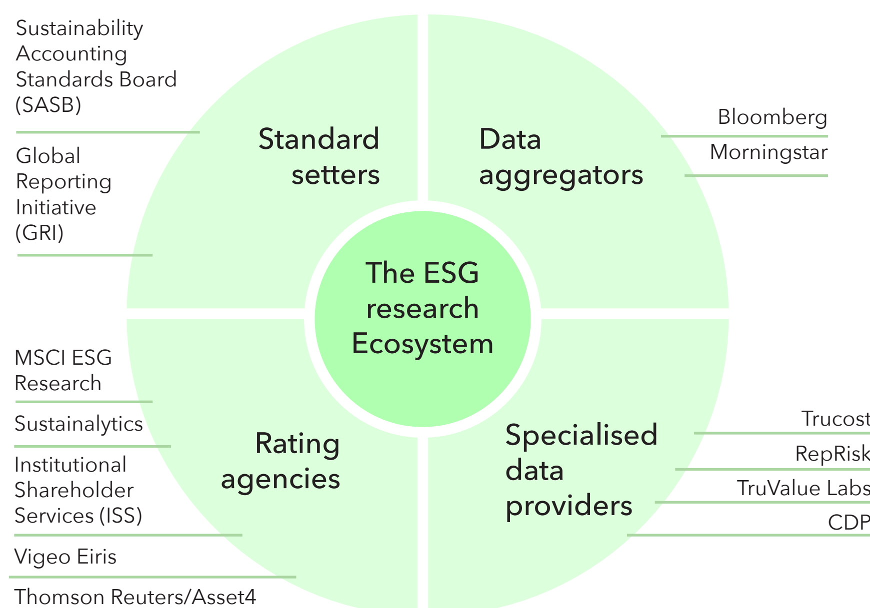
How are ratings developed?
Case studies on MSCI ESG Ratings

The case of MSCI's ESG rating methodology illustrates how ESG ratings are produced. MSCI uses ESG data gathered from government and NGO datasets, company disclosure documents, and public media sources on 37 key ESG issues to form an ESG risk assessment. ESG issues are assigned industry-specific weights according to their impact and the time horizon of risk and opportunity. Analysts score companies on both the exposure of the company to the ESG issues and the ability of the company to manage its exposure. The resulting scores are combined to generate the overall ESG rating, from AAA (highest) to CCC (lowest) in the case of MSCI.

MSCI also assigns a controversy score for each controversy affecting the company. MSCI defines a controversy case as an instance or ongoing situation in which company operations and/or products allegedly have a negative environmental, social, and/or governance impact. Controversies are assigned ratings from "Minor" to "Very Severe", based on the scale and nature of impact.

The ESG Research Ecosystem

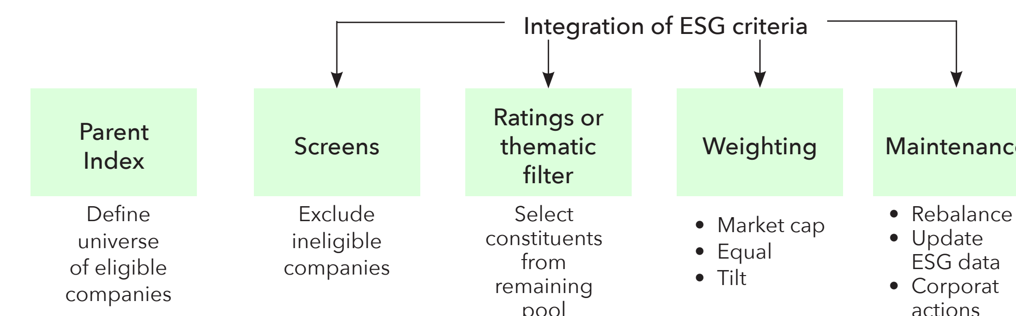
Source: BlackRock



The Construction of ESG Indexes

The construction of an ESG index will involve trade-offs between closeness to parent index and the sustainability of the new index. In re-weighting or selecting a subset of the companies that constitute the parent benchmark an ESG index may introduce differences in structural (e.g., sector or country weights) or financial (e.g., risk and return) characteristics relative to a parent index.

The new index's methodology includes a statement of the kind of ESG exposure the index is intended to provide based on constituent selection and constituent weighting. The constituent selection step will identify the parent index and which companies are to be excluded. Once the companies to be included into the ESG index have been selected, the index provider must determine the contribution of these companies to the new index. Companies are re-weighted based on their market capitalisation or on rules related to a particular metric identified as relevant for the index. The maintenance of the index will involve incorporating new financial and ESG information based on the index' rules.



Constituent Optimisation and the Case Study on MSCI Extended ESG Focus Indexes

The constituent companies of an index can also be weighted through what is known as optimisation. This technique selects and weights constituents to maximise the ESG score for the index without straying too far from the intended investment exposure. Because this technique can be used to specify a level of ESG exposure subject to some constraints, it can be used to manage trade-offs between ESG, financial, and fundamental characteristics.

For example, the MSCI Extended ESG Focus Indexes are designed to maximise exposure to companies with high ESG ratings while exhibiting risk and return characteristics similar to those of the underlying market. The optimisation procedure overweights companies with higher MSCI ESG ratings and underweights companies with lower MSCI ESG ratings, given a tracking error budget. The process sets limits on sector and country weight deviations from the parent market-cap weighted index.

The tracking error is a crucial part of constituent optimisation. A high tracking error budget can lead to an optimal portfolio with fewer constituents and a concentration of stocks with higher ESG ratings in the index. A low tracking error should lead to an optimal portfolio which will be similar to the parent index and with a smaller aggregate improvement on the ESG score.

Applications of ESG indexes

BlackRock has found ESG indexes to be useful tools to help its clients improve their portfolio choices. In one case, a national network of financial advisors approached BlackRock when they needed to build a sustainable model that reflected their traditional benchmark model's regional exposures and overall risk and return characteristics. Through the use of its range of sustainable ETFs, BlackRock was able to help them construct a portfolio with a higher ESG score, lower carbon intensity and higher focus on impact themes.

In another case, a pension fund needed assistance improving the risk-adjusted return of its passive investments relative to an index while reducing its carbon emissions. BlackRock suggested a risk-based low carbon optimised solution with similar traditional risk factor exposures as the policy benchmark and significantly lower carbon emissions.

BlackRock also helped a university foundation move its entire passive global equity exposure to a new index that could fulfil a commitment to fossil fuel divestment as well as ESG integration. BlackRock suggested a set of hypothetical portfolios that could exclude fossil fuel reserves while increasing overall ESG scores, and minimising tracking error relative to the MSCI ACWI Index.

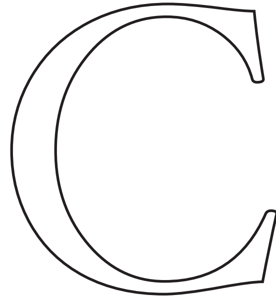
This article is based on "An Evolution in ESG Indexing" published by iShares by BlackRock. Contributors: Sarah Kjellberg, Tanvi Pradhan and Thomas Kuh

Weighing the Evidence

ESG and Equity Returns

by Guido Giese and Linda-Eling Lee
MSCI

The information contained herein (the "Information") may not be reproduced or redisseminated in whole or in part without prior written permission from MSCI ESG Research. The Information may not be used to verify or correct other data, to create any derivative works, to create indexes, risk models, or analytics, or in connection with issuing, offering, sponsoring, managing or marketing any securities, portfolios, financial products or other investment vehicles. Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. MSCI ESG Research is provided by MSCI Inc.'s subsidiary, MSCI ESG Research LLC, a Registered Investment Adviser under the Investment Advisers Act of 1940. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. None of the Information or MSCI index or other product or service constitutes an offer to buy or sell, or a promotion or recommendation of, any security, financial instrument or product or trading strategy. Further, none of the Information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. The Information is provided "as is" and the user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF MSCI INC. OR ANY OF ITS SUBSIDIARIES OR ITS OR THEIR DIRECT OR INDIRECT SUPPLIERS OR ANY THIRD PARTY INVOLVED IN THE MAKING OR COMPILING OF THE INFORMATION (EACH, AN "INFORMATION PROVIDER") MAKES ANY WARRANTIES OR REPRESENTATIONS AND, TO THE MAXIMUM EXTENT PERMITTED BY LAW, EACH INFORMATION PROVIDER HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING ANY OF THE FOREGOING AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT SHALL ANY OF THE INFORMATION PROVIDERS HAVE ANY LIABILITY REGARDING ANY OF THE INFORMATION FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR ANY OTHER DAMAGES EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited. Privacy notice: For information about how MSCI ESG Research LLC collects and uses personal data concerning officers and directors, please refer to our Privacy Notice at https://www.msci.com/privacy-pledge.



Over 2,000 research articles from both academics and financial professionals have analyzed the link between companies' environmental, social and governance-related (ESG) characteristics and their financial risk and performance (Friede et al., 2015). While Friede found little research concluding that using ESG criteria has impaired investment performance, there has also been no clear consensus on whether ESG has improved returns on a risk-adjusted basis. Why the lack of consensus? We find that many of the ESG investing methodologies used in studies were designed to meet social or ethical values and not financial objectives. To understand the link between companies' ESG characteristics and their financial risk and performance, it is important to evaluate only the studies that use ESG methodologies specifically designed to identify financially relevant issues, such as MSCI ESG Ratings.

Guido Giese

Linda-Eling Lee

Consolidating findings from various academic and industry researchers, we observe there is significant evidence that the application of MSCI ESG Ratings may have helped reduce systematic and stock-specific tail risks in investment portfolios. This result makes sense, as the MSCI ESG Rating process focuses on 1) identifying risks that can affect enterprise value and 2) assessing the quality of management's control of these risks. As discussed in Giese (2019a), we found that high-ESG-rated companies were more profitable, paid higher dividends and showed slightly higher valuation levels, when we controlled for other financial factors over a 10-year period between May 2007 and November 2017.[1]

The most difficult question is whether ESG ratings, in general, have been linked to a risk premium like those of traditional financial factors such as quality, value or momentum. ESG ratings have a much shorter history than traditional factors, meaning the statistical confidence level is fairly low compared to that of common factors. A longer time series is needed to authoritatively address this question. However, we observed some evidence that ESG rating changes (ESG momentum) showed the strongest positive performance of any ESG characteristic and was more consistent over time (Giese, 2018, 2019a). Companies with higher ESG ratings, on average, had lower frequency of stock-specific risks, avoiding large drawdowns, and thus representing a "risk-mitigation premium."

Why the jury appears to be out

More than 2,000 research papers have been written by academics and financial professionals about the pros and cons of investing with ESG criteria, according to one study (Friede et al., 2015). The authors found only a few papers showed that ESG had impaired performance, and no clear consensus has emerged as to whether ESG has enhanced risk-adjusted returns. There are (at least) three reasons for this lack of consensus.

1. Most important, different researchers have studied different ESG methodologies, some of which were not primarily designed to identify financially relevant issues. Broadly speaking, we have identified three types of methodologies that use ESG data:

   a. **Values-based exclusions**: Typically, portfolios screen out companies involved in certain business activities, such as the production and distribution of alcohol, tobacco or weapons. These screens, which dominated ESG investing in the 1990s, aim to align portfolios with investors' individual values or preferences and are often referred to as socially responsible investing (SRI), or ethical investing. This contrasts with Friede, who dealt with actual performance, as opposed to expected performance. Research on these exclusionary screens focused on the reduced investment opportunity set that was expected to result in weaker risk-adjusted returns. At best, researchers found that SRI investors could anticipate similar financial results to investing in the full market.[2] This study, however, did not take into account the difference between socially and financially driven methodologies.

   b. **Impact screens**: While values-based screens aim to reduce exposure to companies that impose costs on society at large (known as negative externalities), impact screens aim to identify companies that can drive positive social change — e.g., companies in clean technologies. Impact portfolios are typically fairly concentrated and can have strong active factor exposures and significant exposures to individual stocks that may not relate to their impact theme (Berube et al., 2014).

   c. **ESG ratings**: While values-based screens and positive impact screens focus on what type of products and services companies produce, ESG ratings typically focus on how ESG risks and opportunities are incorporated into a company's business model. This analysis is typically based on a broad range of E-, S- and G-related indicators, such as carbon footprint, water usage, data security, human-capital development, executive pay and board structure. Within ESG ratings methodologies, there are two key approaches — one that relates to the rater's subjective standards on what constitutes "good" ESG and one that focuses on capturing financial relevancy[3]:

      i. **Preference-based ESG ratings:** The different ESG indicators are aggregated using a scorecard where the weights represent the preferences, based on norms or standards set by the rater. The resulting ESG score has no direct economic meaning, since it is based on a weighted sum of very different indicators, such as carbon emissions and gender diversity. However, the scorecard creates a measure that allows the rater to rank companies using this normative scale of what constitutes "good" or "bad" ESG.

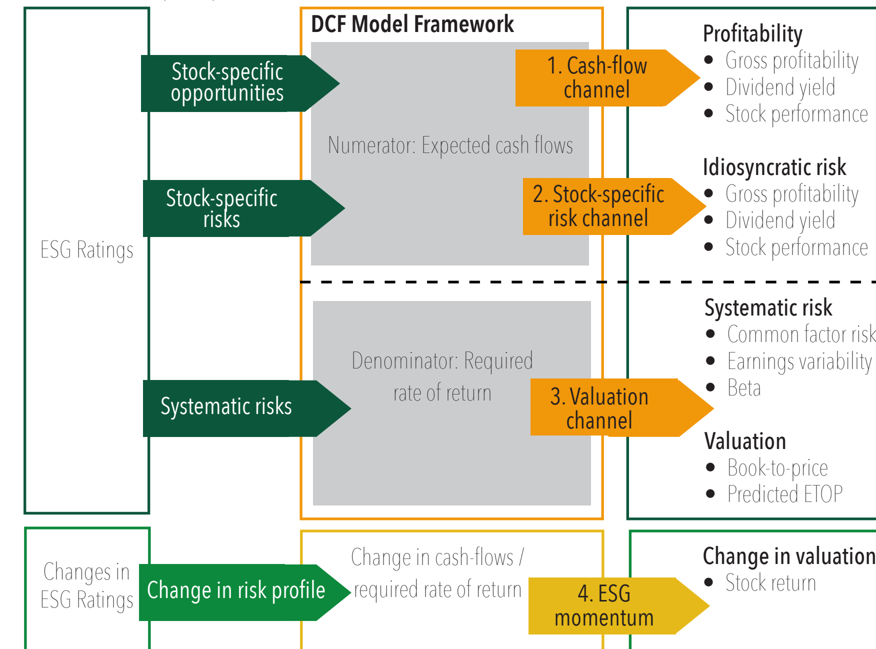
      ii. **Financial-model-based ESG ratings**: To create ESG ratings that may serve as a financial risk indicator in portfolio construction, a model is required that selects and weights ESG indicators based on an economic rationale. For instance, MSCI ESG Ratings translate ESG risk issues for a given industry into a common scale. Specifically, for each ESG risk indicator, MSCI ESG Research assesses the extent that this type of risk may impact future earnings or the assets of the company. Some researchers have assessed only one aspect of ESG.

2. For instance, some researchers (e.g., Breedt et al., 2018, and Pollard et al., 2018, and earlier research from MSCI) have searched for an ESG factor premium and neglected other potentially stronger economic transmission channels, such as the identification of company-specific risks. Giese et al. (2019a) emphasized the need for a holistic approach by analyzing the impact of ESG ratings on a variety of risk and performance indicators following different systematic and stock-specific transmission channels (see Exhibit 1). The authors also provided an economic explanation for how ESG characteristics led to a financial impact in each of the proposed channels.

3. Some researchers, including some at MSCI, have performed backtests or correlation studies, which typically depended on a given timeframe and investment universe and could not provide evidence for a causal relationship between ESG ratings and performance.[4] Therefore, Giese et al. (2019a) emphasized the need to test ESG ratings within an economic model that allows for

Exhibit 1: Test of Financial Significance

Source: Giese et al. (2019a)



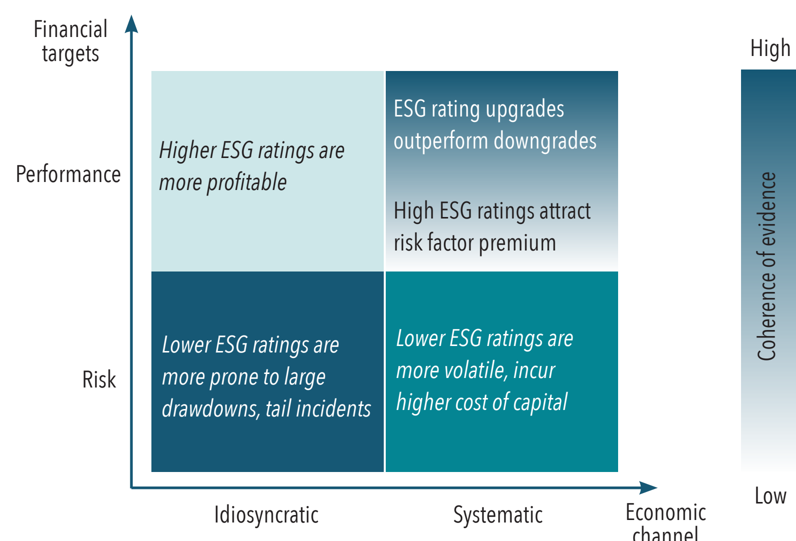
[1] This paper controlled for company size, industry and region in its analysis of stock-specific risks. Sectors are controlled for by using MSCI Industry-adjusted scores. Size is adjusted by regressing ESG scores versus the size of the company and using the residuals of this regression as size-adjusted ESG scores.

[2] There is a decades-long stream of research on this topic – e.g. Hamilton et al. (1993), Luther et al. (1994) and Asness (2017)

[3] Eccles and Strohle (2018) explore the historical origins and recent evolution of various ESG scoring and rating approaches, highlighting a distinction between value-driven and values-driven approaches. A common library of ESG data and metrics can be used to reflect either normative preferences (such as scoring companies on contravention of different global norms or involvement in controversial business lines or practices) or financially driven considerations.

[4] See Harvey et al. (2016) and Krueger (2018).

Exhibit 2: Coherence of Research Results across Financial Categories



Source: MSCI. Evidence has been strongest for risk reduction, in particular for idiosyncratic risks. Results still vary substantially for systematic performance contribution across different research contributions.

an assessment of causality.

In brief, of the various ESG investment methodologies available, only ESG ratings based on a financial model are designed to identify potential ESG-related financially relevant risks. Much research has been focused on ESG methodologies — such as exclusionary screens or preference-based ESG ratings — that are not designed to improve risk-adjusted returns. It is not surprising that there is a lack of consensus on the value of ESG investing, as many papers focus on strategies where achieving superior financial returns is not the main objective.

Weighing New Evidence

For most institutional investors, however, obtaining financial benefits from their ESG investments is a key motivation (Eccles et al., 2016). We can categorize research as follows:

- The type of economic transmission (Giese et al., 2019a), which can either be idiosyncratic (company-specific) or systematic (affecting a group of companies in a similar way).
- The financial objectives, which can be related to either risk or performance.

For each of these categories, there is evidence that ESG ratings have been associated with a financial effect. Most research, however, focuses on just one or two of these aspects. To see a fuller picture, we seek to provide a consolidated overview across all four categories, based on MSCI research (Exhibit 2). Darker shades indicate increasing levels of confidence in the economic arguments and statistical results.

Data history has important implications for our findings. In general, historical data series for ESG ratings applied to a global universe were much shorter (e.g., MSCI ESG Ratings have fully covered the universe of MSCI World Index companies since 2007) and of lower frequency (typically annually) compared to other areas of finance — e.g., credit ratings or equity factors — making it challenging for researchers to achieve similar confidence levels. We get more robust results from analyzing idiosyncratic transmission channels, which offer several thousand ESG company ratings per year.

In contrast, systematic transmission channels have a limited time history and thus are likely to offer lower levels of statistical confidence. The level of economic confidence — i.e., being able to explain the economic reasons (or economic transmission channels) for why ESG characteristics have a causal effect — is also significant.

We are seeking coherence between economic arguments and their statistical confidence in the data. The economic and empirical evidence for each of the four financial categories can be summarized as follows:

1. **Idiosyncratic risk**: Companies we analyzed with high MSCI ESG Ratings have historically shown lower financial-drawdown frequencies, while controlling for other factors. For example, the MSCI ESG Leaders Indexes (which target companies with the highest ESG-related performance in each sector of the parent index) have avoided a number of major ESG-related risk incidents over their live track records. While ESG research cannot predict future incidents, ESG ratings provided an indicator that corresponded with significant differences in the frequency of these incidents happening during the respective study periods. For example, see Jo et al. (2012), Hoepner et al. (2013) and Giese et al. (2019a). These results are intuitive, as companies with high ESG ratings were considered to have had a greater ability to manage and mitigate company-specific risks than lower-ranked sector peers.
2. **Systematic risk**: Many of the companies with high MSCI ESG Ratings that we examined historically showed lower levels of systematic risk (see Dunn et al., 2015, and Giese et al. 2019b) than companies with poor ESG ratings. For instance, they have shown lower levels of volatility in MSCI's Barra Global Equity Factor Model — Long Term Horizon (GEMLT) while controlling for other factors. In addition, the MSCI ESG Leaders Indexes have shown lower levels of drawdowns among their constituents in crisis situations (Giese et al., 2019b). The economic rationale is again intuitive: Companies with strong ESG characteristics were more resilient when faced with changing market environments, such as fluctuations in financial markets and changes in regulation.

[5]Giese et al. (2019a) controlled for company size, industry and region in their analysis of stock-specific risks.
[6]There have been many such incidents in the MSCI ACWI Index since the launch of MSCI ESG Ratings in 2007, including BP's oil-platform accident, Volkswagen's emission scandal, Equifax's and Facebook's respective data-security breaches and Petrobas's bribery scandal. None of these companies were constituents of the live MSCI ACWI ESG Leaders Indexes at the time the incidents occurred, because their ESG Ratings at the time of the selection were below average.
[7]For instance, Giese et al. (2019a) used the MSCI World Index from May 2007 through November 2017 for their empirical assessment.

3. **Idiosyncratic performance**: Companies within the MSCI Index that had high ESG ratings were more profitable and paid higher dividend yields, while controlling for other factors (i.e., size, industry and region) from May 2007 through November 2017 (Giese et al., 2019a). Fatemi et al. (2015) found similar results in their empirical analysis. They explained that stronger ESG characteristics were linked to better business practices, such as attracting more talented employees, achieving better innovation management, creating long-term business plans and incentive plans for management, and providing better customer satisfaction.
4. **Systematic performance**: It is not clear, however, whether ESG can be considered a new factor that has earned a premium over time. Several researchers have observed that companies with high MSCI ESG Ratings outperformed those with low ratings. They also uncovered clear regional differences: Evidence for ESG characteristics having a positive impact on stock performance was strongest in the emerging markets and Europe, but weaker in the U.S. (see Dunn et al., 2015, Frederiksson et al., 2018, and Giese et al. 2019b). However, some of the positive performance results may have been due to exposures to other equity factors (Kurtz et al., 2011).

   Some researchers have tested the existence of an ESG factor premium while controlling for other factors, with varying results: Breedt et al. (2018) found no evidence for ESG ratings' positive or negative performance impact, while Melas et al. (2016) found that MSCI ESG Ratings were a weak factor for explaining risk and performance during the study period when accounting for other factors. However, Pollard et al. (2018) found evidence supporting an ESG premium in their analysis. Again, lack of a long-term time series for ESG ratings may explain this inconclusiveness.

   However, empirical research has provided evidence for a systematic performance impact for ESG rating changes (ESG momentum).[8] For example, see Khan et al. (2015), Nagy et al. (2016) and Giese and Nagy (2018). For instance, in the analysis of Giese and Nagy (2018), ESG upgrades outperformed ESG downgrades within the MSCI World Index from 2007 to 2018, while controlling for all other factors in the MSCI GEMLT model. This observation also provides evidence for a causal relationship between ESG characteristics and levels of valuation.

Additional empirical evidence for a causal link between ESG and financial performance was found by researchers analyzing the financial impact of enhanced regulatory-disclosure standards for ESG-related risks (Grewal et al., 2018).

In short, empirical research provided evidence of a risk-reducing effect when ESG ratings are used in portfolio construction. Statistical confidence levels were higher for idiosyncratic risks due to the larger relative sample size that was used.

Conclusion

While the bulk of academic and industry studies fail to achieve consensus on whether ESG characteristics have affected performance, in reality most of these studies do not focus on strategies that placed an emphasis on financial returns.

To examine strategies focused on obtaining a financial benefit from ESG ratings, we looked across both the type of economic transmission (idiosyncratic or systematic) and the financial objective (risk or performance). We found that the statistical level of evidence that can be obtained from empirical research was driven by both the strength of the financial characteristics and the available data history. The finding supported with the highest statistical confidence level is the result that ESG characteristics had a positive effect on risk, in particular in mitigating tail risks. There is some evidence that ESG momentum (changes in ESG characteristics) was linked with portfolio performance, but a longer time series is needed to verify the existence of an ESG risk premium.

REFERENCES

Asness, C. (2017). "Virtue is its Own Reward: Or, One Man's Ceiling is Another Man's Floor." AQR research report.
Berube, V., Ghai, S. and Tetrault, J. (2014) "From indexes to insights: The rise of thematic investing." McKinsey & Co. Research Insight, December 2014.
Breedt, A., S. Ciliberti, S. Gualdi and P. Seager. (2018). "Is ESG an Equity Factor or Just an Investment Guide?"
Desclee, A., L. Dynkin, A. Maitra and S. Polbennikov. (2016). "ESG Ratings and Performance of Corporate Bonds." Barclays Quantitative Portfolio Strategy Paper.
Dunn, J., S. Fitzgibbons and L. Pomorski. (2016). "Assessing Risk through Environmental, Social and Governance Exposures." AQR research paper.
Eccles, R., M. Kastrapeli and S. Potter. (2017). "How to Integrate ESG into Investment Decision-Making: Results of a Global Survey of Institutional Investors." Journal of Applied Corporate Finance, Vol. 29. No. 4, pp. 125-133.
Eccles, R. and J. Stroehle. (2018). "Exploring Social Origins in the Construction of ESG Measures."
Fatemi A., I. Fooladi and H. Tehranian. (2015). "Valuation Effects of Corporate Social Responsibility." Journal of Banking and Finance, Vol. 59C, pp. 182-192.
Frederiksson, H., E. Porse and A. Bergem. (2018). "ESG – Rested and Ready." Nordea Research Insight.
Friede, G., T. Busch and A. Bassen. (2015). "ESG and Financial Performance. Aggregated Evidence from more than 2,000 Empirical Studies." Journal of Sustainable Finance and Investment, Vol. 5, No. 4, pp. 210–233.
Fulton M., B. Kahn and C. Sharples. (2012). "Sustainable Investing: Establishing Long-Term Value and Performance." Deutsche Bank Climate Change Advisors.
Giese, G., L.-E. Lee, D. Melas, Z. Nagy and L. Nishikawa. (2019a). "Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk and Performance." Forthcoming, Journal of Portfolio Management.
Giese, G., L.-E. Lee, D. Melas, Z. Nagy and L. Nishikawa. (2019b). "Performance and Risk Analysis of Index-Based ESG Portfolios." Forthcoming, Journal of Index Investing.
Giese, G., L.-E. Lee and Z. Nagy. (2018). "How Markets Price ESG – an Analysis using ESG Momentum." MSCI Research Insight.
Grewal, J., E. Riedl and G. Serafeim. (2018). "Market Reaction to Mandatory Nonfinancial Disclosure." Management Science.
Hamilton, S., H. Jo and M. Statman. (1993). "Doing Well While Doing Good? The Investment Performance of Socially Responsible Mutual Funds." Financial Analysts Journal, Vol. 49, No. 6, pp. 62-66.
Harvey, C., Y. Liu and H. Zhu. (2016). "... and the Cross-Section of Expected Returns." Review of Financial Studies, Vol. 29, No. 1, pp. 5–68.
Hoepner, A., M. Rezec and S. Siegl. (2013). "Does Pension Funds' Fiduciary Duty Prohibit the Integration of Environmental Responsibility Criteria in Investment Processes? A Realistic Prudent Investment Test." Working Paper in Responsible Banking & Finance, No. 13-010, School of Management, University of St Andrews.
Jo, H. and H. Na. (2012). "Does CSR Reduce Firm Risk? Evidence from Controversial Industry Sectors." Journal of Business Ethics, Vol. 110, pp. 441-456.
Khan, M., G. Serafeim and A. Yoon. (2015). "Corporate Sustainability: First Evidence on Materiality." Accounting Review, Vol. 91, No. 6, pp. 1697-1724.
Krueger, P. (2015). "Corporate Goodness and Shareholder Wealth." (2015). Journal of Financial Economics, Vol. 115, No. 2, pp. 304-329.
Kurtz, L. and D. DiBartolomeo. (2011). "The Long-Term Performance of a Social Investment Universe." Journal of Investing, Vol. 20, No. 3, pp. 95-102.
Luther, R. and J. Matatko. (1994). "The Performance of Ethical Unit Trusts: Choosing an Appropriate Benchmark." British Accounting Review, Vol. 26, pp. 77-89.
Melas, D., Z. Nagy and P. Kulkarni. (2016). "Factor Investing and ESG Integration." MSCI Research Insight.
Nagy, Z., A. Kassam and L. Lee. (2016). "Can ESG Add Alpha? An Analysis of ESG Tilt and Momentum Strategies." Journal of Investing, Vol. 25, No. 2, pp. 113-124.
Pollard, J., M. Sherwood and R. Klobus. (2018). "Establishing ESG as Risk Premia." Journal of Investment Management, Vol. 16, No. 1.

[8]MSCI ESG momentum scores measure the year-to-year change in companies' MSCI ESG Industry-adjusted ESG score. To create MSCI ESG Ratings, these scores are then are mapped onto a ratings scale from AAA to CCC.

Low-Carbon Indices

A Cost-Efficient Answer to Sustainable Investing

by Sagarika Chatterjee
PRI

Exploring the different answers to the question "How to invest in the Low Carbon Economy", the PRI has analysed a variety of investment options, in a guide[1] destined to institutional investors. The paper considers four solutions: listed equity funds, unlisted strategies and asset, green and climate-aligned bonds, and last but not least, low-carbon indices.

While none of these producte categories is designed to fully tackle climate-related investment challenges on their own, they each provide at least partial responses for different types of investors. In this summary, we explore in details the characteristics of low-carbon index-based startegies.

For off-the-shelf fund solutions, investing against lowcarbon indices is a potentially lower-cost option than actively managed strategies.

It might also present the opportunity for some investors to develop a tailored, bespoke benchmark to shift the equity portfolio towards a lower carbon, more climate-resilient future in a way that best aligns with an organisation's climate-related investment policies and objectives.

Passive investment against low-carbon indices is not without its challenges, however. Investors might wish to consider:

- how effective the indices are in changing the cost of capital for higher CO_2 emitting companies (versus lower emitting companies);
- the absence of Scope 3 emissions in reported data and index construction;
- the balance between focusing on minimising risk and avoidance versus allocating to new opportunities;
- the potential investment performance implications associated with the design of a constrained benchmark;
- the need to balance backward-looking versus forwardlooking assessments into building portfolio resilience[2];
- the impact that the growing attention on the need for suitable taxonomies and definitions to validate labels might have on product offerings[3].

Sagarika Chatterjee
Director of Climate Change
PRI

[1] access the full guide at https://www.unpri.org/climate-change/low-carbon-investing-and-low-carbon-indices/3283.article
[2] Mercer (2016) How Low Can You Go? Introducing Low-carbon and Fossil-free Passive Equity Options
[3] See for example the HLEG Final Report (2018) on Indices and Benchmarks, page 53-55: https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf

Approaches

A number of climate-related indices have emerged in response to rising demand from investors[4].

As with all passive funds, the investment exposure to climate-related passive funds is determined by the methodology underpinning the index construction and the resulting index weightings that this produces. In terms of low-carbon or climate-related indices, three broad approaches have emerged.

Approaches to low-carbon indices

Source: Mercer (2016) How Low Can You Go? Introducing Low-carbon and Fossil-free Passive Equity Options, April 2016

1. **Broad market optimised:** Likely to be suitable for an investor that does not have an exclusion policy, but is seeking a reduction in the exposure to carbon emissions/reserves and fossil-fuel-related carbon emissions.

2. **Best in class:** Likely to be suitable for an investor that wants to consider carbon efficiency across sectors and is able to accommodate negative exclusions (typically excluding the worst carbon emissions/reserves performers from each sector and re-weighting across the sector).

3. **Fossil-free:** Likely to be suitable for an investor that is able to accommodate negative exclusions (typically excluding fossil fuel companies).

Investment Characteristics

While there are some off-the-shelf indices and funds that are readily available for investors to allocate to, there are also emerging examples of investors developing a bespoke benchmark solution to fit with their risk/return objectives and strategic goals in mitigating the climate-related risks and capturing the new opportunities. Some of the typical investment characteristics of low-carbon index solutions that have been launched to date are summarised below.

Investment objectives	"Provide enhanced return by replicating the performance of a [specified] equity market index with reduced carbon risk...positive tilt towards the low-carbon transition...and minimal tracking error."
Investment horizon	5+ years
Regions	Global, reflects country weights of global equity indices
Benchmarks	Examples include MSCI World Low-carbon Leaders, S&P500 Carbon Efficient Index, FTSE Global Climate index series
Fees	Typical of other passive enhanced equity funds (on average, higher than core passive funds)
Number of holdings	>1,000 for global funds
Sectors	Aim to minimise sector bias to a comparable (unconstrained) benchmark
Risk indicators	Most funds assess the risks at 5 on a scale of from 1 (low) to 7 (high)
Link to mitigation of climate-related risks and capturing new opportunities	Potential to reduce exposure to fossil fuels and carbon-intensive businesses, while tilting towards companies that are less emission-intensive and more exposed to generating revenues linked to the low-carbon transition. The outcome is highly dependent on the methodology underpinning the index construction

[4] See for example the actions taken by investors as part of their commitment to the Portfolio Decarbonisation Coalition, including shifting passive equity investments towards lower carbon indices: http://unepfi.org/pdc/

Example of institutional investors having moved to low-carbon passive investments

New York State Common Retirement Fund

New York State Common Retirement Fund doubles its passive equity investments against a low emissions index to US$4 billion. The benchmark represents an internally managed, bespoke solution that excludes or reduces holdings in higher CO2 emitting companies, while increasing investments to the lower CO2 emitting companies. The footprint is 75% lower than the Russell 1000 index. The index is also used as a lever for engagement to encourage companies.

The Fourth Swedish national fund AP4

The Fourth Swedish national fund AP4 benchmarks 24% of its global equity investments (US$3.8 billion) against low-carbon indices. Since 2014, AP4 announced its intention to decarbonise its equity portfolio by 2020. It started by allocating €1 billion to track the MSCI Low-carbon Leaders index as the benchmark for its low-carbon equity strategies. AP4 has since extended this benchmark to its regional equity portfolios against MSCI Low-carbon Leaders Indexes in Europe, Emerging Markets, North America and Pacific.

New Zealand Superannuation Fund

New Zealand Superannuation Fund shifts its global passive equity portfolio (NZ$14 billion) to be managed against a low-carbon benchmark. NZ Super approved a target to reduce the carbon-emission intensity of the fund by at least 20% and reduce the carbon reserves exposure of the Fund by at least 40% by 2020.

CalSTRS

US Public Pension Fund CalSTRS commits US$2.5 Billion to low-carbon index in U.S., non-U.S. developed and emerging equity markets. The passively managed equity portfolio is invested in an index designed to have significantly lower exposure to carbon emissions than the broad market and nearly complete reduction in exposure to fossil fuel reserves.

French Reserve Fund (FRR)

French Reserve Fund (FRR) adopts new equity benchmarks to halve its CO2 emissions from standard indices.The fund mandated its passive managers to implement a process to reduce the portfolio's carbon footprint and fossil fuel reserve exposure by 50%. FRR also adopted a policy to exclude companies whose thermal coal mining or electricity generation business exceeds 20% of their revenue. French Reserve Fund (FRR) adopts new equity benchmarks to halve its CO2 emissions from standard indices.The fund mandated its passive managers to implement a process to reduce the portfolio's carbon footprint and fossil fuel reserve exposure by 50%. FRR also adopted a policy to exclude companies whose thermal coal mining or electricity generation business exceeds 20% of their revenue.

French public sector pension fund (ERAFP)

French public sector pension fund ERAFP invests €750 million of its passively managed equity investments into a bespoke, low-carbon benchmark solution. This has reportedly reduced the carbon footprint of its listed equity portfolio by around 40% with low tracking error.

UK Environment Agency Pension Fund (EAPF)

The UK Environment Agency Pension Fund (EAPF) transitions its portfolio of passively managed global equities to a fund run against the MSCI low-carbon target index. The index aims to reduce exposure to GHG emission by 75%-80% and cut exposure to fossil fuel reserves by 85%-90%. The benchmark is also used to support engagement efforts with companies.

The Second Swedish national fund AP2

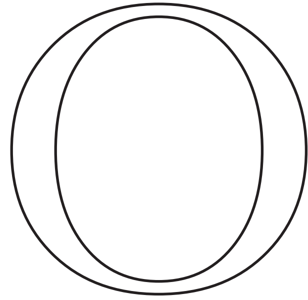
The Second Swedish national fund AP2 benchmarks almost one third of its assets (SEK 350 billion) against a bespoke ESG-focused index. The in-house benchmarks represent a quantitative, multi-factor equity index solution. The assessment and benchmark construction are broader than climate change and include factors such as climate alignment, water and waste management, diversity, human rights and involvement in other controversies and accounting practices.

Download the full report on How to invest in the low-carbon economy at https://www.unpri.org/download?ac=5140

The Wind is Turning

How the European Benchmark Legislation can Change the Game of Sustainable Investing

by Aline Reichenberg Gustafsson, CFA
NordSIP



On February 25, the European Commission (EC) announced that the European Parliament (EP) and Member States had agreed to create two new categories of low-carbon benchmarks to help boost investment in sustainable assets. One of them is a climate-transition benchmark and the second one is a specialised benchmark that brings investment portfolios in line with the Paris Agreement goal to limit the global temperature increase to 1.5°C above pre-industrial levels. The rules for the new benchmarks will be determinant in influencing large investment decisions. The Technical Expert Group (TEG) appointed by the EC in June 2018 is therefore working hard on fine-tuning the details.

Delphine Dirat

At the Sustainable Investment Forum Europe in Paris, on March 12, a panel of experts involved in the benchmark legislation commented on their work so far, and on the possible implications of the new rules. Among the panelists, Delphine Dirat joined the European Commission a year and a half ago, just in time to see the publication of the action plan for sustainable finance. The plan took into account the work of a high-level expert group (HLEG) appointed by the commission a year earlier. Shortly thereafter, the EC published an impact assessment, which evaluated the consequences of the proposed legislation. The legislative proposals came out in May 2018: one on the taxonomy, the second on disclosure and the last on benchmarks. This first step is called a "level 1 act" or "legislation act". At this stage in the legislative process, Member states discuss the EC's proposal and establish a new text, including their amendments. "Try-out" discussions ensue. These closed-door discussions between the EC and co-legislators lead to a political agreement. This was the agreement the Commission announced in February, regarding the benchmark legislation. What follows is the establishment of the "level 2 text", which will specify the technical details of the legislative proposal. The European Financial Market Authority (EFMA) will vote on this text. Given the blend of both financial and environmental concepts, the EC appointed the TEG to help with those details, according to Dirat.

According to Dirat, the agreement over the two new benchmark categories, including an obligation on disclosure for benchmarks, represents a huge achievement for the Commission and for the sustainable finance agenda. The climate-transition benchmark will bring the resulting benchmarked portfolio to a "decarbonization trajectory". This represents a measurable, science-based and time-bound trajectory to reduce carbon emissions. It also implies that policy makers acknowledge the existence of emission reduction objectives disclosed by companies, which will be used for the selection rating and excluding criteria, at the discretion of the benchmarks' administrators. For Dirat, this is completely different from what the Commission proposed. The EC proposed to codify the existing low-carbon benchmarks. This proposal is more ambitious and takes the proposal closer to what the Parliament wanted, which was to take into account, in the selection and weighting of these benchmarks, the companies that disclose their objectives to reduce the CO_2 emissions. According to Dirat, the TEG will help to avoid greenwashing, which is a potential risk for this particular take on the new benchmark legislation.

The second benchmark category is 'Paris-aligned'. It means that the resulting benchmarked portfolio's carbon emissions will be in line with the Paris climate agreement goal, to limit the global temperature 1.5 degrees compared to pre-industrial values. The definition is quite broad. The methodology and minimum standards which the Technical Expert Group will publish will form the base for the benchmark construction.

Each benchmark's methodology will have to include an explanation of how the key elements of E, S and G are reflected. In the benchmark statement, they will disclose whether or not they push through ESG objectives as well, and as of the 31st December 2021, all benchmark with the exception of interest rate and currency benchmarks should include information of the degree of alignment with the Paris agreement.

These two new benchmark categories are labels, they are not mandatory, Dirat points out, but the disclosure is required for all benchmarks. The Technical Expert Group will help the EC in defining the minimum standard for the methodology of the two benchmarks, as well as the KPIs that benchmarks will have to disclose in their methodology and in their benchmark statement.

Sébastien Lieblich, another panelist, is the Global Head of Equity Solutions at MSCI and the chairman of MSCI's equity index committee. Benchmark providers are the primary target of this regulation and being involved is therefore crucial, Lieblich explains. "MSCI is generally supportive of the sustainable finance initiatives coming from the European Commission. We supported the enhanced disclosure initiative of the European Parliament and actually pushed for extending the disclosure further," he explains. "We already report on ESG for all our benchmarks and publish the carbon footprint for all our indexes, be they ESG or traditional indexes. However, we do have some concerns when it comes to the final text, which we believe may introduce unintended and harmful biases," Lieblich says.

Sébastien Lieblich

"In the absence of guidelines from the TEG, we ran some simulations based on the text from the European Parliament to see how an index based on these criteria would look like," the index manager explains. "Our simulation used the science-based targets, as disclosed by the science-based target initiative to build a list of relevant securities that have either a proof target or that have disclosed targets. The results are quite surprising. By focusing on these targets, the simulated index includes many companies involved in ESG controversies such as Nestlé, Philip Morris, McDonald's or Walmart. These are the top constituents in these portfolios. The index is also heavily exposed to mega cap companies and is heavily concentrated in Europe, consumer staples, while underweighting financial companies."

"So it's important that the members of the TEG be mindful with the restrictions they suggest in order to ensure that the future transition indexes are fit for duty," Lieblich adds. "For there to be broad diversified low carbon benchmarks, we need to have more robust company ESG disclosures to support the creation of these benchmarks. The regulation should be joint-ed up."

Moderating the panel was TEG member Andreas Hoepner, Professor of Operational Risk, Banking & Finance at the Michael Smurfit Graduate Business School and the Lochlann Quinn School of Business of University College Dublin. He highlights the trickle-down effect that the benchmark disclosure requirements could have on company transparency. "The non-financial reporting directive has no legislative teeth, so companies do not have to do more disclosure than what they are comfortable with," the TEG member laments. "But if we require benchmarks, like the MSCI World, to disclose the average levels of women on the board or average levels of who reports accurate greenhouse gas emissions, we would achieve disclosure from companies. The benchmark provider would effectively become the watchdog that actually collects these numbers."

"This is incredibly important," the professor continues. "We have the opportunity to use virtually any index, except for currency and interest, for this purpose. There is a very large amount of index with extensive firm-level coverage. Even commodity indexes would have to talk about ESG if they wanted to trade in the EU if we were to pursue this regulatory avenue. That is a lot of impact of that rather simple disclosure"

Lieblich agrees with Hoepner about the power of the index. In his experience, asset managers have moved much faster than legislators. "This idea echoes the use of benchmarks as a means of engagement," he explains. We have seen this trend of asset owners increasingly using benchmarks and their composition as an engagement tool. They explain to excluded companies why they are not included, and what they need to do to resolve that situation." This motivation for companies is clear, he continues. "As soon as they are included in the benchmark, they become exposed to a much broader range of investment opportunities. At MSCI we created on a gender diversity index that investors can use as a powerful engagement tool. The Japanese Government Pension Investment Fund (GPIF) was particularly interested in this line of products for example. The drive for change is coming from investors, not us. We are just adapting to the evolution of their preferences."

"When asset owners change their investment behaviour and start dictating to their own managers the way they want to invest, and which benchmark they're going to use. This initiates the change of trajectory. We, and our index provider peers, are not driving this change; it is being driven by asset owners and asset managers. We just adapt to what they're asking. We provide choice."

Andreas Hoepner

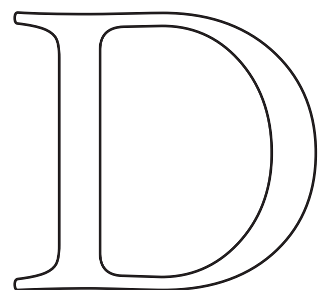
Hoepner concludes the session in tandem with Lieblich. "If you're not an asset owner, go and lobby policy makers. But if you are an asset owner, then maybe consider switching some of the assets, because that is a more persuasive argument to Sebastian at MSCI and his competitors at FTSE and elsewhere. I would like to close with the words of Guido Fürer, CIO at Swiss RE and a member of the TEG," he says, quoting that: "Not every sustainable investment will have a great return, but non-sustainable investing is uneconomic. Not constraining your ESG risk is deadly and wrong".

Photo Credits © Climate Action

Index-Based Strategies

Building Scalable Solutions to Answer the Most Pressing Climate Change Investing Needs

by Henrik Wold Nilsen
SPP Fonder
Storebrand Asset Management



Despite the UN's Intergovernmental Panel on Climate Change (IPCC) reaffirming in October that coal use must be heavily reduced to meet the aims of the Paris Agreement, many asset managers have increased their investment in coal while products labelled as fossil-free can be misleading. In this article, we look at how investors can play their part to make the planet great again.

Henrik Wold Nilsen,
Senior Portfolio Manager
SPP Fonder
Storebrand Asset Management

InfluenceMap, a UK non-profit organisation, recently reported that the world's 15 largest investors (with a combined $40 trillion of assets under management) have grown their holdings of thermal coal reserves by 20% since the 2015 Paris Agreement with some more than doubling their exposure.

This dramatic increase has come despite many of the same asset managers claiming publicly that climate change represents a growing risk to investment returns. Thomas Buberl, CEO of Axa, which the research found had increased its coal investments by 117%, said in 2017[1]: "In the spirit of the Paris Agreement, we want to accelerate our commitment and confirm our leadership in the fight against global warming." In the same year, Jamie Dimon, Chairman and CEO of J.P. Morgan, the next worst offender, said of his firm's sustainability goals[2]: "Business must play a leadership role in creating solutions that protect the environment and grow the economy."

To be consistent with the IPCC's objectives, in December Storebrand announced an acceleration of our coal divestment strategy. We have excluded companies that derive over 25% of revenues from coal since 2013 and intend to reduce this threshold by 5% every second year to divest fully from coal by 2026. Our ambition is also to collaborate with other investors. We believe a gradual transition allows more investors to join the movement and sends a strong message and warning to the global coal industry.

There are now few who question the urgency of reducing our carbon emissions and dependency on fossil fuels. In an increasingly short-termist world, pension savings represent a truly long-term project and it is essential that those who manage them consider the impact of climate change on future risk and returns.

UNISON, the UK's largest trade union, recently passed a motion calling on local government pension schemes to sell their holdings in traditional fossil fuel companies over the coming years, while the Department for Work and Pensions recently announced new rules requiring pension schemes to include ESG risks and climate change in the financially material factors that form part of their Statement of Investment Principles.

Across Europe, an increasing number of institutions are taking action by committing to portfolio decarbonisation. Norges Bank has recommended that the large Norwegian sovereign wealth fund pull out from oil and gas companies. In France, meanwhile, the National Assembly has voted for institutional investors to disclose information on sustainability factors in their investment criteria and pension funds must consider exposure to climate risks and measure greenhouse gas emissions related to their underlying investments.

Finding Substance in Climate Strategies

Institutions globally have tried to come up with methods to reduce their exposure to emissions and position themselves for the low carbon transition. They have chosen to do this in different ways, given the lack of a 'one size fits all' solution and the difficulties involved in finding one.

A common challenge is that the labels of products advertised as being sustainable can be misleading and it is important that investors look at the substance of low carbon portfolios, rather than their form. The InfluenceMap report names a number of exchange traded funds, which are marketed as fossil-free and constructed using MSCI indices, and still have exposure to thermal coal. Similarly, a "Climate Balanced Factor Index" counts ExxonMobil, Total and Royal Dutch Shell among its top ten holdings and has over 6.5% exposure to oil & gas companies which investors may consider to be at odds with a strategy seeking to reduce fossil fuels and carbon emmissions .

Many of these large oil & gas companies have renewable energy divisions alongside their less environmentally friendly core businesses. ExxonMobil, for example, plans to pump 25% more oil and gas in 2025 than in 2017 while investment in fossil fuels generally dwarfs the current $300bn a year committed globally to renewable energy .

Four available solutions

The most common first step for institutions is to apply general ESG analysis, with the "E" capturing climate change-related information.

The next step is to try to improve the carbon footprint of their portfolios through initiatives such as the Portfolio Decarbonization Coalition. AP4, the Swedish national pension fund, for example, identified the worst performing 150 companies in the S&P 500 index in terms of carbon intensity and divested its holdings in them. The remaining 350 stocks track the performance profile of the index closely but have 50% of its carbon footprint.

Other investors exclude fossil fuel producers altogether. For a future compatible with the 2015 Paris Agreement, which saw more than 190 countries commit to reducing carbon emissions in order to keep temperature rises within 2C above pre-industrial levels, not all known fossil fuel reserves can be extracted and burned. This has led to the stranded assets hypothesis, as presented by organisations such as Carbon Tracker. If accurate, investors may well improve their returns by divesting from fossil fuel producers now and an increasing number have chosen to do so.

A fourth commonly used method is to dedicate a proportion of an investment portfolio to impact or solution-oriented investments (e.g. energy efficiency and low-carbon transportation). These are the companies which stand to profit the most should the world implement the Paris Agreement faster than the market currently assumes.

How to choose

At the end of 2018 there were over $40 trillion of gobal pension assets and the idea of using this capital to help reach our goals for the environment is a very powerful concept. The key question remains – how does one best position an equity portfolio to most effectively tackle climate change; ESG-tilt, de-carbonise, divest, invest in solutions?

We believe that all approaches have their pros and cons. ESG ratings capture a wide range of environment-related indicators and strong governance is critical for company trust. However, with such a broad array of different factors, climate-related information can play a relatively small role in the overall ESG score. De-carbonising goes to the core of the problem but suffers from a lack of life-cycle data, for example by assessing a solar panel and a car producer equally in terms of factory-related emissions, the lifecycle emissions of the car are ignored. Divestment is transparent and easy to implement but, by definition, binary and all non-excluded companies are treated equally, whether they are a railway or an airline company. Investments in renewable energy funds contribute towards funding the low carbon transition but are often high risk and expensive, making them suitable for a small part, at most, of an institutional portfolio.

Combining all methods at once

Storebrand's objective is to design investment strategies compatible with the prevailing view on climate change and we use many complementary tools to achieve this goal. We combine all four strategies described above, with others, and this results in a portfolio that is more consistently positioned for the low energy transition than each strategy alone. In addition, it makes it possible to deliver low tracking error, low cost solutions, which should encourage pensions industry to align the bulk of its investments with the goal of the Paris Agreement, rather than a small, thematic, non-core investment. Our hope is that by adopting this approach, the investment industry can play its part in delivering the goals of the Paris Agreement and safeguard not only pensions, but also a world where we and future generations can enjoy retirement.

What's the result?

SPP Global Plus is an index-based fund (*Sw: indexnära fond*) which aims to deliver returns that are as close as possible to the MSCI World Index, while aligning with the low-energy transition.

This strategy is optimised to select companies with a high sustainability rating, a low CO_2 and those that are likely to deliver the solutions to the future climate challenges. The fund's positions may differ from those in the underlying index, while delivering a performance that is highly correlated to the MSCI World Index. The fund has achieved a historical tracking error of 1.25 percent (ex post, 24-months).

The model used by SPP Global Plus is also a cost-effective way of obtaining a climate-adjusted exposure to global equities. The relative performance drag compared to the index, since inception (April 2016), is only 23 basis points per annum, and the fund achieved an absolute net annualised return of 14.8% after fees[3].

[1] Source: Axa press release, 12 December 2017
[2] Source: JP Morgan Chase Sustianbility Factsheet, 2017

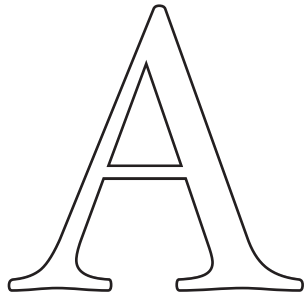
[3] Performance figures as of 28 February 2019. Historical returns are no guarantee of future returns. The money invested in the fund can both increase and decrease in value and it is not certain that you will get back all the deposited capital. The Fact sheets and information brochures are available at www.sppfonder.se

Mitigation & Adaptation

Aligning Portfolios and Climate Objectives thanks to a Robust Data Framework

by Rakhi Kumar
State Street Global Advisors

Marketing Communication. For Professional Clients Use Only.
The information provided does not constitute investment advice as such term is defined under the Markets in Financial Instruments Directive (2014/65/EU) and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell any investment. It does not take into account any investor's or potential investor's particular investment objectives, strategies, tax status, risk appetite or investment horizon. If you require investment advice you should consult your tax and financial or other professional advisor. All material has been obtained from sources believed to be reliable. There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information.
State Street Global Advisors Belgium, Chaussée de La Hulpe 120, 1000 Brussels, Belgium. T: 32 2 663 2036. F: 32 2 672 2077. SSGA Belgium is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.
The views expressed in this material are the views of SSGA Investment Strategy through the period January 1, 2019 and are subject to change based on market and other conditions.
This communication is directed at professional clients (this includes eligible counterparties as defined by the [Financial Services & Markets Authority (FSMA)] who are deemed both knowledgeable and experienced in matters relating to investments. The products and services to which this communication relates are only available to such persons and persons of any other description (including retail clients) should not rely on this communication.
The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research. Investing involves risk including the risk of loss of principal. The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent. © 2019 State Street Corporation. All Rights Reserved. 2416405.1.1.EMEA.INST Exp. Date: 02/28/2020.



For many investors the question is no longer when will they need to take steps to limit the impact of climate change on their portfolio — but how to do it effectively now.

At State Street, we've been studying this question for several years. We're already partnering with clients to help them actively address climate risk in their portfolios through active stewardship of their assets and by creating climate-focused investment strategies based on a robust data framework.

Aligning Portfolios and Climate Objectives

There are essentially three main investment approaches to incorporating climate risk:

Screening: Not investing in companies that are heavily dependent on carbon emissions or fossil fuel use, or avoiding industries with significant climate-related risk exposure.

Mitigation: Reducing the portfolio's exposure to carbon intensity, fossil fuel assets and "brown" revenue derived from extraction or power generation from fossil fuels, as well as increasing exposure to companies that generate "green" revenue from low-carbon opportunities.

Mitigation and Adaptation: In addition to reducing exposure to worse-than-average carbon emitters and "brown" revenue and increasing exposure to "green" revenue, tilting the portfolio toward more environmentally resilient companies and ones that are adapting their long-term strategies to account for their exposure to climate risk.

Of these three approaches, combining mitigation with adaptation is the newest frontier in climate investing. Investors are looking for more information from companies about how they are adapting their business strategies to accommodate the impact of climate change and the transition to a lower-carbon economy.

Rakhi Kumar,
Senior Managing Director
Head of ESG Investments &
Asset Stewardship
State Street Global Advisors

This transition will create both opportunities and challenges, so any investment strategy looking to address these will have to be more diversified in its inputs, and thoughtful in its construction, than simpler strategies that target carbon reduction alone.

Building Practical Solutions

Start with Asset Stewardship

Any action taken to address and disclose climate risk involves the broader concept of asset stewardship — actively engaging with portfolio companies on climate risks and opportunities. As the world's third-largest asset manager, we're committed to partnering with our clients to help them align their portfolios with all of their investment objectives and regulatory requirements. That's why we have made stewardship related to ESG issues a cornerstone of our approach to asset management.

Specifically, we use our influence — our voice and voting power — to encourage corporate boards and management teams to proactively address climate-based issues that could harm or improve long-term performance. We also study how climate change affects specific investment sectors, such as we outline in an upcoming paper examining the impact of climate disclosure on agriculture and forestry.

Don't Just Avoid the Risk, Target the Opportunity

Forerunners in the climate space are using mitigation/adaption to not just avoid future risk but to actively target future opportunities. They're looking to profit from the next-stage world where a combination of future regulation and changing consumer preferences will result in a very different landscape where companies will have to evolve and potentially change their operational models.

Minimize Exposure to Carbon Emission

The cornerstone of any climate-focused strategy. We expect companies with high direct carbon emissions to face increasing challenges such as increased energy costs as carbon pricing regulations become more widespread.

Minimize Exposure to Fossil Fuel Emission

We view fossil fuel reserves as future carbon emissions. The IEA projects that by 2040, renewables are expected to meet approximately 40% of global energy demand.

Minimize Exposure to Brown Revenue

Brown revenue is defined as the proportion of revenues a company derives from activities related to the extraction of fossil fuels, or power generation using fossil fuel-based energy sources. It reflects firms tied to the conventional energy value chains.

Maximize Exposure to Green Revenue

Rapid deployment of solar and wind energy and mass adoption of electric vehicles – accompanied by the adoption of other renewables and a range of low-carbon technologies – are essential to achieving 2°C targets.

Maximize Exposure to Climate Adaptation Ratings

Specifically, we look to maximize exposures to those companies that are showing preparedness for the future with respect to climate risk.

Portfolio Construction

How best to build a portfolio that attains all five objectives? Exclusionary screening or divestment from securitiesbased on the five exposure metrics above cannot produce a portfolio that consistently delivers strong exposure and certainly not maximum exposure.
So, our approach is to use a mean-variance optimization where the objective function balances exposure across all five metrics, resulting in an optimized high-impact portfolio.

Investors should be looking at companies that are not just window dressing or coping but actually positioning to take advantage from a less carbon-intensive economy.

Work with the Right Data

One of the key problems for ESG investors is data. There is data, and plenty of it, but that data is often inconsistent, some of it low quality or stale and there are gaps.

We knew that for our solutions to work well we'd need to build an effective data framework. We've done this by taking best-in-class data inputs from some of the industry's leading sources then cleansing and building on them in a comprehensive, effective data framework.

Our ESG and climate data platform brings together carbon and environmental metrics from multiple data providers such as company-reported greenhouse gas emissions, "green" and "brown" revenues, and company adaptation readiness to climate change.

This data supports State Street's extensive research in equity and fixed income portfolio construction — whether actively or passively managed — that can be applied to screening, mitigation and adaptation. Our approaches are backed by science-based targets established by the Intergovernmental Panel on Climate Change to limit increases in global temperatures to fewer than 2 degrees Celsius above pre-industrial levels.

Be Clear, Be Systematic

Our climate sustainability solutions are built on our robust data framework that effectively quantifies the relevant criteria, they target clear climate criteria and they optimize within those clear criteria.

It is backed by science-based targets established by the Intergovernmental Panel on Climate Change to limit increases in global temperatures to fewer than 2 degrees Celsius above pre-industrial levels.

We are able to filter out only the highest conviction candidates as the basis of our solutions. The result is solutions that are systematic and rules-driven, and that can achieve their climate aims and produce investment results.

Optimize for Success

Implementing a successful sustainable climate strategy requires addressing a more complex problem than simply avoiding the worst offenders. More complex problems require more sophisticated solutions.

We know from our factor investing experience that when you have multiple criteria where individual objectives might sometimes conflict that a well-considered optimization makes for better outcomes.

For example, we've recently used this optimization approach on a substantial portion of a client's portfolio to successfully reach a different environmental aim — to reduce the carbon emission profile of its assets by 70% via an equity index strategy. Slightly different aim but common portfolio construction tool.

Our climate strategy solutions employ optimization to ensure that we balance exposure across five key metrics, resulting in an optimized high-impact portfolio.

Meeting the Climate Investing Challenge

Our solutions allow us to overweight companies that not only are mitigating climate risk today by cutting down on emissions but also those companies that are adapting for future climate risk implications.

On the mitigation front, we wanted to integrate aspects related to carbon-related emissions from production, suppliers, and fossil fuel reserves. On the adaptation side, we wanted to address the future opportunities associated with the low-carbon new energy economy and green revenue.

The end result is solutions that achieve meaningful reductions in targeted climate-related exposures coupled with significantly increased exposure to green sector and low-carbon revenues, helping asset owners truly prepare their equity portfolio for the transition to a low-carbon economy.

Green Bond ETFs

Why are Investors so Excited?

by Carl-Christian Höeg

Lyxor ETF

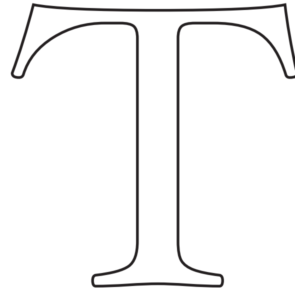
THIS COMMUNICATION IS FOR ELIGIBLE COUNTERPARTIES OR PROFESSIONAL CLIENTS ONLY

This document is for the exclusive use of investors acting on their own account and categorized either as "Eligible Counterparties" or "Professional Clients" within the meaning of Markets in Financial Instruments Directive 2004/39/EC. These products comply with the UCITS Directive (2009/65/EC). Société Générale and Lyxor International Asset Management (LIAM) recommend that investors read carefully the "investment risks" section of the product's documentation (prospectus and KIID). The prospectus and KIID are available free of charge on www.lyxoretf.com, and upon request to client-services-etf@lyxor.com.

Lyxor International Asset Management (LIAM), société par actions simplifiée having its registered office at Tours Société Générale, 17 cours Valmy, 92800 Puteaux (France), 418 862 215 RCS Nanterre, is authorized and regulated by the Autorité des Marchés Financiers (AMF) under the UCITS Directive (2009/65/EU) and the AIFM Directive (2011/31/EU). LIAM is represented in the UK by Lyxor Asset Management UK LLP, which is authorized and regulated by the Financial Conduct Authority in the UK under Registration Number 435658. Société Générale is a French credit institution (bank) authorised by the Autorité de contrôle prudentiel et de résolution (the French Prudential Control Authority).

Lyxor International Asset Management ("LIAM") or its employees may have or maintain business relationships with companies covered in its research reports. As a result, investors should be aware that LIAM and its employees may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Please see appendix at the end of this report for the analyst(s) certification(s), important disclosures and disclaimers. Alternatively, visit our global research disclosure website www.lyxoretf.com/compliance.

CONFLICTS OF INTEREST This research contains the views, opinions and recommendations of Lyxor International Asset Management ("LIAM") Cross Asset and ETF research analysts and/or strategists. Lyxor has mandatory research policies and procedures that are reasonably designed to (i) ensure that purported facts in research reports are based on reliable information and (ii) to prevent improper selective or tiered dissemination of research reports. In addition, research analysts receive compensation based, in part, on the quality and accuracy of their analysis, client feedback, competitive factors and LIAM's total revenues including revenues from management fees and investment advisory fees and distribution fees.



In January 2019, Lyxor launched its green bond ETF in Stockholm – the world's first Green Bond ETF was the first on the NASDAQ OMX Nordic exchange. Carl-Christian Höeg, Head of Nordic for Lyxor ETF, explains why investors are excited about green bonds.

Carl-Christian Höeg
Head of Nordic
Lyxor ETF

Tackling climate change is expensive, and green bonds are raising the finance necessary to bring the fight home. They are also rapidly being snapped up by investors, who are cottoning on to the fact that the environmental benefits do not come at a premium. Environmental concerns aside, green bonds can be an attractive investment in their own right.

Lyxor's Green Bond ETF (code LYXGREEN SS)

From niche to normalised

Because green bonds are a reasonably new investment, they suffer from a lingering perception that they are a niche investment. But in reality, they are now hitting the mainstream. In 2018, new issuance of green bonds hit $168 billion, skyrocketing from $87 billion in 2016.[1] This rapid market growth can be traced back to the Paris Agreement in 2015. That's when 195 leaders agreed to "stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system" (UNFCCC, 2017).

The Paris Agreement is based on nationally defined contributions: each country quantifies and states greenhouse gas reduction targets. The goal is to limit global warming to 2 degrees Celsius above pre-industrial levels. But change on this scale costs money. According to the OECD, $6.3 trillion is needed annually until 2030 to meet global climate goals. That puts finance at the heart of the drive for change.

Figures from the Climate Bonds Initiative put the market for green bonds at $389 billion in September 2018. This could be as high as $1 trillion per year in the early 2020s if the green financing goals set by international agreements are to be met. Green bonds are truly a growth market.

Find out more about the Green Bond market

How 'green' is your bond?

Thanks to the rise in 'greenwashing', investors are increasingly switched on when it comes to ascertaining how 'green' any given product is. Because issuers self-label their green bonds, there is a risk of 'greenwashing' whereby bonds do not actually live up to the rigorous standards expected of such products. Because of this, investors are paying much closer attention to how 'green' a bond really is.

Green bonds are easier than most to quantify, because of the 'use-of-proceeds' principle. A company cannot simply slap a 'green' label onto a new issue. First and foremost, the issuer needs to earmark the proceeds raised for eligible environmental projects. The issuer also needs to meet other criteria, and to comply with the Green Bonds Principles. This is a framework put in place by the International Capital Markets Association (ICMA). And although the Principles are voluntary, an issuer needs to adhere to them to have a realistic chance of 'green' accreditation.

As well as ensuring the funds raised are allocated solely to eligible green projects, the issuer must also carefully track the proceeds of the issuance. Later on, the issuer reports back to the subscribers on metrics of impact measurement – in other words, how the proceeds were used and how the green projects benefited.

As we mentioned, the Green Bond Principles reflect the criteria that should be met if an issuer is to be considered 'green'. But meeting them does not guarantee accreditation. First, a second opinion is often sought, from agencies such as Vigeo Eiris, among others. Then certification and accreditation are often the remit of the Climate Bonds Initiative (CBI). This gives the investor the reassurance that their prospective investment truly is 'green'.

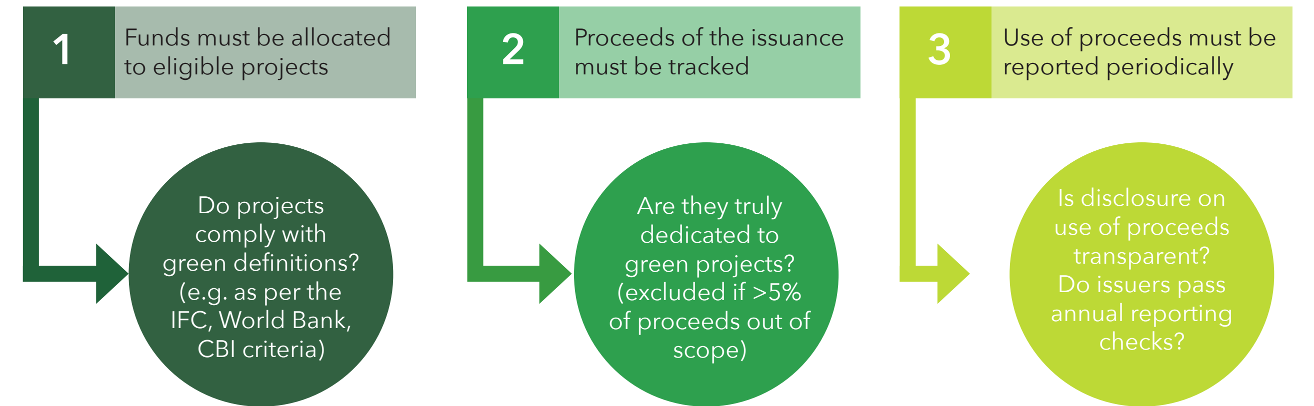
For investors, it is important not to confuse green bonds with generic, climate-change bonds. The latter derive most of their revenues from climate-aligned activities, but they do not adhere to the use-of-proceeds principle just described.

More on how the CBI reviews bonds

Are your Bonds truly Green?

The CBI assesses bonds within the Lyxor Green Bond UCITS ETF (LYXGREEN SS)

Source: International Capital Markets Association



The elusive 'greenium'

Investments that promote environmental sustainability often attract criticism from those who believe that ethical concerns come at the cost of financial performance. Or, to put it more plainly, that 'you get what you pay for'. Surely the environmental benefits ramp up the price, making green bonds more expensive than their 'vanilla' counterparts?

But in reality, it is still hard to quantify, let along prove the existence of any 'greenium'. In the primary market, green bonds are, on average, sold at tighter spreads than were indicated in the book-building guidance, but not so much more than comparable vanilla issues. According to the Climate Bond Initiative market study January-June 2018, bonds denominated in Euro tend to be around 8 basis points (bps) tighter then suggested by the Initial Price Talk (IPT), whereas regular issues are 7 bps tighter than IPT. US dollar issues are around 17 bps tighter than IPT, only slightly higher than the 14 bps observed with regular issues. While green bond issues tend to be eagerly sought after, and are sometimes three times oversubscribed, there is still no evidence that this strong demand has pushed primary market green bond prices significantly above vanilla issues.

Spreads of green bonds generally tighten in the immediate secondary market, which could further indicate that primary market prices are not entirely reflecting the strong demand for green bond issues. Therefore, primary market investors are not giving up any meaningful 'greenium' or excess yield to companies for issuing green. According to the CBI, "spreads tightened materially [for many green bonds] in the first seven and twenty-eight days after the announcement date, both on an absolute basis, and when measured against a corresponding index." The CBI suggests that, seven days after the issue announcement, 70% of green bond spreads have tightened more than spreads in their corresponding bond market segment.[2]

You can do well by doing good

Taken together, the evidence above suggests that it does not really matter if your primary concern is environmental sustainability or financial returns. Green bonds stand up to scrutiny in both respects, and are a worthwhile option for those looking for an attractive addition to their portfolio.

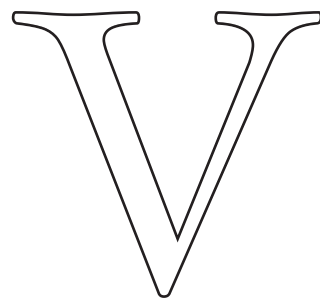
Full information including factsheets for the Lyxor Green Bond ETF

[1] Source: Climate Bonds Initiative, reports January and September 2018.
[2] Source: Climate Bonds Initiative, Green bond pricing in the primary market, reports 2017 and 2018

Asset Owners & Fund Selectors

Can Passive be ESG Active?

by Kim Hansson
NordSIP



Volume growth of index products has been tremendous but ESG index funds or ETFs are still fairly new. You might argue that conviction based active strategies like ESG don't go very well with passive index-based investment products. The direct impact will be less concrete from an index product than from an impact fund but the clout from large index funds can certainly make a difference. We listened to four asset owners, that have come far in integrating ESG in their investment organisations, to hear what they say about passive ESG products. They have somewhat different investment styles and views on active vs passive but around one thing there is no difference of opinion; if you're serious about ESG, all investments have to be ESG.

As Susanne Bolin Gärtner, Head of Fund-selection & ESG External Funds at Folksam expressed it: "We have set the lowest level of sustainable criteria for all external funds, so the whole fund range has to be sustainable including "close to index funds" and systematic funds. First of all, we want to see that the fund company has signed UN PRI or is in the process of doing so. Then we also, of course, want to see how ESG is implemented in the fund process. Therefore, we do not offer any index-funds that do not consider ESG in any aspect. SPP Plus funds are a good example of what we offer today in this range."

At AP4, Tobias Fransson, Head of Strategy & Sustainability says that passive ESG strategies are used "both in systematic low-carbon strategies as well as more general ESG funds. We do it to enhance risk-adjusted returns and to contribute to the long-term development of markets and corporate governance practices, which we also believe are in the interest of our risk-adjusted returns".

For Peter Sandahl, Head of Sustainability at Nordea Life & Pension, lack of usage of ESG passive products is a question of investment philosophy, as he states "we do currently not invest in any passive ESG strategies. We do not invest in any passive strategies, we have a more active approach to our investments".

Kim Hansson
Director
Strategic Relations
NordSIP

Susanne Bolin Gärtner
Folksam

Kristoffer Dreiman
Länsförsäkringar

"We have selected ESG ETF's to our range of recommended ETF's. Currently, they are available to all clients."

Anna-Stina Wiklund
Ålandsbanken

"We do not offer any index-funds that do not consider ESG in any aspect."

Peter Sandahl
Nordea Life & Pension

Tobias Fransson,
AP4

Kristofer Dreiman, Head of Responsible Investments at Länsförsäkringar, tells us that they "have investments in "close-to-index" equity funds that reflect their wish to exclude controversial weapons, companies involved in serious norm violations, and to avoid exposure to the most CO_2-intensive fossil fuels in the form of combustion coal.

At Ålandsbanken, lack of client demand has limited the use of passive ESG products up till now, Anna-Stina Wiklund, ESG specialist, explains. "We have selected ESG ETF's to our range of recommended ETF's. Currently, they are available to all clients, we haven't however used them in broad discretionary mandates yet. The client demand has not yet been that strong, nor the conviction from the allocation team that we would replace a "traditional" ETF with an ESG-focused one.

Maybe is it so with passive ESG products that the manager is more important than the individual fund or ETF for reaching a positive result out of an ESG perspective. Gärtner of Folksam adheres to this view saying that "the big impact would be from the fund company as a whole rather than on a fund level" and Fransson of AP4 gives the following example: "a requirement can, for example, be to have an activist manager in Japan where the ability to influence boards and management in specific companies is of great importance."

Fransson believes that "corporate engagement is always important, but more so for active concentrated portfolios where there may be potential catalysts for value creation and where engagement will have a more significant impact on the portfolio due to portfolio concentration." It is easier for active managers to focus on the individual holdings in their portfolios and be in close dialogue with managements to engage. That said, the increased focus on size of and status of ESG investing combined with the massive amounts invested in different passive strategies, have put pressure on passive managers to act on ESG matters as well. As Sandahl puts it, "passive managers still have a fiduciary duty to fulfil and as ESG aspects are becoming a more integrated part of that duty, they would need to increase their engagement efforts and the tools available. At least, I think greater transparency would help create a better understanding of the approach taken by passive managers. An important part of the transition towards a low-carbon and sustainable economy is about redirecting financial flows. Passive strategies are a natural part of the investment universe today and could, if constructed in the right way, also be an important part of the future. That would however also require harmonised low-carbon benchmarks, which are under development by the EU as part of the European Commission's Action Plan on Sustainable Finance. But passive strategies should, as of today, be seen as a part of the toolbox together with actively managed ESG strategies and pure impact strategies."

The sheer size of passive managers and their actions has even, according to Wiklund, had a positive ESG-effect as "many investors have quoted big ETF-providers when they mentioned that they will exclude certain controversial sectors."

about our partners

The PRI is the world's leading proponent of responsible investment.

It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole. The PRI is truly independent. It encourages investors to use responsible investment to enhance returns and better manage risks, but does not operate for its own profit; it engages with global policymakers but is not associated with any government; it is supported by, but not part of, the United Nations.

SPP Fonder AB is a wholly owned subsidiary of Storebrand Asset Management. SPP Fonder, based in Stockholm, is Sweden's fifth largest fund company with just over SEK 200 billion under management as of March 29, 2019. The Storebrand Group is a leading player in the Nordic market for long-term savings and pensions. At the end of December 2018, Storebrand managed SEK 724 billion, making it Norway's largest private asset manager. Storebrand is a public company listed on the Oslo Stock Exchange.

For more information visit www.sppfonder.se

Lyxor has been running ETFs since 2001, longer than any other European provider. Our pioneering spirit helped shape the market as you know it today.

Over the last 15 years, we've become one of Europe's largest, most liquid ETF managers. And we've built one of its most far-reaching ranges, which spans all asset classes, and includes some of the largest and most efficient ETFs.

We now offer more than 200 ways to explore the markets. So, whether you're seeking essential core index exposure, or reaching out for more tactical opportunities in specific sectors or markets, we have a product to match.

We know choice alone isn't enough. So wherever you roam, you can be sure our quality charter sets standards of management few other providers can match.

Reinventing Investing
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 rigor
- 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 27 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 nearly US $2.73 trillion* under our care.

*AUM reflects approximately $32.45 billion (as of December 31, 2018) with respect to which State Street Global Advisors Funds Distributors, LLC serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated.

BlackRock helps investors build better financial futures. As a fiduciary to our clients, we provide the investment and technology solutions they need when planning for their most important goals. As of September 30, 2018, the firm managed approximately $6.44 trillion in assets on behalf of investors worldwide.

For additional information on BlackRock, please visit www.blackrock.com

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 45 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

Big Green Tree Media AB
Kungsgatan 8
111 47 Stockholm
+46 70 9993966
For any enquiry, please contact:
Aline Reichenberg Gustafsson
aline@nordsip.com

Photographic Credits © Shutterstock

© 2019 NordSIP all rights reserved

GENERAL TERMS AND CONDITIONS

These are the terms and conditions which govern the use of NordSIP Insights, an online magazine edited and distributed electronically and owned, operated and provided by Big Green Tree Media AB (the "Editor"), Corporate Number: 559163-7011, Kungsgatan 8, 111 43 Stockholm, Sweden.

DISCLAIMERS AND LIMITATIONS OF LIABILITY

1. The Content may include inaccuracies or typographical errors. Despite taking care with regard to procurement and provision, the Editor shall not accept any liability for the correctness, completeness, or accuracy of the fund-related and economic information, share prices, indices, prices, messages, general market data, and other content of NordSIP Insights ("Content"). The Content is provided "as is" and the Editor does not accept any warranty for the Content.

2. The Content provided in NordSIP Insights may in some cases contain elements of advertising. The editor may have received some compensation for the articles. The Editor is not in any way liable for any inaccuracies or errors. The Content can in no way be seen as any investment advice or any other kind of recommendation.

3. Any and all information provided in NordSIP Insights is aimed for professional, sophisticated industry participants only and does not represent advice on investment or any other form of recommendation.

4. The Content that is provided and displayed is intended exclusively to inform any reader and does not represent advice on investment or any other form of recommendation.

5. The Editor is not liable for any damage, losses, or consequential damage that may arise from the use of the Content. This includes any loss in earnings (regardless of whether direct or indirect), reductions in goodwill or damage to corporate.

6. Whenever this Content contains advertisements including trademarks and logos, solely the mandator of such advertisements and not the Editor will be liable for this advertisements. The Editor refuses any kind of legal responsibility for such kind of Content.

YOUR USE OF CONTENT AND TRADE MARKS

1. All rights in and to the Content belong to the Editor and are protected by copyright, trademarks, and/or other intellectual property rights. The Editor may license third parties to use the Content at our sole discretion.

2. The eader may use the Content solely for his own personal use and benefit and not for resale or other transfer or disposition to any other person or entity. Any sale of Contents is expressly forbidden, unless with the prior, explicit consent of the Editor in writing.

3. Any duplication, transmission, distribution, data transfer, reproduction and publication is only permitted by

i. expressly mentioning Nordic Business Media AB as the sole copyright-holder of the Content and by

ii. referring to the Website www.nordsip.com as the source of the information provided that such duplication, transmission, distribution, data transfer, reproduction or publication does not modify or alter the relevant Content.

4. Subject to the limitations in Clause 2 and 3 above, the reader may retrieve and display Content on a computer screen, print individual pages on paper and store such pages in electronic form on disc.

5. If it is brought to the Editor's attention that the reader has sold, published, distributed, re-transmitted or otherwise provided access to Content to anyone against this general terms and conditions without the Editor's express prior written permission, the Editor will invoice the reader for copyright abuse damages per article/data unless the reader can show that he has not infringed any copyright, which will be payable immediately on receipt of the invoice. Such payment shall be without prejudice to any other rights and remedies which the Editor may have under these Terms or applicable laws.

MISCELLANEOUS

1. These conditions do not impair the statutory rights granted to the readers of the Content at all times as a consumer in the respective country of the reader and that cannot be altered or modified on a contractual basis.

2. All legal relations of the parties shall be subject to Swedish law, under the exclusion of the UN Convention of Contracts for the international sale of goods and the rules of conflicts of laws of international private law. Stockholm is hereby agreed as the place of performance and the exclusive court of jurisdiction, insofar as there is no compulsory court of jurisdiction.

3. Insofar as any individual provisions of these General Terms and Conditions contradict mandatory, statutory regulations or are invalid, the remaining provisions shall remain valid. Such provisions shall be replaced by valid and enforceable provisions that achieve the intended purpose as closely as possible. This shall also apply in the event of any loopholes.