
ESG

proposition



ESG

proposition

Executive summary

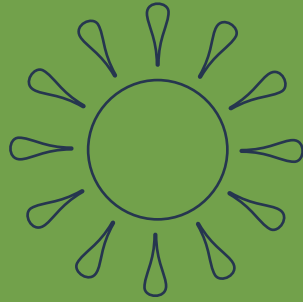
- At Moneyfarm, we believe that our role as investors should be to serve society.
- The transition and physical risks associated with climate change are rising and will be pivotal risk factors in the near future. Being more careful with how we invest money can, on the one hand, help to support the process to mitigate those risks and, on the other, provide more resilient portfolios.
- Our portfolios are built by using ESG ETFs that have strict requirements on ESG ratings, all while guaranteeing effective diversification and low costs.
- We aim to build well diversified portfolios, covering idiosyncratic risk, low concentration and high diversification.
- We don't think there is a clear trade-off between 'doing good and doing well'. We think the data is uncertain - over some time periods ESG performs better, over others it performs worse. In 2020, it outperformed. Indeed, some believe that ESG has consistently outperformed.
- We're confident that ESG is here to stay. The trend has gathered momentum in recent years and has seen a step-change in 2020. ESG will impact both companies and capital allocation (both human and financial, consumer preference). Moreover, the cost of capital and risk may even be lower for better-rated ESG companies, leading to better operational performance and a more sustainable competitive advantage .

INDEX

For starters	6
Physical risks, transition risks and opportunities How does an investment in ESG make a difference?	
Our approach to ESG	10
Our selection process meets responsibility	11
1) ETF quality assessment	
2) ESG data gathering	
3) ESG due diligence and selection process	
4) Financial risk assessment of ESG ETF	
5) What about government bonds?	
6) Portfolio construction	
• Risk analyses	
• ESG analyses at portfolio level	
To ESG or not to ESG?	18
Current evidence	
In conclusion	22



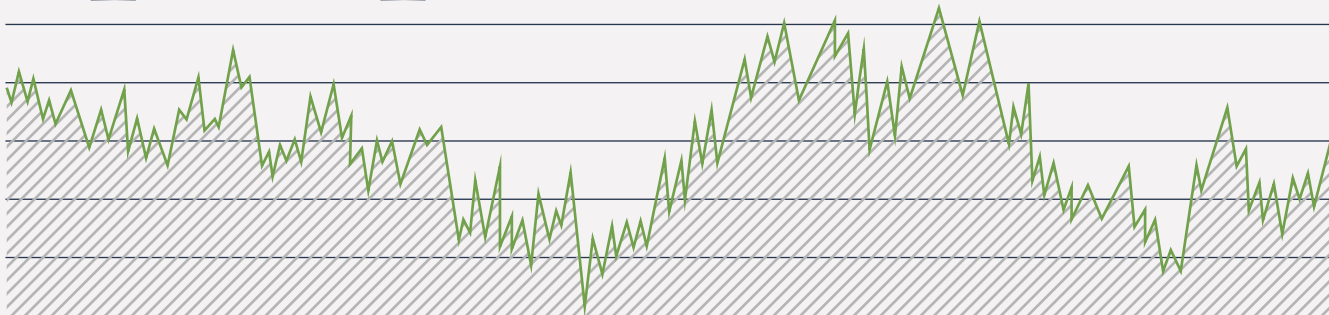
CHAPTER

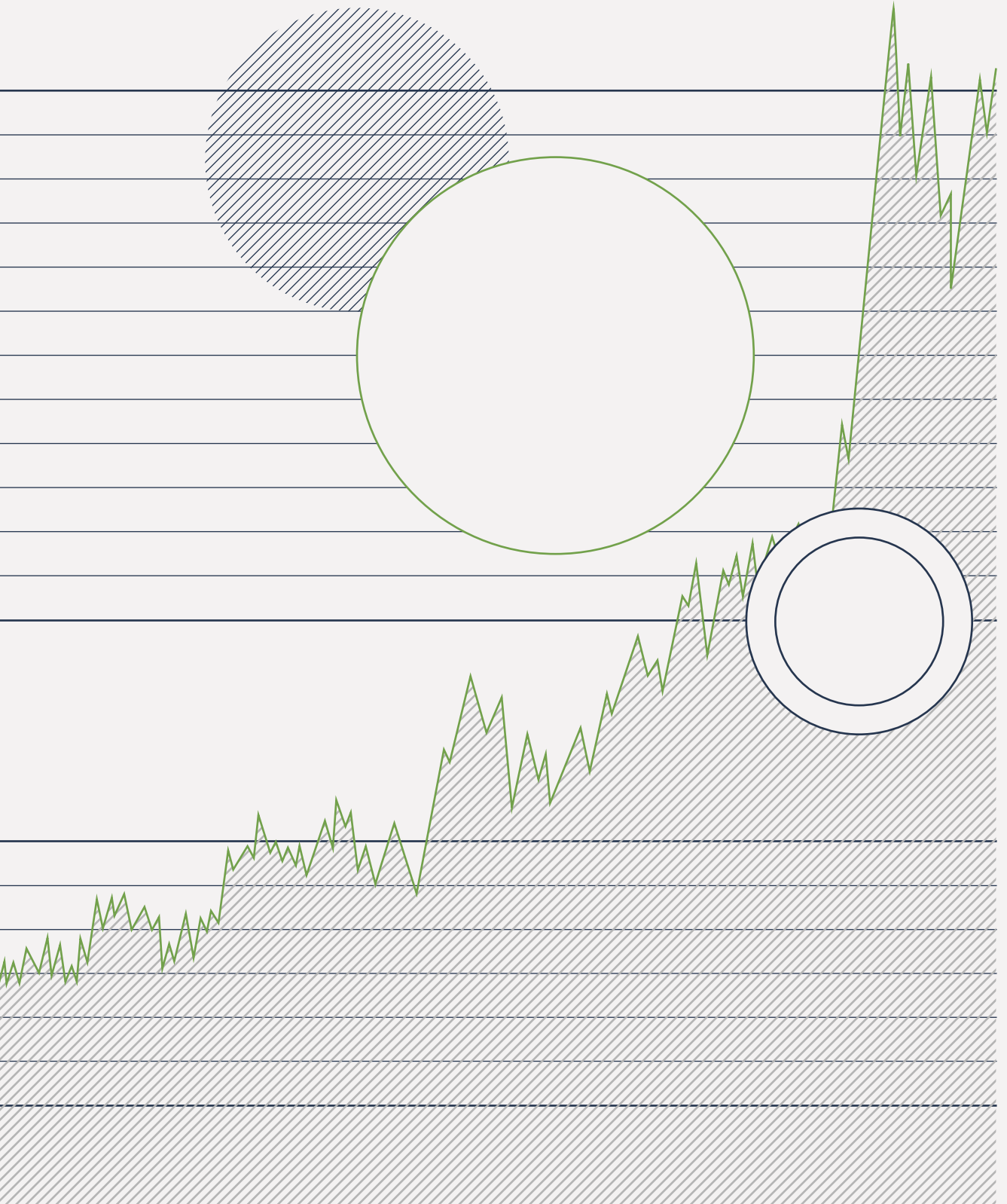


TITLE

ESG

proposition





For starters

Why we believe ESG investing is important

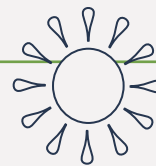
As a society, we are becoming ever more aware of both our impact on the planet and our role in social justice. We take steps to lower our carbon footprint by wasting less food, water and energy. However, when it comes to our savings, ESG investments have only recently become a trend. For some, it's **not clear how sustainable investing can affect our world.**

It's important to understand that the world of **finance and investments plays a primary role** in the development of society. How we invest money is a pivotal driver for the change we want to see in the years to come.

As part of this, Moneyfarm is creating an ESG offering, not only to match the increasing demand of our customers, but because we are aware of the challenges that the world is facing in the coming decades. **We want to use our power as investors,** to contribute to the sustainability U-turn that the world so urgently needs.

Why is Moneyfarm launching an ESG product?

1. We understand the role of investment and finance in **driving social change.** We want to be part of that change by rewarding positive companies and excluding those not aligned with our social values;
2. We want to protect our customers' savings from the **ESG risks** that will arise in the coming decade;
3. Increasing **demands for transparency** from both customers and regulators will come and we want to be ready to show our clients the impact of their investments.



Physical risks, transition risks and opportunities

Market operators are now talking about a '**green swan**'. Cousin of the infamous black swan, the green swan represents the systemic and financial risk connected to climate change.

ESG risks will become more serious year after year, due to not only the **physical impact** of global warming and the increasing sensitivity of society to social inequalities, but also due to **the transition risks** that arise from tighter regulations and changes in customer habits.

The physical and economic impacts of these changes are becoming clearer year by year. Global cost estimates reach into the tens of trillions of US dollars by the end of the century, with the potential to shave off 10% of US GDP by that time, if no action is taken to forestall climate change. A hotter planet means more drought, more famine, more extreme weather events, more property damage, and more dislocation of humanity than any of us have seen in our lifetimes. We cannot know when exactly these disasters will arrive, but we can be confident that they will.

Climate change will impact every company and every investor on earth. Some will benefit, and others may lose everything.

1. **Physical risks:**

Risks associated with the impact of climate change depending on the environment. For example, companies who rely on fishing in certain zones will be affected by ocean warming / acidification.

- Heat stress on humans
- Heat stress on assets and infrastructure
- More powerful hurricanes and typhoons
- Rising oceans and increased coastal flooding
- Extreme weather events
- Ocean warming/acidification
- Loss of food
- Loss of water
- Refugee crises

2. **Transition risks:**

Risks associated with the transitions of society. Companies that need to reduce their carbon emissions, auto makers that need the technology to produce electric cars.

- New regulation
- New habits
- Different demand
- Higher sensitivity of customers

Climate change risks are not the only ESG risks. **Reputational risk** is becoming paramount in a society that strives for more stringent criteria in terms of equality. The risks associated with the **transparency and independence of the governance** of a company are not new, but are becoming more and more quantifiable.

ESG rating

A clear sign of the progression is the diffusion of ESG ratings. Much like a credit rating from S&P or Moody's, this is an indicator of the ability of the company to face the social and environmental risks. These metrics allow to understand how a fund or a company is positioned to face both the physical and transition risks that will arise in the near future.

Moneyfarm is a digital wealth manager that aims to support the financial independence of clients **with long-term investments**. In this long-term time frame, ESG risks will become a significant factor that we need to integrate into our research and portfolio construction.

Most ESG risks will only become fully apparent over the long term, which means a large number of investors are not yet dealing with the problem. As more time passes, however, the risks will become unavoidably relevant and their effects could be sudden.

The difference you can make investing in ESG

We're all paying closer attention to aspects of sustainability in our own lives, consuming less energy and water, wasting less food, using less single-use plastic, etc. The decision of which product to buy is heavily influenced by the company selling them - we generally avoid those which are not aligned to our values. Often, though, people are unaware of the power they have with their savings.

Investors should be aware that it is eminently possible to prompt positive change in the world without sacrificing returns.

Particularly in the case of climate change risks, we need to start acting as soon as possible. We cannot waste any more time - the steps that technology and society have taken are not yet enough to save the planet from irreversible effects. By managing our savings with more care, we have the power to stimulate change, making it more timely and more effective.

“Capitalism also has a severe problem with the very long term because of the tyranny of the discount rate. Anything that happens to a corporation over 25 years out doesn't really matter to them. **Therefore, in that logic, grandchildren have no value.**”

— Jeremy Grantham, GMO

ESG investments can support global change in different ways:

1. By excluding controversial corporates and rewarding virtuous companies
2. By delegating their voting rights to firms with social responsibility awareness
3. By improving transparency

1. **Excluding controversial corporates and rewarding virtuous companies**

We invest to assure our financial stability for the future. This is made possible by receiving returns from the companies we are lending money to. Investing money in virtuous companies allows us to allocate capital and drive funds to the firms that deserve it the most.

This process allows companies to finance themselves more effectively, decreasing the cost of capital and allowing them to keep having a positive impact on society.

This alternative reward scheme - based on more than simple financial fundamentals - should also drive the other, '*less-virtuous*' corporates to improve. Indeed, if they want to have access to the capital market as they did before or at the same conditions of their competitors, they will have to.

2. **Voting rights and stewardship**

Exercising voting rights is fundamental to the fiduciary duty of all socially responsible, long-term institutional investors, in particular when they manage assets of numerous beneficiaries. This applies regardless of the strategy - active or passive. In an ESG context, we will work closely with ETF issuers to understand how they approach voting across a range of issues. We anticipate that voting choices could be an important source of differentiation between different ETF issuers.

3. **Transparency**

Investors are asking for more information about externalities, governance and social impact of the corporates they invest into. Through ESG standards, transparency in the social sphere must be added to the transparency offered in the economic sphere (supply chains, balance sheet, corporate cash flow). To be transparent, companies need to make an assessment of their externalities, through which they will be forced to become aware of their impact. Transparency means nullifying information asymmetries, not only between investors and companies, but also between consumers and sellers.

It seems clear that the range and depth of data on ESG topics continues to increase, but there is still room for improvement. On the qualitative side, there is still a lack of consensus, with certain companies scoring differently on ESG metrics depending on the data provider.

We expect to see continued improvement in terms of ESG data and analysis over time, and, if necessary, we'll adapt our approach to reflect that.

Our approach to ESG

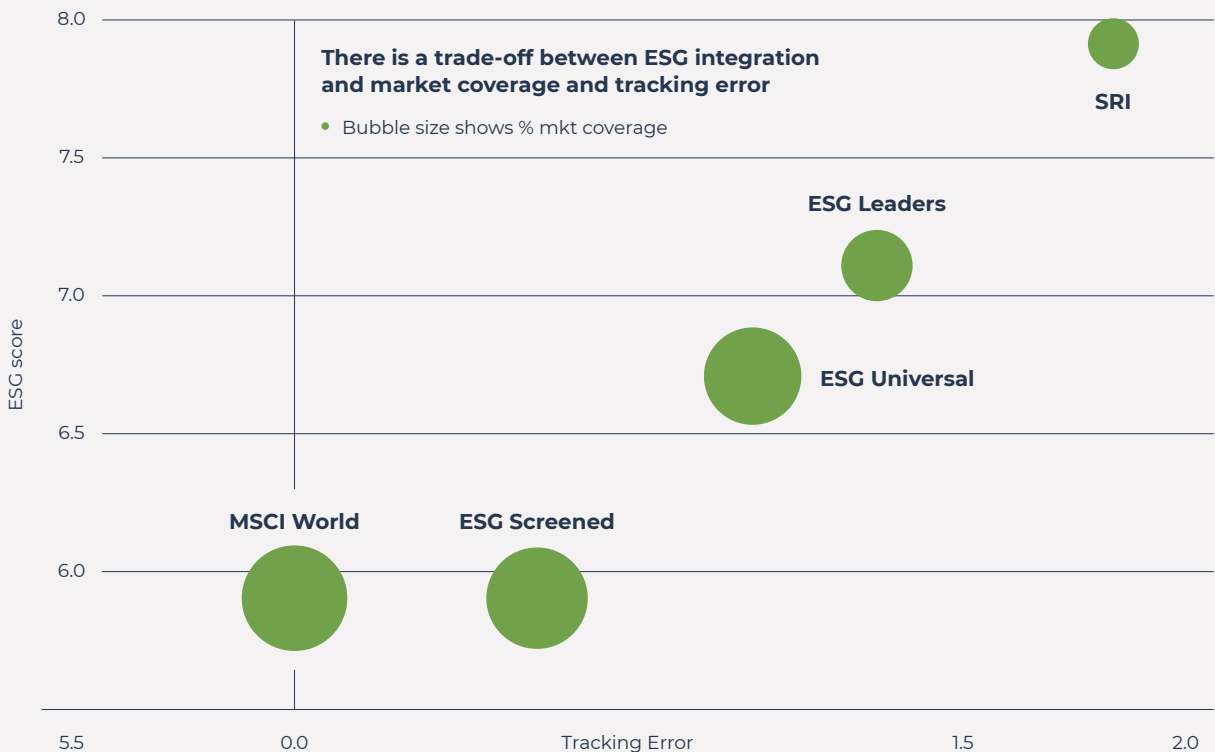
Moneyfarm has created a set of socially responsible portfolios built via ETFs.

Moneyfarm ESG portfolios are built with ESG ETFs since they allow customers to have balanced and well-diversified portfolios with a greater focus on sustainability. The Moneyfarm ESG proposition is based on the roots of the **Moneyfarm tradition**: use ETFs because they are more liquid, transparent and cost-efficient indices that are easily traded. The range of available ESG ETFs has sharply increased over the past few years and we anticipate that it will continue to do so.

Moneyfarm ESG portfolios are built using ETFs with the strictest standards in terms of SRI requirements (as shown in the selection process below) and, all else equal, have a particular emphasis on environmental impact. The portfolios are also built to be more resilient to ESG risks and free from social controversies (weapons and UN violations).

The chart below from MSCI shows a range of ESG indices compared with the standard equity index for global equities. The y-axis shows an ESG score by MSCI – the higher the better. The x-axis shows the tracking error – basically how differently each index behaves compared to the standard index. As you'd expect, the more we consider ESG factors, the higher the overall ESG score and the bigger the difference between the ESG index and the standard one.

At Moneyfarm, our goal is to provide broad market exposure (ie reducing the tracking error) while also considering ESG factors. The question is – do we care about the trade-off between the ESG score and the tracking error? **You can't look at any one piece in isolation, but overall our answer – for these indices – is no.** In this case, we'd argue that a tracking error of below 2% isn't material enough for us not to consider using an SRI index product.



Our selection process meets responsibility



Historically, one building block of the Moneyfarm investment process was the selection of the best ETFs across the wide offering that we see on the market. **The work behind the ESG ETFs screening is much more complex than the usual non-ESG ETFs selection**, but it represents only the starting point of the ESG selection process.

Here, not only do we need to analyse the ETF quality (AuM, liquidity, cost), but also choose the criteria that we think are most suitable from an ESG point of view. The process behind the selection of the ETF is based on the analyses of the MSCI ESG Metrics and the careful study of the methodologies underlying the index.

1) ETF quality assessment

The first filter we apply is our usual ranking of ETFs based on a range of metrics (including cost, spread, tracking error, method of replication, etc). This ultimately allows us to calculate the **Moneyfarm Quality Score** and we remove all ETFs with low quality standards.

We believe that our preference for physically replicated ETFs becomes more significant in an ESG context too, where synthetic replication is more difficult to assess. We need to ensure that the substitute basket follows the same principles of index construction and that voting rights will be addressed on the substitute basket, rather than on the SRI index.

In some cases, the expense ratios for ESG ETFs may be slightly higher than for standard ETFs, but we continue to focus on keeping expenses low.

Portfolio construction process

The ESG portfolio construction process can be summarised in the following main steps:

1. ETF quality assessment
2. ESG Data gathering
3. ESG assessment
4. Risk and return measurement
5. Portfolio construction

1. ETF QUALITY ASSESSMENT

2. ESG DATA GATHERING

3. ESG ASSESSMENT

4. RISK AND RETURN MEASUREMENT



5. PORTFOLIO CONSTRUCTION



Moneyfarm
ESG portfolio

2) ESG data gathering

Data gathering is an important part of the ESG screening process. We identified six groups of data we need to gather to perform proper due diligence on the funds:

1. Forward-looking risk measures (ESG ratings):

The main forward-looking measure is the ESG rating which, like a credit rating, is designed to measure the risk exposure of the fund to ESG risks. Among the different providers (Sustainalytics, Robeco, etc.) we use the MSCI ESG Rating because it gives a complete analysis of the underlying company. The MSCI ESG Rating aims to answer the following questions:

- Of the negative externalities that companies in an industry generate, which issues could turn into unanticipated costs in the medium to long term?
- Conversely, which ESG issues affecting an industry could turn into opportunities for companies in the medium to long term?

Current state-of-the-world measures:

Here we find all the information related to the Environmental, Social and Governance matters of the company. These measures answer the question “how is the company currently positioned in terms of social responsibility?”, not “how will it be able to address ESG risks in the future?”.

3. Index construction methodology:

How the negative screenings and best in class approaches are performed, how the sectors are capped and the threshold for a company to be selected is met. This is a very important step in understanding whether the underlying index meets our requirements in terms of sustainability, as both an ex-ante measure as well as ex-post.

4. Voting guidelines:

As we said, sustainable investing is not only about filtering out negative companies, but also engaging with companies' strategic decisions. Since Moneyfarm portfolios are extremely diversified and contain thousands of companies, we need to delegate voting rights to the panel chosen by the ETF distributor. We need to assess if there are guidelines and policies in place that address the voting choice in this stewardship.

5. Regulatory risk assessment:

There are a set of tools that allow us to stress the portfolios for transition risk. PACTA's open source resources help financial institutions integrate climate objectives and risks into portfolio management.

6. Direct communication with the ETF provider:

Any additional doubts are solved through our communication channels with the ETF issuers, which are able to provide ad-hoc insight.

Going forward, we will work to be sure that our metrics and due diligence are as appropriate as possible to achieve the results we want.

¹ Paris Agreement Capital Transition Assessment

3) ESG due diligence and selection process

Moneyfarm's ESG selection process ensures clients that all the ETFs in the portfolios have the required level of quality in terms of liquidity, cost, and risks. Within the preset quality limits, Moneyfarm's ESG approach is to select instruments that have the highest rating in terms of ESG metrics, with similar 'instrument quality' conditions.

- 1. Select ETFs with a high ESG Peer Rank²** (based on MSCI ESG Rating³). The ESG Peer Rank shows where the funds are allocated, in terms of ESG Rating, across the whole investable universe, taking into account both ETFs and mutual funds. If the ESG Peer Rank is low, it means that there are funds with a much higher ESG Rating. This metric is particularly useful for ETFs with low ESG Ratings, helping us to identify whether there is a limitation in the offering or it is due to the specific asset class it belongs to. We aim to only select funds with a high rank across the universe (more than 90 where possible).
- 2. Select ETFs with a negative screening on social controversies:** Indexes with negative screening applied to those companies, whose revenues are based on social controversies, such as controversial weapons and child abuse are preferred. This information is generally available in the index methodology prospectus and we verify it with the data provided by MSCI.
- 3. Exclude ETFs with a level of controversy⁵ greater than 0.** We do not want to invest in companies that violate human rights or that have revenues based on social injustices. This information is known as a 'controversy score' and is available on the MSCI website for each fund.

² The ESG score ranking of the funds within the whole universe of investable funds that invest in the same asset class.

- 4. Select the pool of ETFs with high ESG Rating and Rating score:** this step allows Moneyfarm to consider the impact of ESG Risk on the portfolios and to take advantage of a best-in-class approach on the MSCI ESG Rating.
- 5. Select best-in-class ETFs for Environmental externalities:** Indexes with techniques that consider the environmental impact of the underlying companies are preferred. There are different methodologies on the environmental layer.
- 6. Select ETFs issued by the most Engaged Asset Managers:** Moneyfarm uses the Moneyfarm ESG engagement score to assess the engagement of the Asset Managers. The framework is based on 5 dimensions: votes on ESG related resolutions, proxy voting policy, pledges, engagement and alignment with the Paris Agreement targets.

At the same level of previous conditions, ETF issuers with a high Moneyfarm ESG engagement score that are active and engage with the invested companies are strongly preferred.

³ MSCI ESG Ratings research aims to answer the following questions: (1) Of the negative externalities that companies in an industry generate, which issues may turn into unanticipated costs for companies in the medium to long term? (2) Conversely, which ESG issues affecting an industry may turn into opportunities for companies in the medium to long term?

⁴ Negative screening means to cut out those companies with certain characteristics, without considering its relative score with respect to peers.

⁵ UNCC controversies, Severe controversies, Controversial weapons

4) Financial risk assessment of ESG ETFs

Integrating ESG in investment decisions often involves the reduction of investable universe. We want to guarantee that ETF are well diversified in terms of number of securities and idiosyncratic risk.

We want to check that the selected ETFs and the portfolios are consistent with our risk metrics in terms of concentration and idiosyncratic risk:

- Minimum number of securities
- Idiosyncratic and systematic risk breakdown
 - Beta with the parent index
 - Drawdown
 - Volatility
 - Risk contribution
 - Performance attribution to understand deltas with the parent index
 - These metrics are derived both at portfolio and ETF level.

Minimum number of securities

When we select the ETF, it is important that the number of securities underlying the ESG index guarantees low concentration and **market and credit risk** diversification. We assess that the number of securities is high enough to guarantee both.

Idiosyncratic and systematic risk breakdown

We compare the risk measure at ETF level.

- **Systematic risk and idiosyncratic risk:** We want the ESG ETF to be exposed to key market dynamics without taking on too much diversifiable risk. This is important both (1) to be sure that the ESG ETF will behave how we expect it to when we formulate our investment decisions and (2) to not take on too much risk that is only partially remunerated.
 - We analyse the **beta**, i.e. the sensitivity of the portfolio to market conditions, since we do not want performance to come from a leveraged amount of risk. We aim to keep within specific targets..
 - The **delta volatility** is important to assess in order to see if there have been any particular periods in which the ETF did not perform as expected in terms of risk.
 - The **tracking error** is a tricky measure since it evaluates the volatility of the difference of the returns. It's a good measure in understanding a fund's ability to replicate its benchmark, however we should bear in mind that the underlying index of the ETF is not the parent index, but the ESG-SRI index. This means it can behave differently in the short term, given that, in the long term, it depends on the same macro dynamics of the market.
 - The **drawdown assessment** aims to show how the ETF has behaved in tail periods with respect to the parent index.
 - The **performance difference** is a bell that rings in order to trigger specific performance attribution analysis. We do not need the performance of the indices to be close, but we want to dig into **the reasons why they are different**. Concentration in a particular stock, market volatility or systematic over / under performance can all be reasons and we want to assess them.

Violin plots

- LECPTREU Index
- MXEF Index
- MXEM Index
- MXJP Index
- MXWO Index
- SPX Index



5) Government bonds

Even with such low interest rates, we continue to believe that government bonds have a role to play in a multi-asset portfolio. Sovereign bonds do, however, represent a slightly different challenge within an ESG context - given the broad range of activities that governments undertake.

This might explain why we've seen far fewer ESG government-bond ETFs so far. We would expect that to change over time. We're gradually seeing ETF providers move towards screening Developed Market Governments through a lens of climate change, and the Paris Agreement – and that's a framework that seems appropriate.

We'll deal with portfolio construction in more detail shortly, but we believe that a combination of investment-grade corporate ESG bonds, green bonds, and ESG-screened government bond ETFs will allow us to manage portfolio risk consistently.

Tracking error

- c1
- c2



6) Portfolio construction

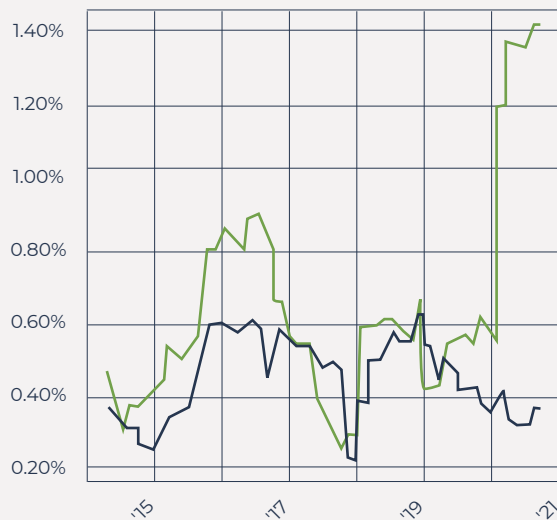
The portfolio construction process is the same one that we use for the traditional portfolios, only with an ESG overlay. We analyse the target risk-return profile of each portfolio, with a focus on diversification. We also include the ESG metrics analyses that are going to be evaluated for the standard portfolios.

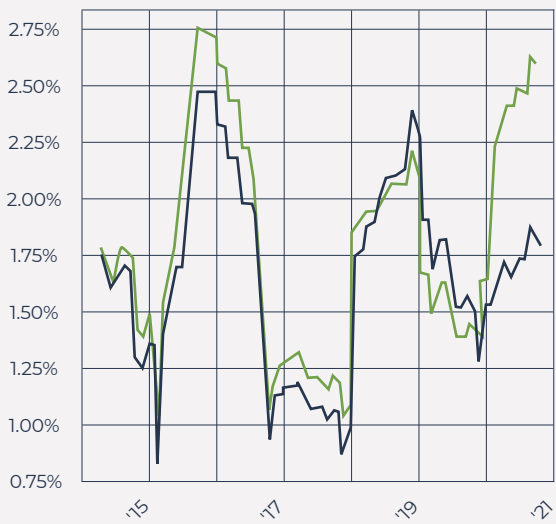
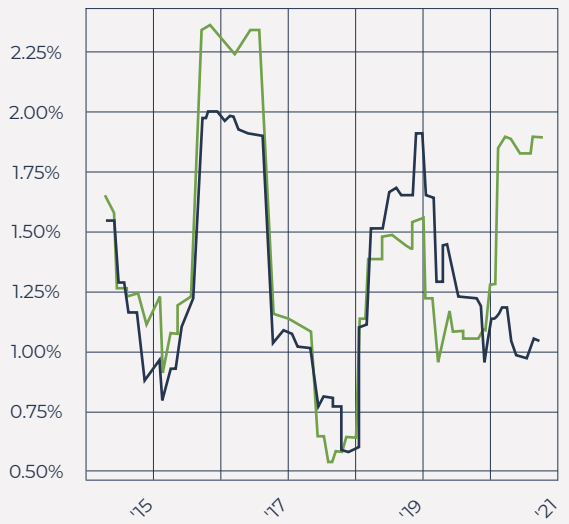
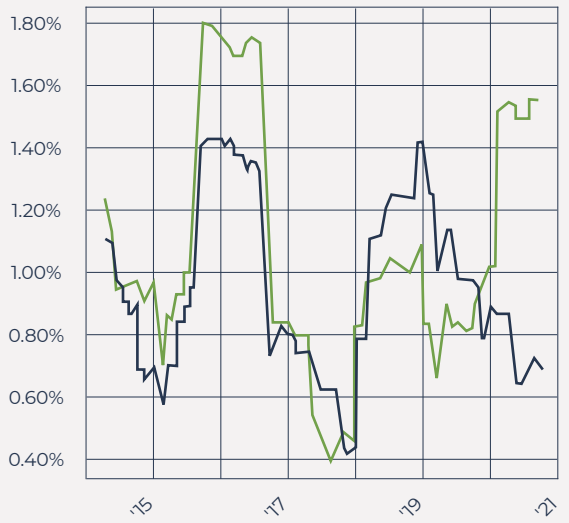
Risk analysis

Our main objective is to build portfolios with a **level of risk** that is suitable for the investor profile of our customers (just as it is in our standard portfolios). So, we are mostly interested in the absolute risk-return metrics of the portfolio, rather than comparing it to the measures of the standard portfolio.

However, we want to be sure that the specific risk in the overall portfolio is mitigated and that the risk is not too concentrated in any specific asset class. With this in mind, the risk comparison is only needed to double check the analyses performed at portfolio level.

At portfolio level, we run the same analyses on drawdown, returns, systematic risk and tracking error that we run on the single ETF. The effects of any differences in the single ETFs are mitigated at portfolio level, since they average with other instruments.





To ESG or not to ESG?

One **important question is around portfolio performance**. Clients often ask if they'll lose out by opting for an ESG portfolio, or indeed if they'll be better off.

It would be great if we could say conclusively that selecting companies based on ESG criteria always gives you better returns.

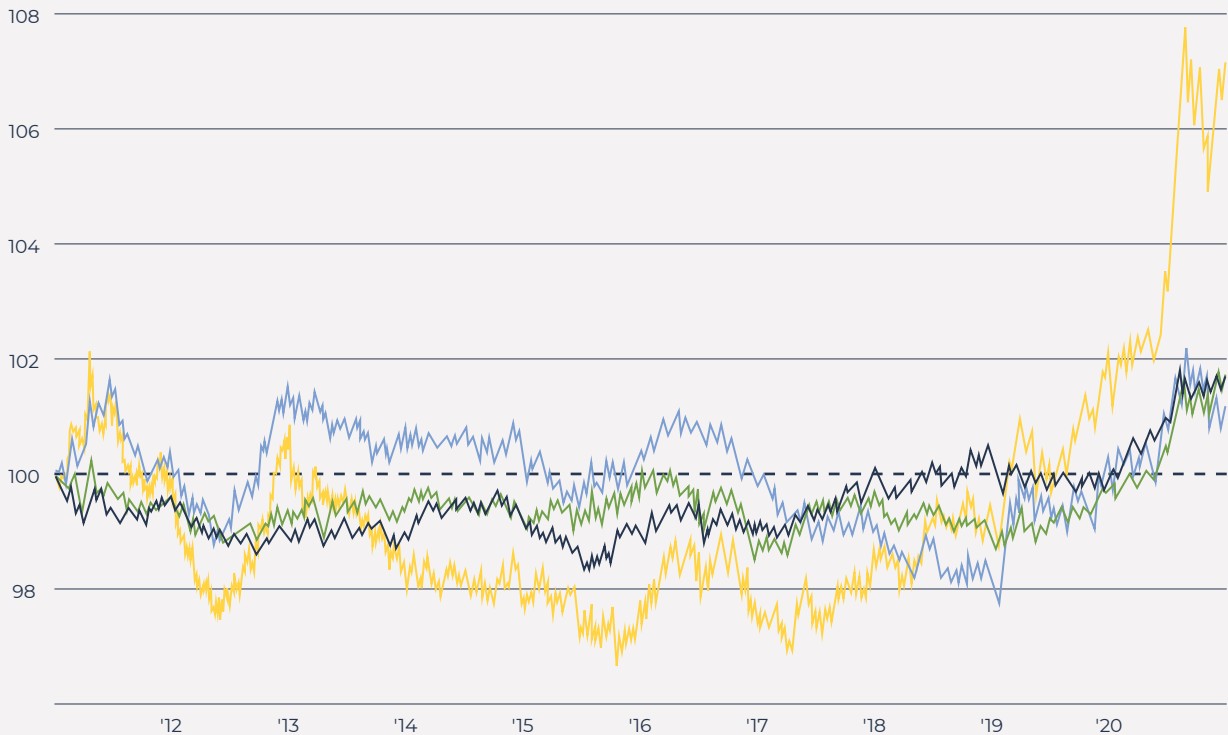
Unfortunately, the evidence is not so clear-cut. The short answer is that, historically, sometimes you'd have done better, sometimes worse - often depending on how well commodity prices have performed.

The chart below illustrates the point. It shows the performance of various Global ESG indices compared to the underlying standard index. While the overall performance for ESG has been positive, much of that has come over since late 2018. The relative performance over previous years has been mixed.

Long-term performance of MSCI world indices

Relative performance

- MSCI World Index
- MSCI World ESG Universal Index
- MSCI World ESG Leaders Index
- MSCI World ESG Focus Index
- MSCI World SRI Index





We would argue that this is not the main reason to invest in ESG. However there are clearly some advantages that companies with less ESG risk will have from a financial point of view. McKinsey & Company⁶ identified five important ways in which

ESG links to cash flows: (1) facilitating top-line growth, (2) reducing costs, (3) minimising regulatory and legal interventions, (4) increasing employee productivity, and (5) optimising investment and capital expenditures.

How ESG can improve companies' performance

Strong ESG proposition (examples)

Top-line growth	Attract B2B and B2C customers with more sustainable products. Achieve better access to resources through stronger community and government relations.
Cost reductions	Lower energy consumption. Reduce water intake.
Regulatory and legal interventions	Achieve greater strategic freedom through deregulation. Earn subsidies and government support.
Productivity uplift	Boost employee motivation. Attract talent through greater social credibility.
Investment and asset optimisation	Enhance investment returns by better allocating capital for the long term (eg. more sustainable plant and equipment). Avoid investments that may not pay off because of longer-term environmental issues.

On the other hand we can argue that, if the ESG framework works and rewards companies with less ESG risk and higher ESG values, it should reduce the cost of capital of those companies, increase their multiples and erode financial returns. This will apply primarily in the short term since, at least on a cash flow side, the ESG factors should be advantageous in the long term.

Also, for a company that is not currently considered ESG, it's possible it can improve its multiples (or reduce its spread for bonds), leading to a capital gain higher than in existing ESG companies.

⁶ <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/five-ways-that-esg-creates-value>

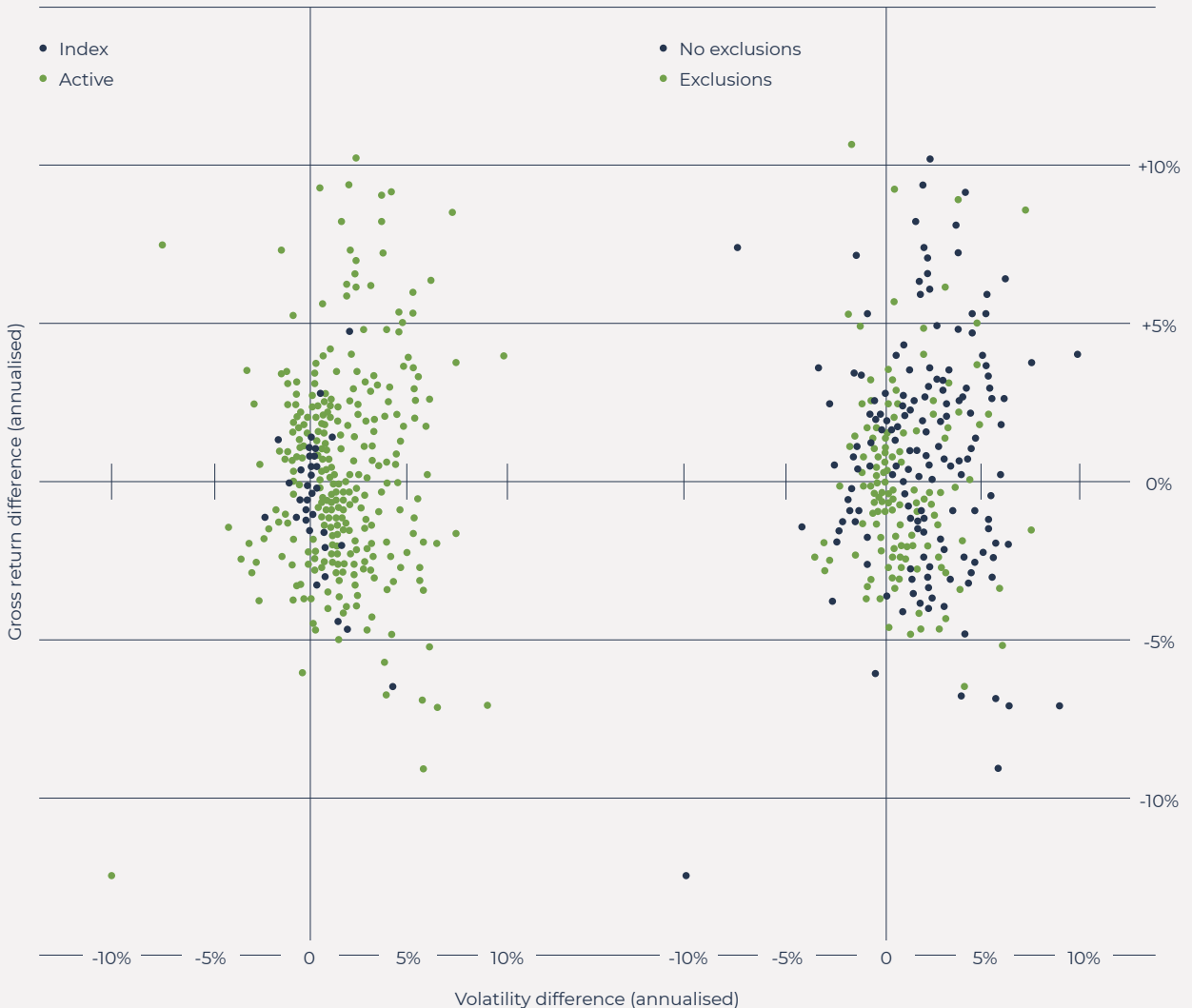
The current evidence

Our analyses on MSCI US

The chart below (Vanguard research) shows the dispersion in terms of volatility (x-axis) and excess return (y-axis) in the last five years of ESG active and index funds. The second chart shows the difference between exclusion-based index and best-in-class.

Aside from the different dispersion of the four groups, we see that the dispersion in terms of excess returns vs the parent index are symmetric around 0. In other words, over the last five years, there has not been a clear direction of performances.

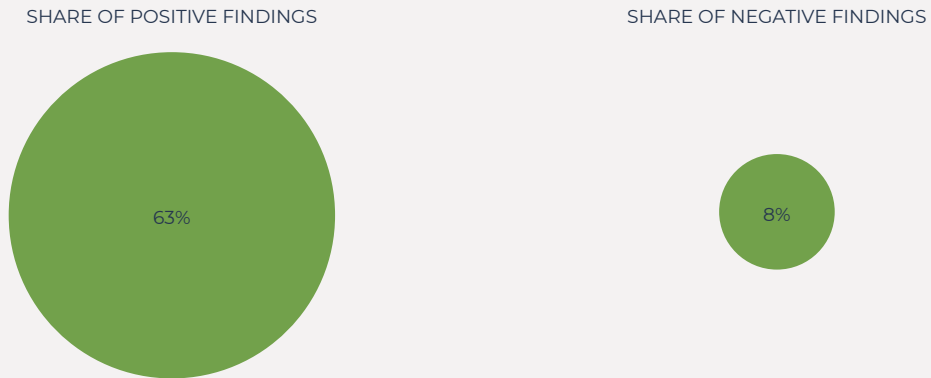
Risk and returns for ESG funds are highly dispersed



On the other hand, if we look at the meta-research around ESG performance, most of that shows that it can lead to positive performance.

Paying attention to environmental, social and governance (ESG) concerns does not compromise returns - rather, the opposite.

Results of >2,000 studies on the impact of ESG proposition on equity returns.



Source: Gunnar Friede et al., "ESG and financial performance: Aggregated evidence from than 2000 empirical studies", Journal Of Sustainable Finance & Investment, October 2015, Volume 5, Number 4, pp. 210-33; Deutsche Asset & Wealth Management Investment; McKinsey analysis

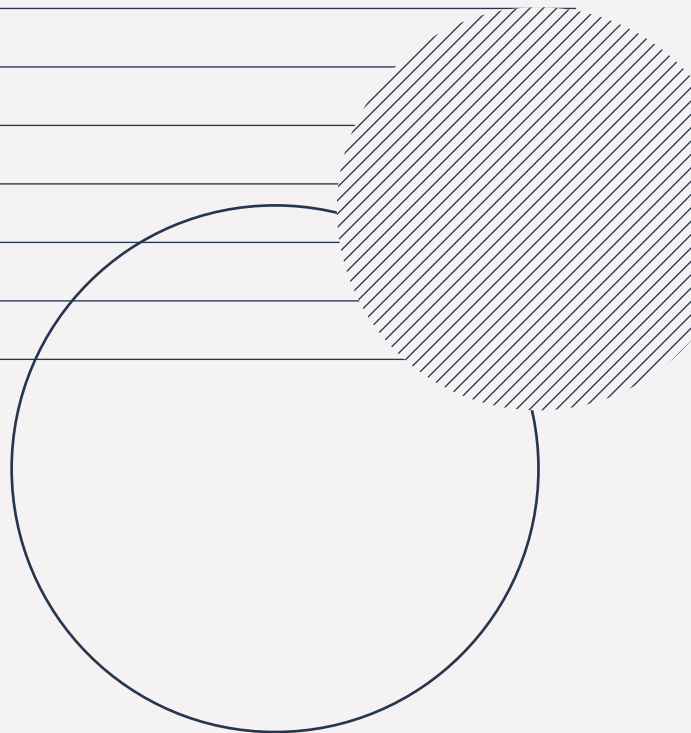
CHAPTER

ESG

In conclusion



Our conclusion is that this doesn't tell us too much about the future. For example, as the focus on ESG has increased, you could imagine that companies that score well would get more attention, and perhaps their stocks would outperform. But markets might move to reflect that. This might mean that the best opportunities are actually in companies that show the biggest improvement in terms of ESG criteria. Sceptics argue that if everyone focuses on high ESG stocks, those with low ESG ratings will be cheap and could outperform! Picking stocks remains a tricky business.



What we can say is that looking forward, **we don't expect focusing on ESG criteria to be a meaningful drag on performance.** We understand that it is not a clear directional statement, but we believe that part of being transparent is highlighting uncertainty.

