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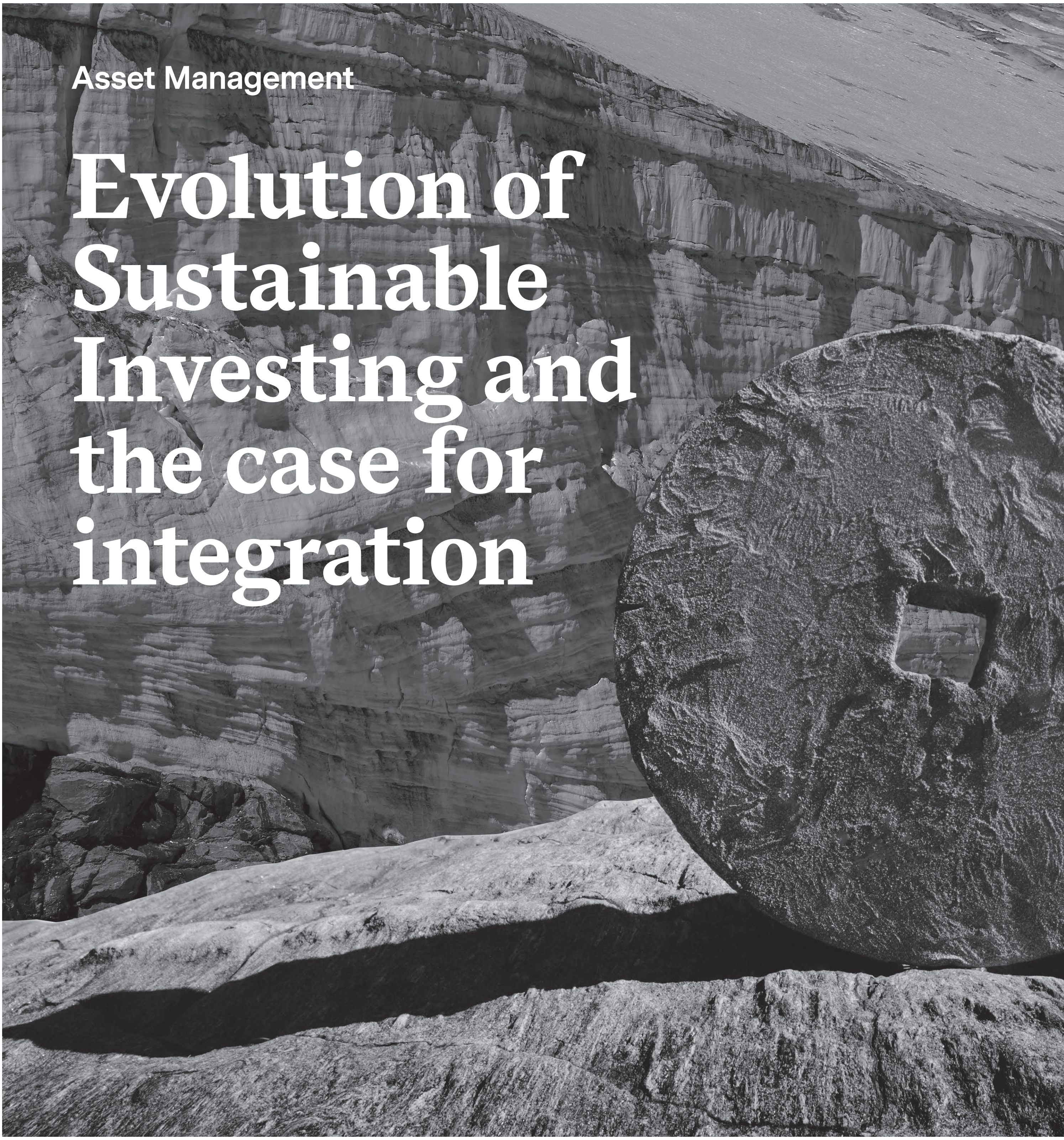

Asset Management

Evolution of Sustainable Investing and the case for integration

For institutional investors only
October 2018

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Foreword

In this paper, we observe the growing interest in Sustainable Investing globally and put particular focus on the trends in this space in the Nordics. Overall, Sustainable Investing is moving forward from its basic focus on screening to more applied approaches that integrate non-financial, ESG data into the investment case. The boom in Sustainable Investing correlates with burgeoning evidence of its positive impact on financial performance. Yet, sceptics question whether sustainability can really add alpha to portfolio returns.

We look at the weight of academic argument addressing this traditional perspective and observe that a skilful approach is needed to successfully practice ESG Integration in order to overcome potential downsides. In fact, there is strong evidence that shows ESG Investing has greatest impact in emerging markets – part 2 sheds light on the reasons and implications for practitioners of ESG Investing in EM developing countries.

Part 1 starts with an overview of the different types of Sustainable Investing and then looks at the trends in how it is applied across the Nordics. The region has long been ahead of the curve on sustainably orientated investing. Using the results of the latest Nordic Investor Survey, part 1 looks at how those investment trends are shifting and concludes with a look at the panoply of views on ESG Integration. Overall, it seems the Nordics are poised to move forward with a more integrated and actively managed ESG investment approach but are seeking guidance on how to best navigate this space.

Part 2 elaborates on strategies to deploy ESG Integration. Following a look at the academic supports for Sustainable Investing, the paper goes on to describe in detail how one approach to ESG Integration (developed by Vontobel mtx) is implemented. The positive, long-term results of this approach are then reviewed as well as alternative approaches within this space. The strategy of Vontobel's mtx boutique might be regarded as a more "Integration light" approach when compared to others as it deliberately seeks to avoid the shortcomings that can arise from more progressive methods for deeper integration. The paper gives some guidance on key issues to be aware of with this type of investing.

We are pleased to provide our combined report on Sustainable Investing and hope to arm investors with the confidence to explore ESG Integration whilst providing some guidance on how to navigate this investment approach.

Casper Hammerich
CAIA, Principal at Kirstein

Lara Kesterton
ESG Sustainability Consultant at Vontobel

Opinions cited in part 1 are based on a study on ESG Integration in equity portfolios conducted by Kirstein and are combined with results from Kirstein's annual Nordic Investor Survey. The Nordic survey studies 44 Nordic pension funds, life insurance companies, associations, and foundations with assets of around 350bn euro. Of these institutions, 35 provided specific feedback to ESG Integration in equity portfolios. These 35 investors represent over 230bn euro.

ESG in the Nordics

Nordic background for ESG Investing

There is no doubt that ESG (Environmental, Social, and Governance) has been – and still is – one of the most coveted topics when speaking of institutional asset management in the Nordic region. Historically, the acronym quickly gained interest and acceptance among top-level executives as a way of mitigating headline risks of the entire organization and has since then become cemented with the majority of tier-I investors across the Nordics.

In more recent years, many of the Nordic institutional investors, particularly tier-I institutions in Sweden and Denmark, have increasingly challenged conventional approaches to ESG Investing. This has led to greater demands on investment professionals to comply with more rigorously defined ESG standards. For example, while complying with an ESG standard appeared fairly straightforward in the past, such as by signing the UNPRI (United Nations-supported Principles for Responsible Investment), conversations with investors and asset managers during recent years proved that this is no longer enough, yet a common denominator of ESG is increasingly difficult to define. A common belief among leading ESG specialists today suggests that the UNPRI standards fall short of integrating ESG considerations into investment decisions properly. As a consequence, many have taken further initiatives on how to fully capitalize on the benefits of ESG.

Defining the steps of ESG Investing

There are many different routes into investing more sustainably, and even more opinions on how to manage ESG at an operational level. The only consensus seems to be that no 'one-size-fits-all' model currently exists.

Today, Nordic investors often allude to a wide spectrum of opportunities when it comes to ESG investing – spanning from conventional approaches to more philanthropically-oriented ones as shown in Figure 1. That said, prevailing approaches among these investors often surround four interrelated directions of ESG Investing:

- Firstly, Nordic investors look at various ways of ***screening investment*** universes by using negative/exclusion, positive/best-in-class or norm-based. These approaches have been seen by many investors as an easy way of implementing a uniform code of practice and hence are often perceived as common practice to ESG Investing.
- Secondly, a handful of leading ESG specialists in the Nordic region have taken action through ***impact investing*** and/or corporate engagement, and a couple of them are currently searching for ways to quantify these impacts.
- Thirdly, Nordic investors will also look at ***sustainability-themed investing*** such as clean energy, green technology, and sustainable agriculture. Investing in thematic funds has proven to be reserved for the few investors with a high conviction in specific themes.
- Finally, ***ESG Integration*** (using ESG information in the investment decision process to achieve enhanced returns) is widely seen as a natural next step in sustainable investing and an area that still very few investors are able to tackle with confidence. The definition of ESG integration also differs between Nordic institutions, and thus many perceive the area as still being slightly underdeveloped.

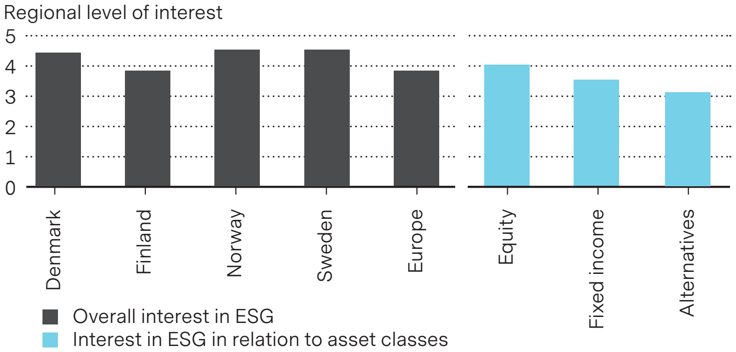
FIGURE 1
Different methods of Sustainable Investing

Source: MSCI ESG Research, Vontobel Asset Management

Geographical distinctions in ESG Investing

The approaches to ESG Investing across the Nordic region are diverse both in depth and breadth of strategies. Investors in Denmark, Norway and Sweden have historically assigned the greatest importance to ESG as shown below. And it seems Nordic investors' focus on ESG is ahead of others in Europe, with the exception of Dutch and French investors.

FIGURE 2
Importance of ESG Investing



Survey Question: "Please indicate the importance your organization assigns to ESG on a scale from 1 – 5 (1 = low importance, 5 = high importance)."

Source: Kirstein proprietary research

From conversations with investors in ***Norway***, it has become clear that ESG is one of the most important factors that stakeholders must adhere to. The Norwegian Government Pension Fund's exclusion list is trend-setting as many investors worldwide closely follow the Norges list. As a consequence, the largest institutional investors have applied significant pressure on fossil fuel companies, and millions of assets have been divested from coal companies.

Sweden was one of the first countries to incorporate environmental and ethical standards in its legislation around the 1990s and continues to lead the way in ESG. And today, the Swedish AP funds largely dictate the ESG developments in Sweden.

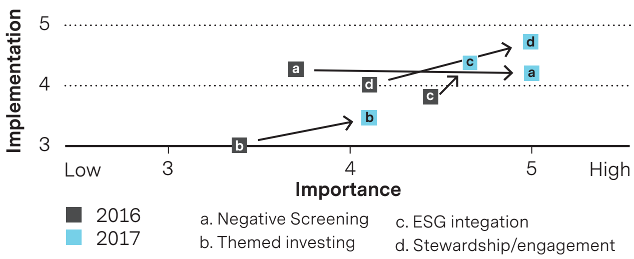
Having historically followed in the footsteps of their Swedish and Norwegian peers, the majority of ***Danish*** investors have currently allocated dedicated resources to ESG. Many Danish investors combine their ESG policies with exclusions and norm-based principles and investments in renewable energy. Furthermore, they have a long history of engaging with shareholders and proxy voting.

Finally, compared to their Nordic peers, ***Finnish*** investors have historically allocated only limited resources to ESG. However, ESG seems to have become more important in this region over the past few years.

Trends in ESG Investing approaches
As we have seen, there is little consensus about the Nordic investors' approach to ESG investing and the trends are also shifting over time. Figure 3 depicts the importance and degree of implementation of different approaches to ESG investing from 2016 to 2017 across the Nordic region. An overarching conclusion seems to be that ESG Integration is gaining in importance, whereas the focus on negative screening and themed investing is decreasing.

FIGURE 3
Importance and degree of implementation of approaches to ESG Investing

Survey Question: "Please indicate the importance your organization assigns to ESG on a scale from 1 – 5 (1 = low importance, 5 = high importance) and the degree of implementation of ESG approaches on a scale from 1 – 5 (1 = low implementation, 5 = high implementation)."



Source: Kirstein proprietary research.

Screening, and particularly negative screening, remains the most implemented ESG approach. It is applied by most tier-I and tier-II institutional investors in the Nordics (more than 75 percent of the surveyed investors have implemented negative screening in more than 50 percent of their portfolios). However, its perceived importance has decreased (Figure 3), which should be seen in light of the growing level of ESG sophistication among Nordic investors: screening is now normal and expected. This is specifically the case with many of the Norwegian investors as well as several entities in Denmark and Finland.

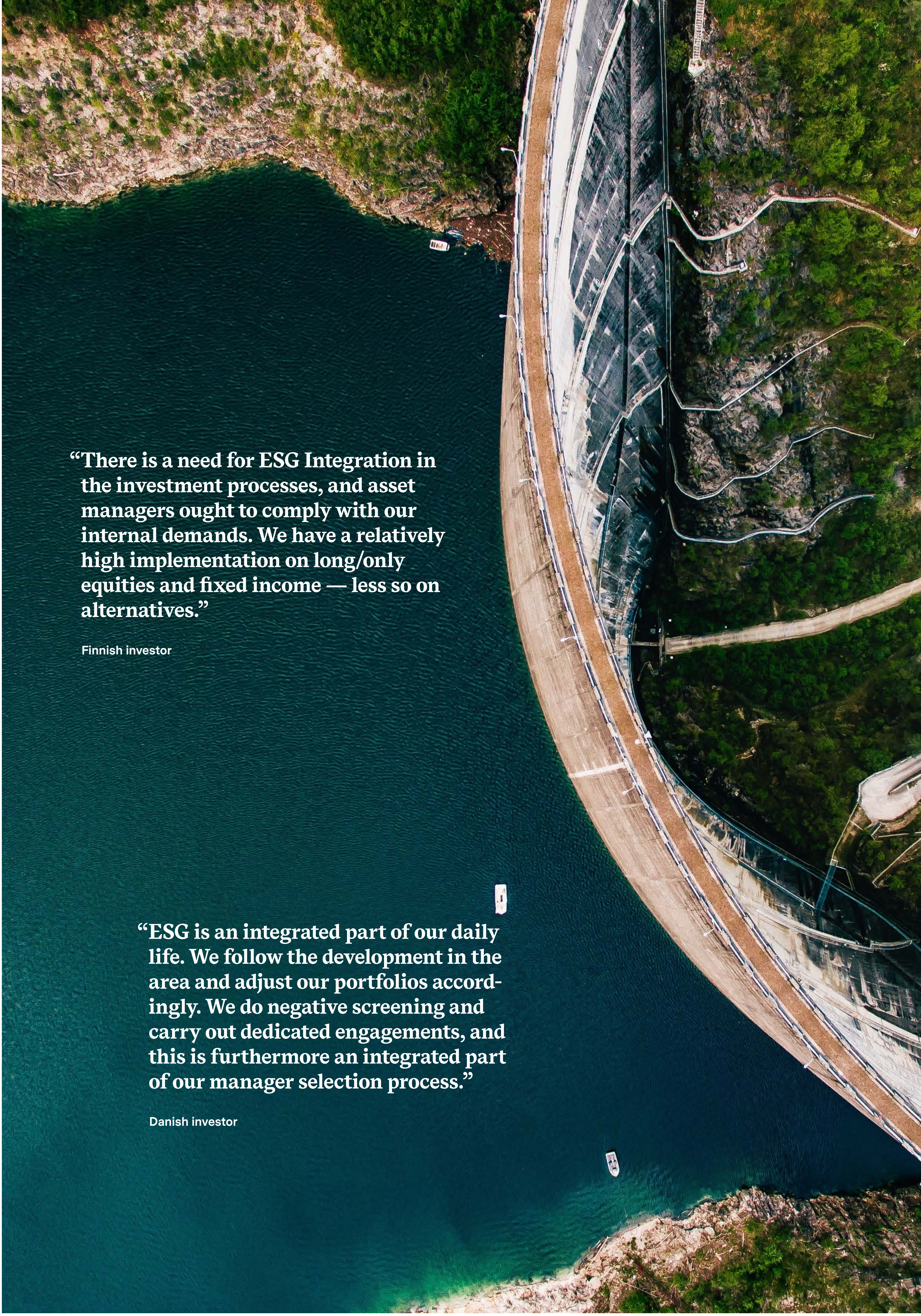
In a manager selection process, it is clear from speaking to investors that screening is no longer considered a competitive parameter, as it is broadly expected of managers to act within established ethical guidelines — or at least be able and willing to adjust portfolios accordingly.

Sustainability-themed investing is only implemented among Nordic investors to a limited extent. This is in part because it is often connected to unlisted investments. The most covered topic on the listed side has been the trend away from the most polluting fossil fuel producers — a trend that is largely led by the Danish and Swedish pension funds. Although the smallest category of ESG implementation, approximately half of the surveyed investors indicate great importance to themed investing.

ESG Integration seems to be on the lips of most investors and asset managers these days, and the approach has gained importance among Nordic investors over the last year (see Figure 3). All of the surveyed Nordic investors assigned some importance to this approach. However, the degree of its implementation it is still relatively small among this group (less than 50 percent fully include material ESG risks into investment analyses). The main protagonists are found among larger Nordic investors, but the approach is clearly gaining ground across the Nordic region. An important question, which remains unanswered to many investors, is how to embark on the right course within integration. This question is explored in depth in part 2 of this paper.

Active engagements with companies on sustainability issues is a component of the ESG Integration approach. However, among Nordic investors, it is mainly the preserve of a limited crowd of ESG specialists. Danish and Swedish investors were among the first to start implementing shareholder engagement and use third parties to engage with their company investments, which is why the importance of engagement as well as implementation is highest among these investors.

In conclusion, the real challenge for many investors is how to embark on the right course within the spectrum of ESG investing.



“There is a need for ESG Integration in the investment processes, and asset managers ought to comply with our internal demands. We have a relatively high implementation on long/only equities and fixed income — less so on alternatives.”

Finnish investor

“ESG is an integrated part of our daily life. We follow the development in the area and adjust our portfolios accordingly. We do negative screening and carry out dedicated engagements, and this is furthermore an integrated part of our manager selection process.”

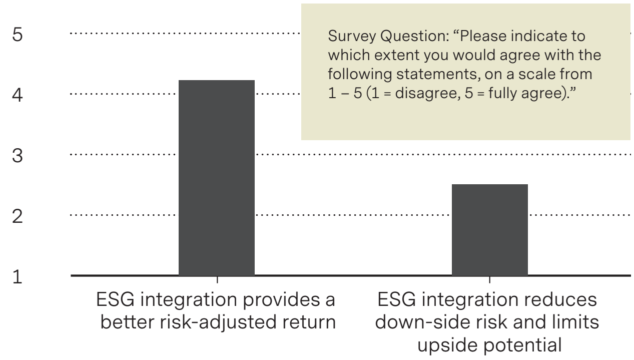
Danish investor

Nordic investors are embracing ESG Integration

A search for superior risk-adjusted returns

For many Nordic investors, ESG Integration is high on the agenda, being the natural next step in the expansion of their sustainable investment programmes. The overall aim of including material ESG risks into investment analyses/decisions is clearly linked to investors' search for superior risk-adjusted returns as depicted in Figure 4.

FIGURE 4
The incentive for ESG Integration



Source: Kirstein proprietary research

Across the Nordics, there is a growing investor base advocating that integrating material ESG metrics will provide superior returns to those of conventional portfolios whilst exhibiting lower risk. This is grounded on a belief that more sustainable companies provide better long-term returns. That said, there are still some antagonists of ESG programs, many of whom tend to hold on to the perspective that integrating ESG will reduce returns on capital and long-run shareholder value.

Therefore, ESG Integration strategies must be applied with professionalism to avoid its potential drawbacks and to achieve the alpha sought.

When looking at the importance Nordic investors assign to each of the three ESG parameters in an integration process, there is surprisingly little difference as to how important environmental, social, and governance issues are considered. For many investors, managing governance-related issues has been an integrated part of most listed investments for years, and this is therefore often regarded as business as usual. Environmental and social issues, on the other hand, are mentioned to be more difficult to approach without the use of specific engagement activities.

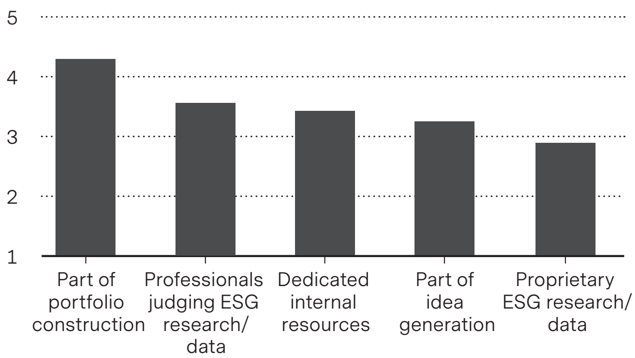
Components of ESG Integration
There is wide variation among Nordic investors on how to define ESG Integration and on the importance that assigned to the different components of it. Figure 5 shows a set of ESG Integration components defined by Kirstein and their importance to be percieved as an "ESG Integration investment approach", as judged by our survey respondents.

The results suggest that at its most fundamental ESG needs to play a part in portfolio construction in some way to be a compliant strategy and managers need their investment professionals to draw on and evaluate specific ESG research data. However, this does not necessarily need to come from internal resources or proprietary research and nor is it required to play a pivotal part of idea generation for the portfolio. It appears only the larger entities in the Nordics make efforts to have dedicated internal resources on ESG.

Interestingly, the respondents did not place heavy weight on proprietary ESG research/data; such reliance has been reduced by the growth of available ESG data and the appearance and growing sophistication of the many specialist ESG Research houses (e.g. Bloomberg, MSCI, Sustainalytics etc.) The respondents appear to believe that managers get less value-added benefit from gathering data in-house. Nevertheless, leading ESG specialists are still recognized for their ability to process and apply the data.

FIGURE 5
Importance of components in ESG Integration

Survey Question: "Please indicate to which extent you would agree with the following statements, on a scale from 1 – 5 (1 = disagree, 5 = fully agree)."



Source: Kirstein proprietary research

Bottom line
It is obvious that a wide spectrum of strategies currently exists when it comes to ESG Investing. For institutional investors in the Nordics, ESG is becoming progressively important. Screening continues to be the most widespread approach, but it is becoming merely an expected tool of asset management rather than a fund differentiator. Investors are increasingly considering how to embark on a 2.0 route within the ESG space. In this quest, ESG Integration has become an important topic for many in the search for superior risk-adjusted returns. However, it is a strategy that appears to be not well understood and there is little consensus or hard conviction on the best approaches to properly integrate ESG factors into the investment process to gain an investment edge.

The case for ESG Integration

Value-add if done well and pitfalls to avoid

Sustainable Investing is big business – accounting for over one quarter of global AUM and growing at 12 percent p.a.[1] This paper examines the evidence driving this proliferating trend, showing that, done right, integrating ESG principles into the investment process can add value to portfolio returns. However, it is not without pitfalls that can detract from returns if not managed carefully. Therefore, we look in detail at one approach with proven success and discuss where and how ESG can add the most value. ESG investing has had particular success in Emerging Markets – we look into the evidence for why this is the case and what this means for investors.

As outlined in part 1 of this paper, Sustainable Investing is a broad church, encompassing many approaches to incorporating ESG factors into portfolio selection and management. In this part, we focus on "ESG Integration" meaning the systematic and explicit inclusion of ESG risks, alongside financial factors, into the investment-decision making process for the purpose of enhanced financial performance.[2]

Why Sustainable Investing matters and where it has the most impact?
The traditional belief has been that Sustainable Investing comes at the cost of financial performance. This has been countered in recent years with burgeoning academic support finding a positive correlation between ESG and corporate financial performance (CFP).

A meta study of 2,200 individual academic studies by Friede et.al. (2015) provides the most exhaustive overview of academic research on this topic. The report found that an overwhelming share (52 percent) of the studies on equities found a positive ESG-CFP relationship while only 4 percent display a negative relationship (see Figure 9, page 12).

Another influential meta study of 200 academic papers (Oxford, Arabesque 2015) had even higher ESG conviction, finding that good ESG practices:

– reduced companies' cost of capital (in 90 percent of studies);
– improved operational performance (88 percent of the studies); and
– positively influenced stock price performance (80 percent of studies).

A recent Deutsche Bank (2018) report looked at over a decade's worth of data and found that stocks with "a high ESG grade" did not demonstrate any loss of performance compared with their peers, while low-rated stocks did experience a performance-penalty.

There are many different explanations for the causal influence of robust ESG practices on financial performance. MSCI (2017b) investigated the main transmission channels and found that companies with higher ESG ratings are:

– more competitive, leading to higher profitability; and are
– less risky and less volatile as they are better at managing idiosyncratic/company-specific risks and suffered fewer incidents which can impact the share price.

In short, if deployed effectively, the application of ESG factors into the investment process can be a source of investment alpha.

The partnership involves close collaboration with the Hermes EOS team, enabling mtx to provide input on engagements and gain insights from the resulting discussions – which in turn provide useful insight for our ESG analysis. We also participate in Hermes' biannual client counsels, in which we have the opportunity to discuss with and learn from other investors using the Hermes EOS service, and engage with Hermes on the current issues of most concern and on the development of their engagement activities.

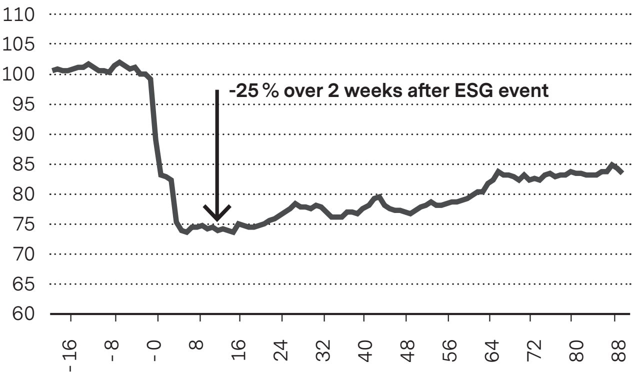
ESG Integration as a risk management tool: avoiding corporate shocks
Vontobel's mtx boutique uses ESG Integration systematically as a tool for avoiding tail risks – i.e., avoiding the most at risk / worst prepared companies and thereby supporting enhanced portfolio performance.

This is supported by a number of studies which conclude that it is more important to avoid the ESG laggards than find the best-in-class performers (GS Sustain 2017b).[3] Likewise, MSCI (2018c) looked at the impact on performance and risk of 1,200 funds if the bottom ESG rated companies were excluded from the fund, and found that "the best result by far was achieved when the worst 30 percent of ESG-rated companies were excluded."

It appears that ESG's greatest value is as a tool to avoid idiosyncratic shocks. The following graph illustrates how major adverse ESG events (e.g., labor strikes, corruption, fraud, embezzlement, serious worker safety incidents, environmental leaks/explosions, indigenous protests, supply-chain disruptions, class-action litigation, consumer boycotts for unethical behavior, etc.) can seriously impact the value of the company and therefore the company's stock price.

FIGURE 6
GS Sustain: Major adverse ESG events can lead to material underperformance

Average sector relative performance for 14 major adverse ESG events in Asia since 2007

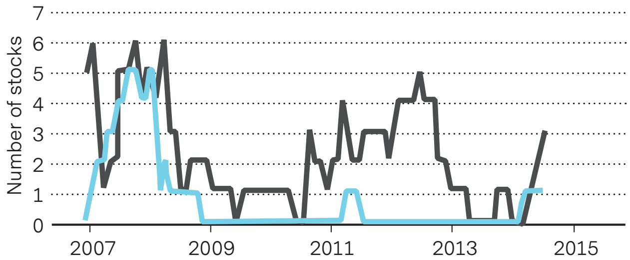


Source: Goldman Sachs equity research: "Asian Corporate Governance" report (GS Sustain 2017a)

A study from The Economist found that notable corporate crises "were deeply injurious to the companies' financial health, with the median firm losing 30 percent of its value since its crises, when compared to a basket of its peers."[4]

Good ESG performance acts as "insurance protection" against shocks
High ESG-rated companies show a lower frequency of idiosyncratic risk incidents, suggesting that they are better at mitigating serious business and operational risks (Figure 7). Hoepner et al. (2013) view this as an "insurance-like protection of firm value against negative events." MSCI also found that companies with high ESG ratings have shown less volatile earnings and less systematic volatility (Figure 8) in line with the theory that they are less exposed to systematic risks. The chart indicates that excluding the bottom two quintiles of ESG performers has a significant improvement on volatility.

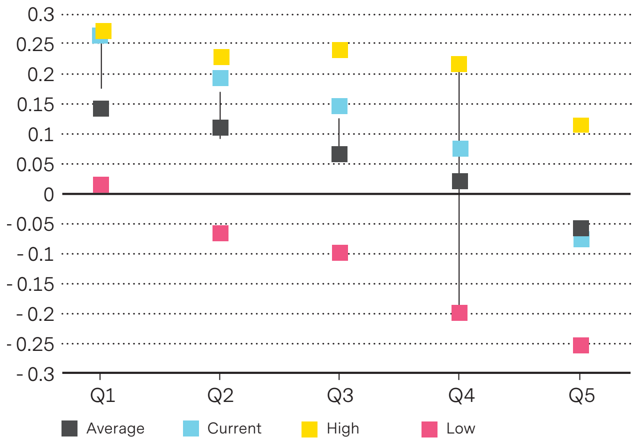
FIGURE 7
Idiosyncratic incident frequency of top and bottom ESG quintiles



For each month, we report the number of stocks that realized a more than 95 % cumulative loss over the next 3 years, taking the price at month end as the reference point for return calculation.

Source: MSCI 2017b

FIGURE 8
Systematic volatility of ESG quintiles



Source: MSCI 2017b

[1] GSIA 2016, The 2016 Trends report looks at industry developments between the 2014 to 2016 period.

[2] For a more detailed look at the different types of ESG integration look at UN PRI 2016 or Sustainalytics 2017a

[3] The GS study (2017b) showed that bottom quartile ESG companies consistently underperform peers (by 118bps on average between 2013 and 2016), whereas top quartile (best ESG performance) companies have outperformed by 72bps over the same period. This suggests ESG framework works best as a risk assessment tool to help avoid ESG laggards.

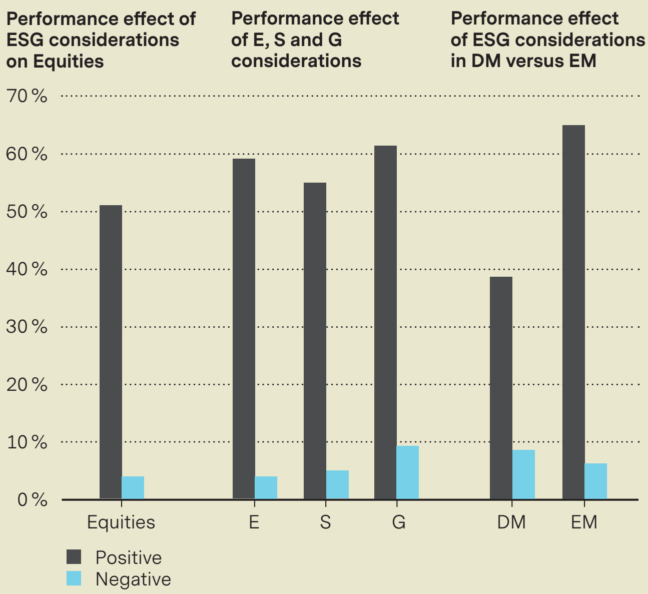
[4] Schumpeter, "Getting a handle on a scandal", The Economist, March 31st 2018. It looked at the eight biggest corporate crises since 2010 (BP, Uber, Wells Fargo, Petrobras, Volkswagen, Facebook, Equifax and United Airlines) – collectively the total forfeited value is $300bn.

ESG Investing: Developed versus Emerging Markets

Interestingly, an overwhelming conclusion from many of the ESG studies was that the impact of ESG investment approaches was not globally uniform. Most notably, ESG strategies had significantly greater impact in Emerging Market (EM) stocks than in Developed Markets (DM). This suggests that ESG investment is most effective where there is greatest divergence in ESG performance (where there is greatest need to filter out the worst-prepared companies) and where the wider institutional, regulatory and economic environments are weakest (i.e., operational risks are more pronounced).

The Friede (2015) meta study found the strongest ESG-CFP correlation in EM (65 percent positive compared to 38 percent positive for DM as a whole).[5]

FIGURE 9
ESG-CFP correlation in EM versus DM



Source: Bassen, Busch and Friede (2015)

Cambridge Associates (2016) findings were even more stark, finding that integrating ESG factors into stock selection processes added significant value in EM equities but had little effect on DM equities. They found that the MSCI ESG EM Index consistently outperformed its parent MSCI EM index by a cumulative 12 percent (2013 – 2016)[6] while the MSCI World ESG Index statistically shows barely any divergence from its parent MSCI World Index and even slightly underperformed.

This suggests that ESG's role in reducing tail-risks and stock volatility has a greater impact in EM compared to DM. Risklab found that "tail risk" (the risk of unlikely events causing catastrophic damage) can be reduced by nearly 40 percent in an EM portfolio that has limited its exposure to ESG risks." Political and social instability poses greater exposure to tail risks. Sustainalytics (2012) found that EM companies have a higher frequency of the most severe ESG controversies, particularly societal and community-related incidents.

Various studies (MSCI 2018a, Deutsche Bank 2018 and Cambridge Associates 2016) have found that the main driver of outperformance in the ESG funds was careful stock selection: in EM "54 percent of the ESG index's excess return over its parent was attributable to stock-specific sources" (Cambridge Associates 2016). This factor outweighed inherent ESG tilts towards factors such as sector, size, geography and quality. In short, in markets where the wider operational context provides more instability, the portfolio manager's ability to employ ESG considerations in stock selection adds significant value.

We should note that these findings did not rule out ESG's value in DM, while it is a less overt tool for finding alpha in DM, its sophisticated use "provides another key tool for thoughtful managers in this space to make individual judgments of materiality" (Cambridge Associates 2016).

Why ESG investment approaches have the most impact in EM

Naturally this leads us to question why this pattern is emerging and what it means for asset managers.

"Lottery of birth" – context matters

MSCI (2018a) found that countries which score well on factors such as governance of institutions, human capital productivity and natural resource management, deliver conducive environments for good business. Companies in these markets were typically less exposed and better positioned to manage significant ESG risks than global peers. Conversely, there is a clear "market drag" – "as the sovereign ESG ratings declined, the ESG ratings of companies domiciled in these countries tended to fall below global industry peers, primarily due to their elevated risk profiles".

[5] Interestingly, they also found the correlations were stable over time, despite expectations that ESG alpha would have shrinking correlations over time due to learning effects in capital markets.
[6] This short period being from the launch of the MSCI ESG EM Index in June 2013 to June 2016

Other systemic business factors in Emerging Markets
Many of the business norms and practices which have been associated with better corporate management and performance are not prevalent in EM.

One of the major critiques is weaker levels of disclosure – EM companies tend to be less transparent about their business policies and procedures to manage major risks and there is poorer data on performance indicators such as environmental impacts, safety records, and other human capital metrics. This information blind spot is exacerbated by weaker interrogation of corporate controversies by the press and civil society. This can make it harder to evaluate EM companies. More significantly, by facing less scrutiny to meet and disclose on global operational norms EM companies might be underprepared to meet operational and business risks.

Governance factors are commonly raised as the major differentiator between EM and DM companies. In EM, state-owned enterprises and family-controlled firms are more prevalent, these ownership structures are often associated with market underperformance. A key area of concern is the rights and protections for minority shareholders (in relation to the heightened risks posed in controlled companies of prioritizing political, social or private ends over shareholder value). In addition, corporate governance regulation, oversight, and enforcement, that support better management, are typically laxer than for Western peers. Sustainalytics (2012) reports the biggest performance gaps between EM companies and their DM peers are in governance and anti-corruption standards.

However, corporate governance (CG) norms and regulations are improving in EM, Farient Advisors (2018) observe increasing focus on this in Saudi Arabia, China, Singapore, Brazil, and India but at an uneven pace. Many EM countries have recently adopted or revised their company and security codes and laws.[7] Nevertheless, on many metrics, CG standards are still lower in EM and momentum to raise the bar still lags DM. Farient Advisors opine that while there is an "unmistakable and growing convergence in key governance practices – certain variations, driven by cultural differences, will persist."

Asset managers using ESG to identify outperformance
In this context it becomes clear that ESG becomes a valuable tool-set for skilled asset managers to identify EM outperformers in these growth markets while controlling downside tail risks.[8]

"The positive results of ESG-based stock selection highlight how important evaluating ESG quality of companies could be to active management in emerging markets. We observed huge variations in the depth of application and, as ever, manager selection is critical."

Cambridge Associates (2016)

Nuanced ESG approach required
The sophisticated ESG investor operating in EM adds value by understanding that Western standards are not always fully applicable in EM. Deeper analysis of the board's practices is needed where governance structures can seem on-the-face-of-it unattractive. As minority shareholders rights are less protected, it is advisable to focus on the board's track record vis-à-vis the long-term interests of minority shareholders. To overcome the information gaps, it is important to undertake more proprietary research and engage directly with companies.

CG is not the only area of risk exposure. MSCI (2017a) estimates that "on average, 16 percent of MSCI Emerging Market Index constituents' operations were located in regions characterized by especially fragile ecosystems, and 24 percent of operations were located in regions with the highest corruption perception levels." Political, social, and environmental vulnerabilities raise particular risks according to industry sector and geography; it is therefore vital to keep up-to-date with country and industry trends. For example, water stress is highly acute in Chile and this has particular management implications for utility & mining companies. Fragile ecosystems (e.g. Brazil, Indonesia) and high prevalence of natural disasters (e.g. India) have implications for many resource industries as well as insurance companies. Workplace safety standards and labor rights are an acute issue in many EM and Asian countries, requiring deeper investigations into operating standards and supply chain oversight.[9] For example, an emerging hot topic for IT hardware companies is greater due diligence of their cobalt supply chains, where human rights abuses are severe. Sustainalytics (2017b) observes that Kenya, South Africa, Malaysia, and Chile stand out as particularly risky markets, as more incidents occur in these countries than might be expected given their size but India is the top EM culprit for ESG incidents.

[7] This includes: China, Hong Kong, Japan, Korea, India, Mexico, Singapore and Saudi Arabia (OECD 2017)
[8] MSCI (Jan 2018) found that there is a narrow quadrant of only 15 percent of EM companies in the MSCI global index that met both the 50% threshold on global governance standards AND exceeded their own country's ESG sovereign rating. In this context, careful stock selection based on deep understanding of local markets clearly becomes more vital.
[9] MSCI 2017a reports that "China has seen a series of industrial accidents leading to 66,000 workplace deaths and around 282,000 workplace accidents in 2015. With around 6 occupational fatalities per USD billion GDP, the workplace fatality rate in China is more than twenty times that of other major global economies. The large disparity can be attributed to a lax regulatory environment and uneven enforcement surrounding workplace safety."

Approach to ESG Integration

The integration of ESG risks into our investment decisions is a vital part of our investment philosophy – both for DM investments as well as EM. This approach is based on the conviction that ESG performance plays an important part in the future returns of a company.

The essential composition of ESG Integration in our proprietary investment approach can be summarized as follows:

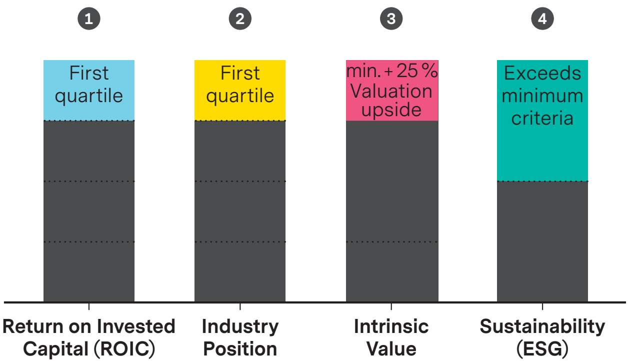
- **Wide investment universe:** we apply only a few pre-filters to our investable universe.
- **Applying a 4-pillar process** with particular focus on top ROIC companies (further on, see Figure 10).
- All 4 pillars (including the ESG analysis) are assessed by our **financial analysts**, giving them a holistic understanding of each company. Thereby the detailed assessment of stock-specific ESG strengths and weaknesses is used to influence their financial models.
- We systematically apply our own sector-specific **proprietary ESG framework** for a rigorous case-by-case assessment of companies on the most material ESG issues.
- **We obtain ESG information** from a range of research houses, our own research and via direct engagement with the companies.
- **Independent audit:** the analyst's ESG assessment is then audited by an ESG expert to ensure the evaluation is unbiased by the strength of the financial case.
- **On-going ESG monitoring:** each company in the portfolio is reviewed in depth at least annually as well as on the alert of any significant controversy.
- **On-going ESG learning and development** within the team to deepen sector expertise and mature our positions as ESG issues emerge and evolve. In addition, we collaborate in external partnerships with proxy voting and engagement firms in order to leverage wider investment pressure on the issues that matter most to us.

Vontobel mtx's unique 4-pillar approach

Figure 10 highlights our 4-pillar approach – a company must meet each of these prerequisites to be eligible for investment:

1. First and foremost, first quartile Returns On Invested Capital (ROIC) is required. This is based on empirical evidence that highly profitable companies outperform through the market cycle.
2. Secondly, strong industry positioning.
3. Thirdly, attractive valuation offering a margin of safety to a company's intrinsic value.
4. The fourth criteria measures how a company's management demonstrates leadership with regards to effectively addressing ESG issues. We believe this is an important factor in a company's ability to post strong financial performance and maintain a leading industry position.

FIGURE 10
Our 4- pillar investment process



1. **Profitability (ROIC)**
   Industry-leading companies with top-quartile profitability, measured as return on invested capital (ROIC), in their sector

2. **Industry Position**
   Industry-leading companies in the best competive positions to maintain top-quartile profitability (ROIC)

3. **Intrinsic Value**
   The stock is trading at a discount to its Intrinsic Value

4. **Sustainability (ESG)**
   Industry-leading companies that are superior in effectively adressing environmental, social and governance (ESG) issues

Source: Vontobel Asset Management

Evolution from ESG screening to ESG Integration
Our approach to ESG Integration has evolved over time. We started in 2009 with a screening approach where ESG exclusion criteria were used to pre-filter and therefore define the investable universe. This approach was more aligned with a best-in-class approach where stock selection was limited to a pool of top ESG performers. We found this approach excluded too many sub-sectors and was too restrictive from a portfolio construction point of view (resulting in a too high tracking error). In 2010, it was decided to integrate the ESG analysis into the evaluation of the companies we consider investing in. Our ESG framework was then developed and over time has evolved and been finessed.

Minimum Standards Framework (MSF)
Core to our ESG Integration approach is our in-house assessment framework, which we call our MSF. We seek to exclude companies who are worst prepared to meet and manage idiosyncratic shocks to which their sector is uniquely exposed. The MSFs are structured assessments to guide a deep evaluation of both the companies' preparedness to meet the most material ESG risks in their sector but also their performance: Do they walk the talk?

The MSFs are used to score the company on a range of 20-25 ESG factors that we consider the most material for that company/sector, and which might have a notable impact on future cash-flows. The metrics are therefore tailored to each sector (and sometimes sub-sector) and the E, S and G pillars are also weighted according to the relevance for each sector. Each sector specific MSF has been developed by the financial analyst in conjunction with ESG experts. The review looks at a company's policies, commitments, methods of implementation and performance metrics on key ESG issues.

Integrating ESG into the investment process has maximal effect when applied to portfolios with a limited number of stocks (allowing for an ESG deep dive and holistic assessment) and which take a longer term investment horizon (as ESG issues tend to manifest over longer holding periods).

FIGURE 11
MSF for consumer staples company
Below is a shortened example of an MSF for a consumer staples company. The MSF is a step-by-step manual to consider and weigh all the material long-term wider business issues that a company faces.

PILLAR	WEIGHT	CRITERIA (EQUAL WEIGHTED)	INDICATOR	INDICATOR SCORE 1	2	3	4	5	CRITERIA SCORE	PILLAR SCORE	FINAL SCORE
ENVIRONMENT	40%	Environmental impact	Policy to manage environmental impacts		■				2.7	3.2	3.2
			There is a functional EMS in place				■				
			Scope of EMS		■						
		Operational eco-efficiency	Disclosure of KPIs			■			3.5		
			Progress in efficiency				■				
		Product stewardship	Product-related health & safety strategy			■			3.3		
			Eco-efficiency improvements in the product lifecycle				■				
			Recycling programs in place			■					
SOCIAL	30%	Employee relations	Code of conducts (policies addressing fair compensation, treatment and non-discrimination)			■			3.7	3.9	
			Health & safety management				■				
			No major labour controversies (child & forced labour, freedom of association)				■				
		Business behavior and socioeconomic development	Business behavior (including excessive lobbying and anti-competitive practices)				■		3.0		
			Responsible marketing			■					
			Alcohol manufacturers: promotion of responsible drinking	not relevant							
		Supply chain management	ESG risks in the supply chain are managed by appropriate means					■	5.0		
GOVERNANCE	30%	Board accountability	Independent and diversified board			■			3.0	2.6	
			Separation of CEO/Chairman position	■							
			Independent audit committee					■			
		Shareholder rights	One share one vote without restrictions			■			2.0		
			No controlling shareholder who poses a risk to the interests of minority shareholders	■							
			No anti-takeover defenses			■					
		Executive remuneration	Independent remuneration committee	■					2.7		
			Transparent remuneration / remuneration policy			■					
			Dilution potential due to outstanding options					■			

Source: Vontobel Asset Management

ESG issues informing the financial assessment
In conducting the rigorous review, the financial analyst synthesizes his own analysis with inputs from external sustainability research providers. The financial analyst is able to apply their deep sector expertise in understanding global and local norms for their industry. This is particularly valuable by adding a forward-looking evaluation of ESG trends that the company may be exposed to, and any ESG initiatives in the company's pipeline.

As the ESG assessment is conducted in conjunction with the financial assessment and by the same sector expert, the additional information obtained by the MSF process informs the analysts' financial modelling of the base, bull and bear case. ESG issues uncovered may influence the assessment of the companies' long-term competitiveness, their potential to generate future cash flows.

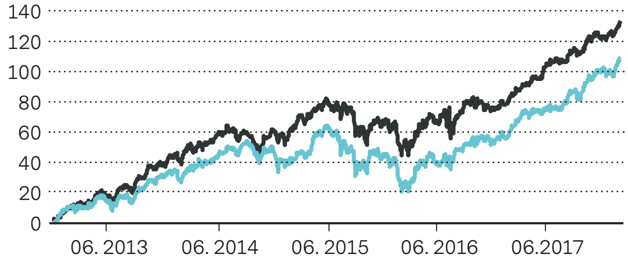
Role of the independent ESG auditor
The analysts are supported in their ESG knowledge and company assessments by the team's ESG expert, who provides a second view, uninfluenced by the strength of the financial case. The auditor is also able to dig deeper on controversial issues and provide guidance on meta trends for the industry. The MSF is agreed through an deliberated dialogue with the financial analyst but ultimately the ESG auditor retains the final decisive vote in case of disagreement. For the most difficult cases, the team can draw on wider ESG expertise within Vontobel. We have found that having in-team ESG expertise (and having it integral to the holistic company evaluation process) provides an important value-add for investors.

Examining the results of the ESG approach at Vontobel's mtx boutique
We wanted to test the value to portfolio performance of our ESG Integration approach. Therefore, we tested all companies globally that had passed the first two pillars in our investment process (Q1 ROIC and Q1 Industry Positioning) and compared the stock price development of the (equally weighted) basket of top quartile ESG performers against the bottom-quartile ESG scorers over a 2012 to 2017 period. The results show (see Figure 12) that companies with high ESG scores outperformed those with low ESG scores.

This theoretical outperformance indicates that our ESG approach provides important additional information for the evaluation of a company and can be a considerable value-adding factor.

FIGURE 12
Top-quartile Vontobel mtx ESG scores
The integrated investment approach at Vontobel's mtx boutique shows a significant difference in performance between top and bottom rated ESG companies using our MSF approach.[10]

Total Return in %



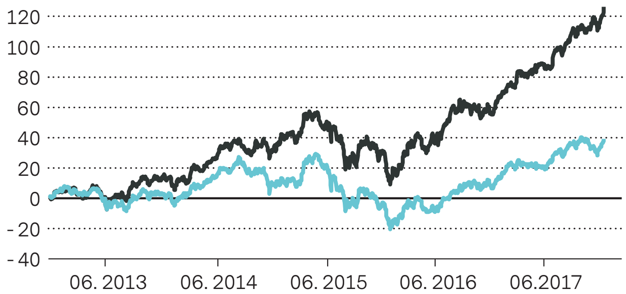
— Top-quartile Vontobel mtx ESG scores (global)
— Bottom-quartile Vontobel mtx ESG scores (global)

Global, all sectors, 17.12.2012–31.12.2017. The ESG scores are based on Vontobel mtx Minimum Standards Frameworks. Source: Vontobel Asset Management

Integrating ESG considerations in EM portfolios is especially valuable
As an interesting comparison, the evaluation was repeated on exactly the same basis but this time we included only EM companies. The results (Figure 13) show that the value-add of eliminating the weakest ESG performers is even more striking in emerging markets. Our results therefore support academic studies in finding that ESG Integration has greatest value in these regions.

FIGURE 13
Emerging Markets ESG scores

Total Return in %



— Top-quartile ESG companies — Bottom-quartile ESG companies

Emerging Markets, all sectors, 17.12.2012 – 31.12.2017.
The ESG scores are based on the mtx Minimum Standards Frameworks

Source: Vontobel Asset Management

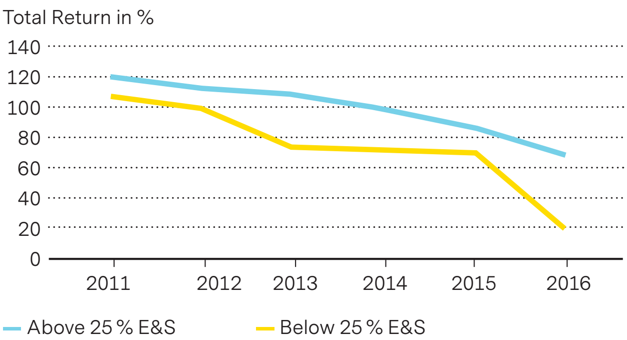
[10] The ESG scores are based on the Vontobel mtx proprietary Minimum Standard Frameworks. The companies fulfil ROIC and industry positioning requirements (total sample size: 260)

ESG's value-add in highly selective portfolios – a ROIC focus

At Vontobel mtx, our investment philosophy is based on the conviction that there is a strong positive correlation between improvements in a company's ROIC and its share price performance. We focus on a limited number of stocks that pass our top quartile ROIC test and are top ranked in their industry. Therefore, we seek to examine whether ESG data is material to the alpha source of the investment strategy in such a highly selective group of top performing stocks and whether ESG performance can support ROIC performance. Empirical research has found that ESG integration can indeed have a marked impact on returns even in such highly screened groups.

GS Sustain found that high-ROIC companies' ROICs are more resilient to changes in the market cycle. Furthermore, the global top-quartile of ESG rated companies consistently tends to achieve higher ROICs compared to bottom ESG rated companies. Additionally, better ESG rated companies tend to offer better ROIC resilience (see Figure 14).

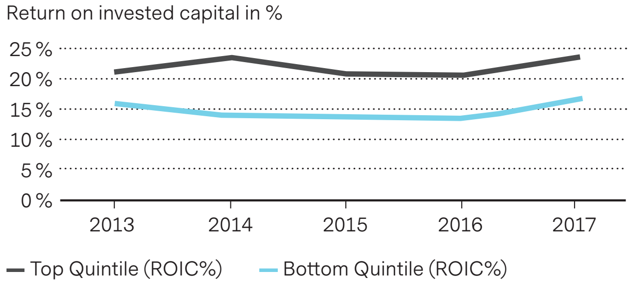
FIGURE 14
GS Sustain study on ROIC degradation comparing global companies that score above and below a 25% E&S threshold



Source: Data supplied by GS Sustain to Vontobel Asset Management, May 2017

GS Sustain's applies its new Environment & Social framework (based only on E&S data) on global companies that had a top quartile ROIC on average between 2010-2015 and then calculating the rolling median ROIC starting in 2011 based on rolling previous years E&S percentile above or below 25 percent E&S threshold score. The results show, companies above the minimum E&S threshold offer higher ROIC resilience than those who fail to meet this low pass mark.

FIGURE 15
MSCI study on average ROIC for top quintile ESG rated companies against bottom quintile ESG companies (from a selective basket of top quality companies)



Source: MSCI ESG Research, Thomson Annual Data , Dec. 2017

GS Sustain's findings are supported by a study by MSCI (2018b), which examined a narrow group of 100 top quality companies[11] and applied an ESG overlay to see if ESG could add value and differentiation within this highly selective universe. They found the companies with the best performing ESG-ratings exhibited superior valuations and higher ROICs compared to the bottom quartile of ESG-rated companies (see Figure 15).

[11] This narrow universe of companies was defined by high returns, high margins and strong balance sheet efficiency yielding substantial value for their shareholders.

Alternative ESG approaches

We have described Vontobel's mtx approach to ESG Integration and we look now at alternative ESG investment approaches and their pros and cons. The following figure illustrates some of the key issues.

FIGURE 16
Impact on portfolio characteristics from different ESG approaches

	NEGATIVE SCREENING	POSITIVE SCREENING	ESG INTEGRATION	THEMED INVESTING	IMPACT INVESTING
Impact on Universe	From a few companies to ~10% of universe	ESG + - Best 30% of each sector are investable	No application of a universe, integrated into fundamental analysis	MSCI World **Companies with clean energy exposure**	**Outside traditional investment universes**
Impact on Sector Allocation	from to				not able to benchmark
Impact on Liquidity	none	none	none	slightly less liquid due to small/mid cap bias	mostly very illiquid
Impact on Tracking Error	↗	↗	→	↑	not able to benchmark

Source: Vontobel Asset Management

Pre-defining the investable universe using ESG criteria / exclusionary screening
The most basic approach used in two-thirds of sustainable investments[12] is to pre-filter the investable universe according to ESG factors. A common approach is to filter according to certain ethical preferences (e.g. avoiding weapons, tobacco, coal, nuclear, animal testing etc.). How many and how tightly the filters are set varies widely to match the plurality of investors' views on these matters. However, we can observe trends as certain exclusions become the new baseline norm over time. As previously discussed, a downside here is a too narrowly defined universe can create performance limitations.

ESG screening can also be used to remove companies that underperform on specific ESG criteria as a strategy to de-risk and improve returns. Governance factors (of all the ESG metrics) are often regarded as the most important litmus tests of good long-term risk management; as such, some funds impose certain governance thresholds to be met as an investment eligibility criteria. A pitfall of this approach is that a single rule yields a poor fit for global portfolios. For example, a 50 percent board independence requirement may be appropriate for many (but not all) Western stocks; however it would lead to many well-run EM companies being excluded.

Defining the investable universe using ESG merits ("positive screening")
On the other end of the ESG spectrum is positive screening: selecting stocks on ESG merits can be used to identify impact stocks that serve social ends ("Impact Investing"), as well as to identify new investment opportunities – for example environmental regulations are opening up new markets in renewable energy or water technologies. This can be a highly successful use of ESG information. However, it tends to result in portfolio overweights in specific industries and geographies, which is not our investment approach.

On the other hand, we believe it is important to have an up-to-date understanding of ESG themes/trends as these influence a company's macro-level operational environment. For example, understanding what the opioid crisis means for healthcare companies, what stranded asset considerations mean for oil & gas players, and what climate scenario analysis means for insurance firms, can all usefully inform an analyst's assessment of how the company is positioned to manage the major operational issues in its industry.

Using ESG metrics to determine financial model levers
Another approach is feeding ESG performance outputs directly into the financial model, affecting the assessment of management quality, growth prospects, competitive edge and risk profile. There are different approaches to this, such as using ESG data to inform discount rates in valuation models.

While this approach may prove to be effective in time as it is finessed, there are inherent problems with internalizing subjective qualitative scores into the financial model. As we discuss further below, there is no definitive ESG score for any company, particularly so when there is limited public data. It would therefore not be helpful if subjective, inconclusive judgments got hard wired into the financial assessment.

Using ESG scores as basis for portfolio construction / weight
Another approach is for the portfolio to be weighted according to ESG ratings and therefore weight the portfolio towards best-in-class performers. However, ESG tilts can bring inherent size, sector, country and currency biases with them. This can have positive influences in certain market cycles but has been found not to be consistently advantageous to performance (Cambridge Associates 2016). Another problem is that this approach risks increasing the tracking error. And, as above, it brings in the risks associated with over-reliance on uncertain ESG data.

Pitfalls of ESG investment approaches and why expertise is needed

As discussed, there are many different approaches to ESG evaluation. Data gaps, inconsistent and unstandardized ESG reporting by companies, different methodological approaches and data inputs by rating agencies are some of the critical issues leading to this discord. Probably the most critical debate for ESG practitioners is on which metrics are actually material to stock price performance. This issue, together with associated challenges are examined here.

Problem of data-overload: Not everything that is measurable is material
As companies become more sophisticated on their ESG disclosures and more companies disclose, publically available ESG data has bourgeoned and there is a tendency to score all you can see. Sustainability rating agencies range from assessing less than 20 ESG factors to over 200.

It is important to distill the material points from the roar of ESG chatter, irrelevant ESG noise can in fact be detrimental to performance (GS Sustain 2018).

Numeric metrics and performance indicators have greater informative weight as compared to disclosure/policy metrics (which dominate data availability but have been found to be negatively correlated with alpha), but disclosure rates are lowest for numerical metrics. In addition, there are problems of non-standardized ESG reporting making comparisons difficult.

Where too much scoring emphasis is placed on disclosure and data availability, a natural tilt emerges towards sophisticated, large caps (often European) with voluminous CSR reports, yet words alone are no harbinger of ESG alpha.

The area of materiality remains one of the most important and live areas of ESG. The Sustainability Accounting Standards Board (SASB) is a preeminent body for its materiality mapping work. It has selected, on average, 17 material sustainability metrics for each industry. Its findings are still a work in progress based on collaborative input from industry experts.

Non standardized disclosures and a plethora of assessment methodologies
There are a number of different agencies promoting standardized disclosure of material non-financial information to better assess and compare companies and rate them according to common approaches.[13]

In addition to the standard setting boards, there are 157 ESG research and rating agencies[14] and across them very little consensus on ESG assessment methodologies. There is no harmonized view on what factors should be assessed, what weight should be assigned to them nor how materiality should be normalized across sectors. As such, there can be great discrepancy on the ESG rating of the same company from different ESG rating agencies. One study found the correlation on companies' ESG scores ranged from 0.47 to 0.76 across four of the leading ESG rating agencies.

Therefore, approaches based on precise ESG scores enables latent biases of judgment to influence portfolio construction, this may not deliver the robust performance sought.

Limitations of ESG data providers
There are pros and cons of the different ESG rating agencies and no one provider solves all draw backs. Some offer broad coverage but then suffer from limited depth of research, while others review companies in great depth

[12] GSIA 2016

[13] Most notably, the Global Reporting Initiative (GRI), United Nations Global Compact (UNGC), International Integrated Reporting Council (IIRC), International Standards Organization (ISO), and Sustainability Accounting Standards Board (SASB), Financial Stability Board (FSB), Principles for Responsible Investment (PRI), CDP (formerly Carbon Disclosures Project), Global Initiative for Sustainability Ratings (GISR).

[14] Global Initiative for Sustainability Ratings. Available from http://ratesustainability.org/hub/index.php/search/report-in-graph Accessed 8/8/2018

but focus only on the largest companies. Many ESG rating agencies suffer from time-lag limitations as a limited team must review many companies or a few but in time consuming detail. Alternatively, more rapid and frequent assessments can be done by machine learning but if “buzz words” are not detected, they may inaccurately underscore the issue.

The proprietary methodologies applied by the different ESG-rating agencies are influenced by their philosophical outlook on what (and how many) issues are defined as the most material. How they then aggregate and weigh such issues can be a blackbox, again with little consensus. Certain agencies’ world outlook may make their review more harsh or lenient than others.

Added to this, the different agencies pool data from different sources. Research can be left incomplete; for example, we observe a general tendency to flag a newsworthy controversy but not do the harder search to find its conclusion.

Nuanced approach to ESG Integration required
Against this discordant background, it becomes clear that a nuanced and dynamic approach is needed to overcome the information challenges. Active investors, with in-house ESG expertise can add real value in differentiating what is financially relevant from irrelevant ESG noise. It helps to look at multiple data points, take account of differing report dates, and draw from varied research providers while understanding who is most reliable for different factors. Critical too is a direct dialogue with companies to overcome information gaps, particularly so in EM.

A clearer understanding of which ESG data is financially material is achieved when the ESG analysis is undertaken by a financial analyst with industry expertise and in-depth knowledge of the company. The combined assessment by an ESG expert helps to navigate the information challenges discussed. An adroit understanding of evolving norms and trends geographically and sector by sector is needed to keep up with the ESG risks that matter most.

The dual review process at Vontobel’s mtx boutique aims to get to a fair and accurate ESG rating based on a distilled number of material indicators. Nevertheless, we acknowledge that there can be different interpretations/sources on the factors that make up the score. We therefore require the company to reach a minimum threshold, with the goal of avoiding the worst prepared for ESG risks.

Conclusion

In this paper, we have explored how applying ESG analysis within the investment process adds alpha and has thus become a more mainstream expectation of investors.

Investing along ESG lines is becoming increasingly in vogue globally. Focusing on the Nordics in the first part of this paper, we have seen that the foundation steps of screening on ESG grounds is now so widespread it is largely seen as a required part of mainstream investing. Investors and asset managers are therefore exploring how to take ESG further into the investment process and ESG Integration in some form is the next step.

The survey of Nordic investors presented by Kirstein demonstrates that there is diversity of views on what ESG Integration involves and how best to apply it. Arguably, this uncertainty is commonplace not just among the Nordics and many investors are just at the start of their journey of implementing ESG Integration into their investment approach.

In the second part of this paper, we delve deeper into successful ESG Integration investing. We shed light on one prosperous approach as well as some alternative strategies together with associated pitfalls. We conclude that positive returns from ESG approaches are not assured, and that care is needed to avoid the many pitfalls of using ESG factors without sufficient skill.

Avoiding idiosyncratic shocks – that can have long term impact on financial returns – is one of the main roles of deploying ESG analysis. Moreover, most alpha from ESG is achieved from avoiding the worst prepared/run companies rather than focusing portfolios on best-in-class achievers.

ESG Integration can best be applied to investments with a longer time horizon; where the portfolio has a limited number of holdings and overall works best for EM portfolios where there are greater operational and systemic risks and the differentiation on ESG performance is greatest.

We have explored in depth one active management approach to ESG Integration, developed by Vontobel's mtx boutique, and how it has achieved proven success over the eight years since its implementation. The key elements of this approach are:

1. ESG analysis conducted by the financial analyst to give deeper, more holistic understanding of the company and its relative position and thereby influence the overall company evaluation.
2. Use a rule-bound, sector-specific framework for ESG assessment, focused on a limited number of material factors, to identify tail risks and systematically filter out the most at risk companies from volatility and shocks.
3. Use ESG experts to provide an independent audit of company ESG scores and in-depth know-how on key ESG issues, whilst helping to navigate the data vulnerabilities that exist in sustainability reporting. In particular, conduct proprietary, up-to-date research, combined with direct engagement, to build an accurate assessment of each company. Finally, constantly monitor ESG risks within the invested portfolio.
4. Start with a wide investable universe and use ESG as a risk management tool that supports other proven pillars for financial assessment.

This paper is designed to increase investors' confidence to explore ESG Integration investing, while arming them with some concepts that asset managers should provide.

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About the Authors

Casper Hammerich, CAIA
Casper is Principal at Kirstein and has been with the company since 2010. Casper is involved in all advisory related activities at Kirstein and focuses on providing operational and strategic advisory to international asset management firms.

Casper earned his B.Sc. and M.Sc. degrees at Copenhagen Business School and London School of Economics (LSE). Casper has held the CAIA charter since 2016.

Lara Kesterton
Lara is ESG Consultant within the mtx team at Vontobel and has been with the company since 2017.

Lara holds a bachelor's degree in politics from the University of Durham, a M.Sc. degree in Environmental Change & Management from the University of Oxford and is a qualified lawyer (member Law Society of England & Wales).

Vontobel, Asset Management
Gotthardstrasse 43
8022 Zürich

mtx-am.com