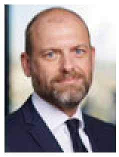
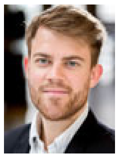
Identifying investment value in ESG data

A deep-dive into Danske Bank's proprietary analytical tool mDASH®


Antti Malava


Kasper Brix-Andersen


Thomas Baden Fabricius


René Ebbesen

Introduction

As an asset manager, it is our duty to customers to deliver competitive and long-term performance. We believe that embedding sustainability into the core of our investment management is an integral part of this duty. This, however can be easier said than done. One priority that looms above all, concerns how to identify investment value from the abundant, but fragmented, volumes of available environmental, social, and governance (ESG) data.

In this publication, we discuss how to cut through the information noise of diverging ESG data and ratings in order to gain insights. To support our ambition for sincere ESG integration, we have developed our proprietary analytical tool mDASH®. mDASH® is a materiality dashboard that sources best available raw ESG data from companies' disclosure and a number of third-party data and ratings providers, as a basis for assessing what is financially material to the companies we invest in. For each company in our universe we can also turn scope and data inputs into a material ESG risk score – mSCORE, which we have developed as one output from mDASH®.

Our analytical tool mDASH® helps us to identify investment value in ESG data, make holistic assessments, and take ownership of our ESG integration in support of making better-informed investment decisions.

More available ESG data but few standards to measure sustainability

Finding investment value in ESG data requires clarity on how to best work with it. Currently, there are vast amounts of ESG data available to us as investors, but the data landscape is characterized by lack of consistent methodologies and limited transparency on how scores and ratings are calculated.

We see this situation as a reflection of how ESG data is produced. Firstly, corporate sustainability disclosures is voluntary and far from all companies issue sustainability reports. Secondly, there are several different reporting scopes and formats that companies use. We discussed this in a previous publication called In search of quality ESG data: an investment view on corporate sustainability disclosures, based on our research of the top 100 Nordic companies' sustainability disclosure. Thirdly, a growing body of ESG data and rating agencies have taken stage in a bid to help investors assess, rate, and score companies based on a number of different scopes and methodologies.

While investors are asking for more of that which is currently not available from companies' disclosure, a wealth of ESG data created by third-party providers have emerged. And while we support the long-term solution for material ESG data to come from standardized corporate disclosure, we are committed to contribute to this solution by identifying value in current volumes of ESG data, taking ownership of our assessments, focusing on what is material, forming our own views, and engaging with companies through dialogue. By doing this, we can manage three main challenges:

1. **The focus-challenge:** How to deal with the volumes of ESG data
2. **The divergence-challenge:** How to deal with the lack of consensus between ratings
3. **The black-box challenge:** How to trace the source of diverging ESG scores

Enhance quality assessments with our value-adding tool

With mDASH®, we address the **focus challenge** by identifying issues that could affect company performance, otherwise known as financial materiality. Financial materiality is our lens for ESG integration and we use Sustainability Accounting Standards Board (SASB)* and their Materiality Map, augmented with traditional corporate governance, across sectors and industries.

We address the **divergence-challenge** by using multiple data vendors and data sources. We ensure the robustness of our ESG assessments by utilizing a vendor agnostic data platform driven by multiple complementary data sources. Multiple vendors also means that we can trace gaps and differences among data providers. We turn conflicting assessments and ratings into a strength by forming our convictions of data based on the degree of misalignment between different sources. By triangulating information from different rating institutions in this way, we build an enduring understanding of a company's ESG performance.

We address the **black-box challenge** by utilizing providers that allow us to look under the hood and provide access to raw data. Raw data is key to circumvent reliance on highly synthesized ESG scores, as it ensures traceability of data points and allows us to back-track and provide complete transparency on disagreement between vendors. Moreover, we allude to the highest degree of transparency ourselves in building mDASH® giving companies access to our methodology and build-up of mSCORE.

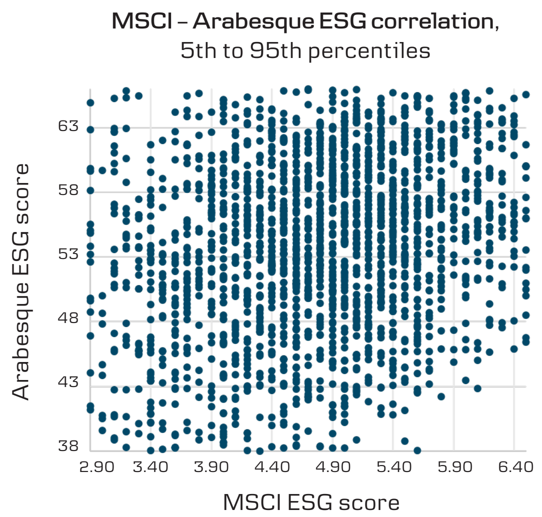
Exhibit 1

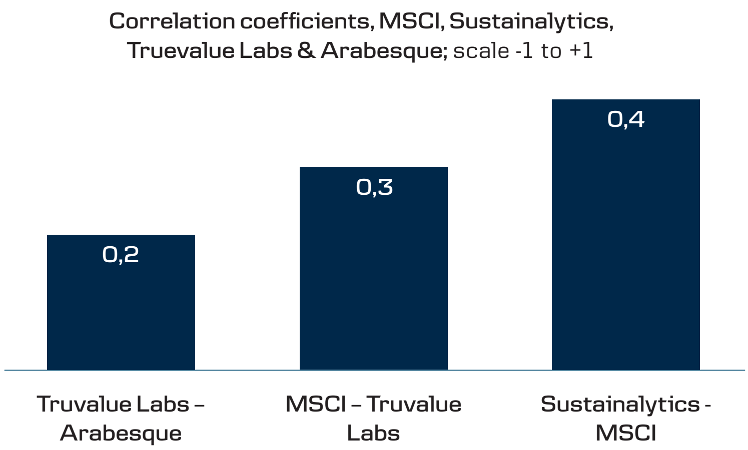
Three main challenges with ESG-data: The 'focus challenge', 'divergence challenge' and 'black-box challenge'

'ESG-data challenge'		Description	How to address
	1 'Focus challenge'	• Concerns how to find 'right' ESG data and deal with the abundance and proliferation of ESG data	• Focus on **ESG topics** that can affect the value of a company's financial capital
	2 'Divergence challenge'	• Concerns how to look at ESG scores when ESG rating institutions tend to say different things	• Gather data from **multiple vendors** • Turn conflicting ESG assessments into a strength by **measuring degrees of misalignment**
	3 'Black-box challenge'	• Concerns how to deal with ambiguity and lack of transparency from diverging ESG scores	• Proprietary ESG scoring model building on **traceable raw data** • Offer **full transparency** on methodology

Exhibit 2

Deep-dive on 'divergence challenge': ESG score correlations between different ESG rating institutions





* https://materiality.sasb.org/

ADDRESSING THE FOCUS CHALLENGE: How to deal with the volumes of ESG data

We address the focus challenge by zooming in on data that covers financially material topics for the companies we invest in. This has three main benefits. First, it taps into the core value proposition of sustainable investments with ESG inside our investment process and decision-making. Secondly, it puts a much needed frame around sustainability by breaking it down into standardized topics. Third, it makes data volumes manageable by cutting out data on topics that are unlikely to drive value.

> *mDASH creates considerable value for us as we can separate out ESG factors with investment value from unimportant ESG factors and at the same time cut through the data noise"*
>
> *Kasper Brix-Andersen, Head of Fundamental Equities*

mDASH® captures industries' varying exposure to different sustainability topics. Sustainability areas such as water-usage are, for instance, much more likely to affect companies in the food & beverages industry than in transportation. Utilizing similar logics, mDASH® maps different industries to its material sustainability topics.

The SASB Materiality Map supports our understanding of how sustainability can impact investment value. SASB outlines five dimensions spanning Environmental capital, Social Capital, Human capital, Business model & innovation and Leadership & governance, to which SASB has established an industry classification system – the Sustainability Industry Classification System (SICS) – to be able to better contrast industries as viewed through the lens of financial materiality.

The SASB framework is complemented with four broad corporate governance topics including Audit & Controls, Board of Directors, Remuneration, and Shareholder rights, to support our holistic ESG assessment.

While financial materiality gives us a starting point to understand the connection between company value and sustainability, there is one important caveat: What is material for a company today may evolve or change over time. There is research indicating that ESG materiality can be dynamic and the financial significance of various ESG issues evolves over time as stakeholder expectations and behaviour, regulatory environment as well as value chains shifts* .

Exhibit 3

Danske Bank's ESG taxonomy: Environmental & Social dimensions augmented with traditional corporate governance

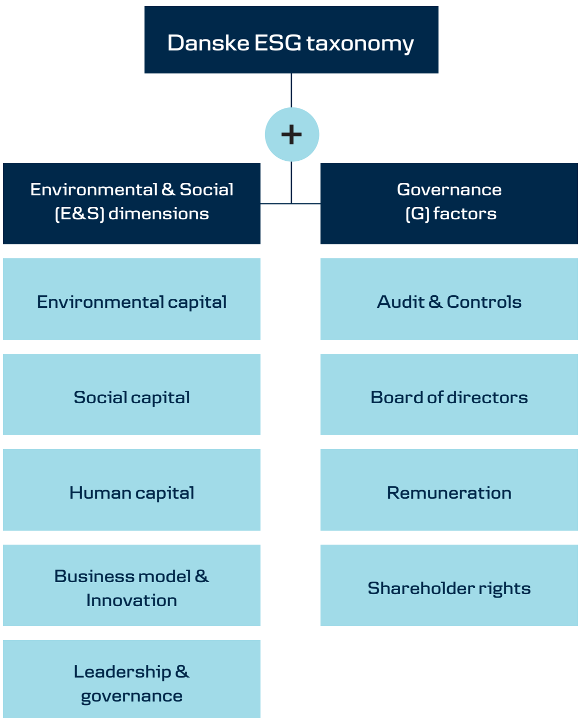
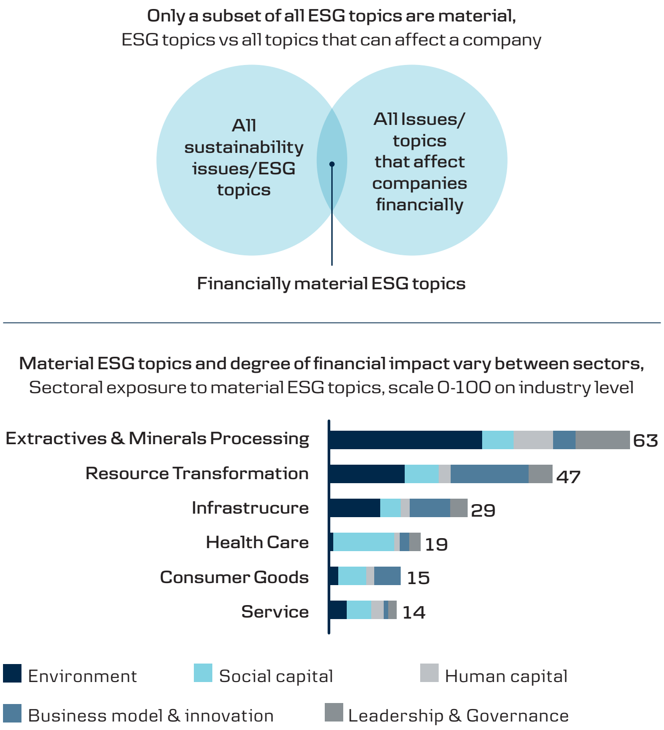


Exhibit 4

Financial materiality definition and example of sectors exposures to different materiality topics



*Pathways to Materiality: How Sustainability Issues Become Financially Material to Corporations and Their Investors

ADDRESSING THE DIVERGENCE CHALLENCE: How to deal with the lack of consensus between ratings

While materiality analysis goes a long way in spelling out which ESG topics companies are likely to be affected by, we seek to understand individual companies' specific performance in managing risks and capturing opportunities. This is done by identifying Key Performance Indicators (KPIs) and mapping these to relevant ESG topics.

As discussed, ESG disclosures are neither standardized nor mandatory and third-party ESG ratings vary between the rating providers. Our solution is to source the best available raw data from multiple sources. To exhaust all possibilities, we source data both from companies' sustainability disclosures as well as third-party data and rating providers.

Utilizing data from a host of different sources ensures robustness of our ESG assessments. To that end, understanding how data sources differ systematically is key. In addition to disclosure-based data, we use three primary types of data sources:

1. Company inferred data is data where we lack disclosures but where data can be estimated by using proxies or industry averages.
2. Unstructured data captures information from news flow and independent reports (e.g. by NGOs) which is aggregated to understand public sentiment.
3. Data on external factors such as for instance climate factors applied to stress-test assets in specific locations.

This approach supports a holistic assessment of a company's ESG performance. These often complement each other by giving contrasting evidence. For instance, many companies that look good when referring to company disclosures data or estimates done by third-parties, come out worse when considering data sources such as news flows or public sentiment analysis.

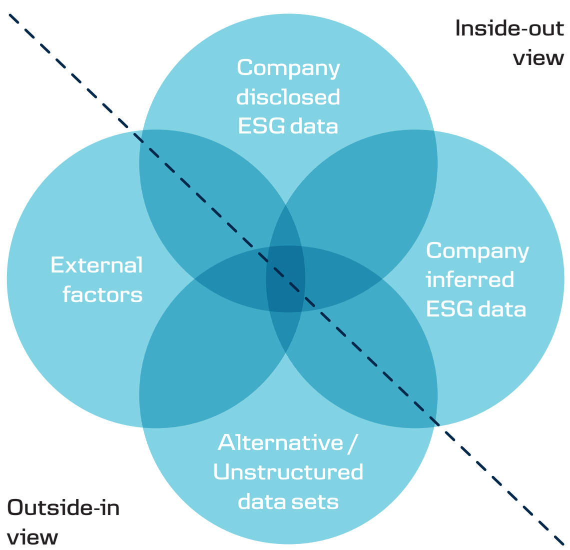
This approach builds on conflicting data points from multiple vendors. We turn this to a strength, as mDASH® traces disagreement by focusing on the dispersion of ESG data. By tracing what is driving different values back to its origins, and measuring the extent of disagreement between ESG rating providers, we can form convictions about the credibility of data and take appropriate action. To that end, mDASH® relies on rigorous data vendors due diligence to ensure that KPIs are fully transparent.

Ultimately, mDASH® provides granularity to our investments by insights from company interviews, dialogues and engagements. This adds an element of self-learning in mDASH® as it is built to get smarter with each iteration.

Exhibit 5

Data sourcing in mDASH®: Principle of complementarity & focus on both inside-out and outside-in sources

mDASH® leverages multiple and complementary data sources



Description

Inside-out view	Disclosed ESG data	• Data gathered and disclosed by companies
	Inferred ESG data	• Data on individual KPIs estimated by third-party ESG rating institutions
Outside-in view	External factors	• Topic-specific external data. E.g. climate factors applied to stress-test assets in specific locations
	Alternative data	• Captures data from news flow and independent (e.g. NGO) reports

ADDRESSING THE BLACK-BOX CHALLENGE: How to trace the source of diverging ESG scores

The focus on raw data rather than third-party ratings and scores provides inroads towards addressing the black-box challenge. Raw data has the advantage of being fully traceable, and consequently allows us to circumvent the use of highly synthesized ESG scores that capture an abundance of information that we cannot evaluate.

Reliance on traceable raw-data allows us to identify the degree of alignment between different data sources, and, if we can detect a misalignment, we can investigate the reasons behind it. For example, a company might disclose material ESG KPIs and perform rather well compared to peers, but a negative public sentiment of the same ESG topic could indicate that there are either factors not captured by the current disclosure metrics or that the outcomes and externalities as perceived by the public are not positive.

A second part of addressing the black-box challenge is to simply not create a new one. As such, we use mDASH® in our dialogue with companies who can view our assessment of their ESG performance.

> *When engaging with investee companies mDASH is a great resource to frame the right questions. In addition to on-point materiality analysis it also offers a battery of engagement questions facilitating deep analysis"*
>
> *Emelie Aulik, Portfolio Manager, Fixed Income*

This thinking is encapsulated in mSCORE. As we map ESG data from vendors to material sustainability topics, we assign scores to these and normalize scores into an overall mSCORE ranging from 0-100, with 100 representing the strongest ESG performance. We disclose mSCOREs and the underlying methodology to companies for full transparency. By doing so, we can claim ownership, and by showing our assessments, we open up to identifying misalignments between what metrics show and what a company really does.

The mSCORE relies on robustness and draws on best-practices identified in the scientific literature to aggregate and normalize data. There are four areas which merit careful consideration:

- Coverage
- Industry replacement
- Standardization
- Weighting

To ensure consistency and comparability, we delimit our coverage of companies to those where data can be sourced from multiple vendors. Moreover, if a particular ESG risk topic is deemed material but no company-specific indicator is found from any individual data provider, we calculate industry average topic score for that particular vendor, and replace the company missing value with this average. In addition, KPIs need to be standardized. Data providers have different scales for the underlying indicators and we standardise raw topic scores cross-sectional across disclosure topics. This ensures a correct peer-group when converting raw scores into a comparable format. Ultimately, when aggregating topic scores to form a final mSCORE, a topic weighting scheme is applied that builds on both backward looking evidence, such as statistical analysis of financial materiality, as well as forward-looking evaluation based on expert inputs.

Exhibit 6

mDASH main interface: Sanitized case example E&S materiality – Company X in Software & IT Services industry

Material topics and their weighting in Software & IT Services industry				Likelihood of impact on different financial variables			Company topic score, its dispersion and peer group rank			
Sustainability dimension	Sustainability topic	Disclosure topic	Topic weight	Profit & Loss	Balance sheet	Long term	mScore	Peer avg.	Peer rank	Dispersion
Social capital	Data security	Data security	18 %	Revenue Expenses	Assets Liabilities	CoC Divest-ment risk	83 %	49	7 of 390	
Leadership & Governance	Systemic Risk Management	Managing technology disruptions	17 %	Revenue Expenses	Assets Liabilities	CoC Divest-ment risk	45 %	50	361 of 390	
Human capital	Employee Engagement, Diversity	Recruiting & managing a global diverse workforce	14 %	Revenue Expenses	Assets Liabilities	CoC Divest-ment risk	72 %	43	11 of 390	
Leadership & Governance	Leadership & Governance	IP protection and competitive behavior	13 %	Revenue Expenses	Assets Liabilities	CoC Divest-ment risk	47 %	47	302 of 390	
Social capital	Social capital	Data privacy & freedom of expression	13 %	Revenue Expenses	Assets Liabilities	CoC Divest-ment risk	91 %	56	4 of 390	
Environment	Environment	Environmental footprint of hardware	6 %	Revenue Expenses	Assets Liabilities	CoC Divest-ment risk	56 %	46	51 of 390	

The main interface of mDASH® shows relative importance of topics for a company and expected impacts on financial variables

Concluding remarks – mDASH® helps us integrate ESG as factors and make better-informed investment decisions.

The need for quality ESG data is clear to us: it will help us make better-informed investment decisions by giving us a more complete picture and a better understanding of the companies we invest in. This data will ultimately be produced by companies themselves, and issued in the form of sustainability disclosures alongside financial information.

Recognizing that this will not happen overnight is important, as is realizing that there is no quick fix to the situation. In the meantime, this issue can be circumvented by finding the best possible way to work with what is available. To that end, using our analytical tool mDASH® goes a long way.

Being supplementary to traditional financial information, ESG integration via mDASH® highlights a number of use-cases that ultimately benefit our customers. First of all, it bolsters our understanding of industries and brings to light insights on how they can be affected given certain ESG events. This can have impacts on for instance security selection as mDASH® helps identify both business opportunities as well as risk exposures.

> *For our quantitative portfolio mDASH enables us to analyse how ESG can add value. We pursue two different roads: First, we look at impact from increasing the ESG scores of existing strategies while keeping the same factor and portfolio exposures. Secondly we will look at whether ESG data can add additional value in terms of risk or return."*
>
> *René Ebbesen, Chief portfolio management, Risk Premia*

Moreover, mDASH® has profound impacts on our ability to manage risks. Being quantitative, mDASH®, and the mSCORE in particular, is integrated into risk management processes and analytics, and brings in a new angle of investment risk.

Taking ownership of ESG assessments creates engagement with the companies we invest in and bridges sustainability and investment value. We believe that engagement on these topics is key to ESG integration, and that creating a common language between us and our portfolio companies on how to address material matters is key to drive value through sustainable investing.

mDASH® also helps us push the envelope on the disclosure agenda. By engaging with companies on their ESG scorecards with full transparency, we are uniquely positioned to support companies on what is material to their business, in the benefit of the company, our customers, and society.

Exhibit 7

Portfolio managers use mDASH® to support investment and engagement efforts

Portfolio managers use-cases

ESG integration	• identify material ESG risks and opportunities • Supplement quality assessments • Understanding different perspectives on ESG performance • Understand implications of ESG factors on financial performance
Active ownership & company engagement	• Guidance for effective and efficient corporate engagement on critical topics • Be a thought partner in sustainability efforts of investee companies

This publication has been prepared by Wealth Management — a division of Danske Bank A/S ("Danske Bank"). Danske Bank is under supervision by the Danish Financial Supervisory Authority (Finanstilsynet).