

Double materiality & ESG-performance in the financial sector

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Keywords

Sustainability, ESG, double materiality analysis, financial sector

Abstract

The double materiality assessment has become a mandatory analytical requirement for most financial institutions, while also representing a logical step for organizations that choose to conduct it voluntarily. A central question is whether undertaking a comprehensive assessment is associated with superior ESG-performance specifically, whether the assessment can serve as a catalyst for improving key environmental, social, and governance indicators. The aim of this project is therefore to examine whether the various components of a double materiality assessment contribute to enhanced ESG performance, as well as to identify additional mechanisms that support such improvements. The study focuses on the Danish financial sector.

Based on surveys and interviews, our findings indicate that only a limited number of assessment components are directly linked to ESG-performance: Employee involvement and resource allocation. Broad employee participation in the identification of material issues appears to be associated with stronger ESG-outcomes because it fosters organizational understanding, awareness, engagement, and commitment. Likewise, adequate resourcing is essential for grasping the complexity of ESG-matters without introducing unnecessary complications or outsourcing the analytical process.

Ultimately, however, our results suggest that conducting a thorough double materiality assessment constitutes only a small part of what drives ESG-performance. Some companies are “born green” and hence inherently aligned with the green transition and therefore perform well regardless of the assessment, while others become more attuned to sustainability considerations through compliance with the CSRD, which in turn drives change. Furthermore, it seems that shareholder-owned companies tend to improve ESG-metrics as part of their pursuit of capital.

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Introduction

In 2023, the European Union introduced stricter requirements for alignment and transparency in corporate sustainability reporting. This directive, known as the Corporate Sustainability Reporting Directive (CSRD), imposes new legal obligations on companies to ensure more consistent and comparable reporting of non-financial environmental and social activities. The directive applies to listed EU companies and large EU enterprises with more than 1,000 employees. A company is considered “large” if it meets at least two of the following three criteria for two consecutive years: more than 250 employees, revenue exceeding DKK 391 million, or total assets above DKK 195 million (Virksomhedsguiden, 2024).

The implementation of the CSRD is accompanied by the European Sustainability Reporting Standards (ESRS), which constitutes the framework companies must follow. Within this framework, the concept of the double materiality assessment (DMA) is central.

The DMA is a mandatory assessment that supports the purpose of the ESRS/CSRD by ensuring that sustainability reports address only material topics. It enables companies to distinguish between what is material and what is not. As stated by Deloitte: “Materiality should be embedded into the company’s purpose and values, and the assessment provides the basis and direction for sustainability efforts by prioritizing the focal topics” (Deloitte 2024).

Given the ESRS requirements and the vital role of the DMA, it appears indispensable for companies to conduct such an assessment as an initial step in addressing their ESG-performance. However, the question arises whether a stronger focus on material issues will lead to improved ESG-performance. While the CSRD seeks to ensure that companies report on material topics, it remains unclear whether the DMA itself contributes to enhancing companies’ efforts related to climate, social responsibility, and governance. Identifying specific steps or processes within the DMA that correlate with improved ESG-performance may provide valuable insights and best practices for companies and organizations seeking to strengthen their ESG-outcomes.

This study aims to identify such steps within companies in the Danish financial sector that are striving to improve their ESG-performance. A financial company operates within the banking, pensions, or insurance sectors.

Conducting a Double Materiality Assessment (DMA) involves several stages. In brief, the process comprises four steps. These four steps follow the guidance issued by the Danish Business Authority (Erhvervsstyrelsen, 2025):

1. Identifying impacts, risks, and opportunities (IROs) within the organization and across the value chain through stakeholder interviews.
2. Assessing the materiality of the identified IROs in terms of their effects on the environment, society, and the company's economic performance.
3. Establishing threshold values that determine when an IRO becomes material.
4. Presenting the results and communicating the methodology applied in the analysis.

This leads to the following research question:

“Can the individual stages of a Double Materiality Assessment contribute to enhancing ESG-performance within financial institutions? Furthermore, which additional organizational mechanisms can be identified as having a positive impact on overall ESG-performance?

This study includes companies from all three categories that:

1. Publish a sustainability report; and
2. Conduct a Double Materiality Assessment

Literature Review

This literature review serves two main purposes: to provide a theoretical foundation for the design of the present study, and to situate our research questions within a broader academic context.

The following review is based on the study of Kia Eskola (2022). Eskola completed her master's thesis at Lappeenranta-Lahti University of Technology LUT in Finland. The aim of her thesis was to examine the extent to which companies disclose information related to their DMA and to investigate whether a relationship exists

between the level of disclosure and a company's ESG-score. According to Eskola, her study constituted a novel contribution by exploring the linkage between disclosure of materiality assessments and ESG-performance. The sample consisted of 200 large companies in Finland and Sweden, and the statistical method employed was a regression analysis relating DMA disclosure to ESG-scores.

Eskola conceptualized comprehensive DMA disclosure based on the number of material topics identified, the presence of a prioritization (e.g., in matrix form), and whether the company addressed the ten most common topics. ESG-scores were obtained from Refinitiv Eikon, a database that applies its own scoring methodology. Across the various regression models, Eskola identified only one significant relationship: "*This analysis predicted that a higher number of identified material topics could to a small extent result in a higher ESG-score*" (Eskola, 2022).

The fundamental difference between Eskola's research and ours lies in the focus of analysis. While her study examined the number of topics companies ultimately classified as material, our research concentrates on the procedural steps involved in conducting the DMA rather than the final outcomes.

The following description of a study is based on the study of Norman T. Sheenan et al. (2022). They emphasize that advancing ESG -performance must begin with a clear understanding of what is material. Their research aimed to identify and examine two key barriers to this process: (1) the ESG-issue assessment barrier, and (2) the shareholder-value barrier. The findings, derived from a combination of literature review and the authors' practical experience, suggest that companies adopting an ESG-oriented mindset are likely to enhance their ESG-performance. The study identifies several potential pitfalls:

- a) Employees may be reluctant to prioritize initiatives that are costly or resource-intensive, or to disclose information that could reflect negatively on the company. Additionally, there is a tendency to focus on immediate concerns rather than long-term implications.
- b) Following a materiality assessment, employees may prioritize topics that are material to the company rather than those important to stakeholders. There is also a risk that issues of stakeholder significance may be undervalued due to misalignment with corporate priorities.
- c) Companies may address ESG-topics without establishing measurement frameworks or baseline goals. Even when

metrics and targets are in place, a lack of alignment between topics, initiatives, and measurable outcomes can hinder meaningful progress.

d) The prevailing belief that shareholder value must be maximized can lead employees to disregard ESG-initiatives that may reduce short-term profitability. Consequently, companies may externalize costs to society - such as carbon emissions or health-related impacts, while appearing financially successful. Moreover, employee incentive structures often reward financial performance over environmental or social outcomes, reinforcing the primacy of shareholder value (Sheenan et al., 2022).

While these findings appear similar to the focus of our research, the distinction lies in the scope of analysis: Sheenan et al. (2022) are concerned about determining materiality, whereas our research concentrates on enhancing ESG-performance.

This review is based on the study of Javier Delgado-Ceballos et al. (2023). They investigated the relationship between ESG-practices and the United Nations Sustainable Development Goals (SDGs) across companies worldwide. Utilizing ESG-data from Refinitiv Eikon, they found that at least seven of the seventeen SDGs

were actively incorporated into the ESG-strategies of most companies. However, the authors argue that merely continuing current ESG-practices is insufficient for companies to contribute meaningfully to achieving the SDGs by 2030: "We believe that double materiality allows businesses to engage investors and shareholders in ESG-integration, while simultaneously contributing to sustainable development and helping to achieve the SDGs" (Delgado-Ceballos et al., 2023, p. 8). The study concludes that adopting a double materiality approach can facilitate engagement with investors and shareholders (Delgado-Ceballos et al., 2023). Building on this, our research examines whether, and why, such engagement may lead to enhanced ESG-performance in Danish financial companies.

The following description is based on a case study conducted by Goettsche et al. (2023). The impact of the Sustainability Accounting Standards Board (SASB) on corporate sustainability performance was examined in this case study. Since 2013, SASB has been publishing materiality maps that identify the most material topics for companies within specific industries, thereby providing managers with guidance on areas of strategic

importance. This approach is expected to enhance sustainability performance. Goetsche et al. employed ESG-data from RepRisk to perform a regression analysis on 800 U.S. companies, covering the period from 2013 to 2016. The study compared the timing of SASB releases with changes in ESG-scores. A key distinction between that period and the present is that SASB's materiality primarily emphasized financial materiality rather than stakeholder concerns, leading to the following findings: (1) after the introduction of SASB, companies improved performance on ESG-factors relevant to investors; and (2) conversely, performance on ESG-factors deemed immaterial to investors declined. The authors argue that this "double-edged sword" necessitates regulation to ensure that managers also address sustainability issues that are important to stakeholders, highlighting the tendency for shareholder interests to overshadow stakeholder considerations (Goetsche et al., 2023). These findings align with the research of Sheenan et al.

This review is based on the study by Nielsen (2023). He conducted interviews with two employees at Port Esbjerg to explore how a double materiality assessment can support the identification

of ESG-metrics or KPIs. The conclusion was that double materiality analyses alone are insufficient for prioritizing ESG-initiatives; rather, a comprehensive understanding of the business model, integrated with double materiality, is essential for connecting ESG-metrics to strategic objectives (Nielsen, 2023). Although our study did not assess companies' understanding of their business models in depth, we investigated the measures companies undertake to comprehend their operations holistically, including internal structures and value chains. Our study confirms Nielsens' findings.

The literature up to the end of 2023 indicates that the concept of materiality warrants scrutiny. Eskola (2022) and Delgado-Ceballos et al. (2023) identify a link between materiality and ESG-performance, while Sheenan et al. (2022) highlight potential pitfalls in determining materiality. Goetsche et al. (2023) emphasize the risks of investor influence that may adversely affect environmental, social, and governance outcomes, and Nielsen underscores the centrality of understanding the business model. Our study both investigates the relationship between materiality and ESG-performance and identifies associated

pitfalls, while taking it a step further elucidating the mechanisms within DMA processes that influence ESG-outcomes.

This description is based on the study of Elias Svensson from Södertörn University (2024). He examined how the adoption of the DMA can influence governance, operations, and practices within ESG-strategies. Based on interviews with eight Swedish companies, Svensson concluded that the drivers of change include increasing ESG-awareness across a broader range of departments to foster motivation and engagement, promoting collaboration - particularly with suppliers in the value chain - and incorporating external stakeholder perspectives into sustainability strategies. He also highlights potential limitations, such as constrained internal resources, which may necessitate reliance on external consultants (Svensson, 2024). This study aligns closely with the objectives of our project, as it similarly seeks to understand the underlying mechanisms through which assessments may enhance ESG-performance.

The following review is based on the study of Lungu et al. (2024). In line with Delgado-Ceballos et al. (2023) they examined the connection between double materiality

and the United Nations Sustainable Development Goals (SDGs). Using ESG-data from Refinitiv Eikon for a global sample of companies, their correlation analysis corroborated Delgado-Ceballos et al.'s findings, indicating that double materiality facilitates the alignment of corporate ESG practices with SDG priorities. It enables investors engaged in DMA processes to consider both financial and stakeholder materiality (Lungu et al., 2024). This study supports our research objective of understanding the mechanisms through which specific actions can enhance ESG-performance.

This review is based on Panfilo et al. (2025). They investigated whether the implementation of the DMA in sustainability reporting is associated with organizational changes, with a specific focus on ESG-risk management. Their study encompassed 442 European companies and employed regression analysis to explore the correlation between the adoption of the DMA and ESG-performance, as measured by Sustainalytics, an independent rating agency that evaluates unmanaged material issues. The authors concluded that adopting double materiality does not necessarily lead to immediate organizational changes or substantial

improvements in ESG-risk management capabilities (Panfilo et al., 2025). This study highlights that a DMA does not drive organizational changes leading to ESG-performance, which might explain why our findings only pointed to two steps in the DMA as being linked to advancement in ESG.

From 2022 to the end of 2023, research on DMA and ESG-performance primarily concentrated on the number of metrics employed (Eskola, 2022) and the extent to which materiality requirements had become mandatory (Goettsche, 2023). While one study in 2022 addressed potential pitfalls, it paid limited attention to the underlying mechanisms of the assessment (Sheenan et al., 2022). More recently, research in this area has become increasingly nuanced, emphasizing an understanding of business models (Nielsen, 2023), highlighting the importance of awareness among a broad range of stakeholders, and noting that companies frequently rely on external consultants (Svensson, 2024). This evolution may indicate a maturation of assessment practices, as firms appear to possess a more sophisticated understanding of the mechanisms involved. Furthermore, Panfilo et al. (2025) found no significant link between DMA and

ESG-performance, which helps explain why only a few steps within a DMA appear critical as a conclusion to our study. Consequently, if this research were conducted today, these insights would likely facilitate a more focused inquiry, and the relationship between the DMA and ESG-performance could potentially be clarified further.

Methodology

This study employs both survey and interview methodologies.

For the survey, we developed questions grounded in theoretical constructs that we aimed to test using the collected data. Additionally, several questions were left open-ended to allow for qualitative responses. The theoretical foundation for the survey is based on research by Norman T. Sheenan et al. (2022). Cross-tabulations were made on the survey data to identify patterns indicative of a potential relationship between DMA implementation and improvements in ESG-key performance indicators.

The interviews were designed as semi-structured, informed by patterns observed in the survey, while still allowing respondents to provide open-ended answers. The interview data were analyzed thematically, with responses coded into

subthemes and overarching themes. From this analysis, patterns and relationships were identified, culminating in the development of a conceptual model, which is presented in Figure 1.

A methodological consideration is the recency of DMA implementation. Most companies have conducted a DMA for only the past one to two years, raising the question of whether these efforts have had sufficient time to impact ESG-performance metrics.

Surveys

The population of financial companies in Denmark - including banks, insurance companies, and pension funds - that publish a sustainability report and implement a DMA consists of 38 entities (Finanstilsynet, 2024). A total of 18 companies participated in the survey. Representativity was ensured with respect to the type of institution, as the sample's percentile distribution closely matched that of the population. Table 1 presents the two distributions.

Table 1 Distribution of population and sample

Type of institution	Population	Survey sample
Banks	63.16%	60.00%
Insurance	15.79%	20.00%
Pension	21.05%	20.00%

Analysis

To investigate and evaluate a potential relationship between ESG-performance and the DMA steps, we made cross-tabulations of survey responses regarding the company's success in reducing carbon emissions with responses concerning the DMA. Similarly, cross-tabulations were performed for the company's success in improving social ESG-indicators.

When examining the number of departments that contributed to the DMA and cross-referencing this with success in reducing carbon emissions, companies involving six or more departments reported higher success in lowering emissions. Among companies involving four to five departments, none reported "very high" success, and only 28% reported "high" success. Companies involving three or fewer departments all reported neutral outcomes (see Table 2).

A similar analysis was conducted using the same question but with respect to improvements in social ESG-indicators. The pattern was comparable, although less pronounced (see Table 3).

The number of stakeholders involved in the DMA appears to be associated with reductions in carbon emissions and improvements in social performance indicators. Including four

or fewer stakeholder groups tends to correspond with lower scores, whereas the involvement of five or more groups is associated with reports ranging from neutral to very high in terms of carbon emission reductions (see Table 4).

The inclusion of seven or more stakeholder groups is also associated with enhanced outcomes on social ESG-metrics, where 100% report high performance on social metrics (see Table 5).

Table 2 Number of departments & carbon-emission

How much have you succeeded in lowering your carbon-emissions?							
How many departments from your company have contributed to your DMA?		Very low	Low	Neutral	High	Very high	Total
	3 or below			100%			100 (1)
	4-5	16%	28%	28%	28%		100 (7)
	6 or above		9%	19%	63%	9%	100 (11)

Table 3 Number of departments & social ESG-numbers

How much have you succeeded in improving your social ESG-numbers?							
How many departments from your company have contributed to your DMA?		Very low	Low	Neutral	High	Very high	Total
	3 or below			100%			100 (1)
	4-5			86%	14%		100 (7)
	6 or above			50%	50%		100 (10)

Table 4 Number of stakeholders included & carbon-emission

How much have you succeeded in lowering your carbon-emissions?							
How many groups of stakeholders have contributed to your DMA?		Very low	Low	Neutral	High	Very high	Total
	4 or below	8%	25%	25%	42%		(12)
	5-6				100%		(3)
	7 or above			50%		50%	(2)

Table 5 Number of stakeholders included & social ESG-numbers

How much have you succeeded in improving your social ESG-numbers?							
How many groups of stakeholders have contributed to your DMA?		Very low	Low	Neutral	High	Very high	Total
	4 or below			73%	27%		100 (11)
	5-6			67%	33%		100 (3)
	7 or above				100%		100 (2)

Permitting stakeholders to approve the final DMA is associated with greater improvements in carbon emissions. In 50% of cases, a very high level of carbon-emission improvement is

observed when five or more stakeholders provide approval. In contrast, companies that allow three or fewer stakeholders to approve predominantly achieve high improvements, but

also report mixed outcomes, including neutral, low, and very low levels of carbon-emission reduction (see Table 6). Regarding social performance indicators, no discernible pattern emerges (see Table 7).

Regarding whether a company includes both current and future stakeholders or only present stakeholders, a notable relationship appears to exist. Companies that incorporate both current

and future stakeholders tend to report high or very high improvements in carbon emissions. Specifically, 67% of these companies report high performance on social metrics, while the remaining report neutral outcomes. In contrast, companies that focus solely on present stakeholders report 62% high performance on carbon emissions, with the remainder reporting neutral or lower levels. Similar patterns are observed for social metrics (see Tables 8 and 9).

Table 6 Number of stakeholders approving & carbon-emission

How much have you succeeded in lowering your carbon-emissions?							
How many groups of stakeholders have approved your DMA?		Very low	Low	Neutral	High	Very high	Total
	2 or below	8%	23%	31%	38%		100 (13)
	3		25%		75%		100 (4)
	4						
	5 or above			50%		50%	100 (2)

Table 7 Number of stakeholders approving & social ESG-numbers

How much have you succeeded in improving your social ESG-numbers?							
How many groups of stakeholders have approved your DMA?		Very low	Low	Neutral	High	Very high	Total
	2 or below			80%	20%		(10)
	3			80%	20%		(5)
	4						
	5 or above				100%		(2)

Table 8 Future stakeholders & carbon-emission

How much have you succeeded in lowering your carbon-emissions?							
Which stakeholders do you include in the DMA?		Very low	Low	Neutral	High	Very high	Total
	Only the present	8%	23%	31%	62%		(13)
	The present and future				75%	25%	(4)

Table 9 Future stakeholders & social ESG-numbers

How much have you succeeded in improving your social ESG-numbers?							
Which stakeholders do you include in the DMA?		Very low	Low	Neutral	High	Very high	Total
	Only the present			71%	29%		100 (14)
	The present and future			33%	67%		100 (3)

There also appears to be a relationship between a company's measurement of its ESG-initiatives and the reduction of carbon emissions. Specifically, 80% of companies that report high or very high engagement in measuring their initiatives also report high or very high reductions in carbon emissions. Conversely, companies reporting very low or low engagement in measurement predominantly report neutral carbon emission outcomes (see Table 10).

Furthermore, the extent of influence exerted by a company's investors and owners on the DMA is also associated with reductions in carbon emissions. Sixty percent of the companies report high or very high reductions when investors have high or very high influence, whereas companies with low or very low investor influence report only very low, low, or neutral reductions in carbon emissions (see Table 11).

Although these crosstabulations have not been adjusted to account for the effects of omitted or confounding variables, it remains valuable to examine the underlying patterns in greater detail:

- a) *What is the relationship between the number of departments involved in the DMA and ESG-performance?*
- b) *How does stakeholder involvement in the DMA relate to ESG-performance?*
- c) *To what extent is the level of measurement of ESG-key indicators associated with ESG-performance?*
- d) *How is the influence of investors and owners connected to ESG-performance?*

Table 10 Measuring initiatives & carbon-emission

How much have you succeeded in lowering your carbon-emissions?							
Are you measuring on your ESG-initiatives?		Very low	Low	Neutral	High	Very high	
	Very low/Low		25%	75%			100 (4)
	Neutral	25%	25%	25%	25%		100 (4)
	High/Very high			20%	70%	10%	100 (10)

Table 11 Investor-influence & carbon-emission

How much have you succeeded in lowering your carbon-emissions?							
How big influence do your owners and investors have when deciding materiality?		Very low	Low	Neutral	High	Very high	Total
	Very low/Low	33%	33%	33%			100 (3)
	Neutral		20%	20%	60%		(5)
	High/ Very high		10%	30%	50%	10%	(10)

Interviews

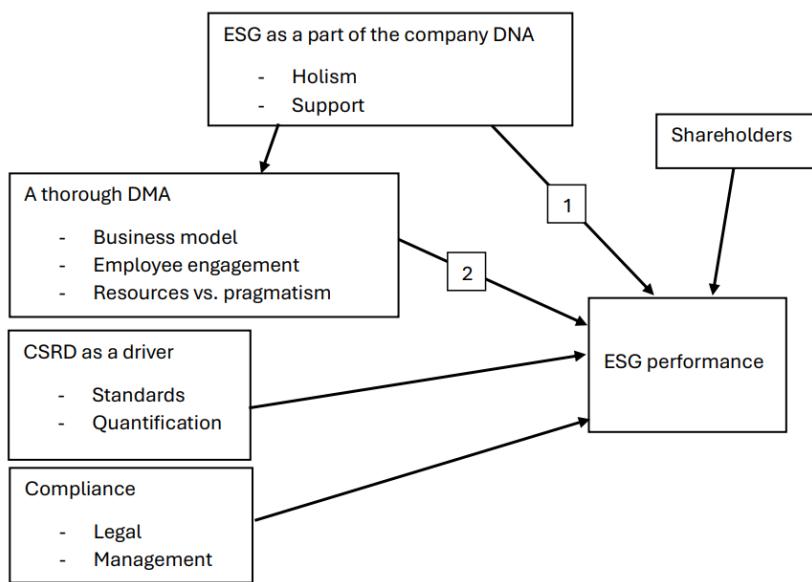
In order to understand whether individual stages of a Double Materiality Assessment or other organizational mechanisms contribute to ESG-performance it was relevant to conduct interviews with informants from institutions with varying levels of DMA experience: those with extensive experience, those with a few years of experience, and those who had recently begun. The objective was to understand what could be learned from experienced institutions and what challenges were perceived by less experienced ones.

To support our argument a crosstabulation was made to explore whether the year of the DMA initiation influenced ESG-performance. Among the 18 companies that participated, only one company reported having initiated the DMA in 2018 or earlier, 52.6% reported having conducted the DMA in 2023, while 63.2% reported conducting it in 2024. The company that began the DMA in 2018 or earlier reported higher scores in self-assessed ESG-performance. Specifically, they reported greater success in reducing carbon emissions and improving social ESG-indicators. Differences were also observed between companies that conducted the analysis in 2023 versus 2024, with a general pattern indicating that longer engagement with the DMA corresponded to

higher reported ESG-performance. Two banks and one insurance company were selected to participate in interviews and included one highly experienced institution that began DMA six years prior to this paper, and one with two years of experience, and one with one year of experience. Interview questions were structured around themes identified from survey patterns that were hypothesized to relate to ESG-performance. These themes included employee involvement, stakeholder engagement, investor influence, and the extent of ESG-data measurement. The interviews were semi-structured, with a combination of guided and open-ended questions to allow for in-depth exploration of these themes.

Analysis of interviews

The interviews provided partial support for the links identified in the survey analysis. They also revealed a more nuanced interplay of additional factors, which informed the development of a new conceptual model illustrating the relationship between DMA and ESG-performance, as presented in Figure 1. It should be noted that the arrows in the figure do not indicate causality but rather represent associations. Four recurring themes emerged from the interviews: (1) ESG as an integral component of the company's DNA, (2) comprehensive DMA practices, (3) CSRD as a driving factor, and (4) compliance. These themes are all represented in the figure below.

Figure 1 Factors linked to ESG-performance

ESG as a part of the company DNA

Initially, we sought to identify which stages within the DMA exert a transformative impact on ESG-performance. In response to the question of whether the number of departments involved in the DMA is associated with ESG-performance, Informant 3 stated the following:

"...I think you can actually talk about correlation more than causality. And I would say, if there is any kind of causality, then it is probably more the other way around in reality. In other words, it starts with whether you have a holistic and broad understanding in your organization about sustainability work. That it is not just a department over in the corner that sits and has the end-to-end responsibility for the reporting."
(Informant 3, 2025, author's translation).

In other words, companies that are genuinely committed to sustainability and have integrated it into their organizational DNA receive full support from management. ESG-related issues are approached holistically, and these companies typically have a long-standing engagement with such practices. This, in turn, contributes to higher ESG-performance. Informant 2 noted that their organization was inherently aligned with ESG-principles from the start and actively involves all stakeholders in a DMA.

"Well, what can you say, we do a lot in sustainability in XXX, yes, it was actually put into the world to have to do with sustainability. So you can say we formed to provide loans to Ecology in yes actually originally there was

someone who came together to lend it and then it has really just grown over the last 42 years..." (Informant 2, 2025, author's translation).

During the remainder of the interview, Informant 2 emphasizes the breadth of their activities within ESG, as well as the extensive support provided at each stage. For both informants, a key driver of ESG-performance appears to be the company's intrinsic commitment to the ESG-agenda. The insights from the interviews show that while some highly engaged companies undertake additional efforts related to the DMA which is illustrated by arrow number 2 in Figure 1 linking to ESG-performance, such measures are not strictly necessary. Companies can achieve strong ESG-outcomes simply by fully integrating the ESG-agenda into their organizational culture. This is illustrated with arrow number 1. These companies often began their ESG-initiatives long ago and have enhanced their performance primarily because they align with their core values, rather than as a direct result of the DMA.

The inclusion of these three diverse institutions suggests that the study's findings may be more reflective of best practices in ESG-implementation rather than solely focusing on the DMA process. The institution with six years of DMA experience could be characterized as a "born green" financial institution, with financial products originally designed to support environmental and social objectives. The

institution with two years experience is highly supported by management, and the institution, which had recently begun ESG-initiatives, reported support from immediate supervisors but less from general management.

The thorough DMA

The informants indicate that there is a connection between a comprehensive DMA and the enhancement of ESG-performance. In particular when the DMA facilitates the identification of all aspects of the business and its value chain, and when stakeholders actively contribute to the identification of all relevant IROs, this process can be associated with improved ESG-outcomes.

Business model

The number of employees involved does not necessarily correlate with ESG-performance. However, informants have indicated that a deeper understanding of the business model enables more accurate and insightful analysis.

Informant number 3: "... Then I would say that regardless of whether you are a large or a small company, you cannot avoid the fact that you do best to involve several business legs in your work. If nothing else, the preliminary work. But then you can always discuss how much they should be involved in the whole process." (Informant 3, 2025, author's translation)

The greater the involvement of employees and stakeholders in the development of the DMA,

the more comprehensively the organization can identify areas of the business that may influence, or be influenced by, external factors. While this process does not establish a causal correlation *per se*, it emphasizes that materiality cannot be accurately assessed without engaging the appropriate stakeholders or informants. The inclusion of specific stakeholder groups involves a trade-off between available resources and ensuring the participation of the most relevant individuals.

Employee Involvement

The extent of employee participation in the DMA process is significant, as it fosters a sense of accountability when a department identifies certain aspects as priorities. This, in turn, may create a link between employee engagement and ESG-performance. Informant 2 notes:

"...it may also obligate somewhat when you have been behind the machinery and said, well, this is what is important and this is what we need to work with." (Informant 2, 2025).

Informant 2 further states, that commitment grows if an entire department is measured on ESG-figures, and the results can be tracked in the ESG-report.

Resources vs. pragmatism

A recurring sub-theme that emerged was the question of whether sufficient resources were available to conduct a comprehensive DMA.

The informants were aware of the ideal

scenario, yet they consistently identified resources as a constraining factor. Another limitation affecting the thoroughness of the DMA was its inherent complexity.

When questioned about the role of resources as a limiting factor, Informant 3 stated:

"Yes, I think it may be more the other way around, and I think maybe I have. We have been more on the other bandwagon ourselves, that the complexity can also be too big." "...I see the opinion that limited resources makes it difficult to do everything to perfection, but conversely, perfection can also affect the process. You have to find a happy medium. But it is most important that the resources are sufficient to do things in-house". (Informant 3, 2025, author's translation)

Shareholders of listed companies

Financial institutions are all owned by shareholders; however, listed companies have shareholders who have acquired their shares on the stock exchange. In contrast, non-listed companies - often cooperative institutions - are owned by their customers.

All three informants emphasized that shareholders of listed companies generally regard ESG as having the potential to positively influence returns, and therefore they regularly question management about ESG-related matters. Since financial firms seek to attract and retain capital, they attempt to align with

shareholders' expectations for improved ESG-performance.

Informant 1 explains:

"... I understand from our executive board, who are the ones who sit at these meetings with the investors, that they are met with many more ESG-questions about our performance and what we do, and whether we are doing something active and all this" ... "So I think. This is what we are aware of, it is something investors look to. Then we also have to act accordingly, because otherwise the price will fall and investors will walk away if we don't do something. So in that way, I think there may be a link to it." (Informant 1, 2025, auhtor's translation)

Informant 3 explains:

"...It is about managing the large cash flows and turning capital into companies that work for a sustainable transition, and therefore you are rewarded, what can you say much more clearly in some way, then they see. So they have really moved, i.e. those we measure ourselves against who are listed on the stock exchange in the last few years". (Informant 3, 2025, author's translation)

To the question: "Is there a link between shareholder influence and improving your ESG-key figures" Informant 2 answers:

"Yes, but you can say that the vast majority of our shareholders also are our customers XXX

and have chosen us because they actually wanted to be part of the green transition, so yes I would say that it is clearly the case with us".
(Informant 2, 2025, author's translation)

Here is an example of shareholders of a cooperative institution who do not express any desire for improvement in ESG: Informant 3 states:

"...it is so funny that we actually do not see much development in this political consumer. In other words, it is investors and legislators who are driving the transition that is taking place right now, and therefore it is also the listed companies in particular who are moving."
(Informant 3, 2025, author's translation)

These statements indicate that shareholder ownership through publicly listed shares is associated with higher ESG-performance, whereas customer ownership in cooperative institutions appears to exert no discernible effect.

CSRD as a driver

The legal obligations embedded in the CSRD appear to exert a direct influence on ESG-performance. In particular, the introduction of new standards and the requirement for quantifiable disclosures have intensified the focus on ESG. As Informant 1 noted:

"It is not only because it is a legal requirement that companies start working with ESG, but the data collection itself and the requirement to

measure ESG make them aware of – what can be worked on and what should be worked on". (Informant 1, 2025, author's translation)

Initially, the CSRD may function primarily as a driver through its legal obligations; however, as the informant suggests, it ultimately also provides guidance and inspiration regarding the actions that need to be taken.

In response to the question of whether an increase in metrics necessarily leads to improved ESG-performance, Informant 3 stated:

"...there's the thing: You manage what you measure. And what gets communicated gets done. So, that's also what gives me hope, when I look at how we break all the planetary boundaries" ... "Then that's what will kind of drive the transition". However, there is a nuance to it, and that is that you can also perform well on ESG without measuring data. (Informant 3, 2025, author's translation)

Informant further 3 explains:

"We also have some suppliers who are master craftsmen, small family-owned businesses. They can easily be waste sorting a lot more than the big private equity fund-owned company that can afford to hire fat XXX like me, to measure waste sorting. But just because they don't measure it, it is not the same. They can easily be better at sorting waste." (Informant 3, 2025, author's translation)

The CSRD is intensifying the ESG agenda through its emphasis on quantification as well as its legally binding nature.

Compliance

Compliance related to ESG measurement constitutes a major concern for all three informants. We have therefore chosen to treat it as an independent theme rather than a subtheme of the CSRD. Even companies not directly subject to the CSRD may face demands from customers, investors, or other stakeholders who require a certain level of ESG-related information, thereby turning ESG-reporting into a broader compliance challenge. Although compliance may initially be perceived merely as an obligation, it can nonetheless contribute to advancing the ESG-agenda. As Informant 1 explained:

"But they have seen it a lot as a compliance exercise.... It is slowly starting to come. I still think we are in this awareness phase, if you can call it that, they are starting to see the advantage in". (Informant 1, 2025, author's translation).

Thus, even if - according to Informant 3 – ESG-measurement is perceived by some company leaders merely as a compliance exercise, the process can nonetheless prompt management to become increasingly aware of, and attentive to, the broader ESG-agenda:

"But I think we will see some steps with well, I can already see that there are people who are inspired to, well, this governance has to work

better or here we have a policy, but we have not got the necessary measures in place" "All this legislation is really about being able to track the effectiveness of the control. And that's what I think is slowly dawning on people" "And then, that's just the way it is. It may feel like a compliance reporting exercise right now, but if you do it right, it will give you much more." (Informant 3, 2025, author's translation).

According to Informant 3, compliance operates in a manner similar to the CSRD in the sense that what is measured tends to be acted upon; however, its effects unfold at a slower pace.

internal awareness, which may foster motivation and engagement among employees. When departments are assessed on ESG-indicators that are subsequently disclosed in the ESG-report, this creates accountability and commitment. These processes: awareness, engagement, and performance measurement, collectively support ESG-improvements. This aligns with the expectation that successful ESG-initiatives depend on the people responsible for implementing them, particularly departmental leaders, for whom awareness and engagement constitute the minimum prerequisite, while measurement further reinforces progress.

Resources also play an important role. Greater resource allocation naturally enhances ESG-performance by enabling organizations to grasp technically complex issues, identify material topics, and determine pathways for improvement. However, resources must be directed toward the right tasks. Overcomplicating the DMA can be counterproductive, and a pragmatic approach may be preferable. Moreover, sufficient in-house capacity is essential to ensure that employees and leaders remain engaged - something that may be weakened if analyses are outsourced extensively to external consultants.

Although we initially hypothesized that multiple stages of the DMA could drive ESG-

Discussion of the results

Our survey findings suggest that several steps of the DMA are associated with ESG-performance, including the number of departments involved, stakeholder engagement, measurement of ESG key figures, and the influence of shareholders. However, insights from the interviews indicate that only a limited subset of DMA steps ultimately contributes meaningfully to ESG-performance.

First, a DMA that incorporates multiple departments enhances the organization's understanding of its business model, which in turn can influence ESG-outcomes. This is intuitive: initiatives that are not identified cannot be deliberately improved. Second, broad departmental involvement increases

performance, our findings suggest a narrowing of focus: two key elements appear most critical and the steps that we initially listed as presented by Erhvervsstyrelsen, can be modified:

1. Identifying impacts, risks, and opportunities (IROs) within the organization through the involvement and engagement of an adequate number of departments
2. Assessing the materiality of the identified IROs in terms of their effects on the environment, society, and the company's economic performance through the involvement and engagement of an adequate number of departments

Thus, the third step of establishing threshold values that determine when an IRO becomes material does not, in itself, appear to be a prerequisite for achieving improved ESG-performance. But allocating sufficient internal resources to enable a deep understanding of complex materiality issues and how they can be improved, without over-reliance on external expertise or overly complex procedures is important.

Beyond the DMA, several additional factors influence ESG-performance. Companies for

which ESG is already embedded in their organizational identity may conduct a comprehensive DMA, yet it is not the DMA itself that drives their high ESG-performance. Rather, it is the holistic perspective and strong managerial support that leads to change.

Companies also benefit from the CSRD, which provides guidance on what to measure and how to improve. Heightened awareness - combined with the quantification requirements - can drive improvements in ESG-outcomes. Even companies that approach the CSRD with a minimal compliance mindset may, over time, improve their ESG-performance, as awareness gradually transitions into action.

Finally, shareholder influence plays a significant role, given the established link between capital flows and ESG-performance.

This raises the question of whether companies could avoid the DMA if their sole objective is to enhance ESG-performance. Our findings do not indicate that the DMA is redundant. Although there are many drivers identified among the three interviewed companies that are external to the DMA, the analysis remains important. The purpose of the DMA is to determine materiality and set priorities within an ESG-strategy. As such, it should be understood as a key tool for directing and prioritizing ESG-improvement activities, rather than as an isolated procedural requirement (KPMG, 2026).

Conclusion

When this project began in 2024, the CSRD had just been implemented, and the DMA was a new procedure for many financial companies. At that time, the central research question; Can the different steps in a DMA contribute to improving ESG-performance? was highly relevant. Based on our findings, the answer is affirmative: certain processes within the DMA can support ESG-performance, though some are more effective than others. Specifically, successful ESG improvement depends on involving sufficient employees to ensure a comprehensive understanding of the business, fostering engagement and awareness among staff, and allocating adequate resources. Pragmatic approaches that avoid unnecessary complexity allow many tasks to be completed in-house with limited resources.

Importantly, improving ESG-performance is not solely a matter of conducting a thorough DMA. For some companies, it reflects an intrinsic organizational commitment to doing the right thing. Supportive management that treats ESG as more than mere compliance and emphasizes awareness and measurement is a crucial driver of performance, independent of DMA steps. Similarly, the CSRD, as a legal obligation, contributes to ESG-performance by

creating awareness among management. Raising awareness is a prerequisite for change, and even companies that initially approach ESG as a compliance exercise may improve over time as awareness translates into action.

For shareholder-owned financial institutions, ESG-performance is further influenced by shareholders, who ultimately determine corporate strategy. When shareholders recognize the link between ESG-performance and returns on investment, they incentivize companies to improve ESG-outcomes. Therefore, in addition to the DMA, CSRD compliance and shareholder influence emerge as significant mechanisms for enhancing ESG-performance.

While the project initially aimed to identify the key requirements of a successful DMA for improving ESG in financial companies, our findings indicate that focusing exclusively on the DMA does not fully capture the drivers of performance.

Companies achieve ESG-improvements when they are genuinely committed to doing so, regardless of the procedural steps involved, including the DMA. Nevertheless, the DMA remains a valuable tool for identifying material issues and engaging employees and management, providing a structured approach to prioritize ESG-initiatives.

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References

Delgado-Ceballos, Javier; Ortiz-De-Mandojana, Natalia; Antolín-López, Raquel & Montiel, Ivan. 2023. "Connecting the Sustainable Development Goals to firm-level sustainability and ESG factors: The need for double materiality." *Business Research Quarterly* 2023, Vol. 26(1) 2-10.

Deloitte. 2024. How can the benefits of the double materiality assessment be unlocked? [Online]. Deloitte, accessed June 13, 2024, <https://www2.deloitte.com/fi/fi/pages/risk/articles/Benefits-of-double-materiality-unlocked.html>

Erhvervsstyrelsen. 2025. Vejledning om dobbelt væsentlighedsvurdering. Erhvervsstyrelsen, accessed October 27, 2025, <https://erhvervsstyrelsen.dk/vejledning-dobbelts-vaesentlighedsvurdering#chapter4-1>

Eskola, Kia. 2022." MATERIALITY ASSESSMENTS IN CSR REPORTING Multi-industry analysis over time and linkages to ESG scores in the Nordic context." Lappeenranta-Lahti University of Technology LUT Master's Programme in Strategy, Innovation and Sustainability 2022, online accessed 20-10-2025.

Finanstilsynet. 2024. Virksomhedsregisteret. [Online]. Finanstilsynet, accessed June 11, 2024, <https://www.finanstilsynet.dk/tilsyn/virksomhedsregisteret>

Goettsche, Max; Griffin, Paul A.; Habermann, Florian; Schiemann, Frank & Spandel, Theresa. 2023. "Materiality as a Double-Edged Sword: Real effects of SASB Sustainability Topics". SSRN 2023.

Hansen, Kenneth. 2013. *Grundlæggende statistik*. Hans Reitzels forlag, København.

KPMG. 2026. Dobbelt væsentlighedsanalyse. KPMG, accessed January 09, 2026, <https://kpmg.com/dk/da/services/esg/csr/dobeltvaesentlighedsanalyse.html>

Lungu, Camelia Iuliana; Caraiani, Chirata & Bojan, Andreea Madalina. 2024. "Double Materiality Approach and Sustainable Business Model Paradigm: A Three-Fold Analysis." *Proceedings of the 20th European Conference on Management Leadership and Governance, ECMLG 2024*.

Nielsen, Christian. 2023. "ESG Reporting and Metrics: From Double Materiality to Key Performance Indicators". *Sustainability* 2023, 15, 16844.

Panfilo, Silvia; Scarpa, Francesco & Canestraro, Nicolas. 2025. "Reporting for change: does the adoption of double materiality influence ESG risk management?" *Management Decision* 2025, Vol. 63 Issue 7.

Roesgaard. 2025. Sådan påvirker de nye ESG krav din virksomhed [Online]. Roesgarrd, accessed September 1, 2025, <https://roesgaard.dk/nyheder/saadan-paavirker-de-nye-esg-krav-din-virksomheds-finansiering>

Sheehan, Norman T.; Vaidyanathan, Ganesh; Fox, Kenneth A. Fox & Klassen, Mark. 2023. "Making the invisible, visible: Overcoming barriers to ESG-performance with an ESG mindset." *Edwards School of Business, University of Saskatchewan* 2023

Svensson, Elias. 2024. "Materiality Matters: Unraveling the Impact of Double Materiality in Swedish Corporate Sustainability". Södertörn University 2024.

Virksomhedsguiden. 2024. CSRD – lovkrav til virksomheders bæredygtighedsrapportering [Online]. Virksomhedsguiden, accessed June 11, 2024, <https://virksomhedsguiden.dk/content/temaer/baeredygtig-omstilling/ydelser/csrp-lovkrav-til-virksomheders-baeredygtighedsrapportering/62c314cd-4e5f-422c-9f55-6f43873fd25e/>