Sustainable investment decisions

A qualitative study on reasons for incorporating ESG in internal investments

Alexander Wirzberger

Jakob Tärnvik

Bachelor Thesis

Stockholm School of Economics

2022

Sustainable investment decisions: A qualitative study on reasons for incorporating ESG in internal investments

Abstract:

Sustainability is becoming an increasingly important topic and the relevance for companies to address non-financial aspects, such as ESG, increases since they are key drivers in the sustainable transition. In this paper, we aim to analyze if, and why, manufacturing companies address non-financial sustainability in their investment decisions. This is done through a qualitative, dual case study. Semi-structured interviews were conducted with employees possessing knowledge of either sustainability or investments. Both companies in the study address sustainability in their investment decisions, which enabled us to examine and compare the reasons behind this decision. Stakeholder pressure, risk mitigation and value creation were all important aspects considered by both companies and examined more in-depth. Another conclusion of the paper is that further research on the standardization of ESG is urgently needed in order to facilitate comparability of firms' internal projects.

Keywords:

ESG, sustainability, investment, standardization, manufacturing companies

Authors:

Alexander Wirzberger (24871)
Jakob Tärnvik (24900)

Tutor:

Johnny Lind, Professor, Department of Accounting

Acknowledgments:
We would like to thank our tutor Johnny Lind for his guidance and being responsive throughout our research process. We would also like to thank the employees for dedicating their time and providing us with their valuable experience.

Bachelor Thesis
Bachelor Program in Business and Economics
Stockholm School of Economics

Table of contents

1. Introduction

1.1. Background

The importance and awareness of sustainability issues is constantly growing. We cannot continue to live and work the way we do today if we want to ensure a sustainable future. When speaking of sustainability, the environmental aspect is often what comes to mind as a result of the carbon dioxide emissions increasing at an alarming rate. However, in the discussion of sustainability in a business context, there are multiple aspects to consider: environmental, social and governance, or ESG. Companies and their businesses are key actors in the sustainable transition to ensure that there is going to be sufficient progress. As companies around the world expand in terms of employees, revenue, and general scale, so does their impact. The interest in committing to sustainable investing has increased immensely over the past years. (Galli & Darboe, 2021) This can partially be seen through an increasing number of extensive sustainability reports where firms are more encouraged than ever to consider non-financial factors when assessing their goals (Lioui & Tarelli, 2022). This could partly be explained by stakeholders valuing ESG more highly now than ever before (Meixell et al, 2015).

Two companies will be analyzed in this paper and will, for the sake of simplicity, be called company A and company B. Company A is significantly larger than company B in terms of scale, employees, and operational width. Nevertheless, both are manufacturing companies with international suppliers as well as customers, and operate within similar industries. ESG is a significant improvement area within their respective industry and will most likely influence the companies' opportunity to survive and thrive. One important difference between the two industries is the level of emissions. Company A operates within an industry with significant emissions throughout the value chain resulting in other circumstances compared to company B. While environmental sustainability is key for both industries, other issues such as transparency, safety and delivery time are relevant to consider in order to achieve long term success.

1.2. Problem formulation

Businesses have a significant role in the green transition. Therefore, it is important to have a thorough understanding of whether they address sustainability in their operations to support the transition, and the reasons for, or against, it. According to Christensen et al (2008), there is a risk of companies committing to a business-as-usual approach continuing to develop already existing products and services instead of innovating and therefore inhibit the development of new, more sustainable products. For example, a loss of market shares can manifest itself if one only focuses on short-term profits instead of considering non-financial aspects in investment decisions as well. (Christensen et al, 2008) This implies that if a company solely bases their investment decision on financial aspects, it could inhibit the development of new, more sustainable products and processes.

Why and how ESG could be incorporated into investment decisions has been researched to some extent (Nidumolu et al, 2009). There is also extensive research on how ESG affects financial performance, most of which is quantitative (Friede et al, 2015). Sustainability is becoming more commonly addressed in the corporate landscape. However, this trend does not showcase indisputable evidence that all companies address sustainability issues in their investment decisions. Whether sustainability is addressed or not must first be determined before exploring the underlying factors to why, or why not, it is incorporated. Finally, it is important to understand the companies' approach to addressing sustainability to obtain a better understanding of the potential challenges and opportunities the firms might face.

The relevancy of this topic increases as more sustainability legislation, especially aimed towards certain companies within certain industries, is introduced. This could potentially create a scenario where some companies are legally obligated to invest sustainably whereas others are not. To understand the issue on a deeper level, and determine more individual aspects for certain manufacturing companies, a qualitative study with semi-structured interviews is an appropriate approach.

1.3. Aim and research question

The aim of this thesis paper is to analyze if, and why, manufacturing companies address non-financial sustainability in their investment decisions. We intend to illustrate possible similarities and differences regarding why different companies incorporate ESG into their work. Furthermore, we will analyze how well theory and the empirical material align in this aspect. Answering why, and comparing differences, is of importance since it could showcase how varying the circumstances are for each company and thus, initiate a discussion around the need for standardizing ESG. In this paper, our research questions that we aim to answer are the following: *Is the increasing focus on sustainability addressed in the manufacturing companies' investment decisions?*

The question above aims to answer whether the companies include sustainability in their investment decisions. The findings will initiate a discussion and comparison between the companies' reasons for, or against, addressing sustainability in order to answer the second question:

How does two manufacturing companies differ in their reasons for addressing sustainability?

1.4. Contribution

Not only is there limited research on why manufacturing companies incorporate ESG, but also on how factors like size and operational scale affect the reasons for sustainable investing. We contribute to the literature by exploring whether the sustainability trend is addressed in the companies' investment decisions and why companies of different sizes address sustainability. Through the analysis provided by the qualitative dual case study, it is apparent that factors related to size and industry will affect the circumstances for committing to sustainability. This contribution is partly based on the different legal requirements the firms face, affecting the way they operate. A second contribution that is showcased is the ambiguity concerning value creation, where value creation is expanded on compared to previous research. Already well-researched topics such as market shares and monetary value are discussed, however, we also explore some value creating aspects which are occurring less in research, like talent management and comparability between projects. Comparability concerns a company's ability to evaluate their internal projects against each other. Finally, our study exhibits the urgent need for standardizing ESG, because of the difficulty of comparing internal projects.

2. Theoretical development

2.1. Introduction to ESG and the investment process

2.1.1. Definition of ESG

ESG stands for Environmental, Social and Governance, which is an umbrella term that relates to e.g., non-renewable resources, greenhouse gas emissions, human rights, health, diversity and corruption. The market demand to integrate ESG in investments has increased to ensure stakeholders that the organization has a set of values which they can be comfortable with according to Boffo & Patalano (2020). UNEP FI (2011) states that the importance of aligning a company's values with their stakeholders', relates to costs that come with ESG issues, often called externalities. If externalities are excluded from investments, the investment decisions cannot be adequately evaluated. However, integrating ESG in investments is cumbersome and comes with its eventual hardships. Boffo and Palatano (2020) argue that obstacles emerge when trying to properly integrate sustainability into investment decisions. For example, it is difficult to translate qualitative data into pure financials. Furthermore, there is also an absence of standardization and transparency in reporting practices which causes different stakeholders to call out for the implementation of standardized reporting guidelines regarding ESG. (Boffo & Palatano, 2020)

There have been attempts to standardize the work with sustainable investing. The newly implemented EU taxonomy for sustainable activities is a classification system developed by the European Union and is especially relevant when discussing ESG. The framework covers large companies within the most emission heavy sectors such as manufacturing, energy, transport, and buildings. The purpose of the taxonomy is to standardize and structure sustainability reporting to more easily determine which investments can be considered green. Furthermore, it has been developed to avoid the individual classifications of sustainable investments to facilitate the sustainability goals of the Paris Agreement. The EU taxonomy can also help mitigate corporate greenwashing since it aims to differentiate investments from each other, and for companies to have more requirements when disclosing certain investments as sustainable. Based on the EU's climate and environmental objectives, there is a baseline for what can count as a green investment. Since it is mandatory for some firms to disclose information based on this framework, comparability will be facilitated for the companies within the scope of the taxonomy, which is an improvement compared to the currently, rather unstructured, sustainability reporting. (EU Commission, 2021)

Other examples of directives helping to facilitate ESG work in companies' investments are The Waste Electrical and Electronic Equipment Directive shortened WEEE, the Restrictions of the Hazardous Substances Directives also called RoHS and The Registration, Evaluation, Authorization and Restriction of Chemical Substances, called REACH. Lakin (2008) mentions how these directives are implemented by the EU to help decrease electronic waste.

2.1.2. Standardization of the investment process

There are some non-financial aspects that are relevant to the investment process. One study made on the subject is on the innovation killer component by Christensen et al (2008), where the potential losses of market shares from a lack of innovation are discussed. The issue brought up in the paper, which is also supported by Eccles et al (2017), is that ESG investments are often neglected among investors due to the belief of lower initial returns. To adapt the investment process to support long-term sustainability, Christensen et al (2008) suggest that companies include an innovation killer component which could either be quantified and calculated or a qualitative discussion. In their paper, Eccles et al (2017) discuss the problems fund managers face when trying to integrate ESG in their investment decisions. The lacking standards, guiding how the ESG data should be used, is a prominent aspect and clarifies the urgent need of standardizing ESG to facilitate more nuanced investment decisions.

2.2. Previous research

When inspecting the previous literature on this topic, most literature concerns the ESG consideration from fund managers' perspective and analyzes how, and why, they consider it in their investment decision process. Based on the literature reviewed, there are three main reasons for fund managers to incorporate ESG into investment decisions: value creation, risk mitigation and stakeholder pressure. This is emphasized by a multitude of articles, such Nidumolu et al, 2009; Przychodzen et al, 2016; Schaltegger & Wagner, 2011; Svensson & Atasayar, 2021. In this paper, the implications from the research of fund managers will be applied in a different context to analyze if the same line of reasoning is applicable to manufacturing companies as well.

The premise of ESG and its potential benefits is often neglected among managers who make decisions on investments, according to Nidumolu et al (2009). In the paper, it is mentioned that the impact of innovating sustainably to gain long-term competitiveness is underestimated. Furthermore, many corporate managers are afraid to commit to ESG because of the belief that it causes short-term economic harm. In addition, Koller et al (2009) argue for the unambiguousness of ESG and its links to value creation. Christensen et al (2008) explain how having a sole focus on short-term metrics entails a short-sightedness which could lead to a business losing market shares. Nidumolu et al (2009) argue that investors generally tend to disregard the environmental, social and governance aspect which could lead to negative consequences for those businesses long-term. Besides the hardships of integrating ESG in investment processes, one question that arises is whether ESG can bring value if integrated correctly, or if increasing investments only are means of satisfying the external stakeholders short-term.

2.2.1. ESG and stakeholder pressure

Freeman (1984) defines a stakeholder as someone who can affect or be affected by an organization. This can either regard an individual or a group. The pressure from stakeholders is an important contributing factor to the increasing willingness to invest sustainably, which is emphasized by both Lundström & Håkansson (2021) as well as Svensson & Atasayar (2021). Przychodzen et al (2006) suggest that pressure from stakeholders, whether it being external or internal, makes those responsible for investment decisions take ESG into account to a greater extent. This can be explained by the decision-makers essentially avoiding any accusations of misconduct and obstruction. Nevertheless, Koller et al (2009) argue that the effectiveness of implementing ESG can drop significantly if a group considers too many aspects when implementing ESG into investments. Therefore, it is important to evaluate and focus on the ones deemed most crucial and display transparency to get every stakeholder committed to the cause.

A study by Godfrey et al (2009) emphasizes the significance of positively contributing to the stakeholders' interests. It can provide insurance in a situation where a company might experience an enforcement action or liability, but despite this maintain its firm value. If a company remains responsive to the needs of its stakeholders, they are less likely to be financially affected by, for example, harmed reputation. This suggests that management should commit to a long-term focus of their investments, where non-financial risks are considered. (Ho, 2016)

The importance of a company's stakeholders is also mentioned by Schaltegger and Wagner (2011). The paper, which focuses on sustainable entrepreneurship and innovation, discusses reasons why companies work sustainably and how their stakeholders affect them. Stakeholders can pressure a company into an environmentally and socially sustainable direction by adjusting the demand on the market. Two of the triggering factors for emerging sustainable work are changes in regulations and initiatives from stakeholders, such as competitors, that affect either the company or customers. (Schaltegger & Wagner, 2011)

Meixell et al (2015) wrote a paper on stakeholder pressure and its effects on supply chain management with the aim of explaining to what extent these stakeholders were able to influence managers' decision making. The results can be summarized in three steps, all of which will have a positive effect on the company's triple bottom line: awareness, adoption of goals and implementation of sustainability practice. Stakeholders will make the managers aware of what sustainability issues are important to them, and thus, important to the company. The company will then adopt certain goals and objectives requiring changes in the operations. Through this process, a clear connection between stakeholders and the effect they have on a company's operations is showcased.

2.2.2. ESG and risk mitigation

Another basis for integrating ESG into investments is risk mitigation. The consensus in the literature is that potential risks follow from not adequately adapting to sustainable operations. Koller et al (2019) mentions that risks such as stranded investments are significant if a firm does not invest sustainably. In the paper, ESG investing is described as a way of optimally allocate resources as it forces companies to invest in longevity.

The primary focus of risk mitigation will regard laws and regulations in this paper. Companies can benefit from adhering to more than what is currently required regarding sustainability to avoid future consequences as a result of new potential laws and guidelines. (Lundström & Håkansson, 2021; Nidumolu et al, 2009) This is also supported by Svensson &

Atasayar (2021) who state that integrating ESG to align with new legislation to decrease unexpected future costs is risk mitigation. The newly implemented EU taxonomy is often mentioned as the main sustainability regulation for companies within the European Union. Complying with the EU taxonomy can be considered risk mitigating since doing so could help the organization prevent problems stemming from reputational risk. Similarly, Nidumolu et al (2009) mention how firms initially become proactive about environmental concerns as a way to create a better image, hence decreasing the reputational risk. This commitment can, in most cases, end up being cost saving as well. (Nidumolu et al, 2009)

Ho (2016) wrote a paper analyzing shareholders' ability to affect, mitigate and disclose risks within a firm. There are multiple types of risks discussed in the paper, including how risks relate to ESG:

"Risk management is the process of identifying, monitoring, reporting and responding to the range of financial, operational and strategic risks that firms face. As this definition suggests, effective risk management is already widely recognized as requiring firms to take account of nonfinancial or ESG risks, including compliance, regulatory, environmental and other operational risks, as well as strategic risks. It is therefore considered integral to firm strategy and a core governance function. [...] Although effective risk management cannot eliminate all risk, it can help firms manage financial and operational risks." (p. 663-664)

The statement above showcases how ESG incorporation can be a tool for risk mitigation when also considering the financial and operational risks. The tendency to take part in active ESG investing increases among fund managers who are the most risk averse. Those who do implement ESG investments may enjoy benefits thanks to decreasing risks such as reputation and cost risks. (Nidumolu et al, 2009; Przychodzen et al, 2016)

2.2.3. ESG and Value Creation

Value creation is a broad concept and depending on the context, its meaning can vary. In this paper, it will be used as an umbrella term, similarly to the term sustainability. Koller et al (2019) suggest that ESG investing is positive for businesses as it correlates with generally higher equity returns and lower downside risks. In addition, the paper explains that it is important to showcase the link between a company's ESG investments and value creation to their stakeholders.Nonetheless, before it is possible to display a link between ESG investments and how it creates value, it is important to understand what value creation is. As mentioned, what value creation is depends on the situation, but Rutner & Langley (2000) provides two general definitions of value:

"-Value is that quality of a thing according to which it is thought of as being more or less desirable, useful, estimable, important, etc. (p.75)
-Value is a fair or proper equivalent in money, commodities, etc. for something sold or exchanged: a fair price." (p.75)

The two definitions explain value in different ways. First, value can be something abstract, e.g., a feeling or an impression. Because of the more abstract nature of the value, it is quite subjective and can be affected through symbolic procedures. The second definition above can be said to be more exchange-oriented where value is defined as something measurable, based on how willing another person is to pay or exchange something in return for something sold. This makes the value tangible, more easily defined and comparable. (Rutner & Langley, 2000)

According to Przychodzen et al (2016), there is an ambiguous relationship between ESG and shareholder value creation. However, in our paper, value creation covers more than shareholder value. One example of the expanded value creation is talent management. If a company actively works with the implementation of ESG, it will not only attract customers favoring sustainability and superior employees, but also reduce penalties relating to non-compliance. (Przychodzen et al, 2016) Nidumolu et al (2009) states that in the United States, most of the workers entering the job market will evaluate a firm's environmental and social performance while deciding what firm to apply to. Therefore, the paper argues that it is central to most businesses to actively work with, and improve, their sustainability work to attract and keep the best employees possible.

Schaltegger & Wagner (2011) supports the idea of sustainability work creating value for a company if they exceed the minimum requirements set by legislators. According to the paper, depending on the company's primary goal, there are different ways to embark on sustainability. This is through different types of entrepreneurships, e.g., ecopreneurship and sustainable entrepreneurship. In their paper, Schaltegger and Wagner (2011) explain these concepts in the following manner:

"The core motivation and main goals mentioned with ecopreneurship are to earn money through contributing to solving environmental problems" (p.223)

"Defined more widely, sustainable entrepreneurship can thus be described as an innovative, market-oriented and personality driven form of creating economic and societal value by means of break-through environmentally or socially beneficial market or institutional innovations." (p.226)

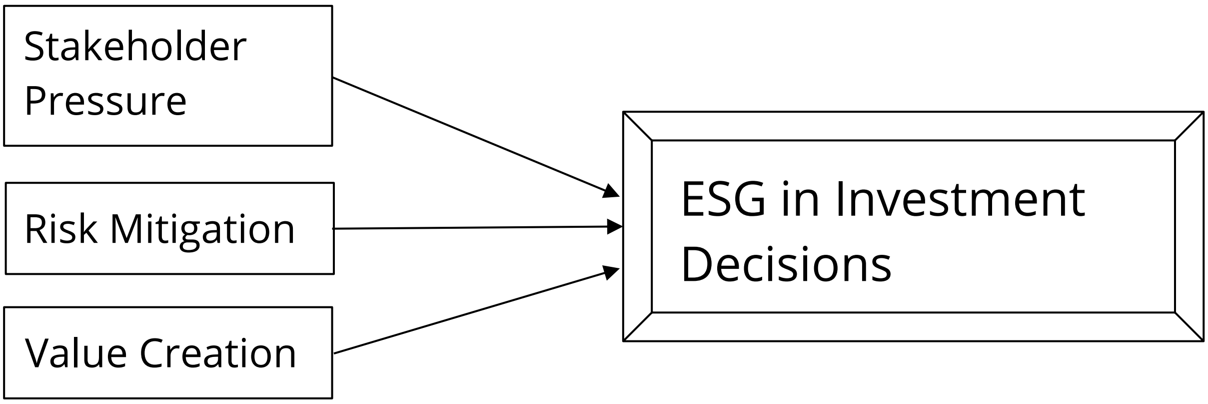
These structures and business models can be applied to most firms actively working with sustainability issues, regardless of it being a startup or a major actor of a certain industry. The main difference between the two types of entrepreneurships is their motives. For ecopreneurship, the goal is to earn as much money as possible and the opportunity is exploited through a focus on solving environmental issues. Sustainable entrepreneurship, on the other hand, focuses on both the sustainable initiative and the future success of the firm. The main goal is not only for the firm to be as profitable as possible, but also to provide useful solutions to issues relevant for most people. (Schaltegger & Wagner, 2011)

2.4. What is missing in today's literature?

Based on the literature review, we believe that the coverage of ESG is becoming more and more prominent in the research, whether it is how fund managers apply ESG in their everyday work, to how they perceive ESG differently. The literature currently does not fully cover the corporate effect that the ESG implementation and integration will have, nor the exact process of how and why e.g., manufacturing companies address ESG in their investments. There will, most likely, be differences between ESG's role in fund managers and corporate managers' decisions. The idea of this thesis paper is to broaden the research of manufacturing firms by identifying important aspects and the role they might have when implementing sustainable investments in their operations. Due to the limited research, we will initially analyze the process based on a fund managers' lens and from there utilize three major components that are part of the foundation in their sustainable investment strategy.

2.5. Theoretical framework

Having done research on the topic of sustainable investments, which mostly included fund managers' point of view, a framework was developed with the inspiration from a multitude of articles (e.g., Nidumolu et al, 2009; Przychodzen et al, 2016; Schaltegger & Wagner, 2011; Svensson & Atasayar, 2021). These articles all had similar findings, where three common aspects were found to have a significant impact on the fund managers' investment decisions. These were stakeholder pressure, risk mitigation and value creation.



References: e.g., Nidumolu et al, 2009; Przychodzen et al, 2016; Schaltegger & Wagner, 2011; Svensson & Atasayar, 2021

Figure 1. The three components identified in the previous research will be evaluated separately in the way they affect ESG in investment decisions. Through the combination of all components, the reasons why ESG is incorporated in investment decisions will hopefully be apparent.

To apply the framework to manufacturing companies' internal investments, and understand the aspects in a new context, further research on the aspects was necessary. Since stakeholder pressure, risk mitigation and value creation has not been extensively studied as a combined framework in the context of manufacturing companies, each component was studied individually. Stakeholder pressure entails stakeholders such as legislators and customers pressuring a company to take sustainability into consideration. Risk mitigation concerns the mitigating effects that ESG can have, as emphasized in the previous literature. For instance, this could relate to a company wanting to decrease its reputational, financial and operational risk. Lastly, value creation can be a reason for incorporating ESG into investment decisions, as some believe that it can create value for the firm.

As mentioned, value creation, risk mitigation and stakeholder pressure were the most used aspects in the context of fund managers. Since the literature on fund managers is a significant part of the basis for this paper, the framework built around these aspects will be used in order to structure and analyze the empirical findings. We are analyzing if and why two different manufacturing firms address their sustainable investments, and therefore, we will utilize the framework above to highlight differences and similarities between the firms in our empirical data as well.

3. Method

3.1. The Design of the Study

3.1.1. Research Approach and Design

The format of this paper is a dual case study of two manufacturing companies of different sizes, operating in similar industries. The empirical material was gathered through a series of interviews where the participants had an overview of their company's investments and sustainability work. In this scenario, a dual case study is the most beneficial type of case study, despite potential hardships such as time consumption when pursuing multiple case studies. Baxter & Jack (2008) explains that through a dual case study, it is possible to compare similarities and differences between the companies in the study, which allows for an extra dimension in the analysis. (Baxter & Jack, 2008) New sustainability regulations are frequently implemented, affecting the field of research as well as companies' operational environment.

The process of gathering and analyzing data followed an abductive approach. The process involved us iterating as well as combining the empirical data and theory we collected, also known as systematic combining. Based on the insight from Dubois & Gadde (2002), systematic combining was utilized in this paper because the main goal was not to develop any new theories, but rather identifying the reasons behind a certain phenomenon. Initially, we identified an interesting field of research frequently discussed today, namely the importance of sustainability in investment practice. Based on our initial field of research, we gathered relevant empirical material. The findings from the empirical data shifted the focus of the paper from an operational perspective of investments to a theoretical approach. This required us to extend our theory and to iterate between the empirical finding and theory.

3.1.2. Scope of the Thesis Paper

When deciding on the focus of the paper, there were two aspects of ESG investments considered. Initially, we aimed to analyze whether ESG was addressed in their investment decisions and how it was incorporated. However, with limited previous research as well as documents on the investment process being deemed confidential, the approach was not possible. Consequently, we decided to analyze whether they addressed ESG and the potential reasons for it. Thus, any in-depth analysis of the companies at an operational level was excluded and the empirical material detailing investment processes was quite limited. Another limitation is that the only researched companies are manufacturing firms. The two main reasons for this delimitation were comparability due to the similar industries the companies operate within, and that both are manufacturing companies. Even though it limits the possibility to draw broad conclusions, the similarities between the companies' processes, value chains and so on, allows for a greater comparison between them.

3.2. Data Collection

We initiated the process of gathering empirical material in February, when we reached out to the companies and presented the idea behind our thesis paper. Both companies were keen on providing us with their perspective of sustainability in their investment process. When the companies agreed to participate, an internal discussion concerning potential interviewees took place and the interviews were scheduled afterwards. The chosen interviewees had an oversight of either the investment process or the sustainability work within the company.

The interviews took place during March and April 2022. We interviewed six people, three from each company in a total of seven interviews, as can be seen in appendix 1. The interviews were between 35 to 55 minutes and were semi-structured. The questions were developed using a semi-structured interview guide where the main topics were sustainability and investments, with related questions underneath each topic. This was to increase the trustworthiness of the semi-structured interview as a qualitative research method, as emphasized by Kallio et al (2016). The interviewees held varying positions with different responsibilities in their respective companies. Therefore, the questionnaire was tailored specifically for the interviewee before each interview session. Every interview, apart from one, was held over Microsoft Teams video chat and recorded with the interviewee's consent. The final interview, which was with the CEO of Company B, was held in person. A full list with details of the interviews can be found in appendix 1 and example questions from each interview can be found in appendix 2.

The chosen format for the interviews was a semi-structured approach. There are multiple benefits with the approach, such as flexibility and the opportunity to retrieve important information through follow up questions on important areas emphasized by the interviewee. If a structured approach was used, it would not have allowed for expanding on topics mentioned by the interviewee, but rather, the interview would have been steered by us, the interviewers, who possess less knowledge on the subjects discussed. The broad and open questions allow for a discussion between the interviewer and the interviewee, given that the interviewer is well educated on the subject. (Qu & Dumay, 2011) Having done our preliminary literature review, we knew what areas to cover during the interview and expanded on the areas via follow up questions. Through this approach, we could focus on the areas important to professionals actively working with the topic researched.

3.3. Data Analysis

After every interview, an internal discussion took place where the most important aspects of each interview were brought up. The exchange of ideas facilitated further thoughts that could potentially be applicable in the research. Subsequently, the recorded interview material was transcribed word by word and reviewed once more to enable a rigorous analysis of the content, as well as an overview on what had been said. The interviews were held in Swedish and therefore, all citations were translated into English to the best of our ability.

The process of transcribing the interviews was in accordance with Gibbs (2018), where it is mentioned that most researchers find the transcription of recordings easier to work with. Transcription can be cumbersome as it is time consuming and requires subjective interpretation. Since this paper was written by two people, common interpretation of the data was necessary and was achieved through transcribing the material. (Gibbs, 2018) Given the amount of empirical material, transcribing was the best alternative, despite the potential hardships.

The transcribed material became the foundation for the empirical material, as it helped screen out what material was relevant and aligned with the research question. Furthermore, we initiated the screening of our empirical material with the help of our theoretical framework and the questions asked during the interviews. The material was grouped based on the framework. Nonetheless, the materials that could not be linked to the main aspects of the framework were neither taken into consideration in the empirics, nor the analysis.

3.4. Data Quality

When assessing the quality of research data, there are multiple aspects that shall be considered. According to Shenton (2004) trustworthiness depends on several sub-criteria, namely credibility, transferability, dependability, and confirmability. Credibility, also known as internal validity, investigates whether the findings of a study are congruent with reality and can be achieved in various ways. Prior to the data collection, the researcher should be familiar with the company at hand. Before the interviews, we studied the annual and sustainability reports of each company to gain familiarity with the research objects. There is always a risk that the interviewee provides information that is aligned with the company's values rather than reflecting a separate opinion. Therefore, the comfort of the interviewee is another important aspect of credibility. By assuring the interviewee of the possibility to withdraw from participation and that anonymity is possible, we increased the likelihood to gather honest information. During and after the data collection, there are multiple procedures to improve credibility as well. By iterative questioning, having multiple interviewees and comparing the results with previous research, the risk of misinformation in our empirical material decreased. (Shenton, 2004)

Lukka & Modell (2010) argues that the use of an abductive approach can lead to potential deficiencies in the research. Since the approach implies a revision of theory and the empirical material, it can be argued that the researcher will only confirm what has previously been researched. If the theory used to analyze a certain issue is based solely on the empirical material gathered, this could be the case. However, in this paper, the abductive approach was not used to find theories to analyze the research question, but rather to identify the research question. Therefore, the risk of confirming previous research is limited.

There are some other possible shortcomings of the thesis paper as well. Transferability is limited since the study relies on one specific type of company, namely manufacturing companies. Thus, the results are not applicable to all situations since there might be differences between companies within different industries. Further differences between companies could be explored if the sample size of the research paper was more extensive. As of now, only interviewing employees from two companies could be seen as a potential shortcoming, which showcases how this paper might not be applicable to other scenarios. Another potential limitation is our choice of qualitative research since the choice of study does not always allow for a comparison to a great extent. In addition, the ever-changing environment of sustainability suggests that reliability is limited since the same tests might show different results in the future. (Shenton, 2004)

4. Empirical findings

4.1. Introduction to the case companies

In the empirical findings, we will present the interviews we held with company A and company B. Company A is a large manufacturing company with a strong focus on sustainability which is part of the operating activities. In this paper, the titles of the interviewees were Director of Innovation and Sustainability, Product Manager and Corporate Responsibility. They were interviewed to gain an overview of the underlying causes behind the potential integration of ESG in investment practices. Company B is a relatively small manufacturing company where the CEO, COO and a Finance Business Partner were interviewed. Interviewing employees from two different companies allowed for a comparison since all the interviewed have some insight in their respective company's ESG work and investment practices.

4.2. Stakeholder pressure

Stakeholders such as employees, competitors, suppliers, customers, or legislators are significant to all firms. There are multiple external forces affecting the environment a company is operating within. Based on the interviews, the effect of stakeholders is significant for both companies, both in the way that they operate and to the extent they include sustainability in their investment decisions.

Company A

There are many important stakeholders for company A. Two of these are legislators and competitors. Employee C mentioned that there have been multiple changes in regulations for the industry to facilitate sustainable investments. He argued that if it was not for the pressure from legislators, or more specifically, the laws and regulations that have been implemented, it would be a lot more costly for a company to commit to sustainable investments.

The customers of company A are an influential group of stakeholders. Both the customers, and company A, have a desire to be market leaders in areas such as technology, environmental issues and sustainability. It is part of the customers' and company A's images. Therefore, the pressure is increased on company A to deliver high-end products to their customers. Furthermore, employee A emphasizes the mutuality between company A and stakeholders, where both parties often put pressure on each other to commonly increase their sustainability work. Employee A clarifies this by stating:

"You should not forget that we are dependent on our suppliers. In order to get a more sustainable product, we have to make sustainable demands against our suppliers who provide us with components. [...] We have a new "supplier code of conduct" where we write what we want and our expectations on them. With that, we have a hope that the suppliers will join us on this journey and always be at the forefront."

- *Employee A*

According to employee B, it is crucial not to lose focus on customer demand, which among several aspects includes keeping costs down. Therefore, company A cannot take every measure conceivable to achieve a fully sustainable business on all fronts, since this could be too costly and counterproductive if it results in non-competitive prices.

"It must not be the case that you lose focus on customers, cost, etc. We need to find a balance and weigh the parameters. [...] But the direction from the company management (to focus on sustainability) is very clear, and gradually it permeates everything. We have high ambitions regarding sustainability and also want to take a clearer position in society and industry as a leader in sustainability."

- *Employee B*

Company B

All customers have demands on aspects such as price, quality, and sustainability which they consider when choosing what company to buy from. Most customers of company B require quite thorough sustainability reporting in their procurement process. One current issue on the market is the lacking standardized definition of what a sustainable product is. Every customer has a different opinion leading to different demands on product quality. This can, in part, be explained by the differing levels of knowledge among the customers. Some are simply not as educated or updated within the area. Therefore, significant time and energy is spent on educating the customers and ensuring that their demands are met by the company. This problem has been reoccurring for this company and is emphasized by employee D saying:

"When each customer comes up with their own list of requirements, it's a huge job to try to adapt to it. They are not always completely up to date or competent in the field either. [...]

Then you have to try, in an educational way, to explain what we do, how it covers what they ask for and maybe that something they ask for does not really go together with other requirements they have made [...].”

- *Employee D*

When asked about the reasons behind the incorporation of ESG in investment decisions, employee D mentioned multiple aspects: legislation, risk mitigation and stakeholder pressure. In addition to these factors, employee D emphasized the importance of sustainability throughout the entire product development process. The choice of suppliers is central in the pursuit of a sustainable value chain. Company B carefully evaluates and controls their suppliers, which now has become convenient as many of their suppliers, who previously were situated in Asia, are now based in Eastern Europe.

“In our entire value chain, we must stand up for something that is good. Of course, we think it will help us in our marketing and our sales. [...] But once you have decided that (the investment) should be green [...], you get into how we should develop this product so that it is as sustainable as possible throughout the entire chain.”

- *Employee D*

4.3. Risk mitigation

What can be defined as risk mitigating actions is up for discussion. In this paper, it mainly covers actions taken in accordance with current and future laws and regulations, as well as to reduce reputational risk and improve image. This is based on previous research mentioned in the theoretical development where similar risks are discussed.

Company A

When discussing laws and regulations, one of the most important frameworks mentioned by employee C is the EU taxonomy for sustainable activities. He describes the EU taxonomy as

“[...] a fairly new perspective is sustainable finance. In the past, sustainability reporting has been quite a lot about “what impact do we have on the outside world, how much do we emit to e.g., water or atmosphere. Nowadays it’s possible to isolate one or more business activities

that are considered green and report back revenues and investments to that activity. This type of reporting triggers completely different stakeholders."

- *Employee C*

A third dimension of the taxonomy in addition to the aspect of the business' effect internally and externally, is the financial reporting. Employee C stated that when this financial dimension is included, it is possible to determine what type of business company A is operating and what segments can be classified as so-called green.

Since the EU taxonomy is a new framework, there is no praxis in place. This is one of the framework's most prominent shortcomings, according to employee C. Currently, guidelines can be circumvented by organizations meaning that the level of self-criticism is important for determining the effectiveness of the EU taxonomy. Certain companies might follow the guidelines more strictly compared to others, leading to a skewed reporting of green investments. This matter of subjectivity and self-evaluation can limit the opportunity for comparability between companies.

The taxonomy for sustainable activities only focuses on the environmental aspect of an investment, as stated by employee C. Regulations covering e.g., social issues are not included, but discussions are taking place to include these aspects as well in the future. These regulations will most likely not be mandatory for company A to follow since they will only be applied to companies whose operations/products are considered socially beneficial. Employee C believes that regulations covering social aspects will bring value for company A. A social taxonomy might provide insight on how to train personnel and adapt products more efficiently than before through new dimensions such as job opportunities and safety.

It is not only the taxonomy that facilitates green investments and comparability through standardization, but other legislation can also move companies in a similar direction, according to employee C. There are so-called soft and hard laws, with the distinction between what a company should do versus what it must do. The interviewee exemplified soft law as having a goal of zero emissions in the entire value chain, because of a potential punishment of becoming irrelevant in the future. On the other hand, hard laws are for example the legal requirements to decrease emissions. As stated by employee C, both the soft and hard laws are aligned with what the taxonomy is ultimately trying to achieve, to decrease emissions.

Company B

Since company B is not within the scope of the EU taxonomy, they are not expected to align with the EU's newly established standards. Company B is not connected to a specific standard and are committing to their vision based on the UN 2030 Agenda, essentially halving their environmental impact by the beginning of next decade. However, employee D argued that there is a risk for company B to follow a framework that is too standardized. Without a standardized framework, the goals might become too unspecified, whereas aligning their sustainability goals directly with specific standards might cause them to become too square. According to him, the current rules, and regulations applicable for them are not sufficiently designed to standardize their sustainability work which is why company B implemented their own tailormade framework for their operations.

One negative aspect with the current rules and regulations not being fully standardized, is potential market confusion. Employee D brought up how players on the market can have different views on what sustainability is. Not all of them know what is important to them, and how different sustainability aspects relate to each. With this, he expressed a wish that the work towards standardization continues, whether it be through the EU, or through the help of other organizations, to help prevent shortcomings like these in the future.

Besides the already mentioned regulations, the company also follows ISO-standards and certain safety regulations. Two of the most prominent EU directives that company B have to follow are the regulations REACH and RoHS. Employee F stated that compliance with current laws and regulations is of importance but does not have a significant influence over their current product decision-making processes. What instead is a more significant factor is satisfying customer demands. Employee E expects new legislation to demand a certain level of sustainability addressed in their operations to be eligible for public and private procurements. Therefore, to ensure longevity, sustainability work should not be neglected or deprioritized.

"We will in one way, or another be affected by the demands. The purchasers are, by their nature, quite clear, [...]. There are must-have and should-have requirements in procurements. Some of those aspects just have to be fulfilled. If you do not do that, then you are gone from the procurement process."

- *Employee E*

Due to the nature of the company B's products, they have to maintain a positive public image. Employee D mentioned that if they are not able to showcase that they are at the forefront of sustainability, it would appear contradictory to their customers. Therefore, it is important both to produce good products, and do so sustainably to maintain the company's image. He exemplified how company B aims to mitigate reputational risk by mentioning that their customers have certain expectations of them.

"People want to associate our products with something that does good, both for individuals and for society."

- *Employee D*

4.4. Value creation

Value creation is of high significance for many firms and can be created in different ways, such as offering competitive prices or improving the quality of a product or service. This could benefit a firm in terms of e.g., market share gains. In this paper, value creation will be in the context of including ESG in investments to see if, and to some degree how, sustainability issues might create value for the firms.

Company A

Employee A mentioned that company A will obtain certain advantages from being ahead of the current legislation. He also stated that legislation concerning sustainability is constantly changing. To act accordingly, employee A emphasized that the company should not commit to being immensely ahead of current legislation as it can be deemed too costly. Since both aligning with, and exceeding, current legislation can easily become too costly, the company aims to only exceed legislation to a degree where it can gain advantages over its competitors.

For company A, the aspect of comparability between internal projects is emphasized. Currently, they can compare projects based on economic effects. But, as employee C stated, it is central to also have the opportunity of comparing projects based on sustainability effects as well. Therefore, company A aims to create a standardized way to compare projects with different sustainability effects. This is shown to be difficult because of e.g., environmental, security and governance issues not being measurable in the same manner. According to employee A, the company can put a price on certain environmental issues such as pollution and emission which is either not possible or very difficult for metrics such as safety. Therefore, in their attempt to include sustainability in the investment processes, the different aspects must be considered separately. Employee B mentioned how the company is evaluating the possibility to introduce internal carbon dioxide prices as a component implemented in their capital budgets. This project, worked on by employee B and C along with external consultants, could potentially provide value in terms of increased project comparability.

"To my knowledge, there is no good way to create a figure that captures the entire sustainability spectrum. However, it has been done for the environment. The way to do this is to set an economic value or cost."

- *Employee A*

Employee C problematized the efforts to decrease the emissions in one part of the value chain. In the interview, he argued that every action might cause a ripple effect due to the complex production processes within the company. Simply put, there are an abundance of components to consider in their production where if one of these gets adjusted to adapt to sustainability, another part of the value chain might be affected negatively. Thus, the efforts could be in vain because of what employee C called complex systemic questions.

Company B

As mentioned, there are certain standards and legislation that the customers expect company B to meet. Nevertheless, the customers are not always certain about what their demands are. To outperform the competitors, it is not always enough to only meet the current demands, according to employee F. Therefore, the firm is constantly studying the customers and competitors' behaviors to identify gaps between supply and demand. Employee F explained this reasoning with the following statement:

"We see that some of our customers demand more sustainable products. If we can provide sustainable products in the form of campaigns and initiatives (currently under development), we would have an advantage on the market as many of our competitors cannot provide those products. In this way, we believe we can gain market shares. Thus, if we can provide more

sustainable products than our competitors, then we have a financial advantage. In this way, one can translate qualitative ESG arguments."

- *Employee F*

By the campaigns and initiatives mentioned above, the company aims to exceed the current legislations and demands from the customers. Employee E mentioned that they expect the current legislations to change in accordance with global climate goals. Because of this, implementing new business models and processes will be required. As an attempt to stay ahead of the competition and gain advantages, company B is working on a new project based on circular economy and reusable material. The intention behind this initiative is primarily long-term market share gains. However, this project is expected to be beneficial from an ESG perspective as well, according to employee E.

One value creating aspect for company B is the focus of attracting the most competent employees. Employee D mentioned how ESG investments could create a sustainable environment within the company attracting a younger generation of employees since the generation appreciates a sustainability-focused firm. Lacking transparency and greenwashing in the form of extensive and well-designed sustainability reports with no actual substance will cause the younger generation to consider alternative employers.

Finally, employee F explained how decisions that are financially motivated often contribute to their sustainability work as well. One instance where company B's value creating commitments correlated with positive ESG work was their change of suppliers. Previously, they had an abundance of suppliers situated in Asia. Because of the increasing transport costs and lead times, measures were taken accordingly, and they moved their Chinese operations to Eastern Europe. Not only did the transition reduce costs, but it also decreased their environmental impact, according to employee F.

"We ultimately believe that the extra investment cost will pay for itself. Maybe not the next day or at this year's PNL, but we are looking 5-10 years ahead, so it should actually be a more profitable business we build."

- *Employee D*

5. Analysis

In this chapter, a discussion will take place regarding if and why ESG investments are considered by the two companies studied. This will be done through the lens of value creation, risk mitigation and stakeholder pressure, as can be seen in our empirical material and theory. Furthermore, similarities and differences will be discussed through a comparison between company A and B. In addition, the empirical data will be evaluated against the theoretical framework to understand whether the empirics fully correspond to the gathered theory.

The first objective was to determine if the companies address sustainability in their investment decisions. This was examined through a discussion regarding the companies' investment processes and the aspects considered by decision makers. It quickly became apparent that ESG factors are considered in both firms' investment decisions. Both company A and B address these issues, while remaining firm on maintaining competitive prices and customer focus. Since both companies do address sustainability aspects in their investment decisions, the analysis and discussion will concern the reasons for their decision to do it.

5.1. Stakeholder pressure

Stakeholder pressure is a relevant aspect on the topic of ESG investing, both in the literature and the empirical findings. Both companies have pressure from their stakeholders to integrate ESG into their investment decisions. As mentioned by Schaltegger and Wagner (2011), stakeholders, like customers, can force a company in a sustainable direction by adjusting demand. In addition, both company A and company B face pressure from competitors and changing legislations which are two common triggers for sustainable innovations. (Schaltegger & Wagner, 2011)

Furthermore, the strong effect that stakeholder pressure can have on a company's operation was summarized by Meixell et al (2015) and is applicable to company A and company B. Both employee A and D explain how customers inform the companies of their requirements by adjusting their demand (Schaltegger & Wagner, 2011). In addition, through regulations and adjustment of demand, both companies must adopt certain goals such as zero emissions throughout the value chain and the UN sustainability targets. Based on the awareness and the adoption of goals, certain changes are made within both companies to meet customer demand.

Some stakeholders are more important than others. Based on the empirical findings, customers are one of the stakeholder groups that is most prominent. Per definition, stakeholder pressure is not unilateral for either company A or company B (Freeman, 1984). Both companies have strict sustainable guidelines that their suppliers must follow to make every step of the value chain sustainable. The stakeholders with the most influence over the companies differ to some extent. The stakeholder applying most pressure to company B is customers. In the case of company A, customers are of an equal importance. However, it is mostly legislators adding most pressure to company A. Due to the nature of their industry and the short-term cost advantages of choosing not to invest sustainably, there are strict regulations forcing all actors to adopt a sustainable investment approach.

Both companies face pressure from customers, but company A faces more stakeholder pressure compared to company B due to the legal requirements they are obliged to follow. This is partially due to the size difference, but also the difference in the environmental impact between the two companies. Przychodzen et al (2016) argue that there is a positive correlation between the amount of stakeholder pressure and sustainable investments. Since company A experiences pressure to a greater extent than company B, the paper from Przychodzen et al (2016) implies that company A would commit to more sustainable investments relative to company B which also appears to be the case.

In the case of stakeholder pressure, the empirical outcome mostly corresponds to the theory. For example, Svensson & Atasayar (2021) argue that stakeholder pressure is one of the most prominent causes for ESG investments among fund managers. Our empirical data shows that stakeholder pressure is relevant to consider in investment decisions for both companies. This corresponds to the study by Godfrey et al (2009) showcasing that if a company is responsive to the needs of stakeholders, the company is less likely to be negatively affected financially.

5.2. Risk mitigation

Previous research mentions risk mitigation as one of the major aspects behind the incorporation of ESG in investment decisions for fund managers. The consensus is that if a company includes ESG in their investment decisions, there is less risk of future economic losses or reputational damage. (Lundström & Håkansson, 2021; Nidumolu et al, 2009 Svensson & Atasayar, 2021) Employee E mentions that if they do not meet customers' sustainability demands, they will be excluded from the procurement process, leading to a potentially lost investment. In accordance with Koller et al (2019), sustainable investments can ensure longevity.

When comparing risk mitigation between the companies, one of the common findings was that both follow certain legislation. However, they do so differently and for different reasons. The legislation that company A and company B follow vary due to the size and industry difference. For example, the newly introduced EU taxonomy for sustainable activities cannot be circumvented by company A whereas for company B, it is not legally binding. Instead, company B emphasized their compliance with the UN 2030 Agenda as well as the EU-directives REACH and RoHS.

Even though the formal guidelines are not legally binding, the difference they make in the operations are significant. By complying with the guidelines, the companies ensure longevity and can remain relevant on the market as there is more demand for sustainable activities in companies' operations (Koller et al, 2019). Due to company A being more affected by legally binding legislation, the non-binding formal guidelines have a more practical effect on company B that adheres to these rules by developing their own tailormade framework.

It could be argued that risk mitigation is the reason company A complies with non-binding legislation more than company B. As stated, company A operates in a sector which has a more negative environmental impact compared to B. Company A emphasizes that it is of the utmost importance for them to be "ahead of the curve" and adaptable to changes in stakeholder demands to stay relevant on the market. Simultaneously, the commitment to non-obligatory laws does not stem as much from environmental aspects for company B. Instead, company B is more affected by image-related issues and is actively working towards a favorable external image. Even though all companies want to present a positive image, the importance is higher when the credibility of their products is affected by the overall image. Nidumolu et al (2009) mentions how a positive external image is both risk mitigating, limiting reputational risk, and value creating since it might reduce costs further on. The reasoning is supported by both Ho (2016) and Przychodzen et al (2016) who mention reputational risk as an important factor to consider to stay relevant and attractive to stakeholders. In conclusion, one can argue that company A mitigates risks by complying with binding, and non-binding, legislations to create sustainable products. Company B, on the other hand, mitigates risks by maintaining their image, primarily by being responsive to their customer needs which is possible through their tailormade framework.

5.3. Value creation

When assessing the link between ESG investing and value creation, the theory is somewhat ambiguous, as stated by Przychodzen et al (2016). On the other hand, Koller et al (2019) argue for a solid linkage between ESG and value creation. Both companies' employees argue that when going beyond requirements of current regulations, it creates value for them in the form of market shares. Through establishing important processes ahead of time, both companies can more easily adapt to any future market changes. In addition, by exceeding minimum requirements, both companies aim to create sustainable products for their customers. The mutual benefit for both the companies and society suggest that they could be classified as sustainable entrepreneurships. (Schaltegger & Wagner, 2011) Since both companies describe a correlation between sustainable investments and value creation, the empirical finding supports Koller et al (2019) rather than Przychodzen et al (2016) and explains the reasons behind the incorporation of ESG in investment decisions.

Some previous literature is, as mentioned, somewhat ambiguous regarding the linkage between ESG investments and value creation. Employee C mentions the complexity of the production processes where all aspects must be considered in order to determine if an investment is sustainable. Based on the definition of value from Rutner and Langley (2000) as something important and desirable, the potential issues mentioned by employee C showcase that a sustainable investment does not automatically have to be value-creating. He exemplifies this when discussing investments in emission decreasing projects where an improvement in one step of the chain might deteriorate another. However, focusing on the whole chain goes against the argument made by Koller et al (2019) stating how one should emphasize a few important goals instead of too many. From this perspective, it is not clear whether company A’s investments will create value in all instances, because of the complex nature of emissions throughout the whole value chain.

Both companies argue that ESG to some extent creates value to the operations when they exceed the minimum requirements on the market, which Nidumolu et al (2009) state as the most beneficial course of action in the context of compliance. The most tangible value is the potential market shares that a company may gain through outperforming their competitors and exceeding current legislation. However, because of the complexity of company A's operations, there are issues with the linkage between ESG and value creation. As employee A mentioned, there is currently no efficient way to capture all sustainability factors in a single metric to determine if a sustainable investment creates value. It is difficult to evaluate different internal projects with different effects on sustainability. Thus, a standardized way to compare projects is necessary according to employee A. To facilitate comparability between projects, company A is, as already mentioned, working on a standardization project. This is a difficult process requiring assistance from external consultants and could possibly benefit from further standardization frameworks like the EU taxonomy. However, the EU taxonomy on its own is not enough, partially due to the lack of praxis since the framework is new, and because of the framework's subjective nature. Since it is possible for companies to evaluate themselves without strict guidelines, comparability based solely on the taxonomy is not reliable enough, neither for external investors nor for internal investments.

The idea of implementing a more standardized process is supported by Christensen et al (2008) who analyzed the negative economic effects of not being innovative. Standardizing ESG factors in a similar manner would arguably improve comparability and showcase a solid link between ESG and value creation, especially stressed by Koller et al (2019). In their standardization project, company A is examining the possibility of adding costs based on pollution and other environmental aspects. Once again, the difficulty of incorporating multiple ESG factors into one criterion is apparent. Company B currently does not work on standardization projects like that of company A. However, according to employee F, they are evaluating the financial effects of projects by examining the possible market shares they gain through sustainable investments. By quantifying ESG information, comparability improves, and the value is more visible.

There is more to value creation than gaining market shares measuring emissions. Employee D believes that ESG investing can facilitate the employment of the younger generation since sustainability work is arguably going to be a more relevant aspect moving forward. Nidumolu et al (2009) argue that a majority of American workforce entrants already consider sustainability when selecting employers, indicating a similar interest in Europe. Finally, Przychodzen et al (2016) state how extensive ESG work can attract superior employees. Based on Rutner and Langler’s (2000) definition of value as something considered desirable or important, creating a sustainable environment is value-creating crucial for the companies’ survival.

One can argue that value creating activities are, in many cases, also executed to mitigate risks and stem from stakeholder pressure. This interrelation is apparent in the empirical data. For example, company B moved production from China to Eastern Europe because of customers putting pressure to facilitate sustainability in the whole value chain. Production in Europe allows for better oversight and control. Simultaneously, this choice could also be considered risk mitigating because it prevents lower future margins and is value creating due to lower transportation and labor costs. In conclusion, the three factors to why ESG is incorporated in investments; value creation, risk mitigation and stakeholder pressure, are often inseparable which can be seen throughout this paper.

6. Conclusion

Through the collection of literature along with new empirical data, we aimed to answer our research questions which are formulated as follows: *Is the increasing focus on sustainability addressed in the manufacturing companies' investment decisions? How does two manufacturing companies differ in their reasons for addressing sustainability?*

Research on the topic of ESG has long been scrutinized and the amount of research on the topic is growing. The aim of this thesis paper was to analyze non-financial sustainability aspects that manufacturing companies integrate into their investment decisions. The research of fund managers provided three main components as reasons why they consider ESG in their investment decisions: stakeholder pressure, risk mitigation and value creation. (e.g., Nidumolu et al, 2009; Przychodzen et al, 2016; Schaltegger & Wagner, 2011; Svensson & Atasayar, 2021) The implications from the research of fund managers were in this paper applied in a different context to analyze if these outcomes were applicable to manufacturing companies as well. The research was utilized as a theoretical framework used to structure and analyze the empirical material.

A thorough discussion of the reasons behind the incorporation of ESG in investment decisions was only possible because both companies considered ESG in their investment decisions. The nature of the companies, being of different sizes within similar industries, yielded further depth to the discussion. To highlight more individual differences between the researched companies, an analysis of the components most significant to fund managers were utilized.

A substantial part of the previous literature focuses on fund managers and their work with ESG. This paper adds to the literature by comparing similarities and differences between two manufacturing companies' reasons for addressing ESG in internal investments. There were several apparent differences between the companies, mainly based on their size and industry difference. These differences were partly determined by what type of stakeholder pressure they faced and the degree of legislation affecting their operations. Company A faced more pressure from legislators due to the nature of their industry. Legislators target industries where the effect will be most tangible, and therefore, not all companies are affected to the same extent. The example mentioned in this paper is the EU taxonomy, only obligatory for firms with the highest contributions to emissions. (EU Commission, 2021) The correlation between stakeholder pressure and sustainable investments argued by both Przychodzen et al (2016) and Schaltegger & Wagner (2011), is in accordance with the empirical material. The shift toward sustainable investments has increased due to more significant stakeholder pressure. The increase can also be seen as a risk mitigating action since they aim to reduce the reputational risk mentioned by Nidumolu et al (2009) and Ho (2016).

We expanded on the concept of value creation compared to the previous literature on fund managers. When discussing investments in the context of a manufacturing company and their operations, value creation is more than just economical value. Aspects such as talent management and comparability between internal projects were, in our empirical material, shown to be significant aspects as well. The role of sustainability in talent management is mentioned by Nidumolu et al (2009) and Przychodzen et al (2016), who suggest that a sustainability focus is crucial for a company's ability to attract and keep the best employees. Another implication from our thesis paper is that the rising sustainability trend affects both manufacturing firms. For example, in the case of company A, it has resulted in a greater need for standardization in order to execute a more in-depth comparison between internal projects. The need for standardization is supported by Christensen et al (2008) who mention the importance of incorporating non-financial metrics in investment decisions. However, the difficulties the firm currently faces indicates that such a commitment requires further research and additional frameworks aimed to facilitate further standardization.

This paper is a qualitative study based on interviews with employees from two companies. The conclusions drawn are based solely on the information in the empirical material compared with previous literature and could be considered too company specific. Therefore, the conclusions should be met with some level of skepticism. Another limitation is that the researched companies could benefit from showing themselves in a positive light. Even though the interviews were anonymous, there is a risk that the answers represent the company's view, rather than their individual ones. In some manner, this potential shortcoming is hard to circumvent and somewhat expected when performing a qualitative study where the empirical material is of an interpretative nature.

Due to the limitations of the paper, more extensive research should be done before more certain conclusions can be drawn. Suggestively, the research should focus more on how ESG is incorporated in investment decisions as it could be a means of implementing standardization in sustainability work. Another potential research area for future research is to research how one could include more companies in the standardization process. Currently, the EU taxonomy is only affecting a certain number of companies, but one question that arises is how a similar framework would be designed for a broader spectrum of companies. Finally, since the findings of this paper is based on manufacturing companies, a similar study researching companies in a vastly different industry could be executed. This could provide further comparability among sustainable investments and deepen the in-depth analysis of ESG.

7. References

Baxter, P. & Jack, S. (2008) Qualitative case study methodology: study design and implementation for novice researchers. *Qualitative report*. 13 (4), 544–559.

Boffo, R., & Patalano, R. (2020). ESG Investing: Practices, Progress and Challenges. *OECD Paris*. https://www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf

Christensen, C. M. et al. (2008) Innovation killers: how financial tools destroy your capacity to do new things. *Harvard business review*. 86 (1), 98–105.

Dubois, A. & Gadde, L.-E. (2002) Systematic combining: an abductive approach to case research. *Journal of business research*. 55 (7), 553–560.

Eccles, R. G. et al. (2017) How to Integrate ESG into Investment Decision-Making: Results of a Global Survey of Institutional Investors. *Journal of Applied Corporate Finance*. 29 (4), 125–133.

European Commission. (2022). EU taxonomy for Sustainable Activities. *European Commission*. Available at: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en [Accessed March 20, 2022].

European Commission, (2021). FAQ: What is the EU Taxonomy and how will it work in practice? *European Commission*. Available at: https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/sustainable-finance-taxonomy-faq_en.pdf [Accessed March 20, 2022].

Freeman, R.E. (1984), Strategic Management: A Stakeholder Approach, Pitman: Boston

Friede, G. et al. (2015) ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of sustainable finance & investment*. 5 (4), 210–233.

Galli, M. & Darboe, L. K. (2021) The ESG Dilemma. *Stockholm: Handelshögskolan i Stockholm, Master Thesis.*

Gibbs, G. (2018) *Analyzing qualitative data*. 2nd edition. London: SAGE Publications Ltd.

Godfrey, P. C. et al. (2009) The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strategic management journal*. 30 (4), 425–445.

Ho, V. H. (2016) Risk-related activism: the business case for monitoring nonfinancial risk. *The Journal of corporation law*. 41 (3), 647–705.

Kallio, H. et al. (2016) Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*. 72 (12), 2954–2965.

Koller, T. et al. (2019) Five ways that ESG creates value. *The McKinsey quarterly*.

Lakin, M. (2008) What's in a name? The roles WEEE, RoHs and REACH play in the environment. *Printed circuit design & manufacture*. 25 (12), 38–39.

Lioui, A. & Tarelli, A. (2022) Chasing the ESG factor. *Journal of banking & finance*. 139.

Lundström, P. & Håkansson, L. (2021) Framing ESG: A qualitative study on ESG integration in investment practice. *Stockholm: Handelshögskolan i Stockholm, Master Thesis*

Lukka, K. & Modell, S. (2010) Validation in interpretive management accounting research. *Accounting, organizations and society*. 35 (4), 462–477.

Meixell, M. J. & Luoma, P. (2015) Stakeholder pressure in sustainable supply chain management: A systematic review. *International journal of physical distribution & logistics management*. 45 (1-2), 69–89.

Nidumolu, R. et al. (2009) Why sustainability is now the key driver of innovation. *Harvard business review*. 87 (9), 57-64.

Qu, S. Q. & Dumay, J. (2011) The qualitative research interview. *Qualitative research in accounting and management*. 8 (3), 238–264.

Przychodzen, J. et al. (2016) ESG Issues among Fund Managers—Factors and Motives. *Sustainability (Basel, Switzerland)*. 8 (10).

Rutner, S. M. & Langley, C. J. (2000) Logistics Value: Definition, Process and Measurement. *The international journal of logistics management*. 11 (2), 73–82.

Schaltegger, S. & Wagner, M. (2011) Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Business strategy and the environment*. 20 (4), 222–237.

Shenton, A. K. (2004). Strategies for Ensuring Trustworthiness in Qualitative Research Projects. *Education for Information*, 22, 63-75.

Svensson, D. & Atasayar, S. (2021) Investment Decisions and ESG - Fund managers' perceptions of ESG information when making investment decisions. *Stockholm: Handelshögskolan i Stockholm, Bachelor Thesis.*

UNEP Finance Initiative. (2011). Universal Ownership: Why environmental externalities matter to institutional investors. *UNEP FI.* https://www.unepfi.org/fileadmin/documents/universal_ownership_full.pdf

8. Appendix

8.1 Interview list

Company	**Position within the Company**	**Interviewee**	**Length of interview**	**Date**
A	Director of Innovation and Sustainability	*Employee A*	~40 & ~35 minutes	21/2-2022 18/3-2022
	Product Manager	*Employee B*	~35 minutes	17/3-2022
	Corporate Responsibility	*Employee C*	~55 minutes	17/3-2022
B	COO	*Employee D*	~35 minutes	1/4-2022
	Finance Business Partner	*Employee E*	~41 minutes	5/4-2022
	CEO	*Employee F*	~35 minutes	9/4-2022

The table above showcases the companies' positions, what the interviewees are called in the paper and how long the interviews were.

8.2 Example questions

Introduction questions

- *Do you agree to the interview being recorded?*
- *Have you signed the consent form?*
- *Is there anything that you want to add before we begin the interview?*
- *Could you describe your occupation and day-to-day responsibilities?*
- *What previous experiences do you have working with investment decisions and ESG?*

Employee specific questions

- *Could you briefly describe the investment process?*
- *Do you utilize ESG in your investment decisions?*
- *Why do you utilize ESG in your investment decisions?*
- *Do you utilize ESG in a formalized way?*
- *Do you face any obstacles in your work with ESG?*

- *Could you describe if and how your sustainability work has been affected by current laws and guidelines?*
- *How do you compare ESG factors with financial factors when making decisions?*