Private Equity’s Value Creation Levers for Green Returns
Three Case Studies of Growth-Orientated SMEs

Greta Björkman & Oscar Schwartz-Blicke

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Examiner: Helene Lidestam
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Abstract

Sustainable investing is an investment trend that has arisen in the past decade. The private equity industry has proven effective in providing financial returns and is increasingly shifting its focus towards green assets. This enables private equity firms to facilitate investors’ demand for financial returns alongside non-pecuniary benefits, such as positive environmental impact. Contrary to other funds, private equity firms use their fund capital to invest as a majority owner in private companies that they see potential in actively improving for a few years. This study intends to demystify private equity’s value creation by studying the private equity firm Alder’s engagements with three selected sustainable portfolio companies, while also suggesting improvements for Alder’s future work.

The study’s research method takes on a qualitative approach, using thirteen semi-structured interviews, to triangulate Alder’s perceived value-added within and between portfolio companies. The analysis takes on an abductive approach and results in four levers of impact used by Alder to create value for its portfolio companies. The suggested levers of impact are: i) Alder funds its portfolio companies’ growth endeavours, ii) Alder strengthens its portfolio companies’ sustainable profile, iii) Alder supplies its portfolio companies with significant process and industry experience, and iv) Alder ensures a scalable governance structure at each portfolio company. Given these levers of impact, the following suggestions are proposed to Alder: i) Alder should exclusively target private-to-private deals, ii) Alder should target industries it has experience in, iii) Alder should clarify the sustainability ambassador role, iv) Alder should include additional sustainability-linked goals in its owners’ agendas, and v) Alder should continue to appoint an external chairman of the board in each portfolio company.

The new suggested levers of impact stem from the finding that the discussion of private equity’s value creation would benefit from departing from the traditional levers of impact, initially promoted by Kaplan & Strömberg (2009). That is, financial, governance and operational engineering, as these are found to be of limited relevance, as private equity’s active ownership seems to be inherently concerned with corporate governance.

Keywords: Private Equity, Value Creation, Active Ownership, Sustainable Investments, Corporate Governance
Acknowledgements

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We wish you an enjoyable reading!

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# Nomenclature

## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DCF</td>
<td>Discounted Cash Flow</td>
</tr>
<tr>
<td>ESG</td>
<td>Environmental, Social, and Governance</td>
</tr>
<tr>
<td>GP</td>
<td>General Partner</td>
</tr>
<tr>
<td>IPO</td>
<td>Initial Public Offering</td>
</tr>
<tr>
<td>IRR</td>
<td>Internal Rate of Return</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td>LP</td>
<td>Limited Partner</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Mergers and Acquisitions</td>
</tr>
<tr>
<td>MOIC</td>
<td>Multiple on Invested Capital</td>
</tr>
<tr>
<td>PE</td>
<td>Private Equity</td>
</tr>
<tr>
<td>PME</td>
<td>Public Market Equivalent</td>
</tr>
<tr>
<td>RDT</td>
<td>Resource Dependence Theory</td>
</tr>
<tr>
<td>SDG</td>
<td>United Nations’ Sustainable Development Goals</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium-sized Enterprise</td>
</tr>
<tr>
<td>WACC</td>
<td>Weighed Average Cost of Capital</td>
</tr>
<tr>
<td>VC</td>
<td>Venture Capital</td>
</tr>
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</table>
1 Introduction

1.1 Background

Climate change poses one of humanity’s biggest challenges, but it also constitutes an aggregate risk to the economy and the financial system (Giglio et al. 2021). In the past decade, global financial markets have experienced exponential growth in sustainable investing (Avramov et al. 2022), particularly concerning environmental issues (BlackRock 2020). There are many investment approaches to this, such as ESG\(^1\) integration and exclusionary screening (BlackRock 2020). Other related investment philosophies include impact investing and socially responsible investing (CFA 2017). While the definitions of such investment trends vary between institutions and stakeholders, what they all seem to have in common is the idea of combining social or environmental positive impact with financial returns to make the world a better place for future generations.

Climate finance is a relatively new and growing field of research, as many activities in climate change economics are in fact financial (Giglio et al. 2021). For example, governments are showing their support in facilitating a green\(^2\) transition by increasing their spending to encourage investments in green industries, such as the 2022 American Inflation Reduction Act (USD 369 billion). Similarly, in Europe, 37% out of the NextGenerationEU Covid-19 package (EUR 800 billion) and the EU’s 2021-2027 cohesion spending (EUR 100 billion) are aimed towards green transition initiatives (Fleming et al. 2023). Alongside fiscal incentive schemes, regulators are imposing stricter guidelines for sustainability reporting. This aims to offer investors a clearer comparison between sustainable investments, to reduce the risk of “greenwashing”\(^3\) and to enable asset managers and advisors to direct capital flows towards sustainable investment products. The most recent of regulations include the EU’s Sustainable Finance Disclosure Regulation (SFDR) in the financial services sector and the EU Taxonomy Regulation, effective from March 2021 and January 2022, respectively (JP Morgan Asset Management 2022).

Sweden has proved innovative in climate finance, including the private equity (PE) industry. In May 2021, the Stockholm-based PE firm EQT AB issued the world’s first sustainability-linked loan in the industry (BNP Paribas 2021). The PE industry has the opportunity to play a significant role in facilitating a green transition by directing capital flows to sustainable private equities (CFA 2017). More importantly, unlike their public market peers, PE firms have a clear advantage in implementing a sustainability agenda (CFA 2017, Eccles et al. 2022). This is mainly due to PE firms’ concentrated equity stakes in their portfolio companies, which enables them to enhance investment returns through active ownership (CFA 2017). In addition to PE firms’ virtual control of their portfolio companies, they have full insight into their portfolio companies’ financial and sustainability performance, for example through extensive due diligence processes upon acquisition and from board meetings (CFA 2017, Eccles et al. 2022). On the contrary, public investors are limited to publicly available information (CFA 2017, Eccles et al. 2022). Furthermore, PE firms’ longer investment horizon, compared to public investors, aligns well with improvements in sustainability matters as it enables a long-term approach to value creation for their investments (CFA 2017, Eccles et al. 2022).

The PE industry is vast, with a total value of USD 7.6 trillion in 2022, and has seen significant growth in the past years, with yearly fundraising of USD 655 billion in 2022 (Averstad et al. 2023). In recent years, due to investor demand, the PE industry has made a shift from viewing sustainability in the light of risk management, to seeing it as an opportunity for value creation (PWC 2021). One significant type of PE investing is growth capital, investing in mature companies to facilitate expansion.

This master thesis report is written in collaboration with Alder, a Swedish PE firm founded in 2008. Alder’s sole investment focus is growth capital investments in small sustainable Nordic businesses. The investment focus on sustainable investment is reflected in the funds’ SFDR classifications, as Article 9 funds, implying that the funds have sustainable investing as an objective

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\(^1\)Environmental, Social and Governance aspects that are used to evaluate a firm’s sustainability profile.

\(^2\)Synonymous with environmentally friendly or contributing with an environmental benefit.

\(^3\)An inaccurate or exaggerated representation of a firm’s alignment with sustainability goals (Matos 2020).
Investigating the levers behind PE firms’ value creation, for different types of sustainable businesses, seems important for understanding the role a PE firm can play in the financial markets and driving the shift toward a more sustainable economy. For a fund like Alder, with sustainability at its core, the conclusions of this report will shine a light on how PE firms can take an active role in growing and improving sustainable business models. Furthermore, this report attempts to bring value and change to Alder’s future work and set an example for the PE industry on how to enable growth in sustainable firms.

1.2 Problem Specification

The financial returns of the PE industry have previously been evaluated and shown to generate large returns (Harris et al. 2014, Brown & Kaplan 2019, Buchner 2020). However, it has been proven difficult to accurately capture the PE industry’s risk-adjusted returns (Korteweg & Westerfield 2022, Gredil et al. 2023), and the level of returns differ depending on PE firm characteristics (Kaplan & Schoar 2005). Investor demand for sustainable assets has paved the way for sustainable investing (CFA 2020) and is currently a topic of interest to PE firms as asset managers (CFA 2017).

Investors and asset managers often motivate investing in sustainable investment products with generating high risk-adjusted returns (Jagannathan et al. 2017, BNP Paribas 2019, BlackRock 2020, Pástor et al. 2022). Confirming this claim, multiple studies have found a non-negative correlation between sustainability performance and financial performance (Whelan et al. 2021, Verheyden et al. 2016). However, sustainable investing, in stocks in particular, faces a major barrier for investment comparison: uncertainty about firms’ sustainability profiles, for example, due to differences in how agents may measure sustainability performance (Avramov et al. 2022). This raises the question of whether investors really get what they think they are paying for and argues for a more in-depth approach to evaluating sustainability efforts.

Financial markets can help to mitigate climate risks, by facilitating investment capital flows towards green projects, away from brown industries and firms (Giglio et al. 2021). As a source of capital aimed at private firms, PE has the opportunity to play an important role in facilitating this, for example, by considering sustainable business practises in their valuation of potential investments (Crifo et al. 2015). Pástor et al. (2022) gives evidence for a general prevalence of a so-called greenium, a green premium, on environmentally responsible assets. Similarly, in the case of venture capital (VC) and PE funds, Barber et al. (2021) show that some investors are willing to forego returns by a lower internal rate of return (IRR) if a fund invests in socially responsible ventures.

How investment firms contribute with value-added to their portfolio companies is a current research topic. Previous studies analyse how VC and PE firms, respectively, create value for their portfolio companies. Acharya et al. (2013) show that 50% of PE funds’ returns come from financial leverage, 34% come from portfolio companies’ improvements, and the remainder comes from sector exposure. Kaplan & Strömberg (2009) and Gompers et al. (2016) categorise PE firms’ main sources of value creation as financial engineering, governance engineering, and operational engineering. Additionally, Biesinger et al. (2020) decompose operational engineering and categorise PE firms’ sources for value creation into operational improvements, top-line growth, cash management, governance engineering, and financial engineering. Furthermore, through the lens of governance, Fredriksson & Klofsten (2001) and Fredriksson et al. (1997) study VC firms’ impact on entrepreneurial portfolio companies, observing a dynamic behaviour across VC firms, that fund managers tend to be more involved when portfolio companies experience issues. PE firms’ specialisation and human capital, through experience, are also sources of value creation according to the literature. Spaenjers & Steiner (2021) show that PE firms perform better as specialists than generalists, and Acharya et al. (2013) show that PE managers’ particular backgrounds correlate with better results in deals related to their previous experience.

To summarise the above, despite that many studies provide evidence for the allegedly non-negative

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4 Synonymous with environmentally harmful.
5 Financial engineering concerns investment valuation, capital structures, and management incentives; governance engineering concerns corporate governance and monitoring; and operational engineering concerns usage of industry and operating knowledge to add value (Gompers et al. 2016).
relationship between sustainability performance and financial performance, little explanation has been given to its channels of causality. Furthermore, few qualitative studies analyse how PE firms create value for their portfolio companies. As such, analysing PE firms’ value-added to their portfolio companies, could have valuable contributions to the preexisting literature, especially considering Alder’s investment focus on firms with environmentally sustainable businesses. This study aims to bring clarity to a PE firm’s role in sustainable investing, taking into account the possibility of variation between three different sustainable portfolio companies.

1.3 Purpose

The purpose of this study is to analyse Alder’s value-creating activities, with regard to Alder’s focus on sustainable investments through growth capital investments in small Nordic sustainable businesses, and how these may differ between portfolio companies’ sustainable business models. This aims to provide Alder with insights on how Alder can improve its value-increasing active ownership.

1.4 Research Questions

This study aims to fulfil its purpose by answering the following research questions:

1. What is the perceived value-added of Alder’s active ownership, according to both Alder and three sustainable portfolio companies, and how is this realised at the company level?

2. Based on Alder’s perceived value-added and the pre-existing literature, what key insights can be identified for improving Alder’s future work?

Each portfolio company’s investment case can be considered foundational for understanding Alder’s value-creation at each portfolio company. Therefore, this study also explores each case study’s investment case, as reflected in the results and analysis. With regard to the study’s purpose, Alder invests in sustainable businesses and all three case studies have sustainable business models. Therefore, value-creation and sustainability are closely linked and sustainability is studied like any other firm characteristic.

1.5 Delimitations

This study is written in collaboration with the PE firm Alder. From a case study point of view, it analyses Alder’s value-added to three, out of ten, of Alder’s portfolio companies. The analysis framework for PE firms’ channels of value creation is heavily influenced, but not limited to, the levers of impact suggested by Kaplan & Strömberg (2009) and Gompers et al. (2016). That is financial engineering, governance engineering, and operational engineering. In the context of this study’s purpose, value refers to investor value, as opposed to value to employees, customers, and other stakeholders. Alder’s value-creating activities will not be measured in exact terms, however, they are assumed to contribute to a higher valuation at exit, thus generating investor return.

Additionally, this paper is of a qualitative nature and will thus not quantify results from the study. It takes on a causal and explorative approach to provide an understanding of Alder’s value creation. The analysis is based on interviews with selected representatives from both Alder and selected portfolio companies. From Alder, interviews are limited to the deal team (represented by a junior member and a partner) and the sustainability officer. From each portfolio company, interviews are limited to key management and employees, that is CEO, CFO, and the sustainability ambassador.

Alder is a small PE firm, which invests in small and medium-sized enterprises (SMEs). Therefore, the results and insights from this study should be interpreted in the context of this investment focus, which poses a limitation for this study’s generalisability.
1.6 Outline

This report is structured as follows. Section 2 provides background to Alder, the selected portfolio companies, and PE investing. It also clarifies the concept of sustainable investments and key regulatory frameworks. Section 3 covers the pre-existing literature and theory about PE firms’ value creation for their portfolio companies, divided into the most common strains of literature. It outlines the theory and previous studies upon which the interview questions are formulated and subsequent analysis is based. Additionally, it aims to give the reader the necessary insights to understand and critically assess the studied topic. Section 4 explains the rationale and key steps of the scientific research method adopted in this study. Section 5 presents and analyses the study’s findings and relates them to the most relevant literature topics. Section 6 discusses the most important findings of this study and concludes the report with answering the research questions. This section also suggests topics for future research.
2 Introduction to Alder, Case Studies & PE Investing

2.1 Alder

Alder is a Stockholm-based PE firm and investment fund management company. It was founded in Stockholm, in 2008, with the purpose of developing Nordic sustainable technology companies. According to Alder’s founders, many companies were at the forefront of technology development but could benefit from more aggressive investments to help accelerate growth and strategic development. As of today, Alder has EUR 250 million in assets under management (AUM). So far, Alder has raised two funds, see additional details in Table 1. Alder Fund I was raised in 2010, and is now fully invested in nine companies, and Fund II was raised in 2018. To this day, Alder has done seventeen platform investments and sixty add-on acquisitions. The funds’ gross multiple on invested capital (MOIC) of realised investments has been approximately 4x.

The PE firm’s focus is buyout in growth capital investments, buying the majority of shares in mature private companies with proven business models. Target companies have profitable growth and revenues between SEK 100-750 million. All portfolio companies contribute with some environmental benefit, by Alder referred to as ”positive impact”. This can be, for example, resource efficiency such as reduced energy consumption, reduced emissions to air and water, and reduced waste. Primarily, Alder invests as a majority stakeholder in sustainable technology companies in the Nordic region, with a secondary focus on the DACH region, and selectively in the rest of Europe.

As an active owner, Alder aims to contribute to the portfolio company with skills, capital, a broad network of industrialists, and experts to strengthen portfolio companies’ advisory boards by providing strategic advice. Alder’s ambition is to expand and develop its portfolio companies, in partnership with its management and board, to create long-term investor value, but also value for employees, customers and other stakeholders. This development may include geographical expansion, product development, acquisition of complementary businesses or technologies, and more efficient internal processes. Upon acquisition, Alder and the portfolio company jointly formulate strategic goals. Once these have been met, Alder’s commitment has been fulfilled and the company is divested through sale, to a financial or strategic buyer, or an initial public offering (IPO) on the stock market.

Table 1: An overview of Alder’s funds

<table>
<thead>
<tr>
<th></th>
<th>Alder Fund I</th>
<th>Alder Fund II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vintage Year</td>
<td>2010</td>
<td>2018</td>
</tr>
<tr>
<td>Fund Size (MSEK)</td>
<td>1 116.8</td>
<td>1 527.8</td>
</tr>
<tr>
<td>No. Platform Investments</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

2.2 Selected Portfolio Companies

The following three companies, Samon, Scanacon, and SI, form the basis of this study. They are selected as case studies as they represent portfolio companies with distinctly different sustainable business models, operating in different industries. Furthermore, these case companies entered Alder’s portfolio, Alder Fund I or II, at different points in time and they are currently enrolled in different growth journeys with Alder.

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6 The equivalent of 2 657.4 MSEK, converted with the average exchange rate of 10.6296 SEK/EUR for the period of 1 January 2022 to 31 December 2022 gathered from the European Central Bank (2023).
7 \( \text{MOIC} = \frac{\text{Realised Value} + \text{Unrealised Value}}{\text{Total Initial Investment}} \) and \( \text{MOIC of Realised Investment} = \frac{\text{realised Value}}{\text{Total Initial Investment}} \)
2.2.1 Samon

Samon is the first case in this study. It is a provider of gas detection systems and related control solutions, for safe and cost-effective gas detection. By providing gas detection solutions, Samon’s mission is to avoid harm to people, the environment and equipment caused by gas leaks. The company was founded in the town of Vellinge, southern Sweden, in 1990. It is still headquartered in Sweden, but operates worldwide through its distributors, serving the refrigeration industry and other industries which may be impacted by dangerous gas concentrations such as industrial, commercial, and marine applications. Samon was acquired by Alder in August 2020 and, upon entry, two of Alder’s senior representatives joined Samon’s board of directors. Alder also appointed an external chairman of the board as well as a new CEO. At acquisition, a sustainability ambassador was appointed to tend to sustainability reporting matters. Please see Table 2 for additional details about these key strategists.

Table 2: An overview of Samon

<table>
<thead>
<tr>
<th></th>
<th>Samon</th>
</tr>
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<tbody>
<tr>
<td>Acquired</td>
<td>August 2020</td>
</tr>
<tr>
<td>Turnover</td>
<td>2020 / 40 MSEK and 2022 / 179 MSEK</td>
</tr>
<tr>
<td>Fund</td>
<td>Fund I</td>
</tr>
<tr>
<td>CEO</td>
<td>Previously Head of Energy and Industry at Hilti in the professional construction industry, and background as an engineer and manager at ABB. MSc in Industrial Engineering &amp; Management, Linköping University.</td>
</tr>
<tr>
<td>External Chairman</td>
<td>Previously CEO at Perten Instrument Group, a food analysis company which was sold to an American firm in 2014.</td>
</tr>
<tr>
<td>Alder Board Member A</td>
<td>Founding partner at Alder and has a background in academia as a Professor and head of a Nordic research institution within Applied Environmental Sciences at Stockholm University. He has advisory experience with private and institutional investors within the environmental technology sector and has worked with research organisations and innovation at a national and international level.</td>
</tr>
<tr>
<td>Alder Board Member B</td>
<td>Investment Director at Alder and joined Alder in 2012. MSc in Finance, Stockholm School of Economics.</td>
</tr>
<tr>
<td>Sustainability Ambassador</td>
<td>Has extensive experience in Samon and works with internal matters such as billing and logistics.</td>
</tr>
</tbody>
</table>

2.2.2 Scanacon

Scanacon is the second case in this study. It is an engineering and manufacturing company, specialised in acid management for the production of a variety of metals. Its business model is both project and service based, and the business’s sustainability niche is offering the ability to recycle and reuse acids and materials from its operations. They do this by manufacturing equipment for monitoring acid solutions, providing technology to recycle contaminated acids, and engineering systems for handling and storing acid solutions. This aims to minimise production costs by reducing the amount of acids and chemicals used, help the environment by recycling hazardous acid wastes, and minimise health and safety risks to factory staff. The company was founded in 1982, currently has 35 employees, and operates in Stockholm, Ohio, Hong Kong and Shanghai. Scanacon was acquired by Alder in 2018. Since then, Alder has appointed an external chairman of the board and a new CEO. Additionally, two of Alder’s senior representatives have joined the board of directors. At acquisition, a sustainability ambassador was appointed to tend to sustainability reporting matters. Please see Table 3 for additional details about these key strategists.
Table 3: An overview of Scanacon

<table>
<thead>
<tr>
<th>Scanacon</th>
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<tbody>
<tr>
<td>Acquired</td>
<td>October 2018</td>
</tr>
<tr>
<td>Turnover</td>
<td>2020 / 111 MSEK and 2022 / 159 MSEK</td>
</tr>
<tr>
<td>Fund</td>
<td>Fund II</td>
</tr>
<tr>
<td>CEO</td>
<td>More than 20 years of operational and international experience from ABB Group and Outokumpu. Previous senior positions include Regional Director SEA Measurement &amp; Analytics, Global Product Line Manager Force Measurement and leading positions in business development and sales with global responsibility. MSc in Mechanical Engineering, Luleå University.</td>
</tr>
<tr>
<td>External Chairman</td>
<td>Experience as chairman and board member of several Nordic industrial firms and currently chairman of two additional firms.</td>
</tr>
<tr>
<td>Alder Board Member C</td>
<td>Partner at Alder and has experience from the investment firm Ratos and as a management consultant at Bain &amp; Company. MSc in Business Administration, Stockholm School of Economics.</td>
</tr>
<tr>
<td>Alder Board Member A</td>
<td>Previously described, see Samon Table 2.</td>
</tr>
<tr>
<td>Sustainability Ambassador</td>
<td>Has a background in environmental technology and extensive experience in R&amp;D at Scanacon and at a major customer of Scanacon.</td>
</tr>
</tbody>
</table>

2.2.3 SI

SI is the third case in this study. It is a firm that specialises in building automation solutions by offering installation and software solutions to energy automation systems and other services. The company was founded in 1996, currently employs 225 people and is headquartered in Varberg, Sweden. It operates in 14 offices around Sweden. SI was acquired by Alder in 2021. Since then, Alder has had the presence of two board members and has appointed an external board of directors to SI. At acquisition, a sustainability ambassador was appointed to tend to sustainability reporting matters. Please see Table 4 for additional details about these key strategists.

Table 4: An overview of SI

<table>
<thead>
<tr>
<th>SI</th>
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</thead>
<tbody>
<tr>
<td>Acquired</td>
<td>March 2021</td>
</tr>
<tr>
<td>Turnover</td>
<td>2020 / 150 MSEK and 2022 / 349 MSEK</td>
</tr>
<tr>
<td>Fund</td>
<td>Fund II</td>
</tr>
<tr>
<td>CEO</td>
<td>Previous CEO of Prosero Security Group, Chairman and Co-founder of Voltiva AB, other chairman and advisory positions and previously Manager at Bain &amp; Company, Stockholm. MSc in Supply Chain Management, Linköping University, and MSc in Finance &amp; International Business, Stockholm School of Economics.</td>
</tr>
<tr>
<td>External Chairman</td>
<td>Previously CEO of Assa Abloy and has experience leading other organisations in the security industry.</td>
</tr>
<tr>
<td>Alder Board Member E</td>
<td>Partner at Alder and has previous experience from the PE industry and the financial advisory industry through working at 3i, Goldman Sachs, Morgan Stanley and Alfred Berg Fondkommission.</td>
</tr>
<tr>
<td>Alder Board Member F</td>
<td>Partner at Alder and has previous experience from the PE industry and financial advisory industry through working at Karnell and Morgan Stanley. MSc in Business Administration, Stockholm School of Economics.</td>
</tr>
<tr>
<td>Sustainability Ambassador</td>
<td>Has extensive experience working at SI and is responsible for business development of Scanacon’s Energy and Operations division. BSc in Energy Engineering.</td>
</tr>
</tbody>
</table>
2.3 The PE Firm & PE Fund

PE investing is when a PE firm raises capital through a PE fund to buy and manage a private company before selling it (Kaplan & Strömberg 2009). The companies that the fund invests in are commonly, and in this study, referred to as platform investments or portfolio companies. Similarly, PE firms are also referred to as PE investors. Typically, each portfolio company is managed by a dedicated deal team. On average, the deal team consists of three to four PE firm representatives, independent of the PE firm’s size (McKinsey 2014). The firm’s partners, the responsible for managing the PE firm, are commonly referred to as general partners (GPs) (Kaplan & Strömberg 2009). Similarly, the PE fund’s outside investors are commonly referred to as limited partners (LPs) and may include both wealthy individuals and institutional investors, such as pension funds, endowments, and insurance companies (Kaplan & Strömberg 2009). Figure 1 illustrates the relationship between the PE firm, the PE fund, the portfolio company, and the associated stakeholders, such as LPs and GPs.

Furthermore, PE funds tend to be closed-end and have a fixed lifetime (Kaplan & Strömberg 2009). In other words, the funds have a fixed number of shares and the investors cannot withdraw their committed funds during their lifetime, on average 10 years (Kaplan & Strömberg 2009). Often, the PE firm has up to five years to invest the fund capital in equity, and an additional five to eight years to return the capital to the fund’s investors (Kaplan & Strömberg 2009). The LPs have little say in how the GPs deploy their funds, as long as they follow the fund agreement and its covenants, such as limitations on how much fund capital that can be invested in each company (Kaplan & Strömberg 2009).

The fee structures of PE funds incentivise GPs to achieve high returns to their investors, both directly and indirectly, as high returns signals an ability to raise subsequent funds to earn additional fees (Gompers et al. 2016). Kaplan & Strömberg (2009) explain that there are three main ways the PE firm receives financial compensation for its efforts, see Figure 2. Firstly, by charging a management fee as a fraction of the fund’s initially committed capital, for example 2%. Secondly,
by charging a percentage fee of the capital employed as investments are realised. Thirdly, through extracting a share of the fund’s profits, also known as carried interest or carry, usually 20%. The 20% fee of a fund’s profit incentivises the GP to create value for their portfolio companies, in order to achieve strong financial results for the fund’s investors (Moonfare 2023). However, there is usually a hurdle rate, the minimum return that a fund must achieve for its investors, that must be achieved before the GP can share the fund profits. Hurdle rate may also be known as preferred return or required rate of return. Lastly, some PE firms charge their portfolio companies deal and monitoring fees (Kaplan & Strömberg 2009).

![Figure 2: Structure of Fund Profits and PE Fee. Note: Dummy rates for illustration only.](image)

It is worth noting that this study focuses on buyout and growth capital investments, as this is the investment focus of the studied PE firm Alder. That is, buying majority control in mature and profitable businesses to help aid expansion. However, many definitions exist for classifying a PE firm. Kaplan & Strömberg (2009) distinguishes between PE firms and VC firms, and claim that VC firms typically invest in young and emerging companies as a minority investor, purchasing a minority share of stocks, with a shorter investment horizon than the average PE firm (Kaplan & Strömberg 2009). On the other hand, Block et al. (2019) claim that PE firms can be distinctively categorised into VC, LBO, growth equity, family offices, and business angels. According to their definition, growth capital, invests in companies with large growth potential and a strong management track record. They put relatively more emphasis on profitability than VC firms or business angels, but relatively less emphasis on this compared to LBO funds. Furthermore, Block et al. (2019) explain that growth equity funds tend to avoid investing together with other PE firms, to consolidate their control of the acquired firm.

### 2.4 Buyouts & LBO

The term used to refer to when a company acquires another company is commonly referred to as a buyout, for example when the PE firm acquires a portfolio company. This is the acquisition of the controlling interest in a company. Simply put, purchasing more than 50% of shares in the target company. Typically, PE firms acquire portfolio companies through a leveraged buyout (LBO). LBO is a transaction type in which a company is acquired by a specialised investment firm using a significant fraction of outside debt financing compared to the portion of equity (Kaplan & Strömberg 2009). The debt typically includes a senior and secured loan portion, and a junior unsecured portion that is subordinated to the senior debt (Kaplan & Strömberg 2009).

There are different types of buyouts and these include for example public-to-private deals, private-to-private deals, divisional buyouts, and secondary buyouts (Boucly et al. 2011, Lowenstein 1985). In a public-to-private deal, also known as take-private, a target company has been publicly traded and is taken private by a PE firm. This has traditionally been conducted by larger PE firms (Kaplan & Strömberg 2009). In a private-to-private deal, the previous owner of the target company, the seller, is an individual, typically a family. In divisional buyouts, the seller is, or is part of, a conglomerate. As for secondary buyouts, the seller is another PE firm, as discussed in preceding Section 2.5. Furthermore, a closely related term to LBO is management buyouts (MBOs). MBO is a transaction type in which company management purchases a target company from its shareholders. MBOs appeared in the 1970s and involved take-privates of small firms that had gone
public in the 1960s and early 1970s and that wished to go private when the stock market and the benefits of being public declined (Lowenstein 1985).

Since this study concerns value creation, it is worth noting that LBOs and the PE industry traditionally have a poor reputation with regards to leveraging portfolio companies (Kaplan & Strömberg 2009). This largely stems from a historical perspective, from the first LBO boom in the 1980s, when the PE industry was known to use heavier leverage than today (Kaplan & Strömberg 2009). Furthermore, many PE firms leveraged their acquisitions with junk bond financing (Kaplan & Strömberg 2009). This became particularly problematic when the junk bond market crashed, leading to default and bankruptcy for many companies (Kaplan & Strömberg 2009). Over time, leverage has played a diminishing role in financial sponsors’ transactions. Today LBO deals are financed with around 40-45% equity, compared to the late 1980s when it was not uncommon for PE firms to finance acquisitions with only 10% equity (or less) (AlpInvest 2021). An explanatory factor for this is the recession in the early 1990s, which lead to a significant increase in defaults and higher risk premiums in the leveraged finance markets, making leverage a less desirable source of funding (AlpInvest 2021).

Moreover, it is worth noting that the PE industry has made a shift towards including the European market and smaller businesses. In the first LBO boom, transactions were predominantly large and in mature industries; public-to-private deals accounted for the vast majority of transaction value (Kaplan & Strömberg 2009). However, after the fall of the junk bond market in the 1980s, the PE activity changed to include smaller private buyouts and new industries, such as information technology, financial services, and healthcare. PE activity also spread, from predominantly the US over to Europe (Kaplan & Strömberg 2009). It is in this new landscape that PE value creation is being studied in this report.

2.5 The PE Investment Process

In a sense, the investment process explains the context and time horizon in which the PE firm operates to create value for its portfolio company. The literature suggest many value-creating strategies employed by PE firms (Kaplan & Strömberg 2009). This study refers to the investment process as divided into three phases, inspired by Alder’s own denotation of their investment process: entry, ownership, and exit. This section aims to provide an understanding of the various decisions that the PE firm makes before, during, and when selling a portfolio company.

Entry refers to the stage before a portfolio company is acquired. According to the literature, PE firms have been shown to devote considerable efforts to analyse investment opportunities, often closing the deal with less than four for every hundred opportunities considered (Gompers et al. 2016). More specifically, Gompers et al. (2016) report that smaller PE firms tend to be more selective in which companies they consider for acquisition, potentially due to a smaller fund size or fewer resources available for considering investment opportunities. Generally, there are two ways in which the PE firm can source portfolio company deals: proprietary or through an auction process. Gompers et al. (2016) find that PE firms attempt to find proprietary deals, i.e. finding acquisition targets that are not up for sale. By doing so, PE firms can avoid auctions with other buyers. Furthermore, Gompers et al. (2016) find that proprietary deals are relatively more important and prevalent for smaller PE firms compared to bigger PE firms. Generally, PE firms tend to rely heavily on sourcing deals themselves and from investment banks, as opposed to sourcing from the management of potential acquisitions, PE firms’ executive network, deal brokers or other PE firms (Gompers et al. 2016). According to the study, the factors PE firms consider most important when sourcing a platform investment are the company’s business model and competitive position. However, other significant aspects include the management team, the ability to add value, and firm valuation.

After the entry follows ownership. This is the phase during which the PE firm holds a majority stake in the acquired portfolio company. In the literature, this is also referred to as the holding period (Biesinger et al. 2020). Previous research finds that PE firms inflict operational changes to their portfolio companies during this period (Kaplan & Strömberg 2009, Biesinger et al. 2020). Biesinger et al. (2020) refers to this as PE firms’ value creation plans (VCP) and fills the literary
void on systematic evidence for what these plans contain and whether they improve company operations, or investor returns. Interestingly, Biesinger et al. (2020) find that PE firms’ value creation practices have long-lasting effects, as most of the operational changes persist in the next five years beyond the PE firm’s exit. This feeds into the claim by Kaplan & Strömberg (2009), that PE has a "permanent component". Not surprisingly, Biesinger et al. (2020) also conclude that what matters the most for value creation and generating investor returns is not the ex-ante selection of strategy, but rather, the extent to which plans are executed. In simple words, the ability to fulfil plans seems relatively more important than the value creation plans, per se. As such, they suggest that LP investors should base their fund selection on a successful track record of plan execution.

Lastly, exit is the stage at which the PE firm sells its stake in the portfolio company. This is a crucial decision point for PE firms, who ponder how and when to exit (Jenkinson & Sousa 2015). In a sense, this is a point in time when PE firms’ value creation at their portfolio companies materialises. The value materialises in the shape of a return to investors and the PE firms’ goal is achieving the highest exit price possible for their platform investment (Jenkinson & Sousa 2015). According to Gompers et al. (2016), most PE firms expect to sell 50% of their portfolio companies to strategic buyers, i.e. another company operating in overlapping markets hoping to realise synergies with the acquisition. The remaining 50% of portfolio companies are expected to be sold to either a financial buyer, i.e. another PE firm, or in the fewest of cases through an IPO.

Although IPOs cannot be considered the most common exit route, the pre-existing literature tends to portray IPO as the preferred choice, a matter addressed in Jenkinson & Sousa (2015). Jenkinson & Sousa (2015) study an extensive set of European PE exits, 1,022 portfolio companies between the years 2000-2014, and provide a contrasting narrative to the glorification of IPOs, especially highlight the prevalence of secondary buyouts. More specifically, Jenkinson & Sousa (2015) find that companies that can operate with high levels of debt may be more likely to undergo a secondary buyout, as they are suitable for an LBO. Similarly, related to company characteristics, Bienz & Leite (2008) find that highly profitable companies that require less monitoring are more likely to exit through an IPO, and consequently, less profitable companies are more likely to exit via a sale. Regarding the exit timing, Jenkinson & Sousa (2015) show that PE firms maximise their value by taking advantage of windows of opportunity, created by market conditions. For example, a favourable loan market or a cold IPO market increase the likelihood of a secondary buyout. However, the phenomenon of secondary buyouts is by critics referred to as pass-the-parcel deals (Jenkinson & Sousa 2015, Degeorge et al. 2016), implying that the true company value remains disguised when a portfolio company is sold between PE firms, but that it may be revealed if the company were to be sold to for example a strategic buyer or through an IPO. Interestingly, when looking at fund characteristics, Jenkinson & Sousa (2015) find that experienced PE firms tend to sell to less experienced firms and that secondary deals tend to enter the purchasing fund later than primary deals, suggesting that secondary purchases may be a quick way for PE firms to finish committed capital.

2.6 Refining & Defining Sustainable Investing

2.6.1 Defining Sustainable Investments

Despite the corporate interest in ESG, promoted by for example consultancy firms and banks in an attempt to capture sustainability in a corporate setting, sustainability is a quality just like other characteristics. As a general concept, sustainability is commonly described as concerning economic, environmental, and social sustainability (CFA 2017). However, incorporating these aspects into investment practices, as an investment strategy, gives rise to many names for such an approach. For example, it is common for studies to use the terms sustainable investing, impact investing, and ESG investing interchangeably (CFA 2017).

ESG investing refers to the investment practice of using criteria that consider how well a corporation considers environmental, social, and governance (ESG) aspects (CFA 2017). This is commonly done using ESG ratings, delivered by a variety of rating agencies (Avramov et al. 2022). ESG in-
vesting grew out of previous investment philosophies, such as socially responsible investing (SRI), with the main difference being that ESG focuses on finding value, rather than using negative screening to exclude investments (CFA 2017).

Similarly, impact investing can be seen as another approach to sustainable investing, see Figure 3. Impact investing refers to investments in companies, organisations, and funds, that intend to generate ‘social and environmental impact alongside a financial return’ (CFA 2017). This definition aligns closely with EU’s SFDR regulation, described in the subsequent Section ??.. As seen in Figure 3, impact investments may deliver a range of financial returns, depending on investors’ strategic goals. According to CFA (2017), the majority of impact investing funds deliver returns of at least market rate, which is beneficial to investors who rationally expect market rate returns to justify their financial investment in an impact investment fund. However, it is worth noting that financial performance data of PE impact investing funds are scarce (CFA 2017).

![Figure 3: The Sustainable Investment Spectrum (CFA 2017).](image)

Alder describes their investment focus as to ’generate attractive returns by owning and developing companies that improve the long-term sustainability of our environment’. In the context of the above-mentioned definitions, Alder’s investment strategy is interpreted as environmental impact investing, or environmentally sustainable investing in this study.

2.6.2 Key Regulatory Frameworks

**SFDR**

The Sustainable Finance Disclosure Regulation (SFDR) is an EU regulation which came into effect on 10 March 2021 (Finansinspektionen 2022a). It requires financial market participants and financial advisors to make disclosures to their end investors, which they act as an agent to (Finansinspektionen 2022a). The regulation standardises sustainability reporting and is a framework for fund managers to environmentally classify their funds (SEB 2023). The framework’s categorisation is based on environmental, social, and governance aspects with the aim to increase transparency in investments and prevent green-washing to enable sustainable investments (SEB 2023). The highest environmental classification is Article 9 funds. These are funds that exclusively invest in sustainable investments (Finansinspektionen 2022a). According to the SFDR³ a sustainable investment is defined as ’investment in an economic activity that contributes to an environmental objective or

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³SFDR article 2(17)
a social objective, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices’ (Finansinspektionen 2022a).

EU Taxonomy

Another EU regulation is the EU Taxonomy, which came into effect on 1 January 2022 (Finansinspektionen 2022a). It provides criteria for whether economic activities can be regarded as environmentally sustainable and aims to clarify for investors the extent to which their investments should be considered environmentally sustainable (Finansinspektionen 2022b). The taxonomy has six environmental objectives:

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

In addition to the environmental goals, the regulation also contains requirements relating to those set out in the SFDR. Currently, only some market participants, such as larger and public firms, are required to report according to the framework. Although only the first two goals are mandatory during 2022, additional goals will be incorporated in sustainability reporting from 2023 onwards.

GHG Protocol

The greenhouse gas (GHG) protocol is an accounting framework for reporting a business’s direct and indirect greenhouse gas emissions (Naturvårdsverket 2023). Emissions are categorised as Scope 1, Scope 2 and Scope 3 emissions, and each scope is defined as follows:

1. Scope 1: First-hand emissions that come from a business’s operations, for instance, car emissions that come from company vehicles
2. Scope 2: Indirect emissions from the usage of, for example, electricity and heating
3. Scope 3: Other indirect emissions from products and services, further down the value chain, that the business does not own or control
3 Frame of Reference

3.1 PE Performance Persistence - A Sign of Value Added?

PE performance is a debated topic in the literature. Considering PE funds’ high management fees, as compensation for their claimed value-added, it is of interest to understand the industry’s potential for delivering superior returns relative to, for example, the stock market. Measuring PE industry performance has proven difficult and depends on the studied time period and sample of PE firms. What seems to be of large importance is the effect GPs have on the returns of their funds through their previous deal experience and active ownership. Additionally, size and geography seem to predict future performances well, indicating that some PE firms’ performance can be explained by other factors than chance.

Early attempts to measure PE returns include, for example, Ljungqvist & Richardson (2003) and Kaplan & Schoar (2005). Ljungqvist & Richardson (2003) study VC and buyout firms in the years 1981-2001 and find that risk-adjusted returns exceed the S&P 500 benchmark index. In contrast with these findings, Kaplan & Schoar (2005) study returns between 1980-1997 and finds that returns are on average lower than the S&P 500 benchmark index, especially for buyout firms. In addition, Kaplan & Schoar (2005) find GP experience and fund size to correlate positively with fund performance and that PE firms’ previous returns can predict future PE fund performance. Furthermore, Kaplan & Schoar (2005) find heterogeneity in PE firm performance and attributes this to the underlying skill of the PE firms’ GPs. In short, this suggests that the PE performance persistence may be due to PE firm managers’ skills. Given this perspective in the discussion of PE performance, Kaplan & Schoar (2005) theorise that scaling firms is problematic due to the difficulty with scaling human capital.

Similarly to Kaplan & Schoar (2005), Braun et al. (2017) also find persistence of PE returns. However, this study finds a decrease in the persistence of returns in recent years. They attribute this slowdown to the fact that the PE industry has matured and become increasingly competitive in recent years. This performance decline is also acknowledged by Korteweg & Sorensen (2017) who find that, although performance has remained at a high level in recent years, it has indeed declined after 2000, especially among smaller PE firms and PE firms located outside the US. Furthermore, with regards to PE firms’ skill and experience, Biesinger et al. (2020) find that successful execution of PE firms’ value creation plans predicts positive returns. Their findings suggest that PE firms’ planned strategies on average generate firm value, implying that PE firms, on average, add value to their portfolio companies.

Similar to Ljungqvist & Richardson (2003), Harris et al. (2014) study the returns of PE firms, based on cash-flows to and from PE funds in the years 1984-2008, based on LP reporting. This study shows that PE firms outperform the S&P 500 over a PE firm’s lifetime and that the relative over-performance of PE firms compared to the S&P 500 is predominantly positive around the years 1990, 1994 and between 1997-2006. This shows that the performance of PE firms, compared to the market, depends on the studied time period. Brown & Kaplan (2019) also study a similar data set and conclude that PE firms outperform the MSCI All Country World Index each year between 1988-2014. Together, these studies suggest that PE returns seem positive both before and after the financial crisis, but that the performance is also dependant on what reference index that is used.

Attempts to compare returns of PE funds to the market is largely grounded on the public market equivalent (PME) method introduced by Kaplan & Schoar (2005). Attempts to further improve this method have been made by Buchner (2016), by incorporating the capital asset pricing model (CAPM) and factor loadings. Buchner (2020) also address the problem of accurately measuring risk and return from PE investments by modelling interim returns from PE firm cash flows, assuming that PE fund investments increase in value. More recently, Gredil et al. (2023) present a direct alpha (DA) approach to measuring returns of PE funds. Measuring PE returns is an ongoing issue and the infrequent PE reporting inherently causes difficulties with accurately measuring returns throughout a PE fund’s lifetime (Korteweg & Westerfield 2022).
3.2 Sustainability & Value Creation

In contrast to the traditional literature on PE value creation, discussed in subsequent sections, the literature is scarce concerning sustainability performance in PE portfolio management. However, there are studies that investigate the correlations between firms’ financial performance and ESG ratings or Corporate Social Responsibility (CSR) performance. McWilliams & Siegel (2001) discuss the implications of CSR on firms’ business models. They suggest that CSR should be treated like any other investment decision by a firm by weighting potential additional revenues of sociably responsible product or processes against their costs. The study also argues that the additional costs from investing in sociably responsible products and processes should equal the revenue increase, implying that CSR should have a neutral relationship with firm performance. This reasoning seems to hold to a limited extent, considering more recent findings of Gillan et al. (2021).

Gillan et al. (2021) finds that the impact of ESG on firm value and financial performance have mixed results, although many previous studies argue for a positive relationship. This is relatively in line with another literature review, Margolis et al. (2009), that finds a small but positive relationship between ESG and firm performance. The literature’s uncertainty regarding the effects of sustainability holds also in the case of cost of capital, where the sustainability impact has been shown to be both positive, in (El Ghoul et al. 2011), and irrelevant, in (Humphrey et al. 2012). Despite this, investors often motivate their ESG investing with improved returns and asset managers feed into this narrative by promoting their sustainable investment products as providing superior risk-adjusted returns (Pástor et al. 2022).

Although the financial benefit of a firm’s sustainable practices can be regarded as uncertain, Burke & Logsdon (1996) provide a framework for how firms can create long-term value from incorporating CSR into their business models. This study identifies five dimensions of how a firm can strategically improve through CSR initiatives, for example by engaging in new markets and improving productivity. These are: centrality, specificity, proactivity, voluntarism and visibility. Schwartz (2009) show that how firms incorporate CSR into their strategy is largely affected by organisational knowledge and experience, by analysing the three case studies Tarkett, The Body Shop, and Volvo. For instance, in the case of Tarkett, the firm shifted to eliminating asbestos in its products, which resulted in extensive market share gains when regulations against asbestos use materialised in Sweden and Germany in the late 1970s. A central aspect in this was Tarkett’s culture and history of product innovation and the firm’s market knowledge, which strengthened their ability to sense and adapt to forthcoming trends and regulations.

There is a variation in how PE firms take sustainability into consideration. Crifo et al. (2015) examine how 33 PE firms value ESG practices upon acquisition in an auction process. They find that irresponsible ESG practises decrease the PE firm’s target valuation with 10-15%. On the contrary, responsible ESG practises are found to increase the valuation with 2-5.5%. In the study, irresponsible ESG practises are defined as ‘practices below legal and/or community standards’. Consequently, responsible ESG practises are defined as practices above such standards. The results imply that PE firms are cautious with bad ESG practices as they perceive bad ESG practices as relatively more negative than the business upside of good ESG practices. This perspective is supported by Zacccone & Pedrini (2020), who conclude that PE firms see ESG integration as risk-minimising rather than value-creating.

Susi & Jaakson (2020) study the CSR practices of a Baltic PE firm focused on growth-orientated SMEs. They find that the PE firm has a significant focus on incorporating CSR into portfolio companies’ operations, through corporate governance initiatives. The study argues that this is the most effective way of incorporating CSR in growth-orientated firms. Furthermore, the study finds that the PE firm perceives sustainability as a way to create long-term value. Similarly, Crifo & Forget (2013) study French PE firms in 2011 and find that PE firms’ ESG incorporation is most likely because they perceive this as value enhancing, but also as risk-reducing. They also find PE firms’ sustainability-orientation as a differentiation tactic to attract fund capital. This finding is interesting when paired with Barber et al. (2021), who find that impact funds generate an IRR 4.7% below traditional VC funds. Together it suggest a strong interest among PE and VC funds’ LPs in the potential for non-pecuniary benefits of impact investing.
3.3 Financial Engineering & Value Creation

Early literature concerning PE firms’ value creation tends to focus on financial engineering and governance engineering, two intertwined forces used by PE firms in their active ownership of portfolio companies (Kaplan & Strömberg 2009, Gompers et al. 2016). This narrative is heavily influenced by Jensen (1989) who, in the early rise of LBOs in the 1980s, argues strongly in favour of PE firms as a superior form of organisation. He claims that they offer governance structures superior to those available in the public markets, due to their concentrated ownership stakes in portfolio companies, performance-based compensation to management, highly leveraged capital structures, and active governance of their portfolio companies. It is, however, Kaplan & Strömberg (2009) that formally establish the literary notion of financial engineering, prevalent in today’s literature about PE firms’ value creation. According to Kaplan & Strömberg (2009), financial engineering concerns that PE firms tend to pay attention to management incentives in portfolio companies and to leverage the acquired company with debt.

3.3.1 Leveraging Portfolio Companies - Motivation or Arbitraging Capital Markets?

As described above, leverage is commonly seen as an integral part of PE firms’ traditional corporate governance structures for value creation, traditionally viewed as an incentive for management to improve firms’ operating performance. The determinants of buyout firms’ capital structures, the balance between debt and equity financing, is a related and wide literary topic, amongst which two main theories prevail: trade-off theory and market-timing theory.

Trade-off theory can be seen as the traditional capital structure theory (Axelson et al. 2013). Jensen (1986) and Jensen (1989) are some of the first papers to argue that leverage incentivises management to improve a firm’s operating performance. According to them, leverage puts pressure on company management to generate sufficient cash flows to amortise the debt. Due to its required payments, debt can be seen as a relatively inflexible funding compared to equity (Jensen 1989) and this pressure reduces the free-cash-flow problem described in Jensen (1986). That is, management teams in mature industries with weak governance might waste cash flows instead of returning them to investors as payouts. According to this theory, unlike public market investors, PE firms, optimise the capital structure of their investments by taking into account firm-level characteristics to balance benefits with costs (Axelson et al. 2013, Gompers et al. 2016). More specifically, that a firm’s debt level will be set to balance the tax and incentive benefit of debt and the expected cost of financial distress, i.e. default risk (Myers 1977, 2001). As such, this theory predicts that the firm’s capital structure is related to the capital structure of public industry peers since industries tend to vary in cash flow volatility (Gompers et al. 2016).

A contrasting view to trade-off theory is market timing theory (Axelson et al. 2013). Baker & Wurgler (2002) suggest that PE firms seek to fund acquisitions with cheap debt, by arbitraging the mispricing of debt or equity in the capital markets. This theory implies that PE-backed firms’ capital structures respond to economy-wide, cross-industry, debt market conditions (Gompers et al. 2016). Simply put, firms tend to raise more debt when interest rates are low, and consequently, when interest rates are high, capital tends to be raised through equity issuance. Thus, buyout capital structures are not necessarily related to the capital structures of public industry peers. The extensive study by Kaplan & Strömberg (2009) argues in favour of the market timing theory as the prevailing consensus among researchers at the time. Their literature base includes Axelson et al. (2013), still a working paper at the time, who provides particularly compelling evidence for the market timing theory using regression analysis to compare cross-sectional company characteristics with time series debt-market variables, to represent debt market conditions.

Interestingly, Gompers et al. (2016) find evidence in their survey that PE investors rely equally on factors of market timing and trade-off theory. Nevertheless, it seems naive to overlook the importance and influence of capital market conditions for the individual firm. Especially considering the complications caused by the junk bond market collapse in the 1990s and the role that PE firms played in this, as previously explained in Section 2.4. In a historical context, Jensen’s early publications and strong claims about PE firms’ superiority to other organisational forms might have been premature (Kaplan & Strömberg 2009). Nevertheless, Jensen (1986, 1989) outlines the
traditional actions taken by PE firms in their quest for value creation and forms the basis for more recent studies.

3.3.2 Reducing Agency Costs with Management Incentives

According to the literature, the very nature of PE ownership, where a portfolio company’s management team executes on behalf of the shareholders, creates a need for aligning the goals of the company management with those of the PE firm (Acharya et al. 2009, Gompers et al. 2016). In the literature, Jensen & Meckling (1976) were among the first to identify the problems with *separation of ownership and control*. They define this as an agency relationship9 which gives rise to a so-called agency cost/conflict10. Consistently, in a later paper, Jensen (1986) argues that the management equity stake in public companies is too small to make managers ‘*sensitive to maximizing shareholder value*’. Acharya et al. (2009) and Gompers et al. (2016) claim that PE managers that are aware of this issue seek to align management and shareholder incentives by increasing management’s equity stake. Theoretically, this reduces agency costs and creates financial upside for management efforts.

The literature suggests that PE firms expect to provide strong equity incentives to portfolio companies’ management (Kaplan 1989, Kaplan & Strömberg 2009, Acharya et al. 2013). More specifically, Gompers et al. (2016) show that PE investors tend to provide an average equity share significantly above the senior management ownership of public companies and that PE investors believe that management equity incentives are exceptionally important. Kaplan & Schoar (2005) find that reducing agency costs between management and the owners in MBOs is one of the main sources of buyout firm value creation. Furthermore, in the case study Baker & Wruck (1989), motivating management and employees to align their interests with the owners, is also seen as a source of value creation, through for example bonus structure programs.

Incentive compensation is thus portrayed as an important tool in governance research and, in terms of PE firm value creation, it seems to lie at the cross-section of financial and governance engineering. For example, Gompers et al. (2016) describe aligning incentives between managers and shareholders as an aspect of governance engineering, while they, in their study, examine equity incentive practices as a type of financial engineering.

3.3.3 PE’s Approach to Capital Budgeting

One source of PE firms’ value creation is not only enhancing the portfolio companies they acquire but also identifying firms that are projected to generate high risk-adjusted returns. The studied PE firm, Alder, only acquires firms that have a sustainability profile. Therefore, how PE firms choose and financially assess future investments are topics highly related to this study.

Interestingly, despite the prevalence of well-educated GPs from financial academic backgrounds, earlier research suggests that many PE and VC investors use sub-optimal modelling choices (Gompers et al. 2016, Isaksson & Fredriksen 2020). Gompers et al. (2016) find that PE investors resort to IRRs and MOICs, instead of discounted cash-flow (DCF) or net present value (NPV) techniques. They do this despite the academic literature’s relatively homogeneous view that discounting future expected cash flows, with a discount rate based on an explicit asset pricing model, such as the CAPM or Fama & French three-factor model, is known to be better models for investment decisions (Gompers et al. 2016). Furthermore, Gompers et al. (2016) show that target IRRs used by PE investors are on average above a CAPM-based rate. This implies that PE firms believe they add value to their investments, and they need to do so in order to generate compensation. Gompers et al. (2016) also find that different firms adjust the IRR/CAPM with different factors and that smaller firms tend to target higher IRRs than larger firms and firms with global investment operations.

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9When a principal engages an agent to perform a service on their behalf, which involves delegating some decision-making authority to the agent (Jensen & Meckling 1976).

10Defined as the cost of incentivising and monitoring an agent, the resources spent by the agent to signal its commitment, and the cost of agent decisions that do not maximise the principal’s utility (Jensen & Meckling 1976).
In a similar spirit, however, observing VC firms’ entrepreneurial endeavours, Isaksson & Fredriksen (2020) find that, during economic downturns, VC firms use fewer and less advanced investment valuation methods and rely relatively more on “rule of thumb” than during economic booms. These observations are transferable to this study in the sense that economic conditions can influence the valuation practices of investment firms. However, it is worth noting that there are significant challenges with valuing young businesses, i.e. VC firms’ portfolio companies, and that this study focuses on more mature companies due to Alder’s investment focus on growth capital.

3.4 Governance Engineering & Value Creation

Alongside financial engineering, governance engineering (or corporate governance) emerged as an area of early research about PE firms’ value creation (Kaplan & Strömberg 2009, Gompers et al. 2016). With the use of intensive debt to finance the buyouts and, as a result, a concentrated majority equity stake in the portfolio company, PE firms hold privileges compared to their public counterparts, who experience a loss of control over resources (Kaplan & Strömberg 2009). Kaplan & Strömberg (2009) establish the literary notion of operational engineering in the context of PE firms’ value creation. According to them, governance engineering is the way that PE investors control their portfolio companies’ boards and that they are more actively involved in the governance of these, compared to public company directors and public shareholders.

It is worth noting that agency theory and management incentives have a strong presence in governance engineering. However, since this is covered in Section 3.3, this section mainly concerns the monitoring aspect of governance engineering and exercising active ownership through portfolio companies’ board of directors. Furthermore, it should be noted that some, including Gillan (2006), view corporate governance as a broader concept. According to Gillan (2006), corporate governance can be divided into internal and external governance, respectively. This definition concerns that the firm may be affected by external forces, such as regulation and markets, or by internal forces, such as the board of directors, incentives, capital structure, and control systems.

3.4.1 Efficiently Monitoring Management Through Board of Directors

The literature highlights board of directors as an important tool for corporate governance, to monitor the management team on behalf of the shareholders (Gompers et al. 2016). As a shareholder, the PE firm has the right to participate in appointing the board of directors for their portfolio companies (Nikoskelainen & Wright 2007). According to Fama & Jensen (1983), the board of directors is the central agent in the decision control-system of any organisation, small or large. A central aspect is the separation of decision management and control, by the absence of the entrepreneur, to ensure that decision-makers are not substantially affected by any wealth effects from their decisions. Furthermore, the board of directors has the right to hire, fire and compensate top management, and to approve and monitor important decisions (Fama & Jensen 1983).

Gompers et al. (2003) show that broad measures of higher corporate governance, represented by stronger shareholder rights correlate positively with higher company returns and firm valuation. Interestingly, they also suggest that stronger shareholder rights are associated with lower capital expenditures and fewer corporate acquisitions. Even though their study covers public companies, one can argue that the underlying mechanisms remain the same for private companies, which would make the implications transferable to this study. Similarly and later, Bhagat & Bolton (2008) show that good corporate governance, as measured by board-member stock ownership and CEO-Chair separation, suggests better future operating performance. Furthermore, board-member stock ownership is highlighted as an aspect with a positive influence on the probability of disciplinary management turnover in poorly performing firms. Interestingly, Bhagat & Bolton (2008) find board independence from management to be negatively correlated with operating performance, which suggests caveats with management and board separation.

In general, the literature seems to argue that small boards dominated by outsiders perform better, and consistent with this theory Gompers et al. (2016) find that PE investors structure smaller boards of directors with a mix of insiders, PE investors, and outsiders. Yermack (1996) is an early
contributor to the body of literature regarding the structure and effectiveness of corporate governance systems, studying US firms between 1984-1991. He argues for restricting the board size, as he finds that small boards of directors are positively correlated with higher firm valuation, proxied for by Tobin’s Q$^{11}$. Furthermore, Yermack (1996) claims that this is due to their efficiency, that while the board’s capacity for monitoring increases with board size, there are also trade-offs such as ‘slower decision-making, less-candid discussions of managerial performance, and biases against risk-taking’. In a later study, Coles et al. (2008), challenge the notion that board size restrictions and that management representation at the board enhances firm value. This is because they find a U-shaped relationship between board size and Tobin’s Q, and claim that this relation arises from the difference between complex and simple firms. They find that more complex firms, with greater requirements for advising than simple firms, have larger boards with more outside investors. As such, the literature suggests that board size together with firm characteristics influence firm performance.

An alternative explanation to the role of firms’ boards can be explained by resource dependence theory (RDT) (Pfeffer & Salancik 2003). Instead of viewing the board as a monitoring agent with the purpose of handling agency conflicts, it can be seen as a resource from which management receives important advice. Süssi & Jaakson (2020) explain that this is particularly true for SMEs, where managerial resources are particularly scarce and the board plays a relatively more significant role in advising compared to boards in larger corporations. In a sense, this theory implies that smaller firms may need additional board expertise, represented by additional members of the board, which in theory goes against the aforementioned literature supporting the effectiveness of smaller boards in smaller firms. However, the literature review Hillman et al. (2009) find that pre-existing literature generally favours a board composition that provides the firm with the necessary knowledge to navigate the environment in which the firm is active. They also find support for the many benefits that directors may bring to their boards, namely advice and counsel, channels of information flow, preferential access to resources, and legitimacy.

### 3.4.2 Maximising Firm Value Through Hiring & Firing Management

As previously described, a key responsibility of the board of directors is hiring and firing management. This is what Cornelli et al. (2013) refer to as ‘active monitoring of managers’, which refers to that an active monitor$^{12}$ collects information about a firm’s operations and the manager’s capabilities, and has the ability to fire the manager if he/she does not maximise firm value. Gong & Wu (2011) describe this as the newly PE-installed boards ‘scrutinize the performance of the incumbent management team and replace them if necessary’. Consistently, Gompers et al. (2016) report that one-third of PE investors expect to create value by changing members of senior management, such as the CEO or CFO, or changing a company’s strategy or business model.

In a similar spirit, Acharya et al. (2009) finds that PE-backed boards are generally more effective in adding value to their companies compared to boards of public companies’. They note that PE boards heavily monitor management and that PE firms are especially focused on strategic decisions. This shows that PE firms address agency relationships through both incentivising management to act appropriately, but also through monitoring and cooperating on important strategic decisions. Furthermore, PE firms are found to allocate extensive amounts of time to informal communication with their portfolio companies, participate in strategic decisions such as M&A deals, and encourage company management to think more ambitiously about their business. These findings seem to align with the PE industry’s shift of focus towards growth, as explained in forthcoming Section 3.5.3, which may require actively involved boards in business expansion.

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$^{11}$Tobin’s Q is the ratio of assets’ market value to book value (Yermack 1996). A high Tobin’s Q implies a high market valuation of the firm. Consequently, a low Tobin’s Q implies a low market valuation.

$^{12}$As opposed to a passive monitor, such as a financial analyst, rating agency, or media (Cornelli et al. 2013).
3.5 Operational Engineering & Value Creation

While the earlier literature on PE firms’ value creation tends to focus on financial engineering and governance engineering, more recent studies collectively argue that LBOs create portfolio company value by significant operating performance improvements and distributing cash through high debt payments (Gompers et al. 2016, BCG 2016, McKinsey 2014). Kaplan & Strömberg (2009) establish the notion of operational engineering in the context of PE firms’ value creation. According to them, operational engineering concerns the industry and operating expertise that PE firms apply to add value to their portfolio companies.

While studies have examined the effects of PE on the operational performance of their portfolio companies, the key operating levers that PE managers pull to improve operating performance remain largely unexamined (Gompers et al. 2016). Kaplan (1989) was among the first to find improved operating performance of firms that undergo leveraged buyouts. A later study by Kaplan & Strömberg (2009) largely confirms that PE investments are associated with productivity, or operating performance, improvement. More recently, Acharya et al. (2013) study the relative significance of operational engineering compared to financial leverage for PE returns, examining mature European PE firms between 2000-2007. They find that 50% of returns are created by financial leverage, 34% stem from abnormal performance (firm-level performance, such as operational improvements), and the remainder is due to sector exposure. This shows that financial leverage is one of the most significant value-creating sources of PE deals, however, operational improvements of PE firms’ portfolio companies pose a significant source of value creation as well.

3.5.1 Human Capital

As previously mentioned, the performance persistence found among PE funds argues for the existence of fund manager skill and suggests fund manager expertise as a potential value driver. This is reflected in today’s PE industry, where most top PE firms are organised around industries (Gompers et al. 2016). Furthermore, PE firms have been shown to perform better in certain industries, for example, the hotel industry; as shown by Spaenjers & Steiner (2021). In contrast to the 1980s and 1990s, PE firms nowadays hire investment professionals of operating backgrounds and industry focus alongside their traditional hires, deal-makers skilled in financial engineering (Gompers et al. 2016).

In addition to identifying the key decisions that PE investors make in their ownership of portfolio companies, Gompers et al. (2016) attempt to categorise distinct strategies used by PE firms and relate these strategies to PE firm founder characteristics. In doing so, they find that PE firms with founders of a financial background tend to focus more on financial engineering, relative to firms with founders of a PE or to some extent operational background, who tend to focus relatively more on operational engineering. Furthermore, Gompers et al. (2016) find that different PE firms express different value drivers (channels of expected value creation) and thus engage in differentiated investment strategies, which could be related to the PE firm’s human capital.

Closely related to the aforementioned study is Acharya et al. (2013), who also examine PE firm founder characteristics, however taking on a quantitative approach, through regression analysis. They find that PE firms’ GPs of operational backgrounds, for example, ex-consultants, perform above industry in deals that focus on internal value-creation programs, such as organic growth. Similarly, they find that GPs of financial backgrounds, for example, ex-bankers or ex-accountants, outperform in deals that involve M&A. Similarly, in a comprehensive study of PE firms’ value creation, BCG (2016) find that both operating experience and deal experience, on their own, are associated with a significantly higher average IRR and a higher frequency of acquisitions.

Literature on the success factors and skills of GPs has been mostly focused on VC firms. These studies show that human capital is a strong predictor of portfolio companies’ success. Specifically, Zarutskie (2010), find that VC firms’ previous experience in VC investing, management of start-ups, management consultancy, finance, engineering and science are strong predictors of VC fund success. Additionally, Hellmann & Puri (2002) examine the effects VC firms have on the professionalisation of start-up firms. They show that VC firms actively influence their portfolio companies through
human resources policies, stock-option plans and hiring of marketing roles. Furthermore, they
find that VC firms tend to influence start-ups to replace their CEOs. Bottazzi et al. (2008)
further examine European VC firms and venture capitalists’ backgrounds between 1998-2001. They
find that venture capitalists with prior industry business experience are more active with their
portfolio companies and that investor activism is positively correlated with portfolio companies’
performance. This is in contrast to the hypothesis presented Fredriksen et al. (1997), that VC
investors are more active with poorly performing portfolio companies.

How relevant previous business experience is to growth equity investments is however less clear.
Block et al. (2019) show that growth equity investors have less entrepreneurial experience than
investors in early-stage investments, but have more business education. They discuss that this
potentially shows that business development is second to expansion for growth equity investments,
as practical business development experience is less frequent. Furthermore, in reference to GP
experience and knowledge, Humphery-Jenner (2013) explains that PE fund diversification relates
to higher IRR, which he explains could be due to knowledge sharing between a PE fund’s portfolio
companies. This would suggest that PE funds’ investments add knowledge synergies between
companies that normally would not interact.

3.5.2 Value-Creation Focus: Growth vs. Cost-Cutting

According to Gompers et al. (2016), PE investors claim to emphasise adding value to portfolio com-
panies both before and after investing. Additionally, they highlight the importance of operational
engineering and revenue growth as the most important sources of value creation.

In the shift towards operational and strategic improvements, the PE industry has been increasingly
focused on growth, while reducing the amount of leverage used in portfolio companies (AlpInvest
2021). PE firms also tend to focus more on operational value creation post-investment than pre-
investment, and specifically on growth rather than cost-cutting initiatives (Gompers et al. 2016).
Biesinger et al. (2020) further show that PE firms in emerging markets have become more engaged
in their portfolio companies and have put more emphasis on top-line growth, comparing between
1992-1997 and 2012-2017. Bernstein et al. (2017) further find that sectors that are targeted by PE
investments between 1986-2008 exhibit larger growth compared to other industries. This includes
growth in total production, value-added, total wages and employment. Additionally, Gompers
et al. (2016) discuss that smaller PE firm investments have more room for revenue increases than
larger investments, which is also supported by Fracassi et al. (2022) who show that PE-acquired
private, small and young retail businesses experience high growth.

PE’s focus on growth investments is further supported by Boucly et al. (2011) who find that LBOs
in private-to-private deals result in large growth effects regarding employment, assets, sales growth
and capital expenditure at the acquired firms, which is thought to be due to larger availability
of funds and debt to finance expansions. This is somewhat in contrast to previous research into
value creation in PE. Kaplan (1989) find that LBOs, and specifically MBOs, create value through
operating margin increases and reduced capital expenditures. Kaplan (1989) further argue that
this is largely due to reduced agency costs through the companies’ debt burden, equity incentives
and monitoring. In studying public-to-private deals between 1990-2006, Guo et al. (2011) find
that firms with higher leverage and firms that replace their CEO, see higher returns. Their data
sample is based on firms with a market value of over $100m, which does create questions about its
generalisability for smaller firms. Paglia & Harjoto (2014) do however study the effects of PE in
small and medium-sized businesses and find that sales and employment increase after they receive
PE financing.

In studying PE backing of firms in the retail industry, Fracassi et al. (2022) show that PE-backed
firms grow significantly more than their non-PE-backed firms through introducing new products
and expanding geographically. Furthermore, like Boucly et al. (2011), Fracassi et al. (2022) show
that growth is likely induced by less financial constraint, and like Bloom et al. (2015) they show
that management is an integral part of firm performance. The reason why Boucly et al. (2011) find
large growth in PE-firms compared to Kaplan (1989) is probably due to that Boucly et al. (2011)
study private-to-private deals, compared to public-to-private deals. Boucly et al. (2011) theorise
that growth-inhibiting financial constraints are probably more prevalent in small private firms than large public firms.

In reference to monitoring, Chemmanur et al. (2011) find that successful VC firms engage in both monitoring and selection of portfolio companies and that VC-backed firms have substantial increases in sales and production efficiencies. Although VC is somewhat different to PE, it shows that active owners see importance in both growth-enhancing initiatives and activities that increase operating efficiencies. Much like how Acharya et al. (2013) show that PE firms between 2000-2007 improve their portfolio companies’ EBITDA margins, in addition to recent studies that show PE’s growing interest in growth investments.

3.5.3 The Rise of Buy-and-Build Strategies

Growth can either be done organically or through M&A. M&A has been extensively studied but results of its effectiveness vary (Haleblian et al. 2009). Nevertheless, academic studies and industry reports show that M&A in the PE industry is an increasingly common phenomenon and thus the topic of discussion in this section. According to an industry report by BCG (2016), M&A is nowadays the most common approach for improving portfolio companies’ operational value. The study is based on a comprehensive sample of 2,372 PE deals exited 1998 through 2012. Furthermore, it shows that between 2000-2012, the share of PE firm deals that include add-on acquisitions grew from 20% to 53%, and the average number of add-on acquisitions per platform investment grew from 1.3 to 2.7.

The characteristics of PE firms tend to affect PE firms’ add-on strategy. Hammer et al. (2017) study 9,548 buyout deals between 1997-2012 and add-on probability depends both on portfolio company and PE firm M&A experience and the PE firm’s reputation. Add-on acquisitions to platform investments that enhance the platform investments’ value are known as “buy-and-build” deals. BCG (2016). Buy-and-build strategies can yield both revenue growth and margin expansion by realising synergies and, in addition, translate into higher exit valuations of portfolio companies as they foster expectations of continued growth and margin improvement (BCG 2016). This is also supported by Smit (2001) who state that larger and more mature firms give rise to more attractive exit opportunities for a PE firm.

Smit (2001) discusses add-on acquisitions for PE firms, and the potential value of these through an option pricing framework. He argues that firm consolidation results in operational improvements related to economies of scale and scope in addition to the benefits of larger market power. This can be related to Bansraj et al. (2022) who study value creation for PE firm buy-and-build deals. In addition to the three value-creating sources of financial, governance and operational engineering presented by Kaplan & Strömberg (2009), they find that buy-and-build strategies generate inorganic growth and operational efficiencies such as improved operating margins and labour profitability improvements. They attribute these synergies to the restructuring of assets between acquired firms, learning between firms, and economies of scope that result from sharing a cost base between firms. Smit (2001) argues that because add-ons can create operational synergies, proprietary deals are to be favoured since no premium will be paid for the potential synergies of add-ons, which might occur in an auction.

An explanatory factor why these strategies have gained popularity in recent times is the fact that buy-and-build deals can outperform standalone PE deals. According to BCG (2016), PE buy-and-build deals generated an average IRR of 31.6%, compared to an average IRR of 23.1% for standalone deals, from entry to exit. This also follows previous academic research by Nikoskelainen & Wright (2007) and subsequent research by Valkama et al. (2013) who, studying the same data sample of 321 UK PE firms between 1995-2004, find that PE firms that engage in add-on acquisitions generate higher returns.

BCG (2016) report several interesting traits relating to the success of buy-and-build strategies. In order for a buy-and-build strategy to be successful, it seems as if the portfolio company should be small or medium-sized, have a PE sponsor with operational and buy-and-build experience, offer an operationally scalable and efficient platform, operate in a low-growth, low-profitability and
highly fragmented industry and make one or two add-on acquisitions targeted in its core industry, preferably in another country. Additionally, all of these factors are found to increase the IRR on their own. The study also mentions that it is a common strategy for PE firms to enter a fragmented market, to consolidate and capture market share, and company synergies. This is somewhat in line with academic research in M&A deals. Both Hammer et al. (2017) and Bansraj et al. (2022) argue that market fragmentation is important for buy-and-build deals, but that the market must be somewhat consolidated in order for add-ons to be large enough to create substantial market power gains. Furthermore, Bansraj et al. (2022) show that synergies can be achieved in both horizontal and vertical add-ons and that small add-ons to the platform company generate better returns, probably due to easier firm integration than for large add-ons. Furthermore, in reference to geographic expansion through M&A, Humphery-Jenner et al. (2017) show that PE firms assist their portfolio companies with networks and experience from previous experiences in a country and that operational improvements can be anticipated at the acquired firm. This shows, as previously discussed, that human capital at the PE firm and the acquired firm, is crucial for PE fund, and M&A, success.
4 Method

4.1 The Chosen Approach

A Qualitative Approach

This study takes on a qualitative approach to study the relationship between a PE firm and its portfolio companies in terms of value creation. This is done using semi-structured interviews, which is a primary method for interviewing in qualitative research (Bell et al. 2019). This approach lies between the two extremes of interview types: structured and unstructured interviews. Unstructured interviews have similarities with conversations, i.e. the interviewer asks the interview subject topic-related questions, asking follow-up questions as needed (Burgess 1984). Semi-structured interviews, however, are characterised by more detailed topic-related questions in an interview guide, in which questions are standardised between interview subjects (Bell et al. 2019). Section 4.2 discloses full details of how semi-structured interviews are adopted in this study, while this section explains the chosen qualitative approach.

A major advantage of qualitative interviewing is the flexibility during the interview to ask follow-up questions, which can result in more detailed answers (Bell et al. 2019). Previous studies of PE value creation, including Bos & Harrington (2017) taking on a qualitative approach, argue in favour of the qualitative research approach for studying PE value creation. While a quantitative approach allows for the detection of associations, a qualitative approach is more flexible and thus allows for examining causality and intricate relationships (Bell et al. 2019). In light of this, some previous studies have taken on a qualitative approach, including Baker (1992), Baker & Wruck (1989), Bos & Harrington (2017), and Siisi & Jaakson (2020). This is commonly, and in this study, done using case studies. Furthermore, the results of previous studies in PE value creation tend to vary with firm-level or industry-level characteristics, of either the PE firm or the buyout firm (Kaplan 1989, Boucly et al. 2011, Acharya et al. 2013, Axelson et al. 2013, Jenkinson & Sousa 2015, Hammer et al. 2017). This highlights the need to dig deeper into the reality of individual cases, to support a thorough understanding, instead of bypassing firm variation by, for example, proxying the underlying forces in a regression model with mixed results and limited insight into causality.

In addition to the appropriateness of using a quantitative approach, data availability is a related limitation considered in this study. A quantitative approach requires appropriate data for modelling. However, when observing the PE industry, data availability is a difficult and sensitive subject, both due to the confidential nature of PE ownership and that private companies simply are not required to disclose as much company data as their public peers. Naturally, data is even more scarce when observing a PE firm investing in SMEs, and even more so when considering sustainability data or ESG performance metrics, due to the lack of legal requirements to disclose these. Some studies gather data through surveys with relatively closed-end questions to which they apply statistical models, including Gompers et al. (2016) and Fredriksen et al. (1997). However, this study perceives this approach as inappropriate due to the risk of sampling too little or unreliable data to draw statistically significant and relevant conclusions. Instead, this study utilises access to experience and knowledge at the studied PE firm and its selected portfolio companies, as a more reliable and rich source of information and a unique opportunity to triangulate the issue of PE value creation. Additionally, this study intends to bring value and insight to the studied PE firm’s future work.

Abductive Reasoning

Regarding the mode of reasoning, this study uses abductive reasoning, with particularly strong elements of induction. Abduction combines deductive and inductive reasoning, two ways that research approaches the relationship between theory and data (Peirce 1974). While deduction aims to use data to confirm or reject (a hypothesis about) a well-known theory, inductive reasoning aims to generate the most probable theories out of the studied data (Bell et al. 2019). Deductive reasoning can be criticised for relying on strict logic of theory-testing and falsifying hypotheses, and that there is uncertainty in what model to test (Bell et al. 2019). On the other hand, a drawback of inductive reasoning is that empirical data may not always be theory-building (Bell et al. 2019). Combining the benefits and drawbacks of the two, abductive reasoning aims to identify
the conditions that make a phenomenon less puzzling, involving selecting the most appropriate explanation from compelling explanations or data interpretations (Bell et al. 2019).

In this study, the research questions and, following these, the interview guides are formulated using pre-existing theories. In a sense, this makes this study deductive in nature, since the data obtained through interviews can confirm or reject the authors’ initial assumptions. However, the freedom of the answers from this study’s semi-structured interviews provides an opportunity for new facts and insights, which might require returning to the literature in search of potential explanations, if available. In this sense, pre-existing theories are only seen as part of the truth, making this study also inductive in nature. According to Alvesson & Kärreman (2007), abductive reasoning is necessary for allowing the researcher to remain open to the possibility of being surprised by data, rather than using it to confirm a pre-understanding. As such, this mode of reasoning can be perceived as suitable for the explorative nature of this study, particularly due to the limited research coverage of sustainability in PE value creation, making inductive reasoning a necessary feature of this study. According to Alvesson & Kärreman (2007), abductive reasoning is necessary for allowing the researcher to remain open to the possibility of being surprised by data, rather than using it to confirm a pre-understanding. As such, this mode of reasoning can be perceived as suitable for the explorative nature of this study, particularly due to the limited research coverage of sustainability in PE value creation, making inductive reasoning a necessary feature of this study. According to Alvesson & Kärreman (2007), abductive reasoning

4.2 Main Steps

This section focuses on the main activities related to the execution of this study. Figure 4 outlines the key steps taken to structure and retrieve the results found in Section 5. For replicability, these are the steps covered in detail in this section.

![Figure 4: Flowchart of Scientific Method](image)

4.2.1 Selecting Case Studies

The first step is selecting portfolio companies as cases for this study. Three case studies, Samon, Scanacon, and SI, described in Section 2.2, are selected based on growth stage and industry. The aim is to select three distinctly different (heterogeneous) case studies that have different characteristics, as shown in Figure 5. This is done to provide insights into how Alder’s practices and portfolio companies’ circumstances may differ between business models. Furthermore, this sample may also provide insights into how common ownership decisions/strategies could have different outcomes, depending on the portfolio company. Once the case studies are decided, the
supervisor appoints a junior member as a contact person for each deal team at Alder, to provide autonomy in reaching out to organise interviews.

<table>
<thead>
<tr>
<th>Scanacon</th>
<th>Samon</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>159 MSEK</td>
<td>179 MSEK</td>
<td>349 MSEK</td>
</tr>
<tr>
<td>35 people</td>
<td>13 people</td>
<td>225 people</td>
</tr>
<tr>
<td>None</td>
<td>Two</td>
<td>Five</td>
</tr>
<tr>
<td>Acid Management &amp; Recycling</td>
<td>Gas Detection</td>
<td>Building Automation Solutions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oct 2018</th>
<th>Aug 2020</th>
<th>Mar 2021</th>
<th>Acquired</th>
</tr>
</thead>
</table>

Figure 5: Firm Characteristics of the Case Studies

4.2.2 Selecting Interview Subjects

The second step is selecting interview subjects. The aim is to select representatives from both Alder and each case study to be able to answer questions related to the suggested levers of impact (financial, governance, and engineering) and the portfolio companies’ sustainability-work. Since the case studies are small and entrepreneurial, it is important to acknowledge that in these companies, individuals may balance multiple responsibilities, providing them with insight into different areas of the business. As such, in some cases, there may be a need to oversee formal responsibilities.

The portfolio companies’ CEOs are interviewed to give insight into Alder’s operational, governance and financial levers of impact, the chairmen of the boards are interviewed to give a non-biased governance perspective of Alder’s ownership and the partners at Alder are interviewed to give an understanding of Alder’s intentions with the portfolio companies and Alder’s view on its value-creating levers. Furthermore, the sustainability ambassadors at the portfolio companies and Alder’s sustainability officer are interviewed to understand Alder’s impact on the portfolio companies’ sustainability work and the value of sustainability-related activities. In general, representatives from both Alder and the portfolio companies are interviewed to understand if there are differences between Alder’s intentions and what is done in practice, and how Alder’s ownership is perceived at the portfolio firms. Since the case studies have business models which offer some environmental benefit, sustainability-work and sustainability-related value creation are topics discussed with all interview subjects and in particular with Alder’s sustainability officer and the portfolio companies’ sustainability ambassadors. See Tables 2, 3, and 4 for summaries of the interview subjects’ previous experiences, note that it is Alder Board Member A, C and E that are included among the interview subjects as Alder’s deal team partners.

The initial proposal of interview subjects includes the CFO of each case study. However, this role is ultimately excluded because two out of three case studies are currently missing this role. Therefore, this study assumes that the CEO has enough financial insight to provide a financial narrative in the interviews. This assumption is confirmed with Alder’s sustainability officer and the junior contact persons before commencing with preparing the interview guides.

4.2.3 Pre-Study of Case Studies

The third step is conducting a pre-study. The aim is to get an introduction and understanding of each of the case studies and of Alder’s general investment process. This is done through a
semi-structured interview, at Alder’s office, with a junior member of each case study’s deal team. Each interview follows the same agenda, as seen in Appendix A. The selected interview subjects, see Table 5, are discussed and confirmed. Then, the junior member provides a background to each of the portfolio companies, and Alder’s general investment process. Lastly, any particular requests or recommendations for the upcoming interviews are communicated. Each meeting is recorded and lasts approximately 45 minutes. Afterwards, each meeting is transcribed and used as input for preparing the interview guides.

Table 5: The Interview Subjects

<table>
<thead>
<tr>
<th>Id</th>
<th>Company</th>
<th>Interview Subject</th>
<th>Interview Date</th>
<th>Interview Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alder</td>
<td>Sustainability Officer</td>
<td>14/3 2023</td>
<td>In Person</td>
</tr>
<tr>
<td>2</td>
<td>Samon</td>
<td>CEO</td>
<td>10/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>3</td>
<td>Samon</td>
<td>Chairman</td>
<td>15/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>4</td>
<td>Samon</td>
<td>Sustainability Ambassador</td>
<td>10/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>5</td>
<td>Samon</td>
<td>Partner</td>
<td>20/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>6</td>
<td>Scanacon</td>
<td>CEO</td>
<td>2/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>7</td>
<td>Scanacon</td>
<td>Chairman</td>
<td>2/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>8</td>
<td>Scanacon</td>
<td>Sustainability Ambassador</td>
<td>9/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>9</td>
<td>Scanacon</td>
<td>Partner</td>
<td>7/3 2023</td>
<td>In Person</td>
</tr>
<tr>
<td>10</td>
<td>SI</td>
<td>Chairman</td>
<td>1/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>11</td>
<td>SI</td>
<td>CEO</td>
<td>10/3 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>12</td>
<td>SI</td>
<td>Sustainability Ambassador</td>
<td>4/4 2023</td>
<td>Video Call</td>
</tr>
<tr>
<td>13</td>
<td>SI</td>
<td>Partner</td>
<td>10/3 2023</td>
<td>Video Call</td>
</tr>
</tbody>
</table>

4.2.4 Preparing Interview Guides & Conducting Semi-Structured Interviews

The final step is preparing the interview guides before conducting the interviews. As previously explained, in section 4.1, the interview guides are a central aspect of the semi-structured interview technique. The aim is to ask questions based on the study’s research questions. The conundrum is asking questions that are specific enough so that they are relevant to the study while being open enough to avoid limiting the interview subject’s individual viewpoint. Each interview commences with a clarification of the interview subject’s role and engagements in the portfolio company or at Alder. Subjects of the same role are asked the same questions, for comparability between firms. In addition, the questions differ between roles so that each role is asked the questions perceived as the most relevant to their respective company engagement. Before the interviews are conducted, the supervisor at Alder is asked for feedback and approval on the interview guides. She suggests a few minor adjustments to the questions, for example, asking explicitly about the case studies’ perceived challenges. See appendix A for full interview guides per role of interview subjects, and appendix B for how the interview questions relate across roles of interview subjects.

The interviews are intended as a method for retrieving the data needed for the study’s results and analysis. The semi-structured format of questions allows for follow-up questions based on the
interview guide and this is used to seek clarification on answers. The interviews are scheduled once interview subjects have given their consent to participate in the study to the junior member of their deal team. The interview guides are provided to each interview subject at least 48 hours before the interview. This aims to give the subject time to reflect on the questions to improve the quality of answers. This study takes on a pragmatic approach by booking interviews in order of the subject’s availability rather than in a pre-determined order, as can be seen in Table 5. As such it does not consider the order of interview subjects. Each interview lasts approximately one hour and is recorded and auto-transcribed using Microsoft Teams. As can be seen in Table 5, the interviews are conducted in person or via video or audio calls using Microsoft Teams. Immediately after each interview, key takeaways and insights are discussed between both interviewers and annotated to reduce information loss between the interview and the succeeding analysis. These key takeaways may result in slight alterations of the interview guides of succeeding interviews, in the shape of follow-up questions, to better capture new insights. This alteration is portrayed as a loop between Preparing Interview Guides and Conducting Semi-Structured Interviews in Figure 4. Lastly, after each interview, the answers to all questions are manually transcribed and transferred into a Microsoft Word table for easier overview and comparison.

4.2.5 Review of Internal Documents

To complement and clarify the information from the interviews, internal documents regarding Alder’s investment process and company-specific information are gathered and reviewed. These include an investment memorandum aimed towards Alder’s LPs, owners’ agendas from each case study, company-specific presentation material, a guide to sustainability-work aimed towards Alder’s portfolio companies (the Alder Way 1.0) and Alder’s sustainability reports. Some of these internal documents are strictly confidential and will therefore not be explicitly included in this study.

These documents clarify Alder’s intended strategy for its general holding of portfolio companies and for particular case studies.

4.3 Analysis Method

This section explains how interview results, obtained through the aforementioned steps, are analysed and discussed to answer the research questions. Figure 6 outlines the main analysis activities, which this section covers in additional detail.

The first step is the within-interview analysis, in which each and every interview is considered separately and in detail. Based on the interview transcriptions, explained in section 4.2.4, Microsoft Word annotation is used to highlight important takeaways and group answers into themes and ultimately the relevant research question.

The second step, the within-case analysis, follows the approach to case study analysis proposed by Eisenhardt (1989). In this step, interviews are collectively analysed per case study to identify...
trends and themes across interview subjects, to detect how themes and insights may differ between stakeholders. According to Eisenhardt (1989), this is a favourable way of handling the significant amount of data that can be expected from case studies. Decomposing and looking at each case as a standalone entity can help detect unique patterns that may otherwise be overlooked when comparing cross-sectionally across multiple case studies (Eisenhardt 1989). Following the abductive reasoning approach, relevant literature is used to confirm, contrast and explain findings within and across case studies.

To compare interview answers within a given case study, the interview answers from CEOs, chairmen and partners are grouped into the following themes: The Investment Case, Industry Knowledge & Experience, Motivation & Incentives, Board-Work Improvements, Executive Improvements, Operational Improvements, Leverage, and Sustainability. The interview answers from the case studies’ sustainability ambassadors and Alder’s sustainability officer all concern the theme Sustainability. These themes are based on the structure of interview questions, found in Appendix A and B, and consider overlapping themes across interview questions. Together these themes outline the structure of the result and analysis, see Section 5.

The third step, the cross-case analysis, also follows the proposed methodology by Eisenhardt (1989). Looking at case study data in multiple different ways, for example pairwise, can help avoid jumping to premature conclusions (Eisenhardt 1989). In this step, key insights are compared between case studies, exploring similarities and differences between cases. This is done per theme outlined in the within-case analysis above. In parallel with the within-case and cross-case analysis, as a supplement to the interview answers, internal documents are reviewed to analyse and verify some interview answers. Together, both the within-case analysis and cross-case analysis result in a theory of Alder’s underlying levers of impact, following an abductive research approach. In turn, these levers of impact form the basis of the suggested improvements of Alder’s future work.

4.4 Research Ethics

Research ethics is important to both the participants of this study and also those that can be indirectly affected, positively or negatively, by the results of this study (Vetenskapsrådet 2017). There are both legislation and recommendations to enhance research ethics, including Vetenskapsrådet (2002) and Vetenskapsrådet (2017). This study has taken research ethics into account in several ways, as described in this section.

Firstly, all the interview subjects of this study give their consent prior to participating in an interview, in line with the requirement of consent (sw. samtyckeskravet) mentioned in Vetenskapsrådet (2002). Secondly, before commencing the interview, all participants are asked to consent to a recording of the interview. The interview recordings are stored for the exclusive access and use of the researchers only, to ensure confidentiality of the interview material. This is explained to the interview subjects. As stated in Vetenskapsrådet (2017), “Good research depends on robust, well-founded trust”.

This thesis is written in collaboration with a PE firm. This shapes the direction of the study as it aims to bring value to the studied PE firm, alike multiple preceding master’s theses. Although this is the case, the studied topic is of interest to the PE firm while also contributing to current academic research into PE. It is worth noting that this study presents results and insights in a way that does not violate the Non-Disclosure Agreement (NDA) that is signed with the PE firm, to ensure the confidentiality of sensitive information gathered from portfolio companies and the PE firm.

4.5 Quality of the Study

4.5.1 Validity

This section explains the measures taken to improve the study’s validity, which can be considered a key aspect of research trustworthiness (Bell et al. 2019). According to Bell et al. (2019), validity
concerns the ability to draw correct conclusions, or simply, whether the study studies the intended objective. Lincoln et al. (1985) suggest two validity measures appropriate for qualitative research in particular: \textit{credibility} and \textit{transferability}. These two reflect what Bell et al. (2019) denote as internal validity and external validity, respectively.

Beginning with credibility, this concept concerns whether a study is measuring causality or association (Bell et al. 2019). It also concerns whether there is a good match between observations and theoretical ideas (Bell et al. 2019), which implies accurate and reliable theory (Eisenhardt 1989). In this study, the purpose is decomposed into research questions, to help structure a relevant discussion of PE value creation. Furthermore, the interview guides are written with the research questions and pre-existing findings in mind, to increase the relevance of questions by anchoring a theory-based approach. In this sense, the study can be considered partly hypothesis-driven. As pointed out by Bell et al. (2019), qualitative research contributes to validity in the sense that it allows for a deeper understanding of contexts and relations between theoretical concepts and observations, compared to quantitative approaches. More specifically, it allows for follow-up questions and seeking clarification, to limit misunderstandings. This format also provides freedom and flexibility of answers, which can help steer the discussion in the correct direction, given that the interview subject’s narrative is credible.

The interview subjects of this study can be considered relevant, and thus credible, as they represent central stakeholders in PE value creation. More specifically, they represent stakeholders from both Alder and portfolio companies, as well as external chairmen of the boards, who aim to provide a more objective narrative. In particular, Alder’s deal partners and the external chairmen of the boards have significant experiences in the PE industry and business management, making them particularly relevant to this study. To help convey the direction of the study, and to retrieve appropriate answers, all interview subjects receive a written introduction to the study’s purpose prior to their interview. The introduction is later repeated as part of the standardised interview introduction for all interview subjects. Furthermore, interview questions are formulated to emphasise \textit{what}, \textit{why} and \textit{how} when possible, to challenge respondents to be as precise as possible in their answers. Before conducting the interviews, both university supervisors and the supervisor and junior contacts at Alder approve the interview guides, with the study’s purpose in mind, which aims to reduce the risk of errors in the interview approach.

Moving on to transferability, this concerns a study’s generalisability, and how applicable a study’s conclusions are in a wider context (Bell et al. 2019). Bell et al. (2019) claim that qualitative studies are limited in this regard since they tend to involve case studies which limit the applicability of findings to similar cases only. This limitation applies to this study as well. However, in the sense that Alder is a PE investor, like many others in their industry, at least some of their strategies should overlap with those of other PE firms. It is worth noting that, although all three case studies from Alder’s portfolio can be considered alike in the sense that they have sustainable business proposals, operate B2B, and are profitable, the study’s results may differ between firms. This is because interview answers may vary across roles due to person-level factors. This may impact both the quality and reliability of the study’s findings. As such, person-level factors are perceived as a key limitation to the study’s transferability and thus the selection of interview subjects has a significant impact.

4.5.2 Reliability

This section explains the measures taken to improve the study’s reliability, which can be considered another key aspect of research trustworthiness (Bell et al. 2019). Similarly to the concept of credibility, Bell et al. (2019) partition this aspect into internal and external aspects, respectively.

Beginning with external reliability, this concerns the degree to which a study can be replicated by others (Bell et al. 2019). Bell et al. (2019) claim that this is inherently difficult for qualitative research since the circumstances of the studied phenomenon are hard to control. As such, in studies of a qualitative nature, randomness might affect the results and violate the robustness of the study findings. Naturally, this critique applies to this study as well, due to its qualitative approach. Therefore, it is worth noting that while the method steps may be replicable, the results may still
differ between succeeding studies.

In this study, external reliability is impacted by the sample of interview subjects, due to people and firm-level characteristics. To increase external reliability, the interviews in this study are based on replicable interview guides which can be found in appendix A. To limit randomness and standardise questions between interview subjects, each interview follows the same structure and each interview begins with the same introduction. Furthermore, the interview guides remain fixed throughout the study, to allow for comparability between interviews. However, as previously mentioned in section 4.2, follow-up questions are used and these may vary between interview subjects, depending on the interview context, as they aim to produce more precise and insightful answers as input for the analysis.

Moving on to internal reliability, this concerns intra-study aspects, such as whether the research team agrees with what they see and hear in their study (Bell et al. 2019). To increase the study’s internal reliability, both authors participate in each interview. This assures information access to both authors and also allows for a brief post-interview discussion. This discussion takes place immediately after each interview, to consolidate the research team’s view of the key takeaways from each interview. The consolidated view is noted down for future analysis. The pair-interviewing also limits biased information retention, since the authors may remember certain aspects of an interview more than other aspects. In this sense, the post-interview discussion allows the authors to complement each other’s individual information retention and point of view. Furthermore, it is worth noting that the recording and auto-transcribing of each interview allow for going back to confirm any ambiguity regarding what was said in an interview, limiting the dependence on memory retention and thus reducing potential misunderstandings.

4.5.3 Literature Review

The literary sources of this report are based on research papers from published scientific journals, but also include working papers, industry reports from consultancies and PE firms, and other internet sources. The main methods for finding reliable sources and articles are searching for articles in Google Scholar using relevant keywords, looking at other articles that cite the initially found ones, and looking at cited sources in already retrieved articles. All sources are selected based on novelty, amount of citations, journal ranking, and whether the authors have previously published papers in the field of research. Generally, primary sources are prioritised to allow for a first-hand analysis of important theories and concepts. Working papers are used but with caution, to allow the use of novel findings on the studied researched topic.

Most of the sources are peer-reviewed sources from scientific journals. Priority is given to renowned journals, such as the Journal of Finance and the Journal of Financial Economics, and other peer-reviewed sources as this likely guarantees a higher quality of research. However, some sources are working papers. As previously mentioned, these are used whenever they are perceived as too important to be excluded from the study’s frame of reference. Working papers referenced by peer-reviewed published articles are given priority, as this provides some level of peer-review by other researchers. In addition, working papers written by renowned authors are also given priority due to the legitimacy of the author. However, one should mention that this does not guarantee avoiding working papers with possible errors.

Two articles are published in Harvard Business Review, although this is a non-scientific journal. The first of these articles, Jensen (1989), is highly cited and forms the basis of many subsequent published research articles. As such it is perceived as too influential to be excluded in this study’s frame of reference. The second of these articles, Verheyden et al. (2016), is used only to motivate studying the topic of PE value creation and sustainability from a commercial point of view and is not used for further analysis. As such, these sources are handled with caution. General internet sources are also used to gather information about regulations and basic concepts or to motivate the studied phenomena. As such, these sources are intentionally not part of the study’s frame of reference. Sound judgement is used to evaluate the information from such sources and priority is given to trusted organisations such as the CFA and Sweden’s financial supervisory authority (sw. Finansinspektionen).
The sources also contain some industry reports from management consultants, asset managers, and other PE firms than Alder. However, these are used sparingly and with caution as they are not peer-reviewed. The upside with industry reports is that they tend to be recent and capture a commercial awareness of PE-related business activity. On the other hand, consultancy reports are oftentimes written with an ulterior motive, to market the consultancy firm in question. For example, this is seen in consultancy firms’ interest in promoting operational engineering and their related consultancy services. Such reports tend to over-simplify assumptions to their own benefit. Such is the case of the PE industry’s ability to generate superior returns, which some consultancy reports attribute to operational activities despite the limited research of its effectiveness. Another example is the PE fund’s possibility to generate superior returns from M&A, another contested research subject.

4.5.4 Method Criticism

While an interview-based approach can be considered the most suitable for achieving this study’s purpose, as discussed in section 4.1, subjectivity can be considered the Achilles heel of any interview-based research approach. Subjectivity can manifest itself in multiple ways. For example, personal reflections and prejudices of the authors affect how the study is carried out, and the interpretations that are applied to the interview answers. Furthermore, the semi-structured interview format allows for follow-up questions which allows the authors or respondents to, consciously or subconsciously, steer interview discussions in a certain direction. Not only might this skew the findings in certain directions, but it also makes the interviews less replicable.

The sample of case studies and interview subjects is not random, as they are intentionally selected to realise the purpose of this study. However, it is important to remember that quantitative and qualitative studies differ in this regard since the subjects, or observations, are used in distinctly different ways. In this study, this tendency requires the authors and readers to be critical and aware of the sample’s bias and not over-generalise the findings. In the sample of case studies, some companies entered the PE firm’s ownership later than others, as seen in the 2.5-year difference between the sample’s earliest and latest acquisition. The findings from later acquisitions could tend to be relatively more focused on what will or is expected, to be done in terms of value creation compared to older acquisitions, whose interview subjects have the ability to reflect and retell what has been done so far. This can complicate the comparison of value-creation activities between case companies. Furthermore, the study’s focus on Nordic growth-orientated SMEs also reduces the generalisability of the findings in terms of market geography and firm characteristics.

The sample of case studies represents companies that have sufficient time to participate in this study and that seem to perform well in terms of their value-creation plans. However, there are likely companies in the studied PE firms’ portfolio that experience less success, despite their PE ownership. This limits the generalisability of findings considerably and the findings might only be applicable to profitable businesses that follow their value-creation plans. As such, this study supports an understanding of the PE firm’s intended value-creating activities under satisfactory conditions, while it might overlook activities that are uniquely relevant when portfolio companies perform poorly. There is also a risk that interview subjects feel observed and obliged to portray their role or company in an overly positive way. This might cause subjects to highlight planned events in the future instead of speaking of what has indeed been done in the past, should they feel like more could be done.

This study covers PE value creation from two perspectives only and could benefit from additional viewpoints. A narrative that could be further strengthened in this study is the relative change before and after the PE ownership, for example by including the founder entrepreneurs or early owners, particularly those that are part of the board of directors to this day. Even though some interview subjects have experience with the case company from before the acquisition, such as the sustainability ambassadors, these are mainly asked about sustainability perspectives and thus these interviews overlook the before and after perspectives in more general regards. Other perspectives that a related study could benefit to include, for a more holistic view, is the perspective of PE fund’s investors, such as retirement funds, and a bank perspective.
In addition to expanding the narrative through additional stakeholders, a related study could include additional subjects per case company. However, since three case studies were selected, instead of for example one, the time limitation restricted the number of possible interviews. It is also reasonable to expect diminishing returns in terms of new information retained from the current pool of stakeholders, as observed in the current sample. However, it is worth noting that exploring one company through more interviews would likely provide deeper insight into the value-creating effects of the PE firm’s ownership with regard to that one studied portfolio company. Some other qualitative studies refer to information saturation as a natural limitation to the number of interview subjects. This applies less to this study’s selection of the number of interview subjects since they represent different stakeholders or roles in value-creation in the three case studies. As such, the level of information saturation may vary between interview groups. However, what is crucial is that the interviews build a complete information saturation so that the study’s purpose is achieved.

The interviews could be more unstructured and evolve freely as new knowledge is obtained. However, this is at the cost of generalisability, comparability between answers and replicability. Such an approach puts more emphasis and responsibility on the perception of each interview subject, and, as a consequence, more interview subjects might be needed. On the other hand, questions could have been more structured or specific. This would require expanding the pre-study, to build an even deeper understanding, for example understanding the owners’ agenda and the PE firm’s on-boarding process. However, this requires awareness that such documents exist for viewing, which was not the case until these were mentioned in the preceding interviews.

The order of interview subjects could benefit from another approach than the pragmatic one adopted in this study, which was based on the interview subjects’ availability. Interviewing Alder before turning to the portfolio companies could be used to verify Alder’s claims. However, interviewing the portfolio companies before Alder could ensure that Alder’s intentions do not influence the perception of the authors. In addition, the internal order of interview subjects within the portfolio company and the PE firm could support learning in a preferable way. The chairman of the board provides the most objective view of the PE firm’s ownership, with experience from similar situations and insight into the company at a strategic level. Initiating the interviews with this role could provide a good overview of the case studies, as an extension of the pre-study. Alder partners provide insight into the investment case, which in a sense forms the basis for the portfolio company’s strategic work or value creation. The authors recommend interviewing this role after the chairman of the board. Then, the CEO and sustainability ambassador of the portfolio companies provide a more hands-on, operational, viewpoints, and could thus benefit from being interviewed after Alder’s partners. Lastly, Alder’s sustainability officer could be interviewed last, given that this perspective is not as necessary for understanding each of the case studies, but rather provides an overarching strategic perspective on sustainability-work.
5 Results & Analysis

5.1 The Investment Case

While all case studies qualify for Alder’s investment focus on sustainable technologies, their growth agendas are found to vary across multiple aspects. In addition, it is explained that platform investments are made with multiple strategic growth opportunities in mind. As such, platform investments’ strategic plans are not entirely pre-determined but rather change depending on uncertain circumstances. Relating to how investment opportunities are evaluated, partners highlight the importance of other determinants than financial valuation. Nevertheless, the valuation practices described by partners align well with the narrative of the pre-existing literature. Regarding portfolio companies’ exit, subjects generally speak positively about a potential greenium. However, the size of such a greenium is debatable.

5.1.1 Growth Strategy

It is explained that SI’s growth journey is mainly driven by acquisitions, primarily focused on geographic consolidation in Sweden. On the other hand, Scanacon’s growth journey is mainly driven by organic investments. As for Samon, the growth journey is explained to be driven by both acquisitions and organic growth.

As a family-run firm with 13 employees upon acquisition, Samon’s partner explains that Samon is the smallest company Alder has ever acquired. The partner explains that Samon was primarily bought because of its underlying profitability. However, it has proven to be a platform investment with a larger acquisitions-based growth than Alder first anticipated. The CEO explains that Samon’s current growth journey is centred around consolidating the fragmented market of small-sized European gas detector companies and that the market for larger companies is already relatively consolidated. The attraction of consolidating smaller firms is for example explained by Bansraj et al. (2022), in that smaller firms are more easily consolidated compared to larger firms due to fewer firm integration issues. However, it is more difficult to achieve market power by consolidating small businesses, an aspect stressed by both Hammer et al. (2017) and Bansraj et al. (2022) as an important advantage of building larger firms. Samon’s partner also explains that building a larger firm, in general, creates multiple expansion at exit. For Alder, this would result in additional value at exit. This claim is in line with the BCG (2016) study, showing higher IRRs for M&A driven companies, and is also supported by Nikoskelainen & Wright (2007) and Valkama et al. (2013) who see higher returns for PE firms that engage in buy-and-build deals.

Another key motivator for acquiring Samon was Alder’s prediction that the gas detection industry would see significant growth due to an industry shift from synthetic to natural cooling gases, driven by the EU F-gas regulation. Similar to the case company Tarkett, analysed by Schwartz (2009), that shifted its product development in anticipation of a regulation shift, which saw it gain additional market share. That means that portfolio companies’ growth is not only attributed to Alder’s direct impact but driven by industry-wide growth, that would be present with or without Alder. Value creation could therefore be extended to Alder’s ability to seek and evaluate investments and their underlying potential, a source of value creation also highlighted by Acharya et al. (2013).

When Alder invested in Samon it introduced a shift in focus, from trimming costs to expanding top-line growth and capital expenditures, which is explained by one of Alder’s Investment Managers:

‘The company was a typical family business. It was slow-paced, and the owner did not want to spend. We are more: let us build as good of a company as possible and not focus on the small costs. Instead, invest.’

Generally, the literature has explained PE firms’ value creation from a resource efficiency standpoint, seeing a PE firm as an entity that stops management from pursuing investments that do not create value, and excessive capital expenditures (Kaplan 1989, Baker & Wruck 1989), stemming from the free-cash-flow argument presented by Jensen (1986). However, in Alder’s case, capital expenditures increase during ownership.
while capital expenditures, in Alder’s case, increase at ownership, one could argue that the core of the argument presented by Jensen (1986) holds. Alder makes the management pursue value-creating activities, however, in growth equity investments, these are tied to increasing capital expenditures, rather than lowering them with the anticipation of higher future revenues, which is seen by Bouchy et al. (2011) in French SMEs. This is supported by Samon’s CEO, who was appointed by Alder and seems to have been a critical component of Samon’s growth, achieved through an organic and acquisitive growth strategy. The chairman explains that the CEO has found a majority of M&A targets, but that the previous owner has contributed with contacts in the refrigeration industry. The CEO explains that he has used relatively simple methods to identify and contact potential M&A targets. This is by the chairman explained as:

‘The acquisitions that have been completed have been done by the CEO, which he has done through Linkedin. These are people who sell their lifework, which they do through Linkedin. It is really fascinating.’

So far, this has contributed to the acquisitions of two gas detection firms in Sweden and Germany. While the CEO has been particularly focused on locating and contacting potential acquisition targets, the CEO and chairman explain that Alder has been supportive of crucial inquiries to facilitate Samon’s add-on acquisitions. This includes, for example, Alder’s network of advisors and lawyers, as well as its experience with M&A processes.

Scanacon’s growth strategy has to some extent been similar to Samon’s. In Scanacon, growth is enabled by a growing metal recycling market. In contrast to Samon, Scanacon had a more structured organisation and business than the average Alder investment when it was acquired by Alder. This was established by Scanacon’s previous owner, the PE firm Verdane, who had led the expansion of an after-market sales business. This business, unlike Scanacon’s core project-based business, generates continuous and predictable cash flows which has enabled a larger flexibility for leveraging Scanacon with bank loans in order to free funds for investments. When Alder acquired Scanacon, it initiated the development of a new product within metal recycling to create organic growth. Verdane, the previous owner, did not have the time horizon to initiate the investment, and therefore Alder had the opportunity to continue Scanacon’s growth journey. However, the project has encountered time delays due to R&D personnel issues, but a pilot project in the US has recently been initiated, to test the metal recycling technology at a large scale. Like Alder’s investment in Samon, which was not initially thought to be a buy-and-build case, Scanacon’s unpredictability of its metal recycling business shows the difficulty of predicting the outcome of growth investments. However, even though the metal recycling investment has been a central investment to facilitate growth, Scanacon’s partner stresses that far from all goals set up for Scanacon need to be met in order to achieve a successful investment. This is in line with one of Samon’s investment managers who says:

‘The one thing you know with 100% certainty is that the plan will fail. There is no company that will follow the plan because you learn things all the time and realise "Why did we want to do this? This is stupid."’

Similarly to Samon, SI’s growth has been largely driven by acquisitions with SI, a company acquired from four co-founders, recently acquiring its fifth target. SI’s acquisitions have predominantly been firms that are geographically diverse around Sweden. This has enabled SI to attract customers that have businesses throughout the country. This is further similar to PE-backed firms in the retail industry, studied by Fracassi et al. (2022), whose growth is partly driven by geographical expansion. SI’s deal partner explains that the main strategy is to conduct acquisitions, and grow these independently, but also find synergies between firms. In Samon, synergies between acquisitions have mainly been external, i.e. cross-selling between firms has been established where products of acquired firms are sold by the acquirer, and vice versa. This is to easily reach new markets and customers in other countries. The implications of cross-selling show that Alder’s value creation affects the industry’s growth, as more products are offered to new markets, giving a possible explanation to the abnormal sector growth that Bernstein et al. (2017) see in sectors targeted by PE firms. So far, only external synergies have been conducted in Samon, while internal synergies, such as cutting production costs, have not been prioritised. Samon’s chairman explains that some tough decisions might have to be made like closing a production line, and relates this to his previ-
uous experience as CEO of another manufacturing firm. Furthermore, the chairman’s experience is something that Samon’s CEO sees great value in and a resource that has been important in terms of experience-sharing and a sign of legitimacy when Samon speaks to other firms. Both Samon and SI have seen more M&A-driven growth than anticipated. In Samon’s case, this was perhaps due to the intricacy of the small-scale gas detection market, that made it difficult to predict potential acquisitions. This further shows the unpredictability of growth, which is dependant on the possibility to make acquisitions or find strategic initiatives to further organic growth.

The CEO explains that the rationale behind not prioritising internal synergies is that it is difficult to cut costs for small firms and that it imposes a risk to pursue such an activity. However, Samon’s CEO acknowledges the need to focus on cost savings in the future, but that this should be a priority for Samon’s next owner. Like Scanacon’s case, this further shows that PE firms, with their fixed ownership horizon, do not complete all the possible value-creating activities, and that secondary buyouts create value depending on the objectives and ambitions of the acquiring PE firm, and the growth stage of the acquired firm. SI’s synergies are, on the other hand, more focused on creating economies of scale and scope. For instance, SI is centralising software development for all their acquired firms and is through larger order volumes achieving economies of scale through lower unit costs from their suppliers. Rather than achieving economies of scale, Samon is achieving synergies by moving some production in-house and sharing some R&D resources between firms.

In the case of SI, conventional synergies have also been complemented by a collaboration between SI and Umia, another one of Alder’s portfolio companies. This is a surprising finding since network effects between portfolio companies is not a topic heavily emphasised in the literature. In the case of Alder, the collaboration is enabled by Alder owning firms within adjacent industries. Furthermore, Alder’s portfolio companies’ sustainability ambassadors have an established contact network, which creates a space for collaboration and communication between firms that would otherwise not interact. Humphery-Jenner (2013) shows that diversification of PE funds facilitates learning that can be value-enhancing. In some way, Alder’s learning, but especially its business network, can be shown to generate business returns that would not take effect without Alder as a facilitator. However, in contrast to Humphery-Jenner (2013), learning from portfolio companies is especially value-creating in acquisitions within the same industry, not between diverse industries.

While Alder has assisted its portfolio companies with M&A-related activities, its involvement with finding and evaluating M&A targets seems to vary. SI’s chairman explains that Alder does not have a CRM system for tracking potential add-on acquisitions. This also seems to be the case at Samon, where its CEO has been the driving force of finding M&A targets, and where Alder has supported the process rather than the target exploring. Furthermore, the previous owner of Samon, who one would have thought to have a valuable network of potential acquisition targets, has had a limited impact on finding targets. In the case of Scanacon, while Alder continuously evaluates potential acquisitions, none has been made so far. The reason has been the lack of potential investments. However, one could argue that it is not the responsibility of the PE firm to find potential investments, as these activities might be too hands-on and add-ons might be too difficult to evaluate for a PE firm associate, often of a financial rather than technical background. This can somewhat be supported by the activities of Samon’s partner, who supports Samon regarding technical and M&A matters. This may be due to his background in academia and understanding of Samon’s products, unlike many others in the PE industry.

Interestingly, the acquisitions of all three case companies have been a combination of proprietary and non-proprietary deals. One of Alder’s investment managers explains that Alder’s strategy should be seen as an effort to gain exclusivity early and that it is not rare that Alder competes with other firms before investment. The reason why Alder wants exclusivity can probably be explained by Smit (2001), who argues that proprietary deals should generate a lower price. This is because proprietary deals have no competition between bidders that would raise the price based on the potential synergies that could be made through future add-on acquisitions. Gaining exclusivity as early as possible could therefore be seen as a way to gain many of the benefits of proprietary deals, by avoiding an extensive auction process. Representatives from Alder explain that industry knowledge and financial incentives are important in getting exclusivity, something that will be later discussed in Section 5.2 and Section 5.3 respectively.
5.1.2 Investment Valuation

Overall, the findings across case studies suggest that Alder adopt a valuation approach similar to what is mentioned in the literature. The overall view is that investment decisions are based on both financial modelling and other aspects. In addition, the modelling choices take risk into account in ways that may seem unconventional to theoretically optimal modelling practices.

Alder’s financial valuation of potential investments is largely affected by experience and scenario analyses. All partners testify to using a traditional IRR-based valuation method, calculated from estimated cash flows, in accordance with the previously reported methods that PE firms commonly use, such as reported in Gompers et al. (2016). This enables Alder to determine the maximum price that they are willing to pay for an investment. A central part of Alder’s investment valuation is using multiples to communicate investment returns, and selling firms for larger multiples, known as multiple expansion.

Similarly to other studies, such as Gompers et al. (2016), Alder does not take risk into consideration using CAPM, but rather, by using various scenarios for their cash flows to generate investment returns based on different business outcomes. Furthermore, both partners of SI and Scanacon explain that Alder expects a higher IRR for riskier investments. This shows that while Alder does not use an explicit model to risk-adjust its returns, its employees use their experience instead, which highlights the importance of PE firm representatives’ experience in financial and business matters. How risk, return and experience relate to each other is further highlighted by Scanacon’s partner:

‘Risk is a non-scientific but experience-based evaluation of a reasonable return target’

The importance of experience in firm valuation is a previously studied topic. Isaksson & Fredriksen (2020) find that it is especially prevalent in VC firms during downturns, where it is especially difficult to value firms. The same can probably be said of Alder’s investments which experience many uncertainties, although not as uncertain as VC fund investments, which makes some theoretical financial models difficult to use in reality. Furthermore, in drawing comparisons with VC firms, Samon’s partner, with a technical background, compares Alder with a VC firm in the sense that risk is naturally a central part of Alder’s business. As such, the investment firm must have a good understanding of the industries, technology and market dynamics of their investments, even though the companies can be considered more proven than VC investments. Additionally, he mentions that Samon is no larger than a company in which a VC fund may invest in and that the key challenges central to a VC firm are central to Alder’s investments as well.

In order for an investment to be desirable for Alder, it should generate a multiple of around 3x the invested capital, based on a holding period of five years. Even though Alder’s historical returns average above a 4x gross MOIC on realised investments, the spread of their previous investments naturally vary. This indicates a fairly large unpredictability of PE investments and the challenge of accurately predicting firm performance. When SI was evaluated, SI’s partner explains that a substantial risk was the lack of management structure and the challenge of appointing a suitable CEO. This risk is probably one of the greatest risks in relation to PE fund success, and hence not a surprising worry. For instance, Fracassi et al. (2022), Gompers et al. (2016), Bloom et al. (2015), Guo et al. (2011) and Hellmann & Puri (2002) all argue for the prevalence and importance of PE and VC firms to monitor and appoint an effective CEO. In addition, Alder also considered business risk, working with few product brands, and cyclical risk before the investment in SI.

When evaluating Scanacon, the main risk was perceived as the project-based business model, creating volatility in its cash flows. However, the offset for this was the after-market sales, explained to create predictability and stability in cash-flows, which in the past has enabled Scanacon to raise debt more easily. This underscores how Scanacon is a fairly mature business that enables Alder to focus more on financial value creation rather than operational value creation. Prior to investing in Scanacon, Alder’s worst-case scenario showed a positive return of 2x the invested capital. According to Scanacon’s partner, this gave Alder the confidence and reassurance of making the investment, showing the importance of financial modelling in Alder’s investment decisions. However, Samon’s partner stress that there are many more parameters to evaluating an investment than the implied returns from financial models. For example, the market, competitive landscape,
and technical uniqueness. Furthermore, Samon’s partner highlights the importance of having a team that can deliver results. Therefore, the incumbent management undergoes an assessment in order to understand their characteristics and whether they complement each other, to determine which human resources that may be needed. Why Samon’s partner might highlight investments’ other parameters could be due to his academic background and extensive technical insight, which gives another point of view compared to someone with solely a financial background. Furthermore, the importance of management is in line with the reasoning of Bloom et al. (2015), showing that PE-owned firms have superior management structures, which would suggest robust management assessments, which can be seen through Alder’s management evaluations. The assessment of management is something Alder has learned from its previous holdings, showing a concrete example of organisational learning in the PE business, that contributes to improved fund management.

5.1.3 Capturing Value at Exit

The interview subjects vary in their perspective of how sustainability-aspects affect the valuation at exit, as seen in Table 6. Most say that it increases the multiple at sale, i.e. the company is sold to a higher multiple, often an EV/EBITDA multiple, which is referred to as multiple expansion. Interestingly, most interview subjects stress that multiple expansion is how sustainability affects the valuation of a firm, i.e. not through immediate cash-flow improvement, but rather as a pricing mechanism. However, the scale of a sustainability premium is less clear. Samon’s chairman, for instance, have no opinion on the matter, SI’s partner explains that there should be a premium but that it is difficult to know how large. Only Samon’s partner and SI’s CEO are somewhat precise on the multiple-expansion’s extent. Samon’s partner explains that Alder can achieve an additional multiple if Samon is able to package itself as a sustainable firm and SI’s CEO says that a 2-3x additional multiple can be reached if sustainability is incorporated throughout the firm. SI’s partner explains that the package of having an environmentally friendly company profile, environmental measurements and sustainability-related reporting is appreciated by acquirers. The extent of a potential greenium is uncertain, which can be somewhat related to the literature. Crifo et al. (2015) find that the upside of good ESG practises generates a small premium in reference to financial buyers. Specifically, core firm characteristics that are environmentally friendly generate a higher premium than characteristics that are peripheral to a firm’s core business. This would indicate that there is support for the claim that Alder’s portfolio companies would see a greenium due to their core sustainable businesses. However, the question remains if a greenium exists only due to a socially responsible business model, or because sustainable businesses are posed to generate excessive growth due to being exposed to an underlying growing market.

Table 6: Expected Impact of Sustainability on Exit Valuation

<table>
<thead>
<tr>
<th></th>
<th>Samon</th>
<th>SI</th>
<th>Scanacon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chairman</strong></td>
<td>No opinion</td>
<td>Potentially higher multiple</td>
<td>Multiple expansion for all types of buyers (IPO, Financial, Strategic)</td>
</tr>
<tr>
<td><strong>CEO</strong></td>
<td>Financial and IPO give highest multiple, then industrial buyers</td>
<td>Financial buyers most interested but historically strategic buyers</td>
<td>There is going to be a multiple expansion</td>
</tr>
<tr>
<td><strong>Partner</strong></td>
<td>Strategic buyers most interested</td>
<td>Financial and strategic buyers most interested</td>
<td>Technical financial buyers most interested. Problematic that strategic buyers are not valued high enough.</td>
</tr>
</tbody>
</table>

What type of buyers, and how they might value sustainability is also discussed. Three interview subjects, Samon’s CEO, SI’s CEO and Scanacon’s partner say that financial buyers would be the most interested in buying their respective firms. In contrast, Samon’s partner sees strategic buyers as the most favourable. In addition, SI’s partner sees strategic and financial buyers as equally likely to favour a buyout. Only two interview subjects include IPOs as exit routes that are likely to result
in a multiple expansion based on sustainability-concerns. Problematic, however, is the difference between buyers that might provide Alder with a multiple expansion because of sustainability, and which buyers that are, in the end, likely to acquire the firms in the case studies. For instance, while Scanacon’s chairman and Samon’s CEO might mention IPOs as exit routes that would result in multiple expansions, the current IPO market is experiencing uncertainties and might not be a viable exit route. Furthermore, IPOs are also not found to be commonplace in portfolio companies’ exits (Gompers et al. 2016, Jenkinson & Sousa 2015) which aligns well with Alder’s previous exits, where IPO routes have not been pursued, as can be seen in Table 7. Furthermore, the preferred exit route could showcase some underlying preference due to other factors than price. Samon’s CEO, for example, highlights a financial buyer as a likely candidate to continue Samons growth journey, while Samon’s partner explains that strategic buyers might be more interested. This could be due to Samon’s CEO being particularly interested in growing Samon, which could be most easily done with a PE firm that can easily provide Samon with capital like Alder has done so far.

Table 7: Alder’s Previous & Current Portfolio Companies.

<table>
<thead>
<tr>
<th>No.</th>
<th>Acquired</th>
<th>Sold</th>
<th>Fund</th>
<th>Company</th>
<th>Sold to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>May-11</td>
<td>May-18</td>
<td>Fund I</td>
<td>Jernforsen</td>
<td>Strategic: Linka energy</td>
</tr>
<tr>
<td>2</td>
<td>Dec-11</td>
<td>Nov-16</td>
<td>Fund I</td>
<td>Dinair</td>
<td>Strategic: American Air Filter Eur</td>
</tr>
<tr>
<td>3</td>
<td>Feb-12</td>
<td>Feb-21</td>
<td>Fund I</td>
<td>Nordic Water</td>
<td>Strategic: Sulzer Group</td>
</tr>
<tr>
<td>4</td>
<td>Sep-12</td>
<td>Jul-18</td>
<td>Fund I</td>
<td>R2P</td>
<td>Financial: HQ Equita</td>
</tr>
<tr>
<td>5</td>
<td>Aug-13</td>
<td>Jun-18</td>
<td>Fund I</td>
<td>Powerbox</td>
<td>Strategic: Cosel Co</td>
</tr>
<tr>
<td>6</td>
<td>Apr-15</td>
<td>Dev-19</td>
<td>Fund I</td>
<td>Gasmet</td>
<td>Strategic: Nederman</td>
</tr>
<tr>
<td>7</td>
<td>Sep-20</td>
<td>Jan-23</td>
<td>Fund II</td>
<td>Autocirc</td>
<td>Financial: Nordic Capital</td>
</tr>
<tr>
<td>8</td>
<td>Aug-13</td>
<td>-</td>
<td>Fund I</td>
<td>Aidon</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Nov-14</td>
<td>-</td>
<td>Fund I</td>
<td>Satel</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Feb-15</td>
<td>-</td>
<td>Fund I</td>
<td>Umia</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Oct-18</td>
<td>-</td>
<td>Fund II</td>
<td>Scanacon</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Aug-20</td>
<td>-</td>
<td>Fund I</td>
<td>Samon</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>Nov-20</td>
<td>-</td>
<td>Fund II</td>
<td>Briab</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>Mar-21</td>
<td>-</td>
<td>Fund II</td>
<td>SI</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>Nov-21</td>
<td>-</td>
<td>Fund II</td>
<td>Centriair</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Dec-21</td>
<td>-</td>
<td>Fund II</td>
<td>AB Inventech</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>Dec-22</td>
<td>-</td>
<td>Fund II</td>
<td>r2pTracking</td>
<td>-</td>
</tr>
</tbody>
</table>

In regard to financial buyers, debt markets are strong predictors of the possibility of PE firms financing acquisitions, according to the market timing theory (Axelson et al. 2013). As interest rates have recently increased, this would suggest that financial buyers would be less likely to acquire Alder’s portfolio companies and that strategic buyers would therefore be preferred. This recent narrative is also in line with Alder’s previous exit routes, which show that strategic buyers have been the most common acquirer of Alder’s firms, as seen in the right-most column in Table 7. The reason behind strategic buyers being interested in Alder’s portfolio companies is in Samon’s case explained by its partner to be due to industrial conglomerates being engaged in sustainability issues. In Scanacon’s case, its partner elaborates that strategic buyers could see Scanacon as a complement to their existing product portfolio. However, as mentioned before, financial buyers are by some interview subjects seen as primary candidates for exits. SI’s CEO explains that financial buyers nowadays pay a larger premium for sustainability than strategic buyers. A reason for this could be funds’ capital that is financed by sustainability-aware investors. Both Samon’s chairman and SI’s partner mention this as a potential reason for financial buyers’ interest in firms that Alder invests in. Furthermore, this could also be seen as a reason for Alder’s investments as Alder’s investors are increasingly more environmentally conscious, according to Alder’s sustainability officer.

5.2 Industry Knowledge & Experience

Alder’s knowledge of the case studies’ business models is explained to be a key element of how these firms came to enter Alder’s portfolio upon acquisition. Additionally, Alder’s board members have knowledge and experiences, seen in Table 8, that assist their portfolio companies. Furthermore,
each of the case studies’ partners stress that Alder’s understanding of the firms’ business models and industries gave Alder legitimacy in the acquisition negotiations with each of the target firms. More specifically, Scanacon’s partner says that:

‘Upon investing Alder had a foundational knowledge of the underlying technology and business model which made the sellers perceive them as legitimate. This also benefited Alder in both the process of quickly and accurately deciding upon a strategic direction for the investment and in the process of recruiting an appropriate CEO and chairman of the board.’

Samon’s partner, one of Alder’s co-founders, explains that Alder had previous experience in the gas detector business from Alder’s prior platform investment Gasmet, a Finish gas-detection company. In addition, as a professor of applied environmental science, he explains that he had a good understanding of gas detection regulation which aims to phase out synthetic gases due to their harmful environmental impact. He explains that this creates the underlying demand for gas detectors, as the replacement gas, natural gas, is harmful to people’s health. The partner claims that his industry knowledge helped him understand Samon’s opportunities when he was presented with the investment proposal from another deal team partner. SI’s partner tells a similar story of how the investment in SI came about. Alder had previously invested in Unia, a Swedish installer of energy optimisation solutions, from which the deal team learned about the market for real-estate energy optimisation. As for Scanacon, Scanacon’s partner explains that Alder had long followed the firm and had personal contact with its previous chairman. In addition, Alder had previously evaluated Scanacon’s competitors, making Alder familiar with the business model and knowledgeable about its market compared to other potential buyers of the company.

Why Alder performs cross-border acquisitions could be explained by Humphery-Jenner et al. (2017) who shows that PE firms, through experience in cross-border deals, can leverage their contacts and networks at the firms they acquire. Meaning that cross-border deals become easier with time and also lead to more business opportunities due to the larger sample of firms outside of the home country. Furthermore, if these advantages could include add-on acquisitions made by platform investments this means that cross-border acquisitions that Samon has made, for instance in Germany, would enable it to further grow in Germany and abroad.

Industry knowledge is also explained to have played an important role in pursuing add-on acquisitions with Samon. The partner says that his knowledge of gas detection has enabled him to assist Samon by engaging in rather technical conversations with potential add-on acquisitions. The importance of a broader knowledge base, especially in engineering and science, is in line with Zarutskie (2010). However, this implies that Alder has similarities to VC funds in the management of their investments. While this might be the case, Alder does have a majority of employees with a business background, and few have entrepreneurial experience, something that fits the human capital aspect of growth equity firms in contrast to VC firms, explained by Block et al. (2019). In conclusion, evidence suggests that Alder is functioning like a traditional PE fund, but has some similarities to a VC fund. This is reasonable as Alder’s investment focus is investments in small technology firms that require professionalisation of their businesses, which is an activity that Hellmann & Puri (2002) identifies as central to VC funds as well.
Table 8: Background of Portfolio Companies’ Board Members. Source: Company websites.

<table>
<thead>
<tr>
<th>Board Members</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samon’s Partner</td>
<td>Founding Partner at Alder and has a background in academia as a Professor and head of a Nordic research institution within Applied Environmental Sciences at Stockholm University. He has advisory experience to private and institutional investors within the environmental technology sector and has worked with research organisations and innovation at a national and international level.</td>
</tr>
<tr>
<td>Samon Board Member</td>
<td>Investment Director at Alder and joined Alder in 2012. MSc in Finance, Stockholm School of Economics.</td>
</tr>
<tr>
<td>Scanacon’s Partner</td>
<td>Partner at Alder and has experience from the investment firm Ratos and as a management consultant at Bain &amp; Company. MSc in Business &amp; Management, Stockholm School of Economics.</td>
</tr>
<tr>
<td>Scanacon Board Member</td>
<td>Same person as Samon’s Partner.</td>
</tr>
<tr>
<td>SI’s Partner</td>
<td>Partner at Alder and has previous experience from the PE industry and the financial advisory industry through working at 3i, Goldman Sachs, Morgan Stanley and Alfred Berg Fondkommission.</td>
</tr>
<tr>
<td>SI Board Member</td>
<td>Partner at Alder and has previous experience from the PE industry and the financial advisory industry through working at Karnell and Morgan Stanley. MSc in Business Administration, Stockholm School of Economics.</td>
</tr>
</tbody>
</table>

Although Alder explains that industry knowledge has been a crucial driver of identifying and acquiring companies, CEOs and chairmen across the case studies claim that financial expertise is the relatively more important contribution from Alder. This is not unexpected given the deal team’s extensive expertise in financial advisory, seen in Table 8, and the M&A they conduct on behalf of Alder’s platform investments. This financial experience is particularly highlighted for SI and Samon, the two relatively more M&A-driven case studies. Samon’s CEO highlights the value of Alder’s associates’ financial expertise as a particularly important complementary competency in their shared and current M&A journey. This story is also supported by SI’s chairman, who claims that Alder’s knowledge of firm valuation and experience in M&As are the two most central aspects of Alder’s value-added. Additional aspects mentioned in the interviews include Alder’s favourable network in the financial industry, which is explained to provide portfolio companies with favourable bank financing and legal advisory services.

Furthermore, the interviews suggest that Alder’s active ownership relieves some of the case studies from conducting relatively operational activities relating to M&A processes. According to Scanacon’s CEO, the company does not need M&A-focused personnel due to Alder’s assistance with M&A-related matters. However, it is worth noting that Scanacon has not yet conducted any add-on acquisitions, although opportunities are explained as continuously monitored by Alder’s deal team. Additionally, in SI and Samon, there are no CFOs in place. Alder, therefore, due to its associates’ financial knowledge, assists these firms with financially operational activities that are needed due to personnel issues at the firms. Alder’s involvement in M&A-related activities supports the finding of Acharya et al. (2013) that financial experience of GPs increases M&A success. Furthermore, the claim by Bottazzi et al. (2008) can also see some support as Alder’s investor activism can be seen as helpful, and that more involvement from Alder leads to firm value creation. That Alder involves itself operationally is similar to the findings of Fredrikson et al. (1997), who show that VC firms engage themselves the most in firms that experience issues. Alder’s active engagements with its portfolio companies are also in line with Biesinger et al. (2020) in that PE firms are nowadays more engaged in their portfolio companies than during the 1990s.

In Samon’s case, Alder’s non-financial experience in its previous investment Gasmet has had a positive impact on Samon. During Alder’s ownership of Gasmet, Alder learned that an effective sales method for gas detection products was through online sales. Therefore, Alder initiated contact between Samon’s CEO and Gasmet’s chief of marketing to enable Samon to learn from
Through continuous investment in a similar industry, Alder managed to leverage its contact network. This shows that continuous investment into similar industries facilitates learning that can be used in subsequent investments. Furthermore, it supports the findings of Spaenjers & Steiner (2021), who show the value of specialised PE firms, and gives further explanation to the claim of Gompers et al. (2016), of why PE firms tend to specialise within certain industries.

Both SI and Samon highlight the many investments that Alder has made, which has enabled Alder to recognise situations that they have encountered before. Furthermore, SI’s partner explains that Alder has dealt with and learned from mistakes it made with its first fund. An example of a change Alder made, based on previous investment experience, was to minimise SI’s investment risk by recruiting a relatively more experienced CEO and board compared to the average Alder investment. Furthermore, Alder has recruited external chairmen, who all have vast experience in leading industrial firms. Samon’s CEO particularly values the partnership with the chairman, which potentially could be due to Samon’s quick expansion, from a small regional firm to an international business, which creates more need for advice regarding operational and business challenges.

5.3 Motivation & Incentives

Interview subjects are found to discuss three types of motivators promoted by Alder. Firstly, equity incentive schemes for management, and secondly, setting strategic goals jointly, the portfolio company and Alder alike, through an iterative strategy process. Thirdly, some interview subjects promote softer factors, such as personal relationships and available experience, as a final group of motivators. While all types of motivators are identified across case studies, several interview subjects highlight that their relative importance is likely a rather personal opinion.

In the interviews, financial incentives are referred to as ‘direct monetary compensation’ or ‘equity incentive programs’. The interviews explain that Alder lets previous owners and management reinvest or buy company stock upon Alder’s entry. The motivation behind this is commonly referred to as putting key stakeholders in the same boat. This explanation is well aligned with the traditional view of management equity incentives, for example, presented by Baker & Wruck (1989) and Gompers et al. (2016), as a tool for reducing agency conflicts and motivating by aligning the goals of the managers and employees with those of the firm. With regard to putting stakeholders in the same boat, this implies that their shared equity ownership makes them all work towards increased future profits, through dividends or a higher sales price, as these can be considered the expected benefits of equity ownership.

The chairmen have a particularly positive view on equity incentives, claiming that these are a natural part of PE firms’ structures for value creation in their portfolio companies, as reflected in a chairman’s claim that equity incentives are ‘foundational in PE and an obvious motivator’. This confirms the findings of Gompers et al. (2016), who finds strong evidence for the prevalence of equity incentives in the wider PE industry. However, other chairmen highlight the personal difference in equity incentives’ effectiveness by claiming that ‘money affects people’ but that people’s approach to goals vary significantly between individuals. Another chairman claims that Sweden’s capital tax system makes equity incentives particularly striking, as this source of income is less taxed than regular pay, making it harder for employees to ‘become rich from pay’ compared to equity ownership. This is an interesting perspective not highlighted in the previous literature and implies that external, regional factors, such as income regulation, could impact the effectiveness of equity incentives.

Alder highlights that in certain portfolio companies, equity incentives are not limited to managers only, they may be offered to a wider range of employees. One of Alder’s investment managers explains that incentive programs are tailor-made, as it is determined on a case-by-case basis, depending on a variety of factors, including equity options and shareholder loans. A CEO claims that such a wide equity participation is unique in the PE industry. Furthermore, the CEO explains the claimed benefit of wider equity participation is twofold. Firstly, it deepens the alignment of participation throughout the organisation. Secondly, it shows that Alder does not seek to exploit its portfolio companies, but rather, that Alder seeks to share the prospect of profits. The second
aspect is particularly interesting, as it challenges the traditional view that LBO firms would seek short-term value-maximisation for their own benefit, explained in for example Kaplan & Strömberg (2009).

Another interesting observation relating to Alder’s seemingly open-minded approach to equity participation is that SI was purchased in an auction process, however, at a discount relative to the price offered by other bidders. This is explained by SI’s partner, who says that letting the previous owner keep an equity stake gave Alder a competitive edge in the bidding process. An investment manager at Alder clarifies that, although this was the case, Alder gained exclusivity early in the bidding process, making it more of a hybrid process than a more full-fledged case of price competition. This observation is interesting as it challenges a key assumption about PE firms’ entry process, that PE firms tend to avoid auction processes as these risk raising the sales price due to the high price competition, as explained in Smit (2001). However, it also highlights that the acquisition process is more complex and not as two-partied as often-times portrayed in the literature. Lastly, this observation showcases the matter of opportunity, which one can argue is unique to the private industry and unavailable to the more liquid public stock market, where investment opportunities are almost continuously available and repriced under significantly higher price competition. While this might not contribute with value-added per se to the acquired firm, it does imply that equity incentives can provide the PE firm with a competitive edge, as it does indeed seem to be an appreciated gesture from the previous owners’ point of view.

In addition to owners and managers jointly owning portfolio companies through stock, the interviews portray joint participation in deciding the company strategy as another key motivator for accelerating portfolio companies’ growth journeys with Alder. This motivator is promoted by the CEOs, chairmen and partners. The strategy process in all three case studies is portrayed as iterative and allows for both company management and the board of directors to jointly decide upon the strategic direction of the company. That is, an owner’s agenda is set by Alder upon entry. This document is explained to clarify the goals that the management, and ultimately the CEO, is responsible for implementing throughout Alder’s ownership. Then, strategy days are held, one to two days a year, during which company management meets and breaks down the owners’ agenda into an annual business plan and budget. These are presented at the following board meeting, during which they are discussed with the board, who may ‘raise the bar’ of pre-existing goals or include additional aspects before ultimately accepting the new strategy. These findings elaborate on Acharya et al. (2009), who report that PE firms can address agency relationships by monitoring and cooperating on important strategic decisions and that PE firms tend to challenge the ambitions of their portfolio companies’ management.

A particularly strong claim, articulated by one interview subject, is that there is ‘no need for external motivation if company management gets to decide their own strategic agenda’. This statement questions the relevance of for example financial incentives, in light of alternative incentives. This has several interesting theoretical explanations from an agency theory perspective. Firstly, one could challenge the relevance of traditional agency theory in the context of small previously owner-led firms, as these have naturally little separation of ownership and control as managers naturally hold equity incentives. Alternatively, one could argue that having an iterative strategy process like the aforementioned, where the owners ultimately accept or dismiss the management’s proposed strategy, would naturally align the goals of management and owners as they jointly agree on a strategic direction. One partner dismisses the importance of financial incentives, claiming that soft motivators would be relatively more important. He explains that soft motivators include for example that the company management may be motivated to maximise the experience and expertise that Alder and the external chairmen may bring to board discussions. Another subject says that ‘the board and CEO share Alder’s ambitions and work towards achieving these’. Once again, one cannot help but question the relevance of agency theory when PE firms recruit like-minded chairmen and CEOs, naturally aligning the viewpoints and reducing frictions, as these are recruited by the PE firm with the intention of realising a pre-defined growth journey.

It is worth noting that equity incentives can be considered an uncomfortable question to interview subjects. As such, it is difficult drawing conclusions regarding their effectiveness in relation to alternative motivators. Nevertheless, most interview subjects highlight that it is rather a matter of personal preference, which seems hard to argue against in most behavioural contexts. The PE
industry would likely not disperse their equity ownership unless they and company management perceived an upside with the arrangement, as it dilutes future earnings for both parties. Looking at equity incentive programs from a perspective other than agency theory, equity incentive programs are commonly used for the retention of talents in for example, tech-orientated companies (Ittner et al. 2003). This could be an alternative motive for the prevalence of such programs in sustainable technology firms as well, given that the relevance of agency theory seems limited in the context of small, previously owner-led, firms.

5.4 Board-Work Improvements

Alder is found to contribute to each of the case studies with similar structures. Firstly, through active corporate governance, by appointing knowledgeable and professional members of the boards. Secondly, by improving board-related processes. In addition, all case studies testify to a positive board climate that supports collaboration between participants, supporting many subjects’ claims that the PE industry is, after all, a people business.

Scanacon’s CEO claims that Alder has the ability to shape the board’s way of working through their ‘three out of four seats’ on the company’s board of directors. For clarification, it is worth noting that Alder in fact has two formal board members and that the third Alder representative is a board deputy. Nevertheless, the implication remains the same. Alder has a significant presence on the board which enables the PE firm to exercise active ownership. While Alder’s presence on the boards varies across case studies, as shown in Figure 7, all portfolio companies testify that Alder has a significant presence through an appropriate number of seats. As SI’s CEO says ‘Naturally, the majority owner has a large representation on the board’. This mode of reasoning aligns well with the theory presented by Fama & Jensen (1983), that the board is the central control system in any organisation. Furthermore, given that Alder holds the majority equity stake in its platform investments, its majority mandate in its boards may not come as a surprise if one argues along the lines of Nikoskelainen & Wright (2007), that it is the shareholders’ right to appoint the board.

Figure 7: Board Composition of Case Studies. Source: Interviews and company websites.

CEOs and partners explain that few case studies had as professional governance structures as the board-work initiated by Alder. SI’s partner explains that Alder tends to initiate working through a board of directors, which is confirmed by Samon’s CEO who claims that ‘The board-work was essentially non-existing prior to Alder’s ownership’. As an anecdote of corporate governance in the past, a CEO says that ‘Before Alder, the firm had approximately five meetings per year, in the entire company. We have significantly more meetings today, which clearly indicates the structure that Alder has added to the business.’ However, circumstances were different upon Alder’s acquisition of Scanacon. Scanacon’s partner explains that a great foundation had already been laid by its previous PE owner, Verdane. This resulted in a level of corporate governance which, upon Alder’s acquisition, was higher than Alder’s average platform investment. The observation of another PE firm’s value creation further strengthens the argument that PE firms enforce the governance structures of their platform investments through for example, professionalisation of the board-work, in line with the findings of Coles et al. (2008) and Gompers et al. (2016). In addition, this shines a light on the fact that this may be a favourable starting point for another PE firm, such as Alder, to continue to take on a new growth journey, as in the case of this secondary buyout.

No matter their starting point, all case studies have had an external chairman appointed by Alder upon their entry. According to a partner, ‘Appointing a CEO and chairman of the board may be
the top three most influential decisions we [Alder] make’. Another partner explains that appointing the chairman of the board is particularly important as this person is intended to act as a mentor to the CEO regarding any operational issues as Alder does not intend to act operationally. This claim aligns well with the story told regarding operational improvements, in section 5.6. Another partner explains that ‘Having an external chairman is particularly handy if times get rough since this person has the ability to commit more resources, for which he also receives compensation’. This story is confirmed by Scanacon’s CEO, who explains that he has relatively more contact with the chairman than with Alder. Furthermore, the associated chairman confirms that he and the CEO have regular contact in-between board meetings with Alder. This is also found in Acharya et al. (2009), that PE firms tend to allocate significant efforts in pursuing supportive informal communication with their portfolio companies.

It is worth noting that the chairmen’s backgrounds seem to support Alder’s claim that the chairmen are recruited with the intention of providing active support to the business, rather than acting as ‘bench-warmers’ on the board. SF’s CEO thinks that Alder has added important competence to the board of directors and that it does not withdraw from recruiting great names in the industry. In the past, he has worked on boards where external board members have been inactive, due to too little time or interest. When the chairmen are asked about what experiences they bring to the board of directors, seen in Table 9, their explanations align well with the associated partners’ descriptions of their intended recruitment goals. The intention to organise small well-functioning boards with a mix of insiders and outsiders has support in the literature, including Yermack (1996), Coles et al. (2008) and Gompers et al. (2016) who generally argue that this enhances firm value. While the board’s size may be an aspect of efficient boards, the findings seem to suggest that it is rather the competency of the board members that is perceived as value-adding to the case studies. This is more in line with RDT by Pfeffer & Salancik (2003), that the board is an important resource for management advice as opposed to a more passive monitoring role promoted in the earlier literature.

Table 9: Chairmens’ Most Significant Experiences According to Themselves and Alder.

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Key Experiences</th>
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<tbody>
<tr>
<td>Samon</td>
<td>Has done a similar growth journey as Samon as CEO for Perten, which grew from 400 million to 1 billion, and was sold in 2014 by the PE firm Valedo to Perkin Elmer, a grand name within the industry of analysis instruments.</td>
</tr>
<tr>
<td>Scanacon</td>
<td>Has experience in global business, project deals, and after-market sales (an important aspect of Scanacon’s profitability). Knowledgeable about how to lead the board in a more mature structure through previous engagements as chairman and board member of several Nordic industrial firms. Currently chairman of the board at two other companies.</td>
</tr>
<tr>
<td>SI</td>
<td>Has 38 years of experience in industrial businesses and acquisitions, as CEO at various firms from 2000-2018, including Assa Abloy, and board member since 2018. Is currently the chairman of the board at four other companies.</td>
</tr>
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In addition to the significance of appointing an external chairman of the board, the interviews highlight the board-related processes and structure that Alder brings to the table. This is for example through formulating an owners’ agenda and structuring the number of board meetings, and their respective objectives, throughout the fiscal year. In Samon, the chairman and partner, in particular, highlight the various evaluations that are carried out as control functions for successful board-work. They say that every board meeting ends with a board evaluation, where the business’s and CEO’s performance is evaluated. Furthermore, once or twice a year, Alder’s performance is reviewed by the portfolio company through a form. While such control functions are not mentioned in the interviews with Scanacon and SI, these two cases mention their own unique governance structures. In Scanacon, the CEO has the mandate to handle all tenders below a certain value on his own, and everything beyond this must be handled together with the chairman of the board or the entire board. This is not surprising, given that Scanacon sells large-scale projects. In SI, Alder has recruited a second external member of the board, according to the CEO. Together with the chairman, they are explained to act as two independent forces in the board, to balance
Alder’s opinions and raise the voice of minority owners. While the balancing force of external board members is acknowledged by the interview subjects, this observation also has support in the literature. For example Fama & Jensen (1983) argue that a central aspect of the board, through external representation, is the absence of the entrepreneur, which helps to ensure decision practices where decision-makers do not optimise for their own good.

Another key aspect is that the case study representatives and partners speak fondly of each other. Samon’s chairman describes the board culture as positive, and relatively informal with ‘no topics off the table’. Scanacon’s chairman tells a similar story of the inclusiveness of board participants and that Alder supplies complementary competence through its three representatives. SI’s chairman specifically highlights the differences between working in a PE-led board, versus a public company board. He claims that small businesses often benefit from not conforming to the rules applicable to public companies, such as quarterly reports and public general meetings. Multiple chairmen highlight that a unique feature of Alder’s ownership is that they are people persons and easy to deal with. This kind of comment highlights the fact that, even though Alder makes platform investments with the intention of growing and professionalising them, one cannot overlook soft values when handling smaller previously owner-led private businesses. This is also highlighted with regard to motivators, elaborated on in Section 5.3. It seems to be the case that one must take personal fit into account in delicate matters such as formulating a smaller company’s central control function, the board. After all, scaling up does likely not happen overnight, and the people driving these major changes are of utmost importance to the endeavours’ success.

5.5 Executive Improvements

Alder is found to recruit portfolio companies’ CEO together with the chairman and to contribute to the recruitment of a CFO. While the definition of executive was discussed in the interviews, all interview subjects conform to the story that Alder, as the majority owner, has the formal right to appoint the management team, ultimately lead by the CEO. However, there was also a strong opinion that a CEO must himself/herself be allowed to elect his/her own senior management team, except when it comes to recruiting the CFO. This is a process in which Alder is allowed to interfere, and does so, as the financial nature is of interest to the owners.

Alder’s partners describe that they aim to build scalable organisations in all of their portfolio companies, due to their growth orientation. For example, in SI, Alder recruited a CEO to replace the previous management structure, where four founders jointly shared the responsibility of a CEO, as it did not allow for conventional governance structures. However, founders were kept on the board of directors, due to their valuable business insight. SI is not the only case study that has seen a change of CEO upon Alder’s entry. This is a change shared with Samon and Scanacon as well. A partner explains that changing a CEO is not a standard procedure for Alder, it is only done if necessary. This is also confirmed by the case studies’ chairmen, who explain different reasons for the change of CEO in their respective company. In Samon, the previous owner and founder had to step down due to health concerns. However, he remained on the company board. In Scanacon, the change of CEO was due to succession, and the previous CEO retired. The circumstances for this latter change of CEO is by the chairman described as ‘the best possible conditions’, due to the overlap of the previous and new CEO. While all case studies have seen a change of CEO for various reasons, in general, Alder’s take on CEO replacement is by a partner described as:

‘If the CEO is unable or unfit to fulfil his work then Alder has to discuss with the chairman whether he should attend the matter of changing management. With time, this happens in almost half of all businesses. Usually, this stage has been overcome when Alder enters. However, sometimes a CEO has to be replaced during Alder’s ownership.’

This perspective aligns with the theory of boards, fundamentally influenced by Fama & Jensen (1983), as it essentially describes the use of hiring and firing as a tool for maximising firm value. Nevertheless, Alder’s involvement in the hiring of other managers is explained as dependant on the management role in question. The interviews convey that it is of utmost importance that the CEO has autonomy and full support from Alder in recruiting and deciding his/her management team himself/herself. However, when it comes to recruiting the CFO, Alder is relatively more involved as
this concerns financial aspects which are of interest to the owners. All three case studies describe that they adopt the **grandfather principle** (sw. farfarsprincipen) in their recruiting processes. This principle implies that the manager of the recruiting manager participates in the recruiting process of a more junior colleague. For example, in each of the case studies, the chairman of the board has been involved in the recruiting process of the new CEO, and more recently, Scanacon’s CEO mentioned that he and the chairman together recruited a quality officer using this principle, without Alder’s active participation other than through the final board approval. Currently, both Scanacon and Samon are in the process of recruiting CFOs, and Samon’s CEO says that:

‘Alder’s participation in the recruitment of the new CFO has significant contributions to a small firm like Samon. Without their help, we would not have been able to find as high-qualitative candidates.’

He mentions that Alder has contributed to the recruitment process with a head-hunting firm, through its network of recruiters, and with valuable feedback on the hire requirements specification. Considering Alder’s extensive experience of recruiting senior management, these positive effects seem plausible and important, considering that senior management recruitment can be considered one of the most influential decisions for value creation, as explained in Section 5.4. While the grandfather principle is not explicitly covered in the pre-existing literature, its implied benefits further strengthen the relevancy of RDT in the matter of small firms, as promoted by Pfeffer & Salancik (2003). Through the grandfather principle, the CEO is supplied with a second opinion and experience of recruiting from the chairman. Similarly, when the CEO was appointed, Alder had a stake in this decision. As such, the principle both supplies managers with resources, time and recruiting experience, and acts as a control function for important decisions that may have significant effects on realising portfolio companies’ intended growth-journeys.

### 5.6 Operational Improvements

Alder is found to wish to not engage in operational matters with its portfolio companies. However, operational PE firms were found to be a matter of unanticipated complexity. No matter the interview subjects’ standpoint, the vast majority of subjects conformed to the opinion that Alder balances its portfolio company engagements with satisfaction. This complexity is particularly interesting, as the growing body of recent literature focuses on operational engineering as an increasingly important tool for PE firms’ value creation. As such, the findings shine light upon the particular challenge of managing small or medium-sized portfolio companies, as analysed below.

The interview subjects who claim that Alder, as an owner, should not be operational in their engagements with their portfolio companies motivate this by saying that Alder should limit its interaction with operational matters to their board-work. They explain that this includes deciding on the portfolio company’s agenda and appointing a chairman and CEO. From this perspective, operational improvements are only indirectly caused by Alder. Most interview subjects, including both chairmen and partners from all case studies, describe that Alder does not intend to be operational in their management of portfolio companies. It seems to be the case that an operational owner crosses the line of the intended governance structure between the PE firm and the portfolio company. A partner captures this theoretical boundary by saying:

‘If Alder starts taking management decisions then, technically, Alder is the one that should be replaced in case of poor performance, and that doesn’t work.’

One CEO has particularly strong opinions regarding operational PE firms, due to his 20 years experience of company development, both on the operational side as CEO and on the owner side, similar to Alder. He clarifies that ‘An owner [PE owner] should supply the company with capital and contribute with sound financial structure, alongside hiring and firing employees to ensure a suitable organisation’. The main problem with operational PE firms seems to be longevity and the portfolio company’s dependence upon the PE firm. The same CEO says that ‘Interfering with details where one has insufficient experience risks creating confusion and short-lived effects. This can also cause problems upon exit, where many PE firms fail. He expresses suspicion towards PE firms with sales or operational experts, who conduct work that the portfolio company itself should
do, which he calls 'letting fire go up the chimney'. This shines light on a more practical aspect of active ownership, that it is important that the PE firm supports in a way that causes persistent effects, instead of stepping in to solve the problem at hand. This short-term fire-fighter behaviour is recognised from Fredriksson et al. (1997), however, identified in the VC industry.

Despite the aforementioned controversy of PE firms overstepping their theoretical boundaries, some interview subjects, the partners and one CEO, are more open to PE firms being what they call 'hands-on' or 'active'. While this might sound similar to being operational, Samon’s partner claims that 'One needs to distinguish between being close, or active, and being executive. While Alder may be perceived as close, we avoid being executive, except for CFO recruiting'. He claims that small businesses are all about 'people relations' and 'knowledge at the right time', even if this reasoning may upset industrialists. The story aligns with RDT by Pfeffer & Salancik (2003), that smaller firms’ management may require more active governance from their boards through the boards’ competency. This is due to smaller firms’ limited resources at hand to the firm. Consequently, this highlights the intricacy of managing smaller portfolio companies compared to larger ones, which may form the basis of much pre-existing literature. As such, supporters of more active PE firms may suggest a reality that is less clear-cut than what the literature may argue for.

Alder is described to work closely, or more actively, with certain portfolio companies through troika meetings. At their core, troika meetings are explained as brief discussion meetings between the CEO, PE firm partners, and the chairman, in-between the official board meetings. These meetings are used in both Samon and SI. In Samon, these meetings are held every other week and include participation from the previous owner as well. In SI, these meetings are held weekly, with an additional 30 minutes dedicated to Samon’s M&A agenda. The interview subjects explain that the concept of troika meetings is adopted by many other PE firms as well, such as EQT and Valedo. While both the chairmen and CEOs of the two portfolio companies and their respective partners express appreciation for these meetings, one partner acknowledges that this format might not play to everyone’s taste, which is why this is not adopted in all portfolio companies. He says that 'Sometimes the CEO or chairman may find these meetings inappropriate'.

One partner highlights the importance of troika meetings’ format, as a condition for their success. He explains that 'It is important that these meetings are not significant decision meetings, as those matters should be handled by the company’s CEO and board’. Instead, he explains that they are intended to be ‘semi-informal meetings where management would like to get micro decisions straight’. This raises the question of whether troika meetings can be seen as an accepted way of bridging the conflict between theory and practice when it comes to PE firms’ relatively more active management of small portfolio companies. Reaching even further in the discussion, troika meetings could be a necessary feature in managing growth-orientated businesses, where the business pace may be higher and require more regular check-in than what is allowed for using traditional board meetings only. Given the format described above, troika meetings might even be theoretically justifiable, given that they keep to the monitoring side of the governance spectrum.

Overall, no matter the standing point in the above discussion, interview subjects express gratitude towards particular efforts from Alder. Firstly, interview subjects mention the Alder Days as a way of supporting the portfolio company with education and inspiration, to allow portfolio companies to make operational improvements on their own. These are two days hosted annually by Alder for all portfolio companies’ CEOs, chairmen and sustainability ambassadors. They are invited to inspirational lectures and workshops, sometimes held by external consultants such as Material Economics. Although last year’s theme was sustainability, a partner clarifies that this has not always been their focus. Secondly, multiple subjects welcome the structure that they claim Alder greatly contributes to. For example, in Samon, the CEO perceived the only direct operational impact from Alder as their pressure on monthly financial reporting. This is a demand also highlighted by the portfolio company’s chairman. In addition, Samon's partner mentions that Alder generally likes to strengthen portfolio companies’ finance function and reporting systems, for improved control, as this is often lacking in small previously owner-led businesses. With regard to the previous discussion of creating persistent improvements, these might be examples of just that.
5.7 Leverage

The interview subjects’ general view of leverage is found to be two-fold. It is seen as both a financial tool, to enable investments and growth, but with the downside of inhibiting growth-related activities due to the stress of both bank covenants and interest payments. The latter is a complement to the traditional view of leverage as a tool to enhance operational efficiencies. However, this may not apply to the businesses at hand in this study, due to Alder’s focus on growth capital investments.

Both partners at SI and Scanacon agree that debt stresses a firm, as interest payments create problems for investments. Specifically, Scanacon’s Partner explains that high leverage is in conflict with Alder’s growth strategy as interest payments, for example, could prevent additional employment and expansion into new markets, activities that Alder would like to promote rather than inhibit. Debt, therefore, is an inhibitor of growth pursued through investments financed with operational cash flows. Important to note, however, is that debt helps finance growth. Both SI and Samon’s CEOs mention that Alder’s financial resources are important to finance growth. In Scanacon, the CEO however stresses the importance of Alder’s willingness to reinvest earnings from the operations, which might be due to Scanacon’s investments being financed by internally generated funds, rather than debt. In terms of a firm’s general leverage, Scanacon’s chairman explains that a sound level of debt, together with sufficient cash, enables product development. He further explains that ‘The worst thing there is is when you are cash-strapped and have high leverage so that management focuses on amortisations and interest payments rather than business development’

Although debt may create problems for investments, SI’s partner explains that it is a necessary tool to finance acquisitions as well as to raise the return on equity. Furthermore, he explains that debt should be raised cautiously over time since it is difficult to create accurate forecasts. Scanacon’s partner further explains that Alder, in a recent acquisition, first financed a platform investment with equity and then raised the total debt level of the firm through financing add-on acquisitions with debt, creating a more optimised capital structure. SI’s partner also explains that the usage of debt varies from case to case. For instance, he mentions that Alder has both been involved in situations where it has recapitalised firms, enhancing the portfolio company’s capital structure, and been involved in restructurings, where changes to the portfolio company’s operations have been done to meet financial obligations and improve operational efficiencies. Furthermore, in the case of Scanacon, the firm has a large cash position and it is now exploring options to improve its capital structure. This view of debt is mostly in line with trade-off theory (Myers 1977, 2001), meaning that firm characteristics are the main determinants of a firm’s debt level. However, not accounting for capital markets and market-timing theory (Axelson et al. 2013) seems naïve as the cost of raising debt to finance acquisitions would increase. However, since Alder is not a firm that uses extensive leverage, this might not be as relevant as trade-off theory. Furthermore, operational efficiencies from debt might be something that is not prioritised by Alder, as there are more value-creating activities that can be pursued. In Samon’s case, its margins are large, and the firm has experienced extensive growth. Therefore, focusing on growing top-line growth is, and should be, prioritised above all, and debt should rather help finance add-on growth, than act as a tool to improve operational margins.

Although a high level of debt can create interest payment and amortisation-related problems, SI’s and Scanacon’s partners and CEOs admit to a small extent that debt can create pressures to make the business more efficient, in accordance with traditional research. However, SI’s partner also explains that ‘Firms should feel some pressure, but it should not come from the bank, but rather from Alder’s demands and a culture that encourages development’. This view of leverage is in contrast to Jensen (1986), who view debt as a tool to make managers focused on firm value maximisation. Rather it is in line with the more recent findings of Boucly et al. (2011) and Fracassi et al. (2022) who find that PE firms use leverage as a tool to enable firms to grow through financing growth-enhancing initiatives. The alignment with Boucly et al. (2011) and Fracassi et al. (2022) could be due to several factors. Firstly, the PE industry has changed in character since the 1980s. There is more competition for deals, and therefore leverage alone is not enough to create sufficient returns on investments. Therefore, growth and operational value-creation must be achieved through more active ownership using additional efforts or skills from the PE firm.
5.8 Sustainability

The case studies address the discussion of sustainability as a two-fold matter, sustainability reporting versus strategically incorporating sustainability in the business proposal to customers. While Alder is explained to be supportive of both matters, all three companies highlight the difficulty of showing customers the value of a sustainable business proposal. Furthermore, the sustainability ambassadors’ level of engagement with sustainability-related activities other than sustainability reporting is found to vary between the case studies. This likely depends on the nature of the ambassador’s other engagements in their respective company.

5.8.1 Sustainability Reporting vs. Sustainable Business Strategy

CEOs across case studies use similar language when speaking about how their respective company incorporates or wishes to incorporate sustainability in the business. Samon’s CEO describes a firm’s sustainability work as a ‘double-edged sword’. By this, he means that it is important to have hygiene factors in place, such as sustainability reporting, but that the relatively more interesting and challenging aspect is incorporating sustainability in the business proposal to customers. The CEO is perceived as interested in the company’s sustainability work, as he believes there is more to be done. Therefore, he argues that Samon would benefit from more board discussions regarding how to incorporate sustainability in its business offering, and wishes that Alder would contribute with more opinions on the matter. Samon’s CEO, chairman and sustainability ambassador experience Alder’s main contribution as being reporting concerns, and secondly, through a network of sustainability ambassadors at other portfolio companies, facilitated by Alder. In the sustainability ambassador interviews, they express gratitude for this network, however, they report no concrete changes in their respective company’s sustainability-work due to these meetings. As such, these meetings may be more of a supportive character to voice concerns and questions regarding their responsibilities.

Scanacon’s CEO mentions that ‘there is a risk that companies see sustainability as a question of reporting rather than the actual impact on the environment’. He and the chairman agree that the greatest challenge, for Scanacon and other sustainable businesses, is that there is always more to be done regarding the actual sustainability impact of the business. For example, by improving the business offering and selling additional products. He explains that ‘Scanacon’s largest sustainability impact is its actual business’.

Regarding sustainability reporting, he mentions that the positive impact is an unregulated topic. As such, he claims that sustainability reporting becomes more of a house-keeping aspect. He explains that this means taking a good look at oneself before publicly making the claim that one is sustainable. Scanacon’s CEO speaks about sustainability in business operations, versus sustainability reporting, as a separation of concerns. Both of which he claims have received great support from Alder. For instance, according to the chairman and the sustainability ambassador, one important contribution of Alder to Scanacon has been through a pilot project that Scanacon conducted with the consulting firm Material Economics in the past year. Regarding sustainability reporting, the CEO explains that Alder has helped with regulatory compliance at a high level, such as aligning Scanacon with the EU Taxonomy. However, Scanacon handles its industry-specific regulation itself, such as regulation in the Chinese steel industry, one of Scanacon’s key markets. Scanacon’s CEO sees the growing body of sustainability regulation as an opportunity for Scanacon to sell more, as the regulation drives Scanacon’s customers’ interest in investing in sustainable technology. However, he also acknowledges the difficulty with keeping consistent sustainability reporting with swiftly changing regulations. Nevertheless, he claims that businesses have to conform to a practical level of key performance indicator (KPI) reporting. For example, that Scanacon should be cautious of the extent of scope three greenhouse gas (GHG) emissions reporting because of lowered accuracy and reliability further down the value chain. He hopes questions like this will clarify through improved, updated, regulations in the future.

Samon’s partner highlights that Samon is a small company, which is why it finds it challenging to fulfil all requirements posed by Alder. He also mentions that the company has not had the resources available for appointing a full-time dedicated sustainability ambassador, as in for example
Autocirc and Umia, two other portfolio companies. The sustainability ambassador confirms that it has indeed been challenging dedicating time for sustainability-work alongside his other, more urgent, responsibilities. However, the partner explains that Samon’s plan moving forward is appointing a full-time sustainability ambassador as the organisation is expanding.

5.8.2 Sustainability Ambassadors & Sustainability-Work

The responsibility of the case studies’ sustainability ambassadors is found to be a part-time endeavour. With regard to specific activities, the main concern of this role seems to be the annual sustainability reporting. However, some sustainability ambassadors are found to pursue initiatives that go beyond their line of duty. For instance, SI’s ambassador takes a more holistic responsibility of ensuring that the firm’s culture embraces sustainability as a part of its mission. This might be due to the fact that she is the only ambassador with a management role, which might naturally broaden her perspective on the matter. In addition, her business unit Energy and Operations (sw. Energi och drift) works closely with aftermarket sales, where customer data collection is an integral part. This is possibly an explanation of her focus on integrating SI’s reporting with its value proposition. She says that

‘In parallel with working with internal sustainability, can we repackage this to a value proposition? And which measurements are needed?’

As previously alluded to, the sustainability ambassadors have varying experiences and roles within their respective companies, either internally or externally orientated. Samon’s sustainability ambassador is one of the most senior employees at the company and he largely tends to internal reporting matters. Scanacon’s sustainability ambassador has extensive experience within Scanacon’s industry, both at Scanacon and its customers. Additionally, his other responsibilities at the firm are centred around R&D and technical installation of Scanacon’s products. SI’s ambassador is partly responsible for SI’s business development and has, similarly to Samon and Scanacon’s ambassadors, been involved in the portfolio company for a long time. The differences in the ambassadors’ complementary roles are reflected in their discussions about sustainability and its business potential. Both Scanacon’s and SI’s ambassadors work in customer-orientated roles, unlike Samon’s sustainability ambassador, which is also reflected in their discussions regarding sustainability, which tends to be more business-focused.

Scanacon’s ambassador discusses the matter of valuing the contribution of sustainability efforts, and whether efforts contribute to Scanacon or Alder, as the owner. The difficulty of justifying sustainability efforts is an issue also discussed by SI’s sustainability ambassador. She explains that in SI, every cost needs to be justified based on the business value it brings, as the organisation is primarily focused on contracting projects. She summarises this as ‘SI is so entrepreneurial that everyone wants to work with the things that yield the highest output’. She says that SI needs more time and motivation to accelerate its sustainability efforts and that in the past the company has worked with clarifying its sustainability profile internally. Additionally, she mentions that due to Alder’s demand for annual sustainability reporting, a significant part of SI’s reporting is conducted during a short period of time close to submitting financial reports. She wishes that Alder would demand more frequent reporting, as this would help her to internally justify the quest for more continuous reporting, which is perceived as a costly activity.

This perception holds in Scanacon and Samon as well. Scanacon will however employ a quality manager to assist with the sustainability reporting process, which extends the reporting responsibility beyond Scanacon’s sustainability ambassador. Likewise, Samon has started to expand the firm’s sustainability reporting to other parts of the organisation, specifically to integrate more business units. Samon’s sustainability ambassador admits that sustainability efforts are mainly internally focused and that Samon’s sales division is practically not involved in Samon’s sustainability work. However, the sustainability ambassador claims that Samon will focus more on the connection between sustainability and sales through more internal education. In contrast to SI’s and Scanacon’s ambassadors, Samon’s ambassador highlights internal activities that SI has to pursue, regarding its emissions and its suppliers’ emissions. Furthermore, Samon, unlike SI

13 Autocirc was recently divested by Alder and sold to the Swedish PE firm Nordic Capital
and Scanacon, uses Alder’s other portfolio companies as benchmarks in regard to sustainability performance. While internal activities might be initiatives that enhance internal sustainability performance, it could be argued that Samon’s main contribution is not through internal emission reductions, since it is not a heavy polluter, but rather the external impact it has through larger sales and customers’ use of their products.

There is significant variance in the current state of case studies’ sustainability work. However, a common challenge across case studies is moving from sustainability reporting to incorporating sustainability in all aspects of the business. Most ambassadors and CEOs share the view that environmental efforts are more likely to yield higher returns in terms of both environmental and financial impact as part of the strategic aspect of the business, rather than being a question of time-consuming reporting practices. However, the sustainability ambassadors experience difficulty with prioritising sustainability-enhancing endeavours, due to time constraints.

Sustainability reporting has previously been studied in the literature and smaller firms, like Alder’s portfolio companies, are explained to have less reporting capacity and see less financial upside than large firms (Dienes et al. 2016). Both capacity concerns and the cost/benefit of reporting are aspects that the ambassadors touch upon. However, Alder’s portfolio companies are in a peculiar situation where one of their strongest stakeholders, Alder, sees a large upside in its firms’ sustainability reporting. Therefore, it might not be directly economical for Alder’s portfolio companies to extensively report sustainability data, but it is a value-maximising activity for the companies’ majority shareholder Alder. Therefore, clear communication about the reasons for conducting sustainability reporting might be lacking, and Alder perhaps needs to explain why sustainability reporting should be prioritised since it generates shareholder value. I.e. Alder’s LPs may expect and appreciate sustainability reporting so that they can compare sustainable investments’ sustainability performance. Following the discussion by Crifo & Forget (2013), the reporting may be beneficial for Alder when raising subsequent funds. Furthermore, since there seem to be capacity concerns, the extensiveness of reporting should be considered by Alder, as reporting may need adjustment depending on portfolio firm size. Alternatively, Alder should consider supporting smaller firms relatively more in their reporting efforts, as these may have particularly scarce resources available for reporting activities.

5.8.3 Capturing Business Value from Sustainability

Samon’s CEO and chairman both claim that Samon’s sustainability profile is rather straightforward, i.e. the equipment sold warns of gases in the immediate environment that are dangerous to people, buildings and the climate. The chairman says ‘the bigger the sales the more positive environmental impact’. Regarding the financial value of Samon’s sustainable business proposal, the CEO and chairman’s views differ slightly. The CEO believes that if Samon could clarify the positive effect of its business proposal to customers, this would likely justify a higher price. He exemplifies this with Swedish Getinge and H2 Green Steel which generate additional business upside due to the sale of sustainable products. On the other hand, the chairman says that the financial value of the sustainability offering is ‘yet to be shown’ and that he has not yet observed customer demand for clarifying the sustainability benefits of Samon’s offering. He explains that Samon’s customers are mainly refrigerator manufacturers and installers, which he claims are not particularly sustainable themselves.

Scanacon’s sustainability ambassador also highlights the difficulty with capturing the sustainable value proposal that its offering brings to its customers. He summarises that the problem is that ‘The current industry is interested in emission data, but in the end, the project cost is prioritised as the industry is heavily competitive.’ He also says that ‘Although you can show, with beautiful slides, the customer savings, the customer can claim that they would receive the same benefits with Scanacon’s competitors. Then, Scanacon’s competitors receive an upside [from the work Scanacon has done].’ This implies that Scanacon’s offer lacks the Specificity dimension, coined by Burke & Logsdon (1996), meaning that Scanacon’s sustainable offering is not any different to competitors’ offerings. This problem forms the basis for Scanacon’s demand for the project with Material Economics, which resulted in a tool that can showcase the environmental and financial benefits of Scanacon’s products, compared to alternative technologies and competitors. The sustainability ambassador
claims that this tool increases the value of Scanacon’s business offering since its customers want to portray themselves as sustainable and that emission regulations, such as carbon pricing, impose costs that ultimately affect its customers’ procurement processes. This view is confirmed by Alder’s sustainability officer who explains that prior to the project, Scanacon did not feel the need to communicate their products’ environmental benefits to customers, as they perceived it as obvious. This can be related to the strategic dimension Visibility, defined by Burke & Logsdon (1996), that sustainable firms need to communicate their efforts in order to gain a strategic advantage.

Alder’s interest in sustainable technology is perceived as genuine by all chairmen. A CEO explains that sustainability as an investment trend has resulted in more sustainability-orientated PE firms in recent years. While other chairmen focus on the fact that Alder invests in sustainable businesses, the CEO claims that it is Alder’s particular credibility that distinguishes it from its wider industry. That Alder’s investment focus in sustainable businesses reaches beyond the last few years, unlike the wider PE industry. While some chairmen argue that more PE firms have adopted an approach similar to Alder, Alder’s dedicated sustainability officer is mentioned by all case studies as a particularly unique and value-adding aspect of Alder’s ownership. She is described to bring value to each portfolio company by motivating and demanding change in how the case studies shape their sustainability agenda, and how they conform to regulatory frameworks.

In SI, the CEO speaks about incorporating sustainability in the business as concerning both keeping up with regulation and ‘doing your part’ as a business for a sustainable future. He argues that it is generally about credibility and making the efforts visible. Only then is business value created. Similarly to Scanacon, he sees a risk, or tendency, of businesses focusing on the reporting aspects of sustainability instead of the real matters concerning the business. He accentuates that ‘SI is sustainable through a sustainable business model’. And therefore, SI should aim to incorporate sustainability in all aspects of the business. He mentions that letting sustainability be a discussion between the appointed ambassador and Alder’s sustainability officer, in isolation, may feed into the tendency of letting sustainability-work primarily concern reporting. The wider board may be less incentivised to discuss sustainability matters, relying upon the belief that it is handled separately. Therefore, he argues that Alder should encourage the wider board to engage in the business’s sustainability agenda. This would enable SI to derive more value from its sustainability efforts. He argues that this would also allow for sustainability to take a more natural part in the business and give him as a CEO more influence in the matter. As an inspirational example, he mentions Haglöfs, where the management and wider organisation were particularly interested in sustainability. This caused sustainability to be incorporated in all parts of the business, while relatively little focus was put on reporting. Despite little focus on reporting, Haglöfs gained a large premium from its investors. This implies that a potential greenium in firm valuation would stem from the essence of a sustainable business, rather than from its reporting of such matters. While reality may not be as clear cut, it does raise the question of how a greenium might be created, and how sustainability reporting affects this.

SI’s CEO further claims that while there are many other businesses dedicated to ticking boxes in sustainability protocols, the offering will be perceived as suspicious if the matter lacks engagement from the board and the CEO as well. This highlights that, in order to capture financial benefits from sustainability, sustainability and business integration need to be anchored at a management level to engage the entire firm and result in strategic benefits.
6 Discussion & Conclusion

6.1 Discussion of Key Findings

As previously mentioned, Alder’s investment focus is growth capital or buyout in sustainable technology businesses. While all three case studies share these over-arching similarities, their circumstances, as individual investment cases, are found to vary distinctly. This impacts both their growth journey with Alder but also how they pursue their sustainability-related work. While the results show that Alder pursues many value-increasing activities at its portfolio companies, most of these activities are recognised from the literature about PE value creation. Similarly to Hellmann & Puri (2002), this study finds that Alder supplies its portfolio companies with important resources such as networks, capital, and appointing CEOs and chairmen, in contrast to solely focusing on monitoring activities. Another strong implication from the results is that resource dependency theory should be used in conjunction with agency theory when studying PE value creation for smaller firms.

The results do challenge the relevance of the literature’s traditional levers of impact (financial, governance, and operational engineering). Leverage is explained to be used as a growth facilitator for platform investments, rather than as a tool for operational efficiency as promoted by the traditional literature. This is not unexpected, due to Alder’s focus on growth capital. As such, there might be less need for improving the operational performance of these companies. The results also highlight that leverage can have unwanted effects on smaller companies, as it may inhibit their growth by focusing on for example cost-cutting instead of expanding by making additional investments. Equity incentives are found as a tool for motivating portfolio company management in all case studies. Although prevalent, their upside seems debatable as the results suggest that it depends on managers’ personal preferences and other motivators, such as jointly setting strategic goals. The latter motivator may even have a relatively more positive effect on managers’ motivation and ambitions than equity incentives. As such, equity incentives may be more of a hygiene factor than how it is portrayed in the traditional literature. Combining the results of these two major forces of financial engineering, leverage and equity incentives, suggests that the literature’s explanations may be outdated in the context of Alder and the wider PE industry’s growth orientation.

Furthermore, the results argue against operational engineering as a tool on its own, but rather, as part of governance engineering. While the term operational engineering may suggest an openness to PE firms being operational on behalf of their portfolio companies, the results highlight that this is generally discouraged across the case studies and that Alder does not intend to be operational in its engagements. Instead, what is explained as Alder’s single most important channel of impact is through the board. This suggests that the matter of PE value creation is fundamentally about corporate governance. Therefore, to avoid confusion in the discussion, the authors argue in favour of discussing PE value creation in terms of concrete value-enhancing actions. As such, this study proposes the following new levers of impact that fundamentally capture the essence of Alder’s value-creation across case studies and interview topics.

**Lever 1: Alder funds its portfolio companies’ growth endeavours**

One of the most important aspects of Alder has been its role in enabling companies to grow. This has mainly been done by giving its portfolio companies access to capital that they would otherwise have difficulty receiving. However, the role of a financier comes with strings attached.

Alder monitors its firms through its presence at the companies’ boards, through regular partner-CEO contact and through monthly financial reporting. Furthermore, Alder can intervene when firms encounter issues, such as when a CFO is missing. Therefore, one could argue that Alder, in a sense, is an intermediary between investors and investments that lowers investment risk, and at the same time, provides its firms with important know-how that smoothens the firms’ growth journey. I.e., Alder helps generate a higher return, while mitigating investment risk.

Contrary to heavily leveraged firms that need to meet interest payments in addition to bank covenants, Alder’s goals and monitoring can be seen as more long-term, value-creating, demands...
that enable growth through investments. Therefore, one could claim that equity financing is superior to debt financing in growth-orientated firms, especially since debt is a stricter form of financing according to Jensen (1989).

This reasoning is strongly in line with Boucly et al. (2011) for Samon and SI. These were both private-to-private deals where Alder is, through additional financing, enabling these to grow, both organically and inorganically. Acquisition-driven growth is however central to both Samon and SI, which contradicts Boucly et al. (2011) who suggests that growth in post-LBOs is mainly driven by organic growth. Scanacon’s growth has solely been organic, but in contrast to Samon and SI, it is a firm that was acquired through a secondary buyout. This would suggest that it inherently had fewer growth opportunities since these would, if value-creating, have already been pursued by its previous PE owner who would have been able to supply it with capital.

The counterargument would be that PE funds have fixed time horizons and therefore do not have the ability to pursue all value-enhancing activities. However, PE firms can extend their funds’ lifetime if found value-creating, and activities that are left to be done are assumingly not as value-creating if they have not been prioritised. Therefore, it can be argued that Alder should exclusively target private-to-private deals, as these inherently have larger growth potential and the most potential for growth-enhancing initiatives.

**Lever 2: Alder strengthens its portfolio companies’ sustainable profile**

Another particularly important aspect of Alder’s ownership is that it helps its portfolio companies with their sustainability profile. In this discussion, it is important to remember that all of Alder’s portfolio companies are sustainable due to their business models, not because they conduct sustainability reporting. This is a foundational statement in this discussion, although the sustainability ambassadors’ role was found to predominately concern sustainability reporting.

Should the sustainability ambassadors’ responsibility concern more of a strategic perspective, one can wonder who would be the most suitable for driving such questions. To understand the full context and complexity of such matters, this role could greatly benefit from a sales perspective. In addition, it could benefit from a higher strategic mandate that allows for delegation. One could also argue that such a question should be a more widespread responsibility, of greater attention from the board. As such, the owners’ agendas could benefit from including additional sustainability goals. This would help to ensure that sustainability efforts are discussed by the wider board and within reach of the CEO, so that they can be more widely incorporated into the business, as part of the company’s strategic agenda. Then, the CEO could benefit from having a sustainability ambassador at the management level. The sustainability ambassador could, then, work with an individual or a team dedicated to sustainability reporting, as this can be considered a more operational issue.

However, no matter where the responsibility lies, providing companies with a better understanding of the expected benefits from sustainability efforts seems crucial for ensuring longevity, so that they persist beyond Alder’s investment horizon. Regarding reporting, in particular, it seems as if the value of sustainability reporting could be more clearly understood by the portfolio companies. This is likely because the firms are operationally orientated, and thus tend to perceive reporting as a less value-maximising endeavour compared to other day-to-day activities. Therefore, the reason for conducting sustainability reporting needs to be more clearly communicated, as it creates more long-term value for the portfolio companies and directly creates value for its majority shareholder, Alder. As highlighted in the result and analysis, incorporating sustainability in the strategic plan and conducting reporting may need varying support from Alder, across portfolio companies, depending on their size and available resources.

**Lever 3: Alder supplies its portfolio companies with significant process and industry experience**

One important aspect of Alder as an owner is its know-how and insight into the intricacies of M&A processes. This involvement is in one sense operational, as it, for instance, supports its firms with financial modelling and bank contact support. How and why Alder involves itself in these matters probably stems from its associates’ academic and professional financial backgrounds. Therefore, why Alder engages itself specifically in financial inquiries is probably simple. Alder does what it
knows.

Alder’s experience and involvement in its firms’ financial matters are reflected in its CFO recruitment involvement. This is the only management role in its portfolio companies, except for the CEO, that Alder involves itself in. This is probably due to Alder’s financial expertise which enables it to add value to the recruitment process. Additionally, Alder probably works closely with the CFO due to its financial involvement in its portfolio companies and therefore wants a say in the recruitment.

Furthermore, Alder has experience in appointing management and knows recruiters that enable it to appoint CEOs and chairmen with suitable experience and knowledge to realise Alder’s investment goals. Therefore Alder, in a sense, knows what it does not know, which enables it to appoint CEOs and chairmen with the right credentials to add industrial knowledge to its firms. One could wonder if a PE firm that is knowledgeable about other aspects of a firm, might be involved in recruitment of those kinds of roles. For instance, how Hellmann & Puri (2002) report that VC firms involve themselves in the hiring of marketing roles. However, deep involvement in a firm’s management might induce problems as the CEO might work poorly with a team member that Alder, on the other hand, works well with.

As an exception within Alder, Samon’s partner is especially active within his firm. But perhaps not surprising, as he has knowledge in applied environmental sciences, which enables him to have technical input on Samon’s products. This further strengthens the notion that Alder does what it knows since Alder’s support depends on its associates’ and partners’ knowledge. Where active ownership crosses the line of operational involvement might however not be obvious. While an owner might be helpful in some firm inquiries, the involvement can be seen as a forbidden fruit, as the owner’s assistance will cease at exit, making the firm operationally weaker.

The essence of assisting with process experience is to create persistent value at portfolio companies. The effects of Alder’s involvement in recruiting can be seen as persistent since Alder’s exit is not tied to the management’s exit. In regard to enhancing its firms’ human capital, Alder organises events to educate the portfolio companies in operationally value-enhancing initiatives. This is to provide its firms with persistent knowledge to create operational efficiencies themselves.

Alder’s knowledge and experience in the gas and energy industries have had clear advantages in its governance of Samon and SI. Therefore, one could argue that Alder should narrow its investment strategy to only focus on sustainable industries that it has previously invested in. This strategy would further feed into the argument that Alder should do what it knows, which is investing in industries it has extensive experience and contacts within, in order to leverage this at the portfolio company level.

**Lever 4: Alder ensures a scalable governance structure at each portfolio company**

The results and analysis highlight that one of the single most important channels of impact is through Alder’s board engagements and the governance structures that Alder helps to strengthen in their portfolio companies as they, generally, transition from owner-led to larger organisations. It is also highlighted that the competency of the board members plays a significant role in supplying the portfolio companies with relevant experience and knowledge. As previously mentioned, the choice of chairman and CEO can be seen as two of Alder’s most influential decisions as an owner.

Given that it is not always necessary to replace the CEO of a platform investment, this leaves the choice of appointing an external chairman a particularly important decision for Alder. In addition, should it be the case that a new CEO has to be recruited, the chairman has a say in this as well.

While a PE owner is generally discouraged from taking an operative role in its ownership of platform investments, the chairmen have more freedom in their engagements. This role can be seen as an important resource for both the CEO and Alder, contributing with time and prior experience, for example, industry expertise, that complements Alder’s contribution through the board and, in some cases, troika meetings. In a sense, this role can be seen as Alder’s right hand when it comes to helping the portfolio company achieve expansion plans, as Alder’s resources are more thinly spread across its platform investments. In addition, the external nature of the chairman likely provides an important control function in maximising firm value. As such, Alder should keep appointing
external chairmen in its platform investments, as a favourable governance structure to both Alder and the portfolio company.

6.2 Conclusion

The aim of this study is to analyse Alder’s value-creating activities at three of its portfolio companies to provide insights into how Alder can improve its active ownership of portfolio companies, which all have sustainable business models. Relating back to the initial research questions, the findings and implications are summarised as follows.

What is the perceived value-added of Alder’s active ownership, according to both Alder and three sustainable portfolio companies, and how is this realised at the company level?

Firstly, Alder funds its portfolio companies’ growth endeavours, either organic or through M&A. Secondly, Alder strengthens its portfolio companies’ sustainable profile, through education and demanding sustainability reporting. Thirdly, Alder supplies its portfolio companies with significant process experience, both regarding recruiting senior management and financial matters, such as M&A processes and bank financing. Lastly, Alder ensures a scalable governance structure at each portfolio company, mainly through hiring and firing senior management and appointing an external chairman of the board.

Based on Alder’s perceived value-added and the pre-existing literature, what key insights can be identified for improving Alder’s future work?

Firstly, Alder should exclusively target private-to-private deals as these are more likely to have more growth potential. Secondly, Alder should target investing in some specific industries, preferably industries it has current experience in. This is because experience in one industry results in benefits in future acquisitions within the same industry. Thirdly, Alder should clarify the sustainability ambassadors’ role. Depending on whether or not this role should be primarily concerned with sustainability reporting, additional revisions may be necessary. These include evaluating whether the sustainability ambassador should be a manager role, with the necessary business perspective and mandate for driving sustainability in the strategic agenda. No matter the role of the sustainability ambassador, Alder should consider supplying portfolio companies with evidence of the expected benefits of sustainability-related efforts. These are efforts that may otherwise not be prioritised in operationally orientated firms. Furthermore, Alder should include additional sustainability-linked goals in its owners’ agendas, to ensure that sustainability efforts are discussed by the wider board and within reach of the CEO. This could help incorporate sustainability-efforts into the wider business, as part of the strategic agenda. Lastly, Alder should continue to appoint an external chairman of the board in each of its portfolio companies. This role provides the company with particularly valuable resources such as experience and time.

In addition to the research questions, the findings suggest that some activities, such as sustainability reporting, are by certain portfolio company representatives perceived to have a relatively more direct positive impact on Alder than on portfolio companies. For Alder, sustainability reporting is a favourable way of communicating its investment focus and efforts to investors, who expect both a financial and green return on their investment in Alder’s fund. At the same time, portfolio companies’ sustainability ambassadors find it challenging to know what to report and how sustainability-efforts can be incorporated into the wider business. As part of the business proposal to customers, efforts may have a relatively larger, indirect, positive impact on business performance, for example through sales price convenience or additional sales volumes. The results also highlight that dividing value creation efforts into the traditional levers of impact, financial, governance and operational engineering, is likely misleading in today’s PE environment. Nevertheless, the major channel of impact is through the board of directors, which naturally makes governance the central aspect of any PE ownership.
6.3 Suggestions for Future Studies

The study’s results and analysis highlight many interesting topics for future research. The usage of equity incentives is for example a topic that has been discussed in this study. However, since this is a common tool for Alder and a prevalent topic in the PE investing universe, there is room for further research. Specifically, in relation to its motivating aspects and importance in retaining and attracting personnel. Equity incentives and sharing ownership also come with the downside of diluting future earnings. Therefore, it would be insightful to further study: Can equity incentives be regarded as a motivating tool or as a tool for retaining and attracting talent? What are the costs of providing equity incentives?

Incorporating sustainability concerns at a company’s board and management is, in this study, recommended. However, the implications of board composition are not discussed. Therefore, in light of implementing a successful strategy that captures the value of sustainability, the following research questions could be studied: Which human resources are needed at a company’s board in order to create a successful business strategy that can effectively monetise a sustainable business model? What is a suitable ownership horizon to implement a value-creating sustainable business agenda that reaches beyond sustainability reporting?

This study has touched upon the value of sustainability reporting and firm professionalisation. These are firm structure activities that Alder improves during its ownership. Furthermore, Scanacon’s firm professionalisation was appreciated by Alder at acquisition. This, therefore, raises the question: How does different types of buyers take firm professionalisation into consideration upon acquisition? What is sustainability reporting valued by different type of buyers upon acquisition?

The PE industry’s income structure is based on taking a share of the funds’ profit as well as taking a management fee from the fund capital. Furthermore, PE funds’ investors want to monitor the performance of the PE funds, which might include sustainability reporting. The PE firm might also want to use sustainability reporting as a way to showcase sustainability alignment, in order to attract subsequent capital in future funds. And lastly, the portfolio companies might want to incorporate sustainability reporting data into their business proposal. This raises the question: For whom does sustainability reporting create value and by whom should it be financed?

Lastly, few case studies have been conducted on PE value creation, other than studies by Baker & Wruck (1989) and Baker (1992). This study partly aims to complement these studies. Due to time limitations, this study does not study the exit process, which is the point in time that value is realised. Therefore, to fully capture PE’s value creation levers for green returns, it is recommended to conduct a longitudinal study of companies, or retroactively study the financial implications of PE ownership at exit.
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Appendix

A Interview Guides

Generic Introduction Agenda

- Thank you for participating in this study
- Brief introduction of writers and the study’s purpose. Mention the NDA and that sensitive information will be handled carefully, in accordance with Alder.
- Can we record this interview? It helps us recollect what was said and we can be more active in the interview. The recording will not be shared.
- The interview is part of the data of this study which will be analysed in a report.
- We take turn hosting the interviews, so [writer 1 / writer 2] will be asking the questions today.
- There is limited time for this interview, so let us begin with the questions.

A Partner in Alder’s Deal Team

1. Can you tell us about your role and responsibilities at Samon / SI / Scanacon?
2. Can you tell us about the investment case Samon / SI / Scanacon?
3. What is Alder’s strategy for creating value at Samon / SI / Scanacon? 
   What are the most value-creating aspects?
4. How does Alder motivate Samon / SI / Scanacon to implement Alder’s goals and ambitions? How do you follow up on this work?
5. What advantages has your industry knowledge and management experience given you in your management of Samon / SI / Scanacon? For example, a good relationship with the previous owner or in acquisition/sale situations.
6. How does Alder contribute to operationally improving Samon / SI / Scanacon? What aspects are most important and influential?
7. With Alder’s focus on growth investments, what strategic goals have you set for Samon / SI / Scanacon? How do you view the possibilities of achieving these?
8. How does Alder contribute to improving the board work at Samon / SI / Scanacon? What is the purpose of the external chairman and how was this person chosen? How do you work with an owners’ agenda?
9. How does Alder help Samon / SI / Scanacon work with sustainability and what value does it contribute to the portfolio company?
10. How does Alder contribute to improving the executive work at Samon / SI / Scanacon? What is the purpose of the new CEO and how was this person chosen? How do you view the recruitment of other management positions?
11. How did Alder value the investment Samon / SI / Scanacon? Did you take risk into account and, if so, how was this done (e.g. CAPM)?
12. In a future exit, how do you think sustainability factors will affect the sale of SI / Scanacon / Samon?
13. How do you think the leverage ratio affects Samon / SI / Scanacon and how is it chosen? Will the debt be paid off when you sell the company?
B CEO

1. Can you tell us about your role and responsibilities at Samon / SI / Scanacon?
2. What value-creating experiences and expertise do you bring as the new CEO?
3. What are the most value-creating aspects that Alder contributes with, and how are they valuable to Samon / SI / Scanacon?
4. How does Alder motivate Samon / SI / Scanacon to implement Alder’s goals and ambitions? How do you follow up on this work?
5. What benefits does Alder’s industry knowledge and management experience bring to your collaboration?
6. How does Alder contribute to operational improvements in Samon / SI / Scanacon?
   *Samon: You are on an operational journey with a strong M&A pipeline. What has been Alder’s biggest contribution to this? What are the expected positive effects? What conditions exist in Samon to make many M&A deals?*
7. With Alder’s focus on growth investments, what strategic goals have you and Alder set for the company? How to you view the possibilities of achieving these? What changes are the most challenging for you to implement and why?
8. How does Alder contribute to improved board work?
9. How does Alder help you work on sustainability, and what value does it bring?
   *Scanacon: How does Alder help you adapt to the sustainability changes that characterise your market, such as regulations on stricter reporting, trends, etc.?*
10. How does Alder contribute to improved executive work? How does Alder contribute to the recruitment of a new CFO, for example?
11. How are you affected by the leverage imposed by Alder? Is the leverage ratio value-creating, and if so, how/why?
12. In a future exit, how do you think sustainability factors will affect the sale of Samon / SI / Scanacon?

C External Chairman of The Board

1. Can you tell us about your role and responsibilities at Samon / SI / Scanacon?
2. What value-creating experiences and expertise do you bring as the (external) chairman of the board?
3. What are the most value-creating aspects that Alder contributes with, and how are they valuable to Samon / SI / Scanacon?
4. How does Alder motivate Samon / SI / Scanacon to implement Alder’s goals and ambitions? How do you follow up on this work?
5. How does Alder contribute to improved board work and what is your role in this? How do you work with an owners’ agenda and what value does this bring to the company? How does your role and perspective differ from Alder’s board members?
6. How does Alder contribute to improving the executive work at Samon / SI / Scanacon? What was the purpose of recruiting a new CEO and how was this role elected? How do you view the recruitment of other management positions and how do you and Alder contribute with this? What changes are the most challenging for you to implement and why? How does Alder’s ownership compare to other PE firms that you have worked with?
7. How does Alder contribute to operational improvements in Samon / SI / Scanacon? What aspects are most important/influential?

8. With Alder’s focus on growth investments, what strategic goals have you set for Samon / SI / Scanacon? How to you view the possibilities of achieving these? What changes are the most challenging for you to implement and why?

9. How are you affected by the leverage imposed by Alder? Is the leverage ratio value-creating, and if so, how/why?

10. In a future exit, how do you think sustainability factors will affect the sale of Samon / SI / Scanacon?

D Sustainability Ambassador

1. Can you tell us about your role and responsibilities at Samon / SI / Scanacon? What does being a sustainability ambassador entail in your day-to-day work?

2. How come you were chosen as Samon / SI / Scanacon’s sustainability ambassador?

3. What value-creating experiences and expertise do you bring to the role as a sustainability ambassador?

4. What did the sustainability work look like before Alder acquired Samon / SI / Scanacon?

5. With what kind of value and how does your sustainability work contribute to Samon / SI / Scanacon?

6. With are the most value-creating aspects that Alder contribute with to your sustainability-work?

7. What benefits does Alder’s industry knowledge and management experience bring to your collaboration?

8. What are the operational implications of Alder’s sustainability requirements on your sustainability-work? What changes are the most challenging for you to implement and why?

9. What should Alder learn from Samon / SI / Scanacon, from a sustainability-work point of view?

10. How would you like to expand your current sustainability-work? What would you like additional support from Alder with and why?

E Alder’s Sustainability Officer

1. Can you tell us about your role and responsibilities at the portfolio companies?

2. Can you tell us about the investment case Samon / SI / Scanacon from a sustainability point of view?

3. What did the sustainability work look like before Alder acquired Samon / SI / Scanacon?

4. With what kind of value and how does sustainability work contribute to Samon / SI / Scanacon? Does this differ between the portfolio companies, and how? Is it a question of reporting or incorporating sustainability as a business proposal?

5. How does Alder help Samon / SI / Scanacon with its sustainability-work? How is a sustainability ambassador elected? How do you collaborate with chairmen of board, Alder’s sustainability representative, CEO and other roles in the portfolio company than the sustainability ambassador? Does this differ between portfolio companies, how? How will the sustainability work be delegated in Samon as add-on acquisitions are pursued?
6. How has Alder’s sustainability work changed over time and why?
   *What are the significant changes?*

7. How does Alder motivate Samon / SI / Scanacon to implement Alder’s sustainability goals and ambitions? How do you follow up on this work? *How is this incorporated in the portfolio companies’ work, for example through the owners’ agenda? Are KPIs used for follow-up?*

8. What advantages has your and Alder’s industry knowledge and management experience given you in your sustainability management of Samon / SI / Scanacon?

9. What do you think are the operational implications of Alder’s sustainability-work requirements at each portfolio company?

10. What is the purpose with the playbook that has been developed for the use of portfolio companies in the future and how will it add value?
   *What are the expected benefits? Is it intended to use for passing legal requirements or requirements demanded by Alder? How does one, generally, make sustainability-work persistent?*

11. What is the purpose with the Toolbox that has been developed for the use of portfolio companies in the future and how will it add value?
   *How will it be used in other portfolio companies than Scanacon?*
B Mapping Of Interview Questions

The main topic of each interview question, found in Appendix A, map to each other as illustrated in Table 10. Please note that this mapping applies to each of the three studied portfolio companies. Please note that the colour coding green indicates sustainability-related topics.

Table 10: Interview Questions Across Groups of Interview Subjects

<table>
<thead>
<tr>
<th>ALDER</th>
<th>PORTFOLIO COMPANY</th>
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<tbody>
<tr>
<td></td>
<td>Deal Team Partner</td>
</tr>
<tr>
<td>1</td>
<td>Role Description</td>
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<tr>
<td>2</td>
<td>The Investment Case</td>
</tr>
<tr>
<td>3</td>
<td>Value-Creation Strategy</td>
</tr>
<tr>
<td>4</td>
<td>Portfolio Company Motivation &amp; Follow-Up</td>
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<tr>
<td>5</td>
<td>Industry Knowledge</td>
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<td>6</td>
<td>Operational Improvements</td>
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<tr>
<td>7</td>
<td>Growth Strategy</td>
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<td>8</td>
<td>Board Improvements</td>
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<td>9</td>
<td>Sustainability Value-Creation</td>
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<td>10</td>
<td>Executive Improvements</td>
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<td>11</td>
<td>Investment Valuation</td>
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<td>12</td>
<td>Sustainability Impact upon Exit</td>
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<tr>
<td>13</td>
<td>Leverage</td>
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<table>
<thead>
<tr>
<th>Sustainability Officer</th>
<th>Sustainability Ambassador</th>
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</thead>
<tbody>
<tr>
<td>1 Role Description</td>
<td>1 Role Description</td>
</tr>
<tr>
<td>2 Sustainability Investment Case</td>
<td>2 Appointing the Ambassador</td>
</tr>
<tr>
<td>3 Sustainability-Work before Alder</td>
<td>3 Sustainability-Work before Alder</td>
</tr>
<tr>
<td>4 Sustainability Value-Added</td>
<td>4 Sustainability Value-Added</td>
</tr>
<tr>
<td>5 Alder’s Contribution</td>
<td>5 Alder’s Contribution</td>
</tr>
<tr>
<td>6 Changes to Alder’s Sustainability-Work</td>
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</tr>
<tr>
<td>7 Motivation &amp; Follow-Up</td>
<td>6 Alder’s Sustainability Know-How</td>
</tr>
<tr>
<td>8 Sustainability Know-How</td>
<td>7 Operational Implications</td>
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<tr>
<td>9 Operational Implications</td>
<td>8 Lessons for Alder</td>
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<tr>
<td>10 The Playbook</td>
<td>9 Expansion of Sustainability-Work</td>
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<tr>
<td>11 The Toolbox</td>
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