

**A Study of Active Ownership Through Board Representation by
Norwegian Private Equity Actors in the Norwegian Population of
Portfolio Company Investments**

Nikhil Dhawan

**Supervisor:
Trond Randøy**

The master thesis is carried out as a part of the education at the University of Agder and is therefore approved as such. However, this does not imply that the University answers for the methods that are used or the conclusions that are drawn.

University of Agder
Faculty of Economics and Social Sciences
Department of Economics and Business Administration

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ABSTRACT

This thesis focuses on the indirect drivers of value creation in private equity, through a study of corporate governance mechanisms employed by the major Norwegian PE actors in a population of Norwegian portfolio company investments. More specifically, it focuses on board representation by PE actors in the venture capital and buyout portfolio company investments. For this study, data pertaining to debt/equity, return on assets and portfolio company size has been collected for the current active population of portfolio company investments for the period (t-1) (one year before PE investment) as well as for (t+1) (one year after PE investment).

The data on changes in debt/equity has shown that PE actors in buyouts generally increase leverage and/or restructure the capital structure of target investments. All PE actors are represented on the boards of their portfolio companies. The degree of board representation of these PE actors in their target company investments doesn't show a clear trend over time, hence I have undertaken a qualitative analysis of six portfolio company cases to examine deviations in PE board representation from the main population. The results from these case studies indicate that PE actors are involved on a strategic, financial and operational level. The degree of PE board representation largely depends on factors such as the strategic positioning of these portfolio companies and industry conditions. In terms of the Norwegian population of active portfolio company investments, the findings indicate that the major PE actors focus on a range of investment segments, in addition to the oil sector. The investments are however, geographically regionally clustered.

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CHAPTER 1

INTRODUCTION

1.1 Background

Private equity, a well-known asset class in the US, has also become influential in Europe in recent years. According to Frontier Economics Private Equity Study (2013), PE can contribute to economic growth in Europe. Economy-wide productivity can be improved *through attracting incremental investable funds, building more resilient companies and raising the operating profitability of portfolio companies* (Frontier Economics Private Equity Study 2013) p 10.

Private equity firms make investments in these portfolio companies through funds which mostly obtain capital from institutional investors. Their aim is to produce favourable returns for these investors, given a limited investment time horizon. PE directs its focus on small and medium sized unquoted companies which face problems in obtaining capital in the public market. The unique PE governance structure aims to align incentives of all parties, including investors and other members of society.

1.2 Motivation

Private equity is currently a hot topic in the Norwegian media. Carsten Bienz has been quoted mentioning the importance of the oil and gas sector in Norway to the contribution of the success of energy related PE funds (Schultz, Trumpy 2013). Bienz also mentioned that these funds have received high returns in Norway in recent years due to good economic conditions and ease of transaction making.

Although the Norwegian private equity market is still young with respect to the US and Europe, there are interesting recent observative trends. According to Menon Economics (2010), PE portfolio companies generated value creation of 1,2 % of Norwegian BNP.

The Norwegian private equity market has received increased foreign attention in the last few years in terms of amount invested and fundraising, as shown by Argentum Markets. Having looked into literature on private equity in Norway, I realized that there is dearth of detailed studies on the impact of PE governance mechanisms on value creation. This makes it interesting to study private equity and its unique governance structure.

1.3 Aims

This thesis aims to identify the parameters that influence the representation of private equity companies on boards of their portfolio companies.

My thesis aims to study corporate governance mechanisms in private equity. More specifically, I have studied active ownership through board representation by the major Norwegian PE actors in the Norwegian population of portfolio company investments. The thesis also looks into whether these actors make extensive use of debt in their investments in the part of private equity known as buyouts. Hopefully my thesis will provide some interesting observations on the indirect drivers of value creation, through a study of corporate governance mechanisms in the Norwegian population of portfolio company investments.

1.4 The Scope of the Work

The scope of the thesis is restricted to the Norwegian population of portfolio company investments of the major Norwegian PE actors. This is chosen as the focus due to time constraints and access to data sources. My focus is on whether the following variables have any association with the number of board members from the PE firm in the portfolio companies:

- 1) Change in debt to equity
- 2) Return on Assets
- 3) Portfolio company size (as measured by number of employees)

1.5 Limitations

The main limitation of my thesis is the small number of portfolio companies I employ. Due to time constraints, I choose to only focus my attention on the Norwegian portfolio of the four major Norwegian PE actors. My population is restricted given that all of these actors also choose to divert significant attention to foreign companies in their portfolios.

My approach to analysis is through observing changes one year before PE investment versus one year after investment for the portfolio companies. For some of the latest investments, I was unable to acquire annual reports for the year after investment (t+1) from the Brønnøysund Register of Company Accounts. This was the case for investments made in 2012 and after. In some cases, I could also not obtain annual reports for the year before investment (t-1) if the companies were newly established.

The major PE actors didn't have time to be interviewed, so this approach to analysis was not an option. Interviews would have also been time consuming and subject to bias.

1.6 Organisation of the thesis

The thesis consists of seven chapters. **Chapter 1** introduces the research subject. It describes in brief the background of the research topic, motivation for research, aims, scope of study and the limitations.

Chapter 2 is devoted to a literature survey on private equity, types of portfolio company investments that can be undertaken and governance mechanisms used in such investments. This section is concluded with empirical evidence from the venture capital and buyout sectors.

Chapter 3 gives an overview of the Norwegian PE market, and **Chapter 4** describes the research methodology used for studying the Norwegian PE market.

Chapter 5 presents the results and a discussion of these in relation to relevant theory. **Chapter 6** provides conclusions for the study of the population of Norwegian portfolio companies of the major PE actors in Norway.

Chapter 7 makes suggestions for future studies. Relevant **references** are included at the end of the thesis.

CHAPTER 2

LITERATURE SURVEY

2.1 Introduction

This section presents literature on the private equity industry, the way it is organized and types of portfolio company investments that are made. This is then followed by a presentation of various corporate governance mechanisms that are employed in such portfolio company investments. The section is concluded with evidence from the venture capital and buyout sector.

In **Chapter 3**, these theories will be discussed in the context of Norwegian portfolio company investments.

2.2 What is Private Equity?

There are two ways to raise equity; it can either be raised in the public or in the private market. Most businesses are not exchange listed and therefore unable to access capital through the public markets, hence they may turn to private equity to acquire capital. Private equity, in simple terms, *is a medium or long-term equity investment that is not publicly traded on an exchange* (Cendrowski and Wadecki 2012) p 4. Broadly, PE encompasses investments in all types of unquoted businesses, irrespective of their industry stage. PE is normally organized in the form of different funds with a limited time horizon, varying from about three to ten years. Such a time horizon allows these actors time to implement value creating changes. PE actors not only provide committed share capital, but also competence through active participation on the company boards and close contact with management as (Grunfeld and Jakobsen 2007) highlight. To achieve this active ownership, PE actors acquire large stakes in their companies. As active owners, PE funds function as middlemen for the fund investors and portfolio company management.

2.3 Organization of Private Equity

Private equity investments can be achieved either through a fund, or through direct capital investment in portfolio companies. According to Metrick and Yasuda (2011), private equity funds exhibit the following characteristics:

1. PE funds act as financial intermediaries which means that they invest capital from investors directly in portfolio companies
2. PE funds only make investments in private companies. This means that such companies are unable to go public right after investment.
3. PE funds aid their portfolio companies through active monitoring. Through the investment contracts they enter into, they can monitor management through board seats, as well as various types of rights entitled to them.
4. The ultimate goal of the PE fund is to maximise its financial returns after exiting respective investments. Investments can be exited through a sale or IPO (initial public offering).

The funds are generally organized as limited partnerships. The fund managers who manage capital investments on the behalf of their investors, are usually known as general partners. These general partners choose which companies to buy, how to manage such companies and when to sell them. The general partners (or GPs) earn fees annually as a percentage of the committed capital. They are also additionally entitled to a certain percentage of fund profit. This is known as carried interest. Investors are denoted as limited partners. They don't have a say in decision making but share in gains or losses from the investments. Examples of potential investors can include; pension funds, banks, insurance companies, foundations, etc. Fund lifetime usually spans from about 8-10 years. **Figure 2.1** is a diagram showing typical stages PE funds go through over their time span, as illustrated by Cendrowski and Wadecki (2012) pg 7.

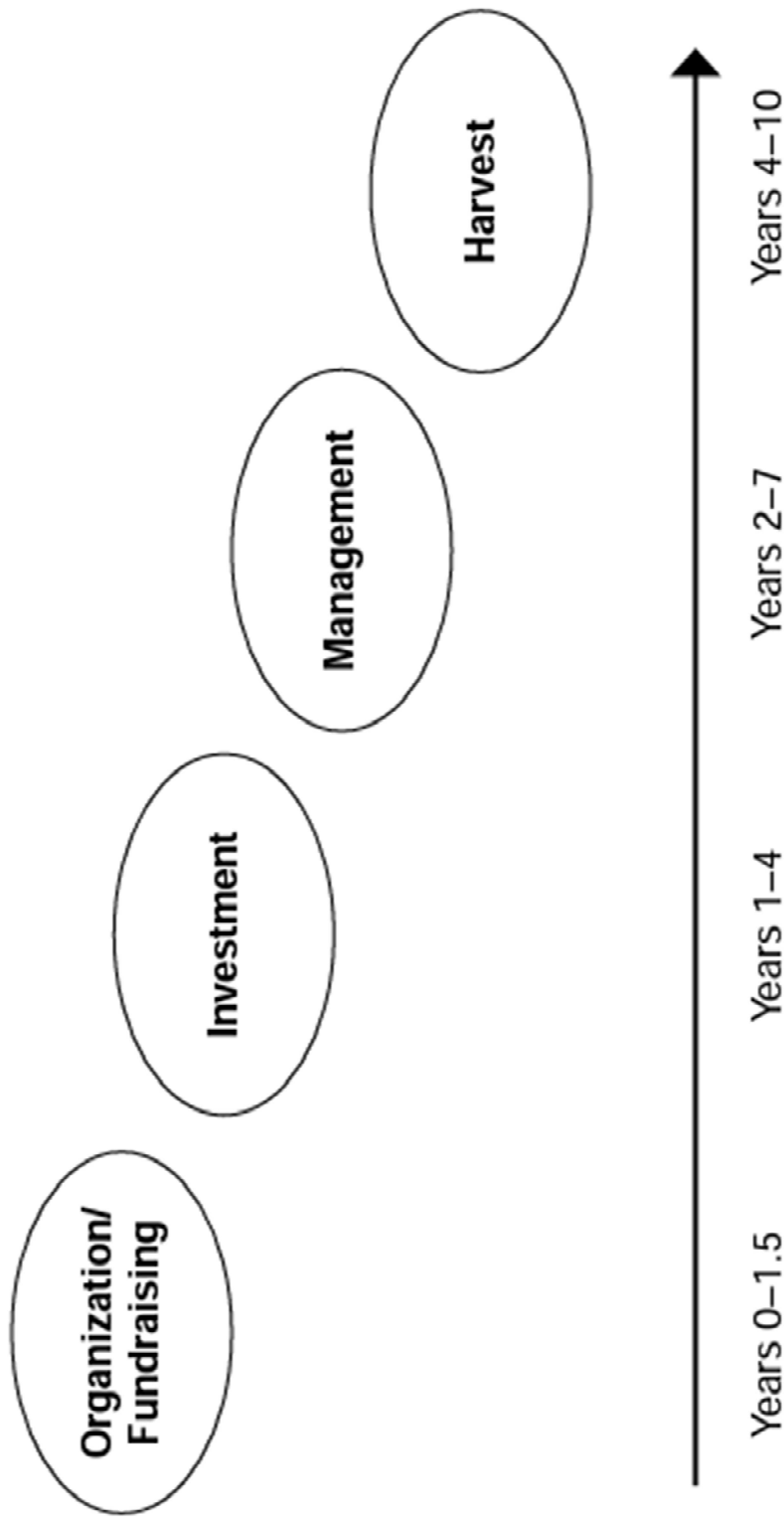


FIGURE 2.1 Typical stages that PE funds go through over their time span.

Cendrowski and Wadecki (2012) illustrate in detail the four stages:

1. **Organization/fundraising:** This stage involves establishing the fund and the necessary capital from investors. The investment strategy is then set with regards to which sector to focus on and type/stage/geography of companies. Fundraising is challenging for these funds given strict regulation. Fundraising is usually achieved through word of mouth among limited partners.
2. **Investment:** This stage involves finding and establishing deals before investing in portfolio companies. Here PE firms can also enlist the help of other funds for backing to give them a solid foundation for investing in the portfolio companies.
3. **Management of portfolios:** After investing in the portfolio companies, the PE firm may choose to work with existing management or replace them with their own members. General partners can hedge portfolio risk by forming relationships with their counterparts. These investments are formally known as syndicated investments. This additionally allows a general partner to sell his share of investment if he wishes to exit.
4. **Harvest / Disinvestment:** The PE firm needs to establish here which investments are worthy of pursuing further and which need to be exited. The general partners want to realize returns on their fund assets. Not all portfolio company investments will prove successful. In other words, the poor investments need to be filtered from the good ones. Harvesting is a way for the funds to realize their returns for investors while additionally allowing managers to sell shares they hold. Portfolio company harvesting can be done in several ways; through a sale, IPO (initial public offering) or a merger, for example. In an exit/harvest, a portion of the shares of the portfolio company are sold either to the public or to corporate buyers.

2.4 Types of Portfolio Company Investments

When investing in portfolio companies, PE funds are usually backed by large lenders, investment banks or hedge funds. PE funds take up short-term loans which are packaged into commercial mortgage-backed securities and also resold. There is a difference between loans for home owners and PE funds. According to Appelbaum and Batt (2012) p 14 *A critical difference is that home owners pay their own mortgages whereas private equity funds require portfolio firms to take out these loans-thus making them, not the private equity investors,*

responsible for the loans. Earnings from the invested portfolio companies are used to service debt in the deals.

Investments in portfolio companies are characterized by the age of these companies and where they are in terms of their life cycle. The following types of portfolio company investments can be made as suggested by Cendrowski and Wadecki (2012) and illustrated in **Figure 2.2.**

- Angel investments
- Early stage & Later Stage Venture Capital investments
- Buyouts

Angel investments can be made in early start-up companies with potential. Such investments can prove risky, which is why investors require large equity stakes or investment in debt securities. Seed investments are also investments in immature companies, but they are a little more mature than angel investments.

Early stage venture capital companies often require investments to realize their business plans and establish facilities to deliver a product to the end user. The later stage venture capital companies on the other hand, may just require a small amount of capital to further stimulate returns. Later stage investments could be less risky than early stage ones given that such companies may already have their products and technology sorted. Staged capital investments are a way to mitigate risk by investing gradually as the company shows results.

Portfolio companies in the buyout sector are either mature private or public companies. Potential buyout company targets normally possess strong cash flows, leadership and low debt/equity ratio. In leverage buyouts (LBOs), cash is used to service debt used for the deal. This is a primary reason why strong cash flows are considered important. MBOs or management buyouts are characterized by the firm management acquiring a large stake in the business. An IBO or institutional buyout occurs when a financial institution takes a controlling stake in a company but without any involvement from management. The institution can establish their own management if deemed necessary after the buyout. Related investments, called distressed investments, are a specialized section of buyouts. Such target portfolio company investments are in their mature stages as well as being under distress.

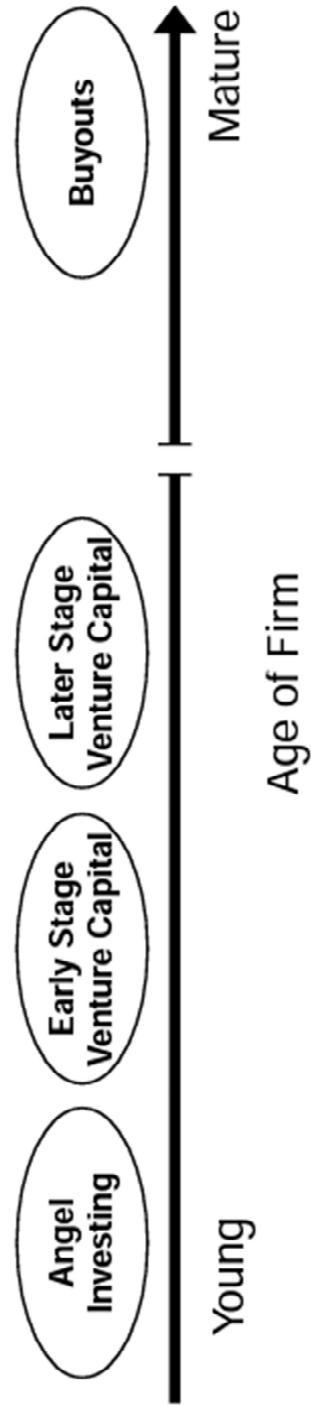


FIGURE 2.2 Types of portfolio company investments that can be made depending on the stage the companies are in in their life cycle.

In addition to the aforementioned stages, Grunfeld and Jacobsen (2007) additionally mention an expansion stage. This stage is often associated with internationalization. PE actors can aid management in portfolio companies in the internationalization process decision making, through strategic and operational advice before entering new markets. Portfolio companies can also receive funding from PE actors, helping their internationalization efforts.

NVCA Activity Report (2012) shows that in terms of amount invested in the Norwegian PE market, the buyout sector has received the most attention compared to venture capital and seed investments. Seed investments received the least attention. “Investments within the seed segment amounted to only NOK 3 mill in H1 2012.”¹

2.5 Motives for PE Investment in Portfolio Companies

PE actors attempt to alleviate agency costs between limited partners and portfolio company management through board representation in portfolio companies. Transaction cost theory discusses the use of boards as one of many governance mechanisms that PE actors employ in portfolio company investments. The agency and transaction cost theories are two motives for PE investment in portfolio companies.

2.5.a Agency Theory

Some of the most well-known theoretical contributions on agency theory are by Michael Jensen and William Meckling. In this theory, the agent conducts a duty on behalf of the principal as defined in a contract. A postcontractual issue arises as the principal is unable to perfectly monitor the activities of the agent. This is a result of asymmetric information, where one party (the agent) has more information than the other party (the principal). The danger associated with the agent pursuing his/her own interests after the contract is signed, is referred to as moral hazard. A way to mitigate or avoid the principal-agent problem is through the enforcement of complete contracts. But as Williamson (1984) illustrates, in practice this is not possible since one can not predict all contingencies, such contracts are too complex, and they are very difficult to monitor. Agency theory also assumes a separation between ownership and control. In the positive stream of agency theory, the managers act as

¹ NVCA Activity Report 2012

agents on behalf of the owners or shareholders of the firm. *The normative stream, also called common agency theory, considers all principal-agent relationships* (Huse 2007) p 45.

Agency costs consist of monitoring/intervention costs for the principal, bonding costs for the agent to signal credibility to the principal and residual loss. Residual loss is the loss resulting from the agent not making value maximising decisions for the principal. Agency costs can arise between the general partners and limited partners, but also between the limited partners and the management of the target company. The general partners monitor their respective target companies on behalf of the limited partners. The alleviation of agency costs are one motive for PE firms to invest in their portfolio companies. Jensen and Meckling acknowledge that serious agency costs exist as a result of free cash flows in the case of public companies. Agency costs also persist in the context of buyouts in the research of Opler and Titman (1993). (Jensen 1989) acknowledges that value can be generated in buyouts through alleviation of such agency costs. “PE practices enable the capture of value destroyed by agency problems” Baldi (2013) p 36. Garg (2013) suggests that venture companies do not have such extreme agency costs when compared to public firms. He argues that there are not so many opportunities for managers to misuse company resources, given that venture capitalists often have small cash flows and limited resources. Additionally, the separation between ownership and control is smaller as venture CEOs often own acquire a large ownership stake.

One way agency costs can be reduced is through the participation of many parties in PE contracts and transactions. Other examples of ways in which these agency costs can be reduced are through provision of adequate incentives aligning shareholders and managers, monitoring and active strategy designs.

Examples of agency problems include perquisites and empire building. Perks are on-the-job consumption by managers. Empire building is related to managers pursuing growth instead of positive NPV projects to maximise shareholder value. Managers can forego value creating projects, in an attempt to pursue their own interests.

2.5.b Transaction Cost Theory versus Agency Theory

Transaction cost theory is thus a theory of governance mechanism, while agency theory is a theory about incentives (Huse, 2007) p 51. Boards and contractual agreements are examples

of two such governance mechanisms used by PE actors. Such actors are always, and not discontinuously involved in governance as Baldi (2013) explains. Both agency and transaction cost theory assume that individuals are boundedly rational, but transaction cost theory focuses on analysis from the perspective of transactions. Bounded rationality implies that individuals are neither hyper-rational nor are they totally irrational. Bounded rational agents can attempt to mitigate conflicts arising from transactions through cost-effective contracts honoring the parties involved.

2.6 Identifying Private Equity Targets

Before selecting suitable portfolio companies for investment, PE actors engage in pre-screening activities. This is done to evaluate whether the companies have potential to grow and become profitable. The portfolio company selection process can prove challenging for the PE actors given the asymmetric information problem that exists between these actors and the entrepreneurs in the companies. These entrepreneurs are better informed about the state of the portfolio companies and could mislead PE actors by not informing them about all contingencies. Asymmetric information can result in PE actors not selecting the optimal projects. Given that the asymmetric information problem exists, it becomes important for PE actors to possess selection competence. PE funds need to analyse companies and company specific conditions, in addition to possessing strategic and financial knowledge. PE funds tend to have selection criteria which help them narrow the process of finding investments. Such criteria allow PE funds to acquire competence for certain regions, company types, company sizes and investment phases. They can build a resource base suited for the specific challenges facing companies matching their selection criteria. Their resource base can direct capital to the most innovative companies, or perhaps also pool resources for companies with similar capital needs. It is important to not narrow selection criteria too much in small markets, as these could complicate the selection process. Grunfeld and Jakobsen (2007) mention that Norwegian PE actors should internationalize to a larger extent, when selecting investments. Gompers and Lerner (1999) show that venture fund companies target sectors with high uncertainty, information asymmetries, high share of immaterial resources and immature markets. This is where such funds feel they have the best selection gain. The focus on this thesis will be on the employment of corporate governance mechanisms by the PE actors after they have made portfolio company investments.

2.7 Value of Internal Control in PE Firms and Their Portfolio Companies

To define internal control, we can use the framework established by Committee of Sponsoring Organizations of the Treadway Commission (COSO). Internal control is an ongoing process affecting the employees in the organization and provides a sense of assurance regarding the fulfillment of organizational objectives. Internal control mechanisms vary depending on organizational characteristics. **Figure 2.3** is a graphic representation of the COSO model and its elements.

Internal control can be viewed both from the PE fund level and also from the portfolio company level. Having solid internal control routines effectivise operations and improve reporting according to the set standards and ensure compliance.

In terms of the PE fund level, internal control can improve resource allocation and utilization in operations. It can ensure consistency and reliability in reporting according to set reporting standards. It can contribute to compliance with respect to industry norms/standards. In terms of reporting, it is important to have internal control routines so that investors and managers can value fund and portfolio company performance accurately. Reporting and performance standards can become standardized across industries, making it easier in the hiring process. Such control mechanisms can increase investment from investors with fraud prevention measures being implemented. Control can thus alleviate risk.

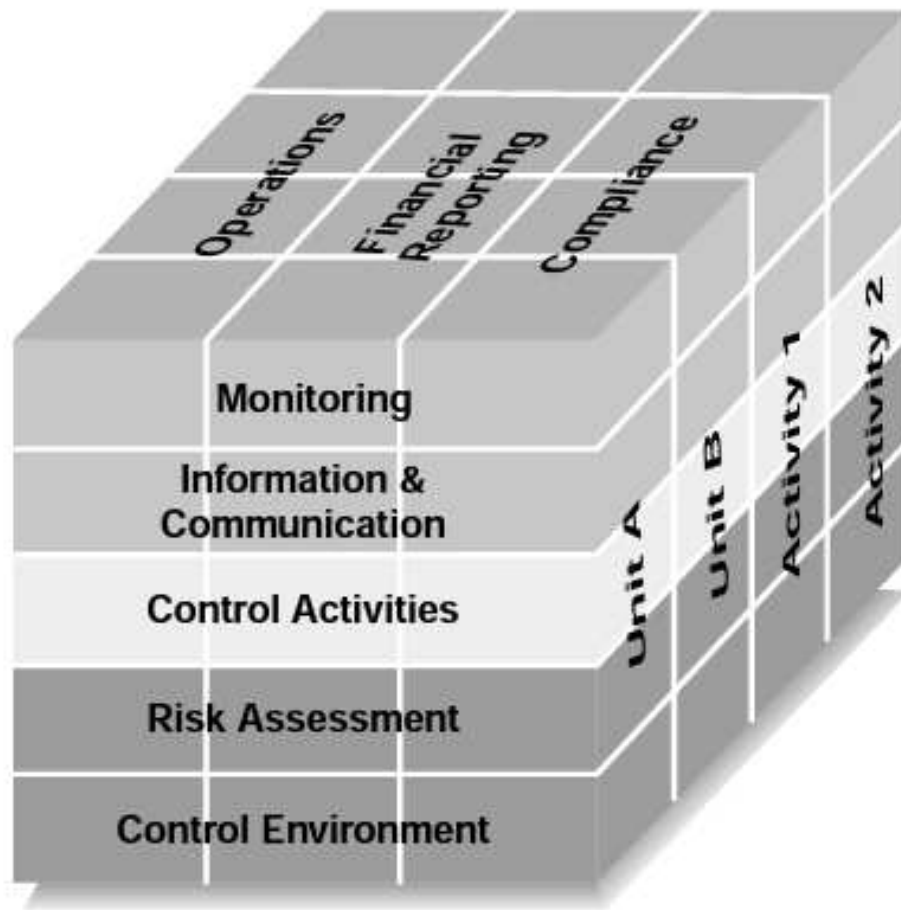


FIGURE 2.3 Committee of Sponsoring Organizations of the Treadway Commission (COSO) model and its elements.

Source: COSO-Internal Control, Integrated framework

To achieve the reporting, operational and compliance goals in PE funds or portfolio companies, the following COSO control components could be considered, as mentioned by Cendrowski and Wadecki (2012) p 193:

- **Control Environment:** The environment in the organization should be aware of the importance of change. There should be a strong leadership presence and board of director presence.
- **Risk assessment:** Internal and external risks/threats should be identified.
- **Control activities:** These activities can either prevent the occurrence of unforeseen events or properly alert the organization when something that has occurred requires attention.
- **Information and communication:** This component ensures that the message of change is communicated to all relevant parties, such as portfolio companies. Information exchange channels need to be in place internally as well as externally.
- **Monitoring:** This can assess the performance and operations to observe where change needs to be implemented.

PE funds often evaluate internal control in portfolio companies based on objectives and control components, before making an acquisition. PE firms evaluate internal control in portfolio companies based on operational value, reliability of financial statements and compliance to laws and regulations. Such internal evaluations aid PE firms when trying to access value and transparency in target company(s). Internal control evaluations in target companies can contribute to positive internal rates of return for the PE firms.

2.8 Active Ownership

Investors in portfolio companies take an active ownership role through the commitment of long-term capital. They provide not only financial competence, but also assistance on an operational level (Keasey et. al 2005). Given their leadership competence during the holding period, they can make active changes to management and alleviate potential agency conflicts through the employment of various corporate governance mechanisms.

2.9 Corporate Governance in Private Equity Sponsored Companies versus Public Companies

Cashin et al. (2009) consider five fundamental differences between private equity sponsored companies and public companies in terms of management and governance structures.

1. Private equity companies, have owner overseers whereas public companies have independent outsiders.
2. Private equity sponsored companies have longer time horizons than public companies. This time horizon is typically between five to seven years.
3. There is a tendency for boards of private equity sponsored firms to have more financial expertise and deeper industry knowledge. *Board meetings are issue oriented, not show-and-tell.* (Cashin et al., 2009) p 161.
4. Boards of private equity sponsored firms can direct their focus to the most vital issues of business. Boards of public firms can be influenced by managerial power if the manager has power in the board of director selection process. Public company boards may prioritize monitoring top management, instead of focusing on performance. Public company boards may also not face significant consequences for loss or destruction of shareholder value.
5. Leverage is often imposed in PE sponsored companies if there are low interest rates to capitalize on and favourable debt covenants.

In terms of advantages, Cashin et al. (2009) highlight that private equity sponsored companies have a competitive advantage over public companies in that they do not have to make their strategies or operations publically available. In this way, they do not disclose too much of value to their nearest competitors. Public companies on the other hand, are required to publish accounting and financial information that could potentially be sensitive. There is risk in terms of money invested for board members of private equity sponsored companies. This higher risk and stake gives these board members an incentive to generate wealth. Public companies can be more short-term focused whereas private equity sponsored companies are not bogged down by short-term thinking and can correct mistakes as they appear.

2.10 Private Equity Governance Mechanisms

Goergen (2012) p 84 defines corporate governance mechanisms *as those arrangements that mitigate conflicts of interests that corporations may face*. Such conflicts of interests can arise between managers and providers of finance, shareholders and stakeholders and types of shareholders (such as large vs. minority shareholders).

2.10.a Strategic Plans

Private Equity firms are active investors in their portfolio companies and have unique governance mechanisms in place to carry out this active ownership. Corporate governance has to do with responding and acting to change. Such change should be embraced firstly by management before it can be implemented by the other layers of the organization. Private equity firms aid their respective companies with devising and execution of strategic plans. This can even be done before the formalization of deals, through the analysis of financial figures, like cash position. Performance issues in portfolio companies are brought to the surface through reporting requirements and controls set by the investing private equity firms. Reporting transparency is important for the investment company as it is used for evaluating performance, and is a governance mechanism.

2.10.b Role of Boards

Private equity actors actively establish themselves on boards of their investing companies. The board advises and rewards managers, who are in charge of the daily operations of the company, to maximise shareholder wealth. The board's roles can be divided into a service and control role. The service role has to do with the enhancement of reputation, establishment of contacts with external environment and counseling of executives. Control role involves looking at whether the CEO is performing in the best interests of the owners and evaluating company performance. How well a board conducts its service and control role is contingent on ownership concentration and company size. If a small number of owners own the majority of stock, this is an argument for the active involvement of these owners on the board. The board's control role can become more important with increasing firm size and complexity. The need to enhance firm legitimacy also increases.

Garg (2013) argues that in the case of venture capitalists, the provision of resources can substitute the board monitoring role. The provision of high-quality resources can limit the need for extensive monitoring, as he discusses.

2.10.c Structure of Boards

PE actors establish themselves on boards of their respective portfolio companies. Such independent board of directors can ensure that the 'owners' interests are protected. Fama and Jensen (1983) acknowledge that board independence and knowledge are the main requirements of the board members. The general partners of the PE firm are totally independent of the management in the portfolio company. These general partners can choose to either work with existing management, but may not hesitate to replace them if they prove themselves incompetent. The CEO tends to be the only internal member of the portfolio company present on the board. Internal and external board members are described by Keasey et. al (2005). They divide outside directors into the following two categories:

- Affiliated outsiders: These are individuals with some form of affiliation to the company, either through past relations or top management positions.
- Non-affiliated outsiders: These are individuals with no relation to the firm except for potential stock ownership

Having PE directors on the board can be important for discussing strategic matters relating to the company. Such directors can monitor management, provide council and a valuable external network. Having these directors on the board can aid in the restructuring process of the respective portfolio companies. Cornelli and Karakas (2008) find in their study that most PE funds prefer to use their own employees/partners as opposed to outsiders. The total number of PE board members in a portfolio company can depend on the complexity of the investment transaction.

2.10.d Boards and Performance

Boards have an indirect effect on company performance. Such company performance can be measured by accounting measures such as return on assets and return on equity. The agency theorists differ from the legalists in that they focus on market-based measures of financial performance as opposed to accounting-based measures.

Pearce and Zahra (1989) indicate that having a reasonable number of external board members has a more positive effect on financial performance than having fewer numbers. Tetlock (1983) mentions how board monitoring can improve performance through creating accountability. Garg (2013) highlights a problem he refers to as the “principal problem” in venture capital firms. Board monitoring can prevent incentivized directors from pursuing harmful firm interests. *For instance, highly aligned VC directors can undermine the focal firm’s interests in order to protect their portfolio-level interests* (Garg 2013) p 103. It can be hard to monitor activities undermining focal firm interests if these VC directors have power. Garg (2013) however, highlights that too much board monitoring can negatively impact upon performance by inhibiting innovation. He finds a curvilinear relationship between venture boards and performance. Grunfeld and Jakobsen (2007) mention that boards in PE focus on goal formulation, strategic choices, demands for returns and incentivizing top management. Such measures are said to improve portfolio company effectiveness and growth. Through tight bonds with management in portfolio companies, PE boards can transfer their competence. This can improve the strategic position of the company either in its local market or in the pursuit of new international markets. The improvement of strategic position can be an indirect driver of potential future performance.

2.10.e PE Deals

Another mechanism to address agency costs and the misalignment of interests between managers and shareholders is through deals PE actors implement. Managers at portfolio companies are incentivised through large equity stakes in such deals, which drive them to create value in the companies. Jensen and Meckling (1976) highlight that shareholder incentives to overcome the free-rider problem and engage in active monitoring increases with equity share. Good value ensures a good exit after the investment period retires. Incentivised managers can make cash available by closing unprofitable segments of the business. As they are incentivised through large equity stakes, these managers don’t need that extensive monitoring from the PE company. *After adjusting for management selecting an attractive deal, evidence suggests that the size of management’s equity stake remains an important influence on performance* (Wright, Gilligan et al. 2009) p 7. The PE managers may however, intervene under times of financial distress. Public companies also receive incentives, these are in the form of stock options. *By their nature, stock options may be exercised at any point*

after their grant date before expiry; in contrast, the equity stakes granted to managers of PE firms can be liquidated only after the company has a successful exit event or after the shares vest (Cendrowski and Wadecki 2012) p 172. The equity stakes PE firms offer tend to be larger than those offered in public companies. The stake can depend on the size of the deal and whether or not the PE firms want to attract the best talent.

2.10.f Dividends

Dividends can be used as an internal governance mechanism to incentivise managers to generate cash flows. Dividend payout can provide a signal that the portfolio company wishes to pursue shareholder value maximisation. Through dividend payout, the free cash flow available in the firm is reduced and hence also the agency costs. Dividend payout can also reduce the disciplinary work of the board of directors to some extent. Paying out dividends can however subject the company to scrutiny by the press if they have to regularly seek new financing.

In the case of the PE industry, actors often use debt with subinvestment grades to pay dividends mainly to their sponsors. These dividend payouts are referred to as “dividend recapitalisations”. PE actors have been able to fund these dividend payouts as a result of strong credit markets yielding lower borrowing costs for debt. Such payouts can be carried out to make money from existing portfolio company investments, if IPOs or trade sales prove tough. “Dividend recapitalisations” have been controversial in the past where *buyout groups have been accused of loading portfolio companies with debt to pay themselves big profits.*² There is a concern that if PE actors take out cash from their companies to pay such dividends, that their incentive for supporting these companies in future efforts could be lessened.

2.10.g Time Horizon of PE Fund

A governance mechanism to ensure that optimal shareholder value is achieved is through the limited time horizon of the PE fund. This can provide incentives for managers to create value, as do the large equity stakes provided to them. Managers have a short time horizon to follow and implement plans before the PE firm exits the deal after some years. During the time

² <http://www.ft.com/cms/s/0/fe4847a4-c924-11e2-bb56-00144feab7de.html#axzz2k3idGif3>

horizon of investment, compensation structures can also be altered. It is important for the PE funds to get consistent high returns in the top quartiles. If the funds do not perform consistently well, it can impact upon receipt of future funding, increasing debt interest rates or even lead to bankruptcy of the PE firm.

2.10.h Debt

Historically, it is known that PE firms leverage their portfolio companies. They use portfolio company free cash flows to convert debt to equity in their investment period. In a study conducted by Achleitner, Betzer and Gider (2010), the PE targets in their sample are found to have stable earnings and low distress costs. This is used as an argument to increase debt financing, and the authors argue that this is a mechanism to reduce agency costs. The general and limited partners of the funds are largely shielded from the debt effects of distress in portfolio companies as Appelbaum and Batt (2012) discuss. It is only the equity that they invest in portfolio companies that is at risk. Debt has the advantage that it has to be serviced periodically, which can reduce empire building or managers seeking private benefits at the expense of the company. Debt also has the advantage of tax deductibility of interest payments. Tax shields from debt can increase company value. Achleitner, Betzer et al. (2013) find support for the tax benefit of leverage as well as for the bonding advantage of leverage. This bonding advantage of leverage implies that PE investors prefer investing in companies with low leverage (and potential for more leverage) and high free cash flows.

The negative aspect of debt however, is the increasing risk of bankruptcy, in terms of higher direct & indirect costs of default. The effects of bankruptcy can be devastating for the operating portfolio companies, even though not felt so greatly by the PE firm. Engel, Braun et al. (2012) argue a linear positive relationship between leverage and equity returns. They observe that at low leverage levels, the positive effects of debt outweigh the risks associated with default.

2.10.i Experience

According to Wright, Gilligan et al. (2009) experience is an important mechanism for improving portfolio company performance in deals. The authors argue that more experienced PE firms tend to build better businesses. PE firms are believed to have selection competence

allowing them to build a resource based targeted for specific regions, industries, sectors, company phases and company sizes. This resource base can for example direct resources to the most innovative and promising companies, which may not have access to capital from the banking sector. The managers in PE firms often have relevant branch experience or management consulting backgrounds. Hitec Vision is an example of a PE firm with branch focus. PE actors can further gain knowledge and sector experience through acquiring knowledge from growing business environments. Kehoe and Heel (2005) discover that differences in PE actor performance arise from their ability to impact the competitive natures of their portfolio companies. Differences in experience between actors also arise from their varying abilities to exercise active ownership through the strategic, financial and operational competence they provide in company boards.

Corporate governance mechanisms, like the aforementioned ones, are implemented for both the PE firm and in the investing portfolio company at all layers. This is to insure high returns for the investors of the fund (limited partners) and value for the portfolio company before the deal is exited. The PE firms themselves are aware that the free cash flows of their portfolio companies only can go to the limited partners and not to funding of other firms. In other words, incentives are in place for both the PE firms and for the portfolio companies. The type of governance measures that are implemented depend on what aspects of performance need improvement in the portfolio companies. Such performance aspects could for example vary from growth to efficiency. The type of PE firm, amount of leverage and managerial stakes put in place, are contingent on each individual company case. The corporate governance mechanisms also vary depending on location. For example, the continental European market is different with respect to the Anglo-Saxon.

Public company PE firms are on the rise and differ in corporate governance mechanisms compared to the usual PE firms. The reporting and regulatory standards will be different for such public company PE firms.

2.11 Evidence from Venture Capital and Buyout Sector

2.11.a Evidence from Venture Capital

Puri and Zarutskie (2010) find evidence that Venture Capital (VC)-backed firms grow faster, are younger and larger compared to firms that do not have VC backing. According to (Inderst and Mueller 2009), the success of venture capital business model depends on the market. Newly emerging markets are found to have the the best potential for venture capital investment, in terms of growth for portfolio companies and returns for the investing actors.

Evidence is found suggesting venture firms employ corporate governance mechanisms, which were highlighted in the above section. Gompers (1995) finds that firms with high levels of agency costs receive more frequent monitoring. Botazzi et. al (2008) discover that experienced venture capitalists provide hands-on interaction and interaction with their portfolio companies. Baker and Gompers (2003) find more independent boards as a result of venture backing. The board representations of venture capital actors can increase if the portfolio companies and the venture capital companies are distant from eachother as Lerner (1995) finds. Cornelli et at. al (2010) also document active board roles in their East European data sample. In terms of incentives, Inderst et. al (2007) find that entrepreneurs in the companies can have the incentive to outperform their industry peers. Such incentives can be created by the staged funding and capital rationing that venture capitalists provide, making entrepreneurs motivated to work for results.

2.11.b Evidence from Buyout Sector

Valkama et al. (2013) find that deal characteristics, funding, macroeconomic and industry factors affect portfolio company level returns in the buyout sector. Industry and GDP growth positively impact upon portfolio company level returns. In the literature, leverage is thought to increase firm-level holding period returns due to an increased pressure to service debt. In terms of leverage, the authors find that this doesn't create value in buyouts. Leverage seems to just inflate returns for equity in successful buyouts. They also distinguish between buyouts and buy-ins. MBIs or management buy-ins are leveraged buyouts using private equity investors operating by themselves, or with a new/partially new management team. MBOs or management buy-outs are led by the management of the target company receiving private

equity backing. The authors discover that buy-outs outperform buy-ins. This could be a result of MBOs having inside information and an informational advantage over outside management teams in MBIs.

Guo et al. (2011) found high financial returns for buyout transactions between the years 1990 and 2006. The tax benefit of leverage was one factor contributing to these returns.

Cotter and Peck (2001) found that long-term debt was used in buyouts along with active monitoring of the portfolio companies. Baker and Wruck (1989) acknowledged that the disciplinary function of debt and managerial ownership were important in their sample, but that also incentive compensation plans as well as relationships between the PE sponsors, managers, and board of directors were equally important for performance. Acharya et al. (2009) find that boards in buyout-backed companies are active in terms of strategy development and operations. In non-buyout companies however, the board role is more concerned with matters pertaining to supervision and monitoring. Cornelli and Karakas (2008) find the following board changes as a result of public to private transactions:

- Significant reduction in board size
- Outside directors being replaced by members of the PE firm
- Higher presence of PE members in the board in cases where more time and effort is required

CHAPTER 3

NORWEGIAN PRIVATE EQUITY MARKET

3.1 Introduction

Chapter 2 presented general principles that govern private equity. This chapter presents an overview of the Norwegian PE market. The information gained from these two chapters shall be used to develop the research methodology in **Chapter 4** and critically discuss the observations in Chapter 5.

3.2 Norwegian Venture Capital Association (NVCA)

Norwegian Venture Capital Association (NVCA) is the interest organization for those involved in the Norwegian private equity industry. This association aims to provide an understanding of the industry to promote future growth and development. It also strives *to build networks between private equity companies in Norway and abroad, and to establish effective collaboration with communities which need the industry's expertise.*³ It has 90 members of which 37 are primary and 53 are associated. The majority of the primary members invest in the oil and energy sector. A Norwegian private equity company as defined by NVCA, is a company with its headquarters in Norway.

3.3 Major Norwegian Actors

Herkules Capital was established in 2003 and *is leading Norwegian Private Equity firm with a total capital base of NOK 12.25 billion.*⁴ It has its headquarters in Norway and focuses on portfolio companies in the Small/Mid-Cap buyout sector primarily in Nordic countries. Each of its three funds has a capital base ranging from 2-6 billion NOK.

³ <http://nvca.no>

⁴ www.argentum.no

HitecVision is another well established actor in the Norwegian buyout market, with headquarters in Stavanger, Norway. They specialize primarily in oil and gas in Europe and North America. Their total capital base is of USD 1.2 billion.

Energy Ventures were established in 2002 and are a venture capital firm headquartered in Stavanger, Norway. Like Hitecvision, they have an international presence with offices in Houston and Aberdeen. Energy Ventures direct their focus on energy.

Reiten & Co Capital Partners, a buyout firm established in 1992, have a generalist industry focus. They have since their establishment, developed into one of the leading Nordic private equity firms. They are headquartered in Norway.

3.4 PE Investments

Figure 3.1 illustrates the number of investments conducted in the Norwegian private equity market from 2008-2013, for venture capital and buyout sectors. From 2011-2012, the buyout sector had generally a stable level of investments. The number of buyout investments declined however, from 2012 Q4 to a virtually non-existent level in 2013 Q1. For venture capital on the other hand in 2013 Q1, number of investments trebled to seven compared to 2012 Q4. The graph additionally illustrates that the number of investments by venture capital have generally been higher than those made in the buyout sector in the period 2008-2013. This could be because Norway has a well developed capital market for venture capital.

3.5 Amount Invested in Norwegian PE Market

In terms of the amount invested in the Norwegian private equity market, there has been more attention given to the buyout sector as opposed to the venture sector in the period 2008-2013 (**Figure 3.2**). Although the amount invested in 2013 Q1 declined from the 2012 Q4 level, there was still a strong interest in the market from international private equity funds.

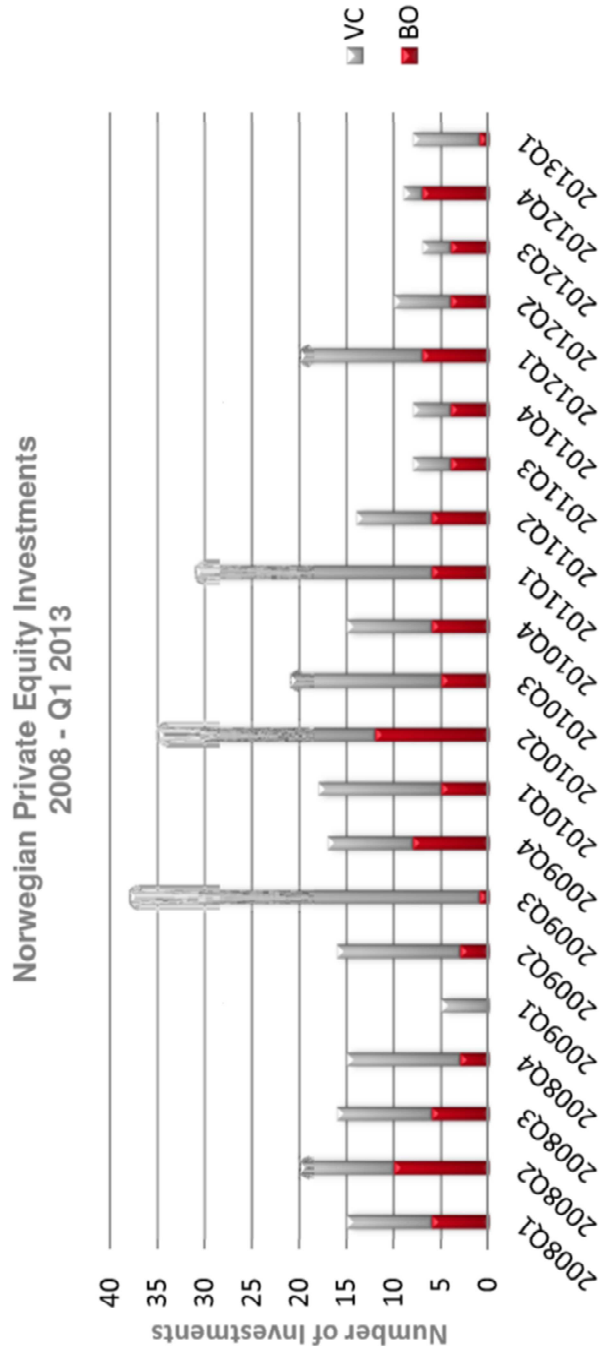


FIGURE 3.1 Scale of Norwegian Private Equity Investments in terms of number of investments in 2008-2013.

Source: Argentum Markets

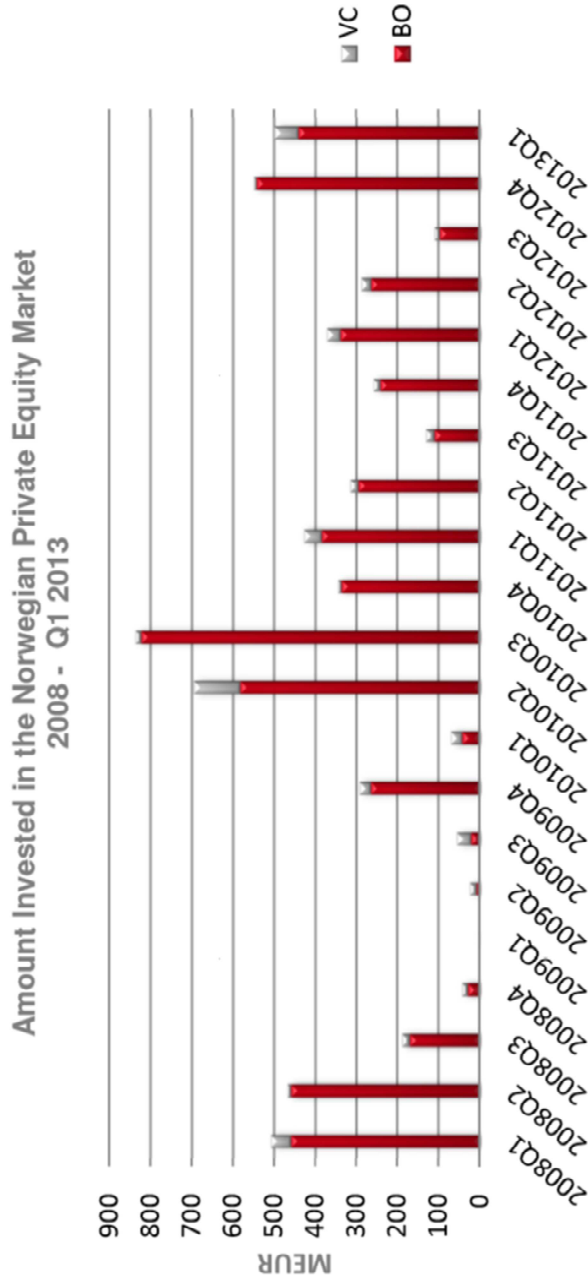


FIGURE 3.2 Scale of Norwegian Private Equity Investments in terms of amount invested in 2008-2013.

Source: Argentum Markets

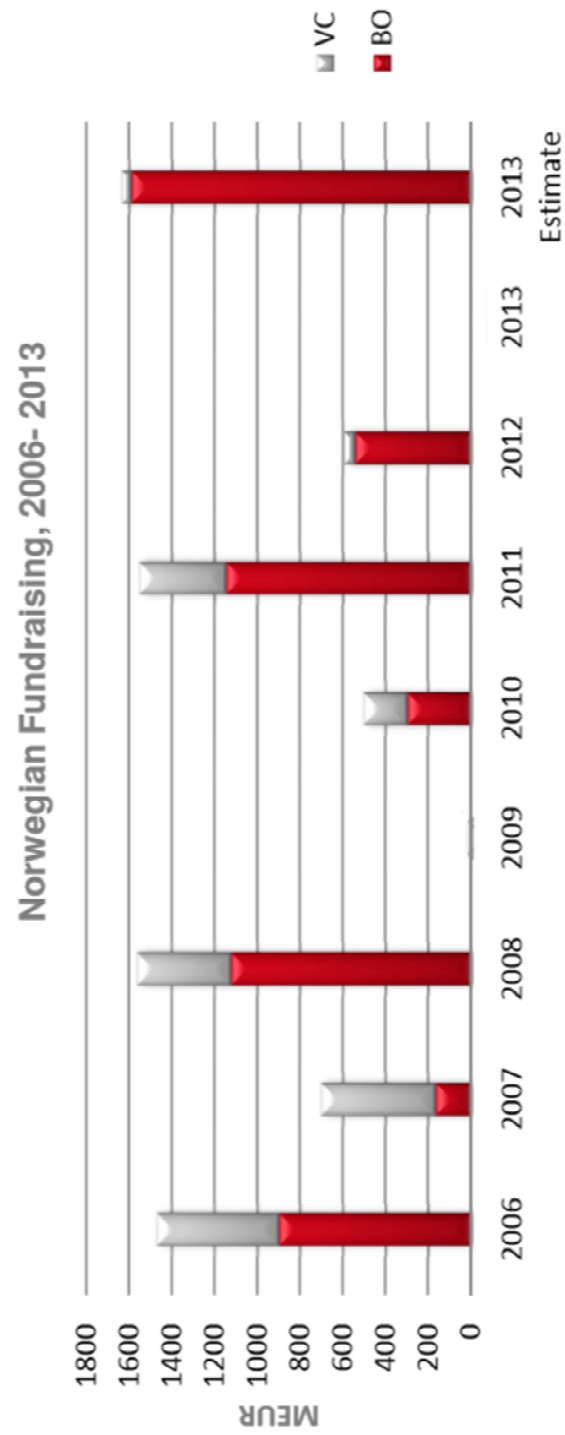


FIGURE 3.3 Total Norwegian fund raising in 2006-2013.

Source: Argentum Markets

*Non-Norwegian private equity funds accounted for as much as 97 percent of the total amount invested in Norwegian companies in the first quarter.*⁵ In 2012, there was also strong interest by Non-Norwegian funds in the Norwegian market. *Overall in 2012, Non-Norwegian funds accounted for 64 percent of the total amount invested by private equity funds in Norway.*²

Figure 3.2 shows the amount invested in Norwegian Private Equity from 2008-2013.

It will be interesting to see whether this increased interest in the Norwegian market will be sustained in the future. It will also be interesting to see whether the fundraising levels for buyouts will increase in the future. Norwegian funds raised about half of the total amount in the Nordic market in 2012. **Figure 3.3** illustrates fundraising activity for venture capital and buyouts from 2006-2013.

3.6 Argentum's Role

Argentum was established in 2001 with the aim of providing a domestically efficient market for unlisted firms. Their vision *is to be a centre of excellence for international private equity and the preferred partner for private equity fund investments in European and energy-focused funds.* This asset manager is wholly owned by the Norwegian Ministry of Trade. Argentum manages on behalf of the Norwegian government and for investors who are involved in their investor programmes. Argentum is a fund-of-fund company meaning that it invests in companies through PE funds. In other words, it doesn't invest directly in the companies. This is a way to diversify risk and obtain a balanced portfolio.

3.7 Trends for Nordic Market

Both, Denmark and Norway, have received considerable attention from PE funds during 2013. Together they have attracted 65% of the total investment in the Nordic market as shown in **Figure 3.4**. Sweden also has a high share of investments, but this is a result of having the largest private equity market in the region. It will be interesting to follow the positive development that is showing for the Danish and Norwegian markets.

⁵ Argentum Annual Norwegian Market Report 2012

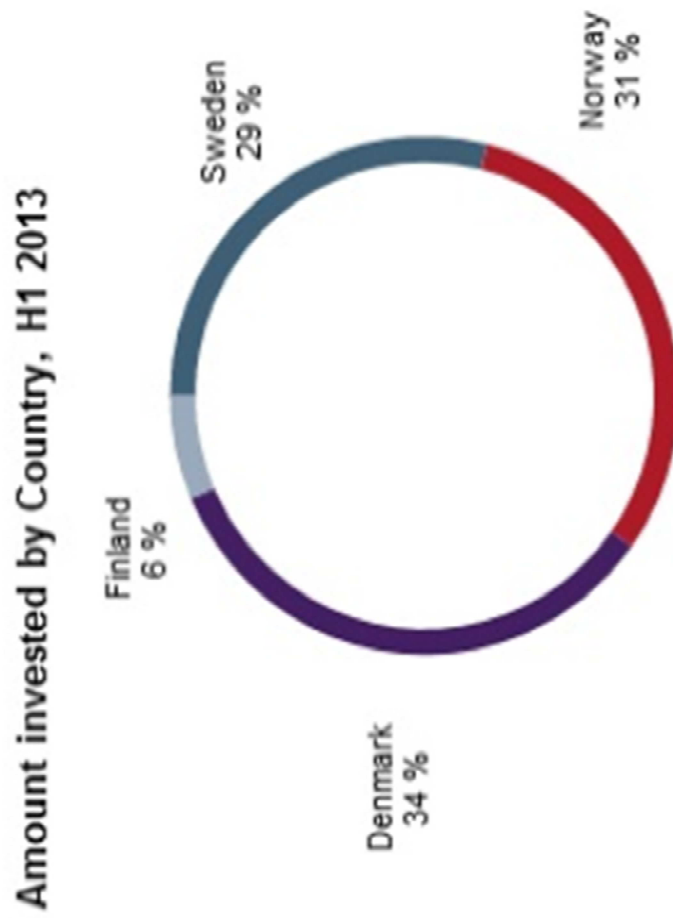


FIGURE 3.4 Distribution of the PE investment share among Nordic countries.

Source: Argentum Markets

3.8 Global Trends

Limited Partners in PE firms are eyeing opportunities for investment in emerging markets such as the BRIC countries (Brazil, Russia, India and China). The sentiment is shifting from a focus on large buyout funds to smaller ones. Large buyout funds are facing credit difficulties, in terms of obtaining credit and renegotiating debt terms from the financial crisis era. **Figure 3.5** from a 2011 survey shows that Limited Partner respondents view Asia, China and India as the most attractive emerging market regions for investment.

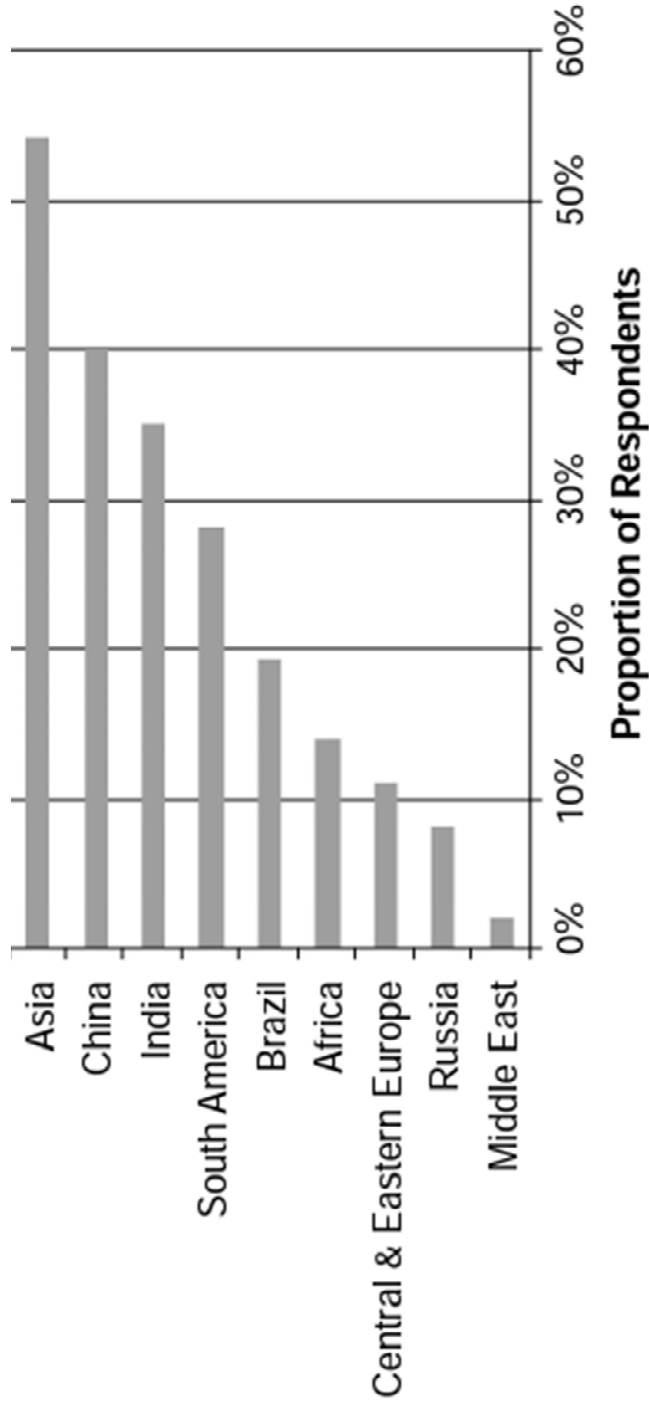


FIGURE 3.5 Proportion of respondents who found the investment in developing countries attractive.

Source: The Preqin Private Equity Quarterly, Q3 2011

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

Chapters 2 and 3 discussed private equity investments in detail. In this chapter, the knowledge gained from the literature survey will be used to develop the research methodology. The results and discussion will be presented in **Chapter 5**.

4.2 Empirical study of the Norwegian Private Equity Market

In this section, I will direct my focus only on the Norwegian market given time constraints. I will consider the Norwegian portfolio companies of the four major Norwegian private equity actors described in the previous section; **Herkules Capital, HitecVision, Reiten & Co Capital Partners and Energy Ventures**. Energy Ventures is the only actor in the venture capital segment. The study will focus on the indirect drivers of value creation in the portfolio companies through a study of board membership by the PE actors. This will enable us to evaluate how active these actors are in their portfolio company investment approach.

4.3 Hypothesis

Given that PE firms are active owners, aiming to alleviate agency costs, I expect that they take a hands-on approach to management through board membership in their portfolio companies.

4.4 Methodology

For my methodology, I choose to adopt a semi-quantitative approach. To accomplish this, I consider the change in debt/equity one year before PE investment compared to one year after PE investment. Additionally, I want to observe whether there is an association between certain variables before PE portfolio company investment and board membership of PE actors in the year after portfolio company investment.

I initially considered interviewing the PE firms and their respective portfolio companies for insight into board membership. They were however, unable to participate due to other commitments. Qualitative case interviews may have given deeper insight into reasons for board membership. Such interviews could have been subjectively biased depending on the interviewant and how much information he/she wanted to disclose. Interviews would also be time consuming and not feasible given my submission deadline.

4.5 Variables Studied

To get an idea of the degree of active ownership through board membership, I will focus on whether there is an association between the following independent variables in the year before investment (t-1), and board membership from the PE firm in the portfolio companies in the year after investment (t+1):

- 1) Change in Debt/Equity (from (t-1) to (t+1))
- 2) Return on Assets in (t-1)
- 3) Portfolio Company Size (As measured by number of employees) in (t-1)

4.5.a Variable 1 – Change in Debt/Equity

The first variable is a capital structure variable indicating whether a change in debt levels from (t-1) to (t+1) has an association with the number of board members present from the PE firm in the year after investment (t+1). Debt can increase the level of financial distress, arguing for a higher PE board presence. However, debt is a governance mechanism employed by these actors to reduce managerial agency costs in portfolio companies. As debt needs to be serviced periodically, it is a way to hinder empire building by managers. PE actors also employ debt to increase their returns on investment. I will exclude Energy Ventures from the debt/equity analysis as it is mainly the buyout firms that employ debt as a mechanism.

To see whether debt is employed in buyout portfolio company investments, I will plot the change in debt/equity from one year before PE investment to one year after PE investment against company name.

4.5.b Variable 2 – Return on Assets

Return on assets, the second variable, is an accounting performance measure indicating the profitability of a company relative to its assets. In other words, it indicates how efficiently management employs its assets to generate earnings. The purpose of using this variable is to see whether the past performance in the year before PE investment of a portfolio company has any say for the number of PE board members in the (t+1) year. According to Keasey et al. (2005), the role of PE actors varies with respect to performance. If weak performance is observed through analysis of financial figures, these actors can take a more controlling approach.

4.7.c Variable 3 – Portfolio Company Size

For portfolio company size (as measured by total number of employees), I want to observe whether there is an association between the size of a portfolio company and how many board members the PE actors chose to represent in their respective companies. A larger firm size could argue for a higher level of PE board membership in (t+1), given that the control role of the board becomes more important.

4.6 Data Collection

Given the time limitation of the thesis, I choose to focus only on the active Norwegian portfolio company investments of the major Norwegian actors in the PE market.

To locate the names of the portfolio companies of these actors, I use Argentum's database. For detailed information on each portfolio company, annual reports were downloaded from the Register of Company Accounts at the Brønnøysund Register Centre.

The four major actors described in **Section 4.2** have a varying number of portfolio companies and operate in different sectors. The Norwegian population I used was fairly small given that most of these actors also have a significant international presence. I wanted to observe whether certain variables from one year before PE investment (t-1) affect board membership from the PE actors one year after PE investment (t+1). This made the population yet smaller given that annual reports are not published yet for 2013, which is the year (t+1) for some of

the investments. In some cases, I was not able to get reports for (t-1) either, if the portfolio company was not established at that time.

Table 4.1 shows the PE actors, their portfolio companies and the respective years of investment that were used in the study.

TABLE 4.1 Names of the PE firms and their portfolio companies that were used for this study.

Private Equity Firm	Portfolio Company	Investing year t
Energy Ventures	Cubility	2007
Energy Ventures	Energreen	2008
Hitec Vision	Aarbakke AS	2006
Hitec Vision	Grenland Group	2009
Hitec Vision	Reef Subsea AS	2010
Herkules Capital	Stamina Hot	2011
Herkules Capital	Norsk Jernbanedrift AS	2011
Herkules Capital	New Store Europe	2010
Herkules Capital	Til bords	2008
Herkules Capital	Nevion Europe	2008
Herkules Capital	Hatteland Display AS	2007
Herkules Capital	Micro Matic AS	2007
Reiten & Co	StormGeo	2011
Reiten & Co	Questback AS	2008
Reiten & Co	Malthus AS	2006
Reiten & Co	Airlift AS	2007
Reiten & Co	Brubakken	2008
FSN Capital	Norman ASA	2009

CHAPTER 5

RESULTS AND DISCUSSION

5.1 Introduction

Chapter 2 was a presentation of the motives for investment of PE firms in portfolio companies, followed by a literature review of governance mechanisms that such firms employ. The literature review highlighted that PE actors are active owners through establishment on the boards of their portfolio companies. The chapter concluded with empirical evidence from the venture capital and buyout sector, supporting the literature that PE firms are active board members in their portfolio companies. In this chapter I shall try to find answers to my hypothesis. I shall then discuss the parameters from my methodology and their impact on PE board membership in portfolio companies. These parameters are; change in debt/equity, past performance as (measured by return on assets) and firm size.

I choose not to focus on board nationality since the population only includes Norwegian board members. Board gender is not particularly interesting either, since there is a mixture of both male and female board members before and after PE investment.

5.2 Change in Debt to Equity ratio

Figure 5.1 shows the change in debt/equity from the pre-buyout period (t-1) to the year after PE investment (t+1) for the portfolio companies in the buyout sector. For HitecVision, there is not a significant change in debt/equity. For Herkules Capital, there is a general increase in the debt/equity ratio, which could be a result of their strategy. For Reiten & Co, companies with high debt in the year before PE investment, experience a significant reduction in debt one year after PE investment. This is the case for both Questback and Brubakken. This is in line with theory indicating that PE firms try to restructure financially distressed companies. These investments are referred to as distressed investments. Reiten & Co increases the Debt/Equity ratio in the period (t+1) for those companies with not so significant debt ratios, for example StormGeo and Airlift.

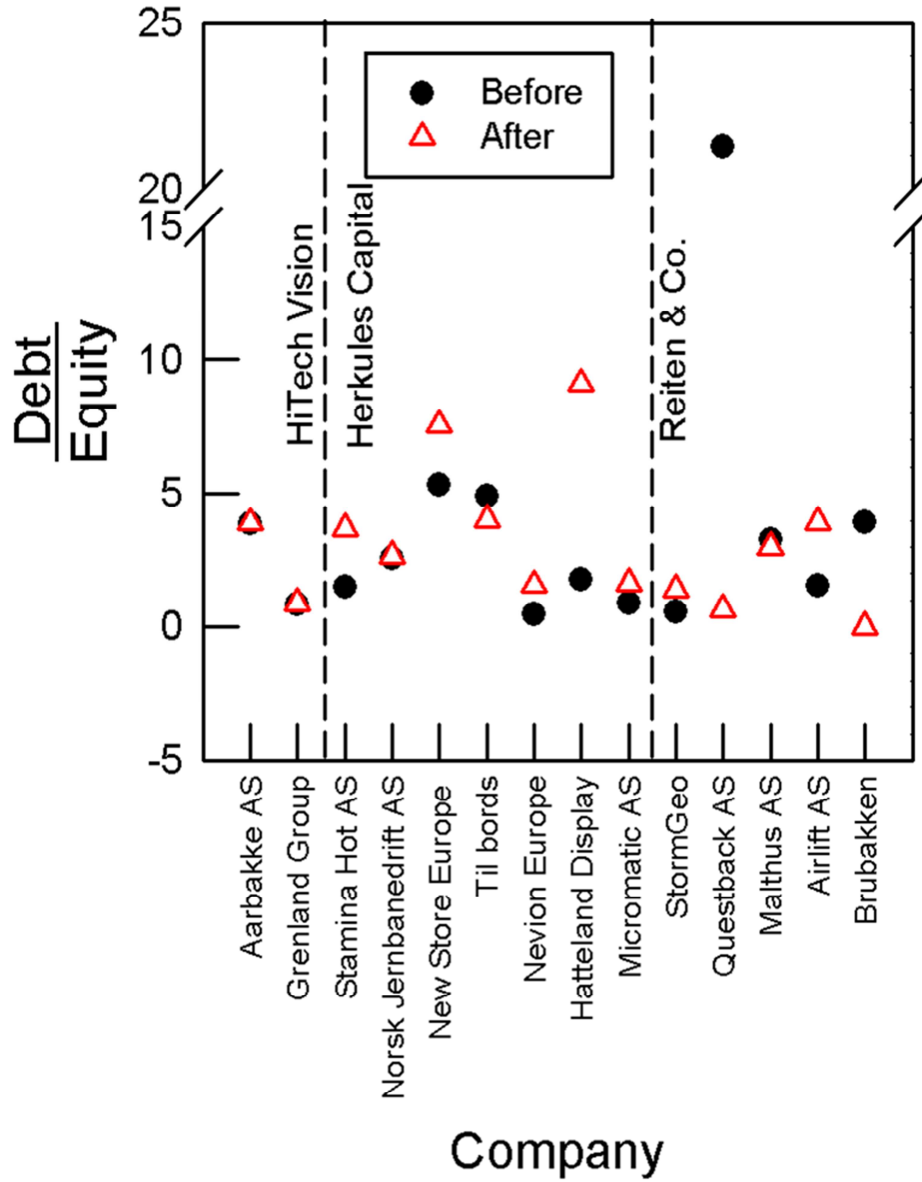


FIGURE 5.1 Change in debt/equity from (t-1) to (t+1) for portfolio companies

5.3 Association of Change in Debt/Equity on Board Representation in (t+1)

It may be expected that when the crucial policy decision to increase debt in portfolio companies has been taken, private equity actors would like to have more of their own members on board. **Figure 5.2** shows the effect of change in debt/equity from (t-1) to (t+1) on board representation in (t+1). The figure indicates that generally as the debt/equity ratio changes from the period (t-1) to (t+1), the board representation by PE actors also changes in portfolio companies. This could be a result of a desire to monitor the portfolio companies more given an increase in leverage and indirect/direct costs of bankruptcy. There is however, no general trend in the results. The majority of portfolio companies have between 20-40% board representation from the PE actors in the year (t+1). Some exceptions are:

- Nevion, Hatteland and Micro Matic from Herkules Capital have a significantly higher board representation as compared to the remainder of the population.
- New Store Europe, a portfolio company of Herkules Capital, has fairly low board representation.
- StormGeo from Reiten & Co Capital Partners have similarly low board representation even with a positive increase in the debt/equity ratio.
- Aarbakke of HitecVision has no change in debt/equity but nonetheless has a fairly high board representation.

The theory mentions the disciplinary role of debt. In the case of Aarbakke, even an increase in debt may not provide adequate incentives for management, therefore requiring a fairly high percentage of board representation from HitecVision. The lack of trends for these companies can highlight that PE board representation here can be associated with other reasons besides debt.

5.4 Association of Return on Assets

Figure 5.3 shows the association of return on assets from (t-1) on board representation by PE actors in (t+1). The figure shows that irrespective of return on assets from the (t-1) year, most portfolio companies have between 20-40% board representation. Some exceptions are:

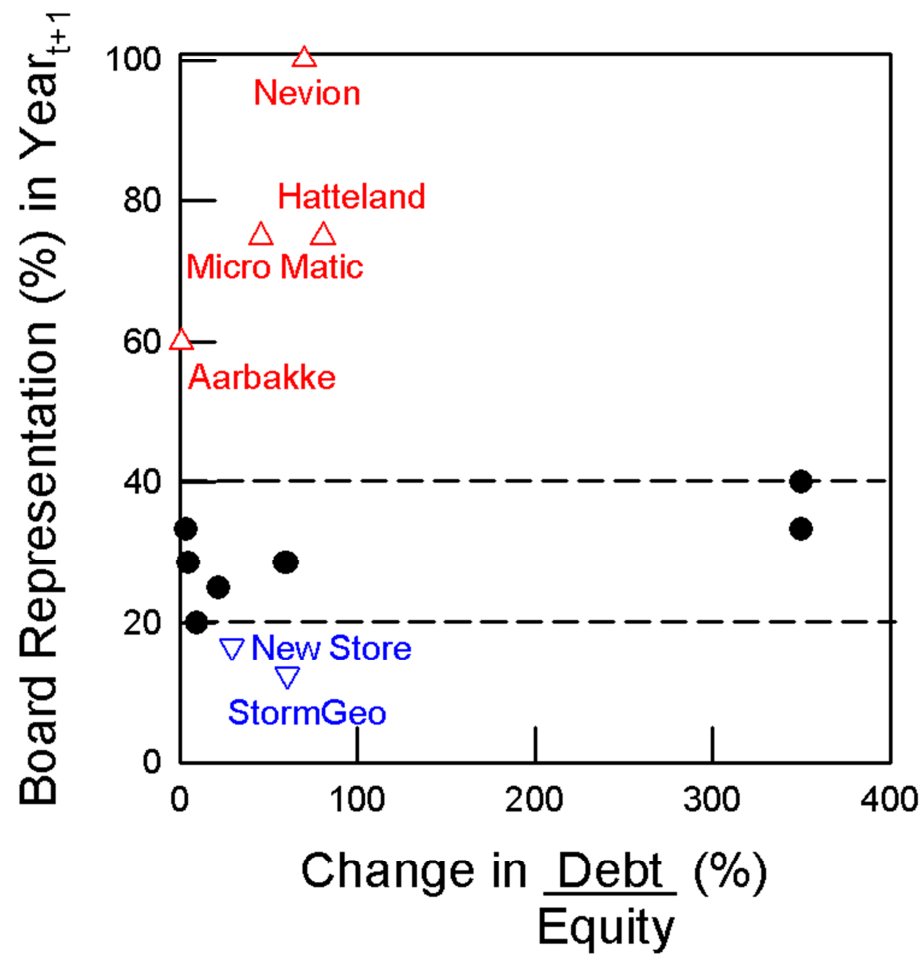


FIGURE 5.2 Association of change in debt to equity ratio and board representation in the year (t+1).

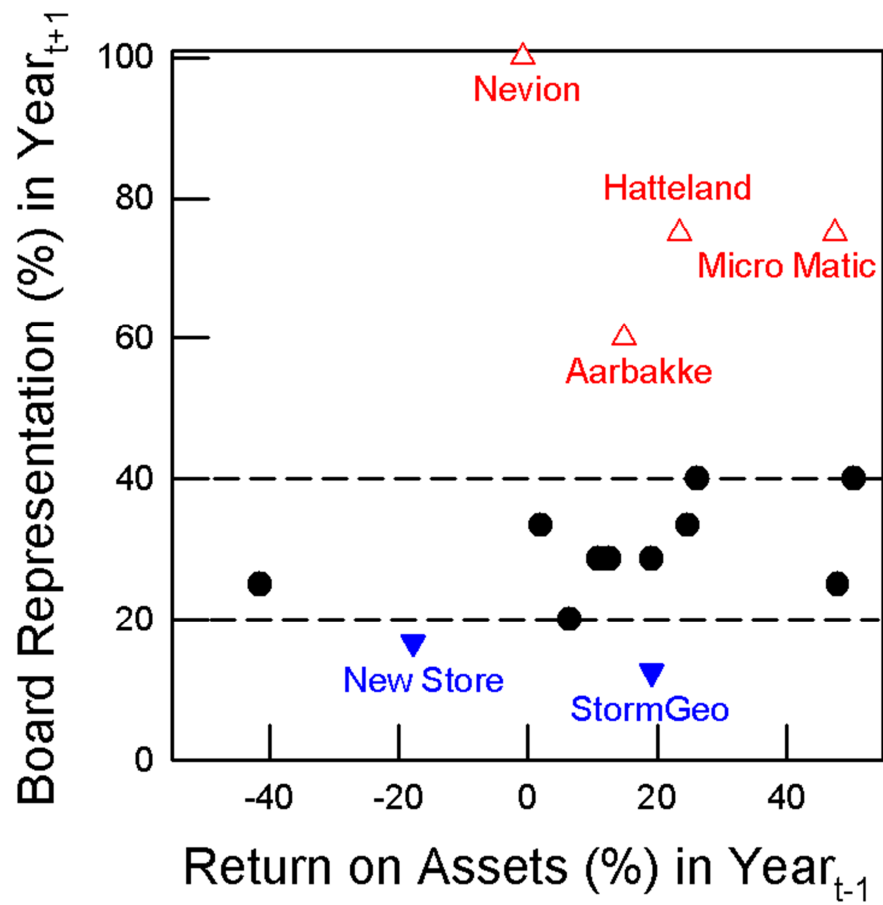


FIGURE 5.3 Association of return on assets in ($t-1$) and board representation in ($t+1$).

- In the case of Nevion, they have 100% board representation when there is no return on assets in the period (t-1). In other words, the entire board is replaced with members from the PE firm. This indicates that PE actors take an active, hands-on approach in their portfolio companies if they are performing poorly.
- Hatteland and Micro Matic from Herkules however, have high board representation even with positive return on assets in the year before PE investment.
- New Store Europe have low PE board representation even with negative return on assets in (t-1).

This goes to show that board representation isn't really correlated with return on assets. Board membership is an indirect driver of value creation which explains its lack of correlation with a direct driver. Keasey et. al. (2005) mention that the role of PE actors vary with respect to firm performance. They argue for more PE involvement as a result of weak performance. In my population it can be the case that there are other underlying reasons for board representation that do not depend on portfolio company past performance.

5.5 Association of Firm Size

Figure 5.4 shows the association of firm size, as represented by number of employees, on board representation by PE actors. This graph shows that firm size as measured by number of employees, does not have much of a say for the representation of PE members on the boards of portfolio companies. The theory mentions that the board control role could increase with firm size, arguing for an increased board presence by PE actors, but this is not the case for my sample. Keasey et al. (2005) mentions that board representation can be higher in larger and more complex firms, given that monitoring can become more difficult. It may not be that the size of the firm fully explains board representation, but instead the degree of challenges facing the firms. The competence and experience that PE actors offer can vary depending on the complexity of transactions as opposed to just the size of their portfolio companies.

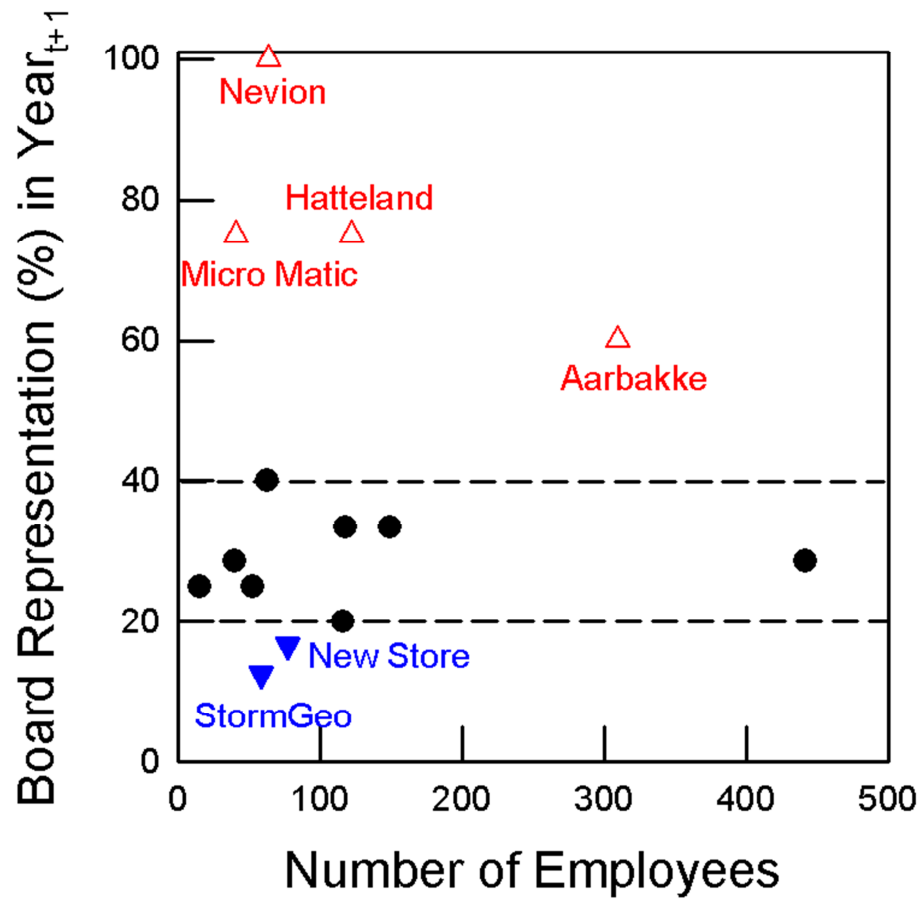


FIGURE 5.4 Association of Firm Size (Number of Employees) and board representation in (t+1).

5.6 Association of PE Ownership Share

In addition to being active on the boards of portfolio companies, PE firms also have a majority ownership stake in these companies.

For the funds of the buyout firms HitecVision, Herkules Capital and Reiten & Co, the ownership shares range from about 50% to 100%. Energy Ventures, the venture capital firm, have a smaller ownership share, but are nonetheless majority owners in their portfolio companies.

The ownership shares of the PE firms in the buyout and venture capital sectors illustrate that these firms are majority owners in their portfolio companies. Although it doesn't give an indication of the degree of active ownership, it suggests that these firms will take an active approach to management in their portfolio companies through board membership. Rogers and Holland (2002) highlight that PE actors, as co-owners or total owners, provide hands-on governance in portfolio companies. The PE firms have a significant stake in their companies through invested money and majority ownership.

Table 5.1 illustrates the ownership shares of each of the PE funds in their portfolio companies.

5.7 Findings

From the work carried out the the following findings can be highlighted:

- 1) The study indicates that PE actors use their influence as majority owners by being active on the boards of their portfolio companies. This was also the case in the study conducted by Cotter and Peck (2001) and by Cornelli (2010) in their East European sample. There is always a representation from the PE firm on the boards of their portfolio companies. This can range from approximately 10% board membership to a complete takeover of the board. The analysis clearly shows that the number of PE board members vary on a case to case basis. PE board representation depends on the amount of time and effort these actors want to devote to their companies, as well the complexity of the the transactions.

TABLE 5.1 Ownership shares of PE funds in their portfolio companies.

Private Equity Firm	Portfolio Company	Investing year t	Majority Owner at (t+1)	Share (%) at (t+1)
Energy Ventures	Cubility	2007	Energy Ventures 2 KS	39.21
Energy Ventures	Energreen	2008	Energy Ventures 2 LP	28.26
HitecVision	Grenland Group	2009	HVS Invest AS	75.20
HitecVision	Aarbakke Group	2006	HitecVision PE IV LP	49.70
Herkules Capital	Stamina Hot	2011	Herkules Private Equity III LP	90.00
Herkules Capital	Norsk Jernbanedrift	2011	Herkules Private Equity III GPII + GP 1	67.00
Herkules Capital	New Store Europe	2010	Herkules Private Equity III	83.14
Herkules Capital	Til bords	2008	Herkules Private Equity II	100.00
Herkules Capital	Nevion EuropeAS	2008	Herkules Private EquityII	100.00
Herkules Capital	Hatteland Display AS	2007	Herkules Private Equity II	95.56
Herkules Capital	Micromatic AS	2007	Herkules Private Equity II	90.74
Reiten & Co	StormGeo	2011	Reiten & Co Capital partners VII	66.50
Reiten & Co	Questback AS	2008	Reiten & Co Capital partners VII	68.00
Reiten & Co	Malthus AS	2006	Reiten & Co Capital partners VI	62.40
Reiten & Co	Airlift AS	2007	Reiten&Co Cap partners VI	60.00
Reiten & Co	Brubakken	2008	Reiten&CO cappartnersVII	88.10

- 2) PE actors can restructure debt. This is visible in the year after investment for the case of two of the portfolio company investments of Reiten & Co. Questback AS had a quite drastic restructuring. Brubakken was also restructured but not to the same extent as Questback.
- 3) Buyout actors generally leverage their companies. Debt is a mechanism to reduce agency costs, as was highlighted by Achleitner, Betzer et. al (2010). PE actors can also decrease debt levels depending on their individual strategies.
- 4) Past performance as measured by return on assets is not showing an association with PE board membership in the year after PE investment
- 5) Portfolio company size appears to not have any say in predicting how many board members will be present from the PE firm on these boards.

The findings suggest that one needs to examine portfolio companies on an individual case to case basis to get an understanding of the underlying motives behind PE board member representation. This examination can be done by going deeper into the company annual reports or through qualitative research. Nevion, Micro Matic, Aarbakke, and Hatteland are interesting cases, given their deviations from the remainder of the population. They have significantly higher board membership from the PE firms. Similarly, New Store Europe and StormGeo are interesting given their relatively low level of board membership by the PE firms. What all these company cases have in common is that they are all innovative and are leaders in their respective segments.

5.7.a Case 1: Nevion AS from Herkules Capital

Nevion is a company headquartered in Sandefjord, Norway. They operate in the international telecom market, providing broadcasting equipment to broadcasters and telecom companies. Gert Munthe from Herkules Capital believes that there are good possibilities for growth in this fragmented industry.

Nevion activated six projects in 2009, which is the year after PE investment. During this year, the NOK strengthened against the USD and the Euro. This had a considerable effect on Nevion, as a considerable share of their purchases were made in these two currencies. They mention in their annual report for 2009 that the market was demanding as a result of the financial crisis.

The industry will need time to improve given the economically challenging situation. Future market conditions remain uncertain despite the fact that long-term prospects seem promising. Obtaining growth under challenging market conditions may be a reason why they require a high degree of board members on their boards from PE actors in the year after investment. They may also require the strategic competence of these actors when preparing for technological shifts, new logistics solutions and threats from competitors. PE representation through number of board members can be a reason why they state that they are in satisfactory economic position despite the challenging market.

5.7.b Case 2: Micro Matic Norge AS from Herkules Capital

Micro Matic Norge AS operates in the electrical equipment industry and is based in Hvalstad, Norway. *It has a leading position in Norway within technical control systems and design installation materials.*⁶ Micro Matic has experienced strong growth in recent years. In 2005 they had a turnover of NOK 164 million and operating profit of NOK 35 million, as reported on the website of Herkules Capital.

This innovative company with a solid customer, supplier and productbase, matched the investment philosophy of Herkules Capital well. In this case, there was a high degree of board members on the board from Herkules Capital, despite the fact that Micro Matic were performing with a return on assets of over 40% in the year before PE investment. There was not a considerable change in debt/equity either in the year before investment compared to the year after investment. In their annual reports, Micro Matic mentioned that the conditions for the electrobranch and building branch in Norway were uncertain. There was strong competition in their branch. This could explain why they required a high degree of strategic involvement from the PE firms to position themselves in a demanding market. Micro Matic faced exchange rate problems in the year after PE investment (t+1) as a result of a depreciation of the Norwegian kroner. This situation stabilised in 2009, but was nowhere near the normal level. The uncertainty surrounding the exchange rate could have been an explanation as to why Micro Matic required decision making input from Herkules Capital. Micro Matic wanted to protect their market position as well as grow in terms of providing innovative solutions to other markets.

⁶ <http://www.herkulescapital.no/index.php?visID=10>

5.7.c Case 3: Aarbakke Group AS from HitecVision

Aarbakke is a leader in Europe for the supply of specialized manufacturing services to the oil and gas industry. They are situated in the Stavanger region of Norway.

I wanted to examine Aarbakke from HitecVision deeply given the high degree of PE involvement on the board despite no change in the debt/equity level. Aarbakke were also performing with positive return on assets in the year before PE investment. In the annual reports, Aarbakke mention the adverse impact of the financial crisis on the company in the (t+1) period, which happened to be 2007 in this case. Aarbakke experienced a risk from competition as its competitors also could perform similar activities. Despite the impact of the financial crisis, Aarbakke Group acquired ITM in 2007, which is a leader in tubular services. With the aid of the PE firm, Aarbakke Group strengthened their position.

Aarbakke Group is optimistic that liquidity will develop positively over time.

5.7.d Case 4: Hatteland Display AS from Herkules Capital:

Hatteland Display AS manufactures industrial and consumer goods and is a leader in the manufacturing of displays used in the maritime sector. They are situated in Stavanger, Norway. According to Herkules Capital, Hatteland has had strong growth over the years and has established a solid product base.

It is interesting given the high percentage representation of Herkules Capital members on the board in the period (t+1) even with a positive performance as measured by return on assets in the period before investment (t-1). Additionally, the debt level for Hatteland rose significantly as compared to the rest of the Herkules Capital population. The annual reports mentioned that Hatteland got a new CEO in 2008. Exchange rates posed a direct and indirect economic risk for the company. No deals were in place to reduce this. PE competence may have been necessary to establish a strategy dealing with this exchange rate risk. The financial crisis had an impact on Hatteland, as was also the case for Nevion. The company expected a lower sales level in 2009 and required a plan of action to deal with this, through structural cost changes. In this case operational competence was required from the PE firm to execute cost changes. Such changes were important given that they deal with demanding customers from the maritime sector that were mainly situated in Europe. The business group was fairly

new at the time, given that it was established in 2007, hence, required adequate monitoring and council from the investing PE firm to achieve further growth.

5.7.e Case 5: New Store Europe AS from Herkules Capital

New Store Europe is an innovative leader in store interior and store design in Europe, situated in Vinterbro. Gert Munthe from Herkules Capital views this market as an attractive investment. This is an interesting case given a fairly low degree of board members from the PE actors despite poor performance as measured by return on assets in the year before investment.

New Store Europe's debt/equity level also increased in the year after PE investment. This could argue for more PE representation on the board, given an increased level of distress. It may however not be of much significance if debt is used as a mechanism to incentivise management to produce periodic results to service this debt.

An increase in debt for this company could be a result of their decision to buy 51% stock in New Store Denmark AS. 100% stock was also bought in Kleerex Group Holding Lt. The purchase of Kleerex strengthened New Store Europe's position in one of Europe's biggest and most important markets. This made the future prospects good. Shopex in Holland was bought. Shopex is a market leader in their brand segment. This strengthening of market position could argue for why they didn't require much expertise or strategic input from PE actors. There was some macroeconomic uncertainty in 2011 relating to customer buying preferences for store inventory goods. The company feels that they have a solid strategic platform from 2010. Additionally, they have a sourcing supplier in China helping them to deliver cost-effective products. Having a high degree of PE board membership would perhaps therefore not add additional value. The PE board representation may have however helped them broaden their network to include international customers. PE firms have strategic connections and expertise.

5.7.f Case 6: StormGeo AS from Reiten & Co Capital Partners

StormGeo is a leading weather forecasting company in Scandinavia measuring risk on the behalf of international customers. StormGeo is headquartered in Bergen.

They had an increase in their debt level in the year after PE investment and were performing with positive return on assets in the year before PE investment. I wanted to uncover why the board representation from the PE firm was considerably lower in this case compared to the rest of my population. Based on their annual reports, StormGeo reported a minimal exchange rate risk for 2012, which was the year after PE investment. They were generally doing well in 2012 and had strengthened their competence. StormGeo were financing two Ph.D. candidates. They won new contracts and offices were established in Reo De Janeiro and Singapore. StormGeo reported that they had a growth of 285% in the year of PE investment (year t). This can argue for why it wasn't necessary to have so many members in the board from Reiten & Co in the year after investment (t+1).

5.8 Discussion of Empirical Study

The conclusions from the quantitative part of the empirical study indicated that PE firms indeed took an active role in the boards of their portfolio companies as Cornelli et al (2010) also documented. This was because they invested money and acquired a majority ownership stake in their portfolio companies. There was always a certain degree of board representation, as measured by number of board members, in the portfolio companies in the year after PE investment (t+1). In one case there was a complete replacement of the portfolio company board with PE members, suggesting that PE firms may even significantly restructure boards.

The buyout PE firms generally tended to employ debt as a mechanism in their portfolio companies as observed from my Norwegian population. Cotter and Peck (2001) also observed that long-term debt was used in buyouts. Appelbaum and Batt (2012) argued that a reason for this could be that the general and limited partners largely are shielded from the debt effects of distress. Another reason relates to the advantage of tax shields from debt. In some cases, they restructured debt for their portfolio companies. There was however, no clear trend between the number of PE board members in the year after investment and the change in the debt/equity ratio. One should also consider managerial equity share and incentive compensation packages for them. It is not necessarily the case that a higher number of PE board members will be present on the boards in their companies just as a result of increased debt. Even with a positive increase in debt levels, PE actors may not feel the need to monitor to a large extent, if the managers already are incentivized. Debt could incentivise managers as

it needs to be periodically serviced. This can restore their entrepreneurial spirit, driving them to work harder and close unprofitable business segments. PE actors can still provide council, however a large presence on the portfolio company boards may not be required, even though leverage may potentially increase the level of financial distress in the company.

There was no visible trend between past performance of portfolio companies and the number of PE actors on the board in the year after investment. It was not necessarily the case that poor past performance as measured by return on assets, led to higher level of control by PE actors through increased board membership. This seems reasonable given that number of board members and return on assets aren't directly correlated. Board membership is an indirect driver of value creation whereas return on assets is a direct driver.

The results showed that portfolio company size, as measured by the number of employees, did not show association with the number of board members from the PE firm in the year after investment. Large firm size could have argued for a stronger control role on the board for PE actors and hence a greater number of members.

Although I was able to uncover that PE actors were active on their portfolio company boards and that debt was generally a governance mechanism used in the buyout sector, I did not get a clear understanding of the underlying reasons for low or high board membership by PE actors in their portfolio companies. This called for a qualitative case based approach of analysis. I therefore chose to examine six portfolio companies which deviated in terms of number of PE board members, from the remainder of the population. This culminated in some interesting findings. I discovered that the PE board membership level depends largely on strategic factors and on industry conditions. Challenging industry conditions and the financial crisis were reasons why a significant level of strategic input was required from the PE firms. The companies especially required competence from the PE actors to undertake strategic changes as a result of macroeconomic conditions, such as exchange rate risk. The strategic position of the portfolio company had a say in how many board members were present from the PE firm. If the companies had a strong position in their markets relative to their competitors, they didn't feel that value was added through a large number of PE members on their boards. The degree of impact the PE firm had from the investing year in the portfolio companies therefore had a say in how many board members they chose to have in the year after investment (t+1).

The findings from the qualitative section of the study are in line with previous empirical findings on private equity. The case studies indicate that PE actors focus on the most vital issues of business and not in daily activity involvement. Acharya et. al (2009) also found that buyout backed companies are active in strategy development and operations. Operational expertise may also be required under challenging market conditions. It is however crucial that operational expertise is embedded in the PE firm culture. This will enable the PE firm to successfully transfer their operational expertise to the portfolio companies. The portfolio companies should similarly possess an operational focus, to benefit maximally from PE firm expertise. The qualitative results additionally confirm that experience from PE firms is an important governance mechanism. Wright, Gilligan et. al (2009) found that PE actors use their industry expertise to build better businesses.

There has been an uneven sector distribution of portfolio companies in favour of the oil, gas, IT and business service sectors in Norway as described in NVCA Yearbook (2008). It was enlightening to discover from the cases that some of the major Norwegian PE actors also are diverting their attention to other sectors besides just the oil and IT dominated sectors. For example Herkules Capital is focusing on portfolio company investments in a variety of industries such as telecom, electricity, consumer and industrial goods. Reiten & Co also have a generalist focus and their StormGeo investment is in the industrial sector. Based on information from the NVCA Yearbook (2008), it is expected that more investments will be undertaken in culture, leisure and media in the near future. This is a result of growing demand in such sectors, allowing potential for PE actors to invest. In terms of regions of investment, the cases match the findings in NVCA Yearbook (2008) that there is more activity in the Oslo, Eastern and Southern Norway regions. This raises a concern that PE actors may be too focused on labour-intensive regions, thus leading to the rural regions falling behind economically.

CHAPTER 6

CONCLUSIONS

This thesis has focused on the indirect drivers of value creation through a study of corporate governance mechanisms employed in the Norwegian population of portfolio company investments of the four major Norwegian PE contestants between 2006 and 2011. The population of portfolio company investments considered both the venture and buyout sectors. My intention was to study active ownership through board representation by PE actors in their portfolio company investments. I also wanted to uncover the extent of debt use by PE actors in buyout sector portfolio company investments.

The quantitative results revealed that the Norwegian PE actors in the buyout sector generally leveraged their companies, but may also restructure companies. All PE actors acquired majority ownership stakes and invested time and money in their portfolio companies. As co-owners or total owners, they provided a hands-on approach to governance in their companies through active board representation. All portfolio companies had board representation by the PE actors in the year after investment (t+1). Most companies had between 20-40% board representation from the PE actors. There was however, not much of a trend over time between the variables I employed and the degree of board representation in PE portfolio companies. Regarding the results, I chose not to conduct statistical tests, given that what I analysed was really the Norwegian population of active PE portfolio investments (based on what could be found in the Brønnøysund Register of Company Accounts).

The lack of general trends in the quantitative analysis led me to logically take a qualitative approach to analyze case studies for underlying reasons why some companies deviate in PE board representation from the remainder of the population. The qualitative results showed that PE actors were involved on a strategic, financial and operational level in their companies. This is in line with theory highlighting how there is a focus on the most vital areas of business. The portfolio companies are all leaders in their market segments and through PE board membership they were able to induce further growth and innovation. The degree of PE board representation varied on a case to case basis, depending on factors such as general macroeconomic conditions, industry conditions and the strategic positioning of the portfolio companies.

The cases highlight that in Norway, investments are being made in a variety of sectors, in addition to the oil dominated sector. The investments are also found to be regionally clustered. PE investments are regionally clustered in the Oslo, Eastern and Southern Norway regions. The PE focus on the most labour intensive regions of Norway raises the concern that certain other regions might be unable to reap benefits that these actors offer.

Norway is facing a demographic shift resulting from an ageing population. PE actors should examine a wider horizon of potential investments in the future, given that an ageing Norwegian population will seek to replace ownership in various sectors. PE actors should therefore consider a larger selection of investment cases. The business environment and institutions can stimulate investments in potential value creating sector cases through increased focus on valuation of companies. This can be one way to stimulate ownership activity as illustrated in NVCA Yearbook (2008). Buyout sector competence and the supporting management environment will be important given that many of the retiring ageing firm owners have established mature companies.

CHAPTER 7

SUGGESTIONS FOR FUTURE RESEARCH

I chose to only study boards of Norwegian PE backed portfolio companies due to time constraints. Future studies can extend this study to include all portfolio company investments of the major Norwegian PE actors. They can make comparisons to other Nordic markets.

Other corporate governance mechanisms in portfolio companies should also be researched. The role of managerial equity stakes and managerial compensation packages as incentives to create value in PE backed companies could be researched. With access to data on PE deals, one can evaluate deal characteristics and their impact as a governance mechanism both at the PE fund and portfolio company level. Such deal characteristics could for example relate to contractual obligations for the parties involved.

My results showed that PE actors are involved at a financial and strategic level in their portfolio companies through the provision of strategic advice and financial restructuring. They can also provide operational competence for portfolio companies in certain branches and sectors. It would be interesting for future studies to research in depth how PE actors implement changes in portfolio companies at an operational level. Studies could direct their focus on the effectiveness of lean manufacturing for operations in portfolio companies.

REFERENCES

Literature

Acharya, V. V., Kehoe, C. and Reyner, M., 'Private equity vs. PLC boards in the UK: a comparison of practices and effectiveness', *Journal of Applied Corporate Finance*, Vol. 21 no. 1, Winter 2009, pp. 45–56.

Achleitner, A.-K., Betzer, A., & Gider, J. (2010). Do Corporate Governance Motives Drive Hedge Fund and Private Equity Fund Activities? *European Financial Management*, 16(5), 805-828.

Achleitner, A.-K., Betzer, A., Goergen, M., & Hinterramskogler, B. (2013). Private Equity Acquisitions of Continental European Firms: the Impact of Ownership and Control on the Likelihood of Being Taken Private. *European Financial Management*, 19(1), 72-107.

Appelbaum, E., & Batt, R. (2012). A Primer on Private Equity at Work: Management, Employment, and Sustainability. *Challenge*, 55(5), 5-38.

Baker, G. P. and Wruck, K. H., 'Organizational changes and value creation in leveraged buyouts: the case of the O. M. Scott & Sons Company', *Journal of Financial Economics*, Vol. 25 no. 2, Dec, 1989, pp. 163–90.

Baker, M. and Gompers, P. A., 'The determinants of board structure at the initial public offering', *Journal of Law & Economics*, Vol. 46 no. 2, Oct, 2003, pp. 569–98.

Baldi, F. (2013). *Private Equity Targets: Strategies for Growth, Market Barriers, and Policy Implications*. Italy: Springer.

Bottazzi, L., Da Rin, M. and Hellmann, T., 'Who are the active investors? Evidence from venture capital', *Journal of Financial Economics*, Vol. 89 no. 3, Sep, 2008, pp. 488–512.

Cashin, R., Jansen Kraemer Jr., H., Rock, R., Segall, G., Silvermann, S., & Zarilli, S. (2009). Private Equity: Panel Discussions at Drexel University's Center for Corporate Governance. *Journal of Applied Finance*, 19(1/2) 160-164.

- Cendrowski, H., & Wadecki, A., (2012). Introduction to Private Equity. In H. Cendrowski, L.W. Petro, J.P.Martin & A.A. Wadecki (Eds.), *Private Equity: history, governance, and operations* (pp.1 online resource). Hoboken, N.J.:Wiley.
- Cornelli, Francesca og Öguzhan Karakas (2008): Private equity and corporate governance: do LBOs have more effective board? (I: The Global Economic Impact of Private Equity Report 2008, p 65-84.) World Economic Forum, Geneve, Sveits.
- Cornelli, F., Kominek, Z. and Ljungqvist, A., ‘Monitoring managers: does it matter?’, Working Paper (New York University, 2010).
- Cotter, J. F. and Peck, S. W., ‘The structure of debt and active equity investors: the case of the buyout specialist’, *Journal of Financial Economics*, Vol. 59 no. 1, Jan, 2001, pp. 101–47.
- Engel,N., Braun,R., & Achleitner, A.-K, (2012). Leverage and the performance of buyouts. (How) does the use of debt impact equity returns? *Z Betriebswirtsch*, 82, 451-490.
- Fama, E.F., & Jensen, M.C.(1983). Separation of Ownership and Control. *Journal of Law and Economics*, 26, 301-326.
- Garg, S. (2013). Venture Boards: Distinctive Monitoring and Implications for Firm Performance. *Academy of Management Review*, 38(1), 90-108.
- Goergen, M. (2012). *International Corporate Governance*.Essex:Pearson Education Limited.
- Gompers,P.A.,‘Optimal investment,monitoring,and the staging ofventurecapital’,*Journal of Finance*, Vol. 50 no. 5, Dec, 1995, pp. 1461–89.
- Gompers, P og J. Lerner (1999): The venture capital cycle. *The MIT Press*.
- Grunfeld,L., & Jakobsen, E.W. (2007). Kompetent kapital med samfunnsøkonomiske gevinster? *Norsk Økonomisk Tidsskrift*, 121, 39-54.
- Guo, S., Hotchkiss, E. S. and Song, W., ‘Do buyouts (still) create value’, *Journal of Finance*, Vol. 66 no. 2, Apr, 2011, pp. 479–517.
- Huse,M. (2007). *Boards, Governance and Value Creation*. New York: Cambridge University Press.
- Inderst, R., Mueller, H. M. and Munnich, F., ‘Financing a portfolio of projects’, *Review of Financial Studies*, Vol. 20 no. 4, Jul, 2007, pp. 1289–325.

- Inderst, R. and Mueller, H. M., 'Early-stage financing and firm growth in new industries', *Journal of Financial Economics*, Vol. 93 no. 2, Aug, 2009, pp. 276–91.
- Jensen, M. C. & Meckling, W. H. 1976. The theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3: 305-360.
- Jensen, M. C. (1989). "Active investors, LBOs and the privatization of bankruptcy." *Journal of Applied Corporate Finance* 2(1): 35-44.
- Keasey, K. et al. (2005): Corporate governance. Accountability, enterprise and international comparisons. John Wiley & Sons Ltd., West Sussex, England.
- Lerner, J., 'Venture capitalists and the oversight of private firms', *Journal of Finance*, Vol. 50 no. 1, Mar, 1995, pp. 301–18.
- Metrick, A., Yasuda, A. (2011). Venture Capital and Other Private Equity: a survey. *European Financial Management*, 17(4), 619-654.
- Opler, T. and S. Titman (1993). The determinants of leveraged buyout activity: Free cash flow vs. financial distress costs. *Journal of Finance*, 48(5):1985
- Puri, M. and Zarutskie, R., 'On the lifecycle dynamics of venture-capital- and non-venture-capital- financed firms', Working Paper (Duke University, 2010).
- Rogers P, Holland T, Haas D (2002) Value acceleration: lessons from private-equity masters. *Harv Bus Rev* 80(6):94–101.
- Tetlock, P. E. 1983. Accountability and complexity of thought. *Journal of Personality and Social Psychology*. 45: 74-83.
- Valkama, P., Maula, M., Nikoskelainen, E., & Wright, M. (2013). Drivers of Holding Period Firm-Level Returns in Private Equity-Backed Buyouts. *Journal of Banking and Finance*, 37(7), 2378-2391.
- Williamson, O. (1984). Corporate Governance. *Yale Law Journal*, 93, 1197-1230.
- Wright, M., Gilligan, J., & Amess, K. (2009). The economic impact of private equity: what we know and what we would like to know. *Venture Capital*, 11(1), 1-21.
- Zahra, S. A., & Pearce, J. A. 1989. Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15: 291-334.

Internet Links

<http://www.ft.com/cms/s/0/fe4847a4-c924-11e2-bb56-00144feab7de.html#axzz2k3idGif3>

<http://nvca.no>

<http://www.argentum.no>

<http://www.herkulescapital.no/index.php?visID=10>

Other References

Argentum Markets

Argentum Annual Norwegian Market Report (2012)

COSO-Internal Control, Integrated framework

Frontier Economics Private Equity Study (2013). Prepared for the EVCA

Menon Business Economics (2010)

NVCA Yearbook (2008)

NVCA Activity Report (2012)

The Preqin Private Equity Quarterly, Q3 2011

Schultz, Jakob., Trumpy, Jacob. (2013, 19.10). Oljeeksperter tjener mest, *Dagens Næringsliv*, p 10.