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Private Equity and the Future of Collaborative Economy

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Preface and Acknowledgement

This master thesis concludes my master degree in entrepreneurship and

innovation at the Norwegian University of Life Sciences (NMBU).

There are a lot of people deserving recognition for their help – without whom

this thesis would not be possible. First of all I want to thank my supervisor,

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Abstract

This thesis explores the phenomenon of private equity investing in collaborative economy. Based on the investment life cycle, the thesis review research on screening and selection, operative management, and exit routes – followed by limited recent literature on collaborative economy. The integration of the two bodies of research provides the following three research questions: 1) *How does collaborative economy measure up to private equity screening and selection?*; 2) *What can private equity contribute to the operation of collaborative economy?*, and; 3) *What are possible exit routes for collaborative economy?*

By interviewing 19 respondents representing investors and entrepreneurs, the study makes five key findings. 1) Corporate ventures might be especially positioned to invest in collaborative-based companies, being able to substitute specialization for capital; 2) Evidence show collaborative economy might be over-hyped in Norway; 3) Findings suggests there is a technology competence gap in Norwegian PE; 4) The collaborative model has limited exit routes, and; 5) Inconclusive evidence for a pattern in the balance of user and contractor demand. The thesis addresses implications for managers, proposes a new definition for collaborative economy, and makes some remarks on further research.

Sammendrag

Denne oppgaven utforsker fenomenet rundt *private equity* investeringer i delingsøkonomi. Basert på investeringslivssyklusen gjennomgår oppgaven teori om *screening* og seleksjon, operativ ledelse og salgskanaler – etterfulgt av begrenset ny litteratur om delingsøkonomi. Integrasjonen av de to feltene resulterer i følgende forskningsspørsmål: 1) *Hvordan sees delingsøkonomi i lys av private equitys screening og seleksjon?*; 2) *Hva kan private equity bidra med i den operative ledelsen av delingsøkonomi?*, og; 3) *Hva er mulige salgskanaler for delingsøkonomi?*

Ved å intervjue 19 respondenter, som representerer investorer og entreprenører, gjør studien fem funn. 1) *Corporate ventures* har muligvis en spesiell posisjon til å investere i delingsøkonomi, med muligheten til å subsidiere spesialisering for kapital; 2) Funn tilsier delingsøkonomi kan være overvurdert i Norge; 3) Funn kan tyde på at det er et teknologikompetansegap i norsk *private equity*; 4) Delingsøkonomi har begrensede salgskanaler, og; 5) Mangelfulle bevis tyder på et mønster i etterspørselsbalansen mellom bruker og kunde. Oppgaven tar for seg implikasjoner for ledere, foreslår en ny definisjon av delingsøkonomi og gjør noen bemerkninger angående videre forskning.

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1 Introduction

We live in interesting times. On one side, you have entrepreneurs utilizing novel technology to make new business concepts (Constantinides & Fountain, 2008). On the other side, you have more flexible capital markets with greater ability to make ideas a reality (Chui et al., 2012). A hot topic between these two mega trends is collaborative economy. The idea of the collaborative economy is for people to share access to their assets through online platforms. In this way, the need for ownership is changed and so are our means of consumption.

PwC projects that the combined revenue from sharing in the travel, car, finance, staffing, and entertainment sectors has a potential to go from \$15 billion in 2015 to \$335 billion in 2025 (PwC, 2015). There is no doubt the financial sector will pay more attention to this as the concept grows.

The literature on private equity does not address this subject, the closest being a body of studies focused on technology (Schock, 2013). In the financial sector, however, major players have published market reports addressing investment in collaborative economy. In fact, the choice of the topic of this thesis was a result of a tip from an experienced private equity expert. It did not take much research to see the attention this business model has gotten in Norway already this year: A major law firm hosts a breakfast meeting in collaboration (!) with a private equity network about collaborative economy, it is debated in national news, and the financial minister has called for a committee to look into policy issues (Selmer, 2016). There is a research gap raised from this situation.

1.1 Research Gap

The topic of private equity has been researched extensively (Schock, 2013). Although late stage funds have traditionally not had much focus on technology (Hall, 1990; Opler & Titman, 1993) newer research find gradual changes toward the emerging industry (Lerner & Strömberg, 2011; Strömberg, 2008). However, private equity research does not go much more specific than this. According to

Schock (2013) there are little research done on the more detailed industry level of private equity investing.

Since Lessig (2008) coined "sharing economy" there have been a number of studies done on this new business model. Several contributions have been made to, e.g. defining, collaborative economy (Böckman, 2013; Belk, 2014; Cohen & Kietzmann, 2014; Avital et al., 2014; Hamari, Sjöklint, & Ukkonen, 2015; Matzler, Veider, & Kathan, 2015; Stephany, 2015). However, these studies does not address the issues regarding investing in collaborative economy. Areas of focus have been more directed to environmental factors (Belk, 2014) and consumer behavior (Hamari et al., 2013). Also, the literature is far from having a universal understanding of what sharing- and collaborative economy entails. A large number of studies build upon the understanding of a business consultant and an entrepreneurs' book from 2010, *What's Mine Is Yours: The Rise of Collaborative Consumption*, but there is still a divide in focus and definitions (Bardhi & Eckhardt, 2012; Böckman, 2013; Belk, 2014; Cohen, 2014; Hamari et al., 2015; Zervas, Proserpio, & Byers, 2015).

The greatest gap is in the intersection between private equity and collaborative economy. Only market reports from the industry itself has addressed financial issues related to the business model (Ernst & Young, 2015; Zobrist & Grampp, 2015; PwC, 2015). Their main focus is however, not on investing primarily but on the model's impact in established business.

1.2 Aim

As the section above indicates, there is a great gap in the research. The gap is not clearly defined either; no one study can enter the field and close it. The aim of this study is to explore the phenomenon of private equity investing in collaborative economy.

1.3 Contribution of the Thesis

The purpose of this thesis is to contribute to theory, identify leads for further research, and to name implications for managers in both private equity and collaborative economy – by exploring the topic in the context of Norway. The width of the research gap makes it important to identify further research needs. Because of this gap, and the novelty of the business model, the thesis has a futuristic aspect, hence its title.

1.4 Terminology and Structure

The business model of collaborative economy will often be referred to as "the model". Representatives of funds are repeatedly referred to as investors, although – technically – they are representing investors. Users are the end consumer (like the Uber customer), and contractors are the co-producers (like the Uber driver). A portfolio company is a company a fund has invested in. More of this will be covered in the next chapter, where previous research on private equity and collaborative economy is assessed in separate sections. The chapter concludes by integrating the aim of the study with the two bodies of research to form three research questions. In the following, chapter three, a methodology designed. The collected data will be analyzed in chapter 4, before discussed in the context of previous research in chapter 5. Some limitations to this thesis will be addressed in chapter 6. Finally, chapter 7 will state the key findings, implications for managers, theoretical implications, and further research needs.

2 Previous Research

This chapter will start by assessing previous research on private equity. Then it will take a look at what the literature have to say about collaborative economy, followed by a couple of critical comments on the literature. Finally, the aim of the study will, in the context of the literature, take the form of research questions.

2.1 Private Equity

Private equity (PE) means trade in equity that is not listen on an unregulated exchange – as oppose to the public stock market (Demaria, 2013). This definition is very broad and does not explain much about PE activity. To better understand the phenomena it can be view through a set of attributes. Demaria (2013) explains a PE investment as: 1) a negotiation in equity; 2) with a fixed maximum term, usually four to seven years; 3) implying specific risks; 4) with high expected returns; 5) undertaken on behalf of qualified investors, typically institutional; 6) to support entrepreneurs.

This section of previous research will first take a look at the universe of investment – the different forms of PE – followed by three modules that cover the PE investment life cycle: screening and selection, operational management, and exit routes. Literature relevant for technology has been in focus.

2.1.1 The Universe of Investment

The components of PE, from venture capital to leveraged buy-out, is understood with the common rational that the essential difference is the stage of maturity the target company is in (Diller & Kaserer, 2009; Koryak & Smolarski, 2008; Metrick & Yasuda, 2011). In this part, the components of PE will be covered from early venture capital to later leveraged buy-out.

Venture Capital

Venture Capital (VC) is about financing company creation (Demaria, 2013). VC funds invest in startup companies in an early stage. These investments bear great risks and high R&D expenses (Metrick & Yasuda, 2011). In the west, VC is known for investing mainly in life sciences and information technology – with

clean technology on the rise. The activities of VC investors are often concentrated on cultural as well as geographical areas. Mutual understanding and good communication is important between the investor and the entrepreneur. (Metrick & Yasuda, 2011)

Venture capital funds do not only bring financial capital to it portfolio companies. They participate in a number of operational activities as well. It is referred to as *soft capital* (Demaria, 2013). Examples of these operational activities can be helping their portfolio companies attract key human resources, find customers for pilot projects, and find share network – which can be lawyers and auditors (Metrick & Yasuda, 2011). The operational efforts made by the funds reduce the risk of their portfolio, which is one of the reasons why VC funds often invest in syndicates. Investing together with other funds also gives the opportunity to spread one funds capital over more companies and thereby achieves diversification of their portfolio (Demaria, 2013).

Corporate Venture Capital

Another form of VC is corporate venturing, which is large corporations creating their own venture fund, typically investing in their own industry (Demaria, 2013; Chesbrough, 2002). Both industry synergies and financial gains incentivize these corporations to engage in venture capital. For some corporate investors, the synergies are of equal importance to the financial gains. Corporate venture is an instrument of strategic growth (Metrick & Yasuda, 2011). A great strength of this kind of investment fund is that their industry expertise and know-how can benefit the entrepreneurs. They can provide services and share contacts (Chesbrough, 2002).

There are two central characteristics of corporate investing strategy: the objective – strategic or financial – and the degree of linkage between the startup and the investing company (Chesbrough, 2002). The objective does not have to be purely strategic or financial, but can be a mixture. Figure 1 illustrates the possibilities.

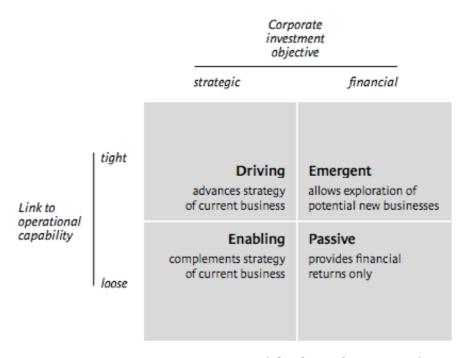


Figure 1: Investment Strategies (Chesbrough, 2002: p7)

Driving is an investment strategy where the operational link between the companies is tight and the objective is strategic. An *emergent* strategy has also a tight operational linkage, but a financial objective. The *enabling* strategy has a loose linkage and strategic objective. Lastly, the *passive* strategy has a loose operational linkage and a financial objective (Chesbrough, 2002).

Growth Capital

Growth capital is about financing companies' expansion (Demaria, 2013). These funds lie strategically between the VC funds and the leverage buy-out funds. In fact, growth capital is so closely related to VC that it can be understood as late stage VC (Bruining & Wright, 2002). The companies they invest in are usually already profitable but need money to grow further. Typical growth projects are financing of development, improving production capacity, invest in sales, and international development. Growth capital look at investment targets that are too risky too get loans from banks because of their size or financial records. The main competitors of growth capital are actually banks that are able to make loans to riskier companies. The growth funds take minority and sometimes majority stake sin their portfolio companies (Demaria, 2013).

Growth capital is usually the least risky form of private equity, since the target company is profitable already. In turn, the return funds can expect is lower; the growth potential is included in their valuation (Demaria, 2013).

Leveraged Buy-Out

Leveraged Buy-Out (LBO) is about financing companies' transmissions (Demaria, 2013). After identifying an investment target, the LBO fund constructs a holding company that borrows money to overtake the target. It can also be multiple target companies, in which it is a leveraged build-up (LBU). LBO managers often see their funds as growth capital as well, because they usually inject additional capital along with the debt. To the extent that they do so, it is growth capital, since the construction of debt is central to LBO (Metrick & Yasuda, 2011).

The companies LBO funds target are mature, and they usually are in a certain situation, that makes them targets for LBO (Metrick & Yasuda, 2011). One purpose can be to solve an ownership issue. Another purpose is to alter the structure of the target. Structural changes can be modernization initiatives, acquisitions or consolidation, internationalization, outsourcing/insourcing (Demaria, 2013). For both purposes, the process is to go in, solve a problem that makes the company worth more, and sell the company for a profit. In an acquisition scenario, where they target company buys another company for strategic reasons, it can be done horizontally by buying competitors or vertically by colonizing the value chain. A specialty of LBO is to make larger companies catch up with macro trends (Demaria, 2013).

2.1.2 Screening and Selection

Screening matter. By comparing US and European VC funds, Hege, Palomino, & Schwienbacher (2009) find that the stronger performance of the US ventures can be explained in part by their superior screening abilities. These skills are not easily replicable either (Nielsen 2011; Lerner, Schoar, & Wongsunwai, 2007). The whole process of screening and selecting can take anywhere from three to 18 months (Demaria, 2013). The literature usually include four categories in the structure this process: 1) market, 2) management team, 3) product and

technology, 4) financials (Petty & Gruber, 2011; Riquelme & Rickards, 1992; Muzyka, Birley, & Leleux, 1996; Zacharakis & Meyer, 2000).

Market

PE funds refer to being invested in a company as a *deal*. When PE funds search for deals they typically follow a top-down approach (Sweeting, 1991). What this means is that the funds make a strategic decision on what industry to invest in before they look at specific investment targets. Studies rank the attractiveness of the market as one of the most important criteria for investing in a company (Wells, 1974; Tyebjee & Bruno 1984; MacMillan, Siegel, & Narasimha, 1986). Being in a market that is growing is also the most important criteria that distinguish high-growth companies from low-growth companies (Siegel, Siegel, Macmillan, 1993).

The importance of the market depends on the stage of the company. For early and more risky VC investments, a growing market is a greater success factor than for later LBO investments (Hargadon & Kenney, 2012). The market's business life cycle matter as well for technology-intensive companies. Less mature markets are more suitable for disruptive innovations (Lerner, 2009). Companies with lower degree of innovation, on the other had, experience less barriers when entering mature markets. While VC and growth capital focus on market growth, LBO put more emphasis on free cash flow (Bull, 1989). LBO funds have traditionally not invested much in high technology industries with high R&D exposure (Hall, 1990; Opler & Titman, 1993) but PE gradually directing the focus towards this industry (Lerner, Sorensen, & Strömberg, 2011; Strömberg, 2008).

Management Team

Early studies declare management team the single most important factor for the VC selection process (Wells, 1974; Tyebjee & Bruno, 1984; Poindexter, 1975). Interestingly, Tyebjee and Bruno (1984) found expected return of a VC investment to be dependent on the market, while the perceived risk of the said investment to be dependent on the management.

Another study, interviewing 102 American VC principals, confirms the importance of management team. MacMillan et al. (1985) found that the ability to mitigate risk and continue to work despite fatigue was the most valued criteria for VC investment. This was categorized as the personality of the entrepreneur. Other criteria were the experience of the entrepreneur, characteristics of the market and the product or service, financial considerations, and the make-up of the team. Later, von Burg and Kenney (2000) also find that VC funds focus more on the competencies of the entrepreneur when the stage of the company is early and the market is risky.

There is a saying that a good management team is more important than a good business model, because a good management can change the direction of the company if the model is not working well. Kaplan, Sensoy, and Strömberg (2009) found a restriction to what extent this is true. By following 50 VC-backed companies from 1976 to 2006, they found a slight favorability to investing in the good business model; a poor management is more likely to be changed than a poor business idea.

Product and Technology

Early studies find startups' product and technology to be of less importance than what entrepreneurs normally expect (Poindexter, 1975; Tyebjee & Bruno, 1984). Wells (1974) ranks product as number three of investment criteria. It is still important enough to have an impact on VC funds. Bad experiences with investing in new technology can make a fund pull out of that industry all together (Sweeting, 1991). A recent study confirms this tendency in the case of the clean technology industry (Migendt, Schock, Täube, Von Flotow, & Polzin, 2014).

A study of 142 German companies found that the VC-backed ones had significantly more patent issues than their peers (Engel & Keilbach, 2007). Because the more innovative companies had that trait before the VC backing as well, the study concluded that innovative capabilities was a selection criteria for

the funds. Another study finds that originators are more likely to obtain VC funding than imitators (Hellmann & Puri, 2000).

Financials

By their very nature, early stage companies do not have much financial data for funds to base their investment decision on. In assessing investment criteria, Wells (1974) and Poindexter (1975) do not take financial history into account. Tyebjee and Bruno (1984) does, but with little emphasis. Robbie and Wright (1997) on the other hand, found that accounting information is important in the VC investment decision. Still, VC funds with better financial expertise invest in fewer early stage companies (Dimov, Shepherd, & Sutcliffe, 2007). The early stage companies tend to present overly optimistic projections in the screening process. VC funds in return have to account for this behavior when planning the investment (Bergemann & Hege, 1998; Gompers, 1995; Tykvová, 2007).

LBO investment targets have low growth prospects and high free cash flow (Opler & Titman, 1993). With more historical financial data, these investments have less uncertainty and the risk is more calculable. Valuations are therefore more emphasized at this later stage (Demaria, 2013). There are essentially two approaches to valuation, intrinsic and relative (Damodaran, 2003). A commonly used intrinsic valuation is the discounted cash flow (DCF) model. Here, the valuation of a company is determined by three factors: 1) the company's cash flow; 2) a discount factor, and; 3) a growth rate (Demaria, 2013). In a relative valuation model, the company is valued relatively to the market. An example of such a model is the commonly used price/earnings ratio (Koller, Goedhart, & Wessels, 2010).

2.1.3 Operative Management

With the evolvement of PE, operational management for portfolio companies has become more important. A major driver of this development is the fact that institutional investors – investors who invest in the PE funds – have added operational criteria to *their* screening process of PE funds (Migendt et al., 2014). Funds that assist their portfolio companies with more strategic help are granted

more capital commitments (Cumming, Fleming, & Suchard, 2005). Independently of criteria from institutional investors, PE has always had a greater focus on operational assistance than other sources of capital – like banks (Gompers & Lerner, 2001; Jensen, 1986; Sahlman, 1990). The attention on operational management is seen in early VC as well as in growth capital, it is with LBO transactions above €100 million that leverage effects has greater focus (Alvarez & Jenkins, 2007). Categories relevant for PE's operational management for technology companies are: 1) R&D and innovation; 2) impact of corporate restructuring on innovation; 3) commercialization and entrepreneurial orientation; 4) productivity and efficiency, and; 5) investment in physical assets (Schock, 2013).

R&D and Innovation

R&D, although considered an operating expense, resemble traits of long-term investment (Meulbroek, Mitchell, Mulherin, Netter, & Poulsen, 1990). It can result in technology that the company can benefit from in the future. R&D spending therefore increases the value of the company (Griliches, 1981; Hall & Oriani, 2006; Oriani & Sobrero, 2003).

In research, innovative and technological capabilities are usually measured in patents issued, and their quality has been measured in number of patent citations. Several studies confirm that this serves as a good indication, although it does not take into account date many companies protect innovations with alternative methods like trade secrets (Bottazzi & Peri, 2007; Hall, Jaffe, & Trajtenberg, 2005; Trajtenberg, 2001). Further, there is a link between VC involvement and patent activity (Tykvová, 2000) and the increased innovation activity is both incremental and strategic (Bruining & Wright, 2002). However, studies also find that companies are innovative themselves before the VC engagement (Hirukawa & Ueda, 2001; Hellmann & Puri, 2000; Engel & Keilbach, 2007; Caselli, Gatti, & Perrini, 2009). Another study finds more specifically that VC has a greater impact on innovation in countries that have low barriers for entrepreneurship and taxes and regulations more welcoming to VC funds (Popov & Roosenboom, 2012).

For later stage companies there are few studies. Green (1992) finds no evidence that change in ownership structure, after growth capital or LBO transactions, impacts innovation. A different study finds that, although the number of patents is not impacted, later stage PE investment strengthens the quality of the patents (Lerner et al., 2011).

Ferreria, Manso, and Silva (2010) provides a model to help understand what type of finance is best for innovation. If a company intends to exploit its current technology, it should go public – i.e. becoming available on the public stock market. If, on the other hand, a company seeks to explore new innovations, it should rely on private capital. What this means for technology companies is that if they do not have much new technology in their pipeline, they might as well entre the stock exchange – and vice versa.

Impact of Corporate Restructuring on Innovation

Investment in tangible assets can support higher leverage for LBO's, because the assets are observable (Long & Malitz, 1985). Higher debt can reduce R&D spending, but it is not directly linked to LBO transactions (Hall, 1990). PE-backed companies invest no less than other companies (Lichtenberg & Siegel, 1990).

VC capital is expensive (Sahlman, 1990). R&D is typically financed internally in a high-technology company (Himmelberg & Petersen, 1994). VC investors tend to direct more focus towards intellectual property rights than, its cause, R&D (Hall & Lerner, 2010).

Finance in the form of equity increases innovation significantly more than what finance from banks does (Atanassov, Nanda, & Seru, 2007). This can be because specialized funds are better to predict the success of a technology than what banks are.

Commercialization and Entrepreneurial Orientation

LBO-backed companies emphasize the commercialization of their technologies more than their peers (Zahra, 1995). The emphasis on commercialization can be attributed to PE funds support of entrepreneurial orientation in target companies (Bruining & Wright, 2002). Entrepreneurial orientation can be understood through five dimensions: innovativeness, proactiveness, competitive aggressiveness, risk taking, and autonomy (Lumpkin & Dess, 1996). *Innovativeness* is the trait of supporting creative activities that result in new solutions. *Proactiveness* is seizing opportunities, taking new initiatives, and letting go of old ones. *Competitive aggressiveness* is the ambition to outperform competitors. *Risk taking* involves the taking chances in allocating assets. *Autonomy* refers to whether the entrepreneurs are free to act on their ideas.

A central concern in commercialization is the time it takes to get a product to market. VC backing significantly reduces this time (Hellmann & Puri, 2000). However, the more usual benefits from having VC backing are strategic analysis and advice (Gorman & Sahlman, 1989).

Productivity and Efficiency

In a study on manufacturing firms, between 1981 and 1986, Lichtenberg and Siegel (1990) found that companies with LBO involvement increased their productivity 14% more than their peers. Wright, Wilson, and Robbie (1996) found similar results.

Davis et al. (2009) have three main results concerning late stage investments and productivity. First, target companies already have higher labor productivity than their peers at the time of the investment. The gap becomes greater two years after the transaction. Second, it is much more likely that PE-backed companies will close down underperforming facilities – compared to their peers. Third, both PE-backed companies and their peers increase wages to share the benefits of greater productivity with their employees.

In terms of productivity, profitability, and sales growth, PE-owned companies are better managed than private-owned, government-owned, and family-owned companies (Bloom, Sadun, & Van Reenen, 2009). Jelic and Wright (2011) do not find evidence to support or refute this.

Investment in Physical Assets

Kaplan (1989) finds that late stage companies backed by PE have, additionally to increased earnings, reduced CAPEX (capital expenditure). The companies LBO funds target typically have negative net present value projects before the investment. Because of these "value-destroying" assets, a decreased CAPEX actually makes the company more profitable (Jensen, 1986). It is interesting to see this in the light of a study showing how companies with high level of free cash flow overinvest in failing projects (Richardson, 2006). PE funds can benefit by taking control of this spending.

2.1.4 Exit Routes

To make the returns real, the PE fund has to exit its investment. There are three categories important for the en of the investment cycle: channels to exit in, returns to investors, and the threat of default.

Importance of Exit Channels

Researchers and PE funds rank the desirability of exit scenarios as: 1) IPO (initial public offering), 2) trade sale, 3) secondary buy-out by another PE firm, 4) buyback by the entrepreneur, and 5) write off (Cumming et al., 2005). The majority of exits are trade sales, which is usually a bigger company acquiring it for strategic reasons (Kaplan & Strömberg, 2009). However, the potential for an IPO is important in considering an investment target for PE funds (Hall & Lerner, 2010). The importance of the potential is so great that the difficulties clean technology has in getting VC backing is attributed to a lack of IPO exit routes (Hargadon & Kenney, 2012). Especially young VC funds measure their success in the number of IPOs they have had (Gompers, 1996).

The decision of whether to exit by IPO or trade sale is mainly affected by the state of the public equity market and the portfolio company's growth prospect and future profitability (Ali-Yrkkö, Hyytinen, & Liukkonen, 2001). Despite the fact that IPO is still viewed as desirable its relevance has drastically changed. Between 1970 and 1984, IPO amounted to 28% of all the exits, while between 2006 and 2007 only 1% (Kaplan & Strömberg, 2009).

Returns to Investors

The literature has given a lot of attention to PE returns compared to public equity. Because of an increasing number of funds, LBOs are not as profitable for the investors anymore (Guo, Hotchkiss, & Song, 2011). Factors contributing to return to investors that will be covered are timing, marketing timing and experience, stage, and past performance.

Timing seems to be an important factor in raising a PE fund; PE funds raised when the economy is booming do not perform better than average (Kaplan & Schoar, 2005; Wright, Gilligan, & Amess, 2009). This effect can be related how more money per deal inflate the prices and makes returns lower for the investors (Diller & Kaserer, 2009).

For VC funds, market timing is important (Schmidt, Nowak, & Knigge, 2006). This factor does not matter as much for later PE funds. For these, the experience of the general partners has more impact on success and return to investors (Kaplan & Schoar, 2005).

How funds have preformed in the past is also an important factor for their results (Phalippou & Gottschalg, 2009). When general partners outperform the industry in one fund, they are likely to do so in the next (Kaplan & Schoar, 2005).

Another factor is what stage the fund invests in. Later stage funds outperform the earlier ones in a study of 746 PE funds between 1980 and 2001 (Kaplan & Schoar, 2005). By expanding the time period studied, Ewens, Jones, and Rhodes-Kropf (2013) find the opposite to be true; VC outperforming later stage funds.

Defaults

VC funds that have partners with *specific* competence have a lower share of companies going bankrupt. At the same time, funds with *general* competence have a higher share of companies going bankrupt (Dimov & Shepherd, 2005). The risk of default is greatly reduced by having the VC fund specialized in a certain stage of development. Syndicating with other funds also reduce the risk (Dimov & de Clercq, 2006).

2.2 Collaborative Economy

Sharing economy, or collaborative economy, is in the process of establishing itself in academia. The research is limited, and a lot of the literature focuses on the behavior surrounding sharing and the environmental benefits (Bardhi & Eckhardt, 2012; Matzler, 2015). However, these attitudes do not necessarily translate to action, the main motivation for participating in sharing or collaborative activities are self-interested (Hamari et al., 2015).

An early viewpoint has been that you are what you own (Belk, 1988). Now there are other bases for identity (Belk, 2014). Ownership is no longer the sole objective of consumer desire; people favor access (Bardhi & Eckhardt, 2012). This access is provided through features like crowdfunding, accommodation sharing, car sharing, ride sharing, performance of everyday tasks, and energy supply sharing (Avital et al., 2014). This section will cover definition and enablers of sharing/collaborative economy before looking into what this means for traditional companies that are adapting to the new economy.

2.2.1 Definition

There are many different views on what collaborative economy involves. Most studies agree that it is an umbrella term for different variations of what can be referred to as a two-sided market (Zervas, Proserpio, & Byers, 2015). The first mention was of collaborative consumption by Spaeth and Felson (1978). Botsman and Rogers (2010) adopted and broadened its definition to include production, and together constitute collaborative economy. "Collaborative consumption is people coordinating the acquisition and distribution of a

resource for a fee or other compensation" (Belk, 2014). Other definitions typically vary in that they include details like peer-to-peer (P2P)-based activity; that the activity can be giving, sharing, or obtaining; and/or that they specify online-based services (Hamari et al., 2015).

The first mentioning of sharing economy was by Lessig in 2008, defining it as "collaborative consumption made by the activities of sharing, exchanging, and rental of resources without owning the goods" (Lessig, 2008). Later definitions highlight other components like P2P services and access (Böckmann, 2013); business-to-customer (B2C) (Cohen, 2014), or; making underutilized assets available (Stephany, 2015). Matzler, Veider, and Kathan (2015) presents the broader view that sharing is anything where pooling of resources, products, or services enables access - and separates between three modes of sharing. The first is product service systems, where a product is and a service is sold in a package. An example of this is transportation services, where the car is the product and the ride is the service. Matzler et al. (2015) links the system to both B2C and P2P. The second is redistributive markets, which are typically P2P and facilitates "reownership" of products. *Third*, there are *collaborative lifestyles* that usually are P2P as well and involve less intangible assets like money, space, and time. Sharing economy as a business model has the potential to unite convenience, cost reduction, increased benefits. and environmental considerations in one model (Matzler et al., 2015).

As discussed, sharing- or collaborative economy still does not have a well-established definition. Some studies equate sharing economy with collaborative consumption (Matzler et al., 2015; Hamari et al., 2015) while others equate it with collaborative economy (Avital et al., 2014). The financial industry favors the latter (Zobrist & Grampp, 2015; PwC, 2015; Ernst & Young, 2015). By not restricting the term to consumption, the production side of collaboration – that contains e.g. crowdsourcing (Schor, 2014) – is included as well. From here on, sharing economy and collaborative economy will be used interchangeably.

Because of the differences in definition, it is necessary to make a judgment. With Belk's (2014) definition as a starting point: production (Schor, 2014; Avital et al., 2014) and the financial industry's preference for collaborative economy are added; access is introduced (Bardhi & Eckhardt, 2012; Böckmann, 2013; Matzler, 2015); the resource is broadened to cover both product and service (Matzler, 2015); and the structure of the sentence is altered to stress the "two-sidedness" of the business model (Zervas, 2015). The result is the following definition, which this study will rely on.

Collaborative economy is people coordinating the access of the production or consumption of a product or a service for a compensation.

2.2.2 Enablers

Contrary to other aspects of collaborative economy, many studies have covered its enablers. Böckmann (2013) categorize them as societal drivers, economic drivers, and technological drivers.

Societal Drivers

When a population is denser, there is less friction in sharing activities (Kriston, Szabo, & Inzelt, 2010). There is also greater potential for supply and demand. Another societal factor is the drive for sustainability in the culture. There is a growing concern about the environment (Porter & Kramer, 2011) that may translate demand for collaborative solutions. However, that might not be the case since other motivational factors are claimed to be stronger (Hamari et al., 2015).

Economic Drivers

There are several economic factors that drive the trend of sharing. Innovation has provided increased financial flexibility that makes commercialization easier (Chui et al., 2012). This flexibility activates underutilized assets with idling capacity and its downtime can be turned into revenue (Stephany, 2015; Matzler,

2015). Greater access to capital, because of more VC funds, has also made its contribution (Chui et al., 2012).

Technological Drivers

Some form may always have been around, but internet, information technology, and social media are the cornerstones of the collaborative economy we know today (Constantinides & Fountain, 2008; Avital et al., 2014; Matzler, 2015; Hamari et al., 2015). More concretely, mobile devices, platforms, and payments systems (Black & Lynch, 2004) have made excess resources accessible by lowering the transaction costs (Avital et al., 2014).

2.2.3 Adapting to the New Economy

Collaborative economy is disrupting the established. It has the potential to alter what demand is for – since access might be wanted as well as ownership – and what supply is based on – since corporate production might face competition from idle resources (Avital et al., 2014). Companies based on this collaborative model are winning market shares, well differentiated, and successful in competing with traditional companies (Zervas, 2015).

Matzler (2015) proposes six possible responses for companies that face competition from collaborative models: 1) rethinking selling ownership of a product as selling use; 2) support customers in their effort to resell products; 3) exploit own unused resources and capacities; 4) offer repair and maintenance services; 5) target new costumers buy using collaboration principles, and; 6) explore new business models that collaboration enables. The essence of Matzler's responses is embracement, not rejection.

2.3 Research Question

In summary, this chapter started out looking into the different stages of PE. From there, a literature review was conducted. The structure was based on the PE investment life cycle: screening and selection, operative management, and exit routes. The literature covering collaborative economy was then reviewed. Here, a working definition was established before looking into some features of the model.

Based on the aim of the study, three research questions are formulated by integrating the two bodies of research. The structure of the investment life cycle is used as a frame for the questions to cover the whole phenomena from beginning to end. The *first* question applies screening and selection to the collaborative economy. The *second* sees collaborative economy in the light of operational management. Finally, the *third* explores possible exit routes for collaborative models. The three questions are as follows.

Question 1: How does collaborative economy measure up to private

equity screening and selection?

Question 2: What can private equity contribute to the operation of

collaborative economy?

Question 3: What are possible exit routes for collaborative economy?

3 Methodology

This chapter will first present the research designed, followed by sample and recruitment, data collection, and analysis. It will then cover validity, reliability, and transferability before concluding with ethical considerations.

3.1 Research Design

In research seeking to explore, by using words like "how", qualitative method is a suitable method (Johannesen, Christoffersen, & Tufte, 2011). There is a research gap in the topic, and this thesis seek to contribute with theoretical implications for further research, which is another reason for choosing qualitative method (Graebner, Martin, & Roundy, 2012).

It is the phenomenon of investing in collaborative models that is in focus, with the narrative of the investors. Limited previous research is also a reason to use an exploratory approach (Grønmo, 2004; Johannesen et al., 2011). This means that the study has a relatively broad focus in assessing the future and investability of collaborative economy and that the contribution of the thesis is intended for *further* research. The study is thereby inductive in its methodology, in that it is uses data to explain theory (Johannesen et al., 2011). The analysis will be basis for potential new theory.

To explore the topic of investing in collaborative models, members of the investing community of Oslo, Norway have been interviewed individually. Some of them brief, asking them only about a specific issue they possess know-how on – others in depth, exploring their narrative of collaborative economy. The interviews of the investors have been more detailed than the ones of support. The data is then analyzed. Being an inductive study, the analysis is structured by its own merit – not by a theoretical framework. The structure reflects what the investors have deemed important.

Other sources of data have to be considered in order to achieve triangulation and confirm findings (Miles & Huberman, 1994). Additional to the primary

interviews, secondary data has been gathered for triangulation. Also, the interpretation of the data has been done with guidance from a leading Norwegian private equity fund. Most valuable was the reactions of the two representatives of the fund when discussing findings.

3.1.1 Methodology of Data Collection: Individual Interviews

The previous research on the topic of investing in collaborative economy is limited and it was only natural to use in-depth interviews of investors, backed up with interviews of entrepreneurs and their support.

To understand the phenomenon, this thesis seeks to explore the investors' narrative. Questions were therefore open. And much of the knowledge was achieved through follow-up questions. The narrative approach let the investors structure their answers and share their thoughts in an optimal way.

3.2 Sample and Recruitment

What was needed, in order to shed light on the research question, was insight in investors view on the future of collaborative economy and its investment potential. In collecting data through interviews, it is important that respondents have in-depth knowledge of the topic (Askheim & Grenness, 2008). Representatives from both PE and VC funds where therefore sought. However, in order to explore certain topics it was convenient and adequate to interview entrepreneurs and people with supportive roles.

The study is limited to the Norwegian investment community. This criterion is necessary to have comparable data, in the sense that they are all considering the context of Norway. The following table shows how the samples can be categorized. There are the main players, the funds and the entrepreneurs, and their support, law and incubator/tech transfer office – as illustrated in Table 1.

	Main players	Support
Investors	Private equity funds Venture Capital funds	Law firm
Company	Entrepreneurs/CEOs	Incubators Tech Transfer Office

Table 1: Categories of Respondents

The recruitment of respondents was not an easy task. Ask any entrepreneur; investors are usually hard to reach, with professional gatekeepers in their organizations. Over the last year period, efforts to build network in the investment community have been made – before the writing of this thesis started. By participating in events like conferences and breakfast meetings, attending job interviews, making phone calls, and having coffee meetings, contacts in the community have been established and maintained.

From the available network, the first interviews were conducted with leading figures in the community. When the initial network was "exhausted", the recruitment kept going on snowball sampling. Snowball sampling is a recruitment method where existing respondents refer the researcher to new subjects (Miles & Huberman, 1994). This method was crucial in recruiting respondents. The greatest chain of respondents referring each other was as great as four links. Several conversations have been made with experts that have not been classified as interviews, but seen as guidance – most notably the feedback on early findings from a leading PE fund that helped set direction for the thesis.

Contact through a third party is, according to Seidman (2006), not a recommended approach to recruitment. Interviewers who are more throughout and personal are more successful. The first points of contact were made directly, referring to the person who had suggested the subject in the snowball sampling. It took over a year to achieve the needed level of network and insight in Norway to recruit the right sample. The initiative regretfully failed in USA and put some limits to the scope of the study. The Norwegian recruitment effort however, achieved a noteworthy sample.

One sign of this is that respondents started to recommend each other. The last representative of a fund that was interviewed recommended three people of interest that was already interviewed. What is significant about this is that they are all from different organizations.

3.2.1 Profiles

The profiles of the sample represent four categories, as seen in Table 1. The respondents have leading positions in their organizations, ranging from trainee to general partner and CEO. All the respondents who are not representing funds have supportive roles in the PE industry (banking or law) or have specializations that were deemed useful to the analysis (entrepreneurship). The respondents are 19 in total, from 17 organizations, listed Table 2.

Representation	Title	Comment
Private Equity Fund 1	Director*	
Private Equity Fund 2	Analyst*	
Private Equity Fund 3	Manager	
Venture Capital Fund 1	General partner	
	/founder*	
Venture Capital Fund 2	Partner*	
Venture Capital Fund 3	Partner	Has invested in
		"Company 3"
Corporate Venture Fund	Investment manager*	
Private Investor	Independent	Tech specialization
Management Consulting	Partner*	Growth and innovation
Law Firm	Partner	LBO specialization
Bank 1	Investment director*	PE department
Bank 1	Corporate Trainee	PE department
Tech Transfer Office	Project manager*	
Incubator	Specialist	Commercialization
Accelerator	Project Manager	Tech specialization

Company 1	CEO	Sharing platform
Company 2	CEO	Collaborative production
Company 3	CEO*	Crowd-sourcing platform
Company 3	Business Unit Manager	Crowd-sourcing platform

Table 2: Profiles (* Key informant)

3.3 Data Collection

After being recommended the topic of investment in collaborative economy, a assessment of secondary data was initiated. Most of this supportive data was found in reports from key players in the financial industry. The majority of the primary data were collected in the form of interviews in March 2016. They were conducted in person, on the telephone, and on Skype. The interviews with the key informants, marked with an asterisk (*) in Table 2, lasted for between 30 minutes and an hour. The remaining interviews lasted between 20 and 45 minutes. However, the relevancy of the information given has had more to do with classifying some as "key informants" than the duration of the interview. The following section will explain preparations and the execution.

3.3.1 Preparations

To explore the aim of the study, semi-structured interviews were conducted. The interview guide was based on the three research questions. There was made two versions, one for the investor side (Appendix, Interview Guide 1 – Investors) and one for the company side (Appendix, Interview Guide 2 – Company) – as categorized in Table 1. Having semi-structured interviews allowed for spontaneous follow-up questions to focus on the narrative of the respondent. The interview guide was tested on two people in the same industry, who was lacking the criterion of in-depth knowledge. Corrections were made after the testing. The interview guide was also checked against the Norwegian Centre for Research Data, to make sure it was in accordance with current regulations.

The research guide opens with an introduction for the respondent with brief information about the study. The respondent is informed about his or her anonymity and if the interview is being recorded. Then terminology is clarified.

The respondent is informed that collaborative economy is understood with a broad definition. They are also being asked how much time they have available to make sure there is enough time to cover all the aims. The questions are then based on the topic of each of the three aims. At the end of the interview, the informant is asked to name potential new interview subjects, for feedback on the questions, and thanked for their time.

3.3.2 Execution

Interviews were mostly conducted in Norwegian – with some follow-up questions asked and answered in English over email. Skype was some times used to battle both time and geography. Investors and entrepreneurs are usually busy; most interviews were over telephone, only three were in person. When needed, interviews were recorded, upon the respondents accept. All interviews were transcribed within a couple of hours after it took place, and recordings were deleted consecutively. Notes were also taken during all interviews. This was a great advantage because it allowed for points to be confirmed and clarified as the interview progressed.

The interview guide was not followed consistently. It provided most importantly direction for the questions. However, most of the valuable information was provided to the direct follow-up question. Prior knowledge about finance was crucial in asking the right follow-ups. In some cases additional phone calls were made and emails were sent to explore key issues further.

The respondents spoke freely and all seemed comfortable with sharing their views. Often in research the researcher is in a superior power position relatively to the respondent. This was not the case during the interviews. The respondents were usually in the prime of their career, on a very high level in their field. The communication was accordingly respectful and formal. It also had to be precise and to the point, to respect their time. Because of this "power balance", the feedback on the interview questions provided much value – to know what they thought was relevant or not. It helped set direction for the thesis.

3.4 Analysis

The analysis consists of three sections. Each section is tied to its respective research part of the investment life cycle. He structure also has a relationship to the research questions. Some of the sub-sections that were covered in the literature review in Chapter 2 are dropped because it was company- or product specific. This thesis considers the business model of collaborative economy in general.

First, the transcripts were translated from Norwegian to English. When facing doubt with translation, the meaning was discussed with a native English speaker. The transcripts were then carefully read again. By encoding elements in accordance with Miles and Huberman (1994), certain categories started to emerge. These categories serve as headlines.

The first section addresses the screening and selection process. The data is analyzed in three sub-sections: market, business model and technology, and financials. The next section explores operative management. Here, restructuring, commercialization, and productivity and efficiency label the sub-sections.

The last section of the analysis looks at what possible exit routes. The section addresses the last research. It is explored through the categories of exit channels and returns to investors. The structure of the chapter is illustrated in Table 3.

Screening		
4.1 Screening and Selection 4.1.1 Market		
	4.1.2 Business Model and Technology	
	4.1.3 Financials	
Operation		
4.2 Operative Management	4.2.1 Restructuring	
	4.2.2 Commercialization	
	4.2.3 Productivity and Efficiency	
Exit		
4.3 Exit Routes	4.2.1 Exit Channels	
	4.2.2 Returns to Investors	

Table 3: Analysis Structure

3.5 Validity, Reliability, and Transferability

This section will cover the validity, reliability, and transferability of the thesis.

3.5.1 Validity

Validity refers to whether the study answers the question it intends to do, if the work is trusted, and the importance of operationalizing terms. Operationalization of terms and concepts means understanding definitions grounded in theory (Askheim & Grenness, 2008).

To improve the extent of which the study answers the questions it intend to do, triangulation and respondent validation can be used (Silverman, 2014). The study validates findings by crosschecking secondary sources. Also, the respondents had an opportunity to add or change their statements after the interviews. Additional questions were asked to confirm important points that were made. The interviews were less like questioning and more like a learning experience.

To make the study trustworthy, there has been constant attention to possible contradictions. For operationalization, the use of terms has been accounted for

from the very beginning of the thesis. Definitions were also treated in the beginning of the theoretical chapter.

3.5.2 Reliability

For the study to be reliable the results need to be consistent with different researchers and over time so that a replication of the study would yield the same results (Silverman, 2014).

To improve reliability the study the data collection method and process is described, making it replicable. The theoretical perspective is also accounted for, contributing to theoretical transparency. Prior knowledge about finance and interview preparations has been important for this study to be reliable. Without prior knowledge of finance a researcher might miss necessary context.

3.5.3 Transferability

A study being transferrable means that the results can be generalized and transferred to other contexts, while the purpose of qualitative research is to study a phenomena – not to generalize (Silverman, 2011). This study is limited to the phenomena of investing in collaborative economy in Norway. More research, where the topic is seen in different contexts, will add to the depth of the understanding.

3.6 Ethical Considerations

All respondents was informed on the outset that they where going to be anonymized and also what they would be referred to as in the study (their title, etc). They were told about the general topic of the thesis and if the interview was recorded. By the test on their webpage, it was established that the study is not required to notify the Norwegian Centre for Research Data in March 2016.

4 Analysis

In this chapter the results of the interviews will be assessed together with secondary data. The chapter is structured as illustrated in Table 3, starting with screening and selection, before exploring operational management and exit routes.

4.1 Screening and Selection

The investors all agreed, collaborative economy is no different from other business model in how it is assessed as a potential investment target. In the screening process, they look at the market, the product, and the team. What they look for is a business model with product that is scalable in a growing market with a team who can get the job done. Since this is a study of the phenomenon of investing in a business model, not a case about a specific company, this analysis will direct less attention to team and product and rather focus on market, business model and technology, and financials. These will constitute the structure of this section.

4.1.1 Market

Naturally, the market was a topic many of the respondents spent much time talking about. An investment manager explains that they are not so concerned about that it is sharing economy, but rather what is happening in the market place. Adding that sharing economy is a market where users can make better and quicker decisions than before. Other responses can be categorized as availability in the market, view on ownership, digitalization, regulation, and market potential.

Availability on the Market

One PE fund director pointed out a critical factor for PE investing in sharing economy that all the preceding will depend on: that the companies becomes available for investment. They will look at sharing economy like everything else they screen, but that is only if they become available – which not all private companies does. Reasons for that can be that owners do not want to sell, or that

PE faces other barriers – like competition from foreign capital or other capital sources.

"Potential investment target, yes. The question is if they enter the market. If they will be available to invest in, not everyone does. We will look at sharing economy like everything else. It is an enterprise like all the others." (Director, Private Equity Fund 1)

Digitalization

A project manager and a VC partner brought up the digitalization trend as an enabler. The partner described sharing economy as just a piece of the puzzle in the whole digitalization trend. The project manager illustrated an effect of digitalization, that leasing can move down from big corporations to the consumer. It cuts the middleman.

A Deloitte (Zobrist & Grampp, 2015) report on sharing economy also name the emergence of internet and smartphones as enablers of sharing economy. Writing that it makes the new business model possible by reducing transaction costs. A respondent also mention the role of the reduced transaction costs, naming it as a central enabler.

Regulation

The market is, however not clearly defined yet. As policy issues are not clearly worked out, the premises of the market are still unknown. A PE manager said that how the model is regulated is going to have a huge impact on its success. Secondary sources also find regulations to be the most immediate barrier for sharing economy. Not all companies are alike either. Lending out material assets and offering services might call for different regulations (CEO, Company 1) – the difference between a rental and a freelance service.

A Deloitte report find that some important players in the regulatory issue are the established firms that faces competition from sharing economy and call for policies protecting them (Zobrist & Grampp, 2015). The Deloitte report challenge

policy makers to not only address the sharing economy, but also revisit the regulations of traditional companies. An uneven playing field might just as well be due to outdated older regulations as well as the need for new ones.

Investors also pointed out that there will be tax implications as well. A project manager thinks the model is fighting for its survival with regard to regulatory issues, but thinks the tax problem will be resolved. The reason is that it represents potential tax revenue. Further, the manager says it might give the government an opportunity to reevaluate the tax system, and tax closer to the source of the value creation.

"Now, sharing economy is on the edge of survival, with regard to regulations. I think the regulatory issues will be solved. The government has an incentive to regulate with regard to tax revenue. It is an opportunity for the government to tax where the value creation is made. Because big companies are better at tax optimization. The success is up to the government – who should consider future tax." (Project manager, Technology Transfer Office)

A Dutch city has used the opportunity the manager refers to. In return for an explicit permission, Airbnb has to collect a tourist tax for the government (Zobrist & Grampp, 2015). A similar approach has also been taken in London.

A Frictionless Market Place

Both a CEO and a PE Director talked about the reduced need for ownership. As the CEO put it, young people today are not concerned about owning cars, but having nice pictures in social media. A market report supports this view (PwC, 2015), finding that 43% of consumers see ownership as a burden. The problem of owning comes from the burden of maintenance, of cost of ownership, and of the lack of choice. According to the report people find sharing economy to elevate these burdens – creating a frictionless market place. An investment manager responded that this is the "goal" of the model, to remove friction in the market.

Market Potential

Zobrist and Grampp (2015) report that investment in sharing economy is breaking records. By 2015, sharing economy has received more than twice the investments than that of social network startups. The investors that were interviewed believe in a future for sharing economy, but were unsure about what that future would look like.

When Uber and Airbnb started up, they were so early in the market that they were able to launch in city by city without facing much competition, explains a VC partner. Now the market looks different. It is what the investors refer to as crowded. It is a challenge to manage to develop global concepts now. However, investors still think the model is "definitely very interesting", even if it is too late for unicorns like Uber and Airbnb to emerge. Unicorns are startups that grow to be valued at more than one billion dollars.

The market potential in Norway is also different. A VC partner responds that Uber is a different case than what we have had in Norway. Uber has solved a real problem of getting transport in San Francisco, while it is not really needed in Norway to the same extent. There is also a much different capital market in San Francisco. The partner would look at the issue differently if they were located in Palo Alto. In Norway, there are not as many real problems to solve and there is less capital to develop the concepts with.

"The funds that have invested a lot in Uber have done so because Uber solved a real problem in San Francisco. It is much harder to get a cab there. In Oslo you can get a cab easily. Sharing economy in Norway is a lot of "me too", it is not really needed in Norway. It is the same with Airbnb. The question for venture capital is how much success do you generate by pushing a lot of money. The challenge in Norway is that it is little capital in venture capital. To summarize the two problems: little capital to grow with and little real problems to solve in Norway. If I had been in Palo Alto, I would have had a

different position on this. With \$10M to use... I would..." (Partner, Venture Capital Fund 2)

Two VC partners and a CEO commented on what industries sharing economy has potential in. They all mentioned variations of the same points: accommodation, transport, and services. Accommodation could be rental of houses, apartments, and cabins. Transportation could be taxi transport or car rental. And, services could be well-defined tasks. These are all very similar to a register of collaborative economy startups, were the main categories are transportation, space, money (crowdsourcing), and co-working (Owyang, 2015)

The CEO adds that the next big industries for collaborative models to dive into will be how to share capacity and knowledge. It is also a question of time when someone will make P2P loans work. A consultant referred to as the "global thought leader" on collaboration and sharing has a framework that encompasses all these terms inside the umbrella collaborative economy. Additionally to collaborative consumption and production, there is collaborative education and finance (Botsman, 2013). The above-mentioned category money/crowdsourcing and P2P loans are included in collaborative finance. Likewise, the knowledge category is included in collaborative education. Coworking and capacity would fit better in collaborative production, but could have a foot inside the education category as well.

A general partner adds to the potential of the model that there can be opportunities for local cases. When global markets are occupied in transportation and accommodation, there might be local opportunities. The issue of trust might be solved by local loyalty.

4.1.2 Business Model and Technology

An investment director summarizes the beneficiaries of collaborative economy: people who own something they can share and make better use of their assets; people who needs the product but not the ownership of it, for whom renting can provide lower costs, and; people who have established a well-functioning

concept of sharing, provides a platform, and can get a cut. The director thinks this model has a great potential. In the following, the business model and the technology will be covered through the categories of disruptors, "it is not only about sharing", business potential, B2B opportunity, and challenges.

Disruptors

Partners see the collaborative model as disruptive. It challenges the status quo. A market report (PwC, 2015) argues that the disruption we have seen in the transportation market can happen to all markets. There are many disruptions coming up that will be disrupting for the car sharing services as well – like self-driving cars. The question, the report conclude, is who can adapt to the changes.

It is Not Only About Sharing

A PE manager points out that there are two different focuses within the sharing model: focus on the sharing aspect and on having an alternative platform with focus on sales and revenue. The investors all have the latter focus. The former was held the most by the respondents working in supportive positions for the entrepreneurs – who seemed to be the group most positive to the model.

A VC partner explains that the other aspects of the model are underestimated. It is not only sharing that these players are good at and makes their model functioning. Uber make use of big data, and will probably also make use of self-driving cars in the future. The partner is also very explicit in stating that there is nothing interesting about sharing itself.

"What they have done is under-estimated. It is not only about sharing. The value of their concepts lies elsewhere as well. Big data. In the future it will be as much about self-driving cars as it will be about sharing. Sharing economy by itself is not necessary what they are good at. There is nothing with sharing economy by itself that makes me interested as an investor." (Partner, Venture Capital Fund 2)

An investment manager adds to this point. Uber is good at being close to the costumer and has done a lot of good work with the buying experience. They also have established well-functioning rating systems. It must not be underestimated how good they have been at these business aspects, which are not unique for sharing economy. The manager favors, in the realm of sharing, models grounded in listing, not necessary only like Ebay, but also B2B. When you get enough users, suppliers will have an incentive to sign up. The VC investment manager has very good faith in this kind of model.

Cohen (2016), a PhD in strategy and entrepreneurship, has identified some attributes of sharing models that resonate with the responses of the partner and investment manager. These are the transaction solution, the business approach (from profit to non-profit), governance model, platform type, and technology used. Shared resources are the only things that make it sharing economy.

Business Potential

The business potential of sharing economy in Norway is not easy to predict. A PE manager says it is too early to tell and that it will be different from industry to industry – as analyzed in "Market Potential". A PE Analyst states that the market is still highly fragmented and immature that does provide opportunities to build leading players across markets. A project manager thinks the model will enter a more mature stage and be more like the established ones. In some years, the manager says – being the most positive respondent to the sharing concept – we will not think of the difference between the sharing companies and the traditional. The manager also states that they see things happening in the market much earlier than what the PE funds do. A VC partner adds to the above stated, with sharing having potential in some industries, that it is exactly this trying and failing we need in entrepreneurs.

"We work with stuff private equity sees in 12 years" (Project manager, Technology Transfer Office)

Because the business model is so scalable and has low costs with high margins it is hard for competitors to outcompete leaders once they are established, says a PE Analyst. It is a "winner-takes-all" type of market. An investment manager also talks about this, saying that the "winner-takes-all" effect pulls in users and contractors. Other sources also report that investors have "woken up" and directed their focus towards sharing models (Anonymous, 2013a).

B2B Opportunities

There are opportunities in B2B as well. A VC partner told about a B2B startup in their portfolio – Company 3. It is a company that crowdsource data on prices from customers, and sells them as aggregates. The market lacks transparency, so the companies have an incentive to share their data in order to learn what the industry average is. The volatility in the market makes it a reoccurring business; the data has to be updated continuously. These two factors, lack of transparency and volatility, have a great lock-in effect and the company has zero churn – meaning that they do not lose customers.

The CEO of this company says they try to avoid using the word sharing – but do acknowledge it as sharing. Their aim is to start an ecosystem of companies around their data, as the data is the essence of their value proposition. The CEO attribute their success to a business model of crowd-sourcing, big data, and B2B network. In a Harvard Business Review, Fiore and Vetter (2016) argue that a B2B model is hard to operate for a collaboration-based company. The issue is that in B2B there are more formal bonds between the players, spending more time with fewer customers. This might make it harder to build B2B networks. Company 3 solved this by appealing to companies' incentives in their go-to-market strategy.

Challenges

With regard to the business model, some challenges were named. One was a more practical one. A VC Partner said that if business people are getting reimbursed by their organization anyway, there is no special incentive to use a sharing platform. Another VC Partner said that sharing solutions like borrowing

a drill form your neighbor does not have much potential. There has to be a certain amount of money involved for the model to work at its best. The value of some items is to small compared to the transaction cost.

Also, trust is challenging the functioning and the scalability of the model. Several respondents touched on this subject. An investment manager explained how Airbnb had approached this problem in the beginning. By hiring professional photographers to take better pictures of rooms that were listed for rent, they increased the credibility of their platform. Another respondent could also tell a story about trust in Airbnb. In a meeting with contractors, Airbnb management had presented their new logo months before launch. There was no leakage anywhere on the web about the logo shift.

From secondary sources, one can also see that trust is a major challenge for collaborative models. 69% will not trust sharing economy until someone they trust themselves recommends it to them (PwC, 2015).

4.1.3 Financials

The key financial issue for sharing economy, according to a PE manager, is that few players have positive cash flow – meaning that they spend more cash than they earn through sales. These negative cash flows are kept sustained by equity holders: the entrepreneurs themselves, VC funds, or other sources of capital.

VC funds are increasingly looking at sharing economy, a PE Analyst responds, saying that we have yet to see if these companies will be investment opportunities for later stage growth capital funds. The Analyst mentions two requirements that must be met in order for later stage PE funds to screen sharing-based companies.

The *first* is established valuation standards. When valuating a company relatively to the market, there has to be standards. The Analyst mentions multiples on users, revenue, and EBITDA (earnings before interest, taxes, depreciation, and amortization). An Independent Investor also addresses the problem of valuating

sharing economy. Most platforms have unique users but no tangible assets. It all depends on the revenue model whether these users are of any real economic value or not. A company can have millions of users and still have a low valuation.

The *second* requirement, for being able to screen sharing economy, the Analyst mention is the need for stable data. For valuations based on cash flow, earnings and growth have to be stable, or else there is too much uncertainty. The Analyst also want to see sharing economy companies report not only stable growth, but high growth as well over time, preferable with double digits.

"Venture capital is starting to focus more and more on sharing economy business models. Time will show how these businesses will develop and provide investment opportunities down the road, once valuations are more established. So we can use user, revenue or EBITDA multiples - or others. Today there are still no industry standards. And earnings are stable and continue to grow by double-digits." (Analyst, Private Equity Fund 2)

In contrast, looking at the rest of the world, the top seven unicorns of 2014 increased 279% in value by 2015 – triple digit growth. There are now 24 unicorns in sharing economy (Owyang & Cases, 2016).

4.2 Operative Management

The respondents shared a variety of (non-contradictory) perspectives on the investors' involvement with their portfolio companies. Operative management differs from early stages to the later stages of PE funds. VC funds are generally closer to their portfolio companies in giving advice and sharing network. In the later stages, growth capital funds might influence operations through having board seats. The responses in this section fall in the categories of restructuring, commercialization, and productivity and efficiency.

4.2.1 Restructuring

Two VC fund Partners believe consolidation is a likely scenario for the future structure of sharing economy. The attributes of the network model make size an important factor. The Partners think four or five big players will merge in each industry to make global concepts – and that there will over time only be a couple of big global players per industry. Further, the Partners state that consolidation cases will make for good investment opportunities for later stage PE. Alex Stephany, an entrepreneur, author, and "sharing economy expert", writes in Los Angeles Times that – because of the network effects of the model – one winner till emerge in each vertical (Stephany, 2014). Stephany argues that consolidations and VC-backing of some companies speeds up this process. In time, there will likely be one big player dominating its own segment.

4.2.2 Commercialization

To explore this topic, a commercialization specialist was interviewed. When asked how commercialization of sharing economy differs from other models, the specialist responded that it is not much different from other models. The challenges of commercialization are three folded, according to the specialist.

First, the company has to create a scalable solution with unique user friendliness and efficient payment solutions integrated. This is not the hardest challenge because there are good cases in the market, like Uber and Airbnb, to copy. *Second*, they need to get enough partners and suppliers onboard – who will sell their product and services on the platform. This can be difficult; the platform has to offer them an additional value. Third, the solution has to be marketed to attract enough users – to make it interesting for the suppliers.

The specialist goes on to say that sharing economy does not require initial big investments, because it is about creating an effective market place for products that already exits. This might only be true if one stresses the word "initial" and the specialist only refers to the period of testing the platform as a prototype. A VC General Partner says there are huge costs associated with building a functional, scalable model.

In the interviews, the respondents covered critical mass, demand, and how marketing requires funding. These categories will serve as the structure of this section.

Critical Mass

Company 3 had, with its crowdsourcing model, problems getting companies to provide data for their aggregates in the beginning – because they did not have any functional aggregates to offer before the data came in. There need to be security and guarantees between these two transactions of information. Non-disclosure agreements were used to solve this situation, as well as heavy focus on data security.

An enabler of critical mass is urbanization (PwC, 2016). The urbanization the last decades has been rapid and many sharing platforms rely on it. Especially some car and sharing services would not be profitable if it were not for the high population density.

Demand

Size is a critical success factor, responded a VC partner, saying that there is no way around it. To succeed in obtaining critical mass and get the size necessary, demand has to be created. Both an entrepreneur and an investor mentioned central challenge for sharing economy, as well as other network-based models: there are two sides of the model demand has to be created for. The entrepreneur says it is easier to get people to sign up as contractors – people are generally more eager to earn than to spend money. The users however, are harder to win.

"The main problem with being in sharing economy is that there are two different target groups: users and costumers. The hard thing is to get enough users. Contractors are okay." (CEO, Company 2)

Several other respondents support this view. A VC partner says this problem makes them skeptic as investors. The commercialization expert, knowing the

case of Company 1, respond that this company has a couple of thousand contractors signed up for their service, but only twenty transactions per day. Further, Airbnb operated for several years before it took off. They have been successful at marketing and story telling – and, the specialist says, there are a lot of good stories to tell regarding sharing economy. Other respondents also stress the need of marketing.

It is not only from the respondents of this study that the problems of two-sided marketing are felt. CMX, a community industry hub, reports some similar experiences shared in a panel of entrepreneurs (Hamilton, 2014). Tristan Pollock says one has to closely monitor the balance of supply and demand in the platform – and refers to it as a "rollercoaster". Shira Levine's approach is to have supply and demand creation separate in two different departments, because it is not easy for one department to manage both.

A VC General Partner explains that it is relatively easy to get 2 000 users, but much harder to achieve 200 000. Most important for growth in sharing economy is referral marketing, because referral marketing has the element of trust that the model depends on. Other investors agree, it all comes down to marketing in order to build demand to get critical mass. An Investment Manager responds that referral marketing comes in the form of a momentum that it is vital for the company to maintain. Other sources of marketing are very expensive.

"Sharing economy is relevant for private equity as well. It depends on the momentum. If momentum is lost: growth through marketing will cost a lot of cash." (Investment Manager, Corporate Venture fund)

Marketing Requires Funding

The good investors and entrepreneurs, a VC fund Partner says, are those who figure out how to grow. Organic growth is hard for collaborative economy because it as a network requires size to be attractive. The growth has to be stimulated from an outside source of capital – i.e. capital in the form of debt or

equity, not organic revenue. Most entrepreneurs are broke, and too risky for banks to touch.

The business model needs a lot of funding throughout its whole lifetime to gain and maintain its critical mass. That involves a lot of paid marketing, a VC fund Partner argues. Growth has a cost. The marketing has be bought, i.e. paid marketing; or worked for by employees, i.e. earned marketing. The bigger players have huge teams of bloggers to create viral effects and win attention. Referring to Company 1, the Partner says they might continue the momentum another year, but will have to face to costs eventually.

"Sharing economy demands marketing, and needs a lot of funding over the life cycle. A lot of paid marketing. The big players hire hundreds of bloggers to create viral effects. Growth has costs. You can use employees – to make lots of noise, or you can use paid marketing – advertising. [Company 1] can live with its earned marketing for maybe a year, after that, they will have to spend more." (Partner, Venture Capital Fund 2)

An Investment Manager from a Corporate Venture Fund supports the other respondents in that a major problem is to create demand. PE funds have to use a lot of capital to get attention. However, by the nature of this Manager's industry they are the center of attention. The Manager explains that they can use this position to create winners in sharing economy. They can contribute more than capital to the startup; having the opportunity to help companies with marketing. This way, the Corporate Venture Fund might have the specialization needed to create industry winners without spending too much capital.

"The problem is to build the demand. We can, with our size and market position or specialization, build this demand. Other private equity funds must use lots of cash. Private equity funds typically inflate the prices when they go big into one chosen startup –they throw money at them to make them into unicorns." (Investment Manager, Corporate Venture fund)

A VC fund Partner acknowledges their limitation on the issue, saying it is a game for big funds in USA. The Partner says that if a unicorn emerges in Norway, it is by chance, like the Swedish Spotify.

A RewardStream article supports the investors view on paid and earned media and stresses the cost of marketing (Byerley, 2013). When something is considered earned media it is still based on content that needs to be created. Creating content has costs, as one VC fund Partner also pointed out. When considering the preparations needed to achieve earned marketing it does seem to be partially bought, Byerley writes.

An Accelerator Project Manager identifies a pattern that ties in to other findings in this section. A food service company has more demand from users than it is able to satisfy with its contractors. Opposite of the other cases covered. A key difference is that they have VC backing. The Project Manager then brings up a startup that was trying to establish itself in the market of mobile phone payment. They did not have much capital to spend. When the market started to move a big bank rushed in with lots of marketing and wiped out the whole market. Today the bank's solution is heavily marketed to the contractor side as well (DNB, 2016).

4.2.3 Productivity and Efficiency

When talking about operative management there was two categories that contribute to productivity and efficiency: network and competence. Trough network, investors can get entrepreneurs in touch with costumers, advisors, and other funds. It varies how active investors are in contributing like this. Later stage funds do not engage much on this level. Some early investors are more passive than others as well. With competence, investors contribute to the business model, market analyses, budgeting, and representation.

"Some investors are very involved, others are passive. The passive ones usually came in early. Some of the active ones have a board seat. They help us through contacts from their network and by giving advice – as they have incentive to do." (Business Unit Manager, Company 3)

Competence

An Independent Investor does not think PE has much to contribute to the model. However, some funds might have relevant specializations. If funds cannot help startups with the sharing component of the business model itself, the investor explains, they can contribute on other aspects like corporate governance. A Management Consulting Partner says PE funds in Norway is lacking needed competency to develop concepts as Uber and Airbnb. Norwegian funds are good at building companies, but do not have experience with this kind of model which might change. In the future they might lose potential investment targets to funds abroad that are more specialized. Norwegian companies coming back from stays at incubators and accelerators abroad might also be hard for Norwegian funds to pick up. The Partner thinks more PE funds will have a greater focus on information technology in the coming years. For now, as another investor says, later stage funds are more focused on technical issues and exits while earlier stage funds often have more competency to contribute to their portfolio companies. By nature of their stage, this is how it should be as well. Immature companies are in the process of "finding themselves" and becoming established businesses, for which they need guidance.

"Private equity in Norway is lacking competency to create Uber or Airbnb. They will change focus... They know generally what it takes to build a good company. If interesting sharing economy tech companies emerge in Norway, I think Norwegian private equity funds will have a challenge in getting them. Foreign private equity funds might have more to offer, with relevant specializations. For example: a company comes home from an incubator in London, what can Norwegian private equity funds contribute with?" (Partner, Management Consulting)

Company 2 is a good example of how a Norwegian company gets competent finance from abroad. From investors in USA, Company 2 received not only capital, but also customers, mentors, and partners through network. The American fund, the CEO explains, improves the credibility of their company and makes them more attractive for other investors. About the recruitment of users and contractors, the CEO states that customers are hard to get but the contractors have been easy.

In some years, when there are more established sharing economy companies, a Partner says, private equity will be more specialized in the needs of network-based models. Things funds might contribute with are distribution, structure and infrastructure, and management support. The Management Consulting Partner doubts that Norwegian private equity funds have this to any significant extent now.

A private equity guide supports the views on the roles of investors (Chen, 2016). They do not run the companies daily operations. Investors are not CEOs, but they might change the CEOs. Through their board seats, investors contribute advice support, and introductions using their network. Their stake in the company tends to play a factor in how involved they are.

4.3 Exit Routes

In regard to exit routes, the respondents gave answers that related to exit channels and returns to investors – which will be the structure of this section.

4.3.1 Exit Channels

One law Partner responded that sharing economy will be acquisition targets for PE on its own. This implies possibilities for secondary markets, where PE funds buy companies from each other. However, during interviews respondents put more emphasis on the scenario of IPO and trade sale.

IPO

A PE Analyst explains that in order for later stage PE funds to invest in sharing economy, there has to be proven interest in the exit market – and this goes for IPO as well. The fund would have to trust that the public would invest in it should they do an IPO.

However, sharing economy might not desire do go public. Braithwaite, (2015) writes that the environment is tough in the public market and the private companies might as well stay safe with their private investors. In USA, there was 23 tech IPOs in 2015, compared to 62 in 2014. The market is slowing down, and there is no reason why the demand from the public should be greater for potential sharing economy IPOs.

"[Sharing economy companies should just] Stay out of the harsh cold of the public markets and snuggle up for winter in Silicon Valley. Throw another bundle of venture capital money on the fire." (Braithwaite, 2015)

Take the case of Uber. If they try to sell 15% of their equity in an IPO, that would mean that \$35 billion would have to be absorbed over a couple of years. Considering that the yearly appetite of the IPO market is between \$8 and \$10 billion, it is just not big enough (Braithwaite, 2015). It raises the question of whether sharing economy is hyped up.

The Gartner (2016) hype cycle might shed some light on the issue. Showing the relationship between visibility and maturity, the model goes through the stages of: 1) Technology Trigger; 2) Peak of Inflated Expectations; 3) Trough of Disillusionment; 4) Slope of Enlightenment, and; 5) Plateau of Productivity. The cycles are illustrated in Figure 2.

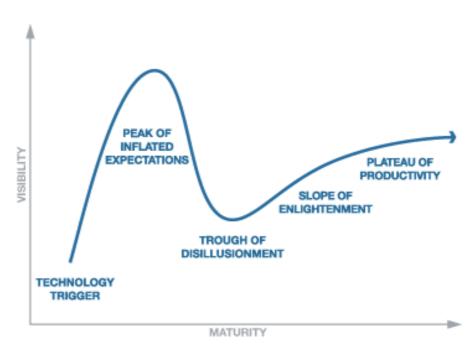


Figure 2: Hype Cycles (Gartner, 2016)

With regard to *visibility*, the Norwegian term for sharing economy ("delingsøkonomi") was more used in Norway in 2016 than all years before combined (CEO, Company 1). *Technology Trigger* is a new technology enabling the hype to take off. *Peak of Inflated Expectations* is recognized by early success stories together with some failures. *Trough of Disillusionment* is interest collapsing, and producers of the technology failing. Efforts only continue if the creators are able to turn around and change their product to meet customers' expectations and demands. In *Slope of Enlightenment*, more sustainable versions of the technology emerge. Finally, at the Plateau of Enlightenment, mainstream adaption takes off (Gartner, 2016).

Trade Sale

This segment will cover how the acquisition market might look and what kind of trade sale exits those scenarios can make possible. There are two likely scenarios for trade sales: sharing economy companies acquiring other sharing-based models and traditional companies acquiring relevant sharing-based companies.

Sharing economy as a business model has a number of different uses for companies. In seeking profits, PE will find ways to benefit from the model, an

Investment Manager explains and gives three examples: Portfolio companies can 1) use sharing platforms to reduce costs. Sharing platforms eliminate the cost of ownership; 2) establish their own sharing platforms, and; 3) acquire sharing platforms. Further, the Investment Manager gives examples on how companies have cars standing still on weekends and empty offices. Renting these assets out can increase their revenue without increasing costs as much, the manager is certain funds will assess this.

The Investment Manager gets support from other experts. Matt Egol, an expert in digital service business tell US News that the challenge for investors is to identify companies that can partner with sharing economy (Whittaker, 2016). This is in line with other writers claiming sharing economy will be integrated into other models (Anonymous, 2013b; Zobrist & Grampp, 2015). Marriott hotel has already been successful at doing this, partnering with a B2C digital booking system (Botsman, 2014).

A VC fund Partner responded that when one player is likely to eat the rest of the market, you will see sharing economy companies doing acquisitions on their own. The car rental company Avis might acquire someone like Uber (not as big), a VC General Partner says, however, Uber will not acquire companies that are not sharing based. It goes only one way. Hilton Hotels might acquire Airbnb, but Airbnb will not acquire Hilton. Further the General Partner also says we are likely to see sharing economy companies acquiring other sharing-based startups.

With sharing economy consolidation, there are potential for more big players like Uber and Airbnb to compete with traditional businesses in the future. A law Partner says this will be a central role sharing economy will take in the future. A natural defense for the established companies is to do more of what they are doing. The partner uses sailboats as an example: when steamboats arrived, there was still need for sailboats – and, in time, it is virtually the only one left.

4.3.2 Returns to Investors

In regard to return for investors there were a mix of responses. Generally, the investors see the issue of returns to investors in regard to sharing economy as no different than with any other business models. There were however, some comments on issues that were more unique for sharing economy, which will be covered in the following.

One referred to another fund that is a late stage fund but has established a early VC fund as well. By doing this, the PE Analyst says, they are in a position to capture value creation opportunities across the life cycle of these companies.

A PE Director points out that there are less revenue in the total transportation market after Uber. This means a smaller market for the investors, because it is ultimately revenue potential they invest in. The Commercialization Expert goes as far as saying there is no need for taxies in Oslo at all, when we can have Uber.

A market report shows the other side of this issue. Sharing economy might reduce total revenues in a market, but it makes the market more liquid (Ernst & Young, 2015). This means that it makes assets accessible and creates an opportunity to capitalize on these.

5 Discussion

In this chapter the research questions will be explored by assessing the main findings in the context of established theory. The structure will therefore be based on the foundation of the research questions: screening and selection, operative management, and exit routes.

5.1 Screening and Selection

In screening collaborative economy, the investors assess the same general factors as found in research (Petter & Gruber, 2011; Riquelme & Rickards, 1992; Muzyka et al., 1996; Zacharakis & Meyer, 2000). Judging collaborative economy is no different than with other models. This section will cover market, business model and technology, and financials to see how collaborative economy measure up to private equity screening and selection.

5.1.1 Market

The attention that was given to the market by the respondents matches well with the ranking of the market as a major criterion for screening (e.g. Wells, 1974). First of all, collaborative businesses have to be available, as a PE director pointed out. From here, investors assess industries before potential investments (Sweeting, 1991).

The finding that collaborative economy has emerged form digitalization and been enabled by lowered transaction costs support previous research (Black & Lynch, 2004; Avital et al., 2014). There has also been observed a cultural shift, explained by CEO in Company 1, where peoples' view of ownership has shifted – supporting Eckhardt et al. (2013). Collaborative economy is producing a more frictionless market space in this new culture as found in responses from an investment manager and in a market report (PwC, 2015).

Research has not addressed the tax and regulatory issues of collaborative economy much yet. However, respondents provided a view that it is a very critical factor for the success of the model, but – as a project manager stated – the government has the incentives to resolve it. From secondary sources it is also

found that governments can use the opportunity to renew regulations and that the regulations of traditional competing businesses should be reassessed as well.

The respondents see potential in the model to do well in accommodation, transport, and services. Services can be P2P loan and education; collaborative finance and collaborative education (Botsman, 2013). There are examples of businesses like these existing already (Owyang, 2015).

There are however some problems with the market for the model. A VC partner claims the market is fundamentally different from that of the source, San Francisco; Oslo does not have the same real problems that needs to be solved. The finding weakens the market potential of collaborative models in Norway.

5.1.2 Business Model and Technology

The respondents see the business model as disruptive. A VC partner points out how other qualities of Airbnb and Uber are underestimated. Findings suggest that the success of the two giants can be attributed to good use of big data, well-functioning rating systems, and great buying experience as well as the sharing component. This supports Cohen (2016).

The VC partner further says that Uber probably will make use of self-driving cars – which might fit this market, since disruptive innovation are more suitable in less mature markets (Lerner, 2009). However, the partner sees nothing special in sharing itself. Another VC partner says he is not so concerned about that it is sharing either, but what is happening in the market place. Their attitude towards the "product", i.e. business model, is in line with Poindexter (1976) and Tyebjee and Bruno (1984) who finds the market to be of greater importance than the product itself.

The interviews uncovered some challenges in the collaborative model, which have not been covered thoroughly in the literature. However, some secondary data addresses the issue of trust (PwC, 2015). Other challenges are the potential

lack of incentives to use a sharing business and the margin between value and transaction cost.

In Company 3, the study finds an excellent example of a collaborative model used B2B. What Company 3 is doing, crowdsourcing of data, should be classified as collaborative production. The aggregated data is their product and it is produced through collaboration. The definition the thesis has been working with should therefore be updated to include the example of Company 3; changing "people" to "entities".

5.1.3 Financials

To be able to screen a sharing economy company, a PE Analyst wants more financial information. It is only the later stage investors who mention this lack. This supports the early findings of Wells (1974) and Poindexter (1976) that for VC funds financials fall in the shadow of the market criterion.

The investors with better financial expertise invest in later stage companies (Dimov et al., 2007); the Analyst wanted to see more established valuations and stable earnings and growth. The analyst, representing a later stage PE fund supports the findings of Bull (1989) with their emphasis on cash flow.

5.2 Operative Management

In analyzing PE's contribution to collaborative models, the same kind of differences between early and late stage investors emerge. Respondents place VC funds closer to the portfolio companies' operation – which will help the funds raise capital (Cumming et al., 2005). Partners have also responded that later stage PE will be more involved with technology in the future, supporting the view of Lerner et al. (2011) and Strömberg (2008). In this section, corporate restructuring, commercialization, and productivity and efficiency will be covered to assess PE's potential operative contribution to collaborative economy.

5.2.1 Corporate Restructuring

Corporate restructuring is a very late stage issue. It was not mentioned much in the interviews. However, three can be mentioned. *First*, early corporate

restructuring might be the road to mature collaborative businesses. By consolidating four-five players, the market can produce great investment target for later stage PE.

Second, owning tangible assets can support higher levels of debt (Long and Malitz, 1985). If a sharing business like Uber enter into the market of self-driving cars, it will own more assets, and possibly make it more attractive for LBO. Third, on the other hand, the lack of physical assets makes Uber's CAPEX lower, and might be a reason for the high valuations observed among the 24 unicorns (Owyang & Cases, 2016).

5.2.2 Commercialization

In assessing the role of PE in the commercialization of collaborative economy, the study makes two main findings related to the relevancy of corporate venture and the relationship between capital backing and balance of demand.

Corporate Venture

A key finding is the compatibility of corporate venture funds with the situation in Norway. As a Partner indicates, there are less capital in the Norwegian VC market. Using the *driving* investment strategy (Chesbrough, 2002) Norwegian corporate venture funds can have tight operational links and strategic objectives when investing in a sharing model. Being specialized and having other resources in the same industry as an investment target, corporate venture funds are in an unique position to substitute specialization for "the lack of Norwegian capital". In the words of the Investment Manager of a corporate venture fund: "We can, with our size and market position or specialization, build this demand. Other private equity funds must use lots of cash." It is exactly this kind of partnership a PwC specialist says is the challenge for investors to find (Whittaker, 2016).

Capital Backing and Demand Balance

The analysis of the interviews finds that critical mass is, as with any other network model, a critical factor for the success of collaborative economy. An entrepreneur responds that it is a challenge to attend to the demands of both

users and contractors. A secondary source confirms that this is a problem for more entrepreneurs (Hamilton, 2014).

First it was observed that startups have a harder time getting users than contractors. Then, examples of the opposite came: startups having a harder time recruiting contractors. The difference between them is that the initiatives with a user-problem were not backed by investors – like Company 1 and the mobile payment app – while the initiatives that had a contractor-problem were backed by investors – like the food sharing service, the bank's payment solution, and Company 3. This pattern underlines the importance of size and capital to succeed in a "winner take all" market. It would have been a great finding had it not been for Company 2 that has both backing and a user-imbalance.

The weakened finding does support Zahra (1995) in that funded companies emphasis the commercialization process more than peers. It is a clear pattern that early startups without funding have a harder time getting users than contractors – like Company 1 with a couple of thousand contractors and 20 transactions per day. This early imbalance should mean that it is easier to do collaborative production than collaborative consumption; when a higher ratio of contractors are willing to sign up in the beginning, it might be easier to create value by crowdsourcing. This might explain the success of Company 3, which has succeeded in incorporating this model B2B.

5.2.3 Productivity and Efficiency

In exploring PE's contribution to productivity and efficiency the study finds two main offerings: network and competence. Using their network, investors help portfolio companies get in touch with customers, advisors, and other funds. This supports Gorman and Sahlman (1989) in that one of VC-backed companies' is advice. Also, introducing portfolio companies to other investors is in the funds' interest: investing in syndicates reduces risk for the investors (Demaria, 2013).

With regard to competence, investors offer their portfolio companies credibility, help with business model, market analysis, budgeting, and representation. Once

again, the stage of the fund determines to what degree investors engage in operative management, and, as a business unit manager mentioned, so does the stake the fund has in the company.

Although some funds might have competence, partners in supportive roles to private equity see a lack of competence in technology and collaborative models. They do not think the competence to build Uber and Airbnb exists in Norway. If potential unicorns do emerge in Norway it would be a challenge for Norwegian funds to get them, as foreign funds might be able to offer better specialization. Company 2 is an example of this, having American investors. Also Norwegian companies coming home from stays in accelerators abroad can be a challenge for Norwegian funds to pick up. It can be characterized as a competence gap. The partners think PE funds will specialize more in the coming year – a finding that provides further support for Lerner et al. (2011) and Strömberg (2008).

5.3 Exit Routes

To look at possible exit routes for collaborative economy, this section will assess the data against previous research in the category of exit channels, followed by some brief comments on returns to investors.

5.3.1 Exit Channels

As previous research indicates, PE funds prefer to exit through IPO before trade sale (Cumming et al., 2005). This resonated well with the investors as well. It was also noticeable that later stage investors had slightly more focus on the exit – while early stage investors had more focus on market. This sub-section will assess some considerations regarding exiting collaborative economy, by the two scenarios trade sale and IPO. Further, the study will make some arguments for collaborative economy being hyped up in Norway.

Trade Sale

The study generally finds that business principles of sharing can work between businesses with excessive capacity – cars and offices. The solution is not specified to sharing economy companies, but to using principles of the sharing model – which larger corporations can do themselves, if not partnering up with someone. For the case of selling a collaborative-based business to a corporation, which constitutes the majority of exits (Kaplan & Strömberg, 2009), the study finds two likely possibilities: A traditional company acquires it or another collaborative-based company acquires it.

Companies can benefit from collaborative models in a number of ways. Acquiring a company has many of same benefits as discussed above with corporate venture and companies partnering up. Previous research finds that increased financial flexibility (Chui et al., 2012) activates underutilized assets with idling capacity (Stephany, 2015; Matzler, 2015). An investment director proposed solutions giving direct support to this research. Cars and offices are often unused and empty in weekends. There is a potential for companies to increase revenue without increasing costs too much. It is not automatically said that the sharing platform this can be solved with has to be an internalized part of the company – i.e. companies can solve this by simply becoming contractors of a platform, without acquiring it. Sharing offers a great opportunity to collect user data, which is a valuable asset for large corporations.

An exit where a collaborative-based company acquires another one is close to the already discussed consolidation case. There are not many players world wide able to do this now, especially not in Norway. However, because of the importance of users it might be a common strategic move in the future. It would basically be the purchase of users if the two companies have similar business models.

IPO

As a PE Analyst says, PE funds will look for a proven interest in the IPO market. VC funds measure their success in IPOs (Gompers, 1996). The importance of potential for IPO is so important that clean technology has difficulties getting funding because of the lack of an IPO market (Hargadon & Kenney, 2012).

However, it turns out that it might not be in the interest of the company. This study finds two arguments for this view. *First*, a research found that private funding is better for companies that have technology in development, while it makes more sense for companies without upcoming technology to go public (Ferreria et al., 2010). With all the technological potentials of collaborative economy, as for example self-driving cars, it can make more sense to stay private. *Second*, the IPO market might be too small for collaborative-based companies. As analyzed, the American IPO market does not have appetite enough for Uber. Since these models require size to be successful, the successful ones that are ready for IPO might be too large. Regardless of the validity of these two arguments, there are in fact fewer IPOs now than decades ago (Kaplan & Strömberg, 2009).

Hyped in Norway?

The size of Uber and the 23 other private sharing economy unicorns compared to the public market raises the question if there is a bubble. The nature of the models' popularity makes it natural to assess the issue using Gartner's hype cycles (Gartner, 2016). The enablers of the model could have triggered the possible hype, in the first stage of the cycle, *technology trigger*.

These triggers could be digitalization, lower transaction costs, and underutilized assets as found in the interviews – or population density (Kriston et al., 2010), concern about environment (Porter & Kramer, 2011), financial flexibility (Chui et al., 2012), the use of idling assets (Stephany, 2015), and more VC funds in USA have given better access to capital (Chui et al., 2012) as found in previous research.

If the hype cycle model explains today's situation, we should be somewhere around *peak of inflated expectations*. The thesis has covered three issues that might be seen as arguments for that. 1) The high valuations of Uber and Airbnb; 2) the CEO of Company 1 saying the Norwegian term for sharing economy has bene mentioned more by March 2016 than ever before, and; 3) A VC Partner saying there is not any real need in Norway, but a lot of "me too".

The question is then if the market is likely to hit the next stage of *trough of disillusionment*. To understand how deep the hype might sink, one can look at what can potentially save it in the next stage. In *slope of enlightenment*, the hype will recover to the extent that the phenomenon meets sustainable real demand. There are four arguments against this, and thereby for a possible *trough of disillusionment*. 1) Two investors responded collaborative economy does not solve any real problems in Norway, 2) they also say there is less capital in the Norwegian market to put money behind the trend; 3) many collaborative initiatives are done with too low value-products compared to the transaction cost, and; 4) urbanization as an enabler (Kriston et al., 2010) is not as strong in Norway's smaller cities.

However, there is some positive evidence as well. This study finds that the principles of sharing economy can be use to a variety of strategic purposes by corporate venture funds and larger corporations. The Economist (Anonymous, 2013b) and Zobrist and Grampp (2015) support the findings. In summary, the hype of the collaborative economy in Norway is a mixture of unsustainably wanting to adopt ideas from Palo Alto and real business potential.

Conceptually, the shaded area in Figure 3 can be understood as the unsustainable hype. E.g. the four arguments against a sustainable demand, represents the gray pinnacle, while the red line represents the real usefulness of the principle – showing a path of sustainable development.

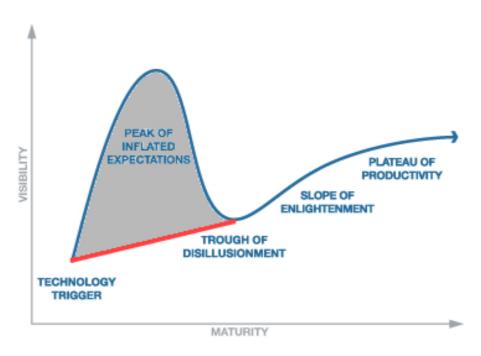


Figure 3: Edited Hype Cycles (edited Gartner, 2016)

5.3.2 Returns to investors

In regard to returns to investors, there is not much difference between collaborative economy and other business models. This study has seen how new structures in PE funds can make them able to capture value over longer periods of companies' life time – by for example having an internal VC arm in a late stage fund.

It is also found that, as a PE Director says, the total transportation revenue n the world is lower after Uber – but collaborative economy makes the market more liquid by making idling assets available for consumption.

6 Limitations

First, this thesis is limited to the investors' perspective. There are many other aspects of and perspectives on collaborative economy that is not assessed here. Further limitations pertain to the theoretical framework and the methodology.

Theory

Some of the studies on PE seem to contradict each other. Although not necessary directly, there seem to be indications pointing in different directions. This is especially relevant in the relationship between PE funds and the entrepreneurs and the resulting innovation – or lack thereof. All can be true in different contexts. One problem can be that studies have different view on what is considered early and late stage capital. A big company in Europe can be considered medium in USA.

The financial literature is much more conservative than the last section on collaborative economy. In discussing business models it is not unusual that researchers refer to expert bloggers. The field is changing rapidly and research is struggling to catch up. Much of the financial tools and literature, on the other hand, are decades old. The two fields are different in nature and abstract level, but makes for an interesting combination.

Methodology

The different abstract levels of the two bodies of research have methodological implications. Previous research is mostly quantitative on PE, while more qualitative on collaborative economy. Market reports have been helpful to understand the intersection.

Because of the wide research gap and the exploratory approach, the analysis has been mutually exclusive with regard to the investment life cycle, but not collectively exhaustive – meaning all issues relevant to the research questions have not been addressed. Lastly, the study is limited to the context of Norway.

7 Key Findings and Implications

In exploring the phenomenon of private equity investing in collaborative economy this study has made five key findings. Some features unique to collaborative economy have been identified in the pursuit of the three research questions.

The *first* key finding is that corporate ventures are especially positioned to invest in collaboration-based companies. In Norway, a lack of capital – relatively to the American market – can be substituted by specialization. With a *driving* investment strategy (Chesbrough, 2002) collaborative-based companies can play a strategic role for larger corporations.

Second, the study finds evidence of collaborative economy being hyped in Norway. The recent attention of the model resonates well with Gartner's (2016) hype cycles. However, the sustainability of the hype is mixed: on the one hand, the study finds four evidences suggesting unsustainability; on the other hand, collaborative economy can have a strategic purpose for corporations and corporate ventures, which supports the views of the Economist (Anonymous, 2013b) and Zobrist and Grampp (2015).

Third, the study finds that Norwegian PE funds might have a competence gap in regard to collaborative models. Respondents question the funds' ability to compete with foreign funds for potential Norwegian companies. Also, the funds might not be able to pick up Norwegian startups coming home from accelerators abroad. Because of this, we will see PE funds specialize more in technology in the coming years – a finding that supports Lerner et al. (2011) and Strömberg (2008).

The *fourth* finding is that collaborative economy has limited exit routes. Two potential exits were focused on, IPO and trade sale. PE funds wants proven interest in the IPO market. It turns out that an IPO might not be in the interest of collaboration-based companies that might want to develop technology with

private funding. Also, the study finds size to be a critical factor for success. The flip side of the success is that they might be too big for the IPO market. A trade sale is most likely to be with a large corporation with strategic interest or another larger collaborative-based company in the same vertical.

Fifth, the study finds a pattern in the balance of user and contractor demand: companies backed by investors tend to have more users per contractor; while companies without backing has more contractors per user. However, contradictory evidence is found – weakening the finding's support of Zahra (1995).

A theme that unites several of the findings is that collaborative economy has potential as a strategic partner for established companies. This supports an expert's view that investors should look for targets that can benefit from partnering with collaborative-based companies (Whittaker, 2016). Collaborative economy does not need to be in the form of a separate company to have value as a business model: as the study has found, traditional companies can apply the principles as well. It depends on if the company chooses to in-source or outsource the activity of collaboration. This support a view expressed in the Economist (Anonymous, 2013b). Collaborative models are walking the runway showing the latest trend in business. Other businesses will not necessarily adopt the concept in its entirety, but might get inspired.

7.1 Implications for managers

This study suggests that PE funds cannot count on taking collaboration-based companies public – through IPO. Trade sales are more likely. Funds should consider exit scenarios where larger corporations can take over the company in a strategic move. The implication for the screening process is to identify collaborative-based companies that can fit into the strategy of a larger player.

Another implication for funds is that corporate ventures might have a real opportunity in the collaborative economy if their specialization fits. Lastly, if there is – as this study finds evidence for – a competence gap in the Norwegian PE market, then that gap might be available market share waiting to be occupied.

For managers in collaboration-based companies, the study finds that one should not underestimate the role other features than sharing play in the success of Uber and Airbnb. As a startup in the collaborative economy, one has to do good business like with any other model – sharing alone is not enough for success. An example of features that should be carefully developed is how transactions are conducted, user experience, rating systems, and the use of big data.

A last implication for entrepreneurs is the perceived inherent strength of the collaborative production model. Based on the finding that it is easier to attract contractors, basing the value creation on the contractor side of the platform might be a more potent model for a company with limited funds to spend on marketing. The study also covered a good example of crowdsourcing used in B2B.

7.2 Theoretical implications and Further Research

As an implication for theory, this study proposes the following definition: Collaborative economy is entities coordinating the access of the production or consumption of a product or a service for a compensation. The study has further assessed the PE investment life cycle in the context of collaborative economy and made five findings that contribute to the research gap.

Further research should look into if collaborative economy is over-hyped in Norway. The question is if initiatives are made on the basis of sustainable or unsustainable factors. Also, this study suggests there might be a technology competence gap in Norwegian PE. Further research could look into if this is true and if it matters.

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Appendix

Interview Guide 1 – Investors

Aim:

To explore the phenomenon of private equity investing in collaborative economy

Introduction

- · Brief information about the study
- Explanation of anonymity
- Ask how much time they have available
- Informing if the interview is being recorded
- Clarify terminology

Research Question 1: How does collaborative economy measure up to private equity screening and selection?

- What is your investment strategy? What do you invest in?
- How do you assess collaborative economy as a potential target?

Research Question 2: What can private equity contribute to the operation of collaborative economy?

- How do you think the model will develop in the future?
- What role do you think PE can have in operations?
- How does the model fit into your investment strategy?

Research Question 3: What are possible exit routes for collaborative economy?

- What possible exits do you see model?
- What would your decision to invest depend on?

Concluding remarks

- Ask for potential interview subjects, for snowball sampling
- Ask for feedback on the interview questions
- Thank them for their time

Interview Guide 2 – Company

Aim:

To explore the phenomenon of private equity investing in collaborative economy

Introduction

- Brief information about the study
- Explanation of anonymity
- Ask how much time they have available
- Informing if the interview is being recorded
- Clarify terminology

Research Question 1: How does collaborative economy measure up to private equity screening and selection?

- What industries do you specialize in?
- What do you think of collaborative economy as a business model?

Research Question 2: What can private equity contribute to the operation of collaborative economy?

- How do you think the model will develop in the future?
- What role do you think investors can have in operations?
- How can established firms work with the model?

Research Question 3: What are possible exit routes for collaborative economy?

- Who would buy a collaboration-based company?
- What does the success of the model depend on?

Concluding remarks

- Ask for potential interview subjects, for snowball sampling
- Ask for feedback on the interview questions
- Thank them for their time

