



# **The Private Equity Investment Process - An Aggregated View on Information Asymmetry Reduction**

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## **Abstract**

The market for private equity (PE) firms exists due to information imbalances between the potential investment and the investors. In previous research, studies have investigated the investment process and its influential factors and the results have showed various criteria affecting the process, as well as different structures of the process. However, none have examined the underlying factors. By creating a more comprehensive model of the PE investment process, this study aims to conclude upon what and when criteria are used and why these are more effective in reducing the information asymmetry.

The results indicate that the investment process can be divided into two parts, one perception-creating and one confirmatory. The criteria are to some extent congruent to the market, financial, product and entrepreneur criteria suggested in previous research, however, the findings imply another order of occurrence. Some new criteria have also been identified, namely the sustainability and IT infrastructure related criteria. Factors that are essential in reducing information asymmetry are at process level the confirmatory stages, which contributes with most of the reduction. The findings lead to proposal of similar studies conducted on a specific PE firm strategy in order to reach a deeper of understanding of the specific process.

**Keywords:** Private Equity, Venture capital, Growth Capital, Buyout, Investment Process, Investment Criteria, Information Asymmetry

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## **Abbreviations**

B2B - Business to Business

BA - Business Angels

BO - Buyout

EBITDA - Earnings before Interest, Taxes, Depreciation and Amortization

ESG - Environmental, social, governance

EVCA - The European Venture Capital and Private Equity Association

FinTech - Financial Technology

GC - Growth Capital

IM - Investment Memorandum

IPO - Initial Public Offering

NDA - Non-Disclosure Agreement

PE - Private Equity

SVCA - The Swedish Venture Capital and Private Equity Association

VC - Venture Capital

## **1. Introduction**

The recent technological advancements, where a combination of automatization and digitalization has revolutionized many industries, has reinforced the need for firms to stay ahead of the innovation curve in order not to disappear from the market (World Economic Forum, 2016; World Economic Forum, 2017). The digital revolution with its techniques have further blurred the lines between physical, digital and biological spheres and brought unprecedented opportunity and an accelerated speed of change (Ibid). Arguably, it is essential for industrial countries to put more effort into innovation and incur policy changes to increase their competitiveness, as innovations are strategically crucial to increase prosperity in society (Braunerhjelm, Eklund and Henrekson, 2013). A fast reignition of growth is demanded where innovation is argued to be essential for the enhancement of growth (World Economic Forum 2017; World Economic Forum, 2016). Thus, there is a need for institutions and other forces of society to favor entrepreneurship.

Innovative countries tend to promote creativity and entrepreneurship by providing a flexible environment that enhances the commercialization of products (World Economic Forum 2017; World Economic Forum, 2016). Despite these factors the financial sector needs to provide venture capital (VC) and other financing solutions that supports companies that are of a smaller and riskier sort (Ibid). Firms that favor entrepreneurship and innovation exists in the form of financial intermediaries known as private equity (PE) firms, which channel capital from the fund's investors to the portfolio firms (Cumming, Gill and Walz, 2009). The PE firms manage the funds by making investments in unlisted companies at different stages of the life cycle. The PE investment professionals seek to manage their investments by adding value to their portfolio firms and then exit the investment within a foreseeable future (SVCA, 2017; Nyman, 2002). It is essential for the PE firms that a reduction of the information asymmetry between the investee company and the investment professionals occurs, which is a prerequisite for a successful investment decision (Cumming et al., 2009).

The market for PE exists due to capital market imperfections, where there is an information imbalance between companies that are seeking capital and the PE firms (Hassan and Leece, 2007). There is an uncertainty between the two parts and thus the role for the PE investment professionals include gathering information to reduce information asymmetries, i.e. that one party have more essential information than the other, in order to make a sound investment decision (Hassan and Leece, 2007). Especially, entity specific information collected directly from the potential investee company is especially subject to being positively biased towards the investee company's benefit in order to obtain funding. Thus PE firms put much effort in collecting information from external sources, and through different approaches and stages they will try to limit the potential information asymmetries to avoid misuse of the investor's money (Van Osnabrugge, 2000).

### **1. 1 Problematization**

As the information gathered by the investment professionals constitutes the basis for an investment decision, getting the right information is crucial for the PE investment professionals and their role for the PE firms as an intermediary between fund providers and entrepreneurial firms. The questioning, however, lies in what sources of information that are more frequently used by PE firms to overcome information asymmetries and also the perceived importance to different sources of information and why these are used.

In the entrepreneurial finance literature, studies have investigated influential factors in the investment process and the results have showed various factors influencing the evaluation of the process. According to Tyebjee and Bruno (1984) the market and product factors are more essential when assessing a ventures return, while the risk drivers are based on the factors of the entrepreneur. However, other researchers have found that PE investment professionals focus more on the characteristics of the entrepreneur (MacMillan et al., 1985; Silva, 2004; Kollmann and Kuckertz, 2010). However, other academics argue that the market orientation of the venture and the growth opportunities of the market is more essential for making an investment decision (Zider, 1998; Zacharakis and Meyer, 1998; Block et al., 2014).

The investment criteria described above are the more commonly used criteria for VC investments in previous research. The majority of the previous research regarding investment criteria are quantitative, and thus based on questionnaires, which ought to render somewhat shallow results when questioning the underlying factors for the used investment criteria. Also the scope of previous research has been mainly limited to VC investments and not the whole spectrum of PE investments. PE investments in firms of more mature company stages can also be seen as vital to sustain the development of markets, and to not consider PE firms in the study would be inconclusive and not give a fair image of all contributing aspects of the PE industry.

The majority of the research is done on the US market, which makes the findings questionable in a Swedish context due to differences in the market systems. Sweden is a country with a bank-centered market system, which is characterized by underdeveloped equity markets and high reliance on debt financing whilst in the contrary, the stock-market centered system, banks have a more limited role in the financial system (Avdeitchikova, 2008). As such, Sweden does not belong to a stock-market system traditionally known for high institutional VC activity, where supportive government policies prevail and where possibilities for IPOs are better. Rather bank-oriented market systems tend to be more reluctant towards equity financing (Avdeitchikova, 2008).

Further, Sweden has been ranked the second most innovative country, which means that Sweden remains the top Nordic economy through gains in investments and in creative goods and services (World Intellectual Property Organization, 2016). Also, Sweden has been especially prominent in the evolving financial technology (FinTech) sector that is growing rapidly (Ingram, Källstrand, Teigland and Wesley-James, 2015), and this sector is mentioned as an important sector for future innovation communities (World Economic Forum, 2015; World Economic Forum, 2016). Further, The Swedish Venture Capital and Private Equity Association (SVCA) affirms that PE-owned firms in Sweden in general grow faster than firms of a corresponding size on the public market (SVCA, 2017). These two somewhat theoretically contradicting paths, the innovativeness and the bank-oriented market system, makes the Swedish PE market interesting to study.

Previous research of the investment processes of more informal investors has used an aggregated approach and do not focus on individual stages of the process, and more interestingly they examine the factors impacting the different stages of the process (Paul, Whittam and Wyper, 2007). Further Paul et al. (2007) put an emphasis on the underlying factors that generates the process and why these factors sustain the process. However, this approach with a more explorative focus and an aggregated view on the investment process has not been applied on the PE industry in previous research. Further, previous research of the investment process in combination with investment criteria have not focused on the reasons



behind why some criteria are used at certain levels, and how these might differ depending on the strategy of the PE firm. In other words, the criteria underpinning the investment decisions have not been put in relation to the stages of the investment process, as well as their impact on the information asymmetry, thus it is of interest to examine this in order to improve the understanding of the PE investment process.

## **1.2 Purpose and Contribution**

By creating a more comprehensive model of the PE investment process, the study will be able to conclude upon when and why certain criteria are used and more effective in means of reducing the information asymmetry in the PE investment process.

Thus the following research questions are posed:

- *How is the PE investment process structured, what criteria affect the investment decision and why?*
- *How is uncertainty (information asymmetry) reduced along this process?*

The purpose of this thesis is to examine how PE investment professionals handle the uncertainty from existing information asymmetry by studying the investment process and the criteria used when evaluating potential investments. As PE investments are driver of innovation and economic growth (Fried and Hisrich, 1994; Hassan and Leece, 2007; SCVA; 2017), it is firstly from an academic perspective interesting to extend the previous research on investment criteria by adding the process view as well as a qualitative research contribution in order to reach a deeper understanding of the reasons why certain criteria are used in what context. Secondly, from the practitioners' view, the study further extend the understanding of PE firms' as it offers an overview of the investment processes critical factors for making sound investment decisions. Lastly, for entrepreneurs, the study offers insight in essential stages and criteria when seeking funding from PE firms. Further, a comprehensive model of the PE investment process helps PE firms and entrepreneurs to understand the concerns of one another when reaching an agreement.

## **2. Theory**

This section starts with the background of the PE industry and the different strategies of the PE firms, followed by the theory behind information asymmetry and how it exists in an investment context. Further, this is followed by a review of the investment process and previous research on investment criteria. Lastly, the theoretical framework is presented containing the background needed for the following sections of the thesis.

### **2.1 The PE Industry**

On a general basis, PE can be explained as an investment in the equity of unlisted companies and an alternative way of financing for private companies instead of external debt (Nyman, 2002). For investors, PE can be referred as alternative investments and a complement to their portfolios of stocks and bonds (EVCA, 2007). In the PE industry, the investment professionals are general partners (GPs) and have unlimited liability for the investments whilst the limited partners (LPs), the investors of the PE fund, are liable only for the amount of capital they have provided (EVCA, 2007). The intermediate role of PE firms exists in order to overcome the information asymmetries between the portfolio firms of the fund and the fund providers, and through specialization, the PE firms can select and oversee the right portfolio firms and gain future profits (Cumming et al., 2009).

#### **2.1.2 Investment Scope of PE Firms**

PE investment professionals manage the funds by making investments in companies of various stages in the company life cycle. The main phases of the life cycle can be categorized into the initial phase, the growth phase, the maturity phase and the declining phase. All phases differ in needs in relation to the specific conditions of each phase (Andrén et al., 2003). As explained by EVCA (2007), the companies in the initial phase are either in the seed, startup or post-creation stages. These forms of stages refer to the financing of the business idea, the development of the business or the commercialization of the business. Further, in the growth phase, the companies are in the expansion stage where the financing is used to develop the business, increase sales and production capacity and/or acquire other companies suitable for the business plan (Ibid). Several rounds of financing in order to make the companies grow often characterize this phase. In the maturity phase, established companies with positive and/or predictable cash flows might go through changes such as management retirement, disposal of a business unit or exit from some of the investors from previous phases in the life cycle (Ibid). This action allows a company to carry on with the business and the role of the PE firms is both as a financial provider and a supporter in operational matters. The declining phase of a company is ultimately characterized by decreased revenue streams and a diminishing market (Ibid), and this phase is naturally not attractive to PE firms and will not be considered further in this study.

## Company Life Cycle

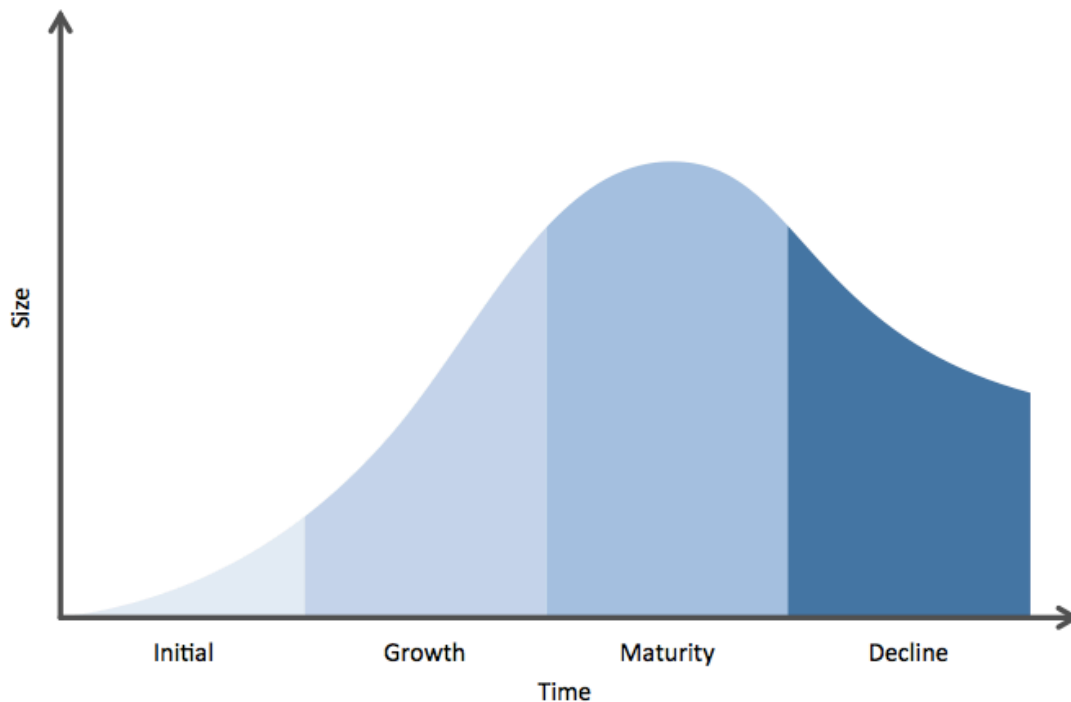


Figure 1 - The Company Life Cycle

There is a changing condition of risks associated with the different phases and the level of risk is closely related to the amount of changes surrounding the company and the predictiveness of these changes (Andrén et al., 2003). Thus, it is reasonable to assume that the PE investment professionals need to adapt the information gathering to these various risks. The following section will present the different strategies of the PE firms' that face these various risks.

### 2.1.3 Types of Private Equity Firms

As the needs of the potential investments of PE firms change according to what phase the companies are in, there are different subcategories of PE firms that focus and specialize on different phases where they can add more value. VC firms specifically finance companies in the initial or growth phases and provides non-financial assistance to increase the chances of survival (Zacharakis and Meyer, 1998). The VC firms fill a void by providing a market for entrepreneurs that need funding, investors that are willing to take on high risk for high returns, and investment bankers that need companies to sell. The investors of the VC funds are usually large institutions such as pension funds that only put a small percentage of their total funds into such high-risk investments (Zider, 1998).

Besides the financing of new ventures, PE firms can as mentioned, also focus on financing in later stages of the company life cycle. For instance PE firms specializing in growth capital (GC) invest in companies in the growth phase and aim for capital to grow rapidly (EVCA, 2007). Further, there are PE firms focusing on buyout (BO), a transaction procedure conducted when a company's management team need financing to buy an existing company from its current stakeholders (Ibid). As indicated, BO firms invest most often in companies in a maturity phase.

The main distinction between VC and other PE firms is generally between investing in ventures in an early phase or investing in more mature companies for GC or BO. In the latter, a majority of shares are acquired and a minority of shares in the early phases (SVCA, 2017). However, the different types of PE firms have the same aim of developing the businesses and creating value for the entrepreneurs by providing capital after negotiated terms between the investment professionals and entrepreneurs (EVCA, 2007). As Hassan and Leece (2007) claim in their study of VCs, it is vital for the investment professionals to have skills in identifying and selecting the right projects to invest in, keeping a positive track record and attracting more funds in the future. Such an assessment of information is however not easily done due to possible information asymmetries between the investment professionals and the company they are about to invest in. The concept of information asymmetry in the context of an investment process will be presented next.

## **2.2 The Principal-Agent Relationship and Information Asymmetry**

In entrepreneurship studies, information asymmetry has gained attention when studying the decision-making of PE firm's investment process. The reasoning behind information asymmetry is primarily based on research within the field of finance and the view of ownership and control. Corporates are usually run by a separation between ownership and control, which forms an agency relationship between the parties involved (Van Osnabrugge, 2000). The agency relationship can be explained as a contract under which one party (the principal) delegates work or responsibility to another party (the agent), who performs the work on the principal's behalf (Jensen and Meckling, 1976). Under such an agent relationship, information asymmetries might occur, which means that some information of effect on the contract, such as true intentions, planned activities or quality of exchanged goods, is available to one party but not to the other (Van Osnabrugge, 2000; Dehlén, 2014). If information asymmetries exist between the parties and the agent is the one holding the information, there is a risk that the agent uses it for his/her advantage rather than for the benefit of the principal.

By reviewing PE firms through the lens of the agency relationship, three parties can be identified: the fund providers, the PE firm itself and the entrepreneurs. The PE firms take on an intermediary role between the fund providers and the entrepreneurial firms, which on one hand puts pressure on the PE firms as agents, as they must convince the principals, the fund providers, that their information is of high quality. By signaling that the information of the PE firms are of importance, responsible behavior may be the best way to signal to their fund providers that they are a high-quality organization (Van Osnabrugge, 2000). However, on the other hand, the PE firms can be seen as the principals, providing the agents, namely the companies they invest in, with funding and then delegate responsibility to them. As the purpose of this study is limited to the investment process and the criteria used by the PE firms, the latter principal-agent focus will be used. As the information is imperfect and costly to obtain according to the information asymmetry perspective (Stiglitz, 2000), it is assumed that the PE firms' could have difficulties to analyze the potential investments based on the information obtained.

### 2.2.1 Agency Problems

As explained by Jensen and Meckling (1976) it is in general difficult for the principal to ensure that optimal decision from the agent's side will be made which is why certain costs often are incurred, which help the principal to make the agent to behave in a certain way. Contracts are created to limit those agency costs that may rise due to the differing preferences between the two parties, by incurring criteria that will measure the agent's performance and connect it to i.e bonus pay in order to regulate the preferences. Unfortunately contracts come at a cost of structuring and monitoring and thus the benefits of a contract need to exceed the costs to incur it (Fama and Jensen 1983).

However, it is difficult to contract the human factor away, which result in two types of agency problems: conflicts in the alignment and verification of goals and conflicts in risk sharing (Van Osnabrugge, 2000). These agency problems are also known as *moral hazard* and *adverse selection*, where the first problem occurs when the agent does not perform what was originally agreed upon (Fama and Jensen, 1983) and the latter when there is a misrepresentation of the agent's abilities (Van Osnabrugge, 2000). As indicated, the moral hazard problems are more applicable to the post-investment period and thus not the focus of this thesis.

Cohen and Dean (2005) argue that asymmetries of information could occur when investors want to know the true value of a firm before investing in it. Thus, the decision to invest can be difficult mainly due to the adverse selection risk since the success of the investment is highly dependent on the entrepreneur (Fried and Hisrich, 1994). Further, since the information asymmetry allows the entrepreneur to engage in opportunistic behavior such as keeping critical information about specific aspects of the venture, or negative information that would prevent the venture of getting funded, a well-grounded decision is essential for the investment professional (Ibid; Hassan and Lecce, 2007). Possible information gaps between the PE investment professionals and entrepreneurs are common, as the investment professionals tend to concentrate in industries with high level of uncertainty and cannot directly observe the competencies and motivation of the entrepreneurs (Compers and Lernes, 2000).

Research in psychology further supports the reasoning above as studies have indicated that credibility of the source is an essential factor to a disclosure's credibility (Birnbbaum and Stegner, 1979). Source credibility in an investment context has further been found in studies showing that the management's credibility is important for the credibility of financial disclosures (Williams, 1996; Hirst et al., 1999), and a positive relationship between investors' perception of management's credibility and their willingness to invest in the firm has been found (Kennedy et al., 1998).

Further, there are primarily two approaches on how to decrease agency problems. The former states that there are no optimal contracts for risk reduction, contracts are always incomplete and therefore the only solution is to focus on what there is to do after the contract has been initiated and negotiated (Hart, 1995). However, as the more classical agency theory - the principal-agent approach states that there are ways of forming the optimal contracts (Jensen and Meckling, 1976), which can be done by pre-investment screening or due diligence so that information asymmetries can be decreased and as such create better contracts (Van Osnabrugge, 2000). As earlier mentioned, this thesis aims to examine the investment process towards making an investment decision, which makes the latter approach more applicable.

### 2.2.2 The Principal-Agent Approach of Reducing Information Asymmetry

From the principal's perspective, problems such as adverse selection can be limited by incurring screening costs to reduce the information asymmetries and to influence the agent's behavior, such as formulate more comprehensive contracts (Van Osnabrugge, 2000). According to the principal-agent approach, there are two main approaches of reducing the problems of information asymmetries, the behavior- and the outcome-based contracts. In the behavior-based contracts the appropriate behaviors of the agent are agreed upon in order to avoid undesired behavior and the principal will incur monitoring costs to ensure this (Jensen and Meckling 1976). These contracts therefore require that the principal can observe the behavior of the agent. If that is not the case, the outcome-based contracts are more suitable. In outcome-based contracts, the principal create appropriate incentives for the agent and his/her performance (Jensen and Meckling 1976).

To summarize the information asymmetry problems, the principal-agent approach suggests that, after the investment professionals have verified certain variables in the investment process by evaluation procedures, the reduction of information asymmetry starts and can be further reduced by contract formation, which is dependent upon whether the actions of the agent are observable or not. The following *figure 2* illustrates the assumption of the reduction of the information asymmetry.

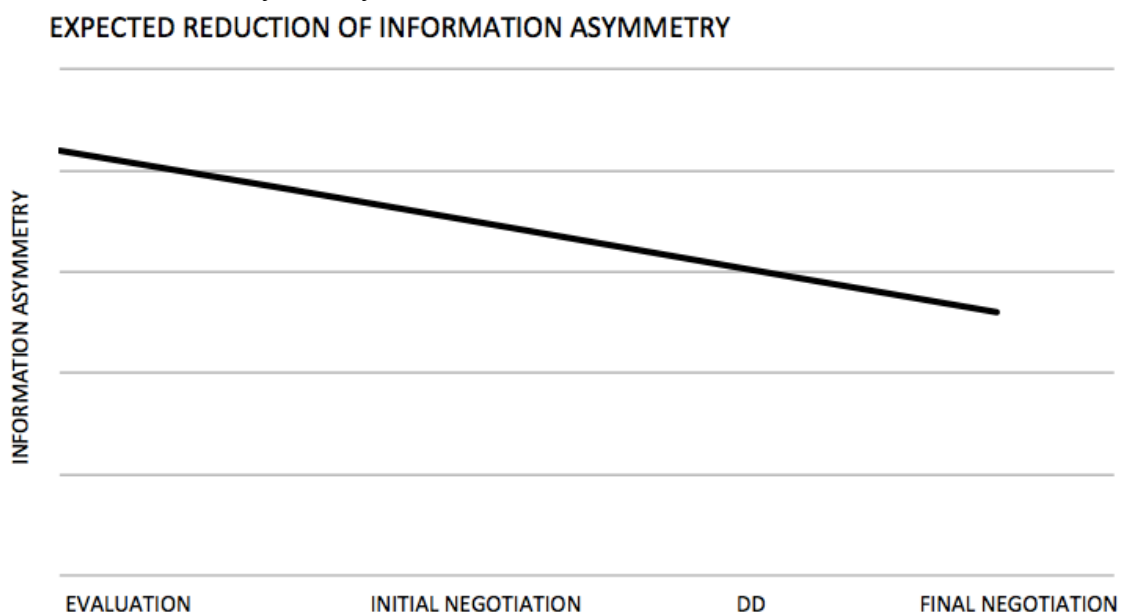


Figure 2 - Illustration of assumed information asymmetry reduction throughout the investment process

In order to reduce the information asymmetry during the investment process, it is reasonable to assume that certain steps or procedures are undertaken in order to realize this. Those steps shown in the *figure 2* will be further explained in the next section, where the PE investment process will be presented to illustrate the stages involved and based on the theory of information asymmetry, the investment professionals are assumed to reduce the asymmetries of information proportionally along the investment process.

## 2.3 The PE Investment Process

EVCA (2007) has mapped out the PE investment process and what actions the PE firms are undertaking at each step. As *figure 3* shows, the process consists of five stages and those imply a set of activities for the PE firms. The first stage, the reviewing of the business plan, might involve activities such as the assessment of the company in terms of growth potential, skillset of management or the return on equity for the fund's investors. Secondly, in the initial negotiation stage, the valuation of the potential investment is conducted. Further, the means of financing, most commonly equity and/or debt, are determined. After this, an offer letter is sent out, setting out terms and conditions for the next stage in the procedure, namely the due diligence process. During this stage, external help might occur, such as from lawyers, tax advisors, accountants etc. that will help the PE investment professional to analyze all aspects of the potential investment. The final negotiation stage completes the investment decision process by using all information that has been gathered throughout the process as background for the contract about to be signed. Lastly, the monitoring stage is the PE fund's involvement and steering in the bought company. As the last step covers post-investment activities this will not be considered in this thesis.

### INVESTMENT PROCESS

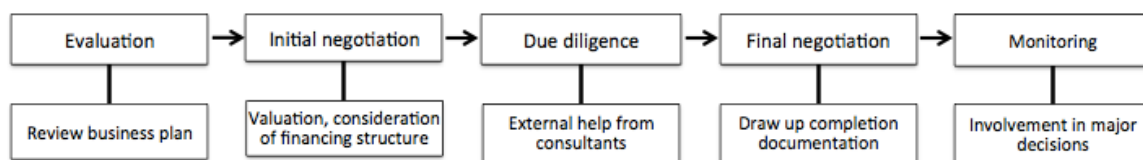


Figure 3 - PE Investment Process. Source: Modified EVCA (2007) illustration of the investment process

Further, most academic research about investment processes are focusing on VC firms and the studies of Tyebjee and Bruno (1984) and Fried and Hisrich (1994) have been widely used in previous research when trying to conceptualize the investment process of VC firms particularly. Even though the conceptualizations of the research are based on similar structure of the PE investment process explained by EVCA (2007), the study of Fried and Hisrich (1994) indicates that some differences might exist as it resulted in another structure of the investment process, where the evaluation and initial negotiation stages are divided in two stages respectively due to different underlying objectives of these stages. Thus the findings imply that the structure of the investment process can differ from previous results. Silva (2004) argues that the investment process is more of an interactive process as some of the activities take place simultaneously, rather than sequentially. Further, as the PE investment professionals work with the pressure of creating value to the fund providers, through different strategies, they must demonstrate competent behavior in the stages of the investment process, before investing (Van Osnabrugge, 2010). Such competent behavior could be the use of certain investment criteria in the investment process. What remain to be presented is what criteria previous research has focused on.

## 2.4 Previous Research on Investment Criterias

There is extensive research about the investment criteria used within the PE industry, mainly with the purpose of mapping out the most used criteria of VC when assessing potential risk and return or trying to assess the uncertainty of the criterias. The study by Tyebjee and Bruno (1984) is one of those focusing on the investment process of VC and the criteria used for assessing return and risk. The findings were five underlying dimensions of the process: market attractiveness, product differentiation, managerial capabilities, environmental threat resistance and exit potential (Tyebjee and Bruno, 1984). The results of the study were that expected return is determined by the first two dimensions and that perceived risk was determined by the following two dimensions (Ibid). Further, the study indicates that the criteria of market attractiveness are usually occurring in the beginning of the investment process, and are sooner accompanied with product differentiation, managerial capabilities and environmental threat resistance criteria.

Further, MacMillan, Siegel and Narashima (1985) studied the most important criteria VCs use to decide on funding new ventures and the results shows that 5 of the top 10 most important criteria were focused on the entrepreneur's experience or personality. Further, Silva (2004) has studied the VC decision-making process and criteria, the findings also imply that VC firms tend to focus most on the entrepreneurs. However, the business idea, sustainable advantages and growth potential are also considered during the process, while the financials do not play a major role in the selection of early-stage projects (Silva, 2004).

In a more recent study, Kollmann and Kuckertz (2010) have developed the study of MacMillan et al. (1985) and their findings suggest that VCs should stress those investment criteria that have proved to be of high relevance and high uncertainty. The study results in that entrepreneur criteria are of most importance due to the management's impact of the business success and the difficulties of assessing it (Kollmann and Kuckertz, 2010). Further, the uncertainty of the criteria changes throughout the investment process. In the beginning of the process, criteria such as innovativeness and investment strategy fit are rather easy to assess, while other aspects such as the entrepreneur, market and financial criteria are of more average uncertainty (Ibid).

Further, Kollmann and Kuckertz (2010) found that the perceived uncertainty changes when the investment process progress to the later stages, as the assessment of market and financial criteria get more uncertain than the entrepreneur assessment. The market and financial criteria remain the most critical criteria, and the entrepreneur criteria get less uncertain to assess (Kollmann and Kuckertz (2010). The findings of Kollmann and Kuckertz (2010) imply that criteria might be of varying importance along the investment process in the question of reducing uncertainty, however, the reason why these criteria are used when assessing potential investments are not considered.

As indicated above, positive influences from the entrepreneur can be found in a variety of prior research, however, Zider's (1998) findings imply that regardless of the talent of the entrepreneurs, they rarely receive funding if their businesses are in low-growth market segments. However, during high growth periods, difficulties in distinguishing the good investments from the bad ones might occur due to similar financial performance and growth (Zider, 1998).



The criteria from previous research has resulted in four categories that will further be used to represent the theory: market criteria, entrepreneur criteria, financial criteria and product criteria, and those have been placed according to where in the investment process they have been assessed or are argued of being most important and effective. The environmental threat criteria presented by Tyebjee and Bruno (1984) has further been categorized into market criteria. The variables behind the market criteria are based on the size, growth and customer accessibility but also external factors such as barriers to entry and sensitivity of business cycles (Tyebjee and Bruno, 1984; MacMillan et al., 1985; Kollmann and Kuckertz, 2010). The variables behind the entrepreneur criteria are according to the research skills in business, management capabilities, personal characteristics and track record (Tyebjee and Bruno, 1984; MacMillan et al., 1985; Silva, 2004; Kollmann and Kuckertz, 2010). The financial criteria were assessed through, the exit potential and future opportunities of capital gains (Tyebjee and Bruno, 1984). Lastly, those of product criteria were uniqueness, patents, technical edge and profit margin (Tyebjee and Bruno, 1984).

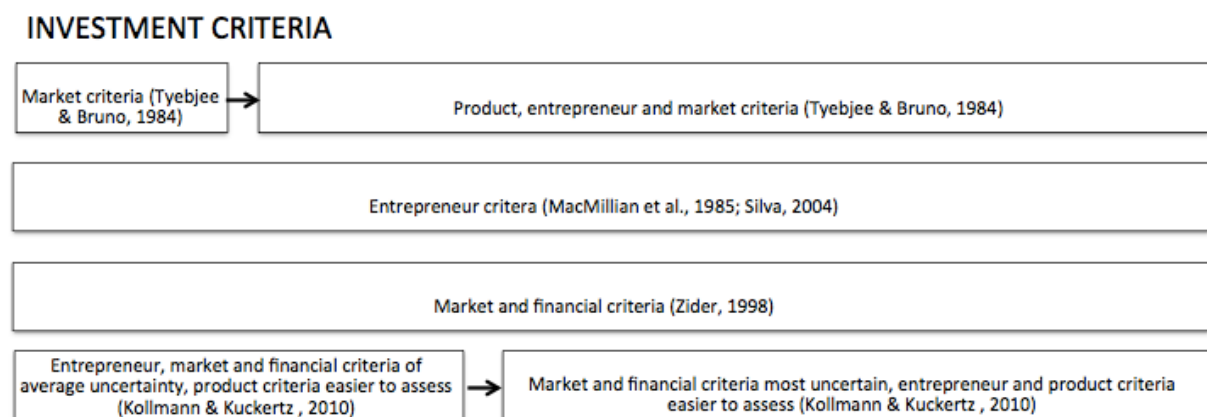


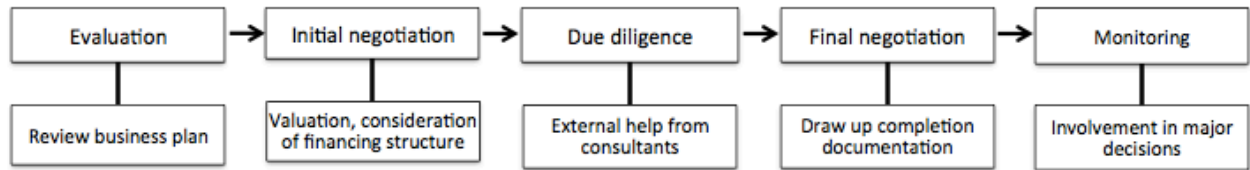
Figure 4 - The investment criteria according to previous research

The investment process and criteria used in previous research will be presented in the next section, along with assumptions of how criteria might differ between the PE firms' strategies and how information asymmetry is assumed and illustrated to be connected to the process and criteria.

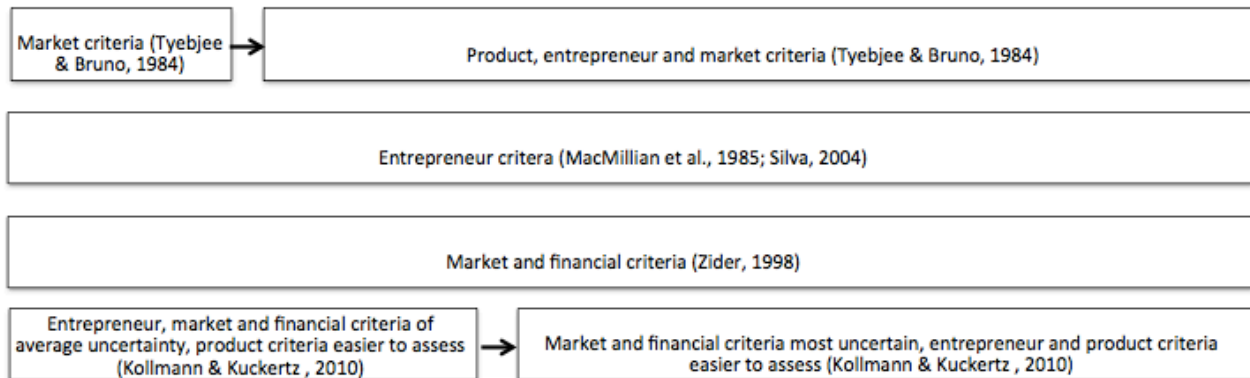
## 2.5 Theoretical framework

The theory presented above can be summarised in a theoretical framework as shown in *figure 5*, which uses the theory presented in a slightly different order with the purpose of creating a more logical sense.

## INVESTMENT PROCESS



## INVESTMENT CRITERIA



## EXPECTED REDUCTION OF INFORMATION ASYMMETRY

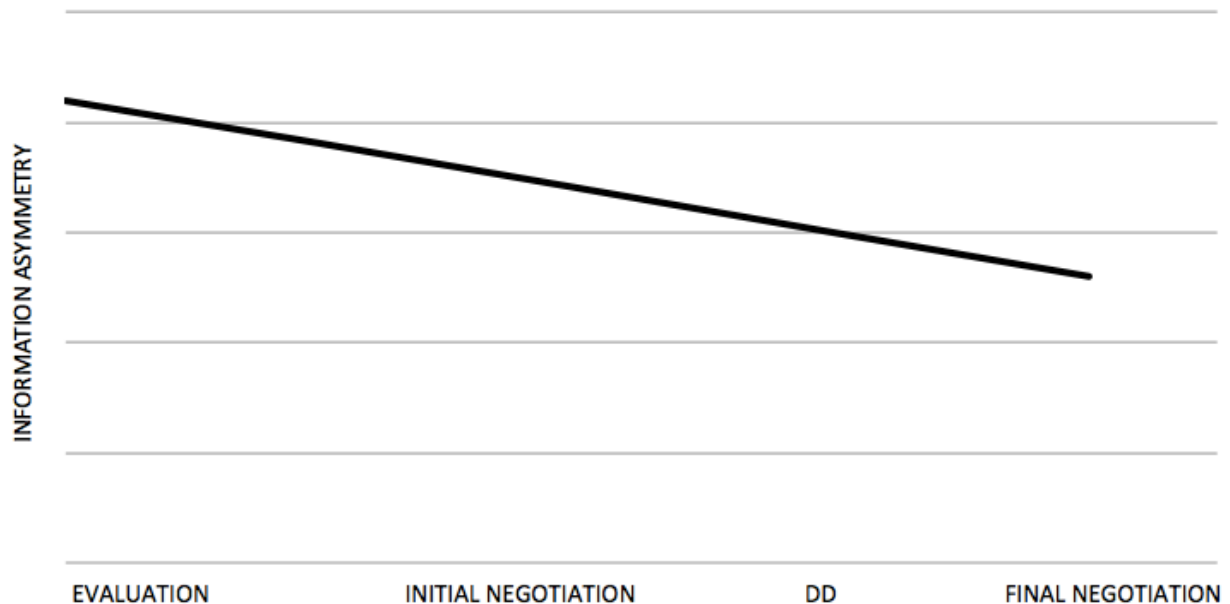


Figure 5 - Theoretical framework of the investment process, investment criteria and an illustration of the assumed reduction of information asymmetry

The theoretical framework follows the investment process structure of EVCA (2007) as it is the recommended form. As previous research has shown, there are no reasons stated of why certain criteria in the investment process have been applied. Further, previous research have focused on VC in particular, it is possible that the investment criteria used by PE firms with other strategies, such as GC or BO, differ to some extent. As Paul et al. (2007) argue, the investment process and the assessment of potential investments can be affected by the objectives of the PE firms, particularly if these are differing. Van Osnabrugge's (2000) study

of VC and business angels (BA) confirms that differences exist in the use of criteria due to the differing strategies of the investors. The findings indicate that VC firms are more rule-based and more concerned with reducing information asymmetries in the pre-investment process than are BA, as the VCs are pressured to signalling competence to their fund providers (Van Osnabrugge, 2000). This reasoning could further be applied to the whole PE industry with the different types of PE firms, as the strategies differ in what life cycle phases the firms invest in, or if the investments lead to majority or minority holdings.

Further, Zacharakis and Meyer (1998) show the importance of the type of information available and how it influences the decision process. The study indicates that investment professionals tend to shift their attention according to the information given, and more information seems to shift the focus from the entrepreneur to the market (Zacharakis and Meyer, 1998). The conclusions to be drawn from this could be that the importance of the entrepreneur is critical when the investment professional have limited information about the market, but if they are confident in the market, the entrepreneur is not of equal importance anymore (Zacharakis and Meyer, 1998).

As Hassan and Lecce (2007) argue, the investment process is a tool for reducing information asymmetries. Therefore, as the last part of the theoretical framework indicates, the information asymmetry is assumed to be reduced proportionally by the use of investment criteria along the stages of the investment process. The following section will present the method used for the research.

### **3. Method**

The following section will cover the method conducted with discussions on methodology and choices made for the intended research, to examine the investment process of the PE industry.

#### **3.1 Research strategy**

The research strategy of the study followed a qualitative approach as the study focused on studying a process, namely the investment process and the activities within this process of the PE sector. The emphasis was on exploring and explaining the stages of the process and criteria used in order to create an understanding for the underlying assumptions used. Langley (1999) argues that when studying process phenomena which is fluid and spreads across time and space, a qualitative research approach is more suitable since it takes the context into account, which leads to the consideration of multiple levels of analysis.

To reach an understanding of the studied phenomena, Bryman and Bell (2011, p. 404) mean that studies of an interpretivist nature is applicable when there is a need to make interpretations of the contexts to reach conclusions. The interpretivist logic, namely the research stance where interpretations of the data do not have to follow a rigid structure, was suitable for the study because it sought to include social constructions when analysing the findings of the research. Since studying a process within an organization that constitutes this process, the interest was to understand the motivation behind choices that subjectively made up this specific process.

The study intended to explore new areas rather than test already existing theory, although some theories were used to serve as a background to the investigation. In order to create a pre-understanding for enabling the collection of primary data, previous research can be used as guidance in formulating the main areas within the field (Bryman and Bell, 2011, p.13). This reasoning leads to the connection between data and theory of being mostly of an inductive reasoning, which is associated with a qualitative research approach because theory will as such be induced from the data or findings collected (Bryman and Bell, 2011, p.573). An inductive reasoning was used in the sense to seek patterns of the collected data from the case participants that represent the studied investment process. Also the data in process research is mentioned as rich and complex and in order to make it understandable and useful without removing too much of the dynamism and richness of it, an iterative process between the relationship of data and theory should be used useful (Langley, 1999). As such an inductive reasoning was the emphasis of the study, although having deductive elements as well as an iterative process where the analysis of the data were repeated to reach more discoveries.

#### **3.2 Research design**

The study intended to evaluate the process of investments and this was based on several selected cases of similar characteristics. As Yin (2014, p.62) states, when the focus is on how and why the outcomes occurred and not the outcomes in themselves, the choice of case firms should be predicted to have similar outcomes. In this study, each respondent represents a PE firm that all together represented a case study, where all respondents contribute to the understanding of the investment process.

The case study had an explanatory ambition in an explorative study. Since the study explored a new area within a research field already studied to some extent, the research sought to

explore new findings with a qualitative approach with an emphasis on answering questions of how and why, contrary to previous research within the field (Bryman & Bell, 2011, p.73). The study also intended to render explanations on findings from previous research, mostly quantitative. This approach also opened up for subsequent research to use the study's findings to map out possible future themes of research (Yin, 2014, p.43).

A common concern when using case study research is the generalizability of the results and conclusions derived, but it is argued that case studies can be generalized to theoretical proposals, but not to populations or universes (Yin, 2014, p.21). The aim of case study research is rather to make generalizations to literature than to other cases, namely to expand and generalize concepts from previous research (Ibid.). This is often referred to as the external validity and Yin (2014, p. 48) proposes that in order to construct external validity, the area to which the study's findings can be generalized to should be defined, which has been mentioned in this study. It is also important that the definition of the research question is formulated to fit the research design chosen (Yin, 2014, p.45), which has been a basis when choosing the research design for this study.

### **3.3 Data collection**

The interview questions were based on previous literature and research within the PE industry, finance and entrepreneurship. The literature review consisted of a literature survey of previous research, containing theoretical propositions of the field of study. The research was retrieved from peer-reviewed academic articles and literature, and constituted the theoretical basis for the study. The primary data collection was based on the questions posed during the interviews, these in turn were operationalized from the theory. The articles were retrieved through Uppsala University Library and the database Business Source Complete and some facts were retrieved from industry organizations' webpages.

The main source of data was collected through in-depth interviews, organized as semi-structured interviews, in order to reach a better understanding of the investment process. The data were collected by the researchers through the original source, the case respondents. All of the interviews were made at each respondent's office except from one due to geographical distance. Instead this interview was made via Skype in order to be able to have a face-to-face conversation. Interviews are suitable when conducting qualitative research when the purpose is to understand a phenomena, in this case a process and its underlying meanings, that requires a more substantial understanding than a survey could create (Yin, 2014, p.110).

Further, two interviewers conducted the interview sessions. Bechhofer, Elliott and McCrone (1984) claim that having more than one interviewer to each respondent is an advantage as it allows one of the interviewers to have an active role as the one responsible for the talking, and one to be more passive by observing and making notes. During the interviews for this study, those active and passive interview techniques were conducted in order to make sure not to miss important information from the respondents.

### **3.4 Selection of respondents**

Potential respondents were initially contacted based on the requirement of being a member of SVCA. SVCA is the association for the Swedish PE industry and operate to keep a well-managed PE environment (SVCA, 2017). Another delimitation was that the SVCA members should be part of either the VC, GC or BO categories, as these forms of PE firms were

considered to be representative for examining the investment process since they all represent the Swedish PE sector.

Further, according to Bryman and Bell (2012, p. 713) convenience samples are selected because of the availability to the researchers, a method that has been used in this study. Depending on the access of e-mail information, contact was primarily made with the investment managers or other members of the investment team and secondly, if no such information was disclosed, the researchers contacted the firms' information e-mail. After the potential interviewees had responded and finally approved to participate, meetings for the interviews were scheduled.

The sampling resulted in 10 respondents that were willing to participate in an interview. The method that was used as an inspiration for the data analysis, namely the visual mapping strategy and the grounded theory strategy, as further presented in the data analysis section, proposed that a sample of 5 to 10 respondents is suitable for representation when studying a process (Langley, 1999). Thus the amount of respondents was deemed representative to get an understanding of how the PE investment professionals view and prioritize in the investment process.

### 3.5 Presentation of respondents of the firms

The respondent firms were categorized into VC, BO and GC. The position within the firm of the respondents is further presented to represent the experience of the respondents.

Type of PE firm	Respondent	Position
VC	R5	Investment manager
VC	R8	Investment manager
VC	R9	Business developer
BO	R1	Associate
BO	R2	Investment Associate
BO	R6	Investment director
BO	R7	Partner
BO	R10	Investment manager
GC	R3	Investment manager
GC	R4	Investment professional

Table 1 - Presentation of the respondents

The limitations of the sampling were that the respondents are firms with different missions as the strategies varied to some extent between VC, GC and BO. Therefore, it could be the source for differing results to some extent on the structure of the processes and criteria

presented. Still, the sampling was considered suitable and sufficient to be able to create a guide on representing the Swedish PE sector as a whole.

### **3.6 Semi-structured Interviews**

Based on the qualitative, exploratory and explanatory nature of the study, semi-structured interviews were conducted in order to make the interview process flexible. In semi-structured interviews, there are typically a set of more general questions but no fixed order in which they are asked (Bryman and Bell, 2012, p. 467). The idea is that all the relevant questions will be asked, but if the conversation allows, follow-up questions are welcomed as they help the interviewers to understand what the respondent views as important (Bryman and Bell, 2012, p. 467). Despite the fact that pre-determined questions can be discouraging and limit the interviewee in freely describing the subject (Bryman and Bell, 2012, p. 472), it was arguably the most suitable interview form for the study since the purpose was to understand a certain process, and since allowed the respondents to talk freely about the subjects posed.

In order to answer the research question of the study, an interview guide containing questions and discussion topics was created based on the literature review, in order to operationalize the research question into sub-questions. The interview guide can be found in Appendix 1 and the operationalization of the interview questions are presented in the end of this method section.

The structure of the interview questions followed the recommendations of qualitative interview research by Gubrium and Holstein (2001) that it should contain 10 to 12 questions based on the literature review and a complimentary fact sheet with information about the respondent. The interview questions were divided into three parts, which are main questions that guided the conversation, clarifying questions in case the interviewers could not understand the respondent's answer and lastly follow-up questions that helped the interviewers dig into the subject of the main questions. Follow-up questions ensured that prevalent areas of the theoretical framework was covered if not already mentioned by the respondent when asked to explain about the process.

### **3.7 Operationalization**

As seen in *Appendix 1*, the interview guide started with questions concerning the background and position of the PE investment professional to gain an insight of the his/her experience. The structure that followed was divided into two parts, one concerning the investment process and one regarding the criteria used in the process. Firstly, main questions were posed to get a perception about the investment process at the respondent's specific firm. Thereafter, follow-up and clarifying questions were asked when needed about more specific characteristics of the investment process. The second part contained criteria-specific questions in order to understand when in the process certain criteria were used and the reason behind their use. Further, one of the questions specifically concerned what criteria the respondent viewed as most important for the whole evaluation procedure.

The investment process was assumed to represent the procedure of where the PE investment professional decreases the information asymmetry. The criteria represented the variables that affects the investment process and reduces the information asymmetry. The questions aimed to cover all aspects of the criteria and variables of the investment process. Thus, some areas were considered to cover the understanding of the choices of criteria. Further, the question *why* gave insight in the reasoning behind a chosen criteria.

### **3.8 Analysis and interpretation**

In order to enable a more thorough examination of the interview conversation (Bryman and Bell, 2011, p.482), the interviews were audio-recorded except for two of the interviews where the respondents asked to not be recorded, instead one of the interviewers took notes. In order to enable an analysis of the primary data collected, the recordings from the interviews were transcribed to provide material to be analyzed as well as documenting the material to increase the reliability of the study. The notes from the two not recorded interviews were compiled into more coherent texts. The parts that were used as quotes in the empirics were translated from Swedish to English. The transcribing and translating process also allowed the researchers to review the interview again and process the material. This gave the researchers a chance to reflect upon relevant information, which was an important part of the analytical process of the study.

The analytical strategy used to analyze the primary data collected was to follow the theoretical framework set for the case study. Data can organize and shape the analysis to help highlight relevant issues (Yin, 2014, p.136). The technique used followed a pattern matching logic, which according to Yin (2014, p.143) is a procedure where some of the found patterns of the empirical findings are compared to the theoretical framework. Understanding patterns in events and sequences is argued to be the key to develop theory and provide explanations of sequences of events (Langley, 1999), which was the desired outcome in this study.

The pattern matching was enabled through the categorization into different themes after the processing of the transcriptions. Other unpredicted themes that were recurring by the interviewees that were prevalent in the findings were also categorized and matched into the rest of the themes. According to Paul et al., (2007), this is to find a logic pattern of the findings in order to identify key activities carried out. Although the interpretation of the findings were nuanced by the chosen theoretical predictions from the literature review, it was important for the researchers to be aware of these limitations and thereof not neglect other possible outcomes.

For the presentation of the analysis of the results a visual mapping strategy was used for the possibility of showing several dimensions of the process, while providing a simple overview (Langley, 1999). In this thesis, the visual mapping strategy allowed the presentation of large amount of information graphically, and was also useful when verifying previous theoretical ideas as from the literature review and the theoretical framework. This was a helpful way of mapping out all the phases found in the results as well as showing additional information crucial to understand underlying assumptions affecting the process simultaneously. This presentation of the analysis was conducted in combination with the grounded theory strategy recommended by Langely (1999) in order for the presentation to provide more in-depth analysis and explanations and avoid too mechanical results. This is characterised by more narrative and more accuracy on specific events and categories of the results, such as underlying factors of specific criteria or event (Ibid.).

### **3.9 Ethical aspects**

All respondents were asked prior to the interview if they felt comfortable of being audio recorded. Further, the respondents were able to answer anonymously and informed that questions could be left unanswered if they wished. In order to verify that the answers were



understood correctly, the respondents was given the possibility to give feedback on their answers before publication of the study.

### **3.10 Reliability**

The objective of the reliability of the study was that, if the procedures described in the study would be performed by a later researcher conducting the case study again, then s(he) would arrive at the same results and conclusions. Yin, (2014, p. 49) states that this implies doing the same case over again and not doing a replication of one case's results applied on another case study. In the research, as much as possible of the procedures have been documented. When collecting the primary data, all protocols from the interviews have been disclosed in the study, as well as the transcriptions of the interviews have been documented and are available for the interviewees that request them, which they have been informed about. The operationalization of criteria of the investment process into interview questions has been thoroughly described. This was done to minimize the biases and errors of the study, as well as the interview questions being constructed as open-ended as possible to reduce the interviewer bias.

## **4. Empirics**

The following section will be structured as following. Firstly, the investment process will be presented. Secondly, the investment criteria used by the respondents are mapped out. Thirdly, the perceived uncertainties and risks of the investment process are presented.

### **4.1 Investment process**

The investment process is presented by following the structure suggested by the theoretical framework.

#### **4.1.1 Deal Evaluation**

The majority of the respondents faced potential investments through advisors, their network or by sourcing on their own. However, three of the respondents, R2, R4 and R8, were not or seldom contacted by advisors regarding potential investments. Further, the majority of the respondents were viewing the origin of deal flows from two processes - structured and unstructured processes. The structured processes are lead by advisors from an investment bank or other similar firm. These processes start with the advisor contacting the PE firm and sends out short information of the potential investment, and if it is of interest and fits the PE firm's investment requirements, a non-disclosure agreement (NDA) is signed and investment memorandum (IM) is received, containing information about of the potential investment. The time-frame for this process is dependent upon the amount of competing PE firms.

The unstructured process is often led by the PE firm itself and as R6 stated, such an investment process can be initiated by first observing a trend, and followed by the PE firm contacting the companies that fit into that trend. As R4 described, in an unstructured process the PE firm receives general information about the potential investment, such as financials, a business plan, and sometimes a meeting with management, in order to decide if the investment is of interest. Even in the unstructured process some sort of NDA is signed. The unstructured process are naturally more time-consuming as it requires more from the PE firm when structuring the process on its own. R3 and R10 always had an internal meeting before deciding whether to proceed and contact the company.

#### **4.1.2 Initial negotiation**

If the initial evaluation of a company succeeds and an interest of investing exists, the majority of the respondents started focusing on the valuation. Some respondents, such as R1 and R4, do not meet the management of the potential investment until this stage. As R3, R4 and R10 all stated, the valuation is based on the investee company itself. In a structured process the company specific information is distributed by the advisors. The task of the PE firm is to try to understand and assess if the information is reasonable. Types of analyses are to try to understand the business, the financial and commercial situation of the potential investment and the outlook for the business. R5 emphasized that the younger the company, the harder it is to assess the financial information as it might not even exist any financial statements. In order to be able to make some sort of valuation, the investment professionals assess the information given from the company, and try to decide what information is needed in the future. For more mature companies with financial history, a hygiene factor is to collect and review financial information. After the valuation in a structured investment process an indicative bid is offered, which means a non-binding offer to buy a certain percentage of the company. This

might give the PE firm the exclusive right to further analyze the potential investment, but as R1, R3 and R10 stated, if there are many interested PE firms in the process, it can result in a few selected depending on their valuation and the seller's preferences.

R3 and R8 have internal meetings with the investment committee, in order to really dig down into the business model and financial statements. If the company is confirmed at this stage, a term sheet covering the investment's structure is signed between the parties. The term sheet contains information about the bid, the plan of actions about to be undertaken by the PE firm and the terms and conditions of the deal. R5 that invests in early stage companies, stated that usually the investments will take place through several rounds of investment in order to set objectives for the investee company, which will be set in the initial negotiation stage. However, as the non-binding indicative offer is based on limited information, it is crucial for the PE firms to be able to make the due diligence process of the company. The timeframe after this offer is commonly a couple of weeks before the advisor addresses who have progressed to the next phase in the investment process when the process is structured.

#### **4.1.3 Due diligence**

The due diligence (DD) process is a recurring part of the investment process that was mentioned in all of the PE-firms' investment processes. According to the majority of the respondents, the DD processes are conducted parallel to each other, to limit time. Although one of the respondents, R7, mentioned that the DD processes were performed sequentially in order to limit the processes of being excessive. The DD process aims to minimize all essential risks of the potential investment, although the decision to invest was more or less already decided upon prior to the start of the DD process.

*"It's simply what comes up, the whole DD process is to minimize risks, and you do all of these different parts to really know what you invest in but you can never eliminate all risks" - R3*

The DD process is mentioned as very time-consuming and expensive, as such the PE firms try to limit the processes where possible, still they are very important for the outcome of the investment. When the investment process is structured by advisors, the PE firms normally are still in competition with other firms during the DD process, and the timeline is set by the external advisors as well, which puts pressure on the PE firms to investigate the most essential areas for the case within limited time, although a lot of essential information are already brought forward by the advisors. Moreover, the DD process is the part where the PE investment professionals have access to information shared by the investee company, and dependent upon what areas are out of most importance, these will be further investigated. R4 described the verifying purpose of the DD process:

*"(...) so you could think of buying a house, first you bid on the house and agree upon a price but then you hire a surveyor to ensure that there are no dampness, that's basically what you do in the due diligence" - R4*

The DD process that was always conducted by all respondents is the legal DD, which is always outsourced for the right competencies. The legal DD aims to prepare the best possible agreements, as well as review the investee company's past agreements. This DD was fundamental for all of the firms and initiated as soon as access was given. Thereafter, 8 out of 10 respondents also conducted a financial DD on a routinely basis, the financial DD sought to verify the financial figures earlier presented by the investee company, and to help understand

the company's unique selling point. The financial DD was also mentioned as having value increasing properties, the financial part is where most of the PE firms can add value and their expertise. The two remaining PE firms that did not conduct a financial DD, at least not an outsourced, mentioned that it was due to their investments were in companies of an early phase, so the financial overview of the company could easily be handled in-house.

Furthermore, other DD processes that were conducted was found to differ somewhat between the respondents but there were some similarities of the groups with similar characteristics, the additional DD processes that were conducted, were dependent upon the size of the PE firm, and also what niche the PE firm invests in. PE firms that did not have a specific industry they invest in always conducted a commercial DD, where experts of the investee's industry were hired. Experts were also hired for technical DD, when investing in highly technological firms. An environmental, social and governance (ESG) DD is also normally performed, and R10 added that the ESG DD stream is becoming much more prevalent and demanded. R7 expressed that the commercial DD is out of most interest and usually brings the most valuable information to build on, whilst the financial and legal DD seldom brings anything new, or the information brought forward from these two DD streams are often manageable.

Another DD process that is often conducted is based on the management of the firm, usually performed through psychological tests or through HR consultants. This process is usually performed as a last DD process. This type of DD was described as an essential part by the PE firms that invest in firms of an early phase, especially where the entrepreneurs' track record are unknown, but also when investing in more mature entrepreneurial firms of a smaller size. The DD processes aims to minimize all potential risks with the added information, where the processes serve as checklists.

*"(...)when you've reached that far in the process, you want to complete the investment and you've become more and more in love with a company the more you have engaged, so actually it is quite uncommon that you interrupt and cancel everything" - R3*

Concurrently, the additional information from the DD processes could also shed light on new findings, depending on if it is negative there could be potential deal breakers. The majority of the respondents confirmed that real deal breakers at this stage are rare, but there could be misunderstandings because of information that had previously been left out by the investee firm. Issues regarding customer agreements, contracts, trust and unclear negotiations are some examples, but these are normally solved by negotiating and changing terms of responsibilities in the final contract.

#### **4.1.4 Final negotiation**

The final negotiation is based on the outcome of the prior DD processes, as long as there has not been any disruptive information that ends the deal. Although, if some information has occurred during the DD process that makes the investors reconsider the valuation and the price, terms and conditions of the investment are renegotiated before signing any contract. The final negotiation is the phase before the holding period, where the PE firm manages the firms they have invested in towards their common set goals and preferred exit.

*"Then you proceed and sign the papers, shareholders agreement, investor's agreement and holders agenda and stuff like that, and then you pay the money and we start working actively*

*with the company. We always do active investments and are active investors, so we always take a seat on the board” -R8*

In this last contracting phase, it differs to some extent between the respondents, considering their last approval body for the investment, either a committee or board approval is necessary, although there was one respondent, R5, that mentioned that the board decision had already been taken before this phase. A majority of the respondents stated that most of the terms and conditions are decided upon prior to this phase, and this last phase is more of a last control assurance instance. Several of the respondents added that usually there is no reason for the board to deny the investment to be implemented, since the investment proposal has already passed many phases of scrutiny and consideration by their own experts within the PE firm. In the case where the PE firm is still in competition with other firms over the investment usually led by an advisor, the final negotiation will lead to a confirmatory bid and then negotiation follows with attempts to increase the bidding offer.

## **4.2 Investment criteria**

In this section, the investment criteria mentioned by the respondents are presented. The following criteria are categorized according to those criteria that previous research has focused on.

### **4.2.1 Market criteria**

The majority of the respondents mentioned that the market criteria are the ones that initially are considered in the investment process, and this regardless of PE firm strategy. The GC respondents, however, indicated that market criteria along with financial criteria are of equal importance. Only one respondent, R8, focused on product criteria first and foremost, before moving on to the market criteria.

The assessment of the market criteria is according to all of the respondents first regarding the size of the market, and then the size of the potential investment in relation to the market. The majority consider those criteria to get an outlook of how much more the potential investment can grow. However, R6 was the only one saying that the growth of the market must not be high, as the most essential factor is sustained competitiveness.

*“A market is seldom only that one component, a market is a total solution of several things, so what is most value adding and where is it reasonable that it occurs?” - R8*

Further, the majority of the respondents mentioned the potential investment's competitors and how the company is positioned. As R2 mentioned, it is important to understand how unique the potential investment is in relation to its market. The uniqueness can be a certain customer relationship or higher prices than the competitors. R4 also emphasised those areas, along with potential substitute of the company's products. R4 and R5 also stressed the entry barriers and that those are essential to assess since they point out how stable the company's position is. R5, who invests in young companies, also mentioned the importance of the length of the sell and innovation cycles of the product. Further, both R4 and R7 focuses on trends in the market as they want clear fundamental trends like demographic, digital or environmental to be visible. R4 explicitly mentioned structural growth trends - trends that are not affected by the economic situation - and the importance of such trends.

#### 4.2.2 Entrepreneur criteria

The entrepreneur criteria considered were according to the majority of the respondents commitment and motivation as those factors will help the business to flourish. These criteria are more occurring later in the investment process, after the initial evaluation of the investee companies. According to the BO respondents, the entrepreneur criteria were the most important criteria during the initial negotiation phase, and the majority of the VC respondents agreed. However, among the GC respondents, the entrepreneur and product criteria were of equal importance in this phase.

The majority of the respondents also stressed business knowledge and business mindset as an important criteria as a knowledgeable management will understand the business and make better decisions. Further, two of the respondents, R7 and R8, also sought for technical competence when reviewing the entrepreneur criteria, as such knowledge was considered to help the company to position itself on the market. The track record of the entrepreneur is further something that three of the respondents, R1, R5 and R9, ask for as prior experience in entrepreneurship might help avoid mistakes. R5 also emphasised the persistence of the entrepreneur.

R4, R5, R6 and R10 emphasised the importance of management as those people are the ones who will make the business achieve its goals. Two of the respondents, R8 and R10, stated that social skills are important as a good leader tend to most often have charisma. However, R6 stated that they do not look for any specific characteristics of the management as they focus on the business, but the management is crucial for the business and their assessment focus is on the composition of the team, the control and how skilled they are on recruiting talents.

The team is also considered for some respondents, as R3, R4 and R10 meant that it is crucial for a business to have a team that complement each other when striving towards the same goal in order to deliver what is promised. R4 specifically stated that they prefer gender equal teams as those show good performance.

*“If you feel that this is a good team that can deliver good stuff, then you can ignore some other aspects, then you can accept that they’re in a earlier phase for example” -R8*

To conclude the entrepreneur criteria, the majority of the respondents mentioned that these criteria help creating trust which is considered very important for the future development of the business. The gut feeling as R10 explicitly stated, best assesses the trust.

#### 4.2.3 Financial criteria

The financial criteria were according to all of the respondents, regardless of the PE strategy, the second most occurring criteria in the investment process and those criteria are considered from the very start of the process. The GC respondents however, as earlier mentioned, indicated that the financial criteria are of equal importance as the market criteria.

According to the respondents, the majority of those investing in companies in an early stage in the company life cycle are firstly checking that all of the financial information is correctly reported, as some companies according to R8 are not familiar with financial reporting procedures. As R5 stated, younger companies’ financial criteria are harder to assess since the numbers either do not exist or are a guess. The respondent also put a lot of resources on assessing the exit potentials. This assessment is in focus from the very beginning of the

investment process. Further, cashflow of the companies is the criteria mostly mentioned when focusing on the financials, as the cash flow tells something on the liquidity of the company and thus how well it is positioned to pay its expenses. Further, the majority focus on the turnover and profitability of the company as those parameters tell how desirable the products or services are. As R6 stated, they do not even contact the company if it is not already profitable. Further, the majority stressed the financial growth potential. R6 also stressed the historical growth of the company. R7 also emphasized the inventory and customer receivables as such factors are important to assess if analyzing producing companies, since they are easily giving misleading earnings before interest, taxes, depreciation and amortization (EBITDA). R10 also focus on the EBITDA and try to compare the stated numbers by the company with the numbers the due diligence has resulted in, to try to create their own perception of the situation.

#### **4.2.4 Product criteria**

The product criteria are as earlier mentioned the first thing R8 was focusing on in the investment process. The other respondents, especially BO firms, also considered product criteria early in the investment process but those tend to get attention after the market and financial criteria first have been considered. The GC and some of the BO respondents did not stress product criteria until the initial negotiation phase in the investment process, after the entrepreneur criteria have been considered.

The majority of the respondents are focusing on the customers when assessing the product or services of a potential investment. This is done in order to understand the customer and what they want, as those insights can be crucial for the future of the business. R3, R4 and R5 especially emphasized the differentiation of the potential investment as an important factor.

Further, the technique of the product or service are also according to the majority of the respondents assessed. The scalability is also claimed being of importance for R9 and R5 when assessing the potential investment. Closely connected to technical aspects of products and services are the possibility to protect the idea. Patents are according to R5, R8 and R9 of importance as those reduce the risk of competitors. For R6 and R8, the product is the first factor they fall for and the product criteria are therefore of importance in the beginning of the investment process. However, the majority tend to focus on the product later in the process, after having reviewed the market criteria.

#### **4.2.5 Other criteria**

The following criteria are those of importance according to the respondents, and have not been focused on in the previous research.

##### **4.2.5.1 Sustainability criteria**

R1, R2, R4 and R10 emphasized the environmental and socially related criteria through the investment process, and those are especially occurring in the due diligence phase. As R2 and R4 stated, there are two perspectives on sustainability factors. The first one is about minimizing risks, such as reduce dangerous emissions, avoid child labor and conduct sustainable production processes, and the second one is about the value-adding aspect of sustainability aspects. They believe those factors might have a commercial value as the customers are willing to pay for environment-friendly products. However, it is difficult to assess this value-adding aspect of environmental aspects as it is complicated to quantify it.

#### **4.2.5.2 Infrastructure criteria**

Three of the respondents, R4, R5 and R8 claimed that the infrastructure of a product or service, taking IT infrastructure as an example, is of importance and that those aspects affect the scalability of a company. In the assessment, the age of the platform might be of importance as it is costly to invest in new equipments or upgrades.

#### **4.2.5.3 Relationship criteria**

R5, R7, R9 and R10 all mentioned the importance of the relationship between the entrepreneur and the PE firm.

*“(...) because the founders want to build a company for the rest of their lives, they wanna build it big and nice, which is okay of course, and we respect that but then maybe they shouldn’t include private equity, maybe it would be better with some other people” - R5*

According to R5, congruent goals, chemistry and a good relationship are essential as they otherwise will meet obstacles in the development of the company.

### **4.3 The uncertainties throughout the investment process**

#### **4.3.1 Perceived uncertainties of the investment process**

All of the respondents meant that the investment process per se was to reduce the inherent risks and uncertainty with the potential investment. Risks and uncertainty are present in different shapes along the whole investment process as well as in the holding period, the respondents are well aware of the impossibility to reduce all risks. Their task partly is to manage uncertainties by analyzing, predicting and quantifying risks. Risk assessments are described as integrated in all parts of the investment process, where the possible impact and manageability are considered against possible return. The areas of concern were to some extent related to the areas of DD that was specifically conducted, which clearly sought to minimize the uncertainty these areas.

#### **4.3.2 Perceived uncertainties of the entrepreneur and the relationship**

A lot of the uncertainty expressed by the respondents concerned personality aspects of management/ entrepreneur, that are more difficult to verify in the investment process, that could become risks and problems at a later stage. Despite the fact of informal as well as formal evaluations of these aspects, misjudgements of these assessments are easily made, where both over- and underestimations occur.

The PE investments involves a lot of negotiations, agreements and obligations towards each other between the investee company’s management and the PE investment professional, which implies a degree of personal relations, where a degree of personal chemistry is essential.

*“(...) you think that people are always rational but it’s not like that, people want to work and do business with people they think are reasonable and that they like, so it’s a lot about personal chemistry” - R4*



Areas prone to constitute more severe risks for the investment were mentioned as more difficult to predict, manage and control, these were to some extent different between the respondents but most of them with a common denominator, namely the human factor.

*“Another challenge is to be able to cooperate and together come to a decision, to be able to create value together, it’s more mentally and personally because you’re dealing and working with humans, not real estate for example” - R7*

The challenges mentioned were the trust for the entrepreneurs and the cooperation and consensus between the entrepreneurs and the PE firm.

#### **4.3.3 Perceived uncertainties of the market and the product**

Another area of uncertainty that was mentioned by the respondents was factors related to the market. The external environment is obviously more difficult to change than internal factors within a firm, but much of the concern described is regarding the adaptability to the external environment that is becoming more complex. R4 gave several examples of struggles for the sector with the present market situation, where one of the challenges was that many industries and products are becoming more complicated and fast changing, a consequence of globalization and digitalization. The situation brings many opportunities considering scalability, where many firms can grow faster, but on the contrary more markets face the threat of more drastic changes, resulting in bankruptcy. The bottom line is that many firms that look promising in today’s market could in three years time diminish due to faster and more interchangeable market changes, which also complicates the valuation of the investment process.

All of the respondents operate on the Swedish market and solely this market is mentioned as too small to focus on especially with higher competition among PE firms. This complicates the situation in where PE firms want to specialize in certain industries or geographical areas only, since there will not be enough firms to invest in. Despite this, Sweden in particular has been a good market with many good technological companies in the growth segment with early adopters in using IT systems. However R8 who specializes in FinTech firms of an early phase, finds no difficulty in finding investments on the Swedish market, but adds that it is much easier now than before when their focus was on B2B, biotechnology and life science.

R5 commented on the best concept to manage PE investments, namely to focus more time on the successful investments rather than the struggling ones, in order to get an as good exit as possible. Since the Swedish market is small, such treatment could impair the reputation of the PE firm as they need to take as much responsibility for every investment made and complete the common plan for the investment. Some respondents also admitted that this is a part of Swedish mentality to act responsible and perhaps hold on longer to some investments.

#### **4.3.4 Perceived uncertainties of the financials**

Considering the valuations, the current economic climate with low interest rates, fosters competition that will increase the prices of the investments. R10 explained that the perfect scenario is when a good firm initially contacts them for an investment, where they can have exclusivity and together with management build a plan for the investment and the business, where they are in direct contact with the source of information, and not through intermediaries.

To conclude, the empirics have rendered results showing the investment process of PE investment professionals in Sweden. These findings will be further discussed in the following section and a new investment process model analysed from the empirics will be presented.

## 5. Analysis/Discussion

Henceforth, the description of the new model is presented, as well as analyses of the process, the criteria and the information asymmetry in accordance to the theory. After the discussion the thesis ends with a conclusion and further research proposals.

### 5.1 Investment process

As the results indicate and as shown in *figure 6*, there are two common ways of the investment process, the structured and the unstructured process.

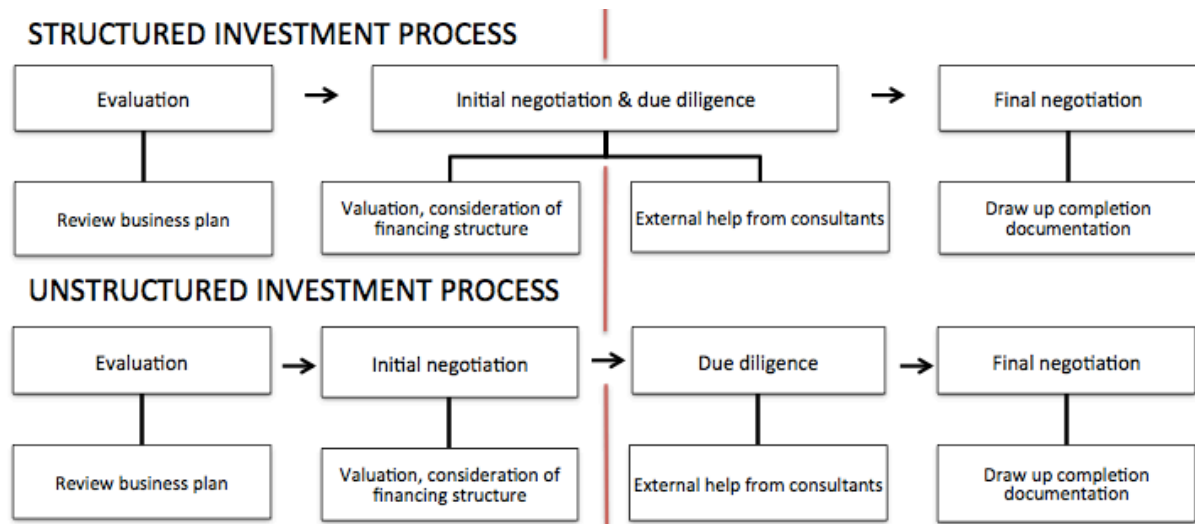


Figure 6 - the investment process according to the respondents

In the structured investment process, external advisors are running the process and the PE firm is often subject to competition. This competitive landscape makes the initial negotiation and due diligence stages of the investment process in the theoretical framework a merged stage, as those activities are occurring parallel to each other. In the unstructured process, the investment process of the theoretical framework is a more suitable description, even though some stages according to the results, such as the evaluation and initial negotiation, tend to occur parallel here as well. The major difference between the structured and unstructured investment process is thus that the PE firms tend to have more control in an unstructured process as there is most often no competition of the potential investment.

Under the DD process all of the respondents are using legal and financial DD in order to verify their analyses from the previous stages of the investment process. Even though it is not required to hire external consultants to conduct these DD activities, it is common practice in the industry, creating trust and some sort of quality stamp of the investment professionals' assessments. Other DD streams that were emphasized by the respondents were the IT infrastructure and sustainability DD processes, where the former is about the platforms, or IT landscape, of the potential investment and the latter about the ESG aspects of it, and the dimensions of IT and ESG criteria will be further discussed in the following section.

Further, a red line between the initial negotiation and the DD stages in the investment process is drawn in order to illustrate how the underlying objective of the stages tend to shift between the two parts. As the first two stages of the investment process, the evaluation and initial negotiation stages, tend to focus more on creating a perception and map out criteria of the

potential investment, whilst the DD step is more a verification of the analyses already made. Consequently, in comparison to the theoretical framework, the investment process can be seen more as two processes in one - the perception-creating and the confirmatory process. Although the DD process can be expected to produce confirmatory value to the investment professionals, it is still relevant to question whether the total investment process should be seen as one comprehensive process or two processes with different objectives and executors. Further, most of the activities performed, and the use of criteria by the investment professionals, mainly occur in the first phase. According to most of the respondents, the DD process tend to be viewed simply as a necessary stage in order to maintain some sort of credibility.

As Silva (2004) claimed, the investment process is an interactive process as some of the activities take place simultaneously, rather than sequentially. This was further confirmed by the results, however, some characteristics of the investment process tend to be more interactive than others. The difference between the structured and unstructured processes as illustrated above indicates that the red line representing the division of the objectives is more blurred in the structured processes. This ambiguity can be due to the initial information in the structured process coming from external advisors instead of the investee company itself, giving more perceived trust among investment professionals during this merged stage where the initial negotiation and DD stages are perceived as combined. In the unstructured process, however, the stages of the investment process tend to be perceived as more sequential and thus the investment process is easier to divide into a perception-creating and confirmatory process. The reduction of information asymmetry along these processes will be discussed after the investment criteria have been analyzed.

## 5.2 Investment criteria

The respondents have been divided into their strategies as PE firms in order to see if there are similarities or differences between the strategies as this might give new insight of the PE investment process as a whole. An aggregated criteria summary has also been created in order to see the overall criteria used in the PE industry. The order of all criteria is ranked according to the prioritization perceived by the respondents.

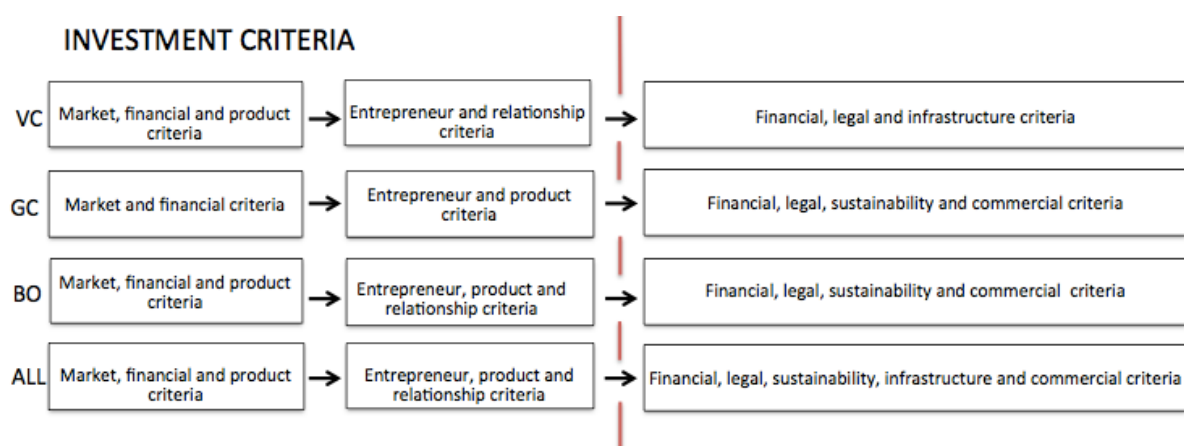


Figure 7 - the investment criteria according to the respondents

### 5.2.1 Market criteria

As seen in *figure 7*, market, financial and product criteria are more common in the first stage of the investment process. The order of the criteria in each box illustrates the ranking of the criteria based on the respondents' perceptions. In accordance to Tyebjee and Bruno (1984) and Zider (1998) the market criteria of a potential investment are of great importance when initially analyzing the company. As the respondents indicate, the market criteria set the outlook of the whole investment and seem to initially be the most crucial variable to proceed with the investment. The size, potential and competition of the market are the most prominent sub-criteria as those are motivated as the best ways of assessing the future of the investment. The reason why market criteria are used are the indication of the growth potential, and as the majority of the respondents mentioned, the attractiveness of the potential growth is due to many underlying factors including the external environment and financial aspects, to mention a few. In comparison the underlying criteria of the market assessment are in accordance to the theory, where it is also stated that the market criteria are based on the size, growth and customer accessibility but also external factors such as barriers to entry and sensitivity of business cycles (Tyebjee and Bruno, 1984; MacMillan et al., 1985; Kollmann and Kuckertz, 2010).

### 5.2.2 Financial criteria

The financial criteria are related to the market criteria as the market information set the foundation for the financial growth and cash flow streams of a company. This further show that the financial criteria per se is complicated to examine as the assessment of all of the criteria can be viewed as an interactive process. The financial criteria bring insight on the potential growth and exit opportunities, and as R3 mentioned, GC firms tend to initially have higher focus on the criteria relating to financial aspects with growth opportunities, as the respondents tend to rank the financial criteria as high as the market criteria. This is reasonable due to the strategy of GC firms, as their investee companies are in the growth stage of the company life cycle, these companies are facing rapid growth thus other factors than financial and market related ones become secondary. However, as the GC firms invest a minority share compared to BO firms, the GC investment professionals are not as dependent upon the entrepreneurs to reach their desirable exit, as such the financial criteria is deemed more crucial for the GC firms to assess growth and exit. This is in contrast to the findings of Kollmann & Kuckertz (2010), that claimed that the management-related criteria are of most importance due to the management's impact of the business success and the difficulties of assessing it. Further, contrary to the findings of Silva (2004), the VC respondents did value financial criteria and even assessed it before assessing the entrepreneur criteria. Thus, the financial criteria used by the respondents tend to be of higher importance than the theoretical framework suggests.

### 5.2.3 Product criteria

In contrast to what Zider (1998) states, the market and financial criteria are not the only criteria of importance. Before moving onwards to the initial negotiation step in the investment process, the product criteria are also considered in the evaluation stage according to some of the respondents. As Kollmann and Kuckertz (2010) stated, the patentability of the product or service is easier to assess at later stages of the investment process. However, as *figure 7* shows, the VC and BO firms tend to focus on these criteria early in the process and this could mainly be due to the focus of some of the PE firms, since some of them invest in

technological-oriented companies, while the GC firms tend to focus on these criteria later in the investment process. Due to the IT development, the VC and BO firms focusing on product criteria early on in the investment process, tended to view specific aspects such as patents and technological advancements as well. However, similar to the financial criteria, these product criteria are also coupled with market information in order to put them in a context, making the product criteria somehow integrated to the market criteria as well. As the theoretical framework suggest, the underlying criteria of the product aspects is uniqueness, patents, technical edge and profit margin. Those criteria are indeed considered by the respondents, but the difference is that the product criteria also tend to be coupled with market specific criteria.

#### **5.2.4 Entrepreneur criteria**

The entrepreneur criteria tend to, according to the majority of the respondents, be of great importance throughout the investment process. The characteristics of the entrepreneur, such as track record, business and technical know-how, commitment and motivation are considered crucial for the success of the business.. However, these criteria are more prominent under the initial negotiation stage as the market, financial and product criteria are the ones the investment professionals initially tend to focus on in assessing a potential investee company. Since the first meetings with the entrepreneurs are usually not until the initial negotiation stage, especially not in the structured investment processes as these tend to follow a stricter structure due to the competition among the PE firms.

Further, the respondents stated that the entrepreneur criteria are assessed in order to form an opinion about the person and his/her potential of growing a business. These criteria were also examined to assess the personality of the entrepreneur, and the willingness to cooperate. The majority of the VC and BO respondents perceived and mentioned that the entrepreneur criteria are the most important criteria for the deal, however, this is questionable as the results showed that market, and to some extent financial criteria, in practice tended to be more crucial for proceeding with the investment. The GC respondents indicated that the product criteria is valued equal to the entrepreneur criteria in the initial negotiation stage.

As claimed by Zacharakis and Meyer (1998) the importance of the entrepreneur is critical when the investment professional have limited information about the market, but if they are confident in the market, the entrepreneur is not of equal importance anymore. The reasoning of Zacharakis and Meyer (1998) could to some extent be applied to GC firms as they tend to focus equally on the product and the entrepreneur, as the product criteria might involve market dimensions as well. However, the results of this study do not generally contribute with evidence of the reasoning of Zacharakis and Meyer (1998) as BO firms tend to a large extent focus on entrepreneur criteria despite that these investment professionals invest in more mature companies offering historical information.

To conclude the entrepreneur criteria, to some extent the underlying criteria mentioned in the theoretical framework: skills in business, management capabilities, personal characteristics and track record (Tyebjee and Bruno, 1984; MacMillan et al., 1985; Silva, 2004; Kollmann and Kuckertz, 2010), are similar to the answers of the respondents. However, the findings of this study seem to contradict the reasoning that the entrepreneur criteria are of less importance when investing in more mature companies.

### **5.2.5 New criteria**

VC and BO respondents mentioned the relationship between the entrepreneur and the investment professional as important criteria for progressing in the investment process. Mainly, having a common goal with the investment, chemistry and a good relationship seemed to be most important. These criteria have not been mentioned in the research previously presented and thus these are new areas that should be mentioned. These findings could be due to these criteria being more specific within a Swedish PE context, where a relationship between the investment professional and the investee company tend to be characterized by mutually responsible cooperation. The reason why specifically VC and BO firms tend to focus on the entrepreneur-investment professional fit could be explained by the strategies of the firms. VC firms are investing in early stage companies and as the results imply, the entrepreneur criteria could be more decisive due to lack of other information available. The BO firms, however, invest in more mature companies with the purpose of improving the business through changes such as efficiency improvements. As the BO firms own a large percentage of the investee companies, it can be assumed that the relationship between the parties becomes important for the collaboration to work.

As mentioned in the introduction, the digitalization has had a major impact on current business sectors, putting more pressure on the investment professionals to assess the IT infrastructure of companies offering such products and services based on such platforms. Criteria regarding IT infrastructure have not been mentioned in previous research, which is something that can be predicted to become more considered in future research due to the higher use of technology in all areas of society. This implies that IT knowledge among investment professionals might become a prerequisite. Further, expanded knowledge can also be considered in terms of ESG aspects. As the results indicate, ESG matters are becoming more important among the investment professionals as the demand is increasing from the fund providers and the customers of the investee companies. What is interesting with ESG-related criteria is further that those tend to be included in all perspectives of the investment process as ESG matters can be implemented on all other criteria throughout the investment process. As mentioned by R5, it is difficult to measure ESG matters, as the quantifiability of these criteria are still rather challenging to assess and thus use as direct investment criteria. The ESG criteria are not yet incorporated in the early stages of the investment process, namely the evaluation and initial negotiation stages, it is difficult to conclude whether these ESG criteria really are about to shift the focus of all criteria into more sustainable solutions, or if it is just a trend.

### **5.3 Reduction of information asymmetry**

The information asymmetry that exists between the PE investment professional and the entrepreneur poses as risks for the investment professional, and these uncertainties exist to a varying extent along the whole process. Due to the adverse selection, the success of the investment is highly dependent on the entrepreneur (Fried and Hisrich, 1994). As proposed by Fried and Hisrich (1994) and Hassan and Lecce (2007) it is essential for the investment professional to make well-grounded decisions and try to gather as much critical information on the investee company as possible. The investment process can further help reduce the information asymmetry and the adverse selection risk.

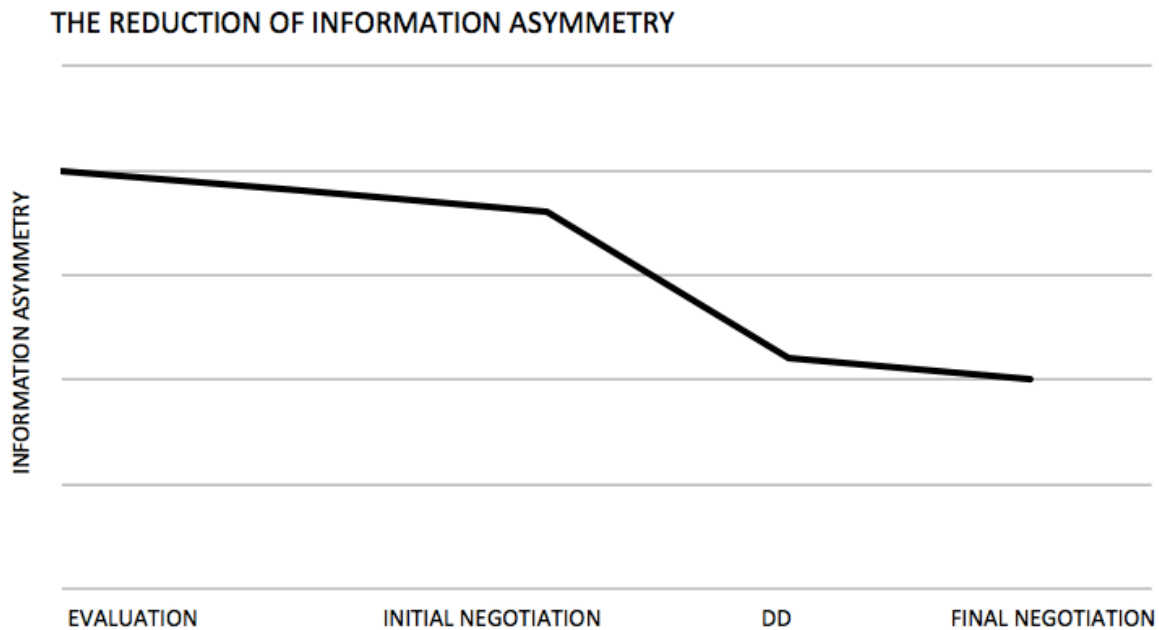


Figure 8 - Illustration on the perceived reduction of information asymmetry

### 5.3.1 The perception-creating stages of the investment process

As the results summarized in *figure 8* illustrates, in the initial parts of the investment process, the evaluation and initial negotiation stages, the information asymmetry are indicated to be slightly reduced. The results are in line with Kollmann and Kuckertz (2010) that stated that criteria in the first stage are assessed according to the PE firms' investment requirements, these criteria are more easily assessed, which results in an illustrated small reduction of the information asymmetry. However, as none of the information that is gathered in the initial stages are verified, the reduced information asymmetry is according to the results, mainly based on trust and thus it can be expected that the information asymmetry will be proportionally reduced. The trust perceived by the investment professionals builds on the presented information of the investee company, such as product, market and financial information. Later in the process the trust is based on the entrepreneur or the external advisors leading the investment process.

In the structured process, lead by an advisor, most of the PE investment professionals will usually not meet the management until the initial negotiation stage. Thus the trust will shift towards the advisor instead to gather valid information in the initial stages of the structured process. As indicated many of the respondents find the structured process to be faster and overall easier, and the pressure lies more with the time limit and the competition among the PE firms. Research in psychology has indicated that credibility of the source is an essential factor to a disclosure's credibility (Birnbaum and Stegner, 1979), which interestingly is applied here where the investment professional seems to rely and trust the advisors instead of the primary source, the investee company, instead. In the aspect of information asymmetry, the structured investment process can be viewed as the information asymmetry being initially reduced by the advisors. As such, when the information reaches the investment professionals, it has already to some extent been verified by the advisors distributing the information. Therefore, this could legitimize that these structured investment processes are more costly for the investment professionals than the unstructured ones, as the PE firms can be seen as paying a premium for the initial reduction of information asymmetry. As the results show, the GC



and BO firms are the ones mainly undergoing structured investment processes, and the reason for this could either be that those PE firms are investing larger amounts or that they are focusing on companies in the later stages of the life cycle, it can then be assumed more crucial to gather thorough information on the investee company whilst VC investments tend to depend on less information.

For VC investment professionals, structured processes of this kind with external advisors is unusual since it would not be justified for the costs or the expertise, the VC investment professional can verify much of the information of early stage companies themselves, but here there is a need for the investment professional to get a good perception on the entrepreneur. Previous research by Kennedy et al. (1998) shows that a positive connection exists between the investment professional's perception of management's credibility and their willingness to invest in the firm. The results of this study indicate that the trust for the investee company is crucial and it is based on the information presented as well as the perceived skills and motivation of the entrepreneur.

### **5.3.2 The confirmatory stages of the investment process**

Considering the second part of the investment process, namely the DD and the final negotiation stages, the results imply that the information asymmetry will be mostly reduced, or to the level of perceived comfort of the investment professional. In contrast to the initial stages, where the interest and willingness to invest is formed, the later stages will shift focus towards verifying and confirming the already analyzed information. The DD process is where the reduction of the information asymmetry is perceived to decrease the most, due to the verification of essential information. Thus it is in this stage where the PE investment professional can affect the risk reduction mostly and decide what DD processes to conduct, however, these procedures are not performed by the investment professionals themselves, as most of the DD processes are outsourced. These DD processes are costly which requires a balance of what areas are deemed most important to prioritize.

The result from the DD process will be the basis for the final negotiation, thus the final negotiation is where the contract and final valuation will be negotiated. As described by Jensen and Meckling (1976) there are two ways for the principal to contract against the agent's opportunistic behavior post-investment, either through outcome-based or behavior-based contracts. This was seen in the results of the BO respondents when the investment professionals aimed for the entrepreneur to co-invest together with the BO firm, as such the entrepreneur will still have a stake in the company and thus behave and act accordingly. The entrepreneur will then still have incentives and be motivated to perform their best, which can be seen as a behavior-based contract described by Jensen and Meckling (1976). The other contract, the outcome-based contract is seen in the results as the situation in where the VC will have several investment rounds, where future investments will not be fulfilled if the objectives for each round is not fulfilled, thus contracting for future outcome to be achieved.

## 6. Conclusion

Figure 9 illustrates the investment process described by the respondents, what criteria they tend to focus most on at each step and how information asymmetry is perceived to decrease along the process.

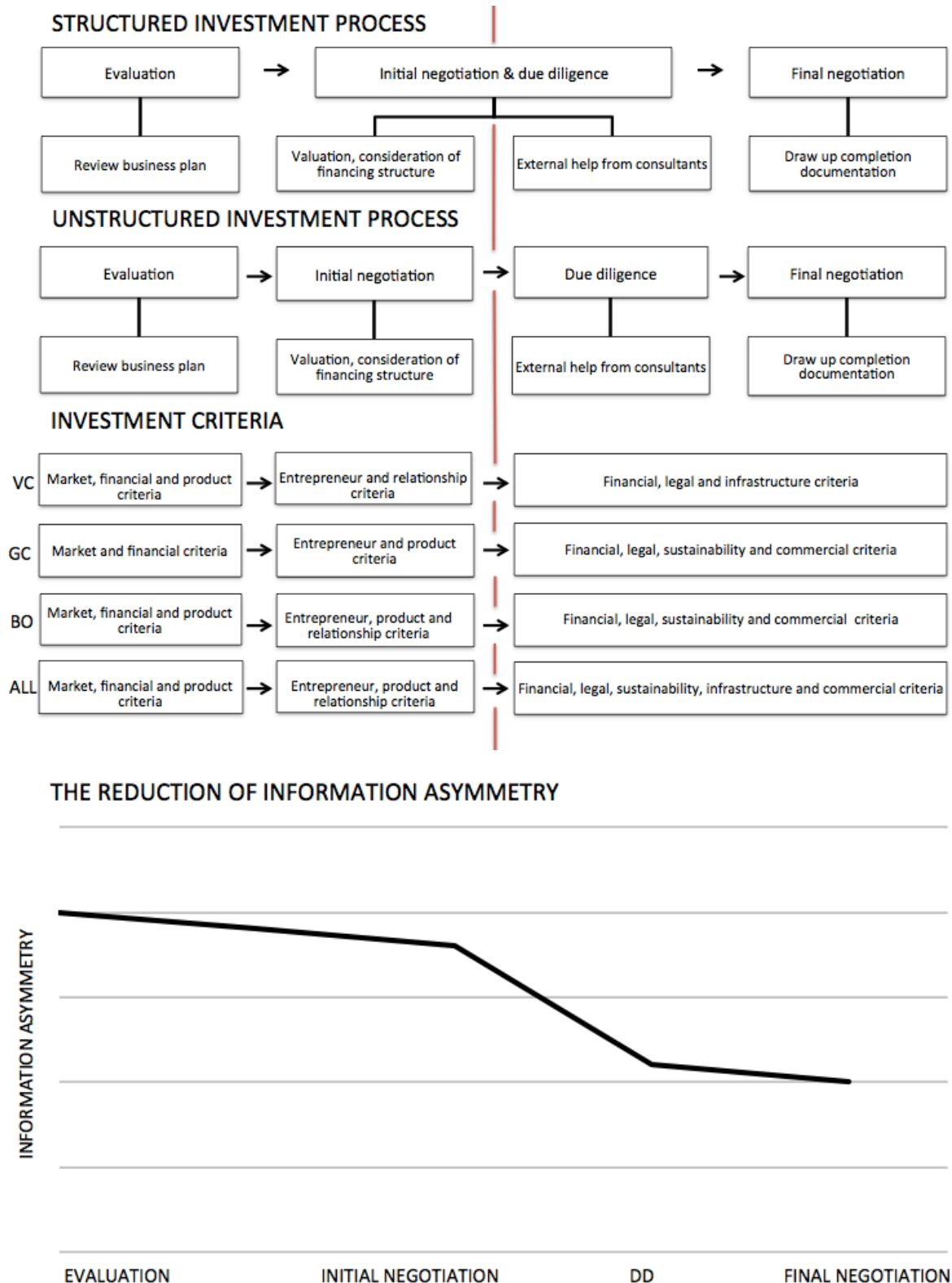


Figure 9 - An aggregated view on the investment process, investment criteria and information asymmetry

The thesis intended to study the investment process of the PE industry within a Swedish context, more specific the investment process was seen as instrumental in reducing the existing information asymmetries between the investment professionals and the investee companies. The reduction of information asymmetry can mitigate the risk of adverse selection leading to more information being provided for the investment professionals, resulting in more sound investment decisions. The study included the aspects of investment criteria in the process research to conclude upon when the criteria are more effective in means of reducing the information asymmetry, as well as what criteria are used.

The study has rendered results showing that the investment process can be illustrated by two different processes, where one is a structured process and the other an unstructured process. Also the investment process as a whole can be viewed as two phases depending on the underlying objective of the criteria within the stages, initially representing a perception-creating phase and following a confirmatory phase. Most criteria assessed by the investment professionals occur in the perception-creating phase, while external advisors and consultants confirm those criteria in the confirmatory phase, before settling the investment. The information asymmetry can be seen as being only slightly reduced in the perception-creating phase and most of the reduction occurs in the confirmatory phase, due to the DD process.

The criteria are to some extent congruent to those suggested in the theoretical framework, however some new criteria have been identified in the study. The new criteria are perceived to particularly have emerged due to the contemporary digitalization and sustainability trends, and those new criteria are expected to become of greater importance throughout the PE investment process and thus put pressure on new knowledge areas of the investment professionals. The results have also shown specific circumstances related specifically to the Swedish PE industry context, such as having a responsible attitude when making assessment of investee companies as well as in managing those in the holding period. The explanations for this were the Swedish culture of carefulness and another due to the small market where you do not want to gain a bad reputation of making irresponsible investments.

The aggregated view of the PE investment process further brings some limitations of the study, mainly that it is not possible to analyze the different PE strategies, such as VC, GC and BO respectively to provide more in-depth conclusions. However, as the aim of the study were to examine the aggregated view on the PE investment process, the differing strategies of the PE firm still is deemed representative as PE investments are considered an important part of the Swedish economy and thus all contributing representatives are included.

From an academic perspective, the study has contributed with insights about the Swedish PE industry, and with an aggregated view of the investment process and investment criteria from a qualitative perspective, where the underlying reasons have been declared. For practitioners, the study has contributed with useful insight as it offers an overview that can help investment professionals to reflect upon their own procedure when assessing potential investees in order to make sound investment decisions. For entrepreneurs, the study has offered a roadmap of the criteria assessed which can be useful when seeking PE funding. Lastly, an aggregated framework of the investment process has been created which can provide understanding between PE firms and entrepreneurs about the concerns of one another.

## **6.1 Future research**

As this study gives an overview of the Swedish PE investment process, a proposal for future research is to conduct similar studies on the VC, GC and BO firms respectively as this could lead to more in-depth analyses of the reasoning behind certain criteria are assessed. Further, another proposal for future research within the investment process field is to conduct similar research but from the perspective of the entrepreneurs or the advisors in order to add insights from those parties to the investment process and criteria framework. Such an research could help both academics and practitioners to expand the knowledge about the driving forces of the investment process. Lastly, a third proposal for future research is to study the DD process more in-depth. As seen from the results of the study, the majority of the PE funds are hiring external DD teams in order to conduct DD processes on various areas. An interesting view on this could therefore be to examine how often the information from external DD teams really are deal breakers for PE funds.

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# Appendix 1

## Interview guide

Areas	What	Why	Questions
<b>Factsheet information</b>	Background information about the respondent.	It is recommended to complement the main questions with information about the respondent's experience (Gubrium and Holstein, 2001).	<ul style="list-style-type: none"> <li>• What is your position?</li> <li>• What experience do you have of the industry?</li> </ul>
<b>Investment process</b>	One main question about the process, followed by clarifying questions about the stages.	To develop an understanding of the process and how it helps the respondent to assess the investee, and how information asymmetry are assumed to reduce.	<ul style="list-style-type: none"> <li>• How is the investment process structured – from the beginning to signed contract?</li> </ul>
<b>Investment criteria</b>	The respondent map out what criteria are used under each step in the investment process, and why these are chosen.	By asking for criteria in general, the respondent will list the most occurring and crucial ones for reducing the information asymmetries in the investment process.	<ul style="list-style-type: none"> <li>• What criteria are used throughout the investment process?</li> <li>• How do the criteria differ between the steps of the investment process?</li> </ul>
<i>Entrepreneur criteria</i>	The respondent are asked to explain the entrepreneur criteria	To sort out how the entrepreneur is assessed, why the criteria are considered and how they help reduce information asymmetry.	<ul style="list-style-type: none"> <li>• What entrepreneur-specific criteria are important, and why?</li> </ul>
<i>Market criteria</i>	The respondent are asked to explain the market criteria	To sort out how the market is assessed, why the criteria are considered and how they help reduce information asymmetry.	<ul style="list-style-type: none"> <li>• What market-specific criteria are important, and why?</li> </ul>
<i>Product criteria</i>	The respondent are asked to explain the product criteria	To sort out how the product is assessed, why the criteria are considered and how they help reduce information asymmetry.	<ul style="list-style-type: none"> <li>• What product-specific criteria are important, and why?</li> </ul>
<i>Financial criteria</i>	The respondent are asked to explain the financial criteria	To sort out how the financials are assessed, why the criteria are considered and how they help reduce information asymmetry.	<ul style="list-style-type: none"> <li>• What financial criteria are important, and why?</li> </ul>
<b>Follow-up questions</b>	These questions are asked in cases the respondent do not mention the subjects in their prior answers.	These questions give the reason why certain criteria are used, which might help the authors to understand how information asymmetry is reduced.	<ul style="list-style-type: none"> <li>• Why are entrepreneur/market/product/financial (or other) criteria assessed?</li> <li>• What criteria are considered most important?</li> </ul>