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# Evaluating Startups: Addressing Herd Behavior and Other Biases in Venture Capital Due Diligence

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Dissertation written under the supervision of Professor Peter V. Rajsingh, PhD

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## Abstract

This paper examines the impact of cognitive biases on the effectiveness of Venture Capital (VC) Due Diligence (DD). In a threefold approach, theoretical background is combined with Expert interviews and a survey, resulting in a comprehensive understanding of biases in investment decisions.

The study focuses on investigating herd behavior, which can affect the independent opinion formation and thoroughness of VC DD. Research demonstrates that relying on other investors' DD and following industry trends can lead to suboptimal investment decisions. The qualitative interviews with Venture Capitalists (VCs) highlight the prevalence and impact of this bias and thus emphasize the need for preventive measures in VC fund structures.

Developing practical strategies to mitigate the effects of herd behavior is a crucial contribution of this work. For example, structured DD protocols, a *Collaborative Evaluation Framework*, or a *Capital Commitment Incentive* were derived from Expert interviews. These initiatives are intended to protect VCs and their decision-makers from the urge of herd instinct by providing VCs with more internal control mechanisms. It is concluded that recognizing and addressing cognitive biases is crucial for fostering a more diverse and innovative investment environment.

**Keywords:** Venture Capital, Due Diligence, Cognitive Biases, Herd Behavior, Investment Decision-Making

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## Sumário

Este documento analisa o impacto dos enviesamentos cognitivos na eficácia da Due Diligence (DD) do capital de risco (VC). Numa abordagem tripla, a fundamentação teórica é combinada com entrevistas a peritos e um inquérito, resultando numa compreensão abrangente dos enviesamentos nas decisões de investimento.

O estudo centra-se na investigação do comportamento de grupo, que pode afetar a formação de opiniões independentes e o rigor da DD do capital de risco. A investigação demonstra que confiar na DD de outros investidores e seguir as tendências do sector pode conduzir a decisões de investimento pouco optimizadas. As entrevistas qualitativas com investidores de capital de risco salientam a prevalência e o impacto deste enviesamento, sublinhando assim a necessidade de medidas preventivas nas estruturas dos fundos de capital de risco.

O desenvolvimento de estratégias práticas para mitigar os efeitos do comportamento de manada é uma contribuição fundamental deste trabalho. Protocolos estruturados de DD, uma Estrutura de Avaliação Colaborativa ou um Incentivo de Compromisso de Capital, por exemplo, foram derivados de entrevistas com peritos. Estas iniciativas destinam-se a proteger as sociedades de capital de risco e os seus decisores do impulso do instinto de manada, proporcionando às sociedades de capital de risco mais mecanismos de controlo interno. Conclui-se que o reconhecimento e a abordagem dos preconceitos cognitivos são cruciais para promover um ambiente de investimento mais diversificado e inovador.



**Palavras-chave:** Capital de Risco, Due Diligence, Vieses Cognitivos, Comportamento de Manada, Tomada de Decisão de Investimento

**Título:** Avaliar as empresas em fase de arranque: Abordar o comportamento de manada e outros preconceitos na devida diligência do capital de risco

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## List of Abbreviations

AI – Artificial intelligence

BN – Billions

DD – Due diligence

EUR – Euros

FOMO – Fear of missing out

PE – Private Equity

USD – United States dollar

USP – Unique selling proposition

VC – Venture Capital

VCs – Venture Capitalists

# 1. Introduction

## 1.1 History of Venture Capital

The idea of VC can be dated back to 1492 when the Spanish royal family financed Christopher Columbus' expedition (Megginson, 2004). The discovery of America can be considered ex-post as one of the most profitable VC investments (Ibid.). The first VC firm was founded in 1946 as *American Research and Development* (Gompers & Lerner, 2001). The first form of VC limited partnership was established in 1958, which became increasingly popular over the following years (Ibid.). Nowadays, many funds are set up as limited partnerships and last around ten years (Invest Europe, 2016). VC firms usually raise new funds every three to four years (Ibid.).

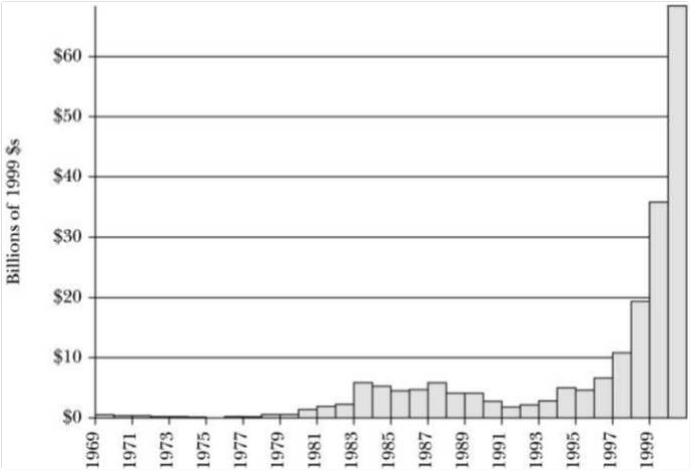


*Figure 1: Commitments to the VC Industry (in bn of 1999 dollars) by Gompers and Lerner (2001)*

The increasing popularity of VC investments is reflected in the billions (bn) of United States dollar (USD) committed in the United States of America between 1969 and 2000, as shown in Figure 1 (Gompers & Lerner, 2001). Besides a growing interest over the period, a significant increase can be seen from 1997 to 2000. The invention of the World Wide Web in the 1990s had a lasting impact on the scene (Kelly, 2023). Commitments increased slowly at first, and in the four years before the dotcom bubble in 2000/01, these grew from USD 10 billion to almost USD 70 billion (Gompers & Lerner, 2001).

It can be implied that the economy and market factors affect both VC and Private Equity (PE), so the extensive fundraising and investment figures in Euros (EUR) of European PE firms from 2000 to 2020 are included in Figure 2 (Invest Europe, 2021).

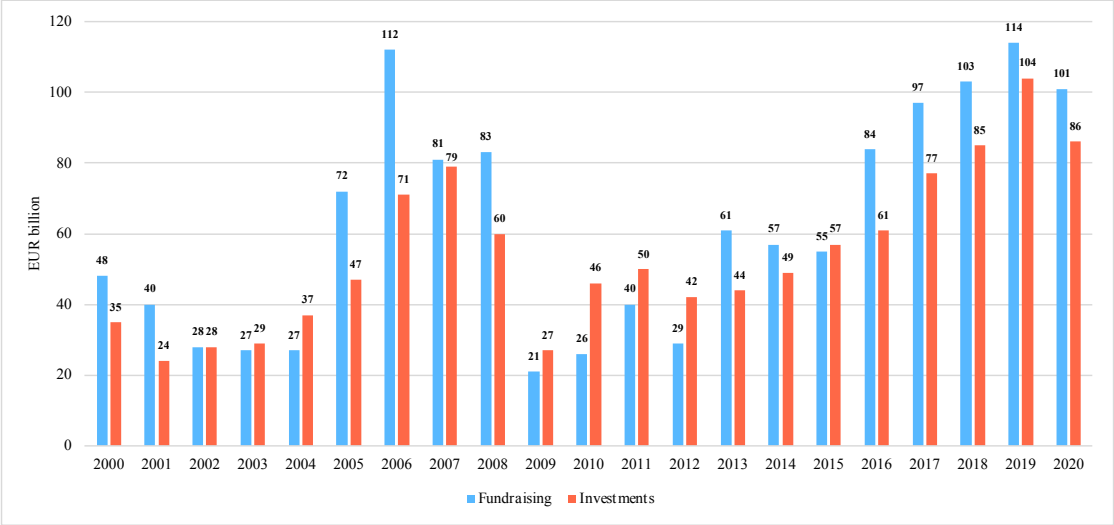


*Figure 2: European PE Fundraising and Investment amounts from 2000-2020 in EUR bn (following Invest Europe, 2021)*

Fundraising and investments dropped in the years following the dotcom bubble in 2000/01 (Figure 2). The two critical figures recovered after the dip until the global financial crisis in 2007/08. From 2004 to 2006, fundraising increased by 415% from EUR 27 bn to EUR 112 bn and investments by 192% from EUR 37 bn to EUR 71 bn. Before the global financial crisis of 2008/09, fundraising fell to EUR 21 bn and investments to EUR 27 bn in 2009. Both key figures rebounded steadily in the following years and reached a high of EUR 114 bn in fundraising and EUR 104 bn in investments in 2019. The COVID-19 pandemic caused both key figures to collapse again immediately afterward. Notably, the fundraising figures before the three crises were consistently higher than the investment figures. In the following years after the 2000/01 and 2007/08 crises, the investment amounts were sometimes higher than the fundraising amounts.

Since 2000, the mentioned key figures have changed, and the trend of VCs operationally supporting their portfolio companies has emerged. In a competitive environment, it can be an advantage if VC firms are able to offer more than just capital to potential portfolio companies, according to Harvard professor Josh Lerner (Browning, 2000). Since such support can be a decisive factor for founders when choosing a VC firm, early-stage VCs have increasingly offered it. Harvard professor Paul

Gompers has called the provision of internal resources by VCs the "Evolution of Venture Capital" (Browning, 2000, p. 7). Today, VC has incubated many leading companies such as *Amazon*, *Apple*, *Facebook*, *Google*, *Intel*, and *Microsoft* (Gompers et al., 2021).

## 1.2 Changing Landscapes in Venture Capital Funding

The study of VC DD is essential in today's business landscape for several reasons.

**Increased Startup Activity:** Companies are facing an uncertain market future, volatility, and recession fears, and despite this, investor friendliness in the current market could be identified (NVCA & Pitchbook, 2023). Among other indicators, the average size of pre-seed and seed deals remains at record levels of USD 0.5 million and USD 3 million, respectively (Ibid.). The sustained interest of investors and the stable high valuations imply ongoing entrepreneurial activity and encourage the development of further start-up ideas.

**Changing Investment Climate**: In 2023, exits became rarer and dealmaking slower (*European VC Valuations Report Q3 2023*, 2023). Investors are assessing valuations more carefully due to the changed market conditions and are allocating their available capital more cautiously (Ibid.). The rolling one-year initial rate of return of the VC scene ranged from 5% to 20% from 2017 to 2019 and even climbed to 80% in 2022, but it fell below minus 10% in Q4 2022. The sixth consecutive quarter with a decline in the rolling initial rate of return for the one-year horizon intensifies the pressure on VC funds (Ibid.).

**Market competition**: In Q3 2023, 126 companies completed an initial public offering (IPO), 24% more than in the previous quarter with 102 (CB Insights, 2023). Europe set a new record with over 1000 Series A deals, while other regions recorded a decline from 2021 to 2022 (Startup Genome, 2023). Competition for young funds to raise new capital also became more difficult (NVCA & Pitchbook, 2023). Although mid-cap funds have a comparatively more robust performance than larger ones, almost three out of four dollars raised in 2023 went to established managers (Ibid.).

**Unicorn Aspirations**: VCs only need 10% to 20% of their financed companies to be actual profit makers to achieve a return on investment of 25% to 30% (Zider, 1998). These profit makers are called unicorns - startups valued at over one billion euros (*European VC Valuations Report Q3*

*2023*, 2023). After a rapid rise and rapid fall in the size of financing rounds after 2020, mega-rounds have recently recovered (CB Insights, 2023). The total funding volume of the USD 100+ million rounds increased by 47% from Q2 to Q3 USD 29.6 billion. At the same time, there were only twelve new unicorns in Q3, the lowest level since 2016 (Ibid.). The shrinking number of new unicorns and larger financing rounds are intensifying competition and demanding larger fund capital to maintain meaningful stakes in the financing rounds.

**Technology Advancements**: Integrating data analysis and artificial intelligence (AI) in the investment process is another notable trend (Weibl & Hess, 2019). The DD phases of deal origination and screening are the primary beneficiaries. VCs can now identify patterns and insights and thus pursue a more differentiated and well-founded investment strategy. The trend's resulting informational and transactional advantages reduce short-term operating costs and increase the VC firm‘s long-term return potential (Ibid.).

## 1.3 Research Context and Significance

The fundamental aspects of the VC industry have already been sufficiently discussed in academia, and with it, the importance and complexity of DD. This thesis aims to expand knowledge about VC DD biases to uncover and evaluate possible evaluation errors. The assumption that the effectiveness of DD could correlate inversely with the influence of cognitive biases was the impulse for this work. In examining various biases, this work enriches the academic debate and highlights the need for action.

## 1.4 Research Question and Objective

This research is driven by the question: ***How do herd behavior and other biases limit the effectiveness of VC DD?***

The thesis aims to identify factors for a successful DD through a comprehensive literature review and then to investigate them in depth through interviews with VCs. This approach aims to shed light on the criteria to be examined in a DD, its effectiveness, and the limitations that investors may face.

# 3. Literature Review

## 3.1 Definition of Venture Capital

VC is an essential source of financing for new companies (Tyebjee & Bruno, 1984) and invests from a pool of capital in equity-linked shares in private companies (Sahlman, 1990). While investments in early-stage companies offer the potential for above-average returns, these are associated with significant risks (Ibid.). The capital for such high-risk investments is pooled in so-called funds. Depending on the VC firm, a company's maturity stage can vary. The fund partners who approve the investment as decision-makers often become involved in the management by serving on the supervisory board. In a fund, capital is invested in new companies for the first three to five years. According to Sahlman (1990), two-thirds of the capital invested annually by VCs goes into companies already in their portfolios, and one-third goes into new investments. VCs often participate in subsequent financing rounds of their portfolio companies. New funds may be added before existing capital from previous pools has been distributed to the limited partners (Ibid).

VCs analyze many pitches each year before choosing which ideas and teams to finance (Ibid.). New ventures are only successful in one out of ten cases (Zider, 1998). For VCs pursuing target returns of 25-30%, only 10-20% of companies need to be real winners, meaning those that generate an above-average return for the VC funds. VCs protect themselves from this risk by co-investing, usually with one lead investor and several followers (Ibid.). Success or failure thereby depends on the efforts and skills of the management and certain external factors such as economic development (Sahlman, 1990). Although it is challenging to determine founders' capabilities before an actual investment (Ibid.).

## 3.2 Definition of Venture Capital Due Diligence

### 3.2.1 The Term Due Diligence

DD refers to activities used to assess an investment proposal (Meyer & Mathonet, 2005). For investors seeking to make better investment decisions, consistent and methodical DD is necessary. A DD process establishes a reliable framework for assessing possible deals in line with predefined criteria as well as specifying the scope, steps, and timing. Startup success is rarely simple to predict, but early pre-investment DD can sometimes prevent investment errors. The rejection of imperfectly

prepared investment plans can lead to the exclusion of potentially solid investments if stringent criteria are followed (Ibid.).

VC firms undertake DD to offer attractive returns to investors (Torres, 2020). One objective of DD is to minimize knowledge gaps between the parties (Ibid.). Research, monitoring, and DD can reduce uncertainty, but there are limits, as gathering information consumes significant costs and resources (Meyer & Mathonet, 2005). Due to the difficulties associated with valuing future cashflows for a startup firm that has no visibility to revenues, VCs perform limited financial DD. Given the limited financial DD, a comprehensive industry/product DD is performed instead. Financial DD includes the assessment of financial aspects such as the annual financial statements, cash flow, liabilities, and income streams to provide conclusions about financial stability and forecasts. Particularly in the early stages, an extensive industry/product DD focuses on analyzing the respective industry sector and product or service (Ibid.).

VCs reported that it takes them an average of 97.1 days to screen an investment opportunity through the stages of the decision-making process before committing to funding (Fried & Hisrich, 1994). This highlights the need for efficient DD procedures. Fried and Hisrich's decision-making process model is divided into six stages: origination, VC-specific screening, genetic screening, first-phase assessment, second-phase assessment, and closure (Ibid.).

### 3.2.2 The Due Diligence Process

Torres (2020) presented a three-phase model of the VC DD process: pre-investment (A), management (B), and exit (C), which is shown in Figure 3. Within this first phase, the DD is performed in the deal structuring phase (AIV), where potential investments are checked for feasibility and consistency with the funds' strategic objectives (Ibid.).

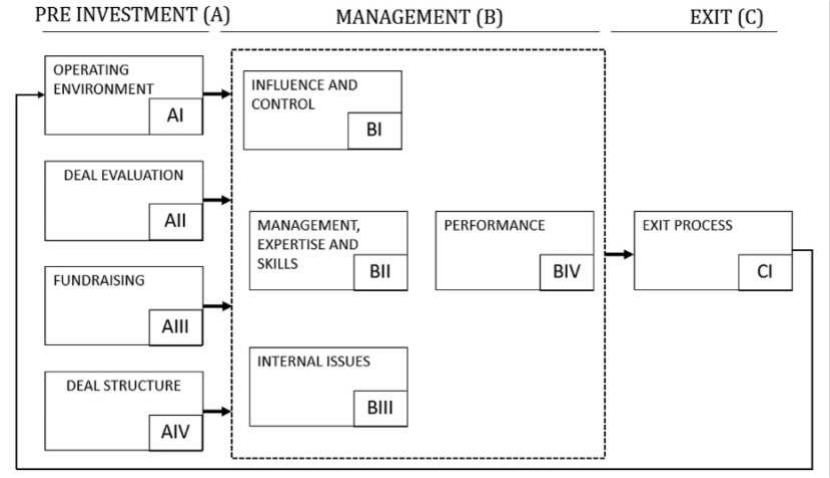


*Figure 3: Integrative Framework of the VC Cycle by Torres (2020)*

Tyebjee and Bruno (1984) divide the process of VC DD into five steps. Starting with deal origination, screening, evaluation, structuring, and finally post-investment activities (Ibid.). Although both presented models differ in their structure, they both emphasize the need for careful analysis before a potential investment. James McNair's comment that deal origination is about how much hard work a VC firm can do in a year reinforces the view of how labor-intensive sourcing and evaluating potential deals is (Teten & Farmer, 2010). A VC investment, therefore, requires a thorough DD. This process is not just a step that needs to be checked off; instead, investments require continuous analysis and monitoring over time (Invest Europe, 2016).

### 3.2.3 Crucial Due Diligence Factors

To provide a clear understanding of the pre-investment factors that guide the assessment of investment opportunities, this literature review intends to discuss the most crucial ones. The structure of this chapter is based on a combination of Hall and Hofer's (1993) and Tyebjee and Bruno's (1984) approaches to categorizing factors. Hall and Hofer (1993) organize the various factors into six categories: VC requirements, proposal characteristics, team skills, type of proposed venture, economic climate of the industry proposed, and proposed venture's strategy. Tyebjee and Bruno (1984) identify the five categories: market appeal, product differentiation, management skills, resilience to environmental threats, and potential for cash-out. Combining both findings results in the following four categories used in this thesis's ongoing process: VC requirements, characteristics of the management team, economic environment, and product. To create an in-depth

understanding of the relevant factors, a comprehensive literature review is conducted. The analyzed studies are similar in the fact that several of the key factors identified coincide and can be divided into four categories. Due to the limited scope of this paper, only some possible factors in the four categories can be discussed.

### *VC Requirements*

Relevant identified requirements are sector and region, profitability, control, and cash-out potential. Significant differences exist between industries and regions in the strengths and risks of various investment characteristics (Kaplan & Strömberg, 2004). These effects are challenging to distinguish because VCs concentrate on industries and regions (Ibid.). VCs further consider profitability and control important in the investment decision (Feld & Mendelson, 2019). Profitability refers to the return investors receive in a liquidation, for example, through a sale or IPO. Control refers to the mechanisms by which investors can influence company decisions (Ibid.). Another decisive factor for VCs is the projected cash-out potential (Tyebjee & Bruno, 1984). This measures when the VC firm could liquidate the investment (Ibid.).

### *Characteristics of the Management Team*

Feld and Mendelson (2019) argue that an experienced founding team matters as it reduces risk, positively affecting the valuation. Previous startup experience of the founding team also positively affects the likelihood of VC financing and risk assessment (Hsu, 2007). In a study by Fried and Hisrich (1994), all participating VCs stated that every management team member is interviewed before an investment as a lead investor is considered. Individual management, interpersonal, and communication skills have a positive impact on venture funding success (Kaplan et al., 2012). Franke, Gruber, Harhoff, and Henkel (2008) examine important literature on evaluation criteria and rank their importance. Nine of the thirteen studied rated capabilities around the management team as one of the three most important criteria. The three most essential team characteristics are industry expertise, educational background, and management experience (Ibid.). Management complications are one of the three most important causes of startup failure (Gorman & Sahlman, 1989). That crucial factor can thus determine the success or failure of an investment (Ibid.). A capable management team indicates a lower risk of venture failure, which is crucial for risk-averse VCs' investment decisions (Tyebjee & Bruno, 1984).

### *Economic Environment*

Market attractiveness, resilience to threats, and public market signals are discussed as part of this factor. Market attractiveness depends mainly on the four factors of market size, growth, accessibility, and the existence of a market need (Tyebjee & Bruno, 1984). Furthermore, the resilience of a startup is crucial and indicates how it deals with uncontrollable pressure from the environment. Technological obsolescence, sensitivity to economic change, or low entry barriers are possible causes of pressure. The market attractiveness is linked to the expected return, while resilience implies a reduced risk of economic failure. Thus, both factors have a different influence on a VC firm‘s investment decision (Ibid.). Feld and Mendelson (2019) present a similar argument since values frequently increase when optimistic macroeconomic forecasts are given.
Moreover, the size and trendiness of the market have at least some influence on the price (Ibid.). VC firms and their investment decision are impacted by public market signals (Gompers et al., 2008). The research discovered that if public market signals improve, VCs with the greatest industry experience raise their investments more than VCs with relatively little industry experience (Ibid.).

### *Product*

VCs believe the startup's product or service must be unique and offer a competitive advantage. Such uniqueness and competitive advantage are of considerable importance for VCs' investment decisions (Franke et al., 2008). This is in line with Tyebjee and Bruno's (1984) statements on product differentiation, according to which it is the founders' ability to use technical skills to create a unique product. The development of patents can indicate a company's differentiation, deter competitors, and result in higher profit margins (Ibid.). This context is aligned with the statements of Andy Rachleff, who states that it is not enough for a startup just to be right because it must also be non-consensual (Griffin, 2017). To achieve above-average returns, a start-up must not only have the right idea but also occupy a unique position on the market (Ibid.).

Product differentiation is, therefore, a core component that can provide information about the current competitive position and a startup's potential future return development.

### 3.2.4 Factors that Limit Judgment

This paper focuses on herd behavior, and other biases will be incorporated to classify herd behavior better. In addition to herd behavior, the factors of first impression, overconfidence, delayed feedback, and cold introduction, which are extensively discussed in the literature, are used for the comparison.

#### *A. Overconfidence*

Overconfidence describes the likelihood of overestimating the probability of a series of events occurring (Zacharakis & Shepherd, 2001). In the study, 96% of the 51 participating VCs exhibited this significant overestimation, which ultimately harms the decision-making accuracy of VCs. Overly optimistic VCs could overlook essential details and neglect to look for more information to help make better selections. The amount, form, and clarity of information VCs use to decide is a crucial determinant of their confidence level. Overconfidence does not necessarily lead to a wrong decision. This bias can hinder learning and improve VCs decision-making processes (Ibid.).

#### *B. Delayed Feedback*

The learning process is also affected by the delayed feedback that managers get (Shanteau 1992). Steve Anderson, the founder of *Baseline Ventures*, claims it can take five to eight years for a Venture Capitalist to determine whether the work was good (Griffin, 2017). The price for a wrong investment decision is only paid after many years, thus prolonging the learning phase. For Peter Fenton, a partner at the VC firm *Benchmark*, this learning curve takes more than ten years before VCs become good investors. The difficulty is that an individual applies biases and dysfunctional heuristics that lead to emotionally and psychologically based mistakes. The necessary skills are learned over the years by investing (Ibid.).

#### *C. First Impression*

First impression bias describes a decision-maker who gives excessive weight to early experiences when evaluating outcomes (Hirshleifer et al., 2021). Analysts affected by this bias tend to be optimistic about a company doing exceptionally well in the year before the observation and vice versa. This effect affects forecasts, price targets, and recommendations. Negative first impressions tend to be more influential than positive impressions (Ibid.).

### *D. Cold Introduction*

Although VCs are often approached "cold" by startups, in other words without the introduction of a third party, it is rare a startup then receives funding (Fried & Hisrich, 1994). Out of 18 investments reviewed, every single one came from an introduction (Ibid.). Andy Rachleff, co-founder and general partner of *Benchmark*, takes it further and rules out meeting with unknown entrepreneurs or companies without a referral (Griffin, 2017). An entrepreneur who fails to get an introduction to a VC firm will not be able to convince potential customers, says Rachleff (Ibid.).

### *E. Herd Behavior*

Herd behavior is another critical and last factor to be examined in detail when considering the effectiveness of DD procedures. Various factors influence the effectiveness of VC DD, but preliminary results from Expert interviews indicate that herd behavior is a crucial factor. Therefore, the focus is on its investigation, which will be analyzed using the following herd behavior management theory.

## 4. Management Frameworks

Herd behavior describes the practice of individuals or institutions to imitate the actions or decisions of others (Banerjee, 1992). This often leads to collective behavior that is not necessarily rational or based on individual information. Individuals can be influenced by the actions of others in a variety of social and economic contexts (Bogaçhan & Kariv, 2004). This can be observed in many environments, such as financial markets and investment choices (Chiang & Zheng, 2010).

For Smith and Sørensen (2000), herd behavior arises if an infinite number of individuals make an identical decision, not necessarily disregarding private information. Individuals thus act similarly but might have acted differently if their private signals had been realized differently. In contrast, an information cascade occurs when an infinite number of individuals ignore their private information in a decision. Individuals follow the behavior of others without regard to their private signals because their beliefs are so strong. The authors conclude that an information cascade implies a herd, but a herd does not necessarily represent the outcome of an information cascade

(Ibid.). Bogaçhan and Kariv (2004) build on these findings and add that individuals acting in a herd commit to a pattern of behavior. At the same time, the behavior of individuals in herd behavior is so fragile that a strong signal can suddenly change their actions (ibid.). According to Cipriani and Guarino (2008), if there is an information cascade, all actors with the same preferences take the same action. Either following the market or deciding to trade against it (contrarianism). Herd behavior occurs because, with heterogeneous traders, consistent behavior occurs only among traders of the same type. The decisive factor for the occurrence of herd behavior or contrarianism is not the fundamental value of the asset because both agree on this. Their different actions are because actors have different private values (Ibid.).

Managers may engage in herd behavior to protect their reputations and imitate the investment decisions of others, even if their private information suggests an alternative (Scharfstein & Stein, 1990). This could be because managers fear being perceived as contrarians if they deviate from the crowd and their investment proves unsuccessful. Herd behavior can avoid the risk of being seen as lonely fools. Thus, the blame for any negative outcomes can be shared if the herd has made the same decision. To protect reputation, conformity can take precedence over independent decision-making. From a social perspective, such herd behavior can be inefficient and lead to suboptimal investment decisions (Ibid.).

The fact that most investors want to participate in an oversubscribed round adds to the phenomenon of herd behavior in the VC industry (Feld & Mendelson, 2019). Almost every VC firm wants to outsource its thinking to the most intelligent person they know and follow them (Suster, 2018). Fried and Hisrich (1994) asked VCs in their research: "Prior to funding an investment as lead investor, how often do you engage in the following activities?". 52% of participants responded that the opinion of other VC firms is sought.

One reason for accepting vicarious DD rather than doing the work themselves could be the fear of missing out (FOMO) (The VC Factory, n.d.). Investors may be led by fear of losing a potential deal if too many questions are asked. Thus, VCs settle with the information provided by the founders and rely on a thorough DD by other VCs (Ibid.).

Investment strategies that avoid herd behavior can generate higher returns (Griffin, 2017). The underlying idea from Andy Rachleff is that ideas need to be both right and non-consensus to achieve the desired outperformance (Ibid.). A startup can have the right idea, but if it is too obvious, there will be competition (Maples, n.d.). A right and non-consensual idea allows the startup time to survive, adapt, and eventually become successful after trial and error (Ibid.).

### Contribution to Literature

The thesis enriches the literature by presenting a comprehensive examination of DD with a focus on the bias herd behavior and its impact on investment decisions. The investigation of this nuanced aspect reveals the gap in the current literature between cognitive biases and the effectiveness of DD.

Thus, the complexity of VC investment decisions and deriving practical recommendations to improve decision quality are illustrated. New insights have been gained that are relevant for both academic research and practical application in the field of VC.

## 5. Methodology

Considering the various factors that can influence VCs in their DD, this study hypothesizes that DD's effectiveness depends on VCs' ability to mitigate the effect of cognitive biases. This working hypothesis aligns with the research question by indicating that a lower influence of cognitive biases correlates to more effective DD results.

The methodological foundation for this work is a literature review, semi-structured interviews, and a survey. The triangulation approach makes it possible to identify, discuss, and evaluate the various limiting factors in the DD. The factors identified in the literature review were analyzed in greater depth in Expert interviews, and the trends among the general public were explored in a study.

### 5.1 Qualitative Data

Given the complexity of the research topic and the need to better understand the cognitive decision-making processes of those involved, semi-structured interviews were chosen to collect qualitative data. A total of ten experts from VC, PE, or Family Office were interviewed (see Table 1).

| Expert | Occupation | Company |
|---|---|---|
| 01 | Ex-Associate | Danish and Swiss VC Fund |
| 02 | Investment Professional | German PE Fund |
| 03 | Chief Investment Officer | German Family Office |
| 04 | Analyst | German VC Crypto Fund |
| 05 | Senior Investment Manaer | German VC Fund |
| 06 | Investment Manager | German VC Fund |
| 07 | Analyst | German VC Fund |
| 08 | Partner | German VC Fund |
| 09 | Investment Associate | German VC Fund |
| 10 | Principal | German VC Fund |

*Table 1: List of Experts*

The key questions about the DD approach and the impact of herding were always asked, but the depth was adapted depending on the interviewee to obtain as many insights as possible. All Experts had a thorough knowledge of investment decision-making processes, relevant criteria for assessing opportunities, factors influencing decisions, and potential risks. The initial questionnaire was retained for question block B and especially block C to guarantee an accurate cross-group analysis of investment decisions. Appendix A contains the interview questions with the Experts.

## 5.2 Quantitative Data

A broad survey of 303 responses was conducted to analyze decision-making biases in financial contexts. The survey targeted a heterogeneous group of people inside and outside the investment environment. This allowed a differentiated analysis of both Experts and non-experts in the field. The main objective was to examine the impact of biases on investment decisions and, therefore, to prove or disprove the working hypothesis. Although the work's focus was qualitative Expert interviews, input from a wider audience allowed for a more holistic view of the decision-making journey. Contrary to the Expert interviews, no focus was placed on herd behavior here, as this phenomenon cannot be investigated in such a short period. The focus was on a general understanding, occurrence, and influence of biases.

The survey focused on the five biases identified in the literature review: herd behavior, first impression, overconfidence, delayed feedback, and cold introduction. A pair of questions - one positive baseline and one negative counter question - was designed for each of these factors to capture the nuances of their impact on investment decisions. The counter questions allow for a comparative analysis with the investment decisions of the baseline question. This contributed to a better understanding of the influence of each bias on investment or abstention decisions. The dichotomous survey was supplemented by a 5-point Likert scale for each factor. This approach was chosen because scales with more than five points do not significantly improve the reliability of the responses (Lissitz & Green, 1975). It should be noted that there is a risk of central tendency bias with this type of question (Ibid.).

A disqualification question was embedded at the end to filter out inattentive participants and ensure the data's validity. The questionnaire is presented in Appendix B.

# 6. Results

## 6.1 Qualitative Data

### *Decision-making Criteria*

In determining key factors for investment decisions in startups, the first seven interviewees were polled as their interviews took longer. The factors mentioned were matched and visualized in Figure 4. The team was mentioned in all seven interviews, the market in five, the business model, and the exit opportunities in two each. Technology, unique selling proposition (USP), vision, traction, competition, and fit between value proposition and pain point were each mentioned once.

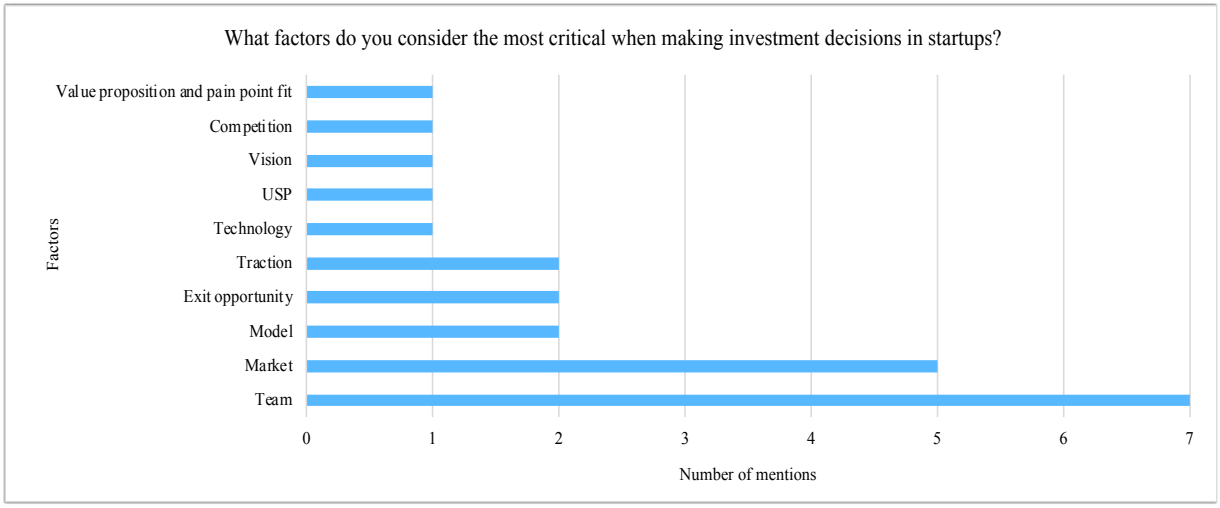


*Figure 4: Critical Investment Factors*

The great emphasis on the team highlights the importance of human capital in startups. Similarly, the increased mention of the market underlines the industry consensus on the need for a scalable market for successful investments. The mention of business models and exit opportunities reflects the need for the financial viability of startups as well as the business model of VC firms wanting to monetize them at some point. Interestingly, factors such as technology, vision, and competition are mentioned less frequently but represent an interesting literature extension. Overall, the insights gained are consistent with the literature review findings. The complexity and differences in the DD of various investors are confirmed since the factors are mentioned with varying frequency.

Next, the ten factors identified in the interviews will be mapped to the four categories discussed in the literature review. The factor team mentioned by everyone can be assigned clearly to the management characteristics category, as can the vision. The economic environment category covers market, traction, and competition. A case could be made for the business model factor due to its link to market attractiveness and profitability. USP and technology are naturally situated within the product category. Lastly, the fit between value proposition and pain point could also be categorized under product, given its relevance to the product's market fit and distinction. The analysis enables the validation of the literature on investment decision criteria in VC DD.

### *A. Overconfidence*

The overconfidence bias could not be sufficiently addressed due to the scope of the work and focus. Expert 2 observed that the extensive and time-consuming DD process in PE, in contrast to VC, leaves less room for overconfidence but can imagine that this effect exists in the VC firm‘s.

### *B. Delayed Feedback*

Only Expert 2 was asked about the delayed feedback bias. Due to the Expert's PE background, only business models already tried and tested are considered for the respective fund. Thanks to the functioning business models, internal performance can be measured more quickly, which means that the delayed feedback and, therefore, the learning phase need to be shorter. It can be concluded that the earlier an investment is made, the longer the delayed feedback.

### *C. First Impression*

Expert 2 admitted that gut feeling is particularly relevant at the beginning and end of an investment appraisal and that the founders' first impression is particularly influential at the beginning. Expert 3 put forward the thesis that sympathy positively influences everyone and is an important factor. Moreover, an analyst is less critical when the founder is convincing. The more mature the startup and its financing round, the less gut feeling there is and the more it is about numbers, which also reduces the first impression effect, according to Expert 6.

### *D. Cold Introduction*

Expert 5 raised that the cold introduction bias might be correlated with the herding bias. If nobody introduces a startup to a VC firm, probably no one will talk about the startup, and herd behavior will not occur. The bias was not discussed in the interviews otherwise.

### *E. Herd Behavior*

Herd behavior received particular attention in the interviews, and all Experts confirmed its existence and influence on VC. Expert 1 explained that FOMO drives this effect, often leading to rushed DD processes. The year 2021 serves as an example, in which the industry showed accelerated decision-making processes driven by FOMO. In addition, Expert 1 speculated that herd

behavior could become less pronounced now compared to 2021 due to the reduced pressure within the VC scene.

According to Expert 4, herd behavior is less prevalent among top-tier VCs because they can rely on their DD and do not have to rely on that of others. Some VCs only make soft commitments to startups until a credible VC firm comes along whose DD they can rely on (Expert 4). Expert 3, a CIO of a family office, is happy to trust the DD of well-known VCs and confirms this by saying: "We like to work with *HV Capital*, *Cusp Capital*, *Patex*, *Index Ventures*, and others because we can rely on their DD" (Expert 3, question 5). Following market trends can be advantageous, but it should be avoided to be the last investor, as this position is usually associated with potential losses, adds Expert 3.

Experts 1, 3, and 4 mentioned possible advantages. According to Experts 3 and 4, herd mentality could lead to increased chances of success by pooling capital and expertise in an industry or a start-up. In addition, an investor can sell his stake more quickly if more money flows into this area (Expert 3). Experts 1 and 9 name the advantage of a potential trend being less likely to be missed due to the herd mentality.

Expert 2, an investment professional in a PE firm, denied that there is greater herd behavior in the PE scene. For PE firms, it is primarily attractive to find a company that can be bought cheaply and improved significantly. Therefore, a good company and a good entry opportunity are needed. In the VC industry, several VCs can invest and get involved simultaneously, but with PEs, this is different.

### *E. Incentive Bias*

Expert 1 spoke about the tendency to present deals in a positive light to push them through the investment committee, sometimes ignoring red flags. This was because of the pressure to perform and the lack of consequences for an incorrect assessment. It often takes five to seven years to evaluate an investment, but the responsible analysts rarely stay with the company for that long. Expert 2 also recognizes this problem in the VC scene but points out that it does not exist in PE companies, as analysts are often allowed to co-invest a small amount. This amount is small but

large enough that the individual would mind losing it. Experts 4, 6, 7, and 8 claim that this bias is absent in their companies as they do not leave any room for it, or the analysts feel connected to it.

## 6.2 Quantitative Data

A representative sample of 303 people living in Germany who were at least 18 years old participated in the survey. The average age of the survey participants was 29.6 years, indicating the participants are likely in the early or mid-career.

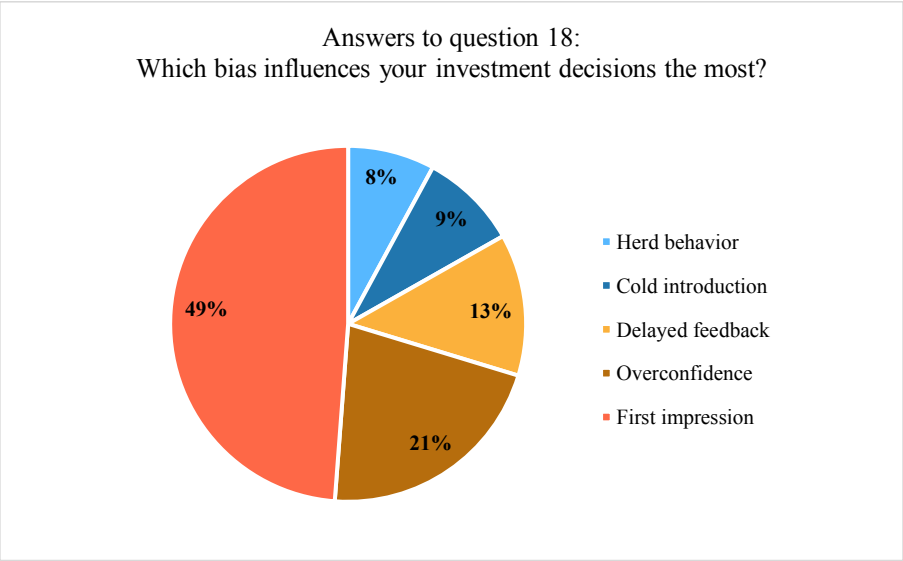


*Figure 5: Most Influential Biases in Decision-Making*

Participants were asked in question 18 to state what they considered to be the most influential factor in their investment decision, as illustrated in Figure 5. 49% of respondents noted that the first impression was the most influential factor in their decisions. The biases of overconfidence (21%), delayed feedback (13%), and then cold introduction (9%) were named next. The bias herd behavior was mentioned least frequently as the most decisive factor, with 8%. This could also be because the participants do not consider this factor relevant, have not understood it sufficiently, or it only plays a decisive role subconsciously.

### *A. Overconfidence*

Overconfidence was named as the most important influencing factor by 21% of respondents, making it the second most important factor.

### *B. Delayed Feedback*

Delayed feedback was considered by 13% of respondents as the most significant influence on their investment decisions. The responses to this factor show that participants are cautious. A high percentage stated in the respective three questions about the bias that they were unsure in various scenarios when faced with insufficient information.

### *C. First Impression*

23% of respondents would invest based on a positive first impression, while only 6% would decide to invest based on a negative first impression. The results strengthen the findings that first impressions influence the decision-making process.

### *D. Cold Introduction*

Cold introduction proved an important factor, with 36% of respondents unwilling to invest based on a cold introduction alone. Although the respondents do not exclusively come from an investment environment, the importance of established networks and trustworthiness in the VC industry is underlined.

Overall, the survey data shows a picture of a decision-making environment in the VC industry that is influenced by immediate perceptions and networks. While herd behavior is seen, it is overshadowed by the immediate effects of first impressions and overconfidence. Given the low perceived influence of herd behavior, the results may seem surprising. It should be added that perceived influence might differ from actual influence. This highlights the need for a deeper investigation of the topic.

### *E. Herd Behavior*

Herd behavior was listed by 8% of participants as the most influential bias. This suggests that although herd behavior is known among the public, it is not considered overly influential compared

to the other factors. The influence of herd behavior is more complex, as already sufficiently discussed in the literature research and the Expert interviews. Nevertheless, 27% of participants stated that they tend to invest if known investors also invest. If no known investors invest, 7% of respondents would now decide to participate, and 6% stick to their initial decision to invest.

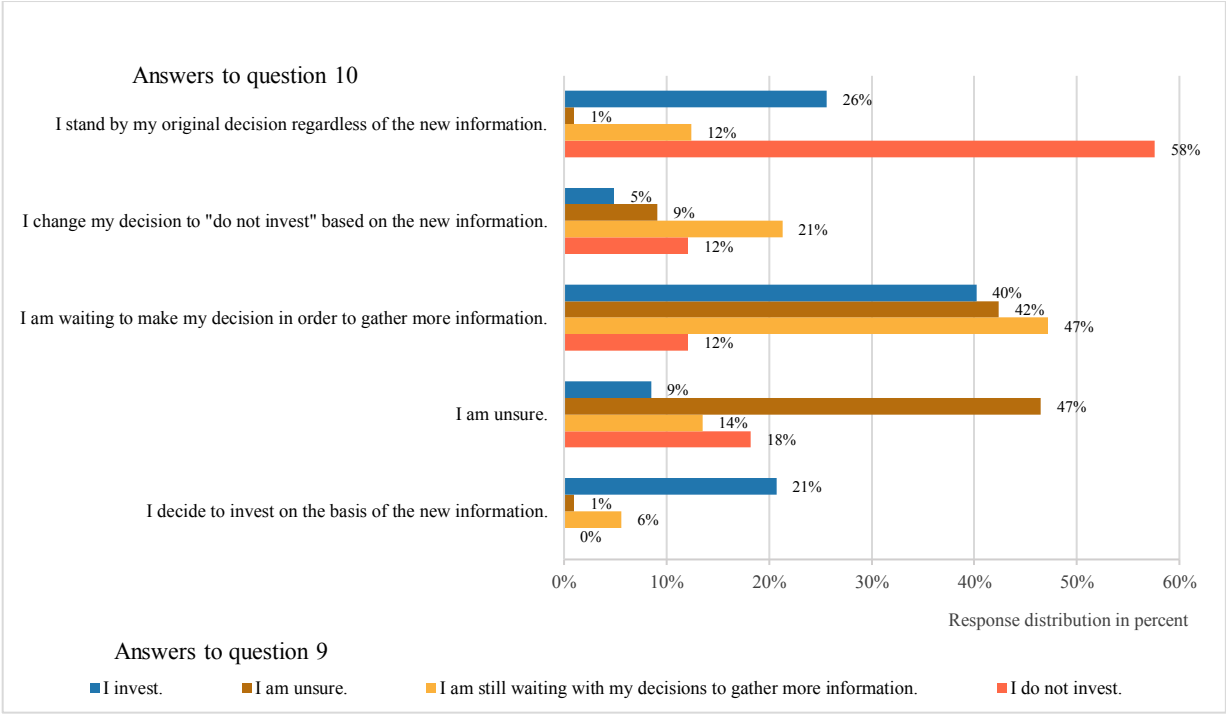


*Figure 6: Influence of Herd Behavior*

In Figure 6, the answers to question 10 are correlated with the previous answers to question 9 to find out how the loss of established co-investors affects the investment decision. 58% of those who would not invest in question 9 kept their decision in question 10. These 19 respondents probably do not consider it relevant who will invest with them. 5% of the respondents who initially invested revised their decisions if no known investors were to participate. Consequently, it was important to these four respondents that they are not the only ones investing. 40% of respondents who were initially willing to invest changed their minds under the new situation and decided to search for additional information instead of making a final decision. This indicates that the investment is being re-evaluated without the validity of known investors, thus falling for the herd instinct.

# 7. Discussion

The discussion is divided into two sections. The first part provides a general discussion of the results, while the second part derives the results into actionable insights and strategies for improving DD processes.

## 7.1 General Discussion

### A. *Overconfidence*

Overconfidence is evident in the survey, in which many participants showed high trust in their decisions despite incomplete information. The interviews revealed that overconfidence is more likely to impact the early stages, where they must rely on limited data and intuitive judgments, as Expert 5 noted. Expert 2 suggested that a structured and more extensive DD process could mitigate overconfidence. The survey data on delayed feedback complements this view and indicates that confidence varies depending on the results of previous investments. While the study's results highlight the existence of overconfidence, it cannot be proven that it impacts the effectiveness of DD.

### *B. Delayed Feedback*

Some Experts confirmed the concept of the delayed learning effect. Expert 6 points out that a delay in feedback can significantly impair decision-making efficiency over time. The bias was also evident in the survey results, in which participants indicated increased uncertainty when confronted with delayed feedback. Remarkably, this uncertainty occurred almost regardless of whether participants had experienced positive (19.5%) or negative results (26.4%) or were still waiting for feedback (29%). Delayed feedback thus seems to be accompanied by a pervasive feeling of uncertainty.

Despite these findings, the results of the survey and interviews do not allow any definitive conclusions to be drawn about the impact of delayed feedback. Fostering a culture of continuous learning could be critical to overcoming the challenges of delayed feedback. This could help VCs better classify temporary market volatility and long-term return on investments.

### *C. First Impression*

The influence of first impressions on the investment decision is confirmed by both the Experts and the survey participants, supporting the academic findings of Hirshleifer et al. (2021). The survey validates the disproportionate impact of negative and positive first impressions. This phenomenon was not explicitly explored in the interviews but may be implied by the tendency of Experts to engage further with startups that make a positive first impression. Startups that fail in this area are sorted out after the initial 30-minute get-to-know call by Expert 5.

Different Experts reported different implications of the first impression bias in various phases of investment valuation. Expert 5 admits that gut feeling and first impressions play a major role, especially in the initial phase, while the influence of these factors decreases as DD progresses. Expert 2 from a PE fund views first impressions not only as a bias but as a critical evaluation factor, pointing to their willingness to pay more for competent founders. This view reflects the more extensive DD typical for PE compared to VC (Expert 2).

Confirmation across the research on the significance of first impressions underlines the need for a differentiated DD approach. In the interviews, it is particularly emphasized that early VC valuations rely on first impressions to make so-called educated guesses due to a lack of solid financial data (Expert 6). The bias can be interpreted as a tactical decision-making aid in scenarios of high uncertainty.

### *D. Cold Introduction*

13.5% of survey respondents indicated they would be willing to invest after a cold email. This can be understood as an aversion to cold emails, which would be consistent with the results of Fried and Hisrich (1994). The Interviews underline this trend further, as all Experts acknowledged the relevance of an introduction as a criterion in their decision-making process.

Skepticism towards cold introductions can result in overlooking promising opportunities. The survey reflected this skepticism, as many participants were unsure (26.4%) or decided against

investing due to cold emails (35.6%). Young start-ups without mature networks may face a disproportionately high hurdle in this test, regardless of their actual potential.

In summary, networking has an important role in VC investment decisions. Recognizing and mitigating the cold introduction bias could uncover undervalued opportunities and foster a more diverse and innovative startup ecosystem. No conclusions can be drawn about the exact impact, but the findings suggest a high relevance of this bias.

### *E. Herd Behavior*

Given its profound and complex implications, herd behavior was examined in particular. The survey results provide a basic understanding of the herd behavior of individuals. In a scenario where well-known investors such as *Lakestar* or *HV Capital* participate in a financing round, 27.1% of respondents decide to invest. The presence of uncertainty (32.7%) and a propensity to delay decisions (29.4%) among the respondents indicate that herd instinct often triggers uncertainty rather than an immediate urge to invest. Herd instinct triggers uncertainty rather than the drive to invest among individuals in decision-making processes. In contrast, 7.6% of respondents would decide to invest without such well-known co-investors. The influence of well-known investors on investment decisions is consequently evident among individuals.

The Expert interviews provide deeper insights into this bias. Experts 1 and 5 emphasize that FOMO is an important driver of herd behavior, especially in the tense investment situation in 2021. In 2021 "when cash was free", decisions were made more quickly and VCs relied more on the opinions of others, according to Expert 1. The influence of the herd instinct thus seems to depend on the market phase: The more favorable the economy, the stronger the herd instinct. Expert 5 adds that you need to be good at passing on potential investments that you do not believe in to escape the herding - in every market phase.

Expert 4 observed that some VCs only make soft commitments until a VC firm with a reputation for performing a solid DD will invest. For instance, Expert 3 likes to trust the DD of certain VCs when making investment decisions and lists a few of them. One of these VCs is that of Expert 4.

All Experts acknowledged the existence of herd behavior, although their views on exposure to this bias vary. The diversity of perspectives underscores the complexity of herd behavior. Various causes for herd behavior, such as market conditions, FOMO, investment strategies, or philosophies, were discussed.

The influence of herd behavior is known to the investors, but the insights do not allow many conclusions to be drawn about its specific impact on investment efficiency. Following the investment decisions of others can homogenize portfolios and lead to overlooking unique and promising opportunities. These findings show the complex interplay of individual analysis and the influence of peers.

## 7.2 Implications for Venture Capital Due Diligence Practices

This section uses Expert interviews to derive practical strategies on how VCs can counter the risk of herd behavior. As the interviews focus on herd behavior, the solutions presented here are directed at this. Understanding and mitigating the impact of this bias is crucial for VCs to ensure the efficiency and effectiveness of their DD. Otherwise, the portfolio could lack innovation, contrariness, and diversity.

### *Herd Behavior*

**Clear Thesis and structured DD Process**

A well-formulated fund thesis effectively protects against herd mentality (Expert 8). Smaller and new funds often have an unclear strategic approach, which can lead to a "spray and pray" investment style, as Expert 8 calls it. A clear and coherent investment thesis is just as important as a strategic framework to fulfill it. Adherence to pre-defined criteria during the DD phases ensures consistent pursuit of the fund thesis.

Experts 1, 4, 5, 7, and 9 emphasized the need for a structured DD protocol to counter the influence of the herd. Introducing such a process enables decision-makers to be less influenced by external assessments. Criteria that need to be matched in DD are a great filter but do not prevent herd behavior, which limits Expert 10. In addition, Experts 1 and 4 advocated a decision-making process

that is characterized by openness and transparency. Ensuring that all concerns and viewpoints are heard and considered is essential for balanced and sophisticated assessments.

Expert 10 was introduced to this structured process and was firmly against it. It is wrong to evaluate with predefined checkboxes. The best founders cannot be benchmarked against each other as they have no common patterns. The DD must, therefore, be entirely guided by the founders. Since there are only a handful of generation-defining business ideas, a Venture Capitalist must find founders who can build them. For these unique personalities, there are no correct checkboxes. Expert 10 concludes that if decisions are to be contrarian, an investor must also be contrarian in its approach.

Expert 10 argued that different paths lead to the desired goal. For instance, the different approaches of VCs like *Benchmark* and *Accel* have each generated exceptional returns. *Benchmark* has generated the best VC returns in the industry by focusing on open discussions with founders. *Accel*, on the other hand, relies on a more mathematical approach (Expert 10).

This type of culture, combined with a framework for pursuing the fund thesis, can help mitigate cognitive bias. The combination should be a prerequisite for VCs who want to approach the complex investment landscape with structure and vision. These are preventive measures and the basis for informed and autonomous investment decisions. Each fund must weigh up the application individually.

**Collaborative Evaluation Framework**

This DD best practice was observed in Experts 4, 6, 7, and 8 funds. At least two analysts assess the start-ups together. In the fund managed by Expert 8, sometimes even a group of three to five people are entrusted with evaluating and presenting potential investments. The possible susceptibility to errors or deliberate omission of important information by an individual, as described by Expert 1, could thus be eliminated. Only start-ups that pass the collective assessment would be presented to the investment committee.

These investment tandems or teams allow for a mutual review, whereby the different perspectives lead to a more diverse valuation. This initiative reduces the influence of external bias by focusing

on internal reference points. Following internal guidelines and critical evaluation can be better assured by the mutual review and recall of these by more than one party. The *Collaborative Evaluation Framework* could be included as an integral part of the DD strategy to enhance its effectiveness.

**Capital Commitment Incentive**

Experts 1 and 5 emphasized the importance and limitations of internal incentive systems. Individual accountability for investment decisions can lead to more careful analyses, according to Expert 5. Expert 1 describes the fundamental challenge: the long-term nature of VC funds or the possibility of evaluating a startup often extends beyond the tenure of the decision-makers at the respective fund and prevents direct consequences. Consequently, incentive structures based on negative effects can be questionable and inefficient. Expert 2 opened the scope for a positive incentive system. Analysts can contribute a modest amount to the investments endorsed in this fund. This approach of the so-called skin in the game can strengthen the sense of responsibility.

This system aligns the analysts' financial interests with those of the fund, which can lead to more prudent investment decisions. A predetermined lock-in period could synchronize the investor's holding period with that of the fund. This creates a commitment to the long-term interests of the fund. A phased approach to financial participation could be implemented to refine this incentive system further based on an employee's seniority and tenure. The longer in the company and the more senior the investor, the larger the minimum and maximum participation size could be.

**Contrarian Autonomy Framework**

In the VC scene, the path to exceptional returns may deviate from the collective consensus. The *Contrarian Autonomy Framework*, as envisioned by Expert 1, has the potential to break through conventional wisdom and establish a path for contrarian investment decisions. For this purpose, typical investment majority requirements could be challenged under certain conditions. Expert 1 assumes optimal investment decisions do not necessarily follow a democratic process. Instead, it could be effective if decision-makers are allowed to make investment decisions independently of one another. Expert 5 agreed with this concept and acknowledges that some VCs already practice this for investments up to a specific ticket size. In the funds managed by Experts 7 and 8, the

approval of at least 50% of partners is the standard procedure for moving forward with investments. In these investment committees, opinions from partners with extensive industry knowledge are particularly persuasive, according to Expert 8.

Taking these considerations into account, the *Contrarian Autonomy Framework* could be operationalized, depending on the definition of a maximum ticket size and the individual expertise of the decision maker. Decisions may still need majority approval, except when investments are under a specified ticket size or the decision-maker is an Industry Expert. This framework thus reflects the philosophy of Andy Rachleff, who argues for non-consensual investments. It creates a space where this autonomy is not only allowed but is an integral part of the investment strategy. It paves the way for decisions that could defy conventional herd behavior.

**Contrarian Alert Criteria**

A *Contrarian Alert Criteria* could highlight potential warning signals during DD and lead to predefined consequences. This approach maintains a reasonable balance between herd influence and independent analysis. Expert 6 acknowledged that vigilance is required when a startup attracts much attention among VC firms. The discovery of an investment opportunity already being discussed by other VCs should be interpreted as a warning signal that it is too late. Expert 8 prohibits justifying an investment based on the participation of other funds. Statements that another fund is investing in this startup are not considered an endorsement but a trigger for critical evaluation.

This section highlights the complexity of possibilities for controlling herd behavior in VC DD. The proposed initiatives present approaches for a more disciplined, independent, predefined investment process. Implementing the proposed initiatives can cultivate a process that mitigates the risk associated with herd behavior and helps to increase DD efficiency. As a result, it can ensure a diverse and innovative investment portfolio that promotes decisions based on thorough evaluation rather than temporary market trends.

# 8. Conclusion and Limitations

## 8.1 Summary of Findings and Implications

This paper combines theoretical insights with findings from Expert interviews and survey data to provide a multifaceted analysis of biases and their influence on the effectiveness of VC DD. A deeper understanding of how cognitive biases, particularly herd behavior, influence investment decisions was gained. It was proven that herd behavior influences the effectiveness of VC DD. Herd behavior can impair the effectiveness of DD by affecting the independence and thoroughness of investment analysis. The effect was predominantly perceived as negative by the Experts.

The Expert interviews revealed the prevalence of this bias as each Expert confirmed its relevance. This underlines the need for preventive measures embedded in the philosophy and structure of the VC fund. Initiatives such as the introduction of structured DD protocols, collaborative evaluations, or internal incentive systems such as the *Capital Commitment Incentive* were derived. These initiatives were developed based on best practices compiled by various Experts and promote well-founded and autonomous decision-making. Concepts such as the *Contrarian Autonomy Framework* and the *Contrarian Alert Criteria* advocate a balanced approach that respects individual expertise and provides warnings against external influences.

In summary, the work provides actionable strategies for practitioners in the industry. The research highlights the need to acknowledge and address herd behavior to foster a more diverse and innovative investment landscape.

## 8.2 Limitations

Even though this study examines herd behavior in VC assessment, some limitations must be considered. The most significant limitation results from the qualitative focus of the study. The lack of a comprehensive quantitative survey avoids a holistic derivation of the broad and heterogeneous spectrum of experiences and practices in the VC industry.

The demographic limitation of the study should be considered, given that the perspective on investment decisions and the influence of cognitive biases such as herd behavior can vary greatly depending on age, gender, geographical location, and professional experience. The exclusive focus

on Germany and the average age of 29.6 years means that not all experiences and perspectives are covered. The study surveyed a nationally representative sample without asking about involvement in the VC scene.
The geographical and professional diversity of the Experts interviewed also limits the qualitative study. While their perspectives are insightful, they predominantly represent a fraction of the broader VC community. Therefore, the findings may only apply to some VC firms, particularly those operating in different markets or under different legal frameworks. The interviews likewise demonstrated that there is no single best approach but room for various approaches. The initiatives, therefore, cannot and should not be applied to all VCs.

The focus on herd behavior has the effect that other potentially influential factors could not be investigated in detail, and the lack of comparison prevents an adequate classification of the influence. An empirical investigation of independent and dependent variables is also missing. This component needs to be revised to ensure a nuanced understanding of the relationship between cognitive biases and the effectiveness of DD. This constraint limits a final accurate answer to the research question. Due to the VC data situation and this work's scope, it was impossible to include such an analysis.

Considering current market conditions and industry practices, the findings and recommendations should be viewed with caution. As described initially, the VC scene is a dynamic and cyclical industry. Therefore, the findings' applicability and relevance can change quickly over time.

Interviewing Experts always carries the risk of a particular bias and false self-perception. The assessment of these Experts is influenced by their professional and personal backgrounds. This skews the results towards certain prevalent viewpoints or practices among the experts and the respective VCs. For example, all Experts acknowledged the relevance of herd behavior, but none wanted to admit falling into this bias.

The work provides valuable insights into herd behavior and DD practices in the VC industry, but limitations must be considered in its interpretation and application.

## 8.3 Research Outlook

Further research into the VC DD, particularly about the cognitive biases presented, offers promising starting points for additional studies. Examining the collective impact of these biases and their relative influence on DD could reveal valuable insights.

Quantitative studies could complement the qualitative findings from Expert interviews presented here. Such an approach could allow for better control and comparability across possible dependent variables such as VC firm differences, regulatory and economic environments, professional and cultural backgrounds of decision makers, market conditions, etc.

A long-term study on implementing proposed initiatives, such as the *Contrarian Autonomy Framework* and the *Capital Commitment Incentive*, could examine their effectiveness, opportunities, and barriers. This would allow the initiatives and their impact on profitability, diversity in the investment portfolio, and effectiveness in combating herd behavior to be assessed.

Exploring the opportunities of technological advancements, particularly in data analytics and the potential mitigation of cognitive biases, could be another exciting research idea.

This work provides valuable insights and presents numerous research opportunities that can further enrich the understanding and practical applications in this dynamic area.

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# Appendices

## Appendix A: Interview Questions

| Topic Block | Questions |
|---|---|
| A: General VC Operations | 1. Can you provide a short overview of your VC firm's investment philosophy? |
| | 2. How does your firm source potential investment opportunities? |
| | 3. Why do you believe startups seeking funding would select your VC firm when they have multiple investment options available? |
| B: Investment Decision-Making | 4. What factors do you consider the most critical when making investment decisions in startups? |
| | 5. Is there any of these factors that would be even more important if you had greater DD resources? |
| | 6. Is there any of these factors that would be less important if you had greater DD resources? |
| | 7. What role does gut feeling or intuition play in your investment decisions, if any? |
| | 8. After completing the DD, how does your firm validate the findings to ensure that the decision to invest is well-founded and risk is reduced? |
| C: Influence of Herd Behavior | 9. Do you think there is a herding effect in VC? |
| | 10. If yes, how do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments? |
| | 11. Do you think you avoid herding better than others? |

*Table 2: Interview Questions*

## Appendix B: Survey Questionnaire

| **Introduction** | |
|---|---|
| Imagine you are an investment manager at a venture capital investment firm. The company looks for good start-ups, invests in them and improves them. You have now found a startup and evaluated it positively based on criteria such as management and market potential. This is the starting point for all subsequent questions. | |
| **Answer format** | **Possible Answers** |
| Option 1 | 1: I do not invest.<br>2: I wait with my decision to gahter more information.<br>3: I am unsure.<br>4: I invest. |
| Option 2 | 1: I decide to invest on the basis of the new information.<br>2: I am unsure.<br>3: I am waiting to make my decision in order to gather more information.<br>4: I change my decision to "do not invest" based on the new information.<br>5: I stand by my original decision regardless of the new information. |
| Option 3 | Likert-Scale: 0 (no influence) to 5 (high influence) |

| Questions | Bias | Answer format |
|---|---|---|
| 1. After meeting the founders, you have a good first impression. What action would you be most likely to take? | First impression | Option 1 |
| 2. After a meeting with the founders, you have a bad first impression. What action would you be most likely to take? | First impression | Option 2 |
| 3. Rate the influence of the first impression on your investment decision from 0 (no influence) to 5 (high influence). | First impression | Option 3 |
| 4. Without knowing whether your previous investments were successful or not, how would this delayed feedback affect your decision? | Delayed feedback | Option 1 |
| 5. If your previous investments were successful after a few years, would you invest in this startup? | Delayed feedback | Option 2 |
| 6. If your previous investments had failed after a few years, would you invest in this startup? | Delayed feedback | Option 2 |
| 7. Rate the impact of delayed feedback on your investment decision from 0 (no impact) to 5 (high impact). | Delayed feedback | Option 3 |
| 8. If you knew that other well-known investors such as Lakestar and HV Capital were involved, what would you do? | Herd behavior | Option 1 |
| 9. If no other investors are involved yet, how would you proceed? | Herd behavior | Option 2 |
| 10. Rate the impact of other people's decisions on your investment decision from 0 (no influence) to 5 (high influence). | Herd behavior | Option 3 |
| 11. Would you want to invest despite the fact that the information you have gathered might be insufficient? | Overconfidence | Option 1 |
| 12. If you found out that the information you were relying on was minimal but still positive, would that encourage you to invest? | Overconfidence | Option 2 |
| 13. On a scale from 0 (no influence) to 5 (high influence), rate how confidence in your investment decision influences your decisions. | Overconfidence | Option 3 |
| 14. How would you react if you just received a cold email (without knowing it) from the founders looking for funding? | Cold introduction | Option 1 |
| 15. If a respected investor sent you an introductory email about the founders, would that influence your decision to invest? | Cold introduction | Option 2 |
| 16. Rate the impact of introductory emails from 0 (no impact) to 5 (high impact) on your investment decision. | Cold introduction | Option 3 |
| 17. Which bias influences your investment decisions the most? | | 1: First impression<br>2: Delayed feedback<br>3: Herd behavior<br>4: Overconfidence<br>5: Cold introduction |
| 18. Please briefly explain your choice. | | Open question |

*Table 3: Survey Questionnaire*

# Appendix C: Interview with Expert 1

| | |
|---|---|
| Question Block A: General VC Operations | |
| JFB | **Can you provide a short overview of your VC firm's investment philosophy?** |
| Expert 1 | Consumer focus, early stage, EU |
| Question Block B: Investment Decision-Making | |
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 1 | TMMT: Team, Market, Model, Technology |
| | TMMT is weighted more important in early than in late stage |
| | Never liked to calculate market size as it so inaccurate to predict |
| JFB | **Is there any of these factors that would be even more important if you had greater DD resources?** |
| Expert 1 | No, because it would not lead to better decisions but you would overweight certain aspects |
| | Try to find out if others already did the same -> but this would probably lead to not investing as it primes you to see failure |
| JFB | **Is there any of these factors that would be less important if you had greater DD resources?** |
| Expert 1 | Most of DD is already gut feeling so with unlimited ressources you would not evaluate the startup more accurate -> sometimes you should not bet on facts but on your intuition |
| JFB | **After completing the due diligence process, how does your firm validate the findings to ensure that the decision to invest is well-founded and risk is reduced?** |
| Expert 1 | There is no protection from that risk and that is also why it is called “risk capital” |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 1 | Yes |
| | And it is quite significant |
| | In 2021 when cash was free the industry was driven by FOMO |
| | You did quite fast DD and were impacted by the work of others |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 1 | For example, if VCs do not miss out on the AI trend due to herd behavior, this can be an advantage |
| | In the end the disadvantages outweigh the advantages |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 1 | Now (2023) it could get better as there is no such pressure on VC and FOMO can decrease |
| | It was crazy in 2021 how fast everything had to be |
| | Disadvantages of herd behavior outweigh advantages from a VC perspective |
| | From an Entrepreneur perspective in can have advantages but only in the short term, because if you raise too much money too early, you then have difficulties growing into this valuation |
| JFB | **How do you balance following industry trends with making contrarian investment choices that might go against the herd?** |
| Expert 1 | It is incredibly difficult as people remain people and there are behaviors that cannot be changed |
| | That is why a VC should build structures in itself that do not allow this to happen |
| | At my first fund, for example, the discussion culture was very open, but at the same time it was very atypical that you did not need a majority to be able to make investments -> this meant that investments could be made contrarily |
| | Not everyone has to believe in the decision and a decision is not right just because it was made democratically |
| | Apparently, the best funds do not work democraticall |
| JFB | **Are there any other things that you would like to share?** |
| Expert 1 | These is an incentive bias at junior level to write the pre DD document as positive as possible, because a analyst want to do as many deals as possible |
| | As the outcome is only seen in 5-8 years and very few juniors stay that long a lot of them igore red flags |
| | It needs an environment where junior do not get so much pressure |

*Table 4: Interview with Expert 1*

# Appendix D: Interview with Expert 2

| Question Block B: Investment Decision-Making | |
|---|---|
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 2 | Fit with investment philosophy (minimum EBITDA/ revenue etc.) |
| | 1st USP: Within the company and the market that it cannot be replicated easily |
| | 2nd Management: Competent team and otherwise you need a clear plan about how to overcome it |
| | 3rd Market: Clear value drivers and megatrends behind it |
| JFB | **Is there any of these factors that would be even more important if you had greater DD resources?** |
| Expert 2 | There are 2 DD ressources you spend: HR and Money |
| | If you have more then you would spend more of both on the market validation as it leads to more learnings |
| JFB | **What role does gut feeling or intuition play in your investment decisions, if any?** |
| Expert 2 | The final decision is always based on facts |
| | Gut feeling plays a role in the beginning and in the final decision |
| JFB | **After completing the due diligence process, how does your firm validate the findings to ensure that the decision to invest is well-founded and risk is reduced?** |
| Expert 2 | Offer these advisors to co-invest (kind of skin-in-the-game) |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 2 | In PE there is no herding effect because in VC multiple firms can invest but in PE rather not |
| | Moreover in PE it is especially interesting if the company is cheap so you can still improve them |
| | In PE you not only search for an attractive company but also a great entry situation |
| JFB | **Is there an Incentive bias?** |
| Expert 2 | You can overcome it by allowing juniors to co-invest |
| | Small investments but an amount that would hurt |
| JFB | **Is there Overconfidence bias?** |
| Expert 2 | Less accurate in PE as DD is 10x more time-consuming as in VC (1 month vs 6-12) |
| | In PE there is less space to fall for this bias |
| JFB | **Is there Delayed feedback bias?** |
| Expert 2 | As the companies and their business models already exists and have a working business model you can see your impact way earlier |
| JFB | **Is there a First impression bias?** |
| Expert 2 | It is definitely the case as the Management is an important value driver |
| | If you have good management then they are willing to pay more |
| | Maybe not a bias but a criteria |

*Table 5: Interview with Expert 2*

# Appendix E: Interview with Expert 3

| Question Block A: General VC Operations | |
|---|---|
| JFB | **Can you provide a short overview of your VC firm's investment philosophy?** |
| Expert 3 | Companies after seed stage/ from Series A onwards |
| | For direct investments where you can understand and evaluate the market |
| | "No stupid money" but you also want to develop the company further, e.g. through board seats |
| Question Block B: Investment Decision-Making | |
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 3 | An exit opportunity with a good multiple, because we do not want to become an equity holding firm |
| | Business concept: less focus on meeting the forecast figures, but believe in it |
| | Founders |
| JFB | **Are there some VC funds that you particularly like to invest with and some that represent a kind of red flag because they are known for sloppy DD, such as Tiger Global?** |
| Expert 3 | We like to work with *HV Capital, Patec, Cusp Capital, Index Ventures* and others because we can rely on their DD |
| | You must take a look at the track record of their last investments |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 3 | Yes |
| | Many VCs are jumping on hot topics that are being heavily discussed |
| | A lot of AI has been discussed at many conferences in the last 2 months but no more biotech |
| | I have rarely seen a year where there were as few capital calls as last year |
| | Where a lot of money goes, you can also turn over participation more quickly in liquidity |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 3 | If more money goes in the same direction, the chance of success can also increase, because it forms a cluster and investments can be sold faster at better prices |
| | If you behave contrarily, you also have to invest more intellectual property |
| | "A trend is your friend" but you do not want to be the last one either, because that is the one who loses money |

*Table 6: Interview with Expert 3*

# Appendix F: Interview with Expert 4

| Question Block A: General VC Operations | |
|---|---|
| JFB | **Can you provide a short overview of your VC firm's investment philosophy?** |
| Expert 4 | The fund is not thesis driven |
| | Started as an tech fund and then evolved into certain verticals: saas, b2bsaas, marketplace, deeptech, climatetech, crypto |
| | Verticals depend on which people are in the fund |
| JFB | **How does the investment process look like with resepct to the Investment Comittee?** |
| Expert 4 | Analysts at first tries to talk with the partners about a deal while for example waiting at the coffee machine |
| | Analysts already lost if the partners hear the deal for the first time in the IC |
| | You (should) only go to the IC If you are 100% sure |
| | At some point you switch from checking to selling |
| | If you are conviced you become less critical and frame the negative things in a way that it sounds fair |
| | Everyone here is very commited to do the best for the VC firm |
| JFB | **Why do you think that everybody is so committed to your VC firm?** |
| Expert 4 | Everyone thinks they will be there in 5 years |
| Question Block B: Investment Decision-Making | |
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 4 | Team, vision & traction |
| | Are the founders able to build it? |
| | Founders should have build something already because otherwise there is no proof they can do it and therefore it is hard and rare to fund junior founders |
| | The best deals are very competitive and you need to be really fast |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 4 | Something like that definitely is there |
| | The better the VC the less they are exposed to this effect |
| | There are a lot of VC investors who made big money as founders and now often only give soft commitment as VCs -> until a lead investor comes along whose DD they can trust |
| | The great VCs who have the best people are not reliant to this |
| | If for example *Lakestar* leads a deal this raises a tension |
| JFB | **Do you think you avoid herding better than others?** |
| Expert 4 | We want to see every deal before the news comes out and not be affected by herding |

*Table 7: Interview with Expert 4*

# Appendix G: Interview with Expert 5

| Question Block B: Investment Decision-Making | |
|---|---|
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 5 | (For me) Fit between value proposition and addressed pain point |
| | Market size |
| | Team |
| JFB | **Is there any of these factors that would be even more important if you had greater DD resources?** |
| Expert 5 | The more resources the more I will use them to get a deeper understanding of the market |
| | There is a certain amount of information you can get from the company itself |
| | But you can get nearly unlimited information about a market, for example the pain point of potential customers |
| JFB | **What role does gut feeling or intuition play in your investment decisions, if any?** |
| Expert 5 | I would not call it gut feeling, rather an educated guess |
| | In early stage there is much more gut feeling involved than in later stage evaluation |
| | VCs evaluate most companies based on their initial 30min call with the founders |
| JFB | **After completing the due diligence process, how does your firm validate the findings to ensure that the decision to invest is well-founded and risk is reduced?** |
| Expert 5 | First not only one individual is looking at one deal but rather a few and they discuss potential investments in the team |
| | Then external reference to validate investments, who are mainly industry experts but can also be other VCs |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 5 | Yes, it is massive |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 5 | Lots of fund acts on FOMO, but not everyone |
| | VCs that focus on building their own theses or are not driven by signals may not be as affected by herd behavior as others |
| | Herding leads to certain types of companies being funded and receiving a large amount of funding, which is not sustainable for a startup or industry |
| | For example the fast delivery services that have become a fundraising war |
| JFB | **Do you think you avoid herding better than others?** |
| Expert 5 | Yes, by mindset: "We all have wins, but you can not have them all" |
| | We need to be good on missing out on something we do not belive in |
| | We are comfortable with not investing and everyone here is holding each other accountable |
| | It also depends on how individuals in a fund are incentivized because you are way more responsible if your head is on the line |
| | There are also funds where you need at least five deals a year, but these will not be high quality then |
| JFB | **Are there any other things that you would like to share?** |
| Expert 5 | The cold introduction bias might be correlated to the herding bias because if no one tells you about it then it is probably not hot |
| | Curious to see a study on VC investing in founders that have similar background than themselves |

*Table 8: Interview with Expert 5*

# Appendix H: Interview with Expert 6

| Question Block A: General VC Operations | |
|---|---|
| JFB | **Can you provide a short overview of your VC firm's investment philosophy?** |
| Expert 6 | □ European tech |
| | □ Seed to pre-IPO |
| | □ EUR 1-60 mio. funding |
| | □ All verticals |
| Question Block B: Investment Decision-Making | |
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 6 | □ Team |
| | □ Traction |
| | □ Vision |
| | □ These 3 are my individual preferences but these are widely spread at our firm |
| JFB | **Is there any of these factors that would be even more important if you had greater DD resources?** |
| Expert 6 | □ We would not evaluate different as the most important resource when trying to find a great company is time as it is such a competitive area |
| JFB | **What role does gut feeling or intuition play in your investment decisions, if any?** |
| Expert 6 | □ A lot and the later it gets the less its gut feeling the more its numbers |
| | □ Moreover you are always biased by the last investment decisions you have done |
| | □ In the early stages than investing is also a bit like a good taste |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 6 | □ Yes |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 6 | □ VC is an industry of hypes and trends |
| | □ In hype cycles, companies in these industries get a push |
| | □ If a VC firm has invested before the hype it will be a sure win e.g. AI, scooters, warehouse |
| JFB | **Do you think you avoid herding better than others?** |
| Expert 6 | □ I do not think you need to avoid but you need to play it smart |
| JFB | **How do you balance following industry trends with making contrarian investment choices that might go against the herd?** |
| Expert 6 | □ If you hear about a company from another VC than it is probably too late |

*Table 9: Interview with Expert 6*

# Appendix I: Interview with Expert 7

| | |
|---|---|
| Question Block A: General VC Operations | |
| JFB | **Can you provide a short overview of your VC firm's investment philosophy?** |
| Expert 7 | □ Industry various from enterprise to insure tech |
| | □ Early stage till series A |
| Question Block B: Investment Decision-Making | |
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 7 | □ Team (background, experience etc.) |
| | □ Market (to scale, to reach ARR) |
| | □ Competition (what is currently available in the market but also globally) |
| | □ Traction (financials, unit economics) |
| | □ Microeconomic topics (if new business models could arrive quite quickly) |
| | □ Shareholding situation |
| JFB | **Is there any of these factors that would be even more important if you had greater DD resources?** |
| Expert 7 | □ No, as it is always kind of pre-fixed how many people should look at what in one company and in what stage |
| | □ No more analysts in order to ensure efficient communication |
| JFB | **What role does gut feeling or intuition play in your investment decisions, if any?** |
| Expert 7 | □ Can not completely exclude gut feeling |
| | □ Try to minimize gut feeling by looking at a company with multiple colleagues |
| JFB | **After completing the due diligence process, how does your firm validate the findings to ensure that the decision to invest is well-founded and risk is reduced?** |
| Expert 7 | □ In the investment committee when potential deals are discussed |
| | □ First it is about presenting |
| | □ Then a follow-up round where the questions from the round before are answered |
| JFB | **Are there any potential biases in the IC or how does it look like?** |
| Expert 7 | □ Buddy system |
| | □ Very transparent |
| | □ Discuss it outgoingly |
| | □ Over 50% of the partners need to agree to a deal in order to get it through |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 7 | □ To a certain extent |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 7 | □ Best VCs are the best VCs for a reason |
| | □ The downfall is that you never know how others do their DD and therefore trusting someone else DD is a risk |
| JFB | **Do you think you avoid herding better than others?** |
| Expert 7 | □ I think it is because we have a quite good, standardized process |

*Table 10: Interview with Expert 7*

# Appendix J: Interview with Expert 8

| Question Block B: Investment Decision-Making | |
|---|---|
| JFB | **What factors do you consider the most critical when making investment decisions in startups?** |
| Expert 8 | Market |
| | Product |
| | Team |
| JFB | **Is there any of these factors that would be even more important if you had greater DD resources?** |
| Expert 8 | No, because we already have 5-10 ref calls and talk to industry experts and to people who know the founders |
| Question Block C: Influence of Herd Behavior | |
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 8 | Yes |
| | I always tell this joke: A venture capitalist goes into a bar. The bartender asks what he would like. The venture capitalist answers by asking what the others have? |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 8 | A lot of funds that with small budget often don't have a clear strategy -> they just "spray & pray" and try to make their less experience gone with more investments |
| | Most startups nowadays have funding for 18-24 months which means there are less opportunities |
| | Many startups raise under the radar and when you are outside this bubble then herding kicks in as you want to be part of this elite circle |
| | FOMO is the one and only driver of herding |
| JFB | **Do you think you avoid herding better than others?** |
| Expert 8 | We have our own thesis that is why |
| JFB | **How do you balance following industry trends with making contrarian investment choices that might go against the herd?** |
| Expert 8 | Three to five analysts look at a white paper and therefore at the potential deal |
| | Being 100% transparent |
| | Internal and external |
| | The white paper is a screenshot, it is dynamic |
| JFB | **Are there any other things that you would like to share?** |
| Expert 8 | A lack of expertise in the industry is fatal, because then the risk of things going wrong is extremely high |
| | We have around 12,000 deals in our CRM system every year so we have more than enough deals, which reduces the risk of herding |
| | I do not want to hear anymore "but VC X and Y invest too" |

*Table 11: Interview with Expert 8*

# Appendix K: Interview with Expert 9

| Question Block C: Influence of Herd Behavior | |
|---|---|
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 9 | Yes, there definitely is |
| | Especially between lower rank analyst who try to get guidance |
| | They are not copying but it is their kind of having an idol |
| | As people try to get accepted in the industry they tend to follow herds |
| | You want to get deals as you need to build your track record |
| JFB | **Could you imagine that you ignore red flags to get due diligence?** |
| Expert 9 | No! |
| | You need to match certain criteria |
| | Criteria to be matched in DD will not prevent herding but it is a great filter |
| JFB | **How do you think herding affects the VC industry, particularly in terms of decision-making? Could you think of potential opportunities and potential downfalls of herding when it comes to investments?** |
| Expert 9 | Opportunity: Might get aware of a deal that you otherwise would not |
| | Downside: Jump to a conclusion to quickly |
| JFB | **Do you think you avoid herding better than others?** |
| Expert 9 | Not being in the berlin bubble definitely helps |
| | Not going to the same events weekly help |
| JFB | **What do you think of my developed Initiative *Clear Thesis and Structured DD Proccess*?** |
| Expert 9 | Does not help you to avoid it a 100% |
| | But it helps to |
| | Having a structured DD is the better key |
| | Thesis impact is rather low |
| JFB | **What do you think of my developed Initiative *Collaborative Evaluation Framework*?** |
| Expert 9 | In theory a good idea |
| | In practice it may not be ideal as you have limited resources |
| JFB | **What do you think of my developed Initiative *Capital Commitment Incentive*?** |
| Expert 9 | Aligns you with the overall fund strategy |
| | But will not avoid herding |
| | Starting from investment manager you can often already co-invest in many VCs |
| JFB | **What do you think of my developed Initiative *Contrarian Autonomy Framework*?** |
| Expert 9 | The decision making process is very different from fund to fund |
| | In some VCs even an associate can make deals but that option is not a real option because you want the validation of others from your fund |
| | When it comes to us our decision is more of a group decision |
| JFB | **What do you think of my developed Initiative *Contrarian Alert Criteria*?** |
| Expert 9 | Often it is fine to be one of the followers |

*Table 12: Interview with Expert 9*

# Appendix L: Interview with Expert 10

| Question Block C: Influence of Herd Behavior | |
|---|---|
| JFB | **Do you think there is a herding effect in VC?** |
| Expert 10 | Yes, and without a doub |
| | Funds that have a strong brand reputation (PR, marketing, fund performance) have a strong herd response |
| | If they invest it leads to higher valuations |
| | The majority thinks a better brand equals better performance |
| | VC is about risk and mitigating risks |
| | VCs want to protect the downside/ not missing on the obvious -> If other VCs commit capital it lowers the hurdler for others to invest "oh there is less risk as others have checked the company for good" |
| | By nature, VCs do not have too much time to look into startups in detail |
| JFB | **Are you affected by who made the term sheet? Is it enough if there is a term sheet or do you want to see a well-known VC who made this sheet?** |
| Expert 10 | Yes, but it could also have the effect the other way around and I would be more critical |
| | It is crucial who invests and not just which fund but rather who within the fund itself: If the person is an efficient investor then I am more into it |
| JFB | **Do you think it is a problem that most VCs are generalists?** |
| Expert 10 | The best returning VCs are generalists of course with exceptions |
| | . They are only a handful generation defining business each generation: If you restrict yourself manually then you maybe can only find 1 or 2 or even none within your industry |
| | 2. The ability to not get lost in the specifics and status quo in the industry |
| | Experts in the industries will tell you "This is not possible" |
| JFB | **How do you make yourself free from quotes like "This is not possible"** |
| Expert 10 | You need to be 100% guided by the founders |
| | Be open-minded and curious as there as only few founders who can build vertical-defining companies |
| | See how the founder reacts to criticism about their startups |
| | It is the founders task to convince us |
| | Take it all in and then make your own decision and see if they have the better arguments/ better vision |
| JFB | **Do you have mechanisms/ frameworks/ criteria to follow this mindset of "being guided by the founders"?** |
| Expert 10 | It is wrong to have checkboxes |
| | Unfortunately, that is not how it works |
| | Every founder and every company are unique |
| | You cannot compare the greatest founders as they have no common patterns |
| | There is a high degree of uniqueness of the greatest startups |
| JFB | **What do you think of my developed Initiative *Clear Thesis and Structured DD Proccess*?** |
| Expert 10 | Totally disagrees with this approach |
| | But there are different cultures that lead to the desired returns |
| | *Accel*: Mathematic approach to investing with a "prepared mind" |
| | *Benchmark*: They do not even have a CRM, they talk to experts and founders in an open discussion -> led them to great outliers -> if you want to be contrarian you also need to be contrarian in your approach |

*Table 13: Interview with Expert 10*