

Financial economics

VC Investment Decisions: Hunches, Metrics, or Coin Flips?

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Abstract

Venture capitalists (VCs) face a complex decision-making process when selecting startups to invest in. This qualitative single case study aims to highlight the factors VCs take into account and how their decisions vary depending on the investment area and startup stage, where previous research has yielded conflicting conclusions. By exploring the concepts of information asymmetry and path dependence, this study uncovers the vital role of founder quality as a critical factor for all VCs. Founder quality serves as a "must-have" attribute that helps bridge the information asymmetry gap between VCs and startups. However, the assessment of founder quality can be influenced by path dependence, as VCs may exhibit a bias towards founders with similar personalities, potentially overshadowing other critical aspects of the investment. As the startup progresses from the early stage to growth and late stage, VCs shift their focus toward financial metrics, reflecting the need for established companies to generate returns and maintain financial stability. Additionally, VCs consider tailored metrics specific to their investment area, allowing for more precise decision-making. Weaknesses of the study include the fundraising environment and future research is suggested to complement this by performing a similar study over a larger time period.

Keywords: Venture Capital, investment decisions, metrics

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i Glossary

To ensure clarity and understanding throughout the following chapters, a glossary of key terminology is provided. By referring to this list of definitions, the arguments and analysis presented in the following chapters will be understandable.

AI/ML, Artificial Intelligence/Machine Learning: computer systems that can learn and improve their performance on tasks without being explicitly programmed.

B2B, Business-to-Business: the transactions and relationships between two businesses.

Burn Rate: the rate at which a company is spending its available funds over a certain period of time, measured as total expenditures per month/revenue per month.

CAC, customer acquiring cost: includes expenses related to marketing, sales, and other customer acquisition activities.

Churn rate: the percentage of customers who stop using a company's product or service over a given period of time.

Impact/Impact Investing: an investment strategy that seeks to generate both financial returns and positive social or environmental impact (meaning less profits but positive impact in other ways).

LTV, lifetime value: the amount of money a customer is expected to spend on a product or service during their entire relationship with a business.

Runway: the amount of time a startup has before it runs out of cash, based on its current burn rate and available cash reserves.

SaaS, Software as a Service: a model of software delivery where a company provides its customers with access to software applications over the internet.

TAM, Total Addressable Market: the total market demand or revenue potential for a product or service.

1 Introduction

1.1 Background

Venture Capital (VC) is an international phenomenon and a financial asset class that is about identifying and investing in high-growth startups. It plays a vital role in providing funding to small and immature firms. These firms typically lack tangible assets and face challenges in attracting financing due to high levels of uncertainty and rapidly changing markets, making them high-risk and (potential) high-reward investments. While the VC industry has developed mechanisms such as different methods of screenings, to overcome investment process problems, it is not immune to pathologies that can create issues for investors and entrepreneurs.²

The challenge Venture Capitalists (VCs) face when evaluating their investment targets originate from the considerable information asymmetries existing between the start-ups and VCs, and VCs try to overcome this by evaluating different factors of the start-up.³ Thus, they consider a range of measures and criteria to determine if the startup has the potential to succeed. These might include metrics like financial features, the founder's and the team's experience, market size, and market share.^{4 5} However, not all metrics are treated equally, and different VCs prioritize them differently.⁶

VC also has a strong local character, such as culture, with unique differentiators depending on the location of the VC firms,⁷ and understanding how different VCs weigh the importance of various investment metrics affect VC firms themselves, as their investment strategies and success rates depend on their ability to find and invest in startups that fit their requirements.⁸

¹ Mohammadreza Radfar, Gholamreza Zomorodian, Mansoureh Aligholi, Mehrzad Minouei & Farhad Hanifi, "Designing Native Decision-Making Model for Selecting Venture Capital Investment in Emerging Companies", *Advances in mathematical finance & applications* 4:2 (2019), pp. 75-76.

² Paul Gompers & Josh Lerner, "The Venture Capital Revolution", *Journal of Economic Perspectives* 15:2 (2001), pp. 145-168.

³ Joern H. Block, Geertjan De Vries, Jan H. Schumann & Philipp Sandner, "Trademarks and venture capital valuation", *Journal of Business Venturing* 29:4 (2014), pp. 525-542.

⁴ Radfar, Zomorodian, Aligholi, Minouei & Hanifi 2019, p. 85-86.

⁵ Henrik Berglund, "Early stage venture capital investing: Comparing California and Scandinavia", *Venture Capital* 13:2 (2011), p. 133.

⁶ ibid, p. 133.

⁷ Darek Klonowski, "Venture Capital Redefined, The Economic, Political, and Social Impact of COVID on the VC Ecosystem", Switzerland: Springer Nature Switzerland AG, 2022.

⁸ Berglund 2011 p. 121-122.

An understanding is also beneficial for entrepreneurs seeking funding, as it can help them tailor their pitches and presentations to appeal to VCs. Thus, researching the various ways in which VCs weigh these in their investment decision can provide valuable insights for both entrepreneurs and investors.¹⁰

Throughout this paper, the abbreviation VC will be used to refer to venture capital (financial asset class) and venture capitalist (individual). The abbreviation VCs will be used to refer to venture capitalists (individuals).

1.2 Problem description and problem analysis

VC firms rely on finding and investing in startups that match their standards to succeed, 11 which can be difficult due to the lack of a clear agreement on the most significant factors and how they should be prioritized.¹² The choice to invest in a company requires consideration of a wide range of metrics such as the start-up's financials, the market opportunity, the founder's personality, and much more.¹⁴

The lack of a systematic approach among VCs on metrics in the investment process can lead to inefficiencies and biases. 15 However, the lack of a systematic approach is what gives VCs the ability to find high risk/high reward investment opportunities. 16 The balancing between intuition and metric-driven investment decisions is what makes this an interesting topic. Suppose VCs do not have a clear perspective on which metrics drive different investments. In that case, it is difficult to evaluate the process they went through ahead of the investment decision, as they need to differentiate between the investment decision process and the investment outcome. The process of an investment decision may be correct (the VCs may have accounted for all relevant metrics and factors). Still, bad luck or unseen events lead to a negative outcome on the investment. It may also make it more challenging for startups to

⁹ Vance H. Fried & Robert D. Hisrich, "Toward a Model of Venture Capital Investment Decision Making", Financial Management 23:3 (1994), p. 35.

¹⁰ Christian Granz, "How do bank-affiliated venture capitalists do deals? Towards a model of multiple investment logics", *Qualitative Research in Financial Markets* 13:4 (2021), pp. 476-477. ¹¹ Fried & Hisrich 1994, p. 35.

¹² Radfar, Zomorodian, Aligholi, Minouei & Hanifi 2019, p. 86-87.

¹³ Berglund, 2011, p. 140.

¹⁴ Radfar, Zomorodian, Aligholi, Minouei & Hanifi 2019, p. 85-86.

¹⁵ ibid, p.87

¹⁶ ibid, p. 75-77.

secure funding if they are not aware of what investors prioritize, potentially resulting in missed opportunities for both parties.¹⁷

By understanding how different VCs weigh the importance of these factors and if there are aspects of the startup being evaluated that affect the decision, it may be possible to develop a standardized framework for evaluating startups. This could lead to a more efficient and effective investment process, increase startup funding opportunities, and reduce path dependence caused by investment bias ¹⁸ (further explained in 3 Theoretical Framework). This study will examine the investment decisions of a single Swedish VC fund, aiming to contribute to local understanding of the startup ecosystem in the region. How VCs make their investment decisions has become more important during the last couple of years, as the amount of VC in the financial system has increased rapidly. With an increase in VC as a way of funding startups, the importance of how they conduct their investment decisions increases as much. ¹⁹

1.3 Research questions

How do Swedish VCs prioritize different metrics in their investment decisions?

How do their investment decisions vary based on the investment area and the stage of the startup?

1.4 Aim of the study

The purpose of this study is to explore how Swedish VCs prioritize and weigh different metrics in their investment decisions, and how their investment decisions vary based on the investment area and the stage of the startup, aiming to pinpoint and understand which metrics are considered and prioritized, and how they are weighted. The aim is to understand how Swedish VCs make investment decisions, which can provide useful insights for both entrepreneurs who are seeking funding, and VCs looking for investments.

¹⁷ Fried & Hisrich 1994, p. 5-36.

¹⁸ Radfar, Zomorodian, Aligholi, Minouei & Hanifi 2019, p. 76-77.

¹⁹ Pitchbook, 2023 NORDIC Private Capital Breakdown (PitchBook Data, Inc, 2023), p. 3.

By gaining an understanding of the investment decision-making process of these VCs, this study can help see how this firm uses different metrics to make informed investment decisions, with conclusions that can help entrepreneurs better align with the metrics most valued by VCs. Additionally, this research can help VCs improve their investment strategy by shedding light on which metrics are most important for different stages and investment areas. Furthermore, this study can contribute to the broader academic literature on information asymmetry and path dependence in the VC industry, as it seeks to uncover how these phenomena affect investment decision-making.

The study will be presented as a framework for investment decisions regarding VC, where metrics in relation to startup stage and startup investment area are considered. The metrics that will be used are categorized into financial, founder quality, and market - metrics.

1.5 Structure of the thesis

The theoretical framework (2) will present information asymmetry and path dependence, followed by the literature review (3) presenting previous conclusions in the field. The methodology (4) presents the qualitative approach taken and introduces the case and the respondents. Finally, the result (5) is presented followed by the discussion (6) which analyses the result together with the theoretical framework and previous literature.

2 Theoretical framework

2.1 Information asymmetry theory

Information asymmetry theory refers to situations where one party in a transaction has more or better information than the other. This creates a power imbalance that can result in issues like adverse selection or moral hazard, which are problems that stem from information asymmetry.²⁰

In the context of VC, adverse selection could refer to a situation where founders possess more information about their risk than the VCs who fund them. This information asymmetry leads

²⁰ George A. Akerlof, "The Market for "Lemons": Quality Uncertainty and the Market Mechanism", *The Quarterly Journal of Economics*, 84:3 (1970), pp. 490-496

to founders making decisions that suit their needs, while the VC faces an increased risk of loss if the information asymmetry is large. Specifically, founders may have a better understanding of the probability and size of potential losses than the founders.²¹ ²²

Moral hazard in the VC context refers to a type of behavior that increases the likelihood of losses occurring under funding. The idea is that when a company is funded, it may take more risks or be less careful because it knows it will not bear the full cost of any losses. The basic idea is that this can change the founder's or company's behavior and make them more likely to experience losses. This can be a problem for VCs who are investing and trying to avoid losses.²³ ²⁴

VC firms deal with the risks of adverse selection and moral hazard, which result from information asymmetry between entrepreneurs and VCs. Adverse selection risks arise when entrepreneurs possess certain information that VCs do not know, while moral hazard risks stem from entrepreneurs taking actions that VCs cannot observe. VC firms address these risks through strategies such as intensive proposal screening, legal contracting, and extensive monitoring of the firms they invest in.²⁵

The magnitude of the information asymmetry could affect what metrics the startup founders will limelight or hide, and the investment evaluation is probably formed by what the founder wants the investors to focus on to increase the chance of investment.

2.2 Path dependence

Path dependency theory proposes that an organization or system's present state is heavily influenced by its past experiences and decisions. It suggests that once a particular path is taken, changing course becomes increasingly difficult due to factors like sunk costs,

²¹ Alma Cohen & Peter Siegelman, "Testing for Adverse Selection in Insurance Markets", *Journal of Risk and Insurance*, 77:1 (2010), pp. 39-84.

²² Cristiano Bellavitis, Dzidziso Samuel Kamuriwo, & Ulrich Hommel, "Mitigation of Moral Hazard and Adverse Selection in Venture Capital Financing: The Influence of theCountry's Institutional Setting", *Journal of Small Business Management*, 57:4 (2019), pp. 1328–1349.

²³ David Rowell, & Luke B. Connelly, "A History of the Term "Moral Hazard", *The Journal of Risk and Insurance*. (2012), pp. 1051-1075.

²⁴ Bellavitis, Kamuriwo, & Hommel 2019, p. 1342-1345.

²⁵ Kshitija Joshi & M. H. Bala Subrahmanya, "Information Asymmetry Risks in Venture Capital (VC) Investments: Strategies of Transnational VC Firms in India", *Transnational Entrepreneurship. Entrepreneurship and Development in South Asia: Longitudinal Narratives.* (2019), pp. 117-142

institutional inertia, and network effects. The theory highlights the significance of early decisions and their potential to create lock-in effects that limit an organization's flexibility in the future. It also suggests that external factors, such as changes in regulations or competition, may be necessary to break a company out of its established path to pursue new strategic directions²⁶.

Path dependence could affect a VCs inclination to continue investing in an area where they previously have had an investment success, even if other opportunities may be more profitable. Additionally, path dependence could create a bias toward investing in certain types of founders, based on the VCs' past experiences.

3 Literature review

Over the years, multiple studies have concluded that VC is important for economic growth and that it is important to have VC models that are tailored to local economic and cultural contexts. ^{27 28 29 30} A decision-making model for choosing which emerging companies to invest in based on qualitative data collected from literature reviews and expert interviews was formed in 2019. ³¹ The model looks at a variety of factors, such as financial features, product or service, market and industry, risk types, entrepreneur experience, innovation, personality traits of the entrepreneur, and information asymmetry. The study emphasizes the importance of developing VC models that are native to a particular country to increase the success rate of VC investments. ³² That VC is different in different countries is additionally shown in a study comparing local VC markets in the US and Sweden, concluding the VC markets develop in response to institutional changes such as deregulation of the financial markets and the design of the tax system. ³³

²⁶ Paul A David, "Path Dependence: A Foundational Concept for Historical Social Science", *Cliometrica*, 1:2 (2007), pp. 6-7

²⁷ Fried and Hisrich 1994, p. 32-34

²⁸ Radfar, Zomorodian, Aligholi, Minouei & Hanifi 2019, p. 85-86.

²⁹ Berglund 2011, p. 133-140.

³⁰ John Hall & Charles W. Hofer, "Venture capitalists' decision criteria in new venture evaluation", *Journal of Business Venturing*, 8:1 (1993), pp. 25-42

³¹ Radfar, Zomorodian, Aligholi, Minouei & Hanifi 2019, p. 77.

³² ibid. p. 85-86

³³ Josh Lerner & Joacim Tåg, "Institutions and venture capital", *Industrial and Corporate Change*, 22:1 (2013), pp. 153–182.

Additionally, another study proposes a general six-stage process model regarding VC investment decision-making, the stages being origination, evaluation, technical studies, financial projections, emotional commitment, and closing.³⁴ In the first stage, VCs generate investment proposals and use firm-specific and generic screens to eliminate proposals that do not meet their investment criteria.³⁵ The second stage is the evaluation process, where VCs gather additional information through meetings with the company's management team.³⁶ The third stage involves using technical studies and customer feedback to assess a company's technology, and the fourth stage involves analyzing pro forma financial projections to assess a project's potential for earnings growth. The fifth stage is the emotional commitment stage, and finally, the sixth stage is the closing stage, where the deal is either funded or rejected.³⁷ The article describes that a model of the investment decision-making process aims to reduce information asymmetry and thereby make the investment process more efficient.³⁸

Another type of VC decision-making model is the actuarial model, which could serve as a decision-making tool for screening. These models are consistent over time and investment proposals as they consistently weigh information in the same manner, in contrast to humans that could be influenced by biased perceptions. With an actuarial model, each VC firm could develop models tailored to their specific criteria.³⁹ An actuarial model could also reduce the path dependence that challenges the decision-making, as the actuarial model is consistent while a VC's opinions are affected by the VC's previous experiences.⁴⁰

Looking at the aspects VCs consider in the investment decision-making process, one study compares VCs' different approaches in California and Scandinavia. It is discovered that in the selection phase, Californian VCs focus on technology and building a good working relationship with entrepreneurs, while Scandinavian VCs prioritize trust, fairness in contracts, and retaining influence over entrepreneurs.⁴¹ Californian VCs also evaluate what they can do with a deal, which may lead to changes in the original offering, while Scandinavian VCs have

³⁴ Fried & Hisrich 1994, p. 28.

³⁵ ibid, p. 32-34.

³⁶ Fried & Hisrich 1994, p. 34.

³⁷ ibid, p. 34.

³⁸ ibid, p. 29.

³⁹ Andrew L. Zacharakis & G. Dale Meyer, "The potential of actuarial decision models: can they improve the venture capital investment decision?", *Journal of Business Venturing* 15:4 (2000), pp. 323–346.

⁴⁰ Andrea Schertler, "Path Dependencies in Venture Capital Markets". Kiel Institute for World Economics. *Kiel Working Paper* nº 1120 (2002).

⁴¹ Berglund, 2011, p. 133.

a broader focus due to seeing fewer quality deals. Both groups emphasize the importance of focus.⁴² The study concludes that Californian VCs are more business-oriented, and have better networks and technical expertise, while Scandinavian VCs are less business-focused.⁴³ Furthermore, another study shows that VCs in general prefer to invest in a more qualified founder with a worse product than a less qualified founder with a better product.⁴⁴ Regarding the technical expertise of the VC, one study shows that a VC with a higher technical expertise shows lower errors in the assessment of the startup and that a VC's technical competence makes the assessment of technical startups more accurate.⁴⁵

In contrast, another study concludes that key criteria when deciding to invest include long-term growth and profitability of the business industry and that there is a lack of importance regarding VCs' attachment to the founder during the early investment stages. The reason for this is that relying too much on meetings could result in personality having too much weight in the investment decision.⁴⁶ The reason for these contrasting conclusions could be that founder quality and management capability are often linked to other important aspects such as market opportunity.⁴⁷ Further nuancing the VCs' decision-making, one study is concluding that VCs themselves do not have an understanding of their decision-making, particularly as decisions become more complex and information-intensive, the VCs may struggle to keep a clear understanding of their strategies.⁴⁸

In summary, these studies emphasize the importance of developing VC models that are specific to the local economic and cultural context by using a comprehensive decision-making process that takes into account many factors. They also show that different VCs show different investment behavior and prioritize different metrics in their investment decision-making.

⁴² ibid, p. 133.

⁴³ ibid, p. 140.

⁴⁴ Dmitry Khanin, J. Robert Baum, Raj V. Mahto & Charles Heller, "Venture Capitalists' investment criteria: 40 years of research", *Small Business Institute*® *Research Review*, 35 (2008), pp. 187-192.

⁴⁵ Rohit Aggarwal, David Kryscynski & Harpreet Singh, "Evaluating Venture Technical Competence in Venture Capitalist Investment Decisions", *Management Science*, 61:11, (2015), pp. 2685-2706.

⁴⁶ Hall, Hofer, 1993, pp. 25-26.

⁴⁷ Dean A. Shepherd "Venture capitalists' assessment of new venture survival", *Management Science*, 45:5 (1999), pp. 621-632.

⁴⁸ Andrew L Zacharakis, & G Dale Meyer, "A lack of insight: do venture capitalists really understand their own decision process?", *Journal of Business Venturing* 13:1 (1998), pp. 57-76.

4 Methodology

To gain insights into how Swedish VCs evaluate investment opportunities in startups, a qualitative single case study of semi-structured interviews is conducted.

Qualitative research is chosen because it is designed to uncover the meaning and experiences of individuals in a given context, which aligns with the aim of this study to gain insight into the decision-making processes of VCs. By utilizing this approach, the subjective meanings, actions, and social contexts of the respondents can be explored in-depth, providing a rich and nuanced understanding of their investment decisions. In this way, the qualitative research approach aims to ensure that the participants' perspectives are highlighted.⁴⁹

The case study is chosen to illuminate the set of decisions made by VCs and why they are taken,⁵⁰ allowing for a deeper level of analysis regarding the phenomenon of VC investment decision-making. This can lead to greater insights and understanding of the unique factors that contribute to success or failure within this specific case. 51 52 By examining one case in detail, it may be possible to identify common themes or issues that can be applied to the industry more broadly.⁵³

Semi-structured interviews are deemed the most appropriate since the research questions are complex and require a deep understanding of the experiences and perceptions of the individuals involved which can be achieved with semi-structured interviews. Purposive stratified sampling is used to choose respondents, where the choice of interviewing both a junior and senior VC from the same fund with the same investment area allows receiving a more complete understanding of the investment practices and perspectives within the organization, to be able to answer the research question.⁵⁴ Thus the variables for the stratified sampling are hierarchy and investment area. This approach could help to identify any

⁴⁹ Ellie Fossey, Carol Harvey, Fiona McDermott & Larry Davidson, "Understanding and evaluating qualitative research", Australian and New Zealand Journal of Psychiatry (2002) 36:717 pp. 717-732.

⁵⁰ Wilbur Schramm, "Notes on Case Studies of Instructional MediaProjects", Stanford: California Institution for Communication, Stanford University, 1971.

⁵¹ Sarah Crowel, Kathrin Cresswell, Ann Robertson, Guro Huby, Anthony Averyl & Aziz Sheikh, "The Case Study Approach", *BMC Medical Research Methodology* 11:110 (2011) pp. 1-9. ⁵² Roberta Heale & Alison Twycross, "What is a case study?", *Evidence Based Nursing* 2:21 (2018) pp. 7-8.

⁵³ Norman K. Denzi & Yvonna S. Lincoln, "the Sage Handbook of Qualitative Research". California: Sage Publications, Inc. 2011.

⁵⁴ Oliver C. Robinson, "Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide", *Qualitative Research in Psychology* (2014) 11:25 pp. 25-41.

discrepancies or differences in investment strategies, as well as provide a more comprehensive view of the firm's investment philosophy. Additionally, having representatives from the same investment area could help shed light on any particularities of that industry which can be valuable in understanding the investment landscape more broadly.⁵⁵ The reason to use stratified sampling instead of random sampling is that this distribution, of two representatives of different hierarchies from each investment area, might be better situated to provide insights into the study than others. Hence, probability sampling would not fit the goal of the study.⁵⁶

The interviews involve standardized questions with the optionality for the VCs to elaborate without restrictions, lasting around 30 minutes each, and are designed to evoke information on the importance of various investment decisions. The participants of the study remain anonymous to protect their confidentiality and receive truthful perspectives and reflections. Additionally, they were fully informed of the study's purpose, their rights were explained and consent was obtained before the interviews began.

To avoid biases during interviews and when compiling the result, the following strategy was used:

- 1. Using a relevant sample: the group of VCs with different backgrounds and experiences (years in the industry and investment area) were interviewed to generate rich information to answer the research questions.⁵⁷
- 2. Asking open-ended questions: rather than asking leading questions that may steer the VCs towards a certain answer, open-ended questions were used that allow the VCs to provide their perspective.⁵⁸
- 3. Being transparent about the intentions and research goals: transparency of the potential implications of the findings is important as it helps to build trust with the VCs and encourages them to provide honest and accurate responses.⁵⁹

⁵⁵ ibid, p. 35-38

⁵⁶ Laura S. Abrams, "Sampling 'Hard to Reach' Populations in Qualitative Research", *Qualitative Social Work* 9:4 (2010) pp. 536-550.

⁵⁷ ibid, p. 540.

⁵⁸ Kathryn Roulston & Stephanie Anne Shelton. "Reconceptualizing Bias in Teaching Qualitative Research Methods", *Qualitative Inquiry* (2015) 21:4, pp- 332-342

⁵⁹ Christine Benedichte Meyer, "A Case in Case Study Methodology", Field Methods 13:4 (2001) pp. 329-352.

- 4. Considering the limitations of self-reported data: considering self-reported data and its limitations is important as VCs may have biases or blind spots when it comes to their investment metrics.⁶⁰
- 5. Considering biases of authors: author bias could exist or be generated through the research process, due to the particular angle of vision and/or systematic sources of errors that may favor particular results that align with the author's prejudgments.⁶¹

It is important to note that despite implementing the above strategies of mitigating biases and obtaining accurate results, there is still a possibility of bias influencing the outcome.

4.1 Case introduction

The study is a singular case analysis that focuses on a Swedish-based VC fund. The fund selected for the case study is a well-established investment firm with a diverse portfolio and a reputation for supporting innovative startups. The selected fund is a multi-stage fund. As a multi-stage fund, it invests in companies at various stages of development, from early-stage to growth- and late-stage. Without revealing the fund by being too specific, the fund has assets under management somewhere between SEK 2-25 billion making it one of the larger ones. The firm has a local presence in Stockholm. The fund's agnostic investment area approach means that it does not specialize in any specific industry or sector, but rather seeks to support promising businesses across a range of investment areas making it possible to compare selected metrics between different areas. The fund is large enough to have a significant number of VCs on its team, which makes it an ideal candidate for conducting interviews with a range of junior and senior staff members. Overall, the fund's reputation, diverse portfolio, and investment area-agnostic approach make it an appropriate choice for studying the investment decisions of VC investors.

The VC investment process of the chosen fund starts with deal sourcing, which means finding as many startups as possible which can be relevant to the fund. It is done through networking events, startup databases, referrals, and by the startups contacting the fund themselves. Then, the deal screening starts which tends to be when the first meeting between the investor and founders takes place. It involves assessing key aspects such as market size,

⁶⁰ Roulston & Shelton 2015, p. 335-337

⁶¹ ibid. p. 335.

the experience of founders, and the general first impression. The selected companies enter the due diligence stage, an analysis in depth of the business where the VCs contact customers, partners, and experts who share their insights about the firm. After the due diligence phase, investors should be well informed about all important aspects of the business. The next phase is the investment decision phase where the VCs at the firm discuss why they think it is a good investment or not. If they find it interesting enough, the process ends with the firm sending a term sheet to the startup including the amount of investment, terms, conditions, startup valuation, and more. When a mutual agreement is achieved, both parties sign the term sheet.

The research includes interviews with eight individuals who hold various positions and focus on different investment areas within the fund. To better understand the findings, it is relevant to note the varying levels of a VC firm's hierarchy. This hierarchy is the one used at the interviewed fund (and most other funds).

- General Partner: the highest level in a VC firm's hierarchy. They are responsible for managing the firm's investment strategy, raising funds, and making final investment decisions. General partners typically have extensive experience and play a critical role in the success of the firm.
- Principal: a senior-level position that involves managing the investment portfolio and leading deal negotiations. They work closely with the general partners to make investment decisions and are responsible for helping to shape the overall strategy of the firm.
- 3. Associate: more experienced than analysts and responsible for sourcing and evaluating potential investments. They work closely with the principals and general partners to help manage the portfolio and identify new investment opportunities.
- 4. Analyst: responsible for analyzing potential investments and providing recommendations to senior members of the team. They conduct market research, evaluate financial statements, and perform due diligence on potential deals.
- 5. Intern: typically an entry-level position in a VC firm. They assist other members of the team with research, deal sourcing, and other administrative tasks.

4.2 Respondents

Providing context for the eight VCs who were interviewed is crucial to better understand the result and place them within a larger framework. The descriptions of what investment area and what level at the firm each VC operates in are provided below:

- A. B2B SaaS-focused VC on associate level.
- B. B2B SaaS-focused VC on partner level.
- C. Cybersecurity-focused VC on intern level.
- D. Cybersecurity-focused VC on partner level.
- E. AI/ML-focused VC on associate level.
- F. AI/ML-focused VC on partner level.
- G. Impact-focused VC on associate level.
- H. Impact-focused VC on partner level.

4.3 Motivation for chosen metrics

To answer the research questions of how Swedish VCs prioritize and weigh different metrics in their investment decisions and how whether their investment decisions vary based on the investment area and the stage of the startup, three categories of metrics will be analyzed. The metrics are financial, founder quality, and market metrics. Using these is a sensible approach to analyze the VC investment process because these three sets of metrics together provide a relatively complete overview of a business. Within these metrics, there are hundreds of different subcategories of metrics. The ones that are used in this report are a reflection of the ones the eight VCs talked about most frequently during the interviews.

Financial metrics such as CAC, LTV, and net margin provide valuable insight into a company's financials. They help investors assess the company's financial performance and stability, which is critical in determining whether an investment is beneficial.⁶²

Founder quality metrics are also essential as they provide valuable information about the team leading the company. These metrics could include the founder's communication skills,

⁶² Soenke Sievers, Christopher F. Mokwa & Georg Keienburg, "The Relevance of Financial versus Non-Financial Information for the Valuation of Venture Capital-Backed Firms", *European Accounting Review* (2013) 22:3 pp. 467-511.

past track record, experience in the industry, and technical expertise. They help VCs determine if the founder has the potential to build a successful company.⁶³

Market metrics provide insight into external market factors that can impact the company's success, like TAM, market growth, and regulations. VCs use market metrics to assess the competitive landscape and determine whether the company has a viable opportunity to both grow and succeed in the market.⁶⁴

When used together, financial, founder quality, and market metrics provide a holistic view of the company's current state and its future potential. For example, strong financial metrics combined with a seasoned and talented founder, and a favorable market landscape, could indicate a strong investment opportunity. Conversely, weak financial metrics combined with inexperienced founders and a saturated market may suggest a high-risk investment. 65 66 The metrics used in the report reflect what the VCs talked about themselves in the interviews. By looking at these together, investors can form a more complete and holistic view of the startup, which can contribute to more well-informed investment decisions. 67

5 Result

To provide a thorough analysis of the startups, the results are presented in three main categories: financials, founder quality, and market aspects. Financials are presented first, followed by founder quality including both soft and hard skills. Finally, market aspects are presented, with a focus on the TAM and key trends and drivers. The stage of the startup is taken into consideration as well, with early-stage, growth-stage, and late-stage startups being evaluated. Additionally, the investment area is examined, with a focus on B2B SaaS, cybersecurity, AI/ML, and impact investing.

Even though efforts have been made to structure the result for easy comparison and understanding of the various metrics and investment decisions, it is important to note that the responses may not always fit perfectly into one category.

⁶³ Radfar, Zomorodian, Aligholi, Minouei & Hanifi 2019, p. 81-87.

⁶⁴ Fried & Hisrich 1994, p. 32-34.

⁶⁵ Berglund, 2011, p. 135 138

⁶⁶ Sievers, Mokwa & Keienburg 2013, p. 505.

⁶⁷ Sievers, Mokwa & Keienburg 2013, p. 504-505.

The reader can refer to Table 1 and Table 2 to get a quick overview and understanding of the following result and discussion parts.

Table 1: Metrics to Investment Area.

| | Financials | Founder Quality | Market Aspects |
|---------------|------------|-----------------|----------------|
| B2B SaaS | X | X | |
| Cybersecurity | | X | x |
| AI/ML | | X | |
| Impact | X | X | x |

Table 2: Metrics to Investment Stage.

| | Financials | Founder Quality | Market Aspects |
|--------|------------|-----------------|----------------|
| Early | | x | x |
| Growth | X | X | |
| Late | X | | |

5.1 Financials

The financial aspect of a startup seems to be one of the most important factors that VCs consider when making an investment, especially when the startup is in the growth- and late stage.

5.1.1 Unit economics

Unit economics is an essential aspect of VC investment which involves using specific metrics to assess the financial performance of a startup. These metrics vary depending on the industry and business model of the startup being evaluated. Some of the most commonly used metrics include CAC, LTV, and Churn Rate.

Unit economics are prioritized more by VCs evaluating startups with low barriers to enter markets and large customer bases such as B2B SaaS investors, described by the B2B

SaaS-focused VC on partner level (B): (letter B from section 2.5.1 where all interviewed VCs are given a letter for further reference):

I am heavily focused on the LTV/CAC ratio. If I see a startup with a ratio above three, it means that the company is very scalable. It means that every single dollar the company has should be invested in accelerating growth. And long-term growth is the core of my investment decisions.

Unit economics seems to be a main factor in investment decision-making. Worded by the impact-focused VC on associate level (G):

In these times, when access to capital is way more limited, burn rate and runway are becoming more and more important for all companies. That is why a lot of people in tech lose their jobs now.

However, unit economics are not a key factor for every VC. As stated by the impact-focused VC on partner level (H) who invests in companies with long sales cycles:

The companies I evaluate have such long sales cycles. When I invest, there can be 5 years until they potentially have revenue. Therefore, I cannot look at unit economics as much as other VCs do. I need to be aware of the fundraising environment, if the company has enough money to develop its product before the fundraising environment is too tough. I need to look at the burn rate and the runway, that is, how long the current cash amount lasts.

5.1.2 Profitability

VCs evaluate startups using various profitability metrics to determine if they can generate positive cash flow and returns on investment. In general, early-stage VCs do not look at the net margin, as it does not matter to them in their stage. The current margin is not viewed as a good indication of what a potential long-term margin could be as everything about a startup is uncertain, described by the AI/ML-focused VC on associate level (E):

Net margin is something I don't hear any early-stage VC talk about. It is much more relevant for late-stage VCs, where the current net margin is somewhat similar to the

long-term potential net margin the company can achieve. For us, it doesn't say anything about what the long-term net margin will be.

The reasoning that profitability in the late stage does not necessarily mean that the company has to be profitable in the early stage is brought up more times, this time with EBITDA. This is emphasized by the cybersecurity-focused VC on partner level (D):

EBITDA isn't important in my investment process. If I would look for companies with good EBITDA levels, I wouldn't find any exciting companies to invest in.

5.2 Founder quality

54.2.1 Soft skills

Soft skills are qualities that are not easily measurable, such as communication skills and leadership style, but they are essential to the success of a startup. They appear to be an important factor in investment decision-making. It is considered important by the respondents, but they have different methods to evaluate them. This is what the B2B SaaS-focused VC on associate level (A) said about soft skills, using his intuition when evaluating:

I don't see soft skills as a metric. In my perspective, soft skills are what makes VC an art rather than a science. I am using 20 years of experience in consulting and banking to understand the entrepreneurs. I have met hundreds of people over the years. I know when a founder speaks the truth, I know when a founder has the long-term mindset that I look for and I know when a founder knows what he is talking about.

The statement that soft skills are important while at the same time not always straightforward to evaluate is strengthened by the AI/ML-focused VC on partner level (F):

I care way more about soft skills than hard skills. Hard skills are hard to know how real they are, but I know a great and motivated human when I meet him or her.

The AI/ML-focused VC on partner level (F) has another reason why he considers soft qualities as essential, and this is something that has been strengthened by most interviewed VCs:

Maybe, the most important reason why we prioritize soft qualities is because we build a long term relationship with the founder. And in order to do a good deal from the beginning with the VC it is important to be almost as knowledgeable about the startup as the founder himself and that is accomplished by building a good relationship with the founder which requires soft qualities.

On the same topic, the more junior AI/ML associate on associate level (E) gives a different perspective on how soft skills can be evaluated. While the more experienced VCs describe how they use their intuitions and know when they meet someone with soft skills that meet their criteria, he tends to evaluate the founder by seeing how they interact with their team and the dynamic they have between each other:

When I meet founders, as I don't have as much experience as many other VCs I try to evaluate soft skills and team dynamics on the basis of the interaction I am seeing between the CEO and the CTO. I ask questions where it is not clear who should respond to the question, and therefore I analyze how smooth their team dynamics are.

An effective team with an inspiring and motivating founder is described to be what the startup's success depends on. Described by the cybersecurity-focused VC on intern level (C):

I prefer to look at the management structure, and skill sets of the team members. Ultimately, the success of a startup depends on the effectiveness of the team. I want a founder who inspires and motivates their team. If they have that, I am sure to see a team that is capable of executing their business plan and has the potential to grow the company.

Additionally, the discussion about soft skills is further nuanced by the view that while being a very important factor in the investment-making decision, the top leadership may not enter the company until it already is successful. This is emphasized by the impact-focused VC on associate level (G):

Team dynamics as a metric is a tough discussion. On one hand, the team is everything in a startup. On the other hand, the majority of the top leadership will not be at the most successful startups until after a few years.

5.2.2 Hard skills

VCs evaluate hard skills, such as technical expertise and business acumen of founders, in several ways, and the respondents do not directly reflect any differences in opinions toward them. They are emphasized to play a central role in a startup, as stated by cybersecurity-focused VC on partner level (D):

The hard skills of a founder plays an important role in startups since it is needed to understand the product. IQ correlates with performance, competent people build great things.

Additionally, technical expertise is relevant to the industry in which the startup is selling its product. This is emphasized by the AI/ML-focused VC on associate level (E):

In highly technical industries I look for founders with a solid technical background and an ability to develop and improve their product.

5.3 Market aspects

5.3.1 Total Addressable Market (TAM)

VCs often use TAM as a metric to evaluate startups because it provides a rough estimate of the potential size of the market for the startup's product or service. Most VCs think TAM is one of the top priorities to look at. In the words of the B2B SaaS-focused VC on partner level (B):

We want to invest in future unicorns. That requires a huge market. The more market share our company potentially can take, the smaller the TAM has to be. But it has to be big. Always.

Put simply, the cybersecurity-focused VC on intern level (C)'s view is that the greater the TAM, the easier his analysis becomes:

I am user-oriented, I want to see a great rise in users. Therefore I like big TAMs, when a company has a big TAM I do not need to worry about potential risks that otherwise exist. Then, I can focus on the user experience. I actually think this is more important than the financials we discussed earlier.

However, this is a topic where it is rather clear that the opinions differ. The AI/ML-focused VC on partner level (F) had a very different perspective:

I do not care about TAM as much as most VCs. I think exceptional founders create their own TAM. Exceptional founders will rebuild their products many times to fit new markets, so I care more about the founder and the product itself.

The impact-focused VC on partner level (H) was making it very clear that what he looks at is entrepreneurs and teams rather than the market trend:

If you let me exaggerate a bit, I care about four things: team, team, team, and TAM.

5.3.2 Trends & Key Drivers

The market trend sparks the investment interest for VCs, worded by the B2B SaaS-focused VC on associate level (A):

Trends are what make me interested in taking a call with a startup. But not more.

The statement that the market trend is a key driver for investment is confirmed by the cybersecurity-focused VC on partner level, (D), who emphasizes that trends help them drive the business, but also that it is difficult to compare trends in different industries:

Using trends as metrics is something we do a lot, as it helps us understand what drives the business. The problem is that it is usually hard to compare the effect of trends in one industry with another one.

In-depth market research is described to be an important factor by the impact-focused VC on partner level (H):

At first glance, my investment decisions may seem like they're made by flipping a coin, but in reality, it's a combination of in-depth market research and a certain gut instinct that comes with years of experience.

Another aspect of trends and key drivers is that they can be hard to quantify but are still an important part of the investment decisions, as elaborated by the cybersecurity VC on intern level (C):

Trends and key drivers are sometimes hard to quantify and sometimes very easy. Predicting how many connected devices there will be in five years is easy, but there might not be good ways of quantifying other drivers such as how a covid boosted business will be able to sustain the trend it's been riding on. However, even though they are hard to quantify they are still essential to understand where the market is going and what the most important products of tomorrow will be.

5.4 Investment area

VCs prioritize metrics differently based on the startup's investment area. Here are some general conclusions about how VCs prioritize metrics for startups based on their investment area:

5.4.1 B2B SaaS

The B2B SaaS-focused VC on partner level (A) gives greater weight to unit economics. As those companies relatively early acquire users for their products, it is possible to see how much money they spend to acquire customers and how much they can monetize on the users:

I put strong emphasis on unit economics. In this industry, companies often acquire users early on, which allows me to get a good sense of their CAC and how they can monetize their users.

However, unit economics are not necessarily more important for B2B SaaS investors, but an accessible metric, as the B2B SaaS-focused VC on partner level describes (B):

Unit economics is a key focus, that said I don't always view them as more important than VCs in other investment areas do. It's just that unit economics exists and can be measured relatively early on, and by analyzing a company's CAC and LTV, I can better understand the company overall.

5.4.2 Cybersecurity

For Cybersecurity startups, VCs tend to prioritize market aspects, churn rate and margins. This is elaborated by the cybersecurity VC on intern level (C):

Cybersecurity startups have high switching costs because no one wants to risk their security system, and changing security systems tend to make them more vulnerable.

Market aspects are important as the best founders try to build their business today toward where the market is going tomorrow. As described by the cybersecurity-focused VC on partner level (D):

Analyzing the market allows me to gain knowledge of where the most attractive innovations will be in a few years. I want to make decisions today that align with the most important needs of humans or businesses tomorrow. By knowing the market characteristics I can accomplish it.

At least as important as metrics as churn rate and margins are market aspects as the VC on partner level (D) elaborated:

For me, a market growing fast is essential, as fast-growing markets have room for disrupting ideas and companies. They are growing fast because new solutions are needed. Cybersecurity is growing very fast, which is why new companies can enter new markets with diverse product offerings.

The cybersecurity-focused VC on partner level (D) further explains how he, by looking at churn rate and margins, judges a startup to be in terms of quality:

Churn is critical to look at as a lot of cybersecurity companies can have very low churn, and low churn together with an important product means good margins. Therefore, margins and churn rate can be seen as an indicator of the quality of the startup.

5.4.3 AI/ML

For AI/ML startups, VCs tend to prioritize founder quality and team experience. Told by the AI/ML-focused VC on associate level (E):

I want to know that the founders have experience and connections from many technology companies from before. These products are complicated to sell as they are complicated themselves. Therefore it is essential that founders have experience and knowledge from the organizations they try to sell to. I have seen that a good founder with a seasoned team can make all the difference in building a scalable and sustainable company in this space.

The other AI/ML-focused VC on Partner level (F) had a similar perspective, describing that people in this fast paced environment need to be on their toes:

The most important thing will always be the founder, but given that, AI companies need to have their nose in the air as there is so much happening in the space at the moment. News emerging can be a gamechanger for them, for example, a new feature by another AI company can be used by the first AI company to develop a more comprehensive product with more features and a higher user proposition.

5.4.4 Impact investing

For Impact startups, VCs tend to prioritize financials. According to the impact-focused VC on associate level (G), this is because any of the impact startups do not have a product in the investing stage, and the investor needs to ensure that the company will still be running when the product is ready for the market:

As many impact startups have a long way before they even have a product that is ready for the market, I need to be aware of the burn rate and the runway of the company. I need to know that the company can survive a downturn in the economy, so having money for at least a year is important.

The impact-focused VC on partner level (H) emphasizes that complicated products require safety margins:

Well, first off there are different kinds of impact, social and environmental are the most common in the startup space. I am more interested in environmental startups and they tend to build pretty complicated stuff like climate tech products. These products are usually more expensive to develop than expected from the beginning so I want founders to have margins of safety when they do their financial planning.

5.5 Startup stage

VCs prioritize metrics differently based on the stage or size of the startup they are evaluating.

For early-stage startups, VCs often prioritize founder quality metrics like the team's expertise, track record, and vision. Although market metrics such as total addressable market (TAM) and customer acquisition costs are also important, they may be less relevant if the startup is still in the process of validating its product or service in the market. Financial metrics may be less significant at this stage since most early-stage startups are not yet generating significant revenue or profits, as explained by the AI/ML-focused VC on associate level (E):

For me, the team behind an early-stage startup is essential. While market share is important, startups in the early stage are often in the process of validating their product. Therefore financials are not significant to me, as most early-stage startups are yet to generate significant revenue or profits.

The B2B SaaS-focused VC on associate level (A) is quite frank with his opinion that the team is important in the early-stage:

In early-stage, the team is everything. Without a good team, there is nothing to invest in

For growth-stage startups, VCs tend to shift their focus to financial metrics such as revenue growth, gross margins, and customer lifetime value. Metrics such as TAM and market share are still relevant but seem to be less of a priority if the startup has already established a strong position in the market. The B2B SaaS-focused VC on partner level (B) emphasizes that while founder quality metrics may still be important, they are typically less of a priority at this stage:

I place more emphasis on financial metrics in the growth-stage. Founder quality and TAM remain significant, but I tend to prioritize it less at this stage.

For late-stage startups, VCs tend to prioritize financial metrics such as revenue growth, profitability, and cash flow. Similar to the growth stage startups, TAM and market share may be less relevant, and the same goes for founder quality. As the impact-focused VC on Partner level (H) put it:

Revenue growth, profitability, and cash flow are important to me in the late stage. At this point, I put less emphasis on the founder's qualities and more on the company's ability to generate sustainable growth.

Finally, what gives VCs their edge compared to other VCs seems to be what is not easy to analyze, or quantify. Worded by the cybersecurity VC on partner level (D):

There are two kinds of metrics, quantifiable and unquantifiable. The quantifiable ones are what all other VCs have access to as well. My edge is in the unquantifiable metrics, which are harder to analyze and are often found by hunches.

6 Discussion

The discussion analyzes the result to answer the research questions by expanding upon the theoretical framework of information asymmetry and path dependence together with the underlying literature. It is presented in four parts. The first part (6.1) focuses on how Swedish VCs prioritize and weigh different metrics in their investment decisions, with the purpose to answer research question one. The second (6.2) and the third part (6.3) discuss how the investment decisions vary based on the startup investment area and stage respectively to answer research question two. Finally, the fourth part (6.4) compiles the result obtained in the study into a framework.

6.1 General investment decisions by VCs

Financials, founder quality, and market aspects are all important considerations for the VCs at the firm. The result clarifies that financials, awareness regarding the fundraising environment, and whether the company has enough money to develop its product before the fundraising environment becomes challenging, are essential considerations for VCs. Unit economics is prioritized more than profitability for startups with low barriers to enter markets and startups with a large customer base. This is because VCs need to know if a startup can acquire customers efficiently, generate more revenue from each customer, and retain customers effectively, which are all crucial prerequisites to scaling a business.

The emphasis on specific financial metrics may lead to path dependence, where VCs rely too heavily on certain metrics and overlook other important factors that could influence a startup's success. Furthermore, information asymmetry between VCs and founders can create a power imbalance that affects the negotiation of funding terms and can lead to a misalignment of incentives between the two parties.

The founder's qualities play a vital role in decision-making, especially soft qualities. VCs have different ways of evaluating soft skills, this could be because one can't measure a personality or leadership quality the same way as net margin can be measured. This is why intuition plays a vital role for the VCs when evaluating soft skills. Establishing a good relationship with the founder may provide a strategy for VCs to mitigate information asymmetry gaps that may exist between the two parties. A good relationship could also help reduce the risk of moral hazard after the decision to carry through an investment, as a solid founder-VC relationship makes it less likely that the founder will act irresponsibly due to the likeability of the VC.

Similar to Berglund's (2011) study which shows that Scandinavian VCs prioritize trust between themselves and the startup, the result of this study shows that Swedish VCs want a founder they have good chemistry with and one they can trust. The evaluation of founder quality is an area where path dependence can significantly affect investment decisions. If a VC has a successful track record with a particular founder personality or within a particular industry, it may be more likely to invest in a similar founder or industry in the future, even if they do not have the same potential for success.

Regarding market aspects, the belief held by one VC that a founder can create their own TAM might stem from an underlying assumption that a competent and skilled founder can navigate any market successfully. This belief combined with the fact that VCs use a variety of methods to evaluate trends and key drivers once again emphasizes path dependence as VCs'

past experiences and industry knowledge significantly could influence their evaluation of trends and key factors. However, relying on past experiences may lead to VCs overlooking potential opportunities or making investment decisions based on outdated aspects that do not accurately reflect the current market conditions. Just as Schertler (2002) finds VCs' accumulated experiences lead to path dependence, there is a possibility that VCs assuming for example that a founder can create their own TAM might miss out on promising prospects or fail to adapt to the evolving market landscape.

While this study does not specifically delve into the investment decisions of different stages of the investment process like Fried & Hisrich (1994), it is evident that certain similarities of the process exist. Both studies highlight the importance of evaluating the management team through personal interactions and tracking their financials. These similarities suggest that factors such as team dynamics and financial metrics have a central role in the investment decision-making process.

After interviewing eight VCs and discussing different relevant ways of measuring financials, founders, and markets the first and foremost conclusion is that the VCs are willing to take risks and therefore consider most metrics as "nice to have" rather than "must-have". There is one metric that seems to be superior compared to all others which is the soft qualities of the founders, unlike the conclusion of Hall and Hofer (1993). All VCs are in agreement that they need to find the characteristics of the founder appealing in some way. The founder does not always need to be the most charismatic, intelligent, or kind. But the founder has to be an outlier in some way or the other, to align with the high-risk characteristics that VC is. In some situations, VCs will be attracted to a cynical founder. In some situations, they will not. But the overlapping conclusion is that VCs need to find founders appealing. It is the only "must-have" of any startup.

6.2 Investment decisions by investment area

The result highlights that VCs have different priorities of metrics when evaluating startups depending on the industry they operate in. Approximately, B2B SaaS startups are more likely to be evaluated based on unit economics, while cybersecurity startups prioritize trends and key drivers. For AI/ML startups, VCs prioritize founder quality and team experience, while for impact startups both financials such as burn rate and market aspects such as trends are

prioritized. One reason for the different priorities in different industries could be that each industry has its unique characteristics and challenges, which affect the success factors. VCs are likely to prioritize metrics that reflect those unique success factors when making investment decisions.

B2B SaaS startups are evaluated based on unit economics because it provides insight into their ability to generate revenue and maintain healthy profit margins. Additionally, they have customers early in their product development stage and therefore can use improving user metrics as an indicator of business development. However, while conducting the interviews it has become clear that the quality of the founder plays a vital role in the investment decision-making. While financial metrics are commonly used, a different perspective emerges when considering good financials as a consequence of a good founder. It can be argued that financials are essentially shaped by the founder's vision, market understanding, and adaptability. This aligns with Shehperd's (1999) research that founder quality is often linked to other important aspects, which in this particular case is financials. Therefore, it is clear that the leadership and market expertise of the founder are important even to B2B SaaS VCs since the founder's abilities influence the potential success of the startup. This highlights that financial metrics are closely intertwined with founder quality.

Cybersecurity VCs prioritize churn rate and margins since customer retention and profitability are critical in this industry as a key characteristic of cybersecurity is high switching costs for customers. Another perspective is that the emphasis on profit margins could be seen as a reflection of the need for financial sustainability and competitive positioning. Cybersecurity startups probably often require substantial investments in research, development, and maintenance to stay ahead of evolving threats. By prioritizing margins, VCs ensure that the startups have a business model that can support continued innovation, scalability, and profitability in the face of intense market competition. High margins and low churn rate reflect the desire to invest in startups that exhibit strong customer relationships, financial stability, and the ability to effectively navigate the competitive landscape of the cybersecurity industry. The cybersecurity VCs spend much time reflecting on the financial metrics of cybersecurity startups but they do find market aspects at least as essential as financials when asked to compare the importance of the metrics. When asked to compare financials with market aspects, they did prioritize TAM as a big TAM mitigates several risks that exist when the market is smaller.

AI/ML startups are evaluated particularly on founder quality and team experience. According to the interviewed VCs, the reasoning goes that in a new and disruptive industry, hard skills are essential because building technical products in an area where technical conditions constantly change requires extensive expertise. However, after interviewing two different VCs focused on AI/ML one interpretation is that as the VCs themselves are less well-informed on the topic (given the information and news overload in AI/ML) they might feel that they can not add as much knowledge-based value to the founders. Therefore, the founders need to possess all relevant knowledge while the VCs can add value to the startup in other ways such as providing a relevant network of additional customers or investors. As discussed in 6.1, a good relationship with the founder could also bridge the information asymmetry gap. Looking to the conclusions of Aggarwal et al. (2015) that VCs with higher technical expertise show lower errors in the assessment, founder quality is important to a VC who is not as well-informed on the area as they are trying mitigate the risk of error in the assessment by knowing the founder.

Impact VCs emphasize the importance of founders incorporating safety margins into their financial planning, accounting for potential budgetary fluctuations and unforeseen obstacles, to better position the startup for long-term success and effective deployment. This highlights a motive of mitigating financial risks to safeguard their investments and ensure stability. The emphasis on safety margins also aligns with their objective of generating positive social and environmental outcomes since this approach reflects a focus on responsible business practices, transparency, and accountability. One interpretation from talking with the impact-focused VCs, of why they are focused on burn rate and runway, could be that they see impact as something they "should" invest in to improve their brand. As the definition of impact itself means less return in favor of positive impact in other ways, VCs could accept an impact startup that does not potentially generate the return of the whole portfolio but instead adds value to the brand of the venture fund itself.

The fact that VCs prioritize different metrics in different investment areas may reflect that information asymmetry is present. For instance, VCs investing in AI/ML startups may not necessarily have expertise in AI or an in-depth understanding of coding details. This knowledge gap creates an information asymmetry where VCs have limited visibility into the technical aspects of the startups they evaluate. Similarly to this, startups in various industries

could possess unique characteristics and face distinct challenges that are not adequately captured by traditional evaluation metrics. Additionally, different types of information are available in different investment areas. B2B SaaS VCs can use user-related financials such as LTV and CAC, while impact startups normally do not have users. This intensifies the information asymmetry problem and highlights the necessity for alternative metrics specific to each industry. Over time, VCs might develop and utilize new metrics that are more tailored to the nuances and success factors of these industries, allowing for more tailored investment decision-making despite the existing information asymmetry.

6.3 Investment decisions by startup stage

Early-stage VCs do not look at the financial aspects as much as growth and late-stage VCs. In the early stage, they focus more on the potential of the startup and the founder's qualities, to generate long-term profits in the future, rather than its current profitability.

The earlier stage the startup is in, the more important the founder's quality is. The result highlights the importance of having a well-rounded team and founder with a diverse set of skills and experiences to achieve success, especially if the startup is in the early to growth-stage. This seems to be because the founder plays an essential role in getting the startup established, while when it already is in its growth- and late stage, to generate returns for the VC the startup needs to be financially profitable.

The evaluation of financial metrics varies depending on the stage of the startup being evaluated. While early-stage VCs do not look at net margin or EBITDA, it is still an important metric for late-stage VCs who want to know the current and long-term potential net margin of the company. The rationale behind the focus on financial metrics is that in the late stage, it becomes possible to calculate a possible exit multiple and gains on the investment with relative accuracy. The potential investors care about the financials of the company in the late stage relatively more as the financials will not change in relative terms as rapidly as they did when the startup was more immature. Further on, if an early-stage startup is burning "too much" cash, it is still a limited amount compared to the future fundraising amount. In the late stage the burn rate as a proportion of the fundraising is larger. This could be one of the reasons why burn rate is more important in the late stage.

To summarize the discussions from 6.1 to 6.3, the conclusion drawn is that in 6.1 and 6.2 there are several indirect conclusions requiring analysis about what the VCs value the most. These sections present a more complex understanding of VC decision-making. On the other hand, section 6.3 provides a more straightforward and practical perspective. The VCs express that they care more about financials in the late stage, and it is clear that they do and that financials carry significant weight at this stage, indicating their increased importance in the evaluation process.

6.4 Implications and recommendations

Both investors and VCs can use the compressed framework below to get a quick overview and understanding of the VC investment decision depending on the stage and investment area of the startup. Table 1 and Table 2 (same as shown at the beginning of the result section) concisely present the discussion section, please refer to sections 6.1 to 6.3 for a more comprehensive explanation.

Table 1: Metrics to Investment Area.

| | Financials | Founder Quality | Market Aspects |
|---------------|------------|-----------------|----------------|
| B2B SaaS | x | x | |
| Cybersecurity | | x | x |
| AI/ML | | X | |
| Impact | x | x | x |

Table 2: Metrics to Investment Stage.

| | Financials | Founder Quality | Market Aspects |
|--------|------------|-----------------|----------------|
| Early | | X | x |
| Growth | X | X | |
| Late | X | | |

6.5 Theoretical contributions

This study aims to contribute to the existing research on VC investment by offering new perspectives on the industry in Scandinavia. While Berglund's (2011) study focused on comparing California and Scandinavia, this research provides a more specific examination of the investment strategies and decision-making processes of Swedish VCs. This adds depth to Berglund's (2011) findings and expands the knowledge of the VC landscape in Scandinavia.

In addition, this study could build on Fried and Hisrich's (1994) model of VC investment decision-making by exploring the six stages in greater detail. Specifically, it could shed light on how VCs act in the second to fifth stages. Investigating how VCs weigh different sources of information and determine their relevance and importance in the evaluation process stage could provide a better understanding of the decision-making process. By exploring how VCs manage their emotions, particularly during the emotional commitment stage, this study could contribute to the understanding of the role that path dependence and emotions play in VC investment.

6.6 Weaknesses and future research

One limitation of this study is its duration of 10 weeks. This timeframe may not have provided sufficient time to gain a comprehensive understanding of the VC investment decision-making process. Additional time to do both the background research and the analysis of the result would be favorable. Additionally, the sample size of eight VCs may not be representative of the whole Swedish VC industry, and may not capture the diversity of investment strategies in other regions of Sweden, which could limit the usefulness of applying this study to a broader area. There is also a chance of self-report bias from the participants. Another potential limitation is the subjective nature of the qualitative research approach, which may affect the validity of the findings.

The fundraising environment at the time of the interviews has been challenging for both VCs and entrepreneurs. Many VCs are pressured to perform to keep their jobs and many people in the industry expect things to get worse before it gets better. This could affect the responses from the VCs during the interviews. Some might be worried about losing their jobs, and

therefore give more risk-averse answers today than they would do when the fundraising environment was more prosperous.

To address these limitations, it is recommended to conduct research with a larger sample size or another VC firm over a larger period of time to confirm and/or complement the result. This would allow researchers to gain a more comprehensive understanding of the investment strategies employed by Swedish VCs and how they compare to other VC industries globally. Insights like that could be valuable for both investors and entrepreneurs.

Regarding future research, there is a natural progression in continuing the analysis from the current study. In the present study, one junior and one senior VC from each investment area were selected to provide insights into the investment practices and perspectives of a Swedish-based VC fund. To further develop the thesis, it would be valuable to explore whether there are significant differences in the metrics used by VCs depending on their seniority level within the firm. Unfortunately, the time was not sufficient enough to analyze seniority differences in this study.

By exploring seniority differences, the study could gain a deeper understanding of how seniority influences the investment decisions of VCs. This allows for the identification of any variations or discrepancies in investment decision-making based on the level of experience and seniority within the organization. Additionally, it could help uncover underlying factors that may shape investment practices, such as resource access, network connections, or industry expertise.

7 Conclusion

Swedish VCs consider a range of metrics when making investment decisions. Founder qualities serve as a "must-have" attribute that helps bridge the information asymmetry gap between VCs and startups. However, the assessment of founder quality can be influenced by path dependence, whereby VCs may exhibit a bias towards founders with similar personalities, potentially overshadowing other critical aspects of the investment.

The priorities vary depending on the investment area, indicating that VCs tailor their investment criteria to align with the specific characteristics and requirements of different

industries. Both because available metrics might differ and because it allows for more tailored investment decision-making. Regarding the stage of the startup, VCs tend to focus more on the team and the potential of the idea in the early stage, as financial metrics may be limited or non-existent. As the startup progresses to later stages and demonstrates tangible progress, financial metrics become increasingly important, indicating a shift towards assessing the startup's ability to generate sustainable growth and profitability.

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Appendix

Questions template - Interviews

All these questions have intuitive follow-up questions \rightarrow we improvise and will ask more questions during the interviews.

- 1. What metrics do you usually use when you evaluate startup investments?
- 2. If you could base your investment decision on only one metric, which one?
- 3. How do you compare those metrics with each other?
- 4. What are some metrics you find important which you think other VCs overlook?
- 5. On the other hand, what are some overrated metrics to look at?
- 6. Does it differ depending on the due diligence stage (1st, 2nd, 3rd meeting)?
- 7. Does it depend on the size/maturity of the startup you are evaluating? (Are some metrics more important the earlier the stage it is)?
- 8. Does it differ depending on the investment area of the startup?