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Venturing Through Economic Disruptions

An In-Depth Analysis of Early-Stage Venture Capital in Sweden and Strategic Guidelines for Startup Success in Economic Challenging Times

Bachelor thesis in Industrial & Financial Management
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Abstract

This thesis thoroughly investigates the impact of economic disruptions from 2019 to 2023 on early-stage venture capital in Sweden. It focuses on shifts in investment decisions during financial disruptions, aiming to clarify how economic fluctuations influences investors' decision-making. The study also provides tailored guidelines for Swedish startups to navigate effective capital-raising in recessions. Using a qualitative approach with semi-structured interviews of twelve investment managers and fund managers from major Swedish venture capital firms, the research identifies key findings. Key findings include reduced capital supply in 2023, heightened risk aversion, and a focus on sustainable solutions. The study draws parallels with historical disruptions, emphasizing the importance of a proficient team, early fundraising initiation, a competitive product, dynamic capabilities, and detailed business plans and road maps for startups navigating economic recessions. The implications offer practical guidelines for startups and suggest potential areas for further research, contributing to a nuanced understanding of investment dynamics in Sweden's evolving venture capital landscape during economic uncertainties.

Keywords: Early-stage venture capital, entrepreneurship, investment decisions, economic disruption, startups

Table of Contents

List of terms

Burn Rate – How quickly a business is using up its cash reserves to cover operating expenses, typically it is expressed in terms of how much cash is spent per month.

Cash-out possibility – Refers to a potential realized return on the investment by selling their equity in the company.

Exit – When the investor sells part or all of their ownership in a startup.

Early-stage venture capital - Refers to a phase in the investment process of startups in their initial stages of development.

Economic disruption - A temporary departure from the usual economic activity within a given society, nation, or globally.

IPO – If the startup goes public, shares will be available for public trade.

Runway – The period during which a company can keep running its operations before it exhausts its remaining capital, which is an indication of when a startup needs to raise more capital.

NVCA – National Venture Capital Association

Roadmap – A visual strategic plan that outlines the milestones and stages of the business plans.

SVCA – Swedish Private Equity & Venture Capital Association

1. Introduction

The first chapter of this study introduces the background to the research followed by a description of the specific research problem. Thereafter, the purpose and aim are specified, and the research questions are presented. Lastly, the delimitation to the study is presented.

1.1. Background

Entrepreneurship and innovation are cornerstone elements in fostering resilient and sustainable economic growth. Starting a business and translating abstract ideas into profitable products or services typically demands financial capital. For startups, especially those in their early or emerging stages, self-funding can be challenging. Additionally, securing traditional bank credit becomes almost impossible for those with insufficient cash flow and intangible resources, as it is naturally associated with high uncertainty from the bank's perspective. Consequently, private equity and venture capital emerge as a viable alternative, involving the exchange of capital for ownership. Such investments are regarded as having a high level of risk, but they also offer the potential for high rewards (Gompers, 1994). Private equity and venture capital play a significant role in financing startups that lack alternative funding options. Their funding contributes to a positive impact on economic growth and innovation. As stated by stated by the Swedish Private Equity & Venture Capital Association [SVCA] (2023, p.2), *"Private equity and venture capital builds successful businesses. Successful businesses invest more in growth. And growth leads to job creation"*.

According to SVCA (2023) Private equity and venture capital involve long-term investments in companies outside the stock market. Investments are typically deployed by a fund to enhance the company's value through activities such as strategic planning, operational efficiency, and talent development. This value creation, in turn, yields a return on the investment. Private equity is a collective term for investors who acquire shares in private companies. Under this umbrella term falls venture capital, which describes investments in newly established companies, often referred to as startups. The investments are minority investments, but the venture capital investors are still active owners in the portfolio companies to increase the startup value and yield returns to the investor. The venture capital process can be divided into four steps. The first step involves raising a fund, which involves securing capital for the venture fund. Establishing trust and showcasing a track record of successful performance become crucial factors for fund managers in attracting investors to the fund. In the second phase, the focus shifts to discovering and evaluating startups and businesses that exhibit substantial potential for growth, making them candidates for investment. This typically takes 2-4 years. The third phase revolves around exercising active ownership in the portfolio companies. Fund managers leverage their expertise to increase the value of the portfolio companies, aiming for the success of the investments. The final step involves realizing the value of the portfolio, wherein the focus is on identifying buyers in other equity markets who are willing to purchase the venture fund's share of the company, facilitating a successful exit.

According to (SVCA, 2023) venture capital is categorized into four distinct investment stages: seed funds, startup venture capital, later-stage venture capital, and growth capital. While investors have the option to engage with companies from their first establishment, a more common entry point is typically the early stage of a business. Early-stage venture capital, also known as startup venture capital, entails investing in the initial operations, facilities, and primary production of the service or product. Early-stage startups typically have a developed product or service, a business plan for expansion, and in some instances, an early-stage revenue.

The private equity and venture capital industry is a relatively young industry that has experienced rapid growth over the past two decades. It originated in the United States in 1946 when the first venture capital firm, American Research and Development (ARD), was established. During that time, a small group of investors discovered the opportunity to make high-risk, high-reward investments in emerging companies that were developing technology for World War II. The venture capital industry gained traction during the 1980s, and it witnessed a substantial boom in the late 1990s (Gompers & Lerner, 2001). In 2023, the total capital raised worldwide by the venture capital market is over 400 billion US dollars (Statista, 2023). Venture capital has a shorter history in Sweden compared to the United States, but over the past year, Swedish venture capital has grown significantly. According to the Swedish Institute [SI] (2022), Sweden is a key player in the European startup ecosystem since it is one of the countries with the fastest growing venture capital sector. In the context of Swedish companies, venture capital and private equity contribute to 264,495 jobs. Further, it contributes to 4.7% of the Swedish GDP and there are 1166 Swedish portfolio companies (SVCA, 2023).

According to SCB (2023), the 264,495 jobs represent approximately 5% of the total employment in Sweden for the year 2023. This indicates that venture capital in Sweden is increasingly becoming a significant contributor to the country's economy and a fully developed mature industry.

In the period between 2019 and 2023, the global economic landscape has faced many challenges. The first challenge was the outbreak of the COVID-19 pandemic in 2019, triggering a significant downturn in financial markets. The pandemic caused people to change their consumption behaviors, leading to a low inflation. It also triggered a rapid and widespread adoption of digital technologies (Renu, 2021). According to the European Central Bank [ECB] (2021), with the easing of restrictions, people began to not only resume their previous levels of consumption but exceeded them. This increase in spending can be explained by the savings accumulated during the pandemic and different kinds of subventions. When the demand rapidly increased businesses were able to raise their prices without losing customers. However, businesses struggled to meet the rapidly increased demand due to challenges in rebuilding their supply chains, leading to increased costs. In 2022, Russia invaded Ukraine, and the subsequent war, coupled with sanctions against Russia, arose as another factor contributing to increased costs for businesses, specifically energy expenses (The European council, 2023). The combination of events during this period has culminated in a recession during 2023 characterized by elevated levels of inflation, interest rates, and heightened uncertainty and risks across various countries, including Sweden.

Furthermore, during this period, between 2019 and 2023 the dynamics of venture capital is one of the many sectors that have been impacted. However, delving into the changed dynamics of venture capital is compelling, given its crucial role in a country's economic growth. According to Kaplan and Strömberg (2004), periods of heightened uncertainty and economic downturns, such as during the dot-com crash during 2000, typically induce a more risk-averse mindset among investors. These events typically impact startup funding dynamics. Since venture capital companies are funded by institutional investors, other venture capitalists, and high-net-worth individuals, which also are negatively affected by such events, securing finance for venture funds becomes challenging. This, in turn, contributes to a decrease in the availability of venture capital. In connection with heightened risk aversion, capital tends to shift away from innovative companies and move toward less risky ventures that are closer to generating substantial revenue.

1.2. Problem Description

Venture capital plays a pivotal role in driving innovation and fostering economic prosperity in the Swedish economy. Sweden stands out as the fastest-growing sector for venture capital in Europe, [SI] (2022). The ongoing recession has brought the venture capital sector into a new perspective, notably in comparison to earlier recessions such as those experienced in 2000 and 2008. During these periods, the Swedish venture capital landscape wasn't as mature as it is today, (SVCA, 2020). Therefore, the period between 2019 to 2023 becomes particularly intriguing as it serves as an initial test, for the now well-established venture capital landscape in Sweden. The limited data and existing research on the Swedish venture capital landscape present a unique opportunity to explore the strategic adaptations implemented by venture capital firms and observe their responses to an economic downturn in Sweden. A specific focus is directed toward early-stage venture capital because it is characterized by high risk and volatility. Since many of the companies lack stable cash flows in such stages, they appear to be most affected by economic fluctuations.

Following the financial crisis in 2008, the venture capital market in Sweden experienced continuous growth until 2022. Despite encountering minor economic downturns, none were substantial enough to impede its overall progress. The period between 2020 and 2021 is particularly marked by aggressive investment strategies and low capital costs. This era saw prosperous times for startups, enabling them to easily secure funding for their ventures. Startups thrived in this environment, leading to record-breaking venture capital inflows in 2021, where Swedish startups attracted the most venture capital in Europe at €7,8 billion (SI, 2022). However, due to these aggressive investment strategies, these investments often occurred at excessively high valuations where the underlying value of many companies was questionable.

However, external factors such as the pandemic and global conflict injected heightened uncertainties into the investment landscape, ultimately leading to a recession in 2023 (Sweden's Ministry of Finance, 2023). This led to reduced available capital, forcing investors to adopt a more cautious approach than during 2019-2022. Entrepreneurs reported a notable change in the funding landscape, with investors prioritizing follow-up investments in existing companies instead of new ones.

An anonymous entrepreneur shared their thoughts on the subject, stating: "*During the COVID-19 pandemic, it was easy to attract capital as there was a significant amount of money in circulation, and company valuations were high. The turning point came when the economy worsened, particularly with Russia's intervention in Ukraine. Raising capital became more challenging, and company valuations declined. Investors became more cautious, preferring to make follow-on investments in companies they already own rather than initiating new investments in other companies.* "(Anonymous entrepreneur, personal communication, 2023-11-14).

This is further substantiated and evident in the statistical data compiled by Statista (2023). Figure 1 illustrates the total capital raised in millions of USD within the realm of Swedish early-stage venture capital. The figure not only highlights the record levels attained during 2020-2021 but also delineates a rapid decline in early-stage investments. According to Statista (2023), the early stage is the investment stage in Sweden that witnessed the most significant decrease between 2021 and 2023, with a decline of 73,1 million USD, while the later stage only experienced a decrease of 55,2 million USD.

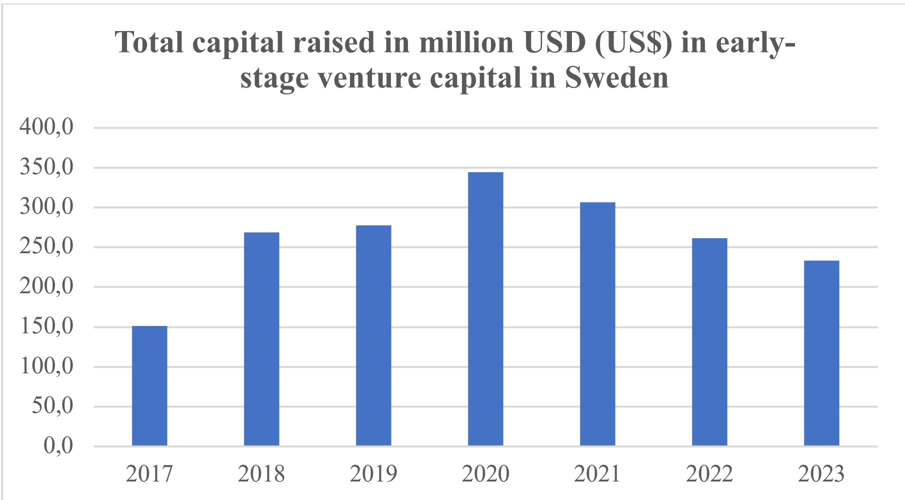

Figure 1. Capital raised in millions of USD in early-stage venture capital in Sweden, based on statistics from Statista (2023).

Even though the economic downturn now and historically has been associated with funding constraints, reallocation challenges and heightened risk aversion. Many success stories have been born in challenging economic climates. Notable examples include Microsoft, which originated during the 1970s oil embargo-induced recession, and more recent entities like Airbnb, WhatsApp, and Uber, products of the 2007-2009 global financial crisis (Ljungqvist & Bias, 2023).

A study conducted by Professor Ljungqvist & Bias in 2023 revealed intriguing insights. Startups born during the Great Recession in 2000 exhibited a remarkable 12,1% higher likelihood of surviving to their seventh anniversary compared to startups born in other years between 2002 and 2012. Furthermore, they exemplify five reasons why it’s better to launch a business in a recession. It is reduced competition, lower costs, innovation opportunities, access to talent, and long-term resilience. This explains why several companies founded during a recession manage to do more impactful follow-on innovations, survive, and manage to list on the stock market in the future (Ljungqvist & Bias, 2023).

This paradox, where certain companies thrive despite uncertain times, underscores the importance of providing guidelines for startups navigating a recession. These guidelines are crucial to empowering startups to make informed decisions when seeking funding, especially given their pivotal role in generating jobs and fostering economic prosperity. In a market where investors tend to adopt a more cautious approach, a set of guidelines becomes essential for startups to stand out and attract capital effectively.

1.3. Purpose and Aim

This thesis’s primary objective is to comprehensively examine the impact of the economic disruptions between 2019 and 2023 on early-stage venture capital in Sweden. Specifically, the study aims to investigate the shifts in investment decisions arising from the financial challenges between 2019 and 2023 in the Swedish context. Through this exploration, the aim is to generate an in-depth understanding of how investors' decision-making processes are influenced during periods of economic challenges.

Furthermore, the study seeks to contribute practical insights by offering guidelines to Swedish startups. These guidelines will be tailored to help startups to navigate the challenges of raising capital during a recession. By synthesizing empirical findings and theories, the research seeks to provide guidelines that not only support startups in Sweden but also contribute to the broader discourse on early-stage venture capital practices in economic recession.

1.4. Research Questions

To address the study's purpose, which involves examining the impact of the economic disruptions between 2019 and 2023 on early-stage venture capital and investment decisions, the first research question has been formulated as follows:

RQ1: How have investment decisions of Swedish early-stage venture capital firms been affected by the economic disruptions between 2019 and 2023?

Given that part of the study's objective is also to provide guidelines to Swedish startups on effectively navigating the recession and changed investment criteria, the second research question is formulated as follows:

RQ2: How can guidelines be developed to assist Swedish startups in effectively navigating economic challenging times in Sweden when raising capital?

1.5. Delimitations

This study is delimited to the context of Sweden and specifically examines the dynamics of early-stage venture capital within this geographical setting. The research exclusively involves interviews with investment managers and fund managers within venture capital firms operating in Sweden. The focus of the study is restricted to the period spanning 2019 to 2023, allowing for an in-depth analysis of the impact of economic disruptions during this timeframe on the decision-making processes within the early-stage venture capital landscape in Sweden. This delimitation is intended to provide a targeted and contextualized exploration, ensuring a comprehensive understanding within the specified parameters.

2. Theoretical Framework

This chapter introduces the theoretical framework. The theoretical framework is centering on relevant literature and theories for this thesis. It specifically addresses early-stage venture capital, the financing structure of venture capital firms and investment activity, the most common investment criteria, the impact of economic recessions on venture capital, and risk management. The chosen theories are justified based on their direct alignment with the research objectives. This streamlined framework establishes a robust foundation for thorough analysis, guaranteeing a comprehensive examination of early-stage venture capital dynamics.

2.1. Early-Stage Venture Capital

Venture capital can be defined differently depending on the purpose. The definition used further in this thesis will be a type of private equity used in businesses in their early stages. By using this definition this thesis will examine the early stages defined as pre-seed, seed, and series A investments. Pre-seed investments represent the initial capital infusion that entrepreneurs pursue at the beginning stages of conceptualizing their business ideas. These investments lay the foundation for subsequent financial injections. Following the pre-seed phase, seed investments become relevant, funds should be directed toward strategic areas such as marketing, sales, and recruitment to the developmental course of the startup. Series A investments are usually raised by startups that have developed a functioning business idea and established a customer base (Fraser-Sampson 2007).

In Sweden, the total equity value invested by private equity in 2022 was SEK 67.64 billion although this was a slight decrease from 2021 when venture capital was in its record state. This implies that the expansion of venture capital in Sweden persists, as evidenced by its upward trajectory (Naess Schmidt et al. 2022). The market share of venture capital in the private equity market can be described by looking at how many companies that were funded through venture capital. According to SVCA (2022), 341 companies were funded through venture capitalizing in Sweden. In comparison with the 60 companies who received capital through growth capital funding, there is a larger market share of venture capitalizing. Regarding the Swedish private equity market compared to the rest of Europe, Sweden was in the top amount of private equity funding.

2.2. Financing Structure of Venture Capital firms and Investment Activity

While venture capital firms are funding startup companies, they concurrently require financial backing for their own operations. According to Avraamov (2022) there are several structures of financing in the venture capital business such as evergreen-, balance sheet-, state- and pension-funding. Evergreen funding is characterized by gradual payments into the venture capital firm through the entire developmental phase of the venture capital firm. This structure of financing is perpetual with no predetermined end date, which gives the investors opportunities to get out of their obligations and the fund managers to purchase additional funds. Evergreen funding is a financing structure that provides money evenly throughout the year. Balance sheet funding refers to funding derived from the balance sheet of the parent. The equity provided to funding initiatives is dependent on the revenue of the parent firm. Subsequentially, the equity is allocated to new investments, therefore balance sheet funding is affected by the financial wellbeing of the parent firm. State- and pension-funding is funding from the government or the pension funds.

Tyebjee and Bruno (1984) depicts the investment decision of a venture capital firm as a five-step sequential procedure. *Deal origination* describes the contact between venture capital firms and the potential investment. Secondly, the *Screening process* is the process where venture capitalist select which investments are possible to realize. Following the screening process, an *evaluation* is conducted which includes an assessment of risk and the potential return of the investment. Upon a favorable evaluation outcome, the investor proceeds to negotiating with the potential investment and *structure the deal, wherein* aspects such as amount, form, and pricing are deliberated. Once the deal is finalized, close engagement ensues between the venture capitalist and the venture. This includes setting up controls to protect the investment, provide consultation and helping the venture, collectively referred to as *post-investment activities.* The five-step model is seen below in figure 2 inspired by Tyebjee & Bruno (1984).

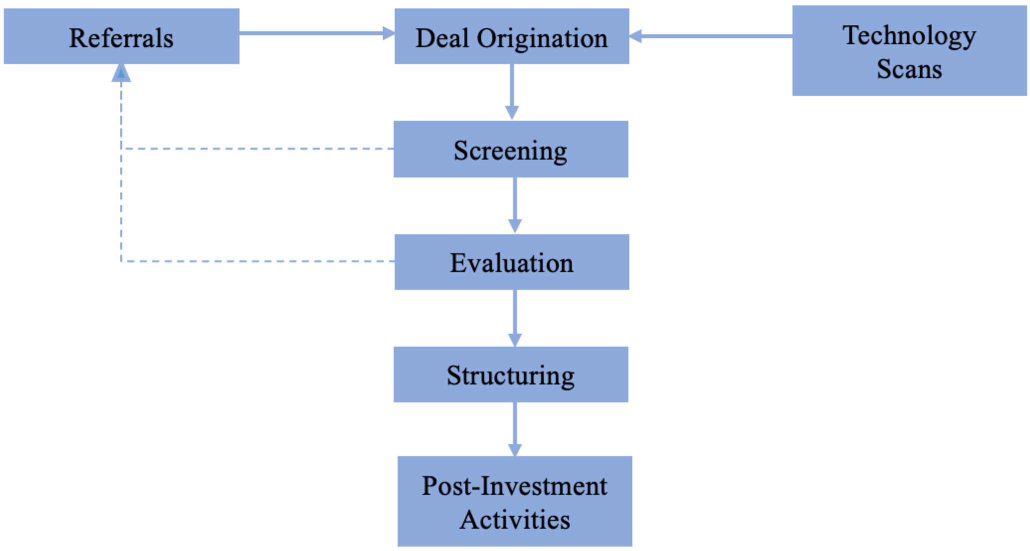

Figure 2. Venture Capitalist Investment Activity inspired by Tyebjee & Bruno (1984).

2.3. Most Common Investment Criteria

Many startups face the challenge of limited sales and, at times, an incomplete product development stage. This lack of substantial sales and finalized products complicates the due diligence process for investors, making it challenging to measure the potential return on investment using traditional financial criteria. Consequently, investors often find themselves relying on more subjective and qualitative measures, known as soft criteria, to assess the viability and promise of an investment. According to Kollmann and Kuckertz (2010) the most common investment criteria within venture capital are; the personality of the entrepreneur, experience of the entrepreneur, product or service, market characteristics, and financial characteristics. These criteria also encompass subcategories; for instance, within market characteristics, factors such as market growth and market volume play a significant role. This is also supported by Tyebjee and Bruno (1984) who outline the decision-making process. Their model furnishes guidance to entrepreneurs navigating interactions with venture capital firms being able to raise capital. The decision-making process by Tyebjee and Bruno is illustrated in Figure 3 below.

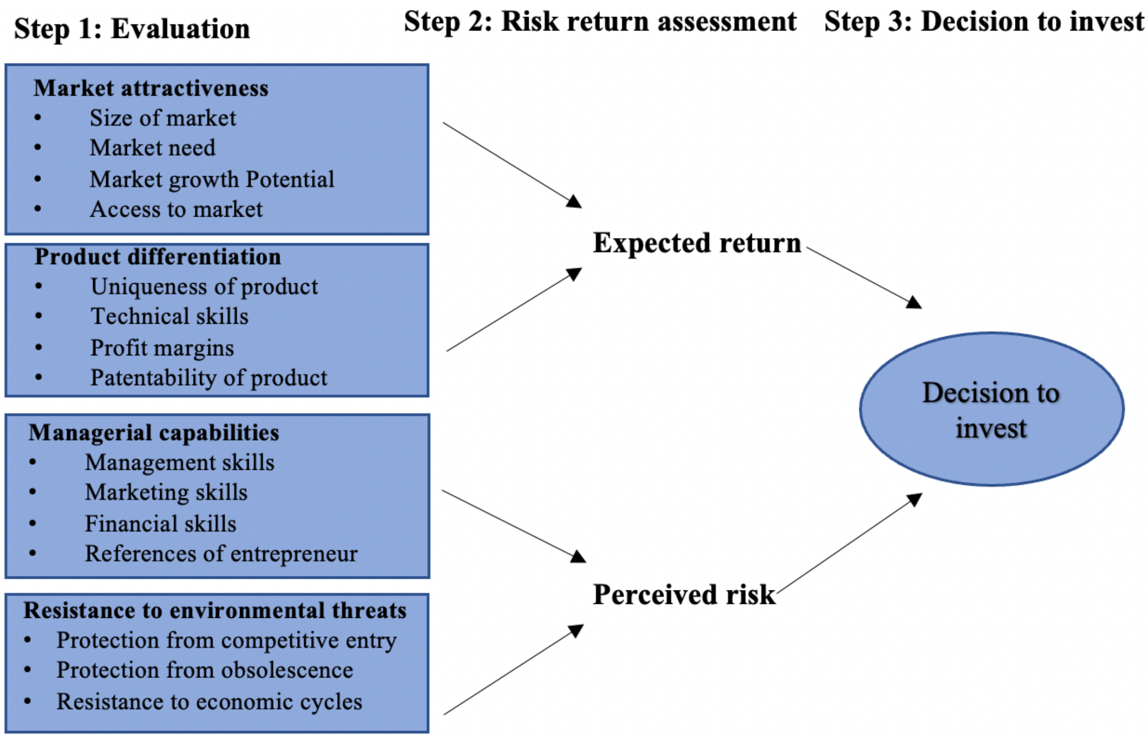

Figure 3.The investment decision-making process, inspired by Tyebjee & Bruno (1984).

2.3.1. Characteristics and Experience of the Startup Team

According to Kollman and Kuckertz (2009), evidence from empirical research underscores that the venture capitalist's decision-making process is significantly shaped by the attributes of the entrepreneur and the composition of the entrepreneurial team. Venture capitalists technically invest in a team, evaluating the leadership's capability to execute a business plan effectively. This means they prefer experienced entrepreneurs who have previously built companies that have generated returns for investors. At times, investors even prefer to invest in a suboptimal idea if the startup is managed by experienced entrepreneurs, compared to investing in a good business idea backed by inexperienced entrepreneurs with unfavorable characteristics. MacMillan et al. (1985) highlighted that investors considered that the most important personality characteristics of an entrepreneurs is the ability to handle risk and being able to prove evidence of staying power, i.e. committing to, and finishing something they have started. Other considered important experiences of the entrepreneur were the entrepreneur’s familiarity with the target market, leadership capability, and a good track record relevant to the venture.

Muzyka et al. (1996) is another researcher that also highlights that the management teams characterizes, and abilities dominate the venture capital firm's investment decision. According to Robinson (1987) important team characteristics is the personal motivation, organization skills and executive experience.

2.3.2. Market Characteristics and Growth Potential

MacMillan et al. (1985) underscored the significance of market opportunities and a high growth rate as a crucial investment criterion. They emphasized the importance of evaluating the potential reach of the innovation within a customer base. The profitability of the innovation is directly correlated with the scale of the customer base it can capture. In essence, a larger customer base enhances the potential for profitability in the event of a successful innovation. Mason and Stark (2004) also underscores that market characteristics is an important investment criterion. They suggest that the primary market characteristics crucial for consideration are the size, growth potential, the presence of limited competition, and no entry barriers. Other studies also suggest an additional factor under the market characteristics which is to what extent there is a market need (Tyebjee & Bruno, 1984).

2.3.3. Product or Service

MacMillan et al. (1985) highlight another frequently employed criterion when evaluating new venture proposals, assessing the nature of the product or service. They stress the importance of proprietary protection, indicating that the proposed product or service should possess patents, copyrights, or trademarks to deter competitors. This protection is viewed as a competitive advantage, guarding against replication, and enhancing long-term profitability, a highly attractive prospect for venture capitalists.

Expanding on this theme, Both Mason and Stark (2002) as well as Tyebjee and Bruno (1984) also mention the important criteria regarding the product or service, emphasizing the significance of the unique selling proposition and the inherent nature of the offering. They highlight characteristics such as competitiveness uniqueness, distinctiveness, and innovation. Additionally, the quality, standard, performance, aesthetics, and flexibility of the product are deemed crucial.

An up-to-date dimension in evaluating venture proposals is the consideration of sustainability, a concept underscored by the National Venture Capital Association [NVCA] in 2023. According to NVCA, climate technology is deemed crucial for the future, offering not only additional job opportunities but also contributing significantly to the reduction of carbon dioxide. Emphasizing the sustained importance of prioritizing climate technology, NVCA actively advocates for fostering the growth of startups dedicated to climate initiatives. In a press release, NVCA declares, "*NVCA will continue to advocate for the prioritization of climate technology and the advancement of climate-focused startups.*"

This commitment aligns with findings from a 2021 report by SVCA affirming that venture capital funds in Sweden are strategically embracing long-term investments in sustainable business models. The SVCA report underscores the inclination of these venture capital firms to invest in companies and technologies that align with ESG trends where ESG signifies the integration of environmental, social, and governance considerations. Additionally, portfolio companies are actively pursuing the development of profitable sustainable products, further solidifying the integration of sustainability within the venture capital landscape.

2.3.4. Financial Characteristics

According to Tyebjee and Bruno (1984) the risk and return are factors that affect the investment decision in a significant way. The importance of the expected return is viable for the perceived risk of the investment is highlighted. The higher the probability of failure of the venture, the greater risk of the investment. Assessment of the risk of the venture is very important when deciding on the investment. The assessment of risk includes factors such as cash out possibility, profitability, runway, and burn rate. The cash out possibility is crucial for the venture capitalist in their investment decision.

There are both external and internal risks to consider by the venture capitalists. The external risks are associated with the liquidation of the investment, the possibility to cash out or to turn the investment to cash. Profitability refers to the startups and their ability to make profit from their business. Whereas the internal risks focus on risks such as burn rate and runway (Kaplan & Strömberg 2004). The definition of burn rate states that it describes the rate at which the company spends their initial funding. Burn rate is an indication of how long the company will last at this rate of spending money when it is not making money which is often referred to as the runway (Cambridge Dictionary 2023).

2.4. Early-stage Venture Capital During Previous Economic Disruptions

According to the Swedish National Institute of Economic Research [NIER] (2018), economic disruptions are tied to economic activity and measured against trends or equilibriums. A disruption as defined by the institute, denotes a temporary departure from the usual economic activity within a given society, nation, or globally. The departure is either an economic upturn or a downturn. The venture capital market has encountered both economic upturns and downturns in the past. It is difficult to say exactly how this current recession will affect the future of early-stage venture capital but by drawing insights from previous crises that have left a lasting imprint, it's easier to understand the effects it may cause.

According to Hellman & Puri (2002), the late 1990s marked a period of rapid internet expansion. Tech startups, lacking substantial sales, attracted significant investments and went public without revenue. This speculative frenzy, fueled by innovative ideas, eventually led to the bubble burst in 2000, resulting in challenges and substantial losses. During the bubble investments of total 100 billion dollars was invested by venture capital firms. However, when the bubble burst in 2000, challenges emerged. The number of investments made by venture capitalists decreased by 80% in 2001 compared to the year before. Investors became more cautious, and took longer time, demanding more evidence of long-term profitability, higher requirements for the team, a business model, and a clear plan for mitigating risk. In addition, the venture capitalists were struggling with their existing portfolio with many overvalued companies, ultimately compelling them to either face bankruptcy or opt for sale. To mitigate the risk, they reallocated their funds to companies in the later stages of development, Hellman & Puri (2002).

After this period, the market recovered, but later in 2008, it faced a new economic downturn but this time it was due to the overvaluation of the housing market. According to Conti (2019), venture capital investments in the USA nearly halved, plummeting from 28,6 billion USD in 2008 to 15,2 billion in 2009. This recession was characterized by a scarcity of capital, making it challenging for venture capital firms to secure new funds. The environment saw fewer co-investors, and the complexities of making exits or initial public offerings further compounded the situation. The reduced availability of capital triggered a shift in its distribution. Venture capital firms, grappling with the constraints, began reallocating their funds toward core sectors where they possessed the most knowledge and expertise.

In 2019, the COVID-19 pandemic broke out, leading to extensive lockdowns and restrictions. These measures, in turn, resulted in significant job losses and reduced consumption, ultimately plunging the economy into a recession once again. According to NVCA (2021), early-stage venture capital had difficulties at the beginning of the pandemic, as they had to contribute all their due diligence online instead of traditional in-person due diligence. However, as 2020 progressed the industry adapted, unlike previous recessions, and it could now be observed that venture capital firms exhibited more resilience. The article by NVCA pinpoints that despite the challenges at the onset, a record number of investments was made, marking the highest since 2015. Large corporations like corporate venture capital firms strengthened their commitment and made the highest number of deals with corporate venture capital in the NVCA dataset. According to SVCA (2021), venture capital in Europe has undergone a maturation process over the past decade, establishing a robust foundation for unseen events, just like the corona virus.

2.5. Risk Management Within Venture Capital

As defined by Dorian et al (2016) risk management is a systematic approach to identify, assess, and prioritize potential risks that could impact the organization's accomplishments. The primary objective is to optimize the opportunities and minimize the negative impacts of risk. Bamford and Douthett (2013) delve into the complex relationship between venture capital and risk management. Venture capital is particularly characterized by high risk, due to information asymmetries between the investor and entrepreneurs, known as the principal-agent problem. It refers to the complex relationship between the principal and the agent. The principle (the VC firm) and the agent (the Entrepreneur) have different access to information. Naturally, the entrepreneurs have significantly more insight into their own business, such as cash flows, potential growth, and return. This increases the risk of a potential exchange between the parties. Venture capital companies tackle this problem with extensive due diligence, which refers to the stage where the venture capital firm carefully examines the business with their investment criteria, before making the investment decisions. This process serves to mitigate the potential of unforeseen events and potential losses (Hirschey & Bentzen, 2019).

Bamford and Douthett (2013) further discuss two different types of risk, operational risk, and firm-specific risks. Venture capitalists are less likely to invest in projects that have a high operational financing risk. Operational risk refers to threats like high development costs, lack of sales, high inventory needs, rapid expansion plans, and a team with a low asset base. The authors suggest that investors cannot help entrepreneurs improve their daily cashflows and liquidity. However, venture capitalists rather take on firm-specific risks. These risks pertain to areas like marketing, product development, intangible assets, and competition. Investors are willing to take on firm-specific risk as investors believe they have the knowledge, resources, and leadership skills to mitigate these types of risks. The authors suggest that extensive due diligence of the company's operations, industry dynamics, competitive landscape, management team, and financial standing allows for a comprehensive assessment of company-specific risk.

3. Method

The following chapter describes the study's method that was used to fulfill the purpose and aim. The research strategy and design will initially be described and motivated, followed by research methods. Subsequently, the collection and analysis of data will be described, and lastly the quality and ethics of the study will be evaluated.

3.1. Research Strategy and Design

This study employed a qualitative research methodology, selected for its alignment with the exploratory nature of the study's objectives and goals, as suggested by Bell et al. (2022). The primary emphasis was on seeking a comprehensive understanding of the underlying reasons and processes. Therefore, the qualitative approach was preferred over a quantitative one, as it is better suited to capturing the nuanced and complex aspects of the research questions (Bell et al, 2022). Besides, opting for a quantitative approach would have been challenging given the study's emphasis on the recession during 2023 in Sweden, as the availability of quantitative data relevant to this specific context would have been limited. A comparative research design was adopted with the aim to contrast the differences in the investors' behaviors and strategies between 2019 and 2023. Additionally, the study employed an abductive approach, since the literature review, data collection, analysis formulation of research questions was carried out iteratively throughout the research process.

3.2. Research Methods

The study departed from a literature review to give an understanding and overview of the relevant research area. Subsequently, interviews were conducted to collect data from investment managers within Swedish early-stage venture capital investment firms. After the interviews were conducted, an additional literature review was executed.

3.2.1. Literature Review

According to Bell et al. (2022), a literature review involves the collection and analysis of existing research within the study's research area. Conducting a literature review is vital to establish a comprehensive understanding of the existing knowledge within the research field. It is also important for identifying relevant theories and concepts applicable to the study. Furthermore, the literature review plays a pivotal role as it can be used to evaluate the study's credibility and its contribution to the ongoing discourse in the field of knowledge. In this study a narrative literature review was conducted. The narrative approach was chosen since it has many benefits when aiming to gain a comprehensive understanding and initial overview of the research area (Bell et al., 2022). Relevant literature was collected iteratively, starting with an initial overview screening of relevant research available online. To find relevant research online, databases such as Gothenburg University Library, Scopus and Google Scholar was used. Keywords were employed to ensure the relevance of the search results. Some of the frequently utilized keywords included: *investment criteria, the impact of recession on early-stage venture capital, early-stage venture capital, portfolio structure, and risks associated with early-stage venture capital.*

3.2.2. Interviews

Interviews was the primary data collection method for this study. According to Bell et al. (2022), when collecting empirical data in qualitative research, interviews are often one of the most common methods. They enable gathering of in-depth knowledge and data of the study's research area, simultaneously as providing a wide range of different perspectives and nuances from experts within the field. To provide flexibility, comparability and enabling interviewees to explore the interview questions in different ways, a semi-structured approach was adopted. The semi-structured interviews consisted of predetermined open-ended question that are presented in Appendix 1. This ensured that the interviews stayed within the relevant topic and could be compared during the data analysis, but without preventing the interviewees from contributing with insightful perspectives and nuances that were of importance for the individual (Bell et al., 2022).

The selection of interviewees involved a purposive sampling approach of different experts, such as investment managers and fund managers, within early-stage venture capital firms in Sweden. The purposive sampling approach is one of the most common samplings in qualitative studies (Bell et al., 2022). It is a non-probability sampling method that is conducted with reference to the study's aim, which means that interviewees are selected so that the research questions can be answered. According to Maxwell (2012), purposive sampling allows for a more representative selection, encompassing potential diversity within a group. The purposive sampling was based on a mapping of the largest Swedish venture capital firms that invest in early-stage startups, aiming to accurately reflect the landscape of early-stage venture capital in Sweden. This strategic approach ensures that the research questions receive a substantive and representative response. Focusing on the largest firms allows the study to derive empirical findings from entities dominating the early-stage venture capital market share, thereby improving the overall representativeness of the research for the entire landscape. The sampling process yielded twelve interviewees that are presented in table 1, all of whom were either fund managers or investment managers in Swedish venture capital firms that invest in early-stage startups. The twelve interviews were considered sufficient to support a comprehensive data analysis, as theoretical saturation was believed to have been achieved. However, there is a potential risk that the twelve interviewees may not fully represent the landscape of Swedish early-stage venture capital. This potential bias is associated with the decisions of contacted investors to either participate or not, as several firms declined to be part of the study.

Table 1. Swedish venture capital firms that were interviewed

Venture capital firms	**Estd.**	**Investment phases**	**Investment sector**
Alliance Venture Capital	2001	Seed, series A & series B	Tech
Almi Invest (2 interviewees)	2009	Pre-seed, Seed	No specific
Backstage Invest	1996	Early-stage	Tech & others
Creandum	2003	Seed, Series A, Series B, Series C, Series D	Tech
GU Ventures	1995	Seed, early-stage	Tech & life science
Industrifonden	1979	Early-stage, series B, Series C, Series D	Tech & life science
Navigare Ventures	2021	Seed, series A	Tech & science
Scale Capital	2012	Seed, series A	Tech & health
SEB Ventures	1995	series A, Series B, Series C, late-stage,	FinTech
SLU Holding	1995	Early-stage, Seed	Agriculture
Volvo Group Venture Capital	1997	Series A & later	Mobility & transport

The interviews were recorded, however it required explicit information to the interviewees about their right to withdraw consent at any point. The recordings of the interviews were essential to capture every detail accurately and facilitate precise transcriptions, which formed the foundation for subsequent data analysis. Given the diverse Swedish geographic locations of the interviewees and the study's time constraints, all the interviews were conducted online. To encourage honest and open responses, interviewees were assured of their anonymization. Additionally, it was avoided attributing specific statements to individual companies in the results. This approach aimed to prevent biased answers and alleviate any pressure on the interviewees to represent their entire company positively, especially given the sensitivity of some questions to the company's reputation.

3.3. Data Analysis

After the interviews were conducted the study perceived with analyzing the collected data. The data analysis employed a thematic approach which entails searching for themes and similarities between the collected data sets but without any predetermined distinctive technique (Bell et al., 2022). The data sets, in form of interview transcriptions and literature, were carefully reviewed and analyzed. The reviewing resulted in found patterns and repetitions that formed the cornerstones for the themes. The data underwent systematic coding, resulting in the formation of code clusters. These clusters were subsequently organized to establish the overarching themes that served as the foundation for the study's findings.

3.4. Research Quality

To assess the trustworthiness of the study, Bell et al. (2022) suggests four aspects that should be considered when conducting qualitative research. The four aspects are: credibility, transferability, dependability, and confirmability. Credibility was ensured by conducting the research according to eminent established research methods, and confirming the findings by submitting them to the members of the social world who were studied. Transferability is secured through a comprehensive description of the study's contextual details. Specifically, the context of the current recession in Sweden are thoroughly described as well as the methods used. Further, there is a detailed description of the sampling of interviewees that also outlines the prerequisites for individuals to qualify as interviewees. The different venture capital firms that were interviewed are clearly presented. Although the sample may not perfectly represent the entire early-stage venture capital landscape in Sweden, this presentation in addition to the description of the disruptions between 2019 and 2023 allows the reader to assess the extent of transferability in this study.

Dependability was ensured by keeping complete records of the study's research process, such as recordings and transcripts from the interviews and data analysis decisions (Bell et al., 2022). Confirmability addresses the objectivity of the research. According to Bell et al., (2022) qualitative study can never be fully objective. However, it should be clear that the researcher hasn't intentionally let personal values impact the research. In this study, confirmability was upheld by avoiding individual decision-making within the group. Each decision underwent thorough discussion and evaluation involving all study members. Additionally, the process and decisions were also discussed with the supervisor.

4. Results

This chapter presents the outcome of the thematic analysis conducted on the collected data. The findings presented below encompass themes mentioned by at least five out of the ten interviewees. This criterion ensures the inclusion of the most significant findings that has an impact on startups and the venture capital landscape in Sweden. The results related to the initial research question are presented first, followed by the findings associated with the second research question.

4.1. The Disruptions' Effects on Investment Decisions Between 2019 and 2023

This chapter presents key insights connected to the first research question derived from an in-depth exploration of the current early-stage venture capital landscape. The exploration draws upon the perspectives of twelve experienced Swedish investors. The empirical findings, summarized in table 2, reveal nuanced trends, including the impact of reduced capital supply, increased risk aversion, and an increased focus on sustainability. The study also uncovers shifts in investment preferences, changes in investment rates, and evolving requirements on burn rate and runway, showcasing the complex nature of investment decisions between 2019 and 2023. The varied responses of investors outline the transformed venture capital landscape and their collective viewpoints and strategic adaptations. The empirical findings to the first research question, summarized in Table 2, will be further elaborated, and described in this chapters following subchapters.

Table 2. Summation and frequency table of this study's empirical findings to the first research question.

Findings	**Frequency**
Reduced Supply of Venture Capital During 2023	12 of 12
Increased Risk Aversion During 2023	12 of 12
Increased Focus on Sustainable Products Solving Real Problems During 2023	12 of 12
Higher Requirements on More Detailed and Convincing roadmaps During 2023	12 of 12
Lower Investment Rate and More Extensive Due Diligence During 2023	8 of 12
Higher Requirements on Burn Rate & Runway During 2023	11 of 12
Existing Portfolio Requires More Follow Up During 2023	5 of 12

4.1.1. Reduced Supply of Venture Capital During 2023

A unanimous consensus among all twelve respondents is that the present investment climate is deemed more normal compared to the period between 2020-2021. During that period, there was an excess of capital in circulation, which has now diminished. One respondent remarked*, "We can't rely on the capital markets to function in the same way as they did at the peak of 2021 when it was easy to obtain capital."*.

Out of twelve respondents, eight identified at least one factor contributing to the reduction in available capital in the market. These factors include fewer investments from other venture capital firms, occurrences of bankruptcies, rescheduled or declined exits and initial public offerings, and decreased engagement from angel investors. The consensus among the eight investors is that macroeconomic factors play a pivotal role in the current scenario. Supply and demand dynamics significantly influence startups fortunes, leading potential buyers to withdraw. Consequently, this trend has resulted in business failures and canceled exits, impacting the economic well-being of venture capital firms, and reducing their available capital for new investments or additional rounds in existing portfolios. High-interest rates have further repercussions on angel investors, particularly those in the real estate market, diminishing their presence in venture capital ownership listings. Additionally, there has been a noticeable decrease in the participation of larger firms in subsequent financing rounds initiated by smaller companies.

One respondent expressed the current macroeconomic situation as "herd mentality". Typically, in a series of downturns and as the market approaches a bottom, overall investment activity tends to stagnate. Many individuals adopt a wait-and-see approach, observing and evaluating the situation, resulting in a general slowdown in the investment market. While this behavior does not apply to everyone, the majority tends to act in a herd mentality, especially in a declining market where investors hesitate to make decisions before identifying the bottom.

A consistent theme that emerged from all the interviews was the acknowledgment that none of the participants faced issues with their financing. However, they all noted that everyone else is having trouble raising capital. The investor's explanation to this is that either they raised a fund a couple of years ago, they live on retained earnings or all firms vary in their financing. Some are financed from balance sheets, EU grants, state grants, contributions from other venture capital firms, and investments from private individuals. Note that none of the interviewees had actively tested the market for raising new funds at the time of the discussion.

Furthermore, three investors specifically highlighted the increasing difficulty in securing funds from institutional investors. This challenge is attributed to institutional mandates and predetermined allocations for such investments. Despite the unanimous agreement that the investment climate is normalizing post the COVID-19 pandemic, there is still available capital in the market, but the investors have become more risk-averse as the capital is reduced, and uncertainty higher.

4.1.2. Increased Risk Aversion During 2023

In general, venture capital inherently involves high risks, especially in the early stages of the investment process. A shared sentiment among all interviewees is the increased risk aversion in comparison to the period between 2020 and 2021. A time marked by substantial capital inflows, soaring valuations, and risk-takers. The current scenario reveals a different narrative, shaped by the historical pandemic and uncertain macro and microenvironment. The respondents mention factors affecting the macro landscape, such as the war in Ukraine, the ongoing conflict in the Middle East, disrupted supply chains, and the challenges of surging inflation and fluctuating interest rates. At the micro level, companies that once embraced aggressive investment strategies during the 2020-2021 period find themselves with investments that might never yield profitability. This shift from a period of risk-takers to a more cautious approach is evident. The landscape has transformed from a time of abundant capital and high valuations to one where investors face the repercussions of global uncertainties.

However, there were just four out of eleven interviewed investors who admitted a slight tendency to reduce their investments in early-stage ventures. Their current preference now leans toward businesses with tangible revenues, cash flows, and less binary outcomes, indicating a cautious approach toward high-risk-early-stage startups. As one respondent stated "*I would say that at present, we prefer to see good cash flows and more stable companies with slightly higher potential. Of course, we do take risks, but not as much as before. The risk behavior has changed a bit.* ". Although there was unanimous agreement among the interviewees regarding an increase in risk aversion, they all asserted that they are still actively making investments in 2023, though at a more conventional pace compared to the period spanning 2019 to 2022.

One of these investors specifically highlighted an aversion to companies requiring multiple investment rounds, recognizing the additional risk associated with ongoing financing needs. The concern is that, even with an initial investment, if a company requires more funds in a short period, the economic downturn could lead to a significant risk of entering a downward spiral. While not all investors prioritize companies with more stable financials during the current economic downturn, there is a unanimous signal of a broader shift in risk behavior. This shift is evident in various factors, including an increased emphasis on sustainable products and solutions that address a significant problem.

4.1.3. Increased Focus on Sustainable Products Solving Real Problems During 2023

All interviewees among the eleven expressed that they have increased their focus on more sustainable products and products that solve important problems. According to all the interviewees, the focus on sustainable products has increased over several years even before the recession during 2023 and the Covid-19 pandemic. A few interviewees suggest that the major factor influencing this is the political debate rather than macro and microeconomics. However, seven of the eleven interviewees stated that the recession during 2023 boosted the focus on sustainable products even more. The recession during 2023 also increased the focus on products that solves important problems. Several interviewees noted that from 2019 to 2022, when there was plenty of capital in circulation and a push for high investment rates, investors could opt for consumer goods like clothing brands. However, in contrast, during the recession in 2023, investors are more averse to consumer goods and are placing greater emphasis on sustainable products that address significant problems. One interviewee asserted that a contributing factor to this trend may be the heightened perceived risk among investors when it comes to startups offering consumer goods. The rationale behind this perspective is rooted in the recession, which leads to reduced individual consumption, particularly in the luxury goods sector. This implies that those startups will generate lower revenue during a recession. Another interviewee highlighted that this phenomenon is aggravated by groupthink. When multiple investors avoid consumer goods, it creates a domino effect wherein more investors refrain from engaging with such startups, due to the perceived increased risk for such startups in raising capital and securing funding.

4.1.4. Higher Requirements on More Detailed and Convincing Roadmaps During 2023

The opinion that startups should have a more detailed and structured plan before starting to raise capital was united from all the eleven investors from venture capital firms. The main theme was that the business idea had to be thought through and should have some kind of impact on the world. The idea must be more thought through and have a more detailed plan to implement it in the business. Another finding in this area was that the more detailed plan also gives an impression of seriousness and commitment showing the investors that the startups are really committed to the process. Several of the investors said that a good presentation of their idea also shows investors that the startups themselves believe in their own idea which is perceived as a safer option since there is more transparency between the startups and the investors. One of the investors summed it up by saying *"Startups reduce risk by really showing a good impression and a solid plan.".* This suggests that startups with a well-crafted and thoroughly considered plan, or so-called roadmap, may be perceived as less risky investments compared to those with inferior roadmaps. This also suggest that there is a reduced risk of information asymmetry since the startups are presenting more in-depth business plans and venture capital firms are more thorough with their due diligence which leads to the next finding.

4.1.5. Lower Investment Rate and More Extensive Due Diligence than During 2023

During the economic crisis in 2023, seven of the eleven investors describe that they are investing more time into the due diligence of the startups. Not only because they feel the need to do so but also because they have more time now than during the highs of the years 2021 and 2022 due to the lower rate of investments. During 2021 and 2022 it was a more competitive environment since there were more investors on the market which also caused the market to form a high. During the economic downturn in 2023 several of the investors found the investment environment to be in a more stable state and that the years 2021 and 2022 were under extreme circumstances. Investors state that there is less competition during 2023 since many of the private hobby investors that invested a lot during the high are now more careful, some of them rushed their investments due to the high investment rate and therefore have not been able to exit with profit and are now in situation where they can’t invest as much anymore.

Further many of the investors said that there is a reduced risk of information asymmetry since venture capital firms are more precise and thorough with their due diligence. Not only with the business idea but also the team around the idea. More time is spent on getting to know the startup and the persons behind them. One investor underscores this point as he was ready to extend an offer after an online meeting but experienced a setback when the in-person meeting led to rejection of the new investment. This is not only due to the extended timeframe but also because of the more careful market which demands the venture capital firms to be more careful in their investment decision.

4.1.6. Higher Requirements on Burn Rate & Runway During 2023

Ten out of the eleven investors that was interviewed pointed out that they have higher requirements on the burn rate and runway compared to the prior economic upturn during the Covid-19 pandemic. According to the nine investors, burn rate and runway are the investment criteria that has changed the most during the economic recession in 2023. The main reason for this is that the investors are aware of the increased time and difficulty it takes for startups to raise capital during a financial disruption. Thus, it is seen as a risk if the startup would need to raise further capital within a short time frame. Investors are prone to invest in a startup only when they are confident that the company can sustain a low burn rate and have a runway sufficiently extended to achieve the next milestone. The next milestone, in turn, increases the startup's value, making it more attractive to potential new investors. Many interviewees also emphasized the importance of startups being able to develop their value and value offering in a cost-effective manner. This suggests that the ability to manage a low burn rate while simultaneously increasing value is seen as a key factor for success.

As further stated by some interviewees, startups that can maximize their value while sustaining minimal costs will gain a significant long-term advantage over other startups that must spend more resources to achieve the same increase in value. One interviewee specifically stated that this could be seen as an opportunity for startups. The interviewee mentioned an existing quote: *“Starvation fosters innovation”.* This quote suggests that startups are forced to foster creativity and innovation to generate value while maintaining a low burn rate and extending their financial runway. This strategic approach is essential for attracting investor interest and support during the economic recession in 2023. It also suggests that the startups that succeed with this will in general become more innovative and competitive.

4.1.7. Existing Portfolio Requires More Follow Up During 2023

The venture capital market is affected by demand and supply. Where there is a demand there will also be a supply. Five of the investors testifies an augmented demand within their existing portfolios during the economic crisis of 2023, notably surpassing the conditions prevalent in the preceding years marked by the Covid-19 pandemic. Consequently, investors find themselves compelled to allocate their resources and attention to managing and sustaining their existing portfolio companies, diverting focus away from potential investments in new startups. The escalated emphasis on the existing portfolio companies inherently intensifies the focus of follow-on investments. When startups perceive a contraction in available capital, a reluctance to engage in capital-raising increases - a departure from previous years characterized by a confluence of heightened demand and abundant supply. When startups feel that there is less capital, fewer startups are willing to raise capital compared to the prior years where it was a high demand and a high supply. It is causing a spiral effect that further diminishes the overall enthusiasm for investing during a period of economic downturn.

4.2. Startup Guidelines for Effectively Navigating Economic Downturns

As we delve into the findings of research question two, the focus shifts from understanding the impact of disruptions on investment decisions to the practical realm of offering guidance for Swedish startups navigating financial disruptions when raising capital. As mentioned earlier, all respondents unanimously agree that the period between 2019 and 2022 was characterized by a surplus of capital, making the cost of capital decrease. One investor implied this was an era where entrepreneurs seemingly required nothing more than a compelling PowerPoint presentation to secure substantial funding. This abundance of funding enabled them to enjoy high salaries and fancy offices, even in the absence of a finished product. However, the current investment landscape differs significantly, raising funds is no longer as facile as it was during that period but a common opinion among the investors is that the most resilient and innovative companies are forged during times of crisis. As one investor aptly expressed "*starvation fosters innovation*". The following guidelines represent the most recurrent themes in the interviews and how to effectively attract capital in an economic downturn.

4.2.1. Utilize Talent Density During a Recession and Build a Good Team

All the respondents agree that the team is an incredibly crucial factor in successfully raising capital, potentially the most significant factor, especially in more challenging economic times. It's better to have an exceptional team and a mediocre idea than to have a poor team and an exceptional idea. You invest in the team and the people behind the idea. During the period from 2019 to 2022, as everyone was eager to explore entrepreneurial opportunities, it became challenging to identify truly talented entrepreneurs. In some instances, teams had one talented entrepreneur, while the rest of the team lacked the necessary expertise. In an economic downturn talent density increases with more talented people looking for work. One of the respondents mentions Spotify as a prime example. In the economic downturn of 2008, numerous exceptional engineers graduated from The Royal Institute of Technology in Stockholm and were in search of employment. With few companies hiring during that period, Spotify had the opportunity to attract the absolute best engineers.

4.2.2. Start in Time and Engage with the Right Investors

A recurring theme emphasized in the interviews revolves around the increased time it takes for startups to secure capital during the recession in 2023 as opposed to the period from 2019 to 2022. The extended time frame is influenced by various factors, most of which are elaborated upon in detail in the chapter above. According to an interviewee, during the period between 2019 and 2022 the investment pace was very fast, and startups could secure their capital within a few months. Nearly all interviewees concurred that initiating the search for capital well in advance is significantly more crucial, with "in time" now translating to six months earlier compared to the period spanning 2019 to 2022. Starting in time will increase the possibility to secure the capital when it is needed.

Eight out of eleven investors additionally emphasize that it is particularly crucial to engage with the right investors at a time when acquiring capital is more challenging and time-consuming.

Once you find the right investor, you can focus on the essential aspects and benefit from their mentorship. Comprehensive research, a deep understanding of your business, and identifying key qualities in an investor will help you find the most suitable venture capital firm for your business.

4.2.3. Focus on a Competitive, Sustainable, and Innovative Product

Given all respondents unanimously observed an increasing significance of the product or service it is a natural factor to contemplate when raising capital, particularly in times of economic downturns. The product or service itself should be encompassing considerations of both environmental and societal sustainability. Additionally, scalability stands out as a pivotal aspect; it should possess the capacity to expand and endure within the industry concurrently. The idea should not only be a good product or service, but it is imperative that the offering addresses a tangible market demand. As articulated by respondents, startups are expected to show evidence of value creation for their clientele. Establishing credibility with investors involves showcasing the target customer demographic and substantiating it with concrete proof. The emphasis is not solely on acquiring high-paying customers but, crucially, on delivering substantial value to the customer. Additional information of value from one of the interviewees is the strategic significance of obtaining patent. A patent not only fortifies the startup's market position but also creates barriers to enter for potential competitors, thereby conferring a competitive advantage to the startup that secures patent protection for its innovative idea.

4.2.4. Create as Much Value as Possible with Minimal Resources

All interviewees highlighted a fundamental factor crucial for the long-term survival of startups. This fundamental factor for startups is to have dynamic capabilities to endure periods of economic decline. This shared viewpoint underscores the collective recognition that adaptability, resilience, and strategic expertise during economic downturns are important to the sustained success and viability of startups. These dynamic capabilities partly encompass the ability to rapidly enhance cost-effectiveness, thereby reducing the burn rate and extending the runway. To rapidly achieve cost-effectiveness, startups must be innovative and demonstrate strategic cleverness. The interviewees emphasized that startups capable of generating significant value with minimal resources possess a significant competitive advantage.

Moreover, these dynamic capabilities may also involve the strategic ability to slow down business operations and enter a dormant phase, ensuring continuity without resorting to bankruptcy until favorable economic conditions prevail.

4.2.5. Provide Investors with a More Detailed and Convincing Roadmap

Another fundamental aspect emphasized by all interviewees is the increased significance of having a comprehensive and detailed plan to show the investors. As earlier explained, the investors have become more risk averse during the economic recession in 2023. Investors now spend significantly more time on conducting thorough analyses and due diligence on startups compared to the period spanning 2019 to 2022. In contrast, during the 2019 to 2022 period, an interviewee mentioned that a simple PowerPoint presentation via Teams could suffice for them to make decisions about raising capital. Subsequently, the interviewee stated that during the recession in 2023, startups face an increased necessity to present more detailed and promising plans, including thorough roadmaps for the future. The interviewee emphasized that the reason for this occurs from heightened risk aversion during the recession. A thoroughly worked-through plan holds the potential to mitigate the perception of risk, offering a more reassuring outlook for potential investors. However, it is crucial that the plan remains truthful and realistic, avoiding any exaggeration or misinformation. Many interviewees emphasized that the slightest indication of dishonesty by a startup often results in an immediate rejection.

5. Discussion

Building upon the theoretical framework and the results presented earlier, this section examines the empirical results, identifying parallels between observed outcomes and established theoretical concepts.

5.1. Venture Capital Landscape: Decline in Capital Supply

The empirical evidence points to several reasons for the reduced capital in circulation, such as decreased investments from other investors, bankruptcies, postponed or declined IPOs, and exits. Investors perceive a diminished supply of venture capital in the market, resembling the patterns observed by Hellman and Puri (2002) and Conti (2019) during previous economic disruptions. Hellman and Puri (2002) specifically mention that during the dot-com bubble, many IPOs and exits were either declined or postponed, automatically leading to a decrease in capital in circulation. Conti (2019) also highlighted the issue of fewer co-investors contributing to the reduction, just as the investment climate seen during 2023. The similarities between today's investment climate and the investment climate during past economic crises can be explained by various factors, such as economic uncertainty and risk appetite. Investors also learn from historical events, potentially becoming more cautious in their co-investments or new ventures. Observing patterns reminiscent of previous crises, investors may opt for a more conservative approach, contributing to the overall decline in the capital in the market.

The reduced capital makes it more challenging for startups to raise capital, as observed in the empirical findings. However, unlike other financial disruptions, there is still capital available with those entrepreneurs with a compelling offer, as confirmed by investors. This is yet another sign that the market has matured, and unlike during the dotcom era when investments decreased by 80 percent (Hellman & Puri, 2002), we do not see the same level of decline today which is a sign of maturation. This also confirms SVCA's (2021) statement about the European venture capital market that has grown over the past 10 years.

A common theme among the interviewees was that none of them encountered difficulties with their own financing. However, they observed challenges faced by other investors when raising capital. This may be due to several reasons, according to the venture capitalists, such as finance structure or if they already have raised a fund. Nevertheless, all interviewees were aware that others faced challenges in raising capital. It is intriguing how twelve out of twelve respondents mean that others have trouble raising capital, yet not even one of them reports facing such issues themselves. This introduces potential bias to the study results, suggesting a reluctance among firms to portray themselves as financially troubled. Alternatively, those who declined participation may represent a subset with capital-raising problems. This nonresponse could result in an underrepresentation of certain perspectives or experiences, impacting the comprehensive understanding of the capital raising difficulties faced by investors. Therefore, acknowledging and considering the potential for selection bias is crucial when interpreting the results of this part of the study.

5.2. Increased Risk Aversion

The study's findings clearly indicate a heightened level of risk aversion during the 2023 recession compared to the preceding period from 2019 to 2022. Increased risk aversion during economic recessions is historically a well-known phenomenon within many different markets, such as the housing market, stock market and other capital markets. The heightened aversion to risk across different markets is associated with a slowdown in market dynamics and a decrease in the overall circulation of capital (NIER 2018). This trend was evident in the 2023 recession within the Swedish venture capital market, where findings indicate not only heightened risk aversion but also a diminished capital supply. Additionally, investors were spending more time analyzing and conducting thorough due diligence on startups, contributing to the overall slowdown in investment activity.

The outcomes of prior research, particularly focused on the dynamics of the venture capital market during the recessions of 2008 and 2000 (Hellman and Puri, 2002; Conti, 2019), affirm the trend of investors embracing a more risk-averse approach during economic downturns. The results of this study further demonstrate that heightened risk aversion prompts investors to exhibit increased caution towards early-stage investments. Instead, they tend to concentrate more on follow-on investments in existing portfolio companies and industries where they have expertise, which align with the findings from earlier research (Hellman and Puri, 2002; Conti, 2019). The heightened risk aversion during economic recessions can possibly be further explained by the theory about operational and firm-specific risks by Bamford and Douthett

(2013). Investors are generally averse to undertaking operational risks associated with startups, leading them to conduct analyses and due diligences to minimize such risks. However, during an economic recession, the operational risks of startups escalate much more than firm-specific risks. This, in turn, heightens investors' risk aversiveness or reduces the number of startups that meet the investors' operational requirements.

There is an interesting difference that this study shows compared to earlier research on the recession in Sweden 2008. Previous research revealed a pronounced risk aversion during the 2008, resulting in nearly nonexistent investment activity in startups and the withdrawal of many investors from the market (Conti, 2019). However, the findings of this study indicate an elevated level of risk aversion in 2023, although not as pronounced as in 2008 recession. Despite the recession, investors continue to make numerous investments in 2023, although significantly fewer than in the period from 2019 to 2022. This phenomenon could be explained by the maturation of the Swedish venture capital industry over the past decade (SVCA, 2020), contributing to its enhanced resilience and reduced volatility.

5.3. Increased Risk Aversion Leads to More Extensive Screening Processes

As previously noted, heightened risk aversion has prompted investors to conduct more thorough screenings and due diligence with higher requirements on different investment criteria, contributing to a slowdown in the venture capital market. This is likely one of the primary factors contributing to the increased challenge that startups experienced when trying to raise capital during the end of the 2022 and 2023. This aligns with the previous economic disruption observed by both Hellman and Puri (2002) and Conti (2019), where the venture capital market stagnated, and everything slowed down. As mentioned by several interviewees there is a less competitive climate during the end of 2022 and 2023 than it was during 2019-2021, allowing investors to take longer time in their due diligence process. The decreased competition can partly be explained by the increased interest rates and reduction of the overall capital supply. The heightened risk aversion prompts investors to conduct more thorough analyses of startups since it reduces information asymmetry and the perception of risk. This risk mitigation strategy within venture capital is also highlighted in earlier research (Hirschey & Bentzen, 2019; Bamford & Douthett, 2013). Together with reduced pressure to make quick investments due to decreased competition, the investment rate declines.

Another factor contributing to the slower screening processes in 2023, as emphasized by investors, is the transition from virtual meetings during the COVID-19 pandemic back to in-person meetings. During the online meetings necessitated by the COVID-19 pandemic, the absence of face-to-face interaction made it challenging for investors to judge the personalities and dynamics of the entrepreneurs. This implied both potential drawbacks and benefits for the startups, depending on individual perspectives. This was exemplified by an investor who initially committed funding after online meetings but canceled the deal upon an in-person visit, citing issues with the team's personalities and dynamics in their environment. This illustrates how the virtual meeting environment may favor startups in securing capital. This is also closely tied to information asymmetry, highlighting the increased challenges of conducting interviews online. Typically, investors spend around three months to gain a comprehensive understanding of the business, market, and founders. However, even with thorough due diligence, unexpected issues may surface post-deal conclusion and while conducting the due diligence online it could increase the information asymmetry.

The increased risk aversion not only leads to slower screening processes but also higher requirements for operational aspects and the business plan, as indicated by most interviewees. Investors, recognize the challenging economic environment in the venture capital market, and become more risk-averse during economic downturns, emphasizing internal risks such as burn rate and runway (Kaplan and Strömberg, 2004). This contributes to the emphasis on detailed business plans as successful startups in downturns prioritize meeting stringent financial criteria. The crucial takeaway is that startups must create value for customers during economic distress, managing a low capital consumption rate for sustained success. An interview remark, "*Starvation fosters innovation*" underscores how thriving businesses often emerge from economic challenges. Maintaining a low burn rate while delivering value becomes crucial for attracting investors in the 2023 recession, enhancing startup resilience against market competitors.

The empirical evidence also underscores a heightened demand for detailed business plans in the current economic climate compared to the period from 2019 to 2023. This shift is attributed to increased investor risk aversion during the recession, emphasizing the importance of robust business plans as a tool to mitigate risk amid economic turbulence. Respondents adapt by seeking more resilient business plans, aligning with Macmillan et al.´s (1985) recognition of their paramount importance in uncertain economic times. These plans play a crucial role in facilitating effective communication, conveying growth potential and scalability. The scrutiny on detailed business plans strategically addresses risk mitigation and reduces information asymmetry, with investors highlighting their role as reliable source of entrepreneur's sincerity and commitments. The emphasis on startups reducing risk through a solid plan reinforces the influential role of meticulously structured plans in navigating challenging financial environments.

5.4. Developed Guidelines for Startups Navigating an Economic Recession.

Based on the empirical findings, a set of guidelines has been crafted for startups. The recommendations are supposed to guide startups in effectively navigating the challenges associated with raising capital during an economic recession. The first and highly emphasized recommendation, as expressed by the interviewees, underscores the importance of assembling a proficient team with the right personal characteristics. This recommendation is also supported by the research of Kollmann and Kuckertz (2009) which states that investors are investing in the team. This contributes to the consensus that the team is the most crucial factor for raising capital. The significance of talent density, especially during economic downturns is also highlighted as a crucial factor to a successful investment. It's likely that, in a thriving economy, the engineers of Spotify might not have ended up in the same company, as they would have been sought after by more employers during 2019-2021. This could be a reason that there is a greater chance to attract talent more easily during an economic downturn due to the increased availability. A proficient team with the most important characteristics described by Macmillan et al. (1985), Muzyka et al. (1996) and Robinson (1987), stands a success factor in raising capital. However, its significance is emphasized during a period of economic downturn as stated by the findings. Considering this startup should increase its consideration to the composition of their teams during and economic downturn to be able to raise capital from early-stage venture capitalist.

The unanimous acknowledgment of an extended capital acquisition process in 2023, in contrast to the preceding period 2019-2022, underscores the second recommendation. The recommendation is to initiate fundraising activities well in advance. Moreover, the heightened emphasis on engaging with the right investors becomes particularly, crucial during challenging times. This suggests that shifts in the investment climate due to financial disruptions are impacting the timeline for raising capital, the empirics implies that startups should commence their efforts at least six months earlier than during the more prosperous period of 2019-2022. These observations align with the findings of Hellman and Puri (2022), who also suggest that the aftermath of the dot-com bubble resulted in a prolonged decision-making period for investors.

The reasons entrepreneurs need to initiate their efforts earlier in 2023, compared to the period of 2019-2022, must be attributed to various complex factors. Partly due to the less aggressive investment climate, where fewer investors are competing for the same opportunities simultaneously. Consequently, there are fewer co-investors, granting investors more time to carefully evaluate whether a deal is favorable, rather than hastily jumping in to avoid missing out on an opportunity. Another possible factor is the increased risk aversion and a decrease in available capital, causing entrepreneurs to wait longer for their funding. This creates a more cautious investment environment, where investors are inclined to conduct extensive due diligence before making decisions. While the parallels between the periods of 2000 and 2023 cover fundamental principles within venture capital that endure over time, adjustments in timelines and conditions emphasize the enduring significance of selecting the right investor and initiating the process in time.

The third recommendation is the necessity of developing a product or service with a competitive edge. This also aligns with Macmillan et al. (1985) who emphasize competitive advantages as a means of mitigating the risk of competitors replicating your product. As both the investors and Macmillan stated these advantages may manifest as patents, scalability, and real value creation for the customers. Some investors explicitly mentioned a strategic shift during these financially challenging times. Rather than favoring consumer-based products or those with binary outcomes, they are inclined towards sustainable offerings. The emphasis has evolved from a willingness to expand funds liberally to a heightened desire to witness tangible solutions and positive impact through sustainable ventures. These sustainable offerings seem to receive an advantage due to their significance in shaping the future and contributing to the preservation of our planet. This perspective aligns seamlessly with the NVCA´s stance, as outlined in their

2023 report, where they explicitly advocate for prioritizing climate technology and supporting climate-focused startups. The altered focus appears to be a response to challenging economic conditions. In times of reduced capital, every investment requires careful consideration. This parallels the behavior of private customers during a recession, where higher costs and limited disposable income prompt a more discerning approach. Individuals tend to prioritize purchases that offer significant value and fulfill essential needs, just like the investors.

The fourth recommendation for startups is to have dynamic capabilities and the ability to create substantial value with minimal resources. This entails a great competitive advantage in both economic upturns and economic downturns. However, this becomes especially vital during economic downturns, where resources are scarce, and there are heightened demands on burn rate and runway. Possibly, the scarcity of resources during recessions has driven startups to innovate and operate with cost-effectiveness. This, in turn, could be a contributing factor to the initiation of numerous successful businesses during economic recessions, as these capabilities lead to significant competitive advantages. This scenario would entail a long-term advantage of starting a business during a recession. Alternatively, it might be the case that these startups were already innovative and cost-effective, and the survival during the recession is a result of their inherent strength, suggesting that economic recession merely sort out weak startups rather than foster success. However, these scenarios lack existing research, making it intriguing for further studies to delve deeper into this phenomenon.

The fifth recommendation is the importance of presenting a detailed and convincing plan. Macmillan et al. (1985) emphasizes that this is in general very important for the startups to consider, however all the investors interviewed underscores that this is crucial during a time of recession. The mention that a simple PowerPoint presentation via Teams was sufficient for decision-making in the 2019-2022 period underscores how the decision-making landscape has evolved in 2023 where a more detailed and promising plan, including road mapping for the future has become a necessity. The emphasis on truthful plans further suggests that the investors values transparency and integrity in the communications with startups. The empirics indicate a more cautious investor landscape during recessions. Startups are advised to adapt their fundraising strategies by providing detailed, realistic, and transparent roadmaps to instill confidence in investors who are now more risk averse. This shift in expectations underscores the importance of strategic planning and communication for startups navigating challenging economic environments.

5.5. Implications and Further Research

Given the limited existing research on this topic, this study fills a crucial knowledge gap by identifying variations in investment decisions from 2019 to 2023. It aims to provide startups with valuable guidelines for effectively attracting capital during periods of reduced funding and heightened investor risk aversion. The study´s results imply substantial benefits for both entrepreneurs and investors in future economic downturns, particularly through the implementation of practical guidelines designed for startups. These guidelines offer valuable, concrete advice for startups striving to not only survive but thrive in the face of uncertain economic conditions. Such guidance serves as a vital tool, enabling startups to navigate challenges, enhance their dynamic interactions with investors, and adapt their strategies more effectively. An additional noteworthy contribution is the potential ripple effect: as more entrepreneurs successfully secure capital following these guidelines, it can pave the way for the establishment of more thriving businesses. This, in turn, generates increased employment opportunities, thereby fostering heightened economic prosperity.

To advance the current understanding of the field, future research could delve into the impact of disruptions on later-stage investments instead of early-stage. Furthermore, cross-country comparisons could shed light on variations in resilience, pinpointing which nations demonstrate the greatest adaptability. A suggestion for further research is also an in-depth investigation into how sustainability factors influence investment decisions during challenging economic periods. This multifaceted approach could significantly enrich the comprehension of entrepreneurial landscapes and investment dynamics amid economic uncertainties. Further research could also explore the correlation between launching a business during a recession and its success rate, comparing it to businesses initiated during economic upturns. Such an exploration can offer practical implications for entrepreneurs and investors by uncovering patterns and factors that influence business success in different economic conditions. Understanding the dynamics of businesses started in recessions versus economic upturns can inform strategies for resilience, risk management, and policy interventions to support entrepreneurship during varying economic climates.

6. Conclusion

The empirical findings highlight a significant shift in the investment landscape, suggesting a return to a more normalized venture capital market in 2023 compared to the preceding investment climate during 2019-2022. The empirical data and literature indicate an elevated challenge in raising capital for early-stage startups in Sweden during 2023 compared to the period spanning 2019-2022. The capital raised by early-stage Swedish startups began to decline in 2021 and has continued to decrease each subsequent year, including 2023. The reduced circulation of venture capital in Sweden has created challenges for Swedish venture capital firms seeking to raise funds in 2023. The decline in venture capital during this period is further influenced by the macro environment, marked by heightened interest rates and risk aversion. This resulted in fewer participants in the industry, including angels and other smaller private investors. The decrease in capital can also be attributed to the challenge encountered by evergreen funds, like many other types of venture capital firms, which engaged in numerous high-valuation investments in the years leading up to 2023. Evergreen funds stand out from other funds due to their unique capital source, originating from the realization and exits of startups rather than subsidies. However, challenges emerge in 2023 as making exits becomes difficult due to lower valuations, posing a hurdle in realizing the expected value. Consequently, this reduction in realized value diminishes the evergreen funds' available capital for reinvestment in new startups. Moreover, the macro environment tends to make investors prioritize follow-on investments in existing portfolio companies, further reducing the capital available for new startups.

The diminished capital availability within the Swedish market correlates to macroeconomic factors such as war, elevated interest rates, and economic disruptions. These factors, as well as the decreased number of rival firms in the more normal venture capital market during 2023 contributes to the venture capital firms taking more time to conduct their due diligence since being more risk averted. The increased risk aversion has led to higher requirements on investment criteria such as runway and burn rate. The investors also have a bigger preference for more comprehensive business plans that mitigate the risk. Between 2019 and 2021, investments were made in consumer and non-sustainable products, the current landscape reflects a shift in investor preferences. Presently, investors are inclined towards supporting more sustainable products. This shift underscores the evolving priorities and heightened emphasis on long-term environmental impact and resilience in investment choices. In the contemporary investment landscape, the venture capital market stands notably more mature than it did during the recessions of both 2000 and 2008. This increased maturity translates into companies exhibiting greater resilience compared to those periods. Consequently, in today’s environment, there remains a viable opportunity to secure capital for those seeking it even though we are in a recession.

Based on the advice and other empirical results from the interviews with experienced investors, the subsequent five guidelines have been formulated to assist startups in achieving success when seeking capital in challenging economic times:

1. Utilize talent density during a recession and build a good team.
2. Start in time and engage with the right investors.
3. Focus on a competitive, sustainable, and innovative product.
4. Create as much value as possible with minimal resources.
5. Provide investors with a more detailed and convincing roadmap.

If startups carry out these five steps, they have a greater chance of succeeding in capital raising and paving the way in the business. A company started in a recession is more resilient and can withstand fluctuations and unforeseen events. Evidence of this is seen in companies like Spotify and Microsoft, founded during previous recessions.

7. References

Anonymous entrepreneur. (2023-11-14). Personal communication.

Avraamov, G. (2022). Experience of evergreen financing in the field of financial technologies. *Otkhody i Resursy, 2022*, Vol.9 (4). 10.15862/49ECOR422

Bamford, C. E. & Douhet, E. B. Jr. (2013). Venture Capital and Risk Management: Evidence from Initial Public Offerings. *Journal of Managerial Issues*, Vol. 25(3), 220-240. https://www.jstor.org/stable/43488819

Bell, E., Bryman, A. & Harley, B. (2022). *Business Research Methods.* Oxford University press.

Cambridge Dictionary (2023) *Burn rate*. Fetched (2023-11-19) from https://dictionary.cambridge.org/dictionary/english/burn-rate

Conti, A., Dass, N., Di Lorenzo, F., & Graham, J.H. (2008) *Venture capital investment strategies under financing constraints; Evidence from the 2008 financial crisis.*

Europeiska Centralbanken (2021). *Varför är inflationen så hög just nu?* Fetched (2023-12-10) from https://www.ecb.europa.eu/ecb/educational/explainers/tell-me-more/html/high_inflation.sv.html

Fraser-Sampson, G. (2007). *Private Equity as an Asset Class*. John Wiley & Sons, Chichester.

Gompers, P. & Lerner, J. (2001). *The Venture Capital Revolution.* The Journal of Economic Perspectives, Vol. 15(2), 145–168. http://www.jstor.org/stable/2696596

Hellman, T. & Puri, M. (2002). Venture Capital and the Internet Bubble, facts, fundamentals, and food for thought. Federal Reserve Bank of Atlanta and Stern School of Business, New York University.

https://www.atlantafed.org/-/media/Documents/news/conferences/2002/02-financial-markets/papers/venturecapitalandinternetbubblehellmannthomaspurimanju2002mar.pdf

Hirschey, M. & Bentzen, E. (2019). *Managerial Economics.* Cengage Learning EMEA

Kollmann, T. & Kuckertz, A. (2010). Evaluation uncertainty of venture capitalists' investment criteria. *Journal of Business Research*. Vol. 63(7) 2010, Pages 741–747. 10.1016/j.jbusres.2009.06.004

Landström H. & Löwegren M. (2009) *Entreprenörskap och företagsetablering: Från idé till verklighet*. Lund: Studentlitteratur

Ljungqvist, A & Bias B. (2023). *Great Recession Babies: How do Macro Conditions at Birth Shape Startups?*. Diss. Vanderbilt University & Stockholm School of Economics.

MacMillan IC, Siegel R, Narasimha PS. (1985) Criteria used by venture capitalists to evaluate new venture proposals. *J Bus Venturing* 1985. 1:119–28. 10.1016/0883-9026(85)90011-4

Mason, C & Stark, M. (2004). What do Investors Look for in a Business Plan?: A Comparison of the Investment Criteria of Bankers, Venture Capitalists and Business Angels. *International Small Business Journal*. 22. 227-248. 10.1177/0266242604042377.

Naess Schmidt, S., Jensen, J. B., Poulsgaard, K., Nielsen A. L. & Lauer, S. M. (2022). *The economic footprint of Swedish Venture Capital and Private Equity.* https://www.svca.se/wp-content/uploads/2022/11/The_Economic_Footprint_of_Swedish_VC_and_PE_Final-1.pdf

National Venture Capital Association. (2021). *US Venture Exit Value Achieved 290 Billion in 2020 Alongside Record Years for investment and fundraising activity.* Fetched (2023-11-28), from https://nvca.org/press_releases/us-venture-exit-value-achieved-290-billion-in-2020-alongside-record-years-for-investment-and-fundraising-activity/

Proksch, D., Tranz, W.,Pinkwart, A. & Schefczyk, M. (2016). Risk management in the venture capital industry: Managing risk in portfolio companies: *The journal of Entrepreneurial Finance,* 18(2). Article 1.

Ramsinghani, M. (2021). The Business of Venture Capital: The Art of Raising a Fund, Structuring Investments, Portfolio Management, and Exits. *John Wiley & Sons*.

Robinson, R.B. (1987). Emerging strategies in the venture capital industry, *Journal of Business Venturing*, 2(1), 53-77, ISSN 0883-9026, https://doi.org/10.1016/0883-9026(87)90019-X.

Statistiska Centralbyrån. (2023). *Antalet anställda ökar.* Fetched (2023-11-28), from https://www.scb.se/hitta-statistik/statistik-efter-amne/arbetsmarknad/sysselsattning-forvarvsarbete-och-arbetstider/kortperiodisk-sysselsattningsstatistik-ks/pong/statistiknyhet/sysselsattning-lediga-jobb-och-lonesummor-2a-kvartalet-2023/#:~:text=Antalet%20lediga%20jobb%20minskar,uppgick%20till%20cirka%20192%20100.

Svenska Institutet. (2022). *2021 rekordår för svenska startups enligt ny rapport.* Fetched (2023-12-02), from https://si.se/2021-rekordar-for-svenska-startups-enligt-ny-rapport/#:~:text=värderingen%20av%20det%20svenska%20ekosystemet,Europas%20snabbaste%20ökning%20per%20capita.

Statista (2023). *Venture Capital – Worldwide.* Fetched (2023-12-14), from https://www.statista.com/outlook/fmo/capital-raising/traditional-capital-raising/venture-capital/worldwide#capital-raised

Kaplan, S. N. & Strömberg, P. (2004). Characteristics, Contracts, and Actions: Evidence from Venture Capitalist Analyses. *The journal of finance,* 59(5), 2177-2210 *https://www.jstor.org/stable/3694821*

Sweden's Ministry of Finance. (2023). *Hög inflation fortsätter prägla svensk ekonomi. The Swedish Government Office.* https://www.regeringen.se/pressmeddelanden/2023/08/hog-inflation-fortsatter-pragla-svensk-ekonomi/

Swedish Private Equity & Venture Capital Association. (2023). *Private Equity, Venture Capital at Work in Sweden.*.Fetched (2023-01-02), from https://www.svca.se/wp-content/uploads/2023/06/PE_at_Work_Sweden_2021.pdf

Swedish Private Equity & Venture capital Association. (2023). *Riskkapitalinvesteringar har ökat Sveriges BNP*. Fetched (2023-12-02), from https://www.svca.se/wp-content/uploads/2023/06/Investing-in-Sweden-Private-Equity-Activity-2022.pdf

Swedish Private Equity & Venture capital Association. (2020). *SVCA:s styrelseordförande Monalotte Theorell Christofferson om effekterna på private equity och venture capital till följd av coronaviruset.* Fetched (2023-12-01), from https://www.svca.se/pressmeddelande/svcas-styrelseordforande-monalotte-theorell-christofferson-om-effekterna-pa-private-equity-och-venture-capital-till-foljd-av-coronaviruset/

Swedish Private Equity & Venture Capital Association. (2021*). The ESG Status of Swedish Private Equity.* https://www.svca.se/wp-content/uploads/2021/07/The-ESG-Status-of-Swedish-Private-Equity-Final.pdf

The Swedish National Institute of Economic Research. (2018). *Konjunkturterminolog.* Fetched (2023-12-01), from https://www.konj.se/var-verksamhet/sa-gor-vi-prognoser/konjunkturterminologi.html

Tyebjee T. & Bruno A. (1984). A model of venture capitalist investment activity. *Management Science.* 30(9), 1051-1066. https://www.jstor.org/stable/2631723

The European Council. (2023). *Konsekvenserna av den ryska invasionen i Ukraina för marknaderna: EU:s åtgärder.* Fetched (2023-12-10), from https://www.consilium.europa.eu/sv/policies/eu-response-ukraine-invasion/impact-of-russia-s-invasion-of-ukraine-on-the-markets-eu-response/

Appendix 1. Interview Guideline

1. Role description - Walk us through a working day, how does it look? How is the prospecting performed? What's your position and how did you get there?

2. In which stage of the company's development do you usually invest and why? Is there any stage you have chosen to niche towards and if so, why? (pre-seed, startup, later stage)

3. Which industries/sectors do you invest in?

4. How have your investment firm been affected overall by the economic downturn in Sweden?

5. Since the interest rate increased globally for the last 2 years, in Europe, a natural consequence has been an increased cost of capital across all sectors. How has this affected your core business and prospecting?

6. How is your firm financed? Is it by private investors, other VC companies or institutional investors?
    a) Have you seen a change in the amount of capital you receive due to the recession?

7. What are the most common investment criteria that you use?
    a) Do you use the same criteria now as before the economic downturn?
    b) Has there been a change in your investment criteria due to the recession?

8. What are the major Key performance indicators (KPI)Is that you focus on?
    a) Has this changed given the economic downturn and high interest rates?
    b) Do you have specific levels for KPIs that are deal breakers?

9. Do you have different criteria and Key performance indicators for different industries? if so please elaborate?

10. What does your portfolio structure look like?
    a) What type of industries
    b) What are the weights between risky and less risky investments?
    c) Has your portfolio management and strategy changed due to the recession? Is the portfolio balanced in a different way than before?

11. Do you have any advice for entrepreneurs starting a business in crisis, what should they focus on to receive capital from VC companies?

12. If you were active during the earlier crisis, did you have the same investment approach as in this current crisis?

13. Do you see a bigger risk of information asymmetry in the current economic downturn?

14. Has the view of risk changed, if so, how?

15. Do you see any possibilities with the current recession?

16. Is there anything of importance that you think we have missed considering the recessions effects on your investments?