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A demand-side perspective on venture capital financing

SARAH GLÜCKSMAN

Department of Technology Management and Economic
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SARAH GLÜCKSMAN

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Division of Entrepreneurship and Strategy
Department of Technology Management and Economics
Chalmers University of Technology
SE-412 96 Gothenburg
Sweden
Telephone + 46 (0)31-772 1000

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SARAH GLÜCKSMAN
Department of Technology Management and Economics
Chalmers University of Technology

Abstract

Entrepreneurial high growth firms are recognized as having a disproportionate impact on economic development and job creation. It is further recognized that many of these firms need access to venture capital if the high-growth potential is to be realized. Intervention by governments to improve access to finance for entrepreneurial ventures have often focused on supply-side measures. However, there is a growing recognition that access to finance can also be hindered by weaknesses on the demand-side where entrepreneurs need information and advice on the process of raising equity finance and what it means to be investment ready.

This thesis focuses on the demand-side of financing and the entrepreneur's point of view on venture capital. Although there is a vast literature about how venture capitalists (VCs) screen and select the entrepreneurial firms they wish to invest in, only a handful of studies have examined venture capital investments from an entrepreneur's perspective. Based on interviews with 53 venture capital backed entrepreneurs and a quantitative longitudinal study of 273 venture capital backed startups, this thesis aims to better understand the "knowledge gap" on the demand-side and how entrepreneurs handle problems and challenges when raising and being funded by venture capital.

The findings in this thesis are related to the full venture capital cycle, from the initial selection phase, through the investment process to after the exit. In paper ONE and TWO we argue that entrepreneurs might be considered as a more active part in the VC-entrepreneur relationship than most previous studies have assumed. To avoid the VC's asymmetric information advantage I suggest in paper ONE that the entrepreneurs develop informal tools to mitigate potential problems and risks. In paper TWO we show how entrepreneurs in "thin" venture capital markets recognize the opportunities that a "thick" venture capital market can provide. In paper THREE we propose that entrepreneurs who are in the process of raising venture capital have reasons to negotiate around future exit choices with the VC when considering the long-term effects of venture capital.

Key words: Venture capital, demand-side perspective, entrepreneurial perspective, information asymmetry, cross-border investments, thin markets, post-exit development

List of appended papers:

Paper ONE:

Glücksman, S. (2019). Entrepreneurial experiences from venture capital funding: Exploring two-sided information asymmetry.

The paper was presented at Research in Entrepreneurship and Small Business (RENT) conference in Berlin in 2019 and is currently (as of June 2020) in the review process of *Venture Capital: An International Journal of Entrepreneurial Finance*. I am the sole author of this paper and conducted all parts of the research process myself.

Paper TWO:

Isaksson, A. & Glücksman, S. (2020). Cross-border investments: Why Swedish entrepreneurs raise venture capital in the US.

This paper was accepted to be presented at the Babson College Entrepreneurship Research Conference (BCERC) conference in Knoxville, Tennessee in 2020, but because of COVID-19, the conference was cancelled. The paper is currently (as of June 2020) in the review process of *Journal of Small Business Management*. The paper was co-authored with Anders Isaksson who conceived the idea and research design. Data collection was conducted by six students as part of a Master Thesis with Anders as their supervisor. Analyzing of data and writing was done jointly by both co-authors.

Paper THREE:

Hulthén, P., Glücksman, S., Lundqvist, M., & Isaksson, A. (2019). Growth of Swedish venture capital financed startups after IPO or acquisition.

This paper was presented at the Entrepreneurial Finance (ENTFIN) conference in Trier in 2019. It has been in a revise and resubmit process of *Entrepreneurship & Regional Development*, but eventually got rejected. The paper was co-authored with Per Hulthén, Mats Lundqvist and Anders Isaksson. Per conceived the idea and research design. Per and myself conducted the data collection with assistance of research assistant Marcus Silkisberg. Analyzing of data and writing was done jointly by all four co-authors.

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1. INTRODUCTION

There are several ways for entrepreneurs to finance their startups. Most entrepreneurial ventures use personal savings, internally generated funds or capital from family and friends to cover the daily operation of the business (Bhidé, 2003). However, there are certain types of start-ups that may have a higher capital needs in the early stage, for example high-tech ventures and growth-oriented firms. The high risk-return characteristics for these ventures make venture capital funding one of the few possible financial sources.

Entrepreneurial high growth firms are recognized as having a disproportionate impact on economic development and job creation (Shane, 2009). It is further recognized that many of these firms need to access venture capital if the high-growth potential is to be realized (e.g. Davila et al., 2003). Several high profile companies including Apple, Facebook, Skype and Microsoft all raised venture capital funding in their early years to boost their growth (Cumming and Johan, 2017). With many governments around the world interested in recreating the success stories from Silicon Valley, there is substantial interest among scholars, practitioners and policy makers on the topic of policies toward venture capital.

Intervention by governments to improve access to finance for entrepreneurial ventures have often focused on supply side measures, for example governmental venture capital funds (Landström, 2017). However, there is a growing recognition that access to finance can also be hindered by weaknesses on the demand-side which is often referred to as lack of investment readiness (Mason and Harrison, 2004; Mason and Kwok, 2010; Rasmussen and Sørheim, 2012). Many entrepreneurs do not know about the role of equity finance or have a negative attitude towards this type of financing. They might have limited knowledge about the financial markets and how to handle various financial actors. They might also be unaware of what is involved in raising external capital and what is required to attract equity investors. Consequently, entrepreneurs need information and advice on the advantages and disadvantages of raising equity finance and what it means to be investment ready (Mason and Kwok, 2010; Rasmussen and Sørheim, 2012).

This thesis concentrates on the demand-side of financing and the entrepreneurs' point of view on venture capital. Entrepreneurs encounter various problems and challenges while interacting with venture capital investors, both before they have actually ensured that they will get funding and during the investment period when entrepreneurs and investors work together. As the process is recurrent for venture capitalists (VCs) but infrequent for entrepreneurs, VCs have an asymmetric information advantage over the entrepreneurs since they naturally have more knowledge about the investment process and their own requirements. This information asymmetry might lead to disadvantages for the entrepreneurs in terms of difficulties in receiving funding, unfavorable terms, or negative startup experiences.

In this thesis, the term venture capitalist (VC) refers to an investor that act as intermediary between financial institutions and unquoted ventures (Gompers and Lerner, 2001). This is often referred to as "formal" venture capital in contrast to "informal" venture capital which usually refers to business angels or family and friends. Formal venture capital is a form of financing which results in a special form of relationship between the investor and the entrepreneur. The fact that a formal VC often has a portfolio of firms means that an investor's risk profile is very different from an entrepreneur's since the VC's investments are more diversified (Manigart et al., 2002). In addition, VCs need to allocate their limited resources between all their portfolio firms. Hence, actual allocation of resources might be very different from those which an entrepreneur requires and expects. There is also a time limit to the relationship. VCs need to exit their investments after a certain amount of years to show returns to their investors. Although entrepreneurs are aware of the exit goal of the VCs, few entrepreneurs have the knowledge to consider all the long term effects from venture capital funding.

Research on venture capital has been dominated by US researchers, based on the characteristics of the US venture capital market and entrepreneurial ventures in the US (Harrison and Mason, 2019). This thesis focuses on the Swedish venture capital market and on Swedish entrepreneurs. Sweden's venture capital market has evolved through five decades to become a mature and developed market, ranked among the top 10 countries in terms of venture capital to GDP ratio (Lerner and Tåg, 2013; Isaksson, 2010; OECD, 2018). After several Swedish entrepreneurial success stories, such as Skype, Spotify, Klarna, iZettle, and King, the regional entrepreneurial ecosystem has grown, and Sweden is today recognized as an important and dynamic startup hub (Atomico, 2020; Inc., 2018). Thus, Sweden offers an alternative baseline to previous US-focused studies and reflects the European context and dynamics of a smaller export-oriented country.

However, even though Sweden has become a more developed venture capital market and has had several successful startups, it is generally considered to be a "thin" venture capital market, with a rather small number of both entrepreneurial ventures and capital providers (Isaksson, 2010). In thin venture capital markets, entrepreneurs have difficulties acquiring capital, while investors have difficulties in finding attractive investment opportunities. Therefore, several Swedish entrepreneurs have turned to the US venture capital market in search of funding. As current research focuses on what drives VC firms to seek investment opportunities abroad (e.g. Guler and Guillén, 2010; Moore et al., 2015), less is known about the demand-side and what motivates entrepreneurs to search for funding from foreign capital providers.

1.1 Aim of the thesis

As explained above there is a clear need to better understand the "knowledge gap" on the demand-side for venture capital. Therefore, the high level aim of the thesis is *to provide insights on how venture capital can influence startup journeys for Swedish entrepreneurs and their companies.*

There are many areas of a startup's journey that might be influenced by funding choices, and in this thesis I have chosen three main fields within the venture capital literature to focus on. First, I aim to extend the existing literature on information asymmetry in a VC–entrepreneur financing situation by discussing how entrepreneurs mitigate the VCs' asymmetric information advantage. Second, I aim to address the current literature on thin venture capital markets and cross-border investments by studying what motivate entrepreneurs in thin venture capital markets, such as Sweden, to search for funding from thick venture capital markets, such as certain regions in the US. Third, I aim to investigate how venture capital funding influence startups long-term and in the post-exit phase of the venture capital cycle.

The stakeholders that will benefit most from this thesis are entrepreneurs and policy makers. Entrepreneurs will know more about the role of venture capital and what is involved when raising this type of external capital. The findings are related to the full venture capital cycle, from the initial selection phase, through the investment process to after the exit. This provides an understanding how venture capital may influence the startup journey both short and long term. Policy makers will gain knowledge to use when designing policies to promote regional venture capital markets and growth. However, it should be said that this thesis is based on the characteristics of the Swedish venture capital market and on Swedish entrepreneurial ventures. Consequently, the findings are mostly relevant to markets and settings similar to Sweden.

Finally, this thesis acts as a counterweight to popular media and their reporting on venture capital. Instead of only reading about success stories and the actual moment of fundraising, entrepreneurs can receive a more unbiased view on the full VC–entrepreneur relationship and how raising venture capital might influence their startup journey.

1.2 Structure of the thesis

The remainder of the thesis is structured as follows. First, I will present the relevant theoretical framework as well as the Swedish context for this thesis. Next, I will discuss the methodology used in the appended papers and the writing process of the research work. The appended papers will then be summarized, and the main contributions will be presented. Finally, I will conclude with the theoretical contributions and practical implications together with future research suggestions.

2. THEORETICAL FRAMEWORK

In this chapter I introduce the main theoretical framework that I have utilized and built this thesis on. I present the most relevant theories and literature from my thesis's point of view and discuss what elements they emphasize and disregard. The theoretical framework is intended to support the discussion and capture the different research streams in focus for this thesis. I will start by discussing the theories and literature that lead up to my research questions: information asymmetry; cross-border investments and "thin" markets; and the venture capital cycle. Then, I will give a brief overview of the literature on the entrepreneurial perspective on venture capital funding.

2.1 Information asymmetry

In a VC–entrepreneurial financing situation, information is often shared unequally among the parties and the problem of information asymmetry is generally cited as the main explanation of the financial constraints faced by small firms (MacIntosh, 1994; Sahlman, 1990). Among the issues that arise from information asymmetries are agency problems (Jensen and Meckling, 1976). These problems arise because of "hidden information" and "hidden actions" between the parties (Amit et al. 1998). Hidden information refers to a situation in which one party possesses relevant information that is not known by the other party, for example, entrepreneurs have more information about their driving forces and their venture than investors. A situation with high information asymmetry in the form of hidden information creates the risk of "adverse selection" where the VC will have difficulties distinguishing between good and bad ventures to invest in. Hidden actions tend to give rise to "moral hazard," which occurs when one party cannot observe relevant actions taken by the other party, for example, once the entrepreneurs have raised capital, they might spend it on items that are not in accordance with the VC's interest.

However, the problem of information asymmetry is two-sided in the sense that nascent entrepreneurs are unfamiliar with the VC's financing process and requirements (Carpentier and Suret, 2006). Difficulties in distinguishing between good and bad VCs due to lack of experience and knowledge is an adverse selection problem for the entrepreneur. Furthermore, a VC often provides substantial managerial contributions to the venture (e.g. Gorman and Sahlman, 1989; Gompers and Lerner, 2004). However, these "efforts" provided by the VC are not something that can be legally verified, creating a potential moral hazard problem for the entrepreneur in which the VC might provide insufficient effort (De Bettignies and Brander, 2007). Several researchers have started to argue that the agency perspective in entrepreneurial finance literature describes the VC–entrepreneur relationship in a one-sided direction. These scholars argue that most research on moral hazard is focused on the VC's control over the entrepreneur's opportunistic behavior while ignoring the entrepreneur's concern that the VC may act opportunistically (Christensen et al. 2009; Drover et al. 2014; Shepherd and Zacharakis, 2001).

Although scholars have acknowledged that problems arising from asymmetric information are two-sided, most studies on information asymmetry in a VC-entrepreneur relationship have focused on how VCs mitigate their agency problems (Drover et al. 2017). To overcome adverse selection problems, investors use mechanisms such as screening, due diligence, syndication of deals, and specialization (e.g., Cumming, 2006; Fried and Hisrich, 1994; Gompers and Lerner, 2004). To overcome moral hazard issues, VCs use mechanisms such as staging of investments, legal contracting, and extensive monitoring (e.g., Arcot, 2014; Burchardt et al. 2016; Pruthi, Wright, and Lockett, 2003). Entrepreneurs use mechanisms as "signaling" to reduce uncertainty and information asymmetries which concern VCs. In order to convince capital providers about the qualities of the venture, entrepreneurs need to send positive signals about themselves and about their venture (Connelly et al. , 2011; Bollazzi, et al., 2019).

However, all the mechanisms above are used to reduce the information asymmetry risks from *the VC's perspective*. The goal of these mechanisms is to make it easier for VC's to distinguish between good and bad ventures (adverse selection) or to decrease the risk of opportunistic behavior from the entrepreneur (moral hazard). To the best of my knowledge, no study has so far examined how entrepreneurs mitigate *their* information asymmetry problems. How do entrepreneurs distinguish between different funding alternatives and investors (adverse selection) or how do entrepreneurs handle their concern that the VC may act opportunistically (moral hazard)? This leads to the research question in paper ONE:

> RQ1: How do entrepreneurs mitigate information asymmetry risks in a VC–entrepreneur relationship?

2.2 Cross-border investments and "thin" venture capital markets

Due to the need to reduce information asymmetries and related adverse selection and moral hazard problems, venture capital investing has long been a local phenomenon (Wright and Robbie, 1998; Cumming and Dai, 2010). The geographical proximity to investment targets was regarded as necessary to locate and evaluate target companies (Sorenson and Stuart, 2001) and to efficiently provide monitoring and value adding services (Mäkelä and Maula, 2006). However, recent research has identified a shift toward a more globally distributed venture capital investment pattern where VCs have shown an increasing interest in crossing border to gain access to investment opportunities (Aizenman and Kendall 2012; Guler and Guillén 2010; Wright et al. 2005).

The supply of possible capital providers and entrepreneurial ventures varies between countries and regions. These various levels are often referred to as "thin" or "thick" venture capital markets (e.g. Nightingale et al., 2009; Bertoni et al., 2016). Thin venture capital markets are characterized by a small number of entrepreneurial ventures and a small number of capital providers. As a result, entrepreneurs in thin markets have difficulties acquiring capital, while investors have difficulties in finding attractive investment opportunities. In contrast, thick markets are characterized by a large number of both capital providers and entrepreneurial ventures. The Swedish venture capital market is by many considered as a rather thin market (Isaksson, 2010), whereas the US venture capital market is considered as a thick market, at least in certain regions such as the Silicon Valley and the New York-Boston-Washington Corridor. Consequently, several Swedish entrepreneurs have turned to the US venture capital market in search of funding for their new ventures.

The majority of research on cross-border venture capital focuses on the VC's investment decisions and the characteristics of VCs that invest abroad (e.g. Guler and Guillén 2010; Manigart et al. 2000; Moore et al., 2015). To some extent, the investor is often viewed by this literature as the leading party in the investment process, while the entrepreneur is often perceived as a passive target. This is problematic since policy makers trying to stimulate regional venture capital markets also need to be aware of the mechanisms that drive entrepreneurs from one market to another. To fill this gap, the purpose of paper TWO is to explore what motivates entrepreneurs in thin venture capital markets to search for funding from distant and thick venture capital markets. Since the US is the most important foreign VC provider for Swedish entrepreneurs (Tillväxtanalys, 2020), we investigate the reasons why Swedish entrepreneurs choose VC funding from US investors, particularly from regions that are known to be thick venture capital markets. Hence the research question for paper TWO is:

RQ2: Why do Swedish entrepreneurs raise venture capital in the US?

2.3 The venture capital cycle

Entrepreneurs aiming to raise venture capital will have to consider the different phases of the VC's investment cycle and the impact of these phases on their relationship with the investor. Overall, three phases can be distinguished in the venture capital investment cycle: the pre-investment, post-investment and exit phases (Tyebjee & Bruno, 1984).

The VC's goal in the pre-investment phase is to make an investment in a venture that offers the potential for significant capital gains. Thus, to qualify, a venture must have a realistic chance of achieving significant growth and offer an exit opportunity in three to seven years after the investment (Sahlman, 1990). For the entrepreneur, it is crucial to understand what VCs are looking for when making investment decisions and the VC's decision-making process has attracted a lot of scholarly interest (e.g. Fried & Hisrich, 1994; Shepherd, 1999).

In the post-investment phase, the VCs are essentially engaged in two broad types of activities; monitoring and providing value-added activities. Monitoring activities reduce the agency risks associated with VC-entrepreneur relationships (Sapienza and Gupta, 1994). Value-added activities relate to the VCs attempts to increase the upside potential of the investment by adding value beyond cash (De Clercq and Manigart, 2007).

The final phase of the venture capital process is the exit from the ventures in which they have invested. Exiting is the crucial last step in the venture capital cycle, because without an exit there are no returns for the VC and its investors. Exits can occur in a number of ways. A company can list on a public market (IPO), be acquired by another company (trade sale), buy back the investors' shares, or be shut down. While IPOs usually are the most preferred exit option for both venture capitalists and entrepreneurs, trade sales are by far the most common exit vehicle (Cumming & McIntosh, 2003; Invest Europe, 2018). Research on the venture capital cycle has mainly taken a financier's perspective and has therefor often ended at the exit phase. Thus, little is known about the post-exit developments of venture capital funded startups and how the type of exit affects a venture's long term growth. This is the basis for the research question in paper THREE:

RQ3: How does venture capital funding influence startups long-term?

As stated above, Tyebjee & Bruno (1984), distinguished three phases in the venture capital investment cycle: the pre-investment, post-investment and exit phases. However, I believe that the influence of venture capital funding for entrepreneurs and their startup does not end at the exit phase but continues post exit. Thus, I have amended the model from Tyebjee & Bruno (1984) with a fourth phase named the "post-exit phase", which is shown in figure 1. I believe that this theoretical model better illustrates the phases of the venture capital cycle from the entrepreneurs' perspective.

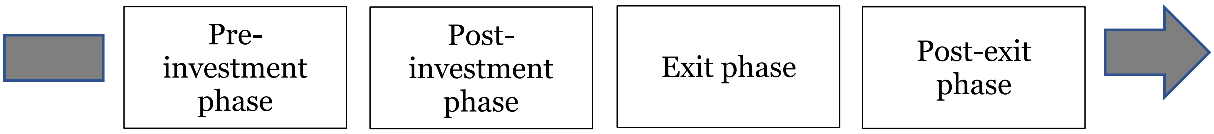

Figure 1. The venture capital cycle from the entrepreneurs' perspective (amended from Tyebjee & Bruno, 1984).

2.4 The entrepreneurial perspective

Although there is a vast literature about how VCs screen and select the entrepreneurial firms they wish to invest in (e.g., Fried and Hisrich, 1994; Hsu et al., 2014; Sahlman, 1990), only a handful of studies have looked at venture capital investments from an entrepreneur's perspective (De Bettignies and Brander, 2007: De Clercq et al., 2006; Drover et al. 2014; Fairchild, 2011; Hallen and Eisenhardt, 2012; Hsu, 2004; Valliere and Peterson, 2007; Zacharakis et al. 2010).

De Bettignies and Brander (2007) examined the entrepreneur's choice between bank finance and venture capital and found that there is a two-sided moral hazard problem when choosing venture capital as both the entrepreneur and VC provide unverifiable effort. Fairchild (2011) analyzed the entrepreneur's choice between VC and angel financing and found that an entrepreneur may consider both economic and behavioral factors when making choice of financier. De Clercq et al. (2006) discussed how entrepreneurs should find the right investors, secure the right amount of money, and obtain a deal structured in an equitable manner. The study also suggested that foundations for a good match between VC and entrepreneur relate to complementary skills and the potential for the entrepreneur and VC to have an open, trusting relationship. Although these studies acknowledge the active part of the entrepreneur in the VC–entrepreneur relationship, they have no empirical findings from entrepreneurs but base their findings indirectly on research of VCs.

Studies with empirical findings from entrepreneurs largely focus on the evaluation of potential VCs. Valliere and Peterson (2007) found that both novice and experienced entrepreneurs considered valuation to be the primary criterion, and also viewed the terms and conditions of the investment deal as important. Furthermore, the study suggested that entrepreneurs were not particularly looking for "smart money," that is, investors capable of providing a range of additional services to help the portfolio firm. Hsu (2004) suggested that entrepreneurs are willing to forego offers with higher valuations to partner with more reputable VCs. Hallen and Eisenhardt (2012) found that firms that form investment ties efficiently avoid drawn-out and high-effort searches, failed attempts, and undesirable partners. Drover et al. (2014) found that ethical reputation of a VC profoundly influences the entrepreneur's willingness to partner. Zacharakis et al. (2010) suggested that it is important for the entrepreneurial team to build cohesion both within the team and with the VC to avoid lower overall performance if conflicts arise. Although these studies mainly focus on the initial phase of the venture capital cycle, the studies are insightful because they suggest that the entrepreneur plays an active part in the relationship and that there are interesting insights from entrepreneurs with prior venture capital experience.

3. THE SWEDISH CONTEXT

The findings in this thesis are mainly based on data and the characteristics of the Swedish venture capital market and Swedish entrepreneurial ventures. In this chapter I first discuss the Swedish venture capital industry and then present data regarding entrepreneurship in Sweden.

3.1 The Swedish venture capital industry

The Swedish venture capital industry has its roots in the 1970s when the first formal venture capital firms were established. Despite the financial crises in the beginning of the 1990s and in 2001, the two decades around the millennium succeeded in establishing a healthy venture capital market in Sweden (Isaksson, 2010). An important aspect of the development of a venture capital market in Sweden is the crucial role played by the government. Increased financial market liberalization and active government policies toward the venture capital market have helped the Swedish venture capital market to take off (Lerner and Tåg, 2013). Figure 2 displays venture capital investments in 2017 as a share of GDP, revealing that Sweden is in seventh place with investments corresponding to 0.06% of GDP. US and Israel are in the top with investments corresponding to 0.40% and 0.38% respectively (OECD, 2018). While the gap is still large in a worldwide comparison, Sweden is among the top European countries.

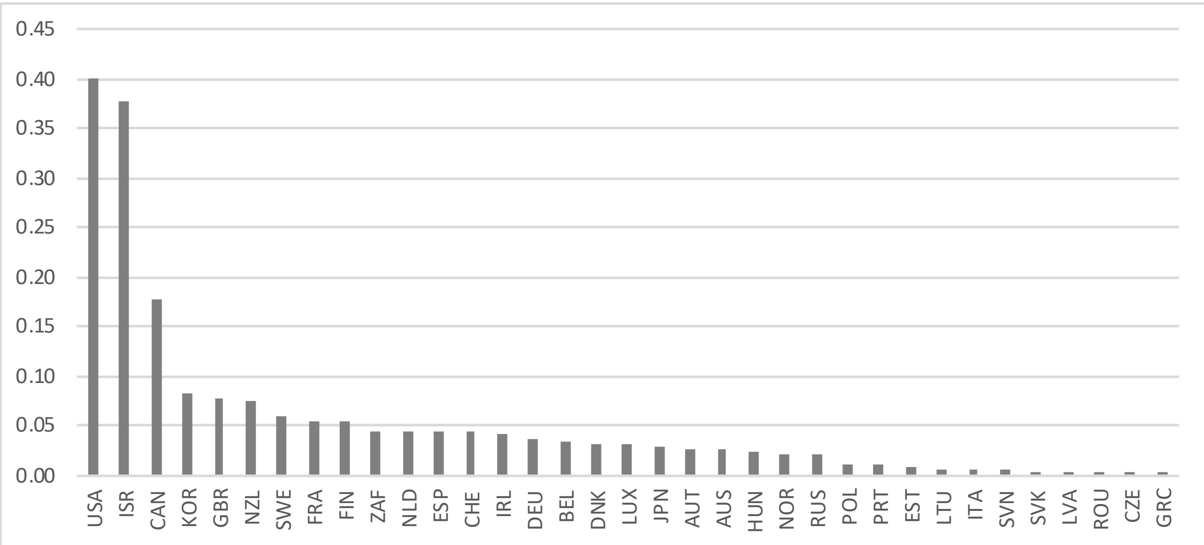

Figure 2. Venture capital investments 2017 as a percentage of GDP (OECD, 2018)

In 2018, formal venture capital investments in Swedish portfolio firms amounted to SEK 3.32 billion, an increase of SEK 998 million (+43 percent) compared with the previous year (Tillväxtanalys, 2020). The increase was mainly attributable to increased investments from foreign funds and Swedish private funds. Foreign venture capital investments in Swedish portfolio firms amounted to 50 percent of total venture capital investments in 2018 (Tillväxtanalys, 2020). The Swedish government is still the main investor in portfolio companies in the earliest seed phase, while foreign and Swedish private funds invest to a higher degree in the later phases. Industrifonden, Almi Invest and Saminvest are the three Swedish governmental funds. The Swedish AP funds (pension funds) also invest in early stage non-quoted companies. In 2019, the Swedish company Northvolt had the largest VC-backed fundraising deal in Europe with a round size $1000M[1]. The Swedish company Klarna had the eight largest deal with a round size of $460M[2] (Atomico, 2020). Both these deals included several types of venture capital investors, i.e. not only formal venture capital.

Table 1 displays the top Swedish venture capital firms based on number of deals made in Swedish companies in 2019, including Q1 2020 (Nordic9, 2020). It should be noted that these data were collected before any possible effects of COVID-19 on investment rounds. Thus, the table might look quite different for 2020. Note that Almi Invest has been excluded from this list. As can be seen from the table, Schibsted Growth is the Swedish VC which had the largest number of investment deals in Swedish portfolio firms in 2019. However, Creandum had by far the largest average round investment in MUSD.

VC firm	**Number of deals**	**Average round investment (MUSD)**	**Top deals**
Schibsted Growth	14	4.33	Bynk, Capcito, Dicopay, Hypoteket Bolån, Pej
Creandum	10	16.59	Voi, Pleo, FirstVet, Epidemic Sound, Cake
Luminar Ventures	9	1.91	Greenely, Insurello, Normative, Percepti Labs, Mynt
Club Network Investment (CNI)	9	6.34	G:Loot, Meds, Billogram, Albacross, Oden Technologies
Industrifonden	8	7.52	Funnel, Gesynta Pharma, Fishbrain, Combinostic, Crosser
Inbox Capital	7	7.33	Voi, Kitab Sawti, Meds, Bilogram, Zaver
Norrsken Foundation	7	4.16	Einride, Matsmart, Kognity, Winningtemp, Heart Aerospace
Bonnier Ventures	6	6.31	Sulapac, Doktor.se, Kitab Sawti
Brightly Ventures	6	2.42	Kaching, Worldfavor, PerceptiLabs
Wellstreet	6	1.57	Tibber, Textual
Philian Invest	6	5.93	Kognity, Fyndiq

Table 1. Top Swedish venture capital firms based on number of deals made in Swedish companies in 2019, including Q1 2020 (Nordic9, 2020).

Of the total venture capital investments in Sweden 2018, 94 percent were placed in firms in the metropolitan municipalities, whereas 5 percent in urban municipalities and 1 percent in rural municipalities (Tillväxtanalys, 2020). Thus, there is a clear concentration of venture capital investments in the metropolitan areas.

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[1] The largest investors in this round were Volkswagen Group (DE), BMW Group (DE), AMF (SE), Folksam Group (SE) and IMAS Foundation/IKEA (SE).

[2] The largest investors in this round were Dragoneer Investment Group (US), Svenska Första AP-fonden (SE), Commonwealth Bank of Australia, Merian Chrysalis Investment Company (UK) and funds managed by Blackrock Investment (US).

3.2 Entrepreneurship in Sweden

In 2019 Sweden had approximately 1,200,000 registered companies. The majority of these companies (96 percent), were small firms with less than 10 employees. Small and medium size businesses (0-249 employees) amounted to 99.9 percent of all companies (Tillväxtverket, 2020). However, although larger companies only accounted for a small fraction of all companies, they contributed with 40 percent of the total turnover in the economy and one third of all employees (Tillväxtverket, 2020). The number of newly started companies in Sweden amounted to 67,000 in 2018 (Tillväxtanalys, 2019)[3].

In comparison with other European countries, the level of early-stage entrepreneurial activity in Sweden is relatively low (GEM, 2020). This could partly be explained by the tradition of large enterprises within the Swedish economy where a lot of the entrepreneurial skills have been distributed among established firms (GEM, 2020). However, even if Sweden ranks low on early-stage entrepreneurial activity per capita, the country has over the last years produced several international well-known companies such as Skype, Spotify, Klarna, iZettle and King, which has made the popular media sometimes referring to Sweden as a 'global startup hub' and a 'unicorn factory' (EU-Startups, 2019; Inc., 2018; Wharton, 2015).

An article published by Wharton School (2015), claims that after Silicon Valley, Stockholm produces the highest number of so-called "unicorns" per capita. This implies that the Swedish entrepreneurial ecosystem has comparably many startups that grow into larger companies. This can also be seen in data on venture capital investments in Swedish startups in 2019, where ten startups accounted for more than half of the total venture capital raised in Swedish startups (Dagens Industri, 2019). Table 2 displays the ten largest VC investments per company in Sweden in 2019. As previously stated, Klarna and Northvolt had by far the largest investment rounds in 2019. It should be noted that Table 2 includes all types of venture capital (e.g. corporate VC, governmental VC, foreign VC).

Company	**Industry**	**Founding year**	**VC raised in 2019 (MUSD)**
Klarna	Fintech	2005	567
Northvolt[4]	Energy	2015	515
Voi	Scooters	2018	113
Bynk	Fintech	2016	52
CTEK	Energy	2011	52
Tink	Fintech	2012	46
Einride	Transportation	2016	25
Yubico	Hardware security	2007	25
G-Loot	E-sport	2014	24
Mathem	Online shoping	2009	21

Table 2. Venture capital investment in Swedish tech startups in 2019, as of 8th November 2019, (Dagens Industri, 2019)

[3] These numbers include both limited liability companies as well as sole proprietorships.

[4] As per the 8th of November 2019, only 515 MUSD of the total investment of 1,000 MUSD in Northvolt had been registered at Bolagsverket.

The Swedish startup economy could be classified as a strongly export-oriented economy. More than four out of ten entrepreneurs have customers outside Sweden and more than one in four entrepreneurs starting or running a new business expect sales outside Sweden to generate 25% or more of their revenue (GEM, 2020).

According to the GEM report (2020) the main motivation for Swedish entrepreneurs to start their own business is ‘To build great wealth’ (55% agree) and ‘To make a difference’ (50% agree). Compared to most other countries relatively few Swedish entrepreneurs answered that they wanted to start a company ‘To earn a living’ (39% agree). 33% of the entrepreneurs agreed that their motivation to start a new business was to ‘Continue family tradition’.

4. METHODOLOGY

In the following chapter I present the methodology used in the appended papers and the writing process of the research work. As each of the appended papers describes the specific research method used, this chapter expands the overall approach to the research methodology for this thesis.

4.1 Writing process and timeline of the research process

I started my doctoral studies in March 2018 and I have since then written three papers which form this licentiate thesis. In figure 3 I have illustrated the development process and timeline of the papers in this thesis. In addition, I have included some other relevant milestones. Because of the COVID-19 virus the BCERC conference 2020 was cancelled and the planned presentation of paper TWO could not be carried out. Further details on conferences and review processes are provided in the summaries of the papers in chapter 5.

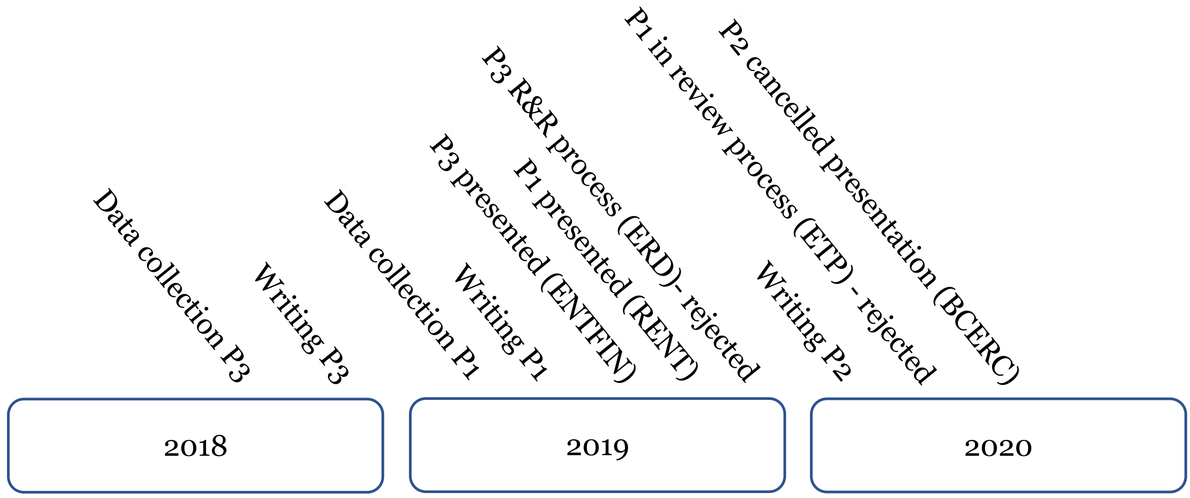

Figure 3. Development process of the papers and some other relevant milestones.

4.2 Research design

Entrepreneurial finance encompasses the intersection of the two separate fields of "entrepreneurship" and "finance." For high ranking journals in the field of entrepreneurial finance (e.g. Small Business Economics, Venture Capital) the majority of studies are and have historically been based on quantitative research methods.

Since I wanted to use interview studies with a qualitative inductive approach for paper ONE and TWO, I searched for a methodology that could convince quantitatively inclined readers that the conclusions from a qualitative study are plausible and defensible. By studying the few examples of qualitative methods within the entrepreneurial finance field, I found the "Gioia methodology" (Gioia, Corley, & Hamilton, 2013). Although a qualitative method, I believe that this approach allows the reader, whether qualitatively or quantitatively inclined, to more easily discern the progression from raw data to emergent theory.

In paper THREE the aim was to study what happens after exit for venture capital funded startups in Sweden. We wanted to track the startups from one year before exit and for as long as the firms were traceable. The purpose was to show patterns and trends for a nation-wide sample of venture capital funded startups. For this study we chose a quantitative method where we compiled a longitudinal data set based on information from annual reports.

Table 3 lists the research design and data collection for each paper. Thereafter, follows a discussion on the research methodology in general.

	Research design	**Data collection**
Paper ONE	Gioia methodology	20 semi-structured interviews
Paper TWO	Gioia methodology	33 semi-structured interviews plus a questionnaire with 106 responses
Paper THREE	Quantitative study with a longitudinal data set	Nationwide sample of 273 startups that made IPO or M&A exit 2002-2017

Table 3. Research design and data collection per paper

4.2.1 Qualitative method (paper ONE and TWO)

With the Gioia methodology the interviewers get close to the interviewees and conscientiously try to use the terms of the interviewees to understand their experiences (Gioia, Corley, & Hamilton, 2013). Once completed, the interviews are transcribed and analyzed (using the Nvivo software in my case). The coding begins inductively, using first-order codes based on concepts and themes expressed directly in the statements of the interviewees. Codes and themes are reviewed and adjusted until agreement among researchers are achieved. The full set of 1st-order themes, 2nd-order themes and aggregate dimensions then gives a basis for building a data structure (see Figure 4). This data structure not only helps to translate the data into a sensible visual aid, it also provides a graphic representation of the progression from raw data to terms and themes in conducting the analyses.

First Order Codes - > Second Order Themes -> Aggregate Dimensions

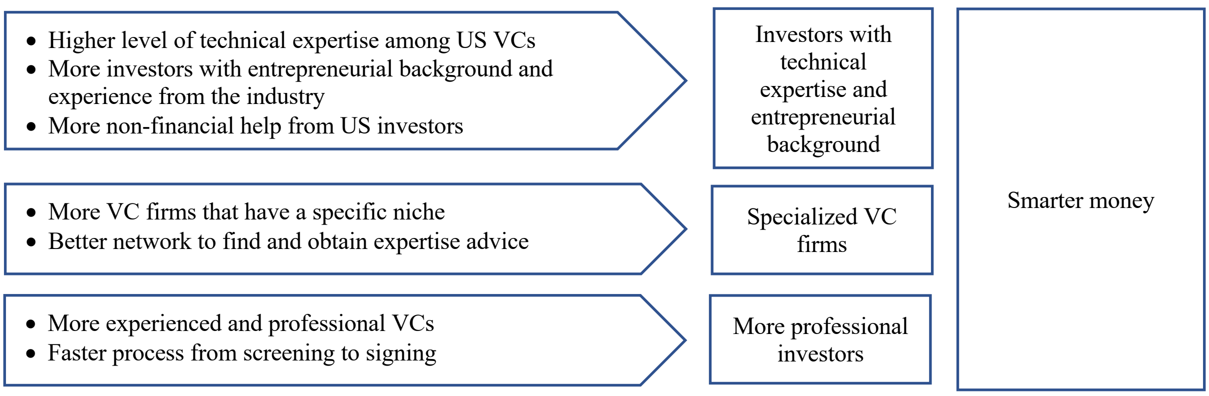

Figure 4. Example of data structure with the Gioia methodology

To obtain interviewees for article ONE and TWO, purposeful sampling was used to select entrepreneurs who were experienced with our research phenomena but had various backgrounds and whose ventures were in different industries and stages. In this sampling procedure, the selection criterion is based around a specific variable of interest, often for comparison purposes. The founders were found through internet searches, personal networks, and snowball sampling of participant entrepreneurs.

A semi-structured format was used for the interviews, starting with a standard list of open questions which allows the interviewee to divert and new ideas to be brought up during the interview. Combining semi-structured interviews with elements of narrative interviews provides the interviewee opportunities to present their experiences in detail. The central element of this form of interview is that the interviewer recurrently asks the interviewee to present narratives of situations (e.g. "If you look back, what was you first….? Could you recount that situation for me?").

For article TWO the interviews were performed as part of a Master Thesis for six students in the program Industrial Engineering and Management at Chalmers University of Technology. The interview guide was developed together with their supervisor (and the co-author of the paper) Anders Isaksson, with me as a sounding board. Several meetings were held during the data collection process to ensure validity and reliability. Each interview was performed by at least two students and was recorded and transcribed. The analysis of the interviews was performed by us and based on the transcribed interviews and within the agreed respondent confidentiality. The students have approved our use of the collected data, and they have declined the offering of being involved as co-authors, but acknowledgements are done in the article.

4.2.2 Quantitative method (paper THREE)

For paper THREE, we downloaded the public annual reports for the relevant period for the 273 startups to compile a longitudinal data set of their development until exit and post-exit for as long as possible. When the information in the annual reports had gaps or was hard to interpret, we assembled complementary information from company websites and newspaper articles. We also collected additional data from the Swedish Tax Agency and Swedish Companies Registration Office to substantiate our records.

Based on this data we conducted a variety of multivariate analyses but because of endogeneity problems (e.g. determinants of a particular exit route influence not only the exit route but most likely also the post-exit performance) we chose to focus on descriptive statistics rather than causality and explanatory variables. Consequently, the focus in paper THREE is on nationwide descriptive statistics on pre- and post-exit performance for venture capital funded startups.

4.3 Validity and Reliability

In paper ONE several steps were taken to enhance the reliability of the study's findings. First, interviews were reviewed and transcribed within 24 hours of the original interviews. In addition a self-reflective journal was kept with learnings from both the interviewee and the interview process. Second, codes and themes were reviewed and adjusted together with my supervisor until agreement was achieved. Third, checks were conducted with five of the interview participants to ensure that the story matched their experiences. To ensure the validity in paper ONE two additional interviews were carried out with VCs who previously had founded their own venture capital-backed startups. Additionally, current and archival secondary data for each founder regarding their venture capital funding were collected, including website materials, annual reports, and newspaper clippings. These documents added details to the background story and allowed comparisons with the interview data.

In paper TWO the data collection was performed as part of a Master Thesis, as mentioned above. To enhance reliability, interviews were done in pairs and both transcription and main findings were discussed among all members of the groups. Based on the transcribed interviews, I performed my own coding before reading the findings of the students. Emergent themes were then compared and found to be very similar. To gain additional perspective and to triangulate data the students conducted 15 additional interviews with entrepreneurs who had raised venture capital from Swedish investors. After the interviews and coding, the students performed a survey with entrepreneurs to support and rank their findings (106 responses).

When using interviews for inductive research, as in paper ONE and TWO, the size of sample is determined by the "theoretical saturation" of categories rather than by the need for demographic "representativeness". The people who are interviewed in qualitative research are not meant to be representative of a population. Instead, the goal is to generalize to theory rather than to populations (Bryman and Bell, 2011). In other words, it is the quality of the theoretical conclusions that are made out of qualitative data that is crucial to the assessment of generalization.

In paper THREE various methods were utilised to ensure validity. The sample represents our best effort in achieving a complete picture of venture capital financed startups which made an IPO or were acquired during the selected time period. The original source for our sample is Dow Jones' database VentureSource. It is possible that VentureSource missed certain venture capital funded startups in Sweden. However, since we only included startups that exited through IPOs or acquisition, which are considered as the most successful exit routes and arguably of most interest to VentureSource and their customers, this part of VentureSource's database should be the most complete part. Furthermore, since Swedish annual reports are quite detailed even for smaller companies we managed to gather very detailed data for the studied companies. However, in terms of replicability this study might have practical limitations as access to annual reports is usually more restricted in other countries than Sweden.

Finally, when discussing methodology I believe that it is relevant to discuss my role as a researcher. Having worked in various finance roles for over a decade, as well as being part of a startup and searching for funding myself, has given me considerable experience from the finance industry and the research topic. I believe that this has been vital in establishing trust and obtaining authenticity in the interviews as well as being able to analyze the data in the studies. The practical experience has provided me with sound background knowledge that have been valuable in the preparation of my research, as well as in the execution of it.

However, being an insider is not solely positive but there are particular risks of biases and of being unable to see certain patterns which are more easily depicted from outside. Therefore, I frequently discuss with my supervisor and fellow PhD colleagues to help analyze the data. In this manner new patterns might be identified that will help in improving both the construct validity and the internal validity of the paper.

5. SUMMARY AND MAIN CONTRIBUTION OF THE PAPERS

In this chapter I make a summary and present the main contributions of the appended papers.

5.1 Paper ONE: Entrepreneurial experiences from venture capital funding: Exploring two-sided information asymmetry

Information between entrepreneurs and VCs is often shared unequally. VCs are experienced and professional dealmakers, while entrepreneurs have great knowledge about their venture but usually limited knowledge about the VC's financing process and requirements. For entrepreneurs, the VCs' asymmetric information advantage can lead to disadvantages in terms of difficulties in receiving funding, unfavorable terms, or negative startup experiences.

This paper studies how entrepreneurs mitigate problems from information asymmetry in a VC–entrepreneur relationship based on in-depth interviews with 20 Swedish entrepreneurs. The study answers calls for research on what entrepreneurs can do to create a good partnership with VCs and how information asymmetries could be used to study double-sided agency problems in a VC–entrepreneur relationship.

Four themes emerged from these interviews: (1) choosing the optimal time to raise the initial external capital, (2) ensuring that the VC fits the startup, (3) studying and understanding the VC process beforehand, and (4) building an open and honest relationship with the VC. Although entrepreneurs have not developed any formal tools similar to what VCs have done to mitigate information asymmetry risks, our study shows that entrepreneurs use informal tools based on experiences from themselves and others. This indicates that the entrepreneur might be considered as a more active part in the VC-entrepreneur relationship than most previous studies have assumed.

The paper underlines how a two-sided agency perspective on a VC–entrepreneur relationship helps identifying mechanisms that mitigate information asymmetry problems for the entrepreneurs. In addition, it extends the existing literature on two-sided information asymmetry in a VC–entrepreneur financing situation by discussing the mechanisms that entrepreneurs use to mitigate the VCs' asymmetric information advantage. The study also makes important practical contribution to entrepreneurs and practitioners aiming to support nascent entrepreneurs by gathering valuable advice on issues concerning venture capital funding.

This paper has been presented at the Research in Entrepreneurship and Small Business (RENT) conference in Berlin in 2019. It has been in the review process of *Entrepreneurship Theory and Practice*, but eventually got rejected. The paper is currently in the review process of *Venture Capital: An International Journal of Entrepreneurial Finance* since February 2020.

5.2 Paper TWO: Cross-border investments: Why Swedish entrepreneurs raise venture capital in the US

Venture capital has traditionally been portrayed as a local phenomenon, where investors and entrepreneurs keep a close proximity to each other in order to reduce transaction costs and information asymmetries. However, a new, growing body of literature suggests a shift toward a more globally distributed venture capital investment pattern.

This paper investigates the reasons to why Swedish entrepreneurs seek venture capital funding in the US. While prior entrepreneurial research on cross-border investments has focused on global venture capital investments from the investors' perspective, research has not explored distal venture capital funding from the entrepreneur's perspective. This is problematic as policy makers trying to stimulate regional venture capital markets need to be aware of the mechanisms that drive entrepreneurs from one market to another. To address this gap, we explore what motivates entrepreneurs to search for funding from geographically distant regions. Since the US is the most important foreign venture capital provider to Swedish entrepreneurs, the purpose of this study is to investigate the reasons why Swedish entrepreneurs choose venture capital funding from US investors.

Based on 18 interviews with Swedish entrepreneurs who have either received US venture capital or who were actively looking for US investors, four themes emerged: (1) the US venture capital market has access to more capital and has higher valuations; (2) US investors are considered to contribute with more non-financial help; (3) US venture capital is considered as a mean to position the company for market expansion and future financing rounds; (4) US venture capital gives validation to the companies and their founders. To gain additional perspective and to triangulate data, 15 additional interviews were carried out with Swedish entrepreneurs who had raised venture capital from Swedish investors. We then supplemented this data with a survey to support the findings from our qualitative data analysis.

The paper shows that the large supply of capital and investors on the US market seem to play an important role for Swedish entrepreneurs. This confirms earlier research on thin markets and extends this literature by using the perspective of the entrepreneur. The study also contributes to the literature on cross-border investments by showing how Swedish entrepreneurs use US venture capital as a mean to improve the company's market position and conditions for future development. Finally, although research has focused on reasons and processes that push the investors to seek investment opportunities abroad, the study suggests that the trend towards a more internationalized venture capital market can also be explained by the push from entrepreneurs who actively search for venture capital in distant regions.

This paper was accepted to be presented at the Babson College Entrepreneurship Research Conference (BCERC) conference in Knoxville, Tennessee in 2020. However, because of COVID-19, this conference was cancelled. The paper is currently in the review process of *Journal of Small Business Management* since the end of April 2020.

5.3 Paper THREE: Growth of Swedish venture capital financed startups after IPO or acquisition

Venture capitalists may accelerate startups during their involvement until the financial exit event when they sell their equity stake, but how startups perform long-term and post-exit is less known. To the extent post-exit growth of startups has been studied, indications are that different exit routes, such as going public or being acquired, lead to divergent post-exit growth trajectories for the startups. The long-term impact of startups is to a large extent dependent on the subsequent performance of the startups following their exit events. Hence, if startups remain in their regions of origin and grow post-exit constitute important policy concerns.

The paper investigates if and how exit routes of venture capital financed startups matter from a regional development perspective, i.e. to what extent venture capital backed firms stay and grow in the region. The study is mainly a descriptive study showing how venture capital funded startups perform pre- and post-exit related to exit route.

The sample consists of 273 venture capital funded startups founded in Sweden 1992-2010 and exited by Initial Public Offering (IPO) and Mergers and Acquisitions (M&As) in 2002-2017. By using annual reports and other available public data we tracked the venture capital funded startups from exit and for as long as the data allows.

The paper presents a previously unseen post-exit pattern specific for venture capital funded startups. 32 percent of the studied companies exited via IPO, of which 3 percent exited on regulated stock exchanges and 28 percent on Multilateral Trading Facilities (MTFs). 43 percent of the studied companies exited through foreign M&As, and 25 percent through domestic M&As. We find that the pre-exit performance of the startups relates to exit route, and that exit routes lead to divergent post-exit growth trajectories. Firms exiting through IPOs (regulated or MTF) have stronger post-exit growth than firms having either a foreign or domestic acquirer. Furthermore, approximately half of the acquired firms are closed down post-exit. The main theoretical contribution is that we need to revise our understanding of acquisition being the only viable exit route apart from a few exceptional IPOs and increase our understanding of when and how an IPO alternative should be preferred. The largest performance improvement post-exit is among the startups exited by IPO on MTF, making MTFs relevant to consider for future studies.

This paper has been presented at the Entrepreneurial Finance (ENTFIN) conference in Trier in 2019. It has been in a revise and resubmit process of *Entrepreneurship & Regional Development*, but eventually got rejected.

5.4 Positioning of the papers

In figure 5 I have plotted the papers in this thesis next to the venture capital cycle described in section 2.3 in order to illustrate which phase of the cycle they mainly relate to.

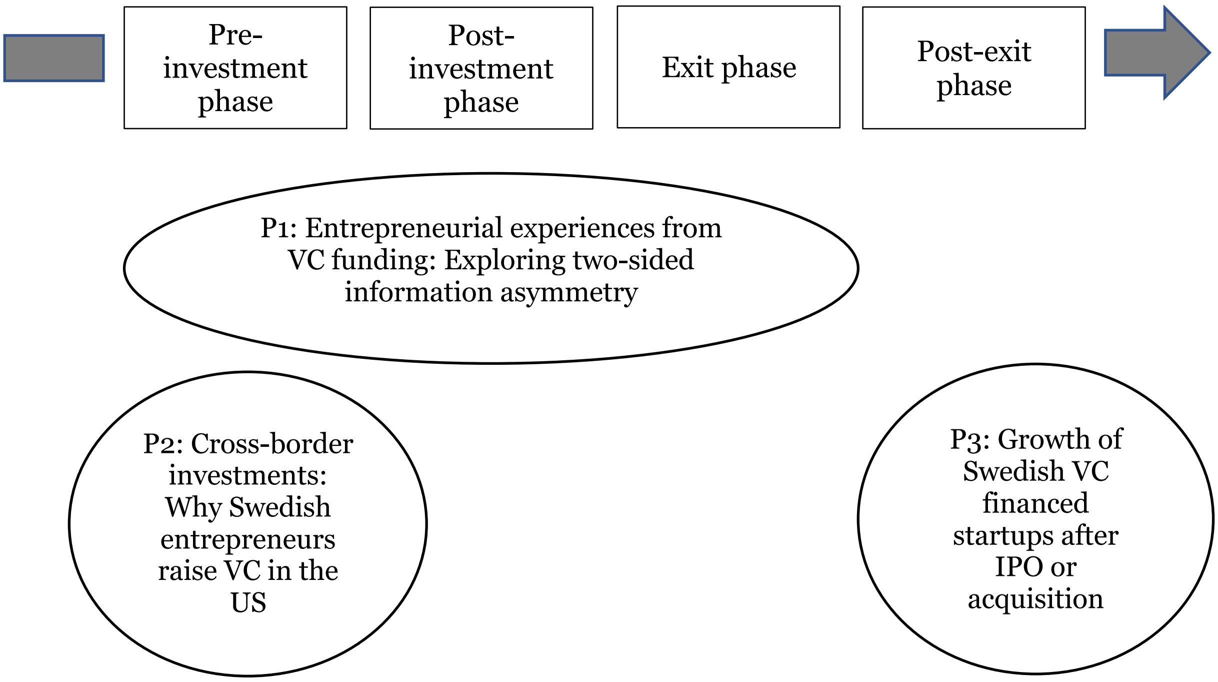

Figure 5. The thesis' papers plotted next to the venture capital cycle from the entrepreneurs' perspective (amended from Tyebjee & Bruno, 1984).

6. CONCLUDING DISCUSSION

Going back to the original aim of the thesis: *to provide insights on how venture capital can influence startup journeys for Swedish entrepreneurs and their companies*. Below I present the theoretical contributions and some future research suggestions. Finally, I conclude by discussing the practical implications of the thesis.

6.1 Theoretical contributions and suggestions for future research

Regarding the theoretical contribution of the thesis, key discoveries relate to the demand-side perspective of two-sided information asymmetry in the VC-entrepreneur relationship, cross-border investments and thin markets, and the long-term effects of venture capital. Below I will discuss these contributions and provide suggestions for further research.

One interesting aspect from a theoretical point of view on the entrepreneur-VC relationship is the two-sided information asymmetry between the parties. Numerous researchers have studied the mechanisms that VCs have developed to mitigate their information asymmetry problems. Several scholars have also acknowledged that problems arising from asymmetric information are two-sided. However, research has not managed to empirically identify how these problems are managed by the entrepreneurs. Although entrepreneurs have not developed any formal tools similar to what VCs have done to mitigate information asymmetry risks, paper ONE shows that entrepreneurs use informal tools based on experiences from themselves and others. This indicates that the entrepreneur might be considered as a more active part in the VC-entrepreneur relationship than most previous studies have assumed. Even though information asymmetry has been used before to explain the relationship between VC and entrepreneur (e.g., Amit el al. 1998; Carpentier and Suret, 2006; De Bettignies and Brander, 2007), this study shows how actions taken by entrepreneurs might be explained by the motive to mitigate *their* information asymmetry problems. By challenging the traditional agency theory approach in a VC–entrepreneur relationship, where it is generally assumed that VCs act as principals and entrepreneurs act as agents, this study shows how a two-sided agency perspective helps to discern entrepreneurs' information asymmetry problems and the tools used to handle these problems. In addition to our analysis there are a lot of interesting future research avenues. Key questions that could be studied are: What is considered to be a "good" or "bad" investor from the entrepreneur's perspective, how is the decisions process when entrepreneurs choose between various types of venture capital and how do positive or negative prior venture capital experience influence future funding? I have touched upon these aspects in paper ONE but rigorous empirical analysis is highly recommended, as is replication studies with entrepreneurs in other countries.

One interesting and potentially relevant theoretical contribution is the entrepreneurial perspective on the trend on cross-border investments. Although research has focused on reasons and processes that push the investors to seek investment opportunities abroad (e.g. Guler and Guillén 2010; Manigart et al. 2000; Moore et al., 2015), paper TWO suggests that the trend towards a more internationalized venture capital market can also be explained by the push from entrepreneurs who actively search for venture capital in distant regions. In a small and thin venture capital market as Sweden, it is not only the small amount of capital providers that may push the entrepreneurs to search for funding abroad, but also the fact that foreign VCs may provide opportunities and benefits that domestic VCs have difficulties in providing, such as more technical expertise or different attitude towards risk. Instead of stagnating in a thin market, new entrepreneurs might recognize the opportunities that a thick market can provide. In paper TWO we show that Swedish entrepreneurs consider US VC as a means to improve company market positioning and conditions for future development. The view that emerged was that VCs in thick markets can facilitate establishing a position in their home market as well as enhancing the company's position for future financing rounds. Positioning is rarely discussed in the VC literature when considering the entrepreneurial perspective on VC. We believe that our study thus alters positioning as an important dimension when discussing value-added contributions from investors. Regarding further research avenues, I believe that it would be interesting to investigate the background of US investors compared to European investors. Key questions might analyse: What kind of education do they have, what is their professional background, how much personal startup experience do they have? In addition, a more general analysis of differences among various thin and thick VC market investors might provide valuable insight for entrepreneurs when for example Asia is becoming a more important and apparent market for high growth ventures.

In paper THREE we have promoted the idea that growth accelerating effects of venture capital are short- to mid-term, and not necessarily long-term and post-exit. Our findings suggest that exit route is related to subsequent growth, both in terms of magnitude and whether the startup continues to operate in the region. The findings are in line with the view that venture capital steers startups towards acquisitions (Cumming, 2008). Considering that most of the best performing venture capital backed Swedish startups exit by foreign acquisitions and that approximately half of these startups are consolidated post-exit and that the remaining acquired firms show slower growth, our study suggests that the growth accelerating effects of venture capital are short- to mid-term. The high ratio of Swedish ventures exiting on MTFs has been previously overlooked in research and is by itself a novel finding. Our findings indicates that startups going public on MTFs has a strong post-exit performance, but that these startups require more time to mature into successful businesses. Seeing that several of the ventures exiting on MTFs eventually show growth, but that growth in acquired companies often manifests through the acquiring companies, our findings suggest that VCs' inclination toward acquisition exit might reduce the likelihood for a startup's independent and regional growth. Warnings to governments not to interfere with private investors or disturb private market behavior (Lerner, 2009) need to be seen in this new light. Judging from the current study, these warnings are not sensitive to regional development perspectives. Furthermore, this study suggests that entrepreneurs who are in the process of raising venture capital have reasons to negotiate around future exit choices with the VC. If the entrepreneurs' long term goal for themselves and their startup is not in line with the VC's inclination toward acquisition exit, there are reasons for the entrepreneur to ensure more influence over the exit strategy. Conclusions open several avenues for research. We present a previously unseen post-exit pattern specific for venture capital funded startups. However, we cannot as yet gauge the extent of generalizability nor adequately explain the causality driving exit choice and post-exit development. For generalizability, future studies should examine exit and post-exit patterns of startups in additional regions and countries to provide a deeper understanding of the regional dynamics and long-term consequences of venture capital and exits.

6.2 Practical implications

In this section I discuss the practical implications of my research for various key stakeholders.

6.2.1 Implications for entrepreneurs

The main advice to entrepreneurs from this thesis is to analyze the consequences of working with VCs beforehand. For certain companies, venture capital might be the only possible source of financing. However, sometimes bootstrapping, family/friends or public grants/funding might be sufficient in the early stages and a better alternative than venture capital funding. One implication of this thesis is therefor to promote the idea that entrepreneurs (1) should consider whether venture capital is the right type of financing for them and (2) if they chose venture capital funding, to ensure that both company and founders are prepared for this special type of financing.

Second, although few Swedish entrepreneurs are in the position that they can choose between several investors, this thesis suggests that they should try to ensure that there is a good match between investor and founders. Entrepreneurs should do a due diligence to understand how they match with the potential VC and if the VC is going to add value in addition to capital or if there might be possible areas of conflict. The founders will be closely connected to the people investing in the company for a long time and if the wrong partner and team are chosen, these years can become difficult. This issue is extensively covered in paper ONE.

Third (based on paper THREE), entrepreneurs should consider the long-term effects of raising venture capital. The ultimate goal for a VC is the exit from the company they have invested in. Exits can occur in a number of ways, but the most preferred exit options for both investors and entrepreneurs are IPOs and acquisitions. Since acquisitions are by far the most common exit vehicle of these two, the entrepreneur should consider what the long-term consequences of acquisitions might be for themselves and their company. Acquisition often leads to a consolidation of some sort and a loss of main ownership and control for the entrepreneur, which might not be in line with the vision of the founder. Consequently, the long-term goal of the entrepreneur should be compared to the exit goal of the VC. A practical advice is to investigate various types of venture capital (e.g. business angels, governmental VCs, corporate VCs) to compare attitudes on exits and investment horizons.

Fourth, paper TWO gives a background on how experienced entrepreneurs who have raised venture capital from US investors reason about the US venture capital market. The implications for nascent Swedish entrepreneurs is in recognizing the opportunities a large venture capital market can provide.

6.2.2 Implications for venture capitalists

This thesis concentrates primarily on the entrepreneur's point of view and implications for policy makers but also provides certain implications for venture capitalists.

As discussed in paper ONE, entrepreneurs with prior venture capital experience emphasize the importance of a personal and strategic fit with the investors. Consequently, for investors who are competing for investment opportunities, focusing more on a good relationship with the founders as well as ensuring similar views on risk/return mindset, expansion plans and how to build a company, may help the investors to close the investment deals.

In paper TWO, Swedish VCs receive knowledge on entrepreneurs' motives to be financed by US investors. Several reasons are specific to the US market and are difficult for Swedish investors to contribute with, such as positioning for market expansion and providing niched technical expertise. Therefore, one practical implication of this study is that local VCs who focus on ventures with international growth ambitions should be open for syndication with larger cross-border VC actors who are able to complement the value creation contributions that entrepreneurs need.

6.2.3 Implications for policy makers

Although venture capitalists may accelerate startups' growth during their involvement until the financial exit, less is known about how these venture capital backed startups perform long-term and post-exit. Paper THREE presents a previously unseen post-exit pattern specific for venture capital funded startups. Growth accelerating effects of venture capital seem to be short- to mid-term, and not necessarily long-term and post-exit. If a startup's potential growth manifests primarily through the acquiring corporations (e.g. closing of local business, move of IP or employees), it will of course matter if the acquiring firm is local or foreign. Venture capital may thereby be most beneficial for regions hosting a large local community of potential acquirers (e.g. Silicon Valley). Policy makers in regions without these conditions may thereby need to look into exit-centric policies.

In paper TWO, we discuss implications of thin venture capital markets on entrepreneurs' decision to search for investors in the US. For policy makers in thin markets trying to stimulate regional venture capital markets it is important to recognize that venture capital is becoming more global and that thin venture capital markets are to a higher degree than previous pushing entrepreneurs to distal venture capital funding. Policy makers need to be aware of the motives that drive entrepreneurs from one market to another and analyze how different policy instruments might be affected by these motives.

Finally, several of the interviewed entrepreneurs in paper ONE and TWO had been in incubator or accelerator programs which were partly or fully governmental funded. Almost all of these founders mentioned how venture capital was discussed as "the only option" for funding while there was little or no focus on alternative financing sources in these programs. Most coaching regarding financing concentrated around pitch training to VCs and rarely discussed potential problems that may arise in this relationship with a VC or what founders should consider before raising venture capital. Therefore, one implication of this thesis is to promote the idea that incubators and accelerators should provide a more nuanced picture of the full venture capital cycle as well as more knowledge about different financing options.

7. REFERENCES

Amit, R., Brander, J., and Zott, C. (1998). Why do venture capital firms exist? Theory and Canadian evidence. *Journal of Business Venturing*, *13*(6), 441–466.

Arcot, S. (2014). Participating convertible preferred stock in venture capital exits. *Journal of Business Venturing*, *29*(1), 72–87.

Atomico, State of European tech report 2019 https://2019.stateofeuropeantech.com/chapter/key-findings/. Accessed 2020-04-16

Bertoni, F., D'Adda, D., and Grilli, L. (2016). Cherry-picking or frog-kissing? A theoretical analysis of how investors select entrepreneurial ventures in thin venture capital markets. *Small Business Economics*, 46 (3), 391-405.

Bhidé, A. (2003). *The origin and evolution of new businesses*. Oxford University Press.

Bollazzi, F., Risalvato, G., and Venezia, C. (2019). Asymmetric information and deal selection: Evidence from the Italian venture capital market. *International Entrepreneurship and Management Journal*, *15*(3), 721–732.

Bryman, A., and Bell, E. (2011). *Business research methods:* Oxford University Press

Burchardt, J., Hommel, U., Kamuriwo, D. S., and Billitteri C. (2016). Venture capital contracting in theory and practice: Implications for entrepreneurship research. *Entrepreneurship Theory and Practice 40*(1), 25–48.

Carpentier, C., and Suret, J. M. (2006). Some evidence of the external financing costs of new technology-based firms in Canada. *Venture Capital: An International Journal of Entrepreneurial Finance, 8*(3), 227–252.

Christensen, E., Wuebker, R. J., and Wüstenhagen, R. (2009). Of acting principals and principal agents: Goal incongruence in the venture capitalist-entrepreneur relationship. *International Journal Entrepreneurship and Small Business*, *7*(3), 367–388.

Connelly, B. L., Certo, S. T., Ireland, R. D., and Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, *37*(1), 39–67.

Cumming, D. (2006). Adverse selection and capital structure: Evidence from venture capital. *Entrepreneurship Theory and Practice*, *30*(2), 155–183.

Cumming D. (2008). Contracts and exits in venture capital finance. *The Review of Financial Studies* 21(5): 1947-1982.

Cumming, D., & Dai, N. (2010). Local bias in venture capital investments. *Journal of Empirical Finance*, 17(3), 362-380.

Cumming, D., & Johan, S. (2017). The problems with and promise of entrepreneurial finance. *Strategic Entrepreneurship Journal*, *11*(3), 357-370.

Cumming, D. J., & MacIntosh, J. G. (2003). A cross-country comparison of full and partial venture capital exits. *Journal of banking & finance*, *27*(3), 511-548.

Dagens Industri, (2019). https://digital.di.se/artikel/miljarderna-valler-in-svenska-startups-krossar-rekorden?loggedin=true. Accessed 2020-05-07.

Davila, A., Foster, G. & Gupta, M. 2003. Venture capital financing and the growth of startup firms. Journal of Business Venturing, vol.18 p.689-708.

De Bettignies, J. E., and Brander, J. A. (2007). Financing entrepreneurship: Bank finance versus venture capital. *Journal of Business Venturing*, *22*(6), 808–832.

De Clercq, D., Fried, V. H., Lehtonen, O., and Sapienza, H. J. (2006). An entrepreneur's guide to the venture capital galaxy. *Academy of Management Perspectives*, *20*(3), 90–112.

De Clercq, D., & Manigart, S. (2007). *The venture capital post-investment phase: Opening the black box of involvement,* u Landström, H.(ur.), Handbook of Research on Venture Capital.
Drover, W., Busenitz, L., Matusik, S., Townsend, D., Anglin, A., and Dushnitsky, G. (2017). A review and road map of entrepreneurial equity financing research: Venture capital, corporate venture capital, angel investment, crowdfunding, and accelerators. *Journal of Management*, *43*(6), 1820–1853.
Drover, W., Wood, M. S., and Fassin, Y. (2014). Take the money or run? Investors' ethical reputation and entrepreneurs' willingness to partner. *Journal of Business Venturing*, *29*(6), 723–740.
EU-startups, (2019) https://www.eu-startups.com/2019/01/10-swedish-startups-to-watch-in-2019/. Accessed 2020-04-08.
Fairchild, R. (2011). An entrepreneur's choice of venture capitalist or angel-financing: A behavioral game-theoretic approach. *Journal of Business Venturing*, *26*(3), 359–374.
Fried, V. H., & Hisrich, R. D. (1994). Toward a model of venture capital investment decision making. *Financial management*, 28-37.
GEM, (2020). Global Entrepreneurship Monitor 2019/2020 Global Report
Gioia, D. A., Corley, K. G., and Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, *16*(1), 15–31.
Gompers, P., & Lerner, J. (2001). The venture capital revolution. *Journal of economic perspectives*, *15*(2), 145-168.
Gompers, P. A., and Lerner, J. (2004). *The venture capital cycle*. MIT press.
Gorman, M., and Sahlman, W. A. (1989). What do venture capitalists do?. *Journal of Business Venturing*, *4*(4), 231–248.
Guler, I., & Guillén, M. F. (2010). Institutions and the internationalization of US venture capital firms. *Journal of International Business Studies*, 41(2), 185-205.
Hallen, B. L., and Eisenhardt, K. M. (2012). Catalyzing strategies and efficient tie formation: How entrepreneurial firms obtain investment ties. *Academy of Management Journal*, *55*(1), 35–70.
Harrison, R. T., & Mason, C. M. (2019). Venture Capital 20 years on: reflections on the evolution of a field.
Hsu, D. H. (2004). What do entrepreneurs pay for venture capital affiliation?. *The Journal of Finance*, *59*(4), 1805–1844.
Hsu, D. K., Haynie, J. M., Simmons, S. A., and McKelvie, A. (2014). What matters, matters differently: a conjoint analysis of the decision policies of angel and venture capital investors. *Venture Capital*, *16*(1), 1-25.
Inc., (2018) https://www.inc.com/zoe-henry/stockholm-sweden-hub-fast-growing-private-companies-2017-inc5000-europe.html. Accessed 2020-04-08.
Invest Europe (2018). European Private Equity Activity Report 2018. Accessed September 15, 2019 from: https://www.investeurope.eu/research/activity-data/annual-activity-statistics/
Isaksson, Anders (2010). Staten som venture-capitalist: En sammanställning av internationell empirisk forskning. In: *Tillväxtanalys, State och riskkapitalet – Delrapport 1: Metodbeskrivning och kunskapsöversikt*, Rapport 2010:01 (pp. 33-84). Östersund: Tillväxtanalys
Jensen, M. C., and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360.

Landström, H. (2017) *Advanced Introduction to Entrepreneurial Finance*. Cheltenham: Edward Elgar Publishing.

Lerner J. (2009). *Boulevard of broken dreams: why public efforts to boost entrepreneurship and venture capital have failed--and what to do about it*. Princeton University Press: Princeton, NJ.

Lerner, J., & Tåg, J. (2013). Institutions and venture capital. *Industrial and Corporate Change*, *22*(1), 153-182.

MacIntosh, J. G. (1994). *Legal and institutional barriers to financing innovative enterprise in Canada*. Government and Competitiveness, School of Policy Studies, Queen's University.

Manigart, S., Baeyens, K., Van Hyfte, W., 2002. The survival of venture capital backed companies. Venture Capital, vol.4, p.103–124.

Manigart, S., De Waele*, K., Wright, M., Robbie, K., Desbrières, P., Sapienza, H., & Beekman, A. (2000). Venture capitalists, investment appraisal and accounting information: a comparative study of the USA, UK, France, Belgium and Holland. *European Financial Management*, 6(3), 389-403.

Mason, C.M. and Harrison, R.T. 2004. Improving access to early stage venture capital in regional economies: A new approach to investment readiness. *Local Economy*, 19(2): 159–173.

Mason, C., & Kwok, J. (2010). Investment readiness programmes and access to finance: a critical review of design issues. *Local Economy*, *25*(4), 269-292.

Moore, C. B., Payne, G. T., Bell, R. G., & Davis, J. L. (2015). Institutional Distance and Cross-Border Venture Capital Investment Flows. *Journal of Small Business Management,* 53(2), 482-500.

Mäkelä, M.M. and Maula, M.V.J. (2006) Interorganizational commitment in syndicated cross-border venture capital investments. *Entrepreneurship Theory and Practice* 30(2): 273–298.

Nightingale, P., Murray, G., Cowling, M., Baden-Fuller, C., Mason, C., Siepel, J., and Dannreuther, C. (2009). *From funding gaps to thin markets: UK government support for early-stage venture capital*. National Endowment for Science, Technology and the Arts.

Nordic9, (2020) https://nordic9.com/nordic-lists/the-top-venture-capital-companies-in-sweden-in-2019-art9902540526/ Accessed 2020-05-07.

OECD (2018) *Entrepreneurship at a Glance Highlights 2018*. See Figure 15. 'Venture capital investments as a percentage of GDP'.

Pruthi, S., Wright, M., and Lockett, A. (2003). Do foreign and domestic venture capital firms differ in their monitoring of investees?. *Asia Pacific Journal of Management*, *20*(2), 175–204.

Rasmussen, E., & Sørheim, R. (2012). Obtaining early-stage financing for technology entrepreneurship: reassessing the demand-side perspective. *Venture Capital*, *14*(2-3), 77-89.

Sahlman, W.A., (1990). The Structure and Governance of Venture-Capital Organizations. *Journal of Financial Economics, 27*(2), 473–521.

Sapienza, H. J., & Gupta, A. K. (1994). Impact of agency risks and task uncertainty on venture capitalist–CEO interaction. *Academy of Management journal*, *37*(6), 1618-1632.

Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small business economics*, *33*(2), 141-149.

Shepherd, D. A. (1999). Venture capitalists' assessment of new venture survival. *Management science*, *45*(5), 621-632.

Shepherd, D. A., and Zacharakis, A. (2001). The venture capitalist- entrepreneur relationship: Control, trust and confidence in co-operative behaviour. *Venture Capital: An International Journal of Entrepreneurial Finance, 3*(2), 129–149.

Sorenson, O., & Stuart, T. E. (2001). Syndication networks and the spatial distribution of venture capital investments. *American journal of sociology*, 106(6), 1546-1588.

Tillväxtanalys (2020). *Riskkapitalstatistik 2018 – venture capital*. Tillväxtanalys rapport 2020:01. Available: https://www.tillvaxtanalys.se/publikationer/statistik/statistikserien/2020-01-27-riskkapitalstatistik-2018---venture-capital.html

Tillväxtanalys (2019). Nystartade företag i Sverige 2018. Tillväxtanalys rapport 2019:04.

Tillväxtverket (2020) https://tillvaxtverket.se/statistik/foretagande/basfakta-om-foretag.html. Accessed 2020-03-31

Tyebjee, T. T., & Bruno, A. V. (1984). A model of venture capitalist investment activity. *Management science*, *30*(9), 1051-1066.

Valliere, D., and Peterson, R. (2007). When entrepreneurs choose VCs: Experience, choice criteria and introspection accuracy. *Venture Capital: An International Journal of Entrepreneurial Finance, 9*(4), 285–309.

Wharton, (2015) https://knowledge.wharton.upenn.edu/article/how-stockholm-became-a-unicorn-factory/. Accessed 2020-04-08.

Wright, M., Pruthi, S., & Lockett, A. (2005). International venture capital research: From cross-country comparisons to crossing borders. *International Journal of Management Reviews*, 7(3), 135-165.

Wright, M. and Robbie, K. (1998) Venture capital and private equity: a Review and synthesis. *Journal of Business Finance & Accounting* **25**(5-6): 521–570.

Zacharakis, A., Erikson, T., and George, B. (2010). Conflict between the VC and entrepreneur: The entrepreneur's perspective. *Venture Capital: An International Journal of Entrepreneurial Finance, 12*(2), 109–126.