



BI Norwegian Business School - campus Oslo

GRA 19703

Master Thesis

Thesis Master of Science

VC Value-Adding Activities and Cross-Border Funding: A study of priorities, performance, and attitudes

Navn: Alexander Iversen, Tord Fanøy Bårdsen

Start: 15.01.2021 09.00

Finish: 01.07.2021 12.00

VC Value-Adding Activities and Cross-Border Funding: A study of priorities, performance, and attitudes

Authors:

Tord F. Bårdsen and Alexander Iversen

Supervisor:

Dr. Sheryl Winston Smith

Hand-in date:

30.06.2021

Programme:

Master of Science in Entrepreneurship and Innovation

Table of Contents

<i>Abbreviations</i>	<i>V</i>
<i>Acknowledgements</i>	<i>V</i>
<i>Abstract</i>	<i>VI</i>
1.0 Introduction	1
2.0 Literature Review	3
2.1 Cross Border Venture Capital	3
2.2 Value-Adding Activities	5
2.3 Governmental and Traditional Venture Capital	7
2.4 Information Asymmetries	9
2.5 Summary Literature and Research Questions	10
Cross-Border Venture Capital	10
Value-adding Support Activities	11
Information Asymmetries.....	12
3.0 Research Methodology	13
3.1 Research Design	13
3.2 Survey Design	13
3.2.1 PFC Survey Design	14
3.2.2 VC Survey Design.....	15
3.3 Sample and Data	17
3.4 Data Cleaning	19
3.5 Privacy and Ethical Considerations	20
4.0 Summary Statistics	21
4.1 Portfolio Company Survey	21
4.1.1 General.....	21
4.1.2 Types of funding	22
4.1.3 Value-adding activities satisfaction.....	24
4.1.4 Investor portals.....	24
4.2 VC Survey	25

4.2.1 General.....	25
4.2.2 Foreign venture capital.....	27
4.2.3 Value-adding activities prioritization.....	28
4.2.4 Investor portals.....	29
5.0 Hypothesis Testing.....	29
5.1 Results.....	32
RQ1: What factors matter most in navigating the conceptions of portfolio companies and domestic VCs with foreign venture capital?	32
H1: Portfolio companies that have received foreign venture capital are more positive towards foreign venture capital participation in their next round.	32
Results Mann-Whitney and correlation matrix inspection	33
Results standalone regression	33
Results regression with standard control variables.....	33
Results regression with standard and selected control variables.....	34
H2: Portfolio companies with foreign venture capital as lead investor are more positive towards foreign venture capital participation in their next round.	35
Results Mann-Whitney and correlation matrix inspection	35
Results standalone regression	35
Results regression with standard control variables.....	36
Results regression with standard and selected control variables.....	36
RQ2: How do different investor types and syndicates differ in their prioritization and performance in value-adding activities when supporting their portfolio companies?.....	37
H3: TVC performs better with PFCs in terms of value-adding activities than other types of VCs.....	37
Results correlation matrix inspection	38
Regression Results - TVC vs other VCs and Commercialization.....	38
Regression Results - TVC vs other investors and Commercialization	38
Regression Results - TVC vs other investors and investor introductions.....	39
H4: Between domestic and foreign VCs, foreign VCs perform best with PFCs in terms of value-adding activity satisfaction.....	39
Results correlation matrix inspection	41
Results regression	41
6.0 Discussion.....	42
6.1 Foreign Venture Capital.....	42

6.2 Value-adding Support Activities	45
6.3 Information Asymmetries and Investor Portals.....	48
6.4 Limitations	49
6.5 Theoretical implications and Further Research.....	51
6.6 Practical Implications.....	52
<i>7.0 Conclusion.....</i>	<i>53</i>
<i>8.0 References.....</i>	<i>54</i>

Abbreviations

TVC (Traditional Venture Capital)

GVC (Government Venture Capital)

CVC (Corporate Venture Capital)

FVC (Foreign Venture Capital)

DVC (Domestic Venture Capital)

PFC (Portfolio Company)

Acknowledgements

We are fortunate to have received phenomenal support and motivation from a number of people and organizations in the entrepreneurial ecosystem.

Our gratitude goes out first and foremost to our supervisor and Associate Dean Dr. Sheryl Winston Smith, whose dedication to our thesis and her field of research is remarkable. We are by no means professional researchers, so we are thankful for the patience exhibited by Dr. Winston Smith when guiding us through uphill and downhill in this project. We would also like to thank all the founders, VCs, advisors, co-workers, co-students, and friends who took the time to discuss and spar on ideas, concepts, theory, and practice with us during the project. Lastly, we offer a special gratitude to all the respondent venture capital firms and portfolio companies who not only completed the surveys, but also responded with supporting messages, points for discussion, and important limitations to the surveys.

All of you took the time, in the midst of a global pandemic that impacted your lives and businesses in so many ways, to support us in carrying out our research project. This is a testament to your dedication to students and the field of entrepreneurship, and we thank you for it.

Abstract

The aim of this study was to map the venture capital landscape in terms of portfolio companies' and different types of VC firm's attitude to foreign VC funding, and to extend the literature on value-adding activities by introducing a new category of support activities specifically aimed at attracting foreign VC. Additionally we intended to shed light on investor portals, a recent technological trend in information asymmetry mitigation between VC, foreign and local, and their current and prospective portfolio companies. The study built on two questionnaires to collect a fresh and unique set of data from 155 portfolio companies and 32 venture capital firms from 13 European countries. We find a distinctly positive attitude to foreign VC investors both in portfolio companies and all types of venture capital firms. Our results also indicate that portfolio companies have positive experiences with foreign VC investors in that they are more welcoming of it after having received it. Furthermore, we find indicative evidence that venture capital firms have improved in regard to value adding support performance in the last decade or so. We also find a strong indication that foreign lead VCs outperform lead domestic VCs on some, but not most, support activities. Lastly, we provide fresh statistics on the application and perceptions of investor portals as a mitigating mechanism for information asymmetries. All findings are reviewed in terms of their limitations and implications for further research.

1.0 Introduction

Venture capital has for long been regarded as a positive contributor to economic growth, employment, innovation, and capital accessibility in economic downturns (Strömberg, 2009; Copenhagen Economics, 2019). At the same time, it has also performed remarkably well as a business model in a financial sense, resulting in significant growth in the sector over the past decades as more professionals and investors (limited partners) seek to reap the benefits (Copenhagen Economics, 2019). Recognizing stronger competition in their home countries, venture capitalists are increasingly drawn towards crossing borders to expand their pipeline of deal opportunities (Moore et al., 2015), and some are communicating their focus on value-adding support activities as a way to stand out from the crowd (Tollerud, 2021). In the Nordics, venture capital associations are reporting that VC portfolio companies are not reaching their potential in terms of internationalization and scale due to a lack of larger, more internationally experienced VC funds, and domestically focused policy (Copenhagen Economics, 2019). So where should these larger VC funds come from? One alternative is from the local sector, given that potential limited partners such as institutional funds see an opportunity for higher returns in larger scale funds. Another is that the funds come from abroad through cross-border direct investments or newly established offices from larger international VCs. Given the benefits of foreign/local VC syndicates highlighted by a number of studies (Cumming and Dai, 2010; Dai et al., 2012; Wang and Wang, 2011; Nahata et al., 2014; Chemmanur et al., 2016), a more favorable scenario is likely a mix, where the need for larger funds is covered through foreign and domestic syndicated investments or syndicated funds. In any case, foreign VCs would not enter a new market unless there is opportunity for returns, and it is therefore obvious that local startups/scaleups want to present themselves as such. As for their local VC investors, this is also an area where they, given the aforementioned benefits, could and should offer support,

In this thesis, we explore two fresh sets of data collected from 32 European venture capital firms and 155 portfolio companies. First, we explore the attitudes and experiences of VCs and their portfolio companies (PFCs) to follow-on funding from foreign VC investors. This is interesting because cross-border venture capital, or

foreign venture capital (FVC) as it is mostly referred to in this paper, matters a great deal in increasing the pool of available funding and complementary resources for a country's entrepreneurs (Devigne, 2013). Although this may seem as an obvious case, there are large differences between total and foreign funding between countries. Therefore, mapping the attitudes and experiences of local entrepreneurs and investors to foreign funding can provide meaningful information for policy-makers when designing policy aimed at sustaining and growing their local venture capital market.

Then we extend on prior research on value-adding support activity such as Berg-Utby et al. (2006), Luukonen et al. (2013), and Gompers et al. (2020) by analyzing both the support activity performance of VCs as rated by their portfolio companies, as well as the reported priority given to different activities as reported by the VCs. Most importantly, we introduce a new category of value-adding support specifically concerned with attracting foreign venture capital funding. So far there has been research on this topic scoped on the VC or the PFC side, but there has been little prior research mapping the reported prioritization of support activities side by side with their performance in the same activities as rated by the PFCs of the same set of VCs. Also, to our knowledge, recognizing and studying attracting FVC as a support category of its own has not been previously done. Given the value-adding benefits of syndication between local and foreign VCs (e.g. Mäkelä & Maula, 2006; Cumming et al., 2009; Schertler & Tykvová, 2012; Devigne et al., 2013; Chahine et al., 2018), this should be of value to VCs, PFCs, and other stakeholders interested in growing their local entrepreneurial ecosystems. Another novelty of this paper is that although there is some literature on the differences between foreign and domestic VCs in value-adding support, it has a more broad focus. To our knowledge no study in the likes of Berg-Utby et al. (2006) and Luukonen et al. (2013) have compared performance between FVC and DVC.

We also include descriptive statistics and figures from our datasets both as standalone findings of interest and as supporting material to the discussion of the two aforementioned topics. The descriptives also include some introductory statistics on dedicated investor portals, a technological tool designed to mitigate information asymmetries mitigation mechanisms.

The organization of the remainder of this report is as follows. Section 2 provides an overview over relevant literature on all the aforementioned topics, section 3 includes our research methodology, survey design, as well as data collection and cleaning procedures. Section 4 is concerned with presenting descriptive summary statistics, whilst our testing of hypotheses is documented in section 5. In the following section 6, we discuss our findings from the summary statistics and regression models as well as implications for further research, and limitations. We then offer some concluding remarks followed by our references and appendix sections.

2.0 Literature Review

2.1 Cross Border Venture Capital

One of the benefits of attracting foreign venture capital into a country's entrepreneurial scene is, amongst other factors, an increase in the total pool of available capital and introduction of complementary resources to those of domestic VCs (Devigne et al., 2013). From the perspective of the VC, they are showing an increased interest in crossing borders in order to gain access to investment opportunities (Moore et al., 2015), and about half of new VC funds in Europe originated from foreign sources already in 2005 (Gompers et al., 2005). Furthermore, from 1988 to 2003 the share of VC inflows in Europe more than doubled, and the outflow from the US quadrupled (Pruthi et al., 2003). Seventeen years ago close to 70 percent of European VCs stated they would expand their cross-border investment focus over the next five years (Deloitte, 2006). A study of 6259 VC deals made worldwide from 1971 to 2009 revealed that cross-border deals are made by older VCs, and the deals are larger and more likely to be syndicated at later financing stages (Buchner et al., 2018). This is supported by findings from Dai et al. (2012), who found that VCs mitigate the higher costs of cross-border investments by investing in later stages and in larger, more mature, and transparent companies that are less costly to screen.

So, what are these higher costs? Even though major benefits are experienced when VCs cross borders, Lu and Hwang (2010) indicated that FVCs hold a disadvantage over domestic ones, struggling to maintain a sufficient deal flow as they source fewer

unsolicited deals from their networks compared to domestic VCs. FVCs are also less likely to obtain successful exits than domestic ones (Humphery-Jenner & Suchard, 2013; Li et al., 2014), mainly due to liabilities of foreignness such as institutional and cultural distance, limited resource transformation and information asymmetries (Devigne et al., 2016; Li et al., 2014). Cross-border deals also underperformed domestic ones in terms of internal rate of return (IRR) by 12-28 percent (Buchner et al., 2018). On the other hand, FVCs can bring additional exit opportunities (Bertoni & Groh, 2014). With FVCs there is also a higher probability and faster processes of M&A and IPO exits, in addition to higher IPO valuations (Espenlaub et al., 2015; Cumming et al., 2016; Chahine et al., 2018). Again, a general understanding is that there are major benefits of local and cross border VC syndication, in terms of portfolio company exit (Cumming & Dai, 2010; Dai et al., 2012; Wang & Wang, 2011; Nahata et al., 2014; Chemmanur et al., 2016), and Dai et al. (2012) reveals a 5 percent higher probability of successful exit with such syndication.

There are also benefits and drawbacks for portfolio companies of FVC investors. Through a study of 761 technology-based companies from seven different European countries that received initial VC investment between 1994 and 2004, Devigne et al. (2013) found that FVC investors provide more specific resources for portfolio companies to grow internationally. On the other hand, they were also found to devote less time to the companies due to transaction costs, and more likely to pull out more promptly if PFCs fail to meet expectations (Devigne et al., 2013; Fritsch & Schilder, 2008). Devigne et al. (2013) also found that while domestic VCs do well in contributing resources in early stages and are better equipped to overcome information asymmetries, FVCs have a better knowledge of external markets and provide legitimacy for PFCs. Value-adding activities towards early-stage companies are halted when investing across borders due to the fact that they often require geographical proximity and a deep understanding of the local environment (Devigne et al., 2013). As a result, this demands a significant amount of adaptation from cross-border investors in their investment processes and post-investment activities. Wright et al. (2002) bring forward an example of foreign investors in India who put greater emphasis on product-market factors than domestic ones and prefer strategic monitoring and advice instead of operational monitoring merely because it is an easier process (Pruthi et al., 2003).

Following this, Devigne et al. found that an initial investment including at least one FVC significantly affects growth in a company, while initial investment solely from FVC significantly lowered initial growth rate in sales, as compared to solely domestically backed ones. However, sales and total asset growth level off more quickly over time compared to companies backed by FVCs, implying their growth rate will exceed those of domestically backed ones. The significantly better option is therefore a syndicate of FVC and domestic VC investments, in terms of growth in sales, total assets, and employment (Devigne et al., 2013). Such syndication provides more experience, a broader set of skills and networks that increase the value-added for PFCs (Schertler & Tykvová, 2012; Devigne et al., 2013). Moreover, the FVCs may aid PFCs with international expansion through legitimization, knowledge, and networks in an unknown market (Mäkelä & Maula, 2006; Cumming et al., 2009; Devigne et al., 2013; Chahine et al., 2018). Mäkelä and Maula (2008) found that high-quality local VCs improve the likelihood of cross-border investment to portfolio companies and that the value-added by high-quality domestic VCs or even just the existence seemed to be critical to many companies seeking foreign investments.

2.2 Value-Adding Activities

According to Reid (1999), venture capitalists offer a comparative advantage in attracting additional capital. However, a lot of prior research on the strategic support from VCs to portfolio companies on further financing is focused mostly on their certification role in IPOs allowing for higher exit valuations, and not on the early-stage investments (Megginsson & Weiss, 1991; Jain & Kini, 1995; Dolvin, 2005). Common knowledge in the entrepreneurial finance literature is that VCs provide their portfolio companies with much more than capital. Much of the VC's work remains post-investment in terms of non-financial resources and value-adding services to maximize growth (Sapienza et al., 1996; Hsu, 2004).

Sourcing/selecting investments, structuring investments and post-investment monitoring are seen as the most critical success factors for VCs, and the success of VC-backed companies is consistent with VCs taking actions that are effective at generating

value (Kaplan & Strömberg, 2001, Gompers et al., 2020). Several researches find various aspects where the VC adds value to their PFCs; improving governance and active monitoring, aid in hiring outside managers and directors, involvement in professionalization of PFCs and in the structuring of the board of directors (Amornsiripanitch et al., 2016, Hellmann & Puri, 2002, Lerner, 1995).

Gompers et al. (2020) surveyed 885 VCs who responded they provide a large number of services post investment, such as; strategic guidance (87 percent), connecting PFCs to new investors (72 percent) connecting to customers (69 percent), operational guidance (65 percent), and finally hiring employees (46 percent). 85 percent of these VCs find value-adding activities post-investment important, and 27 percent found it to be the most important factor. Sørensen (2007) compared how returns are affected by value-adding activities from VCs versus deal sourcing and selection and found it to be a 40/60 split.

Berg-Utby et al. (2006) studied the extent to which VCs meet the expectations of their portfolio companies in terms of value-adding activities outside of capital. As previously mentioned, one of these activities is the certification role and support in securing further financing, and they therefore anticipated companies to have rather high expectations on their investor's contributions in this field. From surveying the CEOs of seventy Norwegian startups with VC investment, they found that the expectations in the area of finance, strategy, and marketing were as assumed high relative to other areas. Regarding the VCs ability to meet expectations, Berg-Utby et al. (2006) found significant gaps between expectations and perceived actual contributions in all areas, including finance.

Knockaert et al. (2005) examined the relationship between human capital and fund characteristics of technology focused VCs and their portfolio company follow-up behavior. By interviewing investment managers of 68 VC firms, they found that the level of involvement in value-adding activities were dependent on human capital variables such as previous consulting and entrepreneurial experience of the investment manager. They also found that the more diverse the portfolio of an investment manager is, the less involved the manager would be in value-adding activities. As for fund

characteristics, they found a difference between captive and non-captive funds in that managers at captive funds were less inclined to participate in these activities than the managers at non-captive funds.

Regarding the value-adding activities of FVCs and FVC/DVC syndicates, syndication as mentioned provides more experience, a broader set of skills and networks that increase the value-added for PFCs (Schertler & Tykvová, 2012; Devigne et al., 2013).

2.3 Governmental and Traditional Venture Capital

Researching the relationship between government and traditional venture capital sources in 15 European countries from 1990 to 1996, Leleux and Surlemont (2003) found a correlation between smaller VC industries and government involvement. However, they found no support for the view that public funding was crowding-out private funds. Instead, government participation appeared to attract more capital to the venture capital market, arguing that the contributing factor was the government demonstrating the social value of and its commitment to the industry.

Through a study of 183 European high-tech companies that received their initial fundings from 81 different GVCs, Guerini and Quas (2014) reveal that GVC-funded companies are at least as likely as other VC-backed companies to receive FVC funding in later rounds or an exit. On the other hand, additional recent studies have found that the effect of GVC on the performance of portfolio companies is limited (Grilli & Murtinu, 2014; Bertoni & Tykvová, 2015). Furthermore, solely governmentally owned VCs are proven to have a negligible effect on the performance of portfolio companies in terms of exit (Cumming et al., 2014), sales, and employee growth (Grilli & Murtinu, 2014), and productivity (Alperovych et al., 2015).

Cumming et al. (2014) elaborates on three reasons why GVCs perform worse than TVCs; GVCs are created based on political and regulatory processes, and not negotiations among contracting parties, GVC covenants are determined by regulators, and hence do not vary over time or through fund managers, making them less efficient (Cumming & Macintosh, 2007), GVCs face employee retention problems for one main

reason; the less efficient compensation terms relative to that of TVCs, which also leads to agency problems in the effort. Another fundamental difference that may halt GVCs is the fact that they lack independence in decision making, facing political pressure to not fire a poorly functioning CEO or to pursue non-financial related measures such as employee maximization (Cumming & Macintosh, 2007).

Portfolio companies invested by TVC/GVC syndication would benefit from structural advantages of limited partnership from TVC, while not compromising the benefits of a GVC investment (Cumming et al., 2014). The independence of TVCs (not subject to influence from institutional investors, nor political pressure) mitigates the agency problems of inefficient decision making associated with the vast bureaucracy connected to GVC investment decisions. Such syndication is also expected to improve the performance of portfolio companies, seeing that political connections are unarguably valuable and that TVCs can mitigate the cost of inefficient GVC structures (Cumming et al., 2014). A co-investment from GVC with TVC indicates better performance, and VC funds that are partially owned by governments outperform funds solely owned by governments in terms of both total funding and exit (Brander et al., 2015).

A syndicate of TVC and GVC improves the likelihood of a positive exit, could lead to more equity capital for the portfolio companies, improve access to financial and non-financial skills, resources, industry expertise, and networks (Cummings et al., 2014; Andrieu & Groh, 2012). Gompers and Lerner (2004) bring on a second opinion on the matter, it may also improve the efficiency and quality of due diligence, signaling the market about the quality of the company. Schefzyk and Gerpott (2001) researched the determinants and impacts of German TVCs management support activities on the performance of their portfolio companies. From their own literature review, they grouped management support into two types of activities, 1) support for business decisions, and 2) support on methods and processes. Assuming the latter is where support and coaching regarding methods and processes for making the portfolio company an attractive investment case, their review established only a narrow involvement in the second type of support. Overall, they found that TVCs should focus on continuous, content-oriented consultative support onsite beyond financial decisions.

Luukkonen et al. (2013) looked more specifically at the differences between TVCs and GVCs in terms of value-adding behavior as assessed by the portfolio firms. Controlling for selection effects in the inherent differences between the two types of investment firms, they surveyed TVC and GVC backed firms in seven European countries and found smaller differences in the values added than what they expected. Although they found evidence of superior performance by TVCs in professionalization, such as management changes, recruiting board members, and exit orientation, they did not find support to the view that GVCs on average add less value to their portfolio companies than TVCs.

2.4 Information Asymmetries

The entrepreneurial finance literature widely shares the view that VC investors contain superior due diligence and screening capabilities to effectively address information asymmetries (Chan, 1983; Sahlman, 1990; Denis, 2004). According to Brander et al. (2015), this is due to their often highly relevant technical and practical skills, as well as extensive networks in the sectors they invest in. On the other hand, it also indicates that information asymmetries give rise to unfortunate selection pre-investment and agency conflicts post-investment (Sahlman, 1990; Wright & Robbie, 1998; Manigart & Wright, 2013).

Domestic VCs are shown to be better equipped at handling information asymmetries in comparison to FVCs (Devigne et al., 2013). Manigart & Wright (2013) state that VC investors can add value to their investments by resolving these limitations through advice, expertise, and access to networks. The access to local information, knowledge, and networks are crucial factors for success with these aforementioned methods, furthermore, these methods result in higher costs for FVCs and thus a desire for higher returns to compensate for this cost (Wuebker et al., 2015). The need to reduce these asymmetries has for long made VC a local industry (Wright & Robbie, 1998; Cumming & Dai, 2010), and the proximity was demanded to locate and evaluate targets (Sorenson & Stuart, 2001), as well as efficiently provide monitoring and value-adding services post investment (Mäkelä & Maula, 2006).

One of the most crucial factors of success for a VC is the selection of the right target (Sørensen, 2007), a foreign VC encounters challenges in selection due to geographical and cultural distance, lower embeddedness in portfolio companies, all coming down to a hampered transfer of soft information (Devigne et al., 2016). Devigne et al. (2016) further elaborate that to overcome these challenges, FVCs tend to select companies with lower information asymmetries pre-investment. As a result, cross-border VCs tend to invest in companies more transparent with information or in general a higher willingness to share, thus companies in later stages, later rounds, or larger deals are preferred (Schertler & Tykvová 2012; Dai et al., 2012). To limit the information related challenges when investing in early-stage companies foreign VCs turn to syndication with local VC firms, where they outsource value-adding services and monitoring activities (Mäkelä & Maula, 2008; Devigne et al., 2013; Nahata et al., 2014; Huang et al., 2015; Chemmanur et al., 2016).

2.5 Summary Literature and Research Questions

Overall, we have identified a number of gaps or “ends of the branch” in the available research.

Cross-Border Venture Capital

From our review of relevant literature, it is clear that there are significant benefits to seeking FVC funding, especially in syndication with local VCs. Still, foreign VC inflows differ widely between countries even between those of close proximity such as the Nordics where Sweden is towering over its neighbor, Norway, according to (Danish Venture Capital & Private Equity Association et al., n.d.). Many factors, such as for example public policy, probably play a role in this (Bradley et al., 2019). From our own experience in the Norwegian entrepreneurial ecosystem, some speculate that cross-cultural differences in the attitudes and ambitions of founders matter. For example, that founders in Norway may in some way be more skeptical to foreign investors than Swedish founders because of a fear of being relocated to a foreign market. Whatever the case, from our review of literature, our impression is that there is a lack of research on attitudes to foreign venture capital participation between European VCs and their

portfolio companies to FVC funding. There is also little research on how the attitude of portfolio companies towards foreign venture capital investors is affected by actually receiving it, in other words how successful are these deals in terms of a “would do it again” criteria. Based on this, we introduce the following research questions and related hypotheses 1 and 2 in Figure 1.

RQ1: What factors matter most in navigating the conceptions of portfolio companies and domestic VCs with foreign venture capital?

H1: Portfolio companies that have received foreign venture capital are more positive towards foreign venture capital participation in their next round.

H2: Portfolio companies with foreign venture capital as lead investor are more positive towards foreign venture capital participation in their next round.

Figure 1 - RQ1 & Hypothesis

Value-adding Support Activities

Following this, our review of literature concerning value-adding activities revealed that there are gaps to be explored in the research on the value-adding activities provided by VCs. First, there is research on the benefits and challenges in value-adding activities provided by domestic VCs and foreign VCs, as well as on how they sometimes compliment each other. However, there is little research on the differences in performance of value-adding activities between FVCs and DVCs, as perceived by their portfolio companies.

Second, there is research both in terms of relative performance between GVC and TVC, and between the expectations and later perceived value of VCs' value-adding contributions. But, there is little research on value-adding activities specifically aimed at attracting and reaping the benefits of foreign venture capital investors. It could be reasonably argued that practically all support activities in a sense contribute to attracting foreign VC, because FVCs as any investor are interested in prior and expected performance, and this is the essential purpose of support activities. However, considering the benefits of FVC syndication as outlined in our literature review, we argue that it deserves a category of its own.

Furthermore, although there is research on what support activities VCs actually offer and their perceptions regarding the importance of different activities, there is little research connecting this directly to the portfolio company side. Another issue is that although most of the identified research is somewhat recent (10-20 years), we are of the opinion that the technological developments and growth in VC activity for the past decade warrants more updated data. Therefore, we introduce our second research question and hypotheses 3 and 4 in Figure 2.

RQ2: How do different investor types and syndicates differ in their prioritization and performance in value-adding activities when supporting their portfolio companies?

H3: TVC performs better with PFCs in terms of value-adding activity satisfaction than other types of VCs.

H4: Between domestic and foreign VCs, foreign VCs perform best with PFCs in terms of value-adding activity satisfaction.

Figure 2 - RQ2 & Hypothesis

Information Asymmetries

Technological developments also warrant the gathering of more recent data on how information asymmetries are handled by investors and startups/scaleups both domestically and across borders. For example, there is research supporting the view that FVCs handle cross-border challenges such as information asymmetries by outsourcing monitoring activities to local syndicate partners and investing in more mature and transparent companies (Mäkelä & Maula, 2008; Devigne et al., 2013; Nahata et al., 2014; Huang et al., 2015; Chemmanur et al., 2016). However, this in itself is a potentially lucrative problem to be solved by innovative entrepreneurs, and throughout our review we did not identify any meaningful body of research on the role of more recent tools for mitigation. In that we bring notice to dedicated investor portals, different to data room solutions such as cloud-based drives (Google Drive, SharePoint, DropBox, etc.), in that it is designed with functions specifically intended to tackle information asymmetry between startups/scaleups and their current, and potential, investors.

Although this topic is highly interesting, priority is given to the two prior research questions in terms of data collection for two reasons. First, we observe that the use of investor portals is a rather recent phenomenon, which may impede availability and quality of data on the topic. Second, we want to avoid the risk of increasing respondent fatigue in our survey respondents by introducing too many topics. Considering this, we introduce an exploratory research question into an emerging phenomenon, but instead of hypothesizing regression outcomes, we include the topic in our review and discussion of the descriptive statistics of the collected data.

RQ3: To what extent do portfolio companies and their investors apply digital investor portals as a means of mitigating frictions associated with information asymmetries?

Figure 3 - RQ3

3.0 Research Methodology

3.1 Research Design

This thesis obtained knowledge on the topic of cross-border investments from FVCs, the impact of value-adding services from GVCs and TVCs, as well as information asymmetry. Furthermore, the goal of the research was to describe the phenomenon of the aforementioned topics through information gathered, both secondary and primary, to make estimates and generalizability of the findings, defined by Straits and Singleton (2018, p.p 68) as descriptive research. The data gathered and analysed is also used to draw explanatory conclusions.

This section aims to provide a thorough explanation of the process through which we have gathered and analyzed our data. In general this thesis will build on quantitative data collection, seeing that the research questions will benefit from quantifiable insight. In addition to collection of additional secondary data we included data collection from two questionnaires.

3.2 Survey Design

Both questionnaires had descriptive designs in order to gain an understanding of the impact of the various challenges and opportunities connected to our research problem

(Straits & Singleton, 2018, p.p 206). They contained a specific set of questions with a preselected set of alternatives based on secondary research findings, but also certain open-ended sections for additional information - for example an option to elaborate when selecting “other” on various questions. To reduce participant mortality and fatigue the surveys were kept at approximately 4-6 minutes for startups (up to 26 questions depending on the path chosen), and 6-7 minutes for VCs (up to 36 questions depending on the path chosen). As there are two different surveys, we have elaborated more in the following two sections.

3.2.1 PFC Survey Design

The full questionnaire distributed to portfolio companies is attached as Appendix 1.

The initial part of the survey was concerned with company specifics such as location, years since the company was founded, amount and type of VC funding. We also enquired on their satisfaction with the amount raised in the latest round on a pseudo-likert scale with the ordinal categories “More than desired”, “On target”, “Less than desired”, and “Round failed”. Then we moved on to the type of VC they consider as their 1) lead investor, and 2) main source of strategic support. Regarding lead investor and main source of strategic support we also included the alternatives “Family office”, “Angel investor”, “Accelerator/incubator”, and “Other” (followed by elaboration option) for two reasons. Firstly, some start-ups are funded by syndicates of different types of investors, and it is not given that a VC is lead. Secondly, there may be cases in which start-ups perceive their main source of strategic support to be different from their lead investor. because sometimes angels and other early-round investors are dedicated and highly valuable advisors even after the startups scale up and the funding rounds grow in size. Also, dissatisfaction with, or deprioritization by, lead investors may result in portfolio companies perceiving other investors' support as more valuable.

Regarding cross-border investment we asked whether respondents PFCs had received FVC, and also whether or not this FVC firm was lead. Additionally, we asked the PFCs if they were planning another funding round or not, where we also included the option to answer that they were planning for IPO, acquisition or dissolution of the company. The ones that were planning another round were then asked about their stance on

participation by FVCs in their upcoming round with an option, if their stance was negative, to describe why. This question had ordered answer alternatives on a 7-point likert scales where 7=“Very positive” and 1=“Very negative”.

The next section was a number of 7-point Likert scale items (categories exactly as the previous) that was contained in 5 subsections. Each of these included 3-6 relevant value-adding activities of which the respondents were asked to rate their satisfaction with their VC as specified in Table 1.

Financial	Operational	Strategic
1. Financial planning/modelling	4. General management	9. Internationalization
2. Liquidity management	5. Stakeholder communication	10. Technological development
3. Access to further funding	6. Access to experts	11. Commercialization
	7. Functional advice	12. Vision/mission
	8. Information security	13. Planning (e.g. 2/3 year plan)
		14. Exit
Networking	Attracting Foreign Venture Capital	
15. Recruitment/hiring	20. Mock pitching	
16. Investor introductions	21. Screening/due diligence	
17. Strategic Alliances	22. Term sheet understanding	
18. Access to networking events	23. Coaching in what FVCs are looking for	
19. Community building	24. Introductions to FVCs	

Table 1 - Value-Adding Categories

A section, “other”, in which respondents were given the choice to elaborate on any additional value-adding activities was also included in case we had missed any activities deemed important by our survey respondents.

The final part of the survey contained questions about investor portals. We asked if respondents were using a dedicated investor portal for information sharing and transparency, and then asked them to share the name of the portal they were using. The final two questions included what type of information investors and potential investors could access on this portal, and if “regular updates about your firm's progress” was selected they were also asked to share how often.

3.2.2 VC Survey Design

The full questionnaire distributed to European VCs can be found as Appendix 2.

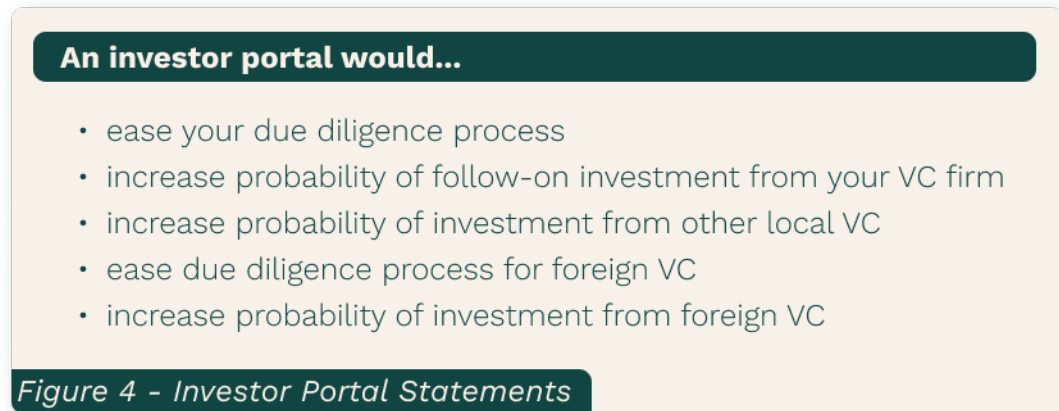
As with the PFC survey the initial section involved company specifics such as type of VC firm (TVC, GVC, CVC, GVC/TVC hybrid, or Other (With text field)). Further the location of the VCs headquarters, regions and number of countries they have an investment presence in, number of employees, total assets under management, and amount of current PFCs. The following section contained questions regarding board seat requirements, average initial investment size in the past three years, as well as average and highest return on investment in the same period. We also asked them to specify their most frequent investment stages, if they participate in later rounds, and their stance on syndicating with FVCs investing in their home country.

Further, the VCs were asked whether or not they had a current or previous PFC that received FVC funding after their investment. To learn more about such deals the VCs were asked to share the amount the FVC invested, the stake obtained, the location of the FVCs headquarters, if the FVC have offices in the PFC home country, and how the deal originated. We also asked VC respondents to select from a set list of typical terms which ones the FVC required (including an “other” option), and finally if the PFC was required to relocate out of its home country following the FVC investment. If the VCs had exited an investment where an FVC was invested we also asked them to provide the ROI on this deal, and if several they provided this information on the latest deal.

The next section included the exact same 7-point Likert scale items and subcategories as in the PFC survey, where VCs instead were asked to rate the level of priority they offered it in the management of their portfolios, going from 1=“Not a priority” to 7=“Essential priority””. As in the PFC survey, we also added a section where the VC respondents could elaborate on additional value-adding activities in case we had missed any ones that they regarded as relevant.

The final part of the survey contained questions about investor portals, starting with if they had PFCs using a dedicated investor portal for information sharing and transparency, and then to provide the name of the portal they were using. As with the PFC survey we asked what type of information they could access on this portal. Finally, the VC survey included 5 statements connected to the use of investor portals on which

VCs were to report their stance on a 7-point Likert scale where 7="Strongly agree" and 1="Strongly disagree", the statements are stated in the Figure (4) below.



3.3 Sample and Data

Straits and Singleton (2018, p.p 138) defines sampling as the process of choosing subjects on which one can draw conclusions on the entire set, thus we obtained knowledge through a broad sample of both European VCs and PFCs. VCs and PFCs received two different surveys (Appendix 1 & 2), both of which were tested by both our supervisor and industry professionals.

To obtain suitable prospects we reviewed member lists of venture capital associations and data sets from CB insights, Pitchbook, and Crunchbase to generate a list of all relevant VCs in a selection of European countries (Nordics, U.K., Netherlands, Estonia, Lithuania, Latvia, Iceland and Hungary). The countries were selected with the goal of including a diverse set of countries with both higher and lower amounts of total VC investment, also based on percentage of total GDP. Our sample countries have a range from €3 192m to €118m raised in 2020, and a diverse percentage of total GDP from Norway at the bottom with 0.033% to Finland at the top with 0.208% (Table 2). We found the datasets from Pitchbook, CB Insights, and Crunchbase to be unreliable as

Country	VC raised 2020	Percentage of GDP
United Kingdom	€ 3 192m	0.118%
Netherlands	€ 1 029m	0.113%
Finland	€ 564m	0.208%
Sweden	€ 526m	0.098%
Denmark	€ 284m	0.080%
Norway	€ 118 m	0.033%

Table 2 - VC raised and percentage of GDP per country

(OECD, n.d.)

many of the companies and entities categorized as VCs were in reality Family Offices (FO) or Private Equity firms (PE), and even some governmental offices for R&D grants were listed as VC. For that reason, all prospects were screened by analyzing websites and available information. In addition we added a safety-filter in the survey to rule out non-VC firms. All in all, this resulted in a final prospect list of 114 European VC firms.

As the scope of our study was aimed at startups with VC investments we used the portfolio-page on VCs webpage to create our list of prospective PFCs to survey. We filtered out exits and bankruptcies, resulting in a final list of 1 966 prospective PFCs. Of this population we filtered out PFCs that had IPO'd but were not listed as exited by the VC, and also those that had no available contact information. This resulted in a final list of 1 331 PFCs.

Internet sampling was found to be advantageous as it is convenient, fast and inexpensive. While publishing the survey on social media (e.g. LinkedIn) would save vast amounts of time, a decision was made to prioritize control of who participated over fast responses. For distribution we performed a test by messaging roughly 50 portfolio companies through two different mediums, LinkedIn's Inmail and regular email. Inmail resulted in only a couple of answers and was also found to be quite expensive in addition to a maximum limit of sendouts per month. Therefore, we decided to focus on regular mail instead, using our BI Norwegian Business School emails for distribution as we believed the @student.bi.no domain to have a lower risk of being categorized as spam. Also, we believed it to be more trustworthy since we were essentially asking respondents to click our survey link, and company executives today are receiving significant amounts of phishing attempts through email.

All prospects, both VCs and PFCs received an initial email with their invitation to participate in the study. Then, those who did not confirm by email that they had completed the survey received another email with a friendly reminder 1-3 weeks after the initial invitation. As prospects in several countries were targeted, we had Swedish, Finnish and Danish individuals translate our emails targeted towards the prospects in these countries as a measure to improve the response rate. Norwegian prospects also received their invitation in Norwegian. The rest of the prospects received an English

mail. The survey itself was kept in English, because translating the survey would require excessive time and would introduce a risk of creating differences in the perceptions of survey questions and answer alternatives due to translation of quite specific technical words and phrases.

The data collection period ranged from March 20th to June 5th, with the majority of time spent on gathering contact information. The online survey allowed participants to answer whenever, wherever and on their preferred device - a factor that may have improved the response rate. The questionnaires were created with Qualtrics and distributed with an anonymous link. The anonymity turned out to be a beneficial factor for our response rate as some PFCs reached out to get more information about the measures taken to preserve anonymity before they would submit their answer.

3.4 Data Cleaning

The PFC survey was distributed to 1 331 of the VCs portfolio companies and resulted in a response rate of 16.45 percent (222 respondents) before cleaning. 37 respondents (16.90 percent) completed 50 percent or less and were excluded from the study. We included some safety measures to make sure all portfolio companies had received investments from one or more VCs. Firstly, a question on the amount of VC investments obtained, 26 PFCs (11.87 percent) answered none and have therefore been excluded. Secondly, a section on what type of VC they obtained investment from. 4 PFCs (1.83 percent) did not check the box of GVC, TVC or CVC, they were then asked to provide the name of their investor, and as none of these were VCs their responses were also excluded from the survey. This was unexpected, because all recipients of the survey were in fact listed as portfolio companies of VCs screened by us, except for one VC that was excluded as will be discussed in the next section. In an attempt to understand this, we screened again the companies of which we received emails from founders and executives who claimed the survey was not relevant due to them not having received any VC funding. All of them were again confirmed to be listed as portfolio companies on the websites of venture capital firms, however as a precautionary measure we decided not to re-include them. The final response rate for

PFCs was 11.72 percent, or 155 respondents (Table 3). We also consider the completion rate of the PFC survey as satisfactory at 71 percent.

The VC survey was distributed to 114 VCs in the aforementioned countries, and resulted in a response rate before cleaning at 35.09 percent (40 respondents). 7 respondents (17.5 percent) completed 50 percent or less of the survey and were excluded from the study. 1 VC answered 89 percent and stopped the survey at the beginning of questions regarding investor portals, therefore this respondent is included in all other parts of the analyses. We also excluded one respondent (2,5 percent) who did not self report as a VC firm. The final response rate was 28.07 percent, or 32 respondents (Table 3). Previous similar studies such as Gompers et al.. (2020) had completion rates of 57-78 percent, and we therefore consider ours as satisfactory at 80 percent.

	VC Survey Percentage		PFC Survey Percentage	
Contacted	114		1.331	
Answered	40	35%	222	17%
No VC Funding/Not a VC	1	3%	26	12%
>50% Completion	7	18%	37	17%
“Other VC” was not VC	0	0%	4	2%
Complete Answers	32	28%	155	12%
Completion Rate		80%		70%

Table 3 - Answer rates

3.5 Privacy and Ethical Considerations

The data collection with the purpose of answering the research question and hypothesis, was all conducted anonymously, hence there was no need for an application through NSD (NSD, n.d.). No personal information was processed during the study. Given the nature of the questions, there was no risk of harm involved (Straits & Singleton, 2018, p.p 484). All participants were fully informed that their response would be confidential. Further, we followed the informed consent checklist as described by Straits and Singleton (2018, p.p 487).

4.0 Summary Statistics

4.1 Portfolio Company Survey

4.1.1 General

In total, our PFC survey after cleaning included 155 respondents from 14 European countries, with the majority located in the Nordics, UK and the Netherlands (Figure 5). The majority of surveyed PFC were founded less than six years ago with a significant spread up to more than ten years (Figure 5).

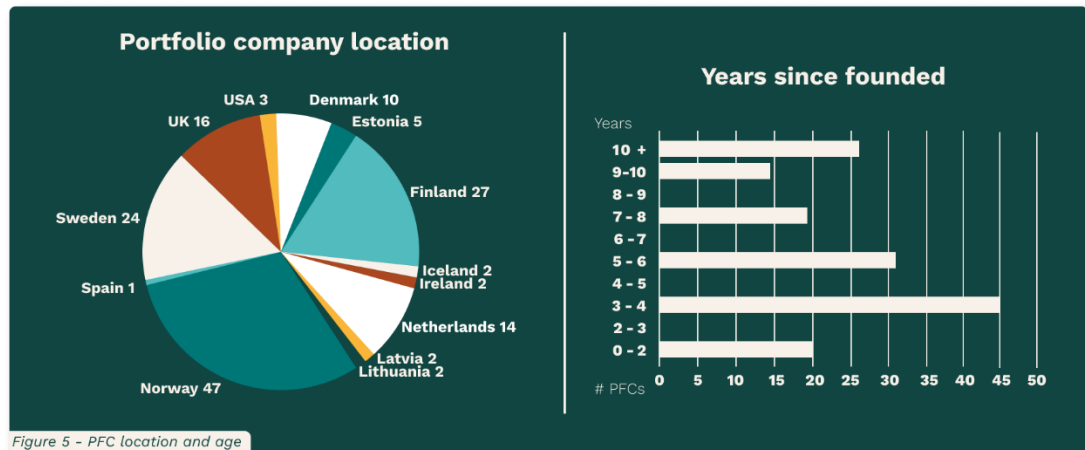
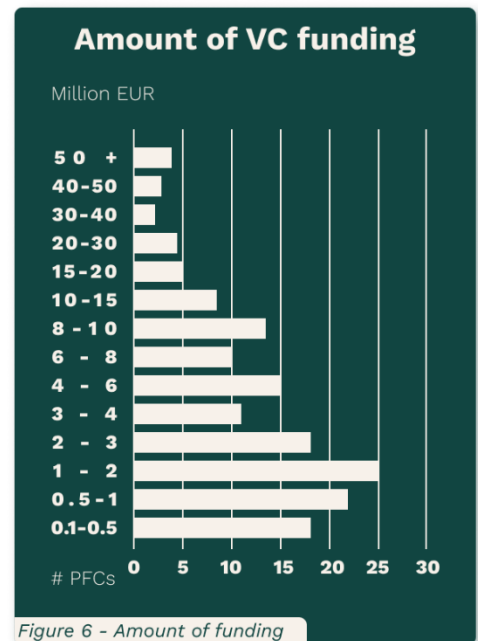
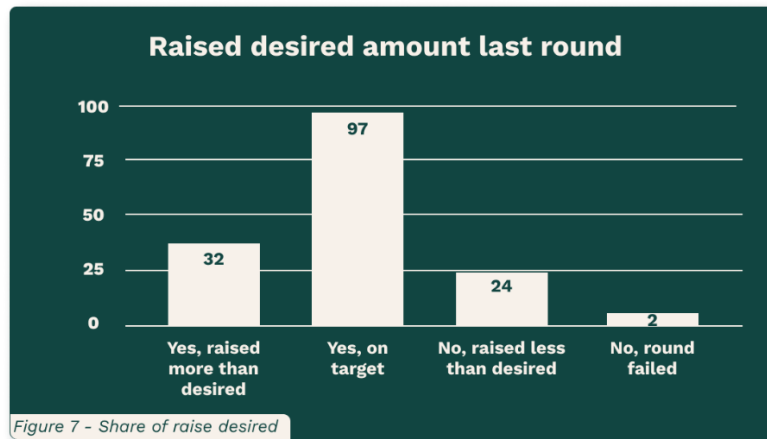


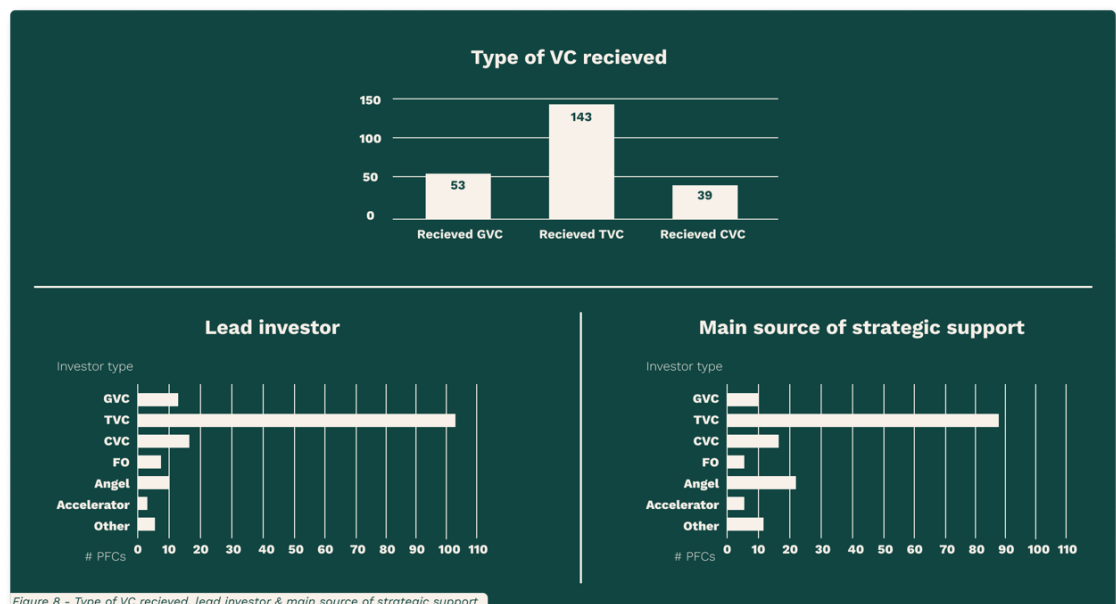
Figure 6 displays the amount of total VC funding the PFCs have received, 83.9 percent have raised 10 million euros or less, but we also see a presence of PFCs with funding up to and above 50 million euros. The amount of funding is one factor, but we also sought to learn more about the outcome of their last funding round. From Figure 7 it is clear that among our sampled portfolio companies, the vast majority had a successful last funding round in that they raised at least the desired amount or more. Of the ones that did not, 24 PFCs raised less than desired and 2 unfortunates had a round that failed.





4.1.2 Types of funding

Of the sample, the vast majority reported to have obtained TVC funding, but with a significant selection also received GVC or CVC funding, Figure 8 also indicates some degree of syndication. In the same table the PFC’s lead investor and the investor the PFCs regarded as their main source of strategic support is included. 84.5 percent reported a VC (either TVC, GVC or CVC) to be their lead investor, while the rest reported either an angel investor, family office, accelerator/incubator, or “other”, for example private equity and corporate finance firms. Compared to the above, 72.9% reported a VC to be their main source of strategic support, a decrease of 11.6 percent. Most of this difference is represented by portfolio companies reporting angel investors as their main source of support, where we see a 7.1 percent increase from lead investor to main source of strategic support.



With regards to cross-border investments, 42.6 percent of the PFCs stated they had obtained investment from an FVC, and 60.6 percent of these stated that FVC to be their lead investor (Figure 9). There are notable differences between the countries in the percentage of portfolio companies that have received foreign funding. Norway has the lowest percentage at 28% both in the Nordics and of all the countries that had at least 10 respondents (Incl. UK, NL), with Denmark in top position at 60%. However, these statistics should be taken with a grain of salt due to the differences in the number of respondents for each country, as displayed in Figure 9.

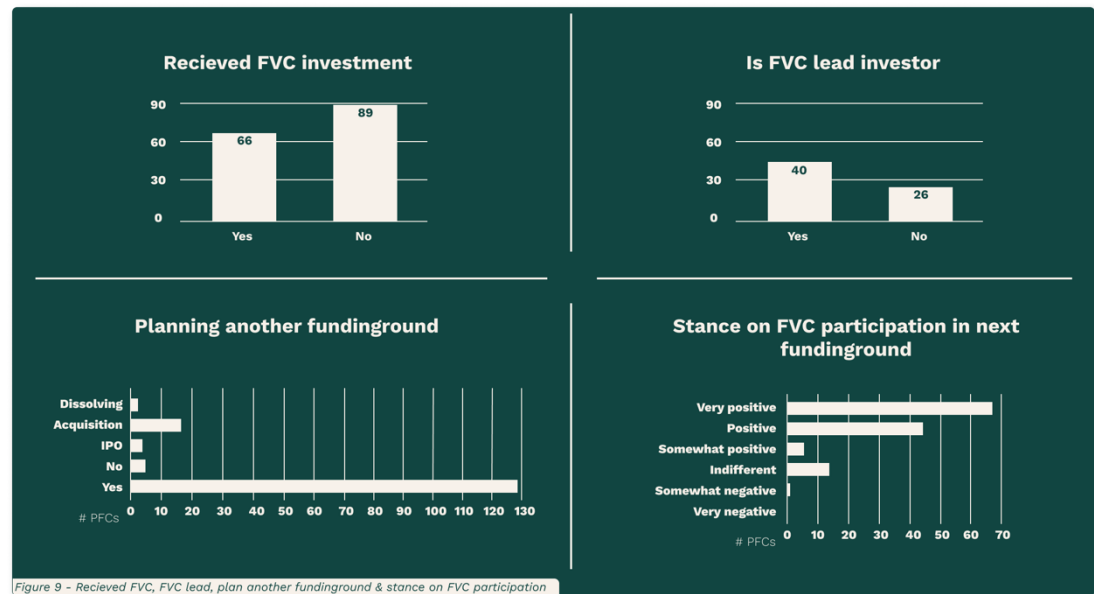


Figure 9 - Recieved FVC, FVC lead, plan another fundinground & stance on FVC participation

129 of the PFCs were planning to go through another funding round, with the rest going for IPO, acquisition, to dissolve the company, or simply answered “no” (Figure 9). Our respondent portfolio companies were overwhelmingly positive towards participation from FVC firms across all countries and types of lead investors. Of the sample, 13 PFCs (10.1%) reported a neutral stance, and only one out of all 155 respondents reported a (somewhat) negative view towards FVC. Topping the list is Finland, where 81% of the PFCs planning another round (N=21) reported being very positive towards FVC.

4.1.3 Value-adding activities satisfaction

Support activities - PFC satisfaction											
	N	Min	Max	Mean	Median	Mode	SE	SD	Var	Kurtosis	Skewness
Financial											
<i>Financial planning</i>	155	1,00	7,00	5,22	5,00	6,00	0,11	1,36	1,85	0,42	-0,69
<i>Liquidity management</i>	155	1,00	7,00	4,98	5,00	4,00	0,12	1,44	2,07	-0,35	-0,36
<i>Access to funding</i>	155	1,00	7,00	5,46	6,00	6,00	0,11	1,38	1,91	0,92	-1,09
<i>Average score</i>	155	1,00	7,00	5,22	5,33	6,00	0,09	1,18	1,39	1,15	-0,78
Operational											
<i>General management</i>	155	1,00	7,00	5,07	5,00	6,00	0,11	1,42	2,03	-0,52	-0,44
<i>Stakeholder communication</i>	155	1,00	7,00	5,30	6,00	6,00	0,11	1,37	1,87	-0,31	-0,52
<i>Access to experts</i>	155	1,00	7,00	4,88	5,00	4,00	0,12	1,47	2,15	-0,58	-0,31
<i>Functional advice</i>	155	1,00	7,00	4,95	5,00	4,00	0,12	1,45	2,09	-0,29	-0,43
<i>Information Security</i>	155	1,00	7,00	4,62	4,00	4,00	0,11	1,32	1,73	-0,12	0,01
<i>Average score</i>	155	1,60	7,00	4,96	5,00	4,00	0,10	1,21	1,47	-0,09	-0,46
Strategic											
<i>Internationalization</i>	155	1,00	7,00	5,08	5,00	6,00	0,12	1,44	2,08	-0,53	-0,50
<i>Technological development</i>	155	1,00	7,00	4,85	5,00	4,00	0,11	1,35	1,82	-0,52	-0,18
<i>Commercialization</i>	155	2,00	7,00	5,16	6,00	6,00	0,11	1,31	1,72	-0,71	-0,43
<i>Vision/mission</i>	155	2,00	7,00	5,17	5,00	6,00	0,11	1,41	2,00	-0,66	-0,44
<i>Planning</i>	155	1,00	7,00	5,20	5,00	6,00	0,11	1,33	1,76	0,00	-0,59
<i>Exit</i>	155	1,00	7,00	4,95	5,00	4,00	0,11	1,35	1,84	-0,24	-0,39
<i>Average score</i>	155	1,83	7,00	5,07	5,33	6,00	0,10	1,21	1,46	-0,38	-0,50
Networking											
<i>Recruitment</i>	155	1,00	7,00	4,75	5,00	4,00	0,12	1,44	2,07	0,03	-0,33
<i>Investor introductions</i>	155	1,00	7,00	5,27	6,00	6,00	0,11	1,43	2,04	0,67	-0,93
<i>Strategic alliances</i>	155	1,00	7,00	4,85	5,00	4,00	0,12	1,44	2,07	-0,05	-0,48
<i>Networking events</i>	155	1,00	7,00	4,96	5,00	4,00	0,11	1,40	1,96	0,00	-0,52
<i>Community building</i>	155	1,00	7,00	4,79	5,00	4,00	0,12	1,44	2,08	-0,11	-0,37
<i>Avg_network</i>	155	1,00	7,00	4,92	4,80	4,40	0,10	1,25	1,57	0,68	-0,64
Attracting FVC											
<i>Mock pitching</i>	155	1,00	7,00	4,65	4,00	4,00	0,11	1,31	1,71	-0,21	0,16
<i>Screening DD</i>	155	1,00	7,00	4,77	4,00	4,00	0,10	1,27	1,61	0,07	-0,15
<i>Term sheet understanding</i>	155	1,00	7,00	4,97	5,00	4,00	0,11	1,34	1,80	-0,52	-0,12
<i>FVCs looking for</i>	155	1,00	7,00	4,89	5,00	4,00	0,11	1,38	1,92	-0,69	0,02
<i>FVC_intro</i>	155	1,00	7,00	4,79	5,00	4,00	0,11	1,37	1,88	-0,26	-0,17
<i>Avg_attractingFVC</i>	155	1,00	7,00	4,81	4,60	4,00	0,10	1,19	1,42	0,17	-0,12

Table 4 - PFC satisfaction with support activities from VCs

As specified in Table 4, the mean value of PFCs satisfaction with value-adding activities from their lead VC investors is above the middle value and hovering around 5 (somewhat satisfied) of the Likert scale in all sub-categories. Also looking at the skewness, nearly all sub-categories had a negative skew, only with a couple of exceptions. This fits with the rather low counts in the below-middle values of the Likert scale, and clearly indicates that, at least for our sample of 155, very few PFCs appear to have negative feelings about their received (or not) value-adding activities.

4.1.4 Investor portals

Of all the PFCs, 57 reported using a dedicated investor portal. However, 34 of them were only using simpler solutions or data rooms such as Google Drive, OneDrive and DropBox. While the remaining 23 were using dedicated portals. The majority of dedicated investor portals used were Rudit (6), OwnersRoom (4) and Firmex (3). Of

the ones that reported using their investor portal for updating investors, Figure 10 illustrates how often these were sharing information with their investors.



Figure 10 - Investor portals and update frequency

The correlation matrix (Appendix 2) specifies some significant correlations regarding how often PFCs with investor portals are sharing updates and other variables in our survey. As this is an introductory research question in which we do not have enough data to conduct a meaningful regression analysis, we shed light on these correlations as an indicator that there might be more to be found in a research paper dedicated to this topic. Years_since_founded and age_5years_and_lower both had significant positive correlations, indicating that older PFCs share more often than younger ones. Updates_how_often also had a significant but negative correlation with Lead_FVC_DVC, indicating that those with FVC as lead investors share more often than those PFCs who do not have foreign VC investment.

4.2 VC Survey

4.2.1 General

The majority of VCs are also located in the Nordics, UK and Netherlands (Figure 11). 20 VCs characterized themselves as TVC, 3 as GVC and finally 9 as a hybrid VC firm partially owned by the government. The vast majority of the surveyed VCs had an investment presence in more than 1 country and selected the Nordics as one of their investment regions (Figure 12).

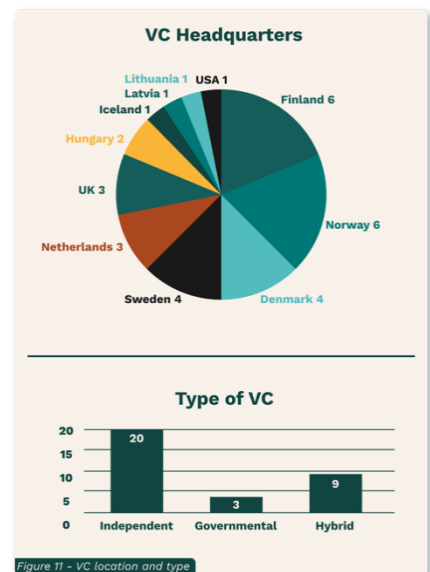


Figure 11 - VC location and type

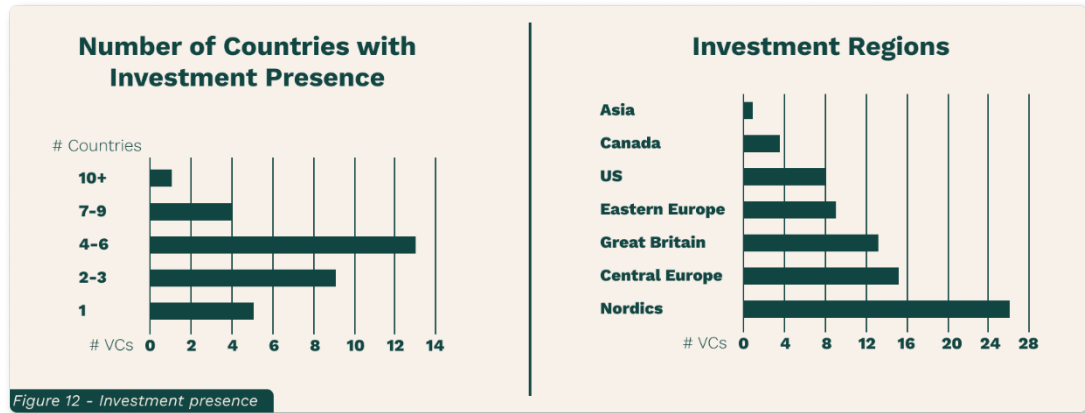


Figure 12 - Investment presence

The surveyed VCs have average assets under management ranging from >10 million EUR to more than 50, and initial investment size from >0.5 to 5 million EUR (Figure 13). Another measure to assess the size of the surveyed VCs is the amount of PFCs, ranging from >5 to more than 50 (Figure 13). In regards to performance 12 of the VCs had not yet gone through an exit, indicating that those VC firms are rather young. The VCs who had one or more exits reported an average ROI from >100 percent to more than 2 000 percent (Figure 13).

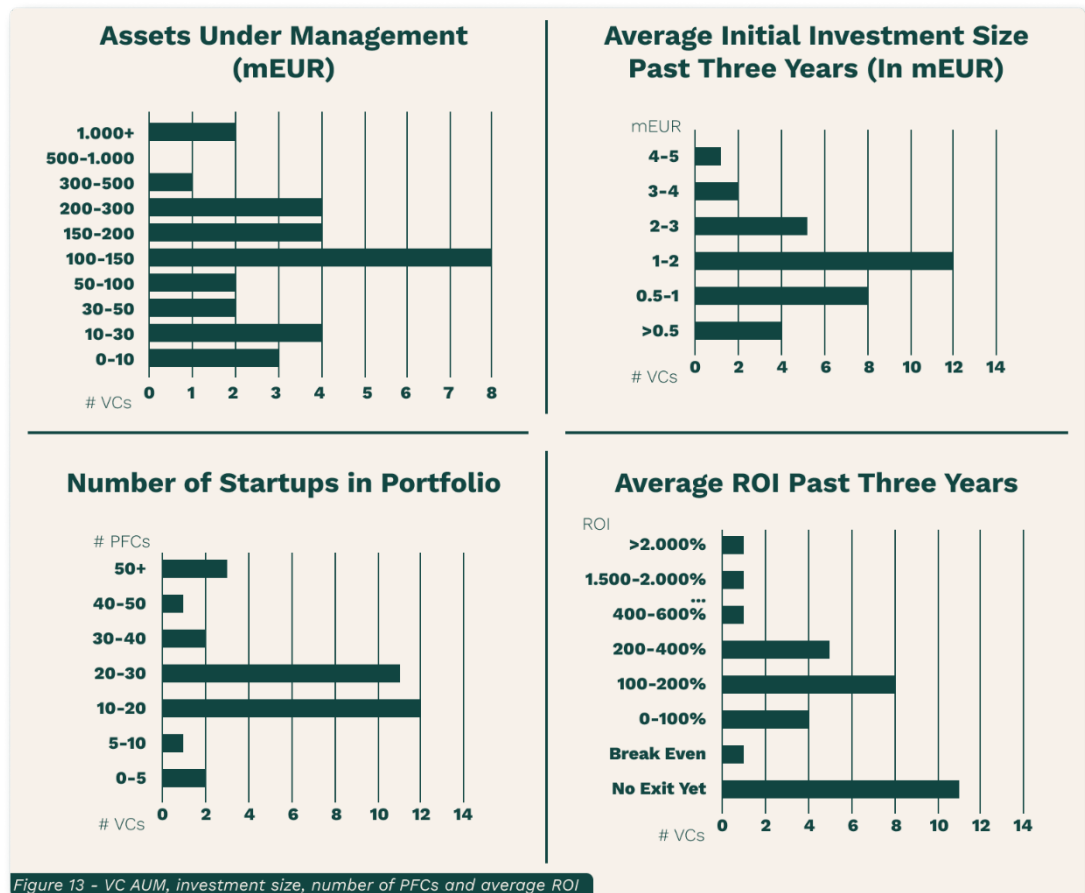
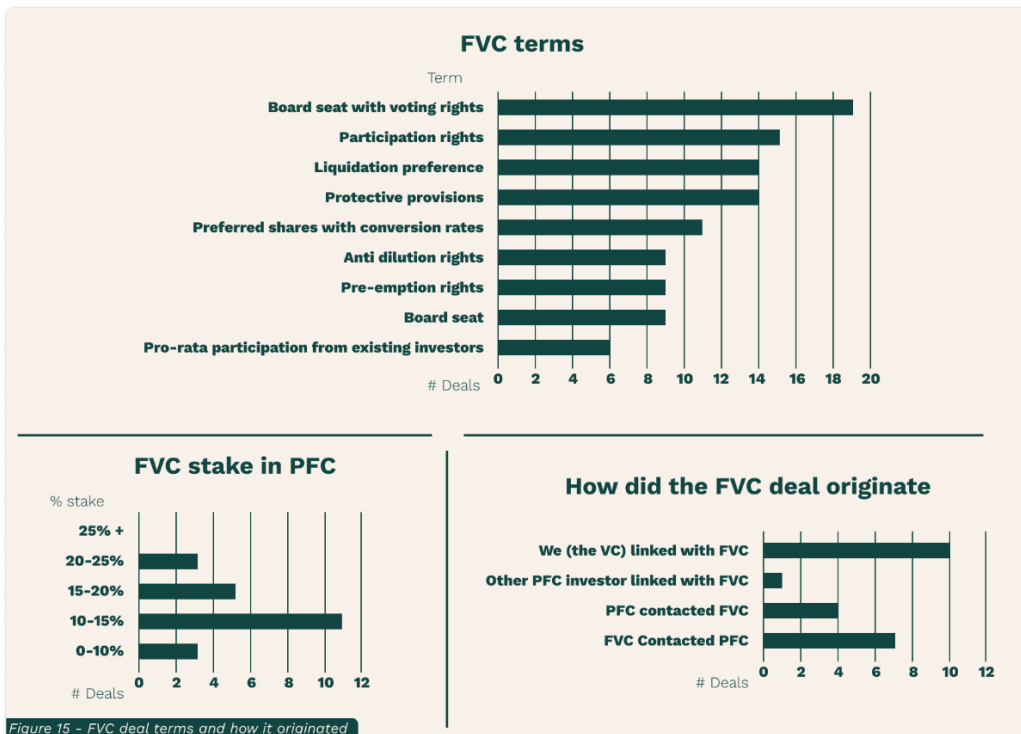
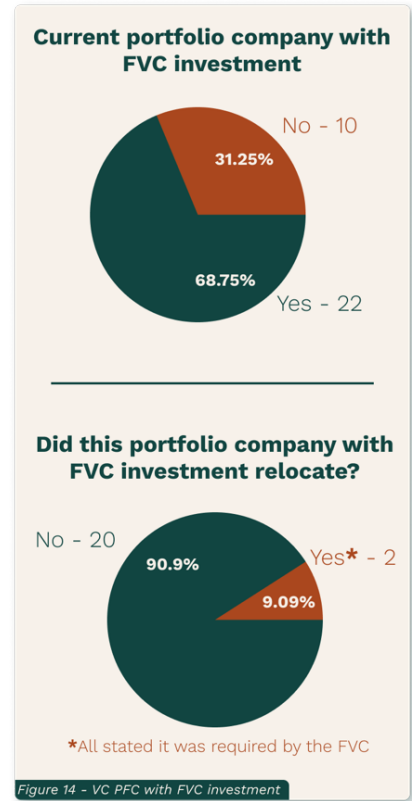


Figure 13 - VC AUM, investment size, number of PFCs and average ROI

4.2.2 Foreign venture capital

22 VCs had one or more PFCs that obtained FVC investment post their investment, the majority of these FVC have headquarters located in the US or U.K, only 2 had offices in the home country of the PFC. In regards to FVC deal terms 14 of the VCs reported the FVC to obtain 15 percent or less ownership stake (Figure 15). Furthermore, 10 VCs reported the FVC were introduced by them, 1 by another investor in the PFC, 4 stated the PFC contacted the FVC themselves, while 7 were contacted by the FVC directly. Only 2 out of 22 (9.1%) reported that the latest PFC to receive foreign funding had to relocate following the investment. 7 of the VCs reported having an exit where an FVC was invested, Table 5 on the next page explains the

ROI on exit with FVC invested versus their average ROI and highest ROI the past three years. Of all the firms, 25 were either “very positive” (14) or “positive” (12). This is no surprise considering that 27 out of the 32 VCs had current cross-border investments.



VC	Avg. ROI	Highest ROI	ROI with FVC investment
VC 1	Break even	<100%	<100%
VC 2	200-400%	>2 000%	100-200%
VC 3	200-400%	800-1 000%	200-400%
VC 4	100-200%	>2 000%	400-600%
VC 5	100-200%	1 000-2 000%	400-600%
VC 6	200-400%	600-800%	600-800%
VC 7	<100%	800-1 000%	800-1 000%

Table 5 - Average ROI vs FVC syndication ROI

4.2.3 Value-adding activities prioritization

Support activities - VC prioritization											
	N	Min	Max	Mean	Median	Mode	SE	SD	Var	Kurtosis	Skewness
Financial											
Financial planning	32	2,00	7,00	5,38	6,00	6,00	0,20	1,16	1,34	1,19	-0,94
Liquidity management	32	1,00	6,00	5,09	5,00	6,00	0,20	1,12	1,25	4,63	-1,82
Access to funding	32	4,00	7,00	6,44	7,00	7,00	0,13	0,72	0,51	2,92	-1,46
Average score	32	4,33	6,33	5,64	5,83	6,00	0,11	0,64	0,41	-0,67	-0,76
Operational											
General management	32	2,00	7,00	5,50	6,00	6,00	0,22	1,27	1,61	1,91	-1,26
Stakeholder communication	32	2,00	7,00	5,09	5,00	6,00	0,23	1,28	1,64	0,46	-0,78
Access to experts	32	2,00	7,00	5,34	5,00	5,00	0,19	1,07	1,14	1,96	-0,59
Functional advice	32	3,00	7,00	5,66	6,00	6,00	0,18	1,00	1,01	0,30	-0,66
Information Security	32	1,00	7,00	4,13	4,00	4,00	0,27	1,54	2,37	-0,07	-0,51
Average score	32	3,40	7,00	5,14	5,10	5,00	0,14	0,79	0,63	0,18	-0,10
Strategic											
Internationalization	32	3,00	7,00	6,44	7,00	7,00	0,16	0,91	0,83	5,38	-2,10
Technological development	32	2,00	7,00	5,16	5,00	5,00	0,24	1,37	1,88	0,76	-0,86
Commercialization	32	3,00	7,00	6,22	6,00	7,00	0,17	0,94	0,89	2,87	-1,46
Vision/mission	32	2,00	7,00	5,66	6,00	6,00	0,22	1,23	1,52	1,45	-1,26
Planning	32	3,00	7,00	5,75	6,00	6,00	0,19	1,08	1,16	0,05	-0,78
Exit	32	2,00	7,00	5,75	6,00	7,00	0,26	1,46	2,13	1,05	-1,26
Average score	32	4,17	7,00	5,83	5,92	6,00	0,14	0,79	0,62	-0,60	-0,35
Networking											
Recruitment	32	2,00	7,00	5,72	6,00	6,00	0,22	1,25	1,56	3,33	-1,64
Investor introductions	32	4,00	7,00	6,09	6,00	6,00	0,15	0,86	0,73	0,45	-0,85
Strategic alliances	32	3,00	7,00	5,50	6,00	6,00	0,17	0,95	0,90	0,33	-0,48
Networking events	32	1,00	7,00	5,06	5,00	5,00	0,22	1,27	1,61	3,01	-1,44
Community building	32	1,00	7,00	4,94	5,00	6,00	0,25	1,44	2,06	0,92	-1,07
Avg_network	32	3,40	6,80	5,46	5,60	6,00	0,14	0,82	0,67	1,06	-0,88
Attracting FVC											
Mock pitching	32	2,00	7,00	4,94	5,00	6,00	0,25	1,44	2,06	-0,32	-0,65
Screening DD	32	2,00	7,00	5,28	5,00	5,00	0,18	1,02	1,05	2,24	-0,81
Term sheet understanding	32	4,00	7,00	5,81	6,00	6,00	0,18	1,00	1,00	-0,78	-0,43
FVCs looking for	32	4,00	7,00	5,97	6,00	6,00	0,15	0,82	0,68	0,41	-0,68
FVC intro	32	3,00	7,00	5,91	6,00	6,00	0,18	1,03	1,06	0,77	-0,94
Avg_attractingFVC	32	3,60	6,80	5,58	5,60	5,60	0,14	0,78	0,60	0,50	-0,80

Table 6 - VC prioritization of support activities

As shown in Table 6, the mean value of VCs prioritization of value-adding activities to their PFCs is above the middle value and hovering between 5 and 6 (moderate to high priority) of the Likert scale in all sub-categories, with some exceptions. Also looking at the skewness, nearly all sub-categories had a negative skew. This fits with the rather low counts in the above-middle values of the Likert scale, and clearly

indicates that, at least for our sample of 32, very few VCs appear to have a low priority on any type of value-adding activity towards their PFCs.

4.2.4 Investor portals

We also surveyed the VCs regarding investor portals, 10 of the VCs had PFC that used such a software. 4 of them reported “other”, 3 used OwnersRoom, 1 with Admincontrol, 1 with Allvue and 1 with Carta. An additional question regarding investor portals where whether or not the VCs agreed with 5 statements, the VCs agreed the most on the two statements regarding FVC investment, firstly that it would ease the DD process for the FVC and secondly that it would increase the probability of obtaining cross border investment (Table 7).

To which extent do you agree that an investor portal would...	Mean	Median
ease your due diligence process	5.48	5.00
increase probability of investment from your VC firm	4.42	4.00
increase probability of investment from other local VC firm	4.42	4.00
ease due diligence process fro FVC	5.55	6.00
increase probability of investment from FVC	5.55	5.00

Table 7 - Investor portal statements mean and median

5.0 Hypothesis Testing

A benefit of our portfolio company survey sample size, which even after cleaning ended up at 155, was that it allowed for regression analysis of the data retrieved from the surveys. Regarding the VC survey, we did not reach a sufficient sample size of respondent firms in order to run regression analysis on this data. This is simply an issue with there being substantially less VCs out there than there are portfolio companies, so there was never any real expectation that, even with our favorable response rate of over 35%, we would reach a sample size large enough to analyze using regression.

For all regressions, since the dependent variables were all ordinal, model fit and explanatory relevance was analyzed by interpreting the output of SPSS’ built-in ordinal logistic regression model, namely:

1. Likelihood chi-square test at the five percent significance level.
2. Individual parameter estimates at the five percent significance level.

3. Pearson chi-square tests of goodness-of-fit at the five percent significance level, where a non-significant p-value indicates good fit (Field, 2018, p. 1174).
4. The Nagelkerke pseudo R-square value as a rough indicator of the amount of variance explained by the independent variable(s) (Field, 2018, p. 1146).
5. A test of parallel lines to check the proportional odds assumption, which upheld, would indicate no issue with the distribution between parameter categories (IBM, 2014b).

Multicollinearity between independent variables was evaluated by inspecting SPSS' Spearman's rho correlation matrix due to the ordinal or nominal nature of the variables (IBM, 2014a). Also, prior to each regression, a Mann-Whitney U-test was run on ordinal dependent variables and the focal independent variable, in order to better understand the effect of controls and models from correlation analysis to regression analyses. Then standalone ordinal logistic regression was performed, followed by two more, one with a set of main control variables, and one with a set of the main ones and any additional control variables if applicable.

Since our sample size was only 155, the standard control variables were dummy coded to prioritize fewer categories with a better partition of the sample population.

Control variables:

- **Age_5years_and_lower** where 65 companies were 5 years or younger.
- **Location_scandinavia** where 80 companies were located in Scandinavia.
- **VC_raised_less_than_10mEUR** where 130 companies had received less than 10 million. The 10 million Euro partition was also chosen because it represents, at least to some degree, an indication of a startup leaving the seed funding phase and gaining some real traction.
- **Raise_desired** where 129 companies had raised at or above target in their last funding round. We considered this to be a meaningful control variable since funding issues may cause PFCs to be more positive towards foreign funding simply because they are put in a "beggars can't be choosers" type of situation.
- **Main_strategic** was added since we find it reasonable to assume that the main strategic support as a trusted advisor can affect the attitudes of founders in many

ways. This variable was included with its original categories out of curiosity for any unexpected relationships that may come up.

Hypothesis 1 and 2 - Additional selected control variables:

- **FVC_Avg_scale** was coded as an average of all “attracting FVC” likert scale items in order to avoid multicollinearity. This is because most likert scale items on value-adding activities within the same sub-categories had a moderate to high degree of correlation. The rationale for the control variable was that we considered it reasonable to assume that high satisfaction with value-adding activities related to attracting FVC may affect how positive a PFC is towards FVC funding. For example, one would expect founders that are frequently introduced to FVCs to at least have some judgement on the impression they make, be it negative, positive, or neutral.

Hypothesis 3 and 4 - Additional selected control variables:

- Only the standard control variables set were selected for these regressions.

Table 8 displays the dummy variables created for control and analysis:

Variable	Original	Recoded	Recoded name
Location	Selected choice	1= location scandinavia 2= location outside scandinavia	Location_scandinavia
Years_since_founded	Categorical selected choice	1= 5 years and younger 2= Older than 5 years	Age_5years_and_lower
AmountVC	Categorical selected choice	1= Raised 10mEUR or less 2= Raised 10mEUR or more	VC_raised_less_than_10mEUR
Raise_desired_categories	Categorical selected choice	1= Raise desired 2= Not raise desired	Raise_desired
Lead_investor	Selected choice	1= Lead TVC 2= Lead other VC (Also if FVC is lead)	Lead_TVC_vs_other_VCs
		1= Lead TVC 2= Lead all other investors (Also if FVC is lead)	Lead_TVC_vs_other_investors
		1= Lead FVC 2= Lead other VC	Lead_FVC
Stance_FVC_participation_all	7-point Likert-scale	1= Somewhat positive and lower 2= Positive 3= Very positive	Stance_FVC_participation
ActivityX* <small>*All value-adding activities</small>	7-point Likert-scale	1= Somewhat satisfied and above 2= Neither satisfied or dissatisfied and below	*activityX*_satisfied
FVC_activity* <small>*All FVC related value-adding activities</small>	7-point Likert-scale	Average score of all FVC categories	FVC_AVG_Scale

Table 8 - Recoded variables for controlling

Due to the low amounts of responses below neutral on the 7-point Likert scale applied for recording PFC stance, the dependent variable Stance_FVC_participation was

dummy coded from seven categories into three, namely “Very positive = 3”, “Positive = 2”, and “Somewhat positive and below”.

5.1 Results

RQ1: What factors matter most in navigating the conceptions of portfolio companies and domestic VCs with foreign venture capital?

H1: Portfolio companies that have received foreign venture capital are more positive towards foreign venture capital participation in their next round.

Before moving on, we note the null hypothesis:

H0: There is no relationship between having received foreign venture capital and the stance towards foreign venture capital participation in a portfolio company’s next funding round.

For both regressions, the size of the sample population was N=129 compared to our complete sample size of N=155. The 26 missing values are PFCs that were not planning another round, and therefore naturally were not asked to share their stance towards FVC participation in their next round.

Regression Results RQ1 H1				
Dependent variable	Focal independent variable	Standard control variables	Selected control variables	
Stance_FVC_participation	Reclived_FVC	Age_5years_and_lower Location_scandinavia VC_raised_less_than_10mEUR Raise_desired Main_strategic	FVC_AVG_scale	
		Standalone	Standard control	Selected control
Model-fit		p<0.001	p<0.001	p<0.001
Goodness-of-fit (Pearson)		p=0.951	p=0.284	p=0.382
Pseudo R-square (Nagelkerke)		0.113	0.305	0.352
Test of paralell lines (Proportional odds)		p=0.951	p=0.705	p=0.612
Focal independent variable estimate		1.278	1.398	1.190
Focal independent variable significance		p<0.001	p=0.001	p=0.007
Age_5years_and_lower estimate			1.371	1.194
Age_5years_and_lower sign.			p<0.001	p=0.004
Raise_desired estimate			-1.258	-1.435
Raise_desired sign.			p=0.023	p=0.013
Main_strategic=4 (Family Office) estimate			2.692	2.427
Main_strategic=4 (Family Office) sign.			p=0.074	p=0.117
FVC_AVG_scale estimate				0.482
FVC_AVG_scale sign.				p=0.008

Table 9 - RQ1H1 Regression results

Results Mann-Whitney and correlation matrix inspection

Our Mann-Whitney U-Test resulted in a significant difference at $p < 0.001$ between the independent groups Received_FVC=yes (N=57) and Received_FVC=no (N=72) on Stance_FVC_participation indicating a relationship. From inspecting the correlation matrix (Appendix 2) we identified no troublesome correlations between the control variables.

Results standalone regression

Overall, the standalone regression model for dependent variable FVC_Stance_participation and independent focal variable FVC_Received supported hypothesis 1 (see Table 9). From interpreting the likelihood ratio chi-square test we identified a significant improvement in fit ($p < 0.001$) over the null model, with the focal variable FVC_received coefficient estimate at 1.278 and $p < 0.001$. The non-significant results of the Deviance and Pearson ($p = 0.951$) chi-square tests were also suggestive of good model fit. The pseudo R-square Nagelkerke target value of 0.113 indicated that at least some, although low, proportion of the variance in Stance_FVC_participation may be explained by the focal variable Received_FVC. The assumption of proportional odds was upheld from the test of parallel lines at $p = 0.951$, indicating no issue with the distribution between parameter categories.

Results regression with standard control variables

As seen in Table 9, the ordinal regression with control variables also resulted in an improved model-fit over the null model with significance at $p < 0.001$. The Deviance and Pearson ($p = 0.284$) chi-square tests were also non-significant. Explanatory power of the model seemed to have increased at a pseudo R-square Nagelkerke value of 0.305. Received_FVC retained its significance at $p < 0.001$, and the coefficient estimate increased to 1.398. Lastly, the proportional odds assumption held up with a test of parallel lines p-value at 0.166.

Additionally, we noted significant relationships between the dependent variable and 3 of the control variables. PFCs 5 years or younger had a positive estimate coefficient of 1.371 at $p < 0.001$. The PFCs that raised the desired amount in their last round had a

negative coefficient estimate of -1.258 with a significance at $p=0.023$. Lastly, control variable `Main_strategic` seemed to have a somewhat significant effect for category 4, Family Office, with a coefficient estimate of 2.692 at $p=0.074$. It is worth mentioning here that only 3 out of 129 reported a family office to be their main source of strategic support, so we pay no attention to this and expect any additional controls to have an effect.

Results regression with standard and selected control variables

As satisfaction towards support-activities related to obtaining FVC could reasonably be assumed to potentially have an impact on PFCs stance on FVC participation, we ran another ordinal logistic regression including the variable with the average score of satisfaction on these support activities. As seen in Table 9 this resulted in no material change to the fit of the model except for an increase in the variance explained with the pseudo R-square Nagelkerke value going from 0.305 to 0.352, and a change in Pearson p-value from 0.284 to 0.382. `Recieved_FVC`'s coefficient estimate and significance somewhat decreased to 1.190 at $p=0.007$. The proportional odds assumption also held up with a test of parallel lines p-value at 0.612.

Inspecting the output for notable control variables, `Age_5years_and_lower` also retained its significance with $p=0.004$ and positive relationship with a coefficient estimate of 1.194. Also, `raise_desired` obtained a significance of 0.013 and a negative coefficient estimate of -1.435. The variable for Family Office as main strategic support, `Main_strategic=4`, was no longer significant with a p-value of 0.117, likely due to the aforementioned low sample reporting family office as main support. The selected control variable, `FVC_AVG_scale`, also had significance with a p-value of 0.008 and a coefficient estimate of 0.482.

Based on the results we *reject* the null hypothesis that there is no significant relationship between the two variables.

H2: Portfolio companies with foreign venture capital as lead investor are more positive towards foreign venture capital participation in their next round.

Before moving on, we note the null hypothesis:

H0: There is no relationship between having a lead foreign venture capital investor and the stance towards foreign venture capital participation in a portfolio company’s next funding round.

Regression results RQ1 H2			
Dependent variable	Focal independent variable	Standard control variables	Selected control variables
Stance_FVC_participation	Lead_FVC	Age_5years_and_lower Location_scandinavia VC_raised_less_than_10mEUR Raise_desired Main_strategic	FVC_AVG_scale
		Standalone	Standard control
Model-fit		p=0.003	p<0.001
Goodness-of-fit (Pearson)		p=0.970	p=0.463
Pseudo R-square (Nagelkerke)		0.077	0.275
Test of paralell lines (Proportional odds)		p=0.970	p=0.702
Focal independent variable estimate		1.229	1.259
Focal independent variable significance		p=0.005	p=0.011
	Age_5years_and_lower estimate		1.365
	Age_5years_and_lower sign.		p<0.001
	VC_raised_less_than_10mEUR estimate		-0.905
	VC_raised_less_than_10mEUR sign.		p=0.099
	Raise_desired estimate		-1.221
	Raise_desired sign.		p=0.025
	Main_strategic=4 (Family Office) estimate		2.632
	Main_strategic=4 (Family Office) sign.		p=0.080
	FVC_AVG_scale estimate		0.520
	FVC_AVG_scale sign.		p=0.004

Table 10 - RQ1H2 Regression results

Results Mann-Whitney and correlation matrix inspection

Our Mann-Whitney U-Test resulted in a significant difference at p=0.004 between the independent groups Lead_FVC=yes (N=33) and Lead_FVC=no (N=96) on Stance_FVC_participation indicating a relationship. From inspecting the correlation matrix (Appendix 2) we identified no troublesome correlations between the control variables.

Results standalone regression

As seen in Table 10, the model fitting output had a significance of p=0.003 and Pearson Goodness of fit P-value at 0.970. Independent variable FVC_lead had a coefficient estimate of 1.229 at p=0.005, indicating a positive relationship between the variables.

Additionally, the Pseudo R-Square Nagelkerke value was 0.077 indicating that a low proportion of the variance in Stance_FVC_participation can be explained by FVC_lead. Last, we identified no issue with the proportional odds assumption at $p=0.970$ for the test of parallel lines.

Results regression with standard control variables

The ordinal regression with control variables had a model-fit significance at $p=0.001$, and Pearson chi-square test at $p=0.463$ also indicating good fit. The test of parallel lines was still acceptable at $p=0.702$. The pseudo R-square Nagelkerke increased to 0.275. The focal independent variable, FVC_lead, retained its significance at $p=0.011$, and a coefficient estimate of 1.259.

Some of the control variables had significant relationships in the output similar to H1. PFCs 5 years or younger had a positive estimate coefficient of 1.365 and significance with a $p<0.001$. VC_raised_less_than_10mEUR had a coefficient estimate of 1.365 and significance at $p=0.001$. Raised_desired once again had a negative coefficient estimate of -0.905 with a significance at $p=0.099$. Main_strategic=4 (Family Office) was significant, but as previously mentioned this is not of interest.

Results regression with standard and selected control variables

The regression including the average score of satisfaction with support-activities related to obtaining FVC resulted in a still significant model fit at $p<0.001$, and Pearson goodness of fit at $p=0.403$. The test of parallel lines was unproblematic at $p=0.632$. The pseudo R-square Nagelkerke increased to a p-value of 0.333. FVC_lead still retained its significance with a p-value of 0.033, and a coefficient estimate of 1.083.

Additionally, as seen in Table 10, the control variables Age_5years_and_lower, VC_raised_less_than_10mEUR, Raise_desired all still had significant relationships as in the previous model. The selected control variable, FVC_AVG_scale, also obtained significance at a p-value of 0.004, and a coefficient estimate of 0.520.

Based on the results of these regressions we *reject* the null hypothesis that there is no significant relationship between the two variables.

RQ2: How do different investor types and syndicates differ in their prioritization and performance in value-adding activities when supporting their portfolio companies?

H3: TVC performs better with PFCs in terms of value-adding activities than other types of VCs.

Before moving on, we note the null hypothesis:

H0: There is no relationship between type of VC firm and value-adding performance.

Regression results RQ2 H3			
Dependent variable	Focal independent variable	Standard control variables	
commercialization or investor_introductions	Lead_TVC_vs_other_VCs or Lead_TVC_vs_other_investors	Age_5years_and_lower Location_scandinavia VC_raised_less_than_10mEUR Raise_desired Main_strategic	
		Standalone	Standard control
TVC vs other VCs - Commercialization			
Model-fit		p=0.044	p=0.010
Goodness-of-fit (Pearson)		p=0.175	p=0.642
Pseudo R-square (Nagelkerke)		0.032	0.181
Test of parallel lines (Proportional odds)		p=0.168	p=0.493
Focal independent variable estimate		0.770	0.549
Focal independent variable significance		p=0.044	p=0.276
TVC vs other investors - Commercialization			
Model-fit		p=0.035	p=0.018
Goodness-of-fit (Pearson)		p=0.215	p=0.342
Pseudo R-square (Nagelkerke)		0.029	0.144
Test of parallel lines (Proportional odds)		p=0.209	p<0.001
Focal independent variable estimate		0.646	0.289
Focal independent variable significance		p=0.035	p=0.475
TVC vs other investors - investor introductions			
Model-fit		p=0.035	p=0.005
Goodness-of-fit (Pearson)		p=0.947	p=0.994
Pseudo R-square (Nagelkerke)		0.029	0.165
Test of parallel lines (Proportional odds)		p=0.947	p=0.211
Focal independent variable estimate		0.644	0.487
Focal independent variable significance		p=0.035	p=0.227

Table 11 - RQ2H3 Regression results

Results correlation matrix inspection

The bivariate correlation matrix with Lead_TVC_vs_other_VCs and all 24 support activities resulted only in one significant correlation at the 5 percent level, “commercialization”. There were no other significant correlations at the 10 percent level either. Therefore, we also inspected a correlation matrix with Lead_TVC_vs_other_investors and all the 24 support activities. “Commercialization” was still significant at the 5 percent level. Additionally, “investor introductions” had a significant correlation in this case.

Multicollinearity had already been checked for since we only applied our standard control variables, which had their correlations inspected in the correlation matrix (Appendix 2) in the previous hypotheses.

Regression Results - TVC vs other VCs and Commercialization

As seen in Table 11, the standalone regression had a model fitting significance of $p=0.044$ and Pearson Goodness of fit P-value at 0.174. The relationship between the variables is positive and may indicate that the PFCs in our sample that had TVC as lead were more prone to be satisfied with support related to commercialization. We identified no issue with the proportional odds assumption at $p=0.168$ for the test of parallel lines. Adding for controls, the model stays both significant and holds a good fit. The model still indicated a positive relationship between the variables, but it was no longer significant with a $p=0.276$. The Nagelkerke increased, and there were no issues with the proportional odds assumption based on the test of parallel lines for both standalone and regression with control variables.

Regression Results - TVC vs other investors and Commercialization

For the ordinal regression with the focal independent variable as Lead_TVC_vs_other_investors, the model was significant and signalled a good fit, as seen in Table 11. The coefficient estimate indicated a significant and positive relationship between the variables. The Pseudo R-square Nagelkerke indicated that a low proportion of the variance can be explained by Lead_TVC_vs_other_investors. Additionally, there was no issue with the proportional odds assumption based on the

test of parallel lines. Adding for controls did not compromise the model fit and significance, but the test of parallel lines indicated issues with the proportional odds assumption and the focal independent variable was no longer significant. Due to these indications, we ran a binary logistic regression with the same variables (including control) which turned out to not be significant with a $p=0.096$.

Regression Results - TVC vs other investors and investor introductions

Table 11 specifies the results from the standalone regression for Lead_TVC_vs_other_investors and investor_introductions. The model has a good fit and is significant, the Nagelkerke indicates that a low amount of variance in investor_introductions can be explained by Lead_TVC_vs_other_investors. Adding the selected control variables keeps the model fit and significance, and increases the Nagelkerke value to 0.165, but the focal independent variable is no longer significant with a p-value of 0.227.

Based on the results of all above-mentioned regressions we cannot reject the null hypothesis that there is no relationship between type of VC firm and value-adding performance.

H4: Between domestic and foreign VCs, foreign VCs perform best with PFCs in terms of value-adding activity satisfaction.

Before moving on, we note the null hypothesis:

H0: There is no relationship between foreignness of VCs and value-adding performance.

Significant regression results RQ2 H4

Dependent variable	Focal independent variable	Standard control variables
functional_advice / community_building / screening_DD / term_sheet_understanding / coaching_what_FVCs_look_for / FVC_introductions / strategic_alliances / networking_events / mock_pitching / vision_mission / internationalization / general_management / access_further_funding / investor_introductions / liquidity_management	Lead_investor_FVC_DVC	Age_5years_and_lower Location_scandinavia VC_raised_less_than_10mEUR Raise_desired Main_strategic

	Standalone	Standard control
functional_advice		
Focal independent variable estimate	0.717	0.708
Focal independent variable significance	p=0.036	p=0.005
community_building		
Focal independent variable estimate	1.045	1.199
Focal independent variable significance	p=0.030	p=0.001
screening_DD		
Focal independent variable estimate	1.074	0.996
Focal independent variable significance	p=0.002	p=0.008
term_sheet_understanding		
Focal independent variable estimate	0.706	0.683
Focal independent variable significance	p=0.042	p=0.062
coaching_what_FVCs_look_for		
Focal independent variable estimate	0.999	0.919
Focal independent variable significance	p=0.004	p=0.012
FVC_introductions		
Focal independent variable estimate	1.411	1.319
Focal independent variable significance	p<0.001	p<0.001
strategic_alliances		
Focal independent variable estimate	0.841	1.023
Focal independent variable significance	p=0.014	p=0.050

Table 12 - Significant regression results RQ2H4

See Appendix 3 for full table

Table 12 above specifies the focal independent estimate and significance of the regressions that resulted in a significant model with a good model fit based on the Pearson p-value, and that in addition showed no issues with the proportional odds assumption based on the test of parallel lines. The complete regression Table, also including all non-significant, can be found in Appendix 3.

Results correlation matrix inspection

From reviewing the bivariate correlation matrix (Appendix 2) with Lead_FVC_DVC and all 24 support activities displayed significant correlations at both 5% and 10% level as seen in Table 13 below.

Significant correlation at 5%	Significant correlation at 10%
Functional_advice	Liquidity_management
Investor_introduction	Access_funding
Strategic_alliances	General_management
Networking_events	Internationalization
Mock_pitching	Vision_mission
Screening_DD	
Term_sheet	
Coaching_what_FVCs_look_for	
FVC_intro	

Table 13 - Significant correlations for RQ2H4

Multicollinearity had already been checked for since we only applied our standard control variables, which had their correlations inspected in the correlation matrix (Appendix 2) in the previous hypotheses.

Results regression

The standalone regressions for Lead_FVC_DVC and satisfaction with all support activities in Table 12 had both model-fit and focal independent variable significance below 0.05. They all specified good model fits based on the Pearson value, but the low Nagelkerke value indicated that a low proportion of the variance in the various support activities can be explained by Lead_FVC_DVC (see Appendix 3). The focal independent value had in all cases from Table 12 a positive coefficient estimate, indicating a positive relationship between the two variables in each regression. Adding control variables keeps the model-fit and focal independent variable significance of all dependent variables except term_sheet_understanding. Furthermore, the coefficient estimate somewhat decreased on all support activities in the table, except for an increase for community_building and strategic_alliances. The Nagelkerke still indicated that a low proportion in satisfaction with the various support activities can be

explained by Lead_FVC_DVC, and none of them had issues with the proportional odds assumption based on the test of parallel lines (see Appendix 3).

Based on the results from all regressions in regards to H4 we reject the null hypothesis that there is no relationship between foreignness of VCs and value-adding performance. However, we emphasize that this counts for some, not all, activities.

6.0 Discussion

Our main goal for this thesis was to provide a fresh set of data on the topics of foreign venture capital, value-adding support activities, and information asymmetries. For all research topics and questions, we had a number of findings that in our view were interesting when considered up against the reviewed literature.

6.1 Foreign Venture Capital

In the descriptive statistics of both the PFC and VC survey, there were a number of findings related to foreign venture capital that are worthy of mention.

First, relative to the other countries, it appears that fewer Norwegian companies receive foreign VC funding than others. Seen in light with the other results, this does not appear to represent any funding gap. For example, 85% of the Norwegian PFCs reported having raised their desired amount in the last round, and none reported having their last round fail. In addition, only 7 (14.9%) out of the 47 Norwegian respondent companies reported less than a neutral satisfaction with access to funding. Also, the average score of access to funding satisfaction (5.42 where 5 = somewhat satisfied) did not deviate much from the average of the whole sample population (5.45).

Moreover, one thing is clear from our regression results and descriptive statistics on foreign venture capital attitudes. If there ever was a myth about founders having negative attitudes to foreign venture capital for different reasons, our results should be a strong indication that the opposite is true. As seen in the summary statistics, there is practically no negative attitude towards FVC contained in our sample. Our Mann-Whitney U-Test and regression model also strongly indicate that foreign venture capital

in European countries perform well in the sense that founders are significantly more positive towards it after having received it at least once. In other words, companies have positive experiences with foreign venture capital. Finally, considering that only two VCs reported that the latest PFC to receive foreign funding were required to relocate following the investment, this should be somewhat reassuring results for any founders and advisors that are considering approaching foreign venture capital firms.

Our regression model on having an FVC investor who is also lead supports hypothesis 2. However, we note that the model analyzed the effect of having an FVC as lead investor as opposed to not having an FVC as lead investor. The latter includes both the companies who have received FVC who do not have this FVC as lead AND the companies who have not received FVC and therefore naturally do not have an FVC as lead. Due to our limited sample size we were not able to apply ordinal logistic regression to analyze if having the FVC as lead had an additional effect on stance compared to only having received FVC. However, we note the lower pseudo R-square values for both the standalone and control regressions in H2, is at least some indication that there is little additional effect.

According to our model, younger startups are seemingly likely to be more positive towards FVC participation than those who are 5 years or older. This may be due to younger startups being more hungry for funding, or perhaps differences in ambitions of scale and internationalization. Another reason may be that older companies are less positive to FVC because more of it is available to them because FVC have been found to invest in later stages and more mature and transparent companies (Schertler and Tykvová, 2012; Dai et al., 2012). We have indications of this in our correlation matrix since higher amounts of funding was correlated, albeit a low one, at the 5% significance level with having received FVC. It should be noted that we do not know the degree of endogeneity between the two. For example, we do not know whether firms receive FVC because they have more funding, or if they have more funding because they have received FVC. Also, age had no significant correlation with having received FVC or not. This is not counterintuitive though, since later stages do not necessarily mean the same as age, and some companies reach a more mature stage earlier than others. Another thing to note is that in this case we studied foreignness of funds as a binary

case, and did not assume or attempt to measure any degree of foreignness. Our sample population was drawn from the portfolios of VCs located mostly in the same countries as we see represented in the Figure 5, and not from VCs located outside of Europe. This means that the foreign venture capital measured in our sample may be overrepresented by cross-border investments within the boundaries of Europe, where tendencies regarding the maturity of target companies may be more lax than with intercontinental investments.

PFCs who did not raise their desired amount in the latest funding round were likely to be more positive towards FVC participation in the next one. Although speculative, we consider two hypothetical explanations for this. The first is that PFCs who did not raise their desired amount from local investors may be overly positive towards FVC, or any alternative that may increase their amount of funding. The ones that received the funding sought have less of an incentive to look elsewhere, including in external markets, for more funding. This fits well with our summary statistics, considering Finland. Topping the list with 81% of PFCs reporting being very positive towards FVC, Finland also had the highest percentage (26%) of PFCs that raised less than desired in their latest round of all the countries with ten or more respondents. In comparison, the corresponding percentages for Sweden, Norway, Denmark, UK, and the Netherlands were respectively 4%, 15%, 0%, 13%, and 14%. The existence of this apparent funding gap should be valuable information to Finnish policy-makers, founders, investors and advisors. In no way does our sample data indicate that Finnish startups are less attractive to foreign investors, because the percentage of Finnish respondents that have received FVC is actually high at 56% versus 43%, 28%, 60%, 44%, and 36% for Sweden, Norway, Denmark, UK, and the Netherlands respectively. We speculate that this may be due to a high presence of Swedish VC funding, so there may be significant value in considering whether increased efforts in attracting foreign VC funding of a more international character can close the gap since it increases the pool of financial capital made available to an entrepreneurial ecosystem (Devigne et al., 2013).

We also identified a significant positive relationship between the control variable `FVC_support_Avg`, the average score on the 7-point Likert items related to attracting foreign funding. This indication that PFCs that are more satisfied with their

introductions and exposure to FVCs are more positive towards receiving it, seems to match well with the significant positive relationship between having received FVC and stance towards it.

6.2 Value-adding Support Activities

As an introduction to our discussion on this topic, we present our Table 14 displaying the VC Priorities and PFC Satisfaction side by side.

Support Activities	Mean		Median	
	PFC	VC	PFC	VC
	satisfaction	prioritization	satisfaction	prioritization
Financial				
Financial planning	5.22	5.38	5.00	6.00
Liquidity management	4.98	5.09	5.00	5.00
Access to further funding	5.46	6.44	6.00	7.00
<i>Average financial</i>	5.22	5.64	5.33	5.83
Operational				
General management	5.07	5.50	5.00	6.00
Stakeholder communication	5.30	5.09	6.00	5.00
Access to experts	4.88	5.34	5.00	5.00
Functional advice	4.95	5.66	5.00	6.00
Information Security	4.62	4.13	4.00	4.00
<i>Average operational</i>	4.96	5.14	5.00	5.10
Strategic				
Internationalization	5.08	6.44	5.00	7.00
Technological development	4.85	5.16	5.00	5.00
Commercialization	5.16	6.22	6.00	6.00
Vision/mission	5.17	5.66	5.00	6.00
Planning	5.20	5.75	5.00	6.00
Exit	4.95	5.75	5.00	6.00
<i>Average strategic</i>	5.07	5.83	5.33	5.92
Networking				
Recruitment/hiring	4.75	5.72	5.00	6.00
Investor introductions	5.27	6.09	6.00	6.00
Strategic alliances	4.85	5.50	5.00	6.00
Networking events	4.96	5.06	5.00	5.00
Community building	4.79	4.94	5.00	5.00
<i>Average networking</i>	4.92	5.46	4.80	5.60
Attracting FVC				
Mock pitching	4.65	4.94	4.00	5.00
Screening/Due diligence	4.77	5.28	4.00	5.00
Term sheet understanding	4.97	5.81	5.00	6.00
What FVCs look for	4.89	5.97	5.00	6.00
FVC introductions	4.76	5.91	5.00	6.00
<i>Average attracting FVC</i>	4.81	5.58	4.60	5.60

Table 14 - Comparison of support activity prioritization and satisfaction

Considering that Berg-Utby et al. (2006) found Norwegian PFCs to consider their VC investors to not meet their (moderate) expectations, our data may indicate that VCs have improved in their value-adding support since then. This may be related to an increased focus from the VCs due to more competition over the pool of attractive deals (Tollerud, 2021).

The PFCs in our sample are most satisfied with support-activities related to the financial aspect with the highest mean score given to access to further funding. One might consider this as obvious as funding is probably the main expectation of VCs, but this is not necessarily the case. Having a VC investor does not mean that PFC is entitled to further funding. It depends on a number of internal and external factors, for example commercial and technological performance, founder commitment, VC fund performance, and limited partner developments. With this in mind, the high score on access to further funding can also be interpreted as a sign that the investors of our sampled portfolio companies consider them worthy of follow-on funding, and that the VCs themselves are also accessing sufficient funds.

With regard to differences in satisfaction based on the type of VC, our findings indicate no significant difference between traditional venture capital firms and other types such as GVCs and CVCs. This supports the overall findings of Luukkonen et al. (2013) that on average there is little difference in support activity performance between TVC and GVC. It also does not support our interpretation of the findings of Knockaert et al. (2005) that GVC funds contribute less value to their portfolio companies because their managers are less prone to participate in value-adding activities. As will be noted in the limitations section, we acknowledge a drawback with our survey design, in that we asked portfolio companies to provide ratings on their lead VC investor. This is problematic because the vast majority naturally had a TVC as their lead, and only 12 out of 155 had a GVC lead investor. The above findings should therefore only be regarded as indicative, and not as conclusive evidence.

Our survey design did however allow for clear identification of lead foreign VCs (40) and domestic ones (93). Our findings indicate that portfolio companies that have a

foreign lead investor are more satisfied with several value-adding activities, and we identified no support activities in which domestic leads were predicted to perform better. As seen in Table 14, most of the support activities in which lead FVCs performed better were related to attracting FVC. One could speculate that this may be related to them having more experience with cross-border investing than the domestic ones. We are somewhat skeptical of this, considering that only five of the VCs that we drew our portfolio sample from did not have foreign investments. It would be interesting to study the specifics such as size, location, international experience, etc. of the foreign leads up against the domestic ones. In retrospect, we regret not asking for more details about PFCs foreign investors, fearing respondent fatigue and anonymity concerns.

Of the other categories, FVCs were predicted to outperform DVCs on functional advice, community building, and strategic alliances. One should not take this as a definitive rejection of the view that FVCs have troubles in supporting portfolio companies that are located outside of their country (Devigne et al., 2013). It may instead be a supporting model for the view that foreign and domestic venture capital syndicates perform better because they compliment each other in supporting their portfolio companies. In a sense, PFCs higher satisfaction with FVCs in these activities could be a result of the FVC leveraging the knowledge and experience of local co-investors.

There are also interesting non-findings. Although we did not specify our hypothesis 4 by activity, we did expect FVCs to outperform in terms of internationalization support, since Devigne et al. (2013) indicated that FVCs provide more specific resources for PFCs to grow internationally. We found no indication that portfolio companies with lead FVCs are more satisfied with internationalization support than those with domestic ones. Again, this may be related to similarities in the international experience of the domestic and foreign VCs.

We emphasize that we measured performance as a factor of satisfaction, so had we instead included or measured other metrics such as financial and market penetration performance, we might have seen different results. Lastly, we remind our readers of

the rather low pseudo R-square values of our standalone regression models of the effect of lead FVCs on support activity satisfaction. By that we mean that although we have significant results in favor of FVCs, this likely only explains a minor amount of the variance in PFCs satisfaction with the support they receive.

By asking our respondents about prior funding and foreign venture capital, and then introducing a category of support activities specifically dedicated to activities aimed at attracting it, our goal was to trigger some critical thinking in both VCs and their portfolio companies. We cannot say for certain that we achieved this goal, but what we can do is bring attention to the category on attracting FVC, with both the lowest average score on the PFC side, and also the largest difference between reported priority and performance (Table 14). Our category for attracting foreign venture capital included four activities, 1) mock pitching, 2) screening/DD, 3) term sheet understanding, 4) coaching in what FVCs are looking for, and 5) introductions to foreign venture capital firms. None of these categories had average performance scores exceeding 5="Somewhat positive". This does not by any means indicate that portfolio companies are dissatisfied with their VCs' support on this topic, as the percentage of PFCs reporting anything below "neither satisfied or dissatisfied" is between 7% and 13% in this category. Instead, it is a result of a higher proportion of PFCs answering "neither satisfied or dissatisfied" instead of "positive" or "very positive". Our respondent VCs largely reported these activities as having either high or essential priority, ranging from 40% to 78%, between the categories and 26 of 32 VCs were either very positive or positive to syndication with FVCs. Recognizing the unison positive attitude towards FVC participation and the superior financial performance of FVC/DVC syndication, it does appear that our respondent PFCs would highly appreciate more focus on this from their local investors.

6.3 Information Asymmetries and Investor Portals

From our data it is clear that investor portals have yet to be adopted as a common tool for sharing information, as only 22 out of 155 PFC reported using a dedicated portal for their current and potential investors.

The correlation analysis indicated that older PFCs share more often than younger ones. Additionally, the negative correlation between having FVC as lead and how often PFCs share updates could indicate that they share more updates with their investors because they have an FVC firm as lead. As the sample of PFC using such portals is not sufficient enough these are purely speculative statements. As stated by Dai et al. (2012), FVCs tend to invest in more transparent companies, in both later and larger rounds, in addition to older companies. It could therefore be wise for PFCs in search for FVC funding to look for ways to mitigate information asymmetry, and utilizing an investor portal could be one way to make this easier.

This is supported by our VC survey findings, as the respondents agreed the most with the use of an investor portal's ability as means to ease the due diligence process for FVCs and increase the probability of obtaining such FVC funding. It is worthy of a mention here that the majority of our surveyed VCs are in fact investing across borders, with the majority of them investing in 4 countries or more. One could therefore assume that they may base these opinions on their own experience from cross-border deals.

6.4 Limitations

As with any research project, there are practically always limitations, and ours is not the exception.

To begin, our data collection took place in the midst of the global COVID-19 pandemic, and this may have had unknown effects on the data. For example, emotional stress due to the many challenges of running a company through such an extraordinary social calamity may have temporarily affected the perceptions and priorities of both founders and investors.

Although we cannot know for certain since the non-respondent side of the population is not known, we need to acknowledge the risk of representativeness and self-selection bias in the survey (Glen, 2017). For example, we speculate that the response rate may have been higher for founders of relatively successful start-ups. The start-up game is an emotional one, and the survey may have triggered strong negative emotions with

founders of start-ups that are struggling financially or that are in conflict with investors, leading to a higher chance of non-response or non-completion. Another limitation is that we did not ask the VCs to rate their own satisfaction with their support activities, but instead their level of priority. This means that one should reflect on these differences between founders' reported satisfaction and investors' reported priority more as indications of where to focus more in-depth future research.

Initially, we wanted to be able to study the direct relationship between founders' reported satisfaction with value-adding support activities and the related priority reported by their investors. However, since the surveys were anonymized we are only able to study these relationships as aggregated values for the whole sample instead of on the individual founder-investor differences (or agreement) of satisfaction and priority.

Our data collection highly relied on the data available on the portfolio page of European VCs' webpages, there may be a limitation here that data could be outdated, and that VCs have only showcased a selection of portfolio companies. The external sources used for obtaining information on which VC firms existed in Europe were flawed as many such sources reported several PE firms to be VCs. This may have resulted in PE portfolio companies without VC investment despite our precautionary measures with the survey.

Some variables would have benefited from being a drag function or ability to write a number instead of categorical selection (i.e. amount of funding). Additionally, we only asked the PFCs to provide information on whether FVC was lead or not, while we should also have included if this FVC was their main source of strategic support. As for the type of VC, some PFCs may have been unaware of the fact that their VC investor was a hybrid GVC/TVC and reported it as a solely TVC or GVC firm. Additionally, to ensure a higher quality of control variables we should have included more specific questions about the portfolio companies (i.e. industry, latest funding stage, etc.).

6.5 Theoretical implications and Further Research

Our findings, scope, and limitations offer several opportunities for future research.

First of all, we found that PFCs and VCs, including governmentally owned VCs, are highly positive towards FVC funding. Future studies could extend on this topic by studying the attitudes of other stakeholders, such as policy-makers. This would also introduce the possibility of comparing attitudes, perceptions (and resulting policy) of policy-makers, with that of the local ecosystems they are supposed to serve, and with that of the foreign investors that the ecosystems seek. Furthermore, we would welcome research on the trends in rate of, and implications of, portfolio company relocation post FVC-funding. Considering our findings on Finnish PFCs, it would be particularly interesting to see more narrow-scoped research on possible causes and remedies. Case studies on the efficacy of publicly subsidized networks, events, advisors, and so on, aimed at strengthening the foreign VC-readiness of local startups could also be valuable.

Regarding value-adding support, the results indicate that VCs have improved their performance. The current literature would benefit from a deeper study on the driving factors of value-adding performance for all types of VCs and syndicates, also in terms of other performance metrics than PFC satisfaction. Building on this, more research would be beneficial to understand the impact of founders' experience on the need, or desire, for VC support activities. As previously mentioned, a dataset that enables the study of the differences in FVCs and DVCs such as size, location, international experience, etc. up against differences in value-adding performance would be valuable. One could go even further and study optimal support and portfolio management strategies in FVC/DVC portfolios with recent data given the technological advancements we are experiencing. Regarding the aforementioned likelihood of a low explanatory power of having a foreign lead VC compared to a domestic ones, conclusive research on what factors matter more would be of great value.

Our thesis serves as an introductory opener for research on the effect of technological tools such as investor portals as a mechanism for information asymmetry mitigation.

We strongly recommend further academic focus on understanding how technological developments impact cross-border venture capital, which historically have been burdened by information asymmetries.

Lastly, as noted, our foreign venture capital statistics may be overrepresented by cross-border funding within the boundaries of Europe. Research on the impact of different degrees of foreignness in cross-border venture capital would be relevant for all topics covered in this paper. Especially, whether these differences have narrowed over time with technological and cultural changes in recent years, and especially post-COVID-19.

6.6 Practical Implications

Our study has a number of practical implications. First, we found indications of an apparent Finnish funding gap, and this should be valuable information to a number of stakeholders. Finnish policy-makers, founders, investors and advisors should consider whether increased efforts in attracting foreign VC funding of a more international character can close the gap. In light of this, looking at our findings regarding performance on support activities related to attracting FVC, we encourage European VCs to take note of this as an opportunity to go from adequate to awesome. In addition, since most of the VCs we surveyed are doing deals across borders, having their foreign, intra-European, peers focus on facilitating a smooth entrance into their home countries should be welcomed.

We also encourage European GVCs, public Funds of Funds, and other stakeholder institutions to consider how they might strengthen their contribution in this particular area. As previously mentioned it does not appear to be the norm that PFCs are required to relocate after partnering with FVCs. It should also be noted from the data collected in our VC survey, that we have no indication of anything but a positive stance towards attracting foreign venture capital among VCs wholly or partly owned by a government. In fact, 8 out of 12 whole or part GVCs reported a “very positive” stance. Should there be any worry among other relevant public institutions about talent and taxable revenues

being moved out of the country, we argue that they should focus on increasing incentives to stay instead of bolstering the door.

There are indications in our study that the use of investor portals is perceived by VCs as mitigating the challenges associated with due diligence and portfolio monitoring across borders. The general opinion by the 32 VCs surveyed was that the use of an investor portal can increase the probability of obtaining foreign venture capital funding. In a practical sense, what in our opinion is most important is that companies understand and acknowledge how information asymmetries may cause friction in the communication between themselves, their investors, and potential investors. Then they will have a better prerequisite to make informed decisions on how to leverage technological tools such as investor portals to mitigate these asymmetries.

7.0 Conclusion

The aim of this study was to explore portfolio companies' and different types of VC firm's attitude to foreign VC funding, and to extend the literature on support activities by 1) comparing performance between foreign lead VCs and domestic ones, and 2) introducing a new category of support activities specifically aimed at attracting foreign VC. Additionally, we intended to shed light on investor portals, a recent entrepreneurial attempt at information asymmetry mitigation. The study built on two questionnaires resulting in a fresh set of data from 155 portfolio companies and 32 venture capital firms from 13 European countries. We found a distinctly positive attitude to foreign VC investors both in portfolio companies and all types of venture capital firms. Our results also indicate that portfolio companies have positive experiences with foreign VC investors in that they are more welcoming of it after having received it. For one country, Finland, we found indications of a funding gap in the sense that Finnish portfolio companies were exceptionally welcoming to foreign funding whilst at the same time reporting the highest percentage of an unsuccessful funding round. Furthermore, we found indicative evidence that venture capital firms have improved their performance in value-adding support performance in the last decade or so. We also found a strong indication that foreign lead VCs outperform lead domestic VCs on some, but not most, support activities.

Lastly, we provided fresh statistics on the application and perceptions of investor portals as a mitigating mechanism for information asymmetries.

In sum, this thesis and findings should be valuable to those who, like us, want to contribute to continued innovation, cross-border cooperation, and growth in local entrepreneurial ecosystems.

Disclaimer:

One of the authors, Alexander Iversen, is employed at an investor portal provider. His employment started after commencing the thesis project, and at no point has there been any involvement from this employer on the analysis, or discussion.

8.0 References

- Alperovych, Y., Hübner, G. & Lobet, F. (2015). *How does governmental versus private venture capital backing affect a firm's efficiency? Evidence from Belgium*. *Journal of Business Venture*, 30, 508–525.
- Amornsiripanitch, N., Gompers, P. & Xuan, Y. (2016). *More than money: venture capitalists on boards*. Unpublished working paper. Harvard Business School.
- Andrieu, G. & Groh, A.P. (2012). *Entrepreneurs' finance choice between independent and bank-affiliated venture capital firms*. *Journal of Corporate Finance* (18), 1143–1167. ^[1] _[SEP]
- Berg-Utby, T., Sørheim, R. & Widding, Ø.L. (2006). *Venture capital funds: Do they meet the expectations of portfolio firms?* *Venture Capital Journal*, 9(1), 23-41
- Bertoni, F. & Groh, A.P. (2014). *Cross-border investments and venture capital exits in Europe*. *Corporate Governance: An International Review* 22(2), 84–99.
- Bertoni, F. & Tykvová, T. (2015). *Does governmental venture capital spur invention and innovation? Evidence from young European biotech companies*. *Res. Policy* 44, 925–935.
- Bradley, W. A., Duruflé, G., Hellmann, T. F. & Wilson, K. E. (2019). *Cross-border venture capital investments: what is the role of public policy?* *Journal of Risk and Financial Management*, 12(3), 112.
- Brander, J. A., Du, Q. & Hellmann, T. (2015). *The Effects of Government-Sponsored*

- Venture Capital: International Evidence*. *Review of Finance*, 19(2), 571–618.
- Buchner, A., Espenlaub, S., Khurshed, A. & Mohamed, A. (2018). *Cross-border venture capital investments: The impact of foreignness on returns*. *Journal of International Business Studies* 49, 575–604.
- Chahine, S., Saade, S. & Goergen, M. (2018). *Foreign business activities, foreignness of the VC syndicate, and IPO value*. *Journal of Entrepreneurship Theory and Practice*, 43(5), 947-973.
- Chan, Y.S. (1983). *On the positive role of financial intermediation in allocation of venture capital in a market with imperfect information*. *Journal of Finance* 38, 1543–1568.
- Chemmanur, T.J., Hull, T.J. & Krishnan, K. (2016). *Do local and international venture capitalists play well together? The complementarity of local and international venture capitalists*. *Journal of Business Venturing* 31(5), 573–594.
- Copenhagen Economics. (2019). *The role of Venture Capital for Economic Growth in The Nordic Region*. Available at: <https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/3/473/1549623909/rising-north-report.pdf> (Retrieved 30.06.2021)
- Cumming, D. & Dai, N. (2010). *Local bias in venture capital investments*. *Journal of Empirical Finance* 17(3), 362–380.
- Cumming, D., Fleming, G. & Schwienbacher, A. (2009). *Corporate relocation in venture capital finance*. *Journal of Entrepreneurship Theory and Practice* 33(5), 1121–1155.
- Cumming, D.J., MacIntosh, J., 2007. *Mutual funds that invest in private equity? An analysis of labour sponsored investment funds*. *Cambridge Journal of Economics* (31), 445–487.
- Cumming, D.J., Grilli, L. & Murtinu, S. (2014). *Governmental and independent venture capital investments in Europe: A firm-level performance analysis*. *Journal of Corporate Finance* 42, 439–459.
- Cumming, D., Knill, A. & Syvrud, K. (2016). *Do international investors enhance private firm value? Evidence from venture capital*. *Journal of International Business Studies*, 47(3), 347-373
- Dai, N., Jo, H. & Kassicieh, S. (2012). *Cross-border venture capital investments in*

- Asia: selection and exit performance*. Journal of Business Venturing 27(6), 666–684.
- Deloitte. (2006). *Global trends in venture capital 2006 survey*. (New York: Deloitte Touche Thomatsu).
- Danish Venture Capital & Private Equity Association, Finnish Venture Capital Association, Swedish Venture Capital & Private Equity Association, and Norwegian Venture Capital & Private Equity Association (n.d.). nordics.vc. Available at: https://nordics.vc/images/2019/03/FVCA_Report_pdf.pdf (Retrieved: 03.05.2021)
- Denis, D.J. (2004). *Entrepreneurial finance: an overview of the issues and evidence*. Journal of Corporate Finance 10, 301–326.
- Devigne, D., Manigart, S. & Wright, M. (2016). *Escalation of commitment in venture capital decision making: differentiating between domestic and international investors*. Journal of Business Venturing 31(3), 253–271.
- Devigne, D., Vanacker, T., Manigart, S. & Paeleman, I. (2013). *The Role of Domestic and Cross-Border Venture Capital Investors in the Growth of Portfolio Companies*. Small Business Economics, 40(3), 553-573
- Dolvin, S.D. (2005). *Market structure, changing incentives, and underwriter certification*. Journal of Financial Research 28(3), 403-419.
- Espenlaub, S., Arif, K. & Abdulkadir, M. (2015). *Venture capital exits in domestic and cross-border investments*. Journal of Banking & Finance 53, 215-232
- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). SAGE Publications Ltd.
- Fritsch, M., & Schilder, D. (2008). *Does venture capital investment really require spatial proximity? An empirical investigation*. Environment and Planning A 40(9), 2114–2131.
- Glen, S. (2017). *Self-Selection Bias*. Available at: <https://www.statisticshowto.com/self-selection-bias/> (Retrieved 29.05.2021)
- Gompers, P. A., Gornall, W., Kaplan, S. N. & Strebulaev, I. A. (2020). *How do venture capitalists make decisions?* Journal of Financial Economics, 135(1), 169-190.
- Gompers, P.A., Lerner, J., 2004. *The Venture Capital Cycle* (2nd). MIT Press, Cambridge.

- Gompers, P., Lerner, J. & Scharfstein, D. (2005). *Entrepreneurial Spawning: Public Corporations and the Genesis of New Ventures, 1986 to 1999*. Journal of Finance 60(2), 577-614.
- Grilli, L. & Murtinu, S. (2014). *Government, venture capital and the growth of European high-tech entrepreneurial firms*. Res. Policy 43, 1523–1543.
- Guerini, M. & Quas, A. (2014). *Governmental venture capital in Europe: Screening and certification*. Journal of Business Venturing 31, 175–195.
- Hellmann, T. & Puri, M. (2002). *Venture capital and the professionalization of start-up firms: empirical evidence*. J. Financ. 57 (1), 169–197 .
- Hsu, D.H. (2004). *What do entrepreneurs pay for venture capital affiliation?* Journal of Finance 59(4), 1805–1844.
- Huang, X., Kenney, M. & Patton, D. (2015). *Responding to uncertainty: syndication partner choice by foreign venture capital firms in China*. Journal of Venture Capital 17(3), 215–235.
- Humphery-Jenner, M. & Suchard, J.-A. (2013). *Foreign VCs and venture success: evidence from China*. Journal of Corporate Finance 21, 16–35.
- IBM. (2014a). *Bivariate Correlations*. Available at: <https://www.ibm.com/docs/en/spss-statistics/23.0.0?topic=option-bivariate-correlations> (Retrieved 15.06.2021)
- IBM. (2014b). *Test of Parallel Lines*. Available at: <https://www.ibm.com/docs/en/spss-statistics/23.0.0?topic=model-test-parallel-lines> (Retrieved: 20.06.2021)
- Jain, B.A. & Kini, O. (1995). *Venture Capitalist Participation and the Post-Issue Operating Performance of IPO Firms*. Managerial and Decision Economics 16, 593-606.
- Kaplan, S. N. & Strömberg, P. (2001). *Venture capitals as principals: contracting, screening, and monitoring*. American Economic Review, 91 (2), 426-430.
- Knockaert, M., Lockett, A., Clarysse, B. & Wright, M. (2005). *Do human capital and fund characteristics drive follow-up behaviour of early stage high-tech VCs?* International Journal of Technology Management, 34(1-2), 7-27.
- Leleux, B., & Surlemont, B. (2003). *Public versus private venture capital: Seeding*

- or crowding out? A pan-European analysis*. Journal of Business Venturing, 18(1), 81–104.
- Lerner, J. (1995). *Venture capitalists and the oversight of private firms*. Journal of Finance 50 (1), 301–318 .
- Li, Y., Vertinsky, I. & Li, J. (2014). *National distances, international experience, and venture capital investment performance*. Journal of Business Venturing 29(4), 471–489.
- Lu, Q. & Hwang, P. (2010). *The impact of liability of foreignness on international venture capital firms in Singapore*. Asia Pacific Journal of Management 27(1), 81–97.
- Luukkonen, T., Deschryvere, M. & Bertoni, F. (2013). *The value added by government venture capital funds compared with independent venture capital funds*. Technovation 33(4-5), 154-162.
- Mäkelä, M.M. & Maula, M.V.J. (2006). *Interorganizational commitment in syndicated cross-border venture capital investments*. Entrepreneurship Theory and Practice 30(2), 273–298.
- Mäkelä, M.M. & Maula, M.V.J. (2008). *Attracting cross-border venture capital: the role of a local investor*. Entrepreneurship & Regional Development, 20(3), 237-257.
- Manigart, S., & Wright, M. 2013. *Reassessing the relationships between private equity investors and their portfolio companies*. Small Business Economic (40), 449–479.
- Megginson, W. L. & Weiss K. A. (1991). *Venture Capitalist Certification in Initial Public Offerings*. The Journal of Finance 46(3), 879-903.
- Moore, C.B., Payne, T.G., Bell, G.R. & Davis, J.L. (2015). *Institutional Distance and Cross-Border Venture Capital Investment Flows*. ^[1]_[SEP]Journal of Small Business Management, 53(2), 482–500.
- Nahata, R., Hazarika, S. & Tandon, K. (2014). *Success in global venture capital investing: do institutional and cultural differences matter?* Journal of Financial and Quantitative Analysis 49(4), 1039–1070.
- NSD. (n.d.). *How to conduct a project without processing personal information*.

- Available at: <https://www.nsd.no/personverntjenester/oppslagsverk-for-personvern-i-forskning/hvordan-gjennomfore-et-prosjekt-uten-a-behandle-personopplysninger/> (Retrieved: 11.01.2021)
- OECD (n.d.). Venture Capital Investments. Available at: https://stats.oecd.org/Index.aspx?DataSetCode=VC_INVEST (Retrieved 29.06.2021).
- Pruthi, S., Wright, M. & 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.
- Reid, G.C. (1999). *The Application of Principal-Agent Methods to Investor-Investee Relations in the UK Venture Capital Industry.* Venture Capital: An International Journal of Entrepreneurial Finance 1(4), 285-302.
- Rudden, J. (2020). Leading countries for venture capital (VC) fundraising in Europe from 2017 to 2019. Available at: <https://www.statista.com/statistics/879261/value-of-venture-capital-fundraising-in-europe-by-country/> (Retrieved 10.01.2021)
- Sahlman, W. 1990. *The structure and governance of venture capital organizations.* Journal of Financial Economics (27), 473–521.
- Sapienza, H., Manigart, S. & Vermeir, W. (1996). *Venture capitalist governance and value-added in four countries.* Journal of Business Venturing 11(6), 439–470.
- Schefczyk, M. & Gerpott, T. J. (2001). *Management Support for Portfolio Companies of Venture Capital Firms: An Empirical Study of German Venture Capital Investments.* British Journal of Management, 12(3), 201-216.
- Schertler, A. & Tykvová, T. (2012). *What lures cross-border venture capital inflows?* Journal of International Money and Finance 31(6), 1777–1799.
- Sørensen, M. (2007). *How smart is smart money? A two-sided matching model of venture capital.* Journal of Finance 62(6), 2725–2762.
- Sörenson, O. & Stuart, T.E. (2001). *Syndication networks and the spatial distribution of venture capital investments.* American Journal of Sociology 106(6), 1546–1588.
- Straits, B.C. & Singleton, R.A. (2018). *Social Research: Approaches and Fundamentals* (6th). Oxford University Press.
- Strömberg, P. (2009). *The economic and social impact of private equity in Europe:*

summary of research findings. Available at SSRN 1429322.

- Tollerud, H. (2021). The competition about investing in the best startups are increasing: This is how you make venture into more than just money. Shifter. <https://shifter.no/kommentar/konkurransen-om-a-investere-i-de-beste-selskapene-oket-slik-gjor-man-venture-til-mer-enn-bare-penger/206319>
- Wang, L. & Wang, S. (2011). *Cross-border venture capital performance: evidence from China*. Pacific-Basin Finance Journal 19(1), 71–97.
- Wright, M., & Robbie, K. (1998). *Venture capital and private equity: A review and synthesis*. Journal of Business Finance and Accounting (25), 521–570.
- Wright, M., Lockett, A. & Pruthi, S. (2002). *Internationalization of western venture capitalists into emerging markets: risk assessment and information in India*. Small Business Economics 19(1), 13–29.
- Wuebker, R., Kraeusl, R. & Schulze, W. (2015). *Is venture capital really a local business? Evidence from US cross-border investment*. Corporate Finance: Capital Structure & Payout Policies Journal (2015).

9.0 Appendix