

The Board of Directors and the lifecycle of startup companies

Aino Hakkarainen
Milla Kumpulainen
Malin Nordström
Osku Suojanen

Table of contents

1. Introduction	3
2. Board of directors - why does the board exist to begin with?	3
3. Key differences between startup boards and corporate boards	4
3.1 <i>Corporate boards</i>	4
3.2 <i>Startup boards</i>	5
4. The startup lifecycle and evolving boards	6
4.1.1. <i>Early-stage characteristics</i>	6
4.1.2. <i>Early-stage board size, composition and activity</i>	7
4.1.3. <i>Angel investors as early-stage board members</i>	8
4.2.1. <i>Growth stage characteristics</i>	9
4.2.2. <i>Growth stage board size, composition, and activity</i>	9
4.3.1. <i>Late-stage characteristics</i>	10
4.3.2. <i>Late-stage board size, composition, and activity</i>	11
5. Venture capitalists and CEO replacements	12
6. Risks, investor relations and agency issues	14
6.1. <i>The role of board in risk management</i>	14
6.2. <i>Agency issues typical to startups with external funding</i>	15
7. Conclusions	17
References	18

1. Introduction

The board of directors is an essential corporate governance institution which usually acts as one of the most central parts of the company's body. Most organizations are governed by one, even when not required to by law. However, some countries do require this by law: for example, in Finland every company must have a board of directors (Chapter 6, 1§, Finnish limited company law). The board is tasked with highly important business decisions, such as CEO appointments and dismissals. (Roe, 2004)

Finland is currently holding one of the leading startup ecosystems, and the role of startups as contributors to the business world is continuously growing. This makes examining startup governance structures both relevant and timely. Startup boards appear to have different structural choices compared to corporate boards, which leaves plenty of room for reviewing their characteristics and practical implications in more detail. For these reasons, we decided to examine the evolving role of the board of directors along the lifecycle of startup companies.

This report is constructed as follows; First, we aim to determine the most notable differences between startup boards and corporate boards and illustrate what kinds of attributes can be seen as characteristic for startup boards. Second, we examine the changes in the board over the lifecycle of startup companies. The emphasis of our analysis is on differences in size, composition, activity, and independence. Thirdly, we provide some insights into board-initiated CEO replacements in VC-backed firms. Lastly, we discuss risk management in startups especially from the investors' perspective and provide an overview on the unique agency issues prominent in startup governance. To bring some real-life context into our analysis, we have used two interviews as sources of information in this report. Both interviewees are kept anonymous to maintain confidentiality.

2. Board of directors - why does the board exist to begin with?

The reason for the existence of boards of directors has been extensively researched. Hermalin and Weisbach (2003) suggest two theories as to why boards are prevalent in companies, and why they are considered to have such significant importance. One explanation for the existence of the board is regulation. As different incorporation laws and stock exchange governance

require boards, potentially with specific requirements, firms have no choice but to establish a board of directors. However, this is not considered to be the best reasoning. Boards exist in varying legislative areas, as well as different types of organizations, such as nonprofits, which may not have any requirements for establishing boards. Additionally, governing boards have existed since before any such regulations were in place (Hermalin and Weisbach, 2003). An alternative and perhaps more plausible explanation for the existence of the board of directors is that boards serve as a solution to agency problems which are present in organizations of all sizes. A typical way to solve agency issues is to align the interests of management with varying incentives, such as different compensation packages tied to company performance. Consequently, there is a need for a third party, who structures and provides these incentive plans, while representing the company owners and their interests. (Hermalin and Weisbach, 2003)

As mentioned before, the board of directors is in charge of multiple important decisions and tasks regarding the business of the company. Hiring and firing the CEO is often considered to be the task with the most importance and implications for the business, as the CEO is responsible for the company's operations and through that, performance as well. The compensation plans of executives are also in the hands of the board, as they are tasked with aligning the interests of owners and the management. In addition to essentially choosing who runs the company, the board often takes on a monitoring and overall governing role, where they oversee that the company is being run adequately and according to the standards set by the stakeholders. (Roe, 2004; Hermalin and Weisbach, 2003). Furthermore, the board of directors can act as an advising party to the company executives – this is especially present in startup companies, where the business is not thoroughly evolved yet.

3. Key differences between startup boards and corporate boards

3.1 Corporate boards

Board of directors seem to be larger in corporate companies than in smaller growth companies. In the corporate world, the size of the board is usually around 12 members, however this number varies between countries, for example (De Andres et al., 2005). The size of the board is a well-researched subject and there are some assumptions related to the size. For instance, Jensen (1993) and Lipton and Lorch (1992) suggest that larger boards can be less effective than

a smaller one. This is based on idea that the agency problems increase, boards become more symbolic and less part of the management process when the size of the board gets too big. (Hermalin and Weisbach, 2003). In corporate boards, the insider-outsider ratio has been found to be around 30% and 70%, respectively (De Andres et al., 2005).

Typically, a corporate board has its emphasis on monitoring the performance of company management (Ikäheimo, 2021). This can be done through various key performance indicators for example, and the board has the power to also affect the performance of executives by adjusting their compensation packages and the metrics involved in the evaluation. We could, however, argue that corporate boards potentially face more information asymmetry and conflicts of interest compared to startups, as company owners can have drastically different interests that need to be aligned accordingly.

3.2 Startup boards

According to a study conducted on venture capital -backed high-tech firms, the average board size in these companies was 5.6 members, which is around half the size of the board in a typical large company. The number of board members was found to increase on average from 3 to 4.8 with the first investment of venture capital. Typically, the board was composed of 1.7 inside members, 2.3 venture capital principals, 0.3 venture capital staff, and 1.3 other outside members (Rosenstein et al., 1993). The boards of venture capital-backed firms have also been found to have a low insider membership (Fried et al., 1998).

In venture capital backed companies, the board of directors is found to be more involved in both strategy formation and evaluation, in contrast to boards where members are not equally incentivized by large ownership stakes. The reasoning for such pronounced involvement is related to agency theory, which we will discuss further in an upcoming section in the report, as well as institutional theory. Regarding board structure, venture capitalists' high involvement in strategy decisions is considered to be caused by the smaller board size, as well as the lower insider representation. (Fried et al., 1998)

In general, the board in a startup concentrates on advising and helping the managers. For a company still searching for a business model and product market fit, the board assists in making decisions of stopping and starting new projects, however the final call is on the founder. When the start-up already has a clear vision, the board focuses more on guiding the founder in scaling

up the business. Because of this advising role of the board, it is most valuable when board members bring in their knowledge and network. (Ikäheimo, 2021). This is why it is useful for the board members to have varying professional backgrounds, as well as experience in entrepreneurship to fully understand the environment they are operating in.

4. The startup lifecycle and evolving boards

The startup lifecycle can be roughly divided into three separate stages: early stage, growth stage and late stage (Silicon Valley Bank), or the bootstrapping stage, seed stage, and creation stage (Kesim and Salamzadeh, 2015), respectively. The division into three stages is not exhaustive but rather a set of umbrella terms for a variety of smaller steps along the startup lifecycle path. The three stages often differ from each other extensively, which also suggests changing requirements in terms of the company's management and board of directors. Next, we will discuss the three stages of the startup lifecycle from a governance perspective and aim to establish an understanding on how the board of directors are nominated in startup companies, and what are the major differences in board dynamics between the three stages. We will draw connections between what has been discussed in prior literature and bring the matter into real-life context by presenting answers we received from interviews conducted for the purpose of this work. The other interviewee is a CEO and co-founder of a pre-seed startup company, and the other is the current CEO of Startup Säätiö.

4.1.1. Early-stage characteristics

The early-stage phase of a startup often involves significant individual efforts from the founder(s), and contributions from friends and family members, as well as angel investors (Kesim and Salamzadeh, 2015). The capital at hand is usually low at the beginning, and the scope for potential funding is relatively narrow. On top of financing provided by the founders themselves as well as their closest circle, angel investors often hold a critical role as financial contributors in the early-stage phase and therefore have significant interest in how the company is run and might demand contribution to the firm's governance as well. For further clarification, the term "*angel investor*" is used to refer to high net-worth individuals who actively seek investment opportunities in the venture landscape and are often entrepreneurs themselves as well (Morrisette, 2007). Because the venture landscape is characterized by a high rate of failure and only a small part of startups eventually make their ways into profitable companies,

and even smaller part of them have the potential to turn into “unicorns” - according to AngelList (2021), 2.5 % of a seed-stage VC-backed firms have the potential to achieve this status - business angels often seek to allocate capital to multiple different ventures in the attempt to create diversified startup portfolios (Ikäheimo, 2021). However, it is noteworthy that the value of angel investors is rooted in much more than just the money they bring into the company. In fact, money has been placed at the 6th place in a ranking regarding the most relevant contributions by business angels to startup companies, while the most important contribution was found to be the angels’ direct connections to potential customers (Ikäheimo, 2021). This insinuates that finding customers can oftentimes be seen as one of the biggest challenges for start-up companies, and good networks play a crucial part in the success of the following growth phases.

4.1.2. Early-stage board size, composition and activity

The board of directors of a startup company navigating the early-stage phase has been shown to consist of 3.6 members on average, and most of the control is usually in the hands of entrepreneurs themselves and possibly other executives (Ewens and Malenko, 2022). This finding derived from prior literature seems to be aligned with the insights we got from the interviews we conducted with a co-founder and CEO of an early-stage startup company (interviewee I) and the CEO of Startup Säätiö (interviewee II). We asked both interviewees to share some insights from their experience on questions about the board size, composition, activity levels as well as different roles held by board members during the early-stage phase of a startup.

According to interviewee I, the current board of their pre-seed financed startup company consists of four (4) members, including the founder and some advisors. The advisory board members serve as unofficial advisors supporting the CEO and the operations team. The underlying idea of a small-sized board is to keep the board structure simple enough and foster an environment which allows for the operative team to perform their tasks well and drive the company forward in their mission. Hence, the purpose of the board is to help the team thrive and not to increase unnecessary bureaucracy. The activity level of the board of directors remains relatively small for the same reasons. However, the interviewee also explained that they expect the board structure to be adjusted and the board’s activity level to increase as new investors join the company in the future. For instance, as the company grows and the investor-

base gets more diverse, it is likely that the board will be completely reformed, and that there will be a separate advisory board composed of external advisors who bring their own experience and expertise to the table.

Interviewee II, the CEO of Startup Säätiö, shared similar insights regarding board size, composition, activity and the roles held by board members in different phases of the startup lifecycle. According to the interviewee, the board usually consists of founders only at the beginning. If the startup company has angel investors on board, some of them might also insist on having a seat on the board. However, this does not always apply, and especially young companies without angel investors or other major external funding entities often just have the obligatory annual board meetings and maintain focus on operative execution instead of additional board work. The interviewee says that the board's activity and annual planning tend to increase quickly as the company starts to retain funding from external sources. Hence, board work appears to be more short-sighted and reactive during the first stages of the startup lifecycle.

4.1.3. Angel investors as early-stage board members

As mentioned in the beginning of this section, the perceived utility attained from angel investors can be much more than just essential funding - the findings from the interview with interviewee I were aligned with this argument as well. What came forth during the interview was that the most relevant attributes of angel investors were related to their experience and knowledge, networks and the ability to help the company overcome some of the early-stage problems the company might face. For example, angel investors can bring in their expertise about specific markets and product segments, and/or help the company create useful networks through which the company may attract both customers and important resources such as talented personnel.

However, interviewee II emphasizes the importance of initiative from the entrepreneur in choosing the right angel investors on board and then communicating and being active to ask for their help in the areas they were picked in the first place. The angel investors are to some extent in the same boat as the entrepreneur, which further incentivizes them to help with problems that arise along the way. It is therefore crucial to identify the right people who are willing to go above and beyond to help the company go forward and succeed. Interviewee I refer to this as "*sweat equity*" which means that the investor is not afraid of getting their own

hands dirty when they have a significant ownership stake in the company and an opportunity for high pay-off at the end of the road ahead.

4.2.1. Growth stage characteristics

The second phase in the typical startup lifecycle is the growth stage. Some of the main characteristics associated with the phase are teamwork, prototyping and product development, and entries into new markets as well as firm valuation. During this phase, firm management is often seeking different kinds of support mechanisms such as startup accelerators or incubators (Kesim and Salamzadeh, 2015). The amount of investment at this stage is already higher, and the company might seek venture capital investments. Venture capital can be classified as an independent and professionally managed pool of capital typically focused on private equity and invested into young, high-growth companies characterized by high uncertainty and associated risk (Gompers and Lerner, 2001). Venture capital funds typically go through a cycle; the cycle starts from fundraising, and moves on to scouting for investment opportunities, and later monitoring the venture companies and adding value to them by giving meaningful guidance for the founders and executives. Lastly, the venture capitalists seek lucrative deals to exit the companies, and as they return the equity to the investors – the cycle starts from scratch again.

4.2.2. Growth stage board size, composition, and activity

Venture capitalists (VCs) often make substantial investments in new ventures during the growth phase, and consequently they are usually involved in the company's strategy and daily work as advising and supporting entities. The support and help provided by VCs is often well reflected in their role on firms' board of directors (Gompers and Lerner, 2001). Board size has been shown to increase from 3 to 4.8 members with the first investment of venture capital. (Rosenstein et al., 1993) The board composition starts to change as more seats on the board are granted.

According to interviewee II, the seat on the board usually goes to the "lead investor" with the largest financial contribution and in charge of the negotiations in case there are multiple different VCs involved in the same round. In addition, there might be seats for "board observers" as well, i.e. board members who have the right to attend board meetings and speak in them. The interviewee specifies that external board members in VC-backed startups are usually brought on board during the first round of financing. According to interviewee II, board

activity might fluctuate significantly depending on the unique situation of the startup. If the company has a clear growth strategy, and growth occurs in a predetermined pace, board meetings are not held as frequently. Instead, the VC board members might have brief phone calls with the people in the operative side of the company. On the contrary, if the direction of the company is not as clear, board meetings might be arranged on a regular basis. However, as previously mentioned, the board might also contribute via different mechanisms, and board activity should not be measured by the number of meetings only - VCs are often involved in outside meetings and in the operative side as well. In fact, the interviewee emphasizes that *the most remarkable aspect in having VCs on a startup board is related to their networks and advisory*. VCs can provide help in a variety of issues e.g., recruitment, bottleneck problems, introductions to new investors, and so on. The knowledge VCs may bring to the table can be seen as highly valuable to startups due to the prior experience VCs have from similar issues. Issues in different startups often resemble each other in various ways, and VCs might have seen many different solutions to them and hence established an understanding of best practices in certain situations.

4.3.1. Late-stage characteristics

A startup in its late stage can be described as follows: the company has already achieved significant growth, has hired a complete team including a separate sales team, and has managed to go beyond series A funding (Silicon Valley Bank, 2020). During this phase, the company's operations start to resemble that of a mature corporation, with a few different nuances related to e.g., scalability and goals. The amount of investment is generally higher and could comprise of both corporate finance and venture capital (Kawamorita and Salamzadeh, 2015). A clear consensus between a startup in its more mature stage and a corporation has not been established in literature, and some scholars have even argued that there is no such thing as a late-stage startup. This idea has been presented by scholars such as Kawamorita and Salamzadeh (2015) who refer to the last stage of a startup as the "creation stage", which is described to occur already when the company enters the market, hires its first employees, and sells its first products. This would indicate a much shorter startup lifecycle compared to our viewpoint. It has even been argued that a startup company completing the creation stage would essentially lead to the end of entrepreneurship and should be seen more as a regular firm or an organization at this point (Kawamorita and Salamzadeh, 2015). However, we do not see these two as mutually exclusive concepts. Perhaps the underlying idea of this argument is that at this point

the company would have established solid enough operations and organizational structures to survive without the entrepreneur involved in the company's daily operations. Nonetheless, we argue that because startup companies clearly seek rapid growth and expansion even in the later phases, and it is often within their mission statement to eventually go public, it is relevant to include the late stage in examining the role of board of directors in a startup company.

4.3.2. Late-stage board size, composition, and activity

At the start of the late stage the board is usually comprised of 4.5 members and can be expected to grow to a fully fledged board of a mature company over time. At the beginning of this stage, VC investors often occupy roughly half of the seats (45%), executives most of the other half (40%), independent directors being the smallest group (15%) and existing in some companies only (Ewens and Nadya, 2021). Along further rounds of funding (from Series B and C), new investors are likely to join the board, and the board size in general grows (Ewens and Nadya, 2021). More specifically, it appears that during the next 10 years following the initial funding rounds, both the board size and the share of independent directors grow, while executives step out and VC investors maintain their slice of the pie. This effect is more pronounced for firms that manage to successfully exit via an IPO mainly due to the pressure, regulation and scrutiny brought on by public markets. For such companies the board size seems to be set at 7 members on average, of which independent directors make up a third while VCs increase slightly to half of the board and executives drop to a fifth.

It is noteworthy that for example Rosenstein et al. (1993) have found in their study that CEOs do not necessarily rate the advice originating from venture capitalists any higher than advice given by any other board members. Additionally, the scholars emphasize that although venture capitalists are mostly recognized to incubate start-ups and nurture the hatchlings, they may also be so called "vulture" capitalists who take advantage of fledgling companies. Thus, the high percentage of VCs as directors is mostly about control at this later stage, and their input into the development of the company becomes less significant.

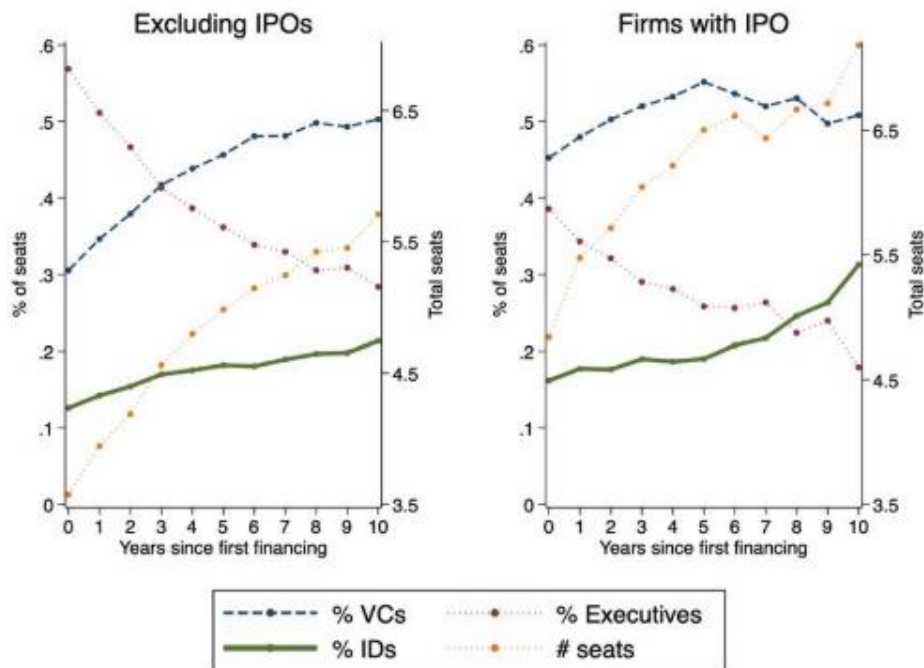


Figure 1

It seems, that the dominant theme during this stage is the trade of control between the independent directors and founder directors. As the company starts to pivot towards an IPO, it seems necessary and logical for the board to be recomposed for it to reflect the needs of a more diverse shareholder base brought on by the IPO process. During this stage, the company grows rapidly and the need for more formal board work and internal processes increases (Tzabbar and Margolis, 2017). The company might have many internal processes in place which have previously been handled in a more casual manner e.g., HR and financial reporting, and a more established board can provide means to increase formality and fix any deficiencies on the board in terms of knowledge and expertise.

5. Venture capitalists and CEO replacements

In history, there have been many cases where venture capitalists have had large effects on the composition of the board via CEO replacements, for example. The effects might be seen as either negative or positive, depending on the underlying intentions of the actions and the perspective of the observer. Wasserman (2017) has brought forth an interesting case in his

¹ Ewens and Nadya, 2021

article: An enterprise application management company called *Wily Technology* was founded by Lew Cirne in 1997, and the company was eventually faced by a difficult situation in which a venture capitalist managed to “snatch” three of the five board seats after their large VC investment in the company. This happened only two years after the firm was founded. When the firm raised the next round of financing, the board ruled up to 60 % by venture capitalist decided that the firm needed a new CEO with stronger business skills compared to the founder. This serves as an illustrating real-life example of a CEO replacement initiated by the board of directors due to new investors.

Usually after the first stage of the startup life cycle, investors are keen to occupy seats on the board. They can either nominate themselves on the board or they can nominate other people to represent them and pursue investors' interests. (Ewens & Marx 2015). Investors having seats or representatives on the board is a way to gain control over the firm and be able to proceed to potential executive replacements with the help of the board. Logically, executive replacements tend to cluster around the second or third rounds of financing, as at this stage the investors have typically had time to observe the management in action. This is exactly what happened in the *Wily Technology* case (Wasserman, 2017) - the CEO was replaced after a couple rounds of financing (Ewens and Marx, 2015). Also, the CEO replacement seems to happen quicker in VC-backed companies than in non-VC backed companies. (Hellman and Puri, 2002).

It appears that CEO replacements initiated by the board are more frequent compared to the replacement of other executives. For example, Ewens et al. (2015) collected data on executive replacements in VC-backed firms in their research and based on the trends found from the analysis it seems that CEOs are more likely to get replaced than other executives. Interestingly, Ewens and Marx (2015) also argued that executives are approximately three times more likely to be replaced in struggling startups i.e., companies which struggle to attract investments from external investors. In addition, CEO replacement seems often to be led by investors who have greater board influence and high portfolio performance. It seems logical that the CEO's capabilities are reassessed by the board of directors in certain points of growth in startup companies - especially if the founder of the company still occupies the CEO's role after different growth phases. The same, presumably emotionally invested person with the capability to build the company from scratch might not be the best person to make rational decisions on behalf of a growth company with a wider investor base and different owner interests. Hence, investors might want to change the CEO to a more experienced or professional one (Hellmann and Puri, 2002).

As part of the interviews we conducted, interviewee I expressed their assumption that the board composition would change in the future along changes in the ownership structure. If the historic events discussed in literature serve as a realistic presumption of the influence of venture capitalists on the company's boards of directors, it seems likely that the CEO will be replaced, and the board will be dominated with new members chosen by the investors.

Despite the inclined-to-negative association with the quick CEO replacement, the venture capitalists do bring value to the internal organization of the firm. Research conducted by Hellman and Puri (2002) has shown that having VCs onboard with companies might help the firm to build its internal organization more solid, including human resources, recruitment processes, hiring the VP of marketing and sales and adoption of stock option plans. The advantage from VCs appears to reside especially in speed - VC-backed companies can adopt more efficient processes faster than non-VC-backed companies.

6. Risks, investor relations and agency issues

6.1. The role of board in risk management

The startup landscape is inherently riskier than investment in mature businesses with established customer base, products, contracts, practices etc. A lot of this can be attributed to the accuracy of the predictions regarding revenue and expense forecasts for the company. In addition, for startups the products are commonly innovative in some way, and carry risks associated with delays, quality problems stemming from insufficient experience, inappropriate partner choices, unintentional legislation breaches etc. (Kaszuba-Perz and Czyżewska, 2020) Due to the immaturity of the company at this stage, a lot of the risk-mitigating work that would normally be done within the board, is done outside the board with the founders' best efforts. We will next explore the methods for risk management commonly used in startups at the earlier stages of their lifecycle and before establishing more formal board structures and moving towards systematic risk management processes.

During the first parts of a startup's journey, there are usually no board members to speak of, or advisors who have a good handle on or expertise in risk management. Because of this the entrepreneurs themselves oversee risk management to the best of their ability. In a study conducted on Brazilian startups, it was found that in the early stage mostly internal risk analysis

was used, and formal literature along with practical methods established in the field of risk management were not implemented by the startups (Köhler and Som, 2014). In general, risk management literature seems to be geared towards more mature companies, with very few - if any - tools or models tailored towards startups, indicating that the entrepreneurs do not have many “out of the box” solutions for their needs, and actual risk management strategies are mostly unsystematic and focused on risk mitigation only (Kim and Vonortas, 2014). This seems to be highlighted in companies where the founder(s) have less formal management training, and whose expertise lies in technical skills regarding the product. (Todeschini et al., 2010). Little data is available on the effects of angel investors on the risk management of companies beyond the finding that startups with angel-backing are 10 % more likely to exit from the startup phase. (Belsie, 2016) While this is speculation, it seems likely that angel investors would have more experience in risk management, so some of this could be attributed to better understanding of the risks involved that the angel brings with them.

For most of the startups (70%) risk analysis is done empirically and without the aid of formal management tools, with only 22% utilizing formal tools and 7% responding that they don't do analysis of risks at all. Most common (35%) strategies are internal controls, regarding financial, product, trainings or action plans. These were found in startups that would be mostly categorized within the growth-stage. (Todeschini et al., 2010) It's clear that board work regarding traditional risk management and the formality of it, is quite low at this point and the focus is on growth and figuring out the products and processes, the money-making technical core of the organization. As the company starts to grow and have a more well-defined technical core and starts to mature towards the late-stage part of the lifecycle, the company slowly gathers more and more staff, and with these increases in the staff and ability, so too does the formality of risk management start to grow. It's also possible at this point, with the increasing number of independent directors joining the board, to bring in an expert on risk management that might bring in expertise in this area.

6.2. Agency issues typical to startups with external funding

The principal-agent theory widely examined in the field of corporate governance is relevant in startup governance as well, and there are some specific issues that are characteristic especially for VC-backed startup companies and relate to different interests of investors getting involved during different funding rounds. Going to the bottom, the central idea of the principal-agent theory lies in solving the problem related to conflicting interests between two parties - the

principal and the agent. According to the principal-agent theory, the agent acts as a representative of the principal, and the theory aims to address and provide solutions to the problem related to delegation of decision-making power and mitigating information asymmetry between the parties (Borch, 2022). For example, an agent might seek to maximize profits to pursue their own interests even if it may not benefit the principal, which creates a conflict of interest (Jensen and Meckling, 1976). Traditional agency theory recognizes that in the modern corporation, the owners of the firm typically do not manage it (Berle and Means, 1932); for example, CEOs of the 50 largest public companies in the US own only 0.19% of their firms (Oswald and Jahera, 1991). In contrast to large public companies, in VC-backed startups the stock ownership levels of the top management are typically quite high, (Fried et al., 2000) which forms the basis for interesting agency issues arising in young companies.

There are a few agency issues that are characteristic for startup companies backed by angel investors and VCs. Firstly, there might be significant informational asymmetries between the founder and potential angel investors during the early stage of the company. On one hand, the principal-agency theory initially assumes that agency problems related to the separation of ownership and control will diminish by providing management with ownership stakes in the company. This management ownership stake has been thought to align the potentially divergent interests of outside shareholders and management (Fried et.al., 2000). However, even if the CEO of a startup company is also a major owner, it does not necessarily mitigate all agency problems that could arise between them and investors. For instance, a founder who is seeking for initial investments in the company might exaggerate the prospects of the company and simultaneously not disclose all the present risks relevant for the investor. Secondly, the startup lifecycle often involves many rounds of funding, and investors coming in during different phases might have different expectations and interests in terms of their investment. It is common that investors joining during later rounds and acquiring minority shareholdings want to invest via preferred stock instead of common shares to receive higher protection compared to other investors (Ikäheimo, 2021). Preferred stock might include liquidation preferences, anti-dilution protection or other similar advantages (AngelList). Hence, preferred stock can be seen as a partial solution to agency problems that might arise between different principals. Thirdly, VCs often invest in multiple startups competing in the same market, and it has been shown that such intertwined investments might have a negative impact on the level of innovation among the companies mainly due to information leakages (McDonald et al., 2015). In addition, VCs seem to be inclined to “pick favorites”, which could present a major issue when VCs are

considered as meaningful sources of expertise in startup companies. These findings suggest that in some cases the principal-agent problems might arise from opposite direction compared to what is traditionally assumed.

7. Conclusions

Based on both our research on prior academic literature and the interviews conducted for the purpose of this work, the key insights on startup boards can be summarized as follows; Firstly, there are major differences between the size, composition, and emphasis on tasks in boards of directors between startup companies and corporations. In general, it seems that corporations have approximately twice as many board members as startups in their earlier stages. In addition, it seems that the purpose of the board of directors in corporations lies more heavily in monitoring and is organized in a pre-planned manner around the financial year, whereas the boards in startups function more as advisory boards and might be unofficially involved in the company's operations in various ways - depending on the nature of the business and the growth phase that the company is undergoing.

Secondly, the board of directors in startups seems to evolve from a smaller, informal board mainly run by founders to a more structured and formal one occupied by investors and other external members as the company goes through the three lifecycle phases described in this work. Towards the late stage of the company, the board eventually begins to resemble a corporate board, and independent directors are added to the board as well.

Thirdly, one of the most examined areas of board impact in VC-backed startups seems to be a forced replacement of the CEO. According to our research, this is more likely to occur after a couple of rounds of funding and when the board has had time to oversee the CEO's work.

Lastly, the startup landscape has unique characteristics related to risks and agency issues. The startup landscape can be considered inherently riskier than many other fields of investment, and there are many different risk-related agency issues arising due to this. Interestingly, on top of agency issues between the founders and investors joining in different funding rounds, there has also been some research on agency issues arising from opposite direction compared to what is traditionally assumed in the principal-agent theory.

References

Adhanan, E.-T. (2020). What are the three stages of a startup? Available at: <https://www.svb.com/startup-insights/startup-growth/what-are-the-three-stages-of-a-startup> (Accessed: December 4, 2022).

Belsie, L. (2016). How angel investors help startup firms, NBER. Available at: <https://www.nber.org/digest/mar16/how-angel-investors-help-startup-firms> (Accessed: December 4, 2022).

Borch, Christian. (2022). Machine learning, knowledge risk and principal-agent problems in automated trading. *Technology in Society*. Vol. 68.

De Andres, P., Azofra, V., Lopez, F. (2005). Corporate boards in OECD countries: Size, composition, functioning and effectiveness. *Corporate Governance: An International Review*, 13(2), 197-210.

Ewens, M. and Malenko, N. (2021). Board Dynamics Over the Startup Life Cycle. *SSRN Electronic Journal*, pp. 1–19. doi: 10.2139/ssrn.3692153.

Fried, V. H., Bruton, G. D., Hisrich, R. D. (1998). Strategy and the board of directors in venture capital-backed firms. *Journal of Business Venturing*, 13(6), 493-503. [https://doi.org/10.1016/S0883-9026\(97\)00062-1](https://doi.org/10.1016/S0883-9026(97)00062-1)

Fried, V. H., Bruton, G. D., Hisrich, R. D. (2000). CEO Dismissal in Venture Capital-Backed Firms: Further Evidence from an Agency Perspective. *Entrepreneurship Theory and Practice* Vol. 24. Issue 4. <https://doi-org.libproxy.aalto.fi/10.1177/104225870002400405>

Gompers, P. and Lerner, J. (2001). The Venture Capital Revolution. *The Journal of Economic Perspectives* 15, no. 2, 145–68. <http://www.jstor.org/stable/2696596>.

Hellmann, T and Puri, M. (2002). Venture Capital and the Professionalization of Start-Up Firms: Empirical Evidence. *The Journal of Finance*. LVII, No. 1 <https://doi-org.libproxy.aalto.fi/10.1111/1540-6261.00419>

Hermalin, B. E. and Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review*, 9(1), 7-26. <https://www.proquest.com/trade-journals/boards-directors-as-endogenously-determined/docview/210395573/se-2>

Ikäheimo, S. (Host). (2021, March). *Start-up financial management: Episode 2 Board work* [Audio podcast].

<https://open.spotify.com/episode/0U9oiGhYjIzKJMs3EIguX?si=925105229a654dc3>

Jensen, M. (1993) “The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems,” *Journal of Finance*, 48 (3), pp. 831-80.

Jensen, M and Meckling W. H. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial economics*. Vol 3, Issue 4, pp 305-360.

Kaszuba-Perz, A. and Czyżewska, M. (2020). “Risk Management in Innovative Startups and the Role of Investors and Business Accelerators,” *Finance and Sustainability: Proceedings from the 2nd Finance and Sustainability Conference*. Wrocław: Springer, pp. 115–124.

Kim, Y. and Vonortas, N. S. (2014) ‘Managing risk in the formative years: Evidence from young enterprises in Europe’, *Technovation*, 34(8), pp. 454–465. doi: 10.1016/j.technovation.2014.05.004.

Köhler, A. R. and Som, C. (2014) ‘Risk preventative innovation strategies for emerging technologies the cases of nano-textiles and smart textiles’, *Technovation*, 34(8), pp. 420–430. doi: 10.1016/j.technovation.2013.07.002.

Lipton, Martin and Jay Lorsch (1992) “A Modest Proposal for Improved Corporate Governance,” *Business Lawyer*, 48 (1), pp. 59-77.

Morrisette, S.G. (2007). A Profile of Angel Investors. *The Journal of Private Equity*, 10(3), 52-66,5.

Pahnke, E. and McDonald, R. and Wang, D. and Hallen, B. (2014). Exposed: Venture Capital, Competitor Ties, and Entrepreneurial Innovation. *Academy of Management Journal*. 58. 10.5465/amj.2012.0777.

Roe, M. J. (2004). The institutions of Corporate Governance. *Harvard Law School Discussion Paper Series, No. 488*. <https://dx.doi.org/10.2139/ssrn.612362>

Rosenstein, J., Bruno, A. V., Bygrave, W. D., Taylor, N. T. (1993). The CEO, venture capitalists, and the board. *Journal of Business Venturing*, 8(2), 99-113. [https://doi.org/10.1016/0883-9026\(93\)90014-V](https://doi.org/10.1016/0883-9026(93)90014-V)

Salamzadeh, Aidin and Kawamorita Kesim, Hiroko, *Startup Companies: Life Cycle and Challenges* (2015). 4th International Conference on Employment, Education and Entrepreneurship (EEE), Belgrade, Serbia, 2015, <http://dx.doi.org/10.2139/ssrn.2628861>

Todeschini, B. V. et al. (2010) 'Risk Management from the Perspective of Startups', *European Journal of Applied Business and Management*, 3(3), pp. 40–54. Available at: <http://nidisag.isag.pt/index.php/IJAM/article/view/263>.

Tzabbar, D. and Margolis, J. (2017) 'Beyond the startup stage: The founding team's human capital, new venture's stage of life, founder-CEO duality, and breakthrough innovation', *Organization Science*, 28(5), pp. 857–872. doi: 10.1287/orsc.2017.1152.

Walsh, J. P. & Seward, J.K. (1990). On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review*.15, 421-458.