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# The effect of different funding partners on exit strategies.

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I wish to dedicate this thesis to my late father.

Willem D. Okkerse

U were my greatest supporter and always had confidence in my endeavors.

U thought me to be strong and persevere, to be true and always follow the principles of  
fairness and kindness.

**Table of contents:**

Abstract.....1

Introduction.....1

Theoretical background.....3

Literature review.....6

Research question.....9

Methodology.....12

Results.....15

Discussion.....18

Contributions and managerial implications.....19

Limitations.....20

Acknowledgements.....21

References.....22

## **Abstract**

Past research shows low consistency on outcome of exit strategies for new ventures and different types of funding relationships. Also; the funding landscape is changing rapidly and the call for applicable theory grows. Which funding relationship should the entrepreneur consider in getting the most favorable exit strategy? The author postulates that the underlying institutional logics of the corporate funding partner inhibit the new venture in getting a speedy and desired exit strategy for the founding entrepreneur. Drawing on a sample of 728 US located new firms, results of a quantitative analysis reveal that the combination of Corporate Venture Capital and Independent Venture Capital funding negatively relates to getting an exit strategy.

## **Introduction**

Exit strategies gradually gain importance for the founders of a new venture as the companies matures and raises the question which funding partner is most likely to guide the venture to a successful exit plan. New ventures often have choices in different types of funding such as independent venture capital (IVC) funding and corporate venture capital (CVC) funding which are acknowledged as major sources of capital that fuel company growth and thereby reach an exit strategy for the founders, (Drover et al., 2017). Traditionally, independent venture capitalist (IVC) funding is an equity financing form with the distinct focus on timely exits via an Initial Public Offering (IPO) or acquisition, however Corporate Venture Capital (CVC) funding is gaining ground in the funding arena (P. Gompers & Lerner, 2010). Subsequently, 30 percent of new firm CEOs say they will try to find CVC funding to finance their endeavors versus 10 percent in the years before 2012 so we can state that CVC funding is becoming increasingly more important and faster changing<sup>1</sup> This modifies and challenges the historical assumptions, theory and dynamics of funding and is an underexplored area of inquiry and raises the question; which type of funding or combination of funding leads to an exit strategy that is most likely to add value to the venture and proves to be most lucrative for the founders being an Initial Public Offering (IPO) or being acquired (acquisition) by a larger company in order for the acquirer to grow. There is a gap in extant knowledge, on the outcomes for new ventures with these distinct types of funding in respect

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<sup>1</sup> PWC 2012, survey.

to the chances of capitalization for the founders of the company threw an IPO or acquisition. Although capital funding is replaceable in the sense that money that is provided by one type of investor is not different from money provided by another type of investor, the difference and or ability to provide other resources than money might influence the ventures performance. It is exactly that discussion on the relationship between these types of funding and the outcomes of new companies, the evolving funding landscape and the growing importance as entrepreneurs are increasingly choosing for CVC funding that triggered us to investigate these funding alternatives. As we look at recent research, we find that; CVC financed ventures exhibit higher firm growth then IVC backed ventures and thereby have more chance on a successful exit. Also, CVC-backed companies get higher appraisals at IPO juxtaposed to companies funded only by independent venture capital, creating more value and higher returns on equity investments (Maula, Autio, & Murray, 2003). However other research tells us that; IVC funding especially leads to firm growth and CVC funding has no influence on commercial innovation a.k.a. firm growth or successful exit strategies (Pahnke et al, 2015). So, by obtaining CVC funding, companies acquire financial capital but also gain additional assets from their corporate funder, but it remains unclear if the CVC funding is beneficial for successful timely exits as the institutional logics of the corporate funding parent might influence the outcome (Pahnke et al, 2015). The institutional logics of the funding partner influences the venture and its potential outcomes as the institutional logics of the funding partners restrict the access to the much needed technical and commercial resources for growth and the obtainability of a suitable exit strategy. Secondly, we expect that the duration of the relationship between of the CVC funder and the company influences the time it takes the company to get to the exit strategy, underpinning the effect of the institutional logics of the funding partner. In other words; the longer the institutional logics of the CVC funder have an influence on the company the more these institutional logics slow the process of getting to a successful exit strategy.

Thirdly, extant literature tells us that independent venture capitalists mostly operate in mid-to late stage deals seeking returns on investments through lucrative exits, such as initial public offering (IPO). Corporate venture capitalists however, who are the investing units of an existing corporation seek strategic benefits for their parent firm. These two different end-goals and strategies led us to believe that IVC and CVC investors are associated with different types of exit strategies as their institutional logics, strategy and end goals differ and that IVC funding leads to more exit strategies in general. In this study we examine how different investments of entrepreneurial equity by IVC and CVC affect the exit strategy of

maturing firms and is not solely focused on isolated funding sources and takes in consideration the simultaneous or interrelated presence of different funding partners. Our research effort aims to provide contributions in the understanding and deconstruction of relational dynamics which are involved in funding relationships and their influence on the chances of capitalization for the founders of the company. We aspire to present evidence for substantiated choices for the founders of the company for which type of funding to choose, as the managerial options in choosing different types of funding are growing. We begin by providing some background on the funding arena and the underpinning logics, motivations and objectives of the different funding partners. We take in consideration the specific funder contingencies and how they interact with the new venture. We will give a description of methods used and present the results, following with a discussion on the insights, limitations and opportunities for possible future research.

### **Theoretical background**

**Independent venture capital** is the most recognized form of equity financing. It has had a large impact on the entrepreneurial landscape and by doing so has drawn the major part of attention in research on funding partners. IVC usually raises funds from a distinct group of investors such as, high net-worth individuals, retirement funds, insurance agencies, and sovereign wealth funds. IVC seeks to deliver a return to the investors and mostly work closely with their portfolio companies and provide an array of value-added services to these distinct entrepreneurs. IVC provides them with guidance and add value beyond capital. They offer guidance in strategy, administration, human resource issues and bring entrepreneurs in contact with potential investors and acquirers (Soerensen, 2007). Independent venture capitalists usually are professionals in private equity that target and finance new firms with high growth potential and are probable influencers of the new firm's innovativeness and growth potential through their authority structure and legitimacy. IVC mostly invests in mid- to late stage deals and average a \$6 million first time investment<sup>2</sup> and invest in risk-oriented ventures and seek returns on investments through lucrative exits, such as initial public offering (IPO) or acquisition. Independent venture capitalists operate at executive level and demand notable autonomy over their investments and usually excel at the advancement of commercial and not especially the technical innovation and through their authority in the funding relationship have the opportunity to

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<sup>2</sup> National Venture Capital Association, 2017

influence major decisions in the innovation process (Pahnke et al., 2015). In the selection of IVC funding, entrepreneurs are willing to pay a premium to partner up with skilled and well renowned independent venture capitalists doing so by discounted valuation and expecting to get better results on outcomes on the partnership (Hsu, 2004). Independent venture capitalists are considered to be skilled executive business advisors who transform technical innovations into commercial products. The commercial and venture expertise leads them into teambuilding, strategy, management and underlies their professional identity. In other words: *'they solve product problems, not technological problems'* (Hallen & Rosenberger, 2014). They view themselves as the co-creators of new ventures and adding value for the new firm in relation to management and understanding the market.

**Corporate venture capital** represents the practice of equity investments by established corporations. CVC is different from IVC in the sense that the investing is done by units of the corporate and thereby extending their primary focus. Corporate venture capitalists are the investing units of an existing corporation and seek strategic benefits for their parent firm through; novel technology, innovative products or services in new firms and by doing enhance the parent corporations strategic position, enlarge market share or create new product market combinations (Katila & Chen, 2015). The focus is more on early to mid-stage ventures and aspires to bring long-term market advantage to their mother firm. To some extent the CVC seeks financial returns but mostly encourages the new firm's innovation with its existing technical, commercial and financial resources (Winston Smith & Lee, 2016). Recently, a multitude of new ventures have taken corporate venture capital (CVC) in consideration (Katila & Chen, 2008). Historically, CVC investment vehicles for new ventures started to appear in the 1960's and especially the beginning of the 21st century marks the start of a new wave of CVC investments by established corporations. In the US, CVC investing came close to 16 billion dollars by more than 400 CVC investors in 2000 and in recent years the total amount of CVC investing is rising well above any historical level<sup>3</sup>. Empirical work on the performance of corporate backed ventures is not unanimous. One strand of research indicates that CVC funded ventures only perform as well as IVC funded ventures if there are similarities in the new venture and the corporate's line of business (P. Gompers & Lerner, 2010). Another research group surprisingly found that CVC funding has no influence on technological innovation and commercial innovation. (Pahnke et al., 2015). Yet another

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<sup>3</sup> National Capital Venture Association, 2017



research team states that CVC-backed ventures get higher valuations at IPO compared to companies funded solely by venture capital, which in itself seems contradictory with the earlier stated objectives of independent venture capitalists to get a timely and lucrative exit for its investors (Maula et al., 2003). Another perspective on CVC funding shows us that the alliance and acquisition abilities of ventures are affected by CVC backing and that a prior interaction between a venture and a corporate increases the chance of the two pairing up in a strategic alliance later on thereby adding value and possibly enhancing the chance of a timely and successful exit strategy (Drover et al., 2017, Van De Vrande & Vanhaverbeke, 2013). CVC is having a growing impact on investee ventures not only by providing capital but also by other assets such as industry-, marketplace-, customer- and innovative knowledge. The prospect of production resources, market validation, acknowledgement of the innovation and thereby external legitimacy and knowledge of the marketplace makes that entrepreneurs might prefer CVC funding to IVC funding. But there might be some drawbacks to CVC funding. For instance; sometimes the parent firm produces competitive products and thereby takes away from the intellectual property of the new venture (Hellmann, 2002). Also, the competitors of the parent firm might be reluctant to work with the entrepreneurs of the new venture and this can constrain the accessibility of resources on the open market. And finally, the CVC investor might not have the managing abilities such as the experienced IVC investor (Busenitz, Matusik, Anglin, & Dushnitsky, 2017).

### **Extant knowledge the effect of IVC and CVC funding on ventures exit strategies**

Both Independent Venture Capital and Corporate Venture Capital funding provide resources and have an effect on firm growth and exit strategies. Prior research on CVC investing was aimed at the question on the relationship between CVC investing on firm patenting output and has been silent on the interactional logics between the funding entity and funded venture. Other research is focused on larger societal logics instead of the logics in the relationship between a funding partners interacting with a new firm. As corporate investors become more present in the venture backing landscape and are active on all continents the institutional complexity of these corporates grows (Drover et al., 2017). This challenges new ventures even more in choosing the type of funding that will bring them the most profitable exit strategy. As stated earlier; the prospect of production resources, market validation, acknowledgement of the innovation and thereby external legitimacy and knowledge of the marketplace makes that entrepreneurs might prefer CVC funding to VC funding.

However, the obtainability of these additional assets is up for debate, although the CVC partner brings relevant resources and aligned incentives to the table, institutional logics of the funding partner make these additional assets difficult to obtain. When we take the two types of equity funding into consideration, we find that their institutional logics differ and exactly these institutional logics might constrain the accessibility of these additional assets (Pahnke et al., 2015) If we want to go forward, we need to generate deeper insights into the prior CVC investments in the venture and the influence of the institutional logics of these particular stakeholders.

### **Literature review**

Entrepreneurial funding emerged in the 1950s as innovative technologies started to become accessible for commercial exploitation and entrepreneur's awareness grew for potentially high-growth ventures. Equity funding grounded in the 1980's and academics started to investigate the essence of equity funding versus the traditional sources of capital (Bygrave, 1988; Elango, Fried, Hisrich, & Polonchek, 1995; Gorman & Sahlman, 1984; Robinson, 1987). Since then; independent venture capital and corporate venture capital equity investing are considered an important source of capital to fuel new firms' innovation and development and embodies considerable significance as new firms and their growth potential are often considered to be drivers of the economy. Firm creation, and firm-growth are relevant because new firms replenish and maintain the population of operating firms and is associated with a number of other important contributions to the state of the economy. New firms and the corresponding entrepreneurial action are often based different types of funding and the conception of new products or services (McMullen and Sheperd, 2006). Conceiving new products or services and external funding have long been recognized to be critical means to generate value in the marketplace and in the stock market and vital to company growth and commercial innovativeness is a predominant factor for firm growth and the eventually the exit strategy (Kumar, Rust, Ambler, Carpenter, & Srivastava, 2004; Sorescu and Spanjol 2008; Srinivasan et al. 2009; Tellis, Prabhu, and Chandy 2009). However new firms have less access to resources such as capital and personnel which large firms do have and face a level of uncertainty that is arguably higher (Smit and Watkins, 2012). Therefore, investing in new ventures entails considerable risk but also has potential for substantial gains. IVC seeks to provide a substantial return on invested funds of a select group of investing partners and invest in relatively young and innovative ventures (P.A. Gompers, Scharfstein, & Lerner, 2003).

Independent venture capitalists often work closely with the companies they invest in and offer guidance and try to add value beyond capital and predominantly invest in mid-stage to late stage development averaging a 6, 4-million-dollar first-time investment. Lately IVC investing is shifting towards the later stage of venture development (Hellmann & Thiele, 2015). In order to provide timely returns for the group of investors the IVCs focus is often on a timely exit via an IPO or acquisition. Corporate Venture Capital (CVC) represents the enactment by established corporations of equity investing in new ventures and are usually searching to bring strategic advantage and value to the parent firm. Their focus is on early stage to mid stage development and have a significant impact on new firms by capital injection, sharing industry-, product development- and marketplace knowledge and other additional assets.

### **Firms need to achieve growth to find a successful exit strategy.**

The path of company growth however is unpredictable and developing new products is a complex and ambiguous process. Also, the technological or commercial promise is poorly understood beforehand. Yet being able to create new products or services is an important element of a company's growth capability. Patents and new products are the means for an organization to adapt, diversify and reinvent themselves in a rapidly changing environment, market and technical circumstances (Schoonhoven, Eisenhardt, & Lyman, 2006). New products or services improve the market share and market value ensuring the survival of companies, a company's growth and finally the chance of a successful exit strategy and thus are a source of competitive advantage. To gain this competitive advantage new firms need funding to create and accelerate growth. From the innovativeness point of view there is research that suggests that new companies that cannot use existing firm assets such as resources and knowledge have trouble achieving company growth (Cohen & Levinthal, 2006). Other research suggests the opposite were the company's innovativeness is highly effective because the organization does not require to work through ill-suited organizational routines and structures (Henderson & Clark, 2006).

### **Equity investing as a driver of company growth.**

Company growth is affected by an array of environmental factors (Kuznets, 1962; Utterback, 1994). Such as the amount of competition because if competitors build new ideas into new products or services more effectively, they will win in the marketplace. Second, the access to capital influences company growth because the availability of

financial resources such as equity investing allows the entrepreneur to develop the new products or services and sell these to customers. Third, the manufacturing process effects company growth because comprehension about the production process effects the further development of products. Fourth, market size effects company growth because it needs to be large enough to give a justification of the investment of time and money such as equity investments in the uncertain activity of development. To accomplish company growth and endow the development of new products or services new ventures regularly have choices in different types of funding, such as independent venture capital and corporate venture capital but which will provide the means to a successful exit strategy?

### **Unraveling the effect of institutional logics on exit strategies of ventures.**

In this paper, we draw on institutional theory which is the theory of social structure and it's deeper and more resilient aspects. Institutional logics are seen as the presupposed foundation of the ruling guidelines of social behavior within a firm such as the practices, schemes, rules, routines, norms and structures of the organization. Funding partners can be attained as institutions with a social structure constituting regulative, normative, cognitive and cultural elements that translate to these social behaviors and activities which are seen as the norm within the business entity and have a degree of resilience. These institutional logics are lodged in corporate structures and in case of CVC funding, the dispersed authority, slow and complex organizational processes and even internal conflict complicates new firms access to the necessary resources. The corporate institutional logic attributes make that corporates are less able to identify what resources are most valuable to the venture and the executives need to mediate the available resources between Parent Corporation and new venture which may decrease the usefulness of these resources for the new venture as the venture has less capability in accessing these corporates resources. Our research effort aims to provide contributions in the understanding if institutional logics of the funding partner influences the venture and provides information on the nature and quantity of funding partners and how they influence successful exit strategies such as Initial Public Offerings (IPOs) and acquisitions. We add knowledge to the recent discussion on the correlation between these types of funding and outcomes of new companies as seen in recent work of (Maula et al., 2003; Pahnke et al., 2015). Their work on the subject argues that innovation and growth in new firms is constricted by the institutional logics of the funding partner. The institutional logics of the funding partners restrict the access to the much needed technical and commercial resources (Pahnke et al., 2015). Contrarily research group Alvarez-Garrido et al

state that CVC backed firm's exhibit higher firm growth than IVC backed firms and thereby have more chance of a successful exit. Yet another research team states that CVC-backed ventures get higher valuations at IPO juxtaposed to companies funded solely by venture capital, creating more value and higher returns on equity investments (Maula et al., 2003). Conceptualization of institutional logics of these corporates with non-homogeneous structures is challenging but it is essential to generate deeper insights into the impact of IVC and CVC funding and the relationship between their institutional logics and successful exit strategies.

### **Research question**

Framing our conceptual model on the institutional logics of a distinct type of funding, we propose that the specific institutional logics of the funding partner, the weighted combination of different funding types and the duration of funding we will have different results on exit strategies of ventures. As these funding partners differ in their institutional logics, it is exactly these institutional logics which might constrain how the maturing firm can obtain the funding partners resources. As the institutional logics of the funding partner entails the values and assumptions on what is ascertained as appropriate and meaningful for an organization to do, we propose that the funding partner will project its institutional logics on the new firm. The different types of funding partners have dissimilar views and expectations on the suitable processes for managing the new firm and will influence the choices made by the young firm and ultimately influence the firm's performance or options for exit strategies. So, we argue that the CVC institutional logics negatively relate to successful exit strategies. We propose that; having more CVC funding will negatively influence the chance of a successful exit strategy. On the other hand, independent venture capitalists core business is to get returns on the invested equity which is tied in with the ventures successful exit strategy such as initial public offering (IPO) or acquisition.

First, we take a look if independent venture capital funding leads to more successful exits being an initial public offering or acquisition than the ventures who have combined funding, being IVC and CVC capital. A quantitative measure of the result of IVC funding on successful exits versus the combination of IVC and VC funding.

Holding all other factors constant, we propose

***Hypothesis 1: New firms will exhibit a greater likelihood to achieve exit strategies with Independent Venture Capital funding than new firms with IVC and CVC funding.***

As stated earlier; independent venture capitalists seek returns on investments through lucrative exits, such as initial public offerings (IPO) or acquisitions and invest in risk-oriented ventures. Also, independent venture capitalists excel at the advancement of commercial and not especially the technical innovation and through their authority in the funding relationship have the opportunity to influence major decisions in the company development process. Recent research suggests that IVC investor's characteristics, they are recognized as form of equity financing with the center of attention on timely exits via an acquisition or IPO and that experienced IVC firms are more likely to realize IPO exits than lesser experienced IVC firms (Drover et al., 2017). We suspect that IVC firms are more likely to realize IPO exits than the CVC funding partners. It is the strategic goal or endgame of the IVC funder which is ultimately most determinative for the exit strategy of new ventures as the independent venture capitalist seeks returns for its investments and has the managerial skills to guide the new venture to a lucrative exit. Also, we suspect that the influence of the institutional logics within the IVC funding partner inhibits the growth and final exit strategy of the new firm.

In succession of our first premise we propose that;

***Hypothesis 2: New firms with Independent Venture Capital funding will exhibit a greater likelihood to achieve IPO exit strategies.***

In succession of our second premise we propose that in case of a mix of equity funding in which the Corporate Venture Capital funding outweighs the Independent Venture Capital funding the strategic goal of seeking benefits for the parent firm of CVC funding will influence the success of exit strategies. Corporate venture capitalists also use the new venture for strategic reasons of the mother firm and these specific CVC characteristics and objectives lead to different exit strategies being more acquisition orientated. Prior research shows us that CVC funding influences the alliance and acquisition abilities of ventures and that a prior interaction between a venture and a corporate increase the chance of the two pairing up in a strategic alliance later on (Drover et al., 2017, Van De Vrande & Vanhaverbeke, 2013). The plausibility in the strategic goals of the CVC funder leads us to believe that defining the success of the venture investment is a strategic pay-off instead of a

financial pay-off and we propose that the combination of IVC and CVC funding leads to more strategic pay-offs being acquisition

***Hypothesis 3: New firms will exhibit a greater likelihood to achieve acquisition exit strategies with Corporate Venture Capital funding.***

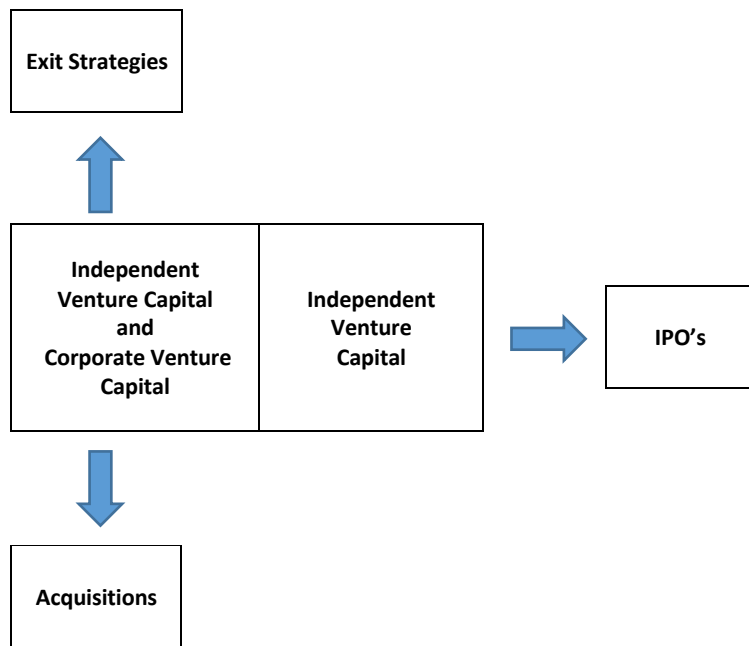
The timing of funding in new firms might influence the amount of successful exit strategies. As the company matures funding is needed for growth and later on the exit strategy. We suspect that if corporate venture capital funding is acquired in the early stage of company existence, the chance of a successful exit strategy is lower than when this type of funding is found later. With the venture being exposed to the institutional logics at an early stage of evolution we suspect that the influence of the slow and complex organizational processes, dispersion of authority, problems with the allocation of resources, internal politics within the funding parent will negatively influence successful exit strategies. The presupposed foundation of the ruling guidelines of social behavior within the funding firm such as the practices, schemes, rules, routines, norms and structures of the organization lead us to believe that this will influence the likelihood of certain exit strategies. The social structure constituting regulative, normative, cognitive and cultural elements that translate to specific behaviors and activities have a degree of resilience and are lodged in corporate structures. In case of CVC funding, the dispersed authority, slow and complex organizational processes and even internal conflict complicates new firms access to the necessary resources and can have an inhibitory effect on getting a successful exit strategy.

***Hypothesis 4: New firms with early stage Corporate Venture Capital funding will exhibit a lower likelihood to achieve successful exit strategies.***

As a representation of our hypotheses we present two conceptual models;

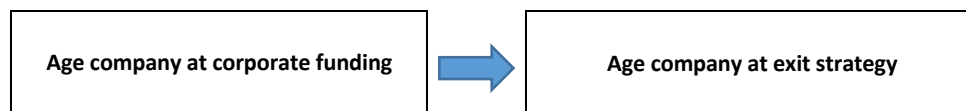
The first model represents the relationship between the combined funding of IVC and CVC and the outcomes being exit strategies in general and secondly the outcome of a specific exit strategy being; acquisitions. It also represents the relationship between IVC funding and the specific outcome of IPO's.

**Figure 1: Conceptual model 1**



The second model represents the age of the company from where the corporate funding starts and its relationship with the company age at exit.

**Figure 2: Conceptual model 2**



## **Methodology**

### **Sample description and empirical setting**

We used a period of 10 years between 2009 and 2019 for the analysis of new firms and their exits. To build a robust data set and explore whether IVC and CVC investment impacts ventures exit strategies, and if this relationship is driven by the institutional logics of IVC and CVC orientation we constructed a list of newly founded U.S. public firms during the period 2009- 2019. Information on company status and the relationships between the firms funding activity was collected from the Thomson One database and includes all private equity transactions in this timeframe. To collect the data from the Thomson One database the internet settings need to be adjusted to allow pop-ups. Thomson One settings are set to all equity information with filters for the correct timeframe being 2009 – 2019 and companies with 1 to 100.000 employees are included. Filters for company status were set at; IPO, acquisition or active and filters for the investors at; IVC and/or CVC to get the proper



output. Collected data variables at company level are: company name, company founded date, first investment received date, company age at financing (months), company total funding (millions), company number of employees. On the investors side which in Thomson One is titled; ‘the firm’ we collected data on; firm founded date, firm type (IVC or CVC), number of firms, firm total estimated equity invested in company (millions), total number of deals by firm and deal value. The Thomson One database provides us not only with data on all private equity investments it also contains a wide-ranging coverage of exit activities in the private equity industry. This provided a list with all new ventures with all according financial transactions of in that period, such as nature of funding, IPO’s, acquisitions, bankruptcies, joint ventures and the time of funding. We don’t differentiate for industry and dropped ventures who received no or different types of funding other than IVC and/or CVC funding. The Thomson One database also provides data on timing of different funding and we built on methodology used by other researchers (Dushnitsky & Lenox, 2006; P. Gompers & Lerner, 2010; Katila, Rosenberger, & Eisenhardt, 2008; Pahnke et al., 2015). The collected data led to a list of 728 companies with subsequently 4502 equity transactions of IVC funding and or CVC funding. We filtered for discrepancies or missing data in the excel output and went back to the Thomson One database at company level or to company websites to resolve the differences and obtain missing data. After importing the dataset in SPSS the strategy was to check if the data set was well-modeled and has a normal distribution. The normality of distribution was checked by using histograms, boxplots and QQ plots and in the case of outliers we adjusted using winsorising (Dixon, 1980). In case of logarithmic distribution, we used the SPSS function transform and adjusted arithmetically to obtain normality of distribution (Field, 2018). To examine the relationship between the different variables we applied SPSS curve fit testing and obtained the optimal sets for our models. To examine the binary dependent, we used the SPSS logistic model and for the linear dependent the SPSS linear regression methodology.

### **Measures and funding partners**

We examine the outcomes for companies with two distinct types of funding in respect to the chances of capitalization for the founders of the company. IPO’s and acquisitions are an appropriate measure of capitalization for the founders and we investigate these venture’s exit strategies as a function of different types of funding (Gompers & Lerner, 2010; Stuart & Hybels, 1999). As we focus on ventures backed by either independent venture capital and/or corporate venture capital. Our sample includes ventures who are IVC backed and both IVC

and CVC backed, this will allow us to analyze the effect of the combined funding of the venture or just the IVC backing. We examine two outcomes being either IPO's or acquisitions versus companies which are still active, **the dependent variables**. The operationalization was achieved by collecting annual data and by constructing a binary variable sets which is set to one in case of a successful exit strategy and to zero in the case of still being active. A second binary variable set was set to one in case of an IPO and to zero for all other outcomes. The third binary variable set was set to one in the case of an acquisition and to zero for all other outcomes. The operationalization of **the independent variables** was achieved by subsequently building binary variable sets of independent venture capital and the combination of independent venture capital and corporate venture capital. Consistent with earlier studies we found that most CVC backed ventures were also funded by IVC firms. Therefore IVC-only funded ventures act as the control group to be used to assess the impact of CVC funding for new companies (Gompers & Lerner, 2010). First the binary variables were set to one if the venture received IVC funding in a particular year and to zero if there was no IVC funding. In the second dataset binary variables are set to one if the venture received CVC funding in a particular year and to zero if there was no CVC funding. Also we combined these measures which result in three different outcomes yearly being IVC funding, CVC funding or a combination of the two, which we will operationalize with a third binary dummy variable set to one if there is a combination of IVC and CVC funding and to zero if there is not. We also created two measures related to the independent variables being; the yearly total amount of funding received of a distinct partner as well as the number of funding relationships with either IVC or CVC partners in a distinct year.

### **Controls**

In this study we focus on the result of funding ties. It is statistically challenging to reveal that any of the effects of the funding ties can be accredited to the treatment and no other elements such as selection. We applied company and firm level control variables that can also influence the amount and duration of exit strategies. Certain types of funding partners may be more effective at choosing new firms to invest in and by doing so achieve more effective exit strategies. Thus, our empirical strategy must account for selection effects a.k.a. selection bias. We account for selection bias by implementing controls for company selection by the firm. Because older, larger and more experienced equity investors have more experience in selecting the lucrative business ventures, we control for investor firm

size. Also, the larger and more experienced CVC funding partner might provide better resources and has learned how to manage the new venture and by doing so positively influence the performance of the new venture. Also, the amount of funding may influence the ability for a venture to grow and reach an exit sooner than in the case of financial scarcity. We control for funding amount by all funding partners in total and was measured in millions of U.S. dollars. Because the size of a company correlates to growth and thereby increases the chance for capitalization for the founding entrepreneurs threw IPO or being acquired, we controlled for company size by measuring the number of employees.

## Results

Table 1 reports correlations and descriptive statistics. The independent variables show considerable variance and the correlation matrix indicates low correlations among them. Combined dummy-variables such as the combination of IPO and acquisition logically show considerable correlation with these distinct variables individually. Variables; *private funding and corporate funding* show perfect negative correlation for they are “mirror” variables. They are as such not relevant for our research models.

**Table 1. Descriptive Statistics and Correlations**

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1 IPO	,12	,32												
2 Acquisition	,20	,40	-,18**											
3 IPO or Acquisition	,32	,47	,53**	,74**										
4 Corporate funding	,04	,19	-,03	-,04	-,06									
5 Independent funding	,81	,16	,01	,02	,02	-,100**								
6 Corporate and Independent funding	,15	,36	,10**	-,03	,04	,32**	-,32**							
7 Company age at exit	70,73	37,65	-,01	,01	,02	,09	-,09	,09						
8 Age at financing	3,59	1,13	-,13**	-,12**	-,19**	,03	-,03	,05	,46**					
9 Company number of employees	5,94	1,54	,09*	-,02	,05	-,04	,04	-,17**	-,01	-,08*				
10 Total equity invested private & corporate	4,41	1,48	,32**	-,12*	,15**	,02	-,02	,34**	,17*	-,02	,26**			
11 Total deals by firm	4,87	1,86	,10**	,03	,09*	,01	-,01	,24**	,09	,10**	-,13**	,23**		
12 Total amount corporate investors	2,53	7,30	,17**	-,06	,07	,19**	,20**	,82**	,11	,04**	,11**	,45**	,19*	

\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

All independent variables showed variance inflation factor (VIF) less than 5.0, indicating that the variables are unrelated. Table 2 presents quantitative data found off dependent variables.

**Table 2. Case summary**

Variables	N
New firms with IVC of CVC funding	728
Exit	232
IPO	87
Acquisition	145

Table 3 presents the analysis for the effects of corporate and private funding on the exit of the new firm being either an IPO or Acquisition and also the effects on the time to exit. We used two tailed significance tests for all our models. One tailed testing would have been statistically justifiable hence the directionality of our hypotheses. Models 1 till 3 show the outcomes of the logistic regression models for the binary outcome variables being an exit as IPO or acquisition or the distinct exit of an IPO or acquisition. Model 4 shows the outcomes on the linear regression on time to exit. Additional controls and variables showed no significant difference in model-outcome.

Consistent with the rest of our analysis we find that the combination of CVC and IVC funding results in less exits, supporting Hypothesis 1; *'New firms will exhibit a greater likelihood to achieve exit strategies with Independent Venture Capital funding than new firms with IVC and CVC funding'*. The factor of -0,57 represents the mean negative change in the response given a 0,57 change in de predictor. In other words, if the coefficient factor of IVC/CVC funding increases by 1, the mean change of an exit decreases by -1.

To test hypothesis 2; *'New firms with Independent Venture Capital funding will exhibit a greater likelihood to achieve IPO-exit strategies'* we used a logistic regression model (model 2) and it shows a negative coefficient (-0,122) for the interaction term between Independent Venture Capital funding and IPO exits and is not significant, not supporting hypothesis 2. In this model we also found a large positive coefficient for the interaction between total equity invested and the exit (being an IPO). This show us that more equity investment leads to more exits, being IPOs.

To test hypothesis 3: *'New firms will exhibit a greater likelihood to achieve acquisition exit strategies with Corporate Venture Capital funding'* we also used a logistic regression model

(model 3) and it shows a small positive coefficient (0,04) for the interaction term between the combination variable of IVC funding and CVC funding and acquisition exits and is not significant, thereby not supporting hypothesis 3. In this model we also found a large positive coefficient for the interaction between total equity invested and the exit (being an acquisition). This show us that more equity investment leads to more exits, being acquisitions.

**Table 2. Logistic regressions and linear regression.**

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
<b>Model</b>	<b>Logistic</b>	<b>Logistic</b>	<b>Logistic</b>	<b>Linear</b>
<b>Dependent</b>	<b>Exit</b>	<b>IPO</b>	<b>Acquisition</b>	<b>Age at exit</b>
<b>Independent</b>	<b>(IVC/CVC)</b>	<b>(IVC)</b>	<b>(IVC/CVC)</b>	<b>(Age at financing)</b>
(Intercept)	1,402 (1,02)	3,02** (1,26)	-2,910 (1,21)	2,29** (0,93)
Independent funding		-0,122 (0,87) <b>(H2)</b>		
Independent funding and corporate funding	-0,57** (0,28) <b>(H1)</b>		0,04 (0,03) <b>(H3)</b>	-0,55* (0,23)
Company number of employees	0,099 (0,08)	-0,159 (0,12)	0,160 (0, 12)	0,430 (1,52)
Company age at exit	0,01* (0,01)	0,01* (0,01)	-0,01* (0,01)	2,29** (0,93)
Age at financing (independent & corporate)	-0,81*** (0,19)	-0,84* (0,34)	-0,74* (0,36)	1,64*** (0,26) <b>(H4)</b>
Total equity invested (independent & corporate)	0,25*** (0,09)	0,74* (0,16)	0,73*** (0, 17)	5,03** (1,70)
Total amount of deals by firm	0,20 (0,07)	0,20* (0,12)	0,20* (0, 01)	0,20* (0,11)

\*p < .10; \*\*p < .005; \*\*\*p < .001

N = 728

The standard error is below each parameter.

H1 – H4 = Hypotheses 1- 4

The linear regression; model 4 in table 2 shows a positive coefficient between the variable of age at financing (independent and corporate combined) and company age at exit and is significant. It shows that if age at financing increases the time to exit increases by a factor of 1,64 and is very significant, thereby not supporting our third and final hypothesis.

In other words, early IVC and CVC funding leads to faster successful exits, undermining hypotheses 4; *New firms with early stage Corporate Venture Capital funding will exhibit a lower likelihood to achieve successful exit strategies.*

In other words; as the combined IVC and CVC funding of the company is found later than it takes the company more time to get to the final exit. These findings seemingly subscribe the results of the other models in which we found that “the earlier CVC and IVC funding is found the more chance of an exit”.

## **Discussion**

Our central proposition is that institutional logics of CVC funding can influence the evolution of a new venture and by doing so influencing the opportunities for exit strategies. This proposition matters since CVC funding has become a more important funding source for entrepreneurs and new ventures and prior research has presented both advantages and disadvantages of CVC funding for the founding entrepreneurs of the new venture. We explored the outcomes for companies with this distinct type of funding in respect to the chances of capitalization for the founders of the company. The outcomes being; IPO's and acquisitions which are appropriate measures of capitalization for the founders and we investigate these particular exit strategies as a function of different types of funding (Gompers & Lerner, 2010; Stuart & Hybels, 1999). We found that, in terms of going public or being acquired, CVC funding decreases the likelihood of an exit by IPO or acquisition. Our argument states that the institutional logics of CVC funding or the combination of different funding types being CVC and IVC would have a negative on the exits of ventures for these funding partners differ in their institutional logics. This can be explained by the phenomena that these institutional logics can constrain the maturing firm and also might create barriers for the venture to obtain the funding partners resources. Our research does not differentiate for industry and thereby can be extrapolated to other first world economies. However, new ventures might benefit from corporate funding partners if they provide specialized complementary assets which are hard to come by on the open market (Kim, Steensma, & Park, 2017). According to our research, if there is not such a specific need for

specialized complementary assets, forming a tie with a CVC funding our partner might even lead to a restriction of accessing different assets on the open market. We propose since our dataset is not industry specific and therefore are a generalized group of new ventures that there is not the need for these specialized complementary assets and that the institutional logics of the funding partner hinder the evolution of the new venture and by doing so reducing the chance of capitalization for the founders. Secondly, we argued that the specific IVC and CVC strategic characteristics and objectives lead to different exit strategies being more IPO oriented in the case of the IVC funder and more acquisition orientated for the CVC funder. However, we could not find evidence supporting hypothesis 2 and 3 in our data. Finally, we suspected that if the new venture was exposed to the institutional logics of a CVC funding partner at an early stage of evolution of the new venture that the influence of these institutional logics such as slow and complex organizational processes, dispersion of authority, problems with the allocation of resources, internal politics within the funding parent would negatively influence the duration until the final exit strategy. We also suspected that if corporate venture capital funding is acquired in the early stage of company existence, the chance of a successful exit strategy is lower with the venture being exposed to the institutional logics of the corporate venture investor. However, in our dataset we found that having funding at an early stage company development leads to faster exit strategies. We suspect that having financial assets at an early stage to induce growth outweighs the effects of being exposed to the institutional logics of the CVC funding partner.

### **Contributions and managerial implications**

Our research effort aims to provide contributions in the understanding if institutional logics of the funding partner influences the venture and provides information on the nature and quantity of funding partners and how they influence successful exit strategies such as Initial Public Offerings (IPOs) and Acquisitions. We add knowledge to the recent discussion on the correlation between these types of funding and outcomes of new companies as seen in recent work of (Maula et al., 2003; Pahnke et al., 2015) By studying partnerships in which organizations with mature institutional logics and the interaction with newly founded firms we extend institutional theory. We show that the institutional logics of corporate funding partners influence the outcomes of their partners. As the fast diffusion of CVC funding in recent years has created a growing interest in the outcomes of CVC funding but most studies investigate this trend from the perspective of the corporate investors (Dushnitsky &

Lenox, 2005). This study joins the developing stream of CVC literature targeted on the perspective of the founders and new ventures and extends it (Katila, Rosenberger, & Eisenhardt, 2008). Earlier work on the subject was empirically targeted at specific industries therefore the result of this research cannot be validated to the entire population of new firms. In our study we used the entire population of new ventures in the most recent timeframe of ten years in United states of America which is highly representative for first world economies and can provide sufficient data on the subject. Our results can therefore be interpreted and extrapolated to other first world economies and industries. However, exit strategies can also be explained by simpler concepts like incentives or resources and CVC funding partners may even have superior resources to IVC funding partners. Still the variety of elements in institutional logics decrease the effectivity of all the assets available in the CVC funding partner and this study of institutional theory provides insights and a more accurate prediction on exit strategies than the simple concepts of assets and incentives.

As the managerial options in types of funding are growing, we present evidence for substantiated choices for the founders of the company for which type of funding to choose. Our research indicates that managers should aspire to get funding at an early stage of company evolution to have the highest chances of a successful exit strategy. Also managers should look for independent venture capital funding if they don't need specialized complementary assets which are hard to come by on the open market. According to our research, if there is not such a specific need for specialized complementary assets, forming a tie with a CVC funding our partner might even lead to a restriction of accessing different assets on the open market.

### **Limitations**

This study is like most not without its limitations. Conceptualization of institutional logics of these corporate funders with non-homogeneous structures is challenging but is it is essential to generate deeper insights in to the impact of IVC and CVC funding and the relationship between their institutional logics and successful exit strategies. We aspired to provide evidence based on a quantitative approach to differentiate the effect of distinct types of funding on exit strategies. Although our research suggests that the institutional logics of the CVC founders inhibits the likelihood of an exit strategy, new studies may benefit from larger datasets over longer periods of time. In our study we used the entire population of new ventures in the most recent timeframe of ten years in United States of America. We found a large distribution of industries in our study and therefor did not



control for industry. In case off larger datasets controlling for industry becomes relevant and will add to the measuring of and understanding of the true influence of institutional logics on exit strategies. We lacked data on the equity stake of the CVC investors and a measure which takes in to account the size of corporate funding will undoubtable give a more strength to our understanding of the influence of CVC funding and exit strategies. We need a more fine substantial and unyielding measurement that takes into account the true size of CVC funding to understand the influence of CVC funding and its influence on exit strategies. (Gompers & Lerner, 2010)

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