Visualizing Strategic Value in CVC – an Impossibility or Solely a Consequence of Inadequate Practices?

A qualitative study about performance measurement in corporate venture capital firms within the automotive industry

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Abstract

This paper presents empirical findings from a multiple case study inspired by a transactional design on strategic value within the field of corporate venture capital (CVC), motivated by its increasingly prominent role in enhancing the strategy of large corporations. Steered by an identified lack of knowledge about how to concretize and measure the strategic value created by CVC firms, the paper contributes with a conceptual framework primarily directed to the automotive industry. It aims to concretize the strategic value gained from participating in the venture capital (VC) ecosystem with the help of measurable KPIs. The research was conducted using primary data and secondary data; the former consisted of interviews with practitioners and industry experts, and the latter of professional industry articles. Combined findings from primary and secondary data are divided into five different themes within the empirical section. The themes' content helps to answer the outlined research questions. First, the findings reveal three broad strategic rationales for large corporations to participate in the VC ecosystem; (1) to fill current capability gaps, (2) to find new growth opportunities, and (3) to prepare for disruption. Second, the findings disclose that there are multiple organizational arrangements of CVC firms. The unique setup of each CVC firm is driven by several factors, including the type of value sought, the brand image desired as an investor, and the arrangement's impact on the CVC firms', as well as the portfolio companies' performance. Third, the findings unfold how strategic value created could be concretized with help of quantitative KPIs suggested in the built conceptual framework. Lastly, the findings unveil that a balanced scorecard could be used to measure and communicate this value, both internally and externally.

Keywords: Strategic value, Performance measurement, Corporate venture capital, Venture Capital ecosystem, Conceptual framework, Key performance indicators, Automotive Industry

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Filippa & Melvin

Definitions

Concept	Definition
Venture Capital	Professional asset management activity that invests funds raised from institutional investors, or wealthy individuals, into promising new ventures with a high growth potential (Da Rin, Hellmann et al. 2013)
Venture Capital firm	A limited partnership that specializes in raising money to invest in equity of young companies (DeMarzo, Berk 2017)
Corporate Venture Capital firm	An equity investment made by a corporation or its investment entity into a high growth and high potential, privately held business (BVCA 2013)
Traditional Venture Capital firm	Venture Capital firms not attached to a corporation (Created by Dunér, Olsson 2022)
VC arm	The CVC firm of a PC (Created by Dunér, Olsson 2022)
Parent Company	A single company that has a controlling interest in another company or companies (Hayes 2022)
Portfolio Company	A single investment for an investment firm's overall portfolio (Divestopedia 2016)
Start-up	A company that is in the initial stages of business (Grant 2021)
(Business) Venture	A business enterprise in which the expectation of gain is accompanied by the risk of loss or failure (Kasemsap 2016)
Venture Capital Ecosystem	A symbiosis of all investors, startups, and other accompanying factors that form one big community that effectively stimulate innovation and job growth (FRC 2021)
Financial Return	The money made or lost on an investment over some period of time (Hayes 2021)
Key Performance Indicator	A set of quantifiable measurements used to gauge a company's overall long-term performance (Twin 2021)
Conceptual Framework	A network, or a "plane", of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena (Jabareen 2009)

Abbreviations

Abbreviation	**Definition**
VC	Venture capital
CVC	Corporate venture capital
PC	Parent company
KPI	Key performance indicator
R&D	Research and development

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1. Introduction

1.1 Background

"Strategy has to be the driving force behind a corporate venture investment", Claudia Fan Munce, a recognized pioneer and leader in corporate investment and global venture ecosystems, states when interviewed in 2018 (Saucedo, Ziebelman 2018). By that, she points to a fundamental distinction between traditional venture capital firms and corporate venture capital firms. Venture capital (henceforth VC) firms' main objective is to earn a financial return on their investments. This is normally achieved by taking board seats, specifying management requirements, and directing organizational procedures. In contrast, corporate venture capital (henceforth CVC) firms can allow for greater flexibility, as the typical CVC investment aims to first and foremost bring strategic value to its parent company (henceforth PC) (Saucedo, Ziebelman 2018). A CVC firm does, however, aim to ensure a balance between financial return and strategic value from its portfolio, a key conceptual issue that constantly must be battled (Burgelman, Golden et al. 2019). Strategic goals sought might be to earn industry insights, gain knowledge about future market trends, access new technology, or to forge new commercial partnerships (Horowitz 2018).

CVC activity has a history of surging in financially good times and rapidly descending in financially constrained times. Thus, the presence and longevity of CVC firms have historically been dependent on the macroeconomic environment. There was, for instance, a notable CVC boom in close connection to the commercialization of the internet in 1995, but only six years later the dot.com bubble burst and CVC investments realized tremendous losses. Shareholders, at the time, questioned not only the strategic value, but also the VC arm's ability to generate financial value for the PC, and most CVC arms were shut down (Burgelman, Golden et al. 2019). Today, CVC firms battle the fact that large corporations expect a return on their investment within a short period of time, whereas the benefits of a venture investment can take up to ten years to realize. This makes the VC arm of a corporation the first division to cut in tough times, as tangible performance is difficult to determine. Despite the challenges faced and the huge risks of engaging in VC, CVC activity remains utterly present in today's market. This is presumably a consequence of its clear value in terms of, for example, defending the organization against industry disruption by providing them with key future insights (Wendt, Spaulding 2019).

Increased interest in the VC ecosystem is presumably a consequence of big changes in most industries, there among the automotive industry. In fact, Maija Palmer, journalist at Sifted, states that the automotive industry is a sector that currently is facing the biggest changes it has ever seen. Trends, including autonomous driving and “mobility as a service”, are contributing to this development (Krupsky 2021). This puts pressure on larger corporations but also opens up opportunities to capitalize on. Partnering with innovative entrepreneurs via the VC ecosystem may therefore be a strategic tactic to gain insights into the emerging areas (Palmer 2022). Volkswagen’s establishment of a fund to invest in ventures who foster the decarbonization movement is an example of a response to the changes in the market (Reuters 2021). Furthermore, Stellantis, the world’s fourth-largest automaker (Southwell 2021), announced in March of 2022 that the corporation is establishing its first venture capital fund. The CVC firm behind this fund aims to act as a strategic investor and enable startups to integrate new technologies. The purpose is to accelerate the PC’s adoption of new innovative technical solutions and by that transform into a “mobility tech company” (Reuters, 2022).

Some industry experts argue that participation in the VC ecosystem is the optimal way for a corporation to reach even further than their R&D department is capable of (Wendt, Spaulding 2019). Companies across many industries, including Google, General Mills and BMW complement their traditional R&D with their own establishment of a CVC firm (Lerner 2013). Considering that the CVC deal-value participation, as a percentage of total VC activity, amounts to almost 50% in the United States in 2019 (Burgelman, Golden et al. 2019) and that the number of corporations that invested in venture capital increased from 273 to 970 between 2011 and 2021 (Horowitz 2022), many other corporations appear to share this belief. Moreover, the total amount of money deployed in CVC grew from 12 billion dollars in 2011 to 194 billion in 2021 (Horowitz 2022). Despite CVC firms' apparent presence and influence in the VC ecosystem, there is still little known about how to measure and communicate their primary objective, strategic value.

1.2 Prior research & research gap

Although extensive research and academia support the essential strategic value that CVC investments can create, recent history has shown that CVC activity is undoubtedly dependent on the current macro-environment (e.g., Saucedo, Ziebelman 2018; Burgelman, Golden et al. 2019). It is therefore not surprising to observe a growing interest from CVC managers to obtain clear guidelines on how to deal with this. As stated by the CEO at a CVC firm within the automotive industry (from an interview on the 1st of March 2022), it is imperative that the CVC firms' relevance and contribution to the corporation is evident also in case of an industry-wide financial downturn in which the CVC realizes losses. Meanwhile, the founder and CEO of a specialized consultancy firm, states that "measuring strategic return is challenging - there are very few frameworks to help corporate venture capitalists articulate strategic goals and measure them" (from an interview on the 7th of March 2022). Hence, it highlights the need to investigate this area further to guide industry practitioners in their work.

Prior research focuses on CVC firms' dual pursuit to combine financial return and strategic value, as well as framing CVC as a tool for innovation and business development (e.g., MacMillan, Roberts et al. 2011; Burgelman, Golden et al. 2019). A small number of practitioners specialize in helping CVC firms concretize and visualize their strategic value by creating customized KPIs (e.g., David Horowitz at Touchdown Ventures; Alberto Onetti at Mind the Bridge). The measurement is, however, still only done by a minority of CVC actors, presumably because of the complexity of the process and the lack of a general framework of how to do it (from an interview with an industry expert on the 7th of March 2022). Other studies try to develop more specific guidelines on how to make the performance of CVC firms more transparent by incorporating both strategic and financial measures (e.g., Bassen, Blasel et al. 2006). Yet, no earlier research or practitioner has, to the authors of this paper's knowledge, developed a general framework to concretize strategic value in a CVC portfolio with help of measurable KPIs directed to the automotive industry. Considering the growing interest from practitioners within this field, as well as the lack of academia available and practice in place, there is an apparent research gap to fill.

1.3 Purpose & research questions

The purpose of this thesis is to provide CVC firms with guidance on how strategic value could be concretized with the help of KPIs, primarily directed towards the automotive industry, as well as how it could be measured and communicated. The growing interest for corporations to engage in the VC ecosystem to earn strategic value (Gutnick 2022), combined with the continued pressure on CVC firms to defend the performance of their portfolios (Burgelman, Golden et al. 2019), increases the need for effective tools to measure and communicate strategic value. This thesis contributes to both literature and practice of CVC activity by establishing an effective way of concretizing, measuring, and communicating strategic value. Measurement and communication have the potential to shed light on the advantages for corporations to engage in the VC ecosystem, as well as clarify its contribution to the corporation also in financial downturns. This clarification does, in turn, enable CVC firms to be more confident in their future existence. Moreover, it gives the shareholders a clear view of the corporation's positioning and long-term strategic goals. In light of this current industry environment, the following research questions are posed. RQ1 and RQ2 aim to cover related topics, whereas RQ3 and RQ4 aim to directly fulfill the purpose.

RQ1: What is the rationale for corporations to participate in the VC ecosystem?

RQ2: What are the reasons to structure the CVC firm in different ways?

RQ3: What could be a successful way to concretize strategic goals and associated KPIs?

RQ4: What could be a successful way to measure and communicate strategic value in a CVC portfolio?

1.4 Delimitation

Although corporate participation in the VC ecosystem has increased across almost all economic sectors during 2021, this thesis' main focus is on CVC activity within the automotive industry. The transportation sector is one of the smaller sectors in terms of CVC activity, making this sector an unexplored area in terms of corporate venture investments (Gutnick 2022). Thus, it makes the delimitation to the automotive industry both relevant and interesting. Furthermore, a narrower scope enables the thesis to provide more specific guidelines to measure strategic value, as strategic goals and value-adding factors presumably differ across industries. Hence, by narrowing the scope, the authors enhance the thesis' relevance and contributory capabilities. This thesis does therefore include insights and knowledge from CVC firms that either have a direct linkage to the automotive industry or perceived knowledge about strategic value measurement in general. Even though the automotive industry is occupied by a great number of CVC firms, this thesis is delimited to include input from six carefully chosen CVC firms. This is mainly because of the time limit of this thesis, but also because of the difficulty to reach and arrange interviews with people possessing the appropriate experience and expertise. The thesis will not deliberately exclude any geographical areas, nor favor any specific area, but it will as a consequence of high CVC activity in North America (Gutnick 2022), and the authors' close connection to Europe include more examples and information from these regions.

2. Literature Review

This chapter gives context to the research questions and the main topic of the paper by presenting relevant professional publications and taking a critical perspective on existing research. The literature review includes four sections. First, it introduces the VC ecosystem, including the actors within the field and their role in today's society. Second, it narrows down the focus to corporations as active players in the ecosystem. Specifically, it explains the common characteristics of CVC firms and the main differences between them and other types of corporate investment vehicles. Third, it dives deep into the connection between corporations and their VC arms by looking at how venture investments effectively can drive the corporate strategy. Fourth, it illustrates the complexity of concretizing and measuring strategic value from investments done in corporate venture capital.

2.1 The venture capital ecosystem

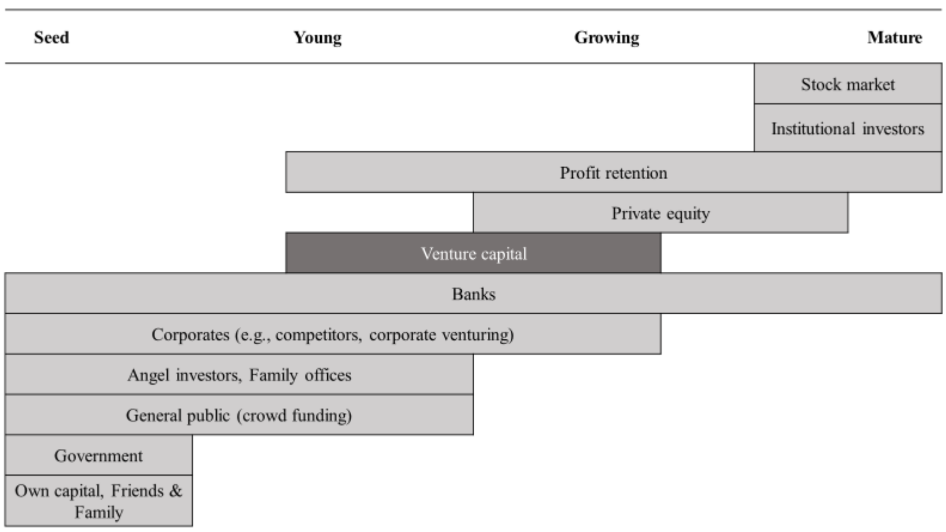

Figure 1. *The role of venture capital and emerging roles of other actors in growing businesses (Bocken 2015). Edited by Dunér, Olsson 2022.*

As visualized by Bocken (2015) with inspiration from the framework developed by Marcus, Malen, et al. (2013), VC is characterized by investments in young businesses with high potential for growth (Da Rin, Hellmann et al. 2013). The concept refers to the "professional asset management activity" of VC funds. Most often are these funds externally financed by institutional investors, but sometimes also from other financially strong actors, including wealthy individuals.

General findings of leading researchers show the positive relationship between VC and the creation of value for the economy as a whole. One of these values is the commercialization of innovation. Rather than contributing substantially to innovation itself, VC firms play a central role in bringing them to life by, for example, taking products to market. In addition, they can support the creation of alliances, which enables and accelerates this process (Da Rin, Hellmann et al. 2011).

The VC ecosystem is characterized by the high risk of investment failures, long periods to realize promised returns, and the overall unproven fields of the ventures. These attributes are seldom compatible with large companies stuck in organizational inertia with established measurements of financial performance. The characteristics of a large corporation make it difficult to pivot and transform effectively (Wendt, Spaulding 2019).

2.2 Corporate venture capital

Executive teams at large corporations all around the world experience constant pressure from innovations disrupting the market – not seldom by start-ups financially supported by VC. The internal R&D activities are often considered insufficient responses to market disruptions. Instead, many corporations enter the VC ecosystem themselves by installing their own funds (Wendt, Spaulding 2019).

The VC arm's investments and alliances with ventures may benefit the PC both financially and strategically (Shrader, Simon 1997; Sykes 1990). These benefits partly come from taking a forward-looking perspective of the industry, innovating the company culture, and opening new opportunities within the internal business development division. Not only are the benefits gained during the holding period but also during insightful company presentations as a part of the sourcing process (Wendt, Spaulding 2019). From successful alliances, the ventures themselves are able to strengthen their performance (Stuart 2000). This is especially true if the PC and its portfolio company have a high level of strategic fit (Thornhill and Amit, 2000).

Corporates can be active in the VC ecosystem in a variety of ways. The definition of CVC, including the activities it encompasses, is not fully accepted across the academic field. Chesbrough (2002) describes it as "investment[s] of corporate funds directly in external start-up companies". Whereas The British Private Equity and Venture Capital association refers to it as the wide variety of ways equity investments are done by corporations or their investment vehicles in private businesses with high growth potential (BVCA 2013).

To put CVC activities in contrast to other ways for corporations to be active in the venture space, Keil (2000) created the framework presented in Figure 2, where he presents both external and internal venturing. Contrary to internal venturing, external venturing is part of "semi-autonomous or autonomous organizational entities that reside outside the existing organization". The "modes" within external venturing are according to Keil's observations (1) transformational arrangements, (2) venturing alliances, and (3) CVC. The first group's main activities are either to externalize internal ventures or to internalize independent ventures. The second, in contrast to the third, is mainly characterized by "intense cooperation" between the PC and the venture. Although CVC can have many similarities to venturing alliances, the former forms relationships with ventures through the actual investments rather than solely through cooperation.

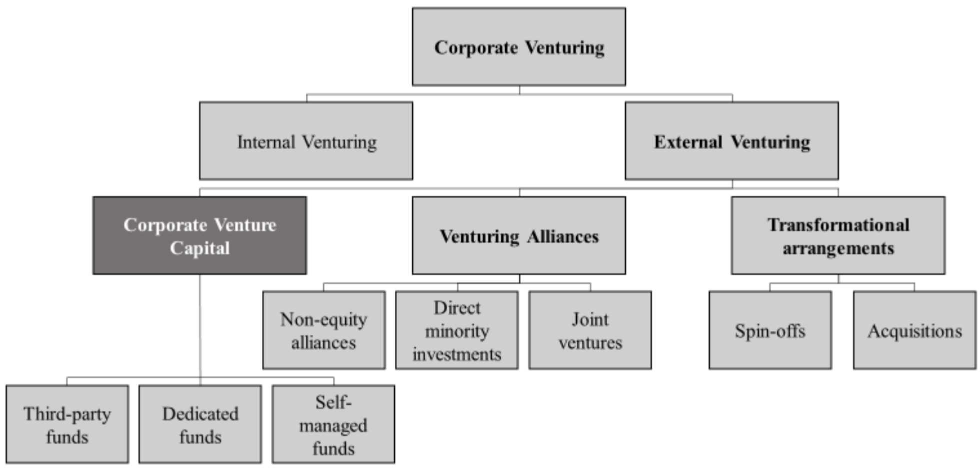

Figure 2. *Modes used for external corporate venturing (Keil 2000). Edited by Dunér, Olsson 2022.*

Furthermore, Keil has chosen to categorize the corporate venture capital firms based on the funds' organizational arrangements, creating three main groups: third-party funds, dedicated funds, and self-managed funds.

Another attempt to categorize CVC firms is done by the British Private Equity & Venture Capital Association (BVCA 2013). The association's developed framework consists of three main types of firms, each described from four main perspectives: purpose, structure, talent, and success measures of their funds. These types are firms involved with corporate/direct investments, internal dedicated funds, and external funds. The characteristics of these are shown in Figure 3.

	Corporate/Direct Investment (Balance Sheet)	Internal Dedicated Fund (GP Model)	External Fund (LP Model)
Purpose	Gain direct business and technology experience in emerging areas	Emerging business and technology with more autonomy for step out options	Develop internal VC capabilities whilst gaining market awareness and understanding
Structure	Direct investment, funding each deal, closely related to business divisions and future business opportunities	Corporate acts as LP in a 100% captive fund. Greater fund autonomy	GP external firm LP corporate part investor Decision on investment GP in fund parameters
Talent	Internal corporate talent	Mixture of external VC hired and internal corporate talent	Experienced VCs and potential secondees from corporate
Success measures	Measurement of direct strategic inputs	Primarily financial with a level of strategic exposure	Predominantly ROI

Figure 3. *Characteristics of different types of CVC firms (BVCA 2013). Edited by Dunér, Olsson 2022.*

2.3 Corporate venture capital firms as strategic & financial value drivers

The objectives of CVC firms are mainly to contribute with strategic and financial value to the PC (BVCA 2013). In fact, these objectives are often strived for simultaneously (Winters, Murfin 1988). Although the concept of CVC has been around since the 1960s, a consensus on how to balance a strategic versus a financial focus has not yet been reached. If anything, the priorities within organizations had broadened (Burgelman, Golden et al. 2019).

Chesbrough (2002) argues there are four distinct types of CVC investments. The matrix created helps classify and understand the rationale behind investments performed by corporations in the VC ecosystem. Also, it supports investment vehicles of this kind to make informed investment decisions to foster strategic development. The dimensions of the matrix are what Chesbrough refers to as the “two characteristics” of an investment of this kind, being (1) its objective (strategic vs financial) and (2) the start-up’s level of linkage to the operational capabilities of the PC.

From this categorization, four distinct types of investments are created. First, there are “driving” investments, which are supposed to strengthen yet remain the direction of the strategy of the corporation. Second, there are “enabling” investments in loosely linked startups in the same ecosystem, with the purpose of stimulating an increased demand for the corporation’s offerings. The two remaining types are “emergent” and “passive” investments, both financially motivated at the outset with the prior having the potential of becoming strategic in the future if e.g., the business environment changes or if the strategy of the PC changes. An example is when the startup enters an unknown territory (new market with new customers), and the received insights from that initiative ultimately result in the PC making strategic changes. A pure financial CVC is, however, challenged by previous research reports stating that independent VC firms generally generate higher financial returns than CVC firms (Siegel, Siegel et al. 1988, Gompers, Lerner 1998, Zahra 1996; Gompers, Lerner 1998; Zahra 1996).

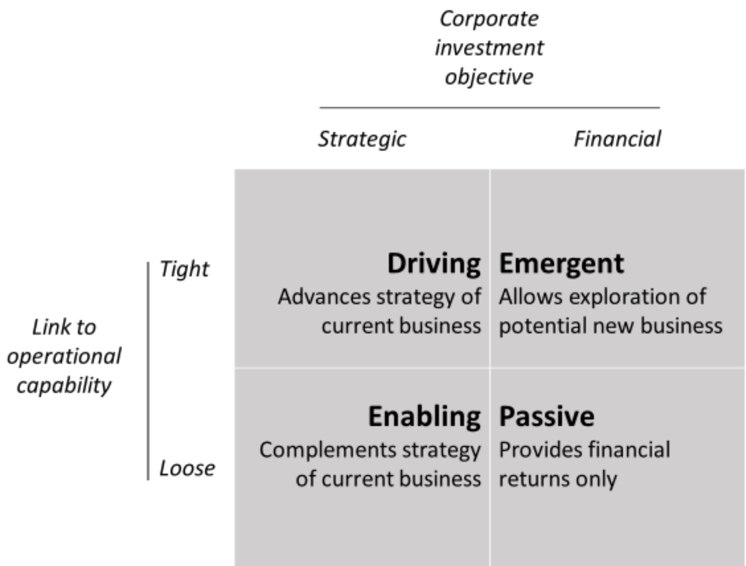

Figure 4. *Mapping your corporate VC investments (Chesbrough 2002). Edited by Dunér, Olsson 2022*

2.4 Performance measurement of strategic value within CVC firms

CVC's role in enhancing corporate strategy has increased partly as a result of a trend toward open innovation. Despite this, there is little known about how to concretize and measure the value created by CVC firms (Napp, Minshall et al. 2009). Glaiser and Buckley (1998) shed light on one aspect of the issue, namely the measuring of alliances' strategic achievements. They stress the issue of restricted characteristics of performance criteria. Another reason for the difficulty of measuring strategic value creation is, according to Bassen, Blasel et al. (2006), the long time it generally takes for strategic value to be realized as financial returns. Furthermore, they stress the necessity of a "performance measurement framework" to properly present the results of CVC activities.

In their article "Performance measurement of corporate venture capital - balanced scorecard in theory and practice" Bassem, Blasel et al. use the Balanced Scorecard, created by Kaplan and Norton (1992), to develop a performance measurement framework adapted to CVC firms (2006). The authors state that a balanced scorecard "can be used to monitor strategic and financial results including their key performance drivers in a balanced way, and furthermore as a base for corporate reports and personal incentive systems of CVC investment managers”. The scorecard should always be adjusted according to the individual CVC firm’s strategy and development stage, by selecting specific perspectives and performance measures.

Another attempt made to solve the issue of measuring strategic value created by a CVC firm is done by Napp, Minshall et al. in their article “External corporate venture capital investment: Towards a framework for capturing and measuring strategic value” (2009). First, the authors present a tool to capture the assessment of strategic value created through the specific investment (see Figure 5). The tool shares attributes of a scorecard and should be used for periodic evaluation of the performance on investment objectives, venture partnerships, alliance structures, and realization of initially sought benefits. It should ideally be used both before an investment is done (to define the expected strategic value creation), during the holding period (to assess its development), as well as after the exit (to evaluate the strategic value created). The tool is, however, best used for a qualitative evaluation of the strategic value outlined at the start, as it doesn’t include any quantitative metrics.

Project Metrics	Rating Criteria			Rating	Supporting Information for Rating
	High (5)	Mid (3)	Low (1)	(1–5)	
Deliverables Project milestones, patentable inventions, prototypes, knowledge, publications, etc.					
Economic Value Cost & time benefits					
Resource Leverage Alliance improves resource management and decision making					
Risk Reduction of risk associated with the program objectives					
Alliance Structure Effectiveness					
Quality of Alliance Partner Organized, follows through on commitments, trustworthy, communicative					

Figure 5. *Alliance performance metrics (Napp, Minshall et al. 2009). Edited by Dunér, Olsson 2022.*

The authors investigated three cases’ suggested processes and metrics for assessing the strategic value created (see Figure 6). These cases were later used as inspiration to create a framework describing the connection between the different actors and the different layers of metrics. The metrics are clustered into (1) yes/no metrics (2) non-monetary quantifiable metrics and (3) monetary quantifiable metrics.

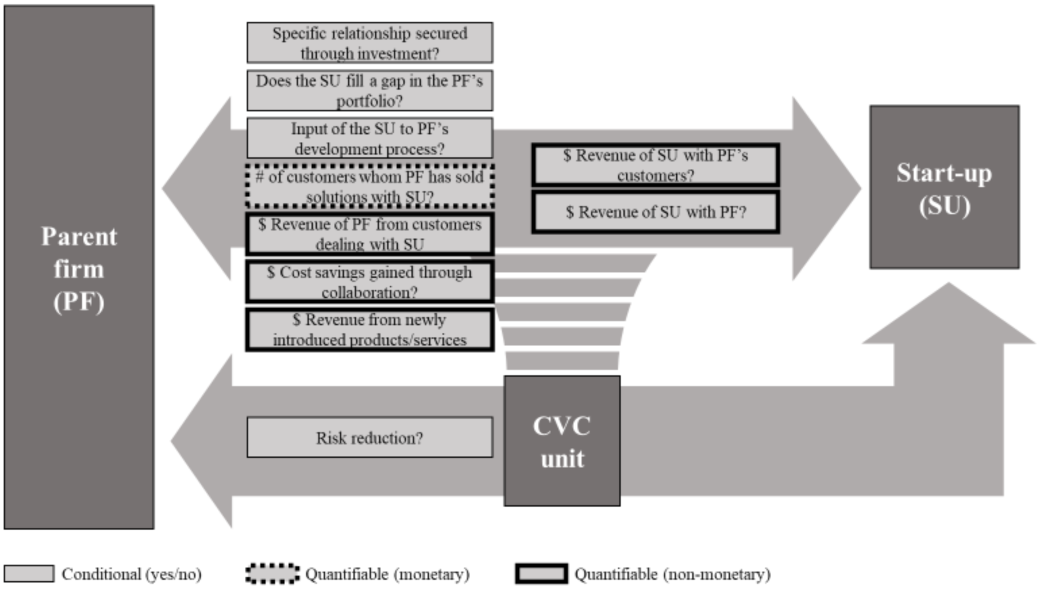

Figure 6. *Metrics layer of the framework (Napp, Minshall et al. 2009). Edited by Dunér, Olsson 2022.*

2.6 Summary of literature review

To summarize, the literature review acknowledges the VC ecosystem's central role in the development of the economy. Further, large corporations participate in this ecosystem in many different ways, including making minority investments in start-ups through self-managed CVC firms. Increased pressure on executive teams has heightened the interest in the VC ecosystem, in addition to its ability to contribute with both strategic and financial value to the PC. It is, however, evident that issues of measuring and communicating the strategic value created by CVC firms remain unsolved.

3. Method

3.1 Research design & method

The research is a multiple case study, inspired by a cross-sectional design. Multiple cases in this context refer to CVC firms interviewed. The purpose of these cases is to provide insights into their current views and practices related to the research questions. The way the research is inspired by a cross-sectional design is that the empirics are collected from multiple people and organizations during a specific point in time (Bryman, Bell 2011). The case interviews are complemented by data from interviews with industry experts that contribute with external perspectives. Moreover, additional data is collected from professional articles written by other industry experts. By including a variety of sources and methods, the study utilizes the benefits of a triangulated research method, ensuring high levels of credibility and validity (Cohen, Lawrence et al. 2000). More specifically, the gathered findings are believed to accurately reflect the reality. This is because how multiple methods to gather data cancel out limitations by cross-checking findings (Bryman, Bell 2011) and overcoming biases arising from individual methods and observations (Bashir, Afzal et al. 2008).

The study takes an abductive approach where the conclusions drawn from the empirics are inferences based on the best alternative explanations (Sober 2013). This approach contrasts the deductive approach where premises of established causal relationships are tested in more general circumstances (Gulati 2009). The "best alternative explanations" are developed by a thorough interpretation of qualitative data made by the authors.

The interviews were conducted on a "semi-structured" basis, meaning some questions were predetermined while others were not. This gives the interviewer the option to individually adopt predetermined questions based on desktop research about the interviewee (and e.g., the organization he/she represents) and ask follow-up questions if wanting to dig deeper on particularly interesting topics. The structured part, however, contributed with comparability and consistency.

3.2 Sample construction

The arrangement of interviews was done by reaching out to relevant people in the industry. There is a restricted number of people with the appropriate experience and expertise to provide sufficient information to answer the research questions. Therefore, the authors used a "judgment sampling" technique in contrast to selecting the sample randomly. Using this method, samples are selected based on their expected ability to answer the research questions (Marshall 1996). More specifically, subjects with specific experience and expertise in CVC and strategic value creation were prioritized. To fill the knowledge and experience gaps of the authors, their personal network within the industry assisted in the process of arranging interviews with relevant people and organizations. The authors of this paper did not have any additional overarching sampling criteria. However, the samples were highly weighted (4/6 of the case interviews) toward the automotive industry because of the purpose of this paper. Additionally, CVC firms in other industries, known to have established processes concerning strategic value measurement, were included.

The collection of qualitative data consisted of a total of nine interviews. Six of which were considered as “cases” since they were held with CVC firm representatives and three of which were classified as “expert interviews". The experts were from both the academic field and the professional CVC advisory field. The list of participants is seen in **Table 1.**

Company	Anonymous denomination	Type of interviewee	Role	Industry / field of expertise	Headquarters / residence	Approx. revenue of PC 2021 (€ million)
A	Anton Anna	CVC representative CVC representative	Investment Director CEO	Automotive	Europe	30 000 – 40 000
B	Beatrice	CVC representative	Head of Strategic Insights	Automotive	Europe	60 000 – 70 000
C	Christopher	CVC representative	Investment Associate	Automotive	Europe	110 000 – 120 000
D	Daniel	CVC representative	Vice President	Automotive	U.S.A.	30 000 – 40 000
E	Eric	CVC representative	Investment Associate	Software	U.S.A.	20 000 – 30 000
F	Fredric	CVC representative	Global Engagement Manager	Technology	Europe	10 000 – 20 000
N/A	Gabrielle	Academic	Professor	Corporate finance	Europe	N/A
N/A	Henric	Industry expert	Chairman	Strategic advisory	U.S.A.	N/A
N/A	Isac	Industry expert	CEO	Strategic advisory	U.S.A.	N/A

Table 1. *Overview of interview participants.*

3.3 Data collection

3.3.1 Primary data

Nine interviews were conducted, laying the main foundation for the overall findings. As mentioned, these were performed on a semi-structured basis. This approach explains the difference in the length of the interviews, ranging from 19 to 46 min. The unstandardized procedure is partly based on the interviewees’ time capacity, and partly because of the number of follow-up questions asked. The important aspect in terms of comparability was to conduct all interviews via the same channel (video meetings) and with the help of the same interview guide. Further, the questions were sent in advance to enable interviewees to prepare the answers to the questions, potentially discuss topics internally, and in some circumstances gather material to show the interviewers. The reason for this was to make the interviews as time-efficient as possible while enabling the interviewees to give answers with high quality. The interviews were conducted between March 1st and April 27th, 2022.

3.3.2 Secondary data

Determined to obtain a comprehensive understanding of the industry, secondary data was gathered as a complement to the primary data collection. To develop the skills necessary to answer the research questions, industry experts' thoughts and insights about the industry's future were carefully considered. Industry events organized by organizations such as Mind the Bridge and Global Corporate Venturing, as well as articles published by online magazines such as Medium and Sifted, are examples of secondary data included in the thesis.

3.4 Data analysis

To make a deep and comprehensive interpretation of the results, the authors of this paper contrasted the firms with the help of the framework created by the BVCA mentioned in the literature review. Thereafter, the analysis of the data was conducted with the help of a thematic analysis approach. This approach is widely used for qualitative studies and ultimately aims to identify and analyze patterns within the collected data. Thematic analysis is also suitable for interpretations of various aspects of the research topic (Braun, Clarke 2006). The first step of the analysis consisted of a thorough familiarization with the data collected, thereby building an understanding of both its depth and width. Second, the authors continued the analysis by organizing similar pieces of text into meaningful groups, thereby generating initial codes that could identify specific features of the data. The third step brought the analysis back to a broader level of interpretation by combining codes into overarching themes, based on differences and similarities between the codes. Five distinct themes were identified: (1) *Strategic rationale for participating in the VC ecosystem*, (2) *The PC's influence on the CVC firms*, (3) *Balancing a strategic and a financial investment focus* (4) *Measurement and communication of strategic value* and (5) *Managerial & operational connection.* The themes were then reviewed and refined carefully before finally being defined and named. To ensure an unbiased and credible interpretation of the data, a professor within the field of corporate finance reviewed the final codes and themes identified.

3.5 Validity and reliability

External validity and reliability are typically harder to achieve in a qualitative study than in a quantitative study because of the difficulty of replication. Findings are by nature harder to generalize across different contexts because of the inability to freeze certain social settings, especially when small samples are used (Bryman, Bell 2011). To advance the study's external validity and reliability the sample is, as described in 3.2, carefully chosen from a theoretical perspective.

Internal validity and reliability are easier to ensure in a qualitative study, as it refers to the authors' common interpretation and understanding of the research findings (Bryman, Bell 2011). To ensure an as high level of internal validity and reliability as possible, several actions were taken. Both authors were present during all interviews to entail two perspectives of the interviewees' answers, one being responsible for asking questions and one for taking careful notes. In addition, six out of nine interviews were audio-recorded and later transcribed. Furthermore, both authors summarized their thoughts and interpretations separately shortly after each interview to prevent confirmation bias, as well as misinterpretations as a consequence of imperfect memory. If uncertain of any information received, and to account for the linguistic and cultural differences, the authors reached out to the interviewees with follow-up questions to confirm that their understanding was accurate.

The reliability was heavily dependent on the interviewee sample, as their answers laid the foundation of the final results, thereby the careful selection described in 3.2. The reliability of the interviewees' answers was further ensured by early on clarifying their anonymity in the final report, thus making the interviewees comfortable to provide truthful answers about their organization. Moreover, it was in the interest of the interviewee to provide sincere answers as it would strengthen the report's final contribution to the industry.

3.6 Ethical concern

In respect of the interviewees' personal information, as well as their companies' unique and to some extent confidential data, a non-disclosure agreement was sent out prior to all interviews (See Appendix 3). Thereafter, all interviews opened with a short disclosure of ethical concerns before starting to ask questions. The interviews were recorded only when implicitly approved by the interviewee. To ensure an accurate interpretation of the interviewees' opinions, all citations were approved and confirmed by the interviewees before being included in the report. Furthermore, all interviewees were anonymized with the help of fictional names, to ensure compliance with GDPR law.

4. Empirics

The findings of this study are presented according to the five themes that emerged during the analysis of the results and guided by the research questions for this study. The analysis revealed distinct differences between the results from the interviews with CVC firms and the results retrieved from industry experts. Therefore, the result section of this report is divided based on (1) case interview findings and (2) industry expert findings. To deepen the interpretation of the results from the case interviews, CVC firms were contrasted with the help of the framework created by the BVCA (Figure 3). CVC firms with similar characteristics as “corporate/direct investment” firms, “internal dedicated fund” firms, and “external fund” firms are henceforth referred to as groups I, II, and III, respectively.

4.1 Case interview findings

Strategic rationale for participating in the VC ecosystem

When respondents were asked about the strategic rationale for participating in the VC ecosystem, it was apparent that strategic value can be divided into two parts. The first part is short-term strategic value, and the second part is long-term strategic value. Short-term strategic value is closely linked to the PC’s core business and is derived from investments whose solutions and innovations are easily implemented to fill an identified gap in technology and other capabilities. Long-term strategic value is less linked to the PC’s core business and is, therefore, more abstract, and harder to define. It aims to enhance the development of the overarching and long-term strategic vision of the corporation. Respondents from groups I, II, and III stated that the strategic rationale for participating in the VC ecosystem is to derive short-term value, whereas respondents from both groups I and II stated that it is to derive long-term value. Only two respondents stated that they seek both short-term and long-term strategic value from their participation in the ecosystem.

Short-term strategic value is primarily received through an enhanced competitive position for the PC. It is achieved by integrating innovation and adding complementary parts to strengthen the customer value proposition. One respondent from group I and another from group II also mentioned that there is value in terms of the brand image that certain CVC activities can help to create. For example, some CVC funds may be focused more on sustainability if the PC is desiring an improved brand image in this area.

Long-term strategic value is primarily received through protection from and preparation for sudden market disruption. By keeping an "ear towards the industry", as stated by Anton, Investment Director (group I), the CVC firm welcomes a discussion about what the PC's core business currently looks like and how it potentially should look in the future. Participation in the industry also enables the corporation to understand how to be a disruptive actor. It enables the corporation to study and learn from previous disruptions, as well as to test risky and disruptive ideas via their portfolio companies to validate a potential launch in-house at a later stage. By doing so, it speeds up the process of reaching the PC's strategic vision as well as driving prosperity by powering up innovative companies to jointly transform the industry.

Anna, CEO of company A (Group I), categorizes CVC firms based on the strategic rationale to participate in the VC ecosystem: (1) Fill gaps, (2) Seek growth opportunities, and (3) Identify disruption. Anna makes this categorization based on values sought by their own CVC and argues that it could be used as a proxy for the industry as a whole.

The PC's influence on the CVC

Respondents from group I and II stated that the PC's strategic goals and long-term vision are what guides the CVC firm's focus areas. A close connection between the CVC firm and the PC ensures that the investment criteria of the CVC firm are aligned with the PC's long-term strategy. CVC firms from these groups invest in the same sector but in new innovative solutions that are somehow connected to the PC's value chain and satisfy the business needs down to a business unit level. Respondents from group III stated that the CVC firm is a stand-alone investor, whose investment focus is independent of the PC's long-term strategy but that all investments are somehow connected to its value chain.

Respondents from groups I and II said that a close relationship between the CVC firm and the PC is necessary to successfully screen for new investments and help current portfolio companies. The industry expertise within the PC is used to validate and value investments, and continuous communication with business units of the PC guides the screening and evaluation of investments. Furthermore, a close connection with industry experts within the PC is exploited to best help the portfolio companies to scale. Respondents from group III argued that it is hard to align the PC's strategic goals with the CVC firm's appropriate actions as an investor. Furthermore, they argue that a close connection to the PC disables the CVC firm to move fast and be agile.

Managerial & operational connection

Depending on the strategic value sought by the CVC firm, the operational linkage between the PC's core business and the portfolio companies varied. When the main rationale was to extract value-adding resources outside their PC's current operations or to gain insights about the future shape of the market, respondents stated that the portfolio companies' operations aren't closely linked to the PC's core business. As stated by Anton, Investment Director (Group I), the CVC firm "doesn't look for companies that immediately can be implemented in the core business, but for new business models, new services, etc.". Still, when the central value sought was to enhance the PC's performance, the portfolio companies were said to be closely connected to the PC's core business.

Regardless of the strategic value sought by the CVC firms, all respondents agree that the portfolio companies should be given autonomy and not be forced into changing their initial business idea. All except one of the respondents stated that they don't actively try to influence the portfolio companies and that the CVC firm's role as an investor solely is to help them scale. Christopher, Investment Associate (Group II), does, however, see potential in partly influencing the portfolio companies, stating that "the stage of the portfolio company determines the CVC firm's ability to align the portfolio company's operations with the strategic value sought by the parent company.".

Although a majority of the respondents were clear about the advantages of autonomously working portfolio companies, respondents also mentioned the perks of a CVC firm as an investor due to the connection to the PC. Beatrice, Head of Strategic Insights (Group I), said that "The CVC helps the portfolio companies to develop by facilitating innovation and experiments". Other respondents (Group I and II) stated that strategic value is created for the portfolio companies by enabling them access to an ecosystem of similar startups as well as a close relationship with industry experts. There were, however, respondents (Group III) that argued that there is a disadvantage for portfolio companies to be closely linked to a large corporation. These respondents argued that the PC's influence on the portfolio companies' operations has a potential negative impact on their performance and that there is a risk to kill the portfolio companies' entrepreneurial and innovative culture.

Balancing a strategic and a financial investment focus

Respondents from group I stated that the main value sought from CVC investments is strategic, with the reason to foster the future vision of the PC. The potential investments must, however, still fulfill internal financial criteria to be selected. Respondents from group II stated that investments primarily are done with a financial focus, whereas strategic value is a positive add-on. Whenever the CVC firm screens for ventures, strategic value is always kept in mind to sustain a connection to the PC. Respondents from group III stated that their CVC firms at the outset had a strategic focus closely connected to the PC's long-term vision. These CVC firms were later rearranged into stand-alone financial investors because of the limitations for a VC firm to be closely connected and associated with a large corporation. The investments are, however, still connected to the PC's value chain.

Measurement and communication of strategic value

All respondents confirmed that communication between the CVC firm and the PC is done regularly. Respondents from groups I and II stressed the importance of communicating the performance of the CVC firm both internally and externally, whereas respondents from group III described the aim of communication as to inform the PC about the current state of the industry and potential emerging innovations. Internal communication is, according to groups I and II, used to evaluate the performance of the CVC firm's portfolio and the value brought to the PC by the CVC firm. The same groups mentioned that external communication is imperative to market the CVC firm as an attractive investor. This is done to access future potential investments, highlighting the value brought to the startups by the CVC firm with support from the PC's resources.

Only one of the respondents (group I) stated that an established process was used to measure strategic value, although both respondents in group I had an aspiration to do so. Beatrice (group I) stated that internally created scorecards are used to evaluate strategic and financial value. The scorecard includes strategic metrics, such as the number of M&A exit options created, number of new collaborations started between a venture and the PC, number of customer introductions, number of deals, number of inorganic integrations to the PC, and additional revenue created by the PC because of the investment. A respondent from group II stated that evaluation of strategic value creation mainly is done through the success of the implementation of the startup into the core business of the PC.

4.2 Industry expert findings

Strategic rationale for participating in the VC ecosystem

According to the majority of industry experts who were interviewed, the primary value of a CVC portfolio is the synergies derived between the PC and the companies invested in. There is, however, always a need for the CVC to balance its strategic and financial interests. Isac, CEO and founder of a specialized consultancy firm, defined strategic value as all additional value beyond the financial return of the investment that the PC can to obtain. It is the ability to through investments contribute to the PC's overarching strategy, by being the eyes and ears of the PC and reporting back valuable insights about the current market. In addition, strategic value has the potential to bring the PC optionality in terms of future strategic decisions. Furthermore, Henric, Chairman of another specialized consultancy firm, states that the strategic value sought from the VC ecosystem is dependent on the PC's characteristics. A mature company may seek strategic value in terms of preparing for market disruption, whereas a younger or smaller corporation may seek strategic value in terms of the investment's ability to help the core business to scale. The elements of strategic value differ for all types of companies, and it is important for the CVC to determine the elements that are most important for the company (Isac).

Strategic value from managing a CVC firm can be gained in many ways, including knowledge sharing, access to new technology, expansion of the industry network, promoting transformative business growth, gaining partnerships, accelerating M&A pipelines, as well as preparing for disruption in the market (Horowitz 2018). Hence, there are a large number of valuable aspects to consider when operating a CVC firm. Furthermore, the VC ecosystem is a source of innovation which according to Onetti (2022) is a necessity for continued success in the market. Onetti argues that consultants and external advice aren't sufficient to fully understand emerging trends and disruptive technology. Therefore, the VC arm can be used as a better source of gaining market intelligence and introducing up-and-coming startups to the PC. It enables companies to stay at the cutting edge of technology and innovation, as well as remain agile in an ever-changing business environment.

The parent company's influence on the CVC

As earlier mentioned, CVC firms can be structured in different ways depending on the PC's aspirations, capital, and pre-conditions. According to (Claussen 2016), the majority of companies don't have the need, size, or capital to carry an internal CVC firm. The companies that do carry a CVC firm internally, most often provide them with annual funding that is renegotiated each year. This puts pressure on the CVC firm to present the fund's performance to successfully negotiate the capital to be allocated. Other CVC firms, structured as traditional VC firms, don't have to renegotiate the funding each year, which enables them to keep a longer strategic time horizon (Henric). Many corporations have in recent times decided to spin out their VC arm, thereby separating investment activities from the PC and making the fund independent. Some companies take it one step further, by actively removing the visible connection between the PC and the VC firm by naming it something else (Onetti 2021). The industry expert describes them as "disguised" CVCs. The reason for this separation is the aspiration to make the investment arm more agile, to erase any potential conflict of strategic interests, or to position the VC firm in a geographically preferred area. Moreover, an independent VC firm is able to add more limited partners at a later stage and may also be able to incorporate a bolder investment strategy. The separation does, however, not come without disadvantages. By separating the VC firm, the ability to provide corporate industry expertise, a wide industry network, and other resources to the portfolio companies post-investment disappears. A majority of industry experts confirm the challenges of an internal CVC firm, but a majority also speak for the advantages of having one. Onetti states that "I'd rather work to solve the challenges CVCs have than giving up their superpowers." (2021).

Managerial & operational connection

All respondents stated the importance of the CVC firm's autonomy for it to be able to act fast when screening for investments. It is, however, imperative that the connection between the PC and the CVC firm is close enough for the CVC to be fully committed to the general strategic goals of the PC to align the interests. Furthermore, the PC must take a long-term perspective of the CVC firm, trusting that its activity will result in long-term value. Hence, a balance between autonomy and alignment must be found.

Balancing a strategic and a financial investment focus

All industry experts agree on the evident conflict between strategic and financial focus in the CVC industry. According to Onetti (2021), the conflict most often results in the CVC skewing towards a financial focus or that the data of the CVC firm's performance is not fully understood. CVC firms may on the other hand have multiple goals that combine both strategic value and financial value. The CVC firms can aspire to profitably allocate free cash flow at the same time as it facilitates insight into disruptive innovation (Ventech 2016). Considering the small financial contribution to the PC's income statement coming from the CVC firm, a partly strategic focus plays a crucial role in advocating for the entity's existence. A solely strategic focus is, however, not preferable in the long run. CVC firms can and should be guided by the PC's strategic interests, on the condition that they can create financial returns (Onetti, 2021). Heriberto Diarte (2021) states that "the first criterion for an investment is whether it would fit in the PC in 15 years, as a supplier partner or customer". However, Diarte argues that it must be a financial rationale guiding the investment decision as well. The main reason for this is that the strategic value created by the CVC firm in terms of its impact on the PC's performance is too hard to demonstrate in terms of financial KPIs.

Measurement and communication of strategic value

All respondents express the difficulty in measuring strategic value and that only a few companies have attempted to develop their own framework to do it. Henric, says that "you don't know if you are sitting on gold until you dig it up. Hence, it is difficult to measure [strategic value] on a rolling basis and it can only be realized once it can be seen.". Another industry expert, Isac, stated that it is impossible to know how the CVC portfolio is performing in the first couple of years because it takes longer to realize a financial return on startups. Therefore, he argues that methods for measuring strategic value are imperative to understand how the portfolio is performing.

In the article "Measuring Success in Corporate Venture Capital", David Horowitz states that all companies must come up with an extensive list of strategic objectives for their specific organization (2018). Thereafter, the objectives should be prioritized for the CVC firm to adapt its investment strategy accordingly. Moreover, the strategic objectives should be divided into short-term and long-term horizons to increase the chances of successfully measuring and communicating the value created. Short-term value is retrieved from investing closer to the core business of the PC, whereas long-term value is mainly retrieved when investing outside the core business to prepare for disruption and find complementary resources. To measure the strategic value retrieved, a comprehensive KPI system including also qualitative descriptions should be used to track the development of the portfolio. The KPIs could, similar to the strategic objectives, be divided into short-term KPIs for the first year and long-term KPIs for over five years or more. Financial goals should always be evaluated on a long-term basis.

Short-term KPIs should, according to Isac, be more activity-based, whereas long-term KPIs should be more transaction-based. A short-term KPI for knowledge-sharing as a type of strategic value can, for example, be the number of meetings held, the number of reports finished, number of companies evaluated in a certain area or number of new connections made. Long-term KPIs can be the additional revenue, deals and transactions realized because of the investment. Preparing for market disruption, as a type of long-term strategic value is, according to the majority of respondents interviewed, too long-term to measure. In addition to a framework of KPIs to measure the strategic value captured, the CVC firm can turn to internal expertise within the PC to ask for feedback on the portfolio company's potential contribution to the PC's operations (Puig 2020).

Ideally, metrics related to the direct impact on the PC's performance because of the CVC portfolio should be displayed to show the value created. It could be the number of new users gained because of the new feature coming from the CVC firm's investment, the time saved because of the new integrated solution, the additional number of sales because of the new complimentary solution etc. The performance of investments done based on more long-term strategic goals may be harder to quantify and showcase in terms of transactions and revenue. In those circumstances, the strategic performance should be showcased with help of the activity-based KPIs previously mentioned (Puig 2020).

The KPIs should, according to Horowitz, later be used to evaluate the performance of the strategic objectives regularly, preferably twice a year but at least annually (2018). Moreover, the KPIs should be used to communicate the performance of the CVC firm both internally and externally. Strong internal communication of the CVC firm's performance and impact on the PC's strategic goals enhances the chances of internal business units incorporating innovative solutions. It also fosters an innovative culture and openness for development. A strong external communication contributes to the PC's brand image by highlighting its aspiration to innovate and showcasing the concrete actions the company is taking to e.g., stay at the cutting edge of technology and drive sustainability questions. Moreover, the CVC firm should communicate the strategic value it creates for the portfolio companies in order to increase its attractiveness as an investor (Puig 2020).

5. Discussion

5.1 Financial CVC firms might be more strategic than they are willing to admit

The findings suggest that CVC firms, in comparison to traditional VC firms, have advantages in terms of being attractive as investors since they can offer strategic benefits to portfolio companies by, for example, giving access to people with industry experience. Nevertheless, the two CVC firms mentioning that their investment vehicles have transformed from having a strategic to a financial focus argue for the opposite. They state that there are limitations for a VC firm to be closely connected to and associated with a large corporation, one of which being a conflict of interest between the ventures and the PC. Further, these investors argue that startups can lose their entrepreneurial spirit if linked to a larger corporation, contributing to CVC firms being seen as unattractive investors compared to traditional VC firms.

The empirics indicate that financially focused CVC firms are more strategic than what is communicated externally. This hypothesis is supported by the argument made by Onetti (2021) that several CVC firms' connection to the PC has been visually removed for the CVC firm to be branded as a completely independent entity. He continues by referring to them as "disguised" CVC firms. What became apparent in the analysis of the interviews was that the CVC firms who classify themselves as solely financial, clearly fulfill literary criteria pointing toward the fact that they in reality have strategic agendas. The CVC firms mention that all investments are somehow connected to the PC's value chain, with the objectives to inform the PC about the current state of the industry and potential emerging innovations. These objectives are similar to the ones sought by the CVC firms who classify themselves as strategic, one stating that having an "ear towards the industry" to prepare for disruption is a central long-term strategic reason for participating in the VC ecosystem. This objective is also closely related to "looking into the future" (Wendt et al. 2019), determined as a strategic value sought from CVC activity in the literature review.

When categorizing the CVC firms with inspiration from the framework developed by BVCA (2013), the said-to-be financially focused firms were put as "external funds", mainly measuring success based on return on investment but with the purpose to "develop internal VC capabilities whilst gaining market awareness and understanding". One might argue that the CVC firms in question could potentially be making mostly "emergent" investments (Chesbrough, 2002), as those investments can become strategic although financially motivated at the outset. This further strengthens the hypothesis that financially focused CVC firms are more strategic than they are willing to admit.

5.2 A conflict between theory and practice

Similar to previous research (e.g., Shrader, Simon 1997; Sykes 1990), industry experts argue for the theoretical strategic benefits of incorporating a VC arm into the PC's business. Onetti (2021) argues that a careful alignment of the PC's strategic goals with the investment strategy of the CVC firm has the potential to release unique capabilities in terms of strategic value creation. Despite both industry experts' and previous research's clear conviction, only a minority of CVC firms attempt to keep a close connection to the PC and measure the strategic value created. Findings from the interviews with CVC firms reveal that the greater part chooses to rely primarily on financial return as a performance measure. They state that a solely strategic focus is not sustainable and that a financial focus must be prioritized to stay alive. Meanwhile, industry experts argue that the additional revenue generated by the CVC firm is close to insignificant to the PC's income statement and that strategic value should be the main reason for the CVC firms' existence. Hence, it appears to be a disagreement between theory and practice. On the other hand, the findings from interviews with CVC firms reveal that a majority aspires to extract strategic value, whereas the remaining minority initially had a strategic focus that later was forced to transform into a financial one. The transformation was also combined with a separation of the CVC firm from the PC. These findings indicate that practitioners aspire to adhere to the theory's reasoning but fail to fully realize the potential of a closely connected CVC firm as they choose to incorporate practices of a more traditional VC firm. The reason for this conflict between theory and practice is potentially a consequence of the importance of measurement and evaluation of strategic value. The absence of effective measurement of strategic value does not allow CVC firms to primarily keep a strategic focus and hence exploit their unique capabilities to create value beyond a financial return. Thus, a separated VC arm may at this point be more appropriate, but a closely connected VC arm may, in an ideal environment (with effective measurement processes), be preferable.

5.3 Towards a best practice for performance measurement of strategic value

As noticed in the literature review, attempts to classify the investment vehicle's strategic goals and to measure the performance of a CVC firm have been made. Chesbrough's matrix of four distinct types of investments aspires to classify and understand the rationale behind the PC's participation in the VC ecosystem. Thereby, it supports the CVC firm to make informed investment decisions in the ecosystem (Chesbrough 2002). Further, both Napp, Minshall et al. (2009) and Bassem, Blasel et al (2006) developed frameworks intended to measure the performance of CVC firms. Yet, the empirical findings confirm that the challenge for CVC firms to display their strategic performance and value brought to the PC remains unsolved. Although industry experts stress the importance of KPI measurement and alignment of interests between the PC and the CVC, none of those factors appear to be adhered to in practice. A potential reason for this is that there is a gap between the rationale for the PC to participate in the VC ecosystem and the appropriate metrics to use for the measurement of strategic goals. The conceptual framework presented in Figure 7 has the intention to guide practitioners in defining their CVC firm's strategic goals and to properly choose KPIs appropriate for performance measurement of those goals. This guide is built upon the literature review and empirical findings, as well as the authors' interpretations of the provided information. The KPIs are either explicitly mentioned by the industry experts and the CVC representatives or built on accumulated information gathered throughout the research process (as briefly explained in 3.1).

Three main steps make up the conceptual framework. First, the PC must define the strategic rationale to participate in the VC ecosystem, the alternatives being to (1) fill gaps, (2) seek growth opportunities, and (3) identify disruption. It may, however, be the case that the PC can identify itself with more than one rationale. Next, the conceptual framework suggests strategic goals suitable for the identified strategic rationale(s). The PC should, however, consider its current capabilities and ambitions to determine strategic goals appropriate for its specific firm. Thereafter, a prioritization of the strategic goals should be performed to specify the investment strategy of the CVC firm. The last step in the framework is to select appropriate KPIs to use as metrics of strategic performance. A combination of short-term and long-term KPIs is preferred to successfully visualize the performance both in the near future and on a long-term basis. As visualized in the framework, short-term KPIs tend to be more activity-based, whereas long-term KPIs are more transaction-based. This is, however, not always the case due to the uniqueness of each strategic goal.

STRATEGIC RATIONALE		
Fill gaps *Fill current capability-gaps in the core business*	**Seek new growth opportunities** *Access new opportunities to capitalize on and by that accelerate growth*	**Identify disruption** *Keep an ear towards the industry and stay at the cutting edge of innovation*

STRATEGIC GOALS		
Fill gaps • Access new technology • Enhance customer experience • Increase employee expertise • Innovate corporate culture • Strengthen brand image	**Seek new growth opportunities** • Trend spotting and market intelligence • De-risking experimentation in unexplored territory • Market expansion • Segment expansion • Product line expansion	**Identify disruption** • Prepare for disruption • Learn how to be a disruptor
Overarching goals • Create commercial relationships • Support M&A activities		

KPIs for selected strategic goals

STRATEGIC GOALS	KPIs (#: number of | %: percentage of) Short-term	Long-term
Fill gaps		
Access new technology	➢ # Contacts generated with innovative technology professionals ➢ # New initiated partnerships with venture development teams ➢ # New patents licensed	➢ # Joint projects between PC and ventures ➢ # New supply chain solutions implemented ➢ # New software solutions integrated to customer value proposition ➢ # New physical features integrated to customer value proposition ➢ # Customers acquired from new integrated feature ➢ Additional revenue generated from new technological integrations ➢ Cost savings realized by new technological integrations
Enhance customer experience	➢ # Efforts made to understand and meet customer preferences	➢ % Improvement in customer satisfaction score generated by VC activity
Increase employee expertise	➢ # Knowledge-sharing sessions with PC ➢ # Recruited experts	
Innovate corporate culture		➢ # Intrapreneurial initiatives taken within the PC fostered by CVC activity
Strengthen brand image	➢ # Marketing activities of specialized fund activities (e.g., sustainability)	➢ % Improvement in sought brand position (e.g., sustainable image) generated by VC activity
Seek new growth opportunities		
Trend spotting and market intelligence	➢ # Insights about emerging customer preferences ➢ # Insights about industry sub-sectors ➢ # Market intelligence session present at (events incl. webinars and fairs) ➢ # Industry reports created ➢ # Deals sourced and evaluated ➢ # New connections with industry organization	
De-risking experimentation in unexplored territory		➢ # Portfolio companies active in unexplored markets ➢ # Portfolio companies targeting new customer segments ➢ # Portfolio companies launching insurgent products
Market expansion	➢ # Pilots initiated	➢ # New markets entered ➢ Revenue generated from new markets
Segment expansion	➢ # Pilots initiated	➢ # New customer segments targeted ➢ Revenue generated from new segments
Product line expansion	➢ # Prototypes created outside of core product lines	➢ # New non-core products introduced ➢ # New customers gained from new product lines ➢ Revenue generated from new product lines
Identify disruption		
Prepare for disruption	➢ # Deals sourced and evaluated ➢ # Industry insight sessions present at (events incl. webinars and fairs)	➢ # Investments done in insurgent ventures with potential for disruption ➢ % Market share protected due to corporate pivoting done based on early indications of disruption
Learn how to be a disruptor	➢ # Internal analyses done on previous disruptive cases	➢ # First-mover disruptive actions done by PC initiated by the CVC firm
Overarching goals		
Create commercial relationships (CRs)		➢ # Full CR implementations with external partners (as suppliers or customers) ➢ # Business units engaged in external CRs ➢ Revenue generated from CRs ➢ Cost savings realized from CRs
Support M&A activities	➢ # Portfolio companies evaluated as potential M&A targets	➢ # Acquisitions made in ventures introduced by the CVC firm

Figure 7. *Guide for defining strategic goals and appropriate KPIs in corporate venture capital (Dunér, Olsson 2022)*

6. Conclusion

The purpose of this thesis was to provide CVC firms with guidance on how strategic value could be concretized with the help of KPIs, primarily directed towards the automotive industry, as well as how it could be measured and communicated. RQ1 and RQ2 aim to cover related topics, whereas RQ3 and RQ4 aim to directly fulfill the purpose.

6.1 Answers to research questions

RQ1: What is the rationale for corporations to participate in the VC ecosystem?

There are both financial and strategic reasons for corporations to participate in the VC ecosystem. The empirical findings in this thesis do, however, conclude that the main rationale is to derive strategic value. Strategic objectives can be divided into short-term and long-term horizons, which further define the character of the strategic value sought and the corporations' initial rationale to participate in the VC ecosystem. Concluded from the data collection, and specifically mentioned by a CVC representative, one broad categorization of rationales to participate in the VC ecosystem is to (1) fill gaps, (2) seek growth opportunities, and (3) identify disruption (Figure 8).

Strategic Rationale	Time Horizon	Common focus
Fill gaps *Fill current capability-gaps in the core business*	Short-term	Core business
Seek growth opportunities *Access new opportunities to capitalize on and by that accelerate growth*	Short-term and long-term	Beyond core business
Identify disruption *Keep an ear towards the industry and stay at the cutting edge of innovation*	Long-term	Core business and beyond core business

Figure 8. *Broad categorization of strategic rationales in corporate venture capital (Dunér, Olsson 2022).*

RQ2: What are the reasons to structure the CVC firm in different ways?

Empirical findings reveal that CVC firms differ in terms of their organizational arrangements. The differences mainly refer to the level of connection between the CVC firm and its PC, in which the connection is twofold. It refers to the PC's influence on the CVC firm and entities' operational linkages. CVC firms can be placed within the spectrum of connected to completely separated.

The results point toward three underlying reasons for the unique arrangements: (1) the type of value sought from the CVC firm (financial versus strategic, as well as the value creation horizon), (2) the brand image desired as an investor in the VC ecosystem, (3) the perceived structural impact on the CVC firm's as well as the ventures' performance.

CVC firms with a financially dominated focus are more likely to have a separated organizational arrangement with their PC. It is presumably because of previous studies stating that independent VC firms tend to generate greater financial returns than CVC firms. The connection between the entities is often stronger if the dominant focus is strategic. Short-term strategic value tends to motivate a strong operational linkage, while long-term strategic value-seeking does not require as tight of an arrangement.

Utilization of the PC's resources enhances the CVC firm's attractiveness as an investor. From this perspective, a close organizational linkage between the CVC firm and its PC is beneficial. From another perspective, a perceived independence of the CVC can be more attractive for ventures looking to raise capital. This is mainly because ventures view this organizational arrangement to have a lower risk of creating a conflict of interest with the PC.

The CVC firm's performance can be strengthened by a tight connection to the PC if the PC's resources are utilized in the sourcing and due diligence processes. From the portfolio companies' perspective, this connection enables PC to contribute with value-adding activities to the ventures and ultimately improve their performance. A loose connection is motivated by the same factors, namely the structure's effect on CVC firm and venture performance. If the PC has too much control over the CVC firm, it makes it difficult for the investment vehicle to work autonomously enough to work efficiently in the intense and fast-changing environment of the VC ecosystem. In addition, a close organizational linkage comes with the risk to weaken ventures' performance as a large corporation's influence can strangle the benefits of a small company, such as the entrepreneurial culture.

RQ3: What could be a successful way to concretize strategic goals and associated KPIs?

The literature review, supported by the empirical findings, suggests that a successful way to concretize strategic value could be to use the conceptual framework (Figure 7). The conceptual framework guides the practitioners to concretize their strategic value sought and determine appropriate KPIs. As visualized in the conceptual framework, the first step is to define the PC's strategic rationale for participating in the VC ecosystem. Next, affiliated strategic goals are to be determined based on the current capabilities and objectives of the PC. Lastly, appropriate KPIs to use as metrics of performance are to be selected.

RQ4: What could be a successful way to measure and communicate strategic value in a CVC portfolio?

The literature review, as well as the empirical findings, suggest that practitioners use a balanced scorecard to visualize the value created by the CVC firm. The scorecard can be used throughout the entire holding period of a venture to effectively communicate the development and ongoing performance of the investment. This is because of the importance to regularly visualize and communicate strategic value created for the PC, as well as for the portfolio companies. Furthermore, communication should be directed both internally and externally to adhere to different stakeholders' interests. Internal communication should reveal the contribution to the PC's different business units and the overarching strategy of the PC, thereby demonstrating the CVC firm's importance. External communication enhances the CVC firm's attractiveness as an investor by highlighting the value brought to the startups, as well as marketing the PC as an innovative corporation.

6.2 Contribution to literature

The report's theoretical contribution consists of (1) a clarification of the strategic rationale for companies to participate in the VC ecosystem, (2) a description of current practices and challenges connected to companies' participation in the ecosystem, and (3) a suggestion of how to combat challenges connected to the participation in the ecosystem. More specifically, the suggestion elaborates on the most appropriate way for companies to define and determine metrics to evaluate the performance of strategic value creation.

6.3 Managerial implications

The report has a dual contribution to practitioners and can be used in two ways: (1) to define the optimal structure and strategic goals for the VC arm and (2) to effectively evaluate and communicate the value of the VC arm. The optimal structure and strategic goals for the VC arm can be defined by reflecting upon the PC's rationale for participating in the VC ecosystem, as well as the reason for different CVC firm structures presented in this report. It enables managers to align the interests of the PC with the strategy of the CVC firm and obtain the initial value sought from participating in the VC ecosystem. Furthermore, practitioners can use the conceptual framework presented in this report to concretize strategic value and choose appropriate KPIs for measurement. Thereafter, the authors' suggestion for regular monitoring of strategic value with the help of a balanced scorecard can aid visualization and communication of the CVC firm's contribution. It enables CVC firm managers to effectively defend the performance of their portfolio.

The report is of interest to both CVC incumbents and future entrants to the CVC arena. Incumbents are encouraged to reflect upon the appropriateness and performance of current operations, whereas future entrants are given a comprehensive guide on how to set up the VC arm based on the PC's current capabilities and future aspirations.

7. Limitations and Further Research

Limitations can be found in the analysis, sample construction, and empirical finding of this report. To begin with, the interpretive approach used to analyze and present the findings is highly reliable in the authors' ability to do so in an accurate and unbiased manner. This limitation was, however, mitigated by asking an industry expert for a second opinion on the empirical themes created, as well as interpretations made. Secondly, as a judgment sampling technique was used to select the companies interviewed, the appropriateness of the interviewees to represent the industry as a whole can be questioned. Moreover, the study consists of a relatively small sample in which all companies interviewed operate in either Europe or the United States, thereby weakening the geographical representation. The companies selected were, on the other hand, picked with the guidance of industry practitioners and known to be relevant players within this area. Hence, the expertise of the companies within this area was deemed more important than the size of the sample. Lastly, three aspects make it reasonable to question interviewees' answers about their company's operations. The first aspect is companies' general unwillingness to share company secrets, the second aspect is the risk that the interviewee didn't possess the appropriate knowledge, and the third is that the answer was biased and based on the personal opinions of the interviewee. It can on the other hand be argued that interviewees were incentivized to contribute with an honest answer, considering the purpose of the study is to create a tool that could aid CVC firms to concretize, measure and communicate strategic value.

To obtain an even more comprehensive understanding of how strategic value could be measured by CVC firms, future studies could use a larger and more globally represented sample. A sample of this kind has the potential to add more valuable aspects and insights to the conceptual framework. Moreover, it could be useful to interview more than one person at each CVC firm to ensure a comprehensive and correct result from each case. Including also managers of the PCs in the sample could, for example, provide an additional perspective on the strategic value component of CVC.

This thesis does not determine the best way to concretize and visualize strategic value in a CVC portfolio, rather it provides practitioners with a conceptual framework of how they could go about doing it. To enhance the managerial implications for practitioners and further strengthen the position of the CVC firm, future researchers could try to determine the best way to concretize and visualize strategic value. This would imply a study that extends over a longer period, following individual cases that use different methods to concretize and visualize strategic value. It would require a dependent variable working as a proxy for “success” to identify best practices.

Appendix

Appendix 1. Interview Respondents

Anonymous denomination	Gender	Date	Time (minutes)	Channel
Anton Anna	Female Male	2022-03-01	42	Video meeting
Beatrice	Male	2022-03-23	45	Video meeting
Christopher	Male	2022-04-14	29	Video meeting
Daniel	Male	2022-03-29	24	Video meeting
Eric	Male	2022-03-23	32	Video meeting
Fredric	Female	2022-04-01	46	Video meeting
Gabrielle	Male	2022-04-19	19	Video meeting
Henric	Male	2022-04-27	30	Video meeting
Isac	Male	2022-03-07	34	Video meeting

Appendix 2. Interview Guide

Background

1. What is your position at the CVC firm?

2. Is there a close connection between the main corporation and the CVC firm?
- How is the cross-functional relationship managed?
- How well aligned are the two companies' operations?

3. What are the driving factors for the main corporation to participate in the VC ecosystem?

Investment Strategy

1. Are strategic goals a decisive factor when screening for potential investments?
- How is the weight of importance split between financial return and strategic value creation when deciding between investments?

2. Are the portfolio companies' operations closely linked to the main corporation's core business?
- Is there a smooth linkage of operational capabilities?

3. How actively does the CVC firm work with the portfolio company to align its focus with the initial strategic value sought from the investment?

4. How is strategic value retained after an exit?

Strategic Value

1. Is there a definition of strategic value?

2. Is there a difference between short- and long-term strategic value creation?
- How is that reflected in the CVC firm's investments?

3. What are the main corporation's main strategic objectives?

Evaluation

1. In what way(s) is the CVC firm's investment activities able to support the overarching strategy of the main corporation?

2. Are qualitative and/or quantitative KPIs:s used by the CVC firm to evaluate and concretize the strategic contribution to the main corporation's core business?

3. How is the strategic performance evaluation carried out from a practical point of view?

4. Does the CVC firm use any frameworks, either built on its own or received externally, to measure strategic value?
- What is the hardest with concretizing and evaluating strategic value from investments?
- How and to whom does the CVC firm communicate the strategic value created by the portfolio companies?

Appendix 3. Non-Disclosure Agreement

Consent to participation in student's survey / interview

The student's project. As an integral part of the educational program at the Stockholm School of Economics, enrolled students complete an individual thesis. This work is sometimes based upon surveys and interviews connected to the subject. Participation is naturally entirely voluntary, and this text is intended to provide you with necessary information about that may concern your participation in the study or interview. You can at any time withdraw your consent and your data will thereafter be permanently erased.

Confidentiality. Anything you say or state in the survey or to the interviewers will be held strictly confidential and will only be made available to supervisors, tutors and the course management team.

Secured storage of data. All data will be stored and processed safely by the SSE and will be permanently deleted when the projected is completed.

No personal data will be published. The thesis written by the students will not contain any information that may identify you as participant to the survey or interview subject.

Your rights under GDPR. You are welcome to visit https://www.hhs.se/en/about-us/data-protection/ in order read more and obtain information on your rights related to personal data.

Project title Strategic Value in a CVC portfolio	Year and semester 2022 VT6
Aim of the study To concretize and visualize strategic value in a CVC portfolio with the help of measurable KPIs adapted to the automotive industry	
Students responsible for the study or interview Filippa Dunér & Melvin Olsson	
Supervisors and department at SSE Gianluca Chimenti at Department of Marketing and Strategy	Supervisor e-mail address gianluca.chimenti@hhs.se
Type of personal data about you to be processed Current role and company name (this information will be anonymised in the thesis)	

I have taken part of the information provided above and consent to take part in this study:

Signature Name	Place and date

Stockholm School of Economics • Sveavägen 65 • P.O.Box 6501 • SE-113 83 Stockholm, Sweden • Phone +46 8 736 90 00 • www.hhs.se

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