

Organizational Structure and Decision-Making in Corporate Venture Capital*

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Abstract

This paper studies corporate venture capital (CVC) units of large US corporations to learn how they make decisions across several areas: internal organization of CVC units, relationships with parent companies, CVC unit objectives, investment process and approval, deal structure, relationship with portfolio companies, compensation, and composition of CVC teams. The study is conducted by interviewing senior team members of seventy-four CVC units, representing 78% of the active CVC units of companies in the S&P 500 index. CVC units are organized in significantly more diverse ways than institutional VC firms. Unlike institutional VC firms, most CVC units do not manage committed venture funds, but instead invest from the balance sheets of their parent companies. Investment committees, in which parent company executives play a pivotal role in approving individual decisions, are common. Many corporate venture capitalists (CVCs) believe executives at their parent companies do not understand the norms of the venture space. The demographic composition of senior team members at CVC units is very different than that of their counterparts at institutional VC firms. The results raise a number of issues about the economic role of CVC units in corporate innovation.

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1 Introduction

Over the past ten years, corporate venture capital (CVC) has been an increasingly important player in the US venture capital (VC) innovation ecosystem. Corporations across a wide spectrum of geographies, industries, and technological prowess establish and maintain CVC units that make minority equity investments in innovative startups alongside traditional institutional VC funds. CVC is an important ingredient in corporate Research and Development (R&D) programs and innovation (Lerner, 2012). In 2020, CVCs invested more than \$70 billion into more than 3,300 investment rounds of early-stage startups, which constituted 25% of VC deals. While many of these CVC initiatives have been around for a long time, more and more US and international firms have set up new CVC units to tap into the burgeoning startup landscape.

Even though corporate venture has been around for a long time and has gained importance more recently, both for the startup and VC communities, as well as for the sponsoring corporations, little is known about their internal organization and decision-making. This paper explores what corporate venture capitalists (CVCs) do and how they do it. I do so by interviewing seventy-four CVC units of large US firms and asking detailed questions on how their organizations are set up, financed, and governed, the nature of their relationships with their corporate parents, how they make decisions, and how they are compensated. These seventy-four CVCs represent more than three fourths of the corporate venture initiatives of large US companies. This is the first ever comprehensive survey of this kind. This paper describes for the first time the wide variety of practices by CVCs along multiple dimensions. It also explores cross-sectional variations in these practices across geography, parent company size and internal innovation effort, as well as compares CVC units with institutional VC firms.

Kaplan and Strömberg (2001) and Gompers and Lerner (2001) argue that institutional VCs play an important role in the market economy by connecting entrepreneurs with more bright ideas than financial resources with investors who possess more financial resources than bright ideas. Corporate VCs, in addition to fulfilling a similar role, bring corporate know-how and the organizational and business capabilities of their parent companies to startups while also gaining an opportunity to bring innovative insights to their parent. At the same time, while institutional VCs pursue the overwhelming goal of maximizing financial returns, CVCs' objectives are much more complex. These factors explain why CVCs are so different from one another, making them both an exciting and perplexing object to study.

The results can be grouped into several areas: the objectives of the CVC and its relationship with the corporate parent, investment decisions, deal structure, post-investment relationship with portfolio companies, and the CVC's human capital and compensation practices. In each of these areas, this paper analyzes several economically consequential questions for the first time. On many of these topics, the results of existing research on institutional VCs, such as those of Gompers et al. (2020), allow a comparison between these two types of organizations. One of the greatest insights that emerges from this analysis is how uniquely different CVCs are from each another, much more so than traditional institutional VCs. Another insight is a better understanding of the aspects in which they are very different from traditional VCs and other aspects in which they operate very similarly to traditional VCs.

One of the surprising discoveries is the formal structure of CVC units, as well as the less formal relationships between CVCs and their parents. Out of seventy-four CVCs, only five are ring-fenced, standalone legal entities, which have similar structures to institutional VC funds. The rest invest "off the balance sheet" (meaning that each investment goes through the balance sheet of the parent company). Off-balance-sheet investing gives much less autonomy to the CVC units and justifies the

captive description often used to describe CVCs. Within these off-balance-sheet structures, however, it was possible to identify three different subtypes. First, CVCs that have an internal multi-year budget commitment from the parent. While such a commitment can be taken away (and on occasion this has occurred), such reneging is costly for a parent. These CVCs enjoy a higher degree of autonomy. Second, CVCs that have an annual commitment, with the budget allocated and approved each year, like most other corporate business units. This provides a much weaker degree of autonomy, which makes it difficult for CVCs to commit successfully to their portfolio companies, given the long lifecycle of most startups. As the results indicate, such annual investment budgets can fluctuate widely. Third, twenty-seven CVCs, or 36% of the sample, invest opportunistically and often sporadically. These CVC units do not have approved budgets but need to seek approval for every individual investment. Interestingly, most of the off-balance-sheet interviewees believed that they were an exception to the rule and that most other CVCs invest from standalone funds.

The results on deal sourcing and deal pipeline suggest that CVCs are very similar to institutional VCs along this dimension. The investment decision-making process, however, is vastly different. The basic finding is that most CVCs have more hurdles to overcome and therefore in many cases have slower investment processes. Most CVCs have a two-stage investment approval process. In the first stage, the CVC venture team decides to put the investment forward. In some cases, this process is similar to that of institutional VCs. In many cases, however, to do so, the CVC venture team needs to secure the interest of a corporate business unit. At any rate, an overwhelming number of CVCs then proceed to the second stage, which is absent in institutional VC funds: the investment committee stage. At this stage, a committee consisting of several senior executives of the parent company evaluates and approves the investment proposal, as the committee holds veto power. The parent’s CEO and CFO are frequently committee members, but the specific composition varies greatly from one CVC unit to another. One impact of such an investment committee is that in situations where it has more power, either formal or informal, the venture team adjusts its decision-making process and deal selection in the first place. The additional layer of the investment committee also slows down the decision process, often making CVCs lose investment deals. One apparent advantage is more closely aligning the CVC processes with the objectives of the parent company.

These results yield the insight that CVCs are much less independent and rely more on their parent company’s decision-making structures than might have been previously realized. Whether this is efficient depends on the objectives of corporations for their CVC units. Interestingly, sixty-two CVCs, or 84%, prefer to invest mostly in adjacent spaces to their core business or to balance adjacent investments with investments in their core or new exploratory domains. As adjacent technologies or products are complementary to the core of what the parent company does, the close involvement of parent company appears more justifiable. However, there are also CVCs that look to invest in new domains and are tasked with bringing new insights to their parent executives and business units. Yet, they can only invest in what their investment committee approves. These practices appear inefficient. More than 60% of respondents also believe that their executives do not understand the norms of the venture space, and that educating them (including those on the investment committee) is a constant struggle, compounded by frequent turnover of parent executives.

Existing empirical and theoretical research emphasizes the centrality of contractual terms in evaluating the relationships between institutional VCs and their portfolio companies (Kaplan and Strömberg, 2001; 2002). CVCs report that they mostly prefer standard financial terms or follow the cash flow rights negotiated by institutional VCs. They are less likely to demand a full board seat, and instead, often opt for a board observer position, which bestows information but not control rights. Importantly, only a minority of CVCs expect to negotiate strategic rights, such as the right of the first

refusal (ROFR), which would make it easier for them to acquire a portfolio company. In fact, one of the central insights is that parent companies very rarely acquire CVC portfolio companies, and in many cases, CVC and M&A functions are distinct and non-overlapping.

Institutional VCs are compensated through a fixed component (management fee) and a variable component (carried interest). The latter depends on how profitable their investments are. Most CVCs are, on the other hand, compensated through more typical corporate compensation packages and do not benefit directly from their portfolio companies' financial performance. While many CVCs believe that their peers are compensated this way, the results suggest this is mainly not so. Only 11, or 15%, of CVC units have any kind of profit-sharing arrangements. This would lead to a high turnover of CVC personnel, which might make CVC units less efficient. The most successful CVC personnel might be expected to leave their parents to join institutional funds in search of more lucrative financial remuneration.

Little is known about the demographic characteristics of people working at CVCs. Therefore, I collected detailed data on all individuals who are senior investment professionals at seventy active CVCs, and the general partners and their equivalents in seventy paired institutional VC funds. The results emphasize the differences between these two samples. CVC professionals have a shorter tenure, suggesting a much higher turnover than institutional VC counterparts. They are more likely to have worked in another CVC unit previously and, interestingly, many have institutional VC or private equity experience. Institutional VCs are much more likely to have entrepreneurial experience and actively utilize their professional networks.

The bulk of the interviews took place during the height of the COVID-19 pandemic in the United States, about a year after its onset. Most CVCs, however, reported that their venture teams benefited from the pandemic. This finding is in line with similar findings reported by Gompers et al. (2021) for institutional VCs, suggesting that CVCs are also resilient to such macroeconomic shocks.

Methodologically, one strength of this paper is the response rate and the resulting sample coverage. Of the ninety-four corporate parents in the S&P 500 universe that have or recently had a CVC unit, seventy-four, or 78%, were interviewed and carefully analyzed. In comparison, typical response rates in existing surveys of executives and institutional fund managers were between 10% and 15%. Such coverage mostly attenuates the inevitable problem of selection bias that is pervasive in survey research. The interview design is also advantageous compared to online or mail questionnaires because CVC units are organized so differently that a one-size-fits-all design would be substantially less informative than with, say, institutional VC firms. Even though substantially more time-consuming and difficult to execute, the interviews enabled an instantaneous follow up or clarification of specific issues. Many of the questions asked in interviews would also likely be less feasible to ask in a survey setup, such as questions requiring subjective responses about the venture space knowledge of their parent company's senior executives.

The paper complements existing literature on corporate innovation and corporate venture capital. An important early study of Gompers and Lerner (2000) studied the determinants of CVCs' organizational structure and outcomes by analyzing CVC-backed investments from 1983 to 1994. In a more recent important contribution, Ma (2017) explored the entry, investment, and termination decisions of CVC units. His finding of a close relation between corporate internal innovation performance and the lifecycle of CVC units corresponds to the findings of this study that the decision-making processes of CVC units are tightly knit within the larger corporate organization. Chemmanur, Loutskina, and Tian (2014) found that CVC-backed startups are more innovative, riskier, and less profitable than firms backed by institutional VC funds. The survey findings are consistent with one of the two mechanisms

the authors put forward: CVCs’ (and by extension parent companies’) greater industry knowledge. The second mechanism, that CVCs are more tolerant of failure, is less consistent with the survey results.

More broadly, this study fits into a broader agenda studying corporate and technological innovation. As discussed in Teece (2010), the firm is the central actor for the effectuation of innovation and technological change. As corporate innovation policies become more diffuse, skills, procedures, organizational structures, and decision rules that firms utilize play a central role in innovation outcomes. CVC policies and their execution bring novel dimensions to this system of relationships as well as extend the traditional boundaries of the firm.

The paper proceeds as follows. Section 2 presents the empirical methodology and data sources. Section 3 reports the main results. Section 4 concludes. Online Appendices contain descriptions of the interview protocol, coding, and definitions of variables used in the analysis, as well as the list of all active CVCs of companies in the S&P500 index.

2 Empirical Methodology and Data Sources

This section describes the construction of the corporate venture sample, the research design of the survey, including the interview protocol, and all the data sources.

2.1 Interview Design

Surveys of corporate executives and investors have become increasingly common in the financial economics literature (Graham and Harvey 2001; DaRin and Phalippou 2014; Gompers et al. 2016; Gorman and Sahlman 1989). This paper is close in spirit to this literature, which aims to tease out answers to several questions that are challenging or impossible to address with existing academic datasets. The closest predecessors are two large-scale surveys of venture capitalists: Gompers et al. (2020) and Gompers et al. (2021). While the main focus of these studies was institutional venture capitalists (VCs), some corporate VCs (CVCs) also participated.

These, and other surveys of VCs and executives, took place using either online or mail-in questionnaires. This study instead utilized an interview format, which introduces several meaningful points of departure in the design and conduct of the research. Accordingly, it is essential to delineate major differences between the online surveys used in, for example, Gompers et al. (2020, 2021) and the interview design for this study.

In an online survey, participants answer multiple-choice questions or report specific values. One well-known difference between institutional and corporate VCs is the diversity of ways in which corporate VC units are set up. Most institutional VC firms have broadly similar organizational structures. Some corporate VCs are standalone investment entities like institutional VC firms, and for those CVCs, many questions for institutional VCs resonate as well. Many other corporate VCs, however, are embedded within their parent companies in a multitude of ways and with different degrees of independence. Their processes, decision-making protocols, objectives, and often even the basic terminology they use are so differentiated from their peers that teasing out meaningful answers from identically formulated questions in the relatively rigid structure of an online survey presents substantial, and for many aspects, insurmountable challenges.

In addition, these executives may quickly lose interest in answering questions that do not apply to them and their business units, leading to them abandoning an online protocol. The diversity of sample subjects may thus also introduce an unwanted selection bias into the survey process. While online or mail surveys work well for a relatively uniform set of participants (such as institutional VCs) or for

more easily quantifiable sets of questions (such as those that require reporting financial values), the same survey format does not work well in the context of corporate VCs. Interviews offer flexibility and branching opportunities that are easier to navigate. In particular, interviews make it possible to reflect various aspects of the CVC unit design and structure as well as provide an opportunity for immediate follow-up and clarification that ensures accurate descriptions and coded variables of interest. As a result, the interview process is in many ways more suitable to study CVCs. An additional advantage of offering face-to-face interviews is a much higher response rate than for online and mail surveys of executives and VCs.

At the same time, while these advantages provide an impetus for conducting face-to-face interviews, the flexibility of interviews inevitably gives rise to the concern that they introduce too much subjectivity. The interview design, adherence to a specific interview protocol, and the precision of subsequent coding are therefore of particular importance so that outcomes can be cross-sectionally compared.

The starting point for the interview design was the online questionnaires in Gompers et al. (2020, 2021) along with several industry publications on corporate VCs (CB Insights 2021; 500 Startups 2020; Global Corporate Venturing 2021). Questions that targeted mostly institutional VCs were removed at the outset. With one hour targeted as the limit of the face-to-face interviews, most of the questions that did not yield new data in prior institutional VC surveys were removed as well. At the same time, many questions that were specific to CVC units were added. The draft interview protocol concentrated on the goals of the parent company in setting up the CVC unit and the evaluation of these goals; the structure of the CVC unit and its position within the parent company, including its financing; the human capital aspect of CVC; investment and approval decision-making processes; investment deal contractual terms; the relationships between CVC portfolio companies and the parent company; and impact of COVID-19.

After developing a draft of interview questions for each category, these questions went to several experienced CVC professionals and academics. A test survey was also conducted to ensure the interview length was within one hour. Following the feedback, numerous changes to the format, order, and style of questions took place to facilitate a more thorough and engaging interview response. The final interview protocol is in Appendix A. In some of the interviews, additional questions beyond the main questionnaire were necessary based on interviewees' specific responses. This ensured a more consistent interpretation of answers.

2.2 Corporate Venture Capital Sample

To explore the most important CVC initiatives of U.S. firms, this paper concentrates on companies in the S&P 500 index. The S&P 500 is the weighted index of the 500 largest public companies trading in the United States. As of December 31, 2020, the total market value of the firms in the index represented 65.7% of the total market capitalization of American publicly traded firms.¹ Silicon Valley Bank, a member of the S&P 500 index, was excluded from the sample. This financial institution is well known for providing services to many venture funds and early-stage companies, and thus unambiguously identifying a CVC activity for Silicon Valley Bank was not possible. Therefore, the final sample from which CVC units were identified consisted of 499 companies.

The first task was to construct a complete sample of S&P 500 companies that had or have had a CVC unit. This is a non-trivial exercise, because of the variety of ways CVC units are set up. Therefore, for each company in the index, a manual, multi-pronged approach was used to determine whether the company either currently has or previously had a CVC unit. As a first step, Pitchbook data on

¹<https://siblisresearch.com/data/us-stock-market-value/> (Accessed April 11, 2021).

all investments made by these companies was extracted. Pitchbook is a premier database on private investments and investment funds, and has been actively used in academic research on private equity and venture capital (Retterath and Braun 2020). Pitchbook contains information on most investments of private VC-backed companies in the last ten years, including in many instances the identities of investors, as well as treating CVC units as separate from their parent companies. Wherever Pitchbook identified VC investments made by CVC units, checks that these were true VC investments (rather than, for example, acquisitions) took place, and the existence of the CVC units was confirmed by visits to the parent company’s or CVC unit’s website. In all cases, the existence of a CVC unit was confirmed.

Often, Pitchbook lists investments under parent companies rather than their CVC units. While in many cases these are ad hoc direct investments by companies or their business units that do not indicate the existence of a CVC initiative, in other cases these investments are through a CVC unit. For example, Pitchbook lists General Mills’ 2017 investment in Purely Elizabeth, a VC-backed company, as a direct investment. In fact, the website and publicly listed portfolio of 301 Inc., the CVC unit of General Mills, identifies Purely Elizabeth as a CVC rather than a direct investment. Given that many CVC units are not standalone legal entities, such classifications by Pitchbook are not necessarily data errors since, in these cases, the parent companies may be listed as direct investors. An additional concern is that Pitchbook sometimes omits investment rounds entirely.

Therefore, for all the companies for which the existence of a CVC unit was not confirmed through Pitchbook, a Google generic search took place using “[Parent company name] venture capital” and a LinkedIn people search using “[Parent company name] ventures” and “[Parent company name] venture capital.” This generated further potential CVC units. For each of these, the existence of the CVC initiative was checked by visiting company websites. In some cases, the CVC initiative was confirmed by reaching out to people identified on LinkedIn.

As in investor or executive surveys, it is important to concentrate on participants who are currently or were very recently in decision-making positions within their organizations. Therefore, a CVC unit is defined as active if it has made at least one portfolio company investment since 2018; otherwise, the CVC unit is deemed inactive. While both active and inactive CVCs were interviewed, more effort went into contacting and securing interviews with active CVCs. In three instances, CVCs for whom a recent investment could not be independently verified confirmed such an investment during the interview. These CVCs were redefined as active. Excluding these three CVCs from the analysis did not change any results.

Table 1 reports that out of 499 companies, ninety-four (or 19%) have active CVC units as of January 2021. Appendix B lists all the companies with active CVC units. Unreported in the table, in total, there were 111 companies with either an active or an inactive CVC unit, implying that seventeen CVCs (or 15% of the CVCs) are inactive and have not made any new investments since 2018.

2.3 Interview Procedure

2.3.1 Interview Solicitations and Sample

For each CVC unit, using the collected LinkedIn data on individual investment team members (see Section 3.3), one person with a perceived higher chance of a response rate based on degrees of LinkedIn separation (first, second, or third), number of mutual connections, and educational background was selected. In most cases, the selected individual was then contacted using LinkedIn Premium InMail credits and personalized connection request messages. Personalized notes on behalf of Professor Ilya Strebulaev, the Faculty Director of the Stanford GSB Venture Capital Initiative, read, “Hi [first name],

it would be great to connect. We are very interested to get in touch with you from the Stanford Graduate School of Business Venture Capital Initiative. Thanks, Ilya.” In several cases, an investment team member was personally known or recommended by a mutual connection.

The initial outreach led to two main outcomes. First, the person connected or responded to the InMail message. This led to a follow up with a more detailed request: “Dear [Name], I am a Professor and the Director of Venture Capital Initiative at the Stanford Graduate School of Business. We are in the process of conducting in-depth interviews with leaders of CVC groups. We have interviewed [Number]+ of your peers, and hope very much you would be open for such an interview. It will be entirely anonymous and confidential. If you have any questions, I’m happy to answer. Let me know and we will schedule a time. Please respond here or by e-mail [Ilya’s email]. Best, Ilya.”

A variation of this outcome is that the person connected but did not send a response to the initial personalized message. In this case, the same detailed request was sent after fourteen days. Second, if the person did not connect or respond to the InMail message in one week, another investment professional in the same CVC unit was identified and contacted in the same way. Alternatively, the person may have accepted the connection request and viewed the messages, but did not respond. In these cases, another team member was contacted a week later. If the second person did not respond, a third person was contacted. No more than three people were approached in any CVC unit.

There was at least one such identifiable individual at ninety-two of the ninety-four active CVC units. In total, 143 individuals associated with these ninety-two CVC units were contacted. Of the ninety-two CVC units, seventy-eight (or 85%) responded and agreed to participate in the interview. In four cases, the interview request was declined. If the interview request was declined, nobody else at that CVC unit was contacted. There has been no response in the twelve remaining cases. A closer investigation of the decline and non-response cases suggested that in some cases, the CVC unit was in the process of being disbanded and thus its representatives were either leaving or being transferred within their company.² Of the seventy-eight who agreed, seventy-four participated in interviews. In the four remaining cases, interviewees failed to arrive for an interview, the interview request is still pending, or it is in the process of being scheduled. Because some interviews were with more than one representative, in total seventy-seven people were interviewed. The eventual sample size corresponds to the sample size of an important paper by Gompers et al. (2016), who conducted a survey of practices by private equity fund managers. The sample also allows for the analysis of statistical differences between various subsamples, as discussed in Section 2.5.

The interview design controlled for several important factors that could be challenging to satisfy in other environments. Everyone who was identified, contacted, and interviewed had worked in a specific CVC unit. The response rate of 85% was substantially higher than observed response rates in online surveys of executives and VCs. For example, Graham and Harvey (2001) reported a response rate of 9% of CFOs of large US companies. Both Gompers et al. (2020) and Gompers et al. (2021) reported response rates of 7% from all the (mostly institutional) VCs they contacted. In some subsamples, in which they had a special network advantage, such as alumni of Stanford, Harvard, and the University of Chicago, their highest response rate was 37%. Thus, the response rate of 85% is several times larger than typically reported response rates, and double that of the highest recorded response rate for “friendly” subsamples in earlier surveys.

Even though a high number of responses ensures that results are less sensitive to self-selection bias, which is pervasive in surveys, and are thus more representative of the entire sample, it is possible that the twenty CVCs who did not respond or declined to be interviewed differ in some respects.

²An example of a recently folded CVC unit is Comcast Ventures. See <https://www.cnbc.com/2020/11/13/comcast-to-narrow-focus-of-comcast-ventures-leading-to-partner-defections.html> (Accessed April 25, 2021).

While the parent companies of the participants tended to be larger, the interviewed CVCs were founded on average six years later and invested twice as much as the non-interviewed CVCs. The two subsamples were similar along other dimensions. There are multiple potential explanations for the observed differences. For example, some non-interviewed CVCs may no longer be actively investing in new portfolio companies and only managing existing portfolio investments. This may have happened because the CVC unit is being disbanded as it has been unsuccessful or no longer fulfills strategic objectives. In this case, it would suggest that the interviewed sample is likely more successful. This is similar to Gompers et al. (2020), who also found that their sample of institutional VCs was likely to be more successful than typical VCs. Given that more than three fourths of all active CVCs were interviewed, the implications of a potentially biased sample are of lesser importance.

Another potential issue is that this population of corporate VCs is not representative of the broader CVC industry because only companies in the S&P 500 sample were considered. These companies are much larger than the average US company, and therefore also more successful. They are all publicly listed, and most are headquartered in the United States. The diversity of responses suggests that substantial variation in practices was captured. One should, however, be cautious in extrapolating results to other samples.

2.3.2 Conducting Interviews

All interviews took place between December 9, 2020 and April 12, 2021, with the bulk of interviews occurring between January 11 and February 26. All interviews were conducted using Zoom, an online videoconferencing platform. In almost all the interviews, there was a visual interaction with the interviewees for the entire duration of the interview. In only one case was the interviewee’s video off. Most interviews were conducted both by Professor Strebulaev and myself. The average interview lasted forty-two minutes, with the range spanning from eighteen to eighty minutes, and the twenty-fifth and seventy-fifth percentiles being thirty-four and fifty-one minutes. One reason for this wide range in interview time is that while some answers were short and clear, in other cases, interviewees volunteered additional information or it was necessary to ask several clarifying questions. On average, there were between forty and forty-five questions asked during each interview. Each interview commenced with confirmation of confidentiality and anonymity. In most cases, permission was sought to record the interview for note taking; all interviewees but one agreed to be recorded. The interview itself closely followed the protocol, with all interviews being live transcribed and each detail being cross-checked with the recordings ex-post.

One potential concern was the veracity of the information that interviewees shared. Interviewees were not asked for any confidential information on individual portfolio companies or personal information typically considered proprietary (e.g., level of compensation). On some questions where it was possible to verify the information independently (e.g., the number of investment team members), not a single case of false information was identified. In addition, in most cases, interviewees volunteered to provide additional, often confidential information and asked the interviewers to share the aggregate results of their peers’ responses. Only one interview, in which the interviewee refused to answer multiple questions, was classified as “low” on openness. Excluding that interview from the sample does not change the results.

2.3.3 Post-Interview Coding

To quantify the results, an extensive coding protocol was developed. Some variables are numerical (e.g., the average number of new investments per year or the number of investment team members) or can

be converted into a dummy variable taking the value of 1 or 0 depending on the presence or absence of a specific feature (e.g., whether a representative of the parent company has a vote on the investment committee). Other variables can be coded using a five-point Likert-type scale (e.g., CVC unit’s attitude towards taking a voting board seat in a portfolio company, with the five possible options being: a voting board seat required for investment; preference for a voting board seat; indifferent; preference for not having a voting board seat; a voting board seat is never taken). Finally, some variables required a text entry (e.g., the title of the executive to whom the CVC unit head reported to could take many values such as CEO, CFO, COO, and so on).

Coding raw interview transcriptions and notes inevitably introduces an element of subjectivity. Therefore, each interview was independently coded by three coders and all disagreements were carefully reconciled. As two of the coders were not present during the interviews, they worked from the raw transcripts after familiarizing themselves with a set of detailed generic instructions (that did not quote from or mention any interview). Four interviews were randomly selected for training purposes. Excluding these interviews from subsequent empirical analysis does not change the results. Overall, the pair-wise agreement between the coders was 97%.

2.4 Summary Statistics

In this section, I provide summary statistics on the interviewed CVC sample, as well as compare the interview sample with the sample of active CVCs who were not interviewed. Appendix C provides definitions of all variables.

2.4.1 Company-Level Data

The primary source of financial data for companies in the S&P 500 universe was WRDS Compustat. In addition, data were collected on companies’ IPO dates, headquarters locations, industries, websites, and employees, as well as the gender, age, and tenure of the current and preceding CEO. Each of these additional variables came from Pitchbook and/or was manually cross-checked and extracted from Wikipedia and company websites.

Table 1 shows that, compared with the average company without a CVC unit, the average company with an active CVC unit has more than two and a half times the market capitalization, has 70% more employees, and spends twice as much on R&D. At the same time, companies with and without active CVCs have similar market to book, CapEx, and financial leverage ratios. Companies with active CVCs also became public companies somewhat earlier than the rest of the sample. As of 2021, the mean age of companies with an active CVC unit is eighty-three years old. California is a well-recognized hub of US venture capital activity. While 12% of the S&P 500 companies without active CVCs are headquartered in California, more than double that proportion, 28%, of companies with active CVCs are headquartered in the state. These companies’ current CEOs have similar demographic characteristics (gender, age, tenure), although previous CEOs of companies with active CVCs had slightly shorter tenures.

2.4.2 CVC-Level Data

Apart from the interviews, most of the CVC-level data came from Pitchbook, LinkedIn, and a manual web search. Variables that may serve as proxies for the standing of a CVC unit within its parent were also collected. Table 3 shows that fifty-eight interviewed CVCs, or 78%, had a web presence separate from their parent companies, and forty-five, or 61%, listed CVC investment team members on the CVC

website. Further, sixty-five, or 88%, of interviewed CVCs had at least one member who is employed full time in the CVC unit, rather than concurrently leading M&A, corporate development operations, or other tasks within the parent company.

Two variables that proxy for the geographical proximity between company headquarters and the CVC unit location were used. First, a dummy variable that equals one if the CVC unit and its parent company are headquartered in the same state. To determine CVC headquarters, the CVC address on Pitchbook was cross-checked with the location of most identified senior investment team members. Out of seventy-four interviewed CVCs, fifty-three (72%) had headquarters in the same state as the parent company’s headquarters. For the twenty-one that had headquarters in a different state, eleven (52%) were in California. Second, Google Maps was used to approximate the geodesic distance between the headquarters of each CVC-parent pair. The average geodesic distance of interviewed CVCs was about six hundred miles. The distribution of distances was bimodal, with forty-nine out of seventy-four CVCs in the same place as their parent (within one mile), while nineteen CVCs were more than six hundred miles away.

2.5 Summary Statistics of the Interview Sample

This section provides the summary statistics of the CVC interview sample and introduces the subsamples for the analyses. Table 2 reports that all seventy-four interviews were completed. The higher rate of completion than surveys is explained by the interview format. More than seventy-four people were interviewed because some interviews included more than one representative of the CVC unit. The table also reports the positions the interviewees hold in their CVC units or parent companies. While corporations differ in the ways they use various titles and the interviewees had a variety of titles, assigning a person to a seniority rank within the CVC unit was straightforward. Senior investment team members had positions such as Vice President, Executive Vice President, Managing Partner, Managing General Partner, Managing Director, and Senior Director. In all cases where the title was insufficient (e.g., Director or Principal), the interview process clarified the seniority position.

The vast majority interviewed were senior investment team professionals, and therefore, they were actively making decisions within the CVC unit. Specifically, most of the interviewees are either heads or co-heads of CVC units (twelve people, 16% of the sample) or other senior investment team members (sixty people, or 81%). Twenty-one Managing Directors, nine Vice-Presidents, and eight Directors were interviewed. In three cases, junior investment personnel were interviewed. Overall, 96% of the interviews included a senior investment team member. The prevalence of senior investment team members is explained by the targeting of respondents. In addition, in some cases, CVC units had only senior investment professionals. The rate of 96% is similar to the 82% of respondents in the institutional VC survey of Gompers et al. (2020) who were senior partners.

The starting point for selecting subsamples was utilizing the subsamples of Gompers et al. (2020), which facilitated the comparison between corporate and institutional VCs. Table 2 shows that CVCs represent several different industries. The industry classification drew on the Global Industry Classification Standard. The largest sector was broadly defined information technology, with twenty-three CVC interviews. This is also the industry with the largest representation in Gompers et al. (2020). Among the interview sample, fourteen CVCs were in the financial sector, twelve in healthcare, and ten in consumer. Finally, fifteen interviews were with CVCs from companies representing industrials, energy, and utilities.

Geography has been identified as an important parameter in previous research on institutional VCs. For example, Bengsston and David (2015) found that California-based institutional VCs write

more entrepreneur-friendly contracts. Gompers et al. (2020) found some important differences between California-based and East Coast-based institutional VCs. As geography may also matter for corporate VCs, Table 2 shows the location of CVC parent headquarters. Thirty-two (43%) are based in California ("CA" subsample), with Illinois (eight interviews) and Georgia (six interviews) being two other well-represented states. Overall, sixteen CVC parents are in the Midwest, ten in the South, twelve in the North-East, and four on the West Coast but not in California. For comparison, all non-California CVC parents (forty-two interviews) went into the "Other" sample. Such a split allows for the exploration of whether the differences Gompers et al. (2020) found between California and the rest of the United States in financial VCs extends to corporate VCs.

The interviews made it clear that the nature of the CVC-parent financial relationship and budgetary commitment of the parent to CVC is vitally important. Four common scenarios describe such a relationship. First, the CVC is a separate, stand-alone investment fund. That is, the CVC unit is legally a separate entity. These CVCs are organizationally closest to the ways institutional VCs are set up, where the corporate parent provides an external commitment not dissimilar to a traditional general partner—limited partner (GP-LP) relationship. As Table 2 reports, only five CVCs in the sample have this structure. In each of the remaining scenarios, the CVCs invest off the parent's balance sheet. The second scenario is one in which the parent has earmarked, announced, or allocated a specific multi-year fund arrangement to its CVC unit, or internally committed to investing a certain minimum amount annually for several years. The sample includes twenty-six CVCs with such a multi-year commitment structure. While weaker than separate fund setups, such multi-year commitments are more forceful than the remaining two scenarios.

In the third scenario, the CVC activity and budget allocation are re-evaluated annually without an explicit multi-year commitment. There are sixteen CVCs in this category. Indeed, in many cases, interviews revealed that annual investment budgets can fluctuate widely. Finally, there are CVCs that do not have an approved budget at all, but rather, invest opportunistically, and thus the budget allocation is evaluated and approved for any single investment on an ad hoc basis. Twenty-seven CVCs invest completely opportunistically. The financial commitment of the parent company is an important dimension along which CVCs differ. Therefore, any of the thirty-one CVCs that are either stand-alone funds or feature multi-year commitments were categorized as "Yes" in the Commitment split, while the remaining thirty-four were assigned "No" in the Commitment split.

Table 3 provides descriptive statistics on the interview sample. As the distribution of the parent company data shows, CVCs represent a diversified sample. For example, looking at 25% cut-offs for multiple variables, a quarter of parent companies are relatively small at less than \$27 billion market capitalization, report no R&D expenses, or have a market-to-book ratio of less than 0.65. Indeed, twenty-four out of seventy-four parent companies, or 32%, report no R&D expenses at all. At the same time, a quarter of parent companies have market capitalizations of more than \$140 billion, spend more than 6.7% of book assets on R&D, or have a market-to-book ratio above 2.9. Fifty-three interviewed CVCs, or 72%, are headquartered in the same place as parent's headquarters, while nineteen CVCs are at least six hundred miles away from the parent's headquarters. Given the important interaction between the internal and external corporate innovation efforts, all CVCs in which the parent company reports positive R&D expenses were designated the "R&D" sample, while the rest were the "non-R&D" sample.

According to Pitchbook, an average CVC unit has made about a hundred investments in total, while the median value is twenty-six. In the last four years (between 2017 and 2020), the median CVC is reported to have made thirteen investments. As the interviews indicate, Pitchbook often underreports the number of investment deals. To see this, note that Pitchbook reports the median

number of thirteen investments in currently active portfolios. The equivalent figure in the interviews was seventeen (the Pitchbook median number for the sixty-one companies for which the interview data is available is still thirteen). By any metric, median size is substantially smaller than the mean size. It is possible that CVC size influences the organizational structure and decision making. Accordingly, the sample is also divided into two subsamples—CVC units with the number of deals below (“S” for small subsample) and above (“L” for large subsample) the median. Similarly, it is possible that the parent company’s size matters. Therefore, the sample is divided into two further subsamples—CVC units with the parent company below the sample median of market capitalization (“S” for small parent size) and above median (“L” for large parent size).

The median CVC unit in the interview sample was founded in 2011, and thus is ten years old. About 25% of CVC units are younger than five years and 25% are older than thirteen years. The median CVC unit has invested in at least twenty-six deals in its history, thirteen of which took place in the past four years, realized eight exits, and currently has seventeen active portfolio companies. The average number of deals and exits are considerably larger, at ninety-eight and forty-three, respectively, indicating that some CVCs make a disproportionately large number of investments. The average number of currently active portfolio companies is also substantially larger, at forty-one. These results are in line with Gompers et al. (2020) on institutional VCs. Many institutional CVCs make limited numbers of investments per year in new portfolio companies. The median CVC unit makes six new investments per year. At the same time, 25% of CVCs make less than four investments per year, made three or fewer investments in the past four years, and have just four or fewer active portfolio companies. Partially, this is driven by the youth of some CVCs. However, even considering only CVCs that were founded prior to 2018, eighteen of them, or 32%, still made only four or fewer investments. This suggests a much wider variation of activity among CVCs than among institutional VCs, which is potentially explained by the non-trivial fraction of CVCs that make ad hoc investments, a strategy that cannot work well for institutional VCs.

The median annual investment amount is \$51 million, while the mean is \$155 million. CVCs also actively co-invest with other investors. The median CVC has more than seventy co-investors across its portfolio. To explore the size of investments and stages of companies in which CVCs invest, for each CVC unit, the median round values of their portfolio companies was calculated using Pitchbook data (for the rounds in which CVCs are reported to have participated), as well as the median post-money valuations for those rounds. The mean of those median round amounts is \$24 million, while the median is \$17 million. The mean of median post-money valuations is \$136 million, while the median is \$68 million. This suggests that a median CVC invests at a later stage than early-stage institutional VC funds typically do.

3 Results

3.1 CVC objectives

Objectives and goals are critically different between institutional VC firms and corporate VCs. In principle, partners at institutional VC firms pursue exclusively financial objectives, with the goal of maximizing the return to their LPs and thus increasing their own compensation through carried interest and an increased likelihood of raising future funds. Even though some important conflicts of interest exist that may lead partners at institutional VC firms to deviate from purely financial objectives, such as increasing their standing and reputation by pushing their portfolio companies to exit too early

(Gompers 1995), there is no doubt that in the vast majority of cases, institutional VCs are driven primarily by financial considerations.

Objectives for corporate VCs are much more complex and multi-dimensional. While some corporate VCs may pursue mostly financial objectives, many CVCs were created by their parent companies to pursue strategic objectives. For example, a blog post by Matt Garratt, Managing Partner of Salesforce Ventures, states that “Salesforce Ventures was founded on the belief that the surest way to spark growth and boost customer success is to accelerate the expansion of a cloud ecosystem and support startups that drive innovation.”³ Another typical example is that of NVIDIA’s GPU Ventures, with the following statement on its website, “NVIDIA supports startups aligned with our strategies ... [and] that are utilizing NVIDIA GPU platforms to pursue the latest breakthroughs.”⁴

Therefore, interviewees were asked several questions about their objectives. The first question asked where interviewees’ CVCs fit on the spectrum of strategic to financial objectives. Their answers allowed for mapping onto a Likert-type scale of 1 to 5, where 1 means financial-only objectives and 5 means strategic-only objectives. One example of a response coded as 5 from a California-based CVC unit was: “I would say we’re heavily weighted on strategic. In fact, I’d go further and say that our fund’s IRR is very good, and nobody cares. The only thing that anybody cares about is the strategic value of the investments we do.”⁵ The value of 4 was assigned to responses that made it clear that while strategic objectives are an obvious priority, financial goals are also of secondary importance. For example, “We’re highly focused on the strategic side of the spectrum. We want [our portfolio] to have a positive return and we do measure the IRR for the purposes of tracking the investments but the corporate venture activity that we pursue is really intended to further our parent’s strategic priorities.”

Table 4 reports that CVCs differ greatly in their objectives. Twelve CVCs (16% of the sample) reported that only strategic objectives matter and that no weight is given to financial objectives in their decisions or evaluation of CVC results. To provide an extreme example, one CVC executive from a parent company in the large parent subsample confided that, “When we were founded, the goals of how to measure success were 100% strategic. In fact, to enforce this point, my CFO said that he didn’t even want me to financially track these investments and that every investment would be written off as an R&D expense the day the transaction is closed.” Thirty-seven, or half of the sample, valued strategic objectives more than financial objectives. Sixteen CVCs reported that their strategic and financial objectives are balanced. A smaller number of CVCs, eight (or 11%), place higher priority on the financial objectives. Only one CVC has financial-only goals.

As Table 5 shows, overall, the average CVC assigned the value of 3.7 to its main objectives, giving a clear preference to strategic goals over financial goals. CVCs in the committed and large subsamples are more likely to be balanced between these two objectives. This panel and most of the following tables report averages and their standard errors. Most tables report means and test differences between subsamples using a two sample, equal variance t-test. Using a binomial test for categorical variables does not impact the results. The California sample was compared to the non-California sample; committed to non-committed; large parent to small parent; large (CVC) to small (CVC); and R&D to non-R&D. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

Depending on interviewees’ answers, follow-up questions explored how financial, strategic, or both objectives are defined and measured before and after an investment is made, and the horizon over which these evaluations are made internally and by the parent company. Most respondents admitted that

³See <https://medium.com/salesforce-ventures/hindsight-in-2020-the-unexpected-urgency-of-adopting-cloud-technology-952764a68985> (Accessed April 26, 2021).

⁴See <https://www.nvidia.com/en-us/about-nvidia/gpu-ventures/> (Accessed April 26, 2021).

⁵All responses have been edited for brevity and to ensure anonymity.

measuring strategic returns, both qualitatively and quantitatively, is very challenging and something they struggle with. However, taken together, the respondents provided several possible ways to measure their CVCs' strategic value add. Most frequently, CVCs and their parent companies paid attention to new learnings and competitive insights that originated from the CVCs, as well as the number of commercial relationships (often very finely categorized depending on the level of engagement) between portfolio companies and the parent. Often, CVCs are evaluated by business unit engagement and their ability to bring new technologies and business models to the parent.

In terms of financial metrics, CVCs are broadly similar to their institutional counterparts. About half of CVCs actively measure the internal rate of return (IRR) of their investments, and a large fraction also measure cash-on-cash and return on invested capital. Some CVCs, however, have a "simple" goal of not losing money (meaning, their net cash-on-cash target is one), an objective that is not sustainable for institutional VCs.

Interviews showed that forty-four of the CVCs (75% of those who answered this question) are evaluated over a horizon of less than two years, often on a quarterly basis—in line with the public company earnings cycle, and in stark contrast to the 10-year horizon of a typical institutional VC fund. In fact, in the last decade, the actual horizon of institutional VC funds has often exceeded the contractual ten years because of the extended lifecycle of portfolio companies. For example, Gornall and Strebulaev (2020) showed that the average exit timeframe for late-stage VC-backed companies is closer to five years, but it takes much longer for some companies to achieve a liquidity event. The short horizon of the CVC unit objectives and metrics, and the resulting inconsistency between the average lifecycle of portfolio companies, and thus CVC investments, and horizon expectations of corporate executives have often been stated as one of the major problems CVC units face. For example, according to one CVC executive from a non-California parent company: "This is where CVC is so funny because to really do true innovation, you have to have a super long-term horizon, but in reality, it's a super short-term horizon. The long term is sacrificed for those short-term needs." All types of CVCs share this challenge, but CVCs of smaller parent companies are particularly susceptible to such short-termist obstacles. The CVCs that succeeded in extending the horizon evaluation reported that they could invest in riskier long-term projects that often generated the most strategic and financial return to their parents.

Corporate executives often view investments by how they relate to the current capabilities of the parent company. Respondents were therefore asked to categorize their portfolio companies into three broadly defined buckets: the core of what their parent company does, adjacent spaces to the core (for example, technologies that the parent is not currently using but that complement its existing business segments), and new domains (in which the parent company presently has no market presence). Most CVCs confirmed that they invest across all three buckets, but that their mandate is to invest more resources towards adjacent spaces than the core and new domains. Sixty-four CVCs, or 93%, preferred to invest mostly in adjacent spaces or balance adjacent investments with other buckets. Only five CVCs considered investing in adjacent spaces unimportant (two focused primarily in the core, and three in new domains).

Twenty-two CVCs, or 32%, said they never invest in their parents' core. To quote a typical response, "We always said core is off limits; business units can do it day in and day out. The only things we would bring that were novel to their core were new business models that weren't technologically driven." At the same time, fourteen, or 20%, said they do not invest in new domains. Often, the hesitancy to explore new territories relates to the CVCs' short-term horizon objectives. To quote a typical response, "It's something that's so much in science and R&D phase that we think it goes beyond our horizon." Such differences indicate that companies set up CVCs with different goals in

mind. Some goals are more defensive, in which CVCs help existing businesses fill gaps, while other goals are more offensive, helping to identify new opportunities for the parent company.

Respondents were also asked whether they make only direct investments in portfolio companies or also invest indirectly by taking LP positions in institutional VC funds. Just 14% of CVCs actively seek taking LP positions, with the main rationale being gaining exposure to and insights from a specific novel industry or geography. Some 43% have never taken and do not intend to take LP positions. Interestingly, a quarter of CVCs acknowledged that they used to invest more frequently in institutional VC funds in the past and, while they still manage legacy positions, they no longer see benefits from doing so. The conjecture that CVCs often utilize LP investments to gain insights into a broad spectrum of portfolio companies was not confirmed.

3.2 CVC Budgeting and Relationship with Parent Company

As discussed in Section 2.5, there is wide variation in the way the financial commitments to CVC units are structured, from completely standalone funds to completely opportunistic behavior. In the latter, CVCs do not have any pre-approved budget, but make a separate decision on any possible investment commitment, often including follow-on rounds of already existing portfolio companies. This is a weak commitment that may make it difficult for such CVCs to secure a successful pipeline and invitation to syndicate co-investment.

Another way to assess the relationship between CVC units and their parents is to establish units' positions within the company structure. Table 2 reports that fifty-nine CVCs, or 80%, are separate units within the company, with the CVC head responsible only or overwhelmingly for the CVC activity. In the remaining fifteen cases, CVCs are embedded into other structures and do not act as a clearly delineated group. In all these cases, CVCs are part of corporate development or M&A groups. In fact, nine CVCs do not have a single full-time employee. Rather, those who function as CVC investment team members also fulfill other functions, such as SVP of Corporate Development, VP of Development and Innovation, or Head of M&A.

In many cases, a subordination structure (that is, the executive[s] to whom the CVC unit reports to in the parent company) could easily be established. This information is helpful because it can illuminate the importance of a CVC unit within the company (for example, whether there is a direct link to the CEO or the board of directors) as well as further illustrating strategic objectives. Table 6 shows that there is a wide range of executives overseeing CVC units. Only in eight cases do CVCs report directly to the CEO. In over a quarter of cases, CVCs report to the Chief Strategy Officers or equivalent. In five cases, CVCs report to the corporate heads of innovation, suggesting the company is taking a long-term perspective. Corporate development heads are in charge of CVCs in seven more cases, which usually also indicates a horizon beyond the immediate future, while in five cases, CVCs report to the head of business development, suggesting a more short-term horizon. Among other executives overseeing CVC units are CFOs (six cases), COO (three), Vice Chairman (one), CTO (one), and Head of Investor Relations (one). Such a wide distribution suggests not only that corporations differ drastically with respect to the hierarchical structures and chains of command, but also that there is no established, natural place for CVC units. This is especially given that many CVCs are of recent origin and varying objectives, and that many were carved out ad hoc from existing corporate functions. The fact that the CTO oversees only one CVC is surprising and suggests a separation between internal and external innovation (as opposed to external innovation and parent sales functions) in many cases. In evaluating these results, it is important to emphasize that in many cases our respondents indicated

that the subordination structure has changed repeatedly over the years, and that often, reporting was more executive-specific than title-oriented.

3.3 Human Capital and its Compensation

As existing research strongly indicates, venture capital is a human capital-intensive business (Hochberg, Ljungqvist, Lu (2007)). The personal and professional characteristics of VCs play a large role in driving outcomes. At the same time, very little is known about either the compensation arrangements in the CVC world or the characteristics of people working in CVC units. To understand the demographics of the CVC professionals, in addition to interviews, I collected detailed biographical information on investment team professionals of all CVC units using LinkedIn. Whenever needed, these data were supplemented with biographical data from Pitchbook, company websites, and web searches. For each CVC unit, a careful search identified every investment team professional employed at that CVC unit. For companies with a dedicated CVC website, all the team members listed on the CVC website and their positions were identified and matched with LinkedIn. If members were not listed, each respective CVC Pitchbook profile’s “team” section was used as the first stage of the identification procedure. Because Pitchbook’s team and biographical data are often outdated, each individual was cross matched with LinkedIn. The final step was manually searching “[Parent company] Venture” on LinkedIn and checking anyone whose current position included these terms. The resulting dataset contains all team members, from junior positions (e.g., analysts, associates) to business development personnel who are not involved in the investment decisions or processes, to the most senior investment team members. In total, 371 people working at CVCs of the interviewed sample were identified.

The team members of particular interest are those responsible for all aspects of investments. Investment professionals are those who are actively involved in due diligence, sourcing of deals, drafting of deal terms with the portfolio companies, and engagement with portfolio companies after the investment. Some 356 people employed as investment team members of the interviewed CVCs were identified, of whom 306 were senior investment professionals (seventy-one of them were interviewed). In every interview, interviewees were asked about the number of overall, investment, and senior team professionals in their CVC unit, which enabled a comparison of the manual search results with the reported values. Overall, there was a good correspondence, suggesting the high-quality outcome of the manual search process and, equivalently, the truthfulness of the interviewees.

3.3.1 Size of the CVC Team

It is well known that institutional VC firms are relatively small organizations. For example, the average VC firm in Gompers et al.’s (2020) survey has four investing general partners, with the twenty-fifth and seventy-fifth percentiles having three and five partners, respectively. Table 7 shows that corporate VCs are similarly small and lean organizations. The average number of senior investment professionals (roughly equivalent to general partners in institutional VC firms) is four and a half, while the median is three; the twenty-fifth and seventy-fifth percentiles having two and five people, respectively. Note that as shown in Table 8, in several cases, people working in CVC units perform other functions for their parent company. In fact, nine CVCs do not have a single full-time employee.

The mean CVC team has nine people, while the median is six people. Not surprisingly, as Table 9 reports, more active CVCs and CVCs of larger parent companies have larger team sizes at all levels. The number of junior investment personnel, such as analysts or associates, is even smaller than in institutional VC firms. An average CVC unit has just one, although a few CVCs feature a disproportionately large number of them. In addition to junior investment professionals and unlike

most institutional VC firms, CVC units often have other personnel, such as corporate development professionals, in charge of connecting portfolio companies to the parent company. Overall, about a third of CVCs employ at least one person dedicated to a development (rather than investment or a purely operational role). Interestingly, as Table 9 shows, dedicated fund CVCs are more likely to have development teams. This could be associated with the more strategic, long-term approach of such CVCs. Alternatively, because these CVCs are further removed from their parent companies, development team members bridge the gap by helping the portfolio companies navigate the “mothership.” Here is the description of such a development team by a CVC head from a technology parent in the large subsample: “In addition, we have three people who manage the operations of the portfolio, and three who manage the marketing and events that we do related to the portfolio, and then we have another three people that work on what we call partner development—after we make an investment, they are making sure we’re achieving the goals of the investment. For example, they make the introductions to customers and set up executive briefings.”

In institutional VCs, the number of general partners is positively correlated with the size of the assets under management and the number of portfolio companies. A similar proxy for corporate CVCs would be the number of active portfolio companies as well as the relationship between the number of investment personnel and the parent company’s size and its overall R&D budget. Looking at Table 7, on average, CVCs have 10.4 active portfolio companies per each senior investment team professional. These numbers are overall in line with evidence on institutional VCs, where each general partner on average holds eight board memberships simultaneously, which is equivalent to leading that VC firm’s deal in eight active portfolio companies. The result is particularly interesting, because, as discussed in Section 3.5, CVC investment team members are much less likely to take on board roles. At the same time, they are likely to spend more time interacting with their parent company than the time institutional VCs spend interacting with their LPs.

Not surprisingly, CVC teams are larger for larger parent companies and for CVCs with more portfolio companies. Another way to look at the CVC team size is to compare to the total R&D or CapEx of the parent company. On average, the ratio is 1.28 billion of R&D and 0.76 billion of CapEx per senior investment team member.

3.3.2 CVC Compensation Practices

Executive compensation has been a major research topic in finance and economics. For institutional VCs, compensation comes in two distinct components: a fixed component, which is a salary paid from the management fee, and a variable component, which is fund profit sharing paid from the carried interest (Metrick and Yasuda, 2010). All interviewees were asked about their CVCs’ compensation practices. Only eleven CVCs, or 15%, reported having carry-like or profit-sharing provisions similar in structure to the variable component of institutional VCs. This is surprisingly low. Many interviewees indicated that the lack of carry-like provisions makes it difficult to retain the best staff, especially in the era of high VC returns, and it leads to an inefficiently high personnel turnover. To quote from a non-California CVC executive, “The biggest challenge we have is attracting and retaining talent. In a corporate structure where traditional carry is not feasible, you don’t want to make more than the CEO of the company in one year, I get the sensitivities there. Our compensation is purely base and bonus. What I do ties into very little of my compensation. And for leaders of CVC units, this is the biggest challenge: trying to convince the organization you need to have some kind of shadow carry or something else to attract talent. If there’s something that’s really kept me up from a business operation standpoint, I don’t have the tools today to retain my talent.” Higher turnover is detrimental,

because it makes the relationships between CVCs and their portfolio companies less credible, especially if CVCs negotiate a board membership or a board observer position.

Multiple patterns about carry-like compensation are identifiable. Interestingly, as shown in Table 9, CVCs in California are much more likely to feature carry-like provisions, with 30% reporting such structures versus only 9% outside California. This could be related to a much higher competition for high-quality human capital in California, and especially in the Silicon Valley innovation ecosystem. Dedicated funds are also more likely to feature carry-like compensation provisions, as are CVCs of larger parent companies. In addition, 31% reported that CVC financial performance influences their compensation, for example, by tying such performance to their annual bonus. In California, where 33% reported such influence, 65% of CVCs have financial incentives tied to the portfolio’s financial outcomes. In the rest of the United States, less than 40% have such financial incentives. Overall, the results clearly indicate that CVCs are more likely to be compensated with a standard corporate package. That should have a major impact on their incentives.

3.3.3 Who Are CVC Investment Professionals?

For most identified CVC investment team members of seventy interviewed CVC units, a number of demographic, educational, and professional background details were collected. Four CVCs were excluded from this analysis, because these units had been disbanded by the time of the interview. This is the first ever comprehensive analysis of CVC personnel demographic data. To benchmark the results, the same demographic data were collected on senior investment professionals of seventy institutional VC firms. To identify these firms, for each CVC unit, a random co-investor who was confirmed to be a US based institutional VC firm was selected, and then all senior partners identified using the Pitchbook, website, and LinkedIn search procedures identical to the ones employed for the CVC sample. For consistency, only senior CVC investment professionals were selected for this comparative exercise. Table 10 shows the results for 306 CVC and 336 institutional VC senior investment professionals, as well as for their respective organizations. To integrate the data up to each CVC unit and each VC firm, for each parameter of interest, a dummy variable was set to one if a specific criterion was present for at least one of the investment team members of that CVC unit or a VC firm. For example, if the CVC unit had five investment team professionals, and only one had previously been employed by an institutional VC firm, the institutional VC variable for that CVC unit was assigned a value of one.

About 19% of CVC investment professionals are women. This is very similar to the 17% of women partners in the sample of institutional VC firms, but substantially higher than the 9% of women in the institutional VC industry, as reported by Gompers and Wang (2017). About half of CVCs and institutional VC firms have at least one woman among their senior staff. One explanation is that previous studies use historical data, and the participation and promotion of women in the VC industry has accelerated over the last few years.

An average CVC senior investment professional has been working at that CVC for about six years, which is roughly half of that CVC’s lifetime. This is a substantially shorter tenure than for their institutional VC counterparts. Moreover, a quarter joined their CVCs within the last two years, suggesting a high turnover. Just 8% hold a joint position at the CVC or elsewhere else at the parent company, such as corporate development, M&A, or R&D. Interestingly, 60% have worked only at the CVC unit of their parent company, and thus most CVC investment team professionals are external hires rather than re-assignees from other functions within the parent company. Some 54% of CVC investment professionals are in the same state as their parent company’s headquarters. Given that 72% of CVCs are in the same state as their parent, this indicates that many CVC employees work

physically in different locations than either their parent or their CVC unit. Some 142 of them, or 46%, work in California.

Table 10 reports that on average, each senior CVC investment professional is overseeing ten companies, in line with the evidence on institutional VCs. The total number of board seats, however, is significantly fewer for CVCs than for institutional VC firms. Table 10 shows that an average CVC unit has 5.6 board seats compared to fourteen for an average institutional VC firm. The mean number of full boards per one senior investment professional is 1.2 in CVC and three in institutional VC firms. For CVC personnel, the median of full board seats is zero. Even the seventy-fifth percentile holds just one board position. As Section 3.5 discusses, many companies have a policy against taking full board seats, but they often require or prefer board observer positions. The average CVC has 5.6 board observer positions, which is not significantly different than the number of board observer positions for an average institutional VC firm. Per senior investment professional, the mean (median) number of board observer positions for CVCs is the same as full boards at 1.2 (0). Combining the two, a mean (median) senior investment CVC professional is associated with 2.4 (0) boards, while the total number of board associations is eleven. This is dramatically lower than the number of board associations for institutional VCs. There are several explanations for such a difference. As already discussed, many CVCs prefer to follow investment rounds rather than lead them, and thus are less likely to gain a seat. In addition, some CVC investment team members are less experienced. Dedicated CVCs, larger CVC, and CVCs in California, have more full board and board observer seats.

About 15% of CVC senior investment professionals have worked at another CVC in the past, 27% have investment banking experience, 25% have worked in an M&A function, and 29% have working experience at an institutional VC or private equity firm. At the aggregated CVC unit level, these percentages are 46%, 54%, 57%, and 54%, respectively. The fact that a third of CVC investment professionals have institutional VC experience and two thirds of CVC units have at least one such professional is an important indicator that the world of CVC and institutional VC is a two-way street. This contradicts anecdotal evidence prevailing in the VC industry that while many CVC investors leave to work in institutional VC funds, it is rare that institutional VC investors leave to work at CVCs. Indeed, a comparison with partners of institutional VC firms shows that they are much less likely to have worked in CVCs before joining their current VC firm (only 3% did so, or ten times smaller compared to CVCs). Just 11% of institutional VC firms have at least one partner with past CVC experience. Institutional VCs are also less likely to have prior investment banking and M&A experience, but they are much more likely to have worked at other institutional VC firms. One potential explanation is the relative sizes of the total population of investment team members at institutional VC firms and CVCs, especially over the previous fifteen to twenty years, coinciding with the bulk of the career span of those in the samples.

Larger parent companies and CVCs with more investments are more likely to have diversified teams, including those with past CVC, institutional VC, and M&A experience. For example, 81% of CVCs with total investments above the median have at least one employee with former institutional VC or private equity experience. Further, every sixth investment professional working at a CVC has founded companies in the past, and 40% of CVCs have at least one entrepreneur among their teams. Dedicated CVC units, those with more investments, and those in California are more likely to have people with entrepreneurial experience. This is higher than might have been expected. However, these entrepreneurial credentials are dwarfed by institutional VC firms. Almost 30% of their partners have founded or co-founded a startup, and two thirds of all institutional VC firms have at least one such entrepreneur among senior partners. Turning to education, the differences between CVCs and institutional VC firms again stand out. Some 45% of CVCs have at least one investment professional

with a degree from a high-ranking US university, where “high ranking” means either an Ivy League member or any other university in the top 10 college programs as defined by US News rankings in 2021 (MIT, Chicago, CalTech, and Stanford). This number is smaller than 63% of institutional VC firms, suggesting that the role of networking is higher in the institutional VC industry.

Remarkably, 61% of CVC senior investment professionals have an MBA degree. As a result, 87% of CVCs have at least one MBA graduate. The prevalence of MBAs is lower among institutional partners, with 47% having an MBA degree. About 36% of CVCs have senior employees with other graduate degrees, including PhD, JD, and MD, similar to the 33% of senior team members at institutional VC firms. Interestingly, California CVCs are less likely to employ MBA graduates than non-California ones.

Venture capital is a network business. In the United States, LinkedIn is a recognized leader in online professional networking. Therefore, to gauge CVC employees’ presence in professional social networks, several variables were collected that reflect the extent of each’s professional network and visibility. Some 14% of CVC profiles do not feature a photo, an initial indicator of the visibility of and attitude towards building a professional network. This is significantly lower than the 8% for institutional VC profiles. Some 34%, on the other hand, opted for a paid premium LinkedIn account, which allows for several features, such as observing who has followed or viewed your profile. The number of LinkedIn followers is the sum of LinkedIn contacts and the number of LinkedIn members who chose to follow a specific profile.⁶ A median CVC employee has around 1,800 LinkedIn followers, with an average of 2,500. The equivalent mean (median) for institutional VC firm partners is 4,000 (2,200). Overall, people working at CVCs appear much less concerned with their external professional networks than investors working at institutional VC firms. Note that this does not mean that people at CVCs consider networking less important, but they certainly consider LinkedIn of lesser importance. One explanation is that LinkedIn is not used for the intra-organization networking, and that people at CVCs are more likely to network with other employees at their parent companies than with outsiders, such as other investors and startup founders. Taken together, these results suggest that the human capital at corporate and institutional VC organizations is very different when it comes to work experience, education, exposure to the startup world and attitudes towards professional networking.

3.4 Investment Approval Process

Existing research shows that deal sourcing and investment selection are important determinants of success in the VC industry (Gompers et al. 2020). CVCs were therefore asked several questions about their investment selection and approval processes. Perhaps not surprisingly, CVCs listed similar types of deal sources to those of institutional VCs, such as their professional networks, including other investors, as well as inbound interest from entrepreneurs. The deal funnel also looks similar in many cases: to make one investment, many CVCs consider more than a hundred potential investment opportunities. However, there exist many differences between the two types of VCs. Specifically, the most significant differences with institutional VCs have been identified in the deal evaluation and investment approval processes as discussed in this section.

⁶The number of LinkedIn contacts is not an informative metric, because LinkedIn does not report the number of contacts above 500.

3.4.1 Portfolio Company Fit and Business Unit Involvement

In their analysis of institutional VCs, Gompers et al. (2020) established that fit with the portfolio company was important for VC firms, although it was of lesser significance than many other aspects of an investment opportunity. For many CVCs, on the contrary, fit with the objectives of the CVC unit and the parent company is of paramount importance. Table 11 shows that for twenty-one CVCs, or 32%, consideration of a potential commercial relationship is an important determinant in evaluating the pipeline. Further, eighteen CVCs, or 27%, will consider investing only if a commercial relationship can easily be envisioned or is in the process of being set up at the time of deal closing. Three of the respondents went even further and said that a commercial relationship is required to make an investment. For twenty CVCs, or 30%, a commercial relationship is a factor in deal selection, although not of first importance. Only five CVCs do not consider a commercial relationship or a fit with a parent company in their evaluations. As shown in Table 12, for CVCs located outside California, commercial relationships play a larger role.

Another way to analyze fit and the CVC investment decision-making process is to consider the role of a parent company’s business unit in the deal evaluation process. Table 11 shows that in most cases, relevant business units play an important role. In twenty-nine CVCs, or 44%, business unit sponsorship is required for the investment to proceed. In ten cases out of these twenty-nine, business units then take the full responsibility for the portfolio company after the deal closes, with financial performance of the investment reflected in the profit and loss statements of that business unit. In eighteen more CVCs, a relevant business unit actively participates in due diligence and deal approval. In many cases, respondents told us that they were perceived by their peers in institutional VCs as having a greater ability to conduct due diligence, especially of the technical capabilities of a startup, than institutional VCs themselves, because of the parent company’s knowledge of the relevant domain. In total, 72% of CVCs rely on business units to sponsor the deal, approve the deal, or conduct due diligence. Only a minority of CVCs stated that while they check in with their business units on relevant deals, these business units do not play a part in the decision-making process. Business units are not involved at any stage of the decision-making process at all in only nine CVCs. Such close interaction with the parent company and sponsoring business units suggests that most CVCs are better positioned to help parent companies in their core and potentially adjacent spaces, rather than providing insights on new domains. Interestingly, there is also a substantial negative correlation of -0.57 between the importance of business unit sponsorship and carry-like compensation of CVC professionals. The more involved the business unit is in the decision-making process, the less likely CVCs are to benefit from the higher values of their portfolio companies.

3.4.2 Deal Approval Process

While deal approval processes differ widely across CVCs, the interviews yield several common threads. Arguably, most important of those is a two-stage investment approval process. In the first stage, the venture team, consisting of CVC investment professionals, decides whether to bring the deal forward for parent company consideration. Internal venture team voting rules are like those of institutional VCs. Table 13 shows that in 29% of cases, a unanimous decision by all the senior investment professionals is required to move the deal forward. Unanimity procedure is the most frequent approach, consistent with the findings of Gompers et al. (2020) for institutional VCs. In 21%, the venture team makes decisions based on a consensus. A majority of senior investment team professionals is required in a further 19%. In 8%, lead partners based on specific areas of expertise or geography on the ventures team have independent authority. All these voting rules correspond closely with those of institutional

VCs. More unusually (from the institutional VC viewpoint), in 19% of cases, the head of the CVC unit has a solo authority to bring the deal forward. While institutional VC firms often feature hierarchical structures, it is rare that one person in a firm with multiple general partners has individual authority on all deals.

In institutional VC firms, the partner’s decision is final and a positive outcome results in offering a term sheet to a portfolio company. In CVCs, a positive decision by the venture team is only the first stage. At the second stage, the parent company’s internal decision-making body takes over. Although these bodies may have different names, most often they are called an investment committee (IC). In some cases, there are two ICs, either responsible for different aspects of the same deal or for evaluating different kinds of investments (for example, as a function of the investment’s size). Even when there is only one IC, the decision-making process is usually more bureaucratic than in institutional VC firms. Indeed, many respondents complained that one of the biggest challenges they face is that the timeframe of internal decisions is so slow relative to the fast-paced world of venture capital that they end up losing high-quality deals because of an inability to react quickly. To illustrate, one interviewee said, “Maybe our parent company understands the norms of the venture space, but quite honestly, if something came to us completely fresh with a six-week deadline, unless it was so obvious I could get all hands on deck support, I wouldn’t ruin our reputation by pretending we could do it. I’d say this is for someone else.”

Every single CVC, apart from the five stand-alone funds, has at least one IC, on which parent company executives play an important and often pivotal role. Table 14 shows that while in twelve cases, or 18%, the IC plays a rubber-stamping role and its positive decision is taken for granted by respondents, this is not because the parent company executives were unimportant in the decision-making process. Rather, in all these cases, the venture team leaders “socialize” the deal with the IC members in advance and proceed with a formal vote only if they are assured of a positive outcome. Excluding stand-alone funds, in only two CVCs does the venture team have enough authority to make new investments of non-trivial size without parent company approval.

Table 13 shows that in 49% of cases, ICs require unanimous agreement to proceed with an investment, followed by majority (25%) and consensus (10%). Table 15 shows that the average IC size is four people. The twenty-fifth and seventy-fifth percentiles are three and five. Further, larger parent companies have larger ICs.

Table 16 looks into the composition of ICs. Interestingly, a representative from the ventures team (usually the CVC head) is only on the IC in 40% of cases. In all other CVCs, the venture team provides input to the IC but does not have a formal vote. The CEO of the parent company is present on the IC in 39% of the sample. Interviewees were also asked whether the IC has one decision maker whose vote really is the only one that counts and got confirmation of that in nineteen, or 27%, of CVCs. Not surprisingly, that decision maker is generally the parent company’s CEO. The presence of such an ultimate decision maker was less frequent for larger parent companies. Parent companies’ CFOs are present on the IC in 54% of the sample, substantially more frequently. Indeed, the CFO is the most frequent executive on ICs across all CVCs. Adding CVCs in which the parent company’s finance office is represented by other executives, such as the treasurer, leads to 61% of CVCs having an IC with a senior finance executive. The CTO or an R&D representative is an IC member in 23% of cases. General counsel is represented on the IC 12% of the time. Table 16 also shows that ICs often contain idiosyncratic company-specific executives, such as Chief Customer Officer, Head of Product, or Head of Marketing.

Such a wide variation in types of executives present on ICs raises questions about whether the main function of these executives is to act as gatekeepers who simply retain the right to veto investments. Given that many of these ICs require unanimity and their members come from different functions, it

is often enough for one executive out of three to five that typically constitute an IC to be skeptical of scuttling the deal. In many interviews, participants were asked whether, in their opinion, the non-venture team senior executives on the IC understood the norms of the venture space. To provide some examples, a simple stylized fact about the lifecycle of VC-backed portfolio companies is that their duration is on average much longer than a typical corporate project; while failures often materialize quickly, it may take years before successes come to fruition; and the pace of portfolio companies is typically faster than a CVC parent company. Such differences require readjustment when making CVC-type decisions.

Some 61% of interviewees told us that in their opinion, the executives on the IC did not understand the norms of the venture space. This ranged from an emphatic, “No” to more nuanced, “They don’t understand but often they don’t need to.” This question also caused by far the largest number of smiles and the most laughter during the interviews. To provide an example from a CVC of a non-California parent: “Certainly not. I mean, from the corporate standpoint, people don’t understand that you do need to pay to play, and they don’t understand that startups have burn rate, and they spend money, and you have to keep the lights on.” Many interviewees confided that their leaders need to get educated and that they see themselves as educators. To quote another CVC from the consumer industry, “It’s been an interesting challenge for me and others to educate the people who are lifers at the company, because at the end of the day, they don’t have the time to spend on this, so they’re trusting us as subject matter experts for this initiative.” As Table 15 shows, executives at larger parent companies were perceived as more understanding of venture industry norms. At the same time, executives in California or those with larger R&D expenses did not seem to understand venture industry norms differently. This suggests that if the non-venture executives on the IC play a pivotal role, it will be more difficult for the CVC unit to invest in riskier, more disruptive startups that are further away from the core expertise of the parent.

3.5 Contractual Features

Institutional VCs negotiate sophisticated contract terms, including cash flow, control, and voting rights. Kaplan and Strömberg (2003, 2004) describe many of these terms and examine the determinants of the contractual provisions in VC contracts. Gompers et al. (2020, 2021) show that institutional VCs consider investor-friendly contractual features, such as pro-rata rights and liquidation preference, of the utmost importance in the negotiation process.

Accordingly, the CVC interviewees were asked several questions about contractual terms and the investment negotiation process. The results clearly show distinctive features in CVCs. To start, as Table 17 shows, thirty-seven, or 57% of CVCs either only follow or strongly prefer to follow investment rounds, meaning that another investor, usually an institutional VC, is leading the round and negotiating the main contractual terms. As such, these CVCs benefit from most of the contractual features the lead investor negotiates, generally including all aforementioned cash flow rights. In only 10% of cases did CVCs indicate a preference to lead. The remaining 33% were indifferent between leading or following. Most of the time, CVCs also request so-called contractual side letters that give them the additional rights and preferences as discussed below.

Institutional VCs, especially those that lead early-stage rounds, consider control and voting rights, and in particular, voting board representation (also known as full board membership), of critical concern. Most would not invest if they could not negotiate at least one voting board position. Even VCs investing at a later stage generally require and expect to get a full board membership. As Table 17 shows, CVCs’ approach to control rights is very different. In fact, 38% of CVCs will never take a

full board seat. This is either because of regulatory constraints (for example, in financial institutions) or legal concerns, in that the parent company does not want to expose itself to the risk of a shareholder lawsuit. At the same time, in 24% of cases, CVCs have a strong preference for voting board membership, a few even going so far as to say they will not invest without such full board representation. This underlines the variation among parent companies' attitudes towards the risks and benefits of taking board positions in CVC portfolio companies. Table 18 shows that CVCs of parent companies with R&D expenses are much more likely to require a full board seat.

An alternative to a full board seat is a board observer position, which gives access to all or most board deliberations and access to the same information shared with full board members. The board observer position does not bestow the right to vote and thus formally participate in the portfolio company decision making. Almost a third of CVCs (31%) will not invest if they cannot secure a board observer position, and 46% more have a very strong preference for a board observer position. In total, 77% of CVCs consider this a critical or very important contractual feature. This finding strongly suggests that one important reason CVCs invest in startups is to gain insights and learnings. Many interviewees mentioned explicitly that not being privy to the board discussions and board-level information make an investment unattractive because it will prevent them from gaining any strategic insights.

Combining the full board membership and board observer positions, 81% of CVCs require or exhibit a strong preference for board rights. An interesting example of the evolving attitude towards board rights is the following quote from a CVC in the IT industry: "The most important thing is getting board visibility because we are strategic—we want to learn and know what is going on. Initially, the board observer was very important. But then we realized that as a board observer, you still don't get control. Of late, we started forcing an actual board seat."

Most CVCs commented that in terms of cash flow rights, they prefer standard contractual terms, often dubbed the NVCA template in the industry.⁷ Like institutional VCs, they consider pro-rata rights—which give the right to invest in follow-on investment rounds—important, with 92% saying that they always require or expect to get pro-rata rights. Not surprisingly, dedicated funds are more likely to secure pro-rata rights. As shown in Table 18, CVCs whose parent companies spend more on R&D are less likely to request pro-rata rights. At the same time, some CVCs who secure pro-rata rights confided that they are less likely to use them despite their desire to do so because of a change of direction of the parent company or its strategic goals. This is vividly illustrated by one interviewee: "We request pro-rata rights. But when we did a hard pivot out of [a specific industry space] because the CEO changed, our new CEO said absolutely no more in [that industry]. And here we had negotiated pro-rata rights and having up-rounds and we weren't taking advantage of it. So, the strategic relevance overruled that."

Almost all CVCs request information rights, and most require quarterly financial information, so that they can reflect the adjusted portfolio company value in their accounting books. While information rights are perceived as a straightforward requirement, the rights of the first notice (ROFN) and rights of first refusal (ROFR) are much more controversial. In this context, ROFR gives the investor (effectively, the parent company) the right to acquire the portfolio company at the terms of another company's acquisition offer. ROFN requires the portfolio company to notify the investor of an acquisition offer in a specified timeframe. Half of the CVCs require or strongly prefer ROFNs and 12% require ROFRs on their investments. Sometimes, ROFNs and ROFRs are specific in that they list the names of specific acquirers that give rise to these rights by investors. ROFRs are controversial and non-standard,

⁷The NVCA template is the template proposed by the National Venture Capital Association on its website.

because such a right by any strategic investor effectively puts a ceiling on the startup’s value by making other potential acquirers less interested in extending an offer in the first place. Several CVCs told us they would love to request ROFR, but have decided not to insist on it, because they would lose credibility with portfolio companies and institutional investors. Other CVCs told us that they have had to educate their parent company executives that ROFRs are suboptimal and lead to exclusion from what they consider the best deals. As one CVC with several portfolio companies told us, “We’ve had business units wanting ROFR, but we try to guide them to ROFN. From a corporate venturing side, it’s better not to have a ROFR in there either because in the chance that [my parent] doesn’t buy it, we don’t want the company to refuse the right of somebody else.” As shown in Table 18, ROFRs are much less likely in California CVCs. Indeed, in our interviews, not a single CVC of a parent company headquartered in California requires ROFRs, while 15% of non-California CVCs do.

3.6 Post-Investment Activities

Existing empirical work on institutional VCs has found that VCs add value to their portfolio companies after they invest. For example, Amornsiripanitch et al. (2019) showed that VCs are critical aids in hiring outside managers and directors. Gompers et al. (2020) found that more than half of institutional VCs report meeting with their portfolio companies at least once a week and contribute to their value creation. Unlike institutional VCs, one of the main advantages for startups in attracting an investment from a CVC is access to the value-added benefits a CVC’s parent company can offer, such as sales channels and complementary technology. Often, the parent company is the startup’s first paying customer. Therefore, interviewees were asked a number of questions concerning the extent of CVC unit interaction with portfolio companies post-investment.

As discussed in Section 3.4.1, many CVCs require or desire a commercial relationship with their parent companies. As Table 11 shows, there is indeed a very high level of realized commercial relationships after investment. (For this and the next question on acquisitions, the data on only those CVCs with sufficient long-term investment history was used in the analysis.) Only one CVC reported that its parent company had not established a relationship with any of its portfolio companies. For 85% of CVCs, at least a third of their portfolio companies entered into such a relationship, and for 50%, the proportion was two thirds. Many provided specific examples of how these worked out and were beneficial to both parent and portfolio companies. Given that many early-stage startups fail before establishing such a commercial relationship, such a high level of engagement is surprising. One important hypothesis arising from this analysis is that startups with strategic investors have a higher chance of survival and eventual success. Analyzing such an impact would be an important avenue for future research.

Historically, startups have been warned not to raise funding from strategic investors, because that would limit their exit opportunities, as CVCs have historically been perceived as investing in order to acquire companies “on the cheap.” As the analysis of contractual terms demonstrates, CVCs do routinely require a ROFN, which allows their parent company valuable time to come up with a counteroffer to an acquisition offer by a competitor. More telling, however, is evaluating what fraction of portfolio companies were eventually actually acquired by the CVC’s parent company. Table 11 shows that in almost half of CVC units, the parent company did not acquire a single portfolio company. Further, in 30% of the sample, the respondents confirmed that one or two portfolio companies were acquired either a long time ago or sporadically over the years. Only in six CVCs, or 10%, did the parent company end up acquiring more than a fifth of the CVC unit’s portfolio companies. Table 12 shows CVCs whose parents do not report R&D spending and those that invest in many portfolio

companies are much less likely to be acquisition channels. The conclusion then is that modern CVC investments do not lead to acquisitions and therefore, using CVC investments as an acquisition pipeline likely does not constitute an important corporate strategic objective when setting such a unit up.

3.7 Impact of COVID-19

The interviews took place roughly eight to eleven months after the onset of the global COVID-19 pandemic that wreaked havoc on economies worldwide, including the United States. Interviewees were therefore asked what the impact of COVID-19 was on their ability to source, negotiate, and close venture investments, as well as any overall effects on their portfolio companies. Overall, responses clearly suggest that COVID-19 had a neutral to a positive impact. As Table 19 shows, twenty-seven, or 43%, confirmed that the impact was positive. To provide a typical response, a CVC executive from a large non-California parent said, “I hate to say this but for us [COVID] has been quite positive. Our business has soared during COVID. Trends we’re looking at are only accelerating.” Twenty-eight more CVCs, or 44%, confirmed that they did not experience any impact of COVID-19 and their deal flow, decision-making processes, or portfolio companies were relatively unaffected. Eight CVCs assessed the impact as neutral to negative, with some negative shocks, especially because of the inefficiency of conducting virtual due diligence. However, they all opined that these negative shocks would not have a long-lasting impact. Tellingly, not a single of our interviewees responded that the impact of COVID-19 was particularly negative or would lead to long-term detrimental consequences for any dimension of their activities. Further, the impact of COVID was uniform across all sub-samples. While surprising, these results are in line with the survey of institutional VCs conducted by Gompers et al. (2021) during the summer of 2020, in the earlier months of the pandemic. The preponderance of evidence suggests that VC activity is resilient to macroeconomic shocks and that venture investors, both institutional and corporate, have adjusted quickly and flexibly to the new environment.

4 Conclusion

This paper fills a gap in our knowledge of what corporate venture capitalists do and how they do it. Seventy-four CVC units were surveyed on a broad range of issues about their organizational structure, relationships with their parent corporations, decision-making processes, and human resource policies.

The paper contributes in several ways. First, while recent evidence has uncovered many fundamental and economically important characteristics about institutional VC funds, little is known about their CVC counterparts, despite their rising preeminence in the world of innovative startups. Second, the results enable a comparison between these two major players in the innovation ecosystem, institutional and corporate VCs, and underline both the areas of similarity and the dramatic differences among them. Third, the results clearly show that the CVC universe is not a uniform, monolithic set of similar structures, but rather a juxtaposition of a wide array of different practices. This raises a lot of interesting questions on the economic efficiency and optimal fit of CVCs that are important for further research to address.

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Table 1: Active CVC units and S&P 500 companies

Basic company and financial data on the S&P500 sample, further segmented by those with and without an active CVC unit.

| | Units | Total Sample | | | Active CVC | | | No Active CVC | | | | | |
|-----------------------|-------|--------------|------|--------|------------|----|---------|---------------|--------|-----|---------|--------|--------|
| | | N | Mean | St.Dev | Median | N | Mean | St.Dev | Median | N | Mean | St.Dev | Median |
| Number | N | 499 | | | | 94 | | | | 405 | | | |
| % of total sample | % | 100 | | | | 19 | | | | 81 | | | |
| Company age | Years | 499 | 77 | 49 | 60 | 94 | 83 | 51 | 74 | 405 | 75 | 48 | 59 |
| IPO Year | Year | 481 | 1986 | 23 | 1991 | 91 | 1981** | 27 | 1986 | 390 | 1987** | 21 | 1992 |
| Equiy market value | Bln | 499 | 59 | 128 | 24 | 94 | 122*** | 210 | 57 | 405 | 44*** | 94 | 21 |
| Employees | 000 | 499 | 53 | 124 | 19 | 94 | 80** | 112 | 47 | 405 | 46** | 126 | 17 |
| R&D ratio | % | 499 | 2.04 | 4.18 | 0 | 94 | 3.83*** | 5.06 | 1.77 | 405 | 1.62*** | 3.84 | 0.00 |
| CapEx ratio | % | 499 | 3.46 | 3.50 | 2.32 | 94 | 3.08 | 3.11 | 2.21 | 405 | 3.55 | 3.59 | 2.34 |
| Market to book ratio | | 499 | 1.98 | 2.14 | 1.30 | 94 | 2.09 | 2.09 | 1.43 | 405 | 1.96 | 2.17 | 1.29 |
| Leverage ratio | % | 499 | 28 | 22 | 28 | 94 | 30 | 18 | 29 | 405 | 28 | 23 | 27 |
| % HQ in California | % | 499 | 15 | 36 | 0 | 94 | 28*** | 45 | 0 | 405 | 12*** | 33 | 0 |
| CEO gender (F=1) | % | 499 | 6 | 25 | 0 | 94 | 9 | 28 | 0 | 405 | 6 | 24 | 0 |
| CEO age as of 2021 | Years | 499 | 59 | 7 | 59 | 94 | 58 | 5 | 59 | 405 | 59 | 7 | 59 |
| CEO tenure as of 2021 | Years | 499 | 8 | 8 | 5 | 94 | 7 | 8 | 4 | 405 | 8 | 8 | 6 |
| Previous CEO tenure | Years | 445 | 11 | 9 | 9 | 83 | 10** | 7 | 9 | 359 | 12** | 10 | 9 |

Table 2: Number of CVC Unit Interviewees

The portion of interviewed CVC units and interviewed personnel who report their job titles, industry classification, the location of their parent company, the CVC unit’s financing method, and the CVC unit’s position within the parent company.

| | Interviewees | | CVC Units | |
|----------------------------------|--------------|-----|-----------|-----|
| | N | % | N | % |
| Total interviews | 77 | 100 | 74 | 100 |
| Completed interviews | 77 | 100 | 74 | 100 |
| Level of seniority | | | | |
| Head of CVC Unit | 12 | 16 | 12 | 16 |
| Senior investment team | 62 | 81 | 59 | 80 |
| Junior investment team | 3 | 4 | 3 | 4 |
| Industry | | | | |
| Information Technology | 23 | 30 | 23 | 31 |
| Healthcare | 12 | 16 | 12 | 16 |
| Financials | 14 | 18 | 14 | 19 |
| Industrials, Energy, Utilities | 15 | 19 | 15 | 20 |
| Consumer | 13 | 17 | 10 | 14 |
| Parent company location | | | | |
| California | 32 | 42 | 32 | 43 |
| West (not California) | 4 | 5 | 4 | 5 |
| Northeast | 12 | 16 | 12 | 16 |
| South | 12 | 16 | 10 | 14 |
| Midwest | 17 | 22 | 16 | 22 |
| Financing method | | | | |
| Stand-alone fund | 5 | 6 | 5 | 7 |
| Off the balance sheet, of which: | 72 | 94 | 69 | 93 |
| Multi-year commitment | 27 | 35 | 26 | 35 |
| Single year commitment | 16 | 21 | 16 | 22 |
| Opportunistic | 29 | 38 | 27 | 36 |
| CVC position within a company | | | | |
| Separate division | 62 | 81 | 59 | 80 |
| Embedded into another division | 15 | 19 | 15 | 20 |

Table 3: Summary statistics of the CVC Interview sample

Summary statistics on the sample of the interviewed CVC units. The first panel focuses on the parent companies, the second on the CVC unit relation to the parent company, and the third on the CVC units.

| | Units | N | Mean | Pct 25 | Median | Pct 75 | St.Dev. |
|--|-------|----|-------|--------|--------|--------|---------|
| <hr/> | | | | | | | |
| Parent Company | | | | | | | |
| Equity market value | Bln | 74 | 134 | 27 | 65 | 139 | 232 |
| Employees | '000 | 74 | 84 | 17 | 47 | 102 | 122 |
| R&D Ratio | % | 71 | 4.08 | 0.00 | 2.19 | 6.67 | 5.12 |
| CapEx Ratio | % | 74 | 2.95 | 1 | 2.12 | 3.59 | 3.28 |
| Market to Book Ratio | | 74 | 2.11 | 0.65 | 1.50 | 2.89 | 1.96 |
| Leverage Ratio | % | 74 | 28 | 17 | 27 | 40 | 17 |
| | | | | | | | |
| CVC units & Parent Company | | | | | | | |
| Same state as parent | Dummy | 74 | 0.72 | 0 | 1 | 1 | 0.45 |
| Distance to parent | Miles | 74 | 600 | 0 | 0 | 620 | 1177 |
| CVC website | Dummy | 74 | 0.78 | 1 | 1 | 1 | 0.41 |
| CVC team listed | Dummy | 74 | 0.61 | 1 | 1 | 1 | 0.49 |
| Full-time CVC employment | Dummy | 74 | 0.88 | 1 | 1 | 1 | 0.33 |
| | | | | | | | |
| CVC units | | | | | | | |
| Year founded | Year | 74 | 2011 | 2008 | 2014 | 2016 | 8 |
| CVC age | Year | 74 | 10 | 5 | 7 | 13 | 8 |
| Investments | N | 72 | 98 | 11 | 26 | 71 | 255 |
| Investments, last four years | N | 72 | 33 | 3 | 13 | 32 | 59 |
| Active portfolio companies, PB | N | 72 | 34 | 4 | 13 | 27 | 68 |
| Active portfolio companies, interviews | N | 61 | 40 | 11 | 17 | 30 | 68 |
| Exits | N | 61 | 43 | 3 | 8 | 23 | 125 |
| Annual investment | Mln | 70 | 155 | 15 | 51 | 156 | 262 |
| Median round amount | Mln | 71 | 24 | 11 | 17 | 26 | 38 |
| Median post-money valuation | Mln | 70 | 136 | 48 | 68 | 108 | 328 |
| Co-investors | N | 69 | 153 | 20 | 77 | 151 | 242 |
| Deals per year | N | 62 | 12 | 4 | 6 | 10 | 23 |
| R&D to annual investment | '000 | 46 | 87.82 | 16.11 | 27.18 | 78.10 | 144.52 |

Table 4: CVC Unit Objectives

The portion of CVC units that report their main objectives, evaluation horizon of these objectives, the importance of core, adjacent and new domain investments, and the importance of taking LP positions.

| | CVC units | |
|--------------------------------|-----------|-----|
| | N | % |
| Main objective | 74 | 100 |
| Purely strategic | 12 | 16 |
| Mostly strategic | 37 | 50 |
| Balanced | 16 | 22 |
| Mostly financial | 8 | 11 |
| Purely financial | 1 | 1 |
| Objectives horizon | 59 | 100 |
| Long-term (more than 5 years) | 6 | 10 |
| Medium-term to long-term | 3 | 5 |
| Medium-term (2-5 years) | 4 | 7 |
| Short-term to mid-term | 2 | 3 |
| Short term (less than 2 years) | 44 | 75 |
| Core goals | 69 | 100 |
| Only in core | 0 | 0 |
| Focus in core | 17 | 25 |
| Balanced in core | 16 | 23 |
| Sporadic in core | 14 | 20 |
| Never in core | 22 | 32 |
| Adjacent goals | 69 | 100 |
| Only in adjacent | 2 | 3 |
| Focus in adjacent | 34 | 49 |
| Balanced in adjacent | 28 | 41 |
| Sporadic in adjacent | 3 | 4 |
| Never in adjacent | 2 | 3 |
| New domain goals | 69 | 100 |
| Only in new domain | 2 | 3 |
| Focus in new domain | 6 | 9 |
| Balanced in new domain | 25 | 36 |
| Sporadic in new domain | 22 | 32 |
| Never in new domain | 14 | 20 |
| Take LP positions | 68 | 100 |
| Top priority | 1 | 1 |
| Actively seek | 9 | 13 |
| Consider in specific scenarios | 13 | 19 |
| Only legacy | 16 | 24 |
| Won't consider | 29 | 43 |

Table 5: CVC Unit Objectives: Subsamples

Statistics on main objectives and horizon of CVC units and subsamples.

| | | Geography | | | Commitment | | Parent size | | CVC number deals | | R&D | |
|----------------|---------|-----------|------|-------|------------|----------|-------------|----------|------------------|----------|----------|----------|
| | | All | CA | Other | Yes | No | L | S | L | S | Yes | No |
| Main objective | Mean | 3.70 | 3.45 | 3.78 | 3.26 *** | 4.00 *** | 3.59 | 3.78 | 3.43 *** | 3.95 *** | 3.42 *** | 3.82 *** |
| | St.Dev. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | N | 74 | 20 | 54 | 31 | 43 | 37 | 37 | 37 | 37 | 24 | 50 |
| Horizon | Mean | 1.73 | 1.81 | 1.70 | 1.74 | 1.72 | 2.07 *** | 1.40 *** | 1.65 | 1.82 | 1.53 | 1.83 |
| | St.Dev. | 1.38 | 1.47 | 1.35 | 1.51 | 1.28 | 1.58 | 1.07 | 1.31 | 1.47 | 1.31 | 1.41 |
| | N | 59 | 16 | 43 | 27 | 32 | 29 | 30 | 31 | 28 | 19 | 40 |

Table 6: CVC Units Subordination

The portion of CVC units that report their subordination structure to the parent company.

| | CVC Units | |
|-------------------------------|-----------|-----|
| | N | % |
| Chief Strategy Officer | 15 | 29 |
| CEO | 8 | 15 |
| CFO | 6 | 12 |
| Head of Corporate Development | 7 | 13 |
| Head of Business Development | 5 | 10 |
| Head of Innovation | 5 | 10 |
| COO | 3 | 5 |
| Vice Chairman | 1 | 2 |
| CTO | 1 | 2 |
| Head of Investor Relations | 1 | 2 |
| Total | 52 | 100 |

Table 7: CVC Team Size

Statistics on CVC units' overall, investment and senior team sizes, and ratios reporting how certain parent company financials and the size of CVC unit portfolio correspond to the senior team size.

| | Units | N | Mean | Pct 25 | Median | Pct 75 | St.Dev. |
|------------------------------------|-------|----|-------|--------|--------|--------|---------|
| Team size | | 70 | 9.24 | 4.00 | 6.00 | 9.00 | 12.29 |
| Investment team size | | 70 | 5.91 | 3.00 | 4.00 | 6.75 | 6.09 |
| Senior team size | | 70 | 4.54 | 2.00 | 3.00 | 5.00 | 4.66 |
| Market Cap to senior team | Bln | 70 | 41.41 | 7.36 | 17.81 | 54.54 | 70.30 |
| CapEx to senior team | Bln | 70 | 0.76 | 0.08 | 0.21 | 0.64 | 1.52 |
| R&D to senior team | Bln | 49 | 1.28 | 0.23 | 0.63 | 1.25 | 2.70 |
| Portfolio companies to senior team | | 70 | 10.40 | 1.05 | 4.33 | 8.19 | 26.84 |

Table 8: CVC Team Summary Statistics

The portion of CVC units that report team commitment to CVC activity, presence of business development personnel, and compensation provisions for the team.

| | CVC Units | |
|------------------------------------|-----------|-----|
| | N | % |
| Full-time employees on CVC team | 74 | 100 |
| Full-time | 65 | 88 |
| Not full-time | 9 | 12 |
| Development team presence | 67 | 100 |
| Development team | 23 | 34 |
| No development team | 44 | 66 |
| CVC performance influence on bonus | 71 | 100 |
| Performance influences bonus | 22 | 31 |
| No influence to bonus | 49 | 69 |
| Carried interest | 74 | 100 |
| Carry or synthetic carry | 11 | 15 |
| No carry | 63 | 85 |

Table 9: CVC Team Composition: Subsamples

Statistics on overall, investment and senior team sizes, as well as team commitment to CVC activity, presence of business development personnel, and compensation provisions for CVC units and subsamples.

| | | Geography | | | Commitment | | Parent size | | CVC deals | | R&D | |
|------------------------------------|---------|-----------|-------|-------|------------|---------|-------------|--------|-----------|---------|------|-------|
| | | All | CA | Other | Yes | No | L | S | L | S | Yes | No |
| Team size | Mean | 9.33 | 14.76 | 7.22 | 11.71 | 7.56 | 13.05** | 5.83** | 12.81** | 5.64** | 8.71 | 9.61 |
| | St.Dev. | 12.45 | 20.89 | 6.03 | 15.78 | 9.07 | 16.80 | 3.72 | 16.19 | 4.30 | 5.60 | 14.55 |
| | N | 68 | 19 | 49 | 29 | 39 | 33 | 35 | 35 | 33 | 21 | 47 |
| Investment team size | Mean | 5.65 | 8.08 | 4.71 | 6.07 | 5.35 | 7.33** | 4.07** | 7.71*** | 3.47*** | 5.85 | 5.57 |
| | St.Dev. | 5.66 | 9.20 | 3.12 | 4.76 | 6.30 | 7.34 | 2.69 | 7.09 | 2.04 | 4.18 | 6.21 |
| | N | 68 | 19 | 49 | 29 | 39 | 33 | 35 | 35 | 33 | 20 | 48 |
| Senior team size | Mean | 4.14 | 6.36 | 3.16 | 3.71 | 4.73 | 5.50 | 3.05 | 6.06** | 2.22** | 3.75 | 4.33 |
| | St.Dev. | 5.24 | 8.78 | 2.15 | 2.49 | 7.69 | 7.37 | 2.21 | 6.93 | 0.81 | 2.18 | 6.27 |
| | N | 36 | 11 | 25 | 21 | 15 | 16 | 20 | 18 | 18 | 12 | 24 |
| Full-time | Mean | 0.88 | 0.90 | 0.87 | 0.94 | 0.84 | 0.92 | 0.84 | 0.97** | 0.78** | 0.92 | 0.86 |
| | St.Dev. | 0.33 | 0.31 | 0.34 | 0.25 | 0.37 | 0.28 | 0.37 | 0.16 | 0.42 | 0.28 | 0.35 |
| | N | 74 | 20 | 54 | 31 | 43 | 37 | 37 | 37 | 37 | 24 | 50 |
| Development team | Mean | 0.34 | 0.44 | 0.31 | 0.47* | 0.24* | 0.39 | 0.29 | 0.47** | 0.23** | 0.39 | 0.32 |
| | St.Dev. | 0.48 | 0.51 | 0.47 | 0.51 | 0.43 | 0.50 | 0.46 | 0.51 | 0.43 | 0.50 | 0.47 |
| | N | 67 | 18 | 49 | 30 | 37 | 33 | 34 | 32 | 35 | 23 | 44 |
| CVC performance influence on bonus | Mean | 0.31 | 0.32 | 0.31 | 0.37 | 0.27 | 0.23 | 0.39 | 0.24 | 0.38 | 0.30 | 0.31 |
| | St.Dev. | 0.47 | 0.48 | 0.47 | 0.49 | 0.45 | 0.43 | 0.49 | 0.43 | 0.49 | 0.47 | 0.47 |
| | N | 71 | 19 | 52 | 30 | 41 | 35 | 36 | 34 | 37 | 23 | 48 |
| Carried interest or profit-sharing | Mean | 0.15 | 0.30* | 0.09* | 0.29*** | 0.05*** | 0.22* | 0.08* | 0.16 | 0.14 | 0.17 | 0.14 |
| | St.Dev. | 0.36 | 0.47 | 0.29 | 0.46 | 0.21 | 0.42 | 0.28 | 0.37 | 0.35 | 0.38 | 0.35 |
| | N | 74 | 20 | 54 | 31 | 43 | 37 | 37 | 37 | 37 | 24 | 50 |

Table 10: CVC and Institutional VC Senior Professionals

Statistics on the current standing, visibility, and past experience of CVC units and a comparable sample of institutional VC firms. Panel A reports at the individual-level, and Panel B reports results aggregated up to a CVC unit or an institutional VC firm.

Panel A: Individual-level data

| Variable | | CVC Senior Individuals | | | | IVC Senior Individuals | | | |
|------------------------------------|-------|------------------------|----------|---------|--------|------------------------|----------|---------|--------|
| | | N | Mean | St.Dev. | Median | N | Mean | St.Dev. | Median |
| First year current position | Year | 300 | 2017 *** | 4 | 2018 | 301 | 2013 *** | 7 | 2015 |
| Years at CVC/IVC | N | 301 | 6.02 *** | 5.33 | 5 | 302 | 8.10 *** | 7 | 6 |
| Joint position | Dummy | 306 | 0.08 | 0.27 | 0 | | | | |
| Only CVC employee | Dummy | 306 | 0.60 | 0.49 | 1 | | | | |
| Board seats | N | 298 | 1.21 *** | 2.22 | 0 | 314 | 3.13 *** | 5.23 | 0 |
| Board observers | N | 299 | 1.23 ** | 2.63 | 0 | 313 | 0.77 ** | 1.81 | 0 |
| Gender | Dummy | 306 | 0.19 | 0.40 | 0 | 336 | 0.17 | 0.38 | 0 |
| Past CVC experience | Dummy | 305 | 0.15 *** | 0.36 | 0 | 313 | 0.03 *** | 0.16 | 0 |
| Past institutional VC experience | Dummy | 306 | 0.29 *** | 0.45 | 0 | 313 | 0.40 *** | 0.49 | 0 |
| Past investment banking experience | Dummy | 306 | 0.27 *** | 0.44 | 0 | 313 | 0.18 *** | 0.38 | 0 |
| Past M&A experience | Dummy | 306 | 0.25 *** | 0.43 | 0 | 313 | 0.04 *** | 0.21 | 0 |
| Past entrepreneur experience | Dummy | 306 | 0.15 *** | 0.36 | 0 | 309 | 0.28 *** | 0.45 | 0 |
| Non-MBA graduate degrees | Dummy | 293 | 0.17 * | 0.38 | 0 | 290 | 0.12 * | 0.32 | 0 |
| MBA degree | Dummy | 286 | 0.61 *** | 0.49 | 1 | 281 | 0.47 *** | 0.50 | 0 |
| LI followers | N | 304 | 2529 ** | 4674 | 1804 | 314 | 4044 ** | 11635 | 2176 |
| LI photo | Dummy | 306 | 0.86 ** | 0.35 | 1 | 316 | 0.92 ** | 0.27 | 1 |
| Same state as parent HQ | Dummy | 306 | 0.54 | 0.50 | 1 | | | | |

Panel B: Organization-level data

| | CVC Aggregate | | | IVC Aggregate | | |
|------------------------------------|---------------|----------|---------|---------------|-----------|---------|
| | N | Mean | St.Dev. | N | Mean | St.Dev. |
| Senior team size | 70 | 4.39 | 5.66 | 70 | 4.71 | 3.41 |
| Female on senior team | 70 | 0.53 | 0.93 | 70 | 0.46 | 0.50 |
| Average team years at CVC | 70 | 5.13 *** | 2.95 | 70 | 7.52 *** | 4.80 |
| Number of team board members | 70 | 1.54 | 2.42 | 70 | 2.11 | 2.10 |
| Board seats | 70 | 5.57 *** | 10.00 | 70 | 13.87 *** | 17.77 |
| Number of team board observers | 70 | 1.23 | 1.97 | 70 | 1.16 | 1.52 |
| Board observers | 70 | 5.60 | 10.49 | 70 | 3.40 | 5.28 |
| Board or board observer seats | 70 | 11.17 * | 18.66 | 70 | 17.27 * | 21.72 |
| Past CVC experience | 70 | 0.46 *** | 0.50 | 70 | 0.11 *** | 0.32 |
| Past institutional VC experience | 70 | 0.54 *** | 0.50 | 70 | 0.80 *** | 0.40 |
| Past investment banking experience | 70 | 0.54 | 0.50 | 70 | 0.46 | 0.50 |
| Past M&A experience | 70 | 0.57 *** | 0.50 | 70 | 0.16 *** | 0.37 |
| Past entrepreneur experience | 70 | 0.40 *** | 0.49 | 69 | 0.64 *** | 0.48 |
| Non-MBA graduate degrees | 70 | 0.36 | 0.48 | 70 | 0.33 | 0.47 |
| MBA degree | 70 | 0.87 | 0.34 | 68 | 0.81 | 0.40 |
| Top undergraduate degree | 69 | 0.45 ** | 0.50 | 68 | 0.63 ** | 0.49 |

Table 11: Portfolio company and parent company relationship

The portion of CVC units that report relations between portfolio companies and parent company: commercial relationships, acquisitions, and the presence of business units in the investment process.

| | CVC Units | |
|---|-----------|-----|
| | N | % |
| Commercial agreement required | 67 | 100 |
| Required for deal | 3 | 4 |
| Expected | 18 | 27 |
| Actively seek | 21 | 32 |
| Secondary consideration | 20 | 30 |
| No requirement | 5 | 7 |
| Commercial agreement formed | 60 | 100 |
| 100% | 9 | 15 |
| More than 70% | 21 | 35 |
| From 30% to 70% | 21 | 35 |
| Up to 30% | 8 | 13 |
| None | 1 | 2 |
| Portfolio companies acquired by parent | 60 | 100 |
| Over 40% | 1 | 2 |
| From 20% to 40% | 5 | 8 |
| From 10 to 20% | 7 | 12 |
| Up to 10% | 18 | 30 |
| None | 29 | 48 |
| Business unit sponsor | 65 | 100 |
| Required; full responsibility post deal | 10 | 15 |
| Required | 19 | 29 |
| Involved in diligence/approval | 18 | 28 |
| Involved in relevant deals | 9 | 14 |
| Not involved | 9 | 14 |

Table 12: Portfolio company and parent company relationship: Subsamples

Statistics on commercial relationships as a requirement at time of investment and ex-post formation, as well as prevalence of eventual acquisitions by the parent by CVC units and subsamples.

| | | Geography | | | Commitment | | Parent size | | CVC deals | | R&D | |
|--|---------|-----------|--------|--------|------------|--------|-------------|------|-----------|-------|-------|-------|
| | | All | CA | Other | Yes | No | L | S | L | S | Yes | No |
| Commercial agreement required | Mean | 2.91 | 2.43 * | 3.04 * | 2.67 | 3.08 | 2.82 | 3.00 | 2.94 | 2.88 | 2.92 | 2.91 |
| | St.Dev. | 1.03 | 1.16 | 0.96 | 1.00 | 1.02 | 1.06 | 1.00 | 1.03 | 1.04 | 1.02 | 1.04 |
| | N | 67 | 14 | 53 | 27 | 40 | 34 | 33 | 33 | 34 | 24 | 43 |
| Commercial agreement formed | Mean | 3.48 | 3.41 | 3.51 | 3.43 | 3.51 | 3.32 | 3.66 | 3.44 | 3.54 | 3.63 | 3.41 |
| | St.Dev. | 0.97 | 0.94 | 0.98 | 0.81 | 1.05 | 1.04 | 0.86 | 0.99 | 0.95 | 0.83 | 1.02 |
| | N | 60 | 17 | 43 | 21 | 39 | 31 | 29 | 34 | 26 | 19 | 41 |
| Portfolio companies acquired by parent | Mean | 1.85 | 2 | 1.8 | 1.55 * | 2.03 * | 1.84 | 1.86 | 1.61* | 2.10* | 1.52* | 2.03* |
| | St.Dev. | 1.04 | 0.93 | 1.08 | 0.80 | 1.13 | 0.95 | 1.14 | 0.62 | 1.32 | 0.98 | 1.04 |
| | N | 60 | 15 | 45 | 22 | 38 | 32 | 28 | 31 | 29 | 21 | 39 |

Table 13: Investment decision making: Voting rules

The portion of CVC units that report the voting rules required to bring a deal forward from the internal CVC team, and at the second-stage investment committee.

| | CVC voting rule | | IC voting rule | |
|-------------------|-----------------|-----|----------------|-----|
| | N | % | N | % |
| Unanimous | 14 | 29 | 31 | 49 |
| Consensus | 10 | 21 | 6 | 10 |
| Majority | 9 | 19 | 16 | 25 |
| Head of Ventures | 9 | 19 | 0 | 0 |
| Lead Partner | 4 | 8 | 0 | 0 |
| Executive Sponsor | 2 | 4 | 0 | 0 |
| Other | 0 | 0 | 10 | 16 |
| Total | 48 | 100 | 63 | 100 |

Table 14: Parent company involvement in investment process

The portion of CVC units that report the parent company's role in the investment approval process.

| | CVC units | |
|--------------------------------|-----------|-----|
| | N | % |
| Parent on IC | 74 | 100 |
| Parent on IC | 69 | 93 |
| Parent not on IC | 5 | 7 |
| Rubber-stamping IC | 68 | 100 |
| Rubber-stamp from IC | 12 | 18 |
| Real authority | 56 | 82 |
| Pivotal decision-maker | 70 | 100 |
| One vote is pivotal | 19 | 27 |
| No single authority on IC | 51 | 73 |
| Parent company executives | 38 | 100 |
| understanding of venture norms | | |
| Understand norms | 15 | 39 |
| Do not understand norms | 23 | 61 |

Table 15: Parent company involvement in investment process: Subsamples

Statistics on the extent of parent company involvement in the investment approval process as the investment committee of CVC units and subsamples.

| | | Geography | | | Commitment | | Parent size | | CVC deals | | R&D | |
|--------------------------------|---------|-----------|------|-------|------------|---------|-------------|--------|-----------|------|------|------|
| | | All | CA | Other | Yes | No | L | S | L | S | Yes | No |
| CEO on IC | Mean | 0.39 | 0.44 | 0.37 | 0.47 | 0.33 | 0.30 | 0.48 | 0.31 | 0.47 | 0.30 | 0.43 |
| | St.Dev. | 0.49 | 0.51 | 0.49 | 0.51 | 0.47 | 0.46 | 0.51 | 0.47 | 0.51 | 0.47 | 0.50 |
| | N | 70 | 18 | 52 | 30 | 40 | 37 | 33 | 36 | 34 | 23 | 47 |
| IC size | Mean | 4.16 | 3.76 | 4.31 | 4.41 | 3.97 | 4.66** | 3.67** | 4.44 | 3.85 | 4.30 | 4.10 |
| | St.Dev. | 1.92 | 1.71 | 1.99 | 2.05 | 1.83 | 1.89 | 1.86 | 2.03 | 1.78 | 2.26 | 1.75 |
| | N | 64 | 17 | 47 | 28 | 36 | 32 | 32 | 34 | 30 | 22 | 42 |
| CVC team on IC | Mean | 0.40 | 0.47 | 0.38 | 0.47 | 0.36 | 0.46 | 0.34 | 0.42 | 0.39 | 0.35 | 0.43 |
| | St.Dev. | 0.49 | 0.51 | 0.49 | 0.51 | 0.48 | 0.51 | 0.48 | 0.50 | 0.49 | 0.49 | 0.50 |
| | N | 72 | 19 | 53 | 30 | 42 | 37 | 35 | 36 | 36 | 23 | 49 |
| Business unit sponsor | Mean | 3.18 | 2.76 | 3.33 | 2.63*** | 3.58*** | 3.06 | 3.32 | 3.24 | 3.13 | 2.95 | 3.30 |
| | St.Dev. | 1.26 | 1.52 | 1.14 | 1.39 | 1.00 | 1.30 | 1.22 | 1.30 | 1.23 | 1.24 | 1.27 |
| | N | 65 | 17 | 48 | 27 | 38 | 34 | 31 | 34 | 31 | 21 | 44 |
| Pivotal decision-maker | Mean | 0.27 | 0.21 | 0.29 | 0.27 | 0.28 | 0.17** | 0.38** | 0.19 | 0.35 | 0.26 | 0.28 |
| | St.Dev. | 0.45 | 0.42 | 0.46 | 0.45 | 0.45 | 0.38 | 0.49 | 0.40 | 0.49 | 0.45 | 0.45 |
| | N | 70 | 19 | 51 | 30 | 40 | 36 | 34 | 36 | 34 | 23 | 47 |
| Understanding of venture norms | Mean | 0.39 | 0.33 | 0.41 | 0.36 | 0.41 | 0.58** | 0.21** | 0.48 | 0.27 | 0.50 | 0.32 |
| | St.Dev. | 0.50 | 0.52 | 0.50 | 0.50 | 0.50 | 0.51 | 0.42 | 0.51 | 0.46 | 0.52 | 0.48 |
| | N | 38 | 6 | 32 | 11 | 27 | 19 | 19 | 23 | 15 | 16 | 22 |

Table 16: Investment Committee Members

A list of parent company executives that sit on the investment committee.

| | Investment Committee Members | |
|--|------------------------------|----|
| | N | % |
| CFO | 40 | 54 |
| CEO | 28 | 38 |
| CVC team member | 25 | 34 |
| Business Unit executive | 19 | 26 |
| Head of Legal/General Counsel | 12 | 16 |
| Head of Strategy | 9 | 12 |
| R&D Executive | 9 | 12 |
| CTO | 8 | 11 |
| Head of Corporate Development | 7 | 9 |
| COO | 5 | 7 |
| President | 4 | 5 |
| Head of Business Development | 3 | 4 |
| Chief Investment Officer | 3 | 4 |
| Head of Innovation | 2 | 3 |
| Head of Product | 2 | 3 |
| Fifteen other executive positions (each) | 1 | 1 |

Table 17: CVC Contractual Preferences

The portion of CVC units that report a preference to lead or follow deals, followed by preferred terms when negotiating contracts with portfolio companies.

| | CVC units | |
|-------------------------------------|-----------|-----|
| | N | % |
| Lead or follow preference | 64 | 100 |
| Only lead | 1 | 2 |
| Prefer to lead | 5 | 8 |
| Indifferent | 21 | 33 |
| Prefer to follow | 27 | 42 |
| Only follow | 10 | 15 |
| Full board or board observer rights | 73 | 100 |
| Required to invest | 24 | 33 |
| Strong preference | 35 | 48 |
| Indifferent | 12 | 16 |
| Prefers not to take | 2 | 3 |
| Won't take | 0 | 0 |
| Full board membership | 68 | 100 |
| Required to invest | 3 | 4 |
| Strong preference | 13 | 19 |
| Indifferent | 16 | 24 |
| Prefers not to take | 10 | 15 |
| Won't take | 26 | 38 |
| Board observer | 70 | 100 |
| Required to invest | 22 | 31 |
| Strong preference | 32 | 46 |
| Indifferent | 11 | 16 |
| Prefers not to take | 4 | 6 |
| Won't take | 1 | 1 |
| Right of First Notice (ROFN) | 64 | 100 |
| Often/always required | 32 | 50 |
| No ROFN | 32 | 50 |
| Right of First Refusal (ROFR) | 68 | 100 |
| Often/always required | 8 | 12 |
| No ROFR | 58 | 88 |
| Pro-rata rights | 60 | 100 |
| Often/always required | 55 | 92 |
| No Pro-rata rights | 5 | 8 |
| Other terms | 71 | 100 |
| Require other terms | 39 | 55 |
| No other terms | 32 | 45 |

Table 18: CVC Contractual Preferences: Subsamples

Statistics on preference to lead or follow deals, and the average frequency with which each following contractual feature is requested or required by CVC units and subsamples.

| | | Geography | | | Commitment | | Parent size | | CVC deals | | R&D | |
|-----------------------------|---------|-----------|---------|---------|------------|--------|-------------|--------|-----------|-------|---------|---------|
| | | All | CA | Other | Yes | No | L | S | L | S | Yes | No |
| Lead preference | Mean | 2.38 | 2.06* | 2.48* | 2.44 | 2.33 | 2.45 | 2.30 | 2.39 | 2.35 | 2.30 | 2.41 |
| | St.Dev. | 0.90 | 0.77 | 0.92 | 0.96 | 0.87 | 0.96 | 0.85 | 0.93 | 0.88 | 0.88 | 0.92 |
| | N | 64 | 16 | 48 | 25 | 39 | 31 | 33 | 33 | 31 | 23 | 41 |
| Board member | Mean | 2.37 | 2.21 | 2.43 | 2.50 | 2.29 | 2.21 | 2.51 | 2.33 | 2.40 | 1.92** | 2.61** |
| | St.Dev. | 1.29 | 1.18 | 1.34 | 1.21 | 1.35 | 1.39 | 1.20 | 1.31 | 1.29 | 1.06 | 1.35 |
| | N | 68 | 19 | 49 | 26 | 42 | 33 | 35 | 33 | 35 | 24 | 44 |
| Board observer | Mean | 4.00 | 3.56* | 4.15* | 3.68** | 4.21** | 3.91 | 4.09 | 3.81* | 4.21* | 3.75* | 4.13* |
| | St.Dev. | 0.92 | 1.25 | 0.72 | 1.02 | 0.78 | 0.95 | 0.89 | 1.02 | 0.74 | 0.68 | 1.00 |
| | N | 70 | 18 | 52 | 28 | 42 | 35 | 35 | 37 | 33 | 24 | 46 |
| Board member or observer | Mean | 4.11 | 3.80* | 4.23* | 3.83** | 4.20** | 4.06 | 4.16 | 3.97 | 4.25 | 3.75*** | 4.29*** |
| | St.Dev. | 0.77 | 0.95 | 0.67 | 0.83 | 0.67 | 0.75 | 0.80 | 0.87 | 0.60 | 0.68 | 0.76 |
| | N | 73 | 20 | 53 | 30 | 43 | 36 | 37 | 37 | 36 | 24 | 49 |
| ROFN | Mean | 0.50 | 0.60 | 0.47 | 0.44 | 0.54 | 0.48 | 0.52 | 0.61* | 0.39* | 0.54 | 0.48 |
| | St.Dev. | 0.50 | 0.51 | 0.5 | 0.51 | 0.51 | 0.51 | 0.51 | 0.50 | 0.50 | 0.51 | 0.51 |
| | N | 64 | 15 | 49 | 27 | 37 | 33 | 31 | 33 | 31 | 24 | 40 |
| ROFR | Mean | 0.12 | 0.00*** | 0.15*** | 0.08 | 0.15 | 0.09 | 0.15 | 0.06 | 0.18 | 0.21 | 0.07 |
| | St.Dev. | 0.33 | 0.00 | 0.36 | 0.27 | 0.36 | 0.29 | 0.36 | 0.24 | 0.39 | 0.41 | 0.26 |
| | N | 66 | 14 | 52 | 26 | 40 | 33 | 33 | 33 | 33 | 24 | 42 |
| Pro-rata rights | Mean | 0.92 | 0.81 | 0.95 | 0.83* | 0.97* | 1.00** | 0.83** | 0.97 | 0.87 | 1.00** | 0.88** |
| | St.Dev. | 0.28 | 0.40 | 0.21 | 0.39 | 0.16 | 0.00 | 0.38 | 0.18 | 0.35 | 0.00 | 0.33 |
| | N | 60 | 16 | 44 | 23 | 37 | 30 | 30 | 30 | 30 | 19 | 41 |

Table 19: CVC and COVID-19 Impact

The portion of CVC units that report the overall impact of COVID-19 on the investment process.

| | CVC Units | |
|---------------------|-----------|-----|
| | N | % |
| COVID Impact | 63 | 100 |
| Positive | 5 | 8 |
| Neutral-to-positive | 22 | 35 |
| Neutral | 28 | 44 |
| Neutral-to-negative | 8 | 13 |
| Negative | 0 | 0 |

Appendix A: Interview Protocol

This Appendix lists the questions in the interview protocol.

1. Objectives:

- (a) On the spectrum of strategic financial, where is your CVC unit?
- (b) How do you define and measure these strategic and financial objectives, both before and after you make an investment?
- (c) On what horizon are you evaluating these objectives? On what horizon is your parent company evaluating these objectives?
- (d) Looking at investments falling into three buckets – the core of what the parent does, adjacent spaces, or completely new, exploratory domains – what is your CVC’s allocation?

2. Team:

- (a) How large is the overall ventures team?
- (b) How many investment professionals are on the team?
- (c) Is anyone on the team full-time on ventures? Do any members perform another function (such as R&D, corporate development) within the parent company?
- (d) Do you have anyone on the team dedicated to a business development role that facilitates a relationship between the portfolio company and the parent?
- (e) Does anyone on the team have past CVC or IVC experience?

3. Fund:

- (a) Do you invest off the balance sheet?
- (b) Is there an annual budget allocation? Or is there a more opportunistic approach?
- (c) Do you have any annual targets for capital deployed?

4. Deal flow:

- (a) On average, how many new companies do you invest in per year?
- (b) How many active portfolio companies do you have?
- (c) Do you make only direct investments or also take fund investments/LP positions?
- (d) If yes, what is the rationale behind taking such positions?
- (e) How do you source deals and perform diligence on the ventures team?

5. Approval:

- (a) Beginning with your internal ventures team, how do you all decide to bring a deal forward to the investment committee?
- (b) When you get to that point, is anyone on the ventures team on the investment committee?

- (c) Who is on the investment committee? CEO? CFO?
- (d) When you get to the investment committee, would you describe it as a rubber-stamp or an actual authority?
- (e) What is the voting rule at the investment committee?
- (f) Is there any single person on the investment committee with total influence?
- (g) Do you require a business unit sponsor to make a deal? What is their role in the diligence and approval process?
- (h) Looking at the executives in the parent company that you work with, do you think that they understand the norms of the venture space?
- (i) What are the major problems that your CVC unit faces? What would you change to make it more efficient?

6. Terms:

- (a) Do you typically lead or follow deals?
- (b) Are there any contractual terms that you insist on? Specific information rights? Right of first notice or right of first refusal?
- (c) Do you request pro-rata rights? If yes, how often do you use them?
- (d) Do you prefer to be a board observer or full board member?
- (e) Would you request without a board observer (member) position?

7. Compensation:

- (a) Compensation-wise, do you have any sort of profit-sharing or carry?
- (b) Is the performance of your portfolio at all tied to your annual bonus?

8. COVID:

- (a) What has been the overall impact of COVID-19 on the ventures team and the entire investment process? Would you say it was overall positive, neutral, or negative?

Appendix B: List of Active CVC Units of S&P 500 Companies

This Appendix lists the entire list of active CVC units of all the companies in the S&P500 index as of December 2020. In total, ninety-four active CVC units were identified.

| | | |
|---------------------------------|-------------------------------------|-----------------------------|
| 3M Company | Comcast Corp. | Merck & Co. |
| Abbott Laboratories | Constellation Brands | Micron Technology |
| AbbVie Inc. | DaVita Inc. | Microsoft Corp. |
| Accenture plc | Discovery Inc. | Motorola Solutions Inc. |
| Adobe Systems Inc. | DuPont de Nemours Inc. | Nvidia Corporation |
| Advanced Micro Devices Inc. | Emerson Electric Company | Occidental Petroleum |
| AFLAC Inc. | Evergy | PayPal |
| Agilent Technologies Inc. | Exelon Corp. | PepsiCo Inc. |
| Alexandria Real Estate Equities | FMC Corporation | Pfizer Inc. |
| Allegion | General Electric | Philip Morris International |
| Allstate Corp | General Mills | Prologis |
| Alphabet Inc. | General Motors | Prudential Financial |
| Altria Group Inc. | HCA Healthcare | QUALCOMM Inc. |
| Amazon.com Inc. | Hewlett Packard Enterprise | Salesforce.com |
| American Express Co | Honeywell Int'l Inc. | Schlumberger Ltd. |
| Amgen Inc. | HP Inc. | Seagate Technology |
| Applied Materials Inc. | Intel Corp. | Simon Property Group Inc. |
| Archer-Daniels-Midland Co | International Business Machines | Stanley Black & Decker |
| Assurant | Intuitive Surgical Inc. | Synchrony Financial |
| Avery Dennison Corp | Johnson & Johnson | T-Mobile |
| Baxter International Inc. | Johnson Controls International | The Hershey Company |
| Boeing Company | Juniper Networks | Truist Financial |
| Boston Scientific | Kellogg Co. | Tyson Foods |
| Capital One Financial | Laboratory Corp. of America Holding | United Parcel Service |
| Caterpillar Inc. | Lam Research | Verizon Communications |
| Cerner | Lennar Corp. | Visa Inc. |
| Chevron Corp. | Lilly (Eli) & Co. | Western Digital |
| CIGNA Corp. | Lockheed Martin Corp. | Willis Towers Watson |
| Cisco Systems | Lowe's Cos. | Xilinx |
| Citigroup Inc. | Maxim Integrated Products Inc | Zebra Technologies |
| CME Group Inc. | McKesson Corp. | |
| Coca-Cola Company | Medtronic plc | |

Appendix C: Definitions of Variables

Table 20: Company-Level Data

| Variable | Source | Definition |
|-----------------------|------------------------------|--|
| Company age | Wikipedia, Compustat | 2021 minus the year the company was founded |
| IPO Year | Wikipedia, Compustat, Google | The year in which the parent company went public |
| Equity market value | Compustat | Common stock price at fiscal year end close multiplied by common shares outstanding |
| Employees | Wikipedia, Google | The number of employees at the parent company as of December 2020 |
| Total Assets | Compustat | The total value of assets reported on the balance sheet at fiscal year end. The sum of: current assets, net PPE, investment & advances - equity and other, intangible assets, and all other assets |
| Total Debt | Compustat | Sum of all short-term and long-term debt |
| R&D | Compustat | All costs incurred during the year that relate to the development of new products or services |
| R&D Ratio | Compustat | R&D over total assets |
| CapEx | Compustat | Cash outflow or funds used for addition's to the company's property, plant and equipment, excluding amounts arising from acquisitions, reported in the Statement of Cash Flows |
| CapEx Ratio | Compustat | CapEx over total assets |
| Market to book ratio | Compustat | Equity market value over total assets |
| Leverage ratio | Compustat | Total debt over total assets |
| CEO gender | Google, Wikipedia | Gender of current company CEO |
| CEO age as of 2021 | Google, Wikipedia | Age of current company CEO as of March 2021 |
| CEO tenure as of 2021 | Google, Wikipedia | The number of years that the current CEO has been the CEO as of 2021 |
| Previous CEO tenure | Google, Wikipedia | The number of years that the previous CEO served as the company's CEO |

Table 21: CVC-Level Data

| Variable | Source | Definition |
|------------------------------|----------------------|--|
| Year founded | Pitchbook, Google | The founding year of the CVC unit |
| CVC age | Pitchbook, Google | The number of years the CVC unit has been in existence. Calculated as 2021 - CVC year founded. |
| Investments | Pitchbook | The total number of investments made by the CVC unit |
| Investments, last four years | Pitchbook | The number of investments made by the CVC unit since 2017 |
| Active portfolio companies | Pitchbook | The number of currently active portfolio companies |
| Active portfolio companies | Interviews | The number of currently active portfolio companies |
| Exits | Pitchbook | The number of realized exits from CVC unit portfolio |
| Annual investment | Pitchbook | Median round amount multiplied by investments over the last four years, divided by four |
| Median round amount | Pitchbook | The median deal size, in millions, of an investment made by the CVC |
| Median post-money valuation | Pitchbook | The value, in millions of dollars, of a company post-CVC investment. The sum of the pre-money valuation and amount of new equity |
| Co-investors | Pitchbook | The number of co-investors on all deals made by CVC unit |
| Deals per year | Pitchbook | Investments in the last four years divided by four |
| R&D to annual investment | Compustat, Pitchbook | Parent company's reported R&D costs divided by the annual investment amount, in thousands |

Table 22: CVC Personnel data

| Variable | Definition |
|------------------------------------|---|
| Individual-level data | |
| First year current position | The first year that the individual has been in their current position at the CVC/IVC |
| Years at CVC/IVC | The number of years that the individual has been at the CVC/IVC, starting from their first position |
| Joint position | Only for CVC individuals; whether the individual holds a position in another parent company function that is not the CVC unit |
| Only CVC Employee | Only for CVC individuals; whether the individual has only worked for the parent company through the CVC unit, or they previously served in another role at the parent company |
| Board seats | Number of full board seats ever held by individual |
| Board observers | Number of board observer seats ever held by individual |
| Gender | Female coded as a 1, male coded as 0 |
| Past CVC experience | Whether the individual previously worked at a different CVC unit |
| Past institutional VC experience | Whether the individual previously worked at a different IVC unit |
| Past investment banking experience | Whether the individual previously worked at an investment bank |
| Past M&A experience | Whether the individual previously served in an M&A function at another corporation |
| Past entrepreneur experience | Whether the individual previously co-founded a startup |
| Non-MBA graduate degree | Whether the individual holds a JD, PhD, or MD degree |
| MBA degree | Whether the individual holds an MBA degree |
| LI followers | The number of LinkedIn followers an individual has |
| LI photo | Whether the individual has a public-facing LinkedIn photo |
| Same state as parent HQ | Only for CVC individuals; whether the individual's LinkedIn location is the same as the parent company |
| Organization-level data | |
| Senior team size | The number of senior team members identified at each CVC/IVC |
| Female on senior team | Whether there is at least one female on the senior team |
| Average team years at CVC | The average number of years that each senior team member has worked at the CVC/IVC |
| Number of team board members | The number of senior team members that hold or have ever held full board seats |
| Board seats | The total number of board seats ever held by the entire senior team |
| Number of team board observers | The number of senior team members that hold or have ever held full board observer seats |
| Board observers | The total number of board observer seats ever held by the entire senior team |
| Board or board observer seats | The total number of full board and board observer seats ever held by the entire senior team |
| Past CVC experience | Whether at least one member on the senior team has previously worked at another CVC unit |
| Past institutional VC experience | Whether at least one member on the senior team has previously worked at another IVC unit |
| Past investment banking experience | Whether at least one member on the senior team has previously worked at an investment bank |
| Past M&A experience | Whether at least one member on the senior team has previously worked in an M&A function at another corporation |
| Past entrepreneur experience | Whether at least one member on the senior team has previously co-founded a startup |
| Non-MBA graduate degree | Whether at least one member on the senior team holds a PhD, JD, or MD degree |
| MBA degree | Whether at least one member on the senior team holds an MBA degree |
| Top undergraduate degree | Whether at least one member on the senior team holds a top undergraduate degree. This includes: the Ivy Leagues, and all other schools in the top 10 as ranked by US News as of 2021 (Stanford, CalTech, Uchicago, MIT) |