

Family Firms in Entrepreneurial Finance: The Case of Corporate Venture Capital

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Abstract

We show that families are an engine of venturing activities: almost 30 percent of all corporate venture capital (CVC) deals in the US from 2000 to 2017 originated from family firms. Family firms orchestrate CVC activities differently than non-family firms: they syndicate more often and with more reputable investors, join larger syndicates, and make more proximate deals (geography- and industry-wise), especially when the parent firm's CEO belongs to the controlling family. Family firms' approach to corporate venturing maps into performance results: family CVC-backed ventures exhibit a higher likelihood of successful exit. We explore several mechanisms pertaining to asymmetric information and risk management. Collectively, our results shed light on the important, and largely unexplored, role of family firms in CVC.

Keywords: corporate venture capital; family firms; investment; performance

JEL: G24; G32; O32

1. Introduction

Since the aftermath of the dot-com bubble, the venture capital (VC) industry has experienced stunning growth. By the end of 2019, VC firms collectively invested a total of \$136.5 billion in US ventures. Despite a recent decline due to a more restrictive monetary policy and episodes like the collapse of Silicon Valley Bank, the VC industry remains a key source of funding for new ventures. While independent VC has historically been the most important provider of such capital, corporations have been increasingly active through corporate venture capital (CVC) programs (CVCs) (Colombo and Murtinu 2017). Ma (2020) shows that CVC investments account for 15% of the whole VC industry in the US. This surge has motivated a growing literature aimed at understanding CVCs' decision-making and their impact on portfolio firms.

CVC activities are typically structured as investment vehicles or business units of a parent organization. Different from independent VC firms, which maximize financial returns from capital gains within relatively short timeframes, CVC seeks to spur parent organizations' performance through strategic synergies with portfolio companies (Hellmann 2002; Riyanto and Schwienbacher, 2006; Tawiah and Keefe 2022). That said, there is substantial heterogeneity in how CVCs operate. Scholars have traced this heterogeneity to the parent organizations' characteristics, which influence the CVCs' objectives, the resources made available to the CVC program, and the selection and management of investments (Da Rin et al. 2013; Gompers et al. 2009; Hellmann 2002; Ivanov and Xie 2010; Mohamed and Schwienbacher 2016). We contribute to this literature by studying for the first time how a key attribute of parent organizations – i.e., their *ownership structure* – matters for CVC.

Using data on CVC from Eikon and manually collected information on the ownership and governance of CVCs' parent organizations in the US from 2000 to 2017, we first show that family CVC is a prevalent phenomenon: almost 30% of all CVC deals in our sample (i.e., 2,382

out of 8,353) have a family firm behind. Family CVCs actively participated in deals totalling \$12 billion, while non-family CVCs' deals amounted to \$20.9 billion. These figures underscore the significant involvement of family firms in the CVC industry, emphasizing their role in shaping the investment landscape.

Second, we look beneath the surface of investment strategies, and we find that family CVCs invest differently than non-family CVCs. Family CVC is positively associated with the likelihood of syndication, syndication with more reputable investors, and participation in larger syndicates as compared to non-family CVC. The literature suggests that syndication helps mitigate risk exposure (Gompers and Lerner 2004; Lerner 1994; Tykvová 2018) by means of a 'second opinion' on the target ventures (Brander et al. 2002; Casamatta and Haritchabalet 2007), resource complementarity across syndicating firms (Hochberg et al. 2007) and enhanced monitoring (Das et al. 2011; Tian 2012). Hence, our results are consistent with the view that family owners seek to minimize hazards in their CVC activities, and they benefit from better connections within the VC industry. Relatedly, we focus on two additional variables which feature prominently in the VC literature: geographic proximity and industry relatedness (Chen et al. 2010; Cumming and Dai 2010; Gompers et al. 2005, 2009; Hochberg et al. 2015; Li et al. 2023). We find that family CVCs' portfolios contain ventures that are geographically closer to the parent organization and that operate in the parent's main industry. Given the role of proximity in reducing asymmetric information (Sorenson and Stuart 2001) and improving monitoring (Bernstein et al. 2016), this evidence, too, suggests that family firms seek to mitigate risk in CVC.¹ The above findings on syndication, geography and industry proximity are

¹ These findings (and all the subsequent ones) are derived by holding constant several factors at the level of the parent organizations, such as venturing experience, size, financial resources, internal investment, R&D intensity, capital structure, and performance. Also, our results are specific to *family* ownership, i.e., they do not stem from other types of blockholders.

particularly strong when the CVC's parent firm is led by a family CEO as opposite to a professional non-family CEO.

In conclusion, we assess the performance implications of family CVC for portfolio firms. Our results indicate that family CVCs are more likely to experience a successful exit (Cumming et al., 2005; Yang et al., 2009) even after controlling for an extensive set of startups, CVC parents, and syndicate partners' characteristics. Parsing the potential mechanisms behind this result, we find that family CVCs are less likely to sit on the board of the startups they invest in and more likely to retain the founders as CEO. These results suggest that family CVCs are more founder-friendly investors and, possibly, better positioned to nurture the ventures' potential.

2. Literature background and contributions

A large literature research in economics, finance, and management has been devoted to family firms. The goal of this section is to review the main arguments on how family ownership makes firms unique in terms of decision-making and outcomes.² One of the early contributions in this domain is Schleifer and Vishny (1986), which asked the question of what the benefits of ownership concentration are relative to being a widely held firms à la Berle and Means. As their theoretical model elucidates, large shareholders have incentives to pursue value-increasing changes in corporate policies that are otherwise too costly for minority investors. This work also initiated a long data collection process, which was fine-tuned and expanded over the years in multiple influential articles such as La Porta et al. (1998, 1999), Claessens et al. (2000), Faccio and Lang (2002) and, more recently, Aminadav and Papaioannou (2020). The bulk of

² Providing a comprehensive review of this literature is beyond the scope of this article; interested readers can refer to, e.g., Villalonga et al. (2015).

the evidence across these papers shows that family ownership is perhaps the most diffuse form of ownership around the world.

Having established the importance of family firms in the business landscape, scholars have asked the question of how these organizations differ from their non-family counterparts. There are at least two theoretical lenses to grasp the uniqueness of family firms. The first is rooted in the agency literature and sees family ownership as an opportunity to overcome the traditional problems of separation between ownership and control. By owning large equity stakes of the firm, families have large incentives and power to monitor the management or even run the company themselves. In this way, they internalize problems of managerial opportunism. At the same time, however, family ownership may create a different agency problem in terms of conflicts between large and small investors. That is, family owners may engage in actions that create private benefits (e.g., nepotism, tunneling) while harming minority, non-family investors. Villalonga and Amit (2006) provides a comprehensive discussion of agency problems in family firms (which they label as Agency Problem I, and Agency Problem II) and study how they map into financial performance. Being a large shareholder likely entails some degree of portfolio under diversification which, in turn, can influence risk-taking in corporate policies (Faccio et al. 2011). This view has been used to enquire whether we should expect significant differences in family firms' capital structure, investment, and diversification decisions (e.g., Anderson and Reeb 2003; Anderson et al. 2012). Besides risk preferences, the literature has argued that family owners differ from non-family owners in terms of time horizon, political capital, and relationships (e.g., Bertrand and Schoar 2006).

The second theoretical lens, which has emerged from the management literature, is labeled as the socio-emotional wealth perspective. The idea here is that family owners pursue a broader set of objectives encompassing financial and non-financial goals because of their

social identification with the firm and the desire to pass on control to the next generations (see Gomez-Mejia et al. 2011 for a review of this literature). Several papers within this stream of research have adopted the socio-emotional wealth perspective to explain how family and non-family firms differ in terms of outcomes such as acquisitions (Gomez-Mejia et al. 2018), IPO pricing (Leitterstorf and Rau 2014; Kotlar et al. 2018), pollution (Berrone et al. 2010) and risk-taking (Gomez-Mejia et al. 2007).

Our work relates to the ongoing research on family firms and corporate outcomes by studying how family control shapes external venturing. This is a novel departure from the existing literature, which, as noted above, mostly focuses on internal innovation or M&A activities. Our contribution to this literature is to show how the ownership structure of the parent organizations that orchestrate CVC activities shapes how these activities are done and the results attained. In doing so, we relate to the large literature on the idiosyncratic preferences of family owners and their influence on a wide array of corporate outcomes such as debt (Anderson et al. 2003), internal investment (Anderson et al. 2012), M&A (Palm et al. 2023), diversification (Gomez-Mejia et al. 2010), and alliances (Bettinazzi et al. 2023). A recent work has also paid attention to the role of family control on the number and size of deals undertaken by CVCs (Duran and Mingo 2022). Studying the investment approach of family-related CVC and its performance implications, we show that families are distinct actors in the CVC industry in terms of strategies and performance. As such, our results provide an important complement to existing works on the role of families as investors in other contexts such as business groups (Masulis et al. 2021) or managers of independent VC funds (Pelucco 2023). We also contribute to research on entrepreneurial finance, which has analyzed how VC firms differ in terms of objectives and strategies (Ma 2020; Hellman 2002) and have studied the effect of CVC on ventures' innovation (Chemmanur et al. 2014) and performance (Colombo and Murtinu 2017;

Dushnitsky and Lenox 2006). Other works have explored how parent organizations' governance (Tian and Ye 2020) and innovation trajectories (Ma 2020) affect CVC investment decisions. We document that looking into the ownership structure of the parent firm is crucial to understanding how CVCs make decisions.

3. Data and variables

3.1 Sources

We gather information on VC deals in the US from 2000 to 2017 from the Eikon dataset.³ Eikon (previously known as Thomson One, VentureXpert, or Venture Economics) is a popular data source in VC research. It includes detailed venture- and deal-level information such as age, industry, and location of portfolio companies, identity, and location of all investors in each round, as well as their amount invested in each round.

For the analysis, we keep all deals completed by CVC funds (i.e., those categorized in Eikon with “Corporate or PE/Venture Fund” as Fund Investor Type) based in the US. As a second step, we identify the corporation behind the CVC arm that made these deals. Often, the name of the CVC arm overlaps with that of the parent organization or can be easily associated with it (e.g., “Google Ventures” or “Qualcomm Ventures”). In other cases, the name of the CVC arm does not recall the name of the parent organization (e.g., “Steamboat Ventures”, which is the CVC initiative of The Walt Disney Company). In these cases, we conduct a manual search using the CVC websites and Crunchbase to identify the parent organization.⁴

³ Even if family firms are slightly more diffused in Europe, we decided to focus on the US given that the VC industry is more developed in the US.

⁴ Crunchbase is widely used in the VC industry and has also become popular among scholars as a source of information on ventures' activity and financing (e.g., Ewens and Townsend 2020).

Once we had identified the parent organization, we checked whether it was listed in the US at the time of the deal. If so, we used corporate proxy statements (drawn from Edgar) to gather data on its ownership structure.

Scholars have wrestled over the definition of family firms (for recent discussions, see Bennedsen et al. 2022 and Amore et al. 2023), and the literature still lacks consensus on how to identify them. Here, we use a comprehensive approach that accounts for differences in ownership and management, and corporate governance. Regarding ownership, consistent with several US studies (e.g., Anderson et al. 2012), we use a classification based on the fraction of equity shares in the hands of a family. In particular, we define a parent organization as family firm if a family (founders or founders' descendants) owns in a given year a 5% or greater equity stake.⁵ Following existing research (e.g., Kotlar et al. 2018), we examined the list of all shareholders reported in the SEC filings and checked whether the individuals sharing the same surname as the founders or founding family collectively owned 5% or more of the company shares. When the list of shareholders included individuals holding more than 5% of the company shares, we checked whether they were in some way related to the founders or founding family even if they did not share the same surname.⁶ We know that even with a relatively low percentage of equity families may exert significant control over firms' operations through control-enhancing mechanisms such as dual-class shares (Villalonga and Amit, 2006). Thus, for firms with multiple class shares, we follow Anderson et al. (2009) and compute the

⁵ As we will show, the use of a more conservative definition (e.g., based on a 10% threshold) or the (continuous) percentage of shares held by the family does not alter our results.

⁶ For example, the New York Times Company was founded by Adolf Ochs in 1896. His heirs still control the firm he founded. Yet, these heirs have different surnames (e.g., Ochs Sulzberg). Since we identified these individuals as Adolf Ochs' heirs, we were able to consider the New York Times Company as a family firm.

controlling shareholders' total voting power. In these cases, we consider a parent organization as family-owned if the family maintains 5% or greater voting power.⁷

If the parent organization was acquired by another firm (i.e., the parent organization became, for instance, a wholly owned subsidiary), we consider the CVC as the arm of the acquiring firm. After the acquisition, the acquiring firm supervises and coordinates the CVC operations, and thus we considered the CVC arm as controlled by a family firm if the acquirer was family-owned.⁸ Instead, when two firms merge, we considered the merged entity as family-owned if a family controls at least 5% of equity shares in the merged firm.

The literature has shown a wide heterogeneity among family firms depending on whether the CEO is a family member or a “professional” non-family member (Bandiera et al. 2018; Bennedsen et al. 2007; Mullins and Schoar 2016). We account for this heterogeneity by collecting data on whether the parent firm's CEO at the time of the deal was a family member or a professional, non-family CEO was. Information about family membership was retrieved using surname affinity and media sources on CEOs' biographies.

From the list of all deals, we drop those involving ventures that were more than ten years old at the time of their first VC financing round (Cumming et al. 2017).⁹ In the last step of the data-gathering process, we use the Compustat dataset to obtain financial data for each (listed) parent organization in our sample.

⁷ An example is Comcast Corporation, i.e. the parent organization of Comcast Ventures. Comcast Corporation was founded in 1963 by Ralph J. Roberts with his two business partners, Daniel Aaron and Julian A. Brodsky. In 2000 the founder, chairman, and CEO Ralph J. Roberts and his son Brian L. Roberts (vice-chairman) owned 3% of the shares but around 85% of the voting power. We consider Comcast Corporation as a family firm, and Comcast Ventures as a family CVC.

⁸ For example, CNET Networks Inc. was founded by Shelby Bonnie and Halsey Minor. In 2007, Shelby Bonnie owned 7% shares of the firm; thus, we classified it as a family firm. However, in 2008 the firm was acquired by CBS Corp., a company founded as Viacom by Sumner Redstone in 1971 and still controlled by the Redstone family as of 2008. Thus, after the acquisition by CBS Corp, we considered the parent organization of the CVC arm of CNET Networks Inc. to be a family firm.

⁹ Our results are unaffected by this exclusion.

3.2 Summary statistics

Our final sample comprises 4,461 ventures involved in 8,364 CVC deals made by 301 US-listed parent firms from 2000 to 2017.¹⁰ Panel A of Table 1 shows that 27.5% of the ventures in our sample received only family (non-family) CVC funding and no funding from non-family CVC. 8.8% received both family and non-family CVC funding. Panel B shows that family owners represent 28.6% of the deals and that 35.9% of the parent organizations were family-controlled at the time of their first CVC deal in our data. These figures suggest that almost one-third of the entire CVC activity in the US during our sample period involved family parent firms.

[[[INSERT TABLE 1 HERE]]]

Figure 1 illustrates how family and non-family CVC activity in terms of the number of deals has evolved during the sample period. CVC investment exhibited a marked decline in the aftermath of the dot-com bubble and then an increase from 2010 onward. Family CVC has become relatively more important over time: the proportion of deals involving family CVCs increased from less than 20% in 2005 to almost 40% in 2017.

[[[INSERT FIGURE 1 HERE]]]

Next, we explore the industry distribution of family and non-family CVC investments. As Figure 2 shows, family CVC is less present in younger and more dynamic industries (such as life science and biotech), and more present in consolidated industries (such as computers).

[[[INSERT FIGURE 2 HERE]]]

Table 2 presents summary statistics for the main variables used in the analysis. In Panel A, we provide information at the deal level. The data show that around 89% of deals are

¹⁰ The number of deals exceeds that of ventures because each venture typically receives multiple rounds of financing (i.e., it is involved in more than one deal).

syndicated, and the average syndicate is composed of four partners.¹¹ Roughly 29% of deals involve ventures in the same US state as the CVC's parent organization, and the average distance between the city of the parent organization and that of the venture is 2,926 kilometers (or 1,897 kilometers excluding non-US ventures). 28% of the deals involve ventures in the same industry as the CVC's parent (same 2-digit SIC code).

In Panel B, we show the parent firms' characteristics (at the year of the last investment). Specifically, we compute the logarithm of one plus the years since the first CVC deal was completed by the firm, and the logarithm of the parent firm's revenues, which account for differences in size and experience in corporate venturing. Then, we compute the ratio of cash and equivalent securities to total assets in order to capture differences in the availability of liquid holdings. Focusing on internal investment, we compute the ratio of capital expenditures to total assets, and R&D intensity measured as the ratio between R&D expenditures and sales (winsorized at 2.5% in each tail).¹² To account for differences in capital structure, we compute financial leverage as the ratio of the book value of total debt to total assets, whereas we measure operating profitability by means of the return on assets (ROA), i.e., the ratio of earnings before interest and taxes to total assets.¹³ Finally, we control for the presence of (non-family) blockholders (i.e., entities owning at least 5% of the company shares) in the corporation. A research assistant compiled this data by leveraging information from Schwartz-Ziv and Volkova (2021) and extracting details from corporate proxy statements sourced from Edgar

¹¹ Following the literature, we define syndication as a joint investment by multiple investors on the same date (Brander et al. 2002).

¹² Almost 34% of parent firms have missing R&D in Compustat. In these cases, we consider the latest available year. If the firm did not report R&D in the past either, we follow Koh and Reeb (2015) and use the 2-digit SIC industry average for the computation of R&D intensity considering firms with at least \$10 million of annual revenues; furthermore, we compute a dummy equal to one if the firm has missing R&D. If no firms in the 2-digit SIC reported R&D expenditures, we consider R&D intensity equal to 0. Results hold when (1) removing the R&D intensity from the control variables, (2) assigning a null value to the R&D when the information on R&D was missing, and (3) dropping deals when the information on R&D was not available.

¹³ When one of the control variables was missing, we imputed the last available value for that variable.

when information was missing in Schwartz-Ziv and Volkova (2021). Through this process, we computed the percentage of shares held by non-family blockholders within the parent organization. Including all these variables as controls in our regression analyses removes several systematic differences between family and non-family CVCs, thus reducing omitted variables' concerns and ensuring that results are specific to family ownership.

[[[INSERT TABLE 2 HERE]]]

In Table 3, we report *t*-tests differences between family and non-family CVC investments. Panel A shows that family CVC investors are significantly less likely to target foreign ventures, more likely to invest in ventures geographically closer (i.e., located in the same state or at a lower physical distance), and more likely to invest in ventures that operate in the same industry as the parent firm. Family CVC is also associated with a higher likelihood of syndication (with a higher number of partners) and with a larger amount invested in each deal. Panel B shows that family parent organizations are less experienced, smaller, less profitable, and hold more liquid assets; by contrast, there are no significant differences in internal investment and R&D intensity.

[[[INSERT TABLE 3 HERE]]]

4. Results

4.1 CVC investment strategies

Existing works show that syndication helps to get an ‘informative second opinion’ on new ventures (Brander et al. 2002, Lerner, 1994) and access complementary assets, skills, and networks from syndicate partners (Hochberg et al. 2007). We start our regression analysis by testing whether family CVC investors exhibit a different syndication behavior than non-family CVC investors.

To this end, we use as dependent variables: (i) a dummy that equals one if a deal was syndicated (zero otherwise), and (ii) a count variable measuring the number of syndicate partners. The key explanatory variable is the dummy *Family Firm* that equals one for family CVCs, and zero for non-family CVCs. As anticipated, we control for venturing experience to remove potential differences between family and non-family CVCs in terms of networking and deal flow (Kaplan and Schoar 2005; Hochberg et al. 2007; Lindsey 2008), fundraising ability (Nahata 2008), and the nature of interactions with portfolio companies (Bottazzi et al. 2008). Moreover, we control for parent firms' size, asset liquidity, capital expenditures, capital structure, ROA, R&D intensity, and percentage of shares owned by (non-family) blockholders; these controls are useful to account for differences in performance, corporate policies, and ownership structure across family and non-family CVC parents. Finally, we control for year fixed effects, which capture time trends in syndication patterns; industry fixed effects at the level of the venture (as defined in Figure 2) to account for the fact that syndication may be more common in certain industries; and state fixed effects at the level of the parent headquarter to control for the fact that investors located in certain areas may syndicate more due to, for instance, geographic networks.¹⁴

Table 4 presents the OLS results on the likelihood of syndication (column 1) and Poisson results on the number of syndicate investors (column 2). As shown, family CVC is associated with a higher likelihood of syndication by 3.4 percentage points. Notably, our set of controls reduces the concern that this finding occurs due to family firms having a more limited CVC expertise (which raises the importance of tapping into syndicate partners' networks, knowledge, and resources). Column (2) further shows that family CVC investors join larger syndicates.

¹⁴ A limited number of deals were completed by CVCs based in the US and related to parent companies listed in the US but with headquarter outside of the US. These parent companies are grouped in a foreign state variable. Results are robust to the exclusion of the deals made by them.

Existing studies show that geographic proximity to portfolio companies reduces moral hazard by improving monitoring and enhancing information exchange (Bernstein et al. 2016; Sorenson and Stuart 2001). We test the influence of families on the geographic selection of target ventures. We use a dependent variable that equals one if the venture is headquartered in the same state as the CVC's parent firm, and zero otherwise. Alternatively, we use: (i) the natural logarithm of one plus the distance in kilometers between the city where the CVC's parent firm is headquartered and the city where the venture is located, and (ii) a dummy that equals one for foreign ventures (i.e., outside of the US). Column (3) shows that family CVC investors are 4.5 percentage points more likely to invest in ventures located in the same state as the parent firm. Column (4) shows that the distance between the CVC's parent firm and the venture is 36.2% lower when the deal is made by a family CVC investor. Column (5) shows that family CVCs are 5.4 percentage points less likely to invest outside of the US.

Like geographic proximity, investing in the same industry as the parent firm offers another tool to reduce information asymmetries (Eckbo et al. 2018) since CVC investors can leverage the industry-specific knowledge and expertise of the parent firms to better assess the value of ventures. We use as a dependent variable a dummy that equals one if the venture operates in the same 2-digit SIC code as the CVC's parent firm and zero otherwise. The number of observations in column (6) shrinks as the SIC code is not available for all startups included in Eikon and because the variable takes a missing value when the CVC parent company has a SIC code equal to 99 (i.e., non-classifiable establishments). As shown in column (6) of Table 4, family CVC investors are 30.8 percentage points more likely to invest in ventures operating in the same industry as the CVCs' parent firms. Finally, in column (7) we show that family CVC is not significantly associated with deal size.

[[[INSERT TABLE 4 HERE]]]

As a robustness check and to ease endogeneity concerns, we test whether the findings presented in Table 4 hold when using a matched sample of family and non-family CVC parents. Specifically, we matched each family parent firm to the most similar non-family parent firm in terms of size and (1-digit SIC) industry. The results in Panel A of Table 5 largely corroborate those presented in Table 4. Furthermore, Panel B of Table 5 shows that the matched family parent firms are observationally identical to their non-family counterparts. As an additional robustness test, we test whether families with higher levels of ownership are better able to exercise a tighter influence on CVCs' investment strategies than families with lower ownership stakes. We replicate the results reported in Table 4 by using (i) a 10% threshold to determine whether the CVC's parent company is family-owned (Appendix Table A1); (ii) a continuous variable indicating the voting power of the founding family rather than the dummy variable *Family Firm* (Appendix Table A2), and (iii) two dummies – rather than the dummy variable *Family Firm* – indicating whether the family firm has only one family member reported as a shareholder and whether the family firm has two or more family members reported as shareholders, respectively (Appendix Table A3). In Appendix Table A4, we reproduced the analyses of Table 4 using Probit instead of OLS for the binary dependent variables. Results in Tables A1-A4 are largely in line with Table 4. Interestingly, Table A2 indicates that the effect arising from family control increases as the voting power of the family increases. Moreover, Table A3 shows that the findings in Table 4 become stronger when multiple family members are reported as shareholders of the family firm.

[[[INSERT TABLE 5 HERE]]]

Going beyond the raw comparison between family and non-family CVC investors, in Table 6 we replace the *Family Firm* dummy with two dummies: *Family Firm with Professional CEO*, and *Family Firm with Family CEO*, which equal one when the family parent firm is led by a

non-family (professional) CEO, or family CEO, respectively. The reference category is represented by non-family firms. As shown all of the results previously illustrated are driven by family parent firms which are led by a family CEO; the investment strategies of family CVCs led by professional, non-family CEOs are indistinguishable from that of non-family firms.

[[[INSERT TABLE 6 HERE]]]

Next, we examine whether family CVCs' strategies are more visible when investing in startups characterized by high information asymmetries. Drawing on insights from Barrot (2017), we recognize that the information asymmetry in VC is particularly pronounced when buying young firms, and it tends to decline over time as insiders and outsiders converge in their understanding and evaluation of the portfolio firm. In Table 7, we augment our models of Table 4 with an interaction term between the family CVC indicator and the natural logarithm of the startup's age at the time of the deal.¹⁵ The results largely support our expectations. As startups mature, the tendency of family CVCs' propensity to invest in geographically and industry-related startups diminishes. Except for the analyses on syndication, the interaction term coefficients consistently exhibit a (statistically significant) sign contrary to that of the family CVC variable. This pattern suggests that as startups mature and uncertainty decreases, family CVCs recalibrate their investment strategies becoming more alike non-family CVCs.

[[[INSERT TABLE 7 HERE]]]

4.2. Further evidence on the reputation of syndicate partners

As noted above, family CVCs syndicate more than their non-family counterpart. This might be attributable to the higher relational capital of family owners with other investors. In this section,

¹⁵ When the age of the startup is missing or negative in Eikon we imputed a value equal to zero. We obtain largely similar results excluding these instances.

we explore whether family CVCs syndicate with more reputable (lead) investors. These investors wield a pivotal influence in both the investment and oversight of portfolio companies, thereby significantly shaping the strategies and outcomes of VC investments (Plagmann and Lutz 2019). As Eikon lacks information on lead investors and the market value of the exits experienced by investors, we turn to Pitchbook data for this analysis. We used a fuzzy matching procedure based on name similarity between the corporate investors' names reported in Eikon and the investors' names reported in Pitchbook. Then we kept all those deals completed by the corporations and/or their CVC units between the years 2000 and 2017. Consistent with Nahata (2008), we gauge an investor's reputation by using the cumulative value of its IPO exits (in million USD) up to the year preceding the focal investment, with the variable's skewness addressed through its logarithmic transformation. The sample was restricted to deals that were syndicated. As shown in column 1 of Table 8, in which we use this reputation measure as a dependent variable, family CVCs syndicate with investors that are on average 40 percent more reputable. This effect amplifies further to 56 percent when the CVC parent firm is led by a family CEO, as demonstrated in column 2, whereas the association is insignificant if the CVC parent firm is led by a non-family CEO.

In Columns 3 and 4, our attention shifts to the identity of the lead investor. To conduct these analyses, we retained only syndicated deals where the focal investor was not the lead investor. The dependent variable in Columns 3 and 4 is the reputation of the lead investor. When no investor was labeled as the leader in Pitchbook, we considered the most reputable syndicate partner as the leader of the investment round. As shown, family CVCs take part in deals led by investors that are on average 27.5 percent more reputable.

Finally, in columns 5 and 6, we explore whether family CVCs are inclined to syndicate with independent VCs, which are arguably knowledgeable investors. The dependent variable

in these columns is the count of independent VCs as syndicate partners (to account for the count nature of the dependent variable in Columns 5 and 6 of Table 11 we adopt a Poisson model rather than an OLS regression). In all columns we incorporate the set of controls for the attributes of the CVC parent company (as done in the previous tables) as well as the investment year, the industry of the startup (as reported in Pitchbook), and the state of the CVC parent company through fixed effects. We further control for a binary variable denoting whether the investing firm received VC financing in the past, and a variable accounting for the number of VC deals completed by the firm and its CVC units up to the year preceding the focal investment to control for prior elements that might affect their relationships with other investors. The findings reveal that family CVCs exhibit a higher likelihood of syndicating with independent VCs, particularly when the CVC parent company is helmed by a family CEO.

[[[INSERT TABLE 8 HERE]]]

4.3. Family CVC and performance

Several works have analyzed the impact of CVC on ventures' performance (Chemmanur et al. 2014; Colombo and Murtinu 2017). A tenet of this literature is that CVC funding grants access to parent firms' assets and resources, which are critical for the success of ventures. In this section, we ask whether having a family behind the CVC arm is beneficial to the venture's performance. As Pitchbook data reports how the investors exited from their investments in startups (while Eikon only provides the status of the startup at the time of downloading the dataset) and we know who the lead investors are, we decided to assess the performance of family CVC investments using Pitchbook data. As we observe the exit of investors up until 2023 and study deals completed up until 2017, this methodology provides at least five years for investors to successfully exit from their investments (Nahata, 2008). Our sample includes 8,608 deals of which 28% were completed by family CVCs, suggesting a correspondence between

Eikon and Pitchbook. Following the literature (e.g., Gompers et al. 2009; Espenlaub et al. 2015), we focus on the occurrence of an IPO, M&A, or buyout as a measure of successful exit. Hence, the dependent variable is a dummy equal to one if the investor successfully exited from its investments in the startup; zero otherwise.

The specification in column 1 of Table 9 incorporates the set of controls included in the prior table. However, we further control for the venture's age at the time of the deal and the number of syndicate partners as these elements might shape the chances of a successful exit. Finally, columns 3 and 4 control for the reputation of syndicate partners or that of the lead investor. This is important since, as previously shown, family CVCs syndicate with more reputable investors, and by providing a better deal-flow this may explain the potential difference in performance between family and non-family CVCs. Suggest that family CVCs' superior performance documented in Table 9 may be just due to better connections with reputable investors.

The results consistently indicate that family CVCs exhibit a higher likelihood of successful exit (equal to 4 percentage points in the most restrictive specifications).¹⁶ That is, family CVC pays off financially even controlling for a large set of confounding factors (including the reputation of syndicate partners). In the next sections, we try to uncover some of the potential mechanisms underlying this finding.

[[[INSERT TABLE 9 HERE]]]

4.4. CVC human capital

That family CVCs perform better may be explained by a superior availability of human capital. To explore this issue, we gathered individual data on all employees holding top management

¹⁶ In untabulated analyses, we find that this effect is predominantly steered by the familial leadership within the parent firm. While we used a linear probability model, results are robust to using probit regressions to explicitly account for the binary nature of the exit variable (see Appendix Table A5).

positions in CVC dedicated units. After having performed the fuzzy matching procedure based on string similarity between the investors' names reported in our original dataset and the investors' names reported in Pitchbook, we identified the individuals who (have) worked in the CVC units of the investors included in our original dataset. In total, we identified 2,118 unique individuals, of which 1,726 hold a top management position in our CVC units.¹⁷ We consider an individual as working for a family CVC unit if the parent firm was family-controlled at the time s/he joined the CVC unit. Since information on the date when individuals joined the CVC units is not always available in Pitchbook, and some individuals joined the CVC units during years for which we do not have information about the ownership structure of the parent firm (i.e., before 2000 or after 2017), we drop additional observations. Our final data include 798 unique employee-CVC unit pairs where employees started working in the CVC units between 2000 and 2017 (with 24% of employees working in a family CVC unit).

In all specifications in Table 10, we control for the size of the parent firm and the (2-digit SIC) industry in which it operates. Comparing the educational attainment (column 1), we find no statistically significant differences in the quality of the institutions attended by family and non-family CVC employees (as proxied by holding a degree from an Ivy League university). Moreover, we find no significant differences in the likelihood of holding an MBA degree (column 2).

We also explore whether family CVC employees display less professional experience. In particular, we test whether family CVC employees are less likely to have had experiences as venture capitalists (column 3) or successful founders of startups that raised VC financing (column 4) before joining the CVC unit. Our results suggest that family CVC employees have

¹⁷ To identify top management positions, we used the following titles: partner, GP, head, president, VP, V.P, founder, founding, principal, manager, director, executive, chief, chairman, chairwoman, CEO, C.E.O, and board member. When any of these keywords appeared in the title of the CVC employee, the employee was retained.

similar professional backgrounds when compared to non-family CVC employees. Overall, these analyses suggest that the findings in the previous section are not merely driven by (observable) differences in the professional experience and human capital background of family and non-family CVC employees.

[[[INSERT TABLE 10 HERE]]]

4.5 Other explanations

In this section, we descriptively investigate a set of mechanisms potentially explaining the above empirical evidence. First, we probe into how family CVCs manage their investments by modeling the likelihood of founders remaining at the helm of their venture as a function of whether the venture was backed by a family CVC investor. *Founder Active* is a dummy taking a value of one if a founder is still operating in the startup at the time the dataset was downloaded; zero elsewhere. *Founder is CEO* is a dummy taking a value of one if a founder is the CEO of the startup at the time the dataset was downloaded; zero elsewhere (this variable takes a missing value when the identity of the current CEO is unknown). As shown in the first two rows of Table 10, founders who are backed by family CVCs are about 8 percentage points more likely to remain at the helm of their startup. These findings seem to suggest that family CVCs provide ventures with more time to thrive, refraining from warding off the founder unless it is strictly necessary.¹⁸

The third and fourth rows of the table show that family CVCs have a lower proclivity to serve as lead investors and a lower likelihood of having a representative from the firm occupy a seat on the board of the ventures they invest in. This hands-off stance underscores a strategic

¹⁸ Other possible explanations are: (i) the higher likelihood of family CVCs to target ventures whose founders are emotionally attached to their ventures, and/or (ii) the higher propensity of founders to retain control and leave the venture to their descendants after being exposed to the value of CVCs' family parents. In unreported analyses, we compared the propensity of family and non-family CVCs' parent firms to hold ventures' shares after the IPO. The difference is not statistically significant.

inclination to grant autonomy to entrepreneurial leaders, fostering an environment where founders can steer the trajectory of their ventures with a greater degree of independence. This approach may contribute to superior performance by allowing startups the latitude to navigate their growth journeys with minimal interference, fostering an environment conducive to innovation and sustained success. It is worth noting that we do not have fine-grained primary data on how the interaction between the venture and the CVC's parent firm materializes and on how such an interaction influences the management processes by which parent firms implement their strategies. To this extent, we refer to Chrisman et al. (2016) who developed a conceptual framework representing a first step towards understanding how family and non-family firm decisions are made and the processes by which CVCs' parent firms plan and execute their strategies.

[[[INSERT TABLE 10 HERE]]]

5. Conclusion

CVC has become an increasingly important source of funding for entrepreneurial ventures, and this trend has drawn the attention of several scholars in corporate finance. Our key contribution has been to look beneath the surface of CVC. We argued that an important yet overlooked source of influence on CVC activity is the presence of families as controlling owners of the parent organizations.

Using data on CVC activities in the US from 2000 to 2017, we provided several novel results to the literature. First, we documented that families matter for CVC: around 30% of CVC deals have been made by firms controlled by families. Second, we showed that family CVC differs from non-family CVC in terms of investment strategy. Family CVC is associated with more syndication and more proximate deals in terms of both geography and industry, especially when the parent organization is led by a family CEO. Third, we showed that family

CVC is positively associated with the likelihood of a successful exit, potentially owing to a “hands off” style which grants more autonomy and latitude to startup founders.

Bridging the literature on corporate ownership and venture capital, our findings shed light on a pervasive influence of family control on corporate venturing activities. Further looking into the organizational attributes of CVCs’ parent organizations represents a promising pathway to better understand some of the critical questions in the CVC literature, such as what determines the pursuit of strategic versus financial objectives, how parent firms arrange CVC activities, and how families structure syndicate networks. Moreover, the investigation of family governance in CVC offers a useful complement to recent research on the role of VC in the evolution of family firms’ management and governance (Chemmanur et al. 2021). We shall acknowledge some limitations of our study, primarily related to the lack of unanimous definitions of family firms, the challenge of establishing causality and spelling out the mechanisms underlying the performance results, and the inability to measure the specific goals and incentives of CVC units. As regards the latter, preliminary analyses show that family CVCs seem more likely to use control rights than non-family CVCs, and this is consistent with the family CVCs’ risk mitigation strategies we showed above. A full-fledged analysis of whether contractual issues (also including e.g. veto rights) and board seats decisions are different between family and non-family CVCs, and how those contract terms may affect venture performance (Bergemann and Hege 1998; Fu et al. 2019; Trester 1998) rank high in our future research agenda. Addressing these limitations provides useful opportunities for future research.

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Figure 1. CVC activity over time

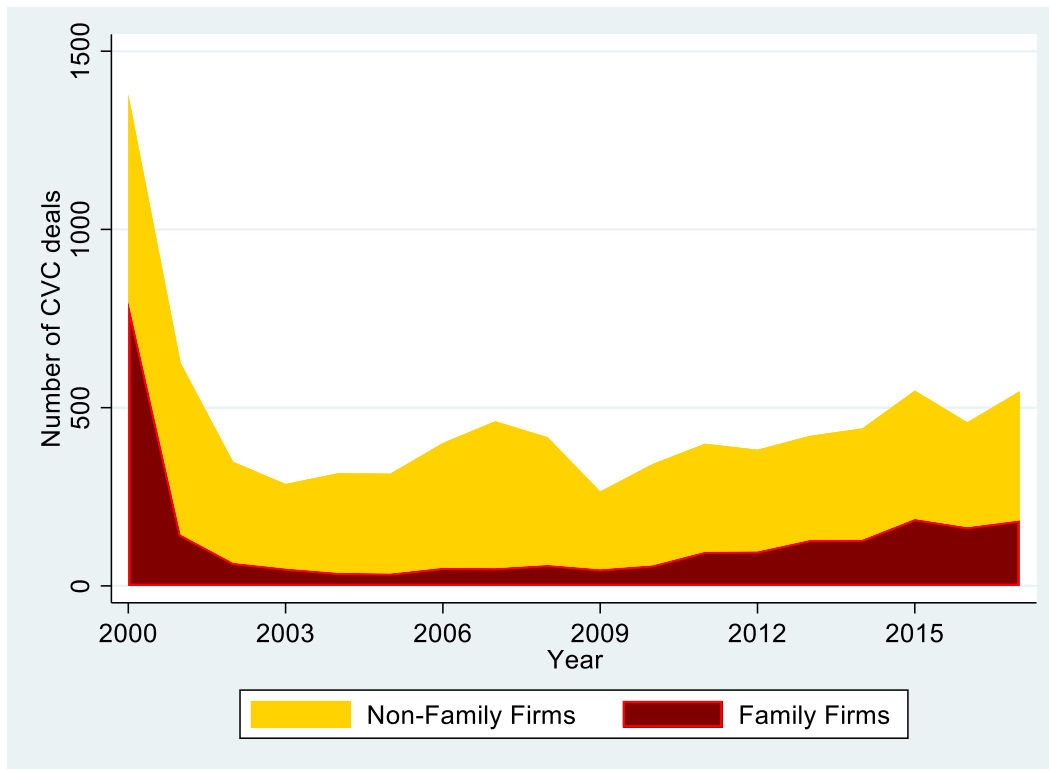


Figure 2. Industry distribution of CVC deals

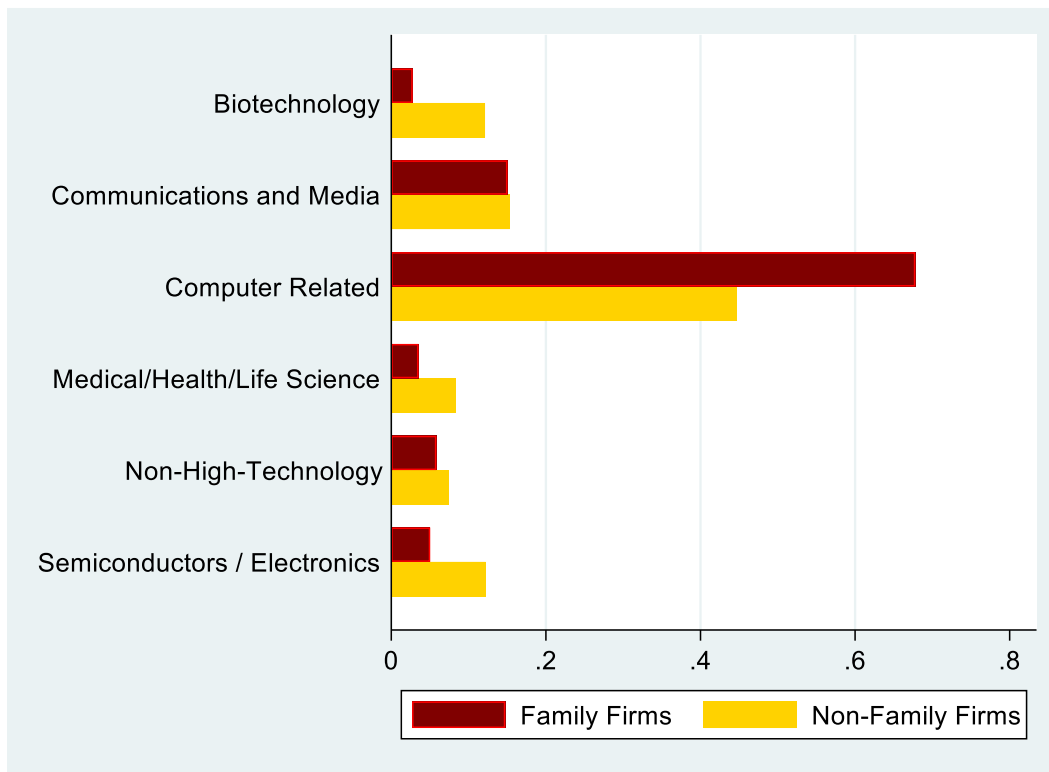


Table 1. Sample description.

<i>Panel A:</i>	Total	Family and Non-family Backed	Only Family Backed	Only Non-family Backed
Ventures	4,461	394 (8.8%)	1,227 (27.5%)	2,840 (63.7%)

<i>Panel B:</i>	Total	Non-family	Family	Family with Family CEO	Family with Professional CEO
Deals	8,364	5,971 (71.4%)	2,393 (28.6%)	1,518 (63.4%)	875 (36.6%)
Parent Firms	301	193 (64.1%)	108 (35.9%)	70 (66.8%)	38 (33.2%)

Panel A shows the total number of ventures (and relative percentages) that have received funding from both family and non-family CVC investors, family CVC without non-family CVC, and non-family CVC without family CVC. Panel B shows the deals joined by family and non-family CVC investors as well as the number of unique parent firms behind the CVC investors that made those deals. Family firms in Panel B are defined as those companies in which 5% or larger share of the firm's equity is in the founder's and/or her heirs' hands; in the case of multiple class shares, if the family maintains 5% or greater voting power.

Table 2. Summary statistics.

<i>Panel A: Deals</i>	N	Mean	s.d.	Median	Min	Max
Syndication	8,364	0.892	0.311	1	0	1
Syndicate Size	8,364	4.315	3.450	4	0	43
Same State	8,364	0.289	0.453	0	0	1
Distance	8,364	6.659	2.401	7.714	0	9.741
Foreign	8,364	0.152	0.359	0	0	1
Same Industry	6,600	0.280	0.449	0	0	1
Deal Size	7,424	2.291	1.326	2.427	-4.890	8.124

Panel A shows the summary statistics for CVC deals. *Syndication* is a dummy that equals one if the venture was funded on the same exact date by multiple investors. *Syndicate Size* is the number of investors that joined the syndicated investment. *Same State* is a dummy that equals one if the venture is headquartered in the same state as the CVC's parent firm. *Distance* is the natural logarithm of one plus the distance in kilometers between the city where the venture is located and the city where the CVC's parent firm is headquartered. *Foreign* is a dummy with a value of one if the venture is based outside of the US; zero otherwise. *Same Industry* is a dummy that equals one if the venture operates in the same industry (2-digit SIC) as the CVC's parent firm; zero otherwise. *Deal Size* is the natural logarithm of the size of the investment round (in million Eur).

<i>Panel B: Parent firms</i>	N	Mean	s.d.	Median	Min	Max
Ln (Experience)	301	1.847	1.113	1.946	0	3.912
Ln (Sales)	300	7.865	2.376	7.950	0	12.199
Cash/Assets	299	0.135	0.131	0.104	0	0.738
Capex/Assets	298	0.042	0.054	0.025	0	0.472
R&D Intensity	301	0.108	0.095	0.085	0	0.313
Unreported R&D	301	0.282	0.451	0	0	1
Debt/Assets	286	0.227	0.214	0.188	0	1.246
ROA	300	0.034	0.159	0.064	-1.096	0.368
Blockholder Shares	301	0.257	0.171	0.226	0	1

Panel B shows the summary statistics for the CVC parent firms at the year of the last CVC deal. *Ln (Experience)* is the natural logarithm of one plus the years since the first deal made by the CVC. *Ln (Sales)* is the natural logarithm of one plus the sales (in million US\$). *Cash/Assets* is the ratio of cash holdings and equivalent securities to total assets. *Capex/Assets* is the ratio of capital expenditures and total assets. *R&D Intensity* is the ratio of R&D expenditures and sales (if the information on R&D expenditures was missing, we imputed the last available value. If the firm did not report R&D expenditures in the previous years, *R&D Intensity* is the average of the (2-digit SIC) industry winsorized at 2.5% in each tail. If no firms in the 2-digit SIC reported R&D expenditures, *R&D intensity* equals zero. *Unreported R&D* is a dummy that equals one if the information on the R&D expenditures of the CVC's parent firm was missing). *Debt/Assets* is the ratio of total debt and total assets. *ROA* is the ratio of EBIT and assets. *Blockholder Shares* is the percentage of shares held by (non-family) blockholders. When any of the accounting variables were missing, we imputed the latest available value.

Table 3. Means comparison.

<i>Panel A: Deals</i>	Family Firms	Non-family Firms	Diff. Family – Non-family
Syndication	0.916	0.882	0.033*** (0.000)
Syndicate Size	4.485	4.247	0.238*** (0.004)
Same State	0.326	0.274	0.051*** (0.000)
Distance	6.345	6.784	-0.439*** (0.000)
Foreign	0.100	0.173	-0.072*** (0.000)
Same Industry	0.404	0.242	0.162*** (0.000)
Deal Size	2.485	2.210	0.275*** (0.000)
<i>Panel B: Parent firms</i>	Family Firms	Non-family Firms	Diff. Family – Non-family
Ln (Experience)	1.577	1.961	-0.384*** (0.006)
Ln (Sales)	6.940	8.255	-1.315*** (0.000)
Cash/Assets	0.164	0.123	0.041** (0.014)
Capex/Assets	0.046	0.040	0.007 (0.333)
R&D Intensity	0.119	0.104	0.015 (0.218)
Unreported R&D	0.371	0.245	0.126** (0.027)
Debt/Assets	0.190	0.243	-0.053* (0.050)
ROA	-0.032	0.061	-0.093*** (0.000)
Blockholder Shares	0.237	0.265	-0.028 (0.192)

Panel A presents the results of t-test comparisons using the CVC deals as a unit of observation. Panel B presents the results of t-test comparisons between CVC parent firms at the year of the last CVC deal. For details on the construction of each variable please refer to the legends of Table 2. P-values in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 4. Family CVC investment strategies.

Dependent variable:	Syndication	Syndicate Size	Same State	Distance	Foreign	Same Industry	Deal Size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family Firm	0.034*** (0.000)	0.043* (0.063)	0.044*** (0.001)	-0.362*** (0.000)	-0.054*** (0.000)	0.308*** (0.000)	0.028 (0.472)
Ln (Experience)	0.007 (0.146)	0.023* (0.065)	0.020*** (0.001)	0.006 (0.881)	0.014*** (0.005)	-0.081*** (0.000)	-0.035* (0.096)
Ln (Sales)	0.009*** (0.001)	0.034*** (0.000)	-0.020*** (0.000)	0.073*** (0.000)	0.005** (0.018)	0.003 (0.337)	0.104*** (0.000)
Cash/Assets	0.013 (0.723)	-0.003 (0.977)	0.133** (0.021)	0.328 (0.296)	0.045 (0.301)	-0.265*** (0.000)	0.199 (0.193)
Capex/Assets	-0.409*** (0.000)	-1.196*** (0.000)	-0.238** (0.030)	0.785 (0.237)	0.296*** (0.001)	-0.294* (0.068)	-1.735*** (0.000)
R&D Intensity	-0.049 (0.344)	-0.165 (0.220)	0.061 (0.413)	-0.102 (0.810)	0.309*** (0.000)	0.951*** (0.000)	0.703*** (0.002)
Unreported R&D	0.009 (0.519)	0.009 (0.796)	0.063*** (0.000)	-0.067 (0.525)	-0.018 (0.206)	-0.240*** (0.000)	0.005 (0.930)
Debt/Assets	0.021 (0.472)	0.188** (0.013)	-0.128*** (0.001)	0.634*** (0.004)	-0.031 (0.330)	-0.241*** (0.000)	-0.022 (0.865)
ROA	-0.091** (0.029)	-0.017 (0.869)	0.076 (0.144)	-0.177 (0.526)	0.056 (0.142)	0.144* (0.070)	-0.128 (0.446)
Blockholder Shares	0.099*** (0.003)	0.437*** (0.000)	0.085** (0.039)	-1.193*** (0.000)	-0.167*** (0.000)	0.127** (0.026)	0.294** (0.028)
Observations	8,180	8,180	8,180	8,180	8,180	6,448	7,261
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Results are obtained by means of OLS (Columns 1, 3, 4, 5, 6, and 7) and Poisson (Column 2). In Column (1), the dependent variable is a dummy that equals one if the venture was funded on the same exact date by multiple funds; zero otherwise. In Column (2), the dependent variable is the number of funds that joined the syndicate. In Column (3), the dependent variable is a dummy that equals one if the venture is headquartered in the same state as the CVC's parent firm; zero otherwise. In Column (4), the dependent variable is the natural logarithm of one plus the distance in kilometers between the city where the venture is located and the city where the CVC's parent firm is headquartered. In Column (5), the dependent variable is a dummy that equals one if the venture is headquartered outside the US; zero otherwise. In Column (6), the dependent variable is a dummy that equals one if the venture operates in the same 2-digit SIC industry of the CVC's parent firm. In Column (7), the dependent variable is the natural logarithm of the size of the investment round (in million Eur). For details on the construction of each control variable, please refer to the legends of Table 2. Regressions also include year fixed effects, venture-level industry fixed effects, and state fixed effects at the CVC's parent firm level. Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 5. Matching.

<i>Panel A: Results</i>			
	Family firms	Non-family firms	Diff. Family – Non-family
Syndication	0.915	0.876	0.039*** (0.000)
Syndicate Size	4.505	4.311	0.194* (0.084)
Same State	0.326	0.271	0.041*** (0.000)
Distance	6.360	6.669	-0.309*** (0.000)
Foreign	0.101	0.126	-0.024*** (0.009)
Same Industry	0.404	0.254	0.150*** (0.000)
Ln (Deal Size)	2.504	2.201	0.303*** (0.000)

<i>Panel B: Balancing Covariates</i>			
	Family firm	Non-family firm	Diff. Family – Non-family
Ln (Sales)	9.171	9.142	0.030 (0.678)

Deals completed by family CVC investors are matched with those completed by non-family CVC investors by means of one-to-one propensity score matching without replacement on the size of the parent firms (i.e., *Ln (Sales)*) and the 2-digit SIC industry. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 6. Investment strategies of family CVC: The role of CEOs.

Dependent variable:	Syndication	Syndicate Size	Same State	Distance	Foreign	Same Industry	Deal Size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family Firm with Professional CEO	0.006 (0.609)	-0.026 (0.416)	-0.010 (0.584)	0.033 (0.741)	0.012 (0.421)	0.113*** (0.000)	0.033 (0.530)
Family Firm with Family CEO	0.054*** (0.000)	0.097*** (0.001)	0.083*** (0.000)	-0.644*** (0.000)	-0.100*** (0.000)	0.410*** (0.000)	0.025 (0.603)
Ln (Experience)	0.010* (0.053)	0.029** (0.021)	0.025*** (0.000)	-0.031 (0.406)	0.008 (0.120)	-0.069*** (0.000)	-0.036* (0.095)
Ln (Sales)	0.008*** (0.005)	0.032*** (0.000)	-0.022*** (0.000)	0.091*** (0.000)	0.008*** (0.000)	-0.008** (0.014)	0.104*** (0.000)
Cash/Assets	-0.008 (0.837)	-0.066 (0.516)	0.093 (0.112)	0.620* (0.055)	0.093** (0.034)	-0.266*** (0.000)	0.203 (0.192)
Capex/Assets	-0.405*** (0.000)	-1.165*** (0.000)	-0.230** (0.036)	0.726 (0.275)	0.286*** (0.001)	-0.238 (0.135)	-1.736*** (0.000)
R&D Intensity	-0.063 (0.217)	-0.197 (0.145)	0.032 (0.669)	0.110 (0.797)	0.344*** (0.000)	0.933*** (0.000)	0.705*** (0.002)
Unreported R&D	0.010 (0.438)	0.013 (0.690)	0.067*** (0.000)	-0.093 (0.377)	-0.022 (0.120)	-0.207*** (0.000)	0.004 (0.935)
Debt/Assets	0.032 (0.279)	0.214*** (0.005)	-0.107*** (0.004)	0.481** (0.028)	-0.056* (0.075)	-0.163*** (0.001)	-0.023 (0.855)
ROA	-0.072* (0.086)	0.028 (0.793)	0.114** (0.031)	-0.455 (0.111)	0.010 (0.801)	0.232*** (0.003)	-0.131 (0.435)
Blockholder Shares	0.101*** (0.002)	0.444*** (0.000)	0.088** (0.032)	-1.219*** (0.000)	-0.172*** (0.000)	0.102* (0.073)	0.293** (0.029)
Observations	8,180	8,180	8,180	8,180	8,180	6,448	7,261
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Results are obtained by means of OLS (Columns 1, 3, 4, 5, 6, and 7) and Poisson (Column 2). In Column (1), the dependent variable is a dummy that equals one if the venture was funded on the same exact date by multiple funds; zero otherwise. In Column (2), the dependent variable is the number of funds that joined the syndicated investment. In Column (3), the dependent variable is a dummy that equals one if the venture is headquartered in the same state as the CVC's parent firm; zero otherwise. In Column (4), the dependent variable is the natural logarithm of one plus the distance in kilometers between the city where the venture is located and the city where the CVC's parent firm is headquartered. In Column (5), the dependent variable is a dummy that equals one if the venture is headquartered outside the US; zero otherwise. In Column (6), the dependent variable is a dummy that equals one if the venture operates in the same 2-digit SIC industry of the CVC's parent firm. In Column (7), the dependent variable is the natural logarithm of the size of the investment round (in million Euros). *Family Firm with Professional CEO* is a dummy that equals one if the parent is a family firm and the CEO is not a member of the controlling family; zero otherwise. *Family Firm with Family CEO* is a dummy that equals one if the parent is a family firm and the CEO is a member of the controlling family; zero otherwise. For details on the construction of each control variable, please refer to the legends of Table 2. Regressions also include year fixed effects, venture-level industry fixed effects, and state fixed effects at the CVC's parent firm level. Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 7. The moderating impact of startup age.

Dependent variable:	Syndication	Syndicate Size	Same State	Distance	Foreign	Same Industry	Deal Size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family Firm	0.040*	0.052	0.102***	-0.772***	-0.103***	0.398***	-0.161*
	(0.092)	(0.378)	(0.000)	(0.000)	(0.000)	(0.000)	(0.087)
Ln (Startup Age)	0.012***	0.081***	0.001	-0.036	-0.018***	0.008*	0.166***
	(0.002)	(0.000)	(0.908)	(0.151)	(0.000)	(0.092)	(0.000)
Family Firm×Ln (Startup Age)	-0.001	0.000	-0.018**	0.123***	0.014**	-0.026***	0.065**
	(0.857)	(0.994)	(0.022)	(0.006)	(0.043)	(0.006)	(0.010)
Ln (Experience)	0.006	0.016	0.020***	0.006	0.015***	-0.082***	-0.048**
	(0.207)	(0.190)	(0.001)	(0.866)	(0.003)	(0.000)	(0.019)
Ln (Sales)	0.009***	0.034***	-0.020***	0.072***	0.005**	0.003	0.102***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.019)	(0.347)	(0.000)
Cash/Assets	0.013	-0.010	0.131**	0.339	0.045	-0.265***	0.198
	(0.719)	(0.922)	(0.022)	(0.278)	(0.291)	(0.000)	(0.190)
Capex/Assets	-0.408***	-1.189***	-0.253**	0.889	0.305***	-0.303*	-1.687***
	(0.000)	(0.000)	(0.020)	(0.177)	(0.001)	(0.061)	(0.000)
R&D Intensity	-0.042	-0.129	0.055	-0.077	0.304***	0.953***	0.824***
	(0.410)	(0.332)	(0.461)	(0.856)	(0.000)	(0.000)	(0.000)
Unreported R&D	0.009	0.009	0.064***	-0.078	-0.019	-0.238***	0.005
	(0.501)	(0.786)	(0.000)	(0.462)	(0.170)	(0.000)	(0.923)
Debt/Assets	0.021	0.189**	-0.129***	0.638***	-0.030	-0.242***	-0.040
	(0.480)	(0.012)	(0.000)	(0.003)	(0.345)	(0.000)	(0.747)
ROA	-0.091**	-0.019	0.079	-0.203	0.053	0.146*	-0.127
	(0.028)	(0.852)	(0.125)	(0.467)	(0.162)	(0.067)	(0.447)
Blockholder Shares	0.098***	0.425***	0.090**	-1.225***	-0.169***	0.127**	0.256*
	(0.003)	(0.000)	(0.029)	(0.000)	(0.000)	(0.026)	(0.052)
Observations	8,180	8,180	8,180	8,180	8,180	6,448	7,261
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Results are obtained by means of OLS (Columns 1, 3, 4, 5, 6, and 7) and Poisson (Column 2). In Column (1), the dependent variable is a dummy that equals one if the venture was funded on the same exact date by multiple funds; zero otherwise. In Column (2), the dependent variable is the number of funds that joined the syndicated investment. In Column (3), the dependent variable is a dummy that equals one if the venture is headquartered in the same state as the CVC's parent firm; zero otherwise. In Column (4), the dependent variable is the natural logarithm of one plus the distance in kilometers between the city where the venture is located and the city where the CVC's parent firm is headquartered. In Column (5), the dependent variable is a dummy that equals one if the venture is headquartered outside the US; zero otherwise. In Column (6), the dependent variable is a dummy that equals one if the venture operates in the same 2-digit SIC industry of the CVC's parent firm. In Column (7), the dependent variable is the natural logarithm of the size of the investment round (in million Eur). For details on the construction of each control variable, please refer to the legends of Table 2. Regressions also include year fixed effects, venture-level industry fixed effects, and state fixed effects at the CVC's parent firm level. Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 8. Syndicate Partners Reputation.

Dependent variable:	Reputation of the Most Reputable Syndicate Partner		Reputation of the Lead Investor		Number of VC Syndicate Partners	
	(1)	(2)	(3)	(4)	(5)	(6)
Family Firm	0.402*** (0.004)		0.275** (0.019)		0.175*** (0.007)	
Family Firm with Professional CEO		0.156 (0.343)		0.275 (0.173)		0.014 (0.785)
Family Firm with Family CEO		0.559*** (0.002)		0.274** (0.022)		0.274*** (0.002)
Ln (Sales)	0.218*** (0.000)	0.204*** (0.000)	0.110** (0.012)	0.110** (0.012)	0.042* (0.079)	0.032 (0.142)
Cash/Assets	-0.428 (0.365)	-0.458 (0.319)	-0.458 (0.273)	-0.457 (0.277)	-0.048 (0.767)	-0.058 (0.729)
Capex/Assets	-5.409*** (0.000)	-5.235*** (0.000)	-4.209*** (0.002)	-4.206*** (0.002)	-0.852* (0.090)	-0.711 (0.125)
R&D Intensity	0.192 (0.823)	0.221 (0.793)	1.738** (0.023)	1.737** (0.023)	-0.642* (0.059)	-0.607* (0.066)
Unreported R&D	0.013 (0.953)	0.062 (0.776)	0.001 (0.992)	0.002 (0.988)	0.043 (0.600)	0.076 (0.327)
Debt/Assets	-0.373 (0.317)	-0.265 (0.456)	0.050 (0.868)	0.051 (0.868)	-0.338** (0.017)	-0.253* (0.054)
ROA	-0.426 (0.434)	-0.270 (0.611)	0.672 (0.198)	0.670 (0.209)	-0.238 (0.182)	-0.129 (0.484)
Blockholder Shares	1.017** (0.018)	0.956** (0.019)	0.667 (0.130)	0.667 (0.130)	0.343** (0.015)	0.296** (0.036)
Parent VC Backed	0.021 (0.885)	-0.024 (0.880)	-0.048 (0.676)	-0.048 (0.685)	0.039 (0.439)	0.006 (0.908)
VC Experience	-0.067 (0.173)	-0.060 (0.208)	0.000 (0.999)	-0.000 (0.998)	-0.005 (0.769)	-0.001 (0.952)
Observations	7,763	7,763	6,740	6,740	8,594	8,594
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Results are obtained by means of OLS (Columns 1-4) and Poisson (Columns 5-6). In Columns 1 and 2, the dependent variable is the reputation of the most reputable syndicate partner that took part in the deal (excluding the focal investor), i.e. the natural logarithm of one plus the cumulative value of the IPO exits in million USD up to the year preceding the year when the focal investment was completed. The sample has

been restricted to syndicated deals only in Columns 1 and 2. In Columns 3 and 4, the dependent variable is the reputation of the lead investor, i.e. the natural logarithm of one plus the cumulative value of the IPO exits in million USD up to the year preceding the year when the focal investment was completed. When the leader of the investment was not reported in Pitchbook, we considered the reputation of the most reputable syndicate partner in the deal (excluding the focal investor). The sample has been restricted to syndicated deals where the focal investor was not indicated as the lead investor in Columns 3 and 4. In Columns 5 and 6, the dependent variable is the count of independent venture capital firms with whom the investment was syndicated. *Parent VC Backed* is a dummy that equals one if the deal was completed by a firm that received VC financing (or by a CVC unit whose parent company received VC funding); zero elsewhere. *VC Experience* is the natural logarithm of one plus the number of deals completed by the firm and the CVC units belonging to the firm up to the year preceding the year when the focal investment was completed. For details on the construction of the other control variables, please refer to the legends of Table 2. Regressions include year fixed effects, venture-level industry fixed effects, and state fixed effects at the CVC's parent firm level. Robust standard errors are clustered at the parent firm level. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 9. Successful exit.

Dependent variable: Successful exit				
	(1)	(2)	(3)	(4)
Family Firm	0.052*** (0.000)	0.043*** (0.005)	0.041*** (0.007)	0.040** (0.018)
Ln (Sales)	0.008 (0.189)	0.003 (0.631)	0.002 (0.801)	0.006 (0.310)
Cash/Assets	0.066 (0.383)	0.098 (0.223)	0.106 (0.185)	0.078 (0.370)
Capex/Assets	-0.040 (0.790)	-0.228 (0.193)	-0.185 (0.284)	-0.219 (0.278)
R&D Intensity	-0.136 (0.219)	-0.069 (0.517)	-0.083 (0.433)	-0.009 (0.934)
Unreported R&D	-0.037 (0.158)	-0.020 (0.422)	-0.019 (0.427)	-0.026 (0.341)
Debt/Assets	-0.053 (0.359)	-0.033 (0.571)	-0.032 (0.584)	-0.030 (0.622)
ROA	-0.134* (0.059)	-0.155** (0.024)	-0.153** (0.023)	-0.171** (0.018)
Blockholder Shares	0.028 (0.676)	0.014 (0.838)	0.012 (0.858)	-0.001 (0.987)
Ln (Venture Age)		0.076*** (0.000)	0.072*** (0.000)	0.074*** (0.000)
Ln (N. Investors)		0.064*** (0.000)	0.038*** (0.002)	0.065*** (0.000)
Foreign		-0.064*** (0.000)	-0.057*** (0.001)	-0.063** (0.011)
Parent VC Backed		0.003 (0.856)	0.005 (0.795)	0.002 (0.928)
VC Experience		0.014** (0.035)	0.014** (0.030)	0.013* (0.063)
Rep. Most Reputable Partner			0.011*** (0.002)	
Reputation Lead Investor				0.003 (0.213)
Observations	8,608	8,438	8,438	6,611
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes

Results are obtained by means of OLS. The dependent variable is a dummy that equals one if the investor successfully exited via IPO, M&A, or buyout from its investments in the startup; zero elsewhere. *Ln (Venture Age)* is the natural logarithm of one plus the age of the venture (in years) at the time of the deal; *Ln (Investors)* is the natural logarithm of one plus the number of syndicate partners; *Foreign* is a dummy with a value of one if the startup is based outside of the United States; and zero elsewhere; *Parent VC Backed* is a dummy that equals one if the deal was completed by a firm that received VC financing (or by a CVC unit whose parent company received VC funding); zero elsewhere; *VC Experience* i.e. the natural logarithm of one plus the number of deals completed by the firm and the CVC units belonging to the firm up to the year preceding the year when the focal investment was completed. For details on the construction of the other control variables, please refer to the legends of Table 2. *Rep. Most Reputable Partner* is the reputation of the most reputable syndicate partner that took part in the deal (excluding the focal investor), i.e. the natural logarithm of one plus the cumulative value of the IPO exits in million USD up to the year preceding the year when the focal investment was completed. When the deal was not syndicated the variable takes a value of zero. *Reputation Lead Investor* is the reputation of the lead investor, i.e. the natural logarithm of one plus the cumulative value of the IPO exits in million USD up to the year preceding the year when the focal investment was completed. When the leader of the investment was not reported in Pitchbook, we considered the reputation of the most reputable syndicate partner in the deal (excluding the focal investor). The sample has been restricted to syndicated deals where the focal investor was not indicated as the lead investor in Column 4. For details on the construction of the other control variables, please refer to the legends of Table 2. Regressions include year fixed effects, venture-level industry fixed effects, and state fixed effects at the CVC's parent firm level. Robust standard errors are clustered at the parent firm level. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 10. Human capital of family and non-family CVC investors.

Dependent variable:	Ivy League	MBA degree	VC Experience	Entrepreneurial Experience
	(1)	(2)	(3)	(4)
Family Firm	-0.031 (0.548)	-0.028 (0.634)	-0.025 (0.399)	0.009 (0.700)
Ln (Sales)	0.031* (0.057)	0.009 (0.662)	0.008 (0.454)	0.005 (0.666)
Observations	798	798	798	798
Industry fixed effects	Yes	Yes	Yes	Yes

Results are obtained by means of OLS. The unit of observation is the employee-CVC unit pair. *Ivy League* is a dummy that equals one if the individual obtained a degree in one of the Ivy League universities; zero otherwise. *MBA* is a dummy that equals one if the individual obtained an MBA; zero otherwise. *VC Experience* is a dummy that equals one if the individual had prior experience in an independent venture capital firm; zero otherwise. *Successful Entrepreneurial Experience* is a dummy that equals one if the individual had founded a company that received VC financing before joining the CVC unit; zero otherwise. *Family Firm* is a dummy that equals one if the parent firm was family-owned (i.e., if a 5% or larger share of the firm's equity were in the founder's and/or her heirs' hands; in the case of multiple class shares, if the family maintained 5% or greater voting power) in the year in which the individual joined the CVC unit. *Ln (Sales)* is the natural logarithm of one plus the sales (in million US\$) of the parent firm in the year in which the individual joined the CVC unit. All specifications include CVC's parent firm (2-digit SIC) industry fixed effects. Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 11. Potential explanations.

	Family CVC	Non-family CVC	Diff. Family – Non-family
Founder Active	0.736	0.656	0.080*** (0.000)
Founder is CEO	0.829	0.754	0.075*** (0.000)
Lead Investor	0.195	0.225	-0.030*** (0.002)
Board Seat	0.211	0.239	-0.028*** (0.050)
Dedicated CVC Unit	0.772	0.781	-0.009 (0.378)
Parent VC Backed	0.621	0.339	0.417*** (0.000)

Founder Active is a dummy that equals one if at least one of the founders is still active in the company; zero elsewhere. This variable is missing when the company is no longer active (i.e., if no current employee is reported in Pitchbook). *Founder is CEO* is a dummy that equals one if one of the founders is the current CEO of the company; zero elsewhere. This variable is missing when Pitchbook does not report the current CEO of the company. *Lead Investor* is a dummy that equals one if the investor is classified by Pitchbook as the lead investor or if the investor was the sole investor in the investment round; zero elsewhere. *Board Seat* is a dummy that equals one if someone representing the firm set on the board of the startup; zero elsewhere. *Dedicated CVC Fund* is a dummy that equals one if the deal was completed through a corporate venture capital unit; zero elsewhere. *Parent VC Backed* is a dummy that equals one if the deal was completed by a firm that received VC financing (or by a CVC unit whose parent company received VC funding); zero elsewhere. P-values in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A1. CVC investment strategies: alternative threshold to identify family firms.

Dependent variable:	Syndication	Syndicate Size	Same State	Distance	Foreign	Same Industry	Deal Size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family Firm	0.038*** (0.000)	0.076*** (0.001)	0.038*** (0.005)	-0.282*** (0.000)	-0.095*** (0.000)	0.231*** (0.000)	0.067 (0.116)
Ln (Experience)	0.007 (0.163)	0.021* (0.092)	0.020*** (0.001)	0.001 (0.974)	0.016*** (0.001)	-0.077*** (0.000)	-0.037* (0.078)
Ln (Sales)	0.008*** (0.006)	0.031*** (0.000)	-0.021*** (0.000)	0.083*** (0.000)	0.009*** (0.000)	-0.001 (0.767)	0.101*** (0.000)
Cash/Assets	0.005 (0.900)	-0.037 (0.709)	0.131** (0.023)	0.313 (0.325)	0.086** (0.043)	-0.244*** (0.001)	0.164 (0.286)
Capex/Assets	-0.360*** (0.000)	-1.078*** (0.000)	-0.192* (0.083)	0.459 (0.498)	0.165* (0.077)	-0.434*** (0.008)	-1.637*** (0.000)
R&D Intensity	-0.056 (0.266)	-0.160 (0.230)	0.046 (0.542)	0.039 (0.928)	0.306*** (0.000)	0.851*** (0.000)	0.710*** (0.002)
Unreported R&D	0.004 (0.762)	-0.007 (0.840)	0.061*** (0.001)	-0.062 (0.563)	0.002 (0.913)	-0.220*** (0.000)	-0.011 (0.839)
Debt/Assets	0.021 (0.466)	0.209*** (0.005)	-0.136*** (0.000)	0.721*** (0.001)	-0.056* (0.078)	-0.355*** (0.000)	0.004 (0.974)
ROA	-0.090** (0.030)	-0.001 (0.989)	0.070 (0.178)	-0.111 (0.694)	0.035 (0.359)	0.054 (0.489)	-0.108 (0.522)
Blockholder Shares	0.098*** (0.003)	0.420*** (0.000)	0.087** (0.033)	-1.228*** (0.000)	-0.151*** (0.000)	0.201*** (0.000)	0.276** (0.041)
Observations	8,180	8,180	8,180	8,180	8,180	6,448	7,261
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table replicates the estimates of Table 4 by changing the definition of *Family Firm*, i.e. using a dummy that equals one if the parent firm is family-owned (i.e., if a 10% or larger share of the firm's equity is in the founder's and/or her heirs' hands; in the case of multiple class shares, if the family maintains 10% or greater voting power). Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A2. CVC investment strategies: continuous measure of family share.

Dependent variable:	Syndication	Syndicate Size	Same State	Distance	Foreign	Same Industry	Deal Size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family Shares	0.155*** (0.000)	0.278*** (0.000)	0.206*** (0.000)	-1.500*** (0.000)	-0.303*** (0.000)	0.730*** (0.000)	0.069 (0.553)
Ln (Experience)	0.008 (0.105)	0.024* (0.056)	0.021*** (0.001)	-0.004 (0.914)	0.013*** (0.008)	-0.073*** (0.000)	-0.034 (0.107)
Ln (Sales)	0.008*** (0.007)	0.031*** (0.000)	-0.022*** (0.000)	0.090*** (0.000)	0.009*** (0.000)	-0.003 (0.369)	0.103*** (0.000)
Cash/Assets	0.002 (0.948)	-0.023 (0.819)	0.118** (0.039)	0.407 (0.191)	0.074* (0.081)	-0.224*** (0.002)	0.204 (0.178)
Capex/Assets	-0.373*** (0.000)	-1.127*** (0.000)	-0.189* (0.085)	0.440 (0.509)	0.220** (0.016)	-0.433*** (0.007)	-1.723*** (0.000)
R&D Intensity	-0.057 (0.262)	-0.171 (0.201)	0.051 (0.498)	0.002 (0.996)	0.316*** (0.000)	0.859*** (0.000)	0.689*** (0.002)
Unreported R&D	0.001 (0.915)	-0.009 (0.794)	0.053*** (0.002)	-0.005 (0.959)	-0.000 (0.988)	-0.218*** (0.000)	0.005 (0.927)
Debt/Assets	0.039 (0.180)	0.230*** (0.002)	-0.104*** (0.004)	0.489** (0.025)	-0.076** (0.016)	-0.256*** (0.000)	-0.024 (0.848)
ROA	-0.090** (0.028)	-0.010 (0.926)	0.077 (0.137)	-0.162 (0.562)	0.047 (0.215)	0.027 (0.727)	-0.136 (0.413)
Blockholder Shares	0.097*** (0.003)	0.423*** (0.000)	0.082** (0.046)	-1.187*** (0.000)	-0.158*** (0.000)	0.170*** (0.002)	0.297** (0.027)
Observations	8,180	8,180	8,180	8,180	8,180	6,448	7,261
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table replicates the estimates of Table 4 by replacing the dummy *Family Firm* with *Family Shares*, which is a continuous variable indicating the fraction of shares (or voting power) in the founder's and/or her heirs' hands. Regressions include year fixed effects, venture-level industry fixed effects, and state fixed effects at the CVC's parent firm level. Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A3. CVC investment strategies: multiple family members.

Dependent variable:	Syndication	Syndicate Size	Same State	Distance	Foreign	Same Industry	Deal Size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family Firm: 1 Member	0.025** (0.028)	0.029 (0.321)	-0.011 (0.517)	-0.119 (0.253)	-0.006 (0.695)	0.270*** (0.000)	0.006 (0.906)
Family Firm: 2+ Members	0.041*** (0.000)	0.056** (0.046)	0.088*** (0.000)	-0.553*** (0.000)	-0.092*** (0.000)	0.326*** (0.000)	0.046 (0.351)
Ln (Sales)	0.007 (0.149)	0.023* (0.065)	0.019*** (0.002)	0.007 (0.849)	0.014*** (0.005)	-0.082*** (0.000)	-0.035* (0.095)
Cash/Assets	0.009*** (0.001)	0.034*** (0.000)	-0.020*** (0.000)	0.073*** (0.000)	0.005** (0.017)	0.003 (0.330)	0.104*** (0.000)
Capex/Assets	0.018 (0.617)	0.006 (0.949)	0.164*** (0.005)	0.187 (0.556)	0.017 (0.705)	-0.245*** (0.001)	0.213 (0.165)
R&D Intensity	-0.399*** (0.000)	-1.176*** (0.000)	-0.175 (0.112)	0.506 (0.448)	0.241*** (0.008)	-0.308* (0.056)	-1.710*** (0.000)
Unreported R&D	-0.052 (0.311)	-0.171 (0.203)	0.040 (0.590)	-0.010 (0.981)	0.327*** (0.000)	0.942*** (0.000)	0.694*** (0.002)
Debt/Assets	0.008 (0.544)	0.008 (0.820)	0.060*** (0.001)	-0.054 (0.609)	-0.015 (0.282)	-0.242*** (0.000)	0.004 (0.946)
ROA	0.020 (0.498)	0.186** (0.014)	-0.136*** (0.000)	0.666*** (0.002)	-0.025 (0.439)	-0.239*** (0.000)	-0.025 (0.845)
Blockholder Shares	-0.094** (0.025)	-0.019 (0.854)	0.059 (0.260)	-0.104 (0.710)	0.070* (0.072)	0.124 (0.121)	-0.135 (0.420)
Observations	8,180	8,180	8,180	8,180	8,180	6,448	7,261
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table replicates the estimates of Table 4 by replacing the dummy *Family Firm* with two dummies *Family Firm: 1 Family Member*, which is equal one if the CVC's parent firm is family-owned and only the founder or one of her heirs is listed as a shareholder (zero otherwise), and *Family Firm: 2+ Family Members*, which is equal one if the CVC's parent firm is family-owned and two or more family members (founders and/or their heirs) are listed as shareholders (zero otherwise). Regressions include year fixed effects, venture-level industry fixed effects, and state fixed effects at the CVC's parent firm level. Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A4. CVC investment strategies: Probit regressions.

Dependent variable:	Syndication	Same State	Foreign	Same Industry
	(1)	(2)	(3)	(5)
Family Firm	0.189*** (0.001)	0.138*** (0.002)	-0.227*** (0.000)	1.042*** (0.000)
Ln (Experience)	0.046* (0.099)	0.074*** (0.003)	0.039 (0.137)	-0.253*** (0.000)
Ln (Sales)	0.051*** (0.000)	-0.066*** (0.000)	0.040*** (0.009)	0.020 (0.283)
Cash/Assets	0.117 (0.622)	0.517*** (0.006)	0.199 (0.351)	-0.753*** (0.005)
Capex/Assets	-2.097*** (0.000)	-0.477 (0.207)	1.144*** (0.004)	-0.784 (0.207)
R&D Intensity	-0.450 (0.150)	0.252 (0.347)	1.612*** (0.000)	3.586*** (0.000)
Unreported R&D	0.063 (0.402)	0.257*** (0.000)	-0.084 (0.288)	-1.153*** (0.000)
Debt/Assets	0.108 (0.548)	-0.399** (0.011)	-0.209 (0.235)	-0.737*** (0.000)
ROA	-0.583** (0.043)	0.231 (0.240)	0.337 (0.199)	0.652** (0.010)
Blockholder Shares	0.597*** (0.002)	0.360** (0.035)	-0.867*** (0.000)	0.517*** (0.009)
Observations	8,071	7,753	8,118	6,381
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes

This table replicates the estimates of Columns (1), (3), (5) and (6) of Table 4 using probit regressions rather than OLS. Standard errors are heteroskedasticity-adjusted. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A5. Successful exit: Probit regressions.

Dependent variable: Successful exit				
	(1)	(2)	(3)	(4)
Family Firm	0.149*** (0.000)	0.127*** (0.004)	0.121*** (0.005)	0.120** (0.014)
Ln (Sales)	0.027 (0.134)	0.010 (0.588)	0.006 (0.759)	0.019 (0.318)
Cash/Assets	0.210 (0.336)	0.310 (0.188)	0.334 (0.153)	0.250 (0.318)
Capex/Assets	-0.132 (0.767)	-0.685 (0.203)	-0.553 (0.297)	-0.686 (0.271)
R&D Intensity	-0.399 (0.215)	-0.209 (0.511)	-0.251 (0.426)	-0.031 (0.926)
Unreported R&D	-0.103 (0.167)	-0.055 (0.453)	-0.053 (0.459)	-0.073 (0.357)
Debt/Assets	-0.138 (0.404)	-0.081 (0.639)	-0.077 (0.654)	-0.077 (0.673)
ROA	-0.441* (0.056)	-0.533** (0.026)	-0.528** (0.025)	-0.594** (0.020)
Blockholder Shares	0.081 (0.674)	0.039 (0.842)	0.034 (0.862)	-0.002 (0.994)
Ln (Venture Age)		0.221*** (0.000)	0.210*** (0.000)	0.217*** (0.000)
Ln (N. Investors)		0.191*** (0.000)	0.116*** (0.001)	0.194*** (0.000)
Foreign		-0.180*** (0.000)	-0.160*** (0.001)	-0.176** (0.012)
Parent VC Backed		0.008 (0.884)	0.012 (0.833)	0.005 (0.934)
VC Experience		0.043** (0.021)	0.044** (0.018)	0.043** (0.036)
Rep. Most Reputable Partner			0.031*** (0.002)	
Reputation Lead Investor				0.009 (0.177)
Observations	8,497	8,328	8,328	6,502
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes

This table replicates the estimates of Table 8 using probit regressions rather than OLS. Standard errors are clustered at the parent firm level. P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1