Journal of Business Venturing 26 (2011) 153–171

Contents lists available at ScienceDirect

Journal of Business Venturing

Towards understanding who makes corporate venture capital investments and why

Sandip Basu [a,1], Corey Phelps [b,*], Suresh Kotha [c,2]

[a] California State University, East Bay, Hayward, CA 94542, United States
[b] HEC Paris, 78351 Jouy-en-Josas, France
[c] University of Washington, Box: 353200, Seattle, WA 98195, United States

ARTICLE INFO

Article history:
Received 11 August 2008
Rceived in revised form 3 July 2009
Accepted 10 July 2009
Available online 22 August 2009

Keywords:
Corporate venture capital
Corporate entrepreneurship
Interfirm collaboration

ABSTRACT

This study examines when established firms participate in corporate venture capital (CVC). We build on the resource-based view of interfirm collaboration and emphasize the strategic flexibility of CVC relationships. We use longitudinal data on 477 firms from 1990 to 2000 to test our hypotheses. We find that firms in industries with rapid technological change, high competitive intensity and weak appropriability engage in greater CVC activity. We also show that firms that possess strong technological and marketing resources and resources developed from diverse venturing experience engage in greater CVC activity. Finally, we find that these firm resources moderate the influence of the observed industry effects in paradoxical ways.

1. Executive summary

A fundamental question in the study of organizations concerns how they adapt to changing environments. Successful adaptation typically involves learning from exploratory initiatives (March, 1991), which allows firms to transform the ways in which they compete (Guth & Ginsberg, 1990). Firms explore and pursue such strategic renewal through external initiatives such as corporate venture capital (CVC) investing, strategic alliances, and acquisitions (Keil, 2002). While acquisitions and alliances have been extensively examined, research on CVC is limited and has only recently attracted renewed interest (Dushnitsky, 2006). In this study, we examine CVC as an important mode of exploration and renewal.

CVC refers to direct minority equity investments made by established companies in privately-held entrepreneurial ventures (Gompers & Lerner, 1998). CVC relationships are exploratory initiatives because they create boundary-spanning ties with new ventures, which often pursue new technologies (Dushnitsky & Lenox 2005a; Rosenkopf & Nerkar 2001). While corporate investors may pursue both strategic and financial goals in making CVC investments, strategic objectives generally dominate[3] (Dushnitsky, 2006). CVC investing can increase investor innovation (Wadhwa & Kotha, 2006), market value (Dushnitsky & Lenox, 2006), and financial returns (Allen & Hevert, 2007). Entrepreneurs also have incentives for seeking CVC. CVC funds have been a significant source of venture financing since their inception in the mid-1960s, accounting for 12% of all U.S. VC funding in recent years (PriceWaterhouseCoopers, 2006). CVC investments also provide strategic benefits to ventures, including access to complementary assets that would be costly and time-consuming to build (Gans & Stern, 2003) and an endorsement effect that sends a positive signal of the venture's quality to other stakeholders (Stuart, Hoang, & Hybels, 1999). By providing these benefits, CVC investors can enhance new venture performance (Gompers & Lerner, 1998).

* Corresponding author. Tel.: +33 1 39 67 74 15; fax: +33 1 39 67 70 84.
E-mail addresses: sandip.basu@csueastbay.edu (S. Basu), phelps@hec.fr (C. Phelps), skotha@u.washington.edu (S. Kotha).
[1] Tel.: +1 510 885 4911; fax: +1 510 885 2660.
[2] Tel.: +1 206 543 4466; fax: +1 206 543 3968.
[3] Dushnitsky (2006) summarized a variety of investor strategic objectives identified in the CVC literature. These include accessing novel technologies, recognizing and reacting to technological discontinuities, learning about potential acquisition targets, stimulating demand for core products by investing in complements, developing strategic relationships such as licenses or alliances, and exposure to entrepreneurial thinking and culture.

0883-9026/$ – see front matter
doi:10.1016/j.jbusvent.2009.07.001

Despite its potential importance to both established firms and new ventures, we know little about the antecedents of CVC relationships (Dushnitsky, 2006). In particular, our review of the extant literature suggests it is limited in at least three important respects. First, while investor strategic and financial objectives have been actively researched, only one study has examined conditions that empirically discriminate CVC investors from non-investors (i.e., Dushnitsky & Lenox, 2005a). Surprisingly, although research characterizes CVC as a means of adapting to changing environmental conditions (Keil, 2002; Maula, 2007), the influence of an incumbent's industry on its motivations to establish new CVC relationships with entrepreneurial firms is unexplored. Prior research provides little insight into how or why the competitive forces an incumbent faces affect its decision to pursue or avoid CVC investing[4]. Moreover, research on the antecedents of CVC investing primarily consists of case studies, descriptive surveys, or cross-sectional analyses, which do not support causal inferences since they do not control for unobserved heterogeneity or temporal precedence.

Second, CVC research has assumed investors are able to attract a sufficient supply of startups in which to invest. This assumption is particularly problematic because corporate investors are often viewed suspiciously by both ventures and independent venture capitalists (IVCs) due to the perception that a CVC investor's intent may be to expropriate a venture's technology (Dushnitsky & Shaver, 2009; Katila, Rosenberger, & Eisenhardt, 2008). Because corporate investors typically seek to co-invest with independent venture capitalists and rely on them for identifying quality investment opportunities (Dushnitsky, 2006), an aspiring corporate investor's opportunities to form new CVC relationships will depend on its ability to attract both IVCs and new ventures. CVC research has largely ignored the characteristics of potential investors or the industries in which they compete that increase or decrease their partnership opportunities. The broader interfirm collaboration literature shows that inducements are a necessary, but not sufficient, condition for partnership formation (Ahuja, 2000). Thus, an explanation of CVC partnership formation must consider not only what motivates incumbents to invest, but what affects their investment opportunities as well.

Finally, CVC research and the broader interfirm collaboration literature treat the sources of a firm's inducements to partner and the sources of its partnering opportunities as independent effects on partnership formation. The potential interactions between these factors have been largely unexamined. Specifically, little research has considered whether the effect of environmental inducements on a firm's formation of CVC or other interfirm ties depends on its resource endowments. Few studies have explored how a firm's resources moderate the influence of its environment on its formation of interfirm ties. This is surprising given a central tenet of strategic management is the “fit” or contingency between a firm's resources and its environment (Venkatraman & Camillus, 1984).

In sum, prior research has largely ignored whether and when an established firm's competitive environment and resources, and the interaction of the two, affect its inducements and opportunities to form minority equity relationships with startup firms. To address these limitations, we investigate the research question, *how do an incumbent's resources and competitive environment, alone and in combination, influence its motivations and opportunities to form new CVC partnerships?* In developing our theory, we build on the resource-based view of interfirm collaboration (Ahuja, 2000; Eisenhardt & Schoonhoven 1996) and emphasize the strategic flexibility inherent in CVC relationships. First, we examine industry conditions that influence incumbents' motivations to pursue CVC. We expect dynamic industries, characterized by rapid technological change, high competitive intensity and weak appropriability, will induce firms to pursue CVC. Second, we examine the resources of incumbents that influence their ability to attract, form and benefit from CVC investment opportunities. We expect incumbents with strong technological and marketing resources and diverse CVC experience will have more opportunities and incentives to pursue CVC. Finally, we derive competing hypotheses regarding the interactions between these external and internal drivers of CVC partnering activity.

We test our predictions using longitudinal data on 477 firms in 312 primary industries from the 1990 Fortune 500 list for the period 1990–2000. We find strong and robust support for our hypotheses. This study contributes to the CVC literature by addressing significant gaps in research on the antecedents of incumbents' CVC activity. Our results also have important implications for research into corporate entrepreneurship, interorganizational relationship formation, and VC syndication networks.

2. Theory and hypotheses

We adopt a resource-based view of interfirm relationships (Eisenhardt & Schoonhoven, 1996). According to this perspective, firms are bundles of tangible and intangible resources (Wernerfelt, 1984). Valuable, rare, inimitable and non-substitutable resources are sources of firm competitive advantage and economic performance (Barney, 1991). Resources are often firm-specific and heterogeneously distributed because their development consists of time-consuming, path-dependent processes (Dierickx & Cool, 1989). This makes market trading for such resources quite difficult (Chi, 1994). Firms create and appropriate value by assembling unique resources and combining them in unique ways. Interfirm relationships allow firms to overcome problems in trading firm resources by enabling partners to access and develop novel resources and efficiently exploit and retain existing resources (Das & Teng, 2000).

A primary advantage of interfirm ties is the strategic flexibility they offer. Relative to internal R&D and acquisition, interfirm ties typically involve smaller irreversible investments of organizational resources and are thus easier and cheaper to restructure or exit in the face of changing environmental conditions (Folta, 1998). Interfirm ties also provide partners with privileged information about the quality of each other's resources. This information reduces partner uncertainty, giving them an advantaged position to scale up or down the partnership activities in response to environmental changes (Kogut, 1991). Finally, interfirm ties enable

[4] While Dushnitsky and Lenox (2005a) found that aspects of a new venture's industry influenced the volume of CVC investment, they did not investigate the influence of an incumbent's industry on its CVC activity.