Corporate Venture Capital in the 21st Century: An Integral Part of Firms' Innovation Toolkit

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List of Topics

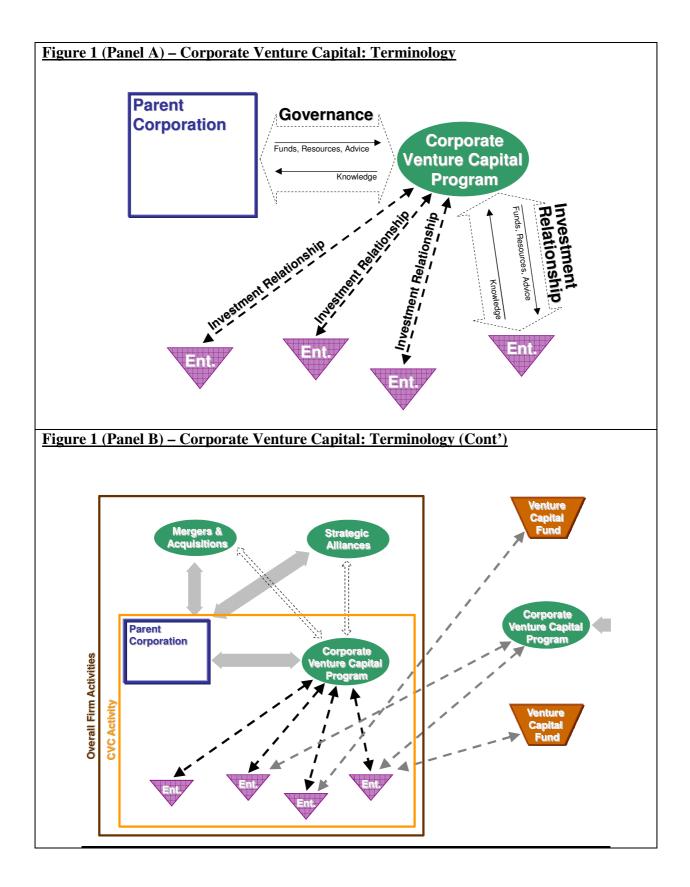
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Introduction

In October 2009, Google Ventures, a part of the search giant Google, led a \$15M investment round in Adimab, a biotech venture that developed an integrated yeast-based human antibody discovery platform. This observation raises a number of questions. What is the magnitude of corporations' venture capital investments? Why do industry incumbents pursue equity investments in small entrepreneurial ventures? And when will entrepreneurs seek corporate backing?

The chapter is organized as follow. It starts with a detailed definition of the phenomenon. An historical background of corporate venture capital is presented, followed by an extensive review of investment patterns. We then present scholarly findings beginning with firms' objectives, through the governance of their CVC programs and the relationships with the portfolio companies. We proceed to review the interactions between CVC investment and other firm activities (e.g., alliances and M&A) as well as other entities (e.g., independent venture capital funds). The performance of the parent corporations, entrepreneurial ventures, and CVC programs is summarized next. The chapter concludes with directions for future research.

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| | CVC | Alliances |
|--------------------|---|---|
| Definition | • A minority equity investment by an established firm in an entrepreneurial venture that seeks capital for growing its operations | • A voluntary arrangement between independent firms that share and exchange resources in the codevelopment or provision of products, services, or technologies |
| Main Objectives | • Sponsoring an emerging or complementary technology | • Cost sharing, joint development, resource access, and market entry, among others |
| Scope | • The agreement covers the whole operations of the funded venture and none of the established firm's operations | • The agreement covers joint operations whose specific scope is limited relative to the partners' independent operations |
| Activities | • The funded venture performs value chain activities on a stand-alone basis | • Value chain activities are performed interactively by both partners |
| Funding | • Only the established firm makes the financial investment | • Both partners may make financial investments |
| Ownership | • The established firm buys a minority equity stake in the funded venture and may exert influence on its corporate decisions | • Most alliances do not involve equity, with joint ventures drawing major equity stakes from the partners that directly influence the operations of the new venture |
| Timing | • The relationship is established during specific investment rounds, often early in the life cycle of the privately held funded venture | • The relationship can be initiated throughout the life cycles of both partners |
| Setting | • The established firm is typically joined by independent VC funds that also invest in the funded venture as part of the syndication | • Most alliances are dyadic and do not involve independent VC funds |
| Role asymmetry | • A clear distinction between the investor and the recipient of funds | • Both partners invest resources and expect monetary returns on their investments |
| Governance | • The established firm manages CVC via a dedicated VC arm or a corporate business development unit | • Alliances are managed by a dedicated alliance function or by business units of the respective partners |

TABLE 1 - A Comparison of Corporate Venture Capital and Strategic Alliances

Adopted from Dushnitsky and Lavie (2010).

| Topics | Studies |
|---|--|
| Investor Objectives | Siegel, Siegel and MacMillan (1988); Winters and Murfin (1988); Sykes (1990); McNally (1997); Kann (2000); Ernst & Young (2002); Dushnitsky and Lenox (2003); Chesbrough and Tucci (2004); Dushnitsky and Lenox (2005b); Gaba and Meyer (2006); Ernst & Young (2009); Basu, Phelps and Kotha (2010); Sahaym, Steensma and Barden (2010). |
| Program Governance | Rind (1981); Block and Ornati (1987); Siegel et al. (1988); Winters and Murfin (1988); Sykes (1990); Sykes (1992); McNally (1997); Kann (2000); Birkinshaw, Murray and van Basten-Batenburg (2002); Keil, Autio and George (2008); Ernst & Young (2009); Dushnitsky and Shapira (2010). |
| Investment Relationships: | |
| pre-investment | Siegel et al. (1988); Sykes (1990); McNally (1997); Birkinshaw et al. (2002); Ernst & Young (2002); Dushnitsky (2004); Katila, Rosenberger, Eisenhardt (2008); Dushnitsky and Shaver (2009). |
| post-investment | Siegel et al. (1988); Sykes (1990); McNally (1997); Maula (2001); Birkinshaw et al. (2002); Bottazzi, DaRin and Hellmann (2004); Cumming (2006); Cumming and Johan (2008); Keil et al (2008); Maula, Autio and Murray (2009); Yang, Narayanan, Zahra (2009); Bengtsson and Wang (2010); Masulis and Nahata (2010). |
| Interdependencies with Other Firm Activities | Siegel et al (1988); Winters & Murfin (1988); Sykes (1990); McNally (1997); Colombo, Grilli, and Piva (2006); Keil, Maula, Schildt and Zahra (2008); Benson and Ziedonis (2009); Ernst & Young (2009); Phelps and Wadhwa (2009); Van de Vrande, Vanhaverbeke and Duysters (2009); Benson and Ziedonis (2010); Dushnitsky and Lavie (2010). |
| Interdependencies with Other Entities | Winters and Murfin (1988); Sykes (1990); Hochberg, Ljungqvist, and Lu (2007); Dushnitsky and Shaver (2009); Ernst & Young (2009); Hill, Maula, Birkinshaw and Murray (2009); Keil, Maula and Wilson (2010). |
| Performance Implications: | |
| ventures | Block and MacMillan (1993); McNally (1997); Gompers and Lerner (1998); Maula and Murray (2001); Hochberg et al. (2007); Maula et al. (2009); Ivanov and Xie (2010). |
| CVC programs | Siegel et al. (1988); Sykes (1990); McNally (1997); Gompers and Lerner (1998); Hill et al. (2009); Dushnitsky and Shapira (2010). |
| parent corporations | Chesbrough and Tucci (2004); Schildt, Maula and Keil (2004); Dushnitsky and Lenox (2005a); Dushnitsky and Lenox (2006); Wadhwa and Kotha (2006); Allen and Hevert (2007). |

Table 2 – Published work on Corporate Venture Capital, by Topic

See Figure 1 (Panels A and B) for main CVC topics.