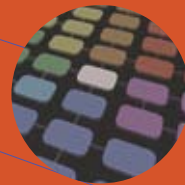


Corporate Venture Capital (CVC) Seeking Innovation and Strategic Growth

Recent patterns in CVC mission, structure,
and investment

By
Ian MacMillan
Edward Roberts
Val Livada
Andrew Wang



A person wearing a white protective suit, hood, and face mask is working in a laboratory. They are holding a large bundle of white cables or wires. The background shows laboratory equipment and a yellow container.

About This Report

This report on corporate venture capital is the product of a collaboration of several institutions, including university, industry, and government organizations.

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U.S. Department of Commerce
Carlos M. Gutierrez, Secretary

National Institute of Standards and Technology
James M. Turner, Deputy Director

Technology Innovation Program
Marc G. Stanley, Director

Acknowledgments

This study project arose from a common interest of industry practitioners, academic scholars, and government policymakers in the role of corporate venture capital (CVC) in technology innovation. The research included a review of academic literature and industry data, interviews with principals at corporate venture capital organizations, and collecting and analyzing survey data on corporate venture capital.

The main study team collaborated with the National Venture Capital Association (NVCA) to collect survey data from CVC organizations. The authors acknowledge the key roles played by Janice Mawson, Vice President of Membership, NVCA, in conducting outreach to CVC organizations and supporting the survey; Jeanne Metzger, Director of Marketing, NVCA, in design and implementation of the survey; and John Taylor, Vice President of Research, NVCA, in providing industry data on CVCs.

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Abstract

This report examines corporate venture capital (CVC) as a model of innovation.

CVC programs in established corporations invest in and partner with entrepreneurial companies. By doing so, established companies are able to identify and source new emerging technologies from entrepreneurial companies.

CVCs typically make a financial investment and receive a minority equity stake in an entrepreneurial company. CVCs also facilitate investment of in-kind resources into portfolio companies. In return, the parent corporation gains a window on new technologies and strategically complementary companies that could become strategic partners. CVCs generally invest with a combination of financial and strategic objectives. Strategic objectives include leveraging external sources of innovation, bringing new ideas and technologies into the company, and taking “real options” on technologies and business models (by investing in a wider array of technologies or business directions than the company can pursue itself).

Corporate venture capital may be viewed in the broader context of corporate venturing, including both internal and external venturing. Internal venturing programs “go inside” the firm and create entrepreneurial ventures from within the corporation. External venturing programs “go outside” the firm and tap external sources of innovation, whether through research collaborations with universities, strategic alliances with other firms, or partnerships with entrepreneurial companies. Often, the firm’s internal and external venturing efforts are closely related and interact with each other.

CVC programs in established corporations face both inward and outward. They face outward to build relationships with the entrepreneurial venture community, learn about new technology and business directions, and make investments that create new strategic opportunities for the corporation. They face inward to interact with the firm’s R&D and business operating units, in order to identify operating units’ interests and priorities. CVCs support the corporation’s existing businesses by introducing new technologies and partnerships to its operating groups. At the same time, CVCs help identify technologies and opportunities that fall between or beyond the corporation’s existing businesses.

This report uses industry data and original survey data to describe trends and characteristics of CVC organizations and investments. These data provide insight on a range of issues relating to CVC operations and investments.



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CVCs have become a significant part of overall venture capital activity. In the year 2000, at the peak of the most recent venture capital cycle, more than \$100 billion in venture capital was invested. About 16 percent of that investment was from CVCs. After 2002, total venture capital investment stabilized at around \$20 to \$25 billion per year, and CVC investment stabilized at around 6 to 8 percent of total venture capital investment.

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While an independent venture capital fund’s sole objective is making financial returns, a CVC typically has a combination of financial and strategic objectives. Generally, a CVC has a strategic mission to help “grow the business” of the parent company. It does this by helping the company identify new ideas or technologies, develop new products or processes, and enter new markets or enhance existing businesses.

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CVCs and independent venture capital have developed working relationships that are mutually beneficial. CVCs communicate with independent venture capital to share information about areas of investment interest, and about companies and technologies seeking venture funding. CVCs benefit from access to the investment “deal flow” of independent venture capital, while independent venture capital benefits from strategic insight and technology expertise provided by CVCs. CVCs and independent venture capital also often co-invest in companies through syndicated investments.

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CVCs interact with the company’s R&D and business units to understand the operating units’ technology directions and business strategies. They then make investments that support or complement those efforts within the company. In screening investment proposals, CVCs draw on technical and business expertise from the operating units. An R&D or business unit may “sponsor” a CVC investment, indicating its support for the investment. CVC portfolio companies benefit from in-kind support and relationships with the parent company’s operating units.



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A key issue for personnel management in CVCs is whether the organizational culture will be more similar to the parent company or to independent venture capital firms. For example, a CVC structured as an independent subsidiary company—with a dedicated investment fund and personnel hired from outside the parent company—will have an organizational culture that is more similar to an independent venture capital firm. Personnel compensation, especially the extent of incentive compensation, is a critical aspect of CVC personnel management.

7. Investments and Strategic Value 26

CVC investments in venture-backed companies help the parent corporation learn about and access new technologies coming out of new firms. CVC investment in a company facilitates knowledge transfer and interaction between the company and the CVC parent corporation. Collaborations between a CVC portfolio company and operating units of the parent corporation may be established at the time of CVC investment or may develop over time as the portfolio company and parent company have informal contact and ongoing exchanges.

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CVCs may be embedded in broader corporate venturing efforts and may interact with internal venturing programs. Corporate venturing includes both internal venturing programs and external corporate venture capital. Internal venturing programs give entrepreneurial employees resources and opportunities to create new ventures (e.g., seed funding for R&D or incubation resources to create new businesses). Successful internal ventures may eventually be incorporated into an existing business of the corporation, set up as a new business unit, or spun out as an independent company.

9. Outcomes and Metrics 34

There is no single “one-size-fits-all” approach to CVC that applies to all corporations. CVC best practices and performance assessment will depend on the CVC’s role in the corporation, its mission, and the corporate environment. Assessing the CVC’s strategic value requires judgments on ultimate outcomes, such as the significance of insights the CVC provides to top management and operating units of the corporation; the importance of referrals, introductions, and external contacts and relationships that the CVC facilitates; and the strategic impact on the corporation of collaborations and partnerships that develop from CVC investments.



Introduction

Established corporations seeking growth today face an increasing need to innovate.

While some corporations try to grow through external acquisitions, many recognize the ultimate importance of generating “organic growth” through innovation. Corporations are searching for new approaches to innovation.

Corporations use a variety of approaches to innovation, including internal R&D, incubation of new businesses, and strategic investments and alliances. Many are emphasizing a strategy of “open innovation” to bring external sources of innovation into the firm. Given the success of venture capital in creating new entrepreneurial companies and technologies, corporations have also looked to that model as yet another approach to innovation.

Corporate venture capital (CVC) may be defined as programs in established firms that make investments in entrepreneurial companies. Typically, a CVC makes a financial investment—just as independent venture capital does—and receives a minority equity stake in the entrepreneurial company. A CVC may also facilitate investment of in-kind and other resources into the portfolio company. In return, the corporation gains a window on both new technologies and strategically complementary companies that may become strategic partners.

While the sole objective of independent venture capital is financial return, CVCs generally have a strategic objective as well. That objective may include leveraging external sources of innovation, bringing new ideas and technologies into the company, or taking “real options” on technologies and business models (by investing in a wider array of technologies or business directions than the company can pursue itself).

Corporate venture capital may be viewed in the broader context of corporate venturing, including both internal and external venturing. Internal venturing programs “go inside” the firm and create entrepreneurial ventures from within the corporation. Entrepreneurial teams are granted independence and resources to innovate and form new business ventures. External venturing programs “go outside” the firm and tap external sources of innovation, whether through research collaborations with universities, strategic alliances with other firms, or partnerships with entrepreneurial companies. Often the firm’s internal and external venturing efforts are closely related and interact with each other.

CVC programs in established corporations aim to build relationships with the entrepreneurial venture community. They learn about technology and business directions of strategic interest, and then make investments that create new strategic opportunities for the corporation. By interacting with the firm’s R&D and business operating units, CVC programs identify the operating units’ interests and priorities. CVCs support the corporation’s existing businesses by introducing new technologies and partnerships to its operating groups. At the same time, CVCs help identify technologies and opportunities that fall between or beyond the corporation’s existing businesses, which could then form the basis for new business directions.

The following chapters use industry data and original survey data to describe trends and characteristics of CVC organizations and investments. In 2007, the National Venture Capital Association (NVCA)—in partnership with researchers at the Wharton School and the MIT Sloan School—conducted a survey of 48 CVC organizations. These resulting data provide insight on a range of issues relating to CVC operations and investments.

1. Investment Trends (1995–2006)

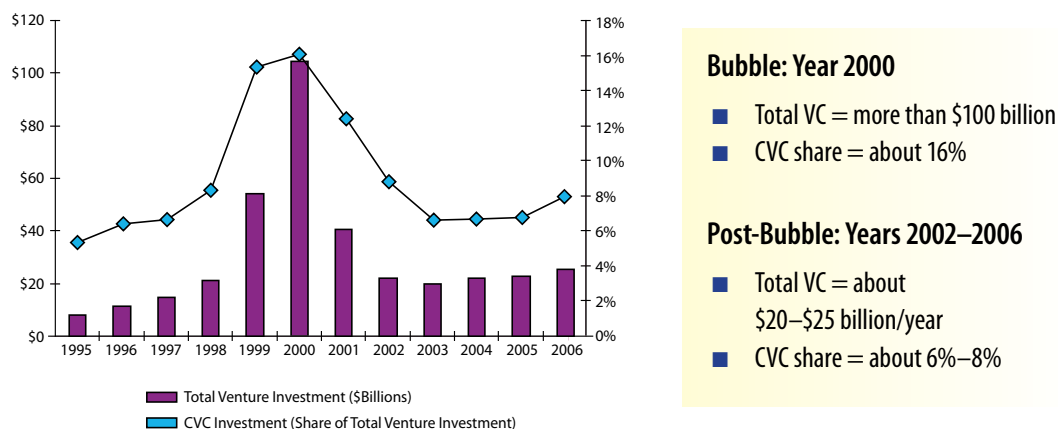
CVCs have become a significant part of overall venture capital activity. In the year 2000, at the peak of the most recent venture capital cycle, more than \$100 billion in venture capital was invested. About 16 percent of that investment was from CVCs. After 2002, total venture capital investment stabilized at around \$20 to \$25 billion per year, and CVC investment stabilized at around 6 to 8 percent of total venture capital investment.

Over the past several decades, waves of CVC activity have largely paralleled the cycles of overall venture capital investment activity. In recent years, CVCs have become a significant part of overall venture capital activity.

Figure 1-1 depicts overall venture capital investment and CVC investment from 1995 to 2006. In this period, the “internet bubble” of 1999–2001 stands out as the latest and most extreme example of boom-and-bust cycles that have characterized venture capital investing over the past several decades.

In the year 2000, the CVC share of total venture investment rose and peaked just as total investment did. This suggests that many CVCs acted as “latecomers,” entering the market or increasing investment just as the “bubble” was about to burst. After 2002, total venture capital investment stabilized and resumed the longer-term trend line from 1995 to 1998. At the same time, CVC investment also stabilized as a percentage of total venture capital investment.

Figure 1-1. How Much CVC and Venture Capital Investment Is There?



Source: National Venture Capital Association

2 Corporate Venture Capital

Investment Distribution by Company Stage of Development

Generally, the sole objective of independent venture capital is to generate financial returns to investors. By contrast, the investment objective for corporate venture capital—affiliated with a parent company that is typically a nonfinancial operating company—is a combination of financial returns and strategic benefits to the parent company.

The strategic benefit to the parent company may be to gain a window on new technology, take “real options” on new technologies or markets, or form a strategic alliance with a company with complementary technology or capabilities. Depending on the strategic objectives, CVCs may make investments in earlier-stage technologies and companies or later-stage technologies and companies.

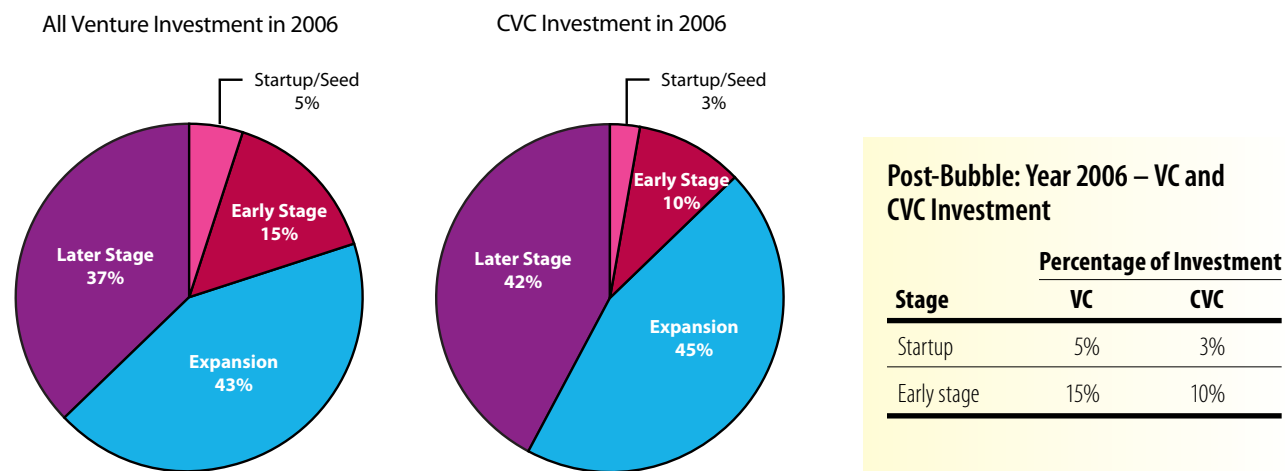
Table 1-1 lists the definitions used by the National Venture Capital Association.

Table 1-1. Stages of Company Development

Stage	Definition
Seed/Startup Stage	The company has a concept or product under development, but is probably not fully operational. Usually, the company has been in existence for less than 18 months.
Early Stage	The company's product or service is in testing or pilot production. In some cases, the product may be commercially available. The company may or may not be generating revenues. Usually, the company has been in business for less than three years.
Expansion Stage	The company's product or service is in production and commercially available. The company demonstrates significant revenue growth, but may or may not be showing a profit. Usually, the company has been in business for more than three years.
Later Stage	The company's product or service is widely available. The company is generating ongoing revenue and is probably cash-flow positive. It is more likely to be profitable, but not necessarily.

Figure 1-2 shows the distribution of venture capital and CVC investment in 2006 by the stage of development of the company receiving the investment. In 2006, as a share of investment, CVCs invested less in startup and early-stage companies, relative to all venture capital.

Figure 1-2. How Does CVC Investment Compare with Venture Capital, by Stage of Development?



Source: National Venture Capital Association

The share of venture capital and CVC investment in startup and early-stage companies has fallen in recent years. From 1998 (the last “normal” year before the 1999–2001 bubble) to 2006, the share of venture capital investment in startup companies fell from 8 percent to 5 percent, and the share of investment in early-stage companies fell from 26 percent to 15 percent. For CVCs, the share of investment in startup companies fell from 7 percent to 3 percent, and the share of investment in early-stage companies fell from 23 percent to 10 percent.

Post-Bubble: Year 2006 – VC and CVC Investment

Stage	Percentage of Investment	
	VC	CVC
Startup	5%	3%
Early stage	15%	10%

Pre-Bubble: Year 1998 – VC and CVC Investment

Stage	Percentage of Investment	
	VC	CVC
Startup	8%	7%
Early stage	26%	23%

Investment Distribution by Industry Sector

Table 1-2 presents the industry sector distribution of venture capital and CVC investments in 2006.

Table 1-2. Which Industry Sectors Receive Venture Capital and CVC Investment?

Industry Sector	All Venture Investment 2006	CVC Investment 2006
Software	19.5%	13.4%
Biotechnology	17.6%	22.0%
Medical Devices and Equipment	10.4%	8.6%
Telecommunications	10.2%	12.0%
Semiconductors	7.8%	10.5%
Industrial/Energy	6.9%	5.3%
Media and Entertainment	6.4%	10.1%
Networking and Equipment	4.2%	3.8%
IT Services	4.0%	3.5%
Electronics/Instrumentation	2.7%	4.8%
Business Products and Services	2.6%	2.1%
Consumer Products and Services	2.0%	0.8%
Financial Services	1.7%	1.2%
Computers and Peripherals	1.6%	1.5%
Healthcare Services	1.5%	0.3%
Retailing/Distribution	0.8%	0.2%
Other	0.1%	0.0%
Total	100%	100%

Top Sectors for VC Investment

- Software
- Biotechnology
- Medical devices
- Telecommunications

Top Sectors for CVC Investment

- Biotechnology
- Software
- Telecommunications
- Semiconductors
- Media/entertainment

Source: National Venture Capital Association

In contrast, the top sectors for venture capital investment in 1998 were software and telecommunications. For CVC investment that year, the top sectors were software, telecommunications, networking, and media/entertainment. Between 1998 and 2006, the most significant changes in industry sector of investment, for both venture capital and CVC, were biotechnology and medical devices receiving increasing shares.



2. Strategic and Financial Objectives

While an independent venture capital fund's sole objective is making financial returns, a CVC typically has a combination of financial and strategic objectives. Generally, a CVC has a strategic mission to help "grow the business" of the parent company. It does this by helping the company identify new ideas or technologies, develop new products or processes, and enter new markets or enhance existing businesses.

Corporations seeking to innovate are emphasizing "open innovation" models that bring external ideas and technologies into the firm. As part of an open innovation approach, CVC programs interact with the venture capital community, and make investments in venture funds or companies. Through these interactions and investments, they learn about and gain access to technologies and ideas that reside in small entrepreneurial firms.

Many CVCs make investments as limited partner investors into independent venture capital funds. By doing so, a CVC develops experience in venture investing, builds relationships in the venture capital community, and gains a view on the "deal flow" of technologies and companies seeking venture capital funding. Most CVCs make direct investments and take minority equity stake in companies, just like independent venture capital funds.

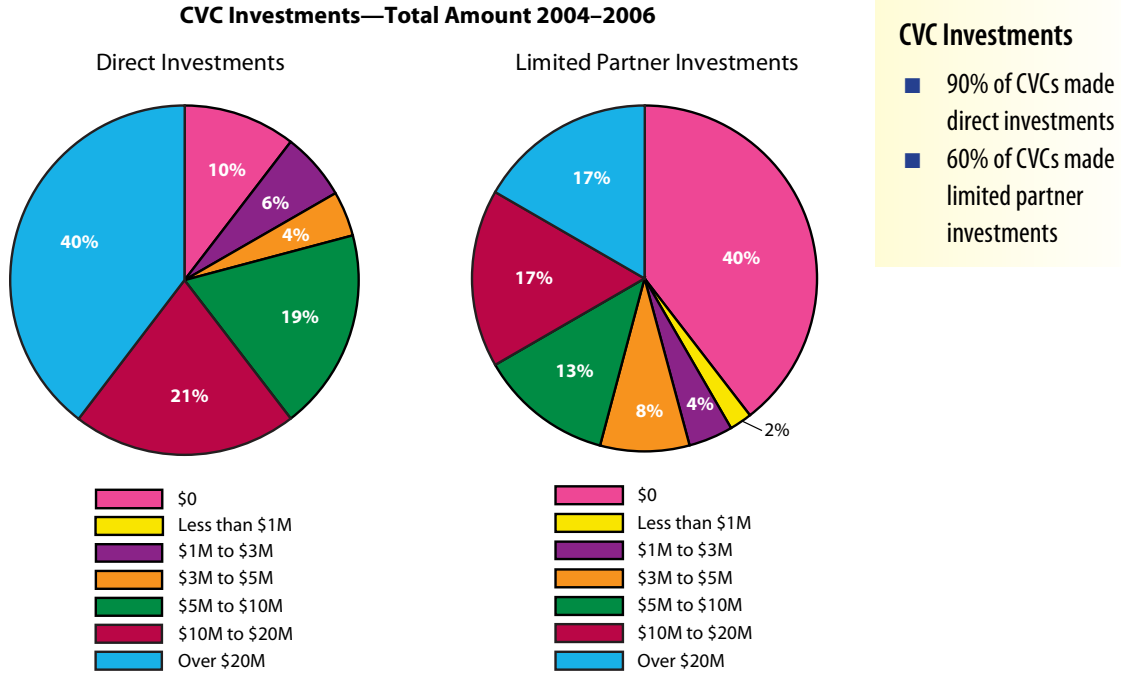
Some CVCs may make investments exclusively for strategic benefits, without consideration of financial returns. For example, a CVC focused on learning about new technologies and bringing new ideas into the parent company may choose to invest without regard to financial returns. On the other hand, some CVCs may invest only for financial returns. Usually, a nonfinancial corporation would not make financial investments solely for financial return—in effect, entering into a financial investment business. But a corporation with a strong industry position may find that its unique knowledge of relevant markets and technology enables it to identify attractive opportunities to invest in smaller companies.



Most CVCs balance strategic objectives with the financial objective of making a financial return. For any individual investment, applying financial criteria in the decision imposes a financial discipline that helps ensure the investment’s quality. Some would argue that a “strategic investment” in a company that fails financially is not likely very strategic. Looking at the CVC as a whole, experienced CVC practitioners recognize that ultimately the CVC has to “pay its own way.” To keep the support of corporate management, the CVC not only has to deliver strategic benefits, but also cover costs and earn a reasonable return over time. In other words, a CVC that persistently loses money will not survive.

Figure 2-1 presents survey results on direct investments and limited partner investments by CVCs in 2004–2006. The results indicate that many CVCs make limited partner investments in venture capital funds, even as they make direct investments in companies.

Figure 2-1: What Kind of Investments Do CVCs Make?

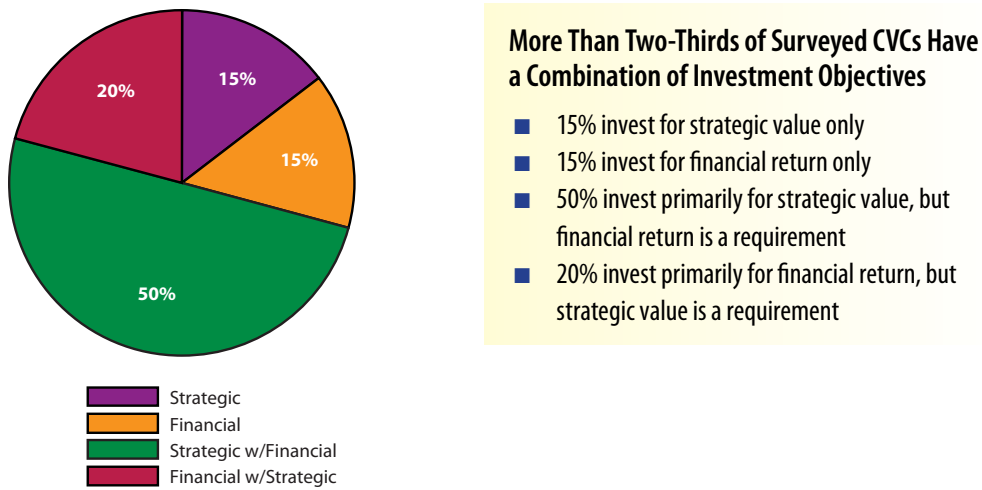


Source: Survey of Corporate Venture Capital (2007)



Figure 2-2 illustrates survey results about the mix of strategic and financial objectives of CVC organizations. The most common CVC investment approach is to screen investment proposals for strategic value to the parent company and then, conditional on the proposal having strategic value, apply standard financial investment analysis similar to any independent venture capital fund that pursues financial returns.

Figure 2-2: Do CVCs Invest for Strategic or Financial Objectives?

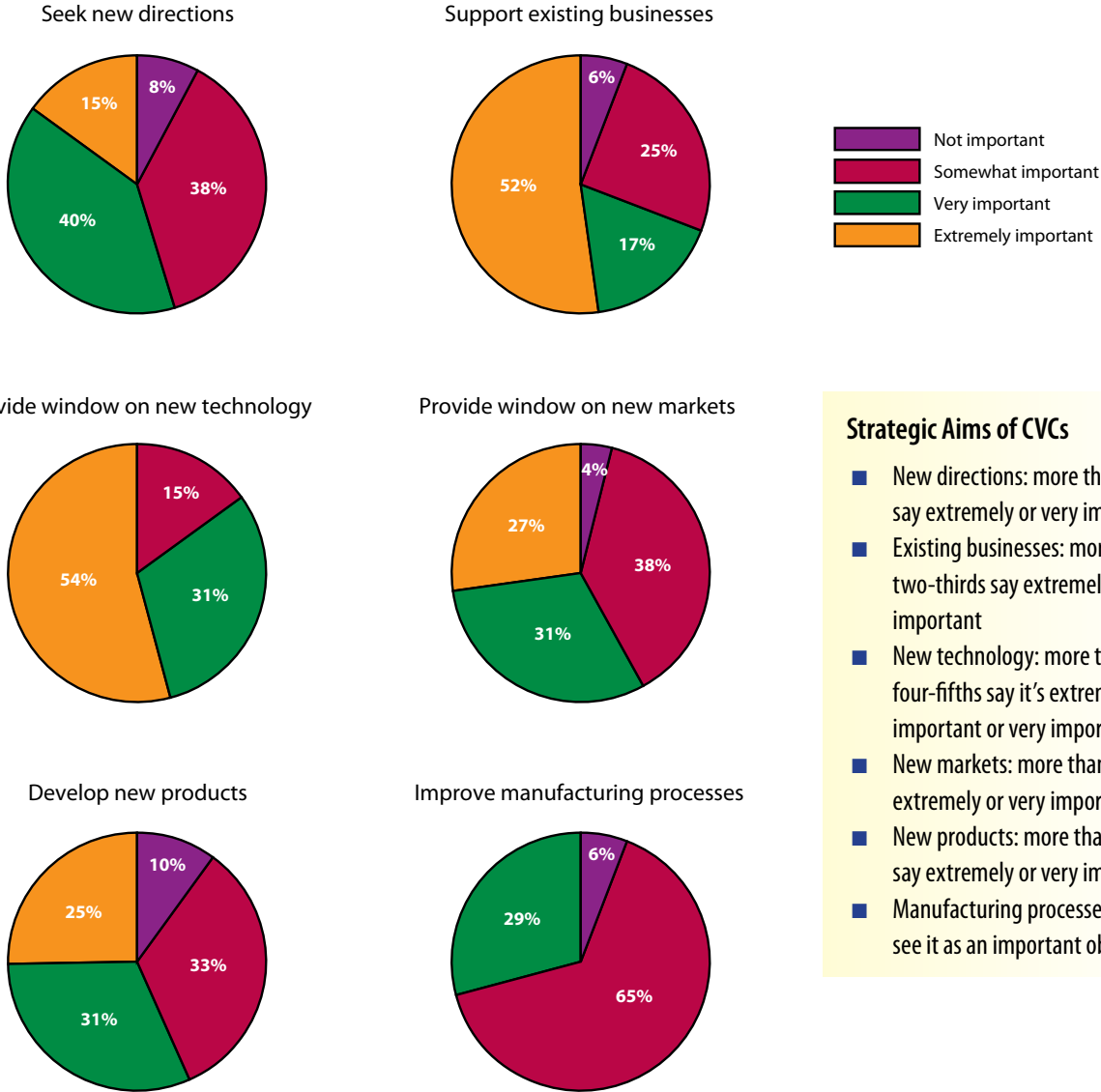


Source: Survey of Corporate Venture Capital (2007)



Figure 2-3 presents survey evidence on the strategic aims of CVCs. Identifying new technologies that can advance the businesses of the parent company appears to be the primary strategic objective for most CVCs.

Figure 2-3: What Strategic Aims Are Important to CVCs?



Strategic Aims of CVCs

- New directions: more than half say extremely or very important
- Existing businesses: more than two-thirds say extremely or very important
- New technology: more than four-fifths say it's extremely important or very important
- New markets: more than half say extremely or very important
- New products: more than half say extremely or very important
- Manufacturing processes: few see it as an important objective

Source: Survey of Corporate Venture Capital (2007)



3. Structure and Organization

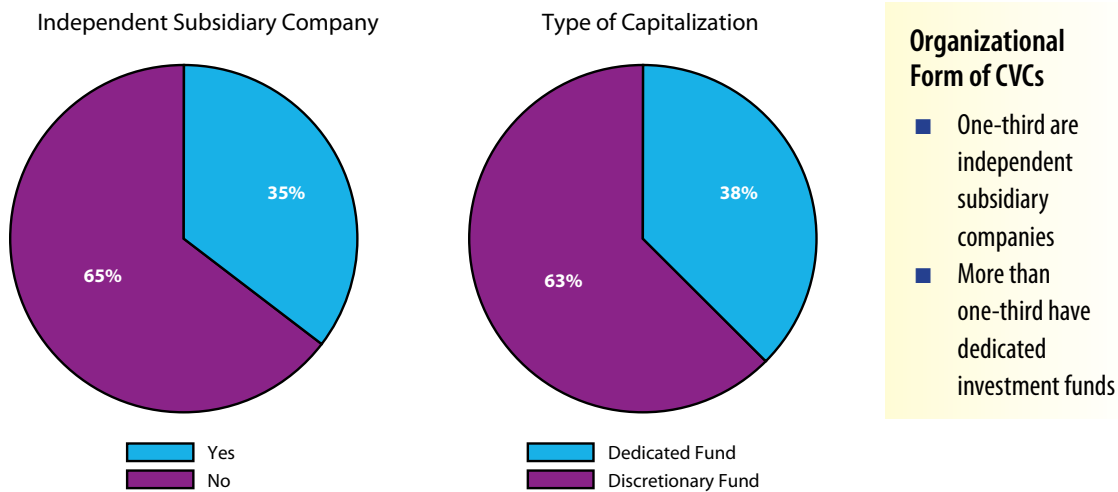
CVC programs are structured in various forms. Some CVCs are organized as independent subsidiary companies, while others operate as a group within the parent company organization. Some CVCs have a “dedicated” investment fund, where the corporation commits a given amount of capital for investment. Other CVC programs are “discretionary,” in that investment capital is allocated as investment opportunities arise. Most CVC programs have a corporate-wide mission, receive corporate funding, and report to the corporate level.

Corporations have established CVC programs with a variety of structural and organizational forms. Some are independent subsidiaries, and some are groups within the parent company. Some have a “dedicated” investment fund structure, similar to independent venture capital, with a fixed amount of committed capital available for investment. Others are “evergreen” or “discretionary” in that investment capital is allocated as investments opportunities arise; there is no fixed fund structure similar to independent venture capital funds.

The source of capital for a CVC may be the corporate level of the parent company, business units within the parent company, or even possibly external investment partners. Most commonly, CVCs are funded by corporate headquarters. Often, business units may also contribute funding, especially when the CVC mission is closely aligned with a specific business unit. In some cases, a CVC may have limited partner investment relationships with one or more external independent venture capital funds.

Figure 3-1 depicts survey results about the organization and capital structure of CVCs in the sample.

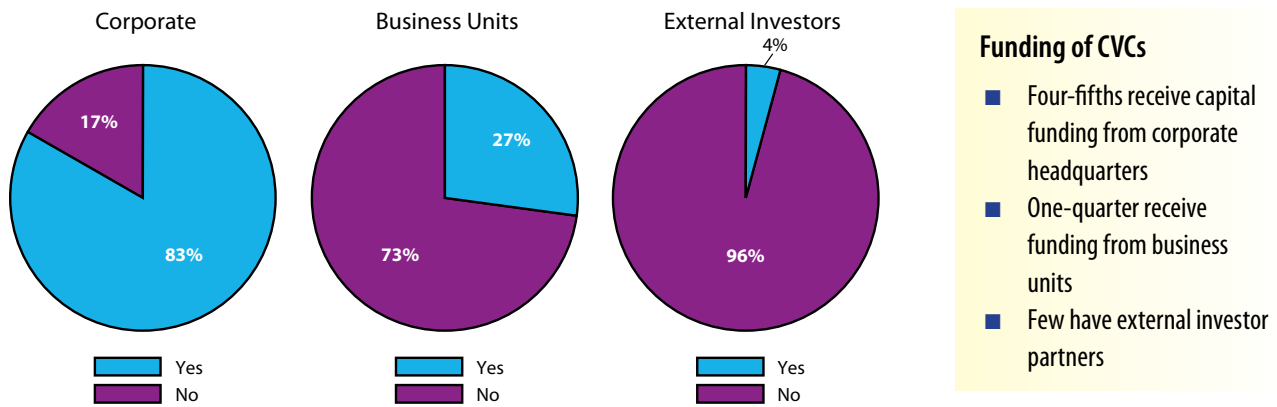
Figure 3-1: What Organizational Forms Do CVCs Take?



Source: Survey of Corporate Venture Capital (2007)

Figure 3-2 shows the sources of capital for CVCs in the survey sample.

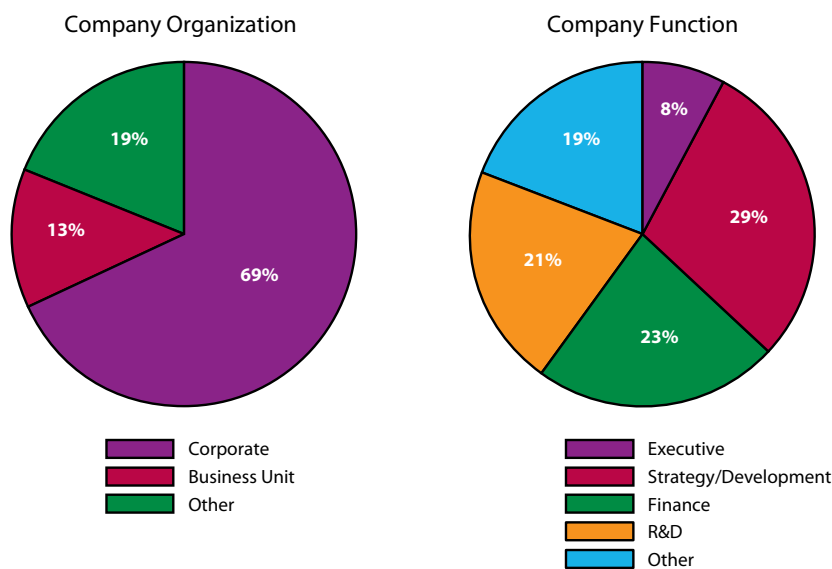
Figure 3-2: What Are the Sources of Capital for CVCs?



Source: Survey of Corporate Venture Capital (2007)

Figure 3-3 shows different reporting relationships for CVCs in the survey. Most CVC programs have a corporate-wide mission and receive corporate funding, and report to the corporate level. CVCs in Japanese companies are most often associated with the R&D function. CVCs in pharmaceutical companies also often have strong ties to R&D.

Figure 3-3: Who Do CVCs Report To?



Source: Survey of Corporate Venture Capital (2007)

CVC Reporting Relationship

By Organization

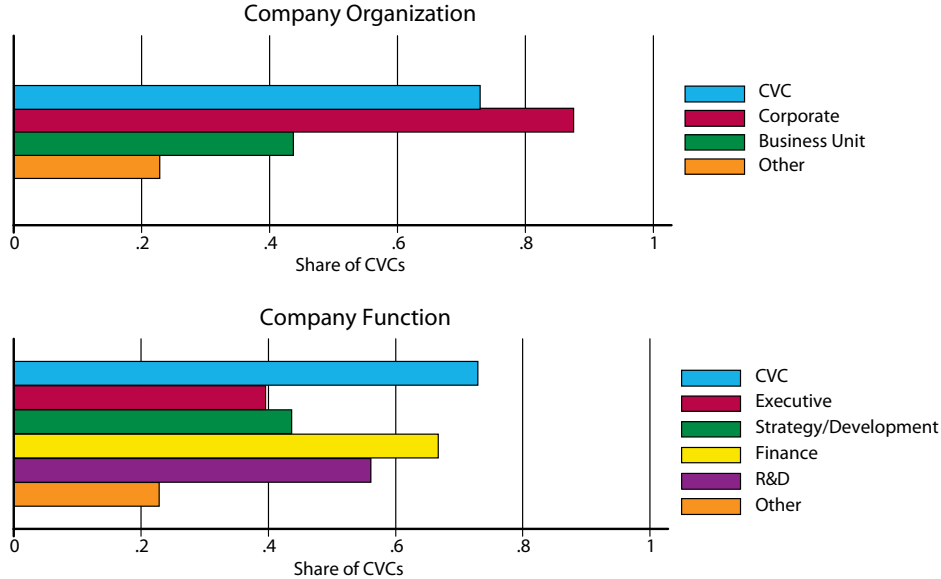
- Two-thirds of CVCs report to the corporate level, either top management (e.g., CEO, CFO, CTO) or a corporate office for Strategy/Development, Finance, or R&D
- About one-fifth report to other types of management structure (e.g., joint reporting arrangement, or a corporate committee)

By Function

- More than one-fifth of CVCs report to Strategy/Development at either the corporate or business unit level
- One-fifth report to Finance
- One-fifth report to R&D

Figure 3-4 shows the composition of investment boards for CVCs in the survey sample. The CVC investment board makes decisions on investments, and its composition reflects the balance of stakeholder and functional interests that enter into the decision making.

Figure 3-4: Who Is Represented on the Investment Board of CVCs?



Source: Survey of Corporate Venture Capital (2007)

CVC Investment Board

By Organization

- Corporate-level offices and the CVC organization itself are most often represented on investment boards
- Business units are represented on the investment board in more than two-fifths of the CVCs

By Function

- Finance is represented on two-thirds of CVC investment boards
- R&D is represented on more than half of CVC investment boards



4. Investment Sourcing and Structure

CVCs and independent venture capital have developed working relationships that are mutually beneficial. CVCs communicate with independent venture capital to share information about areas of investment interest, and about companies and technologies seeking venture funding. CVCs benefit from access to the investment “deal flow” of independent venture capital, while independent venture capital benefits from strategic insight and technology expertise provided by CVCs. CVCs and independent venture capital also often co-invest in companies through syndicated investments.

Most CVCs make direct investments in companies, just as independent venture capital funds do. CVCs and independent venture capital have developed working relationships that are mutually beneficial, sharing information on investment opportunities and often co-investing together in deals.

Figure 4-1 shows results on the sourcing of CVC investment deals. The most important source of investment deals for the surveyed CVCs is independent venture capital, highlighting the relationship of CVCs with independent venture capital. Other significant sources of CVC investment deals include referrals from business units within the CVC’s parent company and direct solicitation from companies seeking investment.

In the past, independent venture capital has often been skeptical of CVCs for perceived concerns that include: CVCs lack experience and sophistication in making investments; they are too slow in making investment decisions; they are unreliable and inconsistent in providing follow-on support to portfolio companies; and they have strategic interests that may conflict with a portfolio company’s interests. In addressing those concerns, many CVCs now emphasize that they operate and act just as any independent venture capital fund, in that they invest for financial return and try to maximize the financial value of their investment. In effect, for a CVC, once an investment deal has passed a strategic “screen” or criterion for investment, it is treated just as a financial investment. As a financial investor and shareholder, a CVC is no different from an independent venture capital investor. Its objective is to maximize the portfolio company’s value and act in the portfolio company’s financial interest. CVCs are therefore careful not to encumber a portfolio company with restrictive agreements that benefit the parent company’s strategic interest, but may turn out to be disadvantageous to the portfolio company.

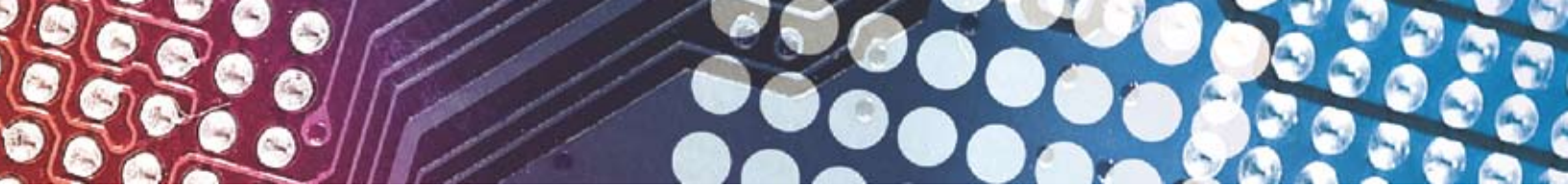
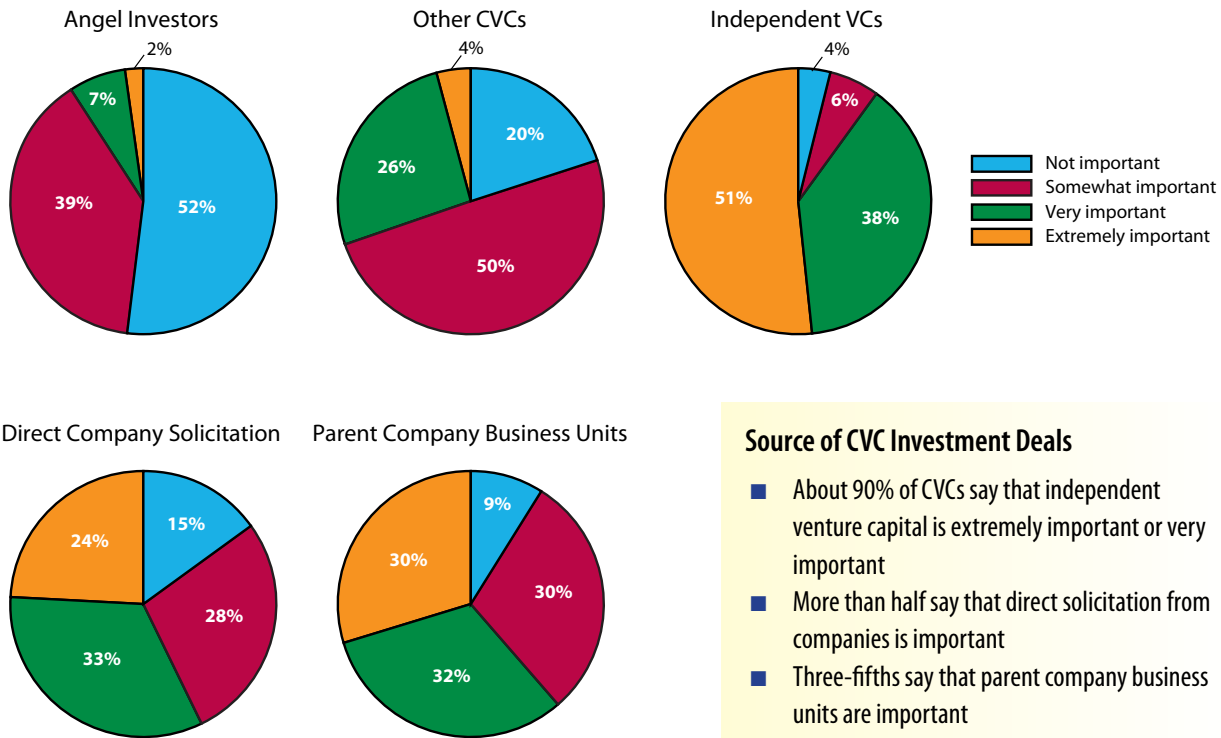


Figure 4-1: How Do CVCs Source Their Investment Deals?



Source: Survey of Corporate Venture Capital (2007)

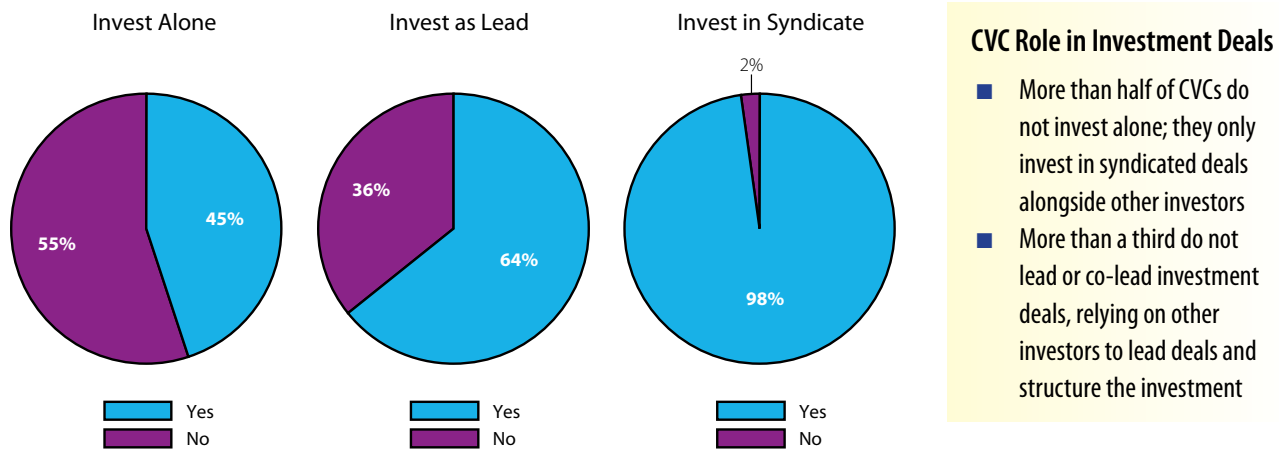
In fact, CVCs and independent venture capital often co-invest in companies in syndicated investments. The independent venture capital investor usually takes the role of lead investor. That investor provides the financial and investment expertise for structuring and managing the deal, while the CVC joins the syndicate as a co-investor adding strategic value to the deal. In syndicated investments, independent venture capital investors can ensure that business agreements between the portfolio company and the CVC parent company are in the portfolio company's best interest and do not create a conflict of interest.



Figure 4-2 shows the structure of CVC investment deals and the role that CVCs play. Nearly all of the surveyed CVCs participate in syndicated investments, and more than half will invest only in syndicated deals. Many CVCs will not lead an investment deal, but rely on their investment partners to lead and structure the deal.

Upon making an investment, CVCs may take either a non-voting observer seat or a full voting member seat on the portfolio company's board. CVCs most often become non-voting observers since their primary interest is gaining a strategic view on technology and market developments at the portfolio company. CVCs with a stronger financial investment interest may be more likely to take a full voting member seat on the portfolio company board.

Figure 4-2: What Role Do CVCs Play in Investment Deals?

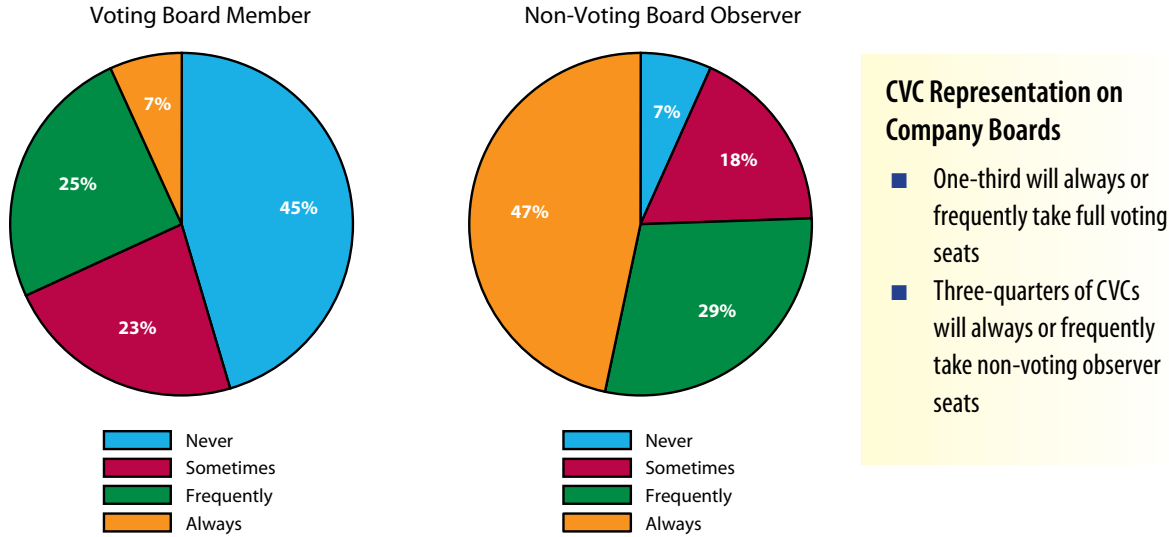


Source: Survey of Corporate Venture Capital (2007)



Figure 4-3 shows that most of the surveyed CVCs will take a non-voting observer seat on the portfolio company board, while many will take a full voting seat at least some of the time.

Figure 4-3: Do CVCs Take Seats on Portfolio Company Boards?



Source: Survey of Corporate Venture Capital (2007)

5. Interactions with R&D and Business Units

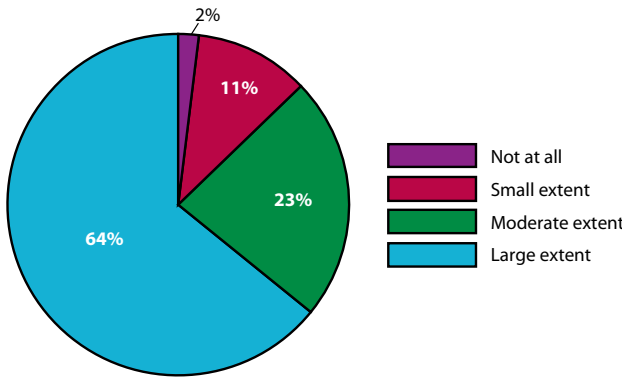
CVCs interact with the company's R&D and business units to understand the operating units' technology directions and business strategies. They then make investments that support or complement those efforts within the company. In screening investment proposals, CVCs draw on technical and business expertise from the operating units. An R&D or business unit may "sponsor" a CVC investment, indicating its support for the investment. CVC portfolio companies benefit from in-kind support and relationships with the parent company's operating units.

CVCs generally have a strategic mission to enhance innovation by bringing new ideas or technologies into the parent company. The specific approaches to the strategic mission vary widely, as do the specific forms of CVC structures and processes. Some CVCs are oriented to R&D organizations in the parent company, while others are oriented to the business operating units. Some CVCs are closely affiliated with a particular business within the parent company, while others serve all the businesses. Some CVCs focus on supporting the parent company's existing businesses, while others look to "white spaces" outside of existing business in order to identify new directions and opportunities.

But whatever the specific approach, in order to deliver strategic value to the parent company, a CVC needs to understand the technology directions and business strategies of the operating units in the parent company. In the investment process, the CVC communicates and interacts with R&D and business units in the company. Business units may provide "wish lists" of technology interests or priorities to a CVC, while a CVC may brief business units on new technologies from the entrepreneurial venture community. In screening investment proposals, CVCs draw on the technical and business expertise of the R&D organizations and business operating units. In many cases, an R&D or business unit may "sponsor" a CVC investment, indicating its support for the investment.

Figure 5-1 presents CVC survey responses about using technical or business personnel from the parent company to conduct due diligence on investment proposals. Most CVCs report that they use parent company personnel to a large extent or moderate extent.

Figure 5-1: Do CVCs Use Parent Company Personnel for Due Diligence on Investment Proposals?

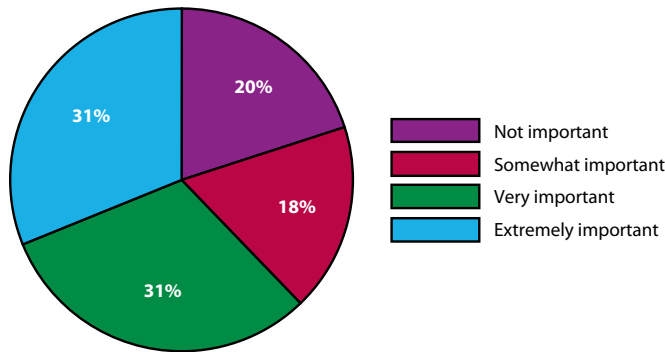


More than four-fifths of CVCs report that technical or business personnel from the parent company are used to a large or moderate extent in screening investment proposals.

Source: Survey of Corporate Venture Capital (2007)

In Figure 5-2, three-fifths of CVCs indicate that having an R&D or business unit in the parent company act as sponsor for an investment is extremely important or very important to the CVC’s decision to invest.

Figure 5-2: How Important Is It to Have an R&D or Business Unit Sponsor for a CVC Investment?



Three-fifths of sample CVCs say that having a parent company R&D or business unit as investment sponsor is extremely important or very important to the decision to invest.

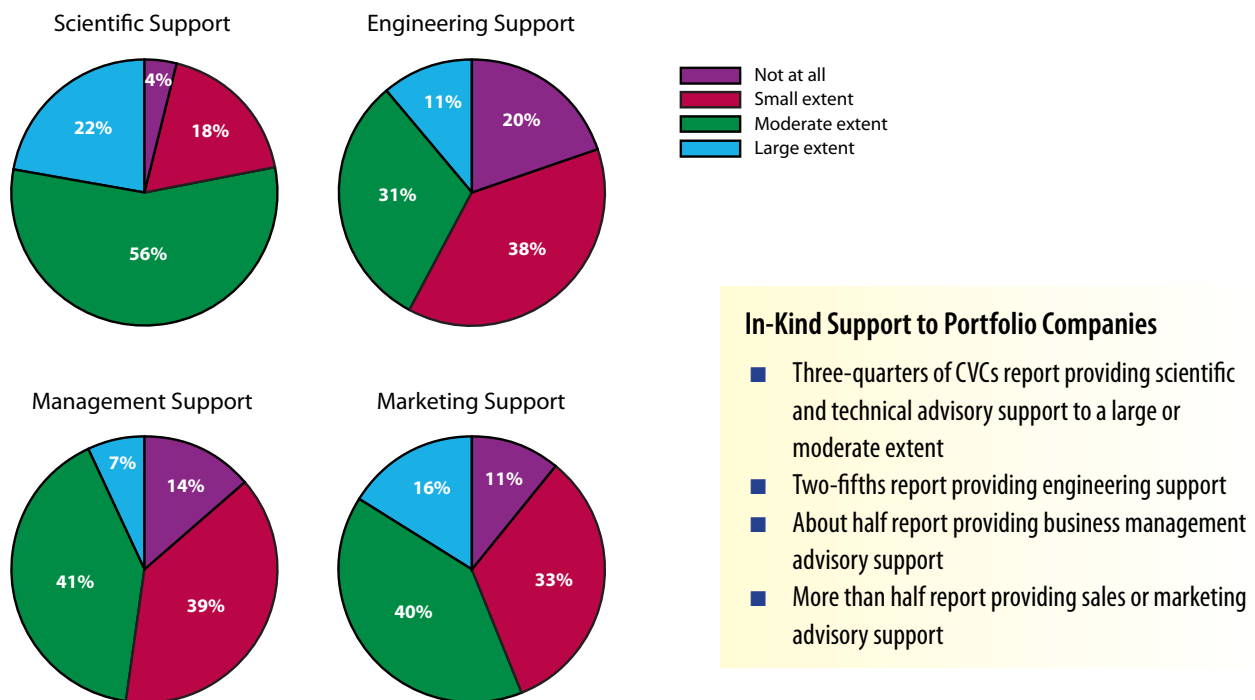
Source: Survey of Corporate Venture Capital (2007)

CVCs have to be careful to distinguish their role as an investor in a portfolio company from their role as an intermediary or conduit between the portfolio company and the CVC parent company. As an investor (and shareholder), a CVC seeks to maximize the value of the investment and acts in the portfolio company's interest. As an interface between the portfolio company and the CVC parent company, the CVC may provide information and introductions to help identify strategic interests and potential collaborations or alliances between the portfolio company and the CVC parent company. However, CVCs must maintain a clear separation, or "firewall," between the CVC and parent company in intellectual property, legal, or financial matters.

Where CVC investments are well chosen, there is a good strategic fit between the CVC parent company and the portfolio company, and strategic cooperation is likely to develop. In some cases, formal agreements for collaboration (such as joint R&D or co-development) with the CVC parent company's operating units are established at the time of CVC investment. In most cases, portfolio companies benefit from in-kind support and strategic relationships as a consequence of CVC investment.

Figure 5-3 shows that CVCs or their parent companies provide various forms of in-kind support to CVC portfolio companies.

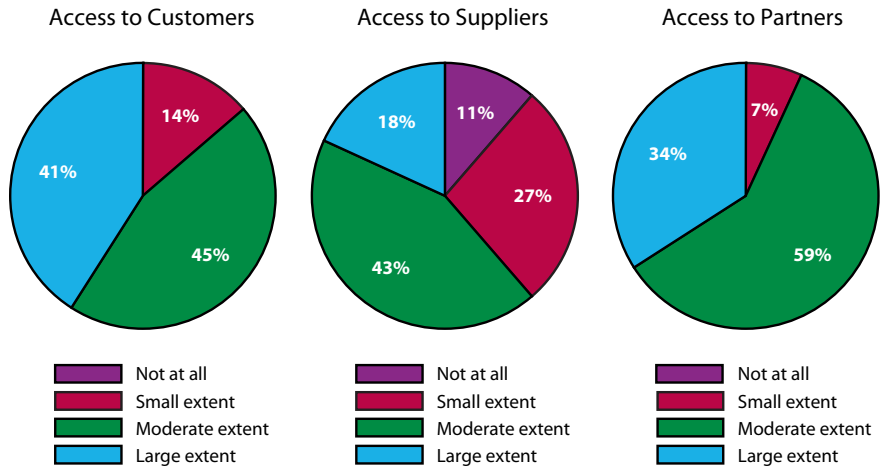
Figure 5-3: What Types of In-Kind Support Are Provided to Portfolio Companies?



Source: Survey of Corporate Venture Capital (2007)

Figure 5-4 shows that CVCs or their parent companies help portfolio companies develop strategic relationships by providing access to potential customers, suppliers, and strategic partners.

Figure 5-4: What Types of Strategic Access Are Provided to Portfolio Companies?



Strategic Access for Portfolio Companies

- More than four-fifths report providing access to potential customers
- Three-fifths report providing access to potential suppliers
- Nearly all CVCs report providing access to strategic partners to a large or moderate extent

Source: Survey of Corporate Venture Capital (2007)

6. Personnel and Incentives

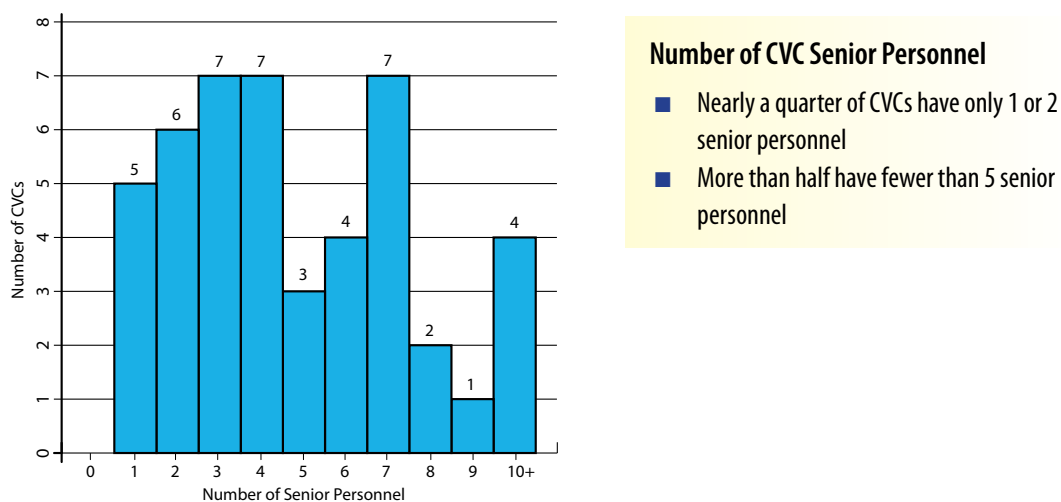
A key issue for personnel management in CVCs is whether the organizational culture will be more similar to the parent company or to independent venture capital firms. For example, a CVC structured as an independent subsidiary company—with a dedicated investment fund and personnel hired from outside the parent company—will have an organizational culture that is more similar to an independent venture capital firm. Personnel compensation, especially the extent of incentive compensation, is a critical aspect of CVC personnel management.

Established corporations recognize that entrepreneurial companies are a dynamic source of innovation. They also recognize the success of venture capital as a model for financing and supporting entrepreneurial companies. To tap this external source of innovation, many corporations have adopted the venture capital approach and formed CVC programs to invest in entrepreneurial companies.

While independent venture capital seeks only financial return as its objective, corporate venture capital aims to fulfill strategic as well as financial objectives. As such, CVCs need to have staff that understand the technical and business strategy of the parent company, and also have knowledge and experience in venture capital investing.

Figure 6-1 shows the size of CVC organizations in the survey sample, in terms of the number of senior personnel. Most of the surveyed CVCs operate with a small staff of senior personnel.

Figure 6-1: How Many Senior Personnel Are There at CVCs?



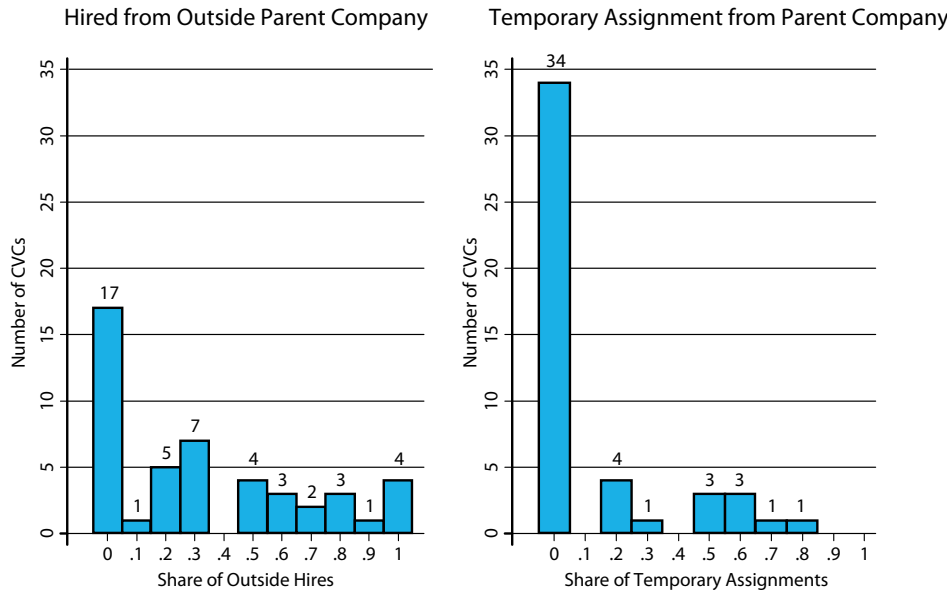
Source: Survey of Corporate Venture Capital (2007)

Senior personnel at CVCs play a dual role: they reach outward to develop relationships with the venture community and also inward to communicate with business units about strategic interests and directions. Most CVC personnel have prior experience working in the parent company’s operating units, so they “speak the language,” know the people, and can communicate with the operating unit stakeholders.

To build partnerships between the CVC organization and operating units, CVCs may use personnel secondments. These are temporary developmental or rotational assignments (typically for one to two years) to bring people into the CVC organization from other parts of the company. CVCs are also likely to hire people from outside of the company. These hires bring expertise and capability in venture investing, along with relationships with the venture community.

Figure 6-2 shows the distribution of CVCs in the sample, by the percentage of senior personnel that are outside hires or on temporary assignment from other parts of the company. Nearly two-thirds of the CVCs have senior personnel hired from outside of the company, and more than one-quarter have senior personnel who are on temporary assignment from other parts of the company.

Figure 6-2: Where Do CVC Senior Personnel Come From?



Source: Survey of Corporate Venture Capital (2007)

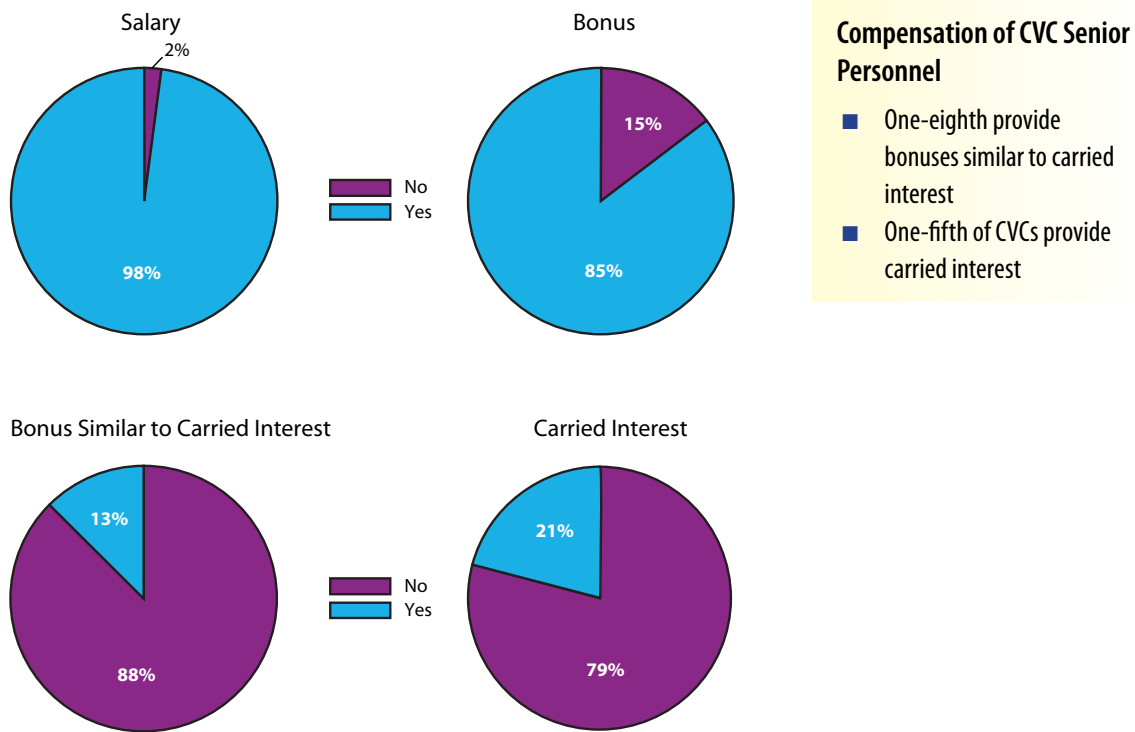
Source of CVC Senior Personnel

- In nearly two-thirds of CVCs, 10% to 100% of senior personnel are outside hires
- In more than a quarter of CVCs, 20% to 80% of senior personnel are on temporary assignment from other parts of the company

The characteristic of personnel management that most influences the CVC's organizational structure may be personnel compensation. In independent venture capital firms, senior personnel receive "carried interest"—that is, a share of the investment returns—as a high-powered incentive in compensation. For CVCs within established corporations, such types of incentive compensation may be incompatible with the corporation's overall compensation system. Personnel at CVCs usually receive salary and bonus as compensation. Some CVCs provide a bonus structure tied to investment returns that approximates carried interest, and some directly provide carried interest.

Figure 6-3 shows the forms of compensation provided to senior personnel at CVCs in the survey sample. About one-third of CVCs offer compensation that either includes carried interest or a bonus similar to carried interest.

Figure 6-3: How Are Senior Personnel Compensated?

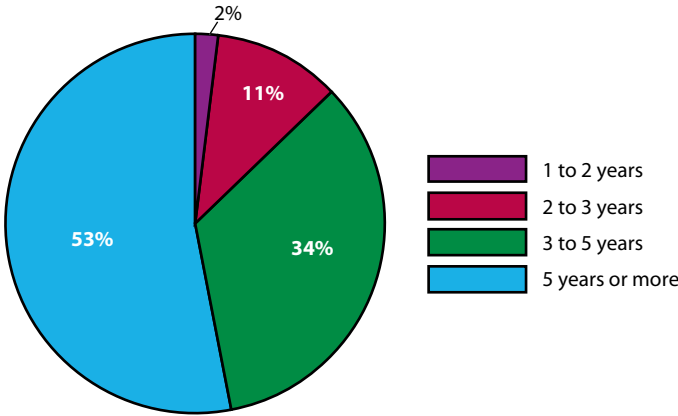


Source: Survey of Corporate Venture Capital (2007)

Personnel compensation is a key factor relating to personnel turnover. Successful CVCs with significant financial returns are likely to experience personnel turnover if compensation structures are inappropriate. Figure 6-4 presents evidence on the expected length of job tenure for senior personnel who are “permanent” (i.e., not on temporary assignment).

Overall, the evidence indicates that the surveyed CVCs successfully manage personnel compensation and organizational culture issues. CVC personnel find their organizational environment appealing and their compensation appropriate.

Figure 6-4: How Long Do Senior Personnel Stay at a CVC?



Source: Survey of Corporate Venture Capital (2007)

Expected Tenure of CVC Senior Personnel

- In half of CVCs: 5 years or more
- In a third of CVCs: 3 to 5 years

7. Investments and Strategic Value

CVC investments in venture-backed companies help the parent corporation learn about and access new technologies coming out of new firms. CVC investment in a company facilitates knowledge transfer and interaction between the company and the CVC parent corporation. Collaborations between a CVC portfolio company and operating units of the parent corporation may be established at the time of CVC investment or may develop over time as the portfolio company and parent company have informal contact and ongoing exchanges.

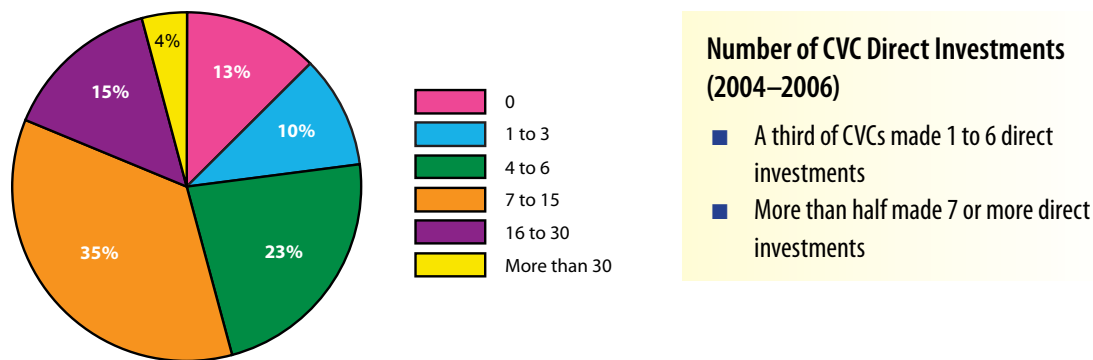
CVC programs in established corporations seek out entrepreneurial companies with new technologies that are of strategic interest. CVCs make investments to track technologies, and create “real options” on new technology or business directions for the corporation, that is, provide the corporation with opportunities to explore or pursue new directions.

CVCs usually work closely with R&D and business operating units in the company to identify technologies that are of interest to the operating units. CVCs aim to support the existing businesses of the company by introducing technologies or partnerships from venture-backed firms. At the same time, CVCs keep an eye on the “white spaces” that fall outside of the company’s existing businesses, and look for technologies or opportunities that may become new strategic directions for the company.

CVC direct investments in companies help the parent corporation learn about and access new technologies coming out of new firms. CVC investments can facilitate knowledge transfer and interaction between a portfolio company and the CVC parent corporation. In some cases, collaborations between a CVC portfolio company and operating units within the parent corporation are established at the time of CVC investment. In most cases, collaborations form over time as informal contact and exchanges develop between the portfolio company and the parent company.

Figure 7-1 shows the number of direct investments made by CVCs during 2004–2006. Figure 7-2 shows the number of collaborations formed between CVC parent companies and portfolio companies as a result of investments made during the 2004–2006 period. A striking result is that nearly all CVCs that report direct investments in 2004–2006 also report collaborations formed from investments in the same period. Figure 7-3 shows the types of collaborations that developed from CVC investments in 2004–2006. Among the CVCs surveyed, the most common type of collaboration formed between a CVC portfolio company and the parent corporation is an R&D collaboration.

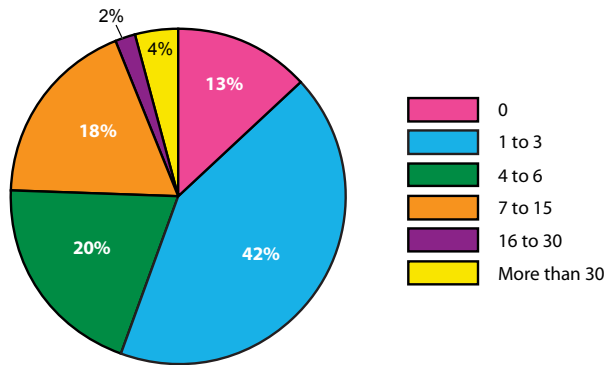
Figure 7-1: How Many CVC Direct Investments Were Made in 2004–2006?



Source: Survey of Corporate Venture Capital (2007)

Figure 7-2: How Many Collaborations Developed from CVC Investments in 2004–2006?

CVC Direct Investments—Total Number 2004–2006



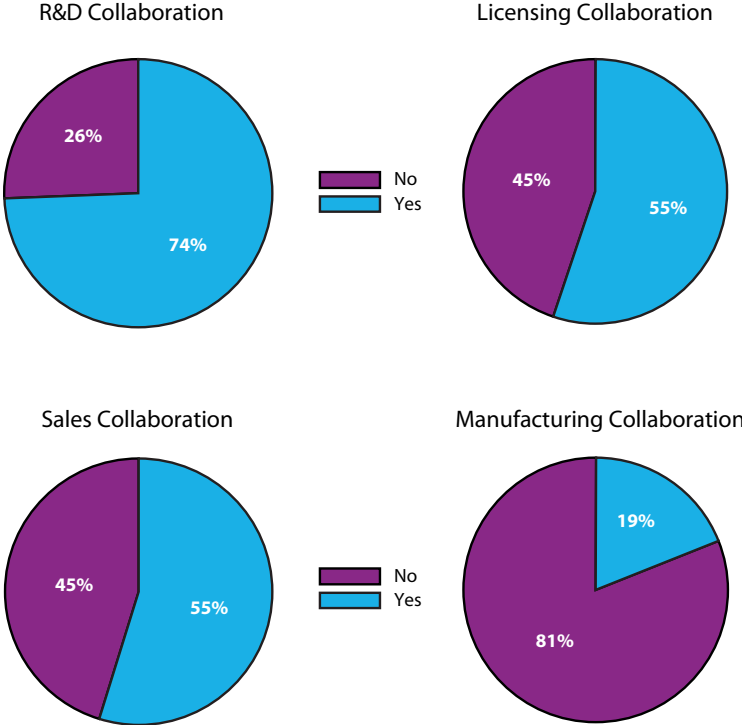
Source: Survey of Corporate Venture Capital (2007)

Number of Collaborations from CVC Investments (2004–2006)

- About two-fifths of CVCs report 1 to 3 collaborations
- More than two-fifths report 4 or more collaborations

The survey evidence indicates that CVCs bring strategic value to the parent corporation most often through R&D collaborations with CVC portfolio companies, and also often through commercial collaborations for licensing or sales.

Figure 7-3: What Types of Collaboration Developed from CVC Investments in 2004–2006?



Source: Survey of Corporate Venture Capital (2007)

- Type of Collaborations from CVC Investments (2004–2006)**
- About three-quarters of CVCs report R&D collaboration
 - More than half report licensing collaboration
 - More than half report sales or distribution collaboration
 - About one-fifth report manufacturing or other collaborations



8. Corporate Venturing

CVCs may be embedded in broader corporate venturing efforts and may interact with internal venturing programs. Corporate venturing includes both internal venturing programs and external corporate venture capital. Internal venturing programs give entrepreneurial employees resources and opportunities to create new ventures (e.g., seed funding for R&D or incubation resources to create new businesses). Successful internal ventures may eventually be incorporated into an existing business of the corporation, set up as a new business unit, or spun out as an independent company.

Corporations seeking innovation pursue a variety of “corporate venturing” activities that go beyond or outside the traditional approaches to R&D and business development. Corporate venture capital may be viewed in this broader context of corporate venturing, which includes internal venturing efforts as well as external corporate venture capital. While external CVC programs aim to identify and access external sources of entrepreneurial innovation, internal venturing programs seek to foster entrepreneurship and entrepreneurial innovation from within the company.

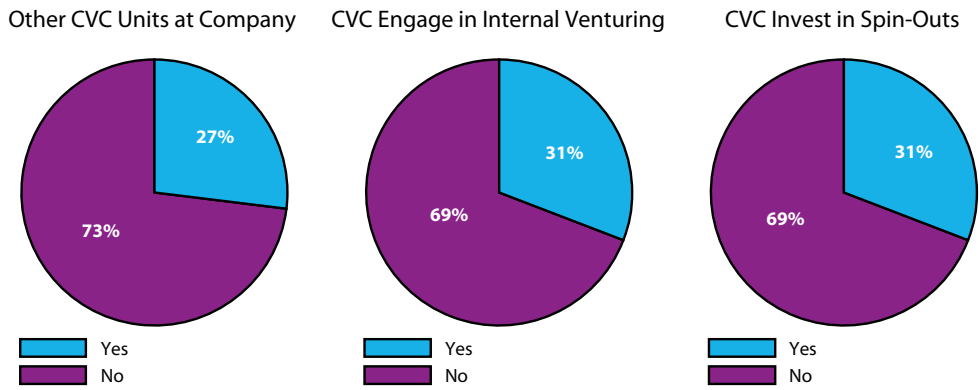
Internal venturing programs provide entrepreneurial employees with resources and opportunity to create new ventures: for example, seed funding for R&D, or incubation resources to create a new business. New internal ventures that become successful may eventually be incorporated into an existing business of the corporation, or established as a new business unit, or spun out as an independent company.

Corporations may take a variety of different approaches to internal and external venturing all at the same time. Multiple CVCs may exist within the same firm, for example, to focus on different technology areas or serve different business unit interests. CVCs may be embedded in broader corporate venturing efforts and interact with other internal venture programs.

Figure 8-1 indicates the corporate venturing context of CVCs in the survey sample.



Figure 8-1: How Do CVCs Interact with Other Corporate Venturing Activities?



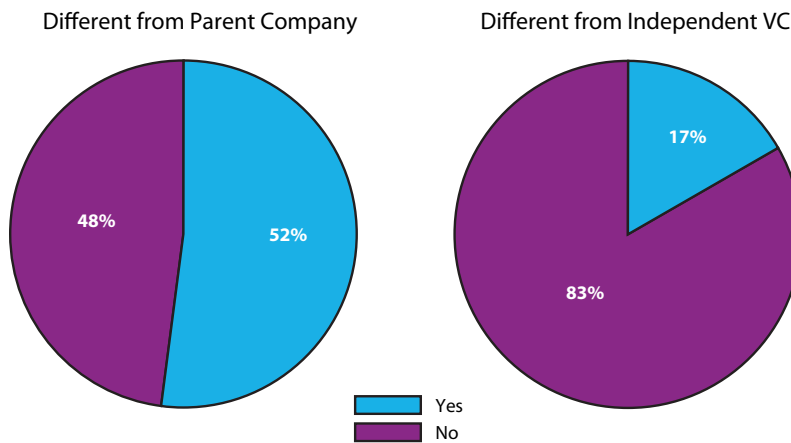
CVCs and Corporate Venturing Activities

- About a quarter of CVCs reported that there are other CVC units within the company
- About a third engage in internal venturing
- About a third invest in company spin-outs

Source: Survey of Corporate Venture Capital (2007)

Figure 8-2 shows survey evidence on whether CVCs make investments that are different from what a parent company or independent venture capital would usually make.

Figure 8-2: Are CVC Investments Different?



CVC Investment Difference

- About half of CVCs make investments that are different from those of the parent company
- About one-sixth make investments that are different from those of independent venture capital

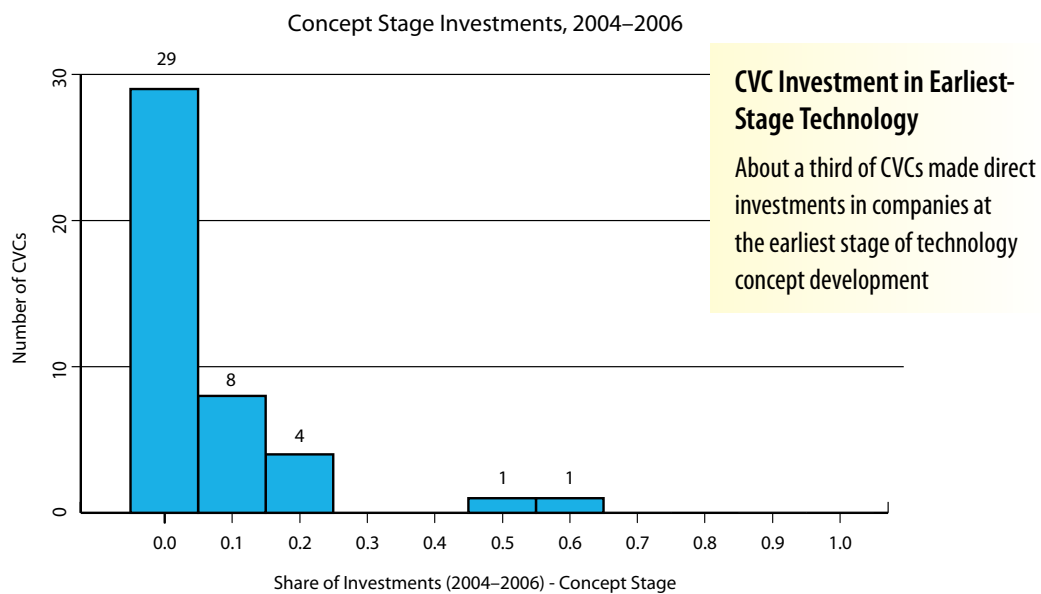
Source: Survey of Corporate Venture Capital (2007)



Half of the surveyed CVCs report that they do make investments different from their parent company. They may invest, for example, in earlier-stage technologies or technologies outside areas typical for the parent company. On the other hand, fewer CVCs report that they invest differently from independent venture capital. This may be because CVCs operate similarly to independent venture capital and often co-invest along with independent venture capital in syndicated investments.

Figure 8-3 shows how many of the surveyed CVCs made direct investments during 2004–2006 in companies at the earliest concept or intellectual property stage of technology development.

Figure 8-3: Do CVCs Invest in Companies at the Earliest Stage of Technology Concept Development?

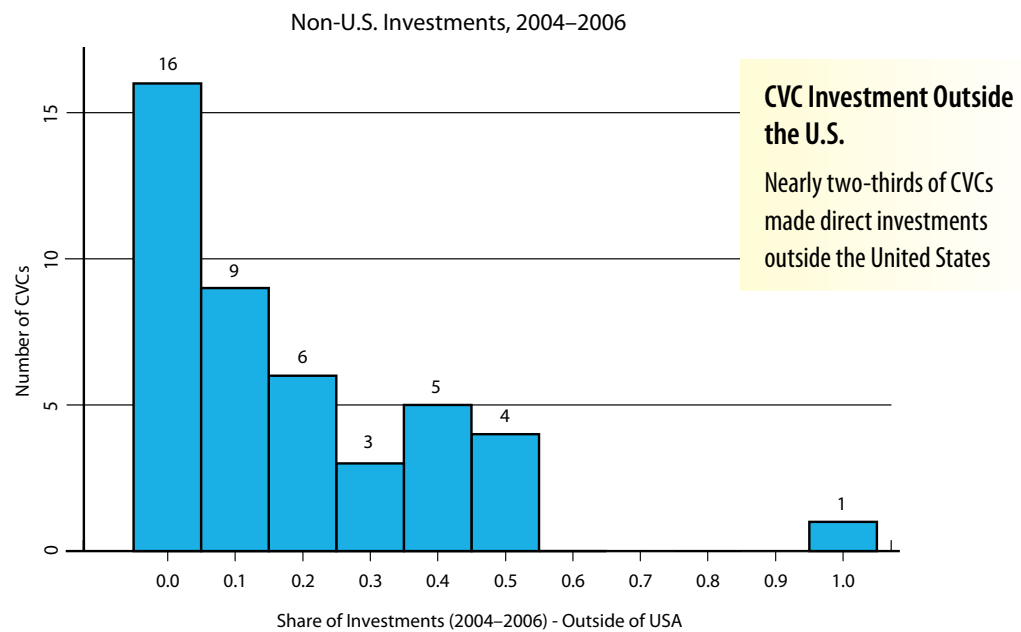


Source: Survey of Corporate Venture Capital (2007)



Figure 8-4 shows that nearly two-thirds of the surveyed CVCs made direct investments outside the United States. These survey data generally illustrate how CVCs fulfill their corporate venturing role by seeking technologies that are further afield and longer term.

Figure 8-4: Do CVCs Invest in Non-U.S. Companies?



Source: Survey of Corporate Venture Capital (2007)



9. Outcomes and Metrics

There is no single “one-size-fits-all” approach to CVC that applies to all corporations. CVC best practices and performance assessment will depend on the CVC’s role in the corporation, its mission, and the corporate environment. Assessing the CVC’s strategic value requires judgments on ultimate outcomes, such as the significance of insights the CVC provides to top management and operating units of the corporation; the importance of referrals, introductions, and external contacts and relationships that the CVC facilitates; and the strategic impact on the corporation of collaborations and partnerships that develop from CVC investments.

Unlike independent venture capital, which has a single objective of maximizing financial return on investment, most CVCs have a combination of strategic and financial objectives. For CVCs, assessing financial performance of investments is relatively straightforward in principle, but in practice, it may be problematic since many CVCs do not have a long enough track record of investing to assess financial returns.

Assessing the strategic value the CVC contributes to the wider corporation is perhaps more difficult. CVCs aim to form relationships with the external venture community, identify new technology and business directions that may be of strategic interest to the corporation, and create strategic options for the corporation by making investments in entrepreneurial companies. A CVC’s strategic value could be measured in a number of ways, including: the quantity and quality of information provided both to top management and to the corporation’s operating units; the significance of referrals, introductions, external contacts, and relationships facilitated by the CVC; and the strategic impact of collaborations and partnerships that develop from CVC investments in portfolio companies.

While some aspects of CVC performance may be directly measured (e.g., the number of investments made), a CVC’s strategic value depends in large part on the subjective judgment of CVC “stakeholders.” Figure 9-1 presents survey data on the extent to which management stakeholders within the parent corporation perceive the CVC as contributing value to the company.

Perception of CVCs’ Value Contribution to the Firm

- Fourth-fifths of CVCs report that senior management perceives them as contributing value to a moderate or large extent
- More than two-thirds report that technical management and business management at operating units perceive them as contributing value

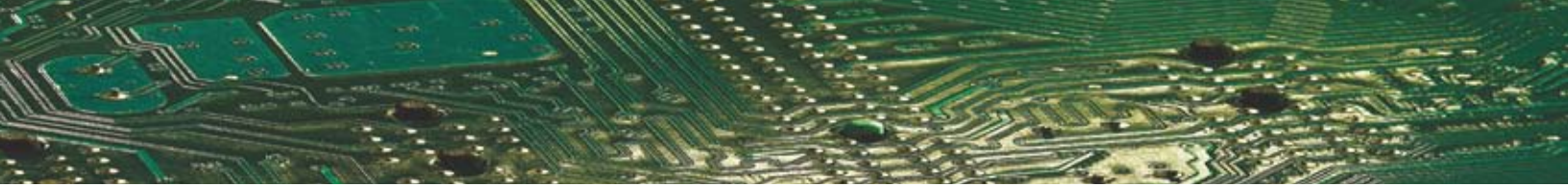
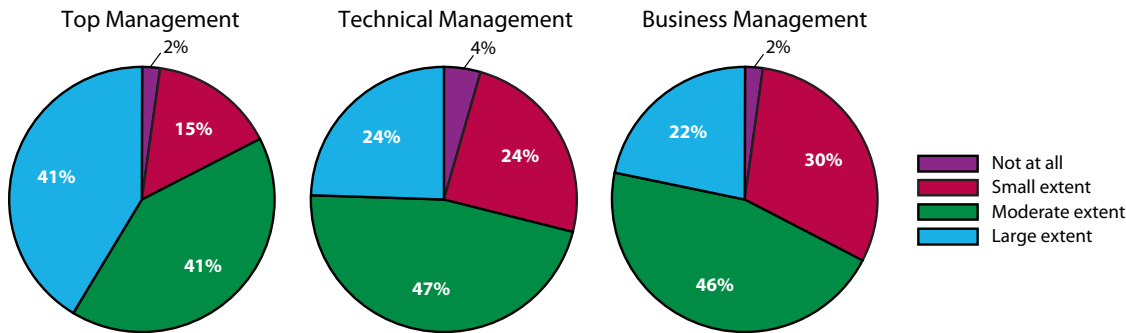


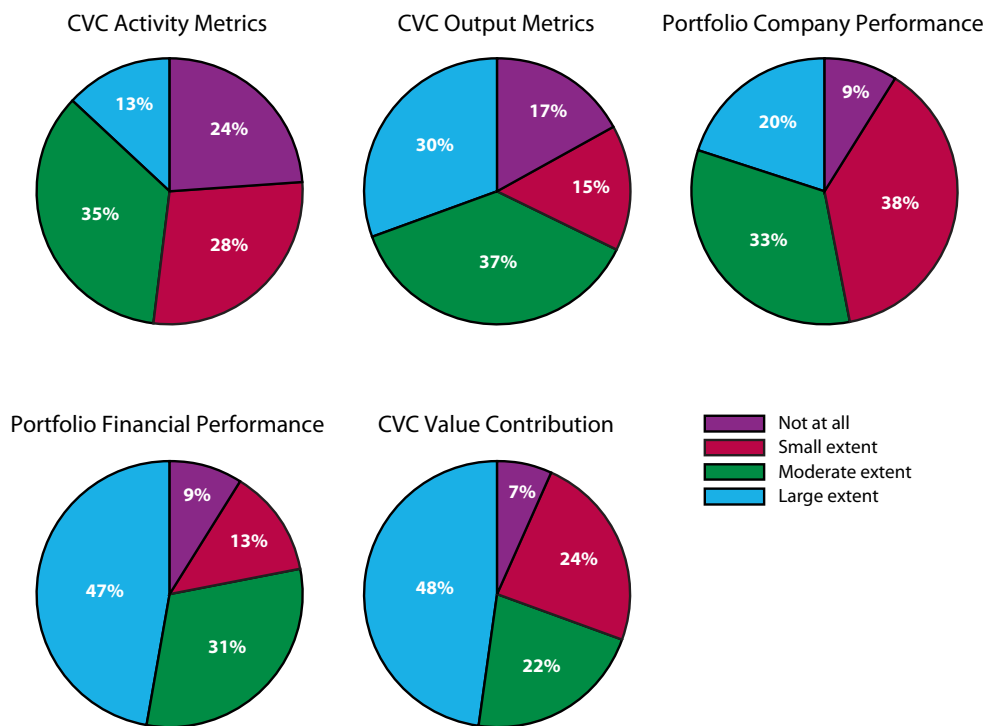
Figure 9-1: Which Key Stakeholders Perceive That CVCs Contribute Value?



Source: Survey of Corporate Venture Capital (2007)

Figure 9-2 presents survey data on the types of metrics used by top management to assess CVC performance.

Figure 9-2: How Is CVC Performance Measured?



Source: Survey of Corporate Venture Capital (2007)

CVC Performance Measures

- About half of CVCs report that activity metrics are used (e.g., number of investment proposals screened)
- Two-thirds report that output metrics are used (e.g., number of investment proposals screened)
- About half report that performance benchmarks for individual companies in the CVC portfolio are used
- Four-fifths report that financial performance of the portfolio as a whole is used
- More than two-thirds report that metrics for the value-added contribution to the parent company are used



Activity metrics and output metrics are most easily measured, but relate only indirectly to ultimate outcomes for the parent company in terms of financial or strategic impact. Company-specific benchmarks and overall portfolio financial performance are metrics that an independent venture capital fund would use to assess and manage its investment portfolio.

The CVC's value-added contribution to the organization may include technology insights and briefings presented to R&D and business units, referrals and introductions to external contacts to assist R&D and business units, and collaborations and partnerships formed as a result of CVC investments.

Over the years, many CVCs have found that maintaining top management support for the CVC is difficult. During upswings in the venture capital investment cycle, many corporations are drawn into forming CVCs, but then quickly abandon the effort when the venture capital cycle turns downward. Some corporations, however, have shown a sustained commitment to corporate venture capital over the long term, maintaining funding support through the ups and downs of the venture capital cycle.

Figure 9-3 indicates the degree of funding support in 2004–2006, following the collapse of the “internet bubble,” and the anticipated funding support for future investment in 2007–2009.

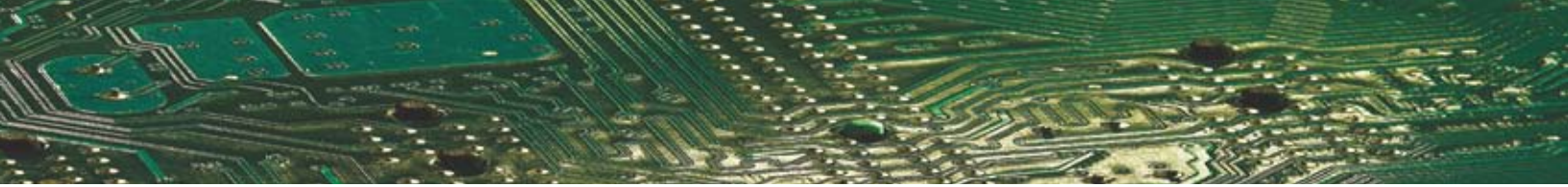
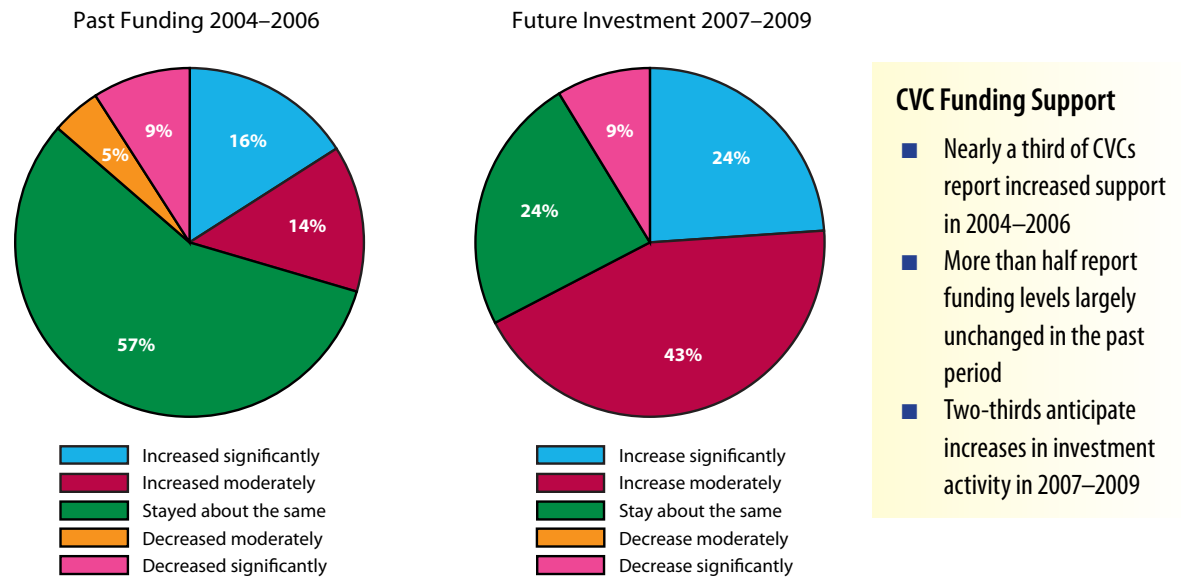


Figure 9-3: How Much Funding Support Do CVCs Have?



Source: Survey of Corporate Venture Capital (2007)

CVCs reporting stronger positive assessment of CVC value by top management (see Figure 9-1) are more likely to report increased support in the past and anticipate more investment in the future (see Figure 9-3). Top management perception of CVC value appears to translate into funding stability and support.

