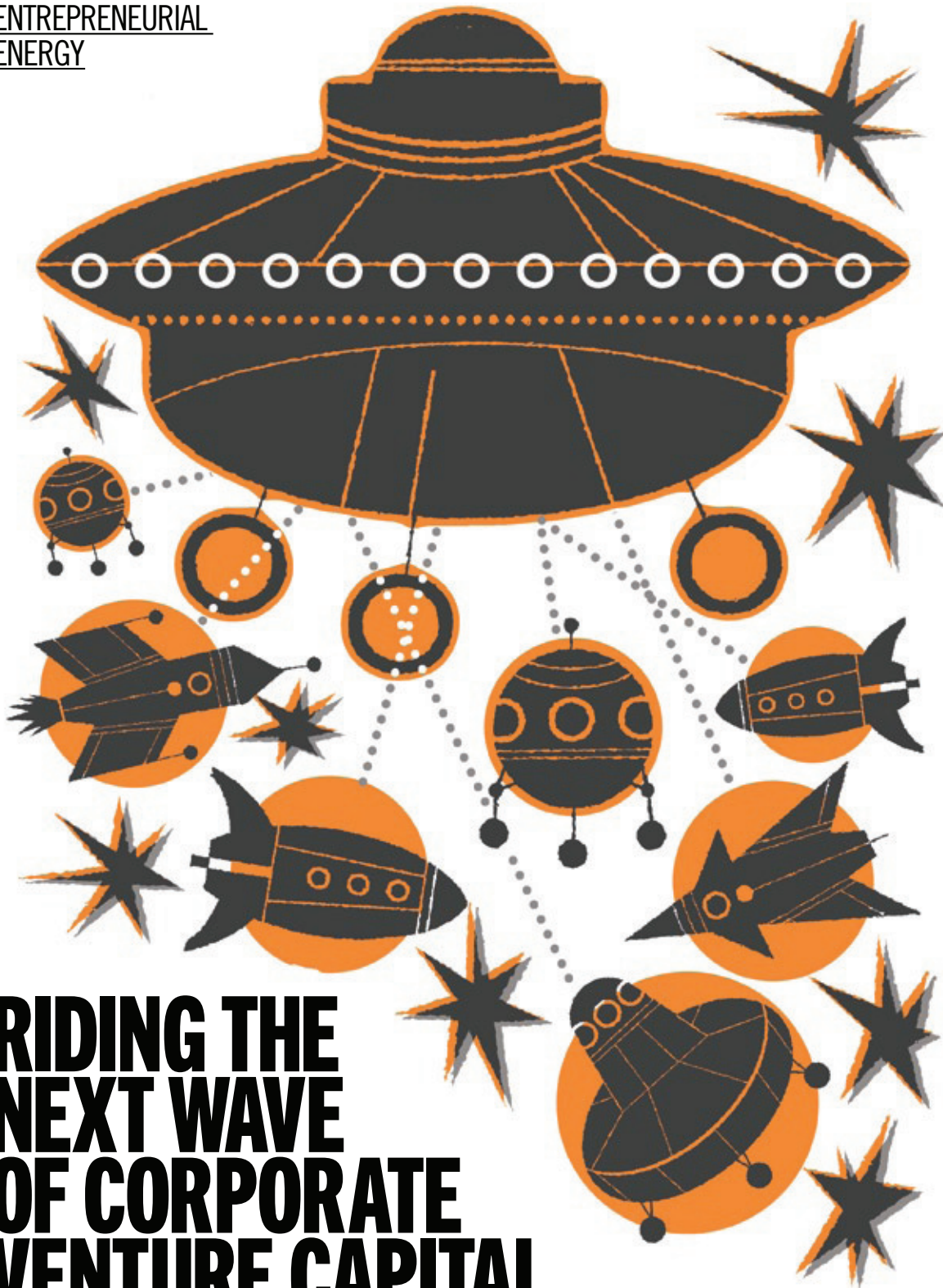


ENTREPRENEURIAL ENERGY

RIDING THE NEXT WAVE OF CORPORATE VENTURE CAPITAL



How can established companies harness the innovative power of entrepreneurial ventures? Corporate venture capital is increasingly the answer as more and more corporations use it as a key component of their innovation strategy. Gary Dushnitsky examines its resurgence.

Today, corporate venture capital (CVC) is increasingly regarded by organisations as a vital weapon in their entrepreneurial and innovation armoury. According to one 2009 study, around 20 per cent of the Fortune 500 have created a CVC unit. CVC occurs when a large corporation becomes, in essence, a kind of venture capital firm. This happens when a mega-corporation, such as BASF, Cargill, Dow, Deutsche Telekom, GlaxoSmithKline, Intel, Johnson & Johnson, Reed Elsevier, Siemens, or UPS, create an entity that can fund much smaller companies — with the aim of benefitting both the entrepreneurial venture and the larger firm. Such CVC activity goes back at least 50 years, and corporate interest in such ventures has ebbed and flowed.

Now the tidal direction is clear: CVC is on the rise. And among those riding the next wave of CVC are some of the corporate world's sexiest and most successful names. Consider the CVC activity of the search engine giant, Google, in recent years.

In October 2009, Google Ventures led a \$15 million investment round in Adimab, a biotech venture. Adimab is developing a computerised platform that scans millions of molecules in search of candidates for further, more expansive, laboratory tests. Executing complex searches over large amounts of data is a Google competency. It is hoped that the Adimab investment may unlock a new industry domain.

A new wave, a sea of change

CVCs, predominantly a large company phenomenon, are a recognition by big corporations that they do not have a monopoly on the next big thing. These firms create CVCs in the hope that they may help them identify novel products, services or technologies that have the potential to be substitutes for those they currently provide. In industries in the midst of rapid change, CVCs allow insights

into new developments taking place that companies have been unaware of. They also can be used to fund ventures that may assist in building an ecosystem, namely increase the value of existing corporate businesses. Basically, corporate venturing activity is an acknowledgement of the importance of having a way to scan, identify and leverage innovative ideas developed by others.

Of course, CVC has been popular before (see related box). But the new CVC wave exhibit a sea of change. It is different from previous waves in a number of respects:

Should we fold or stay in the game?

In the past, the average lifespan of CVC programmes was 2.5 years — a third of the average lifespan of investments by independent venture capital (VC) funds. Today, the average CVC programme has been in operation for 3.8 years, and many notable programmes are entering their second decade of activity. More than 40 per cent of the 350 or so corporate investors between 2000–2009 had been in operation for four years or longer, nearly double the length of those in the previous waves — a change driven by significant persistence in venturing activity and one that may be a reflection of a broader pattern of transition towards embracing external sources of innovations.

CVC MYTHS

THE MYTH: CVC UNITS ARE SHORT-LIVED

In the past, the average lifespan of CVC programmes was 2.5 years. During the 2000s, however, the average lifespan is 3.8 years and more than 40 per cent have been working for four years or longer.

THE MYTH: CVC IS A US PHENOMENON

The fraction of CVC investments in US-based venture declined from 88 per cent between 1991–2000 to 75 per cent between 2001–2009. Also, VentureXpert records a slight decrease in the fraction of investment disbursed by US-based corporate investors: down from 83 (1991–2000) to 78 per cent (2001–2009).

THE MYTH: CVC IS PURSUED ONLY BY IT OR PHARMA FIRMS

While IT and pharma firms are highly active, CVC is also increasingly important to industrial firms where scaling-up capabilities are important.

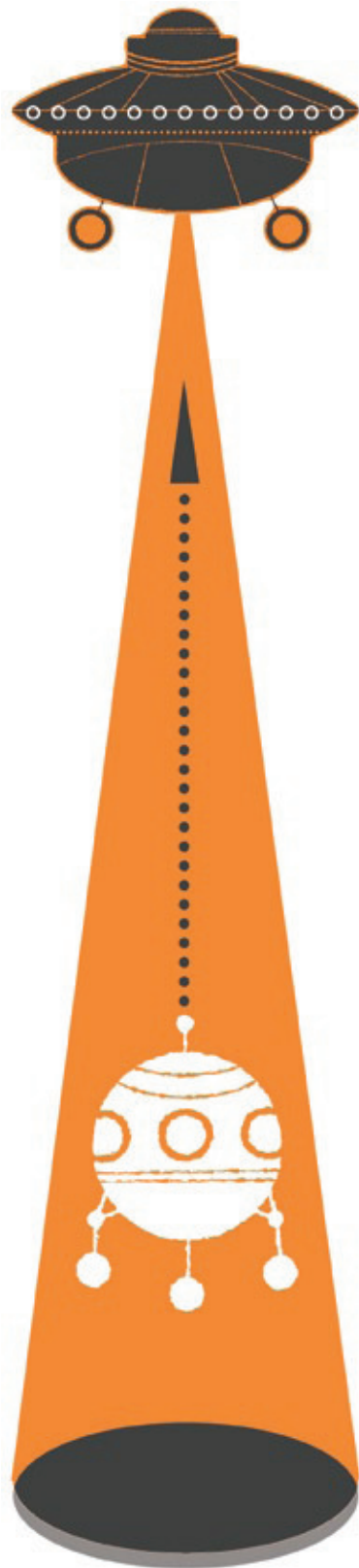
CVC occurs when a large corporation creates an entity that can fund much smaller companies — with the aim of benefitting both the smaller and the larger firm.

Location, location, location A growing fraction of CVC portfolios includes ventures based outside the USA, including many in emerging markets. The fraction of CVC investments in US-based ventures declined from 88 per cent between 1991–2000 to 75 per cent between 2001–2009. UK-based ventures continue to account for two per cent of total CVC investment. And emerging markets are increasingly involved in such activities: China-based ventures account for four per cent of the total investment amount during the fourth wave, up from one per cent during the previous wave; and India entered the ranks as one of the top five recipients of corporate venture capital, accounting for one per cent of global CVC investments.

At the same time, the geographical location of corporate venture capital programmes remains largely unchanged. Data provider VentureXpert records a slight decrease in the fraction of investment disbursed by US-based corporate investors: down from 83 per cent (1991–2000) to 78 per cent (2001–2009). Finally, the fact that corporate venture capital, overall, tends to originate and reach the same countries does not necessarily mean that funds are invested domestically: CVCs are used at times to learn about geographically distant markets or to access distant technologies.

Choosing partners The software and telecommunication sectors, which dominated venture capital and CVC portfolios in the 1990s, continue to attract a significant, but somewhat smaller, fraction of investment. Biotechnology ventures account for almost 20 per cent of aggregate CVC investment, up from about five per cent in the previous decade. The semiconductor sector exhibits a similar pattern. As a fraction of total CVC investments the medical devices and health care services sector has expanded dramatically, while that of the media and entertainment has diminished in relative terms.

Today, the industry and energy sector attracts significant attention from venture capitalists, both independent and corporate ones. Large companies operating in these industries may be well positioned to leverage their resources toward superior deal selection and nurturing.



At the time corporate venture capital investing began, about a fourth of Fortune 500 firms made the decision to follow in the footsteps of the very successful venture capital funds.

Along these lines, it is important to note that some corporations invest in ventures that operate in their own sector while others invest in neighbouring sectors. For example, nearly 50 per cent of all CVC investment by chemical and pharmaceutical companies went into ventures within those sectors, while only 18 per cent of all CVC investment by semiconductor firms went into semiconductor ventures.

Rules of the game The governance of CVC activities involves the structure of a CVC programme, the degree of autonomy it has, the creation of relevant Key Performance Indicators (KPIs), and the compensation of the personnel charged with making investment decisions. There are programmes in which current operating business units are responsible for CVC activities, while others involve separate organisational structures devoted to CVC activities. There also is substantial variation in programme autonomy in terms of capital allocation and decision-making. Some programmes are allocated a large amount of capital up front, while others receive funds on an ad hoc basis. The discretion to make investments (that is, fund a particular venture) and exit (that is, sell a venture or take it public) is fully delegated to the CVC programme in some corporations, yet remains subject to scrutiny and corporate approval in others. Finally, there is a lively debate regarding CVC compensation schemes. Flat-rate corporate salary was the prevailing compensation

scheme among CVC personnel in the past and is still a common practice in a large minority of programmes.

What next?

My close examination of the differences that mark the waves of CVC investment reveals that corporations increasingly stay the course with venture investing in innovative start-up companies due to a host of strategic and financial motives. In the past, companies with a strategic motivation have reaped not only strategic benefits, but also financial benefits, primarily because such strategically driven programmes exploit synergies between the companies, creating actual value that in turn is translated into superior financial performance.

Moreover, analysing the databases of hundreds of companies to compare firms that invested corporate venture capital and those that did not makes it clear that the greater the amount of corporate venture capital invested, the greater the innovation rate of the investing company. In fact, corporations that make venture investments to gain access to outside innovations also tend to have strong internal research and development capabilities. The two paths often complement one another.

For many, the limited lifespans of CVCs in the past has been seen as a major hurdle. The current wave, however, brings reassurance on that score. Today, an increasing number of corporations have come to view corporate venture capital as a key component of their innovation strategy and have put in place policies that may allow them to overcome some past problems.

One such problem during earlier waves was the fact that the compensation of CVC personnel was not tied to their successes and did not match the financial incentives offered by independent venture capital initiatives. As a result, quality personnel left corporations for VC funds, and CVC programmes suffered from low managerial and investment competencies due to poor staffing. In this wave that has changed: today, more and more CVC programmes have been structured to minimise these compensation and staffing problems. For example, in May 2009, Lilly Ventures, the CVC arm of Eli Lilly, announced that it



was to 'go it alone', a decision made partially to allow it to offer more competitive compensation packages in line with traditional VC firms.

Finally, one of the key questions in the past was whether or not to engage in CVC activity. In contrast, nowadays we observe corporations establishing a second or third CVC fund, and others with multiple concurrent funds. Accordingly, the question shifts towards how to best manage and coordinate among the programmes. That is, the focus shifts from initiation to management of CVC programmes.

Indeed, it seems as though this new wave of corporate venture capital is creating a lasting foundation for how companies can innovate, expand and grow. In the end, we are left with the question of whether, in the long run, this wave marks the beginning of a permanent build-up of corporate venture activity, one that will see CVC investment as an integral part of firm strategy, along strategic alliances and M&A activity.

ALTERNATIVE ROUTES

In the past, most corporations turned to alliances, mergers and acquisitions, joint ventures, and research and development (R&D) as the road to innovation. Given the thirst for innovation and growth, more was needed. Enter CVC.

To understand what makes CVCs special, consider alternative ways that corporations can and have reached out to other firms.

Strategic alliances are voluntary arrangements between independent firms to share and exchange resources in order to develop products, services or technologies. Such alliances involve cost sharing, joint development and market entry. Most alliances involve neither equity nor independent VC funds; instead, both partners invest resources and expect monetary returns on their investments. Strategic alliances are managed by a dedicated alliance function (or by business units of the respective partners) and imply mutual dependence of otherwise independent firms that engage in interactive coordination of various value chain activities such as R&D and

Corporations that make venture investments to gain access to outside innovations tend also to have strong internal research and development capabilities. The two are complements rather than substitutes vying for research dollars.

marketing initiatives. Alliances have specific objectives that are negotiated and then pursued by both parties, whereas CVC agreements pertain to the operations of the funded venture.

CVCs have an advantage over alliances in that they target a particular pool of partners: entrepreneurial ventures with cutting edge knowledge of new technology or markets. Unlike alliances, CVC partners are often identified with the help of venture capitalists — a group rarely seen in the typical corporate environment.

Mergers, the combination of two independent companies into one larger company, and *acquisitions*, the buying of one firm by another firm, when aimed at gaining access to technology have had mixed results (as is the case with many M&As made for other reasons). Unfortunately, while broadening the knowledge base of the firm engaging in the activity for that purpose, both mergers and acquisitions take a great deal of effort to ensure that the firms mesh properly, which is especially difficult when the acquired firm is at an early stage of development and has far fewer elements of bureaucracy. The result of the conflicts between the people in these companies often has a negative effect on the creation of pioneering technologies.

Comparing CVC with M&As, it is clear that CVC is more capital efficient, as far as identifying and accessing innovative ideas. CVC usually involves a minority equity investment that can offer insight into new technology or markets at a fraction of the cost of a full merger or acquisition. CVC investments are also often syndicated with venture capital or private equity funds, which means that a company needs to allocate only part of the overall investment amount.

Of course, some corporations can innovate without any external links. Internal research and development is a critical part of any progressive corporation's endeavours. Interestingly, corporations that make venture investments to gain access to outside innovations tend also to have strong internal research and development capabilities. The two are often complements. In fact, well-developed internal research capability may be necessary to ensure that corporations learn from corporate venture capital investment.

HOW CVCS GREW

When corporate venture capital investing began in the mid-1960s, about a fourth of Fortune 500 firms made the decision to follow in the footsteps of the very successful venture capital funds. This first wave can be traced to three major trends of the time: the overall trend toward corporate diversification, the excess cash flow accrued by many of the investing firms, and the financial success of pioneering independent venture capital funds and the stellar performance of their portfolio companies. Such firms as American Standard, Boeing, Dow, Exxon, Heinz, Monsanto and W.R. Grace invested in either external start-ups, employee-based ventures or both.

The externally focused programmes funded start-ups with the goal of addressing or extending corporate needs, pursuing venture capital investments either directly (for example, GE's Business Development Services) or indirectly through independent venture capital funds. A few firms attempted to reinvent their business by encouraging employees, mostly those in technical roles, to start new ventures.

During these early days, many CVC programmes invested in external as well as internal ventures. For example, Exxon Enterprises, an affiliate of Exxon Corporation, initiated and funded some 37 high-technology ventures during the 1970s. But the collapse of the market for IPOs in 1973 brought an end to the prosperity in the venture capital market and, with it, the first wave of corporate venture capital. In addition, the oil shock and related macroeconomic changes meant that many of the investing corporations no longer had excess cash flows, thus further halting investment activities. Finally, frictions within the CVC programmes (and between the programmes and their parent corporations) resulted in inferior financial and strategic performance, ultimately leading to the termination of CVC efforts.

The second wave of CVC activity took place in the first half of the 1980s. The amendment to the Employee



Retirement Income Security Act of 1979 led to a substantial growth of the venture capital industry, as pension funds funnelled considerable amounts into VC funds. Again, established firms followed suit and re-engaged in venture investing. As changes in legislation, significant growth in technology-driven commercial opportunities and favourable public markets stimulated the venture capital market as a whole, many leading firms in the chemical and metal industries launched CVC programmes. Technology firms and pharmaceutical companies also initiated new venture financing efforts. However, the market crash of 1987 led to a sharp decline in independent, as well as corporate, venture capital activity.

The third wave, which took place during the 1990s, reflected a surge in venture capital investing. It was a period characterised by technological

advancement and an explosion in Internet-related new ventures. The number of CVC programmes soared to more than 400; and, by the year 2000, established corporations had become important players in the venture capital industry, managing more than \$16 billion (approximately 15 per cent of all venture capital investment that year). Again, the crisis in the public markets drove many corporations and many independent venture capitalists to end their venturing activities.

A few years into the 21st century, a new wave of corporate venture capital investing began. In fact, dozens of firms have joined the Corporate Venture Group within the National Venture Capital Association since late 2003, and a number of leading corporations remained committed to CVC investment even during the recent economic crisis. ■

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