



ROUND TABLE

Venture capital and efficiency of portfolio companies

A. Thillai Rajan *

Department of Management Studies, IIT Madras, Chennai, India
Available online 4 November 2010

Abstract Venture Capital (VC) has emerged as the dominant source of finance for entrepreneurial and early stage businesses, and the Indian VC industry in particular has clocked the fastest growth rate globally. Academic literature reveals that VC funded companies show superior performance to non VC funded companies. However, given that venture capitalists (VCs) select and fund only the best companies, how much credit can they take for the performance of the companies they fund? Do the inherent characteristics of the firm result in superior performance or do VCs contribute to the performance of the portfolio company after they have entered the firm? A panel that comprised VCs, an entrepreneur and an academic debated these and other research questions on the inter-relationships between VC funding and portfolio firm performance. Most empirical literature indicates that the value addition effect dominates the selection effect in accounting for the superior performance of VC funded companies. The panel discussion indicates that the context as well as the experience of the General Partners in the VC firms can influence the way VCs contribute to the efficiency of their portfolio companies.

© 2010 Indian Institute of Management Bangalore. All rights reserved.

Academic perspective

Venture Capital (VC) has emerged as an important and dominant source of financing today for entrepreneurial and early stage businesses. Many of the successful businesses that we know today such as Cisco, eBay, Apple, and Google

received VC funding at one point or the other. Some of the companies in India that received VC funding include Polaris, Biocon, Saskaen, Shoppers' Stop, and Landmark. VC backed firms contribute to the economy through the creation of jobs, an exceptional growth rate, their heavy investments, and their international expansion (Romain & Potterie, 2004).

The proportion of companies that receive VC funding, however, is very small. Kaplan and Lerner (2010) indicate that only 1/6th of 1% of new businesses manage to obtain VC funding. Despite the small proportion of companies that receive VC funding, there has been a growth in the availability of VC over the years in the different economies. In the US, which is by far the leader in VC investments by a big margin, the availability of VC funding has been stable with respect to the stock markets. From 2005 to 2008, annual commitments to VC ran in the range of \$25–\$33 billion. The historical average (since 1980) of VC commitments in the US, measured as a fraction of the total market value of equity, was 0.138%. Since 2002, however, the commitments

* Tel.: +91 44 2257 4569; fax: +91 44 2257 4552.

E-mail address: thillair@iitm.ac.in

0970-3896 © 2010 Indian Institute of Management Bangalore. All rights reserved. Peer-review under responsibility of Indian Institute of Management Bangalore.

doi:10.1016/j.iimb.2010.10.009



have been slightly above the historical average at 0.146%. Similarly, the historical average of the VC investments as a fraction of total stock market value was 0.164%, and the average since 2002 is 0.155% (Kaplan & Lerner, 2010). If we factor the growth in the economy and the stock market over the years, we can infer that the availability of VC funding has steadily increased over the years.

By contrast, the growth of VC in India has been more recent. The amount invested increased from \$1.4 billion in 2004 to \$22 billion in 2007, before reducing to \$8.1 billion in 2008 (Thillai Rajan & Deshmukh, 2009). The VC investments in India grew at a CAGR of 47% during 2004–08, which is one of the highest growth rates in the world. By contrast, the investments in the US grew only at the rate of 6% during the same period. VC investments in India as a percentage of GDP grew from a mere 0.4% of GDP in 2004 to more than 1.5% of GDP in 2008, whereas VC investment in the US as a percentage of GDP is relatively constant and hovers around 0.7%–0.8% of GDP.

This part of the paper provides an academic perspective on how venture capitalists (VCs) contribute to the portfolio companies that they have invested in. The rest of the academic perspective is structured as follows: Section 2 provides an overview of VC investment. VC has several features that distinguish it from other sources of financing. The differences between VC and bank financing, a prominent source of financing for businesses, are also highlighted. Section 3 discusses the performance of VC funded and non VC funded companies. Examining whether VC funded companies show superior performance as compared to non VC funded companies, this section summarises the findings from some well known comparative studies on VC funded and non VC funded companies. Section 4 discusses the reasons behind the superior performance of VC companies. Two main ideas are explored in the academic perspective viz., whether the better performance can be attributed to better screening and selection of investment opportunities or because of managerial inputs and value addition provided by VCs after investment. Section 5 provides a summary and identifies some areas where more research is needed.

Overview of venture capital investment

The VC investment cycle consists of four phases, namely, fund raising, selection and investment, monitoring, and exit. In the fund raising phase, VC firms (commonly known as general partners or GPs) raise capital from various investors (commonly known as limited partners or LPs) such as financial institutions, corporations, university endowments, family offices, and wealthy individuals. Generally, the VC funds have a close ended structure and have a fund life of around 10–12 years. During the fund raising process, the VC firms clearly state the investment objectives and other features of the fund structure such as the fund life, fund management fees, etc. The funds can have a sector focus (say technology, biotechnology, etc.) or stage focus (say growth stage, late stage, etc.) or both. Established VC firms usually have more than one fund under their management at any time.

During the selection and investment phase, the VC firms evaluate various investment opportunities to deploy the

funds raised. Since the companies that VC firms invest in are private companies, they rely on their proprietary networks to source deals. They use various screening and selection criteria to identify suitable investment opportunities. Once a VC firm has identified an investment, the VC firm and the investee company go through several rounds of complicated deal making to negotiate the valuation as well as the structure of the investment. The investment process is complete after the VC firm 'writes the cheque' in favour of the investee company. In most cases, VCs invest in the company through multiple funding rounds, since staging of capital infusions allows VCs to gather information, monitor the progress of firms, and gives the option of abandoning those projects that are not doing well (Gompers, 1995).

The monitoring phase is the time interval between date of investment and exit of the VC investor. During this phase, the VC works closely with the investee firm. VCs generally get board seats and depending on the need, add value to the investment by providing various managerial inputs. Apart from providing capital, VCs use their specific industrial knowledge, expertise, and contacts to assist their portfolio firms in various areas such as strategic and operational planning, personnel and supplier selection, marketing, financing, and even assume managerial roles where necessary (MacMillan, Kulow, & Khoylian, 1989).

During the exit phase, the VC firms realise returns on their investments in the portfolio company, and return the capital to the investors in the fund. Since VC funds are generally structured as close ended funds, the VCs have to liquidate their investments after a certain period and cannot hold on to them forever. The common routes of exit are the initial public offering (IPO) or an acquisition.

While VC is not a major source of capital for small businesses, the two are often linked closely in the public mind (Winton & Yerramilli, 2008). Using data from the National Survey of Small Business Finances, Berger and Udell (1998) find that commercial bank loans provide 19% of all financing for small businesses, whereas VC investments provide only 2%. Davis (2003) indicates that 90% of startups are not supported by VC and more than 95% of small firm financing comes from sources other than VC, particularly commercial banks. The prominence for VC investments, despite being quantitatively lower than bank financing could be due to the growth in VC funding. According to Ueda (2002), indicators of bank lending to small firms were constant or even fell after 1977, whereas VC investment was 100 times larger in 2001 than it was in 1977. Table 1 compares the features of VC and bank financing on various parameters. While there are some similarities, there are several differences. Mainly, VC investment differs from that made by the banks, or for that matter from any other source, in the extent of involvement in the portfolio company after the investment.

Performance of VC and non VC funded companies

With more and more companies getting VC funding, researchers started to look at the impact of VC on the performance of the investee companies. While before-after

Table 1 Venture capital and bank financing.

| | Venture capital | Bank financing |
|-----------------------------|---|---|
| | Similarities | |
| Monitoring | Given the high risk of failure in small businesses, both forms of investors monitor borrowers | |
| Use of covenants | Both forms use covenants to restrict the actions of the owner and provide additional levers of control when the firm performs poorly | |
| | Differences | |
| Industries | Concentrated primarily in a few industries such as software, telecommunications and biotechnology | Widely used across industries |
| Nature of firms invested in | Very risky and skewed return distributions, with a high probability of weak or negative returns and a small probability of extremely high returns | A wide variety of firms |
| Form of investment | Equity and equity related instruments such as convertible debt and convertible preference equity | Debt |
| Quantum of investment | Median investment of \$4.5 million at each stage of investment | Loans to small businesses are usually less than \$1 million |
| Extent of monitoring | More frequently than banks. It has been estimated that VCs visit their portfolio companies an average of 18.7 times per year | Most bank loans to smaller firms are monitored once or twice a year. The risky loans might be monitored more frequently |
| Control rights | Often hold board seats in the portfolio company, having voting rights in excess of their cash flow rights and contractual right to replace the entrepreneur if covenants are violated | Monitor for covenant violations and exercise control by threatening to force default and possible liquidation |
| Ownership rights | Takes ownership in the firm in which investment has been made, leading to a dilution of the owner shareholding | No shareholding or ownership in the firm |
| Post investment behaviour | Active and provide managerial inputs to portfolio firms | Passive |
| Return expectations | Have very high required rates of return. Depending on the stage of investment, expect to earn annual returns of 25%–50% | Returns are more conservative, and in line with the prevailing interest rates in the economy |

Source: Winton & Yerramilli, 2008; Sahlman, 1990; Kaplan & Stromberg, 2001; Gorman & Sahlman, 1989; Blackwell & Winters, 1997; de Bettignies & Brander, 2007; Morris, 1987; Gartner, 1988

studies indicated that VC investment had a positive impact on the performance of the company, the most compelling evidence on the contribution of VC investment came from comparative studies of VC and non VC backed companies.

Many studies have used the IPO and associated data to compare the performance of VC backed and non VC backed firms. One of the earliest studies that compared VC backed and non VC backed firms was published by Megginson and Weiss (1991). The study indicates that VC backed IPOs are associated with higher underwriter prestige, higher institutional holdings, and lower levels of under pricing than non VC backed IPOs. The presence of VC in the issuing firm lowers the total costs of going public and maximises the net proceeds to the issuing firm. Jain and Kini (1995) find that VC backed firms show superior post IPO operating performance than non VC backed companies. Brav and Gompers (1997) find that VC backed firms have higher long term returns.

Chemmanur, Krishnan, and Nandy (2009) indicate that VC backed firms have higher sales as compared to non VC backed firms before VC funding, and after funding show

a greater growth in sales. The total production costs of VC backed firms are higher as compared to non VC backed firms before funding, and the growth in these costs subsequent to financing is also greater for VC backed firms. They also find that while growth in the level of employment remains comparable across the two kinds of firms, salaries and wages grew more in VC backed firms after receiving financing.

In an oft-cited paper, Hellmann and Puri (2000) show that VC funded companies are more forthcoming in introducing new products to the market. They pursue more aggressive market strategies than non VC backed firms, and also aim at more radical innovations. In another study published around the same time, Kortum and Lerner (2000) also point out that VC funded firms are more innovative and are associated with more valuable patents.

While very few companies receive funding, a large fraction of the startups that make it to the public company stage are funded with venture capital. By taking into account only true startup companies that go public, Kaplan and Lerner (2010) find that from 1999 to 2009, 60% of the

IPOs had VC backing. They also find that only in two out of the 11 years did the figure go down to less than 50%. Since the proportion of companies that receive funding is very low, the authors go on to infer that VC funding and going public are highly related. They interpret that VC funding significantly increases the success of a startup going public.

Explaining the performance differential

Research on the comparative performance of VC and non VC funded companies indicates that by and large VC funded companies have shown superior performance. More recently, the contributions of the VC investor to the superior performance of VC funded companies has attracted a lot of research interest. The two major activities of VCs are screening and selection of the companies to invest in and contributing to the management of the companies post investment. If this is the case, can the superior performance of VC funded companies be attributed to the superior ability of VC firms to identify promising investments? That is, are VCs able to identify, before investment, the firms that would be able to achieve superior performance? Or, can the superior performance be attributed to the value addition and managerial inputs that VCs provide to their portfolio companies after investment? That is, the subsequent superior performance stems not from the ability to pick winners, but by the ability to ensure that the firm is managed well post investment.

Previous studies have documented the extent of involvement of VC investors in their portfolio companies. Gorman and Sahlman (1989) using survey data indicate that VCs are actively engaged in both selection and management activities.

Value addition to the portfolio companies is an important feature of VC investment and one which distinguishes it from other sources of funds. Previous research (see for example, Gorman & Sahlman, 1989; MacMillan et al., 1989; Rosenstein, 1988; Rosenstein, Bruno, Bygrave, & Taylor, 1989; Sapienza & Timmons, 1989; Hellmann & Puri, 2002) gives an understanding of the involvement of VCs in the portfolio companies after investment.

Selection vs value addition

Baum and Silverman (2004) try and answer these questions by analysing the companies in the biotechnology industry in Canada. They study whether the characteristics that attract VC funding such as alliances, intellectual and human capital (top management) are also associated with future performance after the investment. The results indicate that alliances and intellectual property have a similar effect on attracting VC investment and subsequent firm performance. However, human capital or top management characteristics of the firm that was associated with VC investment had little effect on subsequent firm performance. This suggests a combination of both the selection and value addition roles in influencing portfolio company performance. VCs are able to select companies that have strong technology and relationships, but those that are at an increased risk of short term failure. They then provide management inputs that enhance the long

term survival of the firm and contribute to superior performance.

Brander, Amit, and Antweiler (2002) try and address the selection vs value addition issue by studying the performance of syndicated VC investments. Syndication is often observed in VC investments, when more than one VC investor jointly makes an investment in the company. Risk diversification and the inability to fund a larger investment size are often considered the reasons for syndication among VC investors. Brander et al. indicate that syndication is often seen even when the capital requirements of the venture are modest as compared to funds managed by the VC investor. They therefore propose that syndication happens because it improves selection and value addition. VCs syndicate because two or more independent investors can screen projects more effectively than one. If an investment opportunity is brought to the VCs, and if the assessment is very positive, then the VCs would accept the project straight away. If the assessment is very low, then the opportunity is rejected outright. There is no value for a second opinion in both the cases. On the other hand, if the initial assessment is in between, a second opinion from another investor can be valuable. The authors therefore propose that the most promising opportunities would be taken up without any syndication, while those that offer moderate promise would be syndicated. They therefore test for the hypothesis that non-syndicated investments should on average yield higher returns than syndicated projects. If improved selection is the central motivation for syndication, it follows that syndicated investments should have lower returns than non-syndicated investments.

Similarly, different VCs have different skills and information and the value addition improves if investors with complementary capabilities can add value to the portfolio company. Since syndication involves sharing of benefits among different investors, VCs would engage in syndication only when benefit cost ratio of syndication is favourable. If the value addition hypothesis dominates then the returns should be higher for syndicated investments. Using the data collected from Canadian VC investments, Brander et al. indicated that syndicated investments have significantly higher returns than non-syndicated investments. Therefore they infer that the value addition hypothesis drives the rationale for syndication over the selection hypothesis and suggest that management rather than selection contributes to the success of VC investments.

More recently, Chemmanur et al. (2009) use the Longitudinal Research Database of the US Census Bureau to study questions related to efficiency gains in VC investment. They use Total Factor Productivity (TFP), i.e., the residual growth in output after accounting for changes in production factors as a measure to analyse the efficiency of portfolio firms. They find that the efficiency of VC backed firms prior to receiving VC funding is higher than that of non VC backed firms. Further, the growth in efficiency after receiving VC financing is greater for VC backed firms as compared to the growth of non VC backed firms. This indicates the evidence for both screening/selection and the value addition role for VCs in improving firm efficiency. They however find that the contribution due to monitoring and value addition accounts for a higher proportion of the increases in profits in VC funded companies (21% of the increases in profits are due to

screening effects and 35% of the increases in profits are due to monitoring effects). They are also able to find that contribution to portfolio firm efficiencies differ between high and low reputation VCs. While the TFP of firms prior to VC financing was higher for low reputation VC backed firms, the growth in TFP subsequent to financing was higher for firms backed by high reputation VCs. Their results suggest that while low reputation VCs rely on selecting more efficient firms, high reputation VCs are better able to improve the efficiency of the firms they invest in.

Fitza, Matusik, and Mosakowski (2009) try and address the same question in a governance context, by modelling the relationship between the VC and portfolio companies analogous to that of the relationship between a corporation and its business units. They study the impact of owners (VCs) and the contribution of VCs to variation in firm performance. They find that while portfolio company specific effects accounted for 26.3% of the variation, VC effects accounted for the next highest percentage of variation (11.2%). They also find that the VC investor is not a statistically significant predictor of the variance in portfolio company performance during the first round of investment and performance variance attributable to VCs appeared to occur after the initial round of VC investing and not before. Some VCs provided a high value added (estimated at 19% over at least 10 investments), while others appeared to destroy value (estimated at -18% over at least 10 investments). This suggests that VCs may be similar to each other when it comes to choosing investments, but differ in terms of their ability to add value after they have made the investment.

Sørensen (2007), on the other hand, provides a contrary finding to the studies stated earlier. He finds that the effect of selection exceeds that of management. However, the limitation of this finding is that his study was based on identifying only one lead investor per portfolio company investment without considering the significance of multiple investors, some of whom are in a better position to select rather than manage their portfolio companies.

Summary

Evidence indicates that VC funded companies perform better than comparative companies that are not VC funded. Research has indicated that significant variance in performance between them can be attributed to the VC investor. This then led to the subsequent question—what capabilities of VCs contribute to the performance variation. There has been more research evidence to indicate that managerial and value addition capabilities of VCs dominate the selection capabilities in explaining the performance variation.

More research is needed for further insights on the contribution of VC to the efficiency and performance of portfolio companies. Specifically, I would like to highlight two areas that need further research. First, further studies are needed to analyse the attribution of the managerial inputs and resources ('the carrot') that VCs bring vis-a-vis the result of disciplining force ('the stick') that they impose upon portfolio companies in explaining the performance variation. VCs structure their investments in such a way so that most of

the business and financial risk is borne by the entrepreneur. Some of the tools used to discipline the investee companies are staged investments (where the VCs retain the right to stop further funding to the firm), use of convertible preferred stock (instead of straight equity, which gives the VCs senior claim over that of entrepreneurs and a set of enforceable covenants in case of poor performance of the firm) and the right to replace the management team, when the firm does not do well (Sahlman, 1990).

Second, the effect of context on how VCs contribute to the efficiency of portfolio companies needs to be studied further. Most studies on this topic are based on data from the developed countries, primarily the US. While the VC industry has developed significantly in the recent years in many emerging countries like India, the profile of the VCs in these countries is different from those seen in developed countries. For example, many VCs in India are from the financing and investment banking industry and do not have substantial technology or business experience. Further research needs to be done whether such contextual differences impacts the way VCs contribute to the efficiency of their portfolio companies.

Venture capital and efficiency of portfolio companies: Discussion

Anchor

Thillai Rajan A.

Panellists

Ramesh Emani, Co-Founder and CEO, Insta Health Solutions. ramesh.emani@instahealthsolutions.com

Samir Kumar, Managing Director, Inventus Advisory Services (I) Pvt. Ltd. samir@inventuscap.com

G Sabarinathan, Associate Professor, Finance and Control, Indian Institute of Management Bangalore. sabari@iimbernet.in

Guhan Subramaniam, Managing Partner, IL&FS Investment Managers Ltd. Guhan.Subramaniam@ilfsindia.com

Thillai Rajan: The contribution of VCs to the efficiency of portfolio companies has long been a topic of interest to the research community. The preceding part of the paper provides a perspective of academic research on this topic.

The main objective of this round table discussion is to reflect on this topic in the context of practice. The Indian VC industry has clocked the fastest growth rate globally in recent years and the country has emerged as one of the leading destinations for VC investments. However, research on the Indian VC industry has been limited. We hope that this round table would not only provide a practitioner perspective on the topic but also contribute to the literature on the Indian VC industry.

We have four panel members joining us for the discussion this afternoon. Samir Kumar, Managing Director at Inventus Advisory Services, has been an early stage investor in India for the past nine years. Prior to co-founding Inventus, he led the India venture team for Acer Tech

Ventures. Before his venture career, Samir has spent 15 years in the IT industry in India. Guhan Subramaniam is a Managing Partner at IL&FS Investment Managers Limited. As past colleagues at IL&FS, we have worked together. He has more than 10 years of private equity experience across the complete investment cycle. Prior to joining IL&FS Investment Managers, Guhan has had 22 years of operational experience in senior management roles with leading corporations. Ramesh Emani is a co-founder and the CEO of Insta Health Solutions Private Limited. Insta Health is engaged in providing IT solutions for medium and large size hospitals. Prior to starting Insta Health, Ramesh was the president of the Telecom and Product Engineering Solutions division at Wipro Technologies. G Sabarinathan is an Associate Professor in the Finance and Control Area at the Indian Institute of Management Bangalore, where he teaches the first year MBA core course in Corporate Finance. Prior to joining academia, he had long experience in managing VC funds and served on the boards of over thirty firms across a number of industries.

Motivation for value creation: Samir Kumar

Let me begin with a small introduction. Inventus is a \$52 million fund, and invests in early stage companies. By early stage, I mean Inventus is usually the first institutional investor in the company. Like most VCs we raise capital from institutional investors, who are looking for opportunities to multiply their capital. Therefore, while people tend to associate broader objectives like employment generation and new technology with VC investments, VCs are very strongly focused on achieving large financial returns from their investments.

My presentation is structured in two parts: the characteristics that VCs look for when they make an investment decision, and the value they add to their portfolio companies. The main factors the VCs look for can be classified into four categories. First, they look for a great entrepreneurial team. Ultimately, VCs invest in the people behind the idea, and therefore team composition and capabilities are an important factor for any VC. Second, they look for large and fast growing markets. The markets have to be large, because it becomes difficult to exit from companies that are small. Third, VCs look for a differentiated value proposition. For a company to create value, it is important that it is not seen as a me-too player in the market. Fourth, VCs look for the feasibility of exit opportunities, such as initial public offerings (IPOs) or mergers and acquisitions (M&As). VCs need to give back the capital along with the returns to their investors at the end of fund life, and they would not be able to generate returns and give back the capital if they are not able to exit from their investments.

Since VCs invest in equity capital, they do not have guaranteed returns on their investment. While their investments can theoretically have an unlimited upside, they are also sometimes forced to write off their investments. Therefore, in their self interest, to maximise the returns from an investment, VCs add value to their portfolio companies. They add value in multiple ways. As board members, they work closely with the entrepreneur, acting as sounding boards and providing strategic advice to the entrepreneur. The investors use their networks to help the

companies in customer introductions, hire key people or to engage with partners. They also add value during the exit process, and help in identifying investment bankers and in successfully presenting the company to the investors.

Potential areas for value addition: Guhan Subramaniam

In a way, the VC is also an entrepreneur. VCs use their competence, skills, and experience for efficient deployment of funds with the objective of maximising returns for their investor. The money that VCs bring to the table is often called *smart money* (to differentiate it from what one would term as *dumb money*) because in addition to the monetary capital that VCs bring to the table, they also bring intellectual capital and relationship capital. In a sense they actively create an eco system through building and leveraging a network of investors, industry forums, business and thought leaders, investment banks, audit and legal firms, to the advantage of the fund managers (general partners), investors (limited partners) and the portfolio companies.

At the beginning of the relationship between the VC and a portfolio company, the notion of value addition is nebulous or abstract. As the relationship builds the perceived needs of the enterprise and the potential ability of the investor to contribute take a more distinct form and shape. There are many areas where VCs can potentially add value to an enterprise. For example, as Samir mentioned, VCs act as sounding boards for validation of concepts, strategies, markets and business plans. More definitively, VCs mentor the CXOs and senior management. Depending on the profile of the VC partner associated with an enterprise, VCs can provide domain expertise. VCs ensure that the portfolio companies adopt effective systems and processes. In recent years, irrespective of the size of the enterprise, there has been a focus on corporate governance. This has been relevant to early stage companies also because these practices can be difficult to change at a later stage. VCs contribute to the senior management pool – they are able to identify, interview, negotiate and recruit senior management talent for the portfolio company. VCs also help to attract other co-investors to the firm. A most critical value add from a VC is in enabling a liquidity event such as an IPO or Strategic Merger/Acquisition. Large PE/VC investors have a network and in depth understanding of the capital markets. So, if the company wants to list in an IPO, it becomes critical to have the right merchant banker and the ability to value the company correctly. VCs also help in building momentum and managing capital markets during the IPO process.

Value addition by the VCs is not to be seen as charity work. Such value addition directly contributes to the valuation multiple at exit. In sum, VCs do not wave a magic wand and cast a spell on the enterprise. They can provide specific value adds which they understand and can deliver to meet the relevant needs articulated by an enterprise.

Contributing to growth: Ramesh Emani

Before starting my current venture, I worked with Wipro Technologies for about 25 years. I started with a \$1 million

target, and when I left, I was running a \$1 billion business. I have therefore had the opportunity to experience the strengths of a very large and well run company like Wipro. In my current venture, I interact with small and medium hospitals, which can be classified as small and medium enterprises (SMEs). I am also in the board of two other small companies. This has given me an exposure to how small companies work. When I contrast this with the experience that I had at Wipro, I can broadly think of three areas where small companies need help to grow.

First, they need capital. Small companies are inherently more risky than large companies and they need adequate capital to manage those risks appropriately. In the Indian context, apart from the promoters' own capital, there are not many other sources of capital for small businesses apart from VC. Therefore at a basic level, VCs contribute to the growth of the small company by providing capital.

Second, they need expertise. Unlike large companies, small companies do not have substantial functional expertise. Apart from the founders and a couple of other senior members, there would be few others within the organisation who would have significant functional expertise. Therefore, they are compelled to get this expertise from outside. The best people to provide such expertise would be the investors in the company. While others can act as mentors, or even become board members, it is the investor who is well positioned to provide such expertise because the performance of the company is intertwined with the financial returns to the investor. Many VC investors have prior industry experience and are therefore well equipped to advise the companies in different functional areas. They are also well networked and well informed because of their active participation in various industry forums.

Third, small companies benefit from what can be called 'positive pressure'. Many entrepreneurs start their business because they want to be independent. Therefore, many of them are not able to decide whether they want to grow or be content with the existing level of operations. Even when they want to grow, they sometimes do not make the right decisions that would help them to grow. It is here that a VC investment helps. Because of their own exit pressures, VCs bring in a sense of urgency and positive pressure on achieving performance and growth.

In sum, VCs add a lot of value to their portfolio companies. VC funded companies should have disproportionate success as compared to companies that are completely funded by promoters.

Levers of value creation: G Sabarinathan

There are multiple ways in which we could look at the question of efficiency. In financial markets literature, efficiency is generally defined as the excess returns over a benchmark such as the market returns. However, since many VC investments are in unlisted companies, financial returns may not always present a reasonable picture of efficiency. Therefore, many have looked at the operational efficiency of portfolio companies. One of the problems in looking at operational efficiency is in measurement. For example, it becomes difficult to measure the inputs that constitute the so called value addition process. VC

investment happens in a highly unregulated setting, and there are no reporting or disclosure requirements. A lot of the inputs that VCs provide are never documented either by the VC or the company. These happen in private conversations for a variety of reasons. Another issue with value creation is what can be called the 'post hoc, ergo propter hoc' problem. Many believe that returns follow inputs of value addition and therefore when returns occur they are construed as the outcome of value addition. But it is difficult to prove the cause and effect relationship. Most often, the returns might have happened in spite of value addition.

However, as it happens, value addition is an important concept in practice, as VCs often position their post financing involvement as a strategic differentiator from competing funds. While academic literature often tends to look at value creation universally across funds, in reality styles of VC involvement vary across funds and the stage of evolution of the portfolio company. Value addition also varies between angel investors, VCs and private equity investors. While the line of distinction between these categories of investors is fairly thin in the Indian context, traditionally, each of these investors approach value addition very differently. Most of the existing academic literature on value addition dates back to the late 80s or early 90s. From my understanding of the industry, the value addition practices have changed a lot since then. Therefore it becomes important to study the subject of value addition with some of the current practices in the industry.

Previous speakers have spoken about what VCs do to create value. I would like to talk a little about how they do it. The academic literature on early stage or VC financing emphasises the importance of staged financing. While practitioners see this as a matter of routine, academics have attached a lot of importance to staged financing¹.

Staged financing is an important part of how VCs actually bring value addition and it is one of the levers they use in the value addition process. Some of the other levers that VCs use to create value include board representation in the portfolio company, use of covenants, and engagement with the portfolio companies at the operational level.

Finally, I would also like to add that networking among VCs and the reputation of the entrepreneur also play an important role. VCs are a small community and are well networked. If an earlier investor feels that the entrepreneur has been dishonest or fractious, then word gets around to other VC investors, and it becomes very difficult for the entrepreneur to raise subsequent VC funding. VCs thus add value by creating a sense of discipline among the entrepreneurs.

Discussion

Thillai Rajan: Academic literature reveals that by and large VC funded companies have shown superior performance to non VC funded companies. The question then is, how much of the superior performance can be attributed to VCs given

¹ Examples of publications include Sahlman's 1990 paper, Clayton, Gambill, & Harned, 1999 article, and Gompers and Lerner's 2001 publication.

that VCs are very selective and they fund only the best companies. Is superior performance then a result of the inherent characteristics of the firm or do VCs contribute after they have entered into the firm?

Samir Kumar: The answer is, both. Some would argue that the top quartile VC firms because of their reputation get the best entrepreneurs and therefore the companies funded by these firms are inherently superior and therefore they perform better. But I would not completely subscribe to that view point. I think some of the top quartile companies have a special network that comes into play for their portfolio companies that gives them better access to customers, better exits, and better partnership opportunities. Therefore, the VCs definitely contribute to the performance of their portfolio companies. If I have to put a number, I would say that about 50–60% of the superior performance of VC funded firms could be attributed to the inherent qualities of the firms that the VCs fund and the remaining 40–50% of the performance could be attributed to value addition by VCs. The systems, processes, governance and reporting that we make mandatory, play a role in the performance differential.

Since I invest in early stage companies, I can say that the processes that we help put in place play a role in the success of early stage companies.

G Sabarinathan: The answer is contextual. Many VCs believe that their work really begins after the cheque has been signed and handed over; therefore selection is not the major thing. My trouble is with the belief that VCs play a role in the success of their portfolio companies. Though VCs may act in the best interests of the company it is very hard to prove that they have affected the outcome positively. Most successful VCs would probably endorse this view as well. [Gorman & Sahlman's 1989](#) paper looked at a matched sample of companies and investors and interviewed them on the perceived importance of what the VC thought he did to the portfolio company and on what the entrepreneur perceived it to be, and the perceived importance of what the VC thought he should do to the company and that of what the entrepreneur thought he should do. The research revealed a huge difference between the perceptions of the two. Further, the measurement and methodology issues come into focus when one considers the aspect of attribution. Even case studies have limitations when it comes to teasing out these nuances.

Guhan Subramaniam: In a typical VC fund, the portfolio consists of anywhere between 10 and 15 companies, of which only about 25–30% of the companies perform well. In terms of value addition, the VCs do not neglect any company in the portfolio to start with. The contribution is the same for all companies in the portfolio. More often than not, the involvement of the VCs, at least in terms of time spent, is a lot more with companies that have gone down without a whimper than with companies that have achieved a huge return. This leads me to believe that the intrinsic factors such as a competent management team, conceptualising, positioning and delivering a value proposition, being in the right marketplace at the right time, and a buoyant economy become critical issues for a company to succeed besides the VCs value addition. VC's value addition alone is no substitute for success or increased efficiencies.

Ramesh Emami: I often tell entrepreneurs to go for VC funding only to make sure that somebody else also believes

in their story. It is like an endorsement, a good benchmark process, so that people will not embark on a foolhardy business. Secondly, the part played by the VC is similar to that of the audit firms and sometimes even that played by the board. VCs can help in identifying and addressing the shortcomings but they might not be able to contribute much in terms of adding to the positives. Addressing the negatives will make sure the company will not fail but it is addressing the positives that is essential for success. The reason is VCs are not as familiar with the business as the entrepreneurs are and usually do not have in depth understanding of the product, customer or the technology. When the VCs have good understanding of the business then they can contribute to the value addition process. For example, a VC investor like Vinod Khosla can contribute to his investments in the communications technology sector given his business experience.

Thillai Rajan: The viewpoints that have emerged are quite interesting and in a way contrasting to the findings in academic literature, which are largely based on the experience of the developed countries. Most empirical literature has indicated that the value addition effect dominates the selection effect in accounting for the increased efficiency of the VC funded companies. However, the views of the panel members seem to indicate that the absence of such a dominance of the value addition effect, and if at all there is a dominance, it could be the selection effect. One of the reasons for this could be the background of the VC investors operating in India. I'd like Samir and Guhan to address this point – You work in different spectrums as far as investment is concerned. Can we go to the next level and see how you are involved with your portfolio companies as early stage and late stage investors respectively?

Guhan Subramaniam: My experience says that between the VC and the portfolio company there is a stage where you are building trust; the investor is being evaluated as much as the investee. Some entrepreneurs are clear that they do not want a high level of interference. Every entrepreneur has a dream much beyond wealth creation, and in the process of achieving his dream there could be conflicts between him and the VC on varied issues from choice of technology to target markets. It is important that we avoid conflicts in the early stage and understand what is expected by the entrepreneur. Entrepreneurs may want inputs in specific areas. So the initial process of identifying where VCs could contribute and the extent of contribution should be sorted out first. For instance, VCs without the requisite technological knowledge could focus more on contributing to the financial aspects of the portfolio company. VCs cannot add value to every aspect of the business; I have found that sometimes it might be best to step aside and do nothing until asked. Value addition should not be thrust upon companies; the need has to be felt and it has to be asked for.

To address your query, contribution to a portfolio company will vary based on the stage of investment and the profile of the investor. PE/VC investors making investments in growth stage companies would be focused on enabling companies build strategic relationships, strengthening the management team and leadership, enlarging the composition of the board, leveraging changes in statutory policies, financial optimisation, and so on.

Samir Kumar: In my view there are two types of VC investors. One, who understand the industry so well that they figure out the idea and put a team around the idea to implement it. Typically these teams are entrepreneurs whom the VC investors have backed before, and who are now being backed in subsequent firms. The second type, into which we (and many Indian VCs) fall, believe in backing entrepreneurs who are following their dream. We have no great knowledge of the industry, the market or the customers and we think the entrepreneur knows much more about these things and if we think he has a plausible story, we back him.

Adding to what Ramesh Emani said, another area where early stage investors could contribute in is the elimination of negatives, which in itself is a huge positive, and it is one thing we are called to do time and time again. We do not go in with a preconceived notion of what value to add, but the value that we add depends on a specific company, and is different in different situations.

In the Indian context, many VC investors have transitioned to become private equity investors. The reason behind this transition could be that VC investment needs different skill sets. It needs skill sets of people coming from prior experience in business operations. Unlike investors with a background in investment banking or lending, investors with an operating experience are able to understand the needs of an entrepreneur and are able to add real value to an entrepreneur.

I will close with an example from the other side. I worked for a while with a startup which was funded by a prominent VC firm. As Head of AsiaPac, when I visited their Hong Kong office and explained the nature of our products and the sort of help we wanted, they promised me a meeting with the head of the customer organisation, when the person I really wanted to meet and who would be useful to my sales effort was several levels below the head. Finally, nothing resulted from that request. So when we started as a VC investor, I was very clear that value addition should not be thought of in grandiose terms, but as a way of doing several small things which cumulatively make a big difference.

Thillai Rajan: The discussion on the two broad categories of VCs is interesting. In the first, which is commonly seen in the West, the VCs have a strong understanding of the technology and business space. In the second type, which is more often seen in India, the VCs may not have as good an understanding of the business as the entrepreneur. Therefore, in India, entrepreneurs play a central role in the funded companies and investors rely more on the management of the portfolio company. Contrastingly, in developed countries we have heard stories where the VCs often replace the top management team in the portfolio company if the performance is poor.

G Sabarinathan: The belief that VCs replace CEOs and top management is exaggerated. Academic research establishes that it doesn't happen as often as people think it does. The evidence on the effectiveness of this step is very mixed. In the Indian context, I believe that (and as a former practitioner) a lot of what you do is defined by the administrative jurisdiction within which you conduct business. The state plays an important part in the way business is conducted in emerging markets, whether it is related to governance or structuring or the way you write contracts –

in India there is a significant 'Indianness' that creeps in into all aspects. Many covenants that are a part of a standard VC investment agreement can be difficult to enforce in India. For example, it becomes difficult to enforce a 'drag-along' or a 'tag-along' clause in India; the courts simply will not recognise them as they are considered inequitable. Similarly, the courts have never enforced a buy back clause that is often found in VC investment agreements. Yet we have all these agreements, which some people say exist for 'moral suasion'.

Samir Kumar: I agree with Prof Sabarinathan on the changing of the CEO. If you are changing the CEO it means that you have a failed investment that you are trying to salvage. The fact is that you have an entrepreneurial team which is pursuing a dream and it is very hard to substitute it. May be at a later stage, when the company has evolved and become profitable, with the consent of the entrepreneurial team you could bring in a seasoned CEO who would take it to the next level. But not in the first few years.

Guhan Subramaniam: Today, for a startup, an entrepreneur is a person who is passionate about technology that he believes will succeed. What this leads to, especially with early stage investments is that VC firms look at the entrepreneur's idea and the management team around the idea while making the investment. Somewhere midway the VC firm realises that while the entrepreneur is very passionate about the technology, he is not a good manager; the firm needs somebody who can manage cash effectively, be assertive and manage well with clear milestones. These are things which seem to escape when the investment is made initially. We are able to see these hurdles only half way down, and hence the need to induct a professional, an experienced CEO to lead the business instead of the entrepreneur. The downside is that the company may not be able to attract another CEO, as prospective CEO candidates may consider such a development as interference by VCs, and it might be viewed unfavourably. While change of CEOs does not happen often, when it needs to be done, we should have the courage to go ahead and do it.

Thillai Rajan: Ramesh, as an entrepreneur could you reflect on the topic of value addition and how it influenced your choice of investor? Before that, could you also share the reasons why you chose to go for VC financing? We know that there are a lot of conditionalities associated with a VC investment – you have to dilute your shareholding, if things don't go well you could be subjected to extra monitoring, and so on.

Ramesh Emani: For an entrepreneur in the technology and services sector, there are limited sources of capital. Either you put in your own money or you take money from friends and family. Even in the developed country markets there are no other institutions other than VCs to raise money. The draconian clauses or the drag-along and tag-along clauses do not really matter because you know that if you fail, you fail as a company to deliver certain results and you will have to exit. People, even outside India, do not seem very troubled by these considerations. What troubles entrepreneurs about VCs is when they are forced to merge with somebody else. This happens when the company is not doing very well but is not doing badly either. The opinion of the investor and the VC may differ; when you have completed three or four years and have not reached your

assigned goal, then considerations such as removal of the CEO or mergers may arise and opinions may differ.

In selecting a VC investor, if you don't have a choice you would go with whoever is willing to put up the money. But, assuming one has a choice, it is the comfort level that is the consideration. Because the VCs are in some sense an extension of the management, they are part of the team, and therefore it is important that you recognise the level of comfort with the investor. In my case, I have known my investor for a long time and we had worked in the same organisation earlier. But when I advise many young entrepreneurs who might not have the advantage of knowing the investor like we did, I tell them that personal comfort with the investor is very important because they are an extended part of your team.

Audience: You haven't talked much about failure. Are failing companies easier to spot or do they take you by surprise? The issue of predictability – is it different with companies that eventually fail as opposed to the winners?

Guhan Subramaniam: It is a documented fact that no more than 30% of the companies in a portfolio really give you expected returns. So we do build in failure into our scheme of things right at the beginning. Despite the fail-safe system, failures in a portfolio – both predictable and surprises are not uncommon.

One of the key processes that VCs and private equity firms perform is monitoring. We have a fairly rigid monitoring system in terms of information on performance that goes much beyond the statutory requirements of a board meeting. Effective monitoring does throw up a pattern, to indicate companies that may not succeed. Monitoring also results in a more productive discussion in terms of proactive initiatives such as a change in strategy. Those are things that even the management team at the entrepreneur's end would welcome and we would take some collective action on strategies. In case of unexpected failures, such as a company banking on creating a particular IP which is rendered irrelevant by a sudden shift in technology, that would result in sudden death.

Audience: Taking off from there, is the existing VC model the right one? Could it be improved upon? There are newer models such as the Y Combinator model, where the emphasis is not on monetary support but a lot of non-monetary assistance that smaller companies require. Such newer models seem to be more successful than the normal VC models. Are the traditional VC investment models being challenged?

Samir Kumar: In the early stage model, it is less about money and more about time, which is why I made the point of the importance of the operating background. In the US, firms became larger and larger with fees being the driving force – that model is broken. What that model led to in early stage venture was VCs deploying more capital than the company needed, which resulted in higher valuations and lower returns. This led to a return to the smaller fund model, the rise of micro VCs and super angels, all of which are new terms for the old fashioned VC. These are funds in the range of \$100 – \$200 million, deploying up to \$5 million in the early stages, but spending a lot of time with the portfolio companies and trying to get better returns.

Guhan Subramaniam: The VC industry is now 60 years old and the model has been tweaked over a period of time which is why we see avatars like super angels, micro VCs

and so on. However, risk investment is something that is not going away. Any good idea that requires implementation will require support in terms of funds and that will be a pure risk model as opposed to a debt funding model. The business model or expectations could change but I don't see the VC industry per se going away because it fulfills a very critical purpose.

Ramesh Emani: There are several small companies and they need management intervention or advice rather than money. In a country like India this is a fairly large segment which is presently being underserved. Institutions like IIM can take up research projects on the market scope for such interventions, the introduction of technology to improve such processes and systems. There are several companies that are in the Rs 10–20 crores (100–200 million) range, including ITES companies whose managements are happy that they are making money but they do not have the strength or the preparedness to sustain adverse winds. So if institutional mechanisms can be created which are not investment fund oriented but management oriented there is a lot of scope for it in a country like India which has a huge list of SMEs.

Thillai Rajan: Given that India requires a lot of funding for entrepreneurship particularly at the early stage, what should be the contours of the VC model particularly as we go forward. Our model is still US-centric. Can we evolve a model that would more relevant to the Indian context?

Ramesh Emani: Entrepreneurs' issues are the same all over, especially when it comes to investments to run the company. Companies need funds and advice and both are difficult to get. The IT industry may be different because it evolved differently. There are several industries and sectors in India, such as healthcare, education or even the corner grocery store, which do not get the attention of VCs today. Healthcare and education are the largest employing industries, outside of the government – these are examples of SME dominated industries which require intervention, both funds and advice; today their only source of financing is banks. By developing India-centric models, we would be able to target these sectors for VC funding. We may have to follow the example of Germany, where one can see a large number of SME's like in India. Over the years, Germany has successfully developed a financial system to meet the needs of SMEs.

Samir Kumar: From the VC standpoint, what we have to see happening in India which is different from the US is smaller funds. And those who are partners in smaller funds will have to live with smaller fees. We need to have LPs from India providing VC funds. Overseas LPs have a very different view towards portfolio companies. Hopefully, Indian LPs will have a better understanding of the situation and enable VCs to invest in companies that will create real value. These are the two things that need to happen.

G Sabarinathan: The current VC fund model consists of two sets of relationships: one that exists between the limited partner and the VC fund manager, and the second that exists between the fund manager and the portfolio company. Academic research has segmented the VC field into these two sets of agency relationships. The first set of relationships seems to be replicated fairly successfully across market contexts universally – its key aspects being incentive systems, governance mechanisms, performance

measurement and allocation strategy. It has been replicated in the Indian context as well.

It is in the second component that the Anglo–Saxon approach to governance may not apply universally to all jurisdictional contexts—a 2010 paper by Cappelli et al. (2010) argues that there is an Indian approach to managing business which is distinctly different from the handed–down Anglo–Saxon approach. Fund managers may need to take cognisance of this. So while there is no need to tweak the first component of the relationship, in the second component, an Indian model is evolving and VCs may need to relate to their portfolio companies differently and also educate their overseas partners.

Guhan Subramaniam: Looking ahead, while it is true that early stage funding is drying up and there is less and less of venture capital in India, the funds are becoming sector specific. Today it is not unusual to meet investors who focus only on healthcare or education or technology. At the same time, the restructuring of the industry is being driven by need and compulsion. We could draw a parallel with microfinance. The success of microfinance evolved from the Grameen Bank in Bangladesh, and it has currently become a hot favourite with the large institutional investors in the US. Microfinance has been able to raise a lot more money and that was a response to a situation when 80% of the community could not really access debt from the more structured institutions such as commercial banks. I think something similar may happen in this industry because today the difference between venture capital and private equity is more in terms of the size and stage of investment. The structure would throw up a new business model where we would find that VC is back with a lot more of early stage funding. There will be innovation of business models in this industry.

Thillai Rajan: Our discussion has highlighted that the context as well as backgrounds of the VCs can influence the way VCs contribute to the efficiency of their portfolio companies. Thank you all for your inputs and for this very interesting and insightful discussion.

References

- Baum, J. A. C., & Silverman, B. S. (2004). Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *Journal of Business Venturing*, 19, 411–436.
- Berger, A., & Udell, G. (1998). The economics of small business finance: the roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance*, 22, 613–673.
- Blackwell, D., & Winters, D. (1997). Banking relationships and the effect of monitoring on loan pricing. *Journal of Financial Research*, 20(2), 275–289.
- Brander, J. A., Amit, R., & Antweiler, W. (2002). *Journal of Economics & Management Strategy*, 11(3), 423–452.
- Brav, A., & Gompers, P. A. (1997). Myth or reality? The long run underperformance of initial public offerings: evidence from venture and non venture capital backed companies. *Journal of Finance*, 52, 1791–1821.
- Cappelli, P., Singh, H., Singh, J., & Useem, M. (2010). The India way: lessons for the US. *Academy of Management Perspectives*, 6–24, May 2010.
- Chemmanur, T., Krishnan, K., & Nandy, D. (2009). *How does venture capital financing improve efficiency in private firms? A look beneath the surface*. Unpublished working paper. Center for Economic Studies.
- Clayton, J., Gambill, B., & Harned, D. (1999). The curse of too much capital: building new businesses in large corporations. *The McKinsey Quarterly*, 48–59, August 1999.
- Davis, C. (2003). Venture capital in Canada: a maturing industry, with distinctive features and new challenges. In D. Cetindamar (Ed.), *The growth of venture capital: A cross cultural comparison* (pp. 175–206). Greenwich, CT: Quorum Books.
- de Bettignies, J.-E., & Brander, J. A. (2007). Financing entrepreneurship: bank finance versus venture capital. *Journal of Business Venturing*, 22, 808–832.
- Fitza, M., Matusik, S. F., & Mosakowski, E. (2009). Do VC's matter? The importance of owners on performance variance in startup firms. *Strategic Management Journal*, 30(4), 387–404.
- Gartner, W. (1988). Venture capital. In Dennis Logue (Ed.), *Handbook of modern finance*. New York: Warren, Gorham and Lamont.
- Gompers, P. A., & Lerner, J. (2001). *The money of invention: How venture capital creates new wealth*. Harvard Business Press.
- Gompers, P. A. (1995). Optimal investment, monitoring, and the staging of venture capital. *Journal of Finance*, 50(5), 1461–1489.
- Gorman, M., & Sahlman, W. A. (1989). What do venture capitalists do? *Journal of Business Venturing*, 4, 231–248.
- Hellmann, T., & Puri, M. (2000). The interaction between product market and financing strategy: the role of venture capital. *Review of Financial Studies*, 13(4), 959–984.
- Hellmann, T., & Puri, M. (2002). Venture capital and the professionalization of start-up firms: empirical evidence. *Journal of Finance*, 57(1), 169–197.
- Jain, B. A., & Kini, O. (1995). Venture capitalist participation and post issue operating performance of IPO firms. *Managerial & Decision Economics*, 16, 593–606.
- Kaplan, S. N., & Lerner, J. (2010). It ain't broke: the past, present, and future of venture capital. *Journal of Applied Corporate Finance*, 22(2), 36–47.
- Kaplan, S., & Stromberg, P. (2001). Financial contracting theory meets the real world: an empirical analysis of venture capital contracts. *Review of Economic Studies*, 70(2), 281–315.
- Kortum, S., & Lerner, J. (2000). Assessing the contribution of venture capital to innovation. *Journal of Economics*, 4, 674–692.
- MacMillan, I. C., Kulow, D. M., & Khoylian, R. (1989). Venture capitalists involvement in their investments: extent and performance. *Journal of Business Venturing*, 4, 27–47.
- Meggison, W., & Weiss, K. (1991). Venture capitalist certification in initial public offerings. *Journal of Finance*, 46(3), 879–903.
- Morris, J. (1987). The pricing of a venture capital investment. In Stanley Pratt, & Jane Morris (Eds.), *Pratt's guide to venture capital* (pp. 55–61). Wellesley, MA: Venture Economics, Inc.
- Romain, A., & Potterie, B. (2004). *The economic impact of venture capital*. Working paper. Universite Libre de Bruxelles.
- Rosenstein, J. (1988). The board and strategy: venture capital and high technology. *Journal of Business Venturing*, 3, 159–170.
- Rosenstein, J., Bruno, A. V., Bygrave, W. D., & Taylor, N. T. (1989). Do venture capitalists on boards of portfolio companies add value besides money? In R. H. Brockhaus, N. C. Churchill, J. Katz, B. A. Kirchoff, K. H. Vesper, & W. E. Wetzel (Eds.), *Frontiers of entrepreneurship research, Babson College* (pp. 216–229). Wellesley, MA: Centre for Entrepreneurial Studies.
- Sørensen, M. (2007). How smart is smart money? A two sided matching model of venture capital. *Journal of Finance*, 62(6), 2725–2762.
- Sahlman, W. A. (1990). The structure and governance of venture capital organizations. *Journal of Financial Economics*, 27, 473–521.

- Sapienza, H. J., & Timmons, J. A. (1989). The role of venture capitalists in new ventures: what determines their importance? *Academy of Management Proceedings* 74–78.
- Thillai Rajan, A., & Deshmukh, A. (2009). *India venture capital and private equity report, 2009*. Indian Institute of Technology Madras.
- Ueda, M. (2002). *Banks versus venture capital*. CEPR. Discussion Paper 3411.
- Winton, A., & Yerramilli, V. (2008). Entrepreneurial finance: banks versus venture capital. *Journal of Financial Economics*, 88, 51–79.