

Preface—Venture Capital and Technology: What’s Next?

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During the 1990s, a new kind of economic hero emerged. Venture capitalists, particularly the pioneers from Silicon Valley, transformed renegade entrepreneurs into productive corporate citizens. The companies they funded increased productivity, which, in turn, accelerated economic growth. Their success in securing high rates of return for their limited-partner investors created a frenzy to get in on the game—climaxing in 2000 with fundraising of more than \$92 billion.

The decade of success also spawned a critical, if unintended, consequence. Traditionally, very little data have been available regarding venture capital transactions. The details of venture-backed deals—as private equity investments—were rarely disclosed. The dramatic increase in both venture capital funds and venture capital investments, however, created a concurrent interest in tracking information about the industry. This new resource provides an important perspective for understanding how and why venture capital works—or, as importantly, does not work.

In order to examine the impact of venture capital on technological innovation, economic growth, corporate development, and market conditions, among other topics, the Federal Reserve Bank of Atlanta and New York University’s Stern School of Business sponsored a conference titled “Venture Capital and Technology: What’s Next?” The three-day event, held at Sea Island, Georgia, May 2–4, 2002, brought together academicians and practitioners to explore

both operational and policy challenges facing the venture capital industry. Among the highlights was a teleconferenced address by Federal Reserve Chairman Alan Greenspan. In his remarks, the chairman offered a strong statement regarding the accounting practices used for expensing stock options. The issue of stock options is, of course, particularly relevant to the venture capital industry, which uses options to lure key executives to the management teams of its portfolio of companies.

However, options are only one of many issues facing a relatively young industry that remains unregulated and, surprisingly, under- (and inaccurately) reported. The papers presented at the conference tackled issues ranging from the problem of “dirty data” to the replication of the U.S. venture capital model abroad.¹ Impressive and thought-provoking as the presentations were, they were perhaps less remarkable than the passionate debates that took place during the question-and-answer portion of the program—conversations that continued during breaks, over lunch, and throughout dinner. What kind of accountability should venture capital firms have? Is there any way to moderate boom-bust cycles? To what extent, as one participant phrased it, will analytically “lovely” models prove to be empirically challenged?

External versus Internal Venturing

Many venture capitalists dismiss corporate venture investing as a contradiction in terms. Funded solely by a corporate “parent,” these funds

often lack the flexibility of an independent fund. According to Paul Gompers, a professor of business administration at Harvard Business School, corporate venturers actually enjoy a higher success rate than independent venture capitalists do. Gompers's paper stresses the need for corporate investors to "keep close to their knitting." Corporate investing works best when it maintains a highly focused strategy to leverage the company's brand as a value-added asset. It is also important for corporate venture arms to work in concert with various corporate divisions, which might otherwise feel threatened by the fund's portfolio companies. Along the same lines, Gompers contends that the most common cause of failure was lack of executive commitment. Because a corporate fund is, by definition, funded by the corporation, it is as subject to the whims of management as any other division. Having a strongly strategic and well-articulated focus can mitigate the problem of parental apathy.

Valuation and Performance

In spite of the dramatic collapse in venture capital financing during the past two years, the developments of 2001 are, according to Stanford University Graduate School of Business professors Thomas Hellmann and Manju Puri, "a mere kink in an otherwise exceptional growth curve of the venture capital industry." Hellmann, who presented the paper coauthored with Puri, examines the difference between short- and long-term performance in order to ascertain what changes have taken place within the venture capital industry.

Noting that "good data are extremely hard to find," Hellmann discusses the findings from the Stanford Project on Emerging Companies, an interdisciplinary research project that analyzed 170 technology start-up firms. Hellmann and Puri use this information to examine the effects of venture capital on both the market position of the start-up and on internal operational issues. For instance, the presence of venture capital increases the likelihood that a start-up will bring a product to market by 79 percent. Not surprisingly, Hellmann and Puri's research supports the conclusion that venture capitalists provide value-added services. These ancillary, or support, services enhance the value of their portfolio companies. More controversial was their conclusion that the relative lack of oversight by limited

partners in the funds in which they invest poses a risk that could be mitigated by imposing some standards on how the venture capital industry operates.

Innovation and Economic Growth

That venture capital spurs innovation and innovation spurs economic development seems a given. But is it? Josh Lerner, Jacob H. Schiff Professor of Investment Banking at Harvard Business School, examines the effects of the decline in venture capital investments. Stressing the cyclical nature of the venture capital industry, Lerner suggests that innovation can be equally affected by policy issues, such as the Bayh-Dole Act of 1980 and the Federal Technology Transfer Act of 1986, both of which eased entrepreneurs' ability to access early-stage research. Similarly, the Department of Labor's clarification of the Employee Retirement Income Securities Act in 1979 allowed pension funds to make limited investments in venture capital.

Lerner makes an interesting distinction between entrepreneurial activity and innovation, arguing that while the level of venture activity may dramatically affect entrepreneurial enterprises, it does not necessarily follow that it similarly affects innovation. For instance, venture financing for such areas as advanced materials and micromanufacturing languished during the boom of 1998–2000 as money was poured into telecommunications and the Internet, yet innovation was, and is, still taking place in these areas.

Conclusion

By the end of the conference, it was evident that the venture capital industry—under the intense scrutiny of media coverage—has grown up. Maverick intuition is no longer sufficient due diligence. Numbers count. It was also evident that, even in the wake of the burst of the bubble, venture capital remains a dynamic asset class in the United States, contributing significantly to economic development and technological innovation. It is therefore important to examine the issues that have an impact on the operation and management of this asset class. Because academicians and practitioners offer different perspectives, ongoing conversations regarding the nature of the industry are essential if it is to remain a strong and vibrant resource for entrepreneurial innovation.

1. The conference paper by Ronald J. Gilson, "Engineering a Venture Capital Market: Lessons from the American Experience," draws on a decade of theoretical and empirical literature to address the practical problem of whether the U.S. experience can provide guidance in fashioning a venture capital market in other countries. The paper does not appear in this issue of *Economic Review*. It is forthcoming in the April 2003 *Stanford Law Review* and is available on the Federal Reserve Bank of Atlanta's Web site at <www.frbatlanta.org/filelegacydocs/policy_gilson.pdf>.