The Economic Sociology of Capitalism

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Venture Capital and Modern Capitalism

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Over the past thirty years, organizational ecologists have developed an extensive literature on the founding rates of various organizational forms. In doing so, they have probed the institutional underpinnings of these organization-creation processes. In general, founding rates surge and decline as events in the economy lead to massive reallocation of the "factors of production" (capital, labor, and raw materials), as political upheavals, in which the interests and leadership of nation states and other political units are replaced and waves of scientific discovery and invention produce shifts in technology that provide competitive advantage to some organizations and impose obsolescence on others.

Such societal-level processes do not happen automatically, but reflect a complex pattern of interrelationships between various social institutions that are played out at the population level by competitive and mutalistic relationships among various specialized organizational forms. At the community level these same relationships are manifested in the patterned interactions between individual organizations whose behavioral predilections are engineered into the structures, operating processes and strategic models they employ (Hannan and Freeman 1989; Carroll and Hannan 2000). Over the past forty years in the United States, some organizational forms proliferate through processes in which various supporting organizations gather and distribute resources used in the organization founding and building processes. Relationships based on ascribed social status have always assisted or impeded organization builders. Being a member of the right kin, ethnic, or social circle has always improved the chances of entrepreneurial success. These factors do not today. In some parts of the world, however, they have been supplemented or even replaced by other, more formal mechanisms as special purpose organizations have emerged that generate their own resources by providing resources to others. Banks and law firms have done so for centuries (see Black and Gilson 1998 for an analysis of the interplay of such institutions). More recently, a community built on relationships among a larger set of actors has emerged. Resources flow through these relationships, whose structure, therefore, defines opportunity for individuals. In addition to commercial banks and law firms, the organizational forms that characterize this community include accounting firms, executive search firms, investment banks, commercial and industrial real estate brokers, and venture capital firms.

All of these specialists provide access to resources that entrepreneurs and other organization-creators routinely use. They also provide access to each other. They develop strong relationships that include personal ties, partly by being involved in various extra-work social networks, but also by "doing deals" together (Bygrave 1988). That is, they cement relationships by stating their willingness to provide resources to organization founders, and then by performing when the time comes. Having done deals together before provides them with the background to trust each other the next time. Similarly, or course, failure to perform establishes a barrier between such actors. These relationships and barriers form the basic social structure through which organization founding occurs (Anderson 1999).

When companies succeed or fail on matters of dynamics, when they start a new company and how fast they build it to competitive scale, the efficient interaction of these service providers become especially important. This is, of course, exactly what Richard Swedberg identifies as the core surf of the new economic sociology: amalgamations of interests and social relations (2003: 7).

This paper describes one such organizational form, the venture capital firm. It explains how certain observable behavioral regularities of such organizations can be understood as ordinary outcomes of structural arrangements rather than as the heroic acts of media icons. Venture capital firms participate in a communal system including other kinds of organizations such as commercial banks, investment banks, law firms, accounting firms, and executive search firms. This system is designed to reallocate capital very quickly as new technologies and markets appear. The extraordinarily rapid growth of companies receiving venture capital investment imposes burdens on society, and also creates benefits such as employment. By exploring venture capital as a social institution, the chapter may help add to the understanding of how capitalism works at the start of the twenty-first century.

Venture Capital as a Social Institution

In the nineteenth century, when European and American social scientists were struggling to understand the implications of the Industrial Revolution, capitalism was the frequent subject of analysis. One might even say that early social scientists were preoccupied with it. Political power, social status, and wealth were all bound up in a social system driven by capital formation and the ownership of economic assets (i.e., "the means of production"). In
particular, those who financed and organized the areas of economic expansion amassed great fortunes and all that went them.

This is still true today, but two important factors have changed. First, the industrial revolution expanded in areas of infrastructure building (e.g., railroads, bridge and ship building, iron, steel, and lumber mills). It was not until the latter part of the nineteenth century in Europe that science-based entrepreneurship became common. Even then, it was not the principal source of new venture formation, nor was it the principal basis on which great fortunes were built. Today, social change, economic growth, and the creation of great fortunes are driven by the commercialization of science and technology. Second, companies are formed to be sold. Rockefeller and Ford, for instance, did not build their companies in order to sell them. Loss of majority ownership and control of the ventures follow from the speed of the contemporary process and a changed way of thinking. Current financial institutions time-value money, and this makes time to liquidity vitally important for all who invest in the commercialization process. Similarly, the pace of technological change is high in areas of greatest opportunity, and this places a premium on quick injections of capital and rapid growth of new ventures. American venture capital is a device for rapid redirection of the flow of capital, with continuing injections of capital supporting an extraordinarily rapid growth process.

One of the more interesting consequences of modern capitalism is the speed with which new economic entities are formed and the celerity of their growth. Very rapid growth to large size was accomplished in earlier times only out of military necessity. So the firm of Friedrich Krupp A.G., or E. I. DuPont de Nemours & Co., grew very rapidly during World War I, but the conditions generating such growth involved direct governmental mandate and capitalization. More generally, large corporate entities were unknown prior to building the large railroad trunk lines, and such growth occurred through merger and acquisition (Chandler 1977).

VENTURE CAPITALISTS AND VENTURE CAPITAL FIRMS

In this chapter, the term "venture capital" refers to a particular form of organization in its institutional context. A venture capital firm is a management organization that raises money, finds and evaluates entrepreneurial ventures, and participates in their management so as to increase their value as rapidly as possible. The defining characteristics of an American venture capital firm are (see Gompers and Lerner 2000: 17-124):

- **Invest capital provided by others**—they are not principally set up to invest the venture capitalists’ own money.

- **Sequential funds organized as limited partnerships**—the venture capital firms raise money in one or more "funds." These funds are commitments by investors to provide capital on request. Investors are partners whose liability is limited to the amounts invested—hence the term "limited partner." The capital provided by the limited partners is invested and managed by general partners, and those general partners are personally liable for the capital invested (i.e., the general partners are fiduciaries). These funds are set up to liquidate on a fixed schedule, usually in ten years. By law, the limited partners may not exercise control over the specific investments or the managers of the portfolio companies that receive them.

- **Carried interest**—when the fund’s assets are sold, any profits generated are split between the limited partners and general partners. Usually, 20 percent of this "carried interest" goes to the general partners, the venture capitalists. The rest goes to the limited partners. The original investment of the limited partners is returned before carried interest is calculated. Venture capitalists also charge a yearly management fee. It is 1.5 percent to 3 percent of the fund’s capitalization and is intended to reimburse the general partners for the costs of doing business.

Venture capitalists make money by investing when companies are younger, smaller, and less valuable, selling when these companies are older, bigger, and more valuable. As these companies grow, various strategic and managerial problems are solved and risk is mitigated. So investments occurring later in the process are less risky and one would expect the returns to be lower. Carried interest provides a very powerful incentive for venture capitalists to encourage the speed of this process. They make most of their money when they sell their equity in the young company to other investors. To the degree that venture capitalists, other investors, founders, and employees benefit from this growth, their interests are aligned. So they all do best well when the young company grows at a very rapid rate (see Sahlman 1990, for more detail on venture capital firm structure).

Viewed in this structural way, venture capital firms make their money by filling the structural hole that exist in the social networks (Burt 1982, 1992) connecting holders of highly aggregated capital (insurance companies, pension funds, endowments) and the entrepreneurs who are trying to start and grow young companies. The venture capitalists, acting as agents of their limited partners, develop specialized skills for identifying and evaluating nascent ventures. On the other hand, the develop strong social relationships with those who manage this highly aggregated capital. They economize on the time it would ordinarily take for an entrepreneur to find and "pitch" the source of financing. The structural hole exists because the money manager does not speak the same language as the entrepreneur and does not have
the time to make small investments. So the venture capitalist fills the hole and benefits from the social position.

Liquidity is produced in the capital markets, through an Initial Public Offering of securities (IPO) and subsequently through the sale of stock through the market, or through an acquisition. In the latter scenario, another company buys the young company and pays the investors either in cash or in stock. Since owning stock in the acquiring company entails risks, cash is better. Shares in a publicly traded company are second best, and less desirable if the terms of the deal prohibit the investors from selling those shares for some period of time (during which they are “locked up”). Least attractive of all is an acquisition by a private company, which must itself generate liquidity before the focal company’s investors realize a return on their investment. The time between investment and liquidity may be lengthy. Consequently, the venture capitalist assists the managers of the portfolio company in growing their business as quickly as possible. So creating rapid growth is a means to an end. The end is to produce a return for all the partners in the fund.

**Capital Markets.** If the capital markets will buy partially formed companies and provide the kinds of rewards they seek, venture capitalists will happily go along. Ordinarily, however, venture capitalists are constrained by the capital markets, which have their own institutionalized practices and standards, and their own economic realities. This means that investment banks will only underwrite an IPO if the portfolio company has characteristics (such as financial performance and stable management) that the analysts working for the purchasers of securities will accept. Investment banks promise to make a market in a new security. This means that they are willing to buy or sell shares if such actions are necessary to support a stable price for the security.

The fixed costs of taking a company public are high. Lawyers, accountants, and other professionals must be hired to generate the documents required by the markets and government agencies. To sustain such fixed costs and justify the risks associated with making a market, the minimum value of the securities sold in an IPO has to be $50–75 million. Since about one-third of a company’s stock is sold to the public in an IPO, this means that the company must be worth at least $150 million in order to take it public. This is a typical target set by the venture capitalists. They ask themselves what is the probability that this company will ultimately grow to a valuation of $150 million, and how long will it take?

**Successive Funds.** Venture capitalists are concerned about both time to liquidity and the return they receive because these issues underlie their carried interest. A second reason for this concern is that the performance of the current fund is the most important issue in raising the next fund. It takes about three years to invest the capital raised in a venture capital fund.

Of course, this time period adjusts to the business cycle, lengthening when depressed stock markets make IPOs difficult and shortening when markets are rising. IPOs occur more frequently in a rising market, and entrepreneurs bring more deals to the venture capitalists when they believe that their chances of success are higher. After the fund’s capital is invested, venture capitalists continue to work on the portfolio companies in which their capital is invested. After another period of time, they start to have liquidity events and returns can be distributed to the partners. Of course, the venture capitalists do not wait until this happens to raise another fund. They try to time the funds so that they always have funds to invest. So about every three years they raise another fund.

The performance of previous funds is conventionally evaluated in terms of an Internal Rate of Return (IRR). This is time valued against some conservative standard such as returns yielded by government bonds. So current performance fuels future access to capital. Venture capital firms do fail. They disappear when their returns are low by competitive standards.

Indeed, sometimes “low” means negative.

So far, we have described what venture capital firms are, but we have not discussed what they actually do. Their activities vary through the cycle of the funds they have organized and the life cycles of the portfolio companies in which they have invested.

**Institutional Structures**

The rapid growth that underlies the institution of venture capital requires that resources flow into the new venture at high rates. This, in turn, requires that these resources flow through society in a fluid manner. This depends on a set of legal, financial, and social structures that can be seen as preconditions for the venture capital to function.

This chapter cannot possibly deal with all of these institutional arrangements, as they constitute the economic underpinnings of a modern state. So it goes almost without saying that contracts have to be enforceable, and there has to be a generally accepted monetary system. More specifically, however, venture capital requires processes for gaining liquidity.

**Capital Markets.** Initial public offerings are the preferred vehicle for liquidity because they produce higher returns and generate methods of converting large shares of equity into cash. So venture capital tends to work badly without a securities market that has efficient procedures for marketing shares of young companies. This, in turn, requires an underwriting
mechanism to reduce risk for the purchasers of IPO stock. That is, someone has to "make a market" in the stock so there is liquidity when the "float" is small (i.e., not much stock is available to be traded). A set of regulations to create and preserve transparency, along with an enforcement structure, is also necessary if human perfidy is to be assumed.

Technology. Protection of intellectual property rights has to be provided if the window of time between the start of the new company and the liquidity event for investors is to stay open long enough for growth to produce the returns venture capital generates. So if patents, trademarks, and the like cannot be defended, new entrants can begin to cut profit margins before early investors can gain liquidity. If this happens, their risks expand substantially.

Labor Markets. Because rapid growth is presumed, venture capital presumes fluidity in labor markets. "Non-compete" clauses in labor contracts keep experienced managers and technical people from moving into rapidly growing young companies. In some countries (e.g., Germany), a presumption of theft of intellectual property is implicit in employment agreements. The burden of proof is on the employee to show that he or she is not taking company trade secrets when employers are changed.

Employee Incentive Stock Options provide an important vehicle for aligning incentives of founders, investors and employees hired during the growth process. These are contracts to purchase common stock in the future at a fixed price, usually the share price paid by the most recent investor at the time the option is granted. These options are not taxed in the U.S. until they are exercised and the stock is sold. So the person receiving the options takes no risk, as the options cost nothing until exercised but permit the option holder to participate in the company's value appreciation. Such options are usually "vested" over time. They cannot be exercised until vesting has occurred. In many parts of the world such options are taxed at the time they are issued, in spite of the fact that they cannot be converted into cash even to pay the tax (Jaffe and Freeman 2002). Furthermore, they are often taxed as ordinary income while in the U.S. they are taxed at a lower capital gains rate. So U.S. tax law discounts such options for the risk associated with the company's future and provides support for the mobility process that underlies rapid growth.

In addition to the legal issues that may lower employment mobility, cultural factors also operate to limit the fluidity of employment. Employees take risks as the economic and social costs of job changes are rarely compensated in full. Much research shows that the probability of failure of young and small companies is much higher (see Carroll and Hannan 2000: 281-312 for a review), so when an employee leaves a big, older company for a younger and smaller one, the risks of subsequent unemployment are higher. One would think this would be accompanied by higher rates of pay, but the reverse is true. Typically, wage rates are lower in the young companies. Social status returns are similarly lower (especially for senior managers and technical people). Compensation usually takes the form of stock options. These options are rights to purchase common stock in the future, and thus fall behind the preferred stock investors of capital receive (what makes such stock "preferred" is primarily the liquidation preference in which the proceeds of company liquidation go first to the preferred shareholders). Since the value of these options is a function of company success, this mechanism magnifies the risk. Employees make a bet on the outcome of another bet.

Of course, those making this bet are not just the employees themselves; their families are implicitly doing so as well. So the willingness to take such risks for an employee are in part a function of that employee's family's reactions. If leaving a secure, high status company for an insecure unknown startup is not socially supported, recruiting experienced managers and technical people is made much more difficult. This is the situation in much of the world.

Dilution. So far, we have discussed the growing value of young companies and how venture capitalists profit from that growth. A parallel process is working simultaneously to dampen the returns to all involved. This second process is the distribution of equity to investors and employees as time goes by. The young company's cash requirements rise as it grows. Employees and investors conventionally think of this as a "burn rate"; it is evaluated relative to working capital. Simply put, the monthly burn rate and capital resources define the time to failure. Rapid growth ordinarily generates expenses that rise more rapidly than expanding sales can sustain. So successive waves of capital are sought to fuel this rapid growth, and shares in the company are sold in larger and larger quantities. To be sure, the price per share rises. It makes sense to current investors to accept this situation as they own a smaller share of a more valuable entity. When things go well, their absolute interest rises even when their relative position erodes through dilution. When things go badly, of course, this may not be true. In fact, the position of current investors may get worse very fast in hard times as later investors can demand much greater dilution of earlier investors and former employees.

REWARDS FOR SUCCESSFUL VENTURE CAPITALISM

Depending on competitive conditions, venture capitalists need to return 30 percent or more compounded annually. To meet this target an investment
has to double in value in three years. It must increase almost fivefold in six years (see figure 4 below for recent returns of venture capital funds). When venture funds perform at this level, venture capitalists make substantial amounts of money (see Bygrave 1994 for an analysis of venture fund IRRs). A typical fund might have $500 million dollars in commitments from limited partners. Such a fund might have six general partners. Each year, these six partners might charge 2 percent of the fund's value in management fees, $10 million or about $1.7 million each. Of course, expenses such as office rent and salaries of staff come out of this $10 million. If a 30 percent internal rate of return is achieved and results in disbursements according to the indicated return, the original $500 million has grown to a little over $2.4 billion after six years have passed. Of course, some investments produce liquidity earlier and cease to generate returns after the partners have been paid. On the other hand, some of the investments will not produce liquidity until ten or more years have passed. Assuming the process ends in six years, and that the carried interest of the venture capitalists is 20 percent, the six partners will make $380 million, $65.3 million each if they share equally. Their pro rata share of the management fees raises this to about $80 million (although sometimes management fees are treated as an advance against the carry). What do they do to produce such proceeds?

Activities of Venture Capitalists

First, and most obviously, venture capitalists find and evaluate deals. They get paid to pick winning horses. This is difficult to do, as returns are approximately log-normally distributed. A few very successful investments produce the bulk of the fund's returns. The issue is not simply investing in successful companies, but investing in at least a few very successful companies. To do this, venture capitalists need to persuade themselves that there is a billion-dollar market for the new company's products or services, and that the company can take a large share of that market. Such decisions are obviously fraught with uncertainty, which venture capitalists mitigate in part through syndicated investment strategies and in part by tapping into extended information networks (Podolny and Castellucci 1999).

Second, venture capitalists structure deals. They have a great deal of expertise in producing profits for their funds while preserving the incentives the entrepreneurs and other employees require to motivate them in the face of heavy time demands and high levels of risk (Sorensen and Stuart 2001).

Capital is raised for young companies in waves, called "rounds" of investment. Staggered injections of capital this way facilitate monitoring the performance of entrepreneurs as a review of the company relative to its plans as stated when previous rounds were raised (Ami et al. 1980; Gompers 1995). Typically, each round is led by one investor who joins the board of directors. Since all investors in the round purchase stock at the same price, this lead investor essentially represents the interests of all investors in the round. The implicit trust constrains the admission of potential investors (Rosenstein et al. 1993). Joining a syndicated round thus involves social acceptance. Some venture capitalists avoid co-investing with others. Leads often help sell the deal to others with whom they prefer to work (Bygrave 1987; Podolny 2001).

Third, venture capitalists add value by drawing on their networks to provide resources the growing company requires (Florida and Kenney 1983). This sometimes takes the form of access to markets. It also involves access to other service providers such as commercial bankers, investment bankers, law firms, accountants, and executive search firms. As Coleman (1988) points out, these various network connections reinforce each other, and they reinforce the value of human capital venture capitalists also bring to their company-building activities. The intense time demands are exacerbated by distance, and this leads venture capitalists, particularly those focusing on the earliest investment in new companies, to confine their activities to areas of close proximity (Sorensen and Stuart 2001).

Fourth, venture capitalists provide management skills—human capital. The earlier they invest, the greater their involvement tends to be. So they advise the entrepreneurs about organizational structure, business strategy, and financial planning, and often participate in negotiations and recruiting (Sapienza and Gupta 1994). Venture capitalists often provoke entrepreneurs to make decisions they would otherwise put off. People tend to magnify the importance of things they know about and trivialize things they do not know intimately. So venture capitalists pressure entrepreneurs to face problems in areas they would prefer to ignore. This often involves hiring managers in fields such as marketing and finance, which technology-oriented entrepreneurs would otherwise leave to much later and tend to fill with less qualified people.

Finally, venture capitalists help prepare the company for a liquidity event. They negotiate with investment banks and help to secure the last rounds of financing that are required to boost performance, making the new issue more attractive to investors. (More details on these activities can be found in Gorman and Sahlin 1989.)

Resources VC Firms Use

Venture capital firms depend on three kinds of resources: capital, deals, and people. Any of these can be scarce or abundant.

Capital. Obviously, when the economy is expanding there is more capital, but there may also be more demand for that capital. Venture capitalists
compete well for such capital when IPOs are occurring often and when valuations for those issues are high. They also compete successfully for capital when institutional arrangements favor growth and mitigate risks.

One can think of the dynamics as being represented by a clock that starts ticking the minute some engineer or manager has an idea for a new product or service. This clock keeps ticking as the idea is formed, proposals are made to immediate superiors, and series of revisions and elaborations are demanded followed by new reports and meetings. The more resources the new initiative requires, the higher the proposal must go within the management structure of the corporation. All of this takes time, of course. In a well-managed high technology company this might easily take two years.

Now consider the same clock, ticking since the idea was first generated. This time, however, the person who has the idea takes it to a venture capitalist. A series of conversations commences and a business plan is written. Seed Round funding—$500,000—allows the nascent entrepreneurs to quit their regular jobs and focus on starting the new company. They research existing technology, assess the market and competition, and write a business plan. Perhaps this takes three or four months. They then receive a second round of venture funding, $2 million, which allows them to hire additional engineering help and perhaps a marketing person. They spend another six months and produce a working prototype. A third round of capital finances a marketing effort. After another six months they have customers, sales, and a presence in the marketplace. The time from idea to selling products in this scenario might be twelve to eighteen months.

The difference between the two in this example is about a year. This window of time is the head start the entrepreneurs have to grow the business and build their organization. The challenge is to grow rapidly enough, and well enough, to compete when their larger, slower competitors arrive. Venture capital primarily captures this time advantage. The question for financiers is whether they can gain liquidity before the young company is overtaken. This is why the organizational form is set up to maximize the rate of growth.

**History**

The venture capital organizational form as described in this chapter dates from 1961, when the venture firm of Davis and Rock was formed. Predecessors were either publicly traded (e.g., American Research and Development), investment banks (e.g., the British company 3i), or firms that lacked the carried interest or fixed liquidation features (e.g., Draper and Johnson). More details are presented in Bygrave and Timmons (1992: 1–30).

In 1979 the so-called “prudent man rule” was changed by the Employee Retirement Security Act (ERISA). This change can be seen as the adoption
by regulators of the concept of risk propounded by modern finance theory—risk is to be evaluated at the portfolio level, not at the level of the individual investment. This change in the laws allowed fiduciaries for pension funds, endowments, and financial institutions to allocate portions of their capital to risky investments if they are offset by more conservative investments. Similarly, U.S. tax law in some historical periods favors capital gains with lower tax rates than those that are applied to ordinary income. These and a series of other legal changes led to a very large increase in the capital available for investment in startups and young companies. The earliest venture funds were financed by wealthy individuals and families. In recent times, the bulk of the capital comes from university endowments such as Stanford and Yale, philanthropic foundations, and pension funds. The University of California Retirement System and the California Public Employees Retirement System (CALPERS) are two of the largest investors in venture funds. In 2001, for example, CALPERS had investments in venture funds totaling of $2 billion (Sacramento Business Journal 2001).

In this first figure, one can observe the surge in number of funds being formed by venture capital firms in the late 1970s. A few years later there was a drop off, followed by a recovery and another huge surge in the late 1990s. Finally, in 2001 there was a sharp drop in new funds being organized.

The trend toward larger funds is recent. Viewed in constant dollars (adjusted by the base 1984 CPI), funds grew substantially larger only during the surge of the 1990s. A fund with more than $40 million (1984) was not typical until 1994.

While the size of funds rose during the late 1990s, concentration actually fell. The ten largest venture capital firms’ share of the total capital raised from limited partners fell during this period.

One can see what was driving this surge in venture capital fund raising and investment in startups. The capital markets were absorbing IPOs as an economic bubble drove the price of securities upward. Of course, this also meant that public companies could easily raise large amounts of cash with which to purchase private companies. So acquisitions also surged. Software companies, fiber optic infrastructure companies, and internet companies were valued at higher levels than companies like Boeing and General Motors. So both IPOs and acquisitions produced great returns for venture capital firms holding equity in the companies being sold. This is reflected
in their internal rates of return (which are conventionally updated as the values of portfolio companies, in which they have invested, are adjusted to reflect the price paid per share by the fund’s investors).

A “good” IRR of 20 percent in the 1980s looked pale when evaluated by the typical returns on 1999. In an expanding economy, the riskier early stage investments performed the best, producing an average of 150 percent in 1999. By 2001, when the returns were typically negative, later round specialists did slightly less worse than those investing in earlier and middle stage deals.

**Organization of the Venture Capital Firm**

We have described venture capital funds and the limited partnership structure they employ, but we have not dealt with how the firm is organized. Venture capitalists often talk about their partners and, indeed, being a general partner in the latest fund the firm has raised defines membership in the elite who run the firm. Only general partners have a say in the decision to invest; only they share in the carried interest generated by the most recent fund. Not all partners carry over from one fund to the next, but even when they do not participate as general partners in the most recent fund, they may still be involved in the firm as they discharge their fiduciary responsibilities to previous funds and the partners of those funds. The venture capital firm may still be drawing management fees from those previous funds and portfolio companies may still be producing disbursements as liquidity is achieved by those companies.

**Mortality Events.** This partial overlap in the groups of general partners between funds creates some interesting organizational properties. Venture capital firms rarely disband suddenly. Rather, they die a lingering death. Generally, the end of a firm is signaled when it fails to raise another fund. This may happen because of poor performance, or because economic times have gotten more difficult, or simply because the general partners decide to pursue other interests and opportunities. After it becomes clear that there will not be another fund, people still come to work. The phones are answered. Portfolio companies that have received funding are still supported with various services. As long as there are assets to be managed, the funds raised by that venture capital firm still impose duties on the venture capitalists. They will keep their offices going so long as the workload requires a place of business. On the other hand, venture capitalists peel off when their firm falls on hard times. As the prospect of substantial carried interest dissipates, they simply spend less time at the venture firm.

**The Division of Labor.** Venture capital firms are rather small organizations. Many have only one or two partners and a single salaried staff person. The bigger firms have a more elaborate division of labor.

Most venture capital firms seem to have a differentiated status structure among general partners. While all have the same legal status with regard to the current fund whose capital is being invested, some are more senior than others. Some firms have a title like “Founding Partner” or “Managing Partner” to signify such differences in status. Status appears to be linked rather directly to the ability to attract resources and to recent investing successes. So partners whose presence is a lure for limited partners and the capital they bring, or deal flow, speak with a louder voice than partners who make less many for the others. Like most professional services organizations, the partners who bring in the most business and generate the profits always have the option of going elsewhere and taking their business with them. This translates into power and differential status.

While most of the attention is rightly placed on the general partners, venture capital firms have other kinds of employees. They have associates who are usually younger than the general partners. They are venture capitalists in training and, like most apprentices, do much of the routine work. When the general partners are not available, associates often serve to meet and greet entrepreneurs whose companies might receive funding. They perform due diligence investigations on companies that are candidates for funding. This means calling the entrepreneurs’ references, talking with customers and employees, and analyzing the business plans and financial statements provided by the entrepreneurs. Associates generally hope to be promoted to general partner status; they cannot be formally involved in investment decisions or take a share of carried interest until that happens.

**Venture partners** are generally either entering or leaving the venture capital firm. Sometimes senior managers who are transitioning from other careers into venture capital are given an office and a lofty sounding title while they prove that they can add value to the venture capital firm. They do this by bringing deals to the firm and helping to evaluate those deals. They are usually given some portion of the carried interest generated by the deals they bring to the firm, but do not share in carried interest generated by other deals.

The venture partner job title is often given to general partners who are not participating in the next fund to be raised. This generally signifies a part-time status. They may move to this status voluntarily, when, for example, they plan to retire before the next fund’s expected liquidation arrives. Sometimes, however, their performance is deemed unsatisfactory and they are not invited to join the next fund. They still may be managing investments from previous funds, however, and retain the venture partner title to provide a legitimate position in the firm while they continue to be
active with these earlier investments and to provide a bridge as they move to another employment situation.

An entrepreneur in residence is someone who the venture capitalists think has potential to lead a startup team, but who lacks a company or concept that is an attractive investment. Sometimes he or she had a company that received funding but failed. Such a person is provided with an office and frequently receives a salary or some minimal seed financing with the opportunity to attend presentations by other entrepreneurs who visit the venture capital firm seeking funding. Such a person sometimes offers to take over leadership of the new venture with the promise that the venture capital firm will invest if he or she is the Chief Executive Officer. Sometimes, this amounts to stealing the entrepreneur’s idea. Other times such a person adds management skills that are badly needed.

Venture capital firms also employ clerical staff. One of their principal jobs is to buffer the venture capitalists from those seeking their attention. Venture capitalists generally want to be available to those with whom they are doing or intend to do business, and they want to keep free from social contacts with others.

**Decision Processes.** The general partners in the most recent fund meet weekly. They bring each other up to date on deals they have recently done, are closing, or are contemplating. At some point, they propose an investment to their partners and a vote is taken. Each venture capital firm has a set of norms about the percent ownership they seek in a company in return for their investment. They will insist on sufficient equity to be reserved for employees in order to attract additional talent to the company and to provide sufficient incentive for the employees. They want to know how their investment will move the company forward and how risk will be mitigated. For example, they might expect the proceeds to be used in part of generating working prototype. They are interested in how much additional capital will be required.

Usually, venture capitalists are investing after others have already invested. The treatment these earlier investors receive is very much contingent on market conditions. The stronger the position of the current round investors, the more dilution they can force previous investors to accept. The same is true of former employees who have left the company. The venture capitalists investing in the current round are principally concerned with maximizing value creation going forward. So employee incentive stock options are structured to provide incentive for future efforts, not to reward past good deeds. An employee or investor will be treated well to the degree that his or her future efforts and cooperation are expected to accelerate or retard the company’s growth and appreciation in value.

The details of these decision processes are not well known outside the firms themselves. All general partners have a say in such decisions, but some obviously speak with a louder voice than others. In the end, people who make money for their partners receive social status for doing so, and their judgment is weighted more heavily based on their demonstrated ability to do this.

**Limited Partners.** are partners in the funds, not in the venture capital firms. When they invest repeatedly over a long period of time, the venture capitalists know that they will be patient when economic times are perilous.

**Costs to the Entrepreneurs.**

We have described how venture capital works, what the institution does, and what venture capitalists do for those who start young companies. The next issue is the cost. We have already discussed how venture capitalists may have a stake in the company. It might be tempting to assume that their management fees and carried interest are subtracted from the founders’ equity, or from the limited partners’ capital. If the venture capitalists were not adding value, this would be true. To the degree that their activities do, in fact, identify new companies with high potential (or they do it better than others would do without them), and if their contacts and advice result in more rapid growth, then all parties share in the success. It is an open question of how often and to what extent these propositions are true.

There are other costs associated with venture capital investing. These have to do with the organizational dynamics accompanying growth. As the new company proceeds, a series of rounds of financing is often required. As one proceeds from “early” to “late” rounds, amounts of capital raised in the round increase, periods of illiquidity are shorter and, generally, risk is lower. Returns are usually lower as well. Loss of control by the entrepreneurs is one kind of price paid at each round. The investors as a group take seats on the company’s board of directors with each round. Depending on the state in which the company is incorporated, boards have a minimum number of members. In many states, they start out with three members, and one seat is given up in the first round. Usually, one member of the original board drops off the board. When a second round is raised, the lead investor takes a seat, and it is common for the deal to stipulate that a fifth member is added from “outside.” That is, someone joins the board who is neither an investor nor an employee (although such a person usually purchases stock on joining the board). If the venture capitalists nominate this fifth member, control of the board (i.e., the ability to command a majority of votes on the board) is lost at this point. If
another (third) round occurs, control will most likely be lost then if not previously.

So, as the capitalization rises, the investors gain power. Since this is normally occurring as a concomitant of growth and increasing complexity, management requires increasing levels of expertise. When the company has ten employees, weak financial controls can be tolerated. A year or two later the company may employ two hundred people, and sloppiness can produce large losses. Similarly, when the company has no products, marketing is more a matter of strategic planning than operation. Once the company is selling products, its relationships with customers must be managed if repeated sales are valued. Similar points can be made for human resource management, production, and other business functions.

Entrepreneurs who have little or no prior management experience generally surrender control as problem complexity exceeds their skill level. If the founders do a very good job early on, the company grows more rapidly. The faster it grows, the more likely its complexity will increase faster than founders can learn. So they surrender managerial control either voluntarily, when they realize that they are out of their depth, or involuntarily, when investors exercise their governance rights. Either way, it is common for founders to exit, or to assume jobs with less demanding managerial tasks. They become chairs of boards, giving up the Chief Executive’s title; they become Chief Technology Officers. The nineteenth-century model of Andrew Carnegie or Henry Ford is obsolete as waves of new management replace founders.

The venture capital model rewards such new managers with equity through direct grants of stock and with Employee Incentive Stock Options. While the rise of professional, salaried managers is the hallmark of capitalism at the turn of the twentieth century, the rise of owners with equity interests is the hallmark of capitalism at the end of the century.

The ability of venture capitalists to seize control as their capital investment rises depends in part on their community of interest as reflected in the common terms of investment for each round. Employees almost always receive common stock, while equity investors receive preferred stock. The preference most at issue is a liquidity preference that puts them first in line to recoup their original investment should the company be liquidated on terms that produce little or no returns. The important point is that all investors in a round receive the same preference and purchase their stock at the same price. So when a “lead” investor joins the board, this person can represent the interests of all those who co-invest.

Just as corporate governance shifts over time, so does equity interest in the company. The percent founders and early investors own declines over time—their positions are diluted. Of course, if all goes well the value of the company rises, so they have a small share of a much more valuable entity. If things do not go so well, however, later investors can successfully demand greater rewards for the capital they invest. The principal constraint on them is that rapacious behavior may rob the employees of the incentive that rapid growth generally requires. So later round investors can demand that the equity holdings of various previous investors, employees who are no longer with the company, and current employees are adjusted as a condition of investment. Even when things go well, and an IPO is planned, the investment banks underwriting the process may insist on a “reverse stock split” in which a quantity of “old” shares is replaced by a smaller number of “new” shares. This process is driven by demand for shares in the newly traded company relative to its value. Investment bankers want to bring an issue to the public at around $15 per share. If too many shares have been granted or sold, and investors balk at paying the prices the underwriters expect, they will require a reverse stock split. Sometimes, they ask current owners of stock to sell some of their holdings as part of the IPO in order to increase the number of shares trading (i.e., “the float”). So after the IPO, founders may own even smaller share of the company and their ability to maintain control drops.

All of this is contingent on the founders’ (perceived) importance to the company’s future success. If the founder remains a key leader, and has expertise that is difficult to replace, additional grants of equity in the form of options can be demanded. Some founder-CEOs receive large shares of new shares created by the board to replenish the employee option pool. This is all a matter of bargaining and the power they wield based on their supposed contributions to the company going forward.

The venture capitalists generally sell their interests in the new company when they can. Liquidity for them is ordinarily not achieved at the IPO, but in a subsequent Secondary Offering. The IPO process requires a six-month lockup period during which the underwriter guarantees to make a market in the stock, and will not tolerate investors selling into that market. They usually own too much stock to sell it on the open market, so a Secondary Offering is organized to provide liquidity. Employees and founders may gain some liquidity at this point but generally have to wait until the drop in the stock price that accompanies the large sales of investors has passed. So holders of common stock must wait their turn and this usually requires at least a year after the IPO.

CONCLUSION

The analysis presented above should make it clear that venture capital is an intense business. Venture capital is embedded in networks of social relationships in exactly the ways identified by Granovetter (1985). Venture capitalists build trust through their social connections and track records.
The former magnify the latter. They mitigate risk by pooling capital and taking many small positions in ventures that are themselves connected by ties with other service providers (e.g., accountants, bankers). And they find deals through their networks.

Population ecologists of organizations have devoted much effort to theorizing about how resource and institutional environments produce circumstances under which founding rates surge and failure rates drop (Hannan and Freeman 1989; Carroll and Hannan 2000; Hannan 1998). It is generally held that founders of organizations have an easier time of it when they can borrow existing solutions to problems of organizing, and when access to resources is facilitated by resource providers who interact with new organizations through well-established routines and modes of transaction. Venture capitalists assist entrepreneurs precisely by instructing them on how to access such resources, providing social connection and legitimacy through which such resources are provided, and helping entrepreneurs learn what problems need to be solved and what established solutions are available. In short, all of the factors that increase founding rates and lower the risk of mortality in organizational populations are enhanced when venture capital is what they are supposed to do. The principal cost is that their services are not cheap. They often receive huge fees for providing such services. Whether the theorist focuses on age-dependence, size-dependence, or dependence of organizational populations on density (population size), venture capitalists play a role that generally increases the growth of business organizational populations. A secondary cost of their services is that they sometimes overshoot the optimal mark, creating too many organizations of a given form that grow too quickly given the realistic prospects of success (Lomi et al. 2001). Within one year, for example, at least five venture-backed pet food Internet companies were financed. They all failed.

Venture capital firms provide very powerful incentives to increase founding rates where opportunities are thought to exist, and to accelerate the growth of the resulting young companies. These incentives may fail, of course, and do so when the capital markers will not absorb the young companies that have grown to a size that would ordinarily suffice for an IPO, or when an early acquisition provides the returns that venture capitalists seek but forecloses future opportunities for founders and employees. This is especially likely when the founders and employees are motivated by other, nonpecuniary factors, such as the desire to avoid direct supervision or the desire to make some technology broadly available. For the venture capitalists, starting and growing young companies is about the money, and this may not be so true of others involved in the process.

This process depends on the continuing stream of technology that underlies commercial innovation. Venture capitalists do not drive such innovation—they derive economic rewards from applying it economically.

Their rewards depend on their ability to gain liquidity in a time horizon that fits the partnership structure they employ. This does not always map onto the technology-development time horizon. For example, biotechnology firms once received large amounts of venture capital financing. This stream had almost disappeared by the late 1990s in the U.S. because experience showed that the time to develop and market applications of biotechnology has been much longer than venture capital can tolerate.

The venture capital model as described here does not scale very well. Venture capital firms are never really large organizations, with thousands of employees, because their partnership structure breaks down when there are large numbers of people involved. There is so much subjective judgment involved in deciding what companies and people to back, and in nurturing the young companies, that formal organizational mechanisms stiffen rather assist the process. So the large funds that appeared at the end of the 1990s drove firms to make larger investments because they could not simply add legions of partners.

Venture capital does not transport geographically very well either, for much the same reason. Venture capital firms periodically attempt to set up offices in remote locations such as Europe or Asia, and typically do not succeed. The capital they bring is not sufficient to support the returns they seek. The other things they do are somewhat societally specific as they depend on the functioning of other social institutions. Their network contacts are usually local as well, so the value they can add is principally in introducing young ventures to the resource providers and customers located in the U.S. These relationships are difficult to maintain when one spends much of one’s time outside the area. And indirect connections through U.S. partners are difficult to manage.

This venture capital organizational form can be copied by private equity investors in other countries, sometimes with the cooperation of U.S. venture capitalists. This works well if the political and economic elites in those countries are willing to adjust laws and financial structures to mimic comparable models in the U.S. So tax laws are sometimes changed to provide the same favorable treatment for employees as venture incentive stock options as found in the U.S. Stock markets may make it easier for young companies to do IPOs. Such changes can be seen in Britain, Singapore, and Taiwan, for example.

The venture capital organizational form is a highly specialized mechanism that facilitates the founding processes of other highly specialized business organizations. It is adapted to restructuring economic circumstances, where there is a premium to be paid for very rapid reallocation of capital and very rapid company growth. Of course, such situations are not evident everywhere or even in the United States at all times. When venture capital is functioning best, however, many other changes are under way that have long-lasting consequences.
REFERENCES


