*Essentials of Venture Capital*
by Alexander Haislip
Copyright © 2011 Alexander Haislip

CHAPTER 4

# Investing Basics

**After reading this chapter, you will be able to:**

- Evaluate potential investments as a venture capitalist does.
- Build a model of how venture capital investment into start-ups changes over time.
- Follow the process of how a start-up gets financing.
- Differentiate between classes of private company stock.
- Describe the process of deal syndication and start-up valuation.

## What Makes a Good Deal?

Venture capitalists have remarkably uniform opinions on what makes a start-up suitable for investment. Ask venture capitalists what they look for and you'll get some combination of three major things:

1. Team
2. Technology and markets
3. Time horizon for success

## The Team

Arthur Rock, one of the first venture capitalists to travel west in 1961 to what would later become Silicon Valley, said he didn't trust his ability to pick winning technologies. However, he did believe he could pick winning teams. And he picked quite a few, backing the founders of Intel and Apple, among others. Rock writes of his investment methodology:

> Good ideas and good products are a dime a dozen. Good execution and good management—in a word, good people—are rare. To put it another way, strategy is easy, but tactics—the day-to-day and month-to-month decisions required to manage a business—are hard. That's why I generally pay more attention to the people who prepare a business plan than to the proposal itself.[1]

Since then, venture investors often say they'd rather have an A+ team with a C+ idea than a C+ team with an A+ idea. It sounds a little convoluted, but the concept is that a great team should be able to overcome a mediocre idea, insufficient technology, a screwed up business strategy, or any other problem. If the team isn't good, even the best-sounding business will never make it to fruition.

A winning team can mean any number of things and each investor generally takes it to mean something different. At root, the team must have an entrepreneur who overcomes whatever obstacles come along and never gives up. Such people are often called "a force of nature," because they seem by sheer will to succeed. Spotting these people is an art.

Other key components to a top-notch team include the right technologists, salespeople, and product developers. Finding these

people is one thing. Getting them to effectively work together is another. The right team is one that creates value that exceeds whatever the sum of their individual efforts would be.

Team matters to venture capitalists, and that's one of the reasons that successful entrepreneur presentations to investors will start by outlining the founding team's credentials. Teams that have had success working together in the past are more likely to connect with capital than those that haven't.

## Technology and Markets

Not every venture capitalist is from the Arthur Rock school of investing. Although the value and importance of a strong team is indisputable, some investors are just more comfortable picking technologies instead of people. The most famous example of a technology-focused venture capitalist is Sequoia Capital founder Don Valentine:

> Arthur Rock and I have always had sort of a very friendly debate. Arthur disclaims any ability in technology, and any understanding of it. He makes his investments based on people—and he has proven to be a spectacular chooser. I was never very comfortable with that approach. I always felt that I could understand the market and the application. I would invest almost exclusively based on market size and momentum, and the nature of the problem being solved by the company. I always felt that trying to choose people was very difficult . . . .[2]

Valentine certainly proved this by investing in Cisco Systems, a start-up that he thought could capture a piece of the corporate data communications network. Valentine believed that corporations

would increasingly swap information via data networks and would need devices such as routers and switches to help that data move around. He invested in Cisco when no one else would because he could see past the weak team and toward a time when customers would need the start-up's products. He later replaced Cisco's original founders with professional managers who could cope with the rapid growth that the start-up saw.

Start-ups need a competitive advantage to be successful. Often that means selling a product or service that has never been on the market before.

Venture capitalists feel the best path to developing these advantages is through new applications of cutting-edge technology. Of course there are many companies that create new markets and establish long-term competitive advantages by other means than through technology. For example, Federal Express started out with a more efficient delivery chain than its competitors.

## Timing

Although investors may argue about which is most important—team or tech—everyone agrees that anything you invest in should have a reasonable time horizon for commercialization.

A start-up should have its product developed and selling within three years, profitability within five or six and be a size appropriate for an initial public offering within seven to nine years. Not every start-up adheres to this type of schedule, especially during tough economic times. But few venture capitalists will commit to a company unless they believe such a schedule is realistic.

Time to commercialization has been a big problem for industries that require a lot of primary research such as nanotechnology. Nanotech companies sprang up around Silicon Valley and many were funded with the hope that the technology would lead to specialized materials and microscopic machines capable of manipulating human biology, or fighting diseases.

Few of these companies survive today, despite raising tens of millions of dollars from venture capitalists. Many failed simply because it took too long to go from research to revenue.

## Macroeconomics of Investing

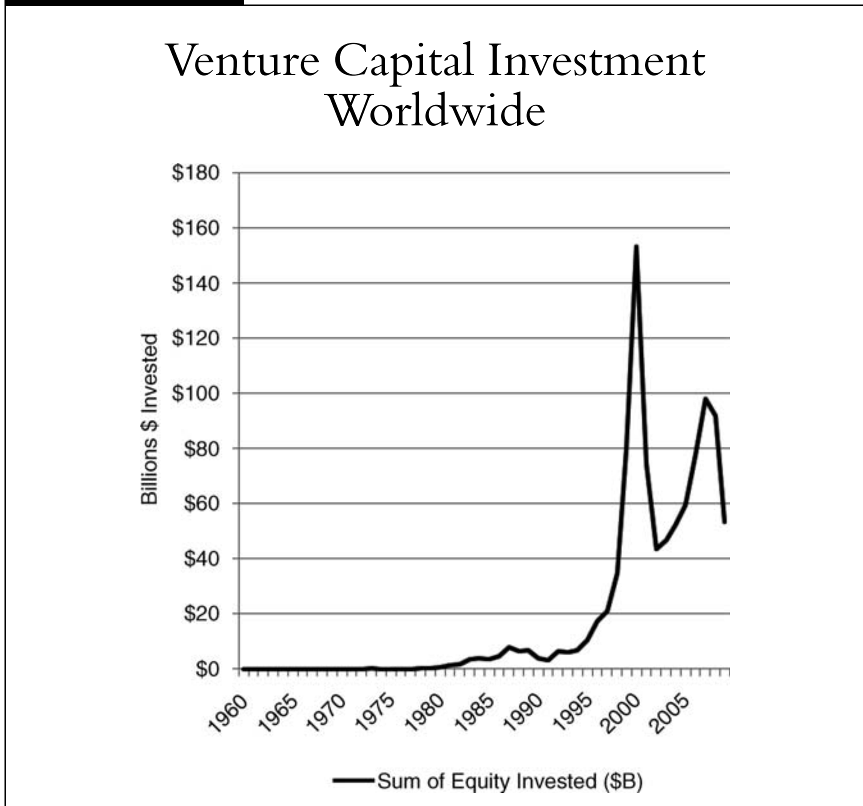
Venture capitalists evaluate each potential investment on its own merits, but the sum of their individual actions is evident in the volume of investments made each quarter. Within the aggregate data presented in Exhibit 4.1, one can see that several key variables impact venture capitalist investment.[3]

### Technology Trends

The first variable that appears to impact the number of deals done and the amount of venture capital dollars invested is the perception of new technology's potential to rapidly change big industries. When venture capitalists believed that the Internet and e-commerce companies were going to change every aspect of modern business, they invested.

The technology trend du jour is anything related to either alternative energy production or resource efficiency, two industries collectively called *cleantech*. Venture capitalists believe that solar panel

EXHIBIT 4.1




innovations, modern wind turbines, renewable fuels, and a host of similar technologies can rapidly revolutionize major industries.

Big new technologies emerge every six or seven years and venture capitalists invest based on their expectations for these innovations to impact big markets.

## The Economy

Macroeconomic health matters to start-ups trying to sell new products or services. When times are good, people are more likely

to part with their money and start-ups are more likely to see sales. When big corporations suffer losses, they are less likely to buy technology. The same thing applies to consumers watching their stock portfolios slide.

When sales slow, start-ups take longer to mature. If venture capitalists believe that it will take a start-up 10 years to reach $100 million in revenue instead of 5 years, they will be less likely to invest.

Still, fluctuations in the stock market and the overall economy have to be pretty serious to get a venture capitalist's attention. Most venture capitalists expect to hold a start-up's shares for five to seven years and anticipate some normal level of economic seesawing. It takes a serious crisis to put a dent in overall investment levels.

## Fundraising

Investment slows when venture capitalists grow concerned about their own ability to raise funds. If a venture capitalist believes she will have a tough time raising a new fund from limited partners (LPs), she will conserve the cash sitting in her current fund. She will pick either low risk investments or start-ups that will make her look good when she goes before limited partners.

## Profit Potential

The opportunity for a quick profit will boost venture investment. If investors believe that strategic acquirers are looking for start-ups to buy or that institutional investors are receptive to initial public

offerings (IPOs), they will increase their investment to try to take advantage of the favorable timing. However, it is difficult to predict when the exit market will be good. This is especially true for start-up investors who expect to hold their investments for several years. It takes fundamental changes in the demand to acquire start-ups or buy shares in IPOs to radically impact investment levels.

Venture capitalists' beliefs about the potential of new technology, the overall economy, their own ability to raise funds, and the opportunities they will have to profit all impact the aggregate level of venture investment. Each of these variables is interrelated, and pointing to any one as the cause of a fluctuation in investment levels is difficult. Barring a major scientific breakthrough or a financial crisis, investment levels remain relatively stable over time.

IN THE REAL WORLD

## The 2008 Financial Crisis

Venture capitalists maintained a relatively positive outlook as the credit crunch gave way to bank failures.[a] But they soon changed their tune when blue chip firm Sequoia Capital told the CEOs of its portfolio companies to assemble for a mandatory meeting toward the end of October and ordered them to get to cash flow positive as soon as possible. ''Forget about getting ahead, we're talking survive,'' General Partner Michael Moritz advised the group.

Eric Upin, a public market investor for Sequoia, told the assembled CEOs that the credit crisis was going to be a long-term problem. ''It's always darkest before it's pitch black,'' a

source reported him as saying. ‘‘We are in the beginning of a long cycle. This could be a 15-year problem.’’

The CEOs took it seriously. In the 10 days following the meeting, three Sequoia-backed companies laid off employees and one shut down entirely.

Desperation radiated in waves from the meeting. One executive who attended took detailed notes and sent them to his team and other investors. The e-mail went viral and in no time half the venture capitalists in Silicon Valley had read it. Two days later, the PowerPoint Sequoia used at the meeting found its way onto the Internet. The opening slide—with the words ‘‘R.I.P. Good Times’’ written on a tombstone—was seared into the psyche of investors and entrepreneurs alike.

Things certainly seemed grim when the Dow Jones Industrial Average lost more than 20 percent during the week. ‘‘Maybe I should invest in canned foods and a gun,’’ one venture capitalist said at the time, only half joking.

Other big name investors weighed in, begging their start-ups to conserve cash, get profitable, and take an acquisition offer if it came.

Angel investor Ron Conway repeated advice he’d given in the spring of 2000: ‘‘The message is simple: Raising capital will be much more difficult now.’’

Bill Gurley of Benchmark Capital echoed that sentiment in an e-mail he sent to portfolio company CEOs several days before the Sequoia meeting. It reads in part: ‘‘If we leave you with one message it would be this: Financings as we know it just got a whole lot tougher. Basically, the cost of capital is going way up.’’

But a week before Sequoia’s meeting, the *Venture Capital Journal* conducted a survey of close to 50 venture capitalists and nearly 75 percent of them said they expected the stock market

**In the Real World (continued)**

to recover in 12 to 18 months. Of course, that was before the Dow Jones Industrial Average dropped below 9,000.

It wasn't the drop that spooked investors as much as the volatility. Jim Armstrong of Clearstone Venture Partners remembers sitting in a trendy business lunch spot in Santa Monica, California, with his partners during October. The group had a nice lunch, but couldn't stop watching the CNBC stock charts on the flat screen television mounted behind the bar. They were lucky to catch it on a good day, at the end of a weeklong slide. ''It was up more than 200 points during the hour we were sitting there,'' he says. ''How do you plan with that level of volatility?''

[a] ''What Now?'' *Venture Capital Journal*, November 1, 2008, http://bit.ly/abP8iK.

## Investment Process

Each venture capital investment comes together in its own way, so there's danger in generalizing—but most firms follow a fairly standard process for evaluating and making deals:

1. First contact
2. Initial pitch
3. Follow-up
4. Due diligence
5. Partner meeting pitch
6. Deal negotiation
7. Final close

## First Contact

An investor will have some initial interaction with an entrepreneur—at a conference, in line at Starbucks, at a networking event, at a kid's baseball game, or by randomly reading business plans. Most investments are made on the basis of a referral from someone who has worked both with the entrepreneur and the venture capitalist in the past. This meeting, phone call, or e-mail exchange is a chance for the entrepreneur to give his elevator pitch: that concise explanation of what his start-up does and why it's going to make lots of money.

## Initial Pitch

If the venture capitalist likes the elevator pitch, he or she will invite the entrepreneur for a formal, in-office pitch. The in-office meeting is designed to professionalize the relationship between investor and investee. It's a chance for both parties to smell each other and determine if collaboration is possible. This meeting will likely involve a formal PowerPoint-style presentation from the entrepreneur and an informal introduction to how the venture firm works.

It should be obvious at this point if the entrepreneur is pitching the wrong type of start-up to the firm—for example, a semiconductor start-up pitching to a health care–focused venture fund. Or a start-up with two employees in a garage may not be a good fit for a venture firm that only looks at companies with several million dollars of revenue. A venture capitalist might direct the entrepreneur to some other investment shop better suited to do the deal.

## Follow-Up

If the start-up may be a fit for the venture firm's industry, investment stage, and general thesis, the investor will start asking follow-up questions. The post-pitch follow-up questions are designed to help the venture capitalist learn more. A venture capitalist considering an investment in a solar panel maker might want to know at what price the company will have to sell its panels to make a profit, or how exactly the company plans to integrate its new technology into existing manufacturing processes.

## Due Diligence

Follow-up questions are just the beginning of a process called *due diligence*. The term comes from an old legal case that describes the standard of care a trustee must take when investing money on behalf of others. The trustee must do a reasonable amount of research on its potential investment to ensure it is viable. Venture capitalists have appropriated the term to mean any research one does in vetting a start-up for investment.

The due diligence process can involve any number of things. An investor might visit the company's offices, or drive around its parking lot on a Saturday morning to see how many employees are working hard on the weekend. He or she might call the entrepreneur's references, or anyone else that might have worked with the entrepreneur, to sniff out any scent of scandal. The venture capitalist might ask for the company's financials, or to see the schematics for its latest semiconductor. It's not unusual for an investor to hire a private detective to dig into the background of the start-up's founders or to tail them around Silicon Valley.[4]

Due diligence can be a difficult time for any start-up. Many entrepreneurs have concerns about releasing too much private information about their companies, or "opening the kimono."

Their fears may be well founded. Venture capitalists, as a whole, refuse to sign nondisclosure agreements, often called NDAs. The official reason any venture investor will give is that they are bombarded with start-up pitches and would be unable to effectively do their job if under the constant legal threat of violating an NDA. Entrepreneurs, however, feel that venture capitalists are not above passing their confidential information to a competitor, especially one that the venture firm may have an investment in.

## Partner Meeting Pitch

Once the primary venture capitalist associated with the potential investment is satisfied that the start-up meets the venture firm's investment criteria, he or she will bring the opportunity to the rest of the firm for consideration. The partners' pitch meeting is more formal than the initial pitch and takes place at the venture firm's offices. General partners from the firm's other offices may join by teleconference. It will include a revised version of the PowerPoint slide, tailored to answer any questions that may have come up during the due diligence process. The entrepreneur will then field questions from any venture capitalist in the room.

Partner pitch meetings can seem intimidating and sometimes are. Each firm has its own process for deciding whether or not to make an investment. Some put the start-up to a vote and require a majority or supermajority to approve it. Others require two advocates beyond

the vote of the venture capitalist who initially discovered the deal. Whatever the process, most firms take their time to decide. Waiting on an answer, which can take days, or even weeks, can be the most stressful part for the entrepreneur.

### Deal Negotiation

If the partners decide they want to make an investment, they will then enter into negotiations with the start-up's founders. The negotiation will center around how much stock the firm will buy from the start-up and at what price. Other discussion points will center on the rights and provisions associated with the stock that the start-up sells. Both the venture firm and the start-up will likely bring in lawyers to help hammer out the details.

### Final Close

Once the details are finalized, the deal is ready to close and both the entrepreneurs and the venture capitalists will put ink to paper. Depending on the terms of the stock sale, the start-up may expect to find a massive amount of new capital wired to its bank account within the week. The venture capitalist that made first contact with the start-up may or may not join its board of directors, depending on his or her experience level and the provisions of the financing.

## Stock Classifications

There are two major forms of stock classification used in financing a private company's growth: common stock and preferred stock.

## Common Stock

Common stock is the plainest-vanilla stock a company issues. It is the equity stake held by the people with the least power to negotiate specialized terms and conditions. Common shareholders may vote and collect dividends but have little power beyond that.

In practice, common stock goes to a start-up's founders and executives. It lacks many of the legal protections afforded to preferred stockholders.

## Preferred Stock

Preferred stock is the type of stock venture capitalists buy when they invest in a company. Preferred stock can have any number of rights and provisions written in when it is created. If common stock is plain vanilla, then preferred stock is vanilla with sprinkles, chocolate chips, caramel sauce, and any other topping you can imagine. It's a more flexible security that lawyers can write almost any protections or rights into.

A company can, and usually does, have several different types of preferred stock, each with its own terms. Most preferred stock is *convertible*, meaning it can be turned in to common stock under certain conditions, such as a company sale or public stock offering. The conversion ratio may be 1-to-1 or it can be any other ratio specified in the terms of the preferred stock agreement.

Although preferred stock opens an infinite universe of features, venture capitalists usually are only interested in one major clause that comes with preferred stock: In the event of a company sale, the preferred shareholders are paid out first. Most of the provisions of

preferred stock deal with exactly how the payments will be split up if the company is sold to a strategic acquirer or liquidated in some other way.

## Typical Preferred Stock Clauses

Preferred stock is the ultimate custom-order. Venture capitalists can contract for any number of protections. Still, most firms ask for only a limited number of standard terms, each with its own minor variations.

There are plenty of other things to worry about when you work with a preferred stock agreement and it is sometimes useful to consult with a lawyer to help demystify things. Some law firms even offer easy explanations of these complicated stock clauses for free.[5] Fortunately, most preferred shareholder agreements are extremely similar.

The terms of preferred stock can be complex, but the reason for their terms can be extremely straightforward. Venture capitalists want to protect their investment. The terms of preferred stock are like a bundle of different insurance policies. They can give a venture capital firm choices on how to be paid when a start-up is sold and can be particularly useful when the acquisition price is disappointingly low and investors start arguing over the scraps of what's left. Liquidation preferences, participation and cumulative dividends, redemption rights, and antidilution clauses are all designed to ensure that when preferred shareholders sell their shares, they'll get a high price.

It's important to note that the investors may or may not decide to apply any or all of the rights conferred from their preferred shares. They will pick and choose which provisions give them the greatest

gain when a start-up either goes public or is sold. A venture capitalist who goes down one path may not be able to later change his or her mind and go down some other.

## Liquidation Preferences

If a company is sold, each stockholder will be treated differently. Preferred shareholders are first in line to be paid, but what will they get?

One of the most common clauses designed to answer this question is a liquidation preference. This clause guarantees that the preferred shareholder will get back the price he or she paid to buy the preferred shares. For example, a venture capitalist who invested $10 million to buy a swath of Series B preferred shares will get $10 million back if the start-up is sold. The payout takes place before anything is paid to the common shareholders, and unless there are additional provisions, the preferred shareholders will get back whatever they initially invested.

Liquidation preference is a pretty good thing for venture capitalists because it guarantees they will at least get their money back if the company is sold. The terms of these preferences have become an important negotiating point for venture investors, who expect many of their companies to be sold to strategic acquirers. Between 40 percent and 50 percent of the investments made each quarter involve some version of liquidation preference, according to the law firm Fenwick & West, which tracks deal terms and conditions. There are two major types of liquidation preferences:

1. *Senior liquidation preference.* This clause bumps a series of preferred stock to the front of the line for getting a payout. This is

particularly useful for venture capitalists who are investing late in a start-up's development. They may fear that the start-up will sell at a price that is so low as to not have enough money to pass out to all of the earlier investors, who may also hold liquidation preferences. If there are no senior liquidation preferences, each set of preferred shares is said to be *pari passu,* or on equal footing with each other.

2. *Multiple liquidation preference.* This makes a liquidation preference more potent by multiplying its payout. An investor may request that a series of preferred shares have a 2X liquidation preference, meaning that in the event of a company sale, the holders of these shares will get paid twice as much as they initially invested. An investor who pays $10 million to purchase a number of preferred shares with a 2X liquidity preference will be paid $20 million in the event of a company sale before anyone else gets paid. Some 50 percent to 60 percent of multiple liquidation preferences fall between 1X and 2X and another 40 percent are between 2X and 3X, according to data from Fenwick & West. One seldom sees multiples over 3X, but they are not unheard of.

To be clear, a liquidation preference only guarantees that the investor will get back what he or she paid for the preferred shares. Nothing more. That's fine if the start-up has a disappointing sale, then the investors are grateful for whatever return they can get. Liquidation preferences are less valuable if the start-up does well.

Consider what happens to an investor who pays $10 million to purchase 50 percent of a start-up's shares and has a 2X liquidity preference.

If the start-up sells for $30 million, the investor will be glad for his or her liquidity preference, getting $20 million back from the sale.

But if the start-up sells for $50 million, the investor would still only get $20 million from the liquidation preference. In this case, a venture capitalist would likely convert his or her preferred shares into common stock. Owning 50 percent of the common stock would yield a return of $25 million.

Not all venture capitalists will negotiate for liquidation preferences. Early stage investors, for example, may specifically avoid writing in these clauses for fear that they will set a precedent for all later investors. It's possible that if the later stage investors get too many liquidation preferences, there will be nothing to pass back to the early stage investors or the entrepreneurs.

## Participation

An entrepreneur negotiating the terms of his or her financing agreement might be excited to hear that the venture capitalists were anxious to get *participation*. But the friendly sounding clause in preferred stock agreements is another way for venture capitalists to ensure they get paid.

When a company is sold, the proceeds first go to pay any outstanding liquidation preferences. Then, what's left is split among the preferred and common shareholders based on how much of the company each owns.

For a preferred class of stock to be paid from what's left, it must be participating. If the preferred shareholders own 50 percent of the company and are all participating, they'll get 50 percent of the returns from a sale after the liquidation preferences are met.

A participation clause can be included on top of a liquidity preference so that the venture capitalist gets the best of both worlds. More typically, however, the venture capitalist will only get one or the other. Participation may be particularly attractive to early investors, which will likely have paid a small amount of money to get a rather large ownership stake in the start-up. Although preferred shares can be customized to fit any need, it is hard to imagine a venture capitalist not taking either a liquidation preference or participation.

Let's look at what happens in the same scenario we considered in the previous section. A venture capitalist pays $10 million to purchase 50 percent of a start-up's equity, has a 2X liquidity preference and now has full participation on top of that.

If the start-up sells for $30 million, the venture capitalist gets $20 million by virtue of the liquidation preferences. That leaves $10 million to be split among the shareholders. The venture capitalist owns 50 percent of the shares outstanding and is fully participating. That means he or she will get half of what's left, in this case, $5 million. The total payout to the venture capitalist is then $20 million from the liquidation preference and $5 million from the participation rights, which sums to $25 million.

Had the venture capitalist owned just common shares, he or she would only have received 50 percent of the $30 million payout, or $15 million. The addition of liquidity preferences and full participation allowed a 50 percent shareholder to take 83 percent of the payout from the start-up's sale.

If the start-up sells for $50 million, the venture capitalist gets $20 million from the liquidation preferences and another $15 million

from the full participation rights, summing to $35 million, or 70 percent of the total payout available.

A nonparticipating preferred shareholder is not nearly so well off if the start-up is sold. He or she is faced with a decision to either maintain the preferred shares or convert the shares to common stock. This comes down to which will yield a bigger payoff: any liquidity preference associated with the preferred shares, or the percentage of the payout that goes with owning a large swath of common stock.

The payout from a liquidity preference is based on the start-up's acquisition price. If the start-up sells for less money than the venture investors put in, the liquidity preferences may yield a bigger payout. If the start-up sells for much more than the venture investors put in, any nonparticipating preferred might be wise to convert to common stock.

The value of liquidation preferences and participation rights is inversely proportional to the acquisition value of the start-up. In our example, the preferred shareholders get 67 percent more than they would have if they were common shareholders if the start-up sells for $30 million. But as the payout increases, the difference between what the preferred and common shareholders are paid decreases. If the start-up sells for $50 million, the preferred get 40 percent more than they would have if they had been common shareholders.

Capped participation is a clause that sets an upper limit on what a preferred class of stock can be paid in the event of a company sale. Capping participation is an entrepreneur-friendly thing to do, and something that venture capitalists are likely to negotiate against.

Caps range from three to five times what an investor pays for the preferred stock and include whatever liquidation preference

shareholders have already received. It's worth noting that if things go really well and a strategic buyer pays a bunch of money for a start-up, the venture capitalists may get a bigger upside by converting their preferred shares into common stock and thereby avoiding the participation cap.

## Cumulative Dividends and Redemption Rights

The logic behind *cumulative dividends* is convoluted, but that doesn't keep lawyers from writing it into financing contracts. The idea is that a young company sells products, earns money, and becomes more valuable. Instead of paying out quarterly or annual dividends, as one might expect a mature corporation to do, the company holds onto the money. The presumption is that the company reinvests dividends it would have otherwise paid out.

Eventually the company is bought. Preferred shareholders with a cumulative dividend provision are then able to collect an additional payout based on how much they invested and how long they held the shares. Cumulative dividends are paid out after liquidation preferences and range from 5 to 8 percent annualized return based on a principal of whatever was paid for the shares of preferred stock.

Cumulative dividends work similarly to a certificate of deposit that you might get from a local bank. As long as the start-up is sold, the preferred shareholders that have this clause get an annualized rate of return. The dividends typically come on top of a liquidation preference.

Few financing agreements actually include cumulative dividend clauses. Fenwick & West puts the percentage of investments made

with such clauses between 4 and 10 percent for each quarter over the past several years.[6]

*Redemption rights* are a part of a preferred stockholder agreement that looks a lot like a "gimme my money back" clause. It states that shareholders can, after some set time period, force the issuing company to buy back the shares. What's more, the company has to pay out at the price the shareholders initially bought in. One seldom sees redemption rights put into play since they require a majority shareholder approval and because most investors expect to get back more than they put in, thanks to all the other clauses written into preferred shares. Roughly 20 percent to 25 percent of the investments made each quarter include redemption rights, according to research by law firm Fenwick & West.

## Antidilution

Writing in an antidilution clause allows a preferred shareholder to convert to common stock at a higher rate than initially established. The clause may be executed if the value of the company decreases.

Suppose each share of preferred stock could initially be converted for one share of common stock. The value of the company goes down and the antidilution provisions kick in, allowing preferred shareholders to trade in each of their shares for two shares of common stock.

Getting twice the number of common shares is like getting each share at half the initial price you paid and can ensure that the investor gets a healthy capital gain.

There are two major forms of antidilution provisions—weighted average and ratchet—which use different formulas for determining how the new conversion rate from preferred to common is set.

### Seeking Simplicity

There is a movement to streamline the terms and conditions of early stage start-up financing, spearheaded by a handful of repeat entrepreneurs. They feel that some venture capitalists use the complexity of the contracting process to intimidate entrepreneurs into giving up rights and company ownership. They developed a "Plain Preferred" term sheet, which outlines typical clauses used in venture financing agreements. It may easily be found online,[7] and studying it may provide first-time company founders with a basis for discussing provisions in a financing contract.

## Stock During Different Stages of Development

As a start-up goes from two founders in a garage with a business plan to an office full of people and real revenue, its financing needs change. So does its ability to negotiate with venture capitalists. Start-ups sell different "series" of stock as they grow. Each series of stock is sold for a different price to account for changes in the start-up's size, value, and risk profile. Each series is designated by a letter, with "Series A" being the first preferred shares sold, "Series B" being the second set of preferred shares sold, and so on.

Although any number of provisions can be included from one round to another, the biggest difference is typically the price paid for each share of preferred stock. Since shares of start-up stock are illiquid and cannot be traded in a market, their price does not freely move up and down like shares in a public company might.

A Series A investor may pay pennies for each stock, while a Series D investor may pay several dollars per preferred share. The Series A investor takes a great risk investing in a start-up that has not yet proven its technology or attracted the right management team.

A Series D investor may invest three or four years later in the start-up's development, after the technology has been shown to work and the company has recruited experienced executives. The Series D investors are likely to be concerned about the start-up's ability to respond to changing customer needs, access new markets, form strategic alliances, and eventually either go public or be sold to a strategic acquirer.

Series A investors who bought stock at a low price early in the company's development face all the same concerns as the Series D investors do. If the company can't access new markets, for example, both classes of stock suffer. For a summary of the different series of stock, see Exhibit 4.2.

An investor who purchases Series A shares may go on to purchase Series B, C, D, and all subsequent preferred shares sold by the company. Most start-ups sell a new Series of preferred shares every 12 to 18 months. There's no requirement that the early investors participate in subsequent financings, but many look at it as a sign of support that indicates that the Series A investor still has faith in the start-up.

**EXHIBIT 4.2**

## A Summary of Series

| Series | Cost of Shares | Stage | Risk | Typical Investment Amount |
|---|---|---|---|---|
| A & B | Low | Early | High: Functioning technology | $500,000 to $5M |
| C & D | Medium | Later | Medium: Getting customers | $5M to $20M |

Some venture firms will only invest in early stage start-ups. They believe that they can pick founders who will navigate the problems of beginning a company, perfecting a technology and connecting with customers and feel that the risk they take will be compensated with great reward. They buy Series A and B preferred shares. Other firms will only invest in start-ups that have reached certain milestones, such as shipping a product or achieving $10 million in revenue. They buy Series C, D, and E preferred shares, take fewer risks, and generally experience lower returns than successful early stage investors.

A series of preferred shares are sold during a "round" of financing. During the round, venture capitalists negotiate a price for the shares with the start-up's management. Once the price for the shares is set, the investors and the start-up agree on a term sheet for the legal provisions of the stock class. Then there may be time allotted to bring in other investors who agree to the same price and terms. Completing a round can take anywhere from a week to more than a month. Once the round is closed, new investors must wait until the start-up is prepared to offer its next series of preferred shares for sale to negotiate a new price.

## Syndication

There's safety in numbers. Venture capital firms often employ that thinking when they look at investing in a start-up. One venture capitalist may invite a friend at another firm to evaluate a promising start-up and, if both agree on its merits, they'll do the deal together.

There are several reasons for doing this beyond just having a second, or third set of eyes to evaluate an opportunity. The most obvious reason is that two firms may combine their resources to make an investment larger than either could have comfortably made on its own.

Venture capitalists often look to partner with each other when times are bad. It helps them spread their bets over a wider area. Having your eggs in a lot of different baskets is a good thing when all the baskets are getting knocked around by a bad economy.

Having many investors can help a start-up stay out of bankruptcy because it increases the chances that at least one of the investors will be willing or able to reinvest at any given point. "When you go through soft economy patches and you have to live through the cycle, having more muscle around the table can help," says Matthew Howard of Norwest Venture Partners.

But when investors expect times to be good, the tide turns and venture capitalists have an incentive to take as large an ownership stake in their start-ups as possible. "If you're going to have influence and impact in a company, you want to make it meaningful," says John Balen of Canaan Partners. "We'd rather have them rely on us instead of going outside and diluting us and taking away control."

**IN THE REAL WORLD**

## Sharing

It's good to share. That's what an investor with Bay Partners discovered when his firm led a $3 million Series A investment round in a stealth hardware company.[a]

Bay Partners could have easily financed the entire round from its $300 million fund, but determined that the start-up needed more than money. It needed help working with Chinese manufacturers and customers. Executing in China would make or break the opportunity.

So Bay took the deal to three venture firms with a strong presence in China. The entrepreneur chose to work with Redpoint Ventures, which had experience investing in China. Bay Partners split the investment with Redpoint.

''Even early on in a company's history, we are comfortable trading off higher ownership to having the right DNA around the table to materially reduce the risk the company faces,'' the Bay investor says.

[a] This section is adapted from ''Early Stage Syndication Drops,'' *PE Week*, March 31, 2008, http://bit.ly/bXJBx4.

For all the benefits of syndication, it is actually happening less at the early stages of company formation now than ever before, according to data from Thomson Financial. The average number of firms involved in a start-up or seed investment has fallen 32 percent over the past seven years. A typical early stage deal might now expect to garner investment from four venture capital firms, down from an average of nearly six in 2002, the data show.

There are several reasons for this. The first and most important is that many start-ups just don't need as much money as they used to. For example, information technology companies can use open-source software and commodity hardware to keep costs down. "We're seeing more deals that get off the ground with just a little money and reach critical mass without the traditional syndicate," says Tom Dyal of Redpoint Ventures.

Even if a start-up wanted to raise more money, cash is concentrated in a shrinking number of firms. Fundraising has gotten harder for firms without a strong track record. But the firms that can raise money are raising more than ever before. That puts pressure on venture firms to put more money to work in each of their deals.

"As funds get bigger, the need to write bigger checks has come with that," says Virginia Turezyn, the former managing director of American Capital Strategies's technology group. "I worked in the 1980s when your summary sheet was who wasn't in the deal instead of who was. That pendulum has swung the other way."

## Valuation

One of the best reasons to bring other venture capitalists in to invest in a start-up is to help determine the price for a certain class of preferred shares.

Establishing a start-up's *valuation,* or the total worth of the business, is neither an art nor a science. It is a negotiation.[8] The start-up's management wants to have the highest valuation possible when it goes to sell a round of preferred shares. A high valuation allows management to either raise more money for expansion or retain a greater

ownership stake in the start-up. The venture capitalists that are still prospective investors want the lowest possible valuation for the start-up. A low valuation makes the price of preferred shares cheap and allows the venture capitalists to either pay less money or get a bigger ownership stake for their firms.

A start-up's management and investors renegotiate valuation each time the start-up sells a new class of preferred stock. A start-up selling Series B stock will argue for a higher valuation than when it sold its Series A stock, pointing to the progress it has made since its first round of financing.

**TIPS AND TECHNIQUES**

## Valuation Math

Imagine an entrepreneur who comes up with a great new idea. She maxes out her credit cards financing research and development of her breakthrough, incorporates, and starts to look for venture capital financing.

She meets with a well-known venture capitalist and after a while, they start talking about what her company might be worth. The venture capitalist thinks the work that the entrepreneur has put in and the idea's potential are worth $10 million. The entrepreneur argues that her innovation is really special and worth $30 million. They settle on a valuation of $20 million.

The venture capitalist offers to buy $5 million worth of Series A preferred shares at a $20 million valuation, or ''five at 20.'' The first number is what is being invested and the second is the ''pre-money'' valuation, or what the company is worth before it takes on the investment. After the start-up has sold this swath

of stock, it will have a ''post-money'' valuation of $25 million, which simply reflects the sum of the pre-money valuation and the new investment. The venture capitalist has paid $5 million for a 20 percent stake in the start-up, based on its post-money valuation.

After a year's worth of progress, the start-up is ready to raise capital again. The entrepreneur sets out looking for an outside investor to set the valuation for the sale of Series B preferred shares. A new venture firm offers ''5 at 40,'' or a $5 million investment at a pre-money valuation of $40 million. The existing venture capitalist is also interested in investing and offers to buy $5 million worth of Series B preferred shares at the $40 million pre-money valuation set by the outside investor. Each firm is effectively paying $5 million for a 10 percent stake in the start-up.

Combined with the Series A financing, the entrepreneur will have sold 40 percent of her company after just two rounds of venture capital investment.

Setting the price for any series of preferred shares is not a simple matter. The venture capitalist that invested in the Series A finds him- or herself conflicted when it comes to negotiating the price for Series B shares. On one side, it is in the venture capital firm's interest to argue for a low start-up valuation, drive the price of Series B shares down, and subsequently pay less for its ownership stake. But the investor involved likely has taken a position on the start-up's board of directors, a position that has a fiduciary duty to maximize the value of the company for existing shareholders. As a board member, the venture capitalist's interests should be aligned with those of the start-up's management and he or she should be seeking the highest possible valuation for the start-up.

Rather than force this conflict on the Series A venture capitalist, the start-up typically goes hunting for a new investor to bring into the Series B round. The new investor will come to the valuation negotiation free of conflicted interests and will set the price of the Series B shares. The start-up's existing investors typically "re-up," or invest again at the price set by the start-up's negotiation with the outside investor. This frees the Series A investor from the conflicting requirements of being both an investor and a board member.

Not every start-up sees its valuation increase from one round of investment to another. If a start-up fails to deliver on a key technological development, experiences a drop in sales, loses key members of its team, or just faces a tougher macroeconomic environment, it may be forced to accept a "down round." A down round reflects a decrease in the start-up's negotiated valuation.

IN THE REAL WORLD

## Changes in Value for Each Series

It is very difficult to find and track reliable data for how start-up valuations change over time. Still, there are a few sources that can be helpful in understanding how the process works.

One way to witness how valuation changes over time is to look at the value of the shares sold during each round of financing. A start-up that wants to go public often has to file this type of information with the Securities and Exchange Commission. To be sure, share price is not a perfect proxy for start-up valuation. Each series of shares may have a different set of liquidity

preferences or other rights that can affect its value independently of the overall value of the start-up.

Consider the share prices paid by investors in lithium-ion battery maker A123 Systems,[a] shown in Exhibit 4.3. The start-up went public in September 2009, offering shares to the public for sale at $13.50.

**EXHIBIT 4.3**

## Share Prices for A123 Systems

| Series | Date | Share Price ($) | Valuation Change from Previous Round (%) |
|---|---|---|---|
| A | December 2001 | 1.00 | |
| A-1 | December 2002 | 1.50 | +50 |
| B | June 2004 | 2.08 | +39 |
| C | January 2006 | 3.37 | +62 |
| D | August 2007 | 6.56 | +95 |
| E | March 2008 | 16.59 | +153 |
| F | April 2009 | 9.20 | −45 |

Notice the drop in share price from March of 2008 to April of 2009. It may be the product of the global financial crisis that began in June of 2008.

It's worth noting that the per-share price is less meaningful than the relative change in price from round to round. Consider two transactions: A start-up could sell 1 million shares at $1 per share and keep 9 million shares in reserve for future sales or it could sell 10 million shares for $0.10 each and keep 90 million shares in reserve for future sales. The only difference between the two is the number of shares issued and the price per share. The start-up valuation is the same as the amount of money it raises from the stock sale.

**In the Real World (continued)**

**EXHIBIT 4.4**

## Share Prices for Tesla Motors

| Series | Date | Share Price ($) | Valuation Change from Previous Round (%) |
|---|---|---|---|
| A | February 2005 | 0.493 | |
| B | December 2005 | 0.740 | +50 |
| C | June 2006 | 1.081 | +46 |
| D | May 2007 | 2.440 | +126 |
| E | May 2009 | 2.512 | +3 |
| F | September 2009 | 2.969 | +18 |

Consider the share prices paid by investors in electric carmaker Tesla Motors (shown in Exhibit 4.4), which has filed to go public but has yet to price its IPO as of this writing.

You can see the regular increase in share price corresponding to an improving company valuation. To be sure, some shares have special rights and their price likely reflects the value of those rights in addition to the underlying value of the company.

[a] Share prices from the company's S-1/A filing to the Securities and Exchange Commission made September 22, 2009, http://bit.ly/bPr7jy.
[b] Share prices from the company's S-1/A filing to the Securities and Exchange Commission made January 29, 2010, http://bit.ly/9HeatA.

There's no formula for how much a company's valuation should increase from one round to another. Each quarter, law firm Fenwick & West tracks the average valuation change that more than 100 start-ups see for their financing rounds.[9] You can see its results for a recent quarter in Exhibit 4.5.

**EXHIBIT 4.5**

## Barometer Analysis—Fenwick & West VC Report

| ***3Q 2009—Price Change*** | Series A | Series B | Series C | Series D | Series E+ | Cumulative |
|---|---|---|---|---|---|---|
| Percent Change of All Rounds | n/a | 23.12% | 21.59% | −11.24% | −4.02% | 10.69% |
| Percent Change of Up Rounds Only | n/a | 65.70% | 115.84% | 49.93% | 75.05% | 76.70% |
| Percent Change of Down Rounds Only | n/a | −73.79% | −54.98% | −42.18% | −63.94% | −56.93% |

The data require a little interpreting. Any one of the more than 100 financings the law firm tracks falls into one of the series and represents just one transaction, it's not as though a single company's progress is tracked over time, as some people mistakenly believe.

The top row, "percent change of all rounds" is an average of all the financings tracked for a given series. The row below that measures the average price increase for financings where the valuation improved and the bottom row measures the average price drops for financings where the valuation decreased.

The table shows that during the third quarter of 2009, start-ups raising a Series B financing round saw an average increase in valuation of 23 percent. Start-ups that saw an "up round" improved their valuation by more than 65 percent, and start-ups that saw a "down round" lost more than 73 percent of their value.

It's worth pointing out that the financial crisis of 2008 impacted late stage start-ups more than early stage start-ups, according to Fenwick & West's data. It's likely that the late stage companies were expecting to get a big boost in revenue that never materialized as would-be customers refrained from spending. The early stage companies, by comparison, may have only needed to prove that their technology worked to get an increased valuation.

## Summary

Venture capitalists evaluate start-up investment opportunities by the quality of the team, the level of the technology, the size of the potential market, and the start-up's ability to be successful within a time horizon of five to seven years. Different investors feel differently

about the relative importance of each of these measures of a start-up's potential. One major school of investing believes that people are a start-up's greatest asset. Another believes that technology is what matters most.

The aggregate level of venture capital investment into start-ups changes along with macroeconomic trends and the emergence of new technology sectors. Venture capitalists are more likely to invest in start-ups when they are optimistic about the ability of these small companies to make sales, attract strategic acquisition offers, or make an initial public offering.

A start-up looking to raise money from a venture capitalist can expect to go through six major steps before the deal is done. Venture capitalists make first contact with an entrepreneur, either via introduction or networking, and then may invite the entrepreneur into the office to make an initial pitch. The venture capitalist then follows up with questions for the entrepreneur and will begin the process of "due diligence," during which he or she researches the opportunity. If the venture capitalist still likes the start-up, he or she will invite the entrepreneur to pitch the rest of the venture firm's general partners. This may lead to a negotiation on the start-up's valuation and how much money the firm will invest. Once both sides agree to the deal's terms, it will undergo a final close and lawyers will draft an investment contract.

There are two major classes of private company stock: common shares and preferred shares. Venture capitalists buy preferred shares and leave the common shares to the company's founders and employees. Preferred shares have special legal rights that help investors protect their interest, but can be converted into common shares at any

point. Protective clauses may include liquidation preferences, participation preferences, cumulative dividends, and antidilution provisions. There are free resources available to help entrepreneurs understand these terms and even a movement to simplify investment agreements.

Venture capitalists often share, or syndicate, investments with each other. Start-ups may seek multiple venture firms for investment to raise a lot of money or to tap different skill sets within different firms. Investors may look to syndicate deals in order to share risk and to set the terms for a new round of investment.

Start-ups sell shares of stock at different times in their development and for different prices. These stock sales are called "rounds" and require renegotiation with venture capitalists to determine the start-up's valuation. A start-up first raises a Series A round, by selling a swath of preferred shares to investors for a low price. Its Series B round preferred shares will usually sell for a higher price because some of the start-ups' risk as an investment will have diminished as the start-up progresses and grows.

Putting a value on a private company is not an easy thing. Venture capitalists and entrepreneurs negotiate the valuation of a start-up to determine how much shares of its preferred stock should cost.

## Notes

1. Arthur Rock, "Strategy vs. Tactics from a Venture Capitalist," *The Entrepreneurial Venture*, 3rd ed., p. 351.
2. Udayan Gupta, *Done Deals*, (Boston: Harvard Business School Press, 2000) pp. 167–168.

3. Data from Thomson Reuters.
4. "Private Eye to the VCs Does 'Human Due Diligence,'" Dow Jones *VentureWire*, May 14, 2008, http://bit.ly/azMnBx.
5. See "Explanation of Certain Terms Used in Venture Financing Terms Survey," Fenwick & West, http://bit.ly/cbrEIM.
6. "Trends in Terms of Venture Financing in the San Francisco Bay Area," Fenwick & West (Fourth Quarter 2009), http://bit.ly/9Kdk2y.
7. "Plain Preferred" stock agreement from *The Funded: Founder's Institute*, August 24, 2009, http://bit.ly/dD90Nw.
8. Some believe that start-up valuation is a science and have devoted serious thought to what should be taken into account when determining what a start-up is worth. The best resource for those interested in the theoretical models of valuation finance is Andrew Metrick's *Venture Capital and the Finance of Innovation* (Hoboken, NJ: John Wiley & Sons, Inc., 2007).
9. "Trends in Terms of Venture Financing in the San Francisco Bay Area" (Third Quarter, 2009), http://bit.ly/d4p9ZK.