Polynomial Ventures

Investment Criteria and Trends Leading the Evolution of Venture Capital

By Steve Valentor

Conventional venture capital (VC) firms raise capital from limited partner investors (LPs), pool that capital into a fund, then invest the fund in a number of early stage portfolio companies. The VCs then guide those companies to increase value and eventually exit through a liquidity event. Often a management fee is applied to the committed capital and may be returned with invested capital. VCs also earn carried interest on any returns generated on the investments.

Forward-looking VC firms recognize that the world has changed while the venture capital industry has remained quite unchanged since its inception more than 80 years ago. These progressive firms seek new and improved ways to serve both their investors and the founders of our future's great businesses. Firms that embrace positive change can offer better guidance, improved terms, more successful portfolio companies, and ultimately superior returns for investors.

The following are some of the differentiators that distinguish forward-looking VC firms from conventional ones.

Being a Registered Investment Advisers (RIA). The Investment Advisers Act of 1940 (the Act) outlines strict and specific rules that determine the standard of care that investment advisers must provide to their clients. The Act requires that financial advisers register with the Securities and Exchange Commission or their state financial regulating authority as Registered Investment Advisers (RIAs). This establishes the highest legal standard of care for investors. Most traditional VC firms operate under the venture capital exemptions in the Act, and very few conventional VCs pass the tests and adopt the standards required of RIAs. It is expensive, difficult to achieve and requires focused attention on compliance. Being an RIA has many advantages, however, which are outlined in this paper, including that RIAs can:

- Invest in government securities, publicly traded securities, and even cryptocurrency technologies in additional to traditional privately held companies.
- Freely use debt to grow portfolios when it makes sense.
- Offer investors broader and more promising alternative investments.

Using Evergreen Funds. In the Act, the Venture Capital Exemptions requires that fund managers do not offer redemption rights to their LP investors. This means that LP investors are not able to access their investment funds during the life of the fund, which is typically 10 years or more. This limits the LP investor's options.

Even worse, fund managers are not allowed to invest more than 15% of the fund's assets under management (AUM) in "unqualified investments." This exemption prevents fund managers from retaining ownership in portfolio companies once their shares are traded publicly or they become part of a public company.

Meanwhile, the VC continues to charge its management fee even on uncalled capital, increasing costs for the LP investor.

RIAs, however, can offer open-ended, or "evergreen," fund options to their investors and are not limited to the traditional closed-ended funds which, until recently, were the only option for investors. (In the last few years, however, some of the leading VCs have taken on the challenge of registration.)

RIA-managed venture capital funds may represent the most progressive and possibly the best alternatives for institutional investors, endowments, pension funds, family offices and high-net-worth-individuals. See this paper for a detailed explanation of how evergreen funds can potentially improve returns to investors by 23%.

Investing in Early Stage Portfolio Companies. The financial projections of every company usually resemble a hockey stick. Investment firms are naturally optimistic and expect growth. That's why they are in business in the first place. In the venture capital space, it is advantageous to make investments as early as possible for as little as possible. This obviously gives the greatest potential for significant returns.

Unfortunately, not every great idea will lead to a billion-dollar initial public offering (IPO). Some portfolio companies will fail. Many will achieve a respectable level of success and will continue to provide an acceptable return for investors as well as a comfortable living for founders and their employees. A rare few will be wildly successful. Most VC firms carefully select portfolio companies that have the potential to repay the entire fund on its own. Since it is impossible to predict which investments will be enormously successful, it makes sense to choose portfolio investments that carry that potential.

This approach constitutes a natural diversification. The theory behind investment diversification is to reduce the risk in each security by distributing investments across multiple issues with divergent coefficients of correlation. This occurs naturally in venture capital because firms tend to hold companies that are not in direct competition.

Many of the firms in VC and private equity (PE) only make investments in companies that have established some track record and history. But forward-thinking VCs willing to make earlier,

riskier investments not only can produce better returns for their investors, but also make the world a better place by bringing better goods and services to market. The riskiest part is that earlier stage companies are more prone to failure. That risk can be mitigated by having strong, experienced operators with decades of early stage experience. Progressive VCs build their infrastructure so that they are optimized to excel at mitigating this risk.

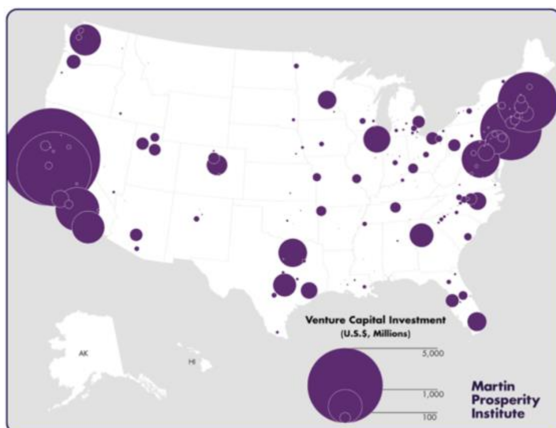
Investing in Technology Companies. Technology companies consistently command the most attention among all startups. This is rightly so since almost all the recent IPO unicorns have been technology ventures. Investments in technology companies typically generate above average returns for investors due to the level of risk-adjusted reward.

However, the failure rate for technology startups is far greater than non-technology startups. Quite often, the technology simply does not deliver on expectations. When it does, the company is often attempting to disrupt an established market with some perceived vulnerability or exposure. Naive founders often underestimate the difficulty of breaking into distribution channels, ramping availability and winning customers. They also underestimate the difficulty in countering the aggressive defensive maneuvers that established market leaders employ when they flex their market-dominating muscles.

Froward thinking VCs make investments in tech-savvy personnel with the leadership skills to maximize the success of high-risk tech companies. They make sure that they speak the language of innovators and can offer much more than simply financial support.

For an analysis of recent venture-backed technology IPOs, click here.

Investing in Underserved Areas. This image shows the geographic concentration of all domestic venture capital investments. The subset of deals that are made in disruptive, early stage technology companies have an even greater concentration in the obvious “hot spots.” In this subgroup, a full 70% of VC investments occur in Silicon Valley, and another 15% are concentrated between Boston and New York City. That leaves only 15% of available venture capital for the remainder of the country. Few would disagree that the rest of the country generates far more than 15% of the good ideas.



What happens is that the basic economic laws of supply and demand force the market to equilibrium. When more promising companies compete for a smaller pool of investment capital, they must lower their valuations to attract the capital. It becomes a market that favors investors. It is not so much that investors are taking advantage of founders who were not fortunate enough to live in the tech hot zones. Rather, these companies would be unlikely to

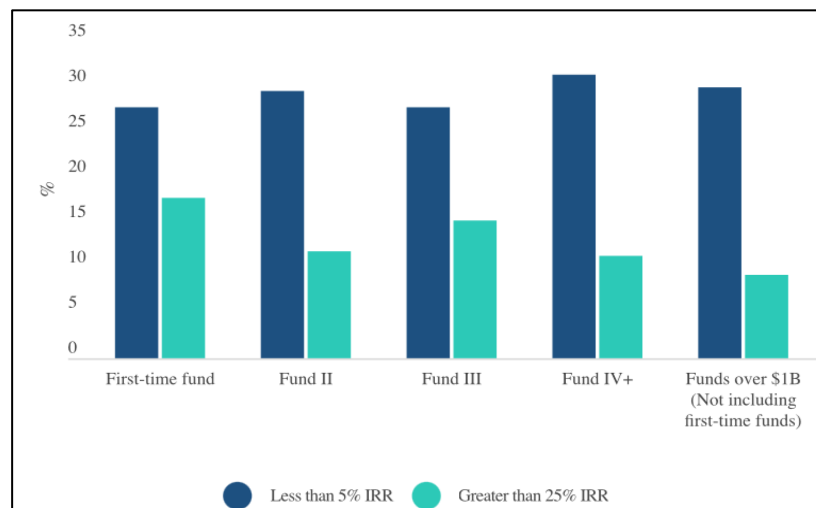
attract funding without relocating. To do so would dramatically increase their costs and the cost of living for their employees.

If companies outside of the "hot spots" succeed, it will likely be on an international basis, which will level the playing field with contemporaries — regardless of their original location. Without VC support, many early stage companies will simply struggle or fail.

Investing in portfolio companies outside of Silicon Valley and Boston allows progressive VCs to offer improved returns for their investors and give founders chances which they might not otherwise get.

Offering a First-Time Fund. By definition, new fund managers are bringing new ideas to investing. The following graph shows that first-time funds are about 5% more likely to return greater than 25% IRR more frequently than subsequent funds. Also, first-time funds return less than 5% at a lower frequency than later vintages.

The reasons for this are not entirely clear. Emerging fund manager firms are startups themselves, which are hungry, nimble, flexible and adaptive. They are often started by dynamic and experienced entrepreneurs who are willing to work harder to prove their value. Many bring a new theory or value assessment technique to the industry.



Source: PitchBook

Regardless of the reasons, emerging fund managers consistently perform better. Their challenge is to build an environment to ensure that they don't lose their emerging advantage. Offering evergreen funds may be one way to increase this advantage.

For a complete analysis of the counterintuitive reality that less experience is more valuable to investors, see this article.

Using Advanced Valuation Methodology. If you are perplexed over why larger companies command higher multiples of earnings in their valuations than their smaller counterparts, consider a systematic investigation of this phenomenon. This paper outlines specific evidence demonstrating that size matters. While disproportionate valuations are clear and well-recognized, further analysis is required to determine the exact reasons. More importantly, the

valuation analysis similar to the methodology outlined in the paper can guide investors to make accurate predictions about the future value of portfolio holdings.

To begin to solve this mystery, one must first understand the fundamental nature of valuations. An asset is valued based on the free cash flow investors believe it can generate in the future. Those future free cash flows can be evaluated in terms of current value through the process of extracting present value using a discounted cash flow (DCF) model.

It is important to understand the proprietary methods used by Fitch Ratings, Moody's and Standard & Poor's that assign credit and bond ratings to publicly traded and private companies as well as governments. Research and analysis have identified that to match the predictions of these "big three" credit rating agencies, employing dozens of accounting ratios that can be derived from financial statements is required. Few of these ratios are publicly reported. But once they are calculated, they can be used to reveal information (and deficiencies) about certain aspects of the company's performance that is not obvious in the financial statements.

If you arrange these ratios as an equation and set them equal to a similar list of terms for the targeted portfolio company, a giant polynomial can be created to examine specific parameters on an apples-to-apples basis between disparate companies. This is the venture polynomial.

By evaluating and analyzing these measurements, operational managers can identify objectives and corrective actions, and set goals for portfolio company managers to bring the portfolio company measurements into convergence with those of a prospective acquirer or an industry average. This process results in the portfolio company being accretive in every measure compared to a strategic acquirer. If the measurements represent sufficient improvement, that portfolio company can become an IPO candidate.

At the completion of such a transaction, the valuation of the portfolio company is assimilated and therefore computed in multiples of the earnings of the much larger acquirer, or the market at large. In any case, the venture polynomial can be applied to generate a considerable increase in valuation and a potentially handsome return for investors.

Lifting the Veil of Mystery

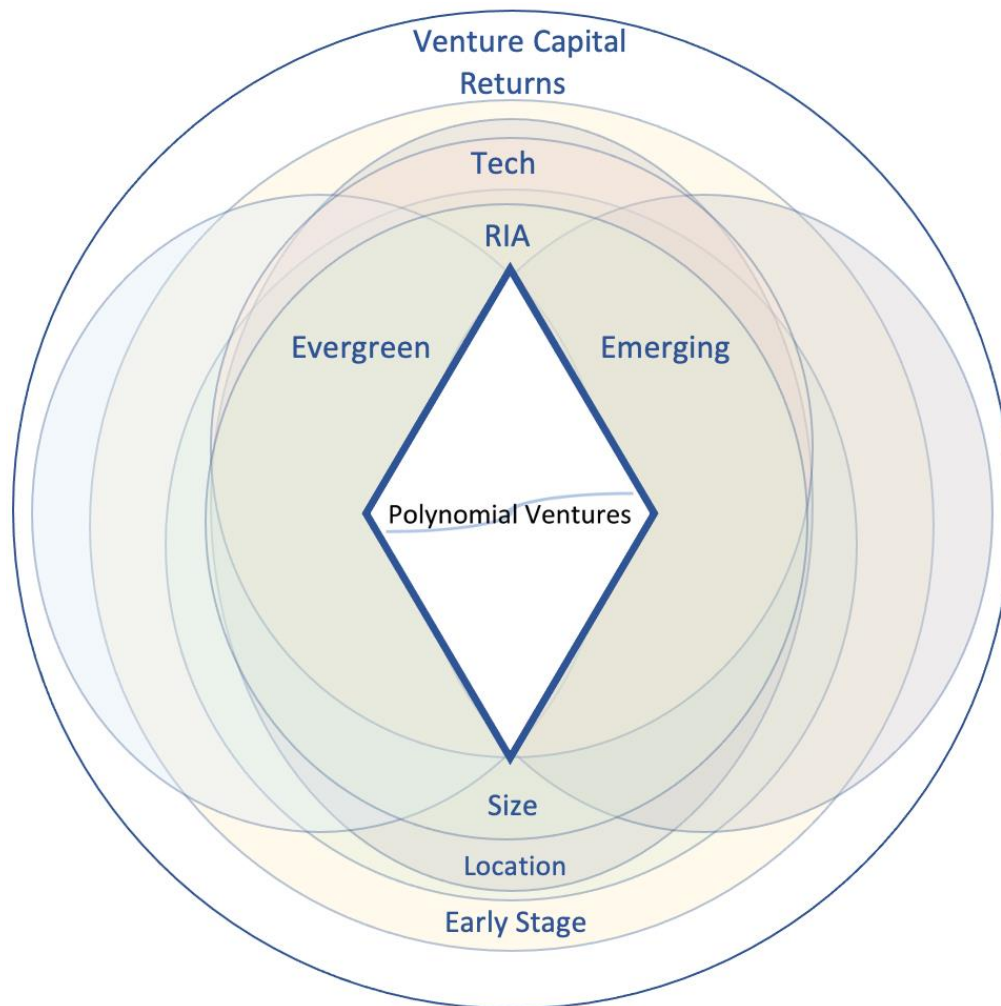
Venn diagrams are an excellent tool for visualizing the relationships between sets and are valuable in identifying the overlap between what customers want to buy, what technologies are available, and what a company can design and manufacture. This is often referred to as identifying a niche. It is simply the subset of the overall market where your company can deliver the best value.

The same theory can be applied to offering a venture capital fund. Investors choose a fund based on their confidence that the fund manager can deliver the best returns. In this case, the

overall space is the return potential that might be achieved in the overall venture capital asset class.

By strategically choosing the differentiation factors listed above, you can illustrate the full set of venture capital returns (sample below). Each factor focuses efforts a bit more on the higher-return segments of the complete set. The illustration below exposes the glowing diamond of opportunity previously hidden in many layers of complexity. VC firm Polynomial Ventures has selected this differentiating focus.

The intersections of value creation create value



Each subsequent refinement improves the focus on higher and higher returns. By combining these differentiating factors, you can target the highest return segments of the set. Specifically, to maximize returns: place investments with registered, emerging managers that nurture small, early stage technology companies in underserved geographies in hot IPO markets through an evergreen fund using a proprietary methodology to systematically converge valuations with industry averages.

This concentration achieves a laser focus where the firm's expertise intersects the highest possible return subset of this vibrant alternative investment market.

Summary

Forward-looking, thought-leading VCs differentiate themselves by evolving the aging industry conventions that have changed little over eight decades.

Rather than simply finding exciting new companies, providing funding, connections and advice, and then showing them a path to prosperity, they see more. They see ways to improve every aspect of the investment industry. The see that RIA registration serves investors better. It establishes standards and procedures that improve transparency and imposes a genuine fiduciary obligation on fund managers.

Registration also makes it possible for these innovative firms to offer evergreen funds, which also better serve investors and generate higher returns. They put extra focus and emphasis on the very special needs of early stage companies, especially those developing new technologies. This greatly improves their probabilities of success. Less progressive investors might rely on aging concepts such as simply diversification to reduce risk, which limits upside potential.

Progressive VCs know that the world has shrunk and that it is no longer necessary for the ecosystem that supports innovative companies to be limited to Silicon Valley and Boston. They also are not satisfied to simply accept that emerging funds outperform established funds. They seek to understand why, capture it and replicate it in later vintages.

They refuse to accept that it is difficult to value exciting new technology. They strive to develop sound, empirical methodologies to predict future valuations. Once valuations can be measured, they can be managed with rigor and predictability.

By combining progressive differentiators, VC firms can offer more to both investors and the portfolio companies they serve.

Steve Valentor is a 30-year technology industry veteran who has worked in computer engineering, semiconductor R&D, software development, and manufacturing for companies ranging from startups to the Fortune 200. He has held positions from entry level engineer to senior technical management, CEO and board chair. Currently the managing partner of Polynomial Ventures and an adjunct professor at DePaul University, Valentor holds an M.B.A. in finance and a bachelor's degree in math, both from the University of Illinois at Chicago.

Polynomial Ventures invests in early stage technology companies outside of Silicon Valley and Boston. The Chicago-based firm is an emerging, registered investment adviser (RIA) operating an evergreen fund.