SVB Capital
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Dialing Down:

Venture Capital Returns to Smaller Size Funds

Venture Capital Update

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Do small venture capital funds outperform large venture capital funds? SVB Capital is interested in understanding this issue and the many dynamics necessary for a healthy venture capital industry. Median fund sizes in venture capital have declined dramatically in recent years, and many limited partners have liquidity constraints that have caused them to reduce or pull back from allocations to the asset class. At the same time, many general partners realized little to no carry (profit participation) over the past decade. Lastly, realized and unrealized returns for venture capital funds over the past ten years have been disappointing. These ongoing developments have posed fundraising challenges for the surviving firms and are gradually leading to a compression in overall fund sizes.

We believe the decline in fund sizes is a healthy trend for the industry. In this issue of *Venture Capital Update,* SVB Capital reviews historical return data and finds evidence to support the commonly-held view that funds at the smaller end of the size spectrum consistently outperform larger funds across vintage years. We derive this result from an analysis of the performance of SVB's own portfolio of funds as well as data from Preqin, one of the industry's leading providers of performance information. In total, we examine returns from more than 850 venture capital funds based in the United States.

There are many compelling reasons for the attractiveness of small funds. Managers of such funds often have industry-specific expertise and focus on particular strategies or sectors compared to those of larger funds which usually target multiple stages and sectors. Small funds tend to have a strong general partner commitment, which heightens the alignment of interests with limited partners and potentially increases investment discipline. In funds with these characteristics, one or two investments can provide positive returns for the entire portfolio. Limited partners have recognized the potential upside of investing in small funds and often expect managers to attain multiples of at least 3x or an internal rate of return (IRR) of at least 25 percent. Our analysis corroborates this general view: We find that a higher portion of smaller-size funds have achieved significant returns on a total value to paid-in capital (TVPI) and distribution to paid-in capital (DPI) basis relative to large funds across most vintage years between 1981 and 2003.

On the other hand, an increasingly select group of brand-name firms that have generated outsized returns will continue to find limited partner support to raise large funds. Many of these firms have successfully raised significant amounts of capital because they have demonstrated an ability to adapt to changing environments over the course of their previous funds. Some of the most successful brand-name firms employ multiple strategies to achieve their results, such as diversification across stages (early vs. late and growth), geographies (multiple regions including global) and sectors (technology, life science and clean technology). In many cases they employ later-stage strategies that require large investments of capital. Many of the most successful large funds have also built brands and a depth of expertise which allow them to outperform small funds. Our data indeed reveals that a few large funds have been able to consistently deliver a TVPI multiple of 2 or above.

SVB Capital believes that the distribution of sizes for funds with vintage years 2010 through 2012 will be dominated by funds which are $250 million or less in size. Larger brand name firms with top-performing track records will be able to close on funds greater than $250 million if they are able to demonstrate a realistic ability to not only achieve multiples of 3x and greater for early-stage investing and 2x and greater for late-stage strategies, but also generate an IRR north of 20 percent. Across the industry we expect firms to reduce fund sizes from prior funds by 25 percent to 50 percent in the next few years.

In the current environment all managers are actively looking to right-size and adjust their funds in order to maximize return potential and ensure their ability to raise funds in the future. The high cost of accessing venture capital for both venture fund managers and entrepreneurs will help ensure that the industry has the necessary discipline and return objectives that are needed during times of low liquidity and a difficult exit environment, which will help set the stage for significant outperformance as markets improve.

ANALYZING THE PERFORMANCE PROFILE OF SMALL FUNDS

To examine the correlation between venture capital fund sizes and relative performance, SVB Capital analyzed a data set comprised of 509 venture capital funds from Preqin, a provider of data on the venture capital and private equity industry.[1] The funds in the data set have at least $50 million under management and span vintage years 1981 through 2003. We also reviewed performance figures from a set of over 350 funds with vintage years 1995 through 2008 that make up part of SVB's portfolio of venture capital investments.

For this analysis, we based performance on two metrics that are commonly used to assess the return on investment of a venture fund: total value to paid-in capital (TVPI) and distribution to paid-in capital (DPI). TVPI provides a multiple value on the entire portfolio — both distributed capital and the net

[1] Preqin collects fund performance data from public sources, typically reports from pension funds and other institutions that must provide their financial performance reports as mandated by the U.S. Freedom of Information Act (FOIA) or similar legislation in foreign countries. Preqin advertises that its data have less selection bias than samples collected via surveys or client investments because Preqin's information would not omit better- or worse-performing funds or be skewed upwards by institutional clients' investment picks.

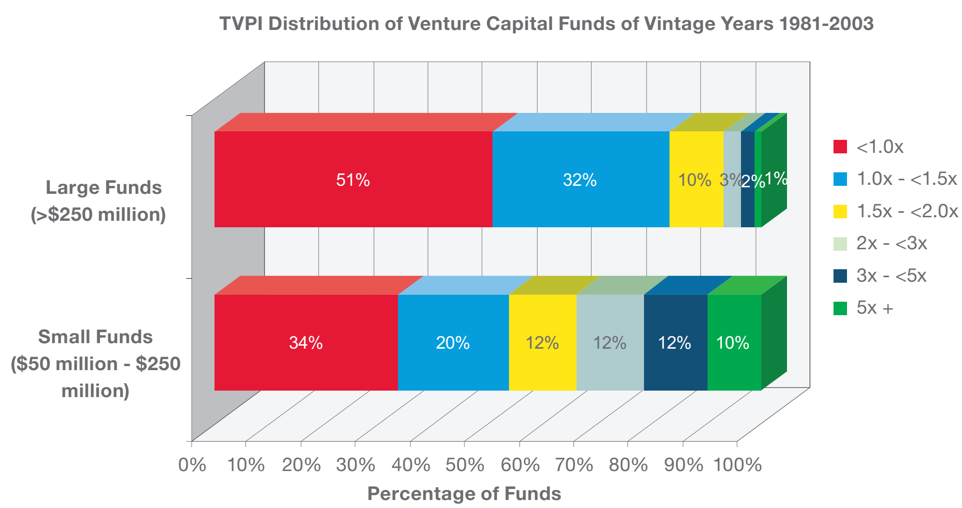
asset value of the portfolio — while DPI measures only the realized portion of the portfolio that was distributed to the limited partner as a multiple of contributed capital. IRR data was not available, which we recognize is a limitation of the analysis. All data are as of June 30, 2009.

To define the parameters for the analysis, we counted "small" funds as those that managed between $50 million and $250 million in capital and "large" funds as those with more than $250 million in capital under management. Out of the funds in the Preqin sample, just over 31 percent fell into the large category. All of the funds were then sorted according to their TVPI performance.

We discovered that across all vintage years a larger portion of funds in the $50-$250 million range had outsize performance relative to the set of funds that manage more than $250 million in capital. As Chart A shows, 66 percent of small funds in the Preqin database had a TVPI of at least 1.0, compared to 49 percent of large funds. In fact, 22 percent of small funds recorded a TVPI of at least 3.0, versus just 3 percent of large funds.

This finding was not limited to funds appearing in the Preqin database. We examined the performance of SVB venture capital fund investments that had outperformed the Cambridge Associates pooled TVPI benchmark for their respective vintage years. The data shows that there were more funds in the $100-$200 million range that exceeded the Cambridge Associates benchmark than in any other range, and the average TVPI of funds in that range was higher than the average TVPI of funds in all other size bands. The group of funds that had the second highest average TVPI comprised those with between $50 million and $100 million in committed capital, as Chart B shows.

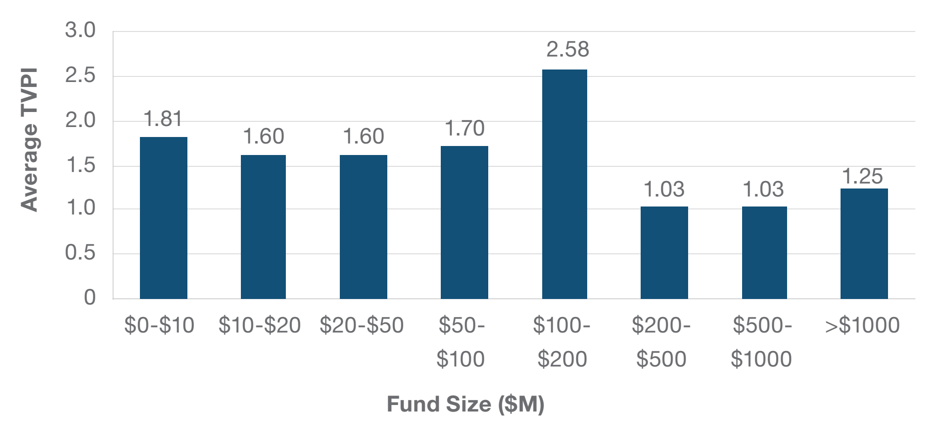
(A): Small Funds Have a Better Performance Profile than Large Funds with Seven Times as Many Funds Achieving a 3x and Greater TVPI Multiple



Source: Preqin

The better-performing small funds tend to be concentrated in the $50-$150 million range. Using the same methodology as in the initial analysis but lowering the small vs. large cutoff point to $150 million, we found that 52 percent of the resulting small funds had a TVPI of at least 1.5, compared to 46 percent of small funds when the cutoff point between small and large is set at $250 million. An examination of performance profiles for the rolling vintage year periods 1995-99 and 2000-03 also reveals that a greater portion of small funds in the $50-$150 million range have a higher performance profile compared to the population of small funds that are defined by a maximum size of $250 million.

(B): Among the Funds in SVB's Portfolio of Investments that Outperformed their Respective Cambridge Associates Benchmark, Small Funds Fared the Best, Surpassing the Benchmark by Over 50 percent in Many Cases

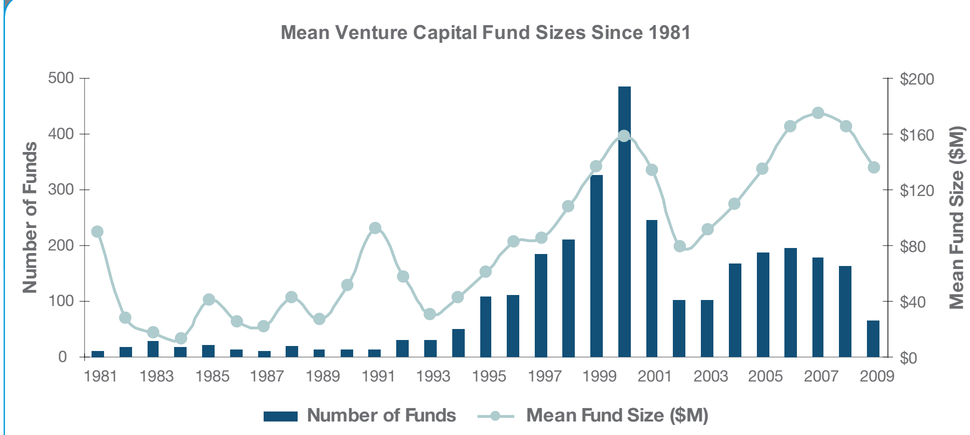


Source: SVB Capital, Cambridge Associates, LLC

To control for such shifts in fund sizes over time, we set the definition of small and large funds to be determined by the median fund size in each vintage year. A fund would be small if its level of committed capital was lower than the median-sized fund in the same vintage year (and vice versa for large funds). Based on this criteria, we determined that 80 percent of small funds between vintage years 1983 through 2003[3] had a TVPI of above 1.0, compared to just 41 percent of large funds. Among all small funds, there were 75 funds with a TVPI of at least 3, compared to none of the large funds (Chart D).

It is important to note that fund sizes in the venture capital industry have fluctuated significantly over the last few decades. Following the dot-com bubble, the average fund size declined until 2004, when optimism across the industry caused both the number of funds and the average fund size to increase. According to data from Thomson Reuters (see Chart C), the average fund size reached a high in 2007 before declining over the next two years.[2]

(C): Fund Sizes Have Declined Since 2007

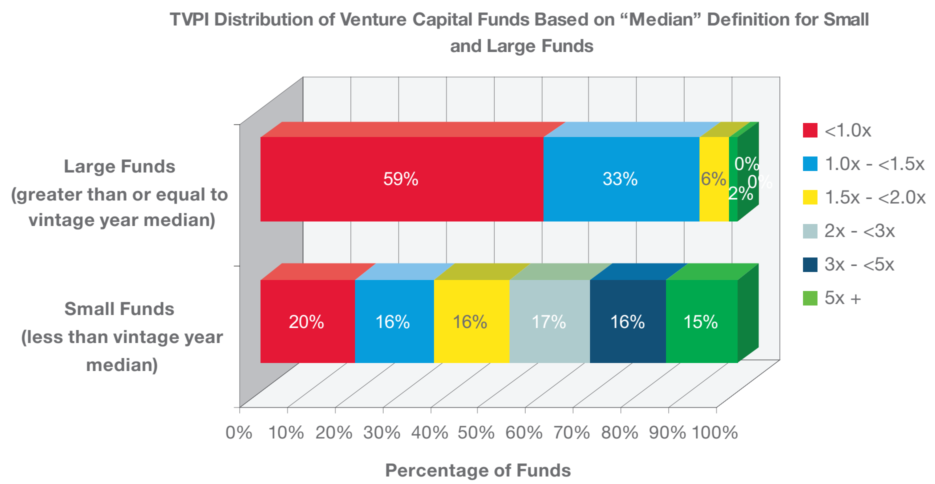


Source: Thomson Reuters

[2] Chart shows funds in Thomson Reuters's ThomsonONE database that have had an interim or final close with a disclosed fund size. Funds that were more than three standard deviations away from the mean were removed from the sample.

[3] The median-sized fund was not defined for vintage years 1981 through 1983, as there were only one or two funds in the data set.

(D): The Outperformance of Small Funds Holds Even When Median Fund Size Trends Are Taken Into Account



Source: Preqin

The data also seems to suggest that the downside potential of small funds is limited during periods of economic volatility. We found that a higher portion of small funds consistently had a TVPI of at least 1.0 relative to large funds across most vintage years with the exception of funds of vintage years 2000 through 2003, where a marginally larger number of small funds actually performed worse than large funds.[4] In fact, most venture capital funds founded during the post dot-com period have delivered poor returns to their investors. The limited downside performance of small funds formed during a "dark period" for the industry should provide assurance to managers who may be concerned that small funds have a relative disadvantage when the economy is in a downturn.

The general performance distribution between small and large funds holds true even when we measure performance on a DPI basis. Using the original $250 million cutoff to separate small and large venture capital funds, we found that a significantly higher portion of small funds with vintages 1981 through 2003 have performed better compared with large funds. For example, only 5 percent of small funds had a DPI of less than 0.25 as of June 30, 2009, compared to 30 percent of large funds.

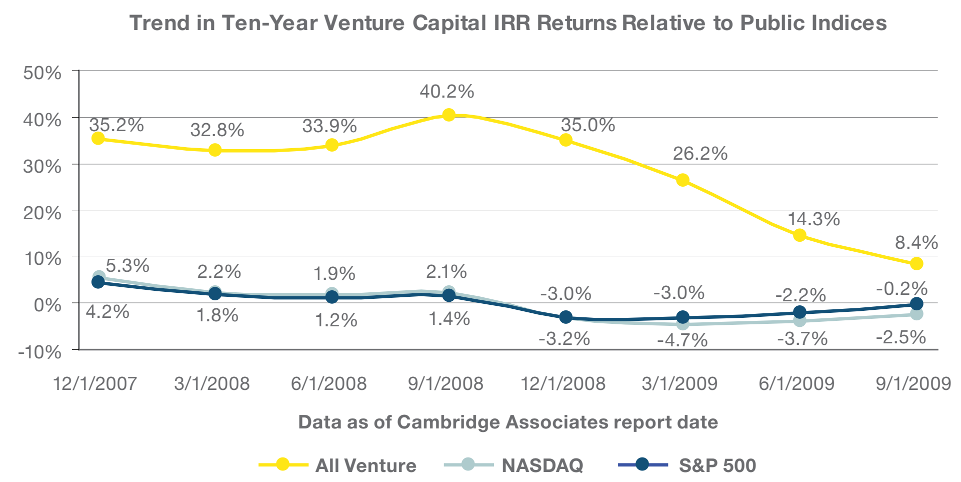
A LACK OF REALIZED RETURNS HAS DRIVEN THE DECLINE IN FUND SIZES

In the last year, the 10-year pooled returns for venture capital have fallen dramatically. At the same time, returns for the industry continue to be favorable compared to other private equity classes and select public market indices (NASDAQ and S&P 500). In addition, many endowments and foundations, which have historically been the core providers of capital for venture, have yet to recover the significant value their portfolios lost during the financial crisis. Since limited partners often make their investment decisions based on long-term returns and prospects for liquidity, certain investors have shifted some or all of their allocations away from the asset class.

As a result, the bar for fundraising has gone up for the majority of venture capital firms. The cost of capital has risen, and only a select group of firms that have collectively produced the majority of returns for the industry

[4] To study fund performance over incremental vintage year periods, we divided the funds in the Preqin dataset into the periods 1985-89, 1990-94, 1995-99 and 1999-2003 and sorted them into "buckets" based on TVPI performance. There was insufficient data to include funds with vintage years 1981-84.

E): Ten Year Returns for Venture Have Fallen 32 Percent in One Year



Source: Cambridge Associates LLC. Data were provided at no charge.

will encounter the fewest challenges in raising capital for their next fund. Firms recognize that they will have to match fund size to market supply and are continuing to adjust target fund sizes down accordingly.

FUND SIZE IS JUST ONE OF SEVERAL DETERMINANTS OF RETURNS

Although smaller fund sizes appear to be associated with higher returns, we do not presume that the size of a fund is a direct predictor of returns. Other important considerations that help determine a fund's potential success include the quality and track record of the general partner, its talent in creatively and proactively capitalizing on the changing landscape and its ability to execute on a focused strategy well ahead of its competition.

Further, there are several considerations that should be noted in our above analysis. First, the set of funds that we examined is just a subset of the entire venture capital fund universe — a problem that often appears when studying venture capital fund performance. Although the more than 850 funds in the SVB and Preqin data sets spanned 21 vintage years, approximately 50 percent of the funds were raised between 1999 and 2002 only. Within the Preqin sample, there were very few funds with vintage years 1981 through 1994. This contributes to some uncertainty in our analyses of fund performance across different vintage year periods and of fund performance where we controlled for changes in fund size over time.

In addition, we did not control for other important fund attributes such as investment stage, sector classification or geographic focus. By isolating fund size and holding other variables constant, we could more clearly observe the degree of correlation between fund size and performance. In addition, we did not have access to IRR data, which may have yielded insights on strategy (e.g. late versus early) and performance based on timing of cash flows from fund investments.

SMALL FUNDS POSSESS CERTAIN ADVANTAGES OVER LARGE FUNDS

The trend towards fewer and smaller pools of capital is helping to improve industry fundamentals and issues of overcapitalization. Further, smaller venture capital funds have distinct advantages that provide them a specific edge to provide top-tier returns.

1. Better alignment with investors

Smaller funds tend to have more attractively structured partnership terms that create a stronger alignment between general partners and limited partners. As the managers of such funds earn relatively less from management fees, they have a stronger incentive to focus on portfolio performance in order to generate wealth through carried interest.

2. Leverage specialized industry expertise

While established managers often get the most recognition for top-quartile returns, they are not alone in their success. Managers of smaller funds typically develop a tighter focus on a specific niche or strategy that gives them a competitive edge over other investors. Focused managers can leverage their sector and geography-specific networks for high-quality deal flow. They use their differentiated expertise to more quickly evaluate opportunities, thereby increasing their chance of winning in a competitive process.

3. Ability to complement large funds

The deep experience and relationships in specific sectors and regions that managers of small funds cultivate place them in a unique position in the venture capital ecosystem. This ensures a differentiated reputation, making the fund a syndicate partner of choice for larger venture capital partnerships and allowing it to attract world-class management teams to its portfolio companies. Differences in size, strategy and positioning allow small and large funds to view each other as partners rather than as competitors.

4. Fewer home runs are needed to return the fund

Smaller fund sizes, and hence fewer investments, force managers to focus on capital efficiency. These managers tend to pursue a strategy of significant initial ownership coupled with selective participation in follow-on rounds that have compelling valuations and strong investor syndicates. In funds with these characteristics, one or two investments can return the entire fund.

TOP-PERFORMING MANAGERS OF LARGE FUNDS WILL CONTINUE TO SUCCESSFULLY RAISE LARGE FUNDS

Venture capital managers whose large funds have outperformed their peers are more likely to continue raising large funds in the future. These managers have usually succeeded in taking advantage of their brand name, have built strong teams able to execute on larger investments or are more likely to invest in growth or later-stage companies, which require larger amounts of capital. They may also be successful investing in capital-intensive sectors such as hardware, cleantech and pharmaceuticals. High-performing managers show an ability to execute strong pricing discipline during the investment process and bring sector-specific value-add to their portfolio companies. They use their size to maintain a high ownership percentage in portfolio companies and may choose not to rely on syndicates with other venture capital firms to finance their companies. In many cases, past success helps them create successful exits for their companies.

Examples of Venture Capital Firms Maintaining or Reducing Fund Sizes

Latest Fund	Vintage	Target ($M)	Previous fund	Vintage	Final Close ($M)
Battery Ventures IX	2010	$750	Battery XIII	2007	$750
Grotech Partners VII	2009	$250	Grotech Partners VI	2000	$410
Highland Capital Partners VIII	2009	$400	Highland Capital Partners VII	2006	$800
Polaris Venture Partners VI	2010	$500	Polaris Venture Partners V	2006	$1,000
Redpoint IV	2010	$400	Redpoint III	2006	$400
Trident Capital Fund–VII	2010	$400	Trident Capital Fund-VI	2005	$400
Venrock VI	2010	$350	Venrock V	2006	$600

Sources: Dow Jones Private Equity Analyst, Preqin, Thomson Reuters

Some large funds have multiple strategies with many partners, and on a dollar-per-partner basis, operate like a few small funds combined. For example, a $500 million fund that targets three industry sectors (technology, life science and clean technology) may have specific allocations to those sectors that do not change over the life of the fund. In such a vehicle, each of the sector strategies is sometimes managed by an investment committee comprised solely of partners with expertise in their respective industry.

A REDUCTION IN FUND SIZES IS POSITIVE FOR THE VENTURE CAPITAL INDUSTRY

We anticipate that the venture capital industry will contract in size by 25 to 50 percent both in the amount of capital raised and deployed and the number of active firms. The increased focus on differentiated strategies, investment discipline and capital efficiency as a result of the scaling down of fund sizes will help drive returns for an asset class that has long been an outsized contributor to innovation and economic growth. SVB Capital expects this will contribute to limited partner and general partner optimism in 2010. Should the public and M&A markets continue to improve, we expect that venture capital returns will outperform other private equity investment opportunities.

PLEASE TAKE OUR TWO-MINUTE SURVEY

SVB Capital welcomes questions and comments you may have about smaller venture capital funds. If you'd like to participate in a survey on this topic, please click here (or go to http://questionpro.com/t/Ajp2ZHWNC). All comments will be kept confidential, and we will be happy to send you a summary of the results after the survey closes on May 31, 2010.

We are interested to get your feedback on questions such as:

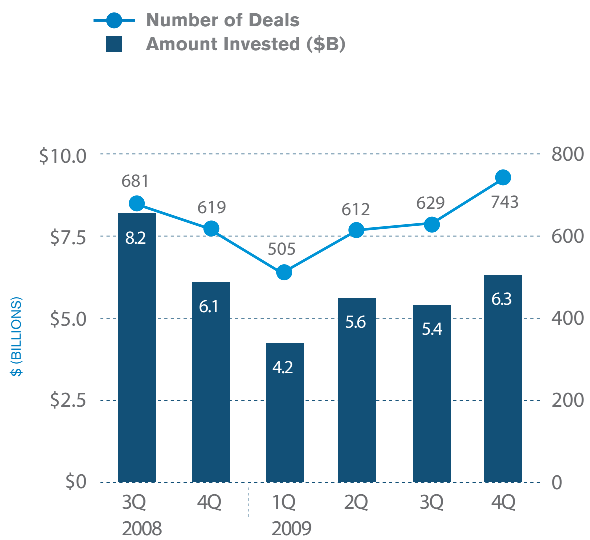
- Over the last 12 months, how has your view on the attractiveness of small funds changed?
- What do you feel are the most compelling reasons for investing in small funds?
- What do you feel are the primary risks for investing in small funds?
- Should limited partners hold higher return expectations for small funds relative to large funds?
- Do you think small funds with vintage years 2010 or 2011 will have higher returns than large funds?
- What sector(s) do you think will realize the best venture capital returns?

TELL US WHAT YOU THINK

Send your comments and suggestions for topics to Jason Liou jliou@svb.com.

Fourth Quarter 2009 U.S. Venture Capital Snapshot

U.S. Venture Investing Activity



Source: Dow Jones VentureSource

Most Active Venture Investors

Firm Name	Assets Under Mgmt $ (MILLIONS)	Number of Deals*
Kleiner Perkins Caufield & Byers	3,305	20
New Enterprise Associates	10,650	19
Venrock	2,200	19
Domain Associates	2,469	13
Draper Fisher Jurvetson	4,410	13
First Round Capital	172	13
SV Life Sciences	1,939	13
Canaan Partners	3,000	12
North Bridge Venture Partners	2,647	12
Versant Venture Management	1,585	12
Advantage Capital Partners	1,015	11
Bessemer Venture Partners	2,350	11
Intel Capital	1,130	10
Sequoia Capital	4,033	10

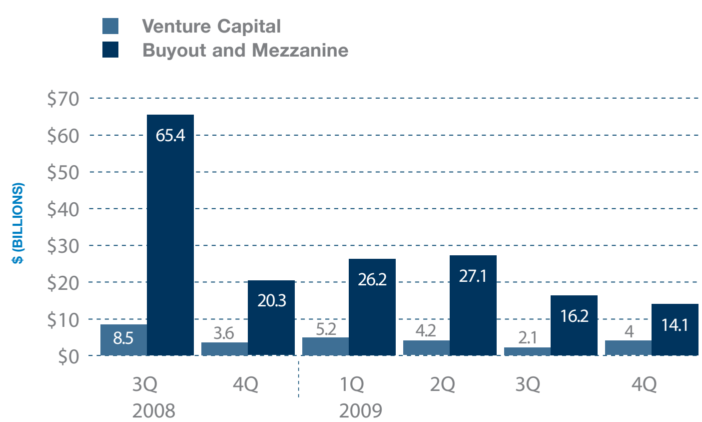
Source: Dow Jones VentureSource
** U.S.-based portfolio companies only*

Venture Investment by Region, All Industries

U.S. Region	Num of Deals	Num of Investing Firms	Average Per Deal $ (M)	Sum Inv. $ (M)
San Francisco Bay Area	228	304	$9.9	$2,235.1
New England	108	143	9.1	983.9
Southern California	70	86	8.1	566.2
New York City Metro	55	89	8.7	459.2
Midwest	61	84	6.4	392.1
South	43	43	8.5	363.9
Mountain West	35	63	9.6	336.0
Pacific Northwest	31	44	9.5	293.4
Texas	35	50	5.7	200.8
Mid-Atlantic	35	47	5.2	180.7
Potomac	21	31	5.9	123.9
Research Triangle	12	21	10.1	121.8
Other Northern CA	5	2	3.6	17.9
Other	2	7	3.0	6.0
Islands/Alaska	2	2	1.6	3.3

Source: Dow Jones VentureOne

Fundraising by U.S.-Based Venture and LBO/ Mezzanine Firms



Source: Thomson Reuters

IRR Performance (%) by Vintage Year (U.S.)

Vintage Year	Num of Funds	Cap Wtd Avg	Pooled Avg	Upper Quartile	Median	Lower Quartile
1996	36	59.2	83.0	113.9	33.0	1.3
1997	62	46.1	49.3	59.6	20.0	(0.9)
1998	76	22.9	17.4	10.6	1.2	(4.7)
1999	110	(6.8)	(5.4)	0.6	(5.8)	(14.3)
2000	126	(0.3)	0.6	1.9	(3.0)	(6.9)
2001	57	1.0	2.0	7.3	(0.7)	(4.2)
2002	20	0.3	1.8	2.4	(1.2)	(3.1)
2003	17	4.2	3.9	8.6	2.9	1.1
2004	23	0.4	1.0	5.5	(1.7)	(6.1)
2005	22	1.0	3.8	6.2	(0.7)	(7.8)
2006	33	(5.5)	(4.9)	1.4	(5.2)	(13.3)
2007	22	(9.1)	(4.2)	3.0	(12.8)	(17.2)
2008	12	(28.7)	(25.7)	(22.1)	(29.2)	(37.9)

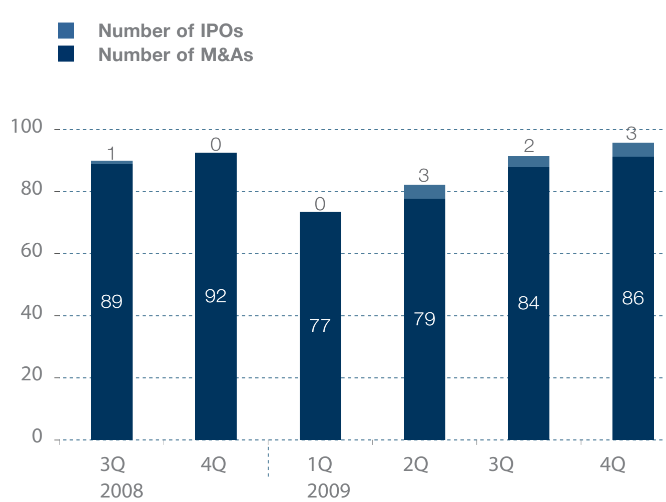
Source: Thomson Reuters. Data are as of September 30, 2009.

Cumulative IRR Performance (%) by Stage (U.S.)

Fund Type	Num of Funds	Cap Wtd Avg	Pooled Avg	Upper Quartile	Median	Lower Quartile
Early/Seed VC	612	7.7	18.6	14.6	2.6	(5.3)
Seed Stage VC	66	3.5	9.2	14.1	5.7	(1.1)
Early Stage VC	546	7.9	19.5	14.6	2.5	(5.6)
Balanced VC	459	6.9	13.4	14.2	5.0	(1.0)
Later Stage VC	214	4.6	13.0	14.8	5.3	(1.4)
All Venture	**1,285**	**6.7**	**15.1**	**14.6**	**3.9**	**(2.8)**
Small Buyouts	180	8.2	15.3	17.2	7.1	(0.1)
Med Buyouts	123	10.9	16.1	20.5	7.9	(1.2)
Large Buyouts	99	9.0	11.6	15.2	6.3	(1.8)
Mega Buyouts	142	(3.3)	8.5	13.0	4.4	(3.0)
All Buyouts	544	(0.3)	10.5	16.8	6.5	(1.3)
Mezzanine	73	5.7	7.7	11.8	7.1	1.2
Buyouts and Other PE	717	1.0	10.1	14.7	6.6	(0.9)
All Private Equity	**2,007**	**2.4**	**12.1**	**14.6**	**4.8**	**(2.0)**

Source: Thomson Reuters. Data are as of September 30, 2009. Figures are for all funds in database, vintage years 1969-2008.

U.S. IPO vs. M&A Transactions for Venture-Backed Companies



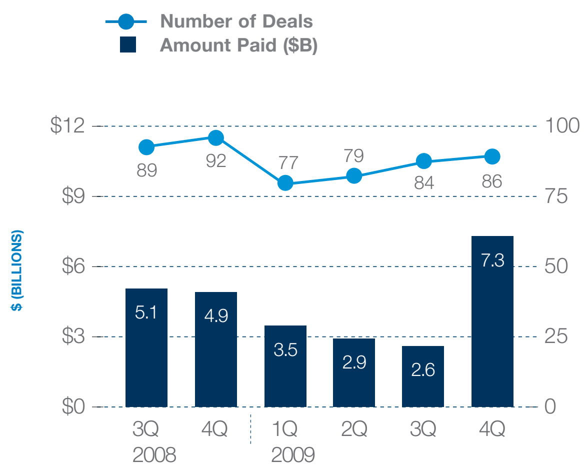
Source: Dow Jones VentureSource

US. Venture Liquidity Events by Industry

Industry	2007 IPO	2007 M&A	2008 IPO	2008 M&A	1H 2009 IPO	1H 2009 M&A
Business and Fin. Services	8	92	1	50	1	51
Cons. Goods and Services	7	50	0	45	2	43
Energy and Utilities	2	6	0	0	0	4
Biopharmaceuticals	19	30	1	29	0	23
Healthcare Services	2	9	1	8	2	3
Medical Devices	8	21	2	15	0	22
Medical Software and IT	3	11	0	8	0	6
Ind. Goods and Materials	1	5	0	4	0	5
Comm. and Networking	10	44	0	30	0	25
Elect. & Computer Hardware	3	12	0	17	0	17
Information Services	0	0	0	0	0	0
Semiconductors	7	25	0	28	1	18
Software	8	178	2	146	2	108
Other	0	0	0	0	0	1
TOTAL	**78**	**483**	**7**	**380**	**8**	**326**

Source: Dow Jones VentureOne

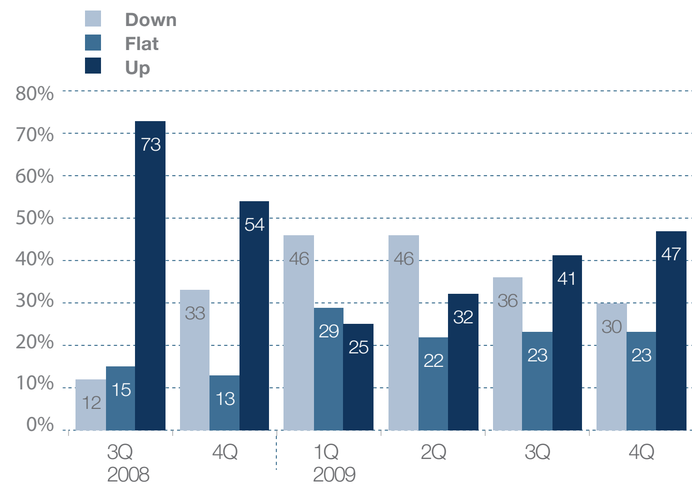
U.S. Venture-Backed M&A Activity



Source: Dow Jones VentureSource

Price Change

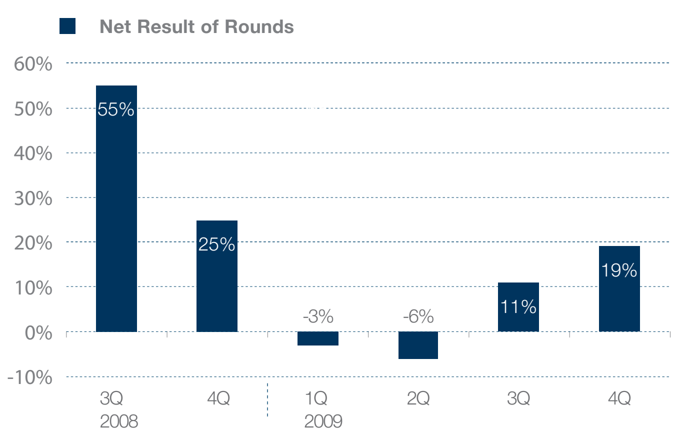
The direction of price changes for 112 San Francisco Bay Area companies receiving financing, as compared to their previous rounds.



Source: Fenwick & West L.L.P.

Venture Capital Barometer™

Average per share % price change from previous round of Silicon Valley companies receiving VC investment in the applicable quarter. Complete report available at http://www.fenwick.com/vctrends.htm



Source: Fenwick & West L.L.P.

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