SVB Capital
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Oasis in the Desert:
Investors Search for Liquidity

Venture Capital Update

February 2009

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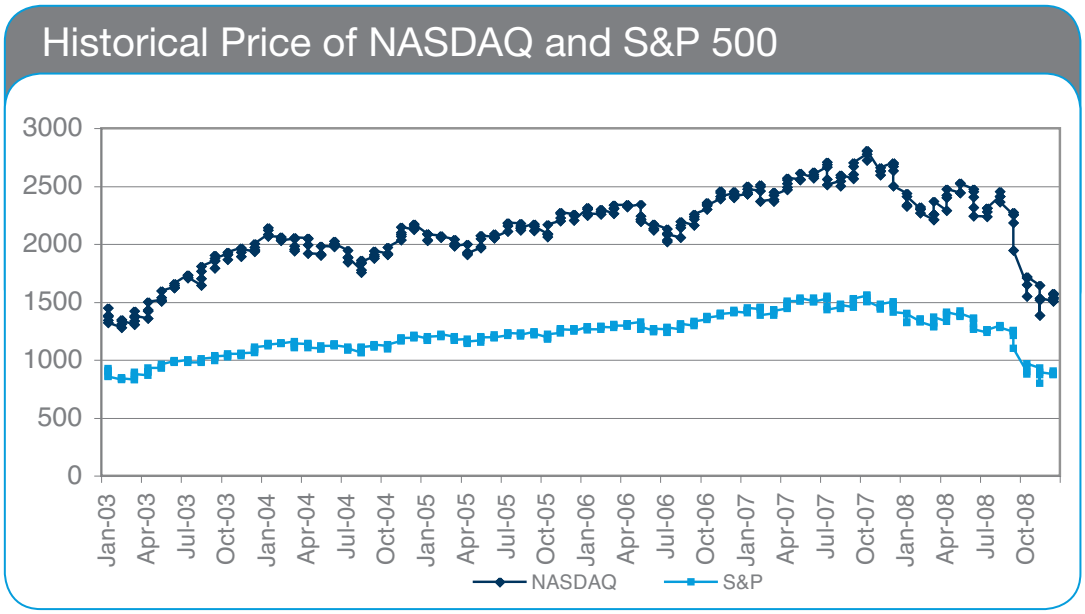
The sharp decline of the stock market in 2008 impacted a broad swath of investors from individuals to large pension funds. The reverberations were also felt in the venture and private equity industry, and analysts started to voice concerns about the effect declines in the public markets would have on limited partner investors (LPs). By late spring, many foundations and endowments began to experience three factors that simultaneously decreased their liquidity: 1) shrinking valuations in their public stock portfolios, 2) continuing capital calls (i.e., incremental funding to managers of committed funds), and 3) fewer distributions from private equity investments. Today, some private equity observers fear that LPs have incurred such severe losses that they will be forced to default on capital calls. Others in the industry characterize these fears as overblown, despite news of huge losses by well-respected endowments.

This issue of the *Venture Capital Update* analyzes how LPs have been affected by declines in financial markets and the economic downturn more generally. We have found that LPs are faced with many different challenges. Some institutions that allocated their portfolios more aggressively to private equity face difficult liquidity issues and are looking at all options, including the possibility of shedding these assets. Still others, such as many pension funds that began investing in the asset class relatively late, plan to continue to increase commitments to private equity. While investors are facing a liquidity crunch, SVB Capital has not found evidence that LP defaults are widespread — or will become widespread. Based on our research, reports in the press may be



Source: Yahoo! Finance

overstated about LP defaults and their waning support for private equity investing.

PUBLIC MARKET FREEFALL

From October 31, 2007 to November 20, 2008, the NASDAQ fell 54 percent and the S&P declined 51 percent.[1] These declines had a direct impact on LPs, dramatically reducing returns and effectively shrinking total assets under management (AUM). Many well-respected funds reported significant losses. Harvard University's endowment lost $8 billion — 22 percent of its value — between June 30, 2008 and December 31, 2008, and Yale University's endowment lost about one-quarter of its value during the same period.[2] Overall college endowment losses averaged 23 percent between June 30 and December 31.[3] In addition to educational endowments, public pension funds have also been affected. The California Public Employees' Retirement System (CalPERS) reported a loss of almost $50 billion in just two months, from August to October 2008.[4]

Many LPs have now found themselves in need of liquidity. This situation was caused not only by declines in public markets but also by the lack of distributions from private equity investments. This past year saw the fewest IPOs since the 1970s; the number and volume of mergers also declined. Exits had previously provided distributions to these funds, and many funds had built alternative asset programs so that they were self-funding (i.e., the distributions from these investments would cover current capital calls). Given the lack of liquidity generated by public and private equity holdings, some LPs are concerned about funding day-to-day operations and future capital calls. For instance, CalPERS has asked a number of private equity funds to ease off requests for additional capital until the economic environment stabilizes, even though it reserved 14 percent of its total portfolio during 2004 to 2007 as a "rainy day fund."[5]

Some private equity fund managers have sought to be proactive in addressing LPs' lack of liquidity. One solution is to reduce the size of the fund and the amount of LPs' commitments along with it. Permira is an example of one

University Endowment Allocations

Asset Class	Yale	Harvard	Princeton	Stanford	Avg. Educational Endowment	Estimated Return June 30 - October 31 2008
Hedge Funds	23%	18%	26%	18%	20%	-20%
Domestic Equity	11	11	9	37 *	26	-25
Fixed Income	4	11	3	10	13	-5
Foreign Equity	15	22	16	n/a ***	22	-37
Private Equity	16	13	25	12	7	-50
Real Assets **	28	26	19	23	10	-35
Cash	0	-3	1	n/a	2	--

Sources: School reports and Bloomberg, as reported in Andrew Bary. "Crash Course," Barron's, *November 10, 2008.*

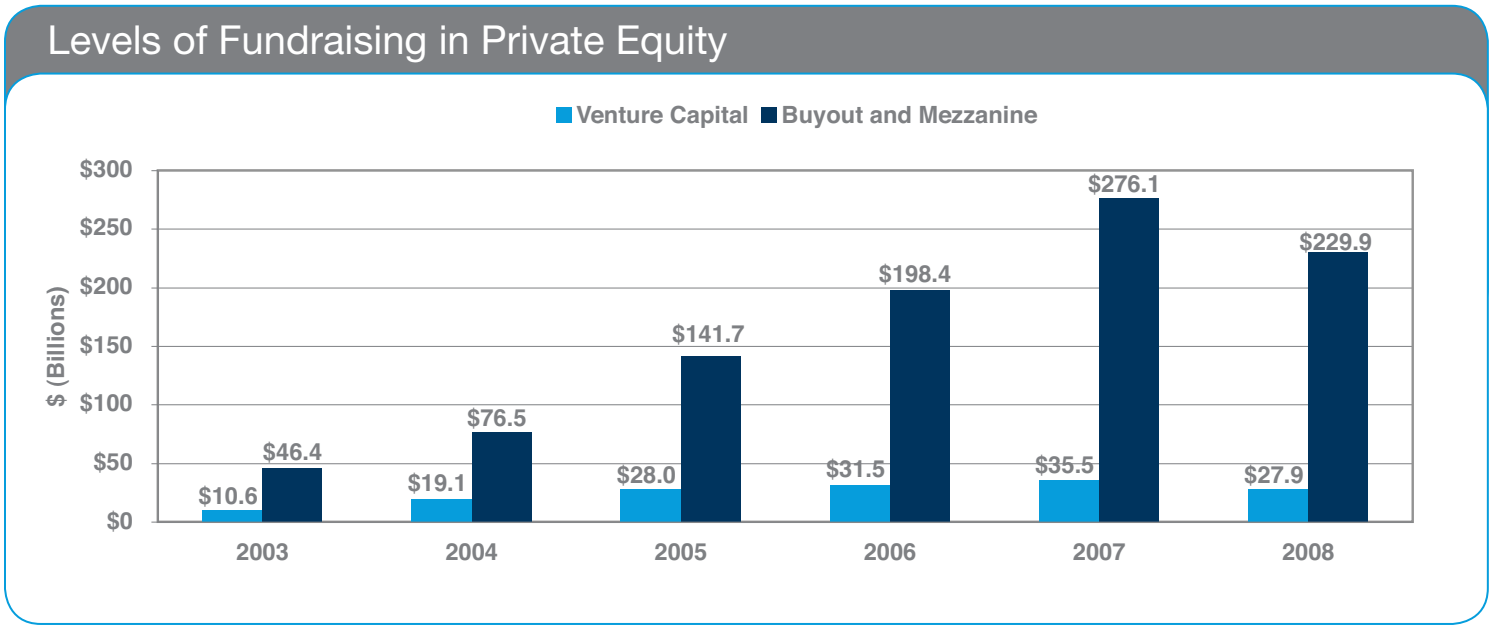
* *Includes Domestic and Foreign Equity* ** *Real assets = real estate, timber, oil, and gas* *** *n/a = not available*

firm that is giving its LPs an option to limit commitments on its €11 billion fund raised in 2006 in exchange for lower profits. Reports indicate that only a few of Permira's LPs are expected to take the offer.[6] This solution was common among venture funds, for instance, during the 2000-01 crash of the stock market when some LPs were strapped for cash, particularly high net worth individuals whose wealth was in stocks. Yet, reducing commitments to funds is not the ideal option for all LPs. Those without liquidity issues want the managers of their committed funds to put capital to work, and thus continue calling capital. Indeed, many LPs as well as fund managers believe that the next two vintage years (2009 and 2010) will generate strong returns for venture and growth investments, particularly in light of lower valuations and an anticipated rebound in exit markets after the economic recovery.

INCREASED ALLOCATIONS TO PRIVATE EQUITY

Large university endowments in particular have invested heavily in private equity in recent years, following the philosophy of David Swensen from Yale who advocated investing large percentages of total assets to alternatives: private equity and hedge funds.[7] Although Barron's magazine estimates that the average private equity allocation (venture, buyout and mezzanine) of educational endowments equals about 7 percent, many of the most prestigious university systems invested 12 percent to 25 percent of their endowment programs in private equity.[8] Compare this figure to an average two-percent allocation to private equity by CIOs of public institutions surveyed by Morgan Stanley Investment Management.[9]

As the popularity of investing in private equity rose, the amount of capital raised by buyout and venture firms increased. The increase in private equity commitments from



Source: Thomson Reuters

educational endowments and public pension funds, among others, has contributed to the upsurge of annual private equity (buyouts, mezzanine and venture) fundraising from $57 billion in 2003 to over $300 billion in 2007.[10]

OVER-ALLOCATION TO ALTERNATIVE ASSETS

With the drop in stock prices, not only did LPs suffer dramatic losses, but they also found themselves over-allocated in more illiquid assets, such as private equity. The table below shows how market factors can easily change the percentage allocation of private equity in diversified portfolios. In the example below, public equity holdings fell in value by 40 percent from the beginning of 2008 to the end of October. Real estate and debt holdings also declined, reflecting losses in these markets, and the value of the private equity portfolio also fell. These combined losses brought the value of total AUM down from $50 million to $36 million. While the value of private equity declined somewhat during this period, the net effect of losses in other areas of the portfolio pushed up the allocation to private equity by 24 percent, from 25 percent to 31 percent of AUM. This is known as the "denominator effect."

While declines in stock values are the main factor contributing to the denominator effect, other factors such as the dearth of exits in 2008 and the continuation of capital calls by GPs exaggerated the impact. Certain foundations and endowments were the first to feel the pinch during the early summer — earlier than most. Steeper declines in the public market as well as the virtual seizing up of credit markets in the fall caused a severe pinch in liquidity for public pension funds.

If the LP in the example above had a planned target of 30 percent for private equity allocations, the institution has exceeded its target by virtue of declines in other areas of the portfolio. Thus, it is likely that this institution will not make additional commitments to private equity funds in the near future. This example demonstrates the situation in which many investors currently find themselves. In a recent survey, Coller Capital found that two-thirds of investors will reach

The Denominator Effect: A Hypothetical Example

	Assets ($ '000) January 1, 2008	Allocation (%)	Assets ($ '000) October 31, 2008	Allocation (%)
Hedge Funds	5,000	10%	3,500	10%
Domestic Public Equity	12,500	25%	7,500	21%
Fixed Income	7,500	15%	7,125	20%
Foreign Public Equity	5,000	10%	3,000	8%
Private Equity	12,500	25%	11,250	31%
Real Assets	5,000	10%	4,500	13%
Cash	2,500	5%	2,500	7%
Total Assets	50,000	100%	35,875	100%

or exceed their private equity allocations in 2009.[11] The survey used "private equity" as a generic term to include venture capital, buyout and mezzanine investments. The allocation constraints of these institutions will directly impact the fundraising environment in the near term by making it tougher for new private equity funds to find investors. SVB Capital's conversations with LPs indicate that the most pronounced reduction in commitments will be specifically to large and mega-buyout funds.

To solve the over-allocation problem, some institutions have decided to modify their allocation targets. The California State Teachers' Retirement System (CalSTRS) has expanded the band to plus or minus 6 percent around the target private equity allocation of 9 percent. The band had originally been plus or minus 2 percent. Its sister program, CalPERS has expanded its band of plus or minus 3 percent to plus or minus 8 percent around its target 10 percent allocation.[12]

It is unlikely that the denominator effect will be permanent. One factor will be the implementation of FAS 157 for year-end 2008 financial statements, which is expected to revise downward the valuations of most portfolio companies (and reduce the "numerator" in the allocation calculation). FAS 157 mandates that fund managers must estimate the "fair value" of each private portfolio company based on relevant facts, which include market conditions. The Generally Accepted Accounting Principles (GAAP) define fair value as "the price that would be received to sell an asset…between market participants at the measurement date."[13] The implementation of FAS 157 may bring further reductions in portfolio valuations as of December 31, 2008, to match changes seen in the public markets, particularly during the fourth quarter. Nonetheless, it is not expected that changes in valuations alone will offset public market reductions to bring private equity allocations back in line.

NOT ALL LPs FACE SIMILAR CHALLENGES

SVB Capital surveyed 15 LPs across the spectrum from small family offices to large pension funds about four issues related to the lack of liquidity: 1) secondary sales, 2) defaults, 3) borrowing and 4) future commitments to

private equity. We found that various LP segments faced different circumstances regarding liquidity and private equity allocations.

1) Secondaries:
None of the LPs that SVB Capital surveyed conveyed that they were interested in selling assets on the secondary market. Only one LP, a mid-sized pension fund, indicated an expectation that some of its peers will use secondaries as an option to rebalance portfolios in the face of a liquidity crunch. These findings may simply reflect that the LPs in our sample have less mature PE portfolios than their counterparts. Many, from small foundations to mid-sized pension funds, stated an interest in purchasing secondaries, although one large-sized pension fund was skeptical that secondary transactions were actually being completed. Another large pension fund stated that secondaries were still "over-priced."

While none of the LPs we surveyed indicated an interest in selling private equity assets on the secondary market, the most popular solution for LPs facing liquidity difficulties or allocation issues is to sell secondaries. A Coller Capital survey found that more than 60 percent of respondents indicated that at least one of the following factors were the main reasons why LPs are selling in the secondary market: increase liquidity, refocus resources on the best-performing LPs, and rebalance their portfolios.[14]

Analysts estimate that investors may look to sell over $140 billion in private equity investments over the next 18 months. Consequently, the supply of funds available in the secondary market will greatly overwhelm demand to purchase these funds. One secondary fund manager estimates that the waiting period for selling interests in certain funds is two years or more. Cogent Partners estimates that last year the average seller received $1.04 for every dollar of face value, but today he will receive only about 50 cents for every dollar — if the interest is sold at all.[15]

2) Defaults
Across the board, all of the LPs stated that it was unlikely that they or others in the industry would default because they were not facing such dire liquidity issues and the risk to their reputations would be too significant. In fact, only one LP knew of a potential default which concerned a legal issue rather than lack of liquidity, while the other LPs did not know of any actual defaults and considered them unlikely in the future. One large pension fund provided a more animated response, stating that the danger of defaults is "completely overblown by the financial press." While he believed that some LPs were negligent in over-prescribing allocations to private equity, these LPs are a small sample set and do not represent the industry.

Based on our conversations with these LPs, SVB Capital does not expect capital call defaults to be widespread. It is possible that more declines in the public markets will deepen the liquidity crisis and will leave some LPs no other option but to default, but SVB Capital believes that even these situations will be exceptional cases. One such exception includes the default by the non-banking entity of Washington Mutual, which missed capital call payments on venture capital funds Financial Technology Ventures Fund III and Arch Venture Fund V.[16] The non-banking entity went into bankruptcy after the thrift division of the institution was purchased by JPMorgan Chase & Company.

Defaults tend to be an LP's solution of last resort. Aside from the damage to an LP's reputation and concern that the investor will lose access to funds in the future, there can be immediate economic consequences if an investor defaults. Most fund agreements contain various remedies for the General Partner (GP) that create economic

consequences for the defaulting LP. These can include interest on overdue amounts, loss of voting rights, a forced sale of the LP's interest, acceleration of the LP's capital commitment, loss of the LP's capital account (or some portion thereof) and a cause of action for breach of contract. GPs generally prefer to avoid declaring an LP in default because of concerns that it could destabilize the fund. We expect LPs to avoid defaults because of risks to their reputations and economic consequences of remedies in LP Agreements and instead, will work with GPs to find better solutions to liquidity issues.

3) Borrowing

While many of the smaller family offices and foundations and endowments acknowledged that they maintain lines of credit as a "safety net," only some expect to borrow to meet short-term liquidity needs. By contrast, some of the mid-sized pension funds are seeking credit lines to facilitate short-term liquidity until the sale of other assets is completed. One pension fund mentioned that they will seek to borrow due to lack of liquidity outside of their private equity portfolio (i.e., short-term fixed income portfolios). However, most of the public pension funds that are planning to borrow short-term are using these funds to meet benefit payments and other operational obligations. Few public pensions are considering borrowing to meet capital calls.

4) PE Commitments in 2009

The majority of the LPs we surveyed stated that they expected a delay in making commitments to private equity in 2009. Some responded that they were "on hold," while others expect a one- quarter or two-quarter lag before they begin to make new commitments. One reason for the delay is the expectation that public markets will rebound during the second half of 2009, providing added liquidity to make new investments. Some of these LPs also stated that they were "staying the course" in terms of committed amounts, while one LP noted that the denominator effect will reduce the amount of capital that his family office expects to invest in new private equity commitments in 2009. Based on these responses, SVB Capital expects a very difficult fundraising environment in the first half of 2009, with year-end levels of private equity lower than in 2008, driven primarily by a large drop off in commitments to large and mega-buyout funds.

The demand for private equity remains strong among some types of investors. Echoing the findings of our conversations with LPs, a recent Coller Capital survey finds that 40 percent of LPs plan to increase their private equity allocation in 2009 (i.e., make additional commitments to private equity funds).[17]

RESTRUCTURING OF PRIVATE EQUITY

Limited partner investors, like most financial players, are facing tough times in the current market environment. Based on our discussions with a broad range of LPs, SVB Capital has found that while the demand for private equity investing is currently reduced, many investors still want to invest in this asset class. However, due to declines in public equity markets and the lack of exits, many LPs are delaying additional commitments to private equity unless they can find great deals on secondary funds or until they see the public markets stabilize. This is somber news for private equity firms that are fundraising. LPs also told us that they and their peers will continue to make capital calls and that predictions of massive defaults in the industry are overblown. Based on these observations, SVB Capital expects cautious investing during 2009, which will gradually increase after the public markets rebound. We believe that the current environment presents many compelling investment opportunities which will generate strong returns in the future and benefit LPs who invest in these funds.

TELL US WHAT YOU THINK

Send your comments and suggestions for topics to Bronwyn Bailey at bbailey@svb.com.

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1 Data from Yahoo! Finance.

2 Bonnie J. Kavoussi. "Yale Loses a Quarter of Its Endowment," The Harvard Crimson, December 17, 2008.

3 John Hechinger. "College Endowments Plunge," Dow Jones VentureWire, January 27, 2009.

4 Keenan Skelly. "Calpers Looks for Some Breathing Room." Dow Jones VentureWire, December 11, 2008.

5 Carolyn Said. "State public worker pension fund takes big hit," San Francisco Chronicle, December 8, 2008, page A-1.

6 Jennifer Bollen. "Permira Allows Investors to Limit Commitments," Dow Jones Private Equity Analyst, December 11, 2008.

7 David F. Swensen. Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment, Free Press, 2000.

8 Andrew Bary. "Crash Course," Barron's, November 10, 2008.

9 Morgan Stanley. "Public Fund CIO Survey: Optimizing Resources to Meet Evolving Demands," November 2008.

10 Data from Thomson Reuters.

11 Coller Capital. "Global Private Equity Barometer," Winter 2008-09. The survey of 107 investors in private equity funds was conducted from August to October 2008. Approximately 40% of those surveyed were based in North America, 40% in Europe, and 20% in Asia-Pacific. Most respondents (54%) held $10 billion or more in assets under management, and they cut across all segments of investors (from family offices to public pension funds). Most of the respondents (71%) began investing in private equity before 2000.

12 Keenan Skelly. "Calpers Looks for Some Breathing Room." Dow Jones VentureWire, December 11, 2008.

13 See Summary of Statement No. 157, Fair Value Measurements, Financial Accounting Standards Board, http://www.fasb.org/st/summary/stsum157.shtml

14 Coller Capital. "Global Private Equity Barometer," Winter 2008-09.

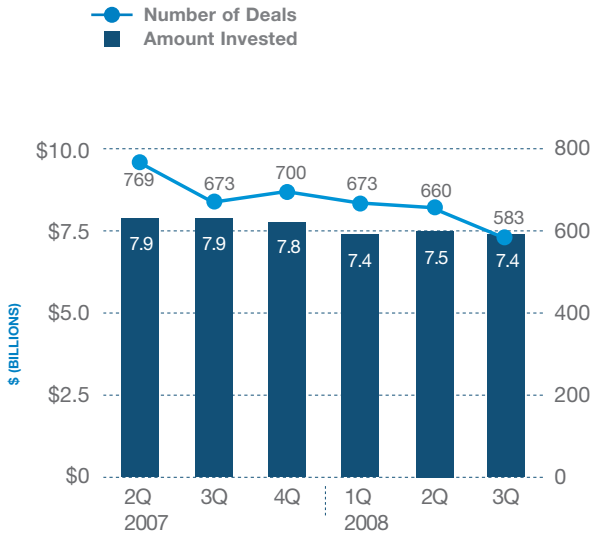
15 "Private equity pull-out brings more victims," Financial Times, December 7, 2008.

16 Pui-Wing Tam and Craig Karmin. "Venture Capital Hits a Cash-Call Crunch—Investors May Not Meet Commitments; WaMu, the 'Defaulting Limited Partner,'" The Wall Street Journal, December 8, 2008. Secondary firm Industry Ventures has since agreed to purchase Washington Mutual's stakes in its commitments to three of FTV Capital funds. (See Tomio Geron. "Industry Ventures Buys FTV Stakes From WaMu," Dow Jones VentureWire, January 23, 2009.)

17 Coller Capital. "Global Private Equity Barometer," Winter 2008-09.

Third Quarter 2008 U.S. Private Equity Snapshot

U.S. Venture Investing Activity



Source: Dow Jones VentureSource

Most Active Venture Investors

Firm Name	Assets Under Mgmt $ (MILLIONS)	Number of Deals*
New Enterprise Associates	9,500	15
Draper Fisher Jurvetson	4,214	13
Kleiner Perkins Caufield & Byers	2,760	12
Canaan Partners	3,000	11
InterWest Partners	2,800	11
Greylock Partners	2,770	9
Versant Ventures	1,585	9
Advanced Technology Ventures	1,600	8
Domain Associates	1,992	8
Foundation Capital	2,350	8
Kodiak Venture Partners	676	8
Norwest Venture Partners	1,600	8
Sigma Partners	2,000	8
Venrock	2,000	8

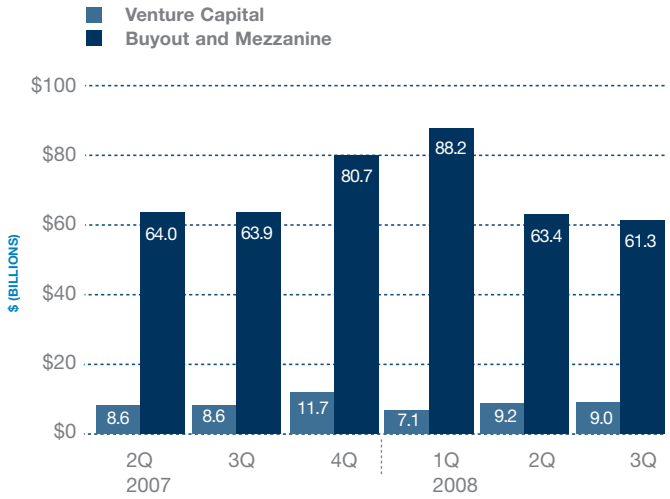
Source: Dow Jones VentureSource
** U.S.-based portfolio companies only*

Venture Investment By Region, All Industries

U.S. Region	Num of Deals	Num of Investing Firms	Average Per Deal $ (M)	Sum Inv. $ (M)
Bay Area	195	278	$17.6	$3,169.9
New England	78	110	10.0	769.3
New York City Metro	49	90	11.4	558.9
Los Angeles Metro	23	43	19.4	406.3
Midwest	36	62	11.1	376.2
Colorado	11	26	26.3	274.7
San Diego Metro	22	45	13.0	274.6
Potomac	21	44	12.6	264.4
Washington State	18	39	12.2	209.7
South	39	43	5.0	206.5
Texas	16	28	7.6	118.9
Philadelphia Metro	9	22	13.3	111.7
Research Triangle	10	23	8.2	74.4
Oregon	5	12	8.2	40.9

Source: Dow Jones VentureOne

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



Source: Thomson Reuters VentureXpert/National Venture Capital Association

Third Quarter 2008 U.S. Private Equity Snapshot

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

Vintage Year	Num of Funds	Cap Wtd Avg	Pooled Avg	Upper Quartile	Median	Lower Quartile
1996	35	59.2	83.3	113.9	29.7	1.4
1997	62	46.1	49.5	59.7	20.1	(0.7)
1998	77	24.0	18.4	11.0	1.8	(3.8)
1999	110	(6.7)	(5.5)	0.8	(6.2)	(14.6)
2000	124	0.4	1.4	2.7	(2.3)	(7.1)
2001	57	3.2	4.3	9.6	1.9	(3.9)
2002	20	1.8	3.8	3.8	(1.1)	(2.3)
2003	17	6.9	6.9	7.3	4.8	2.1
2004	23	4.5	4.3	12.1	0.8	(5.8)
2005	17	3.7	7.3	7.3	5.5	(1.7)
2006	28	(2.3)	(1.1)	7.5	(3.9)	(13.0)
2007	16	(15.2)	(8.9)	(8.2)	(14.5)	(21.4)

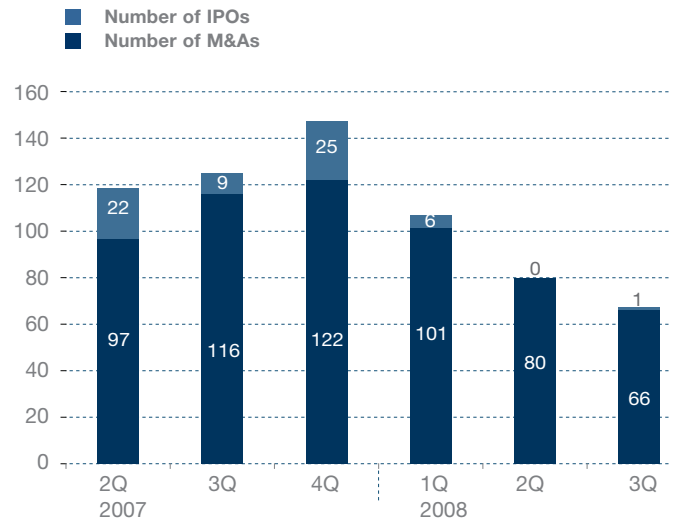
Source: Thomson Reuters VentureXpert / National Venture Capital Association; data as of September 30, 2008

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	598	9.6	19.0	15.4	3.6	(4.5)
Seed Stage VC	66	5.9	9.3	13.3	4.4	(0.5)
Early Stage VC	532	9.8	19.9	15.8	3.5	(4.8)
Balanced VC	455	8.3	13.8	14.7	5.5	(0.4)
Later Stage VC	204	6.9	13.5	14.8	6.1	(0.8)
All Venture	**1,257**	**8.6**	**15.5**	**14.9**	**4.8**	**(2.0)**
Small Buyouts	181	8.7	15.5	17.4	7.6	-
Med Buyouts	116	11.7	17.2	21.7	8.8	(1.3)
Large Buyouts	96	10.6	11.9	17.3	7.3	0.4
Mega Buyouts	130	2.3	10.8	17.2	6.6	(0.1)
All Buyouts	523	4.5	12.1	18.0	7.8	(0.1)
Mezzanine	72	6.3	8.3	12.8	7.3	1.3
Buyouts and Other PE	688	5.0	11.6	16.7	7.6	-
All Private Equity	**1,950**	**6.0**	**13.3**	**15.4**	**5.9**	**(1.4)**

Source: Thomson VentureXpert / National Venture Capital Association; data as of September 30, 2008. Figures for all funds in database, vintage years 1969-2007.

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



Source: Dow Jones VentureSource

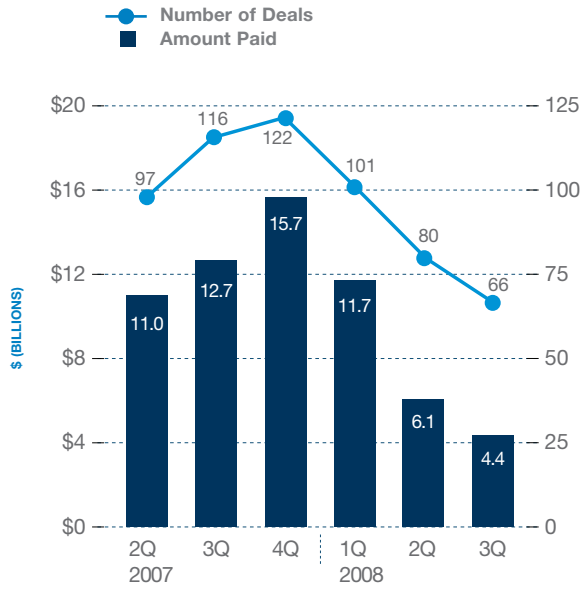
U.S. Venture Liquidity Events By Industry

	2006		2007		2008 Q1-Q3	
Industry	IPO	M&A	IPO	M&A	IPO	M&A
Business and Fin. Services	7	62	4	72	0	28
Cons. Goods and Services	2	25	5	27	0	9
Energy and Utilities	1	4	0	6	0	0
Biopharmaceuticals	20	38	17	28	1	18
Healthcare Services	0	8	2	8	1	6
Medical Devices	6	32	8	20	2	8
Medical Software and IT	2	17	3	11	0	6
Ind. Goods and Materials	2	2	1	6	0	2
Comm. and Networking	5	51	10	41	0	22
Elect. & Computer Hdw.	1	16	2	12	0	14
Information Services	1	20	4	31	1	23
Semiconductors	2	21	6	20	0	16
Software	7	169	7	167	2	95
Other	0	0	0	0	0	0
TOTAL	**56**	**465**	**69**	**449**	**7**	**247**

Source: Dow Jones VentureOne

Third Quarter 2008 U.S. Private Equity Snapshot

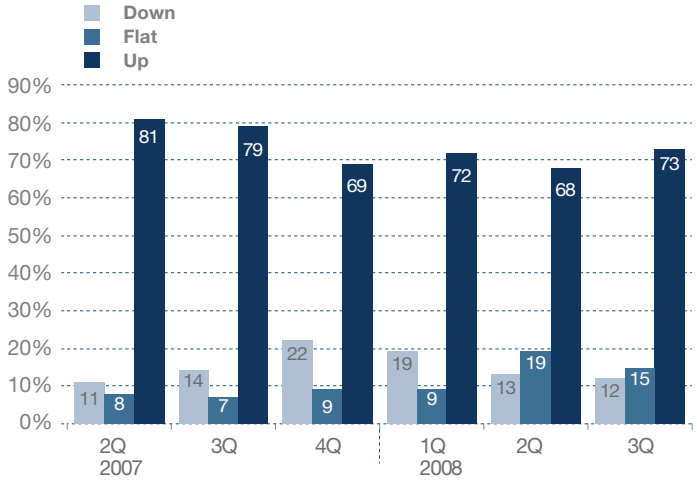
U.S. Venture-Backed M&A Activity



Source: Dow Jones VentureSource

Price Change

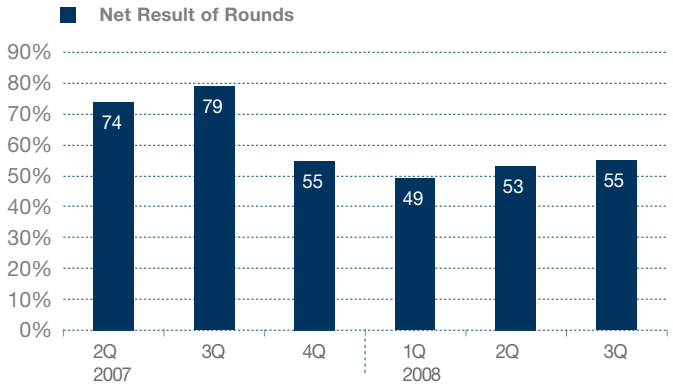
The direction of price changes for 101 San Francisco Bay Area companies receiving financing, as compared to their previous rounds.



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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