
Silicon Valley Roundtable
National Association for Business Economics
Silicon Valley Forecasts
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Silicon Valley Outlook 2000

Silicon Valley should continue to enjoy robust growth in 2000 and 2001. Even the recent downturn in technology stocks is not expected to significantly affect the growth of major Silicon Valley companies, however profits may be squeezed. Although most forecast panel members expect venture capital to be at or above the incredible 1999 levels, some believe there is a retrenchment taking place. Nevertheless, fueled by continuing injections of venture capital, new businesses should continue to emerge, while marginal start-ups will flounder and exit the market. Venture and other investment monies will exacerbate an already tight labor market and push up wages, especially for skilled workers. Silicon Valley companies are expected to post record sales and earnings in 2000, placing additional demands for labor. The already tight labor market will only be able to grow at about 1% to 2% because of constraints from escalating real estate prices and exacerbating congestion. Commutes will become longer, and the definition of Silicon Valley will expand into new geographical areas. Although foreign workers are being sought to fill needed job vacancies, many jobs will be exported off shore, to Asia and elsewhere.

**Nineteen Ninety-nine:
A Venture Capital Blowout**
By Micheal J. Kelly, University of Ottawa

Venture capital investing exploded 1999 with an outpouring of new investment beyond everyone's predictions. Data from the recent Pricewaterhouse Coopers Money Tree Survey indicates that venture firms in the U.S. invested \$36.5 billion last year. This was an increase of 155% over the 1998 level and actually exceeded the combined total of venture investment from 1996-1998. To really understand the significance of this increase, one only has to note that more money, \$14.9 billion, was invested in the fourth quarter of 1999 than in all of 1998.

Notable also, is the fact that Money Tree data do not include angel investors and many other rapidly growing sources of venture capital investments such as investment banks, financial corporations, and most importantly corporations such as Intel, which

alone invested more than \$1 billion in venture deals last year. Nor does it include the billions being invested in the United States by foreign venture funds. Including these sources could easily put the 1999 total in the \$50 billion range. Venture investment in Silicon Valley smashed previous records growing even more rapidly than at the national level. Valley companies received 40% or \$13.5 billion of the total venture capital invested in 1999, an increase of more than 200% over the previous year. This was beyond anyone's expectation and almost twice the Silicon Valley Roundtable's most ambitious prediction for last year. Moreover, according to some estimates, Valley companies received an additional \$2.8 billion in venture capital investments from corporations and another \$1 billion from Asian investors.

The reason behind this explosion is straight-forward. The Internet is the new gold rush and everyone wants to get in on it. Twenty-five billion dollars, about 68% of total funds invested last year, went into Internet companies. Silicon Valley accounted for more than 40% of web VC investments. There were 623 Internet VC deals in the Valley last year that raised \$8.1 billion in funding.

The explosion of venture capital is not confined to the United States. The Internet is providing a global opportunity for investors looking to get in on this new way of doing commerce. New Internet funds were raised in Europe, Asia, and Latin America and U.S. funds are increasingly looking to participate in Internet opportunities abroad. Credit Suisse First Boston has estimated that \$120 billion has been raised globally and has yet to be spent. Much of this will be directed to Internet companies.

There are clear signs that the growth of VC investment will continue through 2000. A flood of money came into the market in 1999 as institutional investors increased their allocations to venture funds. The above-mentioned Credit Suisse estimate

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is one indication of this trend. In addition, the \$14.9 billion invested in the fourth quarter of 1999 signaled a continuing acceleration of the investment trend.

Some venture related trends to watch

•*Everyone wants to be a venture capitalist.* The number of venture capitalists is growing, as is their diversity. In the last six years, the number of VC groups in the U.S. has grown from 441 to over 1400. It seems that everyone is looking to get in on the Internet gold rush. New players have been entering the industry at a rapid pace. These include consulting firms like Bain and Company and Andersen Consulting as well as accountants, law firms, banks, and even former gold mining companies. Pension funds, which in the past only participated in fund investments, have moved into venture capital. For example, CalPERS has announced its intention to make available up to \$1 billion for direct investments in companies in Silicon Valley and elsewhere.

•*Not everyone is putting up money.* Professional service firms are increasingly waiving fees for equity. Consulting companies like Andersen Consulting, Bain and Company, Booz Allen, McKinsey, and so forth, as well as law and public relations firms are foregoing standard business fees in return for equity in Internet companies with the aim of taking their profits when they are floated.

•*Funds are getting bigger.* In the mid-1990's a large venture fund was in the \$100 – \$150 million range. Today \$500 – \$600 million funds are becoming common and \$1 billion funds are not unusual. Last year, ten \$1 billion plus funds were raised and even more are being raised this year.

•*The average size of investments is increasing.* According to Thompson Financial Securities data, the size of individual fundraisings in Silicon Valley rose from an average of about \$6.7 million in 1998 to \$16 million by the fourth quarter of 1999. Last year, it was not unusual to see investors doing rounds of \$25-\$50 million. The increasing costs of getting an Internet start-up off the ground and the large billion in venture deals last year.

•*IPOs are happening earlier.* Traditionally a high tech start-up would take five years before doing an IPO. Now it often takes less than a year for a company, particularly an Internet company, to move from start-up to IPO. The risk is moving from the venture investor to the public market.

•*M&A activity is exploding.* The value of Internet M&As tripled in 1999 to \$75.7 billion. This is only likely to grow in 2000 as consolidation takes place in the Internet sector, especially in the B to C space.

A shakeout is around the corner in the B to C space. Investor interest in new B to C concepts is starting to wane in the United States and a shakeout in this space is likely to begin by the middle of this year and continue through the next. Internet investors in 2000 will focus more on B to B and foundation level technologies.

•*Silicon Valley investors are looking abroad.* For years Silicon Valley has attracted venture investors from around the world. Now Valley investors are looking abroad to participate in the explosive Internet growth that is anticipated in Asia and Europe. Draper Fisher Jurvetson recently announced a \$1 billion venture fund aimed at Singapore-based and other East Asian start-ups. Other Valley investors will follow seeking to capitalize on their expertise in the Internet sector to become players in foreign markets.

For technology entrepreneurs in the Valley the explosion in the growth and availability of venture capital contains both good news and bad. The good news that this should be one of the most attractive fund raising environments they are ever likely to see. Good companies should find it both easier and faster to raise money. They should also have their pick of investors at favorable valuations. The biggest challenge in this environment will be deciding what constitutes a good investor and ensuring that the value that is supposed to accompany the investment is delivered. Not all money is equal. Smart money comes from experienced sources with knowledge of a company's industry and the connections to help advance its business. Dumb money is just expensive money. The value added of many of the new players in the market remains to be seen. On the other hand, experienced VC firms are starting to spread themselves too thinly as they do a greater number of start-up investments. How many board seats can one VC fund really sit on? How much attention can it provide to an individual entrepreneur in a portfolio that may contain several dozen start-ups? In this environment, entrepreneurs will have to work harder to make sure that they get the attention that they need.

Why Venture Capital will Slow in 2000

By Richard Carlson, Spectrum Economics

Last year was an incredible year for Venture Capital investment in Silicon Valley—reaching over \$13 billion from U.S. VC funds alone. The grand total investment in new firms, including Silicon Valley investments from foreign funds and corporate investments, probably exceeded \$20 billion. This is likely to slow down to under \$10 billion from U.S. venture funds in 2000. The problem is threefold: the IPO market, the key source of new money, is

slowing sharply; better investment opportunities lie elsewhere and it is taking too long to absorb last year's investments. IPO investors appear to be the key victims of April's NASDAQ crash. Silicon Valley's mega stocks — CISCO, Oracle, Sun and so forth—are reviving but the 1998-99 IPO stocks crashed and burned and are staying down. The U.S Internet space is now crowded in every segment, but the foreign, especially Asian, Internet market is an open field with far more opportunities. Finally, many of the 1999 crop of Silicon Valley VC start-ups are still searching for space and staff and are far from fully operational. At this point, more VC funding would just lengthen the queue. Even VC's aren't dumb enough to fund more "me too" companies that will just bid staff and space away from their existing ventures.

Picking a Vice Presidential Candidate

By Kenneth H. Jacobson

Victories in five primary elections held in the states of Florida, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas on Tuesday 14 March 2000 clinched the presidential nominations of Vice President **Al Gore** and Governor **George W. Bush** of Texas. Analysts expect the choice of a running mate for the two men to be deferred until the party conventions this summer. The primary's two also-rans, Senator John McCain of Arizona and former Senator Bill Bradley of New Jersey, have ruled out accepting the vice presidential nominations (though many Republicans hope to change McCain's mind). There is no incentive for either Gore or Bush to decide on a running mate in a hurry. They have plenty of time to select promising running mates. In Bush's case, however, he has a strong incentive to mend fences with the McCain camp.

Possible Republican Running Mates

John McCain enjoys great popularity as a war hero and advocate of campaign reform among moderate Republicans and independents. He would appear to be the strongest GOP vice presidential candidate. At present, however, post campaign tension divides the Bush and McCain camps. Michael Kranish of *the Boston Globe* suggests that Bush's object may be "to pick someone just like Senator John McCain--without the McCain baggage." One McCain "look alike" may be Senator **Chuck Hagel** of Nebraska, who saved his own brother from a burning armored personnel carrier in Vietnam. General **Colin Powell** is an unusually popular figure, but has rejected a run at the presidency in 1996 and will almost surely turn down the number two slot this year.

Three governors are frequently mentioned as possible Bush running mates. Governor **Tom Ridge** of Pennsylvania heads a key industrial state. He is also a Vietnam veteran with a Bronze Star and a friend of the Bush family. He is, however, not well known outside his home state. Governor **George Pataki** of New York has strengthened his hand by helping to deliver this megastate to George W. Bush in the primary. Governor **Christine Todd Whitman** of New Jersey is mentioned as a candidate who could help with the gender gap. All three governors, however, support abortion rights, which is an unpopular position with the Republican right. **Elizabeth Dole**, former president of the Red Cross, worked hard for Bush after dropping out of the presidential race. She has demonstrated some appeal to women and youth and might help close the gender gap. At the same time, her campaign for the party nomination was dismal. Other comparative long shots for the vice presidency are Senator **Fred Thompson** of Tennessee, partly because his role in campaign finance investigations, and former secretary of defense, **Dick Cheney**, who could shore up Bush's lack of foreign policy experience.

At the present writing, McCain is Bush's best choice. "Everybody who watches politics knows that Bush-McCain would be our strongest ticket," said Representative Lindsay Graham (R-SC), a McCain supporter. Governor Ridge of Pennsylvania is generally seen as Bush's best second choice if McCain does not join the ticket.

Possible Democratic Running Mates

Al Gore's strong primary showing, particularly his big win in California, gives him a great deal of flexibility in choosing a running mate. An early front-runner is **Robert Rubin**, former secretary of treasury, a Wall Street figure respected on both sides of the aisle, but a man without political experience. Rubin is seen as a symbol of Clinton era prosperity. **Bill Richardson**, secretary of energy, is Hispanic. In the Southwest, Texas, and New York, the Hispanic vote is taking on increased support. On the other hand, the Clinton Administration's handling of the Chinese spying scandal at the Los Alamos National Laboratory could reflect badly on Richardson. Secretary of defense **William Cohen**, a friend of Senator McCain's, is reputedly a favorite vice presidential candidate of President Bill Clinton's.

Many political analysts predicted that Gore would choose a Californian as a running mate in 2000, but his impressive showing in that state's primary

reduces the need for a Californian on the ticket. He must figure on winning California's 54 electoral votes. Senator **Dianne Feinstein** is popular with women voters, but she is up for re-election to the Senate in 2000, which could complicate the presidential election. Governor **Gray Davis** has declined interest in the vice presidency. Gore also has options to compete in key individual states should the need arise. Senator **Bob Graham** of Florida may be considered to counter the influence of Florida governor Jeb Bush, George W. Bush's brother, and bring the Sunshine State into the Democratic fold. Senator **Evan Bayh** of Indiana is a rising star in the party, the son of a senator and a former governor in heavily Republican Indiana. He would help Gore in the Midwest, but would offer little help in Indiana itself, a small state that traditionally supports Republican presidential tickets. A third Democratic senator mentioned as a running mate is Senator **John F. Kerry** of Massachusetts. Kerry worked hard for Gore after deciding not to run himself. He is Catholic, which may help the ticket, but hails from a state not considered pivotal to the election.

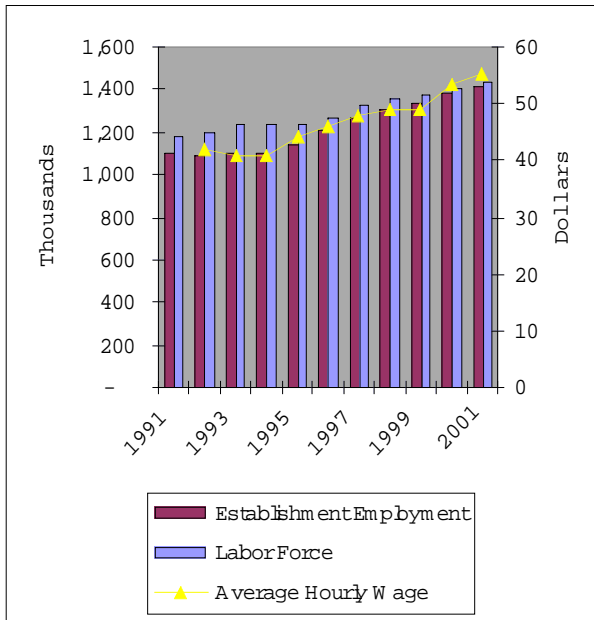
Senator **Joseph Lieberman** of Michigan, the current chairman of the Democratic Leadership Council and would help Gore with independent voters. He was an early critic of President Clinton's affair with Monica Lewinsky. He is also a defense and foreign policy hawk accustomed to working with Republicans on policy matters. He is one of few Senate Democrats, for example, to speak favorably about school vouchers. Lieberman would be America's first Jewish vice president. A practicing Jew, he does not work on Saturday, the Sabbath, and he shares one of John Kerry's drawbacks, Connecticut safely Democratic state.

Lieutenant Governor **Kathleen Kennedy Townsend** of Maryland is a long shot. As a Kennedy and a woman, she has attracted media attention. Maryland, however, will almost surely fall into the Democratic column in November. Former Senator **George Mitchell** of Maine has received praise for negotiating a settlement in Northern Ireland, but regards speculation about his candidacy as unrealistic.

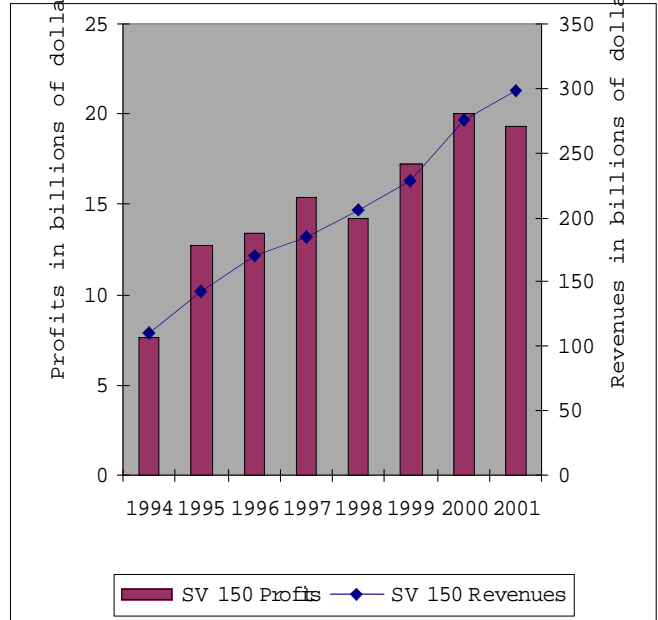
Silicon Valley Consensus Forecasts, April 2000

		1994	1995	1996	1997	1998	1999	2000	2001
Economic Indicators									
Population (1)		2,261	2,280	2,315	2,360	2,403	2,488	2,480	2,539
Establishment Employment (2)	thousands	1,101	1,142	1,204	1,265	1,307	1,334	1,382	1,416
Labor Force (3)	thousands	1,233	1,234	1,266	1,325	1,359	1,371	1,400	1,434
Average Wages (4)	thousands of dollars	41	44	46	48	49	49	53.25	55
Manufacturing Exports (5)	billions of dollars	29	38	41	40	42	43	48	51
Company Indicators									
SV Venture Capital (6)	billions of dollars	0.9	1.1	1.8	2.9	3.3	13.4	14.0	14.4
SV 150 Profits (7)	billions of dollars	7.6	12.7	13.4	15.4	14.2	17.2	20	19
SV 150 Revenues (7)	billions of dollars	109.5	142.2	170	185.3	206.3	228.6	275	298
Commercial Real Estate									
Commercial Vacancy Rate (8)	Percent	9.5	6	4.2	3.3	7.4	7.5	6.4	6.2
R&D Lease Rates (9)	dollars per SF	0.80	0.85	1.05	1.40	1.74	1.75	2.2	2.4
Average Commercial Lease Rate (8)	dollars per SF	4.84	5.09	6.13	6.36	8.60	10.50	11.7	13.0
Quality of Life									
Congestion (10)	Percent of freeway		11	21	29	31		47	53
Housing Units (11)	(Thousands)	811	815	820	825	834	843	852	863
Average Home Price (11)	(Dollars)					404,874	513,747	591,750	643,750
Effective Rental Rate, Apartments (12)	(Dollars)	827	844	974	1,130	1,206	1,276	1,386	1,491
<p>Figures in blue are estimated, figures in red are consensus forecasts.</p> <p>(1) Population of Santa Clara and San Mateo counties, from State of California, Department of Finance.</p> <p>(2) Employment in Santa Clara and San Mateo counties, from Employment Development Department.</p> <p>(3) Labor force in Santa Clara and San Mateo counties, from Employment Development Department.</p> <p>(4) Average wages for Silicon Valley employees, reported by JV SV and Employment Development Department.</p> <p>(5) Manufacturing Exports from Silicon Valley-based firms, reported in JV SV.</p> <p>(6) Total Venture Capital financing in Silicon Valley, as reported by JV SV and SJM Mercury News.</p> <p>(7) SV 150 Profits and revenues as reported by the San Jose Mercury News.</p> <p>(8) Commercial real estate in Silicon Valley, BT Commercial Real Estate.</p> <p>(9) Average quoted R&D space lease rates, quoted in JV SV.</p> <p>(10) SC County Freeway congestion, percent of freeway miles operating at below service level, CalTrans.</p> <p>(11) Association of Realtors.</p> <p>(12) Apartment Market in San Jose, REE Reports.</p>									

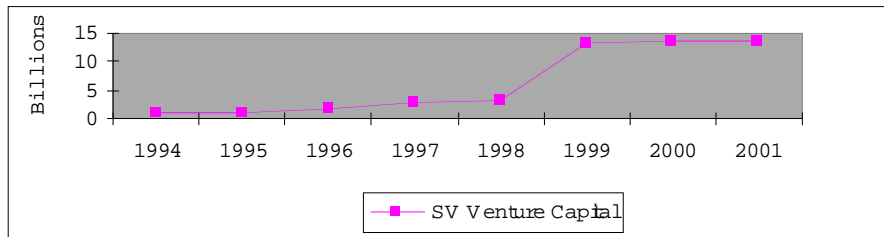
Labor Force, Employment, and Wages



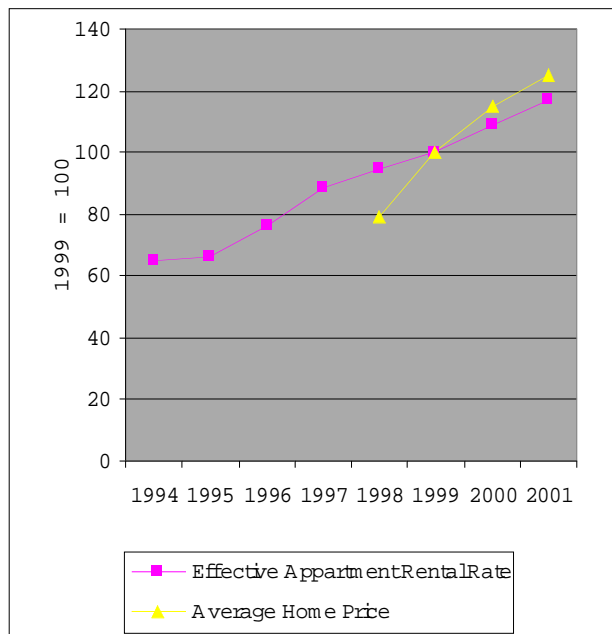
SV150 Profits and Revenues



Venture Capital



Housing Indicators



Commercial Real Estate Indicators

