

Financial Services Alert

**Financial Services Forum
College of Management
University of Massachusetts Boston**

**Where Have All the VC Dollars Gone?
An Analysis of the Venture Capital Industry in
Massachusetts, California and China**

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Foreword: Arindam Bandopadhyaya



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TABLE OF CONTENTS

I. Foreword by Arindam Bandopadhyaya	2
II. The Venture Capital Cluster in Massachusetts	6
III. The Venture Capital Industry in California	17
IV. The Venture Capital Market in China	27

**Where Have All the VC Dollars Gone?
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**Foreword by Arindam Bandopadhyaya
Director Financial Services Forum**

The business of financing start-ups, it turns out, may not be as easy as it seems. “There are Darwinian characteristics to venture capital,” said C. Richard Kramlich, a founding partner at New Enterprise Associates. “Below the surface there’s a huge amount of turnover” – [“So You Want to be Venture Capitalist”, The New York Times, May 22, 2005]

By providing much needed capital for relatively new, entrepreneurial companies that do not have assets sufficient to raise capital from traditional sources, venture capital (VC) have played a critical role in the development of many key industries, both in the US and globally. From 1970 to 2003, the VC industry has invested \$338.5 billion in 26,494 companies. A majority of the world’s VC dollars, almost 72 percent, is invested in US companies; US is second only to Israel in terms of VC investment, after adjusting for population. In 2004, US ranked number one in terms of the availability of VC, as measured by the ease of availability for business development, followed by Hong Kong, Finland Taiwan, Singapore, Canada, United Kingdom, Ireland, Israel and Malaysia (*World Competitiveness Yearbook*, 2004). Some industry experts estimate that forty of the largest US companies were created in the last two decades and a majority was backed by VC. Prominent US VC-backed companies include Intel, Microsoft, The Home Depot, eBay and Jet Blue. In fact, VC supported over 40 percent of the recent US IPOs.

Within Europe, UK accounted for a little over 25 percent of the VC market in 2004, followed by France (17.2 percent) and Germany (13.9 percent). An increasingly larger share of VC in Europe is being directed towards Italy and Spain where some of the biggest VC backed deals are currently taking place. Many growing companies in India and China are increasingly relying on VC over traditional bank debt. Recently when two US banks sold their stake in “Ping An” (an insurance company in China) they reaped a 14-fold return over an eleven year period, making it one of the most spectacular successful VC deals in Asia (see “Suitors Line Up to Dance With Cinderella Sector”, *Financial Times*, June 22, 2005).

VC backed companies have tremendous contributions to the US economy. They have employed more than 10 million American workers in 2003, easily outperforming their non-ventured counterparts in job creation between 2000 and 2003. Even as the national private sector employment shrank by 2.3 percent, employment in venture-backed companies increased by 6.5 percent (9.5 million jobs to 10.1 million jobs, which represent 9.4 percent of the total US workforce). Venture backed “breeder” industries, with a heavy emphasis on research and development (they are the national leaders), like

biotechnology and healthcare products, have made great employment gains since 2000. For example, in the biotechnology industry VC backed employment growth was 23 percent as compared to a total industry employment growth of 5 percent. In the Healthcare Products area, three-year employment growth in VC firms was 16 percent, while overall employment actually declined by 2 percent. VC backed Computer Software, Healthcare Services, and Retailing and Media firms posted double-digit employment gains, much more than the overall growth in their respective industries.

In 2003, VC companies generated \$1.8 trillion in sales. In 2000-03 sales grew in these companies by nearly 12 percent (\$1.6 trillion to \$1.8 trillion, which represents 9.6 percent of all sales), compared to an overall rise in US company sales of 6.5 percent. VC backed sales growth was especially strong in the Computer Software, Biotechnology, Healthcare Services, and Retailing and Media industries.

VC plays a particularly important role in certain US states. In 2003 California, Texas, Massachusetts, Pennsylvania and Georgia were the top national job creators measured by venture-backed companies headquartered in those states. Approximately 2.5 million employed in California; 900,000 in Texas; 700,000 in Massachusetts; 600,000 in Pennsylvania and 550,000 in Georgia. For a more detailed look at employment and sales figures in these and other key states, please refer to Table 1 of the foreword.

Table 1

2000-2003 Employment and Sales at VC Backed Firms Headquartered in the State

State	2003 Employment Rank	2000 Employment at VC Backed Firms	2003 Employment at VC Backed Firms	Percent Change	2003 Sales Rank	2000 Sales at VC Backed Firms (\$B)	2003 Sales at VC Backed Firms (\$B)	Percent Change
California	1	2,341,000	2,470,900	6	1	398	438	10
Texas	2	861,400	899,200	4	2	176	188	7
Massachusetts	3	668,600	712,300	7	3	96	107	12
Pennsylvania	4	534,100	604,000	13	5	74	94	28
Georgia	5	459,900	551,400	20	6	74	91	24
Tennessee	6	497,200	543,000	9	10	51	60	17
New York	7	451,400	470,500	4	7	75	80	7
Washington	8	319,400	399,900	25	4	83	102	22
Virginia	9	310,200	333,200	7	8	48	64	32
New Jersey	10	305,900	310,900	2	12	45	50	11
Florida	11	305,100	309,700	2	9	56	61	8
Minnesota	12	275,700	288,000	4	11	49	57	15
Illinois	13	231,800	235,900	2	14	31	34	10
Ohio	14	199,700	195,200	-2	NA	NA	NA	NA
Connecticut	15	183,700	189,700	3	13	40	49	24

Source: *Venture Impact 2004: Venture Capital Benefits to the US Economy*, Global Insight

Even as VC backed firms continued to perform well (especially relative to the non-VC counterparts) in 2000-03, the VC market went through a rough patch. VC backed M&A activity (202 deals) that peaked in 2000, at a total disclosed value of \$68.4 billion declined to \$7.7 billion in 2003. There were over 400 net new investment funds in 2000, but only about 50 in 2004. In 2000 almost \$100 billion net new money was raised in this market; the market all but dried up in 2002, but has somewhat recovered to just under \$20 billion in 2004. There were roughly 10,000 VC principals (including partners and investing professionals) in 2000; that number has been declining steadily and, in fact, there are hundreds fewer venture capitalists as compared to just two years ago.

However, some analysts seem to be reassured with signs of an industry turnaround. As reported in the November 13, 2005 *New York Times* (“The Great Bubble Buyout Bubble), private equity backed buyout firms have spent more than \$130 billion in US acquisitions this year, and there may be \$100 billion dollars that are still unspent. One year annualized returns in the small and medium buyout funds have been 51.3 percent and 29.3 percent respectively. Robust returns have also been posted large and mega buyout funds. With such encouraging numbers and liquid capital markets with low interest rates some observers are already concerned that a rash rush of private equity funds to acquire potentially profitable businesses may result in a debacle similar to the 1980s leveraged buyout experience.

With VC having played, and continuing to play such an important role in the US and global capital markets the *Forum* decided to notice the conversation. What follows in this issue of the *Alert* is an examination of the VC industries in Massachusetts and California in the US, and in China, which is fast becoming a popular VC destination. Each piece provides a thorough analysis of the VC industry in each market, its evolution and its success. The articles also examine the role of the government in each VC market and looks at some of the VC backed firms in detail.

THE VENTURE CAPITAL CLUSTER IN MASSACHUSETTS

In the period from 1994 through 2004, the cluster of venture capital (VC) companies within Massachusetts has seen many “booms and busts”. Interestingly, the health of the VC market seems to be a reliable indicator as to the overall health of the state’s economy. This relationship can be attributed to the reciprocal flow of funds between VC firms and the larger community: VC companies flourish when investments are fruitful and then, in kind, infuse fledgling companies with capital to grow. In contrast, when investments fail, VC companies are often amongst the first to feel the adverse effects and withdraw for additional spending. The structure of this relationship is based upon the outcome of VC investments and the outcome of personal investments made by those who enter the VC market themselves. Many VC firms have been established and grown by those who have succeeded in personal investments and want to transfer their capital to grow through someone else’s venture.

Growth of the VC Cluster in Massachusetts

From 1994 through 2004, the cluster of VC firms within Massachusetts experienced a net growth of over 50 percent - increasing the number of VC companies in Massachusetts from 109 companies in 1994 to 161 companies in 2004. However, this snapshot of growth only tells part of the story. During that same ten-year period, this cluster experienced accelerated growth to a peak of 657 companies in 2000 followed by a dramatic decrease in what appears to be a still evolving trend (**Exhibit 1**). As of June 2004, the number of VC companies with Massachusetts was 161, only 25 percent of the peak reached in 2000 (www.ventureeconomics.com).

This same trend can be seen in the number of deals completed (**Exhibit 2**) and the value of dollars invested (**Exhibit 3**). In 1994, VC firms completed 131 deals worth a total of \$429,900,000. At the VC peak in 2000, these numbers had grown to 799 deals completed for a dollar value of \$10,556,600,000 and by June of this year the number of deals completed was 165 for a dollar value of \$1,053,600,000. Through each measure of growth, number of VC firms, number of VC deals completed and value of VC dollars spent, this cluster followed a definable trend (**Exhibit 4**) (www.ventureeconomics.com).

VC Activity in Massachusetts as Compared to Other Domestic Regions

While undeniably cyclical, the net success of the VC cluster in Massachusetts has helped define this state as a leader in the domestic VC industry. From April to June of 2004, Massachusetts was ranked more active than all other states both in terms of money invested and money received. VC firms within Massachusetts invested in 60 deals during this period and companies within the state received funding from 73 deals. This is a point worth noting as it acknowledges both the influx and outpouring of capital funds both from firms within the state and those external to it as well. (www.ventureeconomics.com).

While it is clear that Massachusetts is home to an active VC community, it is interesting to examine the stage of firms this cluster is funding. During the first two (2) quarters of 2004, 50 percent of the capital spent was invested in established companies looking to expand. In descending order, other funds spent were dispersed across start-up companies (20 percent), later stage (16 percent), other early stage (13 percent), and seed (1 percent) (**Exhibit 5**) (www.ventureeconomics.com).

Given the ecology of industries within Massachusetts, it is understandable that much of the VC spending within this state focuses on software, biotechnology and telecommunications. While those three (3) sectors consume close to 60 percent of the VC deals and close to 70 percent of the dollars spent during the first two (2) quarters of 2004, other industries funded include semiconductors, networking, IT services, media and retailing/distribution (**Exhibit 6**) (www.ventureeconomics.com).

Historically, many people think of VC funding as a primary force in the launching of Initial Public Offerings (IPOs). While this is often true, an analysis of the overall VC spending as compared to VC backed IPOs during the past ten years in Massachusetts reveals the trends do not match. As discussed above, VC spending grew steadily to a peak in 2000 and has been declining since. In contrast, IPOs backed by VC funds have followed a more erratic pattern of peaks and valleys (**Exhibit 7**) (www.ventureeconomics.com).

Effect of State Involvement on VC Cluster

Private equity investors and their money are concentrated in some very select places – Silicon Valley accounting for about one third - and then other areas as Boston, Austin, San Diego and New York. As a result, anyone who has a new idea or is seeking a patent will most likely go where the money is and states, therefore, have become very active when it comes to retaining their engineers and entrepreneurs. States and public officials are very aware of their affect on legislature and regulations, and how this may influence entrepreneurs and venture capitalists when deciding to locate or invest in Massachusetts. Many states have been very willing to modify regulations or even use public funds to protect their local VC industry and entrepreneurs- and Massachusetts is no different.

Company Incorporation and Tax Benefits

The LLC is a relatively new type of hybrid business structure that is now permissible in most states. LLC's combine the corporate advantages of limited liability with the partnership advantage of pass-through taxation. Due to a new law passed in Massachusetts in March 2003, a single person can now start up an LLC, the owner's liability is limited to the amount of money invested, and the corporation itself does not pay taxes. This provides the entrepreneur with an option with less personal liability than an S-Corp. Other states such as Delaware, Maryland, Wyoming, Michigan, Nevada, California, New York and California do charge the LLC itself a tax. In addition, like

general partnerships, LLCs can establish any organizational structure desired – mainly separating profit interests from voting interests. For example, when it comes to earnings distribution, an LLC is not required to distribute earnings on a pro rata dollar per share basis as is required for a C corporation. All these factors combined give the entrepreneur a greater advantage when creating and operating a new business.

The Massachusetts Department of Economic Development

This department in the Massachusetts government offers several financial incentives to new companies developing in the state. Examples of such incentives are an R&D tax credit, a tax credit for investing in new plant and equipment, an R&D sales tax exemption and an exemption from local property taxes for R&D and manufacturing firms. In 2003, from a push from the state's Science & Technology Initiative, the state approved a \$100 million economic stimulus package that puts an emphasis on higher education and the science and technology sectors. Part of that initiative includes the Emerging Technology Fund.

Emerging Technology Fund

This newly created \$25 million fund was created as part of an economic development package designed to bring more jobs and companies to Massachusetts. It provides loans and guarantees for facilities and specialized equipment for technology-based companies. Recently, Mass Development provided \$1 million from the Emerging Technology Fund for the construction of the new MBIdeas Biomedical Innovation Center in Worcester. The facility is worth \$2.8 million and will house up to eight start-up biomedical companies.

State-Sided Venture-Capital Funds

The Massachusetts Technology Development Corp., (MTDC), is the state's publicly funded venture-capital organization that has tried to fill the 'capital gap' for entrepreneurs when banks or VC firms are unwilling to provide cash. This state sponsored company essentially acts as a catalyst to entice private VC professionals to invest in startups in Massachusetts. With the capital that the MTDC provides, the entrepreneur is able utilize the money from the public funds to pay employees and expenses and build up a stronger marketing campaign. The MTDC was founded in 1978 and since inception, has invested in 63 Massachusetts companies and the fund itself has grown to a net worth of \$20 million (from an initial \$8 million dollar investment). The typical amount given to an emerging company is \$250,000 - \$300,000, with the remainder of needed cash being provided by banks or other VC firms.

To qualify for MTDC financing:

1. The company must be located in Massachusetts
2. Must be technology based
3. Be able to produce significant growth in employment

4. Must be able to demonstrate that it has been unable to raise capital from other sources
5. Must be able to show a high rate of return on the money already invested.

This organization is unique from other VC firms as the typical privately held partnership only last for about 10 years. Because this corporation is state owned – it could potentially have an unlimited life span as long as the investments continue to create a positive return that is re-invested in the corporation itself.

One potential drawback, however, is when the state provides VC money, it is doing so without the expertise that professional venture capitalists have. The very premise behind VC is high-risk, high-return - Venture capitalists assume a much greater risk than the average investor, but they also expect to achieve much higher rates of return in exchange for that risk. These risks are very well known and many argue it should be left purely to the professionals when not only such high stakes are involved – but public money as well. Other states with state-aided venture-capital funds are Connecticut, Missouri, New York, Indiana, Maryland, North Carolina, Oregon, Ohio, Pennsylvania, and South Carolina.

Public Funds

A new and more popular trend in the VC market is the use of public funds to support VC, and Massachusetts is no different. In general, very little information about investment performance of venture-capital funds is available to the public. However, as soon as public funds are involved, it falls under the scope of the Freedom of Information Act of 1966. The Freedom of Information Act says that “any person” can make requests for government information and are not required to explain why they want the information they have requested.

The disclosure struggle began in Massachusetts about two years ago when the *Boston Globe*, *Boston Herald*, *Boston Business Journal*, and others began putting pressure on the MassPRIM (Massachusetts Pension Reserve Investment Management Board). Due to the stress that many venture capitalists feel from the FOIA, many have tried to block the disclosure of publicly used funds and the ROI on each investment.

In August of 2004, for the first time the Massachusetts state pension fund disclosed individual returns for the 103 VC funds it invested in from 1986 to 1998. The \$32 billion state fund has around 6 percent of its money, approximately \$2 billion, invested in 170 private equity funds, which are managed by 80 different firms (www.boston.com/business/gallery/Statepensionplan). Advocates of more disclosure are more than happy about these new developments as they believe more transparency promotes more accountability. However, due to the transparency concerns of venture capitalists, many private investors may be avoiding such public funds as they try to protect their personal investment strategies, the returns they see, and their reputations. Therefore, it is speculated that Massachusetts would have a more difficult time getting in the higher performing funds and therefore will see lower returns.

Effect of the VC Cluster on Other Industries

VC spending in Massachusetts has a great impact on which industries become leaders in the region. It is an indicator of growth potential and investor confidence in the industry's success. According to a study done by the Milken Institute "the new engine of regional economic prosperity is based upon how successful a given location is in attracting and expanding technology and science assets and leveraging them for economic development" (Gardner, David: Information Week, 4/31/04). When looking at the Massachusetts industries that receive VC funding, it is obvious that the region is taking advantage of this new economy. In Massachusetts, specifically the Greater Boston area, there are three sectors that can be considered growing industries and can be identified as receiving the greatest amount of VC funding. As of quarter two of 2004 these sectors were software, biotechnology and telecommunications (www.ventureeconomics.com).

The Software Sector

In Q2 of 2004, the software industry was involved in the greatest number of VC deal in Massachusetts. There were 31 deals made with a total investment of \$210.1 million dollars (www.ventureeconomics.com). It is regularly argued that Massachusetts has "lost" the high tech battle with California, yet software firms still top the list for VC funding. VC funding toward high tech companies (including software) experienced a dramatic 51 percent decrease between the years 2001 and 2002, due to the high tech bust (www.aeanet.org). Yet the recent increase in VC in the software industry is an indicator that Massachusetts is still a viable competitor in this industry. The software sector seems to be filling the high tech void that Massachusetts has experienced over the past couple of years.

The 31 VC deals in Q2 of 2004 is an increase from the 27 deals in Q1. The type of software that VC is being invested in ranges from guided navigational software to print publishing to security (www.boston.com/business/gallery/vc_051004). One might wager a guess that the software industry in Massachusetts is being kept alive by the biotech influx, but currently that is not an accurate statement. In Q1 of 2004, of the 27 software firms receiving VC, one-fifth produce a product aimed at security and/or disaster recovery. Since biotech is growing at a rapid pace in Massachusetts, the future of the Massachusetts software industry might continue to reinvent itself and cater to the biotech industry. If this does happen, potentially an even greater increase in VC funded firms in the region can be seen.

The Biotechnology Sector

The biotechnology industry is one of the fastest growing clusters in Massachusetts. In Q1 of 2004, there were 11 VC deals within the biotech industry, a number that continues to increase each quarter. In Q2 of 2004 alone there were 240.3 million VC dollars invested into the 16 biotech deals. Biotech accounts for the highest dollar volume of VC

funding of any sector in Massachusetts, nearly 30 million dollars greater than software with approximately half the number of deals (www.ventureeconomics.com).

Massachusetts, specifically the Boston area, is home to many of the best healthcare facilities in the world. Because of this both entrepreneurs and venture capitalists are optimistic about success in this region. The reason behind this could potentially be that the Massachusetts biotech industry has learned from its high tech predecessors' mistakes. The biotech industry seems to be taking advantage of its proximity to research institutes, the highly educated workforce, as well as building off the success of established biotech firms in the area. In addition to the region's lure, many VC firms in the area have former biotech executives leading the funding decisions (Abate, Tom. SF Gate, 10/29/01).

The Telecommunications Sector

Telecommunications is the number three industry in Massachusetts for receiving VC funding. This sector is far behind software and biotech in terms of dollars invested and number of deals made. In Q2 of 2004, telecommunications had eight VC deals totalling \$60.9 million – a drastic difference from the two leading industries. Nevertheless, telecommunications is still a viable growing industry in Massachusetts (www.ventureeconomics.com).

The telecommunications industry in Massachusetts is trying to reinvent itself to utilize the many resources it has at its disposal. Similar to the biotech industry, telecommunications can utilize the educated workforce, its proximity to outstanding educational centers and the high availability of VC. This industry is banking its future on the strength of entrepreneurship and the number of new start-ups that occur. The Massachusetts area is home to a large financial services sector, many government agencies and other industries that highly use telecommunications products. The industry in Massachusetts is beginning to take advantage of this. Although the telecom sector is far behind biotech and software in terms of VC dollars and deals in place, it would not be surprising if this industry continues to grow along with its new vision (<http://www.masstel.org>).

VC Backed IPOs in Massachusetts

In Q2 of 2004 there were four Massachusetts companies that went public backed by VC dollars. These companies are:

- *Critical Therapeutics* – Biotech company headquartered in Lexington, MA.
- *Color Kinetics* – A company that specializes in design lighting. Headquartered in Boston, MA.
- *Momenta Pharmaceuticals* – Biotech company headquartered in Cambridge, MA.
- *Alnylam Pharmaceuticals* – Biotech company headquartered in Cambridge, MA

These four companies are examples of how VC can lead to a successful IPO (www.ventureeconomics.com). The majority of these IPOs are in the biotech industry,

which strengthens the argument that biotech is quickly becoming a leading industry in Massachusetts. It is promising to have four companies go public within one quarter. This is a sign that the economy is growing and that there is confidence in Massachusetts' companies.

EXHIBITS

Exhibit 1

Number of VC Firms in Massachusetts

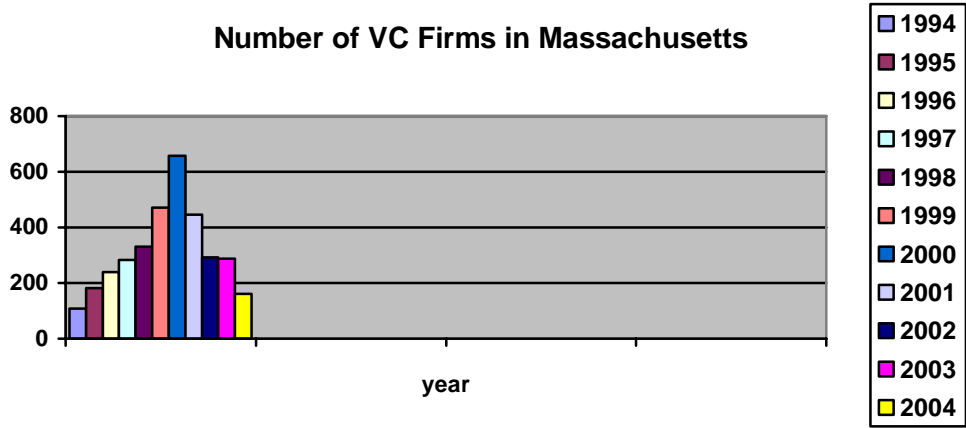


Exhibit 2

Number of Deals Completed by VC Firms in Massachusetts

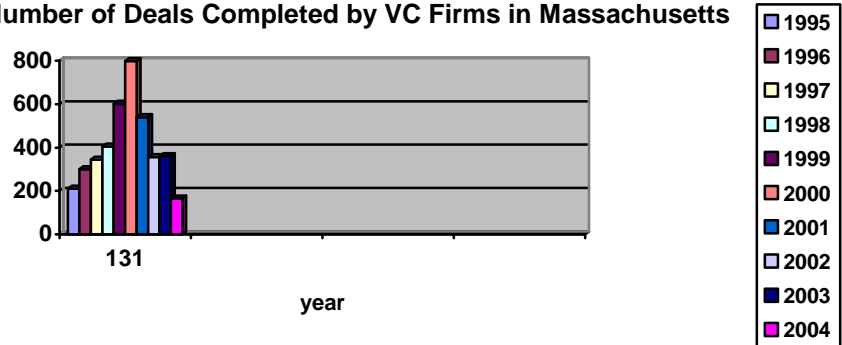


Exhibit 3

Value of VC Deals in Massachusetts (\$)

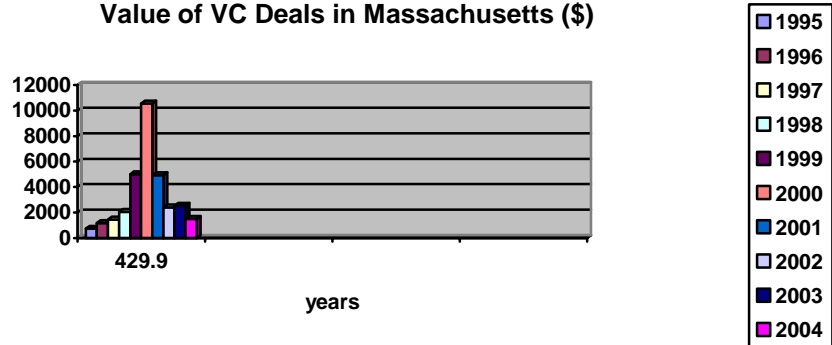


Exhibit 4

VC Firms in Massachusetts

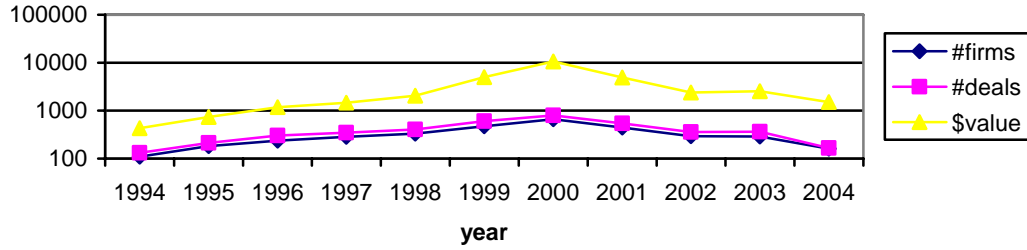


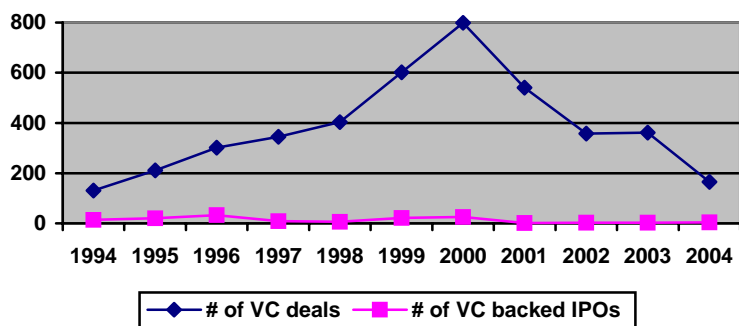
Exhibit 5

Venture Capital Investment in Massachusetts Companies				
By Stage				
04/01/2004 to 06/30/2004				
No.	Stage	Companies	Deals	Investment(\$M)
1	Seed	1	1	0.8
2	Start-up	16	16	116.0
3	Other Early Stage	10	10	61.2
4	Expansion	42	42	407.9
5	Later Stage	13	13	180.8
	Total	82	82	766.6

Exhibit 6

Venture Capital Investment in Massachusetts Companies				
By Industry/Technology Sector				
04/01/2004 to 06/30/2004				
No.	Sector	Companies	Deals	Investment(\$M)
1	Software	31	31	210.1
2	Biotechnology	16	16	240.2
3	Telecommunications	8	8	60.9
4	Semiconductors	6	6	57.7
5	Networking and Equipment	3	3	18.2
6	IT Services	3	3	14.3
7	Media and Entertainment	3	3	76.0
8	Business Products and Services	3	3	9.8
9	Computers and Peripherals	2	2	4.1
10	Medical Devices and Equipment	2	2	21.0
11	Industrial/Energy	2	2	18.8
12	Electronics/Instrumentation	1	1	20.0
13	Healthcare Services	1	1	6.5
14	Retailing/Distribution	1	1	9.0
	Total	82	82	766.6

Exhibit 7



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Massachusetts Department of Economic Development.

THE VENTURE CAPITAL INDUSTRY IN CALIFORNIA

The Venture Capital (VC) market in California has enjoyed a remarkable history during 1994 to 2004. Fuelled with local innovations, academic and corporate stimulation and access to a community of wealth built on the recent success of other ventures, the VC cluster in this region achieved growth rates of staggering proportions. However, in a pattern similar to other regions, the VC market in California trends along similar lines of the general economy and so for better or worse has historically shared a similar fate.

A Boom and a Bust

Much like the VC cluster in other regions, the cluster in California enjoyed a steady growth during the period from 1994 to 2000, as shown in **Figure 1**. During this time, the number of California-based VC firms skyrocketed – as did the number of deals and the dollar value of deals. Starting with 560 firms in 1999, VC firms in California completed close to 700 deals for approximately 3 Billion dollars. In six short years, these figures had grown by astronomical proportions: the number of firms increase by close to 400 percent (up to 2,385), the number of deals also increased by close to 400 percent (up to 2,993) and the dollar value of deals increased by 1,300 percent (up to ~ \$44 billion) (www.ventureeconomics.com).

Unfortunately, these numbers mark the historical peak. From 2000 to the present, the industry has seen a continued decline. However, despite this recent decline, the ten-year period from 1994 to 2004 shows an overall growth rate which rivals or exceeds other growth clusters during the same period. The number of VC firms has shown an overall increase of close to 30 percent (560 in 1994, 713 in 2004). The number of deals has shown an overall increase of close to 15 percent (693 in 1994, 789 in 2004) and the dollar value of deals has more than doubled (\$3 billion in 1994, close to \$7 billion in 2004) (www.ventureeconomics.com).

Is Another Boom Looming?

Despite the downward trend of recent past, good news may be on the horizon. An analysis of year-to-date data through September 2004 shows the potential for the end the cycle of the bust. As of September 2004, year-to-date data in California shows 713 firms, 789 deals, and close to \$7 billion of spending. These numbers are encouragingly close to 2003, which ended the year with 878 firms, 1,073 deals and just over \$8 billion in spending. From the perspective of spending alone, if the last three months of 2004 show half as well as 2003, the mark will be met (this assumes a straight-line progression of the \$8 billion spent in 2003 for an assumption of spending \$2 billion per quarter across four quarters) (www.ventureeconomics.com).

Recipients – Sector and Stage

Within California the focus of VC spending can be analyzed both in terms of what type of firms and what stage of firms the VCs target. As shown in **Figure 2** (representative of June – September 2004) the type of firms spanned eight major clusters (listed in order): Software, Biotechnology, Semiconductors, Networking and Equipment, Medical Devices, Telecommunications, Media and Other (www.ventureeconomics.com).

Given the economic landscape of California, and its focus on academia and innovation, it is not surprising that when analyzed by the number of deals completed Software firms received the most VC funding (~30 percent) while Biotechnology firms received the second -highest portion at 12 percent. It is notable though that even when ranked second, the number of deals completed with Biotechnology firms was 45 percent of those completed with software firms. It is also notable that this relationship changes slightly when viewed through the value of the deals: in that instance the value of the deals for biotechnology was 65 percent the value of deals completed with software firms, which means that though VC firms completed more deals with software firms they spent more per deal with biotechnology firms (www.ventureeconomics.com).

This ranking discounts “other” as the second most likely recipient of funding (20 percent) as this category does not represent a particular cluster but rather a miscellaneous grouping of non-categories. However, it is interesting to note the diversity that this signifies as many of the mainstream clusters are already listed amongst the list – who then are these “others” and is it something specific to the culture of California that allows such deviations from the norm?

As shown in **Figure 3**, the stage of firms that California VCs funded, also speaks to their preferences. However, in this instance no clear pattern emerges as 40 percent of spending is given to expansion stage companies, followed by 25 percent for late stage companies, 20 percent for start-ups and 15 percent for early. Given this distribution, a conclusion cannot be reached to indicate whether California VCs tend to be aggressive and risky or conservative and reserved. Rather, the data reveal a trend towards diversification amongst various staged firms that may explain the relative success of this cluster (www.ventureeconomics.com).

Trends in VC Spending versus Trends in Funds Raised for IPOs

Given the large volume of VC activity based in California, it is not surprising that IPOs in this state are active as well. In fact, a review of the data reveals that the trend of VC spending is a strong predictor for the volume of IPO funds raised. As shown in **Figure 4**, each variable peaked from 1999 to 2000. While this data indicates a strong correlation between the two activities, it should be noted that the data does not reveal how much of the IPO spending was generated by VC firms and so a firm causality cannot be concluded (www.ventureeconomics.com).

California State Involvement in its VC Industry

Like Massachusetts, the California state government does play a part in its own VC industry. Not only those in the industry, but also taxpayers and entrepreneurs within the state are affected by the decisions that are made and the regulations that are put into place. Below are some examples of the influence that the State of California has in its own and the national VC industry.

CalTIP

California has recently experienced a \$38 billion dollar deficit and with the combination of an unwillingness to raise taxes, it has led to some dramatic cuts in some state funded programs. One of the most notable program cuts was the elimination of the California Technology Investment Partnership. This program was developed in 1983 to help small technology companies get on their feet. The program would provide up to \$250,000 in funds to small companies who were looking to make innovations in technology and bring new products to market. The target companies were ones that were not quite at the point where they are attractive to VC's, but were very viable companies that need capital if they are going to reach their potential - and then be appealing to private investors. The program created about 1,245 jobs a year with an average salary of \$63,000 (Klein). By cutting this program the state government will save \$6 million in short-term savings, but the long-term effect is immeasurable and comprises of losses in federal and private funds, millions in taxes, thousands of high-wage jobs and new and innovative products.

The most notable aspect of the discontinuation of this program is that California is cutting off funds in technology investment just when most other states are initiating such programs. For example, in 2002 Illinois signed in a Venture Technology Investment Bill which allows the Treasury to invest about \$50 million in Illinois VC funds (Klein). In addition, Ohio implemented a Technology Investment Tax Credit program, which offers benefits to Ohio taxpayers who invest in small, research and development and technology-oriented firms. Ohio investors can reduce their state taxes by up to 25 percent of the amount they invest in technology and Ohio based companies. The maximum credit (of \$37,500) can be applied against either personal income tax or corporate taxes.

CalPERS

CalPERS is the state's public employee retirement plan. Like the Massachusetts public pension, it is coming under fire for its heavy investing in the private equity markets and is feeling pressure to disclose such information to the public. This huge fund began its investments in private equity firms just when the economy peaked in the late 90's. Therefore, when the Internet bubble burst, the majority of CalPERS \$19 billion investment was with firms who had invested all that money into what turned out to be worthless high tech start-ups. Because of the heavy losses the pension fund has seen, there is a bill that is expected to pass that will force the taxpayers to cover the pension

commitment that is guaranteed by federal law (Marshall). The *Mercury News* filed a law suit against the fund to have this information accessible to the public in hopes of making people aware and keeping the fund managers accountable for their investment strategies. The suit was settled and CalPERS did disclose some but not all of their records. The disclosure revealed that CalPERS investments in VC were actually the worst performers.

On December 7th 2004, for the first time CalPERS released the management fees it pays to individual VC, hedge, and other private equity funds. The California First Amendment Coalition (CFAC) had sued CalPERS to make this news public. What this exposed was that millions of dollars in management fees were given to venture funds that were associated with people who made campaign contributions to CalPERS board members. These fees amounted to about \$200 million a year to firms in which \$13.5 billion was already invested. In addition, profits on a fund-by-fund basis relating to VC, dating back to 1999 were also released. (<http://www.cfac.org/>)

Proposition 71

Proposition 71 was a bill that proposed to issue \$3 billion in California state bonds to finance stem cell research and is the first state-wide initiative of its kind. Over the next ten years, the state of California voted to give universities, institutions and private companies money for this research and is an effort that dwarfs the federal government as the largest source of public funding. The ultimate goal of this proposition was to seed stem cell research in California and eventually pay the state back in job creation, higher tax revenues, and royalties. The passing of this bill created a safe haven in California for its biotech sector that was trying to attract intellectuals and VC. This initiative also created the California Institute for Regenerative Medicine. It has a 29-member board that will allocate the funds.

Prop 71 did not increase or create any new taxes for the residents of California and the bonds are self-financing so there would be no impact on the states general fund. The state will also be able to share in royalties resulting from the research that would generate new state revenue for decades to come. Venture Capitalists supported the measure overwhelmingly. If this proposition is ultimately successful, not only would it accelerate scientific development, but would provide an immeasurable boost to biotech in California. In addition, this movement could cause a ripple effect and states like Massachusetts would have to adopt their own propositions just to remain even mildly competitive.

Many who oppose stem cell research say that the Venture Capitalists are asking the people of California to subsidize research that will only serve to generate profits for VC backed companies. However, one of the few limitations of biotech are a lack of VC as the science itself has limitless potential.

VC Clusters in California

California is the recipient of the greatest amount of VC funding across the United States. This is due in part to the large size of the state, but also due to the innovation and resources that are available. According to a study done by the Milken Institute “the new engine of regional economic prosperity is based upon how successful a given location is in attracting and expanding technology and science assets and leveraging them for economic development” (Gardner, David: Information Week, 4/31/04). California, like Massachusetts has taken advantage of this new economy and has been highly successful. In the third quarter of 2004, the top ten industries receiving VC totaled \$1.77 billion. Even more impressive, were the top three industries software, biotechnology and semiconductors constituted for nearly 58 percent of the total (www.ventureeconomics.com).

The Software Industry

Like Massachusetts, the software industry leads all industries for VC received. Unlike Massachusetts, California receives over 50 percent of all VC dollars spent in the software industry nationwide. In Quarter 3 of 2004 there were 64 deals made with a total investment of \$479.5 million (www.ventureeconomics.com). This is a decrease from the previous quarter with 86 deals totalling \$539.2 million, but is still top in the nation. California’s Silicon Valley has arguably emerged as the leader in the high-tech industry with software topping the list.

When the high tech boom began, California companies were successful in creating lasting technology. This laid the foundation for companies today to draw from the expertise established in the region. California is home to many research facilities, a highly educated and experienced workforce as well as an atmosphere that spawns innovation. Because of these characteristics, Venture Capitalists are more willing to invest in companies in California than in other parts of the country even though the future of this industry is unknown and potentially unstable. Questions have emerged regarding whether or not this industry has reached its peak. Many disagree with this statement, though some experts argue that California’s Silicon Valley will have to continue to reinvent itself to keep or else much of this current funding will be lost to Asia and India (www.venturecapitaljournal.net/vcj/1060714682384.html).

The Biotechnology Sector

Biotechnology research is spread across the United States, but only a few areas have captured the majority of the business – California is one of these regions. Between the years 1995-2001, “the top five cluster areas account for 75 percent of the 9.7 billion invested in the industry” (www.biobelt.org/news). The reason for these clusters is due to an educated workforce, experience in the industry and access to renowned healthcare facilities. These three factors allow the industry to thrive, therefore increasing the amount of VC firms in the regions receive. California’s Silicon Valley and San Diego

regions are no different. These two regions are the heart of California's biotech cluster and therefore receive the greatest amount of funding.

In 2003, the biotechnology industry captured the greatest amount of VC in California as a whole, beating out the software, medical devices and semiconductor industries. In 2004, biotechnology was not the leading industry, but was in the top four. During quarter three of 2004, \$313.4 million VC dollars were invested in 28 biotechnology firms in California, a \$15.0 million dollar decrease from the previous quarter, but an increase of 2 firms. This is nearly 40 percent of the total dollar amount invested nationwide in biotechnology and \$229.4 million more than was invested in Massachusetts firms. (www.ventureeconomics.com). During 2003, Southern California's biotech cluster received 23.4 percent of VC investments in the region or \$395 million dollars (www.larta.org). In Q2 and Q3 of 2004 the same region had received \$312 million. This is a sure sign that biotechnology is a growing industry in the area.

Similar to Boston, VC firms invest in California biotech companies because of the previous success stories. California is home to an educated work force, houses biotech companies that have grown to become leaders and has a population that approves new types of research such as stem cell research. A final reason for the large amount of VC spent in the area is that the majority of VC firms with expertise in biotechnology can be found in either Boston or California giving both regions an edge over competing states (www.biobelt.org).

The Semiconductor Industry

The United States semiconductor industry accounts for approximately 50 percent of semiconductor sales worldwide, with the majority of firms located in California. In the late 1990's the semiconductor industry was the fastest growing industry in California. This rapid growth has slowed down, but if the amount of VC spent on this industry is any indication of health – it is still a very viable industry for the region (www.sia-online.org).

In Quarter 3 of 2004 the semiconductor industry received \$232.1 million VC dollars which funded 23 firms. This was a decrease from the previous quarter, but accounted for approximately 70 percent of the total dollars invested nationally in the industry. This industry is consistently a top recipient of California VC, although regularly lags behind software. Q3 of 2004 the semiconductor industry received 247.4 million dollars less VC than did software, with 41 fewer firms (www.ventureeconomics.com). California far exceeds Massachusetts in the semiconductor industry, with only one Massachusetts firm receiving funding of \$25.1 million.

Although it is predicted that the semiconductor industry will not be quite as lucrative in the upcoming years, California continues to have success in funding new companies (www.bizjournals.com/sanjose/stories/2004/09/13/daily8.html). California receives large amounts of VC in this industry due to the skilled work force and the educational facilities that cater to the industry. California's success within the technology sectors has enabled the VC dollars to flow into all related industries.

VC Backed IPOs in California

In Q3 of 2004, eight California companies went public backed by VC dollars. The top four recipients are as follows:

- *Google*
- *JAMDAT Mobile, Inc.*
- *MannKind Corporation*
- *NetLogic Microsystems*

Google was the largest IPO of the quarter raising \$1666.4 million during the IPO. The total IPO dollars raised across the US during Q3 of 2004 was \$2631.3 million, California firms accounted for \$2059.1 million of this or approximately 78 percent (www.ventureeconomics.com). This statistic alone proves that California is in a league of its own when it comes breeding companies and setting them up for success.

Figure 1

VC Environment in California

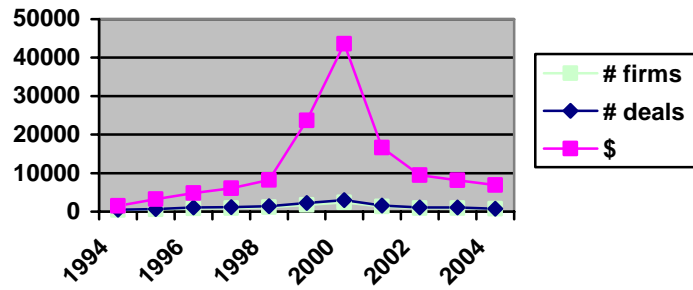


Figure 2

Type of Firms Funded (June – September 2004)

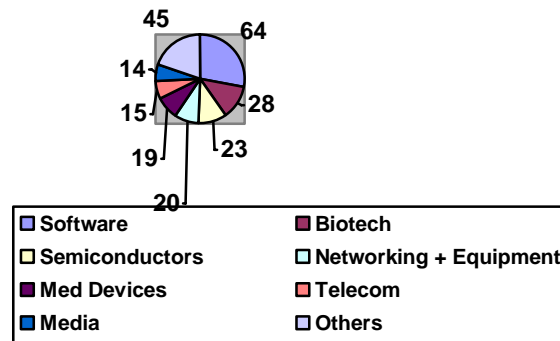


Figure 3

Stage of Firms Funded (June – September 2004)

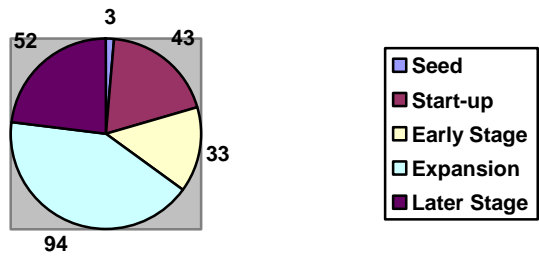
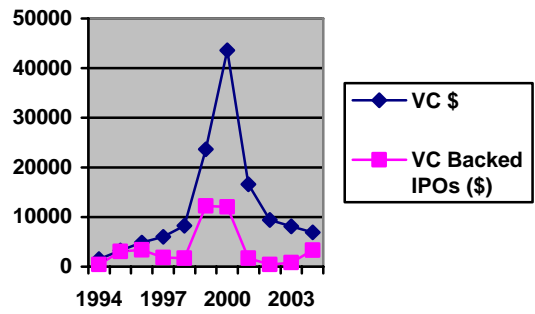


Figure 4

VC Spending vs. IPO funds (June – September 2004)



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THE VENTURE CAPITAL MARKET IN CHINA

Industry Conditions/Background

VC investment in China grew by more than 30 percent in the first six months of 2004. The percentage may be staggering but the total amount of VC dollars invested only amounted to \$438 million (Borrell, Jerry: Private Equity Week, 9/13/2004). In the same period, US firms had received a total of \$10.6 billion VC dollars (www.ventureeconomics.com). The difference is that the VC industry within the US has been a long established industry; in China, it has just started to grow. If the 30 percent growth within six month is any indication of potential long-term growth, then one must take a serious look at this industry in China.

VC activity in China can be traced back to the mid-1980 when the Chinese government began an intense focus on increasing the development of the nation's high tech sector. In an effort to increase competition and innovation, the government started initiatives that included government backed VC firms (Vega, Paul and Li-Choy Chong, "Venture Capital in China: Strategy and Decision Making", EBF, Summer 2004). Many of these initial firms failed, but these efforts have led the way for an ever-increasing number of both domestic and foreign VC firms to enter the Chinese market.

Currently foreign VC firms (mainly US) dominate the Chinese market. According to the President of Zero2IPO, a Beijing based research firm, "foreign VCs invested in 37 companies and contributed 85.44 percent of the total venture investment in China. Investment in the communications/telecom is the highest, accounting for 21.25 percent of total investment" (http://www.ecnetwork.org/ep/news_show.asp?id=2). Foreign firms not only dominate the market in terms of number of deals, but also with the size of deals. The average deal size thus far in 2004 for US VCs was approximately \$10 million. This is about seven times larger than that of domestic firms (Borrell, Jerry: Private Equity Week. 9/13/2004).

Pros of Investing in China

China is "the most populous country in the world, with a middle class alone the size of the entire population of the United States" (Borrell, Jerry, "Road to Riches," *Venture Capital Journal*, 6/2004). It has been estimated that "China plans to achieve an average GDP growth of 7 percent a year for the next 20 years" (Leglise, Claude, *Venture Capital Journal*, 11/1/2004). Couple this with the China's large talent pool, low cost labor and the size of its market place and China becomes a target for many investors. Finally, many US based VC firms are turning attention toward China not only based on the tremendous growth potential, but also as a way to tap into China's outsourcing potential (Rivlin, Gary, "Venture Capitalists Flock to China.", *International Herald Tribune*, 12/07/04).

With these remarkable opportunities for growth, VC firms also have to recognize that this is a relatively new industry within China. In the early 1990's there were approximately

20 VC firms in the country as a whole. This number increased to about 300 in 2002, meaning that two-thirds of the players have only entered the market in the past 4 years (Vega, Paul and Li-Choy Chong, “Venture Capital in China: Strategy and Decision Making”, EBF, Summer, 2004). Because this industry is still growing, there are many barriers that firms will face when trying to enter and participate in this market.

Barriers to Entry and Success

Both domestic and foreign VC firms will face challenges and barriers when attempting to enter the Chinese market. The main barriers that a domestic firm will face relate to the experience of the firm, a lower access to capital and an unstructured process (Vega, Paul and Li-Choy Chong. ‘Venture Capital in China: Strategy and Decision Making’. EBF, Summer 2004). These challenges are similar to what one would expect for any new firm entering a growth industry.

Foreign VC firms have many more challenges to face. The success of a VC deal relies heavily on the success of the company in which the dollars are invested. VC firms tend to work in partnership with the emerging company to ensure success. In China, there are a few reasons why this does not always happen. The culture of Chinese business is based heavily on relationships. Without these formed relationships, information is not readily shared and instructions are not necessarily followed. Foreign VC firms are at a distinct disadvantage if they do not form these relationships. The quandary that they experience is that as a foreigner forming relationships is not always easy (Leglise, Claude, *Venture Capital Journal*, 11/1/2004).

A second issue facing many Chinese businesses today that would affect the success of a VC deal is the lack of skilled managers in China. Around 500,000 Chinese students graduate with a degree in science and engineering each year, but very few in business and management. The typical manager in China is a citizen who has returned to the country after studying and working in the US. This type of manager understands how American business and techniques work, but are not available in large numbers. (Borrell, Jerry: *Private Equity Week*. 9/13/2004).

The current state of the Chinese economy also inflicts a great barrier to entry on foreign VC firms. China is “moving from a centrally planned economy to a ‘socialist market economy,’ signalling that it’s not the kind of market economy Americans are accustomed to” (Leglise, Claude, *Venture Capital Journal*, 11/1/2004). This transition has required new regulations, practices and potentially a change of culture. In tandem with this barrier, China does not have many of the necessary ancillary services for VC firms. The law, accounting and financial service sectors need to grow along with VC in order for success.

The largest barrier facing foreign VC firms are the governmental regulations that are imposed in China. “The government plays an important role in VC in China, which is not so the case in the US and other western economies. In China, the government has an impact on most aspects affecting VC, starting with its role as a source of capital, its

decision-making powers in setting regulations and enforcing law, leading to the operation of its own state venture firms, and ultimately controlling the access of VC investors to financial markets for exit” (Vega, Paul and Li-Choy Chong, “Venture Capital in China: Strategy and Decision Making”, EBF, Summer, 2004).

The Role of the Chinese Government in its VC Industry

The legal and regulatory environment is slowly changing in China as it is moving into a less regulated era. The distrust by Chinese of the VC industry has been mainly due to the lack of a supportive regulatory environment. Until some major changes happen, the government will have to continue to play the lead role in the VC business in the next few years.

VC started to gain momentum in China in mid-1990. The government formulated some policies to develop small to medium sized companies, including the creation of government controlled VC funds. In China, government funding accounts for most of the VC investments made in the country. In the west, government funding accounts for only a small amount of start-up funding (about 8.3 percent). In 2003, it was estimated by the Chinese Venture Capital Institute that the Chinese government accounted for 48 percent of total VC. The central government in China has played a large role in encouraging local governments to set up VC funds and VC firms. This in a large way has helped the shortage of funding in China’s high tech companies. However, it has also limited the scale of total Chinese VC and created a large unmet need – especially when the laws prohibit foreign investors from taking profits out of the country in their own currency. This has traditionally kept foreign start-up capital to a minimum.

Problems with China’s VC Market

Foreign investors have faced many issues when venturing into China – a complex regulatory environment, foreign exchange controls, and rigid corporate laws. Foreign capital has always been welcomed in China, however, there is not a comprehensive legal and regulatory framework to oversee the VC industry and this has created an environment that is discouraging to investors. The laws in China fail to protect investments, exit strategies are largely constricted by complex and complicated legal and capital structures, and there is a lack of protection over intellectual property which deters many venture capitalists for taking on any risk.

Additionally, China mandates that the accumulated amount of investment should not exceed 50 percent of the company’s total assets – which is not consistent with common international practices. This practice is obviously stifling especially when venture capitalists are looking for exceptional growth prospects. In addition, present tax laws are actually unfavorable to capital investments, while most countries create tax laws to encourage VC. Even more restrictions are placed on venture capitalists when exiting. Under existing laws, Venture Capitalists are restricted to investment in domestic entities and limited to the following exit strategies:

- A trade sale of a domestic entity
- A domestic IPO on the Shanghai or Shenzhen stock exchange
- An offering of shares on the Hong Kong Exchange

However, there have been recent efforts by the Chinese government to improve the inflow of VC investments from foreign funds. The realization that high-tech companies are critical for enhancing the country's position internationally has led to the creation of new sources of capital for Chinese entrepreneurs – and China is slowly looking to foreign investors to fill this need. For example, China lowered the barriers to entering the VC market by reducing the minimum capitalization requirement from \$100 million to \$10 million. There is also a bill of an investment fund law that is being discussed by the National People's Congress (the legislative section of the Chinese government). However, there is still no legal framework in place to accommodate a conventional management structure, for example - under current Chinese law, the formation of a LLC is impossible.

Recently, various policies on high-tech VC have been introduced, such as the Venture Capital Law and Regulations on Start-Up Funds. The hoped for result for all of this is a set of rules that will at least appear familiar to industry professionals, as the existing regulations had not exactly followed the way of international investors' thinking. In August of 2001, the Ministry of Foreign Trade and Economy Cooperation (Moftec) issued a new regulation. This established Sino-foreign joint VC companies. Under this law, VC companies can be established in China in the form of a Sino-foreign joint venture and is in fact a corporate fund in which foreign investors can have a stake of at least 25 percent. The Ministry of Science and Technology released a general plan in August 2002 for scientific and high tech development in China through 2010. The plan emphasizes a science-directed VC investment mechanism. In addition, there will be a focus on developing scientific standards, production technologies, and a research and management talent pool.

China has shown that it will put more emphasis on research and innovation in the upcoming years, however, for this to be successful, there will need to be many adjustments in the nation's legal and capital framework. However, due to the efforts of the government, foreign investments in China are growing, and it is looking as though this trend will continue.

Global Companies Focused on the Chinese Investment Potential

While many US firms increasingly view the promise of the VC market in China, DragonVenture Inc. is one of few – if not the only – company solely dedicated to Chinese Investments. Headquartered in Silicon Valley, with a second office located in Beijing, DragonVenture Inc. was founded in 2002 as the “premier Cross-Pacific Venture Capital, consulting and merger and acquisition company (to serve as) a critical bridge between the United States and Greater China” (www.dragonventure.com).

With a commitment to help “entrepreneurs and investors thrive by seeking out sound investment opportunities, culturally savvy business strategies and strategic alliances” DragonVentures Inc. has formed a business model focused on understanding the nuances of the Chinese market and the opportunities available within this growing global power (www.dragonventure.com).

Based in the heart of America’s technology sector, Silicon Valley, DragonVenture Inc. has a strong background in both technology and international ventures. Founded by two entrepreneurs DragonVenture Inc mixes the technological knowledge of its co-founder K. Bobby Chao – who received his MS from Stanford – with the global investing experience of its other co-founder Tony Luh. In addition, to the combination represented in its founders, DragonVenture Inc. is guided by nine full time employees, five of whom are Asian and four of whom are American.

With a growing portfolio, DragonVenture Inc. has focused mostly on telecommunications, Internet infrastructure and distressed real estate assets. The stage of firms that DragonVenture Inc. invests in span from small start-up firms to established companies interested in “accelerated growth and expansion” (www.dragonventure.com). To achieve their investment strategy, DragonVenture Inc. has diversified through the following funds:

- ***The “Ever-green” Fund*** “focuses on areas where DragonVenture Inc’s team and advisors have significant operational experiences or industry insight” and has invested close to \$10 Million to date.
- ***The Strategic Co-Managed Fund with local Chinese VC firms*** is “one of the few VC firms pioneering the concept for co-management of industry-specific funds with other leading venture capitals”. Through this fund VentureDragon Inc. has a \$60M fund under formation together with Shenzhen Venture Capital, PRC, and a \$50M late-stage M&A fund with the first \$5M anchored with Canton Venture Capital, PRC.
- The ***Capital Introduction/Syndication Fund*** is recognition of the fact that in a changing world, its best to maintain the ability to be flexible. Even for business plans not aligned with VentureDragon Inc’s existing objectives, this fund facilitates the matching of “entrepreneur source capitals from (their) investor network in Greater China and elsewhere”.

While DragonVenture Inc. is amongst a niche cluster focused exclusively on Chinese investments, other broad-based US firms have joined in the effort to break into the young market while the opportunities remain fresh. Norwest Venture Partners (NVP) is an established US firm most well known for helping software companies succeed – most notably PeopleSoft. With a continued focus on technology, NVP is “looking to partner with young entrepreneurs in China to build the next wave of global companies out of the nation” (www.chinadaily.com: *NVP: US-based VC Firm*).

Much of NVP's investment strategy is lead by Promod Haque, Managing Partner, who was recently ranked the world's number one venture capitalist by Forbes Midas List in 2004. Hague has lead NVP in a two-pronged effort to build R&D Centers while also "looking to invest in new technologies in China, especially in the software, hardware and security sectors" (www.chinadaily.com: *NPV: US-based VC Firm*).

An additional key to the success NVP may enjoy is their understanding of the long-term horizon in China. Aware that investment strategies may take years to yield results, NVP is safely grounded in other regions and other ventures which will allow the firm to invest wisely now while the market remains in its infancy (www.chinadaily.com: *NPV: US-based VC Firm*).

Another US-based company making in-roads in China is the well-established Carlyle Group who invested \$40 million in China in 2004 as opposed to \$15 million in 2003 (www.chinadaily.com: *Carlyle Eyes Two More Chinese Companies*). Among its investments, Carlyle has focused on "Runstar International an online game developer,... Huaya Microelectronics Inc. a semiconductor designer, ... Target Media Holdings Ltd. the country's largest commercial building video advertising networks (who) plans an initial public offering (IPO) in NASDAQ next year, Ctrip.com an online travel service provider who made the strongest NASDAQ debut in three years" (www.chinadaily.com: *Carlyle Eyes Two More Chinese Companies*).

As further evidence of their commitment to China, Carlyle's "equity fund has committed between \$150 million and \$200 million to China, about 10 percent of its funds under management globally" (www.chinadaily.com: *Carlyle Eyes Two More Chinese Companies*). Like NVP and Carlyle, the British-owned 3I Asia Pacific PLC, is also moving into China and is planning to establish offices in Shanghai or Beijing to expand its Asian operation. 3I is known as "one of the world's leading lenders in private equity and venture capital" and expects to be in China by 2006. With offices already established in Hong Kong and Singapore, 3I views China as a strategic advantage – not just in terms of the country's potential for growth but also as an important "bridge" for 3I's current portfolio: "whether it is outsourcing, taking advantage of cheap domestic production or the growing domestic market, the mainland is a fascinating proposition. So at the moment (3I) is very much a bridge into China for many of (their) portfolios and will become a bridge out of China for Chinese domestic companies in due course" (www.chinadaily.com: *Venture Capital Giant Plans Mainland Office*).

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