Venture Capital Financing In India: Path of Differential Diffusion Trajectory A Comparison with the USA

Dr. Chimun Kumar Nath Lecturer, Department of Commerce, Dibrugarh University. nathchimun@yahoo.com
Dr. A. Saha Reader, Department of Commerce, Dibrugarh University. saha.a@mailcity.com a_sahadib@yahoo.co.in

Abstract-Purpose- To compare between the recent US ventures capital financing (VCF) to that of Indian VCF. The paper also attempts to extract perceptional differences between the FI’s towards VCF operating in the country.

Design/methodology/approach- A comparison of VCF between US operations and Indian operations in this context has been pursued. 2 Indian states i.e. Karnataka and Assam have been studied on various aspects of VCF, followed by comparing the findings there from with that of US findings between the periods ranging from 1990 to 2006.

Findings- It is observed that convergence of VCF maturity in US and acceleration of growth of Indian VCF has been attained during 1990s. Despite a discernible growth of VCF in India since 2000 onwards, venture capital investments in enterprises both in the early and the expansion stages has been significantly less diffusive than that of the US.

Research Limitations/ Implications- The study has considered 6 VCFs and 12 VCFs from Assam and Karnataka respectively out of 56 VCF entities in India recognized by SEBI.

Originality/Value- the paper signifies the operational differences in US and India in the context of VCF. The input from US study however, can be used to improve the modalities of operation in India.

Paper Type- Review of literatures and field survey.

Keywords- venture capital, Venture Capital Financing (VCF), equity investment, India, United States, Karnataka, Assam

I PROLOGUE

There are many definitions of venture capital. However, the present researchers accept the simple definition that states Venture capital as the risky capital collected through different sources to invest alongside management in rapidly growing industries. Venture capital is often referred to as a prerequisite for productivity and employment growth. In line with the American tradition, as an experienced intermediary, the venture capitalist, understands venture capital as offering financial means to young high-technology enterprises in combination with management support for these enterprises. Investments by a venture capital fund can take the form of either equity participation, or a combination of equity participation and debt obligation - often with convertible debt instruments that become equity if a certain level of risk is exceeded. In most cases, the venture capitalist becomes part owner of the new venture. Some investments are structured as debt to equity participation - often reserved by covenant for a future buyout. Venture capital investment criteria usually include a planned exit event (an IPO or acquisition), normally within three to seven years.

The role of venture capital in facilitating employment and productivity growth has made venture capital a major target of financial market policies by the government of India. They attempted to ease the access to equity capital for young high-technology enterprises by improving the regulatory conditions the venture capitalists face in the Indian markets and by granting different subsidies.

The US venture capital financing size can serve as a benchmark for the discussion of the development in the Indian size of VCF. In the US, venture capital is predominantly invested in relatively young, high technology enterprises. During the 1990s, pension funds were the main capital provider to venture capital funds. These funds were managed by independent venture capitalists that are often specialized on particular stages of enterprises’ development and/or particular technologies.

The size of Indian venture capital financing, are relatively smaller as compared to the US size. This follows from the comparisons of investments in young enterprises and from investments in particular high technology areas in India. Until 1990, banks were the main sources of financing here. Only at the beginning of the new millennium, the importance of pension funds increased in most parts of the world. In India, venture capitalists are often dependent on their capital providers. Especially banks prefer to invest in their own subsidiaries and not in an independent venture capital fund.

Moreover, this paper also investigate whether FIs as a venture equity investors acting in a particular national market differ significantly with respect to investment strategies using a collection of primary data of FIs of Assam and Karnataka. This is important because many state governments of India like Gujarat, Maharashtra etc. have introduced specific policies to stimulate venture capital activity, which cannot be identified in aggregated data on VCF activity in India.

The paper proceeds with a description of the Key facts of the US venture capital market. In the next section, the development, of Indian VC market along with two Indian regional VC environments have been examined with respect to the funds raised, investments, and impact of Human and Social Capital in formation of VC and finally compared with the US venture capital market. All these discussions are ranging from 1990 to 2006. Last section summarizes the findings.
II THE US MARKET OF VENTURE CAPITAL FINANCE

The venture capital market in the US is the oldest and most developed of the world and is therefore chosen as the benchmark for the analysis of the Indian market. In the American tradition, which is used here, venture capital finance denotes the simultaneous offering of financial means and management support for a certain area of young high-technology firms. Venture capital funded companies are an integral part of the American economy. The dollars and cents contribution of the venture capital industry goes well beyond the objective economic contribution. It continually reinforces America’s entrepreneurial spirit. In addition, in so doing, the venture capital industry becomes a catalyst for change. Venture capitalists, many of whom are successful former entrepreneurs themselves, shepherd new businesspersons and women to reach their full potential.

The late 1980s marked the transition of the primary source of venture capital funds from wealthy individuals and families to endowment, pension, and other institutional funds. The surge in capital in the 1980s had predictable results. Returns on venture capital investments plunged. Many investors went into the funds anticipating returns of 30 percent or higher. That was probably an unrealistic expectation to begin with. The consensus today is that private equity investments generally should give the investor an internal rate of return something to the order of 15 percent to 25 percent, depending upon the degree of risk a firm takes. However, by 1990, the average long-term return on venture capital funds fell below 8 percent, leading to yet another downturn in venture funding. Disappointed families and institutions withdrew from venture investing in phases during the 1989-91 periods. The economic recovery and the IPO boom of 1991-94 had gone a long way towards reversing the trend in both private equity investment performance and partnership commitments.

In 1998, the venture capital industry in the United States continued its seventh straight year of growth. It raised USD25bn in committed capital for investments by venture firms, who invested over USD16bn into domestic growth companies in all sectors, but primarily focused on information technology.

This potential can be seen in the growth of sales figures for the US. From 1992 to 1998, venture-backed companies saw their sales grow, on average, by 66.5 per cent per annum as against five per cent for Fortune 500 firms. The export growth by venture-funded companies was 165 per cent. The top ten US sectors, measured by asset and sales growth, were technology-related.

Thus, venture capital is valuable not just, because it makes risk capital available in the early stages of a project, but also because a venture capitalist brings expertise that leads to superior product development. The big focus of venture capital worldwide is, of course, technology. So in 1999, of USD30bn of venture capital invested in the US, technology firms received approximately 80 per cent. In addition to this huge supply of venture funds from formally organized venture capital firms, is an even larger pool of angel or seed/start-up funds provided by private investors. In 1999, according to estimates, approximately USD90bn of angel investment was available, thus making the total ‘at-risk’ investment in high technology ventures in a single year worth around USD120bn.

Pension funds have been the main capital providers to venture capital funds (limited partnerships), while corporations, and financial and insurance have played a minor role (Exhibit 1). Pension funds contributed between 35 and 60 per cent of the new funds raised between 1990 and 1998. In 1999, however, only 23 per cent of the capital was contributed by pension funds.

Exhibit 1: Sources of New Funds and its Allocation in the US*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>2.43</td>
<td>1.34</td>
<td>3.02</td>
<td>3.55</td>
<td>6.20</td>
<td>6.20</td>
<td>8.07</td>
<td>13.06</td>
<td>23.13</td>
<td>39.55</td>
</tr>
</tbody>
</table>

As percentage by type of limited partner:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporations</td>
<td>6.8</td>
<td>4.0</td>
<td>3.3</td>
<td>8.4</td>
<td>9.1</td>
<td>4.1</td>
<td>18.9</td>
<td>24.0</td>
<td>11.8</td>
<td>15.0</td>
</tr>
<tr>
<td>Endowments and Foundations</td>
<td>12.5</td>
<td>24.2</td>
<td>18.6</td>
<td>10.7</td>
<td>21.3</td>
<td>19.6</td>
<td>11.3</td>
<td>16.0</td>
<td>6.2</td>
<td>21.0</td>
</tr>
<tr>
<td>Foreign Investors</td>
<td>7.6</td>
<td>11.4</td>
<td>11.1</td>
<td>4.3</td>
<td>2.4</td>
<td>3.8</td>
<td>5.6</td>
<td>4.0</td>
<td>1.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Individuals and Families</td>
<td>11.3</td>
<td>12.1</td>
<td>11.1</td>
<td>7.4</td>
<td>11.9</td>
<td>16.2</td>
<td>6.5</td>
<td>12.0</td>
<td>11.2</td>
<td>22.0</td>
</tr>
<tr>
<td>Financial and Insurances</td>
<td>9.4</td>
<td>5.4</td>
<td>14.4</td>
<td>10.4</td>
<td>9.5</td>
<td>19.2</td>
<td>2.9</td>
<td>6.0</td>
<td>10.2</td>
<td>13.0</td>
</tr>
<tr>
<td>Pension funds</td>
<td>52.5</td>
<td>42.3</td>
<td>41.7</td>
<td>59.1</td>
<td>45.8</td>
<td>37.0</td>
<td>54.8</td>
<td>38.0</td>
<td>59.4</td>
<td>23.0</td>
</tr>
</tbody>
</table>

Note: New funds raised have been deflated using consumer price indices (1995=100) and then converted into euros using 12-month averages.


The 1980 ‘Safe Harbor’ Regulation further improved the conditions for venture capital committed by pension funds.
because it defined pension funds as limited partners, which reduced the risk exposure of venture capitalists. These acts had clearly a considerable impact for the upswing in venture capital activity at the beginning of the 1980s. Especially pension funds and their de-regulation seem to have played a significant role in the development of the US venture capital market.

This extraordinary boom during the 1990s is not the first significant change that the American market for venture capital has experienced since its humble beginnings in the 1930s. Two upswings of venture capital activity can be identified in the time series. The first upswing took place in the mid-1960s, the second at the beginning of the 1980s. Both upswings, however, in the US, new funds raised for private equity grew at a lower rate than new funds raised for venture capital are small compared to the increase in venture capital activity at the end of the 1990s. The first two upswings seemed to be influenced by public policies. The journal ‘Venture Economics’ had identified two reasons for the extraordinary boom in the investments in enterprises’ early and expansion stages at the end of the 1990s (BVK 2001). Venture capital funds brought their passive investors high returns, resulting in a considerable re-investment of money; especially institutional investors reinvested large amounts of their funds. Secondly, the development of stock markets resulted in a restructuring of institutional investors’ portfolios so as to invest more money in venture capital funds. Thus, the US government also supports the creation of venture capital companies.

California, Texas, Massachusetts, Washington, and Pennsylvania topped the list of states by sales of venture capital backed firms headquartered in the State by 2003. Venture capital backed companies headquartered in California were responsible for USD438 billion in sales in 2003. In Texas, venture backed sales reached nearly USD190 billion in 2003 and exceeded USD100 billion in Massachusetts. Other leading states measured by venture capital backed firms were Washington, at USD41 billion and Pennsylvania, at USD 94 billion in 2003. (Exhibit 2)

Venture capital funded companies were directly responsible for more than 10 million jobs and $1.8 trillion in sales in 2003. This corresponds to 9.4 percent of total U.S. private sector employment and 9.6 percent of company sales. This is impressive given that venture investment was less than two percent of total equity investment for most of the past 34 years. Venture Capital Backed Firms Outperform Other Companies Venture backed firms added some 600,000 net jobs to the U.S. economy between 2000 and 2003. Venture supported firms such as eBay, Google, and JetBlue are just three examples of the many successful ventured businesses that have hired hundreds of new employees over these three years.

### Exhibit 2: State Wise Classification of Turnovers by VC Backed Firms in US

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>2000 Sales by VC Backed Firms</th>
<th>2003 Sales by VC Backed Firms</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California</td>
<td>$306 B</td>
<td>$313 B</td>
<td>7%</td>
</tr>
<tr>
<td>2</td>
<td>Texas</td>
<td>$170 B</td>
<td>$188 B</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Massachusetts</td>
<td>$96 B</td>
<td>$107 B</td>
<td>12%</td>
</tr>
<tr>
<td>4</td>
<td>Washington</td>
<td>$93 B</td>
<td>$102 B</td>
<td>7%</td>
</tr>
<tr>
<td>5</td>
<td>Pennsylvania</td>
<td>$74 B</td>
<td>$94 B</td>
<td>10%</td>
</tr>
<tr>
<td>6</td>
<td>Georgia</td>
<td>$74 B</td>
<td>$91 B</td>
<td>24%</td>
</tr>
<tr>
<td>7</td>
<td>New York</td>
<td>$75 B</td>
<td>$80 B</td>
<td>6%</td>
</tr>
<tr>
<td>8</td>
<td>Virginia</td>
<td>$19 B</td>
<td>$84 B</td>
<td>22%</td>
</tr>
<tr>
<td>9</td>
<td>Florida</td>
<td>$56 B</td>
<td>$61 B</td>
<td>8%</td>
</tr>
<tr>
<td>10</td>
<td>Tennessee</td>
<td>$51 B</td>
<td>$59 B</td>
<td>8%</td>
</tr>
<tr>
<td>11</td>
<td>Minnesota</td>
<td>$49 B</td>
<td>$57 B</td>
<td>10%</td>
</tr>
<tr>
<td>12</td>
<td>New Jersey</td>
<td>$45 B</td>
<td>$59 B</td>
<td>15%</td>
</tr>
<tr>
<td>13</td>
<td>Connecticut</td>
<td>$40 B</td>
<td>$49 B</td>
<td>24%</td>
</tr>
<tr>
<td>14</td>
<td>Illinois</td>
<td>$31 B</td>
<td>$34 B</td>
<td>7%</td>
</tr>
<tr>
<td>15</td>
<td>North Carolina</td>
<td>$24 B</td>
<td>$27 B</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Global Impact 2004, v.18, no.3

In the first quarter of 2007, venture capitalists invested USD7.1 billion into 778 deals, the highest quarterly dollar amount since the fourth quarter of 2001, according to the MoneyTree Report by Price Waterhouse Coopers and the National Venture Capital Association based on Thomson Financial data. Deal volume actually declined in the quarter compared with the fourth quarter of 2006, indicating venture capitalists’ willingness to put more dollars into each round. The Life Sciences sector (Biotechnology and Medical Devices together) had an extremely strong quarter, with Biotechnology ranked as the number one industry for investment, while Medical Devices was at an all-time high. Later Stage investing also jumped in the quarter to the highest dollar level since the fourth quarter of 2000. First time financings remained relatively steady, increasing slightly over last year. Medical Device investing skyrocketed to an all-time high in the first quarter, with USD1.08 billion going into 96 deals, a 60 percent increase in dollars over last quarter 2006. Biotechnology was the single largest industry sector with USD1.5 billion going into 102 deals, unseating software, which was traditionally the largest sector. Life Sciences accounted for 36 percent of the quarter’s dollars, an all-time high.

### III THE INDIAN MARKET OF VENTURE CAPITAL FINANCE

In the early 1980s, the idea that venture capital might be established in India would seem to be fuzzy. India has highly insulated economy, avowed pursuit of socialism, quite conservative social and business perception, and a risk-averse financial system provided little institutional space for the development of venture capital. With the high level of government involvement, it is not surprising that the
first formal venture capital organizations began in the public sector.

The 1980s were marked by an increasing disillusionment with the trajectory of the economic system and a belief that liberalization was needed. Prior to 1988, the Indian government had no policy toward venture capital. In 1988, the Indian government issued its first guidelines to legalize venture capital operations, Ministry of Finance (1988). These regulations were aimed at allowing state-controlled banks to establish venture capital subsidiaries, though it was also possible for other investors to create a venture capital firm. There was only minimal interest, however, in the private sector in establishing a venture capital firm, Ramesh et al. (1995).

In the late 1990s, the Indian government became aware of the potential benefits of a healthy venture capital sector. Thus in 1999 a number of new regulations were introduced. Some of the most significant of these related to liberalizing the regulations regarding the ability of various financial institutions to invest in venture capital. Perhaps the most important of these went into effect in April 1999 and allowed banks to invest up to 5% of their new funds annually in venture capital. Until 2001, however, they had not made any venture capital investments. This is not surprising since bank managers are rewarded for risk-averse behavior. Lending to a risky, fast-growing firm could be unwise because the loan principal is at risk while the reward is only interest. In such an environment, even if bankers were good at evaluating fledgling firms, itself a dubious proposition, extending loans would be unwise. This meant that since banks control the bulk of discretionary financial savings in the country, there is little internally generated capital available for venture investing.

From 2000 onwards, the venture capital industry has made an enormous contribution to the high-technology industry. In turn, high technology has furthered national productivity. The three percent annual growth rate in productivity since 1996 in the US, stems from investments in a range of technology industries such as computers, software, and communications equipment. It has helped user industries like retailing, airlines, and manufacturing to be more productive. By 2000 some new countries has emerged in the field of VCF. India is a country where the VCF penetration was although taken place lately, but by 2002, it has attained the coveted list of top twenty countries based on investment criteria (Exhibit 3).  

Exhibit 3: The World View: Top 20 Countries in 2002 & 2001 - Based on Investment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>11</td>
<td>14</td>
<td>Israel</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Belgium</td>
<td>20</td>
<td>19</td>
<td>Italy</td>
<td>04</td>
<td>07</td>
</tr>
<tr>
<td>Canada</td>
<td>09</td>
<td>04</td>
<td>Japan</td>
<td>05</td>
<td>06</td>
</tr>
<tr>
<td>China</td>
<td>19</td>
<td>13</td>
<td>Korea</td>
<td>07</td>
<td>10</td>
</tr>
<tr>
<td>France</td>
<td>03</td>
<td>05</td>
<td>Netherlands</td>
<td>08</td>
<td>11</td>
</tr>
<tr>
<td>Finland</td>
<td>17</td>
<td>—</td>
<td>Spain</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>06</td>
<td>03</td>
<td>South Africa</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>15</td>
<td>08</td>
<td>Sweden</td>
<td>10</td>
<td>09</td>
</tr>
<tr>
<td>India</td>
<td>12</td>
<td>15</td>
<td>United Kingdom</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>Indonesia</td>
<td>16</td>
<td>—</td>
<td>USA</td>
<td>01</td>
<td>01</td>
</tr>
</tbody>
</table>

Source: AVCA report, 2003

The Indian government has reiterated its commitment to the Indian software-driven IT industry by creating a National Venture Capital Fund for the Software and IT Industry (NFSIT). NFSIT, set up in association with various financial institutions and the industry, operates under the umbrella of the Small Industries Development Bank of India (SIDBI). The objective of the fund is to encourage entrepreneurship in the areas of software, services, dot.com and other IT related sectors in which India has inherent as well as acquired competency. The fund is expected to be a key component in addressing the rapidly growing demand for venture capital in India. The fund will be looking at supporting entrepreneurship in high growth sectors.

Many state governments have already set up venture capital funds for the IT sector in partnership with local state financial institutions and SIDBI. These include Andhra Pradesh, Karnataka, Delhi, Kerala, and Tamil Nadu. With so much of changes happening around venture capital financing in India yet, the fruitful result of exploring the advantages of such financing has not been equally distributed among the states in India. It is a fact that certain states like Maharashtra, Gujarat, Karnataka and Andhra Pradesh are far more advanced in mobilizing the venture capital funds rather than the rest of the country. Especially state like Karnataka is on the launching pad; thanks to the information technology advancement.

The picture of venture capital financing is gloomier in entire North Eastern Region in general and Assam in Particular. Although it has been recognized several times that any business running in the North Eastern Region is comparatively risky proposition due to its geographical location, environment, the infrastructural bottlenecks, etc. but there are hardly any venture capital environment being developed around this place. There is an urgent need being felt to uncover why the entrepreneurs in this part of India possess an averse attitude towards venture capital financing - whether they do not have innovative ideas (in the form of new technology) or other factors governing the growth and development of human and social capital or the investing environment of the region is a deterrence.
By considering the above factors, a research observation would be to look into the problem of Venture Capital growth in Assam. At the same time, it is noteworthy to grasp some more information about the growth of Venture Capital in some of the advance states of India where VCF has taken place in large numbers. In India, Maharashtra is the leading state in terms of Venture Capital movement followed by Gujarat, Tamil Nadu and Karnataka. Karnataka happens to be the state where it has been observed that, before the information technology (IT) revolution since 1995 onwards; there was negligible diffusion of venture capital funding. Predominantly having an agro-based economy, Karnataka has shifted its focus from Agriculture to IT and IT enabled services during the first generation of reforms and has started enjoying the benefits during the second-generation reforms starting from 1995 onwards. So far, it has also been observed that the other top positioned states in terms of VCF penetration differ in characteristics as compared to Assam. Thus, the study has attempted to gather the experiences of Karnataka in the direction of VCF development to suggest a comprehensive methodology of VCF development in Assam as Karnataka is still an agrarian economy like pre 1995 Karnataka.

Even after having rich natural and other resources, Assam has witnessed very poor development of venture capital growth. It has been observed that the impact of Social and Human Capital on venture capital needs to be considered as a source of funding for young high-technology enterprises and in the Karnataka market the presence of social and human capital paves the way for formation of financial capital, which ultimately develops the venture capital market positively. The differences between equity investors acting in a single state market are of special interest, since their likely heterogeneity is important when interpreting aggregated data on investments or on new funds raised, because this heterogeneity may imply significant differences in the quality of capital offered. The study was carried out by approaching 12 financial institutions offering venture capital in Karnataka and six financial institutions that are sponsors of venture capital but having the business of conventional financing in Assam. These financial institutions engaged in the business of conventional financing in Assam have been financing venture capital through their subsidiaries or through a separate fund created exclusively for the purpose in Karnataka and some other states in India. Data have been collected by way of canvassing a questionnaire amongst the respondents and analyses have been pursued based on the feedback there in.

It was observed from the study that the formation of financial capital in the state of Assam suffers due to some poor record of accomplishment of repayments in conventional type of loans. This creates a sense of lack of confidence among the Financial Institutions in the state towards the budding entrepreneurs. At the same time in order to protect their risk involvement in financing a project to get the repayment on time, the Financial Institutions prefer to finance only those projects, which are backed by some existing successful enterprises. This could be of any form like experienced entrepreneurs, entrepreneurial generations, conventional type of business where a steady earning can be obtained, or stake of successful business houses in the proposed enterprise. Such an attitude though provides a good support for the Financial Institutions to safeguard their business risk but it also left behind many negative impacts. One of them could be in terms of formation of Venture Capital Financing. Because Venture Capital Financing is generally provided to a sunrise industry having no experience of any actual performance unless it is started and/or to those entrepreneurs who have for the first time ventured into the project. Such conceptual conflict also has some negative impact on the budding entrepreneurs as they were deprived of getting their venture financed.

It was observed from the study that the formation of Human Capital in the state of Assam in comparison to Karnataka is somewhat unorganized. However, Assam has enough potentiality to form such Human Capital but due to the information asymmetry, the proper development of such capital is not there in the state at present. At the same time, the brain drainage could be another problem patronizing the low formation of Human Capital in the state. However, a detailed analysis as to why such problems exist in the state reveals low formation of Social Capital. Interestingly, in case of Karnataka it was found that the Financial Institutions are least bothered to analyze the human capital while receiving a proposal as such because the Social Capital in the state is of high quality.

It was also observed that, as a compensating strategy that entrepreneurs can adopt, is to have a wide range of contacts in their social networks. Research also showed that when networks contain people from a verity of work backgrounds, especially those beyond the immediate work group, they tended to be more powerful (Blau et al. 1982). In Karnataka market, it is seen that most of the IT based VC receivers are previously having working experience mostly in the Silicon Valley as highly paid executives. There is a positive relationship between prior work experience and venture survival and success, it was proved once again in the state especially in IT, and IT enabled Venture Capital Financing. Thus, network diversity enhances the chances of accessing a wide array of resources. However, the likelihood that the contacts will deliver value or resources depends on the strength of the tie, or the nature of the relationships between the network members. Individuals draw instrumental resources like materials and physical resources, as well as expressive resources such as friendship, mutual trust, from their network contacts. In case of Karnataka, it seems that the financial institutions were keen in financing VC as the presence of social and human capital are there among the entrepreneurs. Apart from education and training, human capital derives from work environment (Carter et al. 1997) and social capital derives from social environment. In Karnataka, such environment is created not only from the efforts of people of the state but also by the government. However, in Assam due to the information asymmetry, brain drainage, as well as absence of social network, the entrepreneurial development in the state is not proper. The
governmental effort receives lesser success due to creation of a negative atmosphere in developing entrepreneurial skills among the youths. A financially disciplined approach is necessary for Venture Capital Financing, which is missing in the state.

An interesting finding by studying both the states is that bootstrapping and loan financing provide a foundation for gaining experience and legitimacy that position ventures to secure equity financing. From the study it was observed that in Karnataka, almost all the Financial institutions were doing equity financing and for that they consider only the presence of Human and Social capital. However, in Assam, the loan financing itself gives such a gloomy picture to the financial institutions as it was found that the majority of the repayment scenario for the conventional loans in the state is very poor. Under the circumstances, an equity financing could turn out to be a daydream. It can also be inferred that since the human as well as social capital formulation in the state is very low, the financial institutions are not interested to go for Venture Capital Financing.

The study reveals that there are many factors, which have an adverse impact on the venture capital financing in Assam. At the same time if it is looked from the business potentiality and that too for growing up a considerable venture capital market, the state of Assam can provide certain opportunities also. It has a Strategic location - access to the vast domestic and South Asian market. Assam has a large and rapidly growing consumer market; constitute the market for branded consumer goods - estimated to be growing at 8% per annum. Demand for several consumer products is growing at over 12% per annum. Assam is one of the largest agro based sectors in the world in terms of Tea production. An R&D investment in this sector may bring many innovations that may lead to create many sunrise industries. Assam has one of the pools of scientists, engineers, technicians, and managers in certain specific areas in the country having IIT, RRL, Agriculture University, B-Schools etc. Assam has a potential R&D infrastructure and technical and marketing services for biotech sector. The state/ Central government has created policy environment that provides freedom of entry, investment, location, choice of technology, production, import and export. There is a well-balanced package of financial institutional incentives, Free, and full repatriation of capital, technical fee, royalty, and dividends. There is no income tax on profits derived from export of goods. Complete exemption from Customs Duty on industrial inputs and Corporate Tax Holiday for five years for 100 per cent Export Oriented units & units in Export Processing Zones may makes the environment a Venture capital friendly one provided the entrepreneurs of the region should come up to capitalize it. The information asymmetry presently exist in Assam should be reduced and the demonstration effect of Venture Capital Financing must be properly communicated to the entrepreneurs. The security of investment must be protected by way of mutual dependence between the demand and supply side. Role of NGOs cannot be ignored in creation of social capital. At the same time, the mutual trust between the entrepreneurs and the financial institutions must be created so that the Venture Capital Financing gets momentum. An intervention from state government machineries is necessary for creation of social capital.

In Assam, the concept of supporting entrepreneurs and innovators with Venture Capital funds has not yet developed. Even though development funds have been available from various Financial Institutions and Development Banks, they are largely to support proven technologies whether indigenously developed or imported. Support by funding “Home grown technologies” are available though Government and other sources they still follow the pre-condition of having validated the technology but at least at the laboratory scale, if not in the Pilot Plant. Even today, most of the Venture Capital Companies whether attached to large financial institutions such as IDBI or ICICI or to State and Central Governments are varying in supporting very early stage projects, which are at an R&D stage, primarily due to the fear of failure. In Assam, there is an urgent need to develop a Financial Institution, which will work exclusively to promote Venture Capital Financing in the state. The AIDC in collaboration with other Financial Institutions can create such fund to facilitate the venture capital growth in the state. A combination of Equity and Debt financing support could be the ideal form of Venture Capital Financing in the state. The VCF prospects in the state include equity support to Pharmaceutical industry, IT enabled industry, indigenous engineering process in Oil, Tea, Natural Gas production, Carbon based industries, exclusive SME financing etc. It is only when the human, social and financial capital will meet together to have a conducive atmosphere for Venture Capital Financing growth in the state.

V COMPARISON OF US AND INDIAN VCF MARKET

India is a significant case study in VCF penetration for a number of reasons. First, in contrast to the United States, India had a history of state-directed institutional development that is similar, in certain ways, to such development in Japan and Korea, with the exception that ideologically the Indian government was hostile to capitalism prior to 1991. In the United States, venture capital is only a small component of the much larger national innovation system (NIS), and as such is dependent on many other institutions. In the United States and in India the development of venture capital has been a co-evolutionary process. This is particularly true in India, where it remains a small industry precariously dependent upon other institutions, particularly the government, and external factors such as international lending agencies, overseas investors, and successful Indian entrepreneurs in Silicon Valley. The growth of Indian venture capital must be examined within the context of the larger political and economic system in Indiaii. As was true in other countries, the Indian venture capital industry is the result of an iterative learning process, and it is still in its infancy. If it is
to be successful, it will be necessary not only for it to grow, but also for its institutional context to evolve.

In sharp contrast to the United States, however, where a venture capital fund can invest in any industry it wishes, in India only six industries have been approved for investment: software, information technology, pharmaceuticals, biotechnology, agriculture, and allied industries during 1990 until 2001. Statutory guidelines also limited investments in individual firms based on the firm’s and the fund’s capital. The result of these various regulations has been a channeling of venture capital investment toward late-stage financing. After a lot of debate finally, the SEBI regulations did not have any sectoral investment restrictions except to prohibit investment in financial services firms and of late investment in real estate. Impediments to the development of venture capital also exist in India’s corporate, tax, and currency laws. India’s corporate law did not provide for limited partnerships, limited liability partnerships, or limited liability corporations (LP, LLP, and LLC, respectively) as available in USA.

Moreover, Indian regulations did not recognize limited life funds, so in India, it was relatively easy to terminate a trust, but this meant that the entire firm was closed rather than a specific fund within the firm. Therefore, each fund had to be created as a separate trust or company. This process was administratively and legally time-consuming. Terminating a fund was even more cumbersome, as it requires court approval on a case-by-case basis. The restrictions on venture capital extend beyond the framework of corporate law.

The largest single source of funds for US venture capital funds since the 1980s has been public and private sector pension funds. In India, there are large pension funds but they are prohibited from investing in either equity or venture capital vehicles, thus closing off this source of capital. In summation, prior to the late 1980s, though India did have a vibrant stock market, the rigid and numerous regulations made it nearly impossible for the existing financial institutions to invest in venture capital firms or in startups. Investors amenable to purchasing the equity in early stage companies. It was also possible to bootstrap a firm and/or secure funds from friends and family—if one was well connected. However, no financial intermediaries comfortable with backing small technology-based firms existed prior to the mid-1980s. It is safe to say that little capital was available for any entrepreneurial initiatives. An entrepreneur aiming to create a firm would have to draw upon familial capital or bootstrap their firm.

An interesting observation between the two countries is that there is a surge in risk capital by 2004 onwards. The spread of growth of such capital is outside the information technology sector. The two of the three biggest deals of 2003 in India had nothing to do with technology. One was CDC’s $57 million investment in Punjab Tractors and the other was Warburg’s $50 million deal with Radhakrishna Foodland. Henceforth the important point to really concentrate here as to why the sudden diversification of opportunities occurred in India. At the same time, the US market also witnessed shifting of priorities from IT to biotech by 2003 onwards. One may blame it on India’s happy growth story as the economy is clipping at 7 percent plus and could possibly gather more steam. On the other hand, outsourcing has become a major movement across sectors- from IT to BPO to automotive to textiles to Pharmaceuticals — and on the other, smaller but strategic companies, especially in FMCG, are racking up stunning growth thanks to their low cost, high quality strategy. Such developments in IT sector in Indian market have a downswing of VCF growth in certain states, which are traditionally IT, backed like Karnataka and Andhra Pradesh. However, these states have shifted its gear to adopt various sectors to be incorporated in their priority list.

VI Summary

The above section has analyzed the differences and similarities between the markets for Venture Capital in India and the United States. In the American tradition, venture capital comprises management support and financial means for a subset of young high-technology enterprises provided by experienced intermediaries, i.e. the venture capitalists. Due to data limitations, all the results obtained here have to be interpreted with caution. Indian markets for venture capital differ considerably with respect to the industrial sector invested in enterprises’ early and expansion stages. In Karnataka, for example, early stage investments accounted for mainly in IT and IT enabled sector, while in Gujarat the early stage investments are predominantly in infrastructure development. Assam has a potentiality of VCF investment in biotech, agri-based, and pharmaceutical sectors. The Indian markets for venture capital differ with respect to their sources of funds then US. In India, banks are the main contributors to entrepreneurial finance including venture capital, while in US now a day; pension funds play a significant role. Traditionally, pension funds have contributed considerable amounts of capital to VCF formation in the US, while in country as if India pension funds have never been active as capital providers. Financial Institutions have invested large amounts of capital in venture capital in Karnataka and Maharashtra, while in the US banks have been getting less importance. In addition, the Indian markets differ with respect to governments’ role in comparison to US. Some states in India use tax incentives for passive investors in order to ease the capital access for young high-technology enterprises, while others use guarantees and co-investment programs in order to reduce the risk of young high-technology enterprises for VCF.

In comparison to the United States, some states of India like Karnataka have invested in enterprises’ early stages having similar focused areas. US venture capital investments are more concentrated on high technologies than Indian VCF investments. In the United States, almost 80 per cent of the venture capital investments went into communications and computer-related enterprises in 1999, while only 27 per cent of the Indian VCF investments were invested in these enterprises.

In addition to identifying the differences and similarities between different states of India in terms of VCF, the paper
has also discussed the differences between VCF investors acting in one national market by analyzing micro data on Karnataka and Assam. VCF investors acting in one national market can differ significantly with respect to their investment behavior. The evidence of the Karnataka and the Assam market supports this view, while the results of the Karnataka market support it only to some extent in comparison to US. Karnataka’s VCF investors differ considerably with respect to their investment strategies. Independent equity investors have a high degree of technological specialization compared to all other groups of dependent equity investors. Moreover, independent equity investors are more willing than subsidiaries of banks to invest capital in high-risk enterprises.

The Karnataka market for VCF has not only experienced a significant upswing in the last few years but also a fundamental structural change towards financing high-technology enterprises. The Assam market, by contrast, has merely experienced a qualitative expansion. The number of private equity investors that are not legally connected to another company (i.e. independent equity investors) has increased significantly in India. These equity investors, in contrast to their dependent counterparts, act more like US venture capitalists, and make more intensive use specific control mechanisms such as convertible securities and compensation systems.

VII EPILOGUE

From the above analysis, the following outcomes were emerged:

i. Socioeconomic environment in India is not compatible to American methodology of VCF.

ii. Control and ownership of enterprise is the inherent management practice with investors’ limited access (with few exceptions) to it in the corporate sector in India.

iii. There is lack of local market for high technology products in India.

iv. It has been observed that in case of the VCF with government stake emphasize more on the overall development of the economy of the country/ region than emphasizing on ROI of the projects at the micro level. Which appears to the researchers as not pragmatic in approach?

The characteristics of the American methodology for VCF can be summed up as:

i. More specific to high technology driven, envisaging fast growth.

ii. Long-term horizons classified into specific defined phases.

iii. Expectation of very high risks and return.

iv. Focused on start up stage.

v. Strict preference for equity financing and risk sharing.

vi. Pension fund is one of the major sources of VCF.

The differences between the US market and the Indian market for VCF with respect to the investments in young high-technology enterprises although do not offer meaningful information on the development stage of the Indian venture capital markets but it provides many inputs for generating reforms in the Indian VCF market. The reason is that each market has its own, often-quite special, innovation system, which determines the role of venture capital in an economy. For example, when the innovation system is dominated by in-house research and development, one cannot expect a dynamic venture capital market. Moreover, the figures presented on venture capital activity in India do not include other financial sources for high-technology enterprises such as business angels, which are, however, important to determine the development stage of venture capital markets.

VIII NOTES

1 In the US, new funds raised for private equity grew at a lower rate than new funds raised for venture capital
4 SBIR (Small Business Innovation Research Programme) is a highly competitive programme that encourages small business to explore their technological potential and provides the incentive to profit from its commercialization. By reserving a specific percentage of federal R&D funds for small business, SBIR protects the small business and enables it to compete on the same level as larger businesses. SBIR funds the critical start-up and development stages and it encourages the commercialization of the technology, product, or service, which, in turn, stimulates the US economy.


7 It is true that in the United States, banks have never been an important source of venture capital, even through their SBIC subsidiaries. For the most part, a bank’s core competencies are in evaluating and taking loans. The problem with loans to small startups is that the capital is at high risk, so any interest rate would have to be usurious. Moreover, since the new firm is often losing money in its early days, paying interest and principal would drain money from the firm during the period when it most requires the money for investment.


9 ibid, p.54


11 Carter, N.M., Williams, M. and Reynolds, P.D. 1997, Discontinuance among new firms in retail: the influence of
initial resources, strategy and gender. Journal of Business Venturing, 12, 125-146.


IX REFERENCES


