



Objectives and vision for venture capital in India

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Securities and Exchange Board of India, India

Venture Capital funding is different from traditional sources of financing. Venture capitalists finance innovation and ideas which have potential for high growth but with inherent uncertainties. This makes it a high-risk, high return investment. Apart from finance, venture capitalists provide networking, management and marketing support as well. In the broadest sense, therefore, venture capital connotes risk finance as well as managerial support. In the global venture capital industry, investors and investee firms work together closely in an enabling environment that allows entrepreneurs to focus on value creating ideas and venture capitalists to drive the industry through ownership of the levers of control in return for the provision of capital, skills, information and complementary resources. This very blend of risk financing and hand holding of entrepreneurs by venture capitalists creates an environment particularly suitable for knowledge and technology based enterprises.

Scientific, technology and knowledge based ideas properly supported by venture capital can be propelled into a powerful engine of economic growth and wealth creation in a sustainable manner. In various developed and developing economies venture capital has played a significant developmental role. India, along with Israel, Taiwan and the USA, is recognized for its globally competitive high technology and human capital. The success India has achieved particularly in software and information technology of success against several odds such as inadequate infrastructure, expensive hardware, restricted access to foreign resources and limited domestic demand, is a pointer to the hidden potential it has in the field of knowledge and technology based industry. India has the second largest English speaking scientific and technical manpower in the world. Some of the management (IIMs) and technology institutes (IITs) are globally known as centres of excellence. Every year over 200,000 engineers graduate from Government and private-run engineering colleges. Many also specialize through diploma courses in computers and other technical areas. Management institutes produce 40000 management graduates annually. Given this quality and magnitude of human capital India's potential to create enterprises is unlimited.

In Silicon Valley, these very Indians have proved their potential and have carved out a prominent place in terms of wealth creation as well as credibility. There are success stories that are well known. They were backed by a venture capital environment in the Silicon Valley and elsewhere in the USA, which supports innovation and invention. This also has a powerful grip over the nation's collective imagination. At least 30% of the start-up enterprises in the Silicon Valley are started/backed by Indians. Back home also, as per NASSCOM data, the turnover of the software sector in India has crossed the Rs. 100 billion mark during 1998. The sector grew 58% on a year-to-

year basis, and exports accounted for Rs. 65.3 billion while the domestic market accounted for Rs. 35.1 billion. Exports grew by 67% in rupee terms and 55% in US dollar terms. The strength of software professionals grew by 14% in 1997 and has crossed 160000. The global software sector is expected to grow at 12% to 15% per annum for the next 5 to 7 years. With the inherent skills and manpower that India has, software exports will thrive with an estimated 50% growth per annum. The market capitalization of the listed software companies is approximately 25% of the total market capitalization of around US\$ 200 billion as of December, 1999. There is also greater visibility of the Indian companies globally. Given such vast potential which is not only confined to IT and software but is also present in several other sectors like biotechnology, telecommunications, media and entertainment, medical, health, etc., the venture capital industry can play a catalyst role in industrial development.

It is important to recognize that while India is doing well in IT and software, it is still a low cost developer and service provider. Though it has the advantage of English-speaking, skilled manpower and cheap labour, its leadership is on a slipping edge as other countries such as the Philippines, China and Viet Nam are moving to occupy India's position as the premier supplier of low-end software and support services. Many such countries have superior supplies of power, telecom and internet connections compared with India. As the USA did in the semiconductor industry in the eighties, it is time for India to move to a higher level in the value chain. This will not happen automatically. The sequence of steps in the high technology value chain is information, knowledge, ideas, innovation, product development and marketing. Basically, India is still at the level of 'knowledge'. Given the limited infrastructure, low foreign investment and other transitional problems, it certainly needs policy support to move to the third stage, i.e. ideas, and towards innovation and product development. This is very crucial for sustainable growth and for maintaining India's competitive edge. This will need capital and other support which can be provided by venture capitalists.

India has a vast pool of scientific and technical research carried out in research laboratories, defence laboratories as well as in universities and technical institutes. A conducive environment including incubation facilities can help a great deal in identifying and actualizing some of this research into commercial production.

Development of a proper venture capital industry, particularly in the Indian context, is important for bringing to market high quality public offerings (IPOs). In the present situation, an individual investor becomes a venture capitalist of a sort by

financing new enterprises and undertaking unknown risk. Investors also get enticed into public offerings of unproven and at times dubious quality. This situation can be corrected by venture capital backed successful enterprises accessing the capital market. This will also protect smaller investors. A study of US markets during the period 1972 through 1992 showed that venture-backed IPOs earned 44.6% over a typical five-year holding period after listing compared with 22.5% for non-venture backed IPOs. The success of venture capital is partly reflected by these numbers since 80% of firms that receive venture capital are sold to acquiring companies rather than coming out with IPOs, in which the return multiple vis-à-vis non-venture funded companies is much higher. This potential can also be seen in sales growth figures for the USA where, from 1992 to 1998, venture capital funded companies sales have grown by 66.5% per annum on average, versus 5% for Fortune 500 firms. The export growth by venture funded companies was 165%. All the top 10 sectors measured by asset and sales growth in USA were technology related.

Thus, venture capital is valuable not just because it makes risk capital available at the early stages of a project but also because of the expertise of venture capitalist that leads to superior product development. The big focus of venture capital worldwide is, technology. Thus, in 1999, around \$ 30 billion of venture capital has been invested in the USA, of which technology firms reportedly got around 75%. Besides this huge supply from organized venture funds, there is an even larger pool of "angel" funds provided by private investors. In 1999, it was expected that angel investment would be of the order of \$ 90 billion, thus making the total "at-risk" investment in high technology ventures in a single year of \$ 120 billion. By contrast, in India, cumulative disbursements to date are not more than \$ 500 million, of which technology firms have received only 36%.

The other successful experience is that of Taiwan: Hsinchu Science-based Industrial Park is the showpiece of Taiwan's success. Forty per cent of the firms established in this government promoted park, which currently accommodates 3,000 expatriates, were begun by entrepreneurs from the USA. The revenue of firms located at Hsinchu Park alone was \$ 14 billion in 1998. Facilities at Hsinchu include English language teaching for the children of its expatriate entrepreneurs. The Hsinchu experiment has benefited from the generally high quality of education in Taiwan, whose institutes produce 50,000 engineers annually. Taiwan has 74 technical schools, 36 colleges and 24 universities, two of which are located near Hsinchu Park. The venture capital environment has also been a favourable factor. There are 110 venture capital firms in Taiwan, including 38 begun in 1998. By the end of 1997, these firms had invested \$ 1.32 billion in 1,839 ventures, mostly in high technology.

Taiwan's government has been particularly successful in promoting its hardware industry through tax incentives, low tariff barriers, credit at cheap rates, good infrastructure facilities and establishment of research institutes. The Industrial Research Institute, owned by the government, started with semiconductor technology purchased from RCA Records. The technology subsequently developed at the Institute led to two very successful integrated chip firms. United Microland Corpora-

tion (UMC) and Taiwan Semiconductor Manufacturing Corporation (TSMC), which were initially promoted by the government and ultimately privatized.

Taiwan has benefited from close ties with the Silicon Valley. A transnational community of Taiwanese venture capitalists has fostered a two-way flow of capital, skills and information between the Silicon Valley and Taiwan. There is also an emerging trend of grouping of Taiwanese and Indian high technology talents in the Silicon Valley. India can learn important lessons from the Taiwanese government's focus on education and encouragement of small enterprises, via facilities such as the Hsinchu Park, as well as a US-style legal, regulatory, tax, and institutional environment.

Similarly the venture capital industry in Israel has grown from one firm with a corpus of \$ 30 million in 1991, to eighty firms with a corpus of \$ 3 billion by 1998. Further, Israel's IT speciality is developing technology rather than software or products. This focus has meant that new Israeli ventures are most typically acquired by larger technology firms, and the IPO route in the US markets has also been successful. In fact, Israeli companies are the second largest group of companies listed on the Nasdaq markets after American companies, a remarkable achievement for a country of 6 million people.

Like Taiwan, Israel is another country in which government policy fostered a successful, highly diversified, self-reliant industry. In the early 1990s, Israel restructured its legal, accounting and regulatory framework to mimic that of the USA. The new Israeli framework guarantees US investors parity with US tax rates. In 1984, the Israeli government passed a law to encourage industrial research and development (R&D) and created the Office of the Chief Scientist to implement government policy related to this area. The law's strategy is to encourage private companies to invest in R&D projects with the government sharing the business risk. Under the law, a Research Committee appointed by the Chief Scientist approves proposals for anywhere from 30 to 66 per cent of given projects' funding (up to \$ 250,000). These proposals, when funded, also receive tax exemptions for up to ten years. As an additional incentive to entrepreneurship, the Israeli government has created twenty-six technology incubators designed to allow start-ups to convert their ideas into commercially viable products.

Israel's government participates in international cooperation, seeking to match the nation's technical skills with global markets, and to share start-up risks up front with later-stage activities such as marketing. The most successful of these ventures has been the Bilateral Industrial Research and Development Foundation (BIRD), a joint venture with the US government. The Israeli high technology industry enjoys the same kinds of transnational ties that has helped Taiwan. Similarly, the Israeli venture capital industry has strong US connections. Several of Israel's experiences have relevance for India. Government policy on incubators, the funding of R&D projects, and the BIRD project provide useful object lessons for the Indian government and business alike.

Venture capital has played a very important role in the UK, Australia and Hong Kong also in the development of technology growth of exports and employment.

India certainly needs a large pool of risk capital both from home and abroad. Examples of the USA, Taiwan and Israel clearly show that this can happen, provided there is a right regulatory, legal, tax and institutional environment. It is also necessary that start-ups have access to R&D flowing out of laboratories and universities, with infrastructure support such as telecom, technology parks, etc. Steps are being taken at the government level, the Ministry of Information and Technology, and CSIR for improvement in infrastructure and R&D. Certain NRI organizations are taking initiatives to create a corpus of US\$ 500 m to strengthen the infrastructure of IITs. More focused attempts will be required in all these directions.

Recent phenomena, partly ignited by success stories of Indians in the USA and other places abroad, provide the indications of a growing number of young, technically qualified entrepreneurs in India. There are success stories within India too. At the same time an increasing number of internationally savvy, senior managers have been leaving established multinationals and Indian companies to start new ventures. The quality of enterprise in India is on an ascending curve. The atmosphere thus is ripe for creating the right regulatory and policy environment for sustaining the momentum for high-technology entrepreneurship. The Indians abroad have leapfrogged the value chain of technology to its highest levels. By bringing venture capital and other supporting infrastructure this can certainly happen at home also.

Another important area is the need for multi country integration. Information Technology and the Internet have brought about the trend of what can be called the "death of distance" and operation across the countries can be seamlessly integrated. In the Indian context with developing IT and internet technology coupled with close linkages of Indian technocrats and entrepreneurs located in India and abroad, there are interesting possibilities. This will of course need further regulatory and policy support to provide operational flexibility, easy entry-exit and ownership patterns to suit global needs. It is also to be noted that the quality and quantity of research conceptualized in startups competes favorably with research undertaken by big firms. This phenomenon is seen even in India.

What could all this mean in terms of employment generation within India? There is probably no industry as employment intensive in productivity and numbers as high technology. In the USA venture funded companies have grown jobs by 40% per annum since 1992. Conversely Fortune 500 jobs shrank by 2.5% per annum during the same period. 60% of the jobs created by venture funded companies were engineers/skilled jobs. Further in 62% of the venture funded companies, stock options covered 100% of the employees. India today produces over 60,000 new computer science graduates annually, and over 2 lakh more enroll annually in computer training institutes. Besides, about 200,000 engineering students graduate from engineering colleges, in addition to the substantial number of persons doing diploma and certificate courses in technology related areas.

By contrast, in Taiwan, the total number of engineering graduates is around 50,000 and in the USA it is 30,000 per annum. According to available estimates there are about 3,50,000

unfilled jobs of computer scientists in the USA with the growth rate of 100,000 job requirement each year. Achieving even a reasonable fraction of US scale of development in information technology and other knowledge based areas, there is going to be a big employment generation in India. Additionally, given India's lower labour cost, the potential for employment is even larger than what appears from these estimates.

It also needs to be noted that with other areas of business and industry getting more and more technology oriented, there will be a requirement of jobs all around. Indications are already emerging, as firms in India which are being outsourced by foreign organizations to provide services are recruiting hundreds of employees within one year of their existence. Several such firms are getting located around Delhi, Bangalore and Hyderabad. With proper venture capital support, there can be a phenomenal increase in start-up enterprises which would generate further employment potential.

Given the right environment, large flows of risk finance and venture capital can flow into the country. Apart from the foreign investment, substantial venture capital is likely to come from the overseas Indian community in the Silicon Valley. This is particularly so as some of the Indian technocrat entrepreneurs in the Silicon Valley have strong Indian linkages at professional level and are enthused to invest in India. There are at least 300 such entrepreneurs with individual wealth exceeding \$ 5 million and a total wealth of about \$ 25 US billion. Another 1,000 are believed to have wealth in the range of \$ 1-5 million.

Currently, about 20% of their wealth is reinvested in new ventures which will rise as vesting schedules mature. The risk capital with Indian entrepreneurs is around \$ 6 billion and even if 15% to 20% comes to India annually, there is a ready pool of around \$ 1 billion available for annual venture capital investment in India. Further, larger venture capital firms in the USA, with a combined corpus of around US\$ 35 billion have reportedly set aside up to 20% of their funds for investment offshore. India, along with Ireland and Taiwan, is a favoured destination for investments by these offshore venture funds.

The net FII investment in Indian markets is around US\$ 10 billion, and the flows for the last few years have generally been positive. With enhanced interest in India as compared to some of the other emerging and Asian markets, given the right environment, a good amount of money would flow as venture capital investment. This is more so because India has already acquired credibility, particularly in the area of information technology and sectors like media, pharmaceuticals, etc. While the proportion of offshore to local capital which is around 80% foreign and 20% domestic, may remain same for the first few years, the recycling of entrepreneurial wealth and skills within the industry will gradually lead to a greater presence of the domestic venture capital industry.

With this background, India is rightly poised for a big leap. This can happen by creating the right environment and the mindset to understand global forces, and when that happens we would have created not "Silicon Valley" but the "Ind Valley", a phenomena for the world to watch and reckon with. □



Venture finance

Success stories from India

<http://www.gvfl.com>

Gujarat Venture Finance Ltd., India

GVFL's performance as a classical venture capital company supporting technology-intensive seed and start-up projects especially of the first generation entrepreneurs and providing financial and managerial support has resulted in a number of success stories.

Permionics (I) Limited, Baroda

Promoters: Mr. Satyapal Mayor and Mr. Satyajai Mayor, technocrats and first generation entrepreneurs.

Business: Pioneers in using membrane technology for manufacturing water purifiers. These water purifiers have been designed for use in homes. They require no electricity and have no moving parts. A head of only 3 meters is sufficient to produce 10 litres of pure water per hour.

Value-addition by GVFL

- GVFL has nurtured the company right from the inception. It recognized the technology and helped the company to commercialize the same.
- GVFL has encouraged corporate governance practices and the streamlining of systems and processes.
- GVFL also assisted the company in raising funds from the State Bank of India in the initial stage.
- The company was Industry oriented and had less experience in the consumer market. GVFL networked and brought MUDRA advertising agency to launch the product. Even to get the Nation Wide Network, GVFL helped to enter into contract with Symphony Comfort Systems Ltd. (SCSL).
- GVFL played as a mediator and guide during the tough phase of the company and helped in resolving differences between the promoters and the advertising agency.
- Despite having technical capabilities exceeding companies of its size and top-class promoters, the company went into a downward spiral. GVFL assisted by establishing various strategic alliances.

Achievements of the company

- In India, Permionics was the first to manufacture Spiral Wound Cellulose Acetate Membranes with indigenous technology in 1981. It is the only private company doing membrane work in India.
- Permionics became the pioneers in the field of Reverse Osmosis and Ultra filtration in India. The entire plant and machinery was designed and developed by Mr. Satyapal Mayor, the promoter.
- Starting with just a single product, today the company has developed 5 more products marketed under the following brand names:
 - Pure Flo ● Ultra Flo ● Hi Flo
 - Permapure RO ● Ro - 50

Status

GVFL made a successful exit by promoters buyback. The company's product is well accepted in the market and still after so many years of inception, no company in the world has been able to match its technology. GVFL divested from the company in 2004-05.

Saraf Foods Ltd., Baroda

Promoters: Promoted by Mr. Suresh Saraf, a mechanical engineer and a first generation entrepreneur.

Business: The company processes vacuum freeze-dried fruits and vegetables, using indigenous equipment. Freeze drying is a special dehydration technique whereby the moisture content of the product is reduced to less than 4% by the process of sublimation under vacuum. Freeze drying is the premium technology for food preservation and is the most preferred food preservation technique the world over, even in the advanced countries.

Value-addition by GVFL

- GVFL involved professionals from the Bio-medical group of the Bhabha Atomic Research Centre to help introduce this new technology in India.
- GVFL provided help for early registration of the company and for getting necessary government approvals.
- GVFL assisted in the development of samples and in assessing the market potential.
- GVFL shared its experience of project execution, for speedy implementation.
- GVFL negotiated with IBP and other suppliers of plant and machinery on behalf of the company.
- GVFL helped by networking with Central Food and Technological Research Institute (CFTRI) for preparing samples of the products.
- GVFL helped the company in raising additional finance.
- Subsequent to the onion crisis, GVFL was the only institution, which supported the company. It also sanctioned a soft loan to enable the company to emerge from a liquidity crisis.
- The company successfully turned around with the active guidance and support of GVFL, and improved significantly on parameters like productivity and quality.
- GVFL encouraged corporate governance practices and streamlining of systems and processes.

Achievements of the company

- It is the first company in India to process vacuum freeze dried fruits and vegetables using indigenous equipment.

Status

The company turned around even after major setbacks due to consistent support by GVFL. A partial exit has been made from the company by way of promoter buy back. □