Chapter Three

Venture Capital
Investment in INDIA
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Venture Capital Investment in INDIA

The concept of venture capital in the sense of risk or start-up capital is quite old in India. This sort of capital has been made available for establishing new business and financing later developments, by friends, relatives and family members for centuries. The history of modern venture capital in India, however, is not very old, starting in the mid-eighties. Like many other Asian countries, at the government policy level, venture capital is defined in terms of technology financing (AVCJ, 1994). In India, tax incentives are given to venture capitalists, but only when finance is provided for high-tech ventures. In practice, most venture capitalists in India, however, follow a flexible and broad investment approach to venture capital. Venture capitalists supply funds to new, high-risk, but not necessarily high-tech ventures, and also extend management, marketing and financial skills to the assisted firms. In the Indian context, the concept of Venture capital may be defined as investment in the form of equity, quasi-equity and/or a conditional loan, made in new, unlisted, high-risk or high-tech firms, started by technically or professionally qualified entrepreneurs. The Venture capitalists:
- expects the enterprise to have a high growth rate,
- provides management and business skills to the enterprise,
- expects medium to long term gain, and
- does not expect any collateral to cover the capital provided (Pandey and Jang, 1996).

There are a number of studies on the investment activities of Venture capitalists in developing countries (Clarke, 1987; Bygrave and Timmons, 1985, 1992; Fried and Hisrich, 1988, 1994; Macmillan et al., 1985, Macmillan et al., 1987; Tyebjee and Bruno, 1984; Wan, 1991; Wilson, 1993). There are few studies in the context of Asian countries (Ray, 1991; Ray and Turpin, 1993; Rah et al., 1994; Pandey, 1995, 1996), particularly the developing countries. Most studies have concentrated on the Venture investment process and evaluation criteria rather than the creation and development of Venture capital activity. How does Venture capital activity develop? Particularly, what process, if any, is followed by the Venture capital firms (VCFs) in developing Venture capital activity?

It is difficult to convince people, especially after the Internet mania, that VCs may be on to something big. A major reason is that most VCs and private equity founds have delivered only average performance. According to BW research, the total VC investment has been $2.4 billion since 1994 (that's when the foreign funds came into India with some serious money). At today's valuations and stock prices, this is worth around $2.9 billion. Sure, there are funds like JF Electra and CVC International that have seen three times appreciation in their portfolios, but the majority have either gone underwater or have barely been able to keep their noses above water.
3-1.
Basic Concept of new Enterprise's Problems in INDIA

The grim reality facing India today is the twin problems of poverty and unemployment. Both these issues are intimately inter-linked. In addition to backlog of unemployment of about 100 million people, about 15-20 million people are joining the labor force every year, a large number of them are educated youth. Besides, there is also sizeable level of disguised unemployment. In the absence of well-developed infrastructure of power, transport, roads, ports, railways, telecommunications, etc. big enterprises cannot be set up on a large scale. The employment potential of big projects is extremely limited. At the same time the need for creating large scale employment opportunities can neither be over-emphasized nor delayed any more because of its social implications. The rising aspirations and expectations of the modern youth hold the potential for a violent upheaval. A viable option left to the policy makers and other concerned, therefore, is to focus attention on promoting new ventures. In addition, new ventures serve a number of economic and social objectives. They require relatively low level of capital investment per unit of output and employment, use local skills of artisans and other technically trained and educated people, meet local demand for a large variety of products and services. These can be set up in a dispersed manner, thus subserving the national objectives of industrial dispersal, development of backward and remote region and reducing urban congestion, slums and social tensions. Therefore, in the
new millennium, India desperately needs a conscious and well thought out policy, strategy and a detailed program of institutional and other assistance for promoting and facilitating the development of new ventures in the emerging scenario of globalization and liberalization of world economies. It is pertinent to mention here that new ventures play a significant role in the economies of countries- developed, developing or under-developed.

In the new millennium, globalization has thrown open vast opportunities, India and Indians can ill afford to stand aloof. All our leaders, irrespective of their political affiliations are committed to economic growth and reforms and impliedly a regime of liberalized economic policies. It has now become imperative to be internationally competitive even to survive in the domestic markets. In the given scenario, the Indian new ventures also have no choice but to go global because international competition has already arrived at our door steps. Although the winds of change have been blowing for almost a decade now, it appears that given the Indian psyche, majority of the new ventures are either unaware about the impending situation or are deliberately ignoring it; for some of the more discerning units, however, there is a 'creeping concern' about the future. In any case, ignoring globalization may not only hurt industry in the immediate future but may prove extremely harmful not only for individual ventures but also for the national economy, in the long run. There for, at the moment the question uppermost in the mind of policy makers, administrators, industrialists, experts and non-government organizations and
others concerned is whether the new ventures will be able to take up the challenges of emerging competitive environment? If yes, how best new ventures should take advantage of the enormous opportunities for expansion and growth that have been thrown open.

3-1-1. Financial Problems

Finance is as crucial to an enterprise as is blood to the human body. The requirement of finance is inevitable for setting up a new enterprise almost everywhere in the world. However, funds for setting up new enterprise has been made available more liberally to The entrepreneurs in the western world than in a developing one setting up of. Development financial institutions were meant to support new enterprises, but slowly they have started equating themselves with commercial banks in terms of stringency and rate of interest. Easy availability of credit, both in term of need and cost, is a pre-requisite of all enterprises. In India despite the government having taken several measures to expand availability of credit to small and medium enterprises through commercial banks for working capital and through term lending institutions(SIDBI,SFCetc), the problems of SMEs are far from over. Despite of all these facilities, the new enterprises have been facing major problems relating to:
1. Long term capital.
2. Working capital.
3. Long-term funds.
4. Recovery.
5. Taxation
6. Inadequate finance.

3-1-2. Administrative Problems

In this environment of competitiveness, it is essential that all the resources are put to optimal use. In this context, the Human Resources are assuming importance as optimal usage of other resources would largely depend on them. Some of the European countries have excellent vocational training and apprenticeship programs. Despite that, SMEs there have experienced both quantitative and qualitative skill shortages. Similarly, in the developing countries, skilled manpower continues to be short in supply. Lack of resources also hinder development of training program for human resource. Most of the small enterprises in India are "one man show". There is hardly any scientific management in most of small enterprises. However, awareness both at the enterprise and government levels is increasing and a number of programmers are being drawn up. There is need to evolve an integrated plan of action for upgrading the skills of the workers, supervisors and office staff of SMEs to enhance their productivity and to equip them for global competition. Also the industry associations will have to work in close collaboration and liaison with the vocational training institutions including it is to ensure that job oriented training skills are imparted to the youth. It will not only ensure
availability of right type of skills but also employability of trained manpower for the new and modernizing enterprises. As regards rural industries, it should be kept in mind that keeping in view the present situation, while a uniform education policy for importing the knowledge is ensured for all, planning for their employment in rural industries may be taken up early in their lives. By the time the rural youth reaches the middle school level, depending upon their aptitude, their vocational training in terms of familiarization and training will depend upon the attitude of the worker for hard work and, desire to progress. The following are the major problems in administrative area:

1. Lack of proper planning.
2. Poor project implementation.
3. Poor management.
4. Labor problems.
5. Inadequate capacity utilization.
6. Low level of technical skills.
7. Lack of strategies.
8. Problems of inadequate infrastructure (location, power, water, communication).

3-1-3. Marketing Problems

As regards marketing, this stands out to be the ultimate success of an enterprise. Goods produced must be sold fast because the small entrepreneur can hardly afford inventory build-up.
It is essential to recognize that sub-contracting is widely practiced in Japan and it is a major source of strength for competitiveness of Japanese industries against the American and European counterparts. About two-thirds of enterprises in Japan have been involved in sub-contracting. As opposed to this, only about 25 per cent of industries in India are involved in some kind of ancillary work, sub-contracting, its commercial application is not widespread in India.

Ancillary development in India lid gain considerable ground with the Indian government setting up of the firs' ancillary industrial estate in the country during 1970s at Bangalore through collaborative efforts of HMT as a parent company. While NSIC provided machines and equipments, the state government was responsible for developing infrastructure and sheds. The parent-child relationship between company and the ancillary units had a good impact during 60's and 70's. But it has undergone a considerable change over the tithe into a natural business relationship between the main firm and its sub-contracting component manufacturers. Smaller enterprises have grown, by and large, independently of large industrial undertakings in India but at the same time subcontracting relationships have been getting stronger wherever they are existing.

Sub-contracting is expected to emerge as a major mechanism of strategic alliance between large and small firms to make them globally competitive. This would also be a major area of opportunity for the smaller enterprises as sub-contracting will offer smaller enterprises access to improve technology and manufacturing processes as well as markets. Small enterprises
invariably seem to have better and efficient organizational features like quick decision making, focused product development, lower production costs etc., and hence are cost effective. Therefore, strategic alliance of large and small industries are mutually beneficial.

Studies have shown that the scope for sub-contracting is huge, particularly in the automobiles, electronics and several other sectors including software. In India, it has been noted that small enterprises supplying manufactured products in the open market as well as to large scale units as ancillaries continue to remain at the receiving end due to irregular payments. This seriously affects the production cycle and is one of the main reason for closure of many small enterprises. Even legislation in this matter has been of little help as the small entrepreneurs neither have time nor grit and financial capacity to wait long for payment in respect of goods supplied.

Although sub-contracting by large firms to small units is most beneficial for both, appropriate procedures, norms and code of behavior have to be devised to make sub-contracting arrangements successful. It has been found that where sub-contracting relationship between large and small enterprises is based on mutual benefit (such as Maruti, Hero Honda, Bajaj, etc) and smaller enterprises are progressing very well.

However, despite all these facilities provided by the government, smaller enterprises are facing the following marketing problems:

1. Lack of knowledge about the markets.
2. Competition from large industries.
4. Poor after sales services.
5. Distribution problems.
6. Inadequate advertising and sales promotion.
7. Poor bargaining power.
8. Unfamiliarity with export procedures and markets.

The world over transactions are shifting from shops to cyberspace. Consumers are surfing the internet compare prices across states, even across countries, and then paying online by credit cards. The cost of delivering goods to consumer’s homes is less than the cost of displaying and selling goods in shops. E-business cuts distribution costs for producers, and prices for consumers. Middleman like retail shops and agents are being squeezed out. The volume of e-trade is still a small percentage of total sales, but is growing exponentially. Companies the world over are rushing to sell through internet.

3-1-4. Production Problems

Technology and modernization of the industry particularly of the smaller enterprises is going to play a very important role. So far as the smaller enterprises are concerned till few years ago the thrust of technology policy has been on indegenisation and improved technologies through indigenous effort. But this approach is undergoing a change. The technology environment is changing very rapidly and astonishing technological changes are taking place in almost all the fields.
(i) Technology revolution: Industrial revolution ushered in the last century propelled the growth of industries backed by the inventions with far reaching consequences. The world is undergoing a technology revolution touching every human being in all walks of life. Changes are indeed so fast that a generation can see them by itself. First generation computers filled the entire big size room and it took 35 years to fit the machine on the desk. However, Desk Top TO Lap Top came in less than a decade. Similarly, fax, voice mail, electronic mail and now Internet have all come into a wide spread use in less than a decade. According to John Naisbitt (Global Paradex), telecommunications encompassing telephones, televisions, computers and consumer electronics will be the driving force and simultaneously create huge global economy and make its parts smaller and more powerful. The predictable scenario is emerging in the 21st century, whereby all the telecommunication capabilities could possibly fit on our desk, in our car, or even in the palm of our hand (e.g. Cellular phone). Obviously, information technology will drive changes just as surely as manufacturing brought changes in the industrial era. Further, the global industrial scene in the next decade is expected to undergo wide spread changes. New ventures have a formidable challenge before them to move with the changing technologies, imbibe them and make their operations efficient and globally competitive.

(ii) Indian Technology Scenario: Coming to Indian new ventures, the thrust of technology policy has been on indegenisation and development of improved technologies through indigenous R&D centers. Presently more than 8,000
products from industrial goods, consumer items, components, intermediates to many sophisticated products, both for domestic use and for export, are being produced by the smaller enterprises. Out of this, 836 items are reserved for exclusive production by the SSI sector (15 items having been deserved recently). These policies were framed on the assumption that the small scale industries apply labor intensive technologies and would manufacture economically a large volume of goods.

Despite all these facilities, the problems in production area are:

1. Storage of raw material.
2. Under utilized capacity.
3. Poor quality control.
4. Inadequate utility services.
5. Problems of outdated technology.
6. Low scale of production.
7. Lack of standardization.

3-1-5. Technology Up gradation Problems

Technology provides the cutting edge of success in a world striving to improve the quality of life through better products and services while protecting environment. The Indian small industry, which already accounts for 40 per cent of industrial output and 35 per cent of the total experts of the country, can play a far more active role in the country's economy by focusing on technology up-gradation. The need of the hour for the smaller enterprises, therefore, is to be
technology sensitive and follow a technology plan in their vision for a globally competitive enterprises. This will result in making the 'Made in India' brand a reality.

**Problems in technology acquisition and up gradation:**

3.1.6

- Lack of information on availability of relevant technologies,
- Need for a better investment climate in India,
- Non-availability of venture finance for ventures based on new technology,
- Need to strengthen indigenous technological infrastructure including R&D,
  And enterprise linkages, industrial engineering design, consultancy services, etc.

3.1.7. Technology Up gradation by Indian Small Industry

In order to fully exploit the potential and capabilities of the Indian small industry and to integrate them with world economies, there is a need for evolving integrated policies and programmes revolving around technological acquisition and modernization. A four-pronged strategy for technological upgradation of small industry is outlined below:

**1. Standards and Testing:** In order to make the small enterprise competitive and to put a pressure on its output quality, it is important that certain minimum standards are developed and adhered to. This is better achieved through self-certification. Another aspect of this is to facilitate raw
material testing for small enterprises. Often the quality of raw material is an important factor determining the final product quality. Big industries can join hand and establish a common testing facility for their vendors (like automobile manufacturers association for auto components). In argo and healthcare sector more innovative ways need to be found. Strong user groups, medical professionals and industry may set-up testing facilities for these sectors which directly affect the health of public at large. Some portion of the National labs can be converted into standardization and testing facilities laboratories e.g., National Physical Laboratory (NPL) is doing good work in material testing. Such facilities in laboratories may not be under their direct administration but can be managed by user groups or NGOs.

2. Development of Ancillarisation
* Large scale units should have an ancillary/vendor development department which can functions as a single window for smaller enterprises- for information, for orders, for payments, for assistance and also for raw material selection.
* New ventures may require loan of necessary tooling in initial production years. Manufacturing engineering items requires special tools like dies, jigs, inspection fixtures, etc., which can be provided by the mother units.
* Technical assistance is often sought by small units and for this they prefer to work with the development/engineering department of their sourcing companies. This is important and large companies should extend this support for the overall technology/quality enhancement of the final product.
* Demand for products manufactured by the large company may fluctuate. There are products with seasonal demand, wherein it is advisable to fix the inventory norms so that the small vendors and mother units each holds a pre-determined level of stock.

* The big companies can facilitate their vendors in product testing and quality assurance.

SMEs and large companies have a symbolic relationship and both are dependent on each other. Auto components sector is a reasonably good example in this field. The focus should now be made to strengthen ancillarisation in sectors like capital goods, bio-medical, advanced composites and while goods.

3-1-8. Problems in Business Through Internet

The Internet is driving down costs for transactions and distribution and reshaping the relationships of companies with their customers. The Net produce more competition among vendors and greater access to vendors by potential customers. In pre-internet days, the only way the consumers could get goods, from most manufacturers, was through distributors and resellers. Today, they can deal directly with manufacturers eager to offer their product through the Internet. Nowadays any manufacturer can provide an equivalent of their factory outlet on internet.

Gathering the required information for financial products, travel options and other consumer products requires a lot of time and effort. A multitude of service companies make their money by collecting and organizing thus kind of information for customers. Today, despite imperfect search tools,
consumers themselves can go to the Internet and find out a great lot of the information they need. Now, without having to setup branches at different places but using Internet technology, an entrepreneur can dispense valuable information to its clients including prospective clients.

The term friction-free capitalism is used to describe how the Internet is helping to create Adam Smith's ideal marketplace, in which buyers and sellers can easily find one another without loosing much time or spending much money and effort.

In most markets finding the other interested party is the first problem. The second is understanding the nature and quality of the goods and services being offered. The Internet makes it easy for a buyer to get back ground information about a product and its rating by the consumer organizations.

3-1-9. Business Lessons for Small Enterprises

* The Internet will help achieve friction-free capitalism' by putting buyer and seller in direct contact and providing more information about each other.
* As the Internet drives down the cost of transactions, the middlemen will disappear or evolve a new value addition.
* Only few business will succeed by having the lowest price, so the majority will need a strategy to include customer services.
* Enterprises taking a service approach will, arm their workers with digital information tools to connect them with customers and manage relationships.

An E-revolution has set the ball rolling in India. From shopping and chatting to trading and banking, every service and product
is at a mouse click away, and the Internet is transforming our lives.

E-commerce is no longer a luxury, but a reality staring at our face. While Delhi housewives log on to cyberspace for placing an order for vegetables, 'paans' are made available in Mumbai on the Net. And imagine farmers from Madhya Pradesh logging on to update themselves on the wholesale prices of vegetables and commodities in the region before deciding on the price for the day. The initial signs of the E-revolution are already there. Whether it is e-banking, e-shopping or e-searching for a service, you can do it sitting at home or in the office and it's all part of e-commerce. It is all about business transactions executed electronically between parties such as companies (business-to-consumer or B2C) and consumer to consumer (C2C).

For starters, e-commerce offers enormous opportunities in every sphere of business. It allows low cost trading worldwide and offers enterprises a chance to enter the global market at the right time.

3-1-10.Changing Scenario

E-commerce props up the latest buzz - "the consumer is king". He gets the choice and the best service. Consumers can drive hard bargains on the Net, as the sellers can cut on showroom costs and related supply chain expenses. Besides, the consumer can get a whole range of goods to chose from,
available through the computer screen. Companies are wiring up with stockists and transportation agents so that the rush for goods on the Net can be met.

The Wikipedia encyclopedia has a different idea in relation VCs in India, at below we bring the exactly phrases of above mentioned case:

From Wikipedia, the free encyclopedia.

Frankly speaking, there are no true venture capitalists in India. The Indian financial community is far too reserved to indulge into the "high risk-high returns" philosophy. The Indian Venture Capital Association is an organization set up by many such make-belief venture capitalists who are actually nothing more than mere investment bankers who prefer investing in already set businesses where they enjoy a far lesser risk. The Indian Venture Capital Association was set up in late 1990s to promote talent withing the Indian mainland. Indeed, a few investment were made during the internet "Straw to Gold!" days which virtually disappeared after the dot com bust.

India follows the "Sheep Herd" mentality. The whole country’s economy is based on people getting into "Profitable" domains mostly following the success of a pioneer in the field. The most recent example of this ideology is the "Business Process Outsourcing" industry. New BPO units are propping up here and there at a dime a dozen leading to a quality deterioration in the final deliverable. This process will continue till a saturation level is reached and then they will wait till another "Killer" domain picks up momentum. Till then India will be in a so called "Calm Period" where nothing great and major takes place.
VCFs in India can be categorized into the following four groups (Pandey, 1996):

1. VCFs promoted by the central (federal) government-controlled development finance institutions, such as: TDICI by ICICI; Risk Capital and Technology Finance Corporation Limited (RCTFC) by Industrial Finance Corporation of India (IFCI); AND Risk capital Fund by Industrial Development Bank of India (IDBI).

2. VCFs promoted by the state government-controlled developmental finance institutions, such as: Gujrat Venture Finance Company Limited (GVCFL) by Gujrat Industrial Investment Corporation (GIIC); and Andra Pradesh Venture Capital Limited (APVCL) by Andra Pradesh State Finance Corporation (APSF).

3. VCFs promoted by the public sector banks, such as: Canfina by Canara Bank; and SBI-Caps by State Bank of India.

4. VCFs promoted by the foreign banks or private sector companies and financial institutions, such as Indus Venture Fund, Credit Capital Venture Fund and Grindlay's India Development Fund.

In 1995, the Indian Venture Capital Association (IVCA) had 17 VCFs as its members (14 of these members have
reported information about their venture capital activities).
The growth of venture capital in India is given in Table 4.

Table 4. Growth of venture capital in India

<table>
<thead>
<tr>
<th></th>
<th>1996 (Rs million)</th>
<th>1995 (Rs million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>6729</td>
<td>5724</td>
</tr>
<tr>
<td>No. of ventures</td>
<td>(622)</td>
<td>(602)</td>
</tr>
<tr>
<td>Investment size</td>
<td>10.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Amount of funds</td>
<td>14091</td>
<td>8281</td>
</tr>
</tbody>
</table>


Note: Numbers in parentheses indicate number of projects.

We may notice from Table 4 a steady increase in the number of projects (ventures) as well as in the amount invested by VCFs. The VCFs' average investment in each venture has also increased over the years. This steady increase reflects the general trend in the venture capital industry in the country, with investors (VCFs) focusing on small- and medium-sized ventures. The total venture capital funds available for investment have also increased. In 1996, the bulk of the funding for VCFs came from the central (federal) government-controlled financial institutions (60%). Other investors included: multilateral development agencies, such as World Bank (17%); the private sector (6%); non-resident Indians (4%). Further, there are state government-
controlled financial institutions, foreign institutional investors, the public sector, insurance companies, mutual funds, other banks and even members of the public that also contribute to the capital pool of VCFs.

As regards the investment by the stages of business development, in 1996 the maximum investment (Rs 2867 million or 42%) was in the start-up stage ventures, followed by the later-stage ventures (Rs 1862 million or 29%). Turnaround ventures attracted the least amount of investment (Rs 77 million or 1%). These performances were also reflected in the number of IVCA members who invested in different stages of business development. All 14 members of IVCA who have provided full information about their business invested in start-up ventures, 10 members invested in other early-stage and 13 in later-stage ventures, six in seed-stage and only four in turnaround ventures. Out of the total venture capital investment, the largest part was invested in industrial products and machinery (Rs 1956 million or 29%), followed by consumer-related products (13%) and food processing (8%) industries. Other preferred industries for venture capital investment are computer software, services and medical equipment. This is the general pattern of venture capital investment in India over the past few years (Table 5).
### Table 5: Venture financing by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>1996</th>
<th></th>
<th>1995</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs million</td>
<td>Number</td>
<td>Rs million</td>
<td>Number</td>
</tr>
<tr>
<td>Industrial products</td>
<td>1956</td>
<td>184</td>
<td>1634.79</td>
<td>169</td>
</tr>
<tr>
<td>Consumer products</td>
<td>914</td>
<td>51</td>
<td>572.43</td>
<td>48</td>
</tr>
<tr>
<td>Food processing</td>
<td>524</td>
<td>51</td>
<td>472.46</td>
<td>50</td>
</tr>
<tr>
<td>Medical</td>
<td>443</td>
<td>39</td>
<td>406.49</td>
<td>40</td>
</tr>
<tr>
<td>Computer software</td>
<td>481</td>
<td>58</td>
<td>404.95</td>
<td>53</td>
</tr>
<tr>
<td>Other electronics</td>
<td>339</td>
<td>40</td>
<td>304.10</td>
<td>38</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>323</td>
<td>28</td>
<td>256.22</td>
<td>24</td>
</tr>
<tr>
<td>Computer hardware</td>
<td>258</td>
<td>28</td>
<td>184.27</td>
<td>24</td>
</tr>
<tr>
<td>Tel&amp; communication</td>
<td>212</td>
<td>13</td>
<td>183.83</td>
<td>12</td>
</tr>
<tr>
<td>Energy related products</td>
<td>209</td>
<td>18</td>
<td>130.36</td>
<td>16</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1070</td>
<td>112</td>
<td>1174.65</td>
<td>128</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6729</td>
<td>622</td>
<td>5724.55</td>
<td>602</td>
</tr>
</tbody>
</table>

Source: IVCA, The Indian Venture Capital Activity Report, 1995

One case study has done by I.M. Pandey which discuss the process of developing venture capital activity in India. For the case study, he has selected the Technology Development and Information Company of India (TDICI). TDICI, sponsored by a development financial institution (DFI), the Industrial Credit and Investment Corporation of India (ICICI), is the largest venture capital company in India. The case is analyzed on the basis of data and information obtained from the company reports, brochures, and extensive interviews with the executives of TDICI. This study gives an appropriate pattern to developing countries in establishing venture capital investment.
institution with its natural obligations, by elaborating internal impetus, initiatives and constraints, organizational focus and internal structure, business planning and strategy for sustaining venture capital.

3-2-1. Venture Capital Development Process At TDICI

In the era of economic liberalization in Indian industry which started in 1980s, innovations in financial products and services were introduced to support the resulting growth in the industrial sector. Venture capital was one such financial innovation, and TDICI, a unique institutional initiative to deliver venture capital to Indian businesses, was established in this context.

ICICI is a large development finance company in India. It has government, commercial banks, and domestic and foreign institutions and individuals as its shareholders. It has grown under a private sector ambience, though the majority of its shares are held by the government-owned banks and financial intuitions. Around 1983-84 ICICI was toying with the idea of setting up a venture capital fund. It did some background work, particularly studding the way in which venture capital operates. The idea took shape only in 1985 when the new central (federal) government came into power and started liberalizing the economy. In 1986, a venture capital division was setup within ICICI. The activity started in the form of a division with one or two people, headed by a president. It took ICICI quite some time to get off the ground. The ICICI management was looking for small- and medium-sized
businesses having an investment of Rs 1-3 million. ICICI only had experience of dealing with medium-to large-sized companies and not SSEs (small-scale enterprises). Thus, management did not have any idea about small-size businesses or how to approach the entrepreneurs of small and medium sized firms and convince them about the importance of venture capital financing. Further, in India, at the time when ICICI started its venture capital division, investing in company shares was not a very popular mode of industrial finance. Loans were available from many government-sponsored institutions (state finance corporations, Industrial development corporations, commercial banks, etc.), and equity was not a widely prevalent and favored type of investment. Thus, there was initial resistance from business-owners to the idea of equity participation by the providers of venture capital. The dept-equity rations of small, medium and large firms were very high. Also, ICICI did not have experience of getting out of equity investments made in SSEs. A secondary market for small companies did not exist. The listing requirements was a minimum share capital of Rs 10 million, which many small enterprises could not afford. Certain development finance institutions, with the support of the government, were thinking of starting an over-the counter (OTC) exchange. When the idea took shape, the listing requirement was raised to Rs 30 million. So it became very difficult for ICICI's venture capital division to invest in the listed SSEs. Further, the pricing of equity shares was controlled by the Controller of Capital Issues (CCI), even in the case of private limited companies. Thus, the over-all environment was not very supportive to the concept of
equity investment. Furthermore, the internal problems of ICICI created constraints for the operation of venture capital. It clearly had a development banking bias. ICICI was charging interest at 14% on its lending, and in structuring their venture capital deals this was taken as the basis and 4-6% more added for assuming higher risk. Thus, the venture capital division's expectation was to earn a return of 18-20% from its investment in SSEs. Unless the venture capital division of ICICI obtained this return in the form of capital gains, venture capital would be considered by business-owners as an expensive method of finance. In spite of these difficulties, ICICI took on venture capital business on an experimental basis and hoped to get out quickly. In the process, the ICICI's venture capital division learnt the operation of the venture capital business and made experiments vis-a-vis the methods of venture financing and popularizing the generic concept of venture capital in India. Designing of new instruments, trying to understand the market and products of venture firms, and convincing entrepreneurs about venture capital financing (in the form of equity financing), were the tasks in the initial stages of developing venture capital activity by ICICI. In fact, it took ICICI quite some time to understand the operating mechanics of the venture capital business.

The venture capital division of ICICI went for a number of non-equity instruments for venture financing because of the low popularity of equity financing. They devised an innovative instrument which was quite actively used for the first 2-3 years, called a *conditional loan*. A conditional loan was repayable in the form of a royalty after the venture generated
sales. No interest is paid on such loans. Rather, a royalty at a rate ranging from 2 to 15% on sales is charged. Over a period, the ICICI venture capital division (and later on TDICI) management realized that the conditional loan was not an ideal instrument for supporting venture capital. The major problems were the high cost of the loan for companies generating high sales, difficulties in administering the scheme (particularly ascertaining the sales volume to determine the amount of the royalty), no or minority ownership of TDICI since a conditional loan is a subordinate finance instrument, and low return since there was no possibility of making capital gains on conditional loans.

One important thing that happened during 1988 was that the ICICI chairman talked to the chiefs of a number of public and private sector R&D organizations about technology financing. He found that financing of technology ventures in India needed a focused attention with a long-term investment perspective, and therefore, there was a need to create a separate technology financing company. TDICI was promoted by ICICI along with Unit Trust of India (UTI) in 1988. ICICI is among the more prominent development banks in India, with assets in excess of Rs 183 billion (as on 31 March 31 1995) and over 3000 industrial companies in its loan portfolio. ICICI pioneered several innovations in the Indian financial marketplace, such as the creation of the first credit rating company, the first screen-based stock market and the first venture capital company. UTI is the largest mutual fund in the country with 38 million investors and funds under management of over Rs 517 billion. Through its savings products and funds management,
UTI has catalyzed the flow of retail home savings into India corporate equity. As an asset management company, TDICI raises funds from a variety of domestic and international investors and deploys them primarily in high risk, unlisted companies that do not otherwise have easy access to public sources of debt or equity capital.

TDICI, just after its creation, devoted considerable time to developing its own business plan. It was decided to raise an initial capital of Rs. 200 million. The top management of TDICI also decided that it would invest only in technology-oriented small ventures as well as provide them with technology information. Thus, the twin objectives of TDICI were: financing of technology and providing technology information to small- and medium-sized enterprises. It was a strategic move to involve UTI as a co-investor in the creation of TDICI. It was involved for obtaining tax benefits since UTI as a mutual fund enjoyed tax exemption on its income, and venture capital businesses (at that time) had no tax exemption. TDICI’s first fund was a closed-end fund with 10 years maturity.

TDICI organized itself into two groups for decision-making purposes: electronics and computers (representing 30% of the total business) and non-electronics (bio-tech, health, food processing, energy etc.). The groups were headed by managers designated either as vice-president or assistant vice-president. Under each group manager, there were project executives. TDICI made it clear to its managers that it was not a growing organization and therefore, mobility to the upper echelons was slow. TDICI visualized that managerial power in venture capital was not represented in terms of hierarchical
position but in terms of the nature and significance of the work an incumbent did and, of course, the money he/she makes. In order to keep the managers within the organization, they were allowed a lot of freedom. TDICI later introduced a profit-sharing scheme for its employees.

TDICI management realized that the nature of its business required its executives to have a general management perspective as well as a specialized knowledge of venture financing. Therefore, it recruited professionally qualified young executives with CA (charactered accountancy) or MBA degrees from the well-known management institutes in India. The theoretical knowledge of the executives was supplemented by on-the-job, in-house training. They were trained in understanding the organization philosophy as well as the techniques of venture financing. They were told what was expected of them when they were sitting on the boards of the assisted companies. TDICI always thought that venture capital also was a highly entrepreneurial job. Executives have to go to the marketplaces to identify good ventures. They have to develop businesses and ensure that these businesses succeed.

TDICI designed a simple and unique decision-making system. At the operating level, a lot of discussion was allowed to take place on the ventures. The president has the power to veto any proposal but he does not have the power to force a decision. This means that decisions considered bad at various levels were not accepted, but some decisions may be vetoed by the president. Since TDICI expected most of its profits to come from a few highly successful ventures, the management,
from the very beginning, has been very cautious in selecting ventures.

At the core of TDICI's business philosophy is the quest for creating extraordinary value from small ventures. It started identifying investment opportunities at an early stage and supporting them with capital in the form of equity and loan. Each deal was structured in such a way that it provided equitable sharing of risk and reward between the venture owner and TDICI. It also provided continuous managerial support and later-stage financing depending on the merit of each case.

TDICI adapted the following structured approach to search for investment opportunities:

* identification of industries in high-growth and profitable sectors which could exploit the comparative advantages of the economy in a global context; and

* taking advantage of the powerful business development network to locate and pursue those enterprises that are well positioned to emerge as leaders in these industries.

As regards investment evaluation, TDICI, from the very beginning focused on the quality of the entrepreneur. It collected information about the competence of the promoter or entrepreneur from various sources. It also looked at their business plans closely to ascertain the characteristics of market, product and technology. One common feature with regard to the investment evolution criteria of VCFs in India and other developed countries is that all of them focus their top attention to the entrepreneur's personality and experience (Pandey, 1996). However, in terms of the specific traits of the
entrepreneur’s personality and experience, the Indian practice as reflected in the TDICI experience, differed significantly from that in the USA, Singapore and Japan. For example, amongst the five criteria most frequently rated as essential in the USA, Singapore and Japan, the entrepreneur’s characteristics included sustained intense efforts, familiarity with target market, and ability to evaluate and handle risk well (Macmillan et al., 1985; Ray, 1991; Ray and Turpin, 1993). TDICI considered the entrepreneur’s competence, integrity and honesty as the most important evaluation criteria.

TDICI believed that companies were only as good as the management team behind them. Accordingly, its business was targeted at venture teams that possessed the managerial bandwidth to compete and excel in the global marketplace. TDICI preferred to invest in innovative business ideas. However, TDICI also recognized that in the emerging Indian economy, there were numerous businesses delivering traditional products and services that could develop into high growth business opportunities. TDICI thus decided to invest in such traditional businesses that possessed a sustainable competitive edge.

As a successful early-stage private equity investor, TDICI’s primary focus has been on small-and medium-sized unlisted companies with exceptional growth and capital appreciation potential. These included start-up companies with 1-3 years of revenue record that required growth financing and those companies which were close to initial public offerings (IPO). TDICI also participate selectively in some IPOs that had the risk and capital appreciation profile of typical
venture capital investments. Such offerings were often due to premature public floatation of shares by Indian companies, taking advantage of certain regulatory provisions. As a rule, investments were largely confined to those companies where TDICI was in a position to play the role of a significant financial stakeholder and an influential partner.

TDICI had its initial focus on technological investment and this bias continued for about 1-2 years. This perhaps helped in financing new technologies, but the investments were not profitable. To some extent, TDICI's commercial approach to investment was secondary to technology. In 1988, when TDICI's then president visited the USA, the venture capitalists there asked him about TDICI's primary objectives. They asked if TDICI's primary objective was merely financing technology or making money. This obliged TDICI's management to reassess its business focus and learn how to do business differently.

TDICI started looking at investments as an investor, and in the process it was also able to support technologies. Investors investing in VCFs look for an adequate rate of return. Thus, there was pressure on TDICI to invest in profitable ventures and not to allocate funds merely for the sake of technology. If there were opportunities in the marketplace for supporting technological businesses, TDICI would, in any case, enter those businesses, but if the market did not support the technological innovations, TDICI would not fund it. Through experience, TDICI learnt how to refocus its investment policy. It has a clear focus now, a niche: it invests in those small-and medium-sized companies, new or existing,
which have a high growth and profitability potential and will be able to raise funds from the financial institutions or go public after some time. What were the reasons for the shifting of TDICI's investment focus from purely technology financing to venture financing? They were as follows:

* There is not much Research and Development (R&D) taking place in the large organized sector companies in India. Some process improvement and up-gradation is, of course, taking place, but no product breakthroughs are forthcoming. TDICI initially had discussions with organizations like the Indian Space and Research Organization (ISRO) but, unfortunately, it could not support businesses emanating from the technology development of these organizations. Further, TDICI found that there was a lack of trust between industry and R&D organizations. There was no market-driven compulsion for the industry to approach the research organizations. Thus, from its experiences, TDICI found that if it defined its business as technology finance, there were lots of problems in identifying potential high-growth, high-profit technology businesses. It did not get enough business because it had a narrow focus and was losing good opportunities because of its technology focus.

* Another major problem was the high risk of technology-based innovative ventures, the practical difficulties in assessing the degree of risk and incorporating it in the rate of return objective of TDICI.

TDICI management thought that it had to think of its own profitability rather than simply promoting technology. Hence, it was not prepared to take high risks all the time by investing only in technology-based ventures (without a track record).
From experience, the TDICI management found that its investments had a success rate of about 15%, in spite of a thorough appraisal of ventures before investment.

TDICI always had the alternative of investing its funds in the new issues of shares of existing companies. It could invest in the shares of highly profitable companies owned or started by well-established business groups. So TDICI could realize high profitability and its risk profile could be low. However, TDICI restricted its investment in such companies to 25% of its total investment. TDICI could also easily get profitable business if it decided to act as a merchant bank (being an associate of ICICI) but that was never its mission.

Under its first fund TDICI invested in 42 ventures. It considered three ventures as winners (highly successful), one probable winner (reasonably successful), 18 probable losers and 14 losers. Four ventures have returned the full capital invested by TDICI. TDICI’s own diagnosis indicated that more than one factor was responsible for the failure of the ventures. Management failure was the most dominant cause, followed by marketing, technology and finance problems. In the case of winners, it was found that management alone was not the cause of success, and market, technology and environment, together with management, were all responsible for it.

When TDICI was established in India, venture capital was a new concept, and most entrepreneurs thought that it was another form of institutional industrial finance. Therefore, TDICI undertook the responsibility of popularizing the generic concept of venture capital in India. It adopted a three-pronged strategy: it conducted workshops and seminars, involving
commerce and trade associations like CII (Confederation of Indian Industries), in various cities to educate entrepreneurs about venture capital; it created an international database of scientific and technological developments, and offered a technological information service to entrepreneurs; and it published a monthly magazine containing information about development in venture capital financing, and distributed it free to entrepreneurs.

Once having educated entrepreneurs about the utility of venture capital and provided venture capital to some of them, TDICI's concern was how to keep venture capital financing attractive to entrepreneurs on a continuous basis. From the very beginning of its inception, TDICI thought of developing a specialization in terms of creating value-added services. Therefore, it attached a lot of importance to helping entrepreneurs in preparing business plan, developing markets, providing managerial support and advice, monitoring and follow-up of assisted ventures to give useful feedback to entrepreneurs, arranging IPO etc. At the implementation stage, it would monitor and assist in the physical and financial progress of the project. TDICI took special care in the market development of its clients' products. It provided help even in obtaining potential market contacts for the clients. TDICI executives provided the basic management support services, both internally by participating in the Board meetings in their capacity as nominees, and externally by establishing associations with various organizations and agencies for the benefit of client companies.
TDICI also provided help to its assisted firms in identifying key resource managerial persons. For instance, in one venture an entrepreneur was technically proficient, but lacked marketing skills. TDICI nominated a marketing expert as director in the entrepreneur's firm. Similarly, in another company a TDICI financial executive was deputized to advise and guide the venture promoter on financial matters. In some other ventures even technical experts were appointed to catalyze the market and product development activities. TDICI drew resource personnel from academia, industry and other sectors and deputized them in the assisted firms with the assent of the entrepreneurs.

TDICI, over the years, institutionalized the process of understanding the problems of entrepreneurs and providing them with the required managerial assistance and advice. It periodically met entrepreneurs to understand their problems through direct feedback. For example, it organized meetings of owners of assisted companies in order to ascertain technical, marketing, managerial or financial problems they faced, and to explore ways to improve its interaction with them. Such meetings helped to build a mutual confidence, dispel mistrust and generate several valuable suggestions for TDICI for doing its own business better.

**Conclusion: A Venture Capital Development Model 3-2-2.**

The detailed case analysis of TDICI reveals that the following steps are involved in the process of developing venture capital activity in India – a developing country:
(1) **Impetus.** Positive policy initiatives providing an impetus for initiating venture capital activity and the catalytic and development role played by one or a few venture capital firms.

(2) **Internal context.** Identifying a committed and professionally competent management team that is dedicated to building the venture capital business, creating simple decision-making structure, and providing managers with operating freedom and an environment that is free from bureaucracy.

(3) **External context.** Designing innovative funding and financing mechanisms to confirm with the environmental compulsions, and modifying them as the environment changes.

(4) **Sustainability.** Developing value-added services and help systems that create specialization to sustain the venture capital activity.

### 1. Criticality of initial impetus and vision

The initial impetus for the development of venture capital in India was provided by the government initiative to create a venture capital fund in 1985 to be administered by IDBI (Industrial Development Bank of India). In 1988, the government issued guidelines for the establishment and functioning of venture capital funds. Later on, tax incentives were given to venture capital investors. The chief executive of ICICI was quick to grab this opportunity and envision the role of venture capital in the development of the high-risk or high-tech entrepreneurship. He created an innovative organization which was not only to perform the role of providing venture
finance, management support and technology information, but also to set standards for the development of the concept of venture capital in India. The chairman ensured that he put up a management team that was committed and keen to learn the business of venture capital, take challenges and introduce innovations.

2. Internal Context: business development as an unfolding process

The process of developing venture capital at TDICI was not very systematic and formal. It was an unfolding process based on learning on the job. The organization went through the initial constraint of not knowing the business of venture capital very well. The operating experience of the ICICI's chief as well as of the venture capital business team that he created was confined to the fields of commercial and development banking, which historically needed a conservative business approach. Venture capital business, on the other hand, needed a risk-taking approach. The experience of the ICICI venture capital division in the beginning was that, as a part of a large organization (i.e. ICICI), decision-making was slow, conservative and security-oriented. The management realized that for risk-taking and faster decision making, they needed a simple structure independent of the parent organization and its bureaucratic style, a professionally qualified management team and operating freedom for managers. TDICI put a lot of weight on human resource development and operated with a highly professional, but small, staff. In spite of creating a simple structure and recruiting highly professional staff, TDICI
faced problems with fund mobilization, generating deal flows, retaining experienced employees etc. This paved the way for redefining the methods of doing business.

3. Internal Context: learning through experiences and experimentation

Initially, TDICI focused its investment on the high technology businesses. In due time, it deviated from its original objective of patronizing frontier technologies. It realized, through its experience of low rate of high-tech deal flows and unprofitable businesses, that it was more appropriate to finance potentially high-growth, high-profit businesses and not just high-tech businesses, given the Indian business conditions and low rate of technological and R&D development. It realized that profitable high-tech businesses would, in any case, be financed. It started increasingly investing in growth companies to minimize investment risk. A similar pattern can be witnessed in developed countries like the USA (Bygrave and Timmons, 1992). TDICI, over the years, evolved a strategy of primarily focusing on small- and medium-sized, unlisted companies with exceptional growth and capital appreciation potential. However, it continued with its initial strategy of considering investment in innovative and technology-oriented companies which offered scope for high growth and returns. It has invested its funds across a wide spectrum of industries and across companies at various stages of growth.
4. External Context: developing unique funding and financing mechanisms

Venture capital is essentially an equity or quasi-equity financing. Equity investment was not very popular in India when TDICI was founded. It developed unique methods of financing: conditional loan and income notes. These were not ideal methods of financing high-risk businesses as they posed the problems of implementation, but they did help in establishing venture capital activity in India. As soon as the concept of venture capital was established and entrepreneurs started realizing the need for equity financing, TDICI shifted to equity or quasi-equity financing.

TDICI also faced problems in raising capital. In developing countries like India, equity investment, particularly in the eighties, was not very popular. High tax rates in these countries also deterred equity investment. It was difficult to raise equity funds from the individual and institutional investors. Institutional investors such as banks, insurance companies, pension funds and mutual funds in these countries, including India, were mostly owned or controlled by the government. Unlike in developed countries, venture capital funds from sources like insurance companies, pension funds and corporate investors were absent in India. For example, in the USA, pension funds provide more than one-third of the venture capital while the role of the government is quite negligible (Bygrave and Timmons, 1992). It was a great challenge for TDICI to mobilize venture capital funds. The ICICI chief played a pivotal role in designing a unique tax-exempt initial fund by roping in UTI-a non-tax paying,
government-owned mutual fund as an investor. The success of its first fund attracted many other institutional investors later on.

5. Sustaining venture capital

At TDICI, a closer link with the assisted firms was part of the strategy of ensuring the success of venture capital. It involved itself, without interference, in the management of the assisted firms. Its role included help in planning and budgeting, strategy formulation, environment scanning, marketing strategy formulation, recruitment of professionals, etc. Thus TDICI considered value-added services, in addition to financing, as a sine qua non of the success of venture capital activities. It acted as complementary to the entrepreneurs or promoters. On the basis of its experiences of dealing with a variety of ventures and its affiliation with ICICI, TDICI advised venture promoters on various managerial aspects such as project planning, monitoring, financial management, arrangement for working capital, public issues etc. Also, they helped their assisted companies in finding resource persons for different management functions.