# Globalisation & Indian Venture Capital System

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*Though the modern concept of venture capital started in USA with the formation of American Research & Development Corporation in the year 1946 by Gen. Georges Doriot, a French-born military man who is generally considered as "the father of modern venture capital"; the concept of venture capital has been successfully transplanted (either in the original form or in variation) to almost all parts of the world over a period of 50 years. Presently venture capital industry became an integral part of the financial sector on par with the conventional financial institutions in many of the countries because of its ability to promote entrepreneurial advancement and developing the economy in a manifold way. The impact of globalisation around the world helped the venture capital industry to move further ahead. The benefits of venture capital financing can be seen in many advanced countries in the form of large scale industrial development, increased employment opportunities, higher turn over as well as revenue generation to the government, more and more investments in research and development, and also manifold increase in export of goods and services. This being the case Asia Pacific region occupies only third position on a global scale after North America and Western Europe. The market leader in Asia Pacific region is Japan and India is in the 12th position. The growth and development of venture capital activities during the last 7 years indicates a gradual slow down, but the venture capital players anticipate the possibility of a bright future. This trend is applicable to India also.*

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**Introduction**

As it is well-established fact that the modern concept of venture capital originated in USA in the year 1946, in many parts of the world similar financing practices were being practiced much before 1946. This dates back to the time of great explorers. The reason for the success of all such explorations around the world became a reality only because of the financing done by some people (ancient venture capitalist's) to those explorers. In the year 1492 Christopher Columbus had a vision of exploring new continent America and his vision became a reality when Queen Elizabeth of Spain identified the potentiality of this venture and financed. This is only one such example of ancient venture capital financing.

In the year 1946 this concept was formally recognised in the USA (as they were the market leader at that time) and it was termed as modern concept of venture capital. Venture capital is a special type of finance available; to new and innovative novel ventures or ventures having untried technology or ventures having high growth potentiality with high-risk involvement; in the form of mainly equity (sometimes quasi equity or conditional debt) to those entrepreneurs who are having the technical or professional qualifications for starting up the venture and also efficiently managing the venture. These 'would be' entrepreneurs organizes all other required resources with the help of the venture capital raised and makes the potential business idea pass through different stages of business cycle; as all businesses have a 'life cycle' which involve stage of growth and development, which can be broadly categorized into two; viz.; early stages and later stages. If the idea passes through these stages successfully, one can see the birth of emerging successful enterprises, which in turn leads to the development of the economy. This happens only if the intangible ideas of entrepreneurs are financed with tangible money by the venture capitalists in the form of venture capital, which Megginson (1999) identifies as value addition process. This in turn results in more than proportionate share in increase in well-paid and highly skilled jobs, this was identified by Nuechterlein (2003). Thus Tudini (2004) argues that the only alternative to self-financing development phase of any business venture is venture capital. Presently almost over 60 players are there in the global venture capital arena. According to Bruton (2002), the modern concept of venture capital started in the United States in the year 1946 and expanded there to Europe during 1980's and later to Asia to become a worldwide industry. Koh and Koh (2000) suggest that the success of Silicon Valley has fuelled the growth of venture capital industry around the world.

**Table – 1** given below clearly explains the presence of venture capital activities on a global scale. During the last six years from 1997 to 2003, almost 90% of the venture capital is raised as well as invested by North America and Western Europe. Among the two regions from North America, USA alone accounts for 62% of the amount raised as well as amount invested during 2002. The second player is UK, which accounts for 10% of the amount raised and 15% of the amount invested. The share of Asia is only 6% in the case of the amount of venture capital raised and 11% with respect to venture capital investment.

**Table - 1**
**Global Venture Capital Players**

| # | Regions | % Share [ Raised @ / Invested @@ ] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| 1 | **North America [2]** USA, Canada | 69% [70%] | 72% [68%] | 67% [73%] | 69% [71%] | 67% [60%] | 61% [59%] | 55% [68%] |
| 2 | **Europe [29]** UK, Germany, France, Italy, Sweden, Netherlands, Spain, Belgium, Denmark, Austria, Finland, Greece, Iceland, Ireland, Norway, Portugal, Switzerland, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Slovenia, Croatia. | 21% [18%] | 13% [26%] | 19% [18%] | 22% [19%] | 26% [26%] | 35% [30%] | 33% [21%] |
| 3 | **Asia Pacific [18]** Japan, South Korea, Hong Kong, China, Australia, India, Singapore, Taiwan, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam, Myanmar, New Zealand, Bangladesh | 5% [8%] | 6% [5%] | 11% [6%] | 7% [6%] | 6% [10%] | 3% [8%] | 4% [11%] |
| 4 | **Middle East & Africa [4]** Israel, South Africa, Kenya, Nigeria.( * Approximate Figures) | 1.5% [1.5%] | 3% [0.5%] | 1.5% [1%] | 1% [2%] | 0.5% [2%] | 0.5% [1%] | 4% * [-nil-] |
| 5 | **Central & South America [7]** Argentina, Brazil, Chile, Mexico, Costa Rica, Colombia, Venezuela (* Approximate Figures) | 3.5% [2.5%] | 6% [0.5%] | 1.5% [2%] | 1% [2%] | 0.5% [2%] | 0.5% [1%] | 4% * [-nil-] |

Source : Compiled from Global Private Equity 2000, 2001, 2002, 2003, & 2004; '***A Review of the Global Private Equity and Venture Capital Markets***', Survey conducted by Price Waterhouse Coopers & 3i.

@ Share of Venture Capital Raised (**shown in Bold**)

@@ Share of Venture Capital Invested (**Shown in Square brackets** )

* Due to non availability of accurate information, approximate figures are shown

The share of India during 2002 and the position in relation to others is given in **Table- 2**.

**Table - 2 Top 20 Players [% share in 2002]**

| Rank | Countries | UR | Raised | Invested | Rank | Countries | UR | Raised | Invested |
|---|---|---|---|---|---|---|---|---|---|
| 1 | USA | 114.2 | 62.38 | 61.45 | 11 | Australia | 576.2 | 0.24 | 1.19 |
| 2 | UK | 71.4 | 15.25 | 9.39 | 12 | India | 656.3 | 0.18 | 1.03 |
| 3 | France | 121.8 | 5.16 | 5.42 | 13 | Israel | 86.0 | 1.30 | 0.96 |
| 4 | Italy | 131.2 | 2.15 | 2.43 | 14 | Spain | 153.3 | 0.68 | 0.90 |
| 5 | Japan | 330.6 | 0.82 | 2.33 | 15 | Hong Kong | 136.4 | 0.66 | 0.74 |
| 6 | Germany | 152.9 | 1.76 | 2.32 | 16 | Indonesia | n.a | n.a | 0.55 |
| 7 | South Korea | 541.7 | 0.41 | 1.91 | 17 | Finland | 63.2 | 0.77 | 0.42 |
| 8 | Netherlands | 144.3 | 1.28 | 1.60 | 18 | South Africa | 462.5 | 0.09 | 0.36 |
| 9 | Canada | 75.9 | 2.35 | 1.54 | 19 | China | 109.4 | 0.36 | 0.34 |
| 10 | Sweden | 227.9 | 0.69 | 1.36 | 20 | Belgium | 283.3 | 0.14 | 0.33 |

Source : Compiled from Global Private Equity 2000, 2001, 2002, & 2003; '***A Review of the Global Private Equity and Venture Capital Markets***', Survey conducted by Price Waterhouse Coopers & 3i.

UR: Utilisation Rate = Amount Invested / Amount Raised

India ranks 12th on global scale and the share of venture capital amount raised during 2002 is only 0.18% (0.16 billion $) but the amount of investment is 1.03% (1.05 billion $). Though it looks very negligible in terms of the amount raised, the percentage utilisation is almost equal to 656% during 2002. This clearly indicates the favourable investment climate in India. This is much more than the global utilisation rate (117%) and Asia Pacific region utilisation rate (303%) for the same period (**Table – 4**). The significance of investment climate in India is discussed in detail in the subsequent sections.

Thus it indicates that venture capitalists has a greater role to play when it comes to the development of economy while giving financial assistance in the form of venture capital to the development and growth of new ventures promoted by entrepreneurs, which has been proven by the studies conducted by venture capital associations from countries like USA (NVCA), UK (BVCA), Europe (EVCA), Canada (CVCA), and Australia (AVCAL). Venture capital associations from other countries are in the process of conducting similar studies to find out the exact nature of the economic impact of venture capital. Hisrich and Peters (2001) considers this as the process of bridging the gap between science and market place. Summary information of the study conducted during the period 1991–1996 by the above mentioned associations are shown in **Table – 3**, which give a comparative analysis of economic indicators.

**Table - 3**
**Economic Impact of Venture Capital**
**(Percentage Growth Rate of Economic Indicators During 1991 to 1996)**

| Regions / Countries (Year of Origin) | USA (1946) | UK (1947) | Canada (1962) | Australia (1984) | Europe (1980's) |
|---|---|---|---|---|---|
| **Employment** | | | | | |
| Venture Backed | 34% | 15% | 26% | 20% | 15% |
| Non-Venture Backed | – 3.6% | – 1% | 8.8% | 2% | n.a |
| **Turnover / Revenue** | | | | | |
| Venture Backed | 38% | 34% | 14% | 42% | 35% |
| Non-Venture Backed | 3.5% | 6.8% | n.a | 6% | n.a |
| **Exports** | | | | | |
| Venture Backed | 36% | 29% | 34% | 27% | 30% |
| Non-Venture Backed | n.a | n.a | n.a | n.a | n.a |
| **R&D Investment** | | | | | |
| Venture Backed | 33% | 28% | 40% | n.a | 25% |
| Non-Venture Backed | 12% | n.a | n.a | n.a | n.a |

Source : Compiled from the informations available in the Reports published in the year 1996 by NVCA, BVCA, CVCA, AVCAL, and EVCA on 'Economic Impact of Venture Capital'.

As it is said that an economy moves from a lower level to a higher level only if some development activities takes place in the economy by way of starting up of new business ventures. This happens when the need for product / services are felt by entrepreneurs and this need (demand) is fulfilled when the newly created ventures start manufacturing their output (supply) and bringing it to the market place. At this stage the process of bridging the gap between science and market place takes place, this is the basic process of economic development. If this process goes on (of course with the assistance from venture capitalists), gradually the economy moves towards a higher level of development.

Though in the preceding section an over view of the global venture capital activities are discussed, one has to get some basic idea of the concept of venture capital and how it differs from the new derivative of venture capital, viz., private equity. This classification developed by Mark (2001) was further modified and given in **Figure – 1** below explains both venture capital and private equity, only difference between these two lies in the stages of financing adopted when venture capital financing is because of the fact that the risk element associated with the business ventures falling under this category is medium – low – very low, and also the expected returns comes to only 20–30%. But in the early stage financing, the risk element is high – very high – extremely high, and the return varies from 30 to 60%. Thus the two terms are used interchangeably by most of the venture capital associations.

The second most important global player, viz., Europe, considers early stage and a part of later stage financing; viz., expansion stage as venture capital financing. This makes it necessary to consider both early and later stage financing as venture capital financing. Thus in Europe, both the terms venture capital and private equity financing is used interchangeably.

But in Asia Pacific region (the third major global player) consists of more than 18 countries, no such differentiation is made. Both stages of financing is considered as venture capital financing provided the business venture is not a listed company in any stock exchange.

**Figure - 1**

**Venture Capital Vs Private Equity**

Staged of Venture Capital Financing

1. Early Stage
   a. Seed Stage
   b. Start up stage
   **Venture Capital in US**

2. Later Stage
   a. Expansion
   b. Mezzanine
   c. Buy-outs / Buy-ins
   **Non-Venture capital in US**

**In Europe, 1 (a & b) and 2 (a) comes under *Venture Capital***

2 (b & c ) comes under *Non-Venture Capital.*

As a whole it is considered as *Private Equity*

capitalist's (VC's) decides about financing a business venture.

In the US, only the early stage financing is considered as *venture capital*. Later stage financing is considered as *non-venture capital* financing. But both types put together is termed as *'Private Equity'*. The rationale behind not considering later stage financing as venture

In other regions like Middle East & Africa and Central & South America, venture capital includes both types of investment stages. No demarcation is made between venture capital and private equity.

Thus it is clear that between venture capital and private equity there exists no major difference other than the stages of investments financed by the venture capitalists.

It is the type of equity or quasi-equity investments in (generally) *unlisted* business ventures having high growth potentiality to become a successful enterprise. Since these business ventures are not listed in any of the stock exchanges, their securities (mainly in the form of equity / quasi-equity) can be traded only privately, hence the name private equity.

These would be successful business ventures require various types of timely assistance, of which one is in the form of venture capital financing. This is mainly provided by the venture capitalists, a specialist in identifying the potential business ventures. **Annexure - 1** developed by Subhash (2003) give a comprehensive idea about venture capital. This is based on the assumption that venture capital assistance follows the pattern of the life cycle of the business one after the other till the final stage where the business idea fruitions in to an enterprise. From the inception till the initial public offering, venture capitalist goes hand in hand with the entrepreneur turned owner of the enterprise. This is because unlike any other financing, venture capitalists performs one additional task known as 'Value Addition' wherein they actively take part in the management by contributing their business experience and industry knowledge from their earlier participation with earlier entrepreneurial ideas in the young and start-up companies. This includes various guidance and advises in the areas of marketing, management recruitment, financial advise, contacts, and strategic direction.

## 2. Present Status: Global Scenario

From **Table – 1** it is clear that the market leader in global venture capital industry is North America (USA & Canada), followed by Western Europe and Asia Pacific regions, **Table – 4** gives a full picture of the venture capital investment activities during 1997 – 2003 on a global scale.

**Table – 4**

**Global Venture Capital Activity**

**[ US $ Billion ]**

| Regions | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|
| **North America** | | | | | | | |
| Utilisation Rate - | 55% | 66% | 116% | 84% | 56% | 113% | 239% |
| Balance Fund - | + 33.3 | + 32.4 | - 16.5 | + 28.5 | + 51.5 | - 7.5 | - 62.9 |
| **Western Europe** | | | | | | | |
| Utilisation Rate - | 48% | 414% | 99% | 73% | 61% | 100% | 120% |
| Balance Fund - | + 11.7 | - 6.9 | + 0.4 | + 15.3 | + 18.4 | - 0.1 | - 5.4 |
| **Asia Pacific** | | | | | | | |
| Utilisation Rate - | 78% | 66% | 55% | 69% | 113% | 303% | 530% |
| Balance Fund - | + 1.3 | + 2.5 | + 7.5 | + 5.6 | - 1.3 | - 6.1 | - 14.2 |
| **Middle East & Africa (*)** | | | | | | | |
| Utilisation Rate - | 56% | 13% | 74% | 165% | 224% | 440% | 0% |
| Balance Fund - | + 0.7 | + 3.5 | + 0.6 | - 1.7 | - 1.3 | - 1.3 | + 2.5 |
| **Central & South America (*)** | | | | | | | |
| Utilisation Rate - | 39% | 6% | 143% | 165% | 244% | 220% | 0% |
| Balance Fund - | + 2.3 | + 7.5 | + 1.0 | - 1.7 | - 1.3 | - 0.6 | + 3.3 |
| **Global** | | | | | | | |
| Utilisation Rate - | 55% | 70% | 107% | 82% | 62% | 117% | 189% |
| Balance Fund - | + 49 | + 40 | - 11 | + 48 | + 67 | - 16 | - 73 |

Source : Compiled from Global Private Equity 2000, 2001, 2002, 2003, and 2004; '***A Review of the Global Private Equity and Venture Capital Markets***', Survey conducted by Price Waterhouse Coopers & 3i.

(*) Due to non availability of accurate information, approximate figures are shown

Though the market leaders are North American region and Western Europe, Asia Pacific region is having high utilisation rates compared to other players. This clearly indicates favourable investment climate in this region.

This tendency of favourable investment climate is clear from the global ranking based on the venture capital investment and compound average growth rate. The global ranking (PWC & 3i Report: 2000, 2001, 2002, & 2003) of top 20 players with respect to the amount of venture capital investment during 1999 - 2002. All the years USA and UK are the leaders occupying the 1$^{st}$ and 2$^{nd}$ positions. But four countries from Asia Pacific region, viz., Japan (from 12$^{th}$ to 5$^{th}$), South Korea (from 15$^{th}$ to 7$^{th}$), Australia (19$^{th}$ to 11$^{th}$), and India (from above 20$^{th}$ to 12$^{th}$) improved their investment performance and managed to reach a higher level. All other players show inconsistent results during the above period. But the picture completely changes when we check the ranking of compound average growth rate (CAGR) is considered. USA is in the 20$^{th}$ position where as India is in the 1$^{st}$ position. This is also one indicator for India's favourable investment climate. Increased investment activities are taking place in India in a faster rate than other countries because of the changed economic climate prevailing.

## 3. Indian Experience

Though India has fairly well developed network of specialised financial institutions which provide long term finance to new as well as established industrial projects, a gap felt in the area of equity financing to new projects especially those involving a higher degree of risk due to the technology being new / untried. This is because of the reason that as far as banks or financial institutions are concerned, the new venture has little proven capability to generate the sales, profits, and cash to pay-off short-term debt and even less ability to sustain profitable operations over a number of years and retire long-term debt. This is not to say that a new venture cannot obtain credit and loans. They can raise funds from various financial institutions, but these institutions also cannot serve the purpose of such new entrepreneurs because of the limitations of their financing, like; procedural delays, rigidity of government announced parameters for priority lending and strict standards about security and collaterals. The development of venture capital in India is given in **Table – 5**. The beginning of modern concept of venture capital in India started when in 1964 Industrial Development Bank of India (IDBI) launched its Own Capital (excludes loan) specially for the promotion of high-risk high-growth ventures promoted by first generation entrepreneurs. For the next 18 years (1964 – 81) no major development took place in India except in 1973 R. S. Bhatt Committee recommended creation of Rs.100 crores VCF. It is evident that during 1981 – 91 period emergence of venture capitalists (VC's) in India started. Five VC's launched a total of eight VCF's of these one was offshore. The total amount of Rs. 2,074.53 million was introduced to the market. But from 1991 onwards, slowly and steadily the seeds of LPG (generally used to denote Liberalisation, Privatisation, and Globalisation) started sprouting in the fields of Indian venture capital industry also. During the period 1991 – 2002, at least 81 VCF's were launched in India by 77 VCC's, of these around 30 were offshore VCF's. During 2000 alone a total of 23 VCF's (28% of the total) were launched. But from 2001 onwards there seems to be a slow down in the number of VCF's launched, this slow down is a global phenomenon, but the venture investment activities in India for the period 2001 – 2002 was very high. This is clear from the global ranking of India with respect to the CAGR where India ranks 1$^{st}$ and the world leader in venture capital industry USA in the 20$^{th}$ position.

Another striking point in the Indian venture capital development is about the extraordinary time delay takes for issuing the guidelines for the efficient management and control of venture capital activities in India. The change over of the power of Controller of Capital Issues (CCI) to regulate venture capital was transferred to Securities & Exchange Board of India (SEBI) in the year 1992. But it took almost 4 years for SEBI to frame and issue the guidelines on December 4$^{th}$ 1996, which is quite a long time for drafting and finalising the guidelines. But the time taken by the committee headed by Mr. K. B. Chandrasekhar took only 6 months (from July 1999 to January 2000) to finalise and issue the recommendations for the promotion of venture capital activities in India. This may be due to the fact that

**Table – 5**
**Development of Indian Venture Capital Industry**

| # | Period | Developments |
|---|---|---|
| 1 | 1964 – 81 (18 Years) | • IDBI launches Own Capital (excludes loan).<br>• R.S.Bhatt committee recommended creation of VCF. |
| 2 | 1981 – 91 (10 Years) | • A cess of % % on all technology imports to source funds for IDBI VCF scheme in 1986.<br>• Six (6) domestic and two (2) offshore strated their operations in India.<br>• Between 1987 – 1991, eight (8) VCF's were launched.<br>• Total volume of the VCF amounted to Rs. 2,074.53 million.<br>• In 1990, Indian Venture Capital Association was set up.<br>• In 1990 OTCEI started. |
| 3 | 1991 | • Two more domestic VCF started with Rs. 1,010 million. |
| 4 | 1992 | • Two more domestic VCF started with Rs. 2,522.60 million.<br>• CCI was replaced by SEBI. |
| 5 | 1993 | • Two more domestic VCF started with Rs. 896.16 million. |
| 6 | 1994 | • Venture Capital guidelines were issued by SEBI.<br>• Three domestic and one offshore VCF started with Rs. 4,368.62 million. |
| 7 | 1995 | • Income Tax exemption given to VCF's U/S 10 (23)(F) of the IT Act 1961.<br>• Three domestic and one offshore VCF started with Rs. 8,851.10 million. |
| 8 | 1996 | • One domestic and nine offshore VCF started with Rs. 17,191.13 million.<br>• SEBI guidelines were published. |
| 9 | 1997 | • Five domestic and five offshore VCF started with Rs. 13,976.22 million.<br>• Increased the limit of investment from 5 % to 20 % in any single venture. |
| 10 | 1998 | • Four domestic and two offshore VCF started with Rs. 2,707.35 million. |
| 11 | 1999 | • Two domestic and four offshore VCF started with Rs. 8,922.07 million.<br>• July 1999, K. B. Chandrasekhar committee on venture capital was appointed.<br>• December 8th 1999, the committee submitted draft proposal. |
| 12 | 2000 | • January 8th 2000, final Report of K. B. Chandrasekhar committee on venture capital was submitted.<br>• Nineteen domestic & four offshore VCF started with Rs. 37,894.02 million. |
| 13 | 2001 | • Three domestic and two offshore VCF started with Rs. 19,871.57 million. |
| 14 | 2002 | • Six domestic and one offshore VCF started with Rs. 5,878.04 million. |

Source : Compiled from
(i) IVCA Venture Activity Reports 1993, 1994, 1995, 1996, and 1997.
(ii) AVCJ report 'The 2003 Guide to Venture Capital in Asia'.

Mr. Chandrasekhar knows the importance of time management in the present business world, since he was the Chairman of Exodus Communications Inc, Silicon Valley, California, USA where time is valued in terms of money.

Though with respect to the CAGR India holds 1st rank, the ranking with respect to the amount of venture capital raised in relation to the global players is only 12th, and in Asia Pacific region it is 8th. Now let us consider the development of venture capital in India in terms of the

**Table – 6**

**Asian Pacific Venture Capital Pool during 1992 – 2003* ( % share )**

| | Australia | China | Hong Kong | India | Indonesia | Japan | Korea | Malaysia | Myanmar | New Zealand | Pakistan | Philippines | Singapore | Sri Lanka | Taiwan | Thailand | Vietnam | **Total (US $ m)** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1992 | 5.3 | 3.6 | 10.9 | 0.5 | 0.2 | 65.9 | 6.7 | 0.6 | 0.0 | 0.0 | 0.0 | 0.1 | 3.7 | 0.1 | 1.9 | 0.4 | 0.1 | 23,431 |
| 1993 | 5.2 | 5.1 | 11.2 | 0.5 | 0.4 | 64.2 | 6.1 | 0.6 | 0.0 | 0.1 | 0.0 | 0.2 | 3.7 | 0.1 | 1.8 | 0.4 | 0.5 | 26,222 |
| 1994 | 5.0 | 7.2 | 18.1 | 0.7 | 0.7 | 53.2 | 5.7 | 0.6 | 0.0 | 0.1 | 0.0 | 0.3 | 5.5 | 0.1 | 1.7 | 0.4 | 0.7 | 30,951 |
| 1995 | 6.3 | 9.4 | 21.8 | 0.8 | 0.7 | 40.3 | 7.0 | 1.2 | 0.3 | 0.2 | 0.0 | 0.3 | 8.6 | 0.2 | 1.9 | 0.4 | 0.8 | 33,433 |
| 1996 | 7.6 | 9.7 | 23.3 | 2.1 | 0.8 | 30.1 | 8.6 | 1.2 | 0.3 | 0.2 | 0.0 | 0.4 | 10.6 | 0.2 | 3.6 | 0.5 | 0.7 | 33,791 |
| 1997 | 7.6 | 9.8 | 29.9 | 2.9 | 1.2 | 21.7 | 5.2 | 1.1 | 0.3 | 0.3 | 0.0 | 0.5 | 12.5 | 0.2 | 5.4 | 0.5 | 0.8 | 32,136 |
| 1998 | 6.3 | 6.4 | 31.6 | 2.2 | 0.7 | 25.6 | 6.1 | 0.9 | 0.2 | 0.4 | 0.0 | 0.5 | 10.8 | 0.1 | 7.4 | 0.5 | 0.5 | 45,785 |
| 1999 | 5.0 | 5.1 | 30.6 | 2.5 | 0.5 | 29.8 | 6.8 | 0.9 | - | 0.6 | 0.1 | 0.4 | 10.7 | 0.1 | 6.1 | 0.4 | 0.4 | 69,132 |
| 2000 | 5.1 | 6.4 | 29.7 | 3.6 | 0.2 | 26.0 | 7.4 | 0.7 | - | 0.6 | 0.1 | 0.5 | 11.4 | 0.1 | 7.2 | 0.7 | 0.2 | 81,136 |
| 2001 | 5.5 | 7.1 | 30.4 | 2.9 | 0.2 | 25.1 | 7.3 | 0.9 | - | 0.7 | - | 0.3 | 11.4 | - | 7.3 | 0.7 | 0.1 | 85,554 |
| 2002 | 5.6 | 7.2 | 29.8 | 2.9 | 0.8 | 25.0 | 7.4 | 0.9 | - | 0.7 | - | 0.3 | 11.4 | - | 7.2 | 0.7 | 0.1 | 89,196 |
| 2003* (Rank) | 6.2 (7) | 7.1 (5) | 28.4 (1) | 3.0 (8) | 1.1 (9) | 25.7 (2) | 7.4 (4) | 1.0 (10) | - | 0.7 (11) | - | 0.3 (13) | 11.4 (3) | - | 6.9 (6) | 0.7 (12) | 0.1 (14) | 94,098 |

Source: Compiled from AVCJ report 'The 2003 & 2004 Guide to Venture Capital in Asia'.

* For the first half of the year 2003

amount raised, different sources of funds, amount invested with respect to the geographical preferences, investment preferences with respect to the stages and industries. The following tables ( 6 – 10) give detailed picture of the activities in Asia as well as the share of India in the region.

From **Table – 6**, it is clear that in terms of the amount raised for venture capital investment, only Japan and Hong Kong have a two-digit share during 1992- 2001. From 1996 onwards Singapore also started contributing two-digit share. The share of Japan during 1992 – 1993 was above 60% of the total, but after that the share started decreasing due to the development taken place in other countries of the region. From 1997 onwards Hong Kong became the market leader and presently holds 28% share, where as Japan holds only 26%. The present share of Singapore is 11%. Ranking of the countries with respect

**Table – 7**

**Sources of Venture Capital – 2002 ( % share )**

| | Australia | China | Hong Kong | India | Indonesia | Japan | Korea | Malaysia | New Zealand | Philippines | Singapore | Taiwan | Thailand | Vietnam | Asia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Banks | 14 | 23 | 13 | 23 | 19 | 28 | 22 | 17 | 8 | 15 | 15 | 14 | 36 | 34 | 19 |
| Pension Funds | 49 | 4 | 17 | 12 | 4 | 10 | 9 | 2 | 36 | 0 | 10 | 4 | 15 | 5 | 13 |
| Insurance Companies | 12 | 8 | 30 | 10 | 7 | 13 | 12 | 7 | 21 | 7 | 14 | 8 | 15 | 8 | 17 |
| Corporations | 12 | 41 | 35 | 46 | 52 | 44 | 43 | 32 | 18 | 57 | 36 | 59 | 26 | 38 | 39 |
| Private Individuals | 3 | 7 | 1 | 4 | 6 | 3 | 1 | 1 | 5 | 13 | 4 | 9 | 2 | 5 | 3 |
| Government Agencies | 10 | 17 | 4 | 5 | 12 | 2 | 13 | 39 | 12 | 8 | 21 | 6 | 6 | 10 | 8 |
| Others | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Compiled from AVCJ report 'The 2003 & 2004 Guide to Venture Capital in Asia'.

to the share is also shown in the brackets along with the percentage share for the year 2003. The amounts raised in all the years (except for 1997) were showing an increasing trend, which is also a good indicator about the investment climate in Asia Pacific region. The share of India is only 2.9% and the ranking is 8th.

The trend in Asia pacific (**Table – 7**) region with respect to the contributors of venture capital fund shows that the major contribution is done by various finance corporation's, nearly 37% of the total amount raised during 2002 is by this category. Majority of the countries in this region follow the same pattern except only three countries Australia, New Zealand, and Thailand. Australia (49%) and New Zealand (36%) receives the major share from Pension Funds, a trend usually associated with North America and European regions. Thailand (36%) is getting major contribution from banks.

About the geographical distribution of the amount of venture capital raised and invested is given in **Table – 8**. Australia (83%), China (53%), Indonesia (60%), Japan (79%), Korea (65%), Malaysia (51%) New Zealand (87%), and Taiwan (85%) contributed major share of the amount of venture capital raised domestically. But the countries Hong Kong (89%), India (79%), Philippines (58%), Singapore (66%), Thailand (80%) and Vietnam (87%) were able to attract more foreign institutional investors during 2001. But the amount of venture capital invested shows that except for Hong Kong (11%) and Singapore (15%) rest of the players invested on an average 85–95% of the venture capital amount domestically. This indicates the developmental activities taking place in the domestic markets of the respective countries as well as the favourable investment climate. Only Hong Kong and Singapore ventured to invest in outside their territory.

With respect to the most preferred stages of investment in the Asia Pacific region for 2001 is given in **Table– 9**. All the countries in this region preferred to invest in later stage financing. Almost more than 75% of the investment during 2001 is in the later stage business ventures. In the later stage financing, majority of the investment is given for expansion stage, approximately

**Table – 8**
**Sources and Uses of Venture Capital – 2001 ( % share )**

| | Australia | China | Hong Kong | India | Indonesia | Japan | Korea | Malaysia | New Zealand | Philippines | Singapore | Taiwan | Thailand | Vietnam | Asia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Source of Funds | | | | | | | | | | | | | | | |
| Domestic | 83 | 53 | 11 | 21 | 60 | 79 | 65 | 51 | 87 | 42 | 34 | 85 | 20 | 13 | 48 |
| Other Asian Countries | 5 | 23 | 22 | 19 | 24 | 3 | 7 | 23 | 13 | 15 | 28 | 5 | 14 | 11 | 14 |
| Non-Asian Countries | 12 | 24 | 67 | 60 | 16 | 18 | 28 | 26 | 0 | 43 | 38 | 10 | 66 | 76 | 37 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Use of Funds | | | | | | | | | | | | | | | |
| Domestic | 95 | 86 | 11 | 95 | 100 | 87 | 92 | 92 | 91 | 80 | 15 | 79 | 95 | 80 | 64 |
| Other Asian Countries | 4 | 13 | 85 | 4 | 0 | 5 | 6 | 7 | 9 | 16 | 64 | 7 | 4 | 20 | 29 |
| Non-Asian Countries | 1 | 1 | 4 | 1 | 0 | 8 | 2 | 1 | 0 | 4 | 21 | 14 | 1 | 0 | 6.2 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Compiled from AVCJ report 'The 2003 Guide to Venture Capital in Asia'

**Table – 9**
**Stages of Investment – 2001 ( % share )**

| | Australia | China | Hong Kong | India | Indonesia | Japan | Korea | Malaysia | New Zealand | Philippines | Singapore | Taiwan | Thailand | Vietnam | Asia | Global |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Seed | 2 | 8 | 4 | 7 | 2 | 3 | 7 | 4 | 7 | 1 | 2 | 9 | 3 | 5 | 5 | 7 |
| Startup | 9 | 33 | 19 | 36 | 9 | 13 | 19 | 29 | 22 | 15 | 26 | 26 | 15 | 26 | 21 | 10 |
| **Early Stage** | 11 | 41 | 23 | 43 | 11 | 16 | 26 | 33 | 29 | 16 | 28 | 35 | 18 | 31 | 26 | 17 |
| Expansion | 45 | 41 | 33 | 49 | 58 | 47 | 35 | 48 | 55 | 64 | 42 | 43 | 45 | 59 | 41 | 36 |
| Mezzanine | 5 | 8 | 7 | 4 | 2 | 11 | 5 | 4 | 9 | 1 | 8 | 14 | 2 | 0 | 8 | - |
| Buyout | 39 | 4 | 32 | 4 | 8 | 20 | 9 | 9 | 3 | 13 | 17 | 3 | 9 | 0 | 18 | 36 |
| Turnaround | 0 | 6 | 5 | 0 | 21 | 6 | 25 | 6 | 4 | 6 | 5 | 5 | 26 | 10 | 8 | 11 |
| **Later Stage** | 89 | 59 | 77 | 57 | 89 | 84 | 74 | 67 | 71 | 84 | 72 | 65 | 82 | 69 | 74 | 83 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: compiled from AVCJ report 'The 2003 Guide to Venture Capital in Asia' and Global Private Equity 2000, 2001, 2002, & 2003; '***A Review of the Global Private Equity and Venture Capital Markets***', Survey conducted by Price Waterhouse Coopers & 3i.

equal to 50%. Later stage financing in Asia Pacific region as a whole comes to 74% and in this 41% was towards expansion. The global picture of venture capital investment for the same period shows 83% towards later stage financing, but under this expansion (36%) and buyout (36%) got equal preference.

During the same period, venture capital investment towards the type of industries gives a mixed picture. **Table – 10**. Though the global (55%) and Asia Pacific region (53%) shows preferences towards high-tech business ventures seven countries invested less in high-tech industries. The shares of high-tech investment in these seven countries were Australia (32%), Indonesia (45%), Japan (35%), Korea (45%), Philippines (46%), Thailand (45%) and Vietnam (30%). The two countries where high-tech investment was very high are Taiwan (73%) and India (70%). The most preferred high-tech industries were Computer related, information technology, and telecommunications. The most preferred non-high-tech industries were consumer products & services, financial services, manufacturing (heavy), and travel & hospitality.

Having discussed about the share of venture capital investment of different players in Asia Pacific region, the different stages of investment, and the most preferred industry, let us now check the Venture Capital Development Index (VCDI) developed by Sunil and Anthony (2002) for Asia Pacific region. This is calculated on the basis of the Finance Index (FI), and Technology Index (TI). Weighted average of these two indices are calculated by assigning each countries share as the weight. Thus VCDI is the weighted average of FI and TI that gives an idea of the extent of venture capital development in a country with respect to the stages of financing and type of industry, because higher the investment in early stage and high-tech industries means higher the economic development takes place in that country.

Symbolically,

| | | | |
|---|---|---|---|
| FI | = | Early Stage Investment of a year / Total Investment of a year | ………… (1) |
| TI | = | Investment in High-Tech of a year / Total Investment of a year | ………… (2) |
| VCDI | = | ($W_i$ FI + $W_i$ TI) / 2 | ………… (3) |
| $W_i$ | = | Investment in a year of a country / Total investment in a year in Asia (Weight assigned based on the share of investment of each country in a year. ) | |

**Table – 10**
**Investment by Industry – 2001**
( % share )

| | Australia | China | Hong Kong | India | Indonesia | Japan | Korea | Malaysia | New Zealand | Philippines | Singapore | Taiwan | Thailand | Vietnam | Asia | Global |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Computer Related | 6 | 27 | 9 | 17 | 1 | 7 | 8 | 9 | 14 | 9 | 8 | 20 | 8 | 5 | 12 | |
| Electronics | 1 | 4 | 7 | 5 | 18 | 10 | 9 | 14 | 6 | 6 | 10 | 18 | 6 | 0 | 8 | |
| Ecology | 0 | 1 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | |
| Information Technology | 9 | 8 | 10 | 17 | 11 | 5 | 10 | 17 | 14 | 16 | 14 | 17 | 10 | 7 | 10 | |
| Infrastructure | 4 | 10 | 11 | 4 | 4 | 2 | 2 | 1 | 0 | 3 | 3 | 2 | 7 | 11 | 5 | |
| Medical / Biotechnology | 6 | 4 | 5 | 5 | 3 | 2 | 1 | 4 | 8 | 0 | 9 | 6 | 3 | 8 | 4 | |
| Telecommunications | 6 | 7 | 15 | 23 | 8 | 11 | 11 | 10 | 17 | 12 | 17 | 9 | 13 | 0 | 12 | |
| HIGH-TECH | 32 | 61 | 58 | 70 | 45 | 37 | 45 | 55 | 59 | 46 | 62 | 73 | 45 | 30 | 53 | 55 |
| Agriculture / Fisheries | 1 | 0 | 0 | 1 | 14 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 11 | 0 | |
| Conglomerates | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | |
| Construction | 2 | 4 | 1 | 1 | 2 | 1 | 0 | 2 | 3 | 4 | 5 | 1 | 9 | 4 | 2 | |
| Consumer Products / Services | 18 | 9 | 2 | 4 | 12 | 9 | 10 | 6 | 19 | 33 | 9 | 4 | 8 | 7 | 7 | |
| Financial Services | 7 | 3 | 11 | 5 | 8 | 25 | 24 | 2 | 5 | 5 | 5 | 3 | 7 | 8 | 13 | |
| Leisure / Entertainment | 2 | 0 | 2 | 2 | 0 | 1 | 4 | 0 | 0 | 0 | 2 | 3 | 0 | 3 | 2 | |
| Manufacturing - HEAVY | 15 | 4 | 7 | 3 | 7 | 7 | 11 | 10 | 4 | 2 | 3 | 3 | 8 | 6 | 7 | |
| Manufacturing - LIGHT | 4 | 3 | 3 | 3 | 6 | 7 | 2 | 12 | 0 | 2 | 1 | 5 | 2 | 9 | 4 | |
| Media | 3 | 1 | 4 | 3 | 0 | 1 | 1 | 0 | 3 | 1 | 1 | 4 | 0 | 1 | 2 | |
| Mining and Metals | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 5 | 1 | |
| Retail / Wholesale | 5 | 2 | 2 | 1 | 0 | 4 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 4 | 2 | |
| Services - Non-financial | 2 | 4 | 2 | 3 | 4 | 3 | 2 | 5 | 5 | 2 | 3 | 2 | 3 | 0 | 3 | |
| Textiles and Clothing | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 2 | 3 | 1 | |
| Transportation/Distribution | 1 | 4 | 4 | 1 | 1 | 2 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | |
| Travel / Hospitality | 1 | 2 | 2 | 1 | 0 | 3 | 0 | 2 | 2 | 0 | 2 | 1 | 12 | 11 | 2 | |
| Utilities | 1 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 1 | |
| Non-High-Tech | 68 | 39 | 42 | 30 | 55 | 63 | 56 | 45 | 42 | 54 | 38 | 27 | 55 | 70 | 47 | 45 |

Source: compiled from AVCJ report 'The 2003 Guide to Venture Capital in Asia' and Global Private Equity 2000, 2001, 2002, & 2003; '***A Review of the Global Private Equity and Venture Capital Markets***', Survey conducted by Price Waterhouse Coopers & 3i.

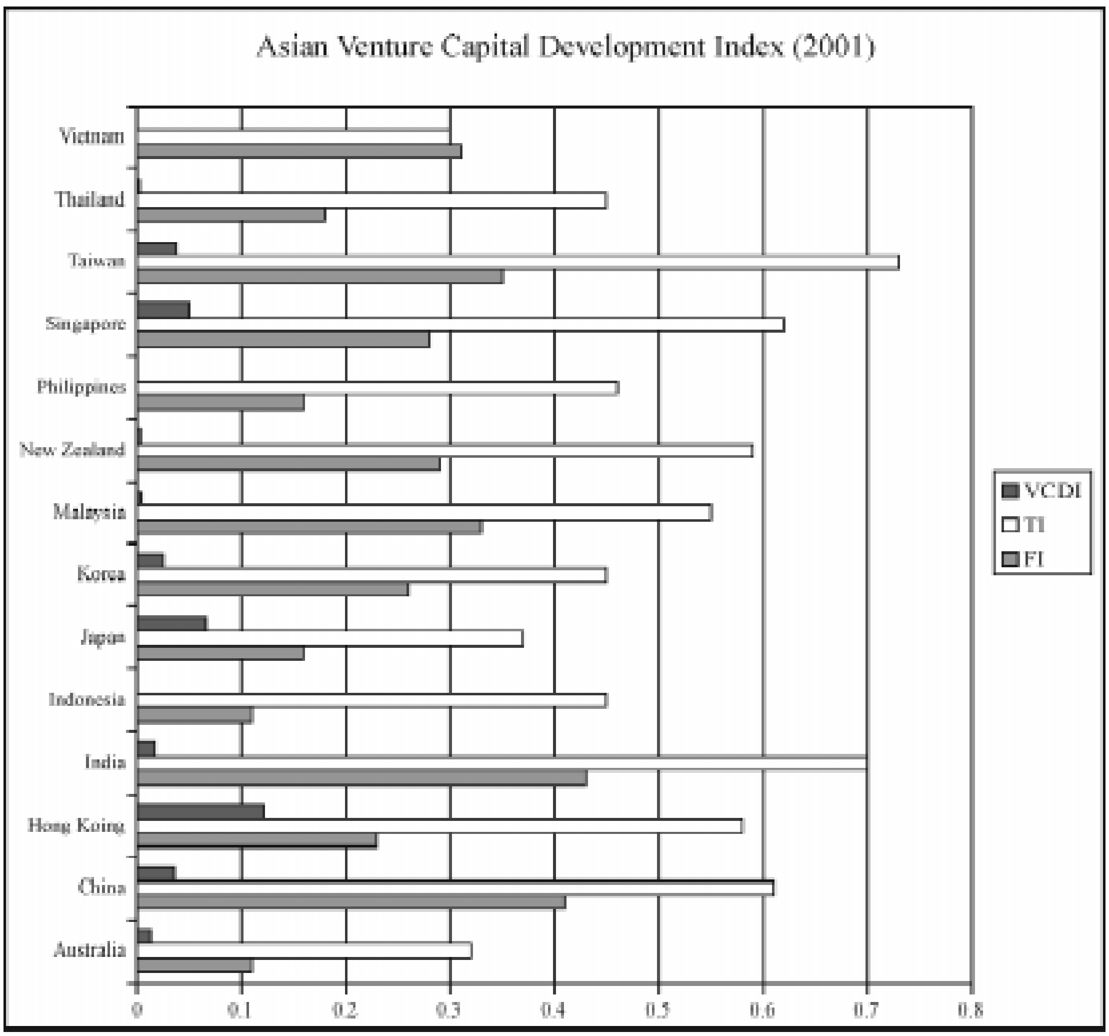
The details of all the three indices are given in **Table-11** and the diagrammatic representation is given in **Figure – 2** for easy understanding. Except for Vietnam, for all other countries TI is more than FI, which is a clear indication of the more investment in high-tech early stage business ventures. The top five countries having high FI are India (0.43), China (0.41), Taiwan (0.35), Malaysia (0.33), and Vietnam (0.31). This indicates in these countries tendency to invest in early stage, where birth of new business ventures takes place. The top five countries with high TI are Taiwan (0.73), India (0.70), Singapore (0.62), China (0.61), and New Zealand (0.59). This shows that in these countries more preference is given for promoting high-tech business ventures which in turn acts as agents of economic growth in other sectors.

**Table – 11**
**Asian Venture Capital Development Index - 2001**

| | Australia | China | Hong Kong | India | Indonesia | Japan | Korea | Malaysia | New Zealand | Philippines | Singapore | Taiwan | Thailand | Vietnam |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FI** | 0.11 | 0.41 | 0.23 | 0.43 | 0.11 | 0.16 | 0.26 | 0.33 | 0.29 | 0.16 | 0.28 | 0.35 | 0.18 | 0.31 |
| **TI** | 0.32 | 0.61 | 0.58 | 0.7 | 0.45 | 0.37 | 0.45 | 0.55 | 0.59 | 0.46 | 0.62 | 0.73 | 0.45 | 0.3 |
| **VCDI** | 0.013 | 0.04 | 0.122 | 0.02 | 0.000504 | 0.07 | 0.02 | 0.004 | 0.003 | 0.001 | 0.05 | 0.038 | 0.0021 | 0.0004 |

Source : Compiled from AVCJ report 'The 2003 Guide to Venture Capital in Asia.'

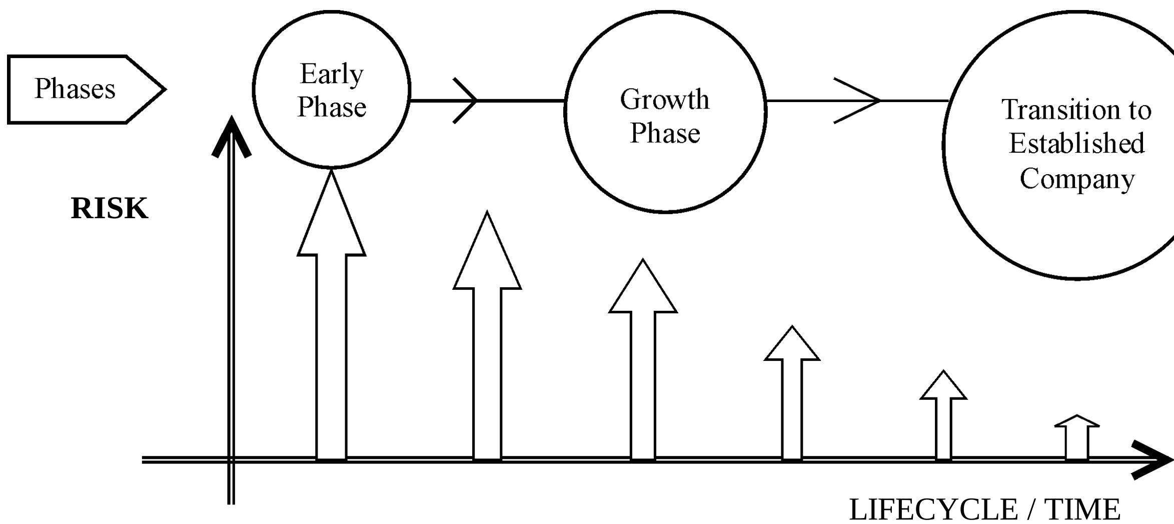
**Figure – 2**
**Asian Venture Capital Development Index – 2001.**



## 4. Conclusion

In the preceding sections it is clear that venture capital financing became one of the most important instrument used for promoting new and novel ideas proposed by potential first generation entrepreneurs who do not have the access to other forms of financing. History clearly shows that this concept has been successfully transplanted in its original form or as an evolved form in different countries and now its impact can be felt on a global scale. Most of the industrialised nations attained

### Annexure - 1
### Concept of Venture Capital




| | | | | | | |
|---|---|---|---|---|---|---|
| Time Scale & Expected Return & Risk | 7 – 10 Years 60 % Return **Extremely High** | 5 – 10 Years 40 – 60 % Return **Very High** | 3 – 7 Years 30 – 40 % Return **High** | 1 – 3 Years 25 – 35 % Return **Medium** | 1 – 3 Years 20 – 30 % Return **Low** | 1 – 3 Years 20 – 30 % Return **Very Low** |
| Nature | Idea to Prototype | Prototype to Product | Product to Market | Market Growth | Market Consolidation | Market Domination |
| Business Status | Laboratory or Workshop | Incubator or Own Premises | Global Research | Global Focus | Global Premises | IPO Trade Sale Merger |
| What Stage | Seed | Startup round) | Market Penetration (2nd round) | Market Expansion (3rd round) | Mezzanine (Bridge Stage) | Liquidity Event (LE) OR Exit |
| When | Before Startup | At or shortly after start-up | At first growth spurt | At second growth spurt IPO is still far off | 6-12 months before IPO | As a rule 5-8 years after start-up |
| What for | Mainly to develop business concept further | E.g.: For Product Development | E.g.: For Initial Marketing Activities | To Finance Growth | To cover financial needs until sale of stock to public | Recovery of invested venture capital for reinvestment in more start-ups |

Source : Compiled on the basis of information available form Business Plan competitin Hand Book (www.greatventure.co.nz), An Introduction to Raising money from venture capitalists (www.onset.com), and 'venture capital and the Indian financial sector' by Ramesh, S & Gupta, Arun.

their present status with respect to the economic development is because of the willingness of the then VC's to bet on the business ideas proposed by the then entrepreneurs. These VC's are a special category of entrepreneurs who takes initiatives in helping other entrepreneurs to achieve their idea of starting a new enterprise. The impact of globalisation even expanded the horizon for the VC's; this is the main reason why many of the VC's are now in a position even to invest out side their country through and with the help of other VC's working in other countries. This is clear from the geographical distribution of the venture capital sources of countries in the Asia Pacific region. This is even applicable to other regions of the world. Globalisation even opened the door of technology transfer from the industrially developed nations to others. Here also one can see that more and more investment is given for high-tech industries around the world as well as in Asia Pacific region. Since there exists some economic slow down after 2001 around the world and its impact is felt in the global venture capital industry also, many economies are slowly and steadily recovering from this and in the near future one can expect a high growth in all economic activates around the world and here VC's has a great role to play in taking up risk again by assisting the business ventures when no one else is ready to help them, to recover. This is already felt in India where the compound average growth rate of venture capital investment is higher than other countries.

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