

C A M B R I D G E A S S O C I A T E S L L C

INDIAN VENTURE CAPITAL INVESTING

2000

David Hutchings
Patricia Selcke
David Sando

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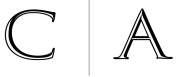
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ABSTRACT

1. The Indian venture market is blossoming, albeit from a small start, and there are cogent reasons for believing it will continue to be the most attractive region for venture investing in Southeast Asia for some time. The venture investment pool currently approximates \$1 billion and is likely to double in the next 12 months.
2. Behind the development of venture investing, India has certain unique characteristics that are not present elsewhere in Asia. India has a 300 million person English-speaking, well-educated middle class, many of whom are trained software programmers and engineers. This human capital resource is a potent force when coupled with an English-based legal and tax system and a democratic government. Problems of red tape, a growing budget deficit, and a fragmented political culture have not dampened the explosive growth of the knowledge economy.
3. Much of the venture activity and economic growth is focused in the South and centers around cities such as Bangalore and Hyderabad. A majority of the Indian software industry, often rated first or second in the world, has been developed in the southern cities.
4. Today, the opportunity in India is in information technology (IT) service companies looking to international markets. Over time, the service sector has moved up a value curve from data entry and call centers to programming, and now to comprehensive development projects. Moreover, Indian IT services have developed an international reputation for dependability, quality, and reliability. The development of original technology in India has yet to occur, although there are some early positive signs. The growth in the venture capital markets is being assisted, in particular, by highly qualified and experienced Indian managers returning from the United States and non-resident Indians acting as angel investors and mentors for companies located in India. Finally, the Nasdaq has developed an appetite for Indian IPOs.
5. A select group of managers have the potential to generate competitive returns, but prospective investors should also be aware of the risks. Like most emerging countries, India is susceptible to economic booms and busts to a far greater extent than are more developed economies. At some point, the current boom in venture investing will inevitably give way to a bust, but no one can predict when. Consequently, investors must have long time horizons and sufficient patience and fortitude to ride out the downswings of the roller coaster. It should also be noted that the primary exit for venture investors is the United States, and the Nasdaq in particular; consequently, the Indian venture cycle is largely dependent on the continued health of the U.S. capital markets.
6. Investors should realize that although India is a democratic country with a strong, independent judiciary, it is also vulnerable to periodic political instability, whether from factional in-fighting, armed rebellion by disaffected minority groups, or renewed tensions with neighboring Pakistan. In sum, periodic economic and political setbacks are to be expected as the country develops.

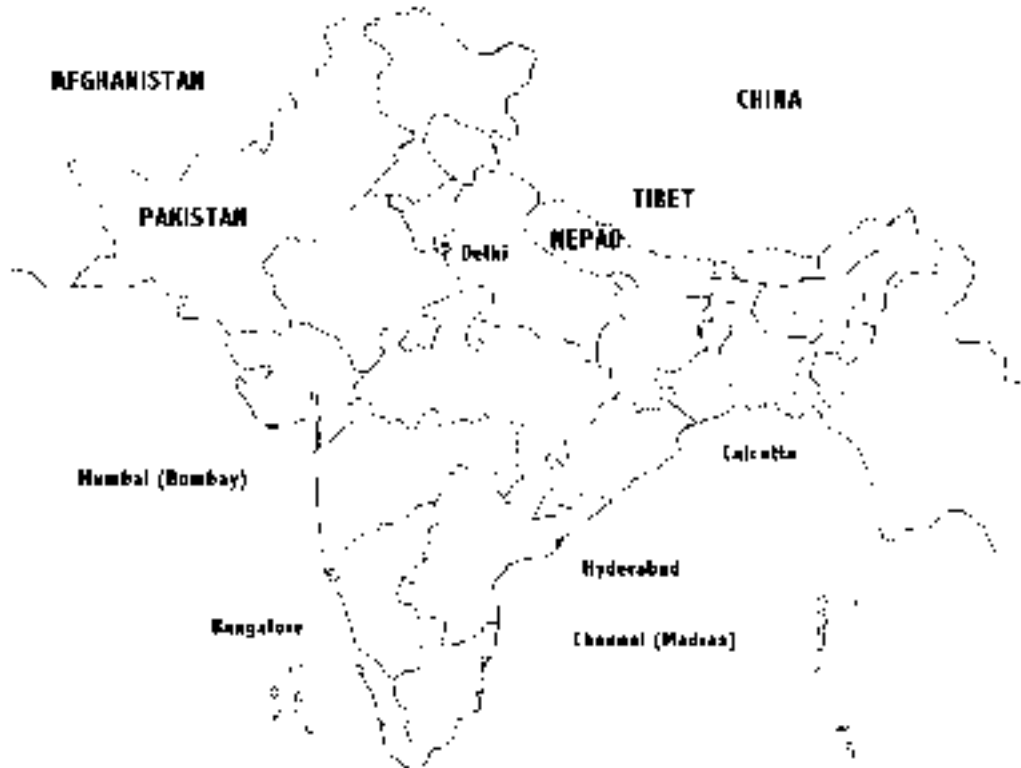


C A M B R I D G E A S S O C I A T E S L L C

SUMMARY

India - The Country

"India is, the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend, and the great grandmother of tradition." Mark Twain



The population of India is estimated to be approximately one billion, and rising. Of this population, approximately 700 million form an underclass that has little if anything in the way of water, food, education, or housing. The World Bank estimates that 1.5 million children die each year from waterborne diseases. Meanwhile, India has become a country of enormous contrasts, as elements of the "new India" that focus on the global marketplace meet remnants of what characterized India in the past.

- Buses, on their last legs after 30 years or more, are adorned with Internet and mobile phone advertisements.
- Offices are wired with high-speed Internet access; outside, beggars and lepers lie in the streets.
- A few hundred yards from the Taj Mahal, truly one of the man-made wonders of the world, the town of Agra is filled with slums and squalor, suffused with motor pollution, rotting detritus, and excrement.
- In high-tech Bangalore, skyscrapers are built utilizing timber scaffolding lashed together with sisal rope.

Commercially, the country divides itself into distinct territories, with the South steering clearly ahead of much of the rest of the country. In general, the "South" refers to the cities of Bangalore, Hyderabad, and Chennai (Madras) and the areas that surround them. To some extent, the South extends north to Mumbai, a city less attractive for investing, but nevertheless the country's key commercial center. The climate for much of the central and eastern area of the South is drier and less susceptible to the monsoons than much of the country. While the infrastructure is crumbling in cities such as Old Delhi and Mumbai, several of the southern states have worked to improve infrastructure by building toll roads, subsidizing land development, and providing access to broadband communications. Moreover, the majority of the key government technology institutions are primarily located in the South.

Many new venture initiatives are focused in the city of Bangalore. Rapid changes are evident on every street from the construction of five-star hotels to stalls selling U.S. franchise burgers, ice creams, and doughnuts. Hyderabad is similarly developed and Microsoft has chosen it as the location of its first Research and Development center located outside the United States.

In contrast to the South, the North, centered on the city of Delhi, has greater infrastructure problems and suffers from the weight of government. The East, centered on the city of Calcutta, is in a poor state, as a result of badly planned industry initiatives, pollution, and a lack of fresh water.

Economic and Political Environment

For a country with the world's second largest population, the local economy is relatively small with an estimated Gross Domestic Product (GDP) for 1999 of \$425 billion, ranking it 13th in the world behind Mexico. Economic growth, however, is strong, averaging 7% over the last five years. India also has relatively low inflation (averaging 6% over the last five years), a low current account deficit, and a reasonably stable currency.

Another sign of positive change is that India has moved in recent years from being a net food importer to now being a net agricultural exporter. To a large degree, this positive change can be attributed to nature, which has granted India cooperative monsoon rains for the 13th year running.

The government (almost regardless of which party happens to be in power) and the electorate are focused on re-forming India into an important global player. India realizes that neither the former doctrine of swadeshi, or economic self-reliance, nor the plan-driven economy implemented by former Prime Minister Nehru, are any longer in the country's best interest. The government is supportive of initiatives to develop the knowledge economy, seeing it as one of the few strengths on which the country can capitalize in the short term. The political stage, however, is delicately balanced, with a 25-party coalition which creates a fragmented and partisan political culture that makes it difficult to implement changes in a timely manner. Furthermore, the trade unions remain strong and create another obstacle in executing legislation.

Somewhat disconcerting, and often coloring the political environment, is the potential for an escalation of the Kashmir conflict with Pakistan, although recently the two nations have shown signs of improving relations, and for renewed conflict with China over Tibet. Furthermore, as a result of the early 1990s U.S. boycott of India, relations with Russia remain close.

Government plans to privatize the vast state holdings and open up the economy have been approved, but little has actually been done. Somewhat encouraging, the government recently opened the insurance industry to foreign and private investors, and announced the deregulation of the domestic long-distance telephony market and the impending dismantling of the last quantitative restrictions on imports.

As India moves forward, there are bound to be disappointments and set backs as trade unions, corrupt officials, and fragmented parties force debate on major changes but allow implementation of few. Also disconcerting is India's budget deficit, which stands at 10% of GDP and rising, and showing few signs of governmental control. The developments in the knowledge economy, however, are at the forefront of change and tend to be less susceptible to political and economic bottlenecks. It is here where the investment environment remains the most attractive.

India versus Neighboring Territories

Today, investing in India compares favorably to the current environments in other Southeast Asian countries and India's largest neighbor, China. In the past, Malaysia, Indonesia, and Singapore have received substantial investment to develop sub-contract manufacturing facilities seeking cheap and dexterous labor, notably among the female population. Such export-led, manufacturing-based activities, however, have yielded a paucity of investment opportunities and unimpressive returns for venture capital managers. Moreover, restrictions on capital flows have steered many managers away from investing in countries like Indonesia and Malaysia.

Comparative analysis with India often points investors toward China, due to the potential size of the market. However, the focus on China is questionable because, unlike India, China lacks the English-speaking population, a technically qualified workforce, or a closeness of labor ties to the United States. Moreover, China's lack of democratic institutions, including a credible legal and tax system and an independent judiciary, demands that investment in China has a substantially higher risk-adjusted return. Schroder Ventures has commented that in their estimation 70% of the money being invested by international managers in China would never be seen again.

As a result, respected global private equity managers with a presence in Southeast Asia, such as Warburg Pincus and Schroder Ventures, have invested a majority of their funds in India. Schroder Ventures commented that without India their last Asia-Pacific fund would have been a "dog." These venture groups have also indicated a strong interest in continuing to invest in India going forward.

The Knowledge-based Economy

The investment environment in India (particularly for the southern states) has some unique characteristics that illustrate the potential for building a thriving knowledge-based economy. India has an English-speaking middle class of 300 million, larger than the population of the United States. An estimated 60 million Indians are fully fluent in written and spoken English. Among this English-speaking middle class, a large well-educated workforce exists. Each year, more than 100,000 engineers and 40,000 management professionals graduate, including a more select few from the world class management (Indian Institute of Management) and technology (Indian Institute of Technology) institutes. The country now boasts that it has the second largest number of engineers in any country (number one is Japan); the second largest number of software specialists in any country (behind the United States); and, the second largest number of basic PhDs in any country (number one is Russia). India is the world's largest democracy. The legal and tax systems, although somewhat complex, are based on English precedent and are understandable and workable. The judiciary is strong and independent.

These positive points need to be weighed against the problems of red tape, which often frustrate and delay initiatives but rarely prevent them. There are also problems of corruption, at least in terms of a need to know and cooperate with the right people to get certain things accomplished.

Overall, investors may view the investment and political risk of India's knowledge-based economy as being similar to that of Israel.

Venture Investing - Overview

Following 1998 legislation, the Security and Exchange Board of India (SEBI) has approved an investment structure that allows for the formation of venture capital funds that are tax transparent to offshore investors. Typically, the venture funds are set up as limited partnerships located in Mauritius, a country which has strong double taxation agreements with India. SEBI, however, still requires managers to obtain government approval for each new investment. Managers commented that the approval process is time-consuming but has not prevented them from making any desired investments. Offshore investors may also experience delays in extracting capital from realized investments; however, to date managers have not been prohibited from receiving cash flows from realized investments, just experienced frustrating delays of several months. Managers and SEBI officials predict that red tape areas will recede over time.

Currently, the venture capital investing opportunity that presents itself in India is in companies that deliver IT services and solutions to U.S. customers. Often building strong companies requires a clear understanding of the problems that U.S. customers face. Therefore, investment managers with extensive contacts and, in some cases, a presence in the United States will have a clear competitive advantage for helping their portfolio companies.

Several venture capital managers located in India have strong ties with non-resident Indians living in Silicon Valley, many of whom are themselves venture capitalists or IT professionals. According to SEBI, approximately 130,000 non-resident Indians currently live in Silicon Valley and have amassed personal fortunes of approximately \$30 billion. To date, non-resident Indians, often acting as angel investors, have invested actively in companies and funds located in India.

Furthermore, many Indians, having been educated and employed in the lucrative technology industry in the United States, are returning to India. Upon their return, these individuals initiated many of the legislative changes to the industry and several are setting up their own businesses or venture capital firms. Indians returning to India (constituting the so-called "reverse brain-drain") are expected to be an important influence for the shaping of the venture capital industry going forward.

Although India has a flourishing stock exchange with over 9,000 listed companies, in the past venture capital managers have steered clear of local exchanges to exit their investments. Companies wishing to be publicly listed have been required to demonstrate three years of profit, and liquidity has been largely illusory. Furthermore, managers with offshore limited partners have had difficulties getting the capital out of the country. As a result, the principal exit route has been Nasdaq, where several Indian companies including Infosys Technologies, Satyam Infoway, and Rediff.com have completed successful initial public offerings. It remains to be seen whether in the cautious current environment Nasdaq will show the same appetite. Several impending Indian companies are currently in registration and will soon serve to test the waters.

Currently, there are approximately 56 managers making venture capital investments in India, with an estimated pool of \$1 billion. On the basis of current and prospective initiatives, the pool of venture capital dollars is expected to double within the next 12 months.

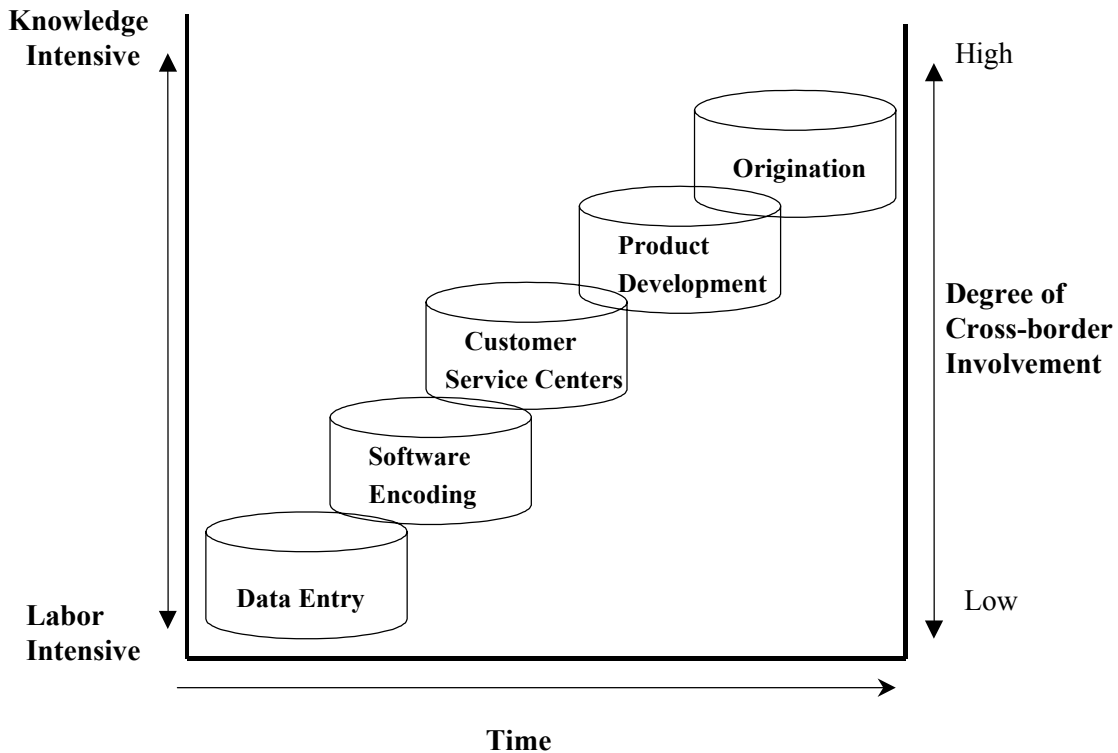
Managers are currently focusing much of their investing efforts in two key areas, software and telecommunications. A discussion of each targeted sector follows.

The Value Curve

The development of the IT sector in India has moved up a value curve which can be divided into several stages. These stages often correspond to the cultural and political changes that are occurring in the country (see Appendix A). In general terms, India has utilized its cheap labor at the data entry level and progressed to software coding and call centers. Currently, India is developing software and operating advanced centers¹, and customer service centers, which are beginning to lead to product and circuit design and software conceptualization.

¹ An example of an advanced call center is General Electric, which employs 3,600 people in its relationship management center located near Delhi. The employees are divided into groups and trained to speak in the accents based on the region in the United States or Europe that they are servicing. Employees are also trained and constantly updated on local news and sports teams in order to develop a more personal relationship with the customers they call.

The final step in the value curve is the generation of original technology. Today, a few engineers, particularly in the software sector, are beginning to think about developing their own technologies. As a result, a few managers, including ConnectCapital, JumpStartUp.Net, and Westbridge Ventures, are currently focused on funding entrepreneurs developing original technologies. There are also hopes for developing life sciences initiatives (ICICI Ventures is promoting a Biotechnology Science Park) though the basis for this optimism is less clear.



The Software Industry²

India is quietly but quickly emerging as a global leader in software engineering and web-based services. The India software sector's cost-effectiveness, world-class quality, reliability, and its rapid delivery are some of its powerful competitive advantages.

This has developed in part since it is seen as an attractive career by virtue of the low levels of capital investment requirements and being free from the clutches of the Indian Government. In a country

² Source: NASSCOM (National Association of Software and Service Companies) and McKinsey & Co. report on Indian IT Software and Services, 1999-2000.

that formerly had a centrally planned economy and scarce capital, the software sector provided a rare route for unfettered advancement.

Until 1990, 90% of the software services were supplied by shipping Indian software engineers to the customers' sites. By 1999, on-site services had declined to 58%. It is expected that with the increasing use of high-speed satellite communication systems, the need for on-site delivery will be further reduced. Furthermore, customers view the 12-hour time difference as a key advantage for large project coordination. Today, by arbitraging the time zone differences, companies can create virtual 24-hour offices that in some cases can cut the product development cycles in half.

In addition to its timeliness, the Indian software industry is world-class. Today, India has more ISO 9000-certified software companies than any other country. Only 12 companies in the world have achieved the highest rating of software certification, the SEI-CMM Level Five. Six of the 12 companies are Indian. A McKinsey & Co. analysis scored India as the best-positioned country to offer cross-border IT services and enterprise solutions based on multiple parameters, including vendor and people sophistication.

As a result of its reputation, the Indian software industry has grown 26-fold over the last ten years, from \$150 million in 1989 to \$3.9 billion in 1999. Today, the industry employs more than 250,000 Indians. Much of the growth has been driven largely by demand from the United States. A majority (60%) of the Indian software exports goes to the United States, with an additional 23% to Europe. More than 200 of the U.S. Fortune 1000 companies outsource their software requirements to India.

Many Indian software companies have realized the need to open overseas offices in the United States and increasingly, in Europe. More than 200 Indian software companies have offices overseas today, which allows them to develop relationships and anticipate client requirements. Currently, key areas of growth include programs for Euro currency conversion, multimedia applications, computer-based training, and enterprise resource planning. By the end of 2008, the country's software industry is expected to earn an annual revenue of more than \$85 billion, which represents an enormous portion of the current GDP of an estimated \$425 billion. Therefore, the sector is likely to continue to be a strong engine for the generation of investment opportunities for the foreseeable future.

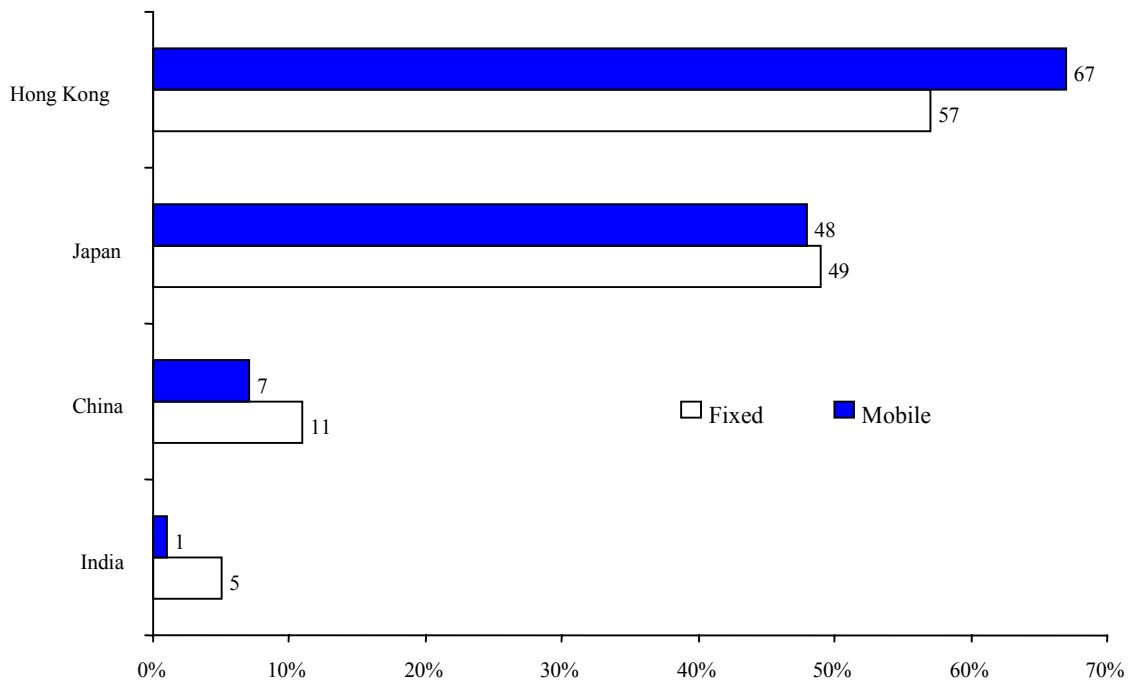
Telecommunications

Several Asian countries, including India, are forecasted to experience an explosion in technological development. Personal computers consumption in Asia is estimated to increase annually by 23% from 1999 to 2004. Internet user growth rate is increasing at an expected 56% compounded annual rate and wireless telephone usage is expected to grow in all markets, with China projecting an increase from 32.2 million in 1998 to 80 million by 2001.

While forecasts for technology growth throughout Asia are astonishing, it is not immediately apparent that these will provide local venture capital investing opportunities in India (see graph below).

GETTING CONNECTED

Telephone Subscriptions per 100 People - 2000 forecasts



Source: Pyramid Research

India is far behind the region in terms of its fixed and mobile telephone network and also (for the moment) in the number of Internet connections and hosts. The forecasted growth in the telecom sector in India requires enormous infrastructure investment and the telecom sector is unlikely to be a fruitful source of venture capital investing opportunities. Although the government has very recently announced the opening up of the long distance telephony market, overseas investors are restricted to maximum holdings of 49%. Such restrictions are likely to stall and limit growth in this area.

Outlook for Venture Investing

In conclusion, the drivers of venture capital investing are the following:

Economic Environment	Subjected to enormous contrasts and a largely inadequate local economy. The principal investment opportunity and growth is tied to the world-class software sector that has an international outlook and is blossoming in the South.
Political Environment	Risky in terms of the potential for upset and disruption as the country seeks to re-establish itself on the world stage. The Kashmir conflict, strong trade unions, and partisan politics may all create problems. May be considered on a par with Israel in many respects.
Cultural Attitude	Excellent among the middle classes, which are particularly focused on the knowledge economy as their best route to wealth creation and a better standard of living.
Investment Skills	Historically in limited supply, but increasingly amplified by skills from non-resident angel investors and expats returning to India.
Management Pool	Excellent and further amplified by skills from U.S. IT professionals and expats returning to India, according to most reports. Likely to improve as India moves further up the value curve.
Regulatory Environment	Rapidly improving with the remaining barriers being more in the way of irritating red tape delays. The potential for backlash to prevent realized gains being repatriated remains, but is increasingly unlikely. Nasdaq exits and Mauritius-based fund vehicles will tend to avoid this potential issue.
Availability of Capital	Sufficient for the time being although possibly moving toward oversupply.
Technology Breakthroughs	Limited generation of original technology in India currently, but signs of improvement notably in the Software sector as the IT industry moves up the value curve.
Pricing	Reasonable pricing and not much competition for deals. Situation is likely to deteriorate as competition increases.
Exits	Excellent opportunities via Nasdaq and M&A from multinational IT firms. Difficult to determine whether appetite is sustainable. Investment exit via local stock exchange is possible but liquidity is largely illusory.

Investment Managers

Currently there are approximately 56 managers in India covering the private equity and venture capital sectors. The different managers can be categorized as new venture capital managers in the course of forming or raising their first fund; established local private equity managers; established local venture capital managers with India-focused funds; and, established venture capital managers with regional funds.

See Appendix B for a brief commentary on 21 of the 56 private equity and venture managers. We would be happy to review each of these in greater detail with prospective investors, indicating which we perceive as best positioned to generate attractive returns.

A Note on Private Equity Investing in India

For the foreseeable future, signs of an attractive buy-out and development capital market do not exist. In the past, several private equity managers located principally in New Delhi or Mumbai, invested in existing businesses focused on the local markets. Performance to date from these managers has been mediocre at best and few exits have been achieved. The local manufacturing and service economy is small and inefficient and the local stock market is relatively illiquid, especially for non-resident investors.

Some of these traditional private equity players are belatedly focusing almost exclusively on technology investing in companies located in the South. Of note, however, is that few of these managers have relocated to the South and most remain in New Delhi or Mumbai.

Conclusion

India's large pool of skilled technicians has developed a world-class software sector that affords many promising opportunities to venture capital investors interested in building an allocation to Southeast Asia. The democratic government encourages the development of the IT and venture capital markets and is slowly improving the regulatory environment. Although keenly aware of the risks associated with investments in emerging economies, Cambridge Associates nevertheless believes that a select group of managers have the potential to earn competitive returns by focusing on those knowledge-based sectors in which India competes successfully in global markets.

India's country-specific risk is tied largely to the continued health of the U.S. technology markets because most Indian technology companies rely on U.S. customers for growth and U.S. public markets for exit. Despite the potential for escalation of the Kashmir conflict and persistent problems of red tape, India's political environment is perhaps less risky than that of most emerging markets and appears similar to that of Israel, a country often considered "developed" rather than "emerging." Finally, as with any market, investors need to consider the manager-specific risks associated with new firms developing their strategies, processes, and teams.

APPENDIXES

APPENDIX A**HISTORY OF THE INDIAN VENTURE MARKET**

The blossoming of the Indian venture capital market may be attributed to a chain of events sparked by deregulation. Until 1990, India's central government controlled virtually all respects of the economy. The government, via a series of five-year plans, controlled the flows of capital, interest rates, the value of the currency, and all principal industries in the country. Beginning in 1990, under pressure from the IMF and following a long and severe balance of trade deficit, India began a process of relaxation of some of the government controls. At the same time, cultural changes were sweeping through the country. In 1991, NASSCOM successfully lobbied the government to gain income tax exemptions on profits from software exports, abolish the import duty on computer software, and make amendments to the copyright laws pertaining to the development of software programs.

In 1992, the process of globalization and cultural change took a step back when the United States imposed strong trade sanctions following India's decision to test its nuclear weapons. The government relocated several of its military establishments, particularly those relating to aerospace and weapons, to the South in order to be less accessible to Pakistan. Many of the new facilities joined the pre-existing concentration of establishments based in Bangalore, the favored site of former President Nehru.

Beginning in the early 1990s, several large U.S. multinational companies such as Hewlett-Packard and Texas Instruments, set up development centers in the South to utilize the inexpensive world-class engineering talent coming initially from many of the local military science establishments. Other multinational companies, data processing, and service/call centers also were established in the South to capitalize on its inexpensive, English-speaking, and technically proficient workforce. These firms also capitalized on the differences in the time zones: data entry work downloaded from Europe or the United States at the end of the working day could be completed and delivered by the start of the following working day.

At that time, it was difficult to attract capital to grow businesses. Capital markets were largely illiquid, foreign investors were restricted from investing in local business, and a tax-efficient structure for venture capital funds did not exist. As a result, fast-growing companies had to find alternative sources of funding for their growth. One solution, labeled "body shopping," involved signing a major design contract with a U.S. company, which was filled by shipping an army of sub-contract engineers with short-term visas to the United States. As a result of the "body shopping" phenomenon, many Indian engineers gained valuable experience working in U.S. companies. During 1997 and 1998, fears of Y2K bugs in computer programs created enormous demand for support staff and dramatically enhanced the growth of the Indian service centers and the body shopping business.

APPENDIX A (CONTINUED)**HISTORY OF THE INDIAN VENTURE MARKET**

In 1997, the Securities and Exchange Board of India (SEBI) and the K.B. Chandrasekhar Committee on Venture Capital recommended a series of legislative and tax changes to facilitate the development of the knowledge industry and create a tax-efficient venture capital fund structure that would allow for the mobility of capital in and out of India. The government wholeheartedly supported the recommendations and expects to complete their implementation by year-end.

Other U.S. companies, including Motorola and Microsoft, set up research and development centers in India, after realizing the high-quality engineering talent available that was in short supply in the United States. In 1998, the government officially recognized the Indian technology industry by placing it on its national agenda, issuing three reports, and financing the creation of Software Technology Parks in various cities throughout India.

In 1999, SEBI, in conjunction with the government and supported by several wealthy non-resident Indians living in the Silicon Valley, mounted a publicity campaign, largely in the United States. This raised awareness of the profusion of successful Indians in the U.S. venture and technology communities and the growth of the knowledge workforce and economy in India.

APPENDIX B**INVESTMENT MANAGERS****3i Asia**

3i Asia does not currently operate in India. Currently, the firm has offices in Singapore and Japan. Several years ago, 3i formed a joint venture with ANZ Grindley's Bank and built a small portfolio of investments. The joint venture, however, collapsed because of issues surrounding exchange controls, red tape, illiquidity, and taxes. They were probably too early in the market in any case. They have, however, reportedly noticed several other groups that have been "seemingly successful" and have begun to think about re-entering India.

Baring Private Equity Partners

Based in New Delhi, Baring Private Equity Partners employs three partners to make venture capital investments in IT, life sciences, and service sectors connected to India. The Manager expects to open offices in Bangalore, Silicon Valley, and possibly Israel in the near future. Since Fund I was raised in 1997, the team has invested approximately \$21 million in nine companies and has completed three liquidity events. They are currently raising a \$250 million fund. The average size of each investment is expected to range from \$5 million to \$10 million, in addition to one or two buyout transactions. Up to 25% of the Fund could also be invested in listed companies.

Carlyle Group

The Carlyle Group has recently opened an office in Bangalore, which will be managed by two investment professionals, both formerly of Intel Capital India. To date, Carlyle has made seven (out of 12) investments in India through the Carlyle Asia Venture Partners I, a \$159 million pan-Asian fund. Going forward, Carlyle's investments in India will become part of Carlyle Asia Venture Partners II, a \$500 million pan-Asian fund which Carlyle is currently raising. Carlyle expects that \$100 million to \$150 million of the Asia Venture Partners II will be invested in India.

CDC Capital Partners

CDC Capital Partners is the private equity arm of CDC Group, a development bank which the U.K. government corporatized in November 1999, and intends to privatize in 2001. The largest of CDC's private equity operations is in India, where the New Delhi-based group manages \$100 million invested in

APPENDIX B (CONTINUED)**INVESTMENT MANAGERS**

11 Indian technology companies. Investments are focused on software services, telecommunications, and the Internet service providers sectors. Investments are made from several pools of capital: a \$22 million technology fund (investments up to \$2 million), a SARF Fund for medium-sized deals (\$4 million to \$6 million each); and a co-investment pool from the CDC Group's balance sheet. CDC Capital Partners did not indicate any plans to raise outside money for its Indian investment activities, but this seems inevitable following privatization.

Citigroup

Citigroup began making private equity investments in 1996 and employs a staff of five for its offices in New Delhi and Mumbai. Currently, Citigroup invests off of the Citicorp balance sheet through a pool of \$100 million, of which \$70 million has been invested. Investments have been targeted at Internet infrastructure and software service companies with a Citicorp connection, with the average investment size between \$2 million and \$5 million. Citicorp indicated that in the future they might raise a country-specific fund, or allocate some of their pan-Asian fund to India.

ConnectCapital Holdings

ConnectCapital Holdings is a newly formed firm founded by Abnay Havaladar and Ramanan Raghavendran based in Mumbai. Previously, Mr. Havaladar was with Draper International, where he co-managed an India fund set up in 1995. Mr. Raghavendran was a partner at Insight Capital and earlier, at General Atlantic Partners, two U.S. venture capital firms. The firm has raised start-up funding from Microsoft, i2 Technologies, and MSD Capital. The Manager is contemplating launching its first fund for third party investors.

Chrysalis Capital

Based in Mumbai, Chrysalis Capital is a venture capital firm established in 1998 and currently employs a team of 12 investment professionals. The firm focuses on making investments in IT, IT-enabled services, and the Internet across all stages of development. The firm raised its first fund in 1999 with \$65 million in capital commitments. Investors included Microsoft, the Economic Development Board of Singapore, Stanford University, and the Bank of Madura. The firm is currently raising its second fund, targeting \$250 million.

APPENDIX B (CONTINUED)**INVESTMENT MANAGERS****Electra Partners-Asia**

Electra Asia's office in Mumbai employs two professionals to make private equity investments in India for Electra's pan-Asian fund, headquartered in Hong Kong. In the past, Electra's private equity investing activities were structured as a 50/50 joint venture with Jardine Fleming. Over the last four years, the Indian-based team has made six investments, totaling \$32 million, and has completed two liquidity events. Electra Asia is currently raising a \$150 million fund, of which Electra is expected to commit \$30 million. The Fund will aim to invest between \$2 million to \$10 million to provide development capital for profit-generating companies in export-focused industries.

eVentures India

eVentures India employs a team of 30 professionals operating out of a single office in Mumbai. The firm is equally owned by ePartners, Softbank, and PK Mittal. The firm was founded in September 1999, when the professionals' incubator merged with Softbank's eVentures activities. The firm is one of Softbank's eVentures entities, which are 50/50 joint ventures with News Corp's ePartners. Since September 1999, the firm has invested a total of \$65 million in 16 transactions. eVentures India is considering a public listing and may accept new investors in three to six months.

HSBC Private Equity India

HSBC India was founded in 1995 and includes a team of five investment professionals based in New Delhi. The firm has invested \$42 million of HSBC Private Equity India Fund, LP, a \$60 million fund raised in 1996. The Fund focused on making development capital investments (\$2 million to \$5 million each) in sectors including pharmaceuticals, engineering, textiles, and food and beverage. Going forward, the Manager plans to make at least 50% of its investments in new economy sectors. The Manager plans to have the fund fully invested by year-end and may raise another India-only fund, but has not yet decided.

APPENDIX B (CONTINUED)**INVESTMENT MANAGERS****ICICI Ventures**

Headquartered in Bangalore, ICICI Ventures employs 25 investment professionals and is a wholly-independent subsidiary of ICICI, India's first private sector financial institution founded in 1955 and today India's second largest financial institution. ICICI Ventures also has a regional office in Mumbai and plans to open an office in San Jose, California, in the future. The firm was founded in 1988 and has raised nine funds, totaling approximately \$210 million. The firm began raising offshore funds in 1997 through a joint venture with Trust Company of the West (TCW), through which they have invested a total of \$45.5 million in 21 companies and completed five liquidity events, and also has raised a \$6 million Software Fund for the World Bank. The Manager is currently raising a \$150 million fund. The Fund will focus on investments (averaging \$5 million each) in IT and health care service companies that address the global markets.

IndAsia Fund

Based in Mumbai, IndAsia Advisors and AMP have formed a joint venture and are currently raising a \$75 million to \$100 million fund, AMP-IndAsia India Fund. AMP is Australia's oldest and largest insurance institution and two members from AMP will be on the Fund's investment committee. IndAsia Advisors is a firm founded in 2000 by two investment professionals (Pradip P. Shah and Darius Pandole), both of whom were formerly with Indochean Chase. The Fund will make investments in IT, Internet/e-commerce, life sciences, communications, media/entertainment, and distribution/logistics companies, with an average investment size of between \$5 million and \$10 million. The Fund has had a first closing on \$38.4 million, primarily from the commitments received from IFC and AMP. The Fund expects to have a final closing by the first quarter, 2000.

Indochean Chase Capital

Indochean Chase Capital Partners acts as the Chase Capital Partners (CCP) affiliate in India. Chase Capital Partners' Asian team includes 14 professionals, four of which are based in Mumbai. The firm's first India-only fund raised in 1997 has invested approximately \$100 million in 14 companies, which include five IT service companies, three B2C e-commerce companies, four B2B companies, and a buyout of an Indian bank. The latter investment dominates their operations. Three companies are part

APPENDIX B (CONTINUED)**INVESTMENT MANAGERS**

of CCP's Asian portfolio and two companies are part of CCP's U.S. portfolio. Last year, Indochean Chase attempted to float the management company on the Singapore exchange, though the plan is currently on hold. The firm remains undecided as to whether Indochean Chase will raise another India-only fund, or continue to make investments off of the Chase Capital Partners' balance sheet.

International Equity Partners

International Equity Partners (IEP) is an emerging markets private equity manager located in Northern Virginia and has approximately \$200 million under management. The firm raised its first Indian fund in 1996 with \$34 million in capital commitments. Fund I has invested \$20.9 million in eight companies, representing a diverse set of old and new economy sectors. The firm is currently raising its second India fund, targeting \$100 million to make investments in technology, entertainment, and communication companies. IEP will work with two in-country advisors: India Direct Advisors (IDEA) and the Housing Development Finance Corporation (HDFC).

IVC

Based in Bangalore, IVC is a venture fund manager owned partially by IL&FS, an Indian financial services company, which has a team of six investment professionals. The Manager currently manages a \$150 million infrastructure fund with AIG and \$55 million in venture investments through two sector funds and two other funds that they purchased from Lazard Credit Capital India.

KVP Ventures

KVP Ventures is a new venture firm set up by Kerry Packer, the chairman of Australia's Consolidated Press Holdings; Vinay Maloo, the chairman of Himachal Futuristic Communications (HFC); and Ketan Parekh, a stockbroker. The firm will be headquartered in Mumbai and will focus on making seed and early-stage investments in IT, e-commerce, media and entertainment, specialty chemicals, and biotechnology. The Fund is targeting \$250 million.

APPENDIX B (CONTINUED)**INVESTMENT MANAGERS****Jumpstartup.net**

Jumpstartup.net is a firm established in January 2000, by three partners. Kiran Nadkarni was the founder of the Indian Venture Capital Association, worked at ICICI Ventures, and since 1995, was with Draper International. Sanjay Anandaram was the founder of Neta, a company that was sold to Infoseek, and Wipro Inc., an Indian IT company. K. Ganapathy Subramanian was a group manager at ICICI Ventures. The firm is based in Bangalore and has plans to hire a total staff of 11. In August 2000, the firm closed its first fund, Jumpstartup.net Venture Fund I, with capital commitments of \$45 million. The Fund will make seed and early-stage investments (less than \$1 million each) in companies in four areas: the Internet, IT services, intellectual property, and click and mortar. Investors included the Vertex Group from Singapore, The National Science and Technology Fund, Silicon Valley Bank, as well as several individuals from the Silicon Valley.

Schroder Ventures

Schroder Ventures' Indian activities are part of Schroder's Southeast Asian operations, which are based in Singapore. Schroder currently has six professionals in Singapore, five in Hong Kong, and one in Mumbai. In the latest fund, Schroder's Asia Pacific II, more than half of the investments (nine or ten companies) were made in India. Although past investments were in companies having an exporting advantage such as textiles, in companies addressing a local market, or in quoted companies, future investments are likely to be exclusively in the technology area. The Manager closed Schroder's Asia Pacific III with \$500 million in capital commitments in the second quarter of 2000.

Walden International

Walden International began investing in India in 1997, through the Walden-Nikko India Fund, which was structured as a joint venture between Walden International and Nikko Securities of Japan. The Walden-Nikko India Fund has invested \$31 million in 13 companies and has completed one liquidation event. Currently, Walden focuses on investments involving knowledge infrastructure, e-services, and companies relating to the Internet and typically in companies focusing on the demand created by Indians living in India and by non-resident Indians. The Walden team currently working out of the office in Mumbai included approximately five investment professionals. It was unclear if the firm would continue

APPENDIX B (CONTINUED)**INVESTMENT MANAGERS**

operating as a joint venture or if the team would make investments as part of Walden's pan-Asian fund, which might be as large as \$1 billion and is expected to begin fundraising in the fourth quarter of 2000.

Warburg Pincus International

Warburg International began investing in India in 1998 on behalf of its ex-U.S. fund, International Fund I. The firm does not have an office in India; but one or two of the six Singapore-based investment professionals is in India each week. The International Fund I has invested approximately \$300 million in 11 Indian companies. Investments have been made across all stages and the firm typically acts as the first institutional investor. Warburg Pincus is currently seeking \$2 billion for its second ex-U.S. fund, Warburg Pincus International Partners.

Westbridge Capital

Westbridge Capital is a new firm founded by three ex-Goldman Sachs employees. Investments, averaging \$3 million per company, will focus on early-stage technology companies involved the cross-border (U.S.-India) space. The firm plans to open an office in Bangalore and over time, build a team of 11 professionals. The Manager launched its first fund, targeting \$120 million in commitments, in August 2000, having received commitments from Goldman Sachs and Capital Z. We understand that it has become rapidly oversubscribed.

APPENDIX C**SOURCES**

David Hutchings and Patricia Selcke visited India in July 2000, to research the local venture investing market. They met with 16 local investment managers, and also professional advisors, members of a portfolio investment team, the Securities and Exchange Board (SEBI), and a government contact. There are no material investors that they did not meet with or talk to afterward. Meetings were held in Mumbai (Bombay), the commercial capital; Bangalore, the technology capital; and Delhi, the center of government.

Articles and Publications

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Additional Sources of Information

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Various Financial Times and The Economist articles.

VCLine, www.vcline.com/india.htm