

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

INDIAN PRIVATE EQUITY INVESTING

2003

Eugene Snyman
Baldhiraj Dang

Copyright © 2003 by Cambridge Associates LLC. All rights reserved.

This report may not be displayed, reproduced, distributed, transmitted or used to create derivative works in any form, in whole or in portion, by any means, without written permission from Cambridge Associates LLC. Copying of this publication is a violation of federal copyright laws (17 U.S.C. 101 et seq.). Violators of this copyright may be subject to liability for substantial monetary damages. The information and material published in this report are confidential and non-transferable. This means that authorized members may not disclose any information or material derived from this report to third parties, or use information or material from this report, without the prior written authorization of Cambridge Associates LLC. An authorized member may disclose information or material from this report to its staff, trustees, or Investment Committee with the understanding that these individuals will treat it confidentially. Additionally, information from this report may be disclosed if disclosure is required by law or court order, but members are required to provide notice to Cambridge Associates LLC reasonably in advance of such disclosure. This report is provided for informational purposes only. It is not intended to constitute an offer of securities of any of the issuers that are described in the report. This report is provided only to persons that Cambridge Associates LLC believes to be "Accredited Investors" as that term is defined in Regulation D under the Securities Act of 1933. The recipient of this report may not provide it to any other person without the consent of Cambridge Associates LLC. Investors should completely review all Fund offering materials before considering an investment. No part of this report is intended as a recommendation of any firm or any security. Factual information contained herein about investment firms and their returns which has not been independently verified has generally been collected from the firms themselves through the mail. We can neither assure nor accept responsibility for accuracy, but substantial legal liability may apply to misrepresentations of results delivered through the mail. The CA Manager Medians are derived from Cambridge Associates LLC's proprietary database covering investment managers. Cambridge Associates LLC does not necessarily endorse or recommend the managers in this universe. Performance results are generally gross of investment management fees and do not include returns for discontinued managers.

C O N T E N T S

Abstract.....	1
Summary	4
Exhibits	
1 Annual Private Equity Investment in India	13
2 Private Equity Investment by Stage in India	14
3 Completed Mergers and Acquisitions: India	15
4 Completed Mergers and Acquisitions by Region	16
5 Indian Private Equity Investments by Industry Sector	17
6 Initial Public Offerings: India	18
7 Global System for Mobile Communication (GSM) Cellular Tariffs in India	19
8 Mobile Penetration in India Compared to Other Asian Countries	20
9 Growth of India's BPO Sector	21
10 Private Equity Investments in India	22
Appendices	
A-1 Representative List of Private Equity Firms Active in India	24
A-2 Universe of 21 Private Equity Firms Active in India	25
B India at a Glance	26

ABSTRACT

1. The Indian private equity market has grown rapidly since it was first given life in 1991 when the central government introduced far-reaching reforms designed to further integrate the local and global economies. The increased participation of global institutional investors, augmented by funding from a small community of influential non-resident Indians, had been instrumental in bringing the aggregate private equity investment pool close to US\$1 billion last year.
2. However, because the market is still very much in its adolescence and without an established track record, investors are encouraged to exercise prudence when considering the vigor with which they pursue private equity opportunities in India. Despite the existence of some interesting opportunities with real prospects, the inherent risks are at least commensurate with the potential rewards. Still, given India's intrinsic advantages and hence the possibility for long-term growth, skeptics and believers alike may find it worthwhile to keep their fingers on the pulse of rapidly unfolding economic developments in the country.
3. Private equity investment has been encouraged by a variety of favorable conditions. India's large population of educated English speakers has given it a global reach that is today envied by its Asian counterparts. The recent increase in mergers and acquisitions within the highly competitive IT-enabled services (ITES) space has created many new investment opportunities. Moreover, the central government, keen to see its homegrown enterprises develop, has been gradually warming to the needs of foreign investors.
4. Nevertheless, private equity investors also face many serious impediments. The public and private sectors are riddled with corruption; labor laws are highly restrictive; legal protections of intellectual property are poor and badly enforced; bankruptcy laws are punitive; financing is often expensive and difficult to obtain; exit opportunities are scarce and capital extraction problematic; majority positions in companies are hard to come by, while corporate accounting and governance are opaque, leaving minority shareholders vulnerable to predatory owners; and persistent Indo-Pak tensions and Hindu-Muslim riots result in an unsettling political climate.
5. Telecommunications, finance, and ITES remain the favorite sectors among private equity firms. Deserving of special mention, however, is the business process outsourcing sector, the recent boom in which is attributable to India's high productivity, low labor expenses, and shrinking costs.
6. Private equity firms targeting investments in India have a domestic, pan-regional, or global focus. Their strategies vary according to investment stage with some preferring to pursue small early-stage deals while others target larger expansion-capital opportunities or a mixed portfolio of both. Worthy of note, the private equity market has recently witnessed a gradual shift in investment interest away from start-up ventures toward later-stage opportunities due to the declining promise of the former following the end of the technology bubble in 2000. On the non-venture side, the dearth of management buyouts and leveraged buyouts is attributable to the difficulty of wresting control of companies from family owners and the high price of debt financing.

7. The hype surrounding India's fast-developing emerging markets status has fuelled the notion that the country is awash with rough diamonds, which will be ready to market after a few rounds of financing, a little marketing, and perhaps some cursory changes in management structure. Not so—unique complexities within the local business environment dictate the indispensable need for constant attention and active involvement on the part of private equity firms hoping to realize competitive returns.

SUMMARY

Overview

Funds Invested

Aggregate private equity investments in India fell from an all-time high of US\$1.1 billion in 2001 to US\$980 million in 2002—an atypical development considering that for more than a decade, funds have been experiencing largely uninterrupted growth. Kick-started by national economic liberalization in 1991, private equity investing was pushed into high gear in 1998 when the Indian government, on the recommendation of the Securities and Exchange Board of India, introduced sweeping legislation designed to facilitate the mobility of capital into and out of the country in a tax-efficient manner. Private equity investment in India grew from US\$81 million in 1998 to its peak in 2001, a 13-fold increase in just four years¹ (see [Exhibit 1](#)).

Market Participants

Private equity firms targeting investments in India may have a domestic, a pan-regional, or a global focus. Their strategies vary according to investment stage with some preferring to pursue small early-stage deals while others target larger expansion-capital opportunities or a mixed portfolio of both. See Appendix A for a list of private equity managers targeting Indian investments, with details on their strategies, geographical focus, and deal size.

Stage Focus

Start-up and expansion-capital investments have made up more than 80% of total funding. Interestingly, however, the former has been in decline while the latter has been growing in recent years. This trend is highlighted by the following figures: from 1999 to 2001, the share of start-up investments declined from 47% to 36% while that for expansion capital rose correspondingly from 36% to 49%. Meanwhile, seed, buyout, and mezzanine-stage investments have remained low at 7%, 4%, and 4%, respectively (see [Exhibit 2](#)).

Much of the early-stage deal flow in India is evaporating for two reasons. First, technology start-ups are virtually nonexistent in the post-bubble environment; second, many of the world's largest software firms have begun to establish Indian operations instead of outsourcing to third parties. Consequently, a number of venture capital firms have set up satellite offices in the United States to take advantage of cross-border opportunities, typically investing in U.S. technology companies and moving their back-office functions to India, thereby adding value by reducing costs. Improved deal flow and the relative ease with which exits are achieved in the United States are key factors that have encouraged firms like Westbridge, JumpStartUp, and ChrysCapital to pursue such opportunities from their offices in California.

The contrary surge in expansion-capital investments by private equity firms has played a key role in satiating the hunger of growth-oriented, funding-starved enterprises that have faced much difficulty in procuring capital from more traditional sources. Expansion-capital deal flow has been given a boost by a wave of M&A activity within competitive sectors like IT-enabled services, business process outsourcing (BPO), and telecommunications (see [Exhibits 3 and 4](#)).

¹ Except where indicated otherwise, all private equity industry data are from *The Asian Venture Capital Journal*.

Of late, private investments in public enterprises (PIPEs) have also been gaining favor, especially among the larger private equity firms. PIPE transactions enable the regional and global firms to make bigger investments, typically between US\$10 million and US\$100 million per investment, while at the same time giving them exposure to more established companies with strong management teams and proven strategies. Publicly listed Indian companies often trade at lower multiples than their private counterparts, making them better value propositions.

Leveraged buyouts (LBOs) and management buyouts (MBOs) have been scarce due to the high costs of debt financing and the difficulties associated with gaining majority control in Indian enterprises. Recently, however, the dismantling of some barriers has rekindled an interest in such deals. For example, as real interest rates have dropped from about 12% to 6% in the past five years, financial institutions have shown a greater willingness to extend loans for LBOs. Meanwhile, MBOs have proved suitable for acquiring both companies with family succession issues as well as the noncore subsidiaries divested by multinationals. A recent example of a prominent MBO transaction is ICICI Venture Funds Management's US\$21.8 million investment in Tata Infomedia, which gave ICICI Bank's private equity arm a 50% controlling stake in a media firm that had been run by the Tata family for nearly half a century.

Finally, India's growing nonperforming loan problem is now beginning to generate distressed debt deal flow, potentially creating opportunities for private equity firms to participate in restructuring and turnaround transactions.

Dominant Sectors

Although private equity funds target a number of sectors in India, three in particular attracted the most capital between 1991 and 2001: telecommunications (23%), information technology (17%), and computer-related (17%) industries. While telecommunications garnered the most funding, this was shared only among 53 companies. The latter two collectively accounted for more than a third (557) of the total number of companies (1,487) that received private equity investments (see [Exhibit 5](#)). The information technology and computer-related industries together encompass a wide range of services, including BPO, which has emerged as a favorite among venture capital investors.

The American Non-Resident Indian (NRI) Connection

The large, established community of non-resident Indians (NRIs) based in the United States has been a key catalyst for the transfer of risk capital to India. Right from its infancy, the venture capital industry in India has been the fortunate beneficiary of funds from wealthy "angel investors" from Silicon Valley, who have been eager to see the growth of IT start-ups in their homeland. More importantly, however, many American NRIs, attracted by lucrative opportunities, are now returning to India to set up their own businesses or venture capital firms. Given the fact that the United States remains the dominant target market for Indian companies offering IT solutions and services, these returnees constitute an important ingredient for success since they have a clear understanding of client needs and possess a ready network of useful contacts to source both investors and customers for their portfolio companies.

The American connection has also resulted in Indian private equity firms establishing offices in the United States. The move serves a dual purpose. Not only is the satellite office used as a base to structure cross-border deals, but by staying abreast of developments in the United States, the private equity firms are also better able to match U.S. demand with Indian supply.

Exit Strategies

There has been no shortage of investment activity or management talent, but the same cannot be said about exit opportunities in India, and this has been the main sticking point for private equity investors. Initial Public Offerings (IPOs) are achievable but undesirable in India primarily due to the poor liquidity of the domestic market. New issues also require a minimum market capitalization of approximately US\$100 million to generate sufficient research analyst coverage. On the other hand, a foreign listing in the United States or the United Kingdom is highly desirable but difficult to accomplish due to the relatively small market capitalization of Indian companies. Despite the fact that India has approximately 1.5 times more publicly listed companies (9,644) than the United States (6,355), its share of the world's total market capitalization is only 0.4% (US\$0.1 trillion)—minuscule compared to the U.S. share of 49.6% (US\$13.8 trillion).² Exhibit 6 shows the level of IPO activity in India since 1991.

One would assume that the difficulty in achieving realizations through the public markets might render trade sales to strategic investors a viable alternative, but this has hardly been the case in India. In the home market, there have been growing concerns that the desire for strategic acquisitions among India's relatively small number of institutional investors has been exhausted, especially in the case of BPO and IT services. Realizations through cross-border trade sales, on the other hand, have been difficult to achieve primarily because family owners of companies in India typically do not relinquish majority stakes to venture capitalists, making it difficult for firms to position their shares for sale to foreign buyers who are generally reluctant to assume minority interests.

Limited Partnerships in Mauritius

The absence of a limited partnership vehicle in India has been a source of some inconvenience for private equity firms. Domestically registered funds tend to structure themselves as trusts or incorporated companies, thereby sacrificing certain tax benefits and leaving themselves open to greater scrutiny by the Indian government. These local difficulties have induced many foreign funds investing in India to conduct their operations from an offshore location, typically as limited partnerships registered in Mauritius, a country with which India has favorable double-taxation agreements. The Indo-Mauritius tax treaty stipulates that any capital gains realized by a resident of Mauritius through sale of capital assets in India need not be subject to Indian capital gains tax. Despite this apparently convenient arrangement, some managers still face frustrating delays in extracting capital after realizations, although there seems to be some consensus that these bureaucratic impediments will eventually be mitigated.

Industry Focus

The bulk of private equity investments in India have been targeted at a small number of key sectors including financial services, telecommunications and software services, major changes which are outlined below. It should be noted that BPO, an industry of equal or greater importance, which has experienced a meteoric rise in India, is studied as a special case in the following section.

² *S&P Emerging Stock Market Factbook 2002*, National Stock Exchange of India Ltd: 2002 Indian Securities Market – A Review.

Finance

The Indian financial sector is dominated by banks but also consists of non-banking financial institutions that provide services, which include investments, equipment leasing, hire purchase, and housing finance. All large banks were nationalized in 1969³ but government control eased in the 1990s with the implementation of sweeping reforms aimed at deregulation and liberalization of the financial sector—igniting the interest of foreign banks and private equity firms, which began to purchase significant stakes in domestic Indian banks. More recently, the decision in February 2003 by Jaswant Singh, India's finance minister, to raise the limit on foreign holdings in private Indian banks from 49% to 74%⁴ has further fuelled their appetite for acquisitions. Private equity deals within the financial sector include CDC Capital Partners' investment in UTI Bank and Warburg Pincus' investment in HDFC.

Telecommunications

The once state-run telecom sector began a process of deregulation in 1999. By inviting private sector players and foreign institutional investors to participate, coverage has expanded in all service segments and tariffs have fallen dramatically. Today, India has 40 million fixed lines, 14 million mobile phone users, and about one million Internet connections—a far cry from pre-liberalization days. The fixed line segment is controlled by state-owned companies BSNL and MTNL, while the mobile segment is dominated by Hutchinson, IDEA (a joint venture between AT&T and two of India's leading business families, the Tatas and Birlas), and smaller regional players including Spice, Escotel, and RPG.⁵

Investors should be aware that while the entire industry is expanding, the wireless market in particular has been experiencing especially robust growth. Some key developments within the mobile segment are:

- GSM cellular tariffs have fallen by more than 80% since 1999 (see [Exhibit 7](#)).⁶
- Launch of CDMA (30% cheaper than GSM) has driven prices down even further.⁷
- Telecom Regulatory Authority of India allowed free incoming calls in May 2003.⁸
- The cellular subscriber base grew at an annual rate of 109% from 1995 to 2001—as opposed to 19% for fixed lines during the same period.⁹

Still, India remains the most underpenetrated country in the region with a 1% cellular penetration, underlining the strong potential for continued growth (see [Exhibit 8](#)). One of the most prominent private equity deals within the Indian telecommunications space is Warburg Pincus' investment in Bharti Enterprises.

³ Richard A. Werner, *Indian Macroeconomic Management: At the Crossroads Between Government and Markets*, Sophia University, Tokyo.

⁴ "India, S'pore: a good match," *The Business Times Singapore*, April 11, 2003.

⁵ Sofia Tippoo, "Telecom Upheaval in India," *The Edge Malaysia*, July 8, 2003.

⁶ CLSA Emerging Markets India Chartbook, March 2003.

⁷ Sofia Tippoo, "Telecom Upheaval in India," *The Edge Malaysia*, July 8, 2003.

⁸ "Enjoy Free Incoming on Cells as Long as it Lasts," *India Business Insight*, May 12, 2003.

⁹ Sofia Tippoo, "Telecom Upheaval in India," *The Edge Malaysia*, July 8, 2003.

Software Services

The explosive growth of software services in India is synonymous with the emergence of homegrown success stories like Wipro, Satyam, and Infosys. The latter is on course to becoming a US\$1 billion company; extremely impressive considering it was only a US\$68 million outfit five years ago.¹⁰ American software-services players such as EDS, IBM, and Accenture have been finding it extremely hard to compete with India's key comparative advantage—its large population of technically educated English speakers who command a fraction of U.S. salaries. The cost asymmetry has engineered a strong Western demand for customized software development, technology consulting, database development, and more recently new service areas like package software implementation, system integration, R&D engineering, and network management. These are products that are applied across various industries such as retail, utility, telecommunications, and health care.¹¹ While the domestic industry giants mentioned above continue to lead the sector, India's deep pool of intellectual talent is constantly generating new ideas, giving rise to the emergence of numerous software start-ups focused on niche areas ranging from e-commerce to biotechnology, a number of which have become the target of investments from private equity firms. Deals within the software services space include JumpStartUp's investment in July Systems as well as Westbridge Capital Partners' investment in Strand Genomics.

Business Process Outsourcing (BPO)—The New Warhorse

Representing a move up the value chain, BPO¹² has replaced IT services as the principal business solution employed by multinationals struggling to manage costs. Nowhere has this development been more apparent than in India, which has outdone competitors such as the Philippines, Mexico, and Poland to become the global BPO frontrunner. While countries like Ireland, Australia, Singapore, and Hungary have been part of the industry for some time, labor shortages prevent them from competing effectively with India, which has the third largest pool of English-speaking people in the world.¹³ Other key drivers that have led to the development of BPO in India include:

- Labor costs in India for qualified engineers are a fraction of those in the United States.
- Communication costs between India and the United States have fallen by over 85% from 1999 to 2002 and are expected to decline further.
- High productivity and quality of work in India is meeting and exceeding international standards.
- Time zone differences between India and the United States offer the possibility of 24-hour service.
- Proven track record of cost savings achieved through BPO—General Electric's outsourcing efforts in India, employing 9,000 people, save the company over US\$270 million annually.¹⁴

¹⁰ Manjeet Kripalani, "Why Infosys May Have Been Hit Too Hard," *Business Week Online*, April 15, 2003.

¹¹ "Not Great, but Still Growing," *India Business Insight*, June 30, 2003.

¹² BPO is the delegation of one or more IT-intensive business processes to an external provider that in turn owns, administers, and manages the selected processes based on defined and measurable performance metrics. (Gartner Dataquest.) Source: www.staffware.com.

¹³ "A matter of syntax as well," *The Hindu*, October 6, 2002.

¹⁴ *Asia Private Equity Review*, March 2003.

BPO Services

Organizations typically outsource noncore functions including human resources, finance and accounting, and customer care—call centers, in particular, have experienced the most rapid growth. Other, less-dominant subcontracted services include medical transcription, digital content development, and geographic information services, which refers to the digitization of maps and remote satellite data for use in applications such as GPS navigation systems.

Market Size and Private Equity Investments

The BPO sector in India has increased in size from US\$0.5 billion in 2000 to US\$1.5 billion in 2002. Revenues are expected to reach US\$2.2 billion this year and US\$21 billion to US\$24 billion by 2008 (see [Exhibit 9](#)).¹⁵ To put these numbers in perspective, Gartner Dataquest estimates that the worldwide BPO market size in 2001 was US\$127 billion.¹⁶ India currently has about 300 independent BPO companies while the Philippines, its strongest rival, has only about 60. Of the US\$502 million in private equity investments that India attracted in 2002, almost a quarter, US\$127 million, was targeted at BPO alone, underlining the importance of the sector.¹⁷ Prominent transactions in the BPO space include ChrysCapital's exit from Spectramind, Barings' investment in MsourceE, and General Atlantic Partners' acquisition of a 25% equity stake in Daksh e-Services.

Pros and Cons of Private Equity Investing in India

Pros

Large, Educated Middle Class. The highly educated middle class, numbering 300 million,¹⁸ is one of India's key strengths when compared to its neighbors in Asia. The new wealth and spending power garnered by this population since economic liberalization in 1991 has given the economy a much needed demand-driven boost. Both foreign and domestic companies, especially those manufacturing consumer goods, have in recent years set up shop in India to take advantage of this new development. The availability of a deep, inexpensive talent pool of technically skilled English-speaking graduates has made India a global hub for IT services and more recently a "back office to the world," spawning a flood of start-ups and creating conditions ideal for private equity managers, many of whom are highly qualified NRIs who have returned from the United States.

Cooperative Regime. Although more remains to be done, Indian government policy has been largely accommodating to private equity managers. As part of the post-1991 reforms, the removal of trade barriers was accompanied by a significant relaxation of restrictions on the inflow of foreign capital and technology transfer—up to 51% foreign participation in Indian companies was immediately allowed in 34 industries, thus opening more of the Indian economy to

¹⁵ Ibid.

¹⁶ Salomon Smith Barney IT Services India Report, May 6, 2002.

¹⁷ *Asia Private Equity Review*, March 2003.

¹⁸ Indrajit Basu, "India's growing urge to splurge," *Asia Times Online*, August 22, 2003.

private equity investors. Levels of foreign direct investment rose sharply and by 1997 had reached US\$3.2 billion, exceeding levels in both the Philippines and Thailand.¹⁹ A major step forward was also taken in 1998 when new legislation allowed for the formation of tax-efficient funds structured as offshore limited partnerships.²⁰

Mergers and Acquisitions. The increasing competition among the IT services and telecommunications companies in India has sparked a round of consolidation within the industry groups, providing increased deal flow for private equity managers. These mergers and acquisitions are expected to continue as companies aggressively seek synergies and cost savings to gain a competitive advantage.

Cons

Socio-Political Environment. The omnipresent danger of armed conflict with Pakistan over Kashmir makes for a rather insecure investment environment. Cross-border tensions were heightened ever since the two rivals conducted nuclear tests in 1998 and the suicide attack by allegedly Pakistan-backed militants on the Indian Parliament in 2001 was a harsh reminder of the fragility of Indo-Pak relations.

Despite the growth of a more affluent middle class, the persistent poverty endured by a large percentage of the Indian population severely limits the pool of potential customers for products offered by portfolio companies of private equity firms. Companies that wish to improve their margins by raising prices often find this difficult due to the low spending power of the general population.

In addition, both the public and private sector in India are notoriously corrupt. Although corporate governance has improved in recent years, much still needs to be done to achieve greater transparency. Investee company performance, and therefore, investor return is often undermined by insiders who violate company trust for personal gain.

Financing Difficulties. This is a chicken and egg problem: because the private equity sector is still in its infancy and lacks a consistently positive track record, it has difficulty attracting funding from the state, domestic corporations, and financial institutions, which impedes its ability to develop the level of professional expertise that might lead to better results and hence easier access to funding.

Of late, it has been especially difficult to obtain funding for early-stage venture capital projects because the appetite for such investing has waned. As a result, many private equity firms have begun to focus on expansion-capital investments.

Leveraged investments are a somewhat thorny proposition. Although they have eased to some extent in recent years, interest rates have historically been high, rendering debt financing a rather expensive undertaking. Moreover, private equity firms prefer to avoid Indian lenders who at times have tarnished their reputations by leaking confidential deal information.

¹⁹ Richard A. Werner, *Indian Macroeconomic Management: At the Crossroads Between Government and Markets*, Sophia University, Tokyo.

²⁰ See our 2000 report, *Indian Venture Capital Investing*.

Legal Issues. Current legislation severely restricts PIPEs. Existing regulations stipulate that a 15% stake in a public company requires the investor to make an open offer for all outstanding shares. Most private equity firms therefore do not hold controlling stakes in public companies and as such their decision-making power is severely diminished.

Labor laws and influential trade unions in India restrict companies' ability to reorganize and streamline operations through job cuts. Businesses are consequently forced to operate inefficiently, thereby compromising potential profits and overall returns.

Many foreign private equity players are reluctant to invest in the booming IT and software services industries because they deem that legal protection of intellectual property rights in India leaves much to be desired. Although legislation is in place, enforcement is made difficult, in part, by the inefficient judicial process.

The lack of a Chapter 11-like procedure within the Indian legal framework means that there exists no provision for distressed companies to restructure under court supervision and protection. Without this "second chance" feature in place, companies, and indeed investors, are prone to greater risks in the event of insolvency.

EXHIBITS

Exhibit 1**ANNUAL PRIVATE EQUITY INVESTMENT IN INDIA**

<u>Year</u>	<u>Invested (US\$ mm)</u>	<u>Year-on-Year Change (Multiple)</u>	<u>Year-on-Year Change (%)</u>
1992	18	---	---
1993	21	1.2x	21
1994	36	1.7x	70
1995	53	1.5x	47
1996	75	1.4x	42
1997	95	1.3x	28
1998	81	0.9x	-15
1999	347	4.3x	326
2000	803	2.3x	132
2001	1,122	1.4x	40
2002	980	0.9x	-13
Total	3,631		

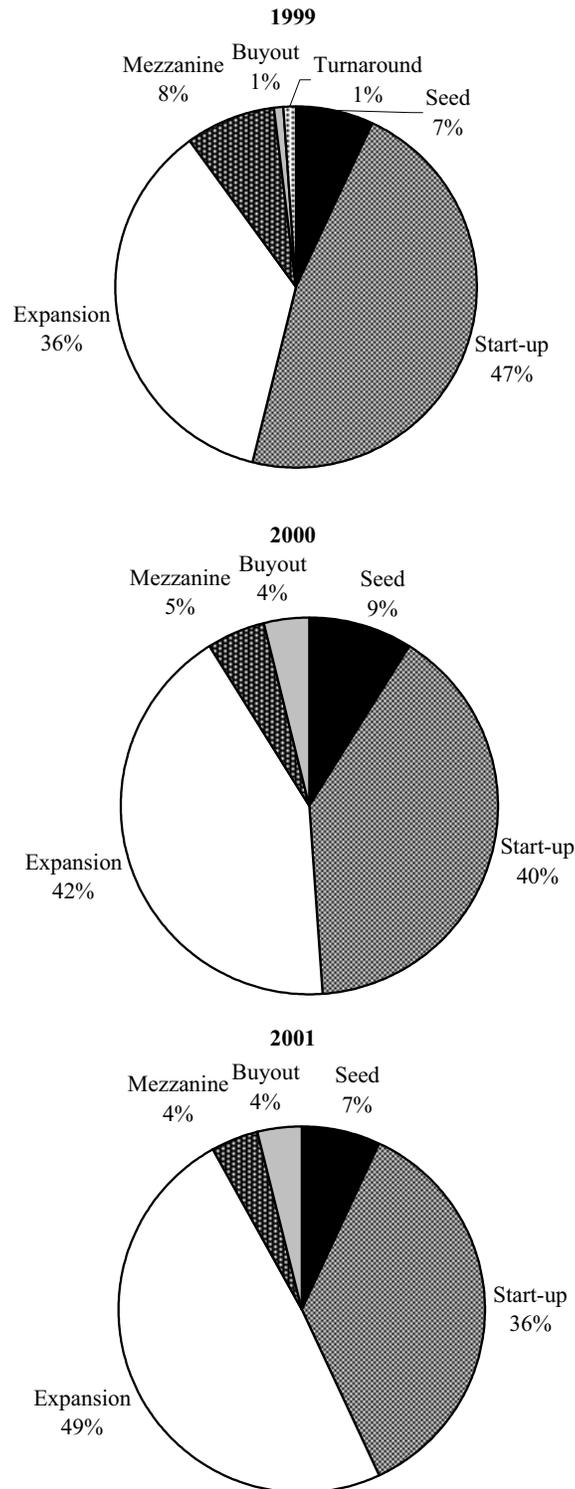
Source: *Asian Venture Capital Journal*.

Note: Exchange rate Rs48.252/US\$1.0.

Exhibit 2

PRIVATE EQUITY INVESTMENT BY STAGE IN INDIA

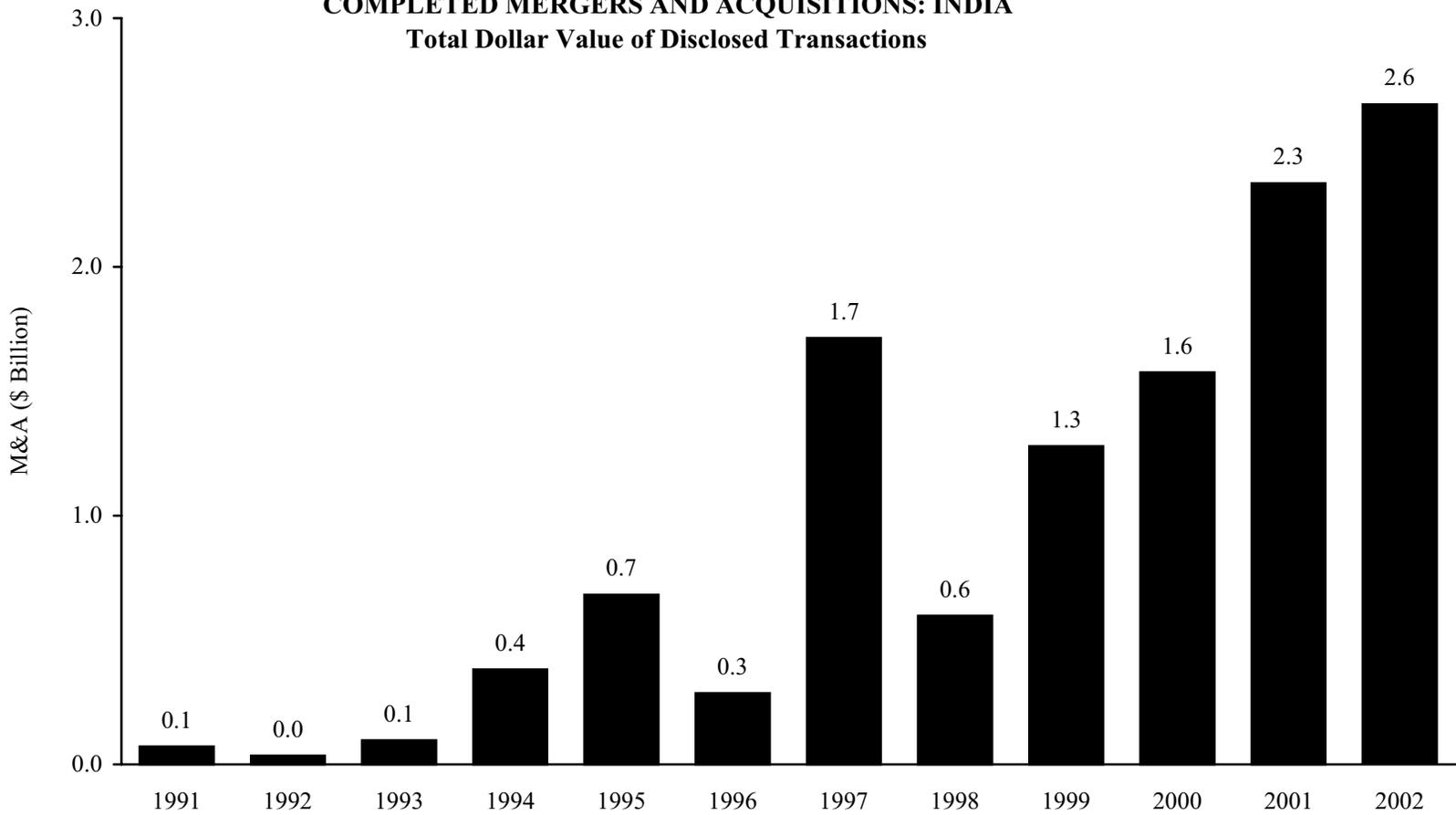
By Capital Invested 1999-2001



Source: *Asian Venture Capital Journal*.

Exhibit 3

COMPLETED MERGERS AND ACQUISITIONS: INDIA
Total Dollar Value of Disclosed Transactions



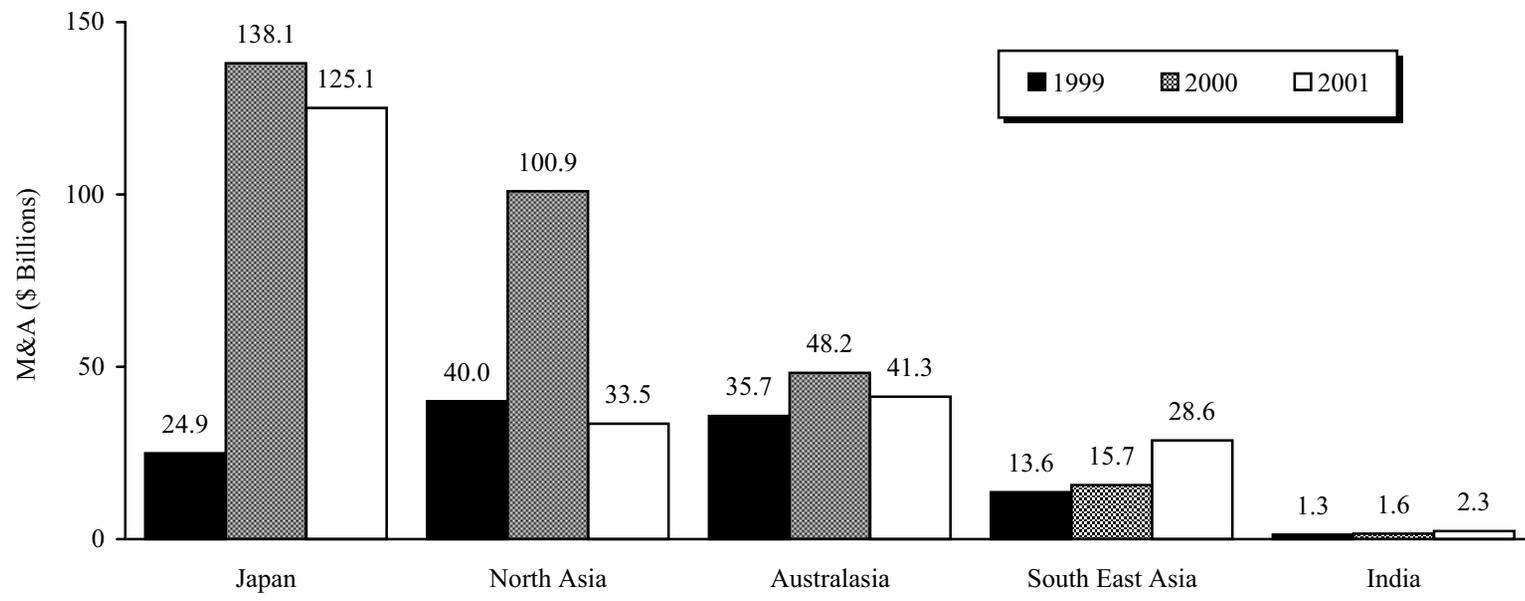
Total Number of Transactions	7	9	12	23	72	33	41	71	102	161	156	113
Number of Disclosed Value Transactions	2	4	8	14	23	11	20	41	48	70	88	59
Average Disclosed Price (\$ million)	35.5	8.5	12.0	27.2	29.7	26.4	85.7	14.5	26.6	23.0	26.5	43.8

Source: Securities Data Company, Inc.

Exhibit 4

COMPLETED MERGERS AND ACQUISITIONS BY REGION

Total Dollar Value of Disclosed Transactions



Total Number of Transactions	527	594	615	384	427	394	974	992	921	575	464	530	102	159	155
Number of Disclosed Value	198	349	384	231	267	266	665	555	497	289	229	274	48	69	88
Average Disclosed Price (\$ millions)	126	396	326	173	378	126	54	87	83	47	68	104	27	23	27

Source: Securities Data Company, Inc.

Note: North Asia (includes China, Hong Kong, Macau, North Korea, South Korea, Taiwan), SE Asia (includes Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam), Australasia (includes Australia, New Zealand, American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, N. Mariana Islands, Nauru, New Caledonia, Niue, Norfolk Islands, Palau, Papua New Guinea, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis, Western Samoa), India, and Japan.

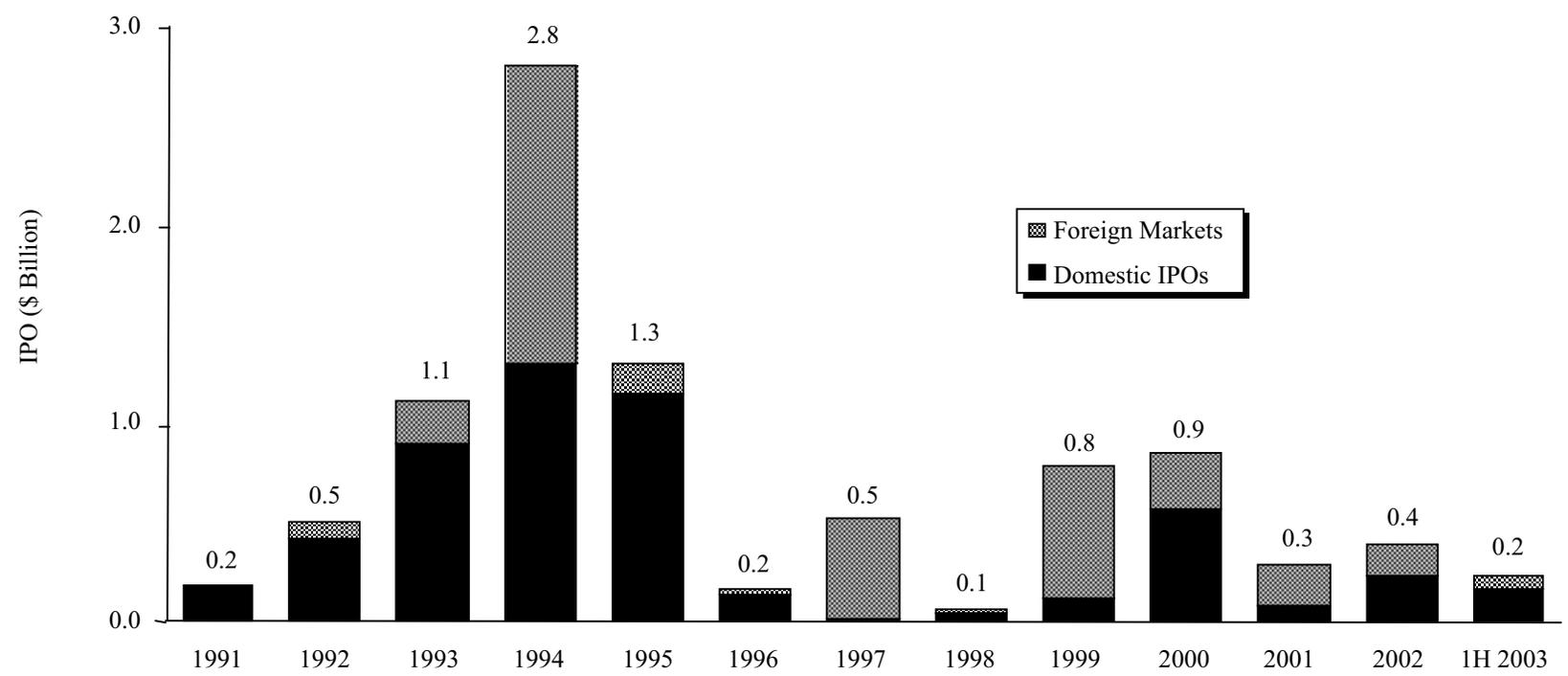
Exhibit 5**INDIAN PRIVATE EQUITY INVESTMENTS BY INDUSTRY SECTOR****1991-2001**

<u>Industry Sector</u>	<u>% of Total</u>	<u>Total Number of Companies</u>	<u>Average Deal Size (US\$ mm)</u>
Telecommunications	23	53	9.9
Computer Related	17	298	1.3
Information Technology	17	259	1.5
Electronics	5	89	1.2
Medical/Biotechnology	5	71	1.5
Financial Services	5	46	2.2
Consumer Products/Services	4	146	0.7
Infrastructure	4	32	2.9
Media	3	38	2.1
Other	17	455	0.9
Total	\$2,316m	1,487	1.6

Sources: *Asian Venture Capital Journal* and *Indian Venture Capital Investment Portfolio 1991-2001*.

Exhibit 6

INITIAL PUBLIC OFFERINGS: INDIA



Foreign Markets

Amount (\$ Billion)	0.0	0.1	0.2	1.5	0.1	0.0	0.5	0.0	0.7	0.3	0.2	0.2	0.1
Number of IPOs	0	1	3	23	1	1	3	1	7	5	2	3	1

Domestic IPOs

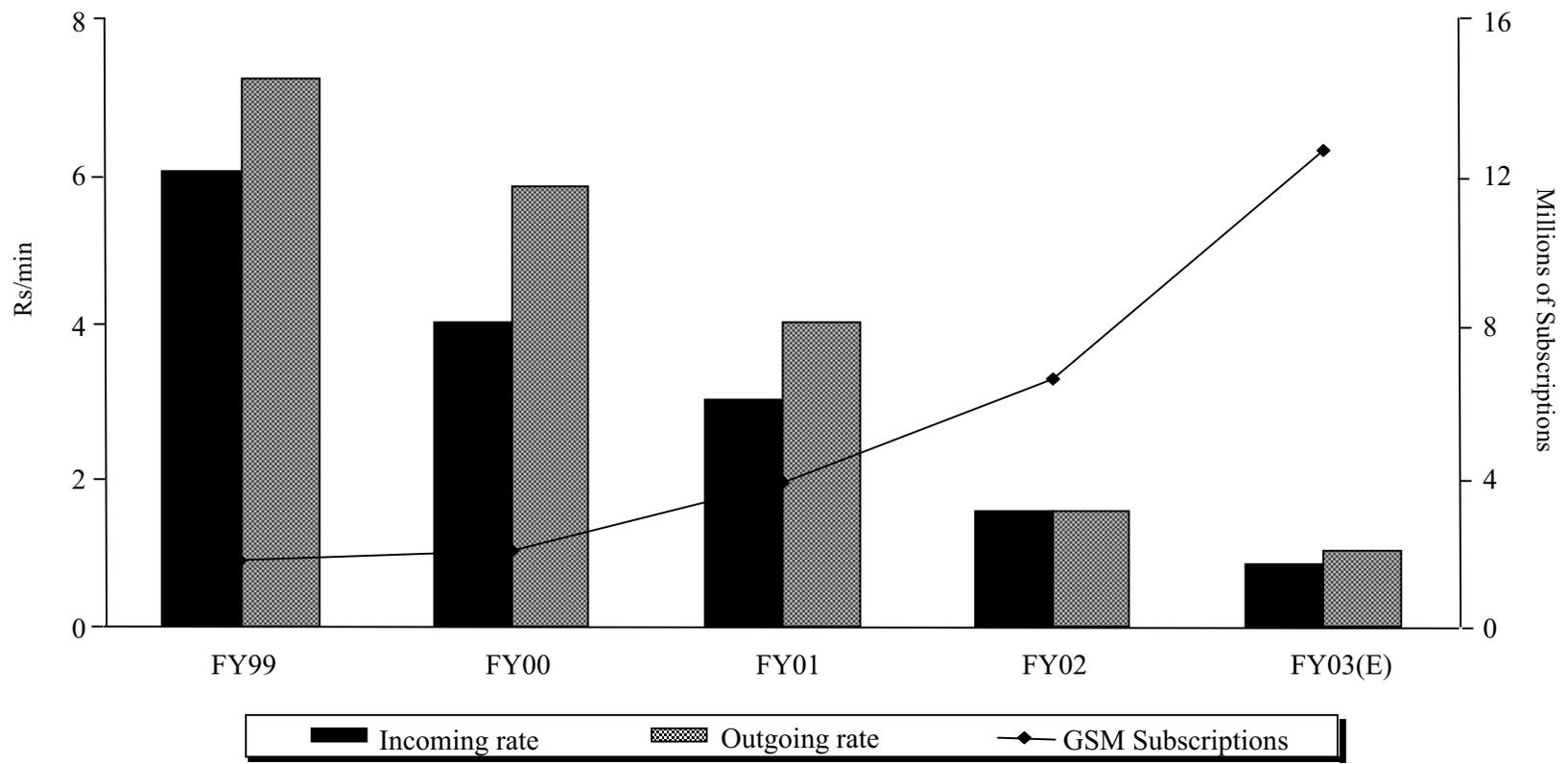
Amount (\$ Billion)	0.2	0.4	0.9	1.3	1.2	0.1	0.0	0.0	0.1	0.6	0.1	0.2	0.2
Number of IPOs	117	324	562	937	661	166	6	7	15	126	15	6	3

Source: Securities Data Company, Inc.

Note: Initial public offerings data include all IPO issues going public for the first time, and exclude rights issues, investment fund share offerings and issues not underwritten.

Exhibit 7

GLOBAL SYSTEM FOR MOBILE COMMUNICATION (GSM) CELLULAR TARIFFS IN INDIA

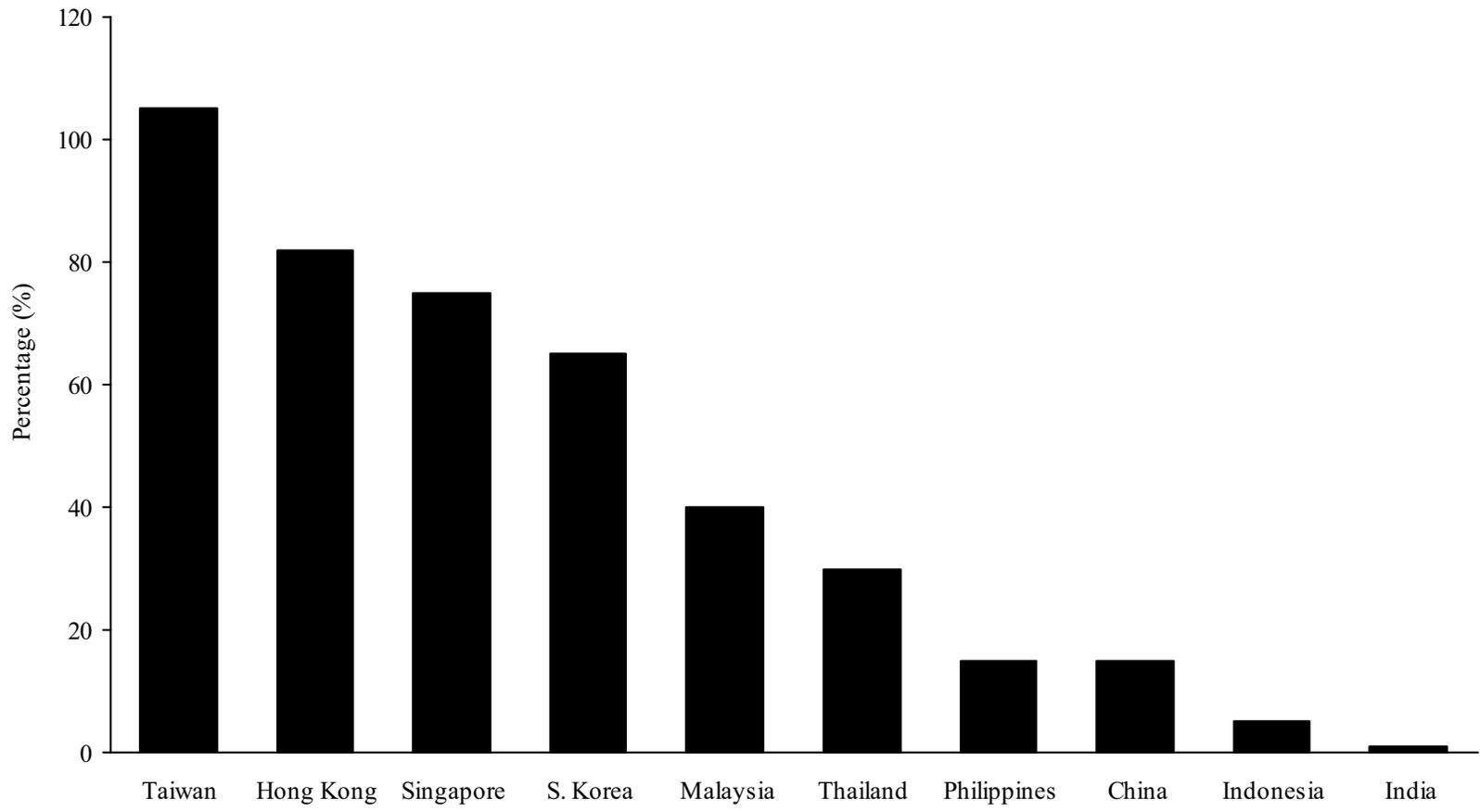


Source: CLSA Emerging Markets.

Note: (E) Estimate.

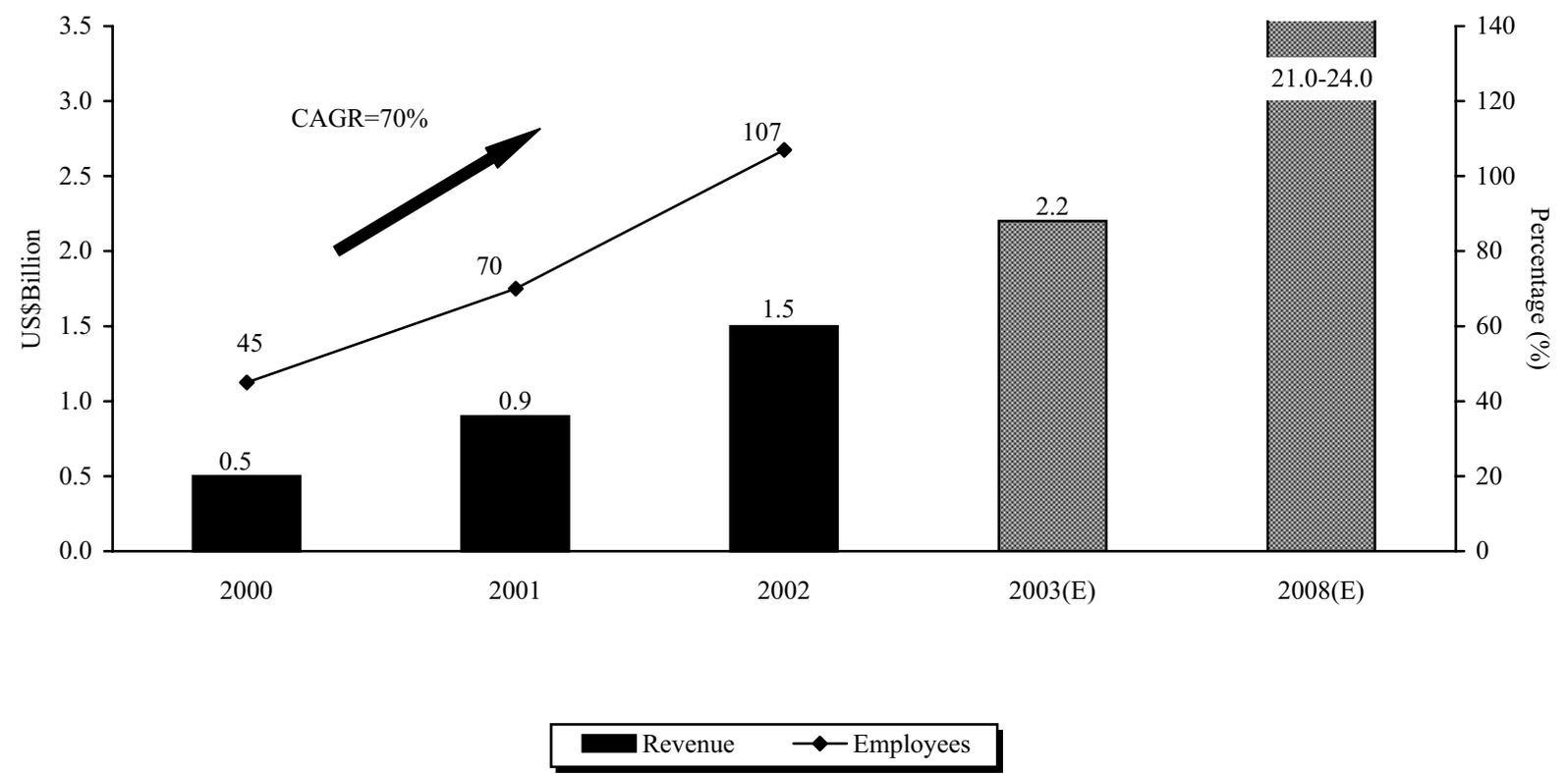
Exhibit 8

MOBILE PENETRATION IN INDIA COMPARED TO OTHER ASIAN COUNTRIES



Source: CLSA Emerging Markets.

Exhibit 9
GROWTH OF INDIA'S BPO SECTOR



Source: *Asia Private Equity Review*.

Notes: (E) Estimated. The fiscal year ends March 31.

Exhibit 10

PRIVATE EQUITY INVESTMENTS IN INDIA

<u>Date</u>	<u>Private Equity Firm</u>	<u>Company</u>	<u>Industry</u>	<u>Disclosed Cost/Holding</u>
2003	CVC International/Newbridge Capital	Lupin Ltd	Pharmaceutical	US\$54m/25%
2003	Carlyle Indian Advisors	Worldzen Holdings	BPO	US\$4m/N.A.
2003	Sequoia Capital	24/7 Customer	BPO	Led US\$22m round/20%
2003	WestBridge Capital Partners Advisors/Acer Technology Ventures	Indecomm Global	BPO	US\$5m/N.A.
2003	UTI Venture Funds Management/TDA Capital Partners	Rev IT Systems	BPO	US\$2.3m/N.A.
2003	GW Capital/AIG Investment Corporation (Asia)	Biocon India	Biotechnology	US\$10m/12.5%
2003	ICICI Venture Funds Management	Tata Infomedia	Media	US\$21.8m/50%
2003	CDC Advisors	Punjab Tractors Ltd	Manufacturing	US\$47.2m/23.5%
2003	Sierra Ventures	iCode Inc	Software Services	US\$7m/N.A.
2002	Warburg Pincus & Co	World Network Services	BPO	N.A./70%
2002	TDA Capital Partners	Cbay Systems Ltd	BPO	US\$4m/N.A.
2002	Citigroup Investments	Progeon (Infosys)	BPO	US\$20m/20%
2002	General Atlantic Partners	Daksh eServices	BPO	US\$21m/25%
2002	Infinity Technology Investments/GW Capital	Epicenter Technologies	BPO	US\$5m/10%+
2002	JumpStartup Fund Advisors/Westbridge Capital Partners/Acer Technology Ventures/NeoCarta Ventures	July Systems	Software Services	US\$8m/N.A.
2002	CDC Advisors/CLSA	Jyothi Laboratories	Manufacturing	US\$27.6m/N.A.
2002	Westbridge Capital Partners/UTI Venture Funds Management	Strand Genomics	Software Services	US\$4.6m/N.A.
2001	Chrysalis Investment Advisors	Ephinay	BPO	US\$10m/N.A.
2001	Chrysalis Investment Advisors	Global Vantage	BPO	US\$12m/90%
2001	Chrysalis Investment Advisors	SpectraMind	BPO	US\$10.2m/N.A.
2001	CDC Advisors	UTI Bank	Finance	US\$35m/26%
2001	Schroder Capital Partners (Asia)	Orchid Chemicals & Pharmaceuticals Ltd	Pharmaceutical	US\$36m/38%
2001	Frontline Venture Services	Astra Microwave Products Ltd	Communications	N.A./28.8%
2000	Infinity Technology Investments	Expopoint Software Pvt Ltd	Software Services	US\$9m/< 50%
2000	ICICI Venture Funds Management	Infowavz	BPO	US\$7m/40%+
2000	Chrysalis Investment Advisors	Transworks	BPO	US\$9.5m/60%
2000	Warburg Pincus & Co	Moser Baer	Manufacturing	US\$72m/24%
1999	Warburg Pincus & Co	HDFC	Finance	US\$40m+/6.6%
1999	Warburg Pincus & Co	Bharti Televentures	Telecom	US\$292m/20%+
1999	Indian Direct Equity Advisors/View Corporate Advisors	Tracmail	BPO	US\$8.9m/72%
1999	Walden International/Capital International	MindTree Consulting Ltd	ITES	US\$18.9m/N.A.
1998	Baring Private Equity Partners (India)/Chrysalis Investment Advisors	Mphasis	ITES	US\$13.6m+/52%
1998	Baring Private Equity Partners (India)/Chrysalis Investment Advisors	Msource	BPO	US\$6m+/22%+
1998	View Corporate Advisors	India Life	BPO	US\$3.2m/30%
1997	AIG Investment Corporation (Asia)	Max Telecom Ventures Ltd	Telecom	US\$14.6m/39.2%

Note: Data derived from news articles, industry publications, and various company websites.

APPENDICES

Appendix A-1

REPRESENTATIVE LIST OF PRIVATE EQUITY FIRMS ACTIVE IN INDIA

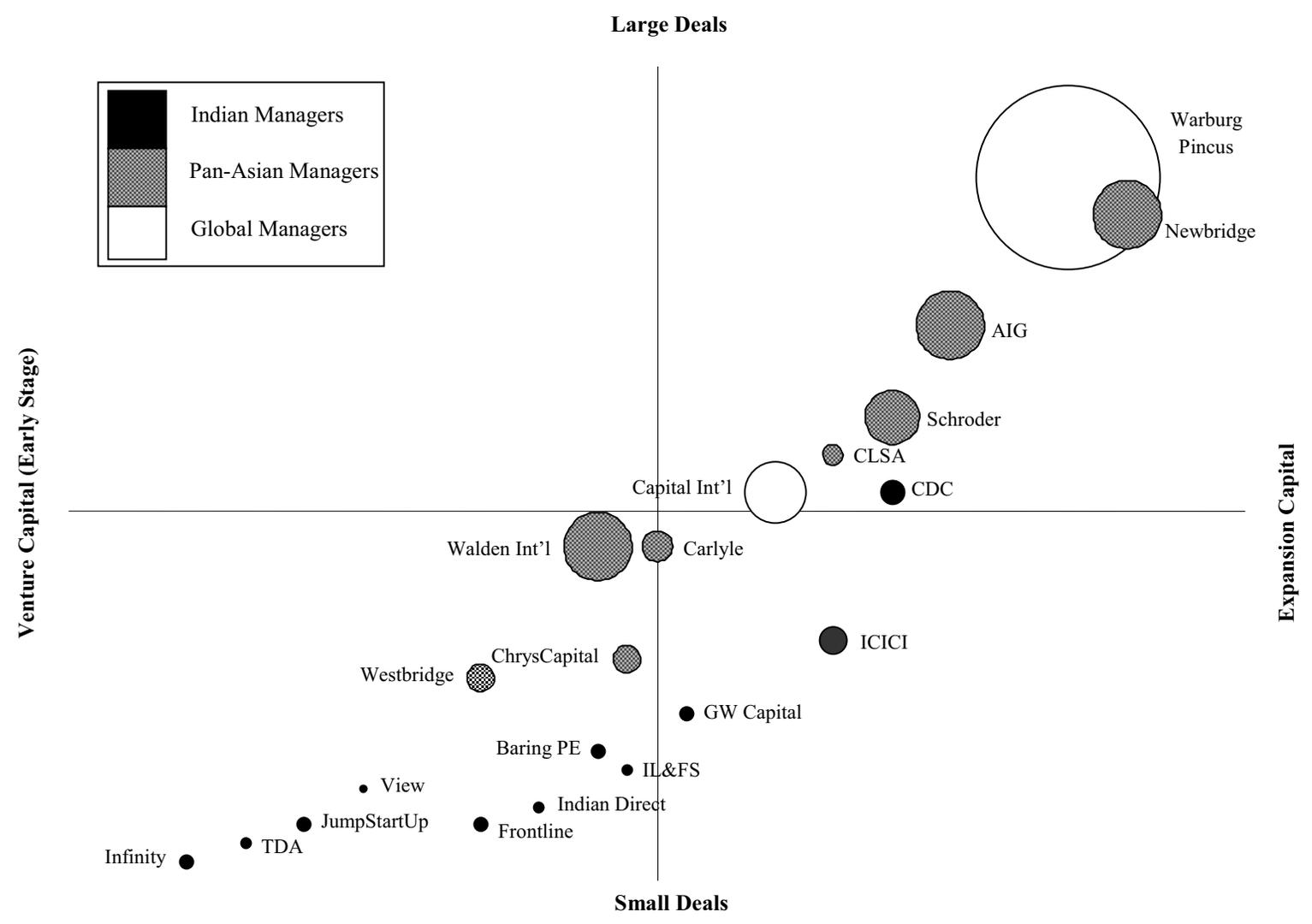
<u>Indian Managers</u>	<u>Fund Name</u>	<u>Fund Size (\$mm)</u>	<u>Year</u>	<u>Investment Strategy</u>
Baring Private Equity Partners (India) Ltd	Baring India Private Equity Fund I	40	1997	Venture Capital
CDC Advisors Pvt Ltd	South Asia Regional Fund	106	1998	Diversified
Chrysalis Investment Advisors (India) Pvt Ltd	ChrysCapital Fund II	127	2001	Venture Capital
ICICI Venture Funds Management Company Ltd	India Advantage Fund	120 ¹	2001	Diversified
JumpStartUp Fund Advisors Pvt Ltd	JumpStartUp Venture Fund I	40	2000	Venture Capital
WestBridge Capital Partners Advisors Pvt Ltd	WestBridge Capital Partners I	140	2000	Venture Capital
Frontline Venture Services Pvt Ltd	Strategic Ventures Fund	38	2000	Venture Capital
GW Capital Pvt Ltd	Indian Value Fund	35	2000	Expansion Capital
IL&FS Investment Managers Ltd	India Project Development	21	2001	Venture Capital
Indian Direct Equity Advisors Pvt Ltd	eTec Venture Fund	27	2000	Venture Capital
Infinity Technology Investments Pvt Ltd	Infinity Venture India Fund I	35	1999	Venture Capital
TDA Capital Partners, Inc	The India Technology Fund	20	1999	Venture Capital
View Corporate Advisors Pvt Ltd	View India Enterprises Fund	12	1998	Venture Capital
<u>Pan-Regional Managers</u>				
AIG Investment Corporation (Asia) Ltd	AIG Asian Opportunity Fund	748	1998	Expansion Capital
Carlyle Indian Advisors Pvt Ltd	Carlyle Asia Venture Partners II	170	2001	Venture Capital
Newbridge Financial Advisors Pvt Ltd	Newbridge Asia III	583	2000	Expansion Capital
Schroder Capital Partners (Asia) Ltd	Asia Pacific Fund III	500	1999	Expansion Capital
CLSA	Aria II	70 ²	2002	Expansion Capital
<u>Global Managers</u>				
Capital International Inc	Capital International PE Fund III	600	1998	Expansion Capital
Walden International Ltd	Pacven Walden Fund V	741	2000	Venture Capital
Warburg Pincus & Co	WP Private Equity Fund VIII	5,340	2001	Diversified

¹ Target fund size of US\$150m. First close at US\$120m took place in January 2003.

² Target fund size of US\$150m. First close at US\$70m took place in December 2002.

Appendix A-2

UNIVERSE OF 21 PRIVATE EQUITY FIRMS ACTIVE IN INDIA



Note: The size of the "bubble" corresponds to the size of the most recent fund raised by that manager.

Appendix B

INDIA AT A GLANCE



Source: CIA World Factbook.

Major Cities

New Delhi in the north was made the capital of independent India in 1950 and is the country's political center. A curious blend of modern and traditional, this cosmopolitan city boasts modern skyscrapers as well as the most elaborate Mughal architecture, depicting India's Muslim history. Government complexes are a major source of employment but the city has also emerged as a nucleus of trade, commerce, and industry in the north. Its impressive progress over recent decades is perhaps marred only by the pollution and poverty that is visible on its city streets.

Mumbai on the western coast is the bustling commercial and financial center of the country. It is the epitome of fast, city living with an energetic nightlife that has developed along with Mumbai's increasingly affluent and progressive youth. India's most influential captains of industry coexist with the glamour of Bollywood, Asia's largest slums, and powerful mafia dons that have managed to exert their influence in politics, business, and even movies.

The "Silicon Valley of India," Bangalore in the south has experienced a momentum of commercial and industrial growth unmatched in the country. Eye of the software whirlwind, with its entrepreneurial talent and highly qualified technical community, the city has emerged as India's technology hub and is today a major target of venture financing, much of which is being directed at the BPO sector.

Government

A federal republic with 28 states and seven union territories,¹ India is a sovereign, secular democracy with a parliamentary system of government. While the President is the constitutional head, real executive power lies with the Prime Minister and his Council of Ministers. According to the constitution, legislative power is to be shared between Parliament and State Legislatures.² India maintains an independent judiciary headed by the Supreme Court, whose judges are appointed by the President and remain in office until they reach the age of 65.³

Political debate in India centers on certain dominant themes, particularly the country's military rivalry with Pakistan and the tensions between secularism and radical Hindus and Muslims. The latter issue manifests itself in two of the most influential political parties in India today—the Hindu nationalist Bharatiya Janata Party (BJP) and the Congress Party, which envisages the country as a modern, democratic, secular, and unified state.

Although the BJP is currently in power, its reign is somewhat of an anomaly—the Congress Party has been the dominant political force for almost all of India's independent history. More intriguing is the fact that for the majority of this period, 38 years in total, three of India's Prime Ministers have been members of the Nehru-Gandhi dynasty: Jawaharlal Nehru, Indira Gandhi, and Rajiv Gandhi.⁴

Society

India is a colorful bouquet of cultures, religions, and languages. While English is widely spoken and is the most important language for business and politics, Hindi is the national language and primary tongue for 30% of the population. Other dominant languages include Bengali, Telugu, Marathi, and Punjabi among many others. India's religious composition is made up of Hindus (81.3%), Muslims (12%), Christians (2.3%), Sikhs (1.9%), and others including Buddhists, Jains, and Parsis (2.5%). A quarter of India's billion strong population live below the poverty line and only slightly more than half are able to read and write.⁵

One of the most radical changes to the fabric of Indian society has been the rapidly expanding middle class, which has tripled since 1985 and now constitutes about 20% of the population. Their growing purchasing power has brought with it a feverish consumer culture that has fuelled India's economy in recent years. With current growth rates in the economy, population, and literacy, half of India is expected to turn middle class before 2040 and it is hoped that this will better equip the country with the means to look after its poor.⁶

¹ CIA World Factbook.

² <http://www.indiatravelogue.com/pass/pass5.html>.

³ CIA World Factbook.

⁴ "Congress – a party in crisis," *BBC News*, March 9, 1998.

⁵ CIA World Factbook.

⁶ Gurcharan Das, "India's Growing Middle Class," *The Globalist*, November 5, 2001.

Amid all the problems that divide India, its citizens are united in their obsession for two of the country's entertainment lifelines, Bollywood and cricket. The burgeoning movie industry boasts an annual output of films nearly double that of Hollywood⁷ and its biggest stars are treated as demigods. Whenever India is involved in a high-profile international cricket encounter, office-goers, homemakers, and school children alike are constantly anxious to know the latest scores, and the entire nation comes to a virtual standstill when the match is against Pakistan.

Economy

GDP in India is dominated by the services sector (50%) but the country is also strong in agriculture (25%) and industry (25%). A labor force of more than 400 million has been propelling the nation at an impressive average annual growth rate of 6% since 1990. GDP per capita stands at US\$2,540, 156th in the world.⁸

India's economic liberalization in 1991, under the stewardship of then Minister of Finance, Manmohan Singh, brought the most significant changes to India since its independence in 1947. Provoked by a balance of payments crisis that threatened to cripple the nation's insular economy, India's senior leadership moved quickly to institute sweeping reforms designed to transform the entire structure of the financial system. This strategy was driven by a pressing need to further integrate India with the global economy. Key aspects of the reforms included the following:

- Sharp reductions in import tariff levels.
- Moderation of exchange controls with full currency convertibility on the trade account.
- Abolition of industrial licensing.
- Privatization of key government controlled industries.
- Relaxation of restrictions on foreign direct investment.⁹

Although economic liberalization proceeds in a stutter-step fashion and is certainly hostage at times to party politics, its striking success has precluded any political party from attempting to turn back the clock or derail its continued progress.

⁷ Alona Wartofsky, "Hooray for Bollywood," *The Washington Post*, May 20, 2002.

⁸ CIA World Factbook (Figure In PPP terms).

⁹ Richard A. Werner, *Indian Macroeconomic Management: At the Crossroads Between Government and Markets*, Sophia University, Tokyo.