Seventeen

New Money

The secret of business success is not who you know. It's what you know.

I read somewhere that China boasts a million millionaires and eighteen million entrepreneurs. This was twenty years after its reforms. I do not know how many we have in India, and our reforms are only ten years old, but we have always had our entrepreneurs. Despite its best efforts, our government could not wipe out the spirit of enterprise. A walk to the bazaar is all one needs to see that commerce is well and alive. The industrialists of the License Raj may have got into bad habits—born of protection—but their behavior even then was entrepreneurial in the way they won and lost market share in bureaucrats' offices. They merely played by the rules of that game. The entrepreneurs of the 1990s, however, are creatures of a competitive economy. And today's young are no longer embarrassed about wanting to be rich. Without the shackles of licensing, FERA, MRTP, closed borders, and high taxes, the country is filled with new confidence and I expect there will soon be a million millionaires in India.

My management consultancy gave me a box seat to observe the changing business scene. I met businesspeople of all kinds. I empathized with their problems, marveled at the opportunities before them, and discovered to my delight that I also began to grow again under the stimulus of new business problems. I jumped at every opportunity to talk to businesspeople—at airports, in trains, at seminars and conferences. It was not difficult because Indian managers are not shy to talk about their business. By far the most interesting people I met were in the new "knowledge" industries. Not since the industrial revolution has any group brought so many improvements and added so much value to their customers as information technology professionals. And the best is still to come. In the new century, these managers and their companies will shape the lives of billions from the boardrooms of New York to the bazaars of Kathmandu. It is here that "the passion and the excellence of our times," in the words of Oliver Wendell Holmes, is being enacted.

The new spirit is reflected in the vast number of rags-to-riches stories. This is not surprising. It has happened in many countries in periods of economic expansion. Money is replacing power and privilege. Many people think that business is about greed. It is, to an extent. But it is also about the pursuit of excellence. It is about young people with ideas reaching out to do the impossible, and creating jobs and wealth for society. Most of us are not tuned in. We are still listening to the background noise of democracy when we could be listening to the music of entrepreneurship.

Two south Indian temple priests sit peacefully beside me waiting to get on the Jet Airways flight from Madras to Bangalore. They are old cronies and they sit side by side, each with a steel tiffin carrier filled with idlis. Their foreheads are smeared with horizontal stripes of paste, their brown faces creased with gossip and laughter. Their jocose voices conjure up coconut groves and the sweet sounds of the veena and a Carnatic musical heaven. Both wear starched white dhotis and they have cell phones dangling from them, which seems just about right on the polished floor of the new Madras airport. Their voices are light and accented in the manner of their caste, and they look like a pair of characters from an R. K. Narayan novel. They are a comfortable sight as they create around themselves a rich aura of incense, temple gods, and Chola bronzes. Why is it, I ask myself, that middle-aged men in such disguise should look both kindly and wise?

The two cronies, it turns out, have started a software company. I had come to Madras to spend a day consulting with Vellayan's T. I. Cycles, trying to bring discontinuity into the mature Indian bicycle market. Sitting at the airport and observing the Brahmins, I feel confused. But isn't that a condition in which we exist in contemporary history, as distinct from the way we try to tidy it up afterwards? Can one expect this city to have peculiar virtues—springing from its old, spiritual way of life—that might help it survive the present pace of industrialization? If my journey to the airport is to be believed, the automobile will soon choke Madras. The rapid growth of the past few years seems to envelop it in a grasping nastiness, like a blight in which human beings are ground down to insects. The Brahmins say that the maddening traffic, the pollution, the noise, and the pace does not bother them. On the contrary, it is a nice change from their old suburban temple life.

My flight is soon called. I sit next to a young six-foot American on the plane. He is a customer of one of Bangalore's software companies. There are at least five cites in India, he thinks, which are ready to leap into the information age. I am going to Bangalore for several reasons. One of them is to visit Infosys, Bangalore's revered software company. Infosys is in a technology park on the Hosur road, but cows are grazing outside the offices. Once inside the campus-like office, I feel transported to Silicon Valley in California. Software professionals are hunched over screens in an atmosphere of quiet discussion, and training rooms are full of bright young engineers. Of the three thousand professionals working in Infosys, two to three hundred are in classes at any moment, updating their technical knowledge or learning about quality. In a spacious classroom filled with the latest equipment, twenty alert minds are in avid discussion of customer service. Infosys's secret is its ability to hire the best talent and keep them motivated in a "learning environment." It is able to do this because of an outstanding stock option plan, which is open to every professional who has worked there for three years. Thus, many of its junior and middle managers are rich by Indian standards and have visible assets to show for their hard work. Infosys spends 5 percent of its turnover on education, research, and on developing its people.

Started by six computer engineers with a capital of Rs 10,000 (\$600), Infosys was worth \$15 billion in February 2000. It develops software for the best global companies, who have kept its sales growing at an average of 40 percent a year, in the past five years. It also designs, erects, and maintains Internet infrastructure for leveraging the power of e-commerce. It sells Bancs 2000, a software system, to banks, and recently sold a warehouse management system to Reebok. With the steady appreciation of its stock, it has more than a hundred managers individually worth a million dollars.

"The secret of our success is teamwork," says suave Nandan Nilekani, the managing director. It is

partly luck, partly chemistry, partly Narayana Murthy, who is the catalyst and the glue. "Infosys makes you subordinate your ego and you invariably put the job above your interest." The CEO is smallish, bespectacled, soft-featured Narayana Murthy, who is one of its six founders. "I got into IIT [Indian Institute of Technology] Kharagpur in 1962, but I didn't go because my father couldn't afford the Rs 120 per month for the hostel." His father was a government servant—an assistant education officer in the old Mysore government—earning Rs 500 per month, and with that he supported eight children. Murthy is in his early fifties and he speaks without shyness and to the point. He is a billionaire now and has cultivated the CEO manner, which means that he is conscious of his image.

So, how did he go from rags to riches? "Since I couldn't go to IIT, I had to settle for the local engineering college in Mysore. From there I went to IIM [Indian Institute of Management] Ahmedabad. After that, I hopped through several early jobs, including one with a defense contractor in France, until I landed at Patni Computer Systems in Bombay, where I worked for five years. They were good people—a business family from Agra. Being professionals themselves, they had succeeded in collecting some real talent. That is where six of us had the idea of starting our own software company. That dream has come true."

As a student, Murthy was a committed Marxist. Disillusionment and conversion came in 1974, when he was hitchhiking from Paris to Bangalore. He boarded the Sofia Express one night at Nishe, a small railway station near the border of Bulgaria and Yugoslavia. On board, he met an East German and an Austrian girl with whom he struck up a conversation in French. At the next station, the police stormed in, dragged him out of the train, and informed him that the East German had accused him of exchanging sensitive state secrets with the Austrian girl. They bundled him into jail, without food or water. "That was the turning point," he muses. "I thought, if this is communism, it isn't for me."

Infosys is a creature of the economic reforms. So are the other 325 software companies of Bangalore. Earlier Indian software engineers had to fly back and forth. With liberalization and the zeal of a visionary civil servant, N. Vittal, the companies got their own satellite link, which lets them do most of their work in Bangalore. Three-fourths of the software companies in Bangalore are Indian, but they account for only one-third of the investment. Foreign companies like IBM, Texas Instruments, Motorola, Group Bull, and Sun Microsystems are also developing software in Bangalore. It makes sense because an Indian engineer costs only 20 percent of an American. The difference between Bangalore and many East Asian cities is that it has prospered through cheap brains rather than cheap hands. Although India produces two million graduates, it trains fewer than fifty thousand computer science engineers. With demand growing so rapidly, wages have been climbing 20 percent a year and companies routinely lose a quarter of their workforce every year. The pressure is accelerated by the foreign companies, who transfer their best Indian engineers to the United States or to their other foreign operations. Many Indians are also lured to Silicon Valley, where one-third of the high-tech companies are today run by Chinese and Indian engineers, according to London's Financial Times. Hence, Narayana Murthy's stock option plan has become the model for all of India's entrepreneurial ventures in order to retain talent.

Because traditional universities and educational institutions cannot cope with the exploding demand, computer education has spilled into the marketplace. Two young entrepreneurs from IIT

Delhi, Vijay Thadani and Rajendra Pawar, saw in the early 1980s what the government did not. They realized that the world was changing and no one would be employable without computer skills. India had a huge and growing appetite for IT professionals and our schools and colleges were only creating an army of unemployables. They stepped into the vacuum, set up the National Institute of Information Technology (NIIT), and began to offer computer lessons in the bazaar. They were so successful that they could not cope with the exploding demand. Since they did not have the resources to expand rapidly across the country, they hit upon the idea of franchising their schools. Soon NIIT centers were flourishing even in the smallest towns. In Bombay, another entrepreneur had the same idea and he started Aptech. Today, India has three thousand centers, training half a million students a year. Infotech training has been growing 30 percent a year. NIIT has 40 percent market share of the \$225 million market—its alumni base is almost a million.

When NIIT and Aptech started expanding in the early nineties, there was a palpable sense of excitement among the youth. Young people everywhere began to flock into the new computer schools. These became the hip places to hang around. It was the second revolution in the Indian bazaar. The first had occurred a few years earlier, when Sam Pitroda's telephone counters came up in towns and villages across India. A third information revolution is around the corner, as Internet kiosks and cybercafes are becoming common, creating virtual villages.

NIIT dreams of becoming a world leader in computer education. It is present in thirty-one countries, and it recently opened in China, where six hundred Shanghai residents are on its rolls. Pawar proudly says that eleven professors from Chinese universities spent more than a year preparing NIIT's lessons in Mandarin and adapting them for the Chinese audience. To become a world leader, they will have to conquer the United States, and they are planning to acquire a company there to get a jump start. An American company would be expensive—it might cost as much as \$100 million. How can an Indian company with sales of \$150 million buy a \$100 million American company? It can, on the shoulders of NIIT's market capitalization of more than two billion dollars.

The tall, bearded, forty-eight-year-old Pawar speaks avidly. Everything seems to come from the heart. Although his head may be in the clouds, his feet are on the ground. The breakthrough came when NIIT discovered that it could franchise education. It is the first time in the world, as far as he knows, that someone has franchised education. Their secret lay in finding the right franchisees, who turned out to be professionals (not local traders) and owned real estate in their hometown. NIIT trained them to become businessmen-educators. NIIT helps its franchisees to replicate standardized classrooms, gives them training material, helps them hire and train teachers, teaches them to advertise locally, audits them regularly, and administers exams with rigorous ethical standards. The attention to the detail and quality, backed by innovative advertising, has rapidly built the NIIT brand. Not having to invest in real estate, and spared the day-to-day problems of administering hundreds of centers in far-flung towns across the country, it devotes its energies to improving its courses and programs. It has thus ensured that all its thousands of students get jobs within days of graduating.

Its most daring innovation is a four-year program, equivalent to an undergraduate degree. The outstanding curriculum was created by a team of visionary educators. Ten thousand graduates have passed out of the "world university" (100 percent placed in jobs), and twenty thousand are currently

enrolled. NIIT's edge over our formal colleges is that learning is interactive. Students spend the fourth year as paid interns in two thousand affiliated companies. Since society expects its young to have a formal degree, most students are also enrolled in formal colleges, although they spend most of their time at NIIT "Success in education comes not from having the best teachers but attracting the best students," says Pawar. NIIT does that. The matrimonial ads in the Sunday papers routinely boast the four-year G-NIIT qualification, and a girl with G-NIIT after her name, they say, needs a smaller dowry. My young neighbor tells me that she is spending Rs 55,000 for the four-year course, which she confidently expects will put her on a par with engineering students on the job. The most important thing she has learned, she says, is self-confidence and teamwork.

NIIT has been reinventing itself over the past five years. Increasingly, it has turned to software solutions and educational multimedia and already has 269 titles. Almost half its revenues now come from noneducational services. Its software business has the advantage in being able to hire from the best graduates in its own "world university." Out of NIIT's 3,800 employees, 1,500 are G-NIITians. The software business returns the compliment by creating case material for the education business. Like Infosys, NIIT retains talent through stock options, which it has given to about 1,000 of its 3,800 employees. Since the stock has also zoomed, 900 of them were worth over Rs 1 million, 88 were worth Rs 1 crore, and 8 were dollar millionaires in July 1999. More important, it has created 1,750 entrepreneurs through franchising and given indirect employment to 15,000 people through its franchisees.

NIIT's most fascinating experiment is to take computer education to 371 schools in Tamil Nadu. "During the day schoolchildren are trained in computerized classrooms," says Pawar. "After school hours the facilities are thrown open to residents of the town to help our franchisees make up for the lost profits during the day." If there is profit to be made, competing education companies will scramble to replicate this across the country. If the Tamil Nadu experiment succeeds, the country might have found a model for taking computer education into government schools, and computer literacy could explode across the country. When Prime Minister Vajpayee's IT Task Force offered us the dream of making all schoolchildren computer literate by 2010, we thought it was a pipe dream. If the NIIT model works, that dream might come true.

Infosys and NIIT are the best examples of the new type of entrepreneurial companies making a mark in the brave new India after me reforms. There are many more, and new ones are cropping up every day. One of them is Satyam Infoway, which was born in November 1998, when Vajpayee liberated the Internet from the clutches of the government. It is one of forty Internet service providers, and had a dream debut in October 1999 on the Nasdaq. Increasingly, information technology services ought to overtake software. Among these, "remote services" offer the greatest employment potential for India. A friend of mine has set up a business in Madras employing medical students to edit and proofread medical texts electronically for a British publisher for a fraction of what it would cost to do the job in the United Kingdom. Aditi Technologies in Bangalore offers a mentoring service for Microsoft products, where customers post their problems on the Net and Aditi resolves them via email. More than a hundred people at Data Tree of Hyderabad convert mortgage documents from American cities into digitized CD-ROMs. British Airways and Cathay have shifted their back offices

to India to reconcile worldwide accounts online. Citibank, American Express, and other international banks are doing the same.

Increasingly, American doctors dictate the diagnosis and prescriptions of their patients into a Dictaphone. These voice files are electronically transferred to Health Scribe, a company in Bangalore, where they are deciphered, entered into the computer, and transferred back. GE Capital employs more than two thousand people in a global facility near Delhi to process mortgage and loan applications from around the world, answer questions from its credit card holders in Europe and the Americas, and do payroll accounting for its plants and offices across the world. Since most employees do their work without ever seeing the customer, it should be possible to transfer lots of back-office jobs to India. I am on the board of Crest Communications in Bombay, which makes digital animated drawings for movies. It recently won a contract to make a 3D film for one of the Hollywood studios. Geographic Software Systems in Kerala has bagged an order for digitizing five thousand maps for Flensburg, a county in Germany.

There is no reason why many toll-free call centers cannot shift from the United States to India. What makes all this possible is India's universities, which produce two million degree holders every year. They have varying levels of proficiency in English; most Indians employed in the remote-service business would be overqualified in the West. A certified public accountant working on account reconciliation costs GE \$15,000 to \$20,000 a year. In America, a less qualified worker doing the same job would cost three times more, and GE Capital's Indian operation expects to save GE \$10 million next year. McKinsey reckons this business could create one to two million jobs and be worth \$50 billion to India by 2010. For this to happen, the wholesale price of international calls would have to become competitive. We will also need to reform our labor laws to allow the hiring and firing of workers depending on market demand.

When President Kennedy amended the U.S. immigration law, replacing quotas by skills as the basis for entry, he set in motion the steady drain of talent from India and the rest of the world to America. Indians moaned about the brain drain, but they couldn't stop their children from emigrating. I too feel uneasy that when the world is moving into the information age and knowledge increasingly separates the winning from the losing nations, we are losing our best and brightest. But I have a lurking faith that Indians abroad will one day return the favor to the land that nurtured and educated them.

Payback time has arrived for some. A tiny company in Bangalore called Armedia made its fortythree employees rich beyond their wildest dreams in 1999. It had been started two years earlier by Tushar Dave, a tall and soft-spoken chip designer who lives in Silicon Valley but retains his Indian passport and accent. America's Broadcom bought Armedia for \$67 million in mid-1999 and gave every single Bangalore employee stock in the American company. Wall Street analysts think that Broad-com is one of America's smarter companies, and when it acquired its first overseas venture in India, it sent a powerful signal to the world's investment community. The impact of this acquisition will be profound. It will bring investment, high-paying jobs, and exports for India, and it will inspire tens of Tushar Daves to do the same.

Tushar Dave went to Silicon Valley, where he worked for sixteen years as an engineer with Intel, and he acquired a gold mine of knowledge about chip design. He realized that Intel had made a

fortune by making more and more powerful chips which made computers run faster. However, the world no longer needed more computing power, it needed computers and TVs to transmit data at very high speeds. He left Intel and set up Armedia to design these new chips in Bangalore. He desperately needed experienced engineers. But no one wanted to leave a secure job to join a small, risky venture. Eventually, he got the right engineers because he offered all his employees shares in the company. In two years, Armedia developed chips that would go inside digital TVs and decode pictures and sound. However, it did not have the resources to make and market the chips. But Broadcom in America did, and it realized that Armedia had created a world-class product. They decided to marry.

Tushar Dave has paid back. So have Raj Vattikuti, Bharat Desai, Ashok Trivedi, Sunil Wadhwani, and Nandu Thondawadi. They are Indians who made good in America, came back, and created jobs and software development centers here—even before India's own IT boom began. They belong to the "billion-dollar club" of Indian software entrepreneurs who have had a meteoric rise in Silicon Valley. India matters to them because they can have the best of both worlds: a creative environment in America, which encourages enterprise, and the marvelous software development skills of India.

When Ramesh Chauhan sold Thums Up, the leading Indian soft drink, to Coke for \$40 million a few years ago, Indian companies shivered. There were howls of protest. How could we let foreigners seize our jewels? There was an emotional reaction across the country, which was far worse than when the Japanese bought New York's Rockefeller Center. When Tushar Dave sold Armedia for \$67 million, no one protested and many applauded. What has changed? For one thing, we have become more mature. We have begun to understand that ownership and national wealth are not the same. It does not matter who owns Thums Up or Armedia as long as jobs and economic activity are on Indian soil. We have also learned that buying and selling companies is part of the game. It makes for a stronger economy and gives Indian entrepreneurs a chance to be rewarded for their hard work. Today's entrepreneurs want to create a company, sell it after a few years, and reinvest their wealth in another venture. Thus, they need an exit route, and often the only one is acquisition by a foreign company.

The story of Ramesh Chauhan and Tushar Dave is a modern Indian parable. It took Ramesh Chauhan decades of sweat, toil, and brand building in a protected market to make a success of Thums Up. In between he got distracted and wasted his energy to keep Pepsi out of India. But he failed to do so. Had he focused his considerable skills on building his business, Thums Up would have been an even stronger brand, and Coke would have paid him an even higher price.

The parable teaches that in two years Armedia became a powerhouse of knowledge and 50 percent more valuable than decades-old Thums Up. All the employees shared the rewards at Armedia, while only Ramesh Chauhan and his family did at Thums Up. Armedia is a creature of the reformed, liberalized Indian economy; Thums Up belongs to the old, protected socialist economy. Armedia is our future; Thums Up is our past.

man?

I do not live in Bombay anymore, but I am still very fond of it and visit it frequently, thanks to my consulting assignments. I have seen a creeping change. Earlier, this fine port city used to be liberal

and cosmopolitan. For fifty years, it stood aloof, contemptuous of socialist India. Its heroes were its stylish cricketers, its flamboyant film stars, and its sedate merchant princes. Bombay was a miniature India which opened its arms to people from all over, and it contained an infinite number of social worlds, intricately interwoven yet separate, which moved back and forth over the long strip of island.

In 1996, Bombay became Mumbai. If this had been a change in name alone, everyone would have dismissed it with an amused smile, as they did when Madras changed to Chennai. They would have shrugged their shoulders and said, "What's in a name?" But the change from Bombay to Mumbai also signaled a new, intolerant spirit which rejected the mercantile, pluralistic ethos of a city built by traders and immigrants from all over India. At first I dismissed the alarmist talk of my Mumbai friends. I used to think that it was business as usual. I believed that once it licked its transport bottlenecks, Mumbai could still aspire to become the premier commercial capital of South Asia—a sort of Hong Kong. Ironically, as the city began to build overpasses and tackle its movement problems, I began to turn pessimistic.

The once liberal city began to turn into an ugly, disturbing shrine city called Mumbai with a malicious political identity. The change began on 6 December 1992, when the Babri Masjid was pulled down. After that tragic moment, the events unfolded that Mumbaikars, to their shame, know only too well: the December–January riots, the retaliatory bomb explosions a month later, the 1995 assembly elections in which the Shiv Sena captured the state government from the hopeless Congress Party. The issue is why the liberal-minded, articulate Mumbaikars did not lead a countercharge against the communalists. Why have they sat and watched the city bleed as the old traditions of tolerance and amity disappeared? There is no easy answer, except to say, as Christopher de Bellaigue has in the *New York Review of Books*, that "the elite of the city has decided that it pays to get on with the Shiv Sena." He quotes the poet Javed Akhtar's poignant metaphor: "If the water is boiling, the frog will naturally leap out ….. Put the frog into cold water and turn on the stove, and you end up with a poached frog."

I met many businessmen in Bombay during my consulting days, but the most fascinating by far was Subhash Chandra, the founder of Zee Television. Subhash Chandra comes from a cotton and grain trading family in Hissar in Haryana, not too far from Delhi. He barely got through high school and never finished college, but his ambition was outrageous. When his family's business went bust in 1967, he left Hissar with Rs 17 in his pocket. In 1999, he controlled a global entertainment empire with his Indian company alone worth over \$11 billion. Having acquired a stake in the ICO Global Satellite Communications business, he plans to create a seamless communication infrastructure in India that could overtake all his other businesses. People call him "the Murdoch of Asia."

Subhash Chandra's great-grandfather was a blind Marwari from Shekhawati district who left Rajasthan with his brothers to start a cotton trading business in the old, undivided Punjab. "Only the weak and the unsuccessful Marwaris leave home," Subhash Chandra reminds me. They were successful and eventually had a dozen branches in Punjab and one in Manchester in England. Subhash Chandra grew up in his grandfather's joint family home in Hissar, where he only heard talk of cotton and helped his grandfather to write hundreds of postcards daily to suppliers and customers. In 1967, when he was at the Government Polytechnic College in Sirsa, he got the bad news. His family had been wiped out in the speculative cotton ginning business and he would have to withdraw from college because they couldn't afford the fees. As he was leaving home, his grandfather said, "Do anything but don't touch cotton."

A bumper grain harvest in 1976 presented the first opportunity to rebuild capital. The state-owned Food Corporation of India was desperately seeking additional storage space for 14 million metric tons of grains, and Subhash Chandra stepped in with a plan to store the grain mountains in the open under plastic sheets. Thus, he found himself fabricating polyethylene covers and learning about plastics. He reinvested these profits in a venture exporting rice to Russia which generated a great deal of money—and some controversy. Now he had serious capital. He knew about plastics and he wanted to become an industrialist. He came to Bombay and set up a packaging plant to make plastic laminated tubes (for toothpaste) when everyone else made aluminum tubes. With 40 percent lower costs than aluminum tubes, he eventually succeeded in becoming a supplier to Colgate, Lever, and others. It took five years of losses and humiliation before "the grain trader" was accepted by the multinationals, but in a decade he became the second-largest and the lowest-cost producer of packaging tubes in the world, earning \$23 million profit before tax.

Subhash Chandra had also invested part of his Russian profits in 730 acres of jungle in Borivili, in the distant suburbs of Bombay. He got it cheap because it was in a "nondevelopment zone" and builders were not interested. He was allowed to set up a Disney World type of family entertainment center in the jungle called Esselworld. Hoping for three million visitors, it only got a million and was not a commercial success. Nevertheless, Subhash Chandra was convinced that "Indians were hungry for entertainment." He persisted in seeking opportunities in entertainment, but all his harebrained schemes met a regulatory roadblock. His breakthrough came in 1991, when he heard that satellite TV was starting in Hong Kong. Private broadcasting was forbidden in India, but why couldn't he show Hindi films on TV from overseas?

It took him months before the Hong Kong executives of Star TV would even see him. When they finally met, they said India was poor and starving and Subhash Chandra must be crazy to think of cable television. Besides, they said, they didn't want a "grain trader" for a partner. It hurt. He swallowed his pride and he told them not to make him a partner but lease him the transponder for an India footprint for \$1.5 million a year. They were tempted, but they didn't believe he had the money. To get rid of him, they mentioned the outrageous figure of \$5 million. "Done," said Subhash Chandra, "but only if you sign today."

Everyone thought Subhash Chandra had gone mad. There was no certainty that the government would not try to stop him. How would he earn revenues when the Indian government forbade advertisers to pay money overseas? But he had a dream and nothing was going to stop him, and Indian TV broadcasting has never been the same. Eventually, Star TV signed with him for a joint venture (weighted in their favor). His great coup was to persuade the Reserve Bank of India to allow exporters to pay for advertising in foreign currency. Starting with a three-person shop, he went on to build a media empire spanning the globe. His Zee TV now reaches twenty-two million homes in India and its advertising revenues have crossed \$140 million, ahead of the state-owned Doordarshan, which reaches sixty million homes. Indians abroad in the Middle East, the United Kingdom, Africa,

the United States, and Canada watch the Zee channel on their cable, and his overseas earnings now equal those in India.

There have been obstacles. The most formidable one was Rupert Murdoch, who bought the ailing Star network in 1993. He wanted Subhash Chandra out. He understood the power of an Indianlanguages network in India, and he wanted it for himself. Although Zee's contract with Star was weak, Subhash Chandra was able to bluff his way in the negotiations, convincing Murdoch that he needed him. They remained equal partners in the Indian broadcasting business until October 1999, when Chandra bought Murdoch's share for close to \$300 million.

In ambition, Subhash Chandra is a match for Murdoch. He is also equally ruthless. Although he has made twenty of his executives millionaires (in dollars) through stock options, he dumps people when he doesn't need them. He can be tough with his cable operators and can lobby hard for government policies that suit him. However, he matters because Zee has created an estimated quarter of a million jobs directly and indirectly. This could become a million in the next five years with his ambitious new ventures—four regional channels, a sports channel, a news channel, an Internet portal and service provider based on its vast film library of three thousand films, a new TV magazine, Zeenet interactive Internet service through its SitiCable network, and direct-to-operator pay-TV service through its cable network. Every sixth person in the world is an Indian, he says, and his ambition is to eventually have two out of three Indian eyeballs (including the diaspora) tuned to Zee.

I have recounted the stories of Infosys, NIIT, Zee Television, and Armedia. Other new and successful companies have emerged after the reforms. Jet Airways has created arguably the best domestic airline in the world. Sun TV started as a Tamil channel from Madras, and it was so successful that it now controls the regional cable TV market in all four languages in the south. Ranbaxy, Dr. Reddy's Laboratories, Cipla, and Wockhardt are building successful global generic pharmaceuticals businesses. In September 1999, Ranbaxy sold the global marketing rights for a new dosage form of an anti-infective to Bayer for \$67 million plus royalties. Dr. Reddy's similarly discovered a new molecule for diabetes and licensed it to Novo Nordisk, a Danish multinational, for clinical development.

All new ventures are not going to succeed. Some companies started brilliantly after liberalization but did not have the ability to sustain success. They crashed during the economic downturn of the late nineties, partly because their ambitions overtook their financial capabilities. They have brought a great deal of pain to their customers, shareholders, employees, suppliers, and bankers. Among the shooting stars that fizzled out were Rita Singh, founder of the much hyped Mesco group, and Nandan Gadgil of the Gadgil Western Group. Other high fliers who were grounded were Ved Prakash Agarwal, K. B. Kedia, and Ravi Khemka of NEPC Airlines. The saddest tale is that of R. Subramanium of Madras, who created Sterling Resorts and made it the largest holiday time-share company in the world with forty-nine thousand customers and ten resorts. From there he went on to build an exciting venture in commercial agriculture, Maxforth Orchards, to grow fruit trees on dry lands. He started it in 1993 and quickly built an excellent team of young professionals. By 1996, he had twenty thousand customers and 25,000 acres of dry lands. One day an impressive salesman from Maxforth came to sell me a mango orchard for Rs 120,000 in Jallipati, Tamil Nadu. He explained that

I could hope to earn a 20 percent return after the fourth year and 100 percent from the twelfth year for the next forty years. He compared my investment to blue-chip stocks and gold. I did not invest but I was thrilled by the enterprising spirit.

Subramanium had the vision of creating Israeli-style orchards on vast amounts of Indian dry lands, which lie fallow and wasted across the country because the peasant doesn't have the capital to farm them. He felt that it needed the transfer of capital from urban to rural India to make them productive, and this is what he set out to do. He set up a training school for agricultural graduates near Madras in collaboration with Camtec of Israel. He planned to drip-irrigate the orchards with groundwater. His experts would manage the farms scientifically and even provide efficient postharvesting facilities via a cold chain. Sales of the fruit minus the cost of materials and management would become the returns to the investor. Since government rules did not permit a company to own farmland, he devised the ingenious solution of giving the land title to thousands of urban investors who would own one-acre plots within a Maxforth orchard. The investor could buy and sell his title much like a mutual fund. Thus, capital would be transferred from urban to rural areas, and he would one day green 240 million acres of India's fallow wastelands and create millions of jobs in the rural areas. It was a wonderful dream.

The dream soured because Subramanium's ambition was too big and he wanted to move too quickly. He was not satisfied with orchards. He wanted to start his own cold storage, packaging, and transport facilities, a chain of 640 supermarkets to sell his produce, an export company to export the fruit, his own schools, teak plantations, ecovillages. There is only so much a man can do. When the liquidity crisis came, everything collapsed. Today, he sits in Madras, a tragic figure hounded by his creditors. In the end, he has done incalculable damage because he has destroyed thousands of others' dreams.

All the stories of the entrepreneurs I have told are a testimonial to liberalization supported by globalization. They reflect a new social contract for postreform India, to which I will return in chapter 22. The critics of the reforms remind us ad nauseam that liberalization will only make the rich richer. This is not true. All the millionaire entrepreneurs in this chapter started modestly. By opening the economy, we seem to have opened the way for a new merit order, where talent, hard work, and managerial skills matter far more than inherited wealth. The old business houses no longer appear to have an advantage, because international fund managers are blind to the past and seek only the best ventures today, run by the most talented professionals. Over time, this ought to lead to a fairer society. The old industrial empires will sell out gradually to new, more able entrepreneurs. No one, it seems, has a head start. The Internet has also leveled the playing field. Any mad, passionate Indian entrepreneur can do it!

Literature is about passion. But so is business. How else does one explain the insane behavior of otherwise sensible Indians who have pulled out all their hard-earned savings after the reforms to start a business and chase a dream? Are they aware that nine out of ten businesses close after twelve months? The remarkable thing about a vibrant economy is the very high failure rate of its entrepreneurs. Success in business goes against the odds. In India, there is also the indignity of having to grovel before and bribe a dozen inspectors. Thus, an entrepreneur has to be a gambler or a lunatic

with an impaired judgment about life. Some will call this courage, others stupidity. It is passion at the root which inspires it. These entrepreneurs are as mad as our medieval Rajputs who went to battle time and again when they knew in their hearts that defeat was their only prize.