

China and India

A tale of two economies

Dilip K.Das



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China and India

The economies of the People's Republic of China and India have been venturing to move to the center stage of the global economy and play more prominent roles than they did in the past. They are emerging-market economies, which are increasingly being seen as two up-and-coming economic powers. Together, these economies account for more than a third of the global population. Together, thus far, China has been exceedingly successful; India's growth rate has recently accelerated and now seems to be following China with a time lag. The two economies share many similarities: they are large, populous neighbors, who were regarded as abjectly poor countries until the 1980s. Both have ancient cultures that bear both advantages and disadvantages for economic development. However, their political systems are very different. While India is an open democratic society, China is a closed society run in an authoritarian manner by the Chinese Communist Party. This dissimilar political orientation has an important impact on their economic decision-making processes. This book is the first to systematically compare and contrast the Chinese and Indian economies. It takes an objective and dispassionate view, and delves into the constructive and favorable, as well as adverse and unfavorable, sides of both economies. Written in a comprehensive and authoritative manner, it covers large areas of the two economies, including macroeconomic, trade and financial sectors.

Dilip K. Das, a distinguished scholar of international economy, has published numerous books and journal articles on the Asian economy. He has been associated with several prestigious business schools in the past, including the Graduate School of Business, University of Sydney, and INSEAD, Fontainebleau, France. He also did short stints for the economic research division of the Asian Development Bank and the World Bank as a consultant. Professor Das is presently a Toronto-based consultant to supranational organizations.

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**For Mira,
Welcome to the world.
May Lord bless you with all the best in life!**

*To exist is to grow, to grow is to change,
to change is to go on creating oneself endlessly.
Conversely, to stop is to fall, to stand is to regress.*

Wisdom of Zen

Preface

Our lineup of Stars recognizes the growing importance of China and India on the global economic stage. Chinese companies, flush with cash from rising exports and cheap access to capital, are buying up energy assets and brand names around the world ... India continues to evolve from an economy that delivers great software, outsourced tax returns, blood-pressure drugs, and angioplasties cheaply to one that offers high-end services such as management consulting and auto and aerospace design.

“Stars of Asia”
Business Week,
11 July 2005, p. 11

Mindsets of academicians, policy-makers in the public policy arena, business professionals and opinion-leaders regarding the Chinese and Indian economies have undergone an insightful transformation. Not long ago, in the mid-twentieth century, the two countries were widely regarded as demographic behemoths but economic weaklings. Not so in the rapidly unfolding twenty-first century; they are increasingly being seen as emerging economic powers of Asia that are capable of future global impact. Writing in *The Financial Times* (23 February 2005), Martin Wolf remarked, “The economic rise of Asia’s giants is the most important story of our age. It heralds the end, in the not too distant future, of as much as five centuries of domination by the Europeans and their colonial offshoots.” The debate that is in progress is not whether but how soon the two economies will come to be important operatives in the global economic arena and meaningfully influence the contours of the global economy. While the present wave of globalization is being initiated and led by the United States economy, present global economic restructuring is being led by the People’s Republic of China (hereinafter China) and the Democratic Republic of India (hereinafter India).

Of the two, the Chinese economy has made the most rapid and far-reaching economic transformation in history. It is giving unambiguous and comprehensible indications of emerging as a key actor on the global economic stage in the foreseeable future. Accolades from academics and business professionals are well-deserved. Some of them even see in it a rising, if nascent, economic superpower, which is gearing up for a new geo-political role, that of providing soft

leadership to Asia in the future. Analysts who study Indian economy, and business professionals who deal with Indian companies, see it on the cusp of an economic leap. Astute and flourishing business corporations from China and India have begun drawing accolades from international business analysts, accolades previously reserved for the paramount firms who were the high achievers of the commercial world in the industrial economies of the past. This achievement has taken decades of pragmatic and dedicated planning, preparations and endeavors of public policy professionals and business leaders.

First China and then India set in motion concerted endeavors to move to the center stage of the global economy and play more prominent roles than they did in the past. These arriviste economies can usher in an era of new international economic alignments, potentially marking a break with some of the post World War II institutions, practices and power structures. This certainly could have decisive and far-reaching global economic and geo-political ramifications. Thus far, China has been exceedingly successful in this undertaking. India's growth rate has accelerated relatively recently and for all appearances it is following China with an appreciable time lag. For a while the academic and policy-making communities and business professionals have started juxtaposing the two economies. An oft-asked question among researchers and policy-mandarin is whether India can be as successful in the future as China has become in the present period. One of the objectives of this book is to delve into this intriguing issue and provide as dispassionate an answer as feasible.

That this topical issue is of contemporary significance is evident from the interest it has generated. Contemporary economic performances of China and India are increasingly being compared and contrasted in academic circles and policy-making institutions alike. There is a flurry of journalistic and academic articles on this theme. Many economic research centers and think tanks have launched, or are launching, research projects on this subject. The two Asian economies are large, populous neighbors, who were regarded as abjectly poor countries until a few decades ago, where large masses of populations toiled and lived a wretched existence below the internationally defined poverty line. Another similarity between the two is that they are both ancient cultures, which has both its advantages and disadvantages. However, one difference of great consequence between the two is their political systems. While India is an open, pluralist, multi-party, democratic society, China still is a closed society run in an authoritarian manner by the Chinese Communist Party (CCP). The two societies will remain very distinctive because of their markedly dissimilar political orientation, which indubitably has a crucial bearing on the economic decision-making process in the two economies.

Escalating interest in the two economies stems from the fact that in the closing period of the twentieth century China turned in a stellar economic performance. It recorded vertiginous decadal growth rates, astounding the onlooking world. Few parallels of such economic performance are available in economic history. In the initial years of the twenty-first century, it was being widely perceived as the fastest growing economy in the world, with a promise of becoming one of the

global economic powers in the medium term. Since the early 1900s India has been trying to emulate China's achievements and has been successful, albeit in a limited manner. Some segments of its economy showed promise of turning in a world-class performance. The global economic community and business professionals are taking note of their accomplishments. It is widely being acknowledged that together they are certain to make an impact on and influence the economic scenario, both regionally and globally, in the foreseeable future.

The ascendancy of the two economies, which are still poor in terms of per capita income, was hardly ever viewed with a mixture of awe, opportunism or even trepidation. Over the post-World War II period, a clutch of East Asian economies recorded the much vaunted economic miracle. In terms of the size of the GDP and population, they were small. None of them were large enough to potentially power global growth or change the game in a large spectrum of goods and services industries. In contrast to these high-performing economies of East Asia, both China and India possess the weight and dynamism to transform the twenty-first century global economy. In a progressively integrating global economy China and India are attempting to integrate their massive labor forces, which is sure to be one of the ways of ushering in a profound transformation in the global economy.

Over the preceding quarter century China's comparative advantage and competitive edge moved from its initial low-cost labor-intensive products to state-of-the-art manufactured goods. India has succeeded in the services industries, essentially in the information and communication technology (ICT) related areas. It made a global mark in software and business-process outsourcing (BPO) as well as in creating world-class research and innovation hubs. Many Indian companies have performed better than their Chinese counterparts and have started appearing on the prestigious global ranking of high-performer firms. Market forces and those of globalization are driving these economies and their business houses to noticeable spots on the global economic stage. A question is being asked—if merely rhetorically—whether these two economies could become a counterweight to the United States in the twenty-first century at the expense of Japan and the Eurozone.

The two economies have risen in importance for the large firms in the industrial economies and the transnational corporations (TNCs). The reason is that China and India are not only becoming powerhouses in manufacturing and services, respectively, but also are able to expand their respective middle classes. They are rapidly developing into enormous consumer markets. As wages rise, no matter after what time lag, more and more Chinese and Indian households will be able to afford everything from luxury shampoos to trendy sedans. To be sure some local companies will focus on the emerging domestic consumer needs. However, not all of them can be met by the local companies, and companies in the industrial economies and TNCs are likely to step up their operations to meet the domestic demands of new-fangled products that *nouveau riche* Chinese and Indian consumers would be able to purchase. Not too long ago, a consumer revolution of this kind was noticed in the high-performing economies of East Asia. A recent study by McKinsey revealed that Western companies find that trying to sell Western-style products in Western ways was not highly successful in the

Chinese and Indian markets (Davis and Stephenson, 2006). For companies of all kinds, the key to success in these rapidly expanding consumer markets would be figuring out what consumers want and how they want to buy it.

China and India fought a short but bloody border war in 1962, and did not interact after that. After a prolonged estrangement, the two countries have been making earnest political overtures to come together and develop an amicable economic bond. Although they started from a low base, their bilateral trade and investments have been rising in the twenty-first century. They have also found other areas of economic cooperation, like feeding their rising energy demands. A noteworthy event of mid-April 2005 was the maiden state visit of Chinese Premier Wen Jiabao to India. He came with a clearly defined, consequential, result-oriented message of an expanding economic, investment, trade and technological cooperation between the two economies. A proposal for a bilateral trade agreement was also tabled by him. He promised support for India's long-standing bid for permanent membership of the UN Security Council and noted that a thaw in bilateral relations between the two countries is not only "immeasurably valuable for the Asian countries but for the world." In his warm welcome address the Indian Prime Minister, Dr. Manmohan Singh, remarked with a tad of hyperbole, "Together India and China could reshape the world order" (Pant, 2005).

Perpetuating the folklore regarding China's rapid real GDP growth or India's relatively tepid economic performance is not the objective of this book—although it cannot be totally excluded. This book is also not a eulogy of either of the two economies. It takes an objective and dispassionate view, and delves into the constructive and favorable, as well as adverse and unfavorable, sides of the two economies. To be sure, favorable features of both the economies have been analyzed; deficiencies and imperfections have not been overlooked. Both the economies are facing their share of problematic issues, which they have so far found difficult to resolve. Notwithstanding recent achievements, the Chinese economy is seriously plagued by alarming long-standing conundrums which have not been addressed. There are unanswered questions such as how to give political voice to the public, if at all, along with increasing economic autonomy and prosperity. As per capita income grows, so will calls for civil liberties, political freedom and human rights. Serious problematic issues in the financial sector of the economy have largely remained unresolved. A large rural–urban migration is presently underway in China, which could cause social instability. The massive state-owned enterprises (SOEs) still have a significant, albeit decreasing, role in the economy. These nearly bankrupt SOEs have continued to play a social security-like role in China for a significant segment of the population and therefore cannot be shut down cold turkey. Growth of the indigenous private sector has remained scrawny. What is even worse is China's problems in its capital markets, particularly the banking sector, which is technically insolvent. The banking problem is one of the biggest constraining factors that are holding back the future development of a vibrant and dynamic domestic private sector.

Similarly, the Indian economy has continued to face the acute problem of reining in its fiscal profligacy. Passing of the Fiscal Responsibility and Budget Management Act (FRBMA) has not made a great deal of impact. Can Indian politicians be

educated and disciplined in this regard? Can they be made to understand the pernicious effects of permanent, if unsustainable, budget deficits? A sprawling, inefficient and incompetent bureaucracy has long remained a serious drag on economic performance—a veritable albatross around the neck of Indian society. The post-1991 reform implementation was tardy, erratic, patchy and incomplete. Important areas of reforms and restructuring—such as modernization of archaic labor laws and bankruptcy procedures, eliminating the large network of market-distorting subsidies and privatization—were ignored on the grounds of political expedience. The negative impact of bureaucratic foot-dragging has proved to be an unmitigated disaster for the economy. The legacy of a stifling bureaucracy has not only persisted but is continuing to prosper. Democracy and domestic politics did turn out to be a genuine hurdle in implementing the much-needed economic and structural reforms. Contemporary India is an extremely apt illustration of how forcefully politics can constrain economics. Consequently India has continued to be an over-regulated economy compared to other countries at its level of per capita income.

An outstanding feature of this book is that, unlike most writings on this theme, it is written in a comprehensive and authoritative manner and covers large areas of Chinese and Indian macro-economy and finance. Constant comparisons have been made between the two emerging-market economies (EMEs). The noteworthy areas of focus include international and intra-regional trade and investment, reforms and restructuring, as well as financial and monetary aspects. In-depth discussions have been provided on the success, or lack thereof, of regional and global integration through expanding trade and financial flows.

Another exceptional feature of this book is that in taking a contemporary or post Asian-crisis view of the two economies, it offers the newest knowledge related to relevant themes as well as the latest concepts. In a succinct manner, this book deals with the principal normative and positive strands which one needs to be familiar in this subject area. As is essential for a book of this kind, some sections have been written in a “just-the-facts-jack” style. This applies most to the first chapter. The selection and rejection of the thematic strands for coverage in this book has been done exceedingly carefully.

The number of academic institutions offering courses related to Asian economies is already significant and growing. The target readership of the book is master’s level students in economics, international political economy, international relations, and Asian economy courses, as well as MBA students. Researchers, policy mandarins, business professionals and ambitious senior level undergraduates can also benefit from the book. Having a background of initial macro, micro, international trade and monetary economics should be sufficient to comprehend this book because it provides definitions and explanations of terminology and advance concepts used in the text as footnotes.

It is written in a reference book style. As noted above, students and other readers can find the latest knowledge and concepts on several important themes related to the two economies in this book, in a manner in which they can appreciate, and absorb and use them as input in their decision-making. Students, particularly those from business schools, who may hold Asian economy related jobs after completing their studies, should find this knowledge extremely relevant and helpful.

The style of writing is neither overly technical nor highly model-oriented. This book essentially employs narrative analysis and avoids utilizing empirical analytical tools provided by econometric analysis (time-series analysis, cross-section and panel data analysis) or applied general equilibrium analysis. Excessive emphasis on technicalities, equations and econometric modeling discourages many potential readers. These characteristics narrow down the market to a small expert readership. The book is easy to access for the target readership because of its narrative analysis style, which stops short of mathematical formulations and econometric modeling. Many students and other readers who have good analytical minds and sound knowledge of economic principles feel lost in mathematical formulations.

So far as possible, the statistical data used in this book are from international sources. The objective is to maintain strict and scrupulous comparability of the two economies and their various sectors and sub-sectors. Besides, numerous academic scholars have argued that the statistics published by both the economies is of questionable quality. Therefore, it is likely that the statistics used here are at marginal variance from those published by the government sources in the two countries. The structure of the book is divided into five chapters. Chapter 1 introduces the two economies and presents a broad-brush historical view and the basic economic facts and statistics about the two economies in a somewhat stark manner. It also deals with the global integration of the two economies and their respective potential places in the global economy. Chapter 2 is devoted to detailed comparative analysis. It focuses on the basic differences between the two economies and their diverse growth paths and economic trajectories. The circumstances under which the reform processes began in the two economies is also dealt with in this chapter, as is the comparison of the current business environment and the progress in global integration. The question why the Indian economy lags behind China is answered in this chapter. Chapter 3 examines the specific circumstances of the Chinese economy and the rationale of its vertiginous growth and meritorious economic achievements. Its success in the areas of trade and investment has been taken up for a detailed analysis. The Indian economy is the subject matter of Chapter 4. In covering its recent economic scenario, the emergence of its 1991 fiscal-cum-balance-of-payments crisis, the reforms and restructuring program, its short-term success and long-term failure have been delved into. Why the Indian economy did not globalize like its Chinese counterpart is also a topic of discussion. In contrast to this, the impressive achievements of the Indian economy are its success on the ICT front and ability to create world-class R&D hubs and some highly successful firms, which have become mini-multinationals. The question whether India can draw level with China has been explored next in this chapter. Finally, Chapter 5 examines the growing recent bilateral interaction between the two economies and how they are cooperating with and influencing each other.

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Professor Dilip K. Das has been associated with several prestigious business schools around the globe, including the European Institute of Business Administration (INSEAD), Fontainebleau, France; the ESSEC, Paris; the Graduate School of Business, University of Sydney; the Australian National University, Canberra, and the Webster University, Geneva. He also was Professor and Area Chairman at the Indian Institute of Management, Lucknow, India, and EXIM Bank Distinguished Chair Professor in the International Management Institute, New Delhi. The areas of his expertise include international finance and banking, international trade and WTO-related issues, international business and strategy and Asian economy, including Chinese and Japanese economies. His most recent interest is globalization and the global business environment.

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1 Comparing the comparables

China and India are the world's next major (economic) powers. They also offer competing models of development. It has long been an article of faith that China is on the faster track, and the economic data bear this out. The "Hindu rate of growth"—a pejorative phrase referring to India's inability to match its economic growth with its population growth—may be a thing of the past, but when it comes to gross domestic product (GDP) figures and other headline numbers, India is still no match for China.

Huang and Khanna
Foreign Policy (2003, pp. 83–91)

1. Juxtaposing the two populous giants

The People's Republic of China (hereinafter China) and the Democratic Republic of India (hereinafter India) are geographically large and neighboring emerging-market economies (EMEs), which are increasingly being perceived as two up-and-coming economic powers. They are two populous economies accounting for more than a third (37.49 percent) of the global population. They have different political systems and pursue distinctly different economic and political routes to growth.

Latterly it has become conventional wisdom to compare and contrast them. Academic researchers, public policy mandarins and decision-makers in the business world have become enormously interested in the growing strengths of the two economies and a comparison between them. Indubitably, deficiencies exist in statistical data in both the economies, making comparison a difficult and imprecise matter. Yet, frequent articles in the financial press and academic journals have continued to dwell on the theme of comparison and evaluation of their economic performance as well as their future prospects and status in the global economy. During the last three years, *The Economist* and *Business Week* brought out special issues addressing the diverse facets of the two economies and their short- and medium-term economic potential. *The McKinsey Quarterly* published two special issues on China and India in 2004 and 2005, respectively. Columbia University, Cornell University, Stanford University, Johns Hopkins University, Royal Institute of International Affairs (RIIA) and the Brookings Institution have organized international conferences on or around the two economies and the theme of comparison between the two. In the recent past, large think-tanks and research institutions, including the East–West Center, Hawai'i, and the Woodrow Wilson International Center for Scholars, launched major research projects addressing this subject, which has both theoretical significance and practical value for the public policy-making community and decision-makers in the business world.

China and India share a 2,175 mile border and have entrepreneurial trading heritage, enormous internal economic diversity and significant agricultural sectors.¹

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Both are ancient cultures, have almost five thousand years of recorded histories and are regarded as cradles of human civilization. Though the two economies were noted for their prowess and prosperity in the remote past, their more recent history of the last two centuries is replete with distressful colonization of one and feudal incompetence leading to economic turmoil in the other.² Sometime between the mid-eighteenth century and the latter half of the twentieth century, the two countries became bywords for stagnation. During this period they were among the poorest countries in the world, typically thought of as locations for famine, disease, pestilence and backwardness. In the mid-twentieth century, particularly during the 1960s, both the economies suffered from famines and their economic fortunes reached their nadir. In the facetious, if sterilized, language of international diplomacy they became “basket cases,” deserving to be viewed through the lenses of pity. India became heavily dependent on external assistance, particularly on United States (US) wheat shipments under the PL 480.³ Until the early 1980s, the two countries were widely regarded as “impoverished” and comparable low-income economies.

First, China, after a long period of isolation, and then India, after an inward-looking and semi-isolationist period, began opening up and trying to integrate with the global economy. China proved to be a far superior success in this endeavor. As alluded to above, the two economies adopted very different political systems as well as diverse growth strategies, which resulted in different trajectories of growth. Their developmental experiences remain distinctive. Together they are home to nearly two-fifths of the total working-age global population. Notwithstanding recent success on the economic developmental front, both countries still have a significant number of poor living within their border, although they have made great strides in reducing poverty in the last decade. China has successfully established itself as the fastest growing economy in the world, and its emergence in the late twentieth century is comparable to the rise of a united Germany in the nineteenth century and the US in the early twentieth century. Although India’s long-term growth rate during its post-independence (1947) period was slothful and disappointingly slow, it picked up momentum after 1991.

China turned in a stellar economic performance during the closing decades of the twentieth century, attracting global attention and inspiring appreciation. At the beginning of the twenty-first century, it was being seen by some analysts as the economic superpower of the future (see Section 7). It emerged as a low-cost manufacturing juggernaut, invading global markets in a sizeable array of products, with a high and rapidly rising level of merchandise exports and imports. In comparison, India’s growth performance has shown improvement but has not matched that of China. Likewise, in spite of improvement in export performance, India’s exports remain far lower than China’s. In addition, India fell behind in every indicator of economic and social well-being. China’s growth strategy is methodical and deliberate, while India’s seems to be impromptu, opportunistic, if not chaotic. However, in the early 2000s the scenario has transformed further, and

India seems to be joining China in the category of one of the world's fastest growing economies.

In terms of real GDP growth rates during the 1980s and 1990s, China and India turned in notable performances. In terms of integrating into the global economy, progress in economic reforms and restructuring of the economy, and improving general macroeconomic efficiency and total factor productivity (TFP), China has gone much further than India and reaped the rewards. "India is often portrayed as an elephant; big, lumbering and slow off the mark. Now investment-bank reports are beginning to talk of it as a new Asian 'tiger'. If that is what it wants to be, it makes sense for it to study China: the tiger in front is Chinese" (*The Economist*, 2005a). A confluence of sustained economic growth in the two economies, expanding industrialization and large populations may well become the root of rapid rise in the future geo-economic and geo-political prowess of these two countries.

Nonetheless, the two societies will remain very distinctive because of their dissimilar political orientations. This difference is of enormous consequence. While India is an open democratic society, China is a closed society run in an authoritarian manner by the Communist Party bureaucracy. And while India is known for its rambunctious, pluralistic, multi-party democracy and free press that readily exposes all economic, political and social deficiencies, China is reviled for the 1989 Tiananmen incident all the world over.⁴ If democracy goes a tad too far in India, the government in China continues to rule by fiat. To be sure, their different political orientation has had an important bearing on the economic decision-making process. This glaring difference is of capital importance, and some scholars are tempted to point to it as the basic rationale for the difference in their economic performances.

2. Comparing pre-modern China and India

History is a great teacher. T.S. Eliot was not the only one who believed that "time present and time past are both present in time future, and time future in time past."⁵ J.M. Keynes (1936) concurred with him and counseled his cohorts to "examine the present in the light of the past" so that the future may benefit from it. A creative concern about the future entails an insightful understanding of the past. Therefore, in the following two subsections I shall briefly focus on the economic history of China and India. Their existence as a definable political and economic entity predates virtually all other countries. The two countries have long histories, but they are completely different. Chinese history demonstrates that it has been a stable and centrally run state for the most part. There were few periods when a cohesive central authority was missing. Conversely, India had only two periods when a large geographical part of India was ruled by an emperor or single political authority as an entity. The two countries remained economically energetic and vibrant until the middle of the eighteenth century, and thereafter went into a steep decline.

2.1 China

Chinese history has records of its military and cultural preeminence over large parts of Asia. China's unification in 221 BC under the Qin Dukedom (221–206 BC) is widely regarded as the starting point of nation state and national economy. The Qin Dukedom was established in modern-day northern China, followed by a long process of territorial expansion. Before the unification China's multiple feudal political units accommodated an economy which was a mix of farming, commerce, handicrafts and pastoral activities. Domestic economic competition prevailed in all spheres, including science and technology. This remote period of history is known as "a-hundred-flowers-blooming" period (Deng, 1999). Thereafter, for a long period, both the state and the peasantry demonstrated a strong proclivity to expand the territory of the empire and, with that, farm land. This expansion of China's agriculture and territories is called its internal colonization. It went hand in hand with the expansion of Chinese bureaucracy and army to the newly settled regions. Geographical expansion and internal colonization of the empire stopped only when it reached the physical limits. This tradition of expanding empire with farm size was unique to China.

In the expansion of farms and their sizes, the state saw fiscal reward in terms of more revenues from the peasantry. The peasants in turn saw more land coming under the plough as an enlargement in their resource endowments, expanding their income base. Clear property rights over land were given to the peasants, which provided them with a further incentive to expand farm size and produce more. The practice of equal inheritance among the peasantry—which led to the constant problem of shrinking farm size—also perpetuated the tendency of expanding farms whenever possible. This was the cause behind the expansion of the empire from the Yellow River basin in the north in all four directions. Gradually the near south, along the Yangtze Valley, was colonized, and so was the west along the oases of the Silk Road. This happened during the Han period (206 BC to AD 24). Under the Tang dynasty (AD 618 to AD 907) this expansion accelerated in the far south, reaching and covering a part of modern-day Vietnam. During the Ming (1368–1644) period modern-day Taiwan was annexed by China, while during the Qing period (1645–1911) vigorous expansion of farmland and territory took place in the far north and the far west. The state supported this expansion by providing migrating farmers assistance in the form of finance, free passage, seeds, farming tools and tax holidays.

Chinese agriculture of this period is acknowledged to be high-yielding. The iron-tipped plough has been used in China since around 500 BC (Needham, 1954). China also developed a large system of irrigation canals. A high-yielding agricultural sector constantly produced surpluses, leading to the development of a market economy in pre-modern China. By the end of the Qing period (1645–1911), more than a third of post-tax agricultural output was marketable surplus. This magnitude of marketable surplus was sufficient to support a market economy in agricultural produce. This is one reason why monetization of the

Chinese economy is over two millennia old. The state mints produced large amounts of coins for domestic use. To save coin metal, paper and cloth currencies were used on a large scale during the Song (960–1270) and Yuan (1271–1368) periods, which created inflation at a later stage.

During a large part of Chinese history, China remained embroiled in domestic conflicts between Chinese and non-Chinese regimes. It was also ruled by non-Han Chinese invaders for long periods. The militarily powerful Mongols and the non-Chinese Yuan dynasty conquered large parts of Central Asia and captured far flung areas like Karakoram and cities like Samarkand. They reached up to the Aral Sea, and also waged wars against Burma, Siam (Thailand), Annam (north Vietnam) and Champa (south Vietnam) (Swaine and Tellis, 2000). The Ming dynasty (1368–1644) re-established the rule of Han Chinese but they remained engrossed in containing the Mongol military might. Obsessed with defense, the Ming dynasty built the Great Wall to block the entry of Mongol and other invaders. They even paid the Mongols for not invading the Chinese territory (Fairbank, 1992).

As China was on silver standard, it was a large importer of silver. Silver imports peaked between the fifteenth and the nineteenth centuries, or during the Ming and Qing periods. The principal suppliers of silver were Japan and the so-called New World countries that were mining large amounts of it. A rudimentary short-term domestic credit system existed in China, which used land and home for collateral. However, foreign trade was either a state monopoly or was dominated by it, adversely affecting the development of a local merchant class (Deng, 2004).

The Manchus are credited with establishing the Qing dynasty (1614–1911). While they were engrossed in containing invasions and domestic rebellions, they were also successful in their military expeditions and extended control over large areas of Asia (Frankel, 2004). Through much of its history, China was governed by a strong power at the center. It saw itself as a nation having a cohesive national market. It had two standard written languages, a uniform calendar, and a system of weights and measures. Together they supported a domestic system of commerce. Although China did not become a colony of any of the metropolitan powers as India did during the last two centuries, a multiplicity of foreign powers jostled for economic, political and military influence.

China made its mark in science and technology by inventing gunpowder, printing, paper and paper money. Tea, silk, the wheelbarrow, the bureaucratic structure of government and the degree of PhD are among the valuable gifts of China to mankind. It was a major exporter of fine textiles and muslins. Until AD 1500, Chinese ships dominated the oceans; thereafter they passed on to the European powers.⁶

The Opium Wars of 1839 were followed by the “century of humiliation” for China. This was the beginning of a low and humiliating historic period. China was forced to conduct trade with the Europeans as equals. However, Britain, France, Germany, Italy, Japan and Russia forced unequal treaties on China. Being treated as an inferior in its own land by foreigners was a national discomfiture.

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The Qing did not comprehend the revolution in ocean-going armies, which had changed the balance of power in warfare. The past successes of traditional Chinese armies could not be repeated during this period. In 1885, China lost the Sino–French war in Vietnam, which was declared an independent sovereign country. In 1894–5, China lost the Sino–Japanese war and Korea was declared an independent sovereign country. Britain maintained a high level of influence in Tibet, which ensured a high level of autonomy for it. In 1945, both the US and Soviet Union pressured China to recognize Mongolia as an independent sovereign country (Frankel, 2004). Japan invaded Manchuria in 1931 and occupied large parts of Eastern and Central China. Naturally, having had such degrading experiences, China demonstrated a strong distrust and abhorrence for all foreigners for a long time. Removal of foreigners and reversing of concessions became an important national objective.

2.2 India

The decline of the ancient Indus Valley civilization was complete by 1700 BC, but the reasons for its demise are far from clear. Over the next 2,000 years the Indo–Aryans developed a Brahmanic civilization, out of which Hinduism evolved. From modern-day Punjab the Brahmanic civilization spread east over the fertile alluvial Gangetic plains and by 800 BC it was established in Bihar, Jharkhand, and Bengal. The first large and important Indo–Aryan kingdom was Magadha, with its capital near present-day Patna. It was from here that Bimbisara (54–49 BC) ruled India. The founders of Buddhism and Jainism preached during this period. An extraordinary historical feature about India is that it was never unified as a single political entity or nation state even during the periods of great empires on the subcontinent.

Alexander the Great invaded the province of Gandhara, in the north-western part of India, in 327–325 BC. The Macedonian invaders were eventually driven out by Chandragupta of Magadha, founder of the Mauryan empire (313–185 BC). This was the first classical age of what is called the Hindu–Sanskrit culture. The Mauryan emperor Ashoka, Chandragupta’s grandson, is regarded as the greatest ruler of the ancient period. Basham (1954) called him “the greatest and the noblest ruler India has known and indeed one of the great kings of the world.” He established a centralized empire and unified almost all of India, except for its southern part, the first ever attempt of this kind in Indian history. Ashoka embraced Buddhism, which had a universal moral appeal transcending national boundaries. Ashoka widely propagated Buddhism and spread it to Sri Lanka and Southeast Asia. Ashoka’s empire lasted for half a century after him because the governors of the large provinces established their independence. His descendents were reduced to ruling the capital, Patliputra, and areas surrounding it. Disorder and invasions followed during the next 200 years, leading to the collapse of the Mauryan empire (185 BC). During this period, South India enjoyed greater prosperity than the north. Among the Tamil-speaking kingdoms of the south were the Pandya and Chola states, which maintained active overseas trade with the

Roman Empire. Due to vigorous trading links of South Indian kingdoms, Indian cultural and religious influence spread throughout the Southeast Asian countries. Remnants of this influence are still to be found in this part of the world.

The Gupta dynasty (AD 350–550) rebuilt power from the Gangetic heartland of Patliputra. Their dynastic empire covered large parts of India, extending from Punjab in the west to Bengal in the east, and Kashmir in the north to the Deccan in the south. It is considered a golden age of Hindu kingdoms, a classical period of Hindu–Sanskrit culture. This was the second classical period of Indian history. This period is well known for royal patronage of artists, sculptors, dramatists and architects. Trade through sea routes with China and Southeast Asian countries prospered. Camel caravans were used for trade, utilizing overland routes, which connected to the fabled silk routes of central Asia. This was the period when Indian culture, art and literature reached its pinnacle. Tales of prosperity and majesty of the Hindu kingdom had reached central and western Asia and Europe. Gupta splendor rose once again under the emperor Harsha of Kanauj (606–47), and north India enjoyed a renaissance of art, letters and theology. The noted Chinese scholar-pilgrim Hsüan-tsang visited India during this period; his written accounts of Indian history of this period are still avidly followed.

During this period, the Pallava kings of Kanchi held sway in south India, and the Chalukyas controlled the Deccan in the west. India became known for its scholars in the areas of mathematics, astrology, logic, medicine and philosophy. Three major religions were born in ancient India, namely Hinduism, Buddhism and Jainism. The concepts of zero and decimal, and the game of chess, are India's gift to mankind. Like China, India was a major exporter of silk, fine textiles and muslin, largely to the European capitals where these products commanded high price.

Between the eighth and thirteenth centuries several independent kingdoms became strong. The largest among them were the Palas of Bihar, the Sen of Bengal, the Ahoms of Assam, and later Chola empire at Tanjore, and a second Chalukya dynasty in the Deccan. In north-central India, the Rajput warriors had grown strong and were able to resist the evolving power of Islam. Seafaring Arab traders had first peacefully brought Islam in the eighth century to the province of Sind, in north-west India. However, in the tenth century powerful Muslim marauders from the north-west started raiding India. Tales of a rich Hindu kingdom had made India an attractive target for Islamic marauders and plunderers. Afghanistan and Persia became bases from where a series of invasions into India were launched by Turko–Afghan Muslims, who invaded to loot for gold and jewels and to destroy Hindu and Buddhist temples, which were rich centers of knowledge and culture.

This was the beginning of a distressful period of Indian history. Each new wave of invader left India ravaged and in shambles, weaker than before in terms of military strength. Between 999 and 1026, Mahmud of Ghazna breached Rajput defenses several times and viciously plundered and pillaged the country. India was poorly able to defend itself from the brawny and battle-seasoned armies of the Turko–Afghan Muslims because it never consolidated a strong national political identity that could be rallied against them, or to expel them once they

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were inside the country. The local kings did not unite in defense, and had also grown soft and effete. They were more interested in art, poetry and literature and neglected to build strong armies. The economic price they paid was devastatingly heavy.

The Ghaznavid power waned and by 1150 they were replaced by the Turkic principality of Ghor. In 1192 the legions of Ghor defeated the forces of Hindu king Prithivi Raj Chauhan in Delhi. This defeat laid the foundation of the Delhi sultanate, the first Muslim kingdom in India. The sultanate was unstable and reduced to vassalage almost every independent kingdom on the subcontinent, except that of Kashmir and the remote kingdoms of south India. The task of ruling such a vast territory proved impossible. There were also constant difficulties in the south with the well-established state of Vijayanagar.

The next powerful invader was Timur, who swept down the northwestern passes to plunder and loot. He captured the city of Delhi. His armies left a trail of blood and torture and brought the Delhi sultanate to an end. Babur, Timur's great-grandson, led yet another wave of invasion. His victory in the decisive battle of Panipat in 1526 established Babur as the first Mughal emperor of India. Subsequently the Mughal empire was consolidated by Akbar, who controlled almost the whole of India. For the second time in Indian history, India came close to becoming one country. Between 1570 and 1707, when Aurangzeb died, India remained something close to a united country. Afghanistan became a part of the Mughal empire in India.

The early Mughal emperors paid a lot of attention to the economic prosperity of the population. Trade and commerce thrived during this period. Although Babur was not an Indian and came from central Asia, Mughals adapted well to their new domicile. A new culture evolved during the reign of the Mughals. This became an opulent period for the development of art and culture as well as the building of grandiose architectural monuments, including the Taj Mahal and the gigantic Red Forts in Agra and Delhi. There were few parallels of Mughal finery and magnificence in the erstwhile world. However, Islam could never supplant Hinduism as a faith of the majority of the Indian population.

Long before Babur's epochal triumph in Panipat, Vasco da Gama had landed on the coast of Calicut (1498) and the Portuguese had conquered Goa (1510). The splendor and wealth of the Mughal empire attracted British, Dutch and French merchants, competing for the trade that so far was monopolized by Portugal. The Portuguese traders had the advantage of being the first on the scene and therefore were better established than the others. The British East India Company established trading posts at Surat (1613), Bombay (1661), and Calcutta (1691). Gradually its dominance grew with expansion in its nautical power and command of the sea. It drove off the traders from Portugal and Holland. As the Mughal empire was strong it liberally encouraged peaceful trade relations with the Europeans.

In the eighteenth century the political and strategic climate changed due to an Afghan invasion, dynastic struggles in the Mughal court, and incessant revolts of small and large Hindu kingdoms, especially the Marathas. The large Mughal

empire began softening and rending. This was an ideal opportunity for Britain and France to build their military strength and flex their military muscle, to increase trade and capture Indian wealth. There was a bitter rivalry between the two; each not only attempted to outdo the other but also oust the other. From 1746 to 1763, India was a battleground for the forces of these two powers, each attaching to itself as many native rulers as possible in the struggle for dominance.

Another turning point in Indian history came in 1757, when Robert Clive defeated the Nawab of Bengal at Plassey. He did so with the collaboration of another Indian ruler who was closely related to the Nawab of Bengal. This marked the establishment of the British Empire in India, which was recognized in the Treaty of Paris of 1763. Clive's successor, Warren Hastings, was the first Governor-General of East India Company's domains to be appointed by the British Parliament. He did much to consolidate Clive's conquests. By 1818 the British controlled nearly all of India. They had reduced to vassalage their most powerful Indian enemies, the state of Mysore and the Marathas. Still the Sikh territories of Sind and Punjab remained defiant and completely independent for some time. After this point, the India Office of the British Government oversaw the East India Company. The British government governed the rich areas and the populous cities and the rest of India was governed by princely Indian rulers, under the effective control of the British residents. Britain treated India as an agricultural reservoir and a captive market for British goods, which were admitted duty free. However, India was a substantial exporter of silk and cotton textiles, which suffered because of the Industrial Revolution in the United Kingdom (UK) and the production of cloth by machine. The British also initiated projects to improve transportation and irrigation systems in India.

Aggrandizing policies of Governor-General Dalhousie spawned social unrest in the general population and apprehensions among the native rulers, leading to the bloody first battle of independence in 1857, called the "Indian Mutiny" by the British. It was brutally suppressed at a high cost in terms of loss of life to both sides. The colonial rulers prevailed essentially due to division among the uprisers, poor coordination, and lack of arms and ammunition. Minor reforms were initiated at this point so that a repetition of such a popular uprising did not take place. With the setting up of government universities, an Indian middle class had begun to emerge which advocated further reform. Among the leaders who organized the Indian National Congress in 1885 was Allan Octavian Hume, who had retired from the Indian Civil Service.⁷

During the latter half of the nineteenth century, the Indian economy industrialized rapidly. It had created the largest jute industry in the world, the fourth- or fifth-largest textile industry and the third largest railroad network. Industrial development was rapid even during the interwar era. The index of industrial production was 239.7 in 1938 (1913 = 100). Only Japan's production index exceeded that of India at this point in time, while Canada, Chile, Italy and Germany had a lower index of industrial production than that of India. Notwithstanding these achievements, at the time of independence India was largely an unindustrialized agrarian economy as well as one of the poorest

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countries in the world. There is little agreement on what caused rapid growth of industrialization in the early stages to stall and economic and industrial stagnation to follow.⁸

According to Maddison's (2002) estimates, the Indian economy monotonically became impoverished under British colonial rule. Measured in 1990 international dollars, India's per capita income was higher than that of the US in 1600. It declined to 42 percent of that of the US in 1820. The steady decline continued and it reached 6 percent of that of the US in 1950 and 5 percent in 1973. However, it recovered marginally to 6 percent in 1998.⁹

After independence in 1947, India was partitioned into India and Pakistan, East and West. The British rule gave India its present territories, creation of a nation-state, a constitutional government, structure of state and federal governments, a tradition of free press, its bureaucratic structure, educational and legal systems, property rights and the Western mindset of the social elite.¹⁰ It also gave India the English language, which has been sufficiently Indianized, facilitating its link with the global market place. It should be conceded that the legal, administrative and political institutions and educational system created by the British significantly deteriorated after independence.

It is noteworthy that modern industrialization in India began in the 1850s, which was almost a quarter of a century before that in China. Until the beginning of World War I, India received twice as much foreign direct investment (FDI) as China. The British also initiated the laying down of a large railroad network in India. However, the flip side of the coin need not be ignored. Nationalistic Indians blamed colonial rule for deindustrialization of the economy, the drain of national treasures, deskilling of the workforce and diversion of agriculture away from food crops towards commercial ones.

3. Twists and turns in the twentieth century

The two economies took comparable turns over the twentieth century. For a long period they remained a little ahead or behind each other in terms of per capita income and the total size of the gross domestic product (GDP) cake. Noted economic historian Angus Maddison (2001) has computed their per capita incomes in constant 1990 dollars, in purchasing power parity (PPP) terms, for different periods.¹¹ This measure is also known as international dollars. The two countries started the twentieth century at a low income level. The share of world income for each one was much smaller than their share of world population. In 1913, China's share of world GDP was 8.9 percent, while the share of population was 26.4 percent. For India the share of world GDP was 7.5 percent, while the share of world population was 17 percent. In 1950, these ratios had deteriorated further, reflecting worsening poverty in the two countries.

China's per capita income declined from \$600 in 1820 to \$552 in 1913. Conversely, India's per capita income grew from \$533 to \$673 over the same period. By 1950, China's per capita income further declined to \$439, and India recorded a smaller decline to \$619. Thus, during the first half of the twentieth

century both economies recorded rapid population growth and declining per capita incomes, resulting in worsening poverty. Comparatively, India was a little better off than China. According to Maddison's (2001) calculations India was 40 percent better off, but others, like Kumar (1998), put this proportion at 20 percent.

However, by 1998 this situation had changed dramatically, even reversed. Not only were both economies significantly better off than they were in 1950, but also China's per capita income was significantly higher than that of India. At \$3,117, China's per capita income increased seven-fold between 1950 and 1998, whereas at \$1,760, India's per capita income increased only three-fold. If PPP exchange rate is used, the size of GDP of the two economies in 1950 was almost equal. The ratio of China's GDP to that of India in 1913 was 1.18, but in 1950 it declined to 1.08, implying that they were neck and neck in terms of the size of GDP. But in 1998 this ratio soared to 2.28, making China's GDP over two-and-a-quarter times larger than that of India.

4. Relative statistical profiles of the two economies

Table 1.1 presents a stark statistical profile of the two economies. To escape the accusation of corrupt or unreliable statistics, statistical data from only international sources has been presented, which has a low probability of being either.

Table 1.1 A comparison of statistical profiles.

| <i>Indicator</i> | <i>Unit</i> | <i>Year</i> | <i>China</i> | <i>India</i> | <i>China/India ratio</i> |
|---|--------------------|-------------|--------------|--------------|--------------------------|
| <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> |
| Population | Million | 2003 | 1,288 | 1,064 | 1.2 |
| Population density | People/ sq mile | 2003 | 138 | 358 | 0.38 |
| GNI at market exchange rate | \$ billion | 2003 | 1,417 | 570 | 2.49 |
| Rank | | 2003 | 6th | 12th | |
| Agriculture | Percent | 2003 | 15 | 22 | 0.6 |
| Manufacturing | Percent | 2003 | 39 | 16 | 2.4 |
| Services | Percent | 2003 | 33 | 51 | 0.64 |
| Gross national income (per capita) | \$ | 2003 | 1,100 | 540 | 2.0 |
| Rank | | 2003 | 134th | 159th | |
| Gross national income at PPP | \$ | 2003 | 6,410 | 3,062 | 2.1 |
| Gross national income at PPP (per capita) | \$ | 2003 | 4,980 | 2,880 | 1.7 |
| Rank | | 2003 | 119th | 146th | |

(Continued)

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Table 1.1 A comparison of statistical profiles—cont'd

| <i>Indicator</i> 1 | <i>Unit</i> 2 | <i>Year</i> 3 | <i>China</i> 4 | <i>India</i> 5 | <i>China/India ratio</i> 6 |
|-------------------------------------|--------------------------------|------------------|-------------------|-------------------|-------------------------------|
| Manufacturing value-added | \$ billion | 2001 | 407.5 | 67.1 | 6.1 |
| Life expectancy | Years | 2003 | 71 | 63 | 1.1 |
| Female literacy | Percent | 2003 | 87 | 45 | 1.9 |
| Mortality rate (under 5 years) | Per 1,000 | 2003 | 37 | 87 | 0.4 |
| Malnutrition (under 5 years) | Percent | 1995–2003 | 12.1 | 45.8 | 0.3 |
| Poverty | Percent living below \$1 a day | 2001 | 16.6 | 34.7 | 0.5 |
| Electricity production | Billion kwh | 2002 | 1,640.5 | 596.5 | 2.7 |
| Goods hauled (railroad) | Ton-KM billion | 2002 | 1,508.7 | 333.2 | 4.5 |
| Container traffic (ports) | Millions | 2003 | 61.62 | 3.9 | 15.7 |
| Air freight | Ton-KM million | 2003 | 6550.6 | 580.0 | 9.7 |
| Telephones (land + mobile) | Per 1,000 | 2003 | 424 | 71 | 6.0 |
| Merchandise exports | \$ billion | 2004 | 593.3 | 75.6 | 7.8 |
| Share in multilateral trade | Percent | 2004 | 8.9 | 1.1 | |
| Rank | | 2004 | 3rd | 20th | |
| Services exports | \$ billion | 2004 | 62.1 | 39.6 | 1.6 |
| Share in multilateral trade | Percent | 2004 | 2.5 | 1.9 | |
| Rank | | 2004 | 9th | 16th | |
| Position in the WTO league table of | | | | | |
| Exporters | | 2004 | 3rd | 30th | |
| Importers | | 2004 | 3rd | 37th | |
| Current a/c balance | Percent of GDP | 2004 | 2.6 | 0.0 | 2.6 |
| Foreign-exchange reserves | \$ billion | 2005 | 711 | 144 | 4.97 |
| Rank | | 2005 | 2nd | 5th | |
| FDI inflows | \$ billion | 2004 | 60.6 | 3.4 | 17.8 |
| Rank | | 2004 | 1st | 5th | |
| Tourist arrivals | Millions | 2004 | 33.0 | 2.4 | 13.8 |

Sources: (1) *World Development Indicators 2005*, (2) *International Trade Statistics 2005*, (3) *Institute of International Finance*, (4) *The Reserve Bank of India*, and (5) *The People's Bank of China*.

Column six of Table 1.1 reveals where these two economies stand vis-à-vis each other. Several revealing *prima facie* conclusions emerge from these statistics.

Although the two populous economies are close in terms of number of people, their population densities are markedly different. India is almost three times as densely populated as China. According to the latest available data, China's GNP, at market exchange rate, is two-and-a-half times higher than India's. This makes China the sixth largest economy in the world, and India the twelfth. The agricultural sector contributed much less to GDP in China than it did in India, where it was still a significant part of the economy. It contributed almost a quarter of the GDP even in the contemporary period. When the GDP per capita was considered at market exchange rate, the two economies were still low-income economies, with China's per capita income being twice as high as that of India. In terms of per capita income the global ranking of China and India was 134th and 159th, respectively. They still are low-income countries. The two economies have a long way to go before they can converge to the standards of the industrial economies of today.

When the purchasing power parity exchange rate is used to calculate GDP, the Chinese economy was again found to be twice as large as the Indian economy. Also, GDP per capita in PPP terms for China was close to twice as high as that of India. The global ranking of the Chinese (119th) and Indian (146th) economies in terms of per capita income improved somewhat in PPP terms. Yet their status as low-income economies did not change. That the industrial sector was much larger in China is demonstrated by the manufacturing value-added, which was six times higher in China than in India. The statistical data on the structure of the gross national income (GNI) confirms this. In contrast, the services sector was much larger in India and contributed over a half to the GDP; while for China this proportion was only one-third.

When the salient social indicators of growth are considered, life expectancy in the two economies does not show a dramatic difference, but China's performance in terms of female literacy rate, mortality rate of infants (under 5) and malnutrition among infants (under 5) is far superior. China has been strikingly more successful in eradicating absolute poverty than India, which has also made some progress in this important area.

In terms of industrial infrastructure, China outpaced India by a large margin. Power generation levels in China were almost three times higher and goods transport by railways was four-and-a-half times higher. However, in terms of container traffic at the ports, airfreight and ownership of phones (land line and mobile), China is so far ahead of India that a comparison begins to look futile.

Although merchandise exports of China were almost eight-fold those of India, in the services exports China's lead was small. While China has emerged as the third largest merchandise exporter in the global economy, accounting for 8.9 percent of global merchandise trade, India's place was twentieth in the league table of traders, accounting for 1.1 percent of multilateral trade. In case of trade in services, while China accounted for 2.5 percent of multilateral trade, India was not far behind with a share of 1.9 percent. China has enjoyed a current account surplus

over the last few years, while India has either recorded a deficit or close to a zero surplus. Since 1990, foreign exchange reserves of both economies has swelled, with China's reserves being five-fold that of India's. In 2005, China was the second largest holder of reserves, while India was the fifth. In attracting FDI, China has become the most successful economy in the world. India's performance remained lackluster in this regard, receiving one-eighteenth of China's level of FDI. Once again, China is so far ahead that a comparison looks meaningless.

5. A plausible place in the global economy

If a long-term historical perspective is taken, until the early nineteenth century China and India were among the largest economies on the planet. Angus Maddison (1998) has calculated that at the beginning of the eighteenth century China and India, in PPP terms, together accounted for 45.7 percent of the global GDP. Their GDPs were almost equal in size, and the GDP of the whole of Europe was approximately the same size as that of China and India individually (see Table 1.2). Thus, at this point in economic history, these two economies were the two largest global economies.

In the early decades of the nineteenth century, in 1820, which for Maddison is the beginning of the capitalist epoch, China and India together accounted for 48.1 percent of the global GDP, and at this point in history China was the largest global economy (see Table 1.2). These estimates need to be taken as broad and indicative. They are far from precise. In 1820, Europe's GDP (26.6 percent) was larger than India's (15.7 percent) but smaller than China's (32.4 percent). These statistics demonstrate that in 1820 the eclipse of China and India had begun and Europe's dominance of the global economy had started.

5.1 Escalating relative weight

The economic weight of China and its integration into the global economy is going to continue to increase, and India should follow suit. If PPP exchange rate is used to calculate GNP, China's importance in the world economy has increased considerably. Between 1980 and 2004, in PPP terms its weight in the world economy increased by 10 percentage points. By 2003, in PPP terms China had become the second largest economy in the world, accounting for 12.5 percent of the global output. Its GDP at PPP exchange rate was \$6,435.8 billion in 2003

Table 1.2 Distribution of world income (in purchasing power parity terms, as a percentage).

| | 1700 | 1820 | 1890 | 1952 | 1978 | 1995 |
|-------|------|------|------|------|------|------|
| China | 23.1 | 32.4 | 13.2 | 5.2 | 5.0 | 10.9 |
| India | 22.6 | 15.7 | 11.0 | 3.8 | 3.4 | 4.6 |

Source: Angus Maddison (1998).

(World Economic Outlook, 2004). One significant contribution of the strong growth performance and re-emergence of China is that it has become a locomotive of global growth. Thus far this has been the prerogative of the US economy alone. Over the 2001–3 period, China accounted for approximately one-quarter (24 percent) of global GDP growth, when output is measured using the PPP exchange rate (Prasad and Rambaugh, 2004).

Over the next few decades the growth generated by China and India—and the other large EMEs—could make these economies a much larger force in the global economy than they were at the opening of the twenty-first century (Das, 2004a). According to the projections of GDP growth, per capita income, currency movement, capital accumulation and productivity growth made by Goldman Sachs (2003 and 2004), the significance of China and India will rise steadily through 2050. They should emerge as a substantive economic force in the global economy. These two economies are projected to achieve higher economic growth than the industrial economies of Western Europe and Japan, whose ageing workforce may inhibit their growth rates.

Relative global importance of these two economies will rise in the shorter term than realized before. New demand growth and the spending power of China and India may cause a shift in the global balance of economic prowess. Assuming a reasonable degree of currency appreciation, the dollar value of GDP of the two economies may grow significantly. The comprehensive projection exercise conducted by Goldman Sachs (2003 and 2004) revealed that the Chinese economy would overtake Germany by 2010 and be the second largest economy by 2016, displacing Japan from its high perch. These computations are based on market exchange rates, not the PPP exchange rates. By 2041, the Chinese GDP was projected to overtake that of the US. The same projections concluded that the Indian GDP would be larger than that of Italy by 2015 and France by 2020. It is likely to catch up with Japan by 2032. These two economies could become an important source of global consumer spending in the not-too-distant future. This exercise also projected the per capita incomes in the two economies. By 2050, China's per capita income has been projected to be 37.5 percent of the present US per capita income and India's per capita income 22.5 percent.

If rapid growth rate in the two economies persists, the proportion of population in the middle-class is sure to grow notably. Yet, it would be significantly less than that in the mature industrial economies at the present time. According to one estimate, China's middle-class could make as much as 40 percent of its population by 2020, which implies doubling of the present proportion. This level is much lower than that of the US, where middle-class is currently 60 percent of the total population. In addition, per capita income of China's middle-class would be much less than that in the industrial economies of the present period. Likewise, there are 300 million Indians estimated to belong to the Indian middle-class, earning between \$2,000 and \$4,000 annually. By 2020, both of these statistics are likely to record a discernible rise. However, the income of the Indian middle-class should continue to be significantly lower than those of middle-classes in the industrial economies. The \$3,000 per capita income is a critical level; it is considered a level

that spurs purchase of a car. Thus viewed, the growing size of the middle-class should surely translate into a huge consumption explosion in both China and India (USNIC, 2005).

A caveat is in order. A level-headed, unprejudiced and realistic vision of the future cannot exclude the fact that, notwithstanding their dynamic growth, the two Asian economies are not likely to compare qualitatively to the mature industrial economies of today. In terms of quality of life, the latter group should continue to be far superior. As noted above, the per capita incomes in China and India would not be anywhere near those in the industrial economies. For sure, they will have several world-class industrial and service sectors in their economies, but a large proportion of their populations will still work on farms, their capital stock will embody less high-technology and be less sophisticated, and their financial systems may well be less efficient than those of the mature industrial economies of today.

Nevertheless, these prospects of future developments in the global economy are nothing short of a tectonic shift. With the gradual and successful integration of China in the global economy, and India making similar endeavors in a small number of sectors with a time lag, millions of working-age adults have joined the progressively integrating global labor market. It will decisively transform the global pattern of production, consumption, trade and employment. This large pool of global labor force will contain growing segments of well-educated and highly skilled workers, who will provide low-cost goods and services of world-class quality. The lesson of the last quarter-century is that the ongoing information and communication technology (ICT) revolution will continue to expand the range of globally mobile occupations. In the mature industrial economies, competition from this global labor force will increase “job churning” and professional retooling (see Section 5.3 below). In particular, the ICT advances are driving India on to the cusp of an economic leap (Burrows, 2005).

Such major shifts in the global economic balance, highlighted in the preceding paragraphs, take place infrequently. The trend growth rate of global GDP has been projected to be favorably affected by the brisk growth rates of China and India. Growth rate of global GDP has averaged 3.7 percent over the last twenty years (1982–2002). The average for the next ten years (2003–13) is likely to remain higher than 4 percent because of the contribution made by GDP growth in China and India (Ahearne *et al.*, 2003). In important global markets like oil, autos and capital, China and India is likely to join the rank of important players in the next ten years (see Section 6.2). Demand growth for energy and oil is likely to remain strong in the global economy. With China industrializing at a rapid pace and India following it, oil prices have hardened significantly between 2001 and 2005. This price pressure on oil is likely to continue in the foreseeable future. Second, China is approaching the stage in its economic growth at which auto ownership begins to grow rapidly. Between 2001 and 2020, it is likely to increase by three-fold. Projections for India also showed a comparable potential. Third, the importance of these two economies in the global equity markets will also rise significantly. They will no longer be diminutive

players as they were until the recent past. Projections show that if they choose a market-based approach to corporate finance, their share of global equity markets will rise to 8 percent of the total global equity markets by 2020 (Ahearne *et al.*, 2003).

5.2 Carving a niche at the global technology frontier: Silicon Valley

Silicon Valley is the largest concentration for cutting-edge technology firms in the world in information and communication technology (ICT), biotechnology and nanotechnology. Chinese and Indian experts and engineers have successfully created a place for themselves in Silicon Valley. This is an achievement of enormous significance. In 1999, 24 percent of the high-technology firms were led by Chinese or Indian CEOs (Saxenian, 2000). Over a third of the workforce in Silicon Valley are highly qualified immigrants, dominated by Chinese and Indians. A local joke is that the abbreviation IC does not stand for integrated circuits but for Indians and Chinese. They meaningfully contribute to the activities of these highly innovative business firms. In the process, these highly qualified and skilled technicians have made the US extremely competitive in these three high-technology areas of business. They not only work as technicians but also as entrepreneurs and middlemen, who facilitate trade and investment links with their countries of origin. These highly skilled immigrants have created a rich fabric of professional activities. They rely heavily on ethnic resources, simultaneously integrating into the mainstream technology industry. Their long-distance networks facilitate globalization of these three high-technology industries, enhancing opportunities for foreign investment.

The Chinese in Silicon Valley have a higher proportion of US degrees, a higher level of technical education, and lower levels of managerial education than Indians. The latter have a higher presence in professional services and executive jobs than the Chinese. This was facilitated by their management education and linguistic ability. Indians also have higher presence in start-ups than the Chinese. While Indian strength is software, Chinese focus is largely hardware (Dossani, 2005).

5.3 Are China and India culpable of job destruction?

For the largest ever trade deficit in the US and job losses in the manufacturing and services sectors, growing imports from China and off-shoring of services from India are being rampantly, if somewhat recklessly, blamed by the economic and financial media and politicians. The story in the other Group-of-Seven (G-7) economies is not very different and protectionist sentiments have been gaining ground. However, it needs to be remembered that comparative advantage is a dynamic concept. As it changes, some industrial and services sectors will be rendered uncompetitive in the mature industrial economies and will face the same future that the “sunset” industries of the yesteryears did.

This is a part of the organic process of economic growth and needs to be accepted as such. Furthermore, manufacturing's share of total US employment was on the decline for almost five decades. This is a common and logical trend among the industrial economies.

A large majority of job losses in the US economy have not been destroyed by imports and off-shoring from China and India. Bailey and Lawrence (2005a and 2005b) analyzed detailed trade and industry data to estimate the extent of dislocation due to off-shoring in the manufacturing and services sectors over the 2000–3 period in the US. Their research concluded that approximately 314,000 jobs, or 11 percent of total manufacturing sector job losses, were the result of declining exports, not rising imports. This quantum of job loss is tiny relative to the millions of jobs created and destroyed annually in the US economy. Additionally, a segment of this unemployment can be justly classified as “frictional” unemployment.

It was the export sector that was the principal cause of job losses (Bailey and Lawrence, 2005a and 2005b). In 2000, when the US economy went into a recession, US exports declined, resulting in a loss of 3.4 million jobs in the manufacturing sector. These workers were producing products for exports. By 2003 this number declined to 2.7 million. Export slump was responsible for destroying a total of 742,000 US manufacturing jobs between 2000 and 2003. Similar statistical analysis revealed that the jobs transferred to India in both ICT and business-process outsourcing (BPO) were minuscule relative to total employment in the US services sector. One proof of this is the relative health of employment in the US ICT sector in spite of recent weakness in the demand for ICT services. If employment in both software and BPO is added, approximately 274,000 jobs moved to India over the 2000–3 period, which amounts to a paltry rate of 91,500 jobs annually. This number should be compared to 2.1 million ICT services jobs created on an average annually during the 1990s, and 327,000 ICT jobs created annually over the 2000 to 2003 period.¹² An OECD (2005) study on off-shoring concluded that “even the largest projections of ‘jobs lost to off-shoring’ are relatively small in comparison to general job turnover and, if history is a guide, growing open economies should be able to adjust and thrive.” It is difficult to disagree with this conclusion.

So far as economic growth and labor market flexibility is sustained, net job loss in the mature industrial economies will be a highly unlikely possibility. The present mode of globalization of the labor market will have welfare implications for the global economy because the new manufacturing and services sector jobs that will be created in China and India—indeed, elsewhere in the EMEs and developing world—are “likely to far exceed the supply of workers with those skills in the advanced economies” (USNIC, 2005). In addition, consumers in the industrial economies will benefit from price and income effects working at aggregate level. While the industrial economies are benefiting from the ongoing globalization in the manufacturing and services sectors, they should not resent the necessary structural adjustment in their domestic economies. They cannot accept one part of the globalization process and reject the other.

6. Alarm bells for the global economy?

A 2001 World Bank study on globalization ranked developing economies by the extent to which they increased trade relative to income over the 1977–97 period, and compared the top third with the bottom two-thirds (WB, 2001). To be sure, the one-third/two-third distinction was arbitrary. The top third economies were branded the globalizing or “more globalizing” developing economies, while the bottom two-thirds were the non-globalizing ones. The former category had a larger increase, 104 percent, in trade relative to income, compared to the industrial economies, 71 percent. The other non-globalizing group of developing economies recorded a decline in trade to GDP ratio during the period under consideration. The twenty-four developing economies in the globalizing category included both China and India, along with other EMEs like Argentina, Brazil, Mexico, Malaysia, the Philippines and Thailand.

Should the ongoing globalization of the Chinese and Indian economies be a source of trepidation and consternation for the other economies? Should the economic re-emergence of China and India be a cause for ringing alarm bells for the other regional and global economies? Global integration and the rapid growth of the Chinese economy, followed by the Indian economy, and their endeavors to move towards the center of global economic stage, is being referred to as the “China syndrome” in the industrial economies in a disapproving, if not disdainful, manner. Sinophobia, and to a lesser extent Indophobia, is brewing not only at Capitol Hill but in the other industrial economy legislatures as well.¹³ The erroneous belief is that such rapid growth in China, followed by India, may cause serious and painful dislocation in the global economy, including significant loss of manufacturing and services sector jobs (see Section 5.3) in the mature industrial economies, resulting in declining living standards and collapsing industrial and services sectors.

For certain, India’s recent improvement in GDP growth and trade performance is by no measure of worrying magnitude. Second, as regards China, economic history has the answer. That is, these anxieties in the industrial economies are acutely exaggerated. The alarmist pronouncements of politicians seem *déjà vu* all over again. When the German economy emerged as a large and vigorous industrial economy in the nineteenth century, it caused anxiety in the other industrial countries of that period in Europe because it was perceived as a disrupter of the established economic order. Likewise, when the US economy came into its own in the late nineteenth and early twentieth century, it was similarly considered a devastating development for the established economic order of that period by the European economies. The US was treated as a villain that disturbed the economic status quo. Large increases in cheap grain exported from the US farms prompted a protectionist response from the European countries. Emergence of China and India, with an inexhaustible capability to supply a large array of manufactured products by China, and to a lesser degree ICT-enabled services, BPO and back-office outsourcing of business services by India, is creating a similar situation once again for the global economy. Indeed, in the short term these two will also cause significant disruption to the established global economic order.

Recent experiences of the Asian high-performing (AHP) economies¹⁴ also provide a lesson in this regard. Japan's output and exports started exhibiting substantial growth after 1955. At this time, the three-year moving average of export growth at constant-prices exceeded 10 percent for the first time for Japan. For the newly industrialized Asian economies (NIAEs)¹⁵ and the ASEAN-4¹⁶ economies this point was reached in 1967 and 1973, respectively (Prasad and Rambaugh, 2003). All these economies also generated similar anxieties in the public policy communities and popular press in the matured industrial economies. When the four NIAEs emerged as industrial economies, the Organization for Economic Cooperation and Development (OECD) secretariat in Paris launched a study to examine its deleterious effects on the OECD economies, which quantified all the negatives of this new development in the global economy. Notwithstanding the short-term disruption, such periods of transition bring with them enormous opportunities for all the economic players in the global economy. The rise, and integration with the global economy, of Japan, the four NIAEs and subsequently the ASEAN-4 economies with the global economy in the latter half of the twentieth century provided a significant lift to both Asian and global economies. Their integration with the global economy eventually lifted all boats.

Although China's contemporary success in global trade after the adoption of outer-orientation strategy has been widely discussed and incessantly analyzed in the academe, when it is compared to the annual rate of export growth in constant dollars for the other successful Asian economies China's export growth rate does not appear extraordinary or out of line. For instance, over the 1954–81 period Japan's annual average export growth rate averaged 14.2 percent. For Korea, during the 1960–95 period it was 21.5 percent, while for Malaysia over the 1968–96 period it was 10.2 percent. For the four NIAEs it averaged 13.1 percent for the 1966–97 period. Against this backdrop, China's export growth rate of 11.9 percent for 1978–2002 fails to appear exceptionally remarkable or excessively favorable (Prasad and Rambaugh, 2003). On the import side, as China prepared for accession to the World Trade Organization (WTO), its tariff rates—both levels and dispersion—steadily plummeted, which led to rapid increase in its imports. Once again, growth rates of China's imports are comparable to those of Japan, NIAEs and the ASEAN-4 economies. In terms of share of world trade, China is far below Japan and the NIAEs, but slightly above the ASEAN-4 economies, at corresponding phases in their growth and integration process (OECD, 2003a; WEO, 2004). Thus, it is safe to conclude that China has merely followed the Asian economic tradition of outer-orientation, and kept up with its energetic neighbors in devising a competitive external sector, which has resulted in its successful real GDP growth and trade performance.

A comparison of long-term GDP growth rates also leads one to conclude that China's growth performance is not extraordinary when compared to those of the other AHP economies. In its high-growth period between 1955 and 1995 Japan's average annual GDP growth rate was 8.5 percent. During the 1965–95 period, Korea and Taiwan also recorded the same average annual GDP growth rates. If another indicator, per capita GDP growth at purchasing power parity (PPP)

exchange rate, is chosen for comparison, China's performance once again appears in line with those of the AHP economies. Between 1978 and 2004, China's per capita GDP rose by 370 percent, implying an annualized trend growth rate of 6.1 percent. In Japan, between 1955 and 1975, the per capita GDP soared by 460 percent, implying a trend annualized growth rate of 8.2 percent. Between 1965 and 1995, Korea's per capita income leapt by 680 percent, which meant 7.6 percent annual growth. In Taiwan this indicator soared by 600 percent for the same period, meaning an annual growth of 7.1 percent (Lo, 2005). Thus, all these comparable AHP economies performed better than China during their respective high-growth periods. This statistical evidence leads one to conclude that, by Asian standards, China's growth performance has not been exceptional.

6.1 PPP versus market exchange rate considerations

As stated earlier (Section 5.1), when GDP is calculated using the PPP exchange rate, China's GDP is the second largest after the US in 2003. To be sure, China's share of world output at PPP exchange rate soared faster than that of Japan, the NIAEs and the ASEAN-4 economies at their corresponding stage of development and integration into the global economy. However, an important point that is often ignored is that using the PPP exchange rate is not a relevant measure in this case because we are concerned with the impact on other global economies. This effect is created by trade and other flows which are conducted and computed at market exchange rates, not the PPP exchange rates. Therefore, we need to change the measure. Table 1.1 demonstrated that China's output growth rate measured at market exchange rate is not extraordinary. It is far below that of Japan, and not much higher than that of the NIAEs and the ASEAN-4 economies at corresponding phases of their integration.

Relatively, Indian exports have created much less anxiety and resentment among the politicians and policy leaders. India's merchandise exports were \$75.6 billion in 2004 and services exports were \$39.6 billion (see Table 1.1). They have not drawn so much ire from the policy-makers in the industrial economies because rapid increase in them is confined only to the ICT sector, BPO and back-office outsourcing of business services. India has lately started exporting high-end services in the areas of management and design. The rest of the export sector is showing only normal increases. The textiles and apparel sector is an exception. It managed to become another high growth sector, particularly after the dismantling of the multifiber arrangement (MFA) in January 2005.

6.2 Comparison with the other Asian high-achievers

Like the three previous episodes of integration into the global economy during the latter half of the twentieth century (see Section 6), China's rapidly expanding trade directly resulted in expansion of its market share in all the three major global markets, namely the European Union (EU), Japan and the US. Imports from China as a percentage of total imports expanded from 3.1 percent in 1980

to 18.5 percent in 2003 in Japan. In the EU this increase was from 0.7 percent to 8.9 percent and in the US from 0.5 percent to 12.5 percent during the period under consideration.¹⁷ Initially, during the 1980s and 1990s, China's exports to these markets were essentially concentrated in labor-intensive and primary products, which included textiles and apparel, shoes, leather goods and light manufactures. However, its share of world manufactured exports increased steadily and by the early 2000s they had become extremely diversified. Remarkably impressive growth was observed in the exports of the following categories of manufactured goods: office machinery, telecommunications equipment, travel goods, furniture and industrial supplies. By the early 2000s, China became a competitive exporter in a large range of manufactures, ranging from kitchenware to car tires and circuit boards, none of which were products of sunset industries. The importance of primary products in exports steadily dwindled. China's export composition was transformed out of recognition. China's export composition has changed further during the recent period. It has made discernible strides in assembling and exporting technology- and knowledge-intensive products, like automated data-processing equipment. Electronic products and ICT hardware and software formed more than 20 percent of China's total exports in the early 2000s. This trend is expected to be strengthened in future and China's export structure is likely to continue to move up further towards technology- and knowledge-intensive products.

The structure of Indian exports has also changed and the proportion of manufactured products has increased, but India has neither been a successful and aggressive exporter to the principal industrial country markets nor has it captured their domestic markets in the manner China's exports have. Also, its noteworthy success in ICT and ICT-enabled services, BPO and back-office outsourcing of business services has jolted the industrial economies in a much smaller way. In the foreseeable future, India is likely to progress more in the same direction and gradually draw lower- and medium-end ICT jobs away from the industrial economy and participate more in outsourcing of business services from the industrial economy. Its foray into high-end services is of recent origin. Together these do not qualify to be called a shocker to the industrial economies. It is nothing more than globalization-induced changes in division of labor, and needs to be accepted as such in the industrial economies.

China has been attracting large amounts of foreign direct investment (FDI), while Indian weakness on this count has persisted for a long time (see Table 1.1). Yet, China's receipt of FDI, when compared to Japan, the NIAEs and the ASEAN-4 during the comparable period of their growth and global integration, is not impressive. Measured as a percentage of GDP, the AHP economies received higher proportions of FDI than did China during the comparable period of growth and integration. It is partly explained by the slow development of the Chinese financial markets, particularly the banking sector, and the stock markets. In terms of magnitude of FDI, Singapore and Taiwan were the champions, attracting the highest amounts of FDI measured as a proportion of the GDP.

The foregoing exposition reveals that China's GDP growth, trade expansion, FDI inflows and its impact over the global economy have been more or less in line

with those of Japan, the NIAEs and the ASEAN-4 economies. Therefore I deduce that China's growth has not been unprecedented in its scope or pace. China abided by the Asian traditions of economic growth established by the earlier successful cases of the AHP economies and it was not a trailblazer. The performance of the Indian economy remains far below the achievements of China at present and those of Japan, the NIAEs and the ASEAN-4 in the past. India is also not regarded as an economy that is having a comparable impact on the global economy, except in a small number of sectors. Notwithstanding the recent acceleration, Indian economic performance cannot be fairly compared to that of dynamic AHP economies.

7. A larger potential global impact for China?

Thus far the global impact of the Chinese economy has not been much larger than that of the comparable AHP economies; what does the future hold? There are good reasons to believe that it is not likely to be so in the future. Going down the road China is likely to cast a longer shadow over the global economy than did Japan, the NIAEs and the ASEAN-4 economies. China has embraced globalization with enthusiasm. The process of China's rapid integration into the global economy and GDP growth has begun only recently and is sure to continue for an extended period. There are several economic factors that will buttress continuance of future growth to a higher trajectory. The first one is the high saving rate, which is sure to decline in the medium term. It will continue to provide China support in capital formation and TFP growth in the short and medium term (Deng and Moore, 2004).

There are indications that China has had some impact over the global economy that was greater than the impact of the other AHP economies during their comparable rapid-growth periods. For instance, when the ICT bubble burst in 2001, the global economy escaped recession due largely to China's robust growth, which boosted global export expansion. By 2003, China began to be regarded as the secondary global growth engine after the US. In addition, competitively priced imports from China in the industrial economies have managed to save them a good deal, leading to a wealth effect. They also helped in reining in inflation and raising the purchasing power of consumers. In the US alone, the saving amounted to \$600 billion between 1995 and 2004 (Lo, 2005). Also, China's purchase of the US Treasury Securities enabled the US to keep its interest rate low and sustain rapid GDP growth during the early 2000s. These are globally significant contributions.

Human capital formation has been going on in China for a while, but its level is still substantially lower than that in the comparable AHP economies. China's acute shortage of line managers is well known. It can be rationally expected that human resource development is to continue to grow for many more years until it at least reaches the level achieved by Japan, the NIAEs and the ASEAN-4 economies. Human capital formation is known to make a decisive contribution to economic growth. Furthermore, China's GDP growth was driven *inter alia* by reallocation of human resources from low-productivity employment in the

rural–primary sectors to high-productivity employment in the urban–industrial sectors. This reallocation is only in its preliminary stage and has to go much further. These two parallel developments are likely to contribute to growth and expansion of the Chinese economy for the next quarter-century, in turn strengthening China’s global stature.

More importantly than any of the factors enumerated above is the fact that China’s per capita income at \$1,100, at market exchange rate (see Table 1.1), is a small fraction of that of Japan and the NIAEs. The majority of the ASEAN-4 economies also have much higher per capita incomes. Therefore, China’s convergence process needs to continue for a long time to come, at the end of which it will have a larger economy than any of the AHP economies, or subgroups among it. By this time China’s emergence will make a much larger impact on the global economy and its factor endowments than any of the previous three episodes of global integration. At this point in time China may potentially have a sizable impact over some sectors of the global economy, several economies themselves as well as the regional economies.¹⁸

By the latter half of the last decade, the Chinese economy had grown sufficiently resilient. It could ward off the Asian crisis (1997–8), while many of the NIAEs and the ASEAN-4 economies were badly mauled. China offered to assist the crisis-affected neighboring economies (Das, 2005a). As noted earlier in this section, China’s economic momentum would continue into the next quarter-century, if not longer. As it is a highly diverse, resource rich and continent-size economy, its internal dynamics can sustain growth for much longer than small AHP economies can.

As set out in the preceding section, in the early years of the twenty-first century China was making its presence felt in the global markets of several commodities as well as affecting their world market prices. Some analysts believe that China is destined to be the next super power (Fishman, 2005). It is well on its way to acquiring this status peacefully. Bijian (2005), a noted Chinese strategic thinker, refers to this as a peaceful ascendancy, a *heping jueqi*.¹⁹ China realizes that its continued development depends on world peace. Chinese political leadership has shown that being a good global citizen matters immensely to their country. The target that the current political leadership has given itself is to quadruple China’s per capita GDP by 2020 and attain *xiaokang* or relative comfort for the Chinese population. The Chinese leadership has been eager to achieve this without seriously disturbing the global balance of power and starting another cold war. They wish to avoid making the mistake that led the US and the Soviet Union into a dangerous, protracted and wasteful cold war (Funabashi, 2005). This policy objective has as much foresight as it is full of sagacity. It reflects the maturity and mellowness of the present corps of Chinese political leadership.

8. How does each perceive the other?

After the 1962 war, political contact between the two countries was reduced to minimal. The participants of a joint conference organized by the Woodrow Wilson International Center for Scholars and the Asia Society on the theme of how the

two countries perceive each other, particularly each other's economic performance, found that there is an obvious asymmetry in the way the two perceive each other. Of the two countries India generally thought about China more seriously than China thought about India. This inference was essentially based on discussions and interviews that the conference panelists had with economic analysts, business leaders and public policy professionals in Delhi, Bangalore, Beijing, and Shanghai.²⁰

In terms of self-perception, both the countries regarded themselves as an emerging star of global proportions, a rising power, both in economic terms and strategically. Both regarded themselves as deserving to be treated as a central player in a "polycentric" global community. With regard to how each perceived the other, Indian business leaders and policy professionals treated China as an emerging economic and strategic star. However, this realization came to the Indian officialdom very slowly, if somewhat grudgingly. Initially they were perturbed about the global accolade earned by the Chinese economic performance and they remained completely convinced that reporting of Chinese growth performance was based on incorrect and spurious statistics as well as biased reporting by the Western media, thereby making China's economic achievements unworthy of attention. As for the Chinese, they were reluctant to display any measure of enthusiasm for India and Indian economic performance, giving an impression that they did not have to be concerned about it becoming a worthy strategic adversary, or an economic competitor in the foreseeable future.

The mainstream perception of bilateral relations with China in India was that there has been improvement in bilateral relations since 1988²¹ by way of state visits by political leaders and a small number of confidence-building minor agreements between the two governments. However, Indians thought that the recent positive turn in bilateral relations may not be a permanent feature. Once China reaches a higher level in economic development, it may reverse this trend and become more assertive than it has been thus far. China's close relations with Pakistan and its transfer of nuclear technology to it have been a constant source of both anxiety and nuisance to Indians.

While business leaders and policy professionals in China exhibited undisguised pride in their economic achievements, they tended to look down on India for its failure to plan and implement comparable economic reforms and restructuring. They were largely critical of India's immature, wasteful and cumbersome democratic processes, which in their view were impediments in India's growth endeavors. They held the belief that this one systemic flaw is enough to bog India down in a morass of stagnation. Senior Chinese officials pointed to the fact that the Indian government has to answer to and appease too many political factions and special interest groups to get any progressive and meaningful policy measure legislated. They believe that this will retard India on the economic front, thereby precluding any possibility of India emulating China in future. They were totally convinced that India cannot be China's future economic rival and therefore deserved mere nonchalance.

9. Conclusion and summary

Two large continent-size Asian neighbors, China and India, are increasingly being perceived as two up-and-coming economic powers. They have different political systems and pursue distinctly different economic and political routes to growth. Although in the remote past the two economies were noted for their economic prowess and prosperity, their recent history of the last two centuries is replete with distressful colonization of one and feudal incompetence leading to economic turmoil in the other. In terms of GDP growth rates, during the 1980s and 1990s China and India turned in stellar performances. China started earlier and has gone much further than India in economic reforms and restructuring of the economy and in integrating into the global economy. In terms of the oft-used indicators of economic and social progress, China has left India far behind. It has also made a significant niche in the global economy. It has become conventional wisdom to compare and contrast these two emerging-market economies.

The two countries started the twentieth century at a low income level. The share of world income for each one was much smaller than their share of world population. During the first half of the twentieth century both the economies recorded rising population growth and declining per capita incomes, resulting in deterioration of poverty. Comparatively, India was a little better off than China during this period. However, by 1998 this situation had changed dramatically, even reversed.

Vertiginous economic growth and rapid integration into the global economy turned China into a progressively important global economy. Its economic weight is going to continue to increase, and India is likely to follow suit after a time lag. Relative importance of these two economies will rise in a shorter term than realized before. New demand growth and the spending power of China, followed by India, may cause a shift in the global balance of economic prowess. Assuming a reasonable degree of currency appreciation, the dollar value of GDP of the two economies may grow significantly in the foreseeable future. These prospects of developments in the global economy are nothing short of a tectonic shift.

With successful integration of China in the global economy, and India making similar endeavors in a small number of sectors, millions of working-age adults have joined the progressively integrating global labor market. It should decisively transform the global pattern of production, consumption, trade and employment. Chinese and Indian experts and engineers have successfully created a place for themselves in the world of high-technology, particularly in places such as Silicon Valley. This is an achievement of enormous significance. The process of China's rapid integration into the global economy and GDP growth has begun only recently and is sure to continue for an extended period. Going down the road China will cast a longer shadow over the global economy than did Japan, the NIAEs, the ASEAN-4 economies and India. Some scholars see a peaceful ascendance of an economic superpower in the present rise of China.

2 Diverse economic growth paths

1. Discarding deliberate isolationism and launching into concerted growth

As we shall observe in this chapter, during the contemporary period the growth paths chosen by the Chinese and Indian economies had more diversities than resemblances. Initially both the economies consciously chose the path of deliberate isolation and remained insulated from the global economy for a long time. Their history had made them suspicious of foreigners and they were reluctant to cultivate more than necessary contact with them. The economy in China was being run as a non-market command economy by its communist government. It was a near autarky during the postwar era. Although India was not an autarky, it adopted an inward-looking economic strategy that pointedly ignored its export sector.

The Indian economy was a mix of public and private sectors, in that order. It had a large public sector but also had a private sector and functioning markets. The latter was rigidly shackled by stringent government regulations and controls, known as the license *raj*.¹ Therefore, while market forces did function, they did so only in a limited, hesitant, distorted and usually extremely inefficient manner. By no stretch of imagination, the private sector could be said to be operating in a free-market environment. Indian society still suffers from the legacy of a stifling large bureaucracy, which continues to be an effective drag on the economy. This scourge has a high social cost and has been a permanent economic disadvantage. In December 1978 China was the first to abandon its isolationist strategy and launch into vigorous reforms of its closed, socialist, centrally planned, non-market economy. India launched its much-needed structural reforms later, in July 1991.

Even in 1980, the two countries were widely regarded as “impoverished” and grouped with the poorest economies of the world in various statistical tables prepared by supranational organizations. India’s population was 687 million, 300 million fewer than China’s. Living standards, as measured by purchasing power per capita, were nearly the same. Since China adopted economic liberalization and modernization of its non-market economy in 1978, it has turned in a stellar performance and left the Indian economy behind. Average long-term GDP growth rates of the two economies for the 1980–2004 period are compared in Table 2.1. According to this indicator China’s economic performance here is far superior to India’s. In 2004, both the economies recorded high rates of real GDP growth, with China’s growth rate being higher than that of India.

Table 2.1 Average annual growth rate of real GDP, 1980–2004 (in percent).

| <i>Year</i> | <i>1980–1990</i> | <i>1990–2003</i> | <i>2004</i> |
|-------------|------------------|------------------|-------------|
| China | 10.3 | 9.7 | 9.5 |
| India | 5.7 | 5.8 | 6.9 |

Source: *World Development Indicators* 2004 and 2005, Table 4.1, April 2004 and 2005. The World Bank. Washington DC.

1.1 Differing growth trajectories: a stark comparison

As seen in Table 2.1, average annual GDP growth rate was higher in China by 4.6 percent during 1980–90, 3.9 percent in 1990–2003 and 2.6 percent in 2004. China's saving and investment rates were much higher than India's and it was exceedingly successful in attracting foreign direct investment (FDI). Also, China's FDI overwhelmingly came from overseas Chinese Diaspora, based in Hong Kong SAR, Macau, Singapore and Taiwan, while in India it essentially came from the transnational corporations (TNCs). The export promotion zones (EPZs) created by India turned out to be completely unsuccessful in attracting FDI, promoting exports and creating large-scale employment opportunities, which was in stark contrast to the phenomenal success of the Chinese special economic zones (SEZs) in all three areas.

China's fixed investment rates exceeded India's by approximately 15 percent per annum; its average FDI receipts were several fold India's. A plausible, albeit somewhat simplistic, argument is that only this one difference in the level of domestic and external investment in the economy could be an explanation of the difference in aggregate growth performance of the two economies. However, there certainly were other sources of growth than gross investment in physical capital. For instance, total factor productivity (TFP) is one of the more important sources of growth. Srinivasan (2004) contends that growth in TFP was higher in India for at least part of the 1980–2003 period. This is supported by the trend in incremental capital-output ratio (ICOR), which is a crude measure of capital utilization efficiency. ICOR increased in China from three to five between 1980 and 2003 (*The Financial Times* 2003). This shows a clear decline in the efficiency of investment, which was largely created by large public sector commercial bank loans liberally going to inefficient state-owned enterprises (SOEs). Large investment flows to the SOE sector not only had the disadvantage of lower productivity of investment but it also raised the level of non-performing loans (NPLs) in the economy to a distressingly high level. As opposed to this, investment efficiency in the FDI sector in China, or the so-called foreign-invested enterprises (FIEs),² was extremely high. It more than compensated for the lack of efficiency in the SOE sector. The overall outcome was a high real GDP growth rate in the economy.

High long-term GDP growth rates (see Table 2.1) were unprecedented for both China and India. While India's economic performance is not comparable to that of China, it is not poor in absolute terms and when compared to other economies.

By poor I mean Indian growth rates never degenerated to the level of the sub-Saharan African economies. During the recent decades its long-term growth performance stubbornly remained superior to the average for the developing economies *en masse*. The World Bank data cover over 200 countries. Of these 200, less than ten countries in the world outperformed the Indian *long-term* GDP growth rate. It is easy to deduce that the two economies are the “miracle” economies of East Asia. Undoubtedly, the Chinese economy has been the global champion in terms of long-term GDP growth rate. No other economy has recorded such high growth rates during the 1980–2003 period. In a trifling manner, Botswana was an exception; its GDP grew at a higher rate (11.0 percent) than China during 1980–90, but it plummeted to 5.2 percent during the latter period of 1990–2003.

1.2 Contrasting recent economic performance

In the late 1990s and early 2000s, the two economies presented a diverse scenario of achievements and challenges. Following the Asian crisis (1997–8), China pursued expansionary fiscal and monetary policies for three years, so that the adverse effects of the crisis could be eschewed and any deflationary trend arrested. Unlike India, under normal circumstances China is known for being an economy with modest fiscal deficits. As a consequence of these well-calibrated policy measures, GDP growth accelerated to 8 percent in 2000. It was primarily driven by domestic consumption and investment demands.

In the early 2000s, Chinese policy-makers worried about overheating because price bubbles were being generated in several sectors, conspicuously in property, steel, cement and the automobile industry. Several industrial sectors were identified as having over-investment. Consequently, a large number of goods were in oversupply. Still, investment in fixed assets grew by 30 percent in 2003, and contributed 47 percent of GDP. According to International Monetary Fund (IMF) estimates, three-quarters of China’s growth came from capital accumulation, yet average TFP rose by 2 percent per year between 1995 and 1999.³ Investment recorded strong growth in the first half of 2004. In some sectors it grew by as much as 170 percent. New lending by some banks was rising at the rate of 40 percent. Inflation began soaring and the People’s Bank of China (PBC) called for restraint in credit disbursement. In April 2004 PBC upped banks’ reserve requirements for the second time in eight months, and took the novel step of telling a group of big banks to stop lending in the near future.

Due to the tepid global economic growth, export performance of the economy remained weaker than in the past. Although in 2002 and 2003 China was afflicted by the SARS (Severe Acute Respiratory Syndrome) epidemic and GDP growth rate in its principal global markets in North America and Western Europe had slowed, its growth performance remained remarkably buoyant. The GDP growth was buttressed by a high and rising ratio of fixed investment to GDP, which rose from 40.2 percent of GDP in 2002 to 43.9 percent in 2003. This level of investment was also reached in the early 1990s, when the economy was feared to be overheating. In 2004, the investment rate edged further up, to 45.6 percent, and

the economy was once again in similar dire straits. The GDP growth rate is climbing from year to year. It was 8.3 percent in 2002 and 9.3 percent in 2003. In 2004, it was marginally higher (9.5 percent), but this level of growth rate was the highest since the Asian crisis. Such a torrid rate of expansion of investment tends to erode investment efficiency and threatens macroeconomic stability in the medium-term. Therefore, China was forced to make policy endeavors to restrain investment. The Government took several specific policy steps to dampen down the overheated sectors of the economy.

Export and FDI growths maintained their robust upturn. Export growth rate in 2002 was 22.4 percent, but soared to 34.6 percent in 2003. The higher growth momentum was maintained in 2004, when it was 35.4 percent. In 2003 China overtook Japan to be the third largest exporter in the global economy. Merchandise import growth also maintained its rising trend. In 2004, China had become both the third largest importer and exporter in the global economy.⁴ The largest proportion of increase in imports came from energy, commodities and raw materials. Strong domestic investment was another causal factor, pushing imports to high levels. The post World Trade Organization (WTO) accession decline in China's tariff rates and removal of the non-tariff barriers (NTBs) facilitated imports.⁵ China was paying particular attention to intra-regional trade, which was reflected in an increase of 36 percent in its trade with the Association of South East Asian Nations (ASEAN) members⁶ in 2004. At this point, China's trade with them crossed the \$100 billion mark, making the ASEAN economies a significant trading partner. The three most important trading partner economies of China still were Japan, the US and the European Union (EU), in that order. In 2003, China accounted for 18.5 percent, 12.5 percent and 8.9 percent of their total imports, respectively.

China has suffered from several long-standing infrastructural weaknesses. The supply shortages that have persisted in the economy include those of coal, electricity, petroleum, and transport. For example, 26 out of 31 provinces suffered power outages even as recent as 2004. The SOEs and financial and banking sector badly need reforms, which so far have not progressed enough. In spite of commendable success on the macroeconomic front, China has also failed to develop a clutch of globally competitive firms and brand names, which is regarded as a serious limitation of its economic strategy.

Notwithstanding these limitations, China has maintained its long-established status as a favorite destination for FDI, which had risen from \$52.7 billion in 2002 to \$53.5 billion in 2003. In 2004, it rose by 13.3 percent, to \$60.6 billion. Foreign investors are attracted most by China's low labor costs for both skilled and unskilled labor forces and the investor-friendly environment offered in various SEZs. The cost of unskilled labor force in China was 4 percent that of the US, and one-third the cost in Malaysia, and other countries at that stage of economic growth. Also, aware of its infrastructure-related weaknesses, China was endeavoring to grapple with them and upgrade them. Its business environment has improved significantly in recent years, particularly since it acceded to the WTO. Two areas of manufacturing have drawn the largest FDI from the transnational corporations (TNCs),

namely the labor-intensive and export-oriented sectors. Many TNCs relocated facilities from other parts of the world to China in these areas.

The WTO accession was *inter alia* instrumental in opening up the services sector for foreign investment. Therefore, during the 2002–4 period, the rate of FDI inflows in services was faster than in the manufacturing sector. Due to restrictions on investment in the steel and cement industries because of overinvestment, FDI flows have slowed down considerably in these two areas. A coalescence of strong FDI inflows, the trade surplus, and capital inflows, pushed higher by speculation that the renminbi yuan would appreciate in the near future, has led to a 51 percent surge in foreign exchange reserves, to \$610 billion by the end of 2004, and \$711 billion towards the end of 2005.

The Indian economy presented a mixed scenario in the early 2000s. The GDP growth rate during 2000 was 6 percent, missing the government target narrowly by 0.5 percent. Several extraordinary events were blamed for this, which included the fallout from the Asian financial crisis, economic sanctions following nuclear testing at Pokhran, border conflicts with Pakistan at Kargil, and a spurt in international oil prices. Despite these adverse developments, the economy turned in one of the best growth performances in Asia in 2000. India's reliance on imported oil has been heavy. The oil price hike was blamed for a spike in the rate of inflation from 3.3 in 1999 to 7.0 in 2000. The economy received a serious supply shock in 2002, when a drought-induced fall in agricultural output drove the GDP growth rate down to 4 percent. A large food stock kept inflation under control. The contribution of the agricultural sector to the GDP growth rate continues to be important to the Indian economy.

A strong recovery in GDP growth rate (8.5 percent) took place in 2003, which softened in 2004 to 6.5 percent. The major challenges faced during 2004 included the devastation caused by the tsunami, a slowdown in agricultural production, a high price of oil that fueled inflation, and the reemergence of a current account deficit. However, the strengths included acceleration in the growth of industrial output to a robust 7.5 percent in 2004; it was 6.2 percent in 2003. Manufacturing expansion was broadly based, although the high growth in the textiles and apparel sector was noteworthy. This sector needed to maintain its productive efficiency in order to remain competitive in the post-multifiber arrangement (MFA) world. This broad-based manufacturing expansion was supported by growth in key infrastructure industries such as energy and cement. Buoyant industrial growth reflected first a pickup in investment and consumption demand, and second an improvement in exports. Together they buoyed business confidence and the domestic investment environment.

Notwithstanding the slowing economy and rising inflation of 2000, India's export performance continued to be reasonably good. Growth rate of exports was 17.0 percent in 2000, up from a disappointing 11.6 percent during the preceding year. Import growth was also strong (13.0 percent); it was partly due to a sharply rising oil import bill. The external sector continued to perform well, with merchandise export growth of 20.3 percent in 2002, 20.4 percent in 2003 and 23.2 percent in 2004. Import growth kept pace with the exports, but in 2004 imports outpaced exports,

which caused a spike in the trade deficit. Despite 22.8 percent growth in trade in services, the current account switched to a deficit of \$6.9 billion in 2004, having previously been in surplus from the third quarter of 2000. Greater import growth was the result of higher oil prices and strong absorption in the industrial sector. A noteworthy feature of acceleration in merchandise exports was strong growth in global demand, particularly in the ASEAN-Plus-Three (APT) group of economies, which accounted for a large proportion of export increases.⁷

Policy measures to attract FDI were taken in 2000, when the Government opened all areas for foreign investment and put them on the automatic FDI route. A small list of items was put on the negative list, which were excluded from FDI. This was an important step in that it eliminated the previous cumbersome, exasperatingly bureaucratic, case-by-case approval procedure. The new procedure also imparted greater transparency to the foreign investment process. Furthermore, subject to sectoral policies and caps, the automatic route was made available to all foreign and non-resident Indian (NRI) investors, who could secure 100 percent foreign investment. The Government had established the Foreign Investment Implementation Authority (FIIA) in 1999 to ensure that the approvals granted for foreign investments actually reached a financial closure. Notwithstanding this policy improvement, total FDI receipt was \$3.27 billion in 2000. There was little improvement in the following years: FDI stagnated at \$3.6 billion in 2002, \$3.4 billion in 2003 and again in 2004. These statistics speak volumes about the perception of the investment climate in India among the global investors and TNCs.

The integrity and efforts for implementing the reform program—which never picked up momentum—had markedly declined by 2000. The impulses to economic growth generated by earlier reforms had almost faded by this point in time.⁸ Furthermore, old structural impediments prevented the economy from taking full advantage of the liberalized economic environment resulting from the past implementation of the reform program. What was more disconcerting was the network of subsidies left untouched by the newly elected Congress Party-led 12-party coalition Federal Government, which came to power in May 2004.⁹ They not only caused ineffable distortions in the economy but also were poorly targeted and consumed a shocking 14 to 15 percent of the GDP. The new Government also failed to announce any disinvestment and privatization strategy for the large, grossly wasteful public sector enterprises. Political pressure from the left-leaning parties of the Government put paid to progress in privatization. Liberalization in archaic and notoriously rigid labor and bankruptcy laws was also ignored, which has had an enormous cost to the economy.¹⁰

Other than reinvigorating reform implementation, the economy faces several immediate challenges. The first one is embracing fiscal discipline and meeting the fiscal consolidation targets as laid down in the Fiscal Responsibility and Budget Management (FRBM) Act of 2003.¹¹ Second, chronic, acute and widespread infrastructural weaknesses, that have persisted for decades, need to be attended to. Infrastructure investment needs to be stepped up immediately. Investment rate in the economy increased from 24.8 percent of the GDP in 2002 to 26.5 percent

in 2004, but investment in infrastructure continues to remain in the vicinity of 3.5 percent. It is much lower than the government target of 8 percent of GDP. This target was determined by the Expert Group on the Commercialization of Infrastructure Projects. India's current rates of both private and public infrastructure investments have been well below target. To be sure, concerted efforts are needed to prevent the economy from slipping into a slower growth path of 4 to 5 percent in the medium term, which is well below the Government's buoyant Tenth Five Year Plan (2001–5) target of 8 percent for the economy (see Section 9).

In early 2006, the two economies still resemble other developing economies in some of the common problems that they face. A good part of the population, particularly in the rural areas, has not been able to share the benefits of recent rapid growth. Both economies face a serious HIV/AIDS pandemic. The latest United Nation rankings show that China is the second most affected country in the world after India, leading to staggering death tolls in the two countries. If not brought under control this could adversely affect future economic growth prospects in both economies.

2. Income and poverty trends

Growth in income and rate of poverty alleviation are vitally important indicators for economies growing from a low level of real per capita GDP and oppressive levels of wide-spread poverty. Together they determine the quality of life in a country. Statistics published in the successive volumes of the *World Development Indicator* enable us to track down the real per capita income in the two economies during the contemporary period. Between 1975 and 2003, China's real per capita income soared almost eight-fold. It rose four-fold between 1990 and 2003. Against this, the Indian real per capita income increased 2.4 times between 1975 and 2003; a major part of this growth was recorded after the launching of reforms in 1991. Notwithstanding these recent achievements, for decades large segments of the populations in the two economies have subsisted below the respective national poverty lines. The following two subsections focus on the comparison of these two trends.

2.1 Comparison of long-term income trends

China was slightly richer in terms of per capita income than India in the early nineteenth century. Maddison (2001 and 2002) has made a historical comparison of the two economies over the last two centuries and concluded that, until two centuries ago (see the two incomes in 1820 in Table 2.2), China was a little better off than India. In 1870, per capita GDP of China and India were the same, but since then China has been a relatively poorer economy (Table 2.2). Maddison's invaluable historical analysis demonstrates that, from approximate equality of the two per capita incomes in 1870, China's per capita income fell 17.1 percent by 1950. Conversely India's rose by 16.1 percent. In constant (1990) dollars, the difference in the two per capita incomes was stark in 1950, when China's per capita income

Table 2.2 The historic trend in GDP per capita, 1700–1998 (in constant (1990) dollars).

| <i>Year</i> | <i>1700</i> | <i>1820</i> | <i>1870</i> | <i>1913</i> | <i>1950</i> | <i>1973</i> | <i>1998</i> |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| China | 600 | 600 | 530 | 552 | 439 | 839 | 3117 |
| India | 550 | 533 | 533 | 673 | 619 | 833 | 1746 |

Source: Maddison (2002).

was \$439 and India's \$619, although in absolute terms China's share of global GDP was higher (see also Chapter 1, Section 3).

For both economies, 1950 was an important moment. In every decade since then, China's per capita GDP growth has outpaced India's. Between 1950 and 1973, China recovered the lost ground by growing at double the rate of India in terms of per capita income. By 1980, two years after abandoning the Maoist dogma and the adoption of the Deng doctrine, both economies were neck-and-neck once again.

Population growth trends are one of the two determinants of the per capita income trends. In the twentieth century, India's GDP and population, measured as a percentage of the global GDP and population, remained by and large constant. In contrast, the proportion of China's population declined from a fourth of the world population to a fifth. The Chinese population was ravaged by natural disasters and devastating famines (in 1958–61). The latter were estimated to have killed as many as 30 million people.

During the 1980–2002 period, India's population growth rate was much faster than that of China, because China succeeded in reining in its population growth rate by implementing stringent family planning measures. Its one-child-per-couple strategy was firmly implemented. Consequently, the average annual growth rate of population for the 1980–2002 period was 1.2 percent in China, while the average for India was 1.9 percent for the corresponding period. China's share of global GDP, adjusted for purchasing power, rose during the twentieth century. It increased from 8.9 percent in 1913 to 11 percent in 2000, and further to 13 percent in 2004.

In terms of per capita income, both economies experienced acceleration during the 1980–2003 period relative to the preceding three decades. However, China's average annual growth rate of per capita income was close to 8.5 percent vis-à-vis India's 4 percent. Consequently, nominal per capita income in China in 2003 at market exchange rate was \$1,100, compared to \$540 for India (see Chapter 1, Table 1.1). China had lagged behind seriously in 1950, and the per capita income gap was significant. Adjusted for purchasing power parity (PPP), China's per capita income grew by 70 percent more than India's during the 1980–2003 period.¹²

2.2 Comparison of long-term poverty alleviation trends

Poverty measurement methodology has inspired impassioned debate, which we shall ignore for this chapter. However, it is beyond doubt that recent acceleration in GDP rate in both China and India has succeeded in reducing poverty since 1980.

In addition, researchers concur that poverty did not increase during the 1990s and early 2000s. This association between accelerated GDP growth and poverty alleviation need not be mistaken for a causal link between the two. A causal link cannot be established without studying the exogenous determinants of growth and poverty. However, empirically, growth acceleration and poverty alleviation not only goes together in many economies but also during many periods. The economic performance of the recent past in China and India confirms this.

The growth enhancing factors certainly affect individual and household incomes, but these factors operate in an idiosyncratic manner in every case of poverty alleviation. Few generalizations are warranted in this regard. For instance, incidence of poverty in India is largely rural. This observation applies less to China. The affected groups in the rural area are landless laborers and small and marginal farmers. If growth in the two economies is urban focused, it would pass by the rural poor. Effect of growth on poverty alleviation in India was found to differ from sector to sector. Therefore, the same aggregate rate of growth, “if it arises from growth of sectors with relatively low elasticities of growth on poverty reduction, would reduce aggregate poverty to a lesser extent than if it arose from the growth of sectors with high elasticities” (Srinivasan, 2003).

In China the household survey data and poverty data are of recent origin, while in India they have been available since the 1940s. National poverty line estimates have been available in India since the 1950s. In contrast, in China these computations were not developed until the late 1970s. Therefore, early estimates of poverty were essentially *ad hoc*. Various estimates of rural and urban poverty reduction were made for both China and India. According to one, the proportion of population living below the national poverty line in India fell from 39 percent in 1987–8 to 25.3 percent in 1999–2000 in the rural areas, and from 22.8 percent to 12.5 percent in urban areas (Deaton, 2001). Official estimates of the Government of India, based on their definition of a national poverty line, show a comparable decline in poverty. According to this set of estimates, the proportion of poor in the population declined from 45.7 percent to 27.1 percent between 1983 and 2000 in the rural areas. In the urban areas, poverty declined from 40.8 percent to 23.6 percent over the period under consideration. If the country as a whole is taken as a unit, poverty in India declined from 44.5 percent to 26.1 percent (GOI, 2003).¹³

Due to its much higher growth rate in per capita income over the 1980–2003 period, China was expected to be more successful in alleviating poverty than India. Assuming data are credible, rural poverty has been virtually eliminated in China. It declined from 30.7 percent in 1979 to 9.5 percent in 1990, and further down to 4.6 percent in 1998 (Park and Wang, 2001). Similarly, using official statistics Hu, Hu and Chang (2003) estimated that in the rural areas the proportion of the poor declined from 33.1 percent in 1978 to a paltry 3.1 percent in 1999.

As opposed to the above statistical results, the World Bank estimates of poverty in China put rural poverty much higher, almost four times what Park and Wang (2001) estimated. These estimates put rural poverty at 42.8 percent in 1990 and 24.2 percent in 1997. Although the levels of poverty are far apart, the trend is similar; that is, halving of poverty during the 1990s decade. However, in both

economies there are serious possibilities of biases and measurement errors in macroeconomic data in general, and savings and investment rates in particular. Srinivasan (2003) understandably admonishes that “given the serious problems with income and poverty data for both the countries, particularly China, one should not over interpret these trends.”

A recent statistical exercise based on new household data sets and national representative surveys provides improved estimates for the poverty in China and India (Chen and Ravallion, 2004). According to these estimates the poverty line is defined as \$1.08 per day, in 1993 PPP. In 1981 63.8 percent of the Chinese population lived below this frugal poverty line, while in 2001 their proportion declined to 16.6 percent. That is, poverty in China was cut down by three-quarters in a short span of two decades. As against this, the decline estimated for India was from 54.5 percent in 1981 to 34.7 percent in 2001, which was significant but not quite comparable to China’s performance.

Poverty alleviation in the two economies was influenced by the timing, nature, sequencing and implementation of reforms in the two economies. Comparatively speaking, not only was Chinese GDP growth faster, but China also saved and invested at a much higher rate than India. In addition, China’s growth was more pro-poor. Also, in China reforms began in the agricultural sector in the early 1980s. Collective farming was eliminated, peasants managed their land as a household unit, being responsible for their own production, and mandatory deliveries of the farm output to the state were gradually eliminated so that farmers could produce for the market. The new land reforms also led to considerable increase in farm production. Between 1978 and 1992, China’s agricultural output grew at the annual average rate of 5.9 percent. The annual average rate of growth of world farm output during the corresponding period was 1.8 percent. The average annual income in the rural sector increased by 7.6 percent during the period under consideration (Yu, 2002). By reforming agriculture first, China not only contributed credibility to its reform program but also augmented income of the poorest segment of society.

As opposed to this, while agriculture was in the private sector in India, both input and output markets suffered from excessive government interference and distortions. Although the size and contribution of the agricultural sector in India is still significant, thus far the Indian reform program has completely neglected the rural economy in general and the agricultural sector in particular. Reduction in rural poverty can only start after reforms are planned for the large rural sector of the economy.

In the pre-reform era, the principal instrument of China’s industrialization was the SOEs. India also had a large public sector. SOEs in China and the public sector enterprises in India were traditionally domineering sectors of the economy. In 2000, the proportion of investment in the state-owned sector was still significant in both China and India (Srinivasan, 2003). It is a well-acknowledged fact that reforming and restructuring the state-owned industrial enterprises in any country is riddled with myriad problems. Once the reforms were launched, the output in the state-owned industrial sector declined in both China and India, albeit there

was little decline in total employment. Notwithstanding these similarities, India did not have anything like China's dynamic township and village enterprises (TVEs) sector. The TVEs were essentially labor-intensive and provided employment to the rural poor and helped ameliorate poverty among the rural households in China.

Another notable similarity in the area of sub-national impact of growth is that, in the post-reform era, regional disparities have widened in both economies. This is not surprising because better-off regions are the first to exploit the opportunities proffered by the reform process. These regions also benefited from other channels of growth sooner than the not-so-well-off regions, such as the profitable deployment of information and communication technology (ICT). This works favorably for these regions because they benefit from the so-called New Economy and consequently grow faster. India's so-called ICT revolution is still confined to a small number of cities in the Southern and Western states. Movement to a northern state, Punjab, has started only recently.

3. Motivation and launching of the reform programs

Economic reform and the restructuring programs in China and India were launched in two different periods. Also, the circumstances that motivated political leadership to launch them were entirely different in the two economies. In fact, India was forced to launch it because of a severe macroeconomic fiscal-cum-Balance-of-Payments (BoP) crisis in the economy (see Chapter 4, Section 3, for a detailed treatment). At the time of adoption of market-oriented reforms and economic liberalization, under the doctrine of "open-door policy" in 1978 in China, the two economies were almost equal in terms of per capita income, with China slightly poorer than India (see Section 2.1). However, the political leadership decided that the socialist system of central planning and centrally directed allocation of resources was untenable and unsustainable. They took the initiative in formulating a sagacious and pragmatic economic reform and liberalization program and earnestly and astutely implemented it. The consequence was the transformation of China from a small, low-income, centrally planned, non-market economy to a large "socialist market economy." It is the only socialist economy that has made a successful transition from a non-market to a market economy. Its Tenth Five Year Plan (2001–5) was merely indicative, not mandatory. But China is still not regarded as a market economy, and prices in China do not have the same role and meaning as they do in a market economy.

The genesis of this reform and liberalization program took place at the Third Plenary Session of the 11th Central Committee of the Chinese Communist Party (CCP), in December 1978. China adopted its now-renowned "open-door policy" and the political leadership announced the target of quadrupling GDP between 1987 and 2000. This was a defining moment in recent Chinese economic history when economic strategy made a tight U-turn. The new strategy became known as the Deng doctrine, because President Deng Xiaoping was widely considered the intellectual father of this liberal and pragmatic economic stratagem. However,

Zhao Ziyang, the Secretary of the CCP, was the one who had originally conceived this strategy. His economic thinking and policies were progressive for their time and place. He had visualized and developed the “preliminary stage theory,” which set the course for transforming the Chinese socialist system, and the stage for much of the prosperity China enjoys today. Zhao Ziyang had first implemented his liberal and pragmatic economic theory and economic restructuring in the Sichuan province in the 1970s and had succeeded.

Economic liberalization and reforms were not a part of Indian economic policy thinking. Notwithstanding poor post-independence economic performance, Indian policy-makers were convinced that making minor policy changes in their existing policy framework would lead them to economic nirvana. Those with their hands on policy levers were of the opinion that outer-orientation was neither a superior policy framework, nor appropriate for India. They willfully remained ignorant of the success and economic achievements of the Asian high-performing (AHP) economies in the postwar period, which justly earned the accolade of being the “miracle economies.”¹⁴ Learning from this sub-group of Asian economies was *infra dignitatem* for the Indian public policy professionals and, therefore, could not be considered. For the Indian political elite and bureaucracy the inward-looking import-substituting industrialization (ISI) strategy, a large public sector and excessive government interference in economic life, no matter what the cost, were the way to go for India. The large Indian bureaucracy passionately loathed even a whiff of economic reforms because it meant erosion of their authority.

Therefore, reforms were not taken up until it was quite late. Minor reform measures were taken in India in the mid-1980s, although there was little change in the mindset of the bureaucracy and politicians. Even these small half-hearted liberalization measures had a small favorable effect on the GDP growth rate. Between 1987 and 1990, economic growth rate spurted to an average annual rate of 7.6 percent, much higher than the annual average (4.8 percent) for 1980–6. This relaxation, leading to a significant response in growth rate, need not be surprising because it can be explained by the theory of distortions. The larger the degree of initial distortion, the greater is the benefit from the marginal reforms and liberalization.

As elaborated in Section 3 of Chapter 4, the immediate motivation for launching into the liberalization and reform program in July 1991 was a major economic crisis, alluded to above. Foreign exchange reserves had depleted to two weeks of import coverage. The Reserve Bank of India (the central bank) had to pawn its gold reserves to the Bank of England to borrow hard currency from it. The International Monetary Fund (IMF) had to be approached for assistance. The severe fiscal-cum-Balance-of-Payment (BoP) crisis eventually became a blessing in disguise because the stabilization and reform program that was conceptualized and launched had to be an economic liberalization program, something India needed without having a crisis as the motivator. India should have launched such free-market reforms decades ago. Some analysts, including myself, became optimistic and hoped that India might make a strategic turn and endeavor to

emulate the dynamic Asian high-performing (AHP) sub-group of economies.¹⁵ The reform program was ostensibly a move away from the ISI strategy—that India had followed for over four decades—and towards the outer-oriented growth strategy.

Many economists believed that the deep fiscal-cum-BoP crisis was caused by incorrect and contradictory macroeconomic policies followed during the 1980s, and earlier. Other believed that the crisis, growing inefficiencies and non-competitiveness of Indian products in the global markets were caused by consistent subversion of market forces for decades through an array of controls and regulations, quantitative restriction and the public-sector dominance of the economy. Inefficiencies in the public sector had existed since its inception and had multiplied over time. They had assumed a gargantuan proportion. The stabilization and reform program adopted in 1991 entailed broad measures for macroeconomic policy improvements, measures to improve efficiency levels in the economy, opening up of the economy to foreign trade and investment, and dismantling the stifling industrial licensing system (Chapter 4, Section 3.1).

4. China: reform paradigm and economic growth

“Reform” is an all-encompassing term. Any economic measure that does away with distortions can be considered a reform. It is not a one-off process. As economies evolve, their economic framework needs constant adjustment to accommodate the changes that are taking place around them. “Economic progress does not pause for breath, and nor should the economic reform process” (Krueger, 2005). This process alters the framework of economic activity in the manner that strikingly improves the prospects for economic growth. The reform process enabled China to establish new standards of sustained growth and dynamic resource allocation.

A characteristic feature of reforms in China was that they were launched without a plan, sequence or a timeframe, rendering them a degree of tentativeness. The absence of a plan was officially referred to as the “process of crossing the river by feeling the stones” and was characterized by gradualism and incrementalism. They were essentially evolutionary in nature. Hindsight reveals that this reform implementation strategy worked well. Therefore, policy-makers did not abandon it and are still following it. According to this strategy, a new reform measure is first implemented on a pilot basis in a small location or limited part of the economy. If they generate desired results, they are implemented in the entire economy. It was a pragmatic method of implementing reforms because, for one, it precluded policy failure which usually has a high cost, and second, it gave the policy-makers time to create institutions for the large-scale economy-wide implementation of a particular reform measure. Third, this experimental implementation minimizes disturbances to the economy. Sub-optimal policy measures were modified before their wider application (Steinfeld, 2000).

An equally noteworthy point regarding reform implementation is their “dual track” nature. When the reform process was launched, the domestic economy was

far from integrated—and it still is not. It continues to be an agglomeration of regional economies with widely differing resource endowments and comparative advantages. Various regions are known to resist trade and factor flows, both inward and outward. This was one reason why China adopted a “dual track” reform and liberalization strategy.¹⁶ The two tracks were the market track and the central planning track. The latter entailed the SOE reforms. Initially they coexisted, but with the passage of time the market track was to become the more prominent of the two, and was to trump the plan track. Establishing SEZs was a part of the first track of this strategy. This approach was an innovative solution to the political constraints on the direction and speed of reforms.

An important achievement of the “dual track” reform process was that China successfully avoided the so-called “supply failure” which badgered other transition economies of Eastern Europe and the former Soviet Union. The rapid transition strategy followed by these countries, referred to as the “big bang,” apparently had its blemishes which became obvious in implementation. Economic analysis of the dual-track approach showed that it was Pareto-improving (Laffont and Quin, 1999).¹⁷ It was by design Pareto-improving because it had minimal additional informational and institutional requirements and minimized political opposition to reforms (Lau, Qian and Ronald, 2000). One of the objectives of this reform strategy was not to create losers. The dual-track strategy not only succeeded in accomplishing this objective but also worked successfully in product- and labor-market liberalization. This strategy was all-pervasive, and all the facets of economy and policy-making reflected it. Sectoral and policy reforms were no exceptions to this generalization. Several well-regarded and comprehensive studies of China’s reform process are now available.¹⁸

Comprehensive open-economy reforms were *inter alia* carried out in the areas of trade, exchange rate and foreign investment. However, two key prices, namely interest rates and exchange rate, are still largely officially determined. Recently some policy measures to begin liberalizing them have been initiated. Of all the areas of economic reform, those in the area of trade, exchange rate, and FDI were the most consequential (Das, 2001a). These reforms are at the root of China’s vigorous GDP growth, integration with the global economy and significant reduction in absolute poverty.

4.1 Devising SEZs and implementing reforms

The expansion of SEZs was pragmatically planned and aimed at capitalizing on the ongoing transformations in global industrial structure.¹⁹ As many mature industrialized economies were abandoning their labor-intensive and low-end manufacturing industries and moving towards information technology-intensive and knowledge-intensive sectors, China began to attract their labor-intensive and low-end manufacturing industries to its coastal area SEZs. The strategy essentially entailed importing industrial raw materials to the SEZs in these carefully identified sectors, manufacture the goods and then export the finished products to the industrial countries. Given China’s abundant labor resources, this was a sagacious

and well-conceived re-positioning of industrial activity. This strategy successfully relieved the large pressure of surplus agriculture labor as well as relative scarcity of industrial raw materials. Exports generated the much needed hard currency, which in turn contributed to the development of domestic industrial and services sectors (Das, 2001a).

The setting up of SEZs was the mainstay of the open-economy reform process. It was the principal instrument of implementing it. Market forces were to operate freely in the SEZs. By establishing them, China endeavored to attract FDI, modern technology and managerial skills. Initially this was done in a slow, cautious and experimental manner. The SEZs were provided with substantial decision-making autonomy. Each one of them decided on its own strategy for attracting FDI, particularly the tax incentives. FIEs based in SEZs were not only offered preferential tax and administrative treatment but were also given a more or less free hand in running their operations, without constantly having to grapple with bureaucratic red tape like they had to do in India. This went a long way in establishing it as an investor-friendly economy.

Liberalization of the trade policy regime and allowing FIEs to operate in a free-market environment in the SEZs led to substantial export growth in goods and services in China. The average annual increase was 12.9 percent for the 1980s and 15.2 percent for the 1990s. Import growth rates were comparable to those of exports for these two decades; consequently by 1980 China's trade to GDP ratio was 18.9 percent, by 1990 it reached 34.0 percent and by 2000 it soared to 49.3 percent. In 2003, China's exports grew at the rate of 34.6 percent and in 2004 35.4 percent. As noted in Section 1.2, by 2003 the Chinese economy had emerged as the third largest exporter and fourth largest importer in the global economy. In 2004, China had become both the third largest exporter and importer in the global economy. As a large trading economy, China's presence is being felt in Asian and global economies. In a short time span, it has gained export competitiveness in a large array of products, from labor-intensive to high-technology ones. Competing economies acknowledge that China's rapid industrialization could allow it to become an industrial economy in a shorter time period than that taken by the mature industrial economies.

When it was observed that the SEZ strategy was fructifying, it was expanded further (in 1988) and called the coastal development strategy. It turned out to be a stellar success. This strategy was an important factor in turning China into a flourishing export-oriented economy. Essentially because of this success, China's growth model is believed to be heavily FDI-based. FDI contributed significantly to building a modern productive industrial capacity base of the economy, and accelerated the pace of industrialization based on free-market forces. Although it was small relative to total investment, there is little doubt that FDI played a larger role in China's economic growth than that of Japan and the four newly industrialized Asian economies (NIAEs).²⁰ The export-led manufacturing boom of China is essentially FDI-driven. The FDI-induced expansion of the export sector drew a lot of redundant labor from the rural sector to the urban areas and assisted in augmenting the employment base of the economy.

China gradually became the most successful emerging-market economy (EME) in terms of attracting FDI.²¹ Between 1988 and 2000, the average rate of growth in FDI flows, as against approval, was 23 percent per annum. In 1996 China was the highest EME recipient. The cumulative total of FDI was \$340 billion in 2000 (Wong and Ding, 2003). In 2004, China received \$60.6 billion as FDI (see Chapter 1, Table 1.1). Huang and Khanna (2003) contend that foreign investors have been a substitute for domestic entrepreneurial talent. Notwithstanding the vertiginous growth, few local Chinese firms have emerged as world-class global companies to rival the large TNCs. This is one certain downside of large FDI inflows. As opposed to this, the bright side of India's failure to attract FDI is its ability to spawn a number of domestic companies that compete in the global market place with the TNCs and other large international corporations from North America and Europe. These high-technology or high-skill Indian firms are in the cutting-edge, knowledge-based industries. Software giants Infosys Technologies, Satyam, TCS and Wipro, and pharmaceutical and biotechnology powerhouses like Ranbaxy and Dr. Reddy's Labs, come under this category. The Forbes 200 list for 2004, which ranks the world's best small companies, included thirteen Indian firms versus four from China.

4.2 The fledgling private sector

The reform process in China is far from complete. Notwithstanding the numerous commendable achievements, the Chinese economy is still in transition from one system to another. This fact must not be ignored. Additionally, several structural, institutional and sector-specific quandaries persist. Unimpressive growth of the private sector is one unconstructive development. Domestic entrepreneurial activity has expanded, although not rapidly. In 1982, China constitutionally legitimized private sector economic activity or the "individual economy." Private sector growth remained limited because China maintained legal and regulatory restrictions on its expansion. Several major sectors were off limits to the private sector. This included banking and telecommunications. These restrictions were installed so that private sector firms did not compete with the inefficient SOEs, both large and small. A strong official bias against the indigenous private sector firms is well known and is regarded as irrational. Private sector enterprises feel discriminated against, particularly in their lack of access to capital. FIEs have been the principal beneficiaries of constraints placed on the local firms.

Normal indicators of output and investment in the SOE sector have indicated that it has been in decline in the recent past. Its shares in the total fixed-asset investment as well as gross industrial output fell from 80 percent in the 1980s to 40 percent in the case of investment and to 47 percent—when all the different kinds of SOEs are taken into consideration—in the case of output in 2002. As opposed to this, industrial value-added data show that the SOE output declined from 54 percent in 1994 to 48 percent in 2002, which is not a dramatic decline by any stretch of imagination. The output of the private sector was 12 percent of the gross industrial output in 2002, up from 5 percent in 1999 (Lo, 2004). These statistics confirm the fledgling status of the private sector in China. According to another

estimate, made by the World Bank, the private sector contributed approximately 30 percent to the GDP in 2003.²² Going by this statistical evidence, it is easy to infer that the private sector is far from becoming large and robust. Despite growth it has continued to remain small, fragile, fragmented and constrained. The private sector cannot become an effective counterweight to the SOEs in the medium term. China's structural changes in this area have moved more slowly than generally perceived. A significant recent development in this regard was the decision of the National People's Congress (NPC) in March 2004 to include private property rights in the constitution, which indeed was a reform step forward. It implies that private property has now the same legal status as state-owned property.

4.3 Reforms in the financial sector

Another structural and institutional quandary that persisted was, despite rapid and meaningful progress, the financial sector as well as institutions continued to remain problem ridden. Many of them were serious and remained unresolved. The major state-owned commercial banks (SCBs), also known as the Big Four, accounting for 53 percent of the system's assets and liabilities in 2005, continue to suffer from an array of deficiencies. The two principal sources of problems are government policies and lack of expertise within the domestic financial institutions (Hope and Hu, 2005). Infirmities in the semi-reformed financial system, particularly poorly reformed SCBs, encouraged rent-seeking behavior at the provincial level and caused frequent budgetary problems. Although high profile reforms were launched in the financial and banking sector after the Asian crisis (1997–8), progress remained tardy. The Asian crisis heightened the concern of the monetary authorities about the vulnerability of China's banking system. Furthermore, the prospects of foreign competition following the WTO accession added urgency to the need for reforms in it.

The monetary authorities have injected massive amounts of new capital into the SCBs in the recent past. After two failed recapitalization programs, in 1998–9 and 2003, financial authorities started another bailout of the Big Four SCBs in 2004. They dominated the Chinese banking sector and controlled over 65 percent of all banking assets. Chinese banks have never been shy of giving very cheap loans to foundering SOEs. The sclerosis in China's financial sector has worsened by the mountain of NPLs. Official statistical data in this regard are not always credible, but as much as 50 percent of the assets of the Big Four were believed to be under the category of NPLs in 2004. According to an estimate made by Standard & Poor's, as much as \$656 billion was needed to resolve the NPL problem of these four largest banks.²³ In 2005 the situation improved markedly.

To resolve the NPL issue, the bailout maneuver dealt with the banks individually and used some \$60 billion of China's large foreign exchange reserves to strengthen the capital base of these NPL-riddled banks (Hope and Hu, 2005). Although the banks immediately needed \$300 billion for sustaining and rejuvenating them, the small capital infusion was made earlier than necessary. However, before bailing them out, these banks first needed to be put on a sound commercial base. They needed

to prove their commercial viability before they were granted liquidity. The first two recapitalization programs failed to transform the way in which the SCBs transacted their business. Corporate governance in the banks has nothing to do with modern financial principles, practices and culture. Risk management has been another area of serious weakness. The banks have not developed a culture of full disclosure; information released at present falls well short of international standards for best practice. They are not driven by commercial consideration but by political criteria and government fiat. Bank lending has continued to remain politically driven, based on policy guidelines and dictates from the appropriate authorities. Bank credit is not advanced on the basis of creditworthiness and risk assessment to viable investment projects. Top bank officials in the Big Four SCBs openly complained of excessive political interference in lending decisions (Lo, 2005). Such practices of advancing bank credit are completely unsound, if not pernicious and unprofessional. Banking reforms are likely to remain a mere illusion unless banks begin to operate in a commercial manner. The financial sector is a vital sector of any economy; there is a pressing need to start reforming it in an earnest manner.

Bank credit expansion accelerated between 2001 and 2003, as the monetary authorities tried to boost GDP growth in the face of a global slowdown. When overheating became obvious at the end of 2003, monetary authorities tried to clamp down on lending, especially on property loans. In an environment of authorities directing credit flows, it was customary for monetary authorities to direct boom-bust lending cycles. With an exceedingly high household savings rate and lack of investment outlets, banks generally have excessive liquid resources. By advancing credit in an unsound and unprofessional manner they have been doing an immense disservice to the economy, and society at large. Adding to these woes, frequent bank fraud is another problem that besets China's banks. Financial scandals have been on the rise. Several well-publicized cases of embezzlement in three of the Big Four SCBs were reported in the Chinese press during 2004 and 2005 (Melloan, 2005). Exposure of these financial scandals in the local press is indeed a welcome and hopeful sign.²⁴

Entry of foreign banks may well improve the quality of Chinese banking services, but their share of Chinese assets was minuscule, 1.9 percent of the total, in 2004. At the time of the WTO accession, foreign banks were assured phased access to the Chinese market beginning December 2006, which *inter alia* will introduce international corporate governance and risk management practices in the Chinese banking system as well as stimulate competition. When foreign banks do enter in large numbers and start competing with domestic banks, they are sure to find themselves poorly prepared to face vigorous foreign competition on even terms. Foreign banks have shown considerable interest in three of the four SCBs as well as many of the smaller banks. In 2005, banks from Australia, Hong Kong SAR, Germany, the Netherlands, Scotland, Switzerland, the UK and the US were negotiating with the Chinese banks, but they were not progressing. Uncertainties persist about the modes of participation in the Chinese banking market. The interests of foreign investors, those of domestic banks and the Chinese government do

not coincide. If partnerships are created in future, they would surely be uneasy at the initial stages and face uncertainties.

Authorities publicly promised to improve bank management and corporate governance—particularly risk management—by bringing in foreign investors as both managers and strategic investors. Since 2003, the reform strategy has been changed and privatization of the PBC has begun to be promoted. The expectation of the new strategy is that foreign investors in the PBC will work as an external force to push for the required structural and corporate governance changes. Reforms were initiated by the PBC by taking steps to liberalize interest rate determination. Since January 2004, Chinese banks are allowed to charge up to 70 percent over the PBC's benchmark lending rate—instead of 30 percent previously—according to the borrowers' credit risks. However, such plans and proposed changes will certainly be slow to filter through the system (Lo, 2004). "The Marxist mindset" still dominates and continues to be a serious drag on banking reforms (Lo, 2005).

It is obvious that banking reforms in China will take a few more years to complete. Until it is fully reformed, the banking sector will not be able to handle the volatile short-term capital flows from the global capital markets. This will also lead to an inability of the monetary authorities to liberalize capital account for a few more years. Full currency convertibility will also not be feasible until the bank restructuring process is completed. The WTO commitment regarding opening up of the banking sector for foreign banks at the end of 2006 will prove to be a difficult proposition.

Stock markets in China remain moribund, incapable of efficaciously allocating capital and creating long-term wealth. The corporate bond market is tiny and the venture capital industry is insignificant. The silver lining behind this dark cloud is that Chinese policy-makers have begun to take financial market reform seriously (Ahmed, 2004). The system of financial and corporate laws and their implementation have continued to remain weedy. Foreign enterprises operating in China feel that the most pressing need is of protection of property rights and strengthening of financial laws. This has been a bane of the business and economic life of the foreign companies operating in China.²⁵ Where such laws exist, enforcement is woefully feeble.

4.4 Tangible results of free-market reforms

What was the material outcome of the adoption of the wide-ranging liberalization and reform package? If long-term averages are taken as a measure of economic performance, China's recent performance has been notable, if not spectacular. It is in keeping with that of the dynamic AHP economies of yore. Foremost, its consequences were reflected in the real GDP growth rate. The economy grew at a vertiginous pace through the 1980s and 1990s, which continued in the early 2000s. GDP grew at the rate of 10 percent per annum in real terms over the 1980–2000 period. In a short span of two decades China transformed itself economically. As noted earlier, between 1975 and 2003 China's real per capita income soared almost eight-fold (see Section 2).

In 1979, the size of the GDP cake in China was \$177 billion; in 1990 it increased to \$378.8 billion. In 1960 the per capita GDP was a paltry \$183; by 1990 it had increased to \$341.60. A decade later, in 2000, GDP reached \$1,080 billion, while per capita GDP rose to \$853.40. China's exports increased with an impressive annual average pace of 17.4 percent during the 1979–2000 period. Compared to this, growth rate of multilateral trade during this period was 7 percent. Between 1981 and 2001, China succeeded in bringing down the population living below the World Bank reference poverty line of \$1.08-a-day from 634 million to 211 million, a reduction of 66.7 percent. If the reference line is moved up to \$2.15-a-day, the population below the poverty line declined from 875.8 million to 593.6 million, a decline of 32.2 percent (Chen and Ravallion, 2004). These are all matchless and meritorious economic achievements.

The success of the Deng doctrine resulted in China integrating with the regional and global economies. The industrial growth of China was also having a great impact on the regional and global economies in the early 2000s.²⁶ Its accession to the World Trade Organization (WTO) in November 2001, and the increasing contribution to domestic growth made by its own voracious consumers, made it feasible for the economy to depend far less on the problem-ridden SOE sector for domestic growth.

4.5 Unresolved predicaments

In keeping with the gradualism and incrementalism philosophy of reforms (see Section 4), no attempt was made to privatize SOEs. The mass privatization strategy followed by the other transitional economies was solicitously eschewed by China, although performance of the SOE sector remained a problem. Losses in the early and mid-1990s mounted and reached a nadir in 1996. Since then some improvement has been observed due to large layoffs, some progress in corporatization and favorable external factors, but reforms that enhance internal efficiency have not even been launched so far. Of the 520 large SOEs, only ten generated 77 percent of total profits in 2002. All these ten enjoyed monopoly or semi-monopoly positions in telecommunications, power, oil, and tobacco industries (McNally, 2002). SOE reforms are in a poor state. Closure of loss-incurring SOEs rendered a large number of workers redundant. Inaction in this area will have high economic and social costs. As noted earlier (see Section 4.1), China still does not have a truly competitive global firm, which is regarded as a failure of its industrial development strategy.

In addition, the ownership structure in the economy still distorts resource allocation, in the process creating large systemic inefficiencies and losses. Inter-provincial and inter-regional disparities are large and have not declined appreciably, thereby threatening social stability. Of the 1.3 billion Chinese population, 900 million live in rural areas and work on farms. This neglected constituency is rapidly becoming aware of the growing economic chasm between them and the rising urban middle class. With the WTO accession competition has intensified in the domestic economy and the structural snags have become more challenging

and problematical. The majority of the SOEs either run at break-even or worse, and their working capital is tied up in “uncollectible bills or unsaleable inventory.” SOEs are more concerned with maintaining patronage and employment than operating in a commercially profitable manner (Ahmed, 2004). In general, they cannot be expected to be competitive commercial enterprises.

5. India: reform paradigm and economic growth

Since independence in 1947, the Indian economy has continued to be riddled with distortions, both macroeconomic and microeconomic, which has engendered serious supply-side constraints. All-round infrastructural weaknesses remain a perennial feature of the economy. That said, many non-economic attributes of society have contributed much more to the underperformance of the economy. Apathetic economic performance is often blamed on *inter alia* rambunctious, pluralistic, multi-party democracy in which multiplicity of political parties operate, frequently in a chaotic manner. Multiple political parties, or multiple factions in one party, make it necessary to have inordinately long negotiations on policy issues, resulting in preposterous compromises after inordinate delays. Erroneous economic policies are accepted as political expedience. A massive network of subsidies and all-round weaknesses in governance have existed for decades. No political party wants to attempt a clean up because it would be unpopular, having a high political cost. In a democratic environment, governments at federal and state levels remain short-term oriented, with their horizon limited to the next election. They easily give in to populist policies as against adopting sound, positive, pragmatic and well thought out macroeconomic strategies that could result in efficient utilization and allocation of resources, which could spawn brisk real GDP growth and integration with the global economy.

In addition, for decades India has creaked and groaned under dull, unimaginative and low-quality political leadership and highly inefficient, corrupt, inept, intrusive, albeit powerful, bureaucracy, that seems to belong to another time period, India’s feudal past (see Section 3). Indians are not an obtuse people; there are few cultural and attitudinal shortcomings in their character. Whenever they could escape the debilitating burden of oppressive bureaucracy and government, they performed spectacularly well. They have done so in several spheres of activity including academics, professions and business.²⁷

5.1 The post-independent economic strategy environment

The establishment of the Planning Commission in 1950 was the foundation of India’s post-independence economic regime.²⁸ This institutional measure was symbolic of the launching of a unique experiment in state-led economic “growth with social justice” within the constitutional framework of a parliamentary democracy. Since its independence, the Indian government has been run by the Congress Party, which did not cast aside its Fabian²⁹ socialistic ideas about the economy until the mid-1990s. These erroneous ideas *inter alia* included public sector dominance of the economy,

meticulously drawn-out five-year-plan exercises, a large and active (meaning excessively intrusive) government superstructure, a grossly over-sized, corrupt and incompetent bureaucracy and the age-old Gandhian maxim of *swadeshi*³⁰ or economic self-reliance or self-sufficiency.³¹ Generations of political leaders had a fetish for *swadeshi*. It helped them win the approval of the masses.

In a mixed economy setting, the private sector did exist but its economic activity was considered peripheral, if somewhat unnecessary. Therefore, it was kept under harsh control with Byzantine requirements of licenses. An investment licensing regime rigidly controlled size of investment and choice of technology for the private sector. There was an overarching public sector dominance because a substantial majority of productive sectors were reserved for it. These enterprises also dominated several of the most important sectors of the economy, such as steel, fertilizers, heavy chemicals, machine tools, and infrastructure. What was worse was their gradual dominance of several industries. They soon came to acquire monopolistic powers in basic industries such as banking, insurance and a range of consumer goods including hotels and bakeries. Neo-classical economic principles like capitalizing on comparative advantage were rejected out of hand and inward-looking ISI policies were vigorously, even devotedly, followed until 1991 (see Section 3). Labor laws were, and continue to be, archaic and inflexible and bankruptcy laws outmoded. A strong anti-market and anti-private sector sentiment persisted for decades. Market forces were either quashed or allowed to work only on the periphery.

At an ideological level, where did this affinity to excessive and unwarranted role of government in economy, central planning and near-autarky mindset come from? Its origin lay in the economic system created under the guidance of the socialist-minded Jawaharlal Nehru, the first Prime Minister of independent India, who was as noble a person as he was cerebral. The Indian economy took a disastrous wrong turn towards Fabian socialism, central planning and an incredible length of bureaucratic red tape under his leadership. This economic philosophy had problems galore and served India poorly. Nehru was naively impressed with the Russian model of economic development and its pre-World War II achievements. Furthermore, his fascination with Fabian socialism led him to numerous policy misjudgments, including the creation of gigantic public sector enterprises alluded to above, which soon became monuments of flagrant inefficiency and wastefulness. The dysfunctional economic structure and systemic inefficiencies created by such policies were of epic proportions, and were comparable to the worst examples of economic mismanagement in the world.

In an economic system in which the government interfered excessively in the economy, the large Indian bureaucracy had a free hand. In providing the seemingly noble maxim of private sector industrial development conforming to social needs, Indian politicians provided an extra instrument for delays, sloth, corruption and inaction to the bureaucracy. For decades, poorly trained and underpaid engineers and bureaucrats continued to review private sector projects, operating without a clear idea of their direction, taking months to micro-review the same data in inter-ministerial licensing committees. They were ignorant of entrepreneurial

realities and operated on an *ad hoc* basis. Import applications for capital equipment had to seek the approval of a capital goods licensing committee, a foreign agreement committee, and several finance committees, creating staggering rent-seeking opportunities—or shall we say corruption. The license *raj* created under this system had an incalculably destructive impact over the economy. To survive, the established business houses had to learn to game the system by appeasing the bureaucracy.

Hindsight reveals that, put together, these were all wrong-headed, inimical, pernicious policies and philosophies, which kept the Indian economy bound to a low level equilibrium for decades. The GDP growth rate barely kept pace with the population growth rate, and jocularly christened the Hindu growth rate, signifying the placid, easy-going and tranquil mindset that Hinduism propagated. India remained mired in poverty for decades. The population growth rate remained high and population crossed the one billion mark in 2000.³² Poverty was accepted as a way of life by the docile Indian society.³³ While the dynamic AHP economies in the neighborhood continued to grow at a rapid clip, India hopelessly, if somewhat smugly, stagnated. The economy languished and lost ground vis-à-vis the dynamic AHP economies by the year.

India did not adopt serious economic reforms and the liberalization process until quite late (see Section 3), and progress in its implementation was tentative, grudging and tardy. Implementation was slow and non-committal to begin with; even that lost steam by 2000. The bureaucratic behemoth is not been dismantled, or even curtailed. Striving for corporate and systemic efficiency is not a part of Indian culture. Indian politicians and bureaucrats have stubbornly remained reluctant to unleash the market forces. Consequently the Indian economy has continued to remain highly distortion-ridden, even if marginally better now. Striving to create an efficacious goal-oriented economic system was never a part of the priorities of Indian politicians and bureaucrats. Achieving rapid economic growth like Japan, the NIAEs or the ASEAN-4³⁴ never appealed to them.

5.2 Reform measures and their implementation

Although a proper and methodical reform and liberalization program was conceived in 1991, some fleeting measures were taken in the 1980s. Consequently, something meaningful and durable happened to the supply-side of the economy in the 1980s, and significantly affected the labor productivity favorably. It grew at an average rate of 0.9 percent per year in the 1970s. The average for the 1980s was 3.7 percent. This growth was triggered by an attitudinal shift on the part of the national government towards a pro-business—as opposed to a pro-liberalization—approach. When the Congress Party government returned to power in 1980 after an electoral defeat, it stopped breathing populist fire and for the first time sought to court the business constituency. The intention was to signal to the global business community that India was a safe place for business and investment (Rodrik and Subramanian, 2004).

The reform and liberalization program of 1991 was implemented in a hesitant, halting, disorderly, inept, patchy and non-committal manner, so progress in

implementation has been slow, scanty and tardy (also see Chapter 4, Sections 3 and 4). Privatization moved only in fits and starts and then stopped. Foreign ownership of Indian firms was liberalized piecemeal, with a glacial pace. When the government changed in 1998, reforms in general slowed further and the privatization program regressed.³⁵ Quantitative restrictions (QRs) on imports and tariff barriers were reduced in the 1990s, but in terms of the IMF's restrictiveness index for 2001, India (along with Bangladesh) was still the most closed Asian economy. India's average tariffs were three times the Asian average. This IMF ranking also applies to non-tariff barriers (NTBs) in India (IMF, 2002). There are well-known static and dynamic gains from free trade, which include domestic efficiency gains through market discipline and integration with the global economy and markets. By devising a rigid system of high tariffs, NTBs and QRs, India deprived itself of the benefits of a liberal free-trade regime.

5.3 Opportunities created by globalization

Globalization—or to be more precise, expanding global trade in services—created profitable opportunities for India. These were in the so-called “New Economy”³⁶ related businesses. By virtue of having a large educated, English-speaking young population available to work at low salaries compared to the industrial economy norms, in the 1980s India found comparative advantage in software and computer programming. Second, it found a lucrative niche in ICT enabled services (ICTeS), business-process outsourcing (BPO) and back-office outsourcing of business services and call centers. By 2000, it became the “back office” of the industrial world. India became the largest destination of the US outsourcing in the ICT sector, Canada taking the second place (Scofield, 2004). Although outsourcing to India began in low-skill areas and Indian firms initially did a techno-coolie's job, Indian ICT firms soon clambered up the technology ladder and moved up to middle-skill areas. Many Indian ICT firms subsequently progressed to knowledge-intensive high-skill services, including financial portfolio analysis, product design and development, and world-class R&D. Success in this one sector is creating an enclave economy.

One direct outcome of the success in the ICT, ICTeS and related sectors was expanding level of foreign exchange reserves. They were \$39.6 billion in 2000, nearly doubled in 2002 to \$72 billion and again in 2004, reaching \$134.5 billion. In October 2005 India held reserves worth \$144 billion. It made India the fifth largest foreign exchange holding economy in the world, creating pressure on the rupee to appreciate beyond what the fundamentals could justify. The Reserve Bank of India (RBI) had to purchase huge quantities of dollars to keep the rupee from appreciating. The skillful international reserve management practices of the RBI drew favorable comments from the IMF.

The BPO firms gradually moved up to high-end services. They have been expanding the range of work that can be performed remotely, and have moved into lucrative areas like consultancy and design. Its applications are virtually endless. There were some 3,000 BPO firms in 2004, which performed a large

number of outsourcing jobs for firms in the industrial countries. Revenue from BPO alone grew by 50 percent in 2003 to \$3.6 billion. Four categories of firms were scrambling to perform these white-collar jobs remotely. First, the large Indian software firms like Infosys Technologies, TCS and Wipro aspired to be full-service providers to their clients in the industrial economies. Second, the specialist third-party outsourcing firms like Evalueserver, Cognizant and Daksh provided narrowly specialized services to their clients. Of these ICT firms, Daksh was set up in 1999; its turnover has doubled every year since its establishment. Third were the large captive units created by transnational corporations (TNCs), particularly by financial services TNCs, like GE Capital, American Express, HSBC, Citigroup and Standard Chartered. Fourth were the establishments created by the gigantic global professional-services consultancies, like IBM, Ernst & Young and Accenture (*The Economist*, 2004). This sector of the Indian economy is globally competitive and India succeeded in making a global niche for itself.

India's thriving BPO industry faced three major uncertainties in 2005, namely growing protectionism in its important markets, particularly the US, a distinct possibility of the usual meddling by an incompetent and parasitic government, and third, during 2003 and 2004 compensation costs in the software industry escalated at the rate of 12.5 percent annually. Some investors are worried about how long India can hold on to its most promising sectors. ICT firms in the Seattle, Silicon Valley and Palo Alto have started looking for alternative locations for outsourcing jobs. Competition from other countries (such as Barbados, Brazil, Bulgaria, China, Malaysia, Mexico, Paraguay, the Philippines, Romania, the Russian Federation, South Africa, Uruguay and Vietnam) is soon likely to start making inroads and challenge the Indian ICT, ICTeS and BPO firms.

5.4 Diluting the SEZ concept

The export promotion zones (EPZs) attempted by Indian policy-makers in the past failed to take off due to poor conceptualization, design and implementation and excessive political and officious meddling in their operation. China's astoundingly successful SEZs had created many admirers and advocates of the China-like concept of export-oriented manufacturing zones in India. Their objective was to establish China-like SEZs, where imaginative strategies to attract FDI and free-market reforms can be implemented, so that export performance can be strengthened. It was believed that the successful EPZs in turn would result in increased earning of hard currency, employment generation and modernization of the economy. China's SEZ strategy was also instrumental in successfully integrating it with the global economy. Therefore, a firm support gradually emerged among the policy-makers to devise and propose their version of Chinese SEZs for India. To that end, after prolonged political and policy debates, an ambitious legislation was proposed in 2000. After protracted negotiations among the political parties, in mid-2005 Parliament approved of the legislation, which was a highly diluted version of the originally proposed EPZ, bereft of several of the key elements

necessary for an EPZ to function successfully.³⁷ This was ironic because those who approved of the new legislation totally failed to learn the lesson from the earlier failure of EPZs in India, let alone failing to learn from China's phenomenal success.

To be sure, the new statute allowed foreign investors significant tax concessions which were to be phased out in 15 years. The tax break included 100 percent exemption for the first five years, a 50 percent exemption for the second five years, and a further tax exemption on a proportion of export profits for the final five years. Given that the effective corporate tax rate in 2005 was over 40 percent for foreign companies, this was the most important special consideration in the bill. The new legislation also streamlined the slow, complex and burdensome bureaucratic process for approving FDI proposals in the EPZs.

The original proposal included exemption for companies in EPZs from India's rigid labor laws, but the new statute excluded this exemption, in the process considerably weakening the initiative. The policies on land acquisition in the EPZ were left cloudy, because there was strong resistance in this area from bureaucracy and vested interest groups. The India Customs Department rejected the EPZ concept on the ground of loss of trade supervision capacity. Thus, the EPZ concept was whittled away in several stages. Some enterprising state governments had pursued the EPZ concept on their own initiative but the absence of a federal framework severely limited their efforts. The new legislation did provide that framework, but it constrained those state governments that were eager to attract prospective foreign investors. This was the sad end of an excellent opportunity to adopt free-market reforms in a plausible, although limited, manner—first in the EPZs and then expand them to wider areas and the rest of the economy. This was also an opportunity to emulate China's economic performance, which was callously squandered.

5.5 Lack of fiscal discipline

Unsustainable levels of fiscal deficits have been one of the long-term weaknesses of Indian macroeconomic management. Unlike the dynamic AHP economies, the Indian economy was plagued with fiscal profligacy, a long-lasting failing. In 2000, seventy-four countries with populations over ten million were arranged in order of descending fiscal deficits for the decade of the 1990s. Only seven countries, including India, had government fiscal deficits of 7 percent or above. Only two developing economies (Turkey and Zimbabwe) had recorded higher fiscal deficits than India (Srinivasan, 2001). Contrary to this scenario, China kept a tight rein on its spending and the budget deficit of the federal government seldom crossed 3 percent of the GDP mark and debt to GDP ratio never went above 25 percent, although the government faces future obligations in the area of NPLs of the SCBs and SOE losses (see Chapter 3, Section 4).

Persistent fiscal deficits have a pernicious effect over long-term economic growth, and the real economy. When they continue for long periods, they reduce national savings, adversely affecting the domestic investment rate. Domestic interest

rates play a role in macroeconomic adjustment needed due to high and perpetual fiscal deficits. They rise in response to weakening savings performance, leading to dampening of investment rates. An investment crunch in turn results in low level capacity creation and declining productivity growth. “Substantial ongoing deficits may severely and adversely affect expectations and confidence, which in turn can generate a self-reinforcing negative cycle among the underlying fiscal deficit, financial markets and the real economy” (Ruben *et al.* 2004). Little wonder that the Washington consensus lays a lot of emphasis on fiscal discipline.

In 2000, India’s fiscal deficit was 9.6 percent of the GDP. Fiscal and debt indicators at this point were comparable to those of Argentina, Brazil and Turkey; all three economies fell into major macroeconomic crises over the 1998–2003 period. In spite of macroeconomic weaknesses, India was not considered immediately vulnerable to a crisis because of its high foreign exchange reserves, restrictions on both inward and outward capital flows, a degree of flexibility in exchange rate, and substantially large public sector ownership of the banking sector. In 2001, the deficit edged up to 10 percent. This situation contrasted with the circumstances in 1991, when India suffered a major fiscal-cum-BoP crisis, with fiscal deficits of comparable size (9.1 percent) and lower debt levels (Pinto and Zahir, 2004). Notwithstanding the lower probability of a 1991-like crisis, the macroeconomic health of the economy was far from normal. There is a pressing need to tame the precariously, if not perilously, high levels of federal government deficits. It was 9.7 percent of the GDP in 2002, 9.4 percent the next year. Although it declined marginally in 2004, it was still 9.1 percent. India has the dubious distinction of maintaining its position in the big league of developing economies that suffer from chronic and excessive budget deficits.

5.6 Tangible results of free-market reforms

The current macroeconomic scenario of the Indian economy presents a mixed picture. Recent progress in some areas cannot be denied. In the 1990s, India’s growth performance was exceeded only by 19 out of 139 developing countries. Even slow and tardy implementation of reforms was reflected in improvement in GDP growth rate and discernible progress in poverty alleviation. Annual growth rate of per capita GDP in real terms accelerated from 1 percent in the 1960s and 1970s to 3 percent during the 1990s. In nominal terms, GDP growth rate during the 1990s was in the vicinity of 6 percent. This implied about one-third increase in per capita consumption over the decade of the 1990s and 5 to 10 percent increase in the rate of poverty alleviation, depending upon the methodology and data used (Ferro, Rosenblatt and Stern, 2002).³⁸ Given that one-third of the world’s poor live in India, this can rationally be considered a valuable contribution of the liberalization and reform program. These meager improvements imply that, if implementation of the reform program becomes earnest, efficient and methodical in future, the power of the market forces would be unleashed and the long-term growth trend would certainly improve.

A notable characteristic of the Indian economy is that monsoons still materially influence the GDP growth rate; a normal monsoon year is generally also a good growth year. India's GDP growth rate in the early 2000s was superior to past achievements (see Section 1.2). Trade balance remained negative in the recent past: the trade deficit was \$12.5 billion in 2000, improved to \$10.7 billion in 2002 but deteriorated sharply to \$31.7 billion in 2004. However, the current account balance turned into surplus in 2001, when it was \$3.4 billion. The surplus rose to \$10.6 billion in 2004, but turned into a deficit again in 2004 (\$6.9 billion). However, India has not been attracting global financial resources commensurate with the size of its economy. Notwithstanding the limited reform implementation, its engagement in world trade is also not comparable to those of China and the dynamic AHP economies. Despite some improvement in policies and performance, all the usual economic indicators confirm that India's integration with the global economy has been moderate, at best. The enclave created by the successful ICT sector and the BPO firms is an exception. Thus, only a small segment of the economy is performing well; the rest of the economy by and large continues to be mired in its old morass.

Indicators like trade to GDP ratio, FDI to GDP ratio, and country credit rating place the Indian economy in the slots far removed from China and the dynamic AHP economies. Future growth prospects are at best tepid because of inadequate macroeconomic and structural reforms, and high levels of fiscal deficits, which crowds out investment in export-related industrial sectors. Privatization has almost been abandoned. Global investors generally find the large and persistent budget deficits unsettling, and confounding. As noted above, the level of protection is still very high, both in absolute and relative terms.

Inefficiencies and weaknesses of an overstretched infrastructure continue to badger the economy. Power outages impose sizable costs on firms. The labor force has serious quality problems, which is compounded by inflexible and archaic labor laws. In this *mise-en-scène*, the large domestic market, which should have furthered prospects of integration with the global economy, discourages Indian firms to pay attention to the external sector. The Congress Party-led coalition announced its determination to follow "reforms with a human face." However, in their first (July 2004) and second (2005) budget proposals, again not a great deal was done to advance the reforms.³⁹ Garnering political support for advancing reforms and fiscal consolidation continued to be daunting challenges for this government as well. The status quo continued even on the most pressing problematic issues like privatization, labyrinthine subsidies and reforming labor and bankruptcy laws. The task for the new Singh government is clear. It needs to liberalize and deregulate the economy and restart the reform implementation process in earnest. A fundamental change in economic philosophy is called for. The government needs to remove itself from all areas of business and economy where it has a history of performing counterproductively, and focus its energies on areas where markets alone do not provide the answer. If it does not, the Indian economy is certain to continue to under-perform. Decades of flawed macroeconomic policies *inter alia* provide little reason to be optimistic about the future of the Indian economy.

Not all the facets of the Indian economy are off-putting and negative. Unlike China, India follows an old and established system of common law, inherited from British colonial rule. Property rights are well protected and financial and corporate laws are far superior to those in China. However, the legal system is as inefficient and disorganized as it is over-burdened, and moves at an exceedingly sluggish pace—but it does move. Although every now and then reform plans are made, they remain merely on paper and gather dust on shelves.

6. Comparison of manufacturing sectors and export performance

Other than adopting reforms and an outward-oriented policy regime, China has made appropriate changes in domestic policies aimed at promoting exports. Implementation of its SEZ strategy and success in attracting FDI played a capital role in modernizing and strengthening China's manufacturing sector and export performance. Together they nurtured China's export industries across the board, first in low- and medium-technology sectors, and then in advanced-technology sectors. To be sure, infrastructure was overstretched at first, but by improving transport and communication facilities other industrial infrastructures were made. They enabled China to exploit the opportunities offered by the splitting of production or value chain and played a key role in both regional and global production sharing. In addition, new lines of products were developed, thereby avoiding the possibilities of a deterioration of terms-of-trade (TOT). Also, in an array of manufactured products, China skillfully developed niche markets and exploited its post-liberalization comparative advantage. India also tried to liberalize and promote exports but commitment to this strategy was lukewarm and efforts were largely unfocused.

A stereotypical trade pattern for developing economies was the export of primary commodities and resource-based products and imports of manufactures. By 1980, China had moved away from this stereotype. Manufactured products comprised 50 percent of total export at this stage. Resource-based products and agricultural exports were almost evenly divided, as 26 percent and 24 percent, respectively. As the trade policy framework was liberalized in the mid-1980s, exports of manufactures surged in China, and in 2001 they were more than 92 percent of the total. At this stage agriculture accounted for 5 percent and resource-based products 3 percent of the total exports.

After the adoption of the "open door" strategy, China's policy-makers focused on promoting manufacturing, both domestic resource-based as well as based on imported raw materials. The latter was essentially aimed at production for export markets (see Section 4.1). Since then, China has turned into a manufacturing juggernaut. With growth in the manufacturing output and exports came a swift transformation in the composition of basket of export products, from labor-intensive simple products to capital- and skill-intensive advanced-technology products. China was not unique in changing the composition of its export basket. Several developing economies demonstrated comparable change in their export structures over the period, but China was the most successful among them, so much so that

many industrial economies became concerned with the emergence of the unstoppable momentum of this export powerhouse that began flooding their markets with a diversified range of products at highly competitive prices.

Growing significantly less rapidly than China, the manufacturing and trade sectors in India also made a marked transformation in the composition of export products over the preceding decades. Proportion of high-technology manufacturing export products has risen in the Indian exports also. Manufacturing played an important part in sustaining India's economic growth in the 1970s and 1980s. In 1980 manufactured products accounted for 63 percent of total exports, which was significantly higher than that of China. At this stage, 30 percent of Indian exports originated from the agricultural sector and 7 percent were resource-based. By 2001, India had also recorded a strong shift in the trade pattern, with manufactured goods accounting for 80 percent of total exports, agricultural products 15 percent, while 5 percent were resource-based. These two sectors no longer contribute significantly to exportable products. This statistical comparison demonstrates that, over the 1980–2001 period, India's success in promoting exports of manufactures was markedly less than China's. In addition, the post-1991 reform process did not provide an impetus to the manufacturing sector in India. Although acceleration was noted until the mid-1990s, growth of the manufacturing sector markedly decelerated in the latter half of the 1990s. The post-reform acceleration in the manufacturing sector was input-driven rather than efficiency- or productivity-driven. A significant level of technological inefficiency in the economy had continued unabated (Kalirajan and Bhide, 2004). This demonstrates the shallowness of the reform process, more at the implementation level than at the conceptual one. It also reveals that the manufacturing sector badly needed policies to improve production efficiency by encouraging investment in research and development (R&D), technical training for workers, and technology-aided managerial processes.

Based on the data analysis from the following two sources, (i) the World Bank's WITS system and (ii) the UN COMTRADE data tapes, Martin and Manole (2004) have determined sector-wise export growth rate for products at different technology levels for China and India. They also compared them to that in the rest of the world. This comparison produced the results shown in Table 2.3.

The textiles and apparel sector is one of the most important low-technology areas. Long-term (1981–2001) average annual export growth rate of China in the textiles and apparel sector, at 16 percent, was torrid by any norms. It was not only a great deal higher than that achieved by India (10 percent), but also more than double the average for the world, which was 7 percent for the period under consideration (see Table 2.3). In the case of other low-technology products, which included a large range of manufactured goods, China's average annual export growth rate was 21 percent for the period under consideration, compared to 12 percent for India. Both the economies performed better than the world average of 8 percent. Growing by such a sweltering rate, China's exports doubled every four-and-a-half years, making it the third largest importer and exporter in the global economy (see Section 1.2).

Table 2.3 Export growth by sector and technology level (1981–2001).

| <i>Sector/Technology Level</i> | <i>China</i> | <i>India</i> | <i>World</i> |
|--------------------------------|--------------|--------------|--------------|
| Low-technology manufactures | | | |
| Textiles and apparel | 16 | 10 | 8 |
| Others | 21 | 12 | 8 |
| Medium-technology manufactures | | | |
| Automotive and components | 23 | 12 | 8 |
| Process-industry products | 12 | 17 | 7 |
| Engineering products | 26 | 11 | 8 |
| High-technology products | | | |
| Electronics | 38 | 17 | 13 |
| Others | 20 | 18 | 9 |

Source: Martin and Manole (2004).

Table 2.3 is revealing in many respects. First, in the medium-technology products, China's average annual export growth rate for the 1981–2001 period was 23 percent, which was almost twice that of India and thrice the world average. Second, the average annual rate of export growth of high-technology products for China is extremely high. At 38 percent, the average annual growth rate of exports of electronics was also extremely high. It was more than twice that of India and three times the world average. This was at the opposite extreme from the average growth rate of exports of primary products, which was 6 percent for the period under consideration for both China and India. The corresponding average for the rest of the world was 2 percent.

What was in keeping with the normal expectations was the high average annual rate of export growth in low-technology products like textiles and other products. For the medium technology products the story repeats itself, with China turning in a stellar performance. However, process-industry products are an exception in this regard, where India scored a better performance than China. India also came close to China's performance in the "other high-technology" category.

One strategy that China adopted soon after it publicized commitment to the open door policy was the introduction of special arrangements for processing trade. It included duty free imports of inputs for exports and rebate of value-added tax. The import of intermediate goods needed for export consignments was completely liberalized. Likewise, capital goods imports for use in joint ventures with foreign enterprises were also totally liberalized. These categories of imports were large and represented over 40 percent of total imports around 2000. This strategy spawned noteworthy results in promoting Chinese exports of manufactured goods.

A little noticed fact about Chinese export is that China was highly successful in expanding the range of exportable products. A good deal of successful export expansion came from enlarging the range of exportable products. Growth of new export product continued to rise from 25 percent in 1990 to 45 percent in 2001 (Martin and Manole, 2004). Adding of new products to the export basket in India

proceeded slowly and with difficulty. There was a small surge in the 1980s, but in the 1990s it lost steam. Unlike China, India neither developed niche markets in merchandise trade nor identified and exploited its comparative advantage in a planned and meticulous manner. Growth in exports resulted from such especial factors as growth in export of oil products. Little wonder that in the WTO league table of exporters, India had thirtieth place in 2004.⁴⁰

7. Comparing the business environment in China and India

Business regulations, bureaucratic procedures and the legal environment in an economy determine how, under normal circumstances, proficiently run business firms operating in that environment can work and generate reasonable profits in a predictable manner. Although they are regarded as soft factors, they are of vital importance for any economy. Together these factors also determine the readiness of investors, both domestic and foreign, to invest as well as prospects for productivity and growth. International financial institutions (IFIs) regard them as imperiously valuable in terms of their impact on the operations of firms. The International Finance Corporation (IFC) and World Bank jointly developed a “Doing Business Database” of business indicators for 145 economies.⁴¹ To prepare this database in a scientific manner, business laws and regulations were studied in each country and targeted interviews were conducted with regulators, business professionals, private sector consulting firms and business and law associations. In this section we shall compare these regulations, procedures and the legal environment for both China and India. Comparable data for Canada, a medium-sized industrial economy, has been presented for the sake of facilitating an international comparison. The assumption here is that Canada has a reasonably sound business environment.

First, when an entrepreneur launches a new business enterprise, she is required to complete bureaucratic and legal procedures to incorporate her new firm. All economies differ in the way they regulate the entry of new business ventures. Entry procedures can range from straightforward and inexpensive to onerous, time-consuming and expensive. The “Doing Business Database” examined start-up procedures of industrial firms with up to 50 employees. Their results for China and India were as follows. While in both economies the procedures were longer than Canada, they were easier and less expensive—in terms of time and money—in China than they were in India. Also, the time invested in completing procedural and legal formalities is less than half in China compared to India.

| | <i>China</i> | <i>India</i> | <i>Canada</i> |
|-------------------|--------------|--------------|---------------|
| No. of procedures | 12 | 11 | 2 |
| Duration (days) | 41 | 89 | 3 |
| Cost (in \$) | 158.14 | 264.59 | 221.58 |

Second, without exception governments have a complex system of laws and institutions to protect the interests of workers because they wish to guarantee a

minimum standard of living for their populations. These laws come under the rubrics of employment laws, industrial relations, occupational health and safety, and social security. Regulations of employment, specifically regarding the hiring and firing of workers, are of critical importance for business firms. When these laws are flexible, firms find it easy to operate. Rigidity in labor laws regarding hiring a new worker, and restrictions on expanding or contracting the number of workers and working hours, are important variables that firms take into consideration when making their investment decisions. Dismissing redundant workers is costly, but if this cost is very steep, it works as a discouraging factor for the firms. The “Doing Business Database” developed indexes regarding difficulties in the hiring and firing of workers. As seen below, for hiring workers the value of difficulty index is 11 for China, which is equal to that in Canada. For India, this index is 33. Similarly, the index value of difficulty in firing a worker is 40 in China and 90 in India. Sacking a worker is expensive in both China (79 weeks’ salary) and India (90 weeks’ salary), but relatively more so in India.

| | <i>China</i> | <i>India</i> | <i>Canada</i> |
|--------------------------------------|--------------|--------------|---------------|
| Difficulty of hiring (index) | 11 | 33 | 11 |
| Difficulty of firing (index) | 40 | 90 | 0 |
| Firing cost (wages for no. of weeks) | 79 | 90 | 28 |

Third, registering properties, land and buildings, is done by all businesses. All countries define property rights in accordance with their laws. With formal property titles, entrepreneurs can obtain mortgages on their land and buildings, which in turn can underpin their businesses financially. In some countries registry procedures are complex, time consuming and expensive. Statistics below show that India is one such country. Compared to China, the number of procedures and time taken are much higher in India and so is the expenditure involved.

| | <i>China</i> | <i>India</i> | <i>Canada</i> |
|-------------------------------------|--------------|--------------|---------------|
| No. of procedures | 3 | 6 | 6 |
| Time (days) | 32 | 67 | 10 |
| Cost (percentage of property value) | 3.1 | 12.9 | 1.7 |

Fourth, difficulties in getting credit from financial markets to continue business is frequently regarded as a serious potential barrier to business. While collateral requirements are logical, well-intentioned and necessary, they can be made so stringent that they successfully prevent businesses from getting finance. In addition, creating collateral so that financial resources can be borrowed from the financial market can be an expensive process. In the case of failure of a firm, legal protection of shareholders is needed. Investors benefit from such legal protection. On the legal rights index of the “Doing Business Database” China was two and India four. That is, legal rights of investors are better protected in India than in China. This is attributable to India’s colonial inheritance of the legal system (see Section 5.6).

Fifth, in the world of business, ability to enforce contract is of crucial importance. Absence of adequate contract enforcement laws would for certain limit business size and discourage investment. When courts are slow or corrupt in enforcement, the business and investment climate suffers. Contract enforcement is done in several steps. There are a number of procedures, each having costs in terms of time and money. A comparison of enforcement procedures and costs for China and India is given below. As the data below shows, both in terms of total time taken and cost of enforcement, China has succeeded in creating a far superior business environment than India.

| | <i>China</i> | <i>India</i> | <i>Canada</i> |
|---------------------------|--------------|--------------|---------------|
| Filing period (days) | 25 | 40 | 17 |
| Judgment period (days) | 20 | 20 | 21 |
| Enforcement period (days) | 86 | 305 | 125 |
| Total time (days) | 241 | 425 | 345 |
| Cost (% of debt) | 25.5 | 43.1 | 12.0 |

Sixth, designing a functional bankruptcy system goes a long way in closing down unviable business firms. Countries that ignore this find that unviable business firms linger at the margins for long periods, which results in productive assets being allocated to unproductive firms. Weak bankruptcy systems often are the consequence of an inefficient judicial process and outmoded corporate laws. Under these circumstances banks do not push for a formal insolvency resolution. Bankruptcy laws in India are still archaic and it is an impossibility for large enterprises to go bankrupt. Over 60 percent of the bankruptcy cases took more than ten years in Indian courts. To measure the efficiency of foreclosure or bankruptcy procedures, the “Doing Business Database” also calculated the recovery rate; that is, how many cents on the dollar invested the claimants recover from an insolvent firm. The results show that in India the bankruptcy system is horrendously inefficient, for sure far inferior than China in terms of time taken in closing a business firm and recovery rate. Conversely, cost of bankruptcy is much higher in China than in India.

| | <i>China</i> | <i>India</i> | <i>Canada</i> |
|------------------------------------|--------------|--------------|---------------|
| Time (years) | 2.4 | 10 | 0.8 |
| Cost (% of investment) | 18 | 8 | 4 |
| Recovery rate (cent on the dollar) | 35.2 | 12.5 | 89.1 |

Thus, detailed information gleaned and compiled in the “Doing Business Database” reveals that China has succeeded in creating far superior business regulations, bureaucratic procedures and legal environment than India. A poor quality business environment not only shackled business firms and kept them from attaining their full potential in India but also significantly raised the transaction costs, or the real cost of doing business. However, one variable where India performs better than China is the legal rights of investors, which are better protected in India.

8. Why has India lagged behind China?

The foregoing exposition has presented a detailed analysis of the variant growth paths taken by the two economies in the contemporary period and their present business environment. Based thereon we should have a succinct answer to the above question. The candid answer is that a clutch of economic and non-economic flaws have managed to retard India's economic growth and precluded any possibility of catching up with China—or for that matter any of the neighboring AHP economies—in the short- or medium-term. It is evident from the above elucidation that adoption of wrong economic philosophies (Fabian socialism, *swadeshi* or economic self-reliance) and strategies like ISI, a shackled private sector tied down with Byzantine requirements of licenses and controls, an oppressive load of a large and corrupt bureaucracy, endless red-tape, methodical smothering of market forces, and rejection of neoclassical economic principles like capitalizing on comparative advantage have had high and perpetual costs for the Indian economy. Gigantic public sector enterprises and intrusive governments soon became albatrosses around the neck of the economy. The Chinese economy also suffered from all the disadvantages from which a so-called non-market command economy suffers when it is a centrally planned economy. But even during the pre-reform era China appears to have performed better than India in educating and providing health care to its people. Therefore, after the free-market reforms were launched, the economy benefited from good quality human capital.

To further the woes, the non-economic malaise of low-quality political leadership, unimaginative governments, and exceedingly delayed adoption of economic reforms, followed by tardy implementation, kept India way behind China. Besides, a democracy can bog the economic decision-making process down at the best of times. Conversely, not having a democratic system helped China at crucial points in its recent economic history in taking bold decisions and implementing the reform program. Deng Xiaoping could never have launched his 1978 reform program—which immediately caused a spike in the unemployment rate—if he had had to muster a parliamentary majority and hope to be re-elected.

It has been debated at length why the outcome of reforms and liberalization measures was weaker in India than in China. With the adoption of the Deng doctrine the unproductive ideological dogmas regarding the economy were rejected in China and the economic strategy made a complete volte-face. Despite being a communist country, China adopted a capitalist economic philosophy. It recognized the value of and moved pragmatically toward a free-market economic system, embracing neoclassical economic principles. Deng Xiaoping announced that “to get rich is glorious.” No such turnaround in economic philosophy and strategy ever took place in India. The design and successful implementation of the SEZs and coastal development strategies enabled China to prepare a firm and sizable base for modern manufacturing industries and put China ahead in terms of manufacturing output and competitive exports. India not only did not have any strategy parallel to this but also its industrialization process progressed lethargically, dominated by inefficient public sector enterprises. Over the decades it succeeded in developing

a high-cost industrial structure, growing under the shadow of high protectionist walls, cut-off from world markets and the global economy. When the reforms were launched in 1991, domestic prices had no relation to prices in the world markets.

To be sure, China has its own infrastructure-related problems (see Section 1.2). Nevertheless, an important area in which India seriously lagged, and continues to lag, behind China is in the availability of reliable and affordable infrastructure, particularly power and transport. While China succeeded in attracting foreign investment into this vital sector, India has failed to do so. Infrastructural limitations restrain growth directly and indirectly and worsens poverty. In their reform exercises, both economies liberalized the external sector by bringing down tariff and non-tariff barriers, but China's liberalization delivered superior results and went deeper. This was largely due to the strategy of allowing foreign investors in the coastal SEZs 100 percent ownership of assets, a liberal labor policy which made retrenchment easy. The SEZs provided improved industrial infrastructure to foreign investors.

In implementing reforms and liberalization of the economy, and developing a reasonable quality industrial infrastructure, India remained—and continues to be—so far behind that a comparison would be futile. In addition, until recently India has reserved several important labor-intensive industrial sectors (such as garments, leather products) for the small-scale industries. This strategy emanated from the socialist mindset of the politicians and prevented full exploitation of the opportunities offered by the liberalization of these important industrial sectors. Consequently, while China went on increasing its share of global exports in labor-intensive industrial products, India struggled to protect its share. In many labor-intensive products India lost its global share of exports. Therefore, unlike China, India's integration with the global economy continued to remain shallow and tentative. Failure of domestic policy reforms to spot and avail of opportunities in the global markets had a high cost. This failure not only seriously reined in the growth-enhancing impact of trade policy reforms in India but also its poverty-alleviating impact.

There is a structural explanation for weaker results of Indian reforms than in China. Over the 1980–2000 period, substantial structural transformation took place in the two economies, essentially due to declining significance of the agricultural sector. In India, the entire decline in the agricultural sector was added to the services sector. Its industrial sector did not rise as a proportion of GDP. China experienced similar transformation in its economic structure but the entire decline in the agricultural sector was added to the manufacturing sector. In 1978, the size of the industrial sector as a proportion of GDP was twice that of India. Over the next two decades, it rose further. Therefore, by 2000 the industrial sector was 50.9 percent of GDP in China, as opposed to 26.9 percent in India. This was a far-reaching structural development for the two economies, and mattered a great deal. As opposed to this, the services sector was much larger in India. By 2000, the share of the services sector in China was 33.2 percent of GDP, while in India it was as high as 48.2 percent.

When a developing economy takes to liberalization, its prospects of exporting goods, particularly labor-intensive manufactured products, from its industrial

sector improve. If it has a large industrial sector, its export industries can try and find niches in the global market place for initially low-technology manufactured products and then move up the product value-chain. As China's industrial and manufacturing sectors were much larger than those of India, it benefited more and succeeded in globalizing at a far brisker pace than did India. Thus, the reforms in China had tangible results in terms of higher manufactured goods production and exports. The same logic applies to FDI. Compared to China, India received meager amounts of global FDI. Investment in industry remained sluggish. This included both domestic and foreign investment. Global investors feel hesitant for the same reason as do the domestic ones. The formal services sector can absorb FDI in India, but its capacity to do so is limited (Panagaria, 2004). Owing to these structural factors India has lagged further behind China over the preceding quarter-century.

9. Sustainability and attainability of high growth rates

Whether China can sustain its higher real GDP growth trajectory over the medium-term, and whether India can attain a comparable one, is a moot point. Let us examine the factors that can help and hinder the sustainability of China's growth performance. The essential ingredients that influence the sustainability of high-growth trajectory are the current high savings and investment rates in China, and the TFP, particularly efficiency of invested capital. As the variety of consumer durables, including big ticket items like autos, expands in the Chinese markets, consumers that tend to save a large proportion of their rising disposable income will certainly switch to spending more and saving less. Going by the recent survey of consumers conducted by McKinsey in thirty Chinese cities, it may happen sooner than later (Lane and St. Maurice, 2006). Second, the process of phasing out SOEs has neither progressed enough nor smoothly so far and is acknowledged to be a serious problem for which no short-term solution is evident. Also, creating a genuine indigenous private sector in China that responds to market signals has not been trouble-free. Until now its development has been slow and unimpressive at best. Both of these issues may affect future GDP growth adversely. Third, the financial sector in China is in a poor shape and the banking sector has been problem-ridden and reforms long delayed. The Big Four banks suffer from a massive load of NPLs. Any further delay may be detrimental for the economy.

The flip side of the coin is that China's 2001 World Trade Organization (WTO) membership is likely to offset these potentially detrimental developments by honing production efficiency in the economy. Its possible sources are further integration of the Chinese economy with the global economy. Increasing integration would improve the efficiency of domestic resource allocation. It would promote intensification in domestic and external competition on the one hand and increase inflows and adaptation of higher level technology from the global technology markets on the other. In keeping with the WTO accession agreement, as the financial sector is opened to large international banks, the efficiency of

financial intermediation—which is valued highly for growth—should improve significantly. It could also offset the impact of declining savings and investment. Furthermore, in future, FDI may flow more to the services sector, including the wholesale and retail sectors of the domestic economy. This was agreed during the WTO accession negotiations (Das, 2001a). It is sure to generate systemic efficiencies, offsetting the impact of the declining investment rate. Thus, in the short- and medium-term China should be able to sustain its high growth trajectory. There are few compelling factors that could force a significant decline in it.

The recent long-term average annual GDP growth rate in India was 5.8 percent (see Table 2.1). However, the target growth rate of the Tenth Five Year Plan (2001–5) was fixed at 8 percent, which makes one wonder whether it amounts to optimism run amuck. Those who are skeptical about the attainability of such an unprecedented GDP growth rate for India in the short-term are not without reason. As the Indian economy has not integrated with the global economy like China's and has also not attracted comparable quanta of FDI, it is less likely that it will be able to achieve the targeted GDP growth rate of 8 percent per annum. Therefore, convergence can still be one of the important sources of growth for India. Additionally, integration with the global economy and FDI inflows could have a large growth-augmenting effect on the Indian economy. However, the manner in which the policy mandarins have gone about their business means that the prospects of integration with the global economy like China managed do not realistically seem high. The same applies to the probability of attracting FDI in the manner China did.

Implementation of macroeconomic and financial reforms is another vitally important factor that can determine the attainability of a high growth rate target for India. As noted above, while reforms were well conceived, they have a history of slow, disorderly and patchy implementation. If political commitment to the reform process spurts suddenly and they are implemented in an orderly and steadfast manner, the target of 8 percent GDP growth rate could certainly come closer. However, a hard-nosed realist cannot but learn from the past in this regard. Implementation not only never gained momentum, but also slowed further down significantly by 2000 (see Section 1.2). The new Congress Party government has shown little commitment to the reform process. Tardy and rudderless implementation has continued to be a characteristic feature of the Indian economy. Hoping for a miracle on this count would be uncharacteristic, if not absolutely futile. If market forces and competition in the domestic economy are unleashed and firms are encouraged to compete domestically as well as internationally, and the reform program is implemented in an earnest and professional manner first, and then broadened and deepened, the attainability of the target of 8 percent would certainly be a possibility. The unanswered question is whether there is a realistic probability of these measures being taken. An honest answer will necessarily have to be in the negative.

There are several fundamental areas of reforms where there has been an exigency regarding reforms and restructuring. They have been, and continue to be, neglected at an exceedingly high cost to the economy. They include privatization, liberalization of rigid labor laws, modernization of outmoded bankruptcy laws, basic reforms in the generation, transmission and distribution of power, and modernization

of transport. Attainability and sustainability of a high GDP growth rate is *inter alia* conditional upon immediate reforms in these sectors. The new Congress Party coalition government has not displayed any willingness or interest in making progress in reforms in these fundamental areas. Instead, it has taken a well-calculated and well-entrenched stance; that is, as reforms in these areas are going to be politically unpopular, there is no need to take the bull by the horns. There is an excessive emphasis on accommodation of conflicting interests, political expedience and appeasing different lobbies, without calculating the cost to the economy. This callous stance is, perhaps, the cost of working in a democratic system. Successive governments have adopted policies and enacted laws with an eye on the next election, which is merely five years or less away.

Complete lack of fiscal discipline—or more accurately fiscal profligacy—has been another perennially pernicious attribute of the Indian economy, which was, and will continue to be, a serious drag on the economy. According to Srinivasan (2004) the cumulative fiscal deficit of “all levels of government taken together and not including the losses of public sector enterprises, was 10.4 percent of GDP in 2002–3.” For 2003–4, it was 9.8 percent of the GDP. In comparison, China’s fiscal deficit has remained in the neighborhood of 3 percent. Indian fiscal deficit levels have been perilously high from the normally accepted international norms as well as high from lax Indian standards. Unless this insouciance on fiscal deficits changes to cautious and calculated policy-making, and concerted endeavors are made to bring down the fiscal deficits of all levels of government to approximately 3 percent, the probability of attaining and sustaining high GDP growth rate is nonexistent.

10. Conclusions and summary

For historical reasons, immediately after the end of World War II China and India chose deliberate isolation from the rest of the world economy. China was being run as a command economy by the communist government and was a near autarky during the post World War II era. Conversely, India was not an autarky but it adopted an inward-looking growth strategy that ignored the external sector. Distinctive differences in their political systems was not the only major difference between China and India. The two economies pursued diverse growth and reform paths, and achieved dissimilar growth trajectories.

In the early twenty-first century, China’s economic achievements were clearly rated to be far superior to those of India. Based on past performance and present level of endeavors, one can easily conclude that, in the near future, the Chinese economy can be expected to sustain its growth momentum and continue turning in a robust performance, superior to that of India. While the Indian economy has anormous potential, it has merely fulfilled a part of this promise by improving the long-term GDP growth rate. The probability of India’s ability to sustain even this growth momentum is low because of its tardy pace of implementation of reforms in the past, and even losing that momentum by 2000. China’s successful reform program and the implementation of the strategy of SEZs turned China into a highly successful

manufacturing economy and a competitive exporter. Although successful in exports in the services sector, India could not emulate China's performance in the manufacturing sector. Business regulations, bureaucratic procedures and the legal environment in an economy determine how, under normal circumstances, proficiently run business firms operating in that environment can work and generate reasonable profits in a predictable manner. In terms of these criteria, China presented a far more conducive environment to business firms than India. The latter apparently lagged behind in developing its manufacturing sector *inter alia* because of infrastructure and governance-related problems and government regulations.

During the post-war period, the Indian economy was a mix of public and private sectors, in that order. The latter was rigidly shackled by stringent government regulations and controls, known as the license *raj*. Since China adopted economic liberalization and modernization of its non-market economy in 1978, it has turned in a stellar performance and has left the Indian economy behind in terms of GDP growth, savings and investment rates, and the rate of expansion of multilateral trade and FDI.

Assessed reasonably, in a dispassionate manner, the Indian economy is more likely to continue to underperform, but there should be improvement in its under-performance because of partial implementation of reforms in the past. Realistic prospects of a catch up with China in the medium-term do not exist. However, a small number of sectors in the economy—ICT, ICTeS and BPO—have turned in a dynamic performance and are justly regarded as globally competitive.

During the preceding quarter-century, both economies experienced acceleration in their GDP growth rates and per capita incomes. However, China's average annual growth rate of per capita income was twice as high as India's. Acceleration in growth enabled both economies to reduce poverty, both rural and urban. During the much higher rate of per capita income growth during the 1980–2003 period, China was far more successful than India in bringing down the proportion of people living below the poverty line. If the data are correct, China has almost eliminated its rural poverty. China's growth was more pro-poor than India's.

Economic reform and restructuring programs in China and India were launched in two different periods. Also, the circumstances that motivated political leadership to launch them were entirely different. In China, the open-economy reforms were *inter alia* carried out in the areas of trade, exchange rate and foreign investment, albeit two key prices, namely interest rates and exchange rate, are to a significant extent officially determined. The reforms in China were launched without a plan, sequence or a timeframe. A "dual track" reform process was visualized, which enabled China to successfully avoid the so-called "supply failure" which plagued other transition economies. The dual track reform process was Pareto-improving. The SEZs were an important policy plank of reforms. They were pragmatically planned and aimed at capitalizing on the transformations in global industrial structure. Success of the SEZ concept made China a large magnet for FDI. Consequently, its modernization and industrialization is FDI-based. The growth of the private sector in China is slow and the sector is still considered fledgling because China has maintained legal and regulatory restrictions on its rapid expansion.

High profile reforms were launched in the financial and banking sector but progress was slow and inadequate. Large banks are over-laden with NPLs, which according to one estimate are as high as 50 percent of total outstanding loans. Similarly, reforms of the SOEs have not been completed so far. This has been a difficult area to reform for the policy mandarins.

Since independence, the Indian economy has remained heavily laden with distortions, both macro- and microeconomic, which has engendered serious supply-side constraints. All-round infrastructural weaknesses, particularly in the areas of power and transport, remains a perennial feature of the economy. There are both economic and non-economic reasons for the apathetic growth performance since independence. A major problem was that of dull, unimaginative and low-quality political leadership and highly inefficient, corrupt, inept, intrusive, albeit powerful, bureaucracy. Adherence to wrong economic philosophies like Fabian socialism and the age-old Gandhian maxim of *swadeshi* debilitated the economic growth process. The government interfered excessively in the economy; consequently the large Indian bureaucracy had a free hand.

Globalization created profitable opportunities for India. These were in the so-called “New Economy” related businesses. India first found comparative advantage in software and computer programming. Second, it found a lucrative niche in ICTeS, BPO, back-office outsourcing of business services and call centers. Recent progress in some areas cannot be denied. Yet, the current macroeconomic scenario of the Indian economy presents a mixed picture. Realistic prospects of the Indian economy catching up with the Chinese are dim.

3 The dragon's breath: the transitioning Chinese economy

China's development is not just a powerful driver of global growth, its impact on other economies is also far more pervasive than ever.

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1. Introduction

The detailed analysis in Chapter 2 compared and contrasted the growth paths chosen by the two economies and the destinations they reached. It also examined how over the last two decades of the last century China established itself as the economy with the highest long-term GDP growth in real terms, in the fastest growing region of the global economy. This feat was achieved despite the Asian economic and financial crisis of 1997–8 and the SARS (Severe Acute Respiratory Syndrome) epidemic of the early 2000s, which had a shriveling effect on the GDP growth rate. While the economic and social costs of the Asian crisis to several newly industrialized Asian economies (NIAEs)¹ and the ASEAN-4² economies were high, China remained unscathed. It is one of the few socialist economies that have made a successful transition from a command economy framework to a market-oriented one, in which most economic interactions are governed by market forces. This structural transformation is so far incomplete.

China's global shares of trade, foreign investment (see Sections 5 and 6) and production have soared in a short span of two-and-a-half decades. Productivity levels, production standards and quality of life for some 400 million of its population in its southern and eastern coastal provinces have been steadily rising. China's regional presence has grown markedly, so much so that it is swaying regional institutions and economic structure. This includes the emergence of a noteworthy sub-group called the ASEAN-Plus-Three (APT)³ as an important part of the regional architecture. Another name for this sub-set of economies is "JACK," which is short for Japan, ASEAN, China and Korea (Republic of). The APT or JACK has an Asian identity and has enormous future potential. It could well become the kernel for an EU-like regional structure in future, an Asian Economic Community (Das, 2005b). Since the latter half of the 1990s, China has consistently took the initiative in imploring and drawing the thirteen member economies together to form the APT, so that they could collaborate and synergize the regional economy.⁴ China was also behind the East Asia Summit of December 2005, which is an "East-Asians-only" club modeled on the Shanghai Cooperation Organization.

China's contribution to global GDP growth since 2000 has been almost twice as large as that of the next three biggest emerging-market economies (EMEs),⁵ namely Brazil, India and Russia, combined. Indubitably, this has materially increased China's global presence. China's openness to trade and investment is unusually high. The sum of its exports and imports of goods and services amounted to 75 percent of its GDP in 2004. The corresponding proportion for Brazil, India, the European Union (of fifteen), Japan and the United States (US) ranged between 25 percent and 28 percent. Consequently, the dragon's awakening matters more for the rest of the global economy. The positive supply-shock that China has provided has favorably influenced the growth rate of the global economy.

With a massive supply of low-cost workers, China has become the manufacturing workshop of the global economy, a highly competitive purveyor of an enormous range of products, from textiles to toys, to integrated circuits and mother-boards to computers. Persistence of certain trends in the Chinese economy has become conspicuous. In the early 2000s, China continued to remain the most attractive destination for foreign direct investment (FDI). A large proportion of this FDI went into the production of low- and medium-technology products. More recently, the high-technology industries have started attracting FDI. Second, China's importance as the regional export platform has continued to grow, which has contributed to both incomes and employment generation in the domestic economy, particularly in the southern and eastern provinces, which have been relatively more successful in attracting FDI and participated in regional production networks. Third, the trend in strengthening of the trade sector also continued. Of particular importance was that of China's trade with the surrounding Asian high-performing (AHP) economies.⁶ It has been growing at the rate of 20 percent per annum, or higher. This has led to the emergence of a new division of labor in the region.

This chapter draws up a detailed profile of characteristic recent developments in the transitioning Chinese economy, focuses on the key aspects of its present economic transformations, and delves into the challenges that lie ahead.

2. Why did the reform and liberalization program succeed?

This is a worthwhile question because reform and liberalization programs have performed poorly in many centrally planned economies. In the early stages, they resulted in steeply negative growth rates which had exceedingly high social costs and spelt misery for large segments of the populations. The fundamental reason why the reform program succeeded in China is that the political leadership, which is widely regarded as well-educated, capable and pragmatic, was earnestly committed to it and was not beguiled by ideological dogmas. They had an open mind and did not let ideology bog them down. Their no-nonsense attitude, single-mindedness and strong commitment to strategies that foster global integration have been viewed by policy mandarins in other parts of the world with esteem. Their approach to implementation gave high priority to pragmatism. Consequently, there was nothing of value in the capitalist economic system that they did not rationally consider and adopt for China. Unmistakably, the economic policy

objectives of the policy mandarins were modernization, industrialization, growth, urbanization and globalization, which are imbued with the forces of convergence. Once the high-growth trajectory was achieved, they nimbly and skillfully moved on to the policy framework for growth with equity in Chinese society. As the rural areas are known for an income and non-income disparity, they have become a special focus of policy attention. Management of outward migration from the rural areas in such a manner that it did not affect the urban quality of life adversely was also being paid a great deal of policy attention.

The reform strategy in China provided incentives to as many economic agents as was feasible. That implies that incentive compatibility was high. Expectations of benefits induced economic agents to take the desired economic actions. This kind of implementation of reforms was the legacy of Deng Xiaoping. When a large proportion of the population saw benefits for themselves, they were supportive of the liberalization and reform program. To be sure, there were disenchanting groups that stood to lose. For instance, the incumbent bureaucrats saw themselves as potential losers. Resistance from this class had created innumerable hurdles in the implementation of reforms in India, Eastern European countries and Russia. In China, reforms did not exclude or neutralize the bureaucrats. They were given opportunities to sponsor private or semi-private businesses with entrepreneurs. Although this approach resulted in corruption and was criticized, it was accepted as a price that had to be paid for progress in reforms.

Those who conceived the reform process in China believed in creating the new economic system around the old. They did not begin by destroying the old institutions so that the new ones could supplant them. Hindsight reveals that this strategic philosophy served China well. First, agricultural reforms that were enacted in 1979 and continued through the early 1980s gave each peasant household a long-term lease of land. They turned out to be highly successful. Under the new system the farms became essentially private farms with household ownership. Second, entry of new non-state firms was the most striking feature of reforms. They grew slowly but steadily and made a niche for themselves in the economy, without in any way dominating it. The entrepreneurial activity occurred despite impediments created by weaknesses in the financial market. Third, while the state-owned enterprises (SOEs) have shrunk (as discussed below) relatively, they recorded some productivity gains. They were the result of the adoption of both liberalization and incentives. The incentive measures included allowing SOEs to retain a part of their profits. New methods of hiring managers were devised and successful managers were given monetary rewards. They in turn were allowed to reward more productive workers and pay them bonuses and devise their own incentive systems. Rigidity in labor laws was reduced by allowing managers to hire workers on short-term contracts. Fourth, expansion of the foreign-invested enterprises (FIEs)⁷ played a crucial role in the success of reforms. Finally, one of the most vital factors for the success of reforms in China was that it unleashed the forces of competition in the economy.

As set out in the preceding paragraph, as reforms progressed China adopted creative destruction and the size of the SOE sector began to decline.

Between 1980 and 2003, its share in fixed-asset investment declined from 80 percent to 40 percent. Over the same period, its share in industrial output declined from 80 percent to 13 percent. The non-SOE sector produced over half of the total industrial output in the early 2000s, but it should not be taken to mean that the private sector has recorded robust growth. In terms of industrial value-added, SOEs accounted for 45 percent in 2003, down from 54 percent in 1994. This has meant a dramatic decline in the SOE sector (Lo, 2005).

3. The high growth environment and deflation

High GDP growth rate and inflation frequently go together. Since the launch of the reform program, there have been four serious bouts of inflation in China. The last one occurred in the early 1990s, peaking at 27 percent inflation rate in late 1994. Thereafter, inflation began easing and in 1998 it turned into a deflation, which continued until 2000. The lowest rate of deflation was recorded in 1999, when it was 2.2 percent. The second episode of deflation occurred in the last quarter of 2001 and continued until the end of 2002 (Feyzioglu, 2004). The annual deflationary rate during 2002 was 0.8 percent. The next year prices recorded a small increase of 1.2 percent. They further increased by 3.9 percent in 2004.

An examination of disaggregated prices reveals an interesting pattern; that is, prices of tradable consumer goods declined consistently between 1997 and 2002. In particular domestic prices of clothing and housing, two items that have a heavy weight in the consumer price index (CPI) basket, recorded a sharp decline during this period. Similarly prices of foodstuffs, which have a heavier weight in the CPI basket, recorded a sharper decline. The deflationary phase ended in 2002. In late 2002, prices of food and energy began to rise. This was a turning point, after which tradable goods prices began to show a moderate increase.

During the central-planning period, China practiced price control or an administered price system. A large majority of price controls were eliminated by 1993. Although most prices in China are market determined now, some prices are still controlled and administered by the state. The most important state-determined price is the interest rate, which was slowly being liberalized in 2004. Administratively determined prices include those of pharmaceuticals, and health and education services. The price controls are euphemistically referred to as the “guidelines” by the State Development and Reform Commission. They take the form of price or fee ceilings. These components have approximately 10 percent weight in the CPI. Promoting social stability was the basic objective of keeping price increases in these sectors under control.

4. Saving and investment rates

One of the characteristic features of contemporary Chinese economic growth is its high saving and investment rates, both in comparison to its past and to that in other EMEs. In fact, calling saving rates high is a euphemism because they are among the highest in the world. During the reform era (post-1978) it averaged

37 percent of GDP. This saving performance was far superior to that during the central-planning period, when it averaged 27 percent of GDP and was essentially “engineered by the state fiat” (Kraay, 2000). In 2003, the household savings rate in China was 42.5 percent of GDP, compared to 14.3 percent for the United States, 20.7 percent in France and 25.5 percent in Japan.

During the pre-reform (pre-1978) era, relative prices were distorted and favored industries, which led to large profit accumulation or operating surpluses in the SOEs. These engineered profits were subsequently invested into state-determined sectors. As the household incomes were low, the savings of the household sector were infinitesimal. They were also exceedingly low as a proportion of total savings in the economy. Once the reform process was set in motion, consumption and savings decisions of the households became voluntary. It transformed the structure of public and private savings. Reform of the pricing system and the onset of competition eroded the large contrived profits of the SOEs. Both the quantum and importance of public sector savings declined and that of household savings soared. Rising household incomes led to rising household savings, which soon grew to be as large as a half of the total savings in the economy. With the collapse of the commune system in rural areas and the emergence of property rights to land and housing, a boom was ignited in the rural savings rate. Rural savers were eager to save and invest in land and property. The spread of banking services in the rural areas facilitated a large build up of rural savings. The other reasons behind a strong saving performance were high real GDP growth rates, healthy prospects for future growth, and the one-child-per-couple policy. The latter improved the ratio of employed persons to total population in the economy.

Annual gross capital formation data from national accounts show that, since the early 1980s, the investment rate in China has remained exceedingly high. It peaked at 43.3 percent of GDP in 1993. After that, the cyclical slowdown brought it down to 36.3 percent in 2000. The investment rate in the economy continued to be strong thereafter. It increased monotonically to 38.5 percent of GDP in 2001, 40.2 percent in 2002, and 43.8 percent in 2003. In 2004, it was 45.6 percent, when just concerns regarding overheating of the economy became ubiquitous among the policy authorities. Bringing investment under control and a soft landing of the economy became the government's prime objectives. In late 2004 and early 2005, policy measures had to be taken to rein in investment in the economy. The government consolidated its own spending with the intention of paring down the budget deficit. Other policy measures taken to slow down investment included a change in banks' reserve ratio to slow bank credit expansion, intensifying borrowing operations to sterilize foreign currency inflows and adopting policies to promote outflows of foreign exchange.

A crucial macroeconomic characteristic of the Chinese economy is that national savings and investment tended to be more or less in balance, which in turn led to the current account remaining by and large in balance. Domestic savings have been the dominant source of investment. Although, no doubt household saving contributed to a strong saving performance of the economy, the contribution made by high government savings and the rising level of enterprise

saving was equally significant (Kuijs, 2005). In this context, it should be pointed out that China's fiscal position has also remained relatively sound, with the budget deficit remaining in the vicinity of 3 percent of GDP and the debt to GDP ratio close to 25 percent of GDP. It compares well to the fiscal deficits and debt situation in other well-functioning EMEs and is opposite of the Indian situation.

With rising disposable income, consumerism in China is bound to rise, causing a decline in the national savings rate. In a recent McKinsey survey conducted in 30 Chinese cities, representing 60 percent of the Chinese population, when consumers were asked about the big-ticket items they intended to buy during the next twelve months, they came up with an ambitious shopping list, including autos, appliances and fancy electronic gadgets. Over 8 percent included a flat-screen television in their list. For 10 percent of the respondents, an apartment or house was at the top of their list. Some 43 percent of the respondents agreed or strongly agreed that "having a car is my biggest dream." Over 2 percent planned it within the next twelve months (Lane and St. Maurice, 2006).

5. As China emerges as a large trading economy

The World Trade Organization (WTO) accession procedure took 15 years (1986 through 2001) of arduous and thorough going negotiations, which was the longest for any WTO member (Das, 2001b). China acceded to the WTO in November 2001, as its 143rd member.⁸ The post-accession period has so far been smooth. The many negative effects of accession that were apprehended have not materialized. China has been commended by the General Council of the WTO for sincerely meeting its obligations and abiding by its accession commitments. Also, the report of the Transitional Review Mechanism, a procedure established by the WTO for critically examining compliance annually, did not find any deviations in compliance for 2002 and 2003, although there were some areas where technical problems existed. The preparatory phase for the WTO accession began in the early 1990s. During this period and after the accession, China lowered its tariffs and dismantled non-tariff barriers (NTBs). Trade reforms and commitments made by China as a part of the Protocol of Accession were *inter alia* instrumental in integrating the economy with the regional and global economies. This integration process proceeded rapidly and is still ongoing (Das, 2001a).

Two significant policy measures that were taken from the perspective of the domestic economy were, first, unification of the dual exchange rates in 1994, and second, removal of exchange controls on current account transactions in 1996. Future implementations of commitments made during the accession negotiations would continue to further regionalize and globalize the Chinese economy. Tariff exemptions were granted for importers who were processing for exports. Thus, a greater proportion of imports were completely duty free. Average tariffs declined from 55.6 percent in 1982 to 12.2 percent in 2002, while the weighted average came down from 40.6 percent in 1992 to 6.4 percent in 2002. Under the WTO commitments, average tariffs in China are down to 10 percent in 2005.⁹

Agriculture had proved to be a sticking point during the prolonged WTO negotiations, at the end of which China agreed to bind¹⁰ all tariffs and reduce them from an average of 31.5 percent to 17.4 percent over the designated adjustment period of 1990–2005. Such a large tariff cut exceeded all expectations. It also committed to eliminating export subsidies and increasing the volume of tariff-rate quotas (TRQs), which are two-tier tariffs.¹¹ With regard to industrial products, an average tariff reduction from 24.6 percent to 9.4 percent by 2005 was committed. China also signed the Information Technology Agreement of the WTO, which entailed all tariffs on telecommunications equipment, semiconductors, computers and computer equipment, and other information technology products.

The accession negotiations in the area of services were the first ever such reforms negotiated and undertaken by the WTO. China agreed to liberalize their key services sectors in an agreed timeframe. It included liberalization of telecommunications, financial services and insurance, in which foreign participation either did not exist or was marginal. Foreign providers are to eventually have full access to the domestic markets in these services. The licensing procedures agreed were transparent. Agreement included elimination of restrictions on foreign participation in the area of domestic trade and distribution. In addition, China made significant commitments in the areas of Trade-Related Investment Measures (TRIMs) and Trade-Related Aspects of Intellectual Property Rights (TRIPs). It also reached an agreement to follow the principles of national treatment and non-discrimination in the TRIPs and TRIMs. As compliance with these commitments progresses, it will have a decisive and extensive ramification for the domestic economy.

China's export and import growth rates were comparable, and thus it cannot be accused of mercantilism. Rapid expansion of export from and import into China has contributed a great deal to sustained growth in multilateral trade. The growth rates of its exports and imports have been much faster than the world average for over two decades. The latter half of the 1990s was a period of exceptionally high trade expansion. Both exports and imports grew at twice the global rate of trade expansion. Notably, since 2000 China has been the single largest contributor to multilateral trade expansion.

According to WTO statistics, China has grown into an imperious presence on the global trade scene. In 2003, it was the fourth largest exporter after Germany, the US and Japan, in that order. Its total exports were \$437.9 billion, which were 5.8 percent of the total multilateral exports. China could not be a large exporter without being an equally large importer—it was the third largest importer after the US and Germany, with total imports of \$413.1 billion, which were 5.3 percent of the total multilateral imports. The United Kingdom, France and Japan, in that order, were smaller importers than China. In 2003, its imports and exports grew by 34 percent and 40 percent, respectively.¹² These were the highest growth rates in the two categories in the world. In 2004, China's exports were \$593.3 billion and imports \$561.2 billion, making it both the third largest exporter and the third largest importer in the global economy, following Germany and the US.¹³

While these macro trade statistics established China's growing stature in the arena of international trade, they did not reveal a great deal regarding the regional and global impact of China's trade expansion. While China's trade penetration into the large industrial economies has deepened, its trade with the surrounding Asian economies has become dynamic and vigorous. China's importance as a trading partner has markedly increased for the neighboring Asian economies. This emerging trade dynamic is meaningful for them as well as for the Chinese economy. One of the reasons for it is the strengthening trend towards vertical trade specialization in Asia, which has gone on increasing China's regional imports. In addition, increasing imports for domestic consumption has made it a worthy export destination for the regional economies. Consequently, by the early 2000s China had become the most important trade partner for many regional economies (Das, 2001a and 2001b). In 1980, 15 percent of China's imports originated from the neighboring Asian economies; in 2000 this proportion increased to 53.5 percent, although there was a marginal decline to 52.8 percent in 2003. This is the latest structural change in the Asian trade paradigm.

5.1 Outcome of trade expansion

There are far-reaching domestic, regional and global ramifications of China's emergence as a large trading economy—one of global dimension and significance. China's rapid trade expansion will materially affect both its developing and industrial country partners. It is not only influencing and transforming the regional trade structure (noted above) but also the global trade pattern. China was the source of 12.5 percent of total US imports in 2003, which was higher than those originating from Japan (9 percent) and the Republic of Korea (hereinafter Korea) (3 percent). However, in the early postwar period when the Japanese economy was starting to come into its own, Japan accounted for a higher share of US imports. Its share of the US market continued to increase during the 1960s and 1970s, peaking at 22 percent in 1986. Similarly, Korean exports to the US market continued to increase for over three decades. As the Korean economy was much smaller in size compared to those in China and Japan, its proportion of the US import market was not comparable. It peaked at 4.5 percent of the US market in the late 1980s.

The extent of market penetration can also be compared in a subtle manner at a disaggregated level, using two-digit SITC (Standard International Trade Classification) trade data. China had more than 10 percent of the US import market in five two-digit product categories in 1990, which increased to sixteen two-digit product categories in 2002. Compared to this, Japan's penetration in the past was more pronounced. In 1962, Japan had 10 percent import market penetration in twenty-three product categories, which continued all through the 1980s. It gradually declined to eight product categories in 2002. Similarly, Korea did not have 10 percent market penetration in any product categories in the 1960s, but by the 1970s it did have in four product categories. However, it declined to one product category in 2002 (Rambaugh and Blancher, 2004a and 2004b).

As alluded to above (Section 5), vertical trade specialization was an important causal factor behind the strong increase in regional imports into China. The changing

composition of imports proves this beyond any shadow of doubt. For one, importing for processing, and then exporting the final product to industrial country markets, has gone on increasing in China. The proportion of such imports was 37 percent in 1990, which increased to 50 percent in 1997, and has hovered around the same level since then. This implies that China's exports are determining its imports, their composition and source countries. Second, according to one estimate, imports for further processing form a part of 40 percent of all Chinese exports. In the advanced-technology sector, large import of integrated circuits and micro-assemblies are also evidence of increasing vertical specialization, because they are vital components in a range of electronics products whose exports from China have risen rapidly in the past.

The source countries of FDI also portend to the same conclusion of intensifying vertical specialization. In the recent past, a large part (over 60 percent) of FDI to China originated from Japan, the NIAEs and ASEAN-4 economies, while a small part (20 percent) came from the European Union (EU) and the US. Finally, with the rising level of vertical specialization, China's trade structure has been transformed. Although China's imports from all the trading partners have increased rapidly, with double-digit growth rate, its imports from its Asian trading partners have increased much faster than those from the industrial economies. During 2003–4, imports from its Asian trading partners increased at the average rate of 36 percent per annum, while those from the EU and the US increased at the rate of 20 percent and 14 percent, respectively. This implies that China's emergence as a large trading economy is driving the regional economy towards greater specialization in trade, implying increased compliance with the classical principle of comparative advantage.

However, in the area of export the reverse seems to be true. That is, average growth rate of exports to industrial economies has been far higher than those to the neighboring Asian economies. During 2002–3, exports to the EU and the US increased at an average rate of 33 percent and 31 percent, respectively. The corresponding rate of increase for the regional trade partners was 26 percent (Rambaugh and Blancher, 2004a and 2004b). As imports increased from the Asian economies with a corresponding rise in exports to the industrial economies, it changed the structure of China's current account. China's current account deficit with the Asian economies and surplus with the mature industrial economies went on rising. China has not been ignoring the other geographical parts of the world; its imports from Africa and Latin America have risen faster than those from Asia in the past, although they started from a very low base. China is the third largest importer of exports from the developing economies, while the US and the EU are the first and second, respectively.

5.2 Quantitative assessment of the welfare implications

The global general equilibrium model is an oft-used methodology for assessing the welfare impact of trade. The Global Trade Analysis Project (GTAP), developed at and coordinated by the Center for Global Trade Analysis, Purdue University, is a well-known analytical instrument. The objective of GTAP is to improve the quality

of quantitative analysis of global economic issues within a global economy-wide framework. It has been routinely used by researchers for quantifying the welfare impact of trade expansion. Several studies have been undertaken, which concur that China's WTO accession and trade expansion has favorable welfare implications for both China and the global economy.¹⁴ Another common conclusion is that the degree of complementarity between China and the trading partner economy will go to determine how much a country benefits or loses by its trade with China. With regard to the quantitative estimates of gains, the results were as follows: Hertel and Walmsley (2000) have estimated welfare gains to China of the order of \$23.7 billion to \$25.6 billion annually and to the global economy of \$35.7 billion to \$38.2 billion. Ianchovichina and Martin (2003) estimated welfare gains to China of \$28.6 (or 2.2 percent of GDP) billion annually, while those to the global economy amounted to \$56.1 billion (or 0.2 percent of GDP).

The flip side of this coin is that the post-WTO accession trade expansion will require domestic macroeconomic and structural adjustment in several areas in China. Although the textiles and apparel sector has expanded with the termination of the multifiber arrangement (MFA), China's heavily protected sectors, particularly automobile and petrochemicals, will decisively contract (Ianchovichina and Martin, 2003). Some of the agricultural sectors will also be forced to contract because, being land-intensive, they have been losing their comparative advantage. However, China will continue to have comparative advantage in growing fruit and vegetable crops. The financial services industry, which is largely state-owned and highly inefficient, will also feel the heat of foreign competition. It is an undeniable candidate for future shrinking. There will be productivity gains, which will be the direct result of intensification of competition in the domestic economy. The unemployment rate is likely to worsen because of job losses in shrinking sectors, particularly in automobile and agriculture, both of which are providers of employment to a large number of skilled and semi-skilled workers. This will adversely affect income inequality and poverty alleviation endeavors (Zhai and Li, 2000).

The industrial economies of the region, namely Australia and New Zealand, as well as those of North America and Western Europe, should benefit from China's post-WTO accession trade expansion. Australia, New Zealand and the US will have easy access to China's large agricultural market. In addition, the US and the EU will certainly be able to increase their exports of capital goods and technology-intensive products to China. During the accession negotiations, the US was particularly interested in China's services sector because it has enormous comparative advantage in several service areas, and therefore is expected to expand its trade in services.

5.3 Complementary trade pattern

The four NIAEs have a complementary trade pattern with China and therefore they stand to gain from China's growing trade. They have become important suppliers of intermediate goods, components and sub-assemblies to China because it needs them for its exports to the industrial economies. As the export composition

of China is constantly evolving and has been moving up the value-added chain, with the passage of time more and more of these imported components will be produced domestically. Eventually China will turn into a directly competing economy with the NIAEs in the global markets.

Likewise, the ASEAN economies are also benefiting because their exports to the large Chinese markets have been expanding. Many of their export products fulfill the need of the domestic economy in China. Besides, NIAEs-like complementarities have also emerged between China and the ASEAN economies. However, in a significant array of labor-intensive products China also competes with the ASEAN economies. To that extent the ASEAN economies will need to adjust their trade structure. For instance, China is one of the most competitive economies globally in textiles and apparel. The ASEAN economies that have textiles and apparel as their major export sector will not be able to compete against Chinese exports in the global markets. However, the alternatives open to them are, first, that they can make up for their loss of global market niches to China by exporting to the large and growing domestic market of China. Second, they can establish a new relationship of input suppliers for Chinese exports. Third, some of the ASEAN economies are capable of outcompeting China in the global markets by moving up the value-added chain into higher-technology products than China is currently producing and exporting. Going by past performance, Malaysia and Thailand are nimble economies and are capable of achieving this feat.

The dependence of AHP economies over the markets of the Group-of-Seven (G-7) economies for their exports was traditionally high and continues to be high. However, due to strong intra-regional trade, a declining trend has set in in this dependence. Also, intra-trade among the AHP economies, *excluding* Japan, is also causing reduced dependence of the AHP economies on the G-7 markets. China's large imports from the regional economies are proving beneficial to the regional economies. It is plausible that Asian exporters of resource- and capital-intensive products will benefit from China's increasing integration with the regional economy and that future Asian trade will grow more among the AHP economies (Zebregs, 2004).

5.4 Exchange rate dynamics

Outstanding and sustained export growth during the reform era created considerable interest in the analysis of the exchange rate behavior of the renminbi yuan.¹⁵ Early in the reform period, the renminbi yuan followed a fixed exchange rate regime. It was devalued frequently, which was in keeping with the various liberalization moves that were being taken in the economy. Between 1988 and 1993, a dual exchange rate system was installed. It comprised an officially determined fixed exchange rate and a market-determined rate of swap market. The latter had emerged since the early 1980s, although swap centers were only formally established in 1988. In these centers market participants could purchase and sell foreign currency at market-determined rates. These centers grew in importance because they took care of more than three-fourths of foreign exchange business. As the

swap market exchange rate depreciated in the early 1990s, the fixed officially determined rate became increasingly overvalued and untenable. Therefore, in 1994 the official rate was devalued by 28 percent, to the level of the exchange rate in the swap centers, and the dual exchange rate system was eliminated. This amounted to adoption of a *de facto* dollar peg of 8.28 renminbi yuan to the dollar.

Although during the 1980s and 1990s, the exchange rate regime was either *de jure* or *de facto* fixed, the real effective exchange rate (REER) had experienced large swings vis-à-vis the CPI.¹⁶ Until the early 1990s, the REER depreciated appreciably due to frequent devaluations of the nominal exchange rate, as China was liberalizing its economy for promoting trade and enticing foreign investment. After 1994, the REER appreciated consistently until the onset of the Asian crisis in July 1997. This was due to faster CPI growth in China than that in its trading partner economies.

During the Asian crisis (1997–8), the exchange rate was kept stable vis-à-vis the dollar. However, the renminbi yuan appreciated because first the yen depreciated and then the currencies of the crisis-affected Asian economies were depreciating at a steep rate vis-à-vis the dollar. As the V-shaped recovery from the crisis set in in 1999, this trend reversed because the Asian currencies began appreciating against the dollar. The rate of inflation in China was much lower than that in the trade partner economies. Continuing low inflation led to gradual appreciation of the renminbi yuan until 2001. It was followed by depreciation due to the movement of the dollar against other currencies (Wang, 2004; Das, 2005a).

There was international pressure from the G-7 economies to appreciate the renminbi yuan because China's foreign exchange reserves were rising rapidly.¹⁷ In addition, global economic imbalances were glaring and growing. The most disturbing feature of the imbalances was the alarming twin deficits in the US. Speculators in the currency markets have been betting on the revaluation of the renminbi yuan since the beginning of the dollar correction period, that is February 2002. Consequently speculation has been endemic in the currency markets. Expectations of a revaluation became stronger after the official statements regarding China's flexibility towards currency reforms and a series of liberalization and deregulatory measures taken by the People's Bank of China (PBC). These measures included allowing foreign trading companies to retain their foreign exchange incomes in full in their foreign exchange accounts, insurance companies and pension funds to invest overseas, Chinese emigrants to transfer their assets out of China, and Chinese tourists and students to take larger amounts of hard currency out of China.

Conditional upon a reduction in speculative pressure and the government's policy measures to rectify macroeconomic and financial limitations, a shift in the currency regime was expected by market participants sometime during 2005 in the form of either a renewed peg or a link to a currency basket. This expectation was met after the meeting of the G-7 finance ministers and central bankers¹⁸ in the first week of February 2005. The PBC announced that it is preparing to peg its currency to a basket of currencies in lieu of the dollar, although it will take China some time to allow the value of the currency to be determined by market forces.

On 21 July 2005, the renminbi yuan was revalued by 2.1 percent against the dollar, its new value being 8.11 to the dollar. Also, the dollar peg was abandoned and replaced by a managed float against a basket of undisclosed currencies. The trading band was relaxed from ± 0.1 percent to ± 0.3 percent. This realignment in the currency value was much smaller than the expectations of the market participants. It was also too small to have any major macroeconomic impact. Rapid GDP expansion would not be dampened by it. However, the shift to a currency-basket peg would increase the monetary flexibility for managing the economy.

The combination of the small appreciation and the shift to a currency-basket pegging signal that more monetary reforms may be in the offing. If they do come through in due course of time, they should increase international confidence in the Chinese economy, and hence be conducive to more long-term capital inflows to both China and Asia, eventually increasing demand for Asian assets. As the new system is called a “managed floating exchange-rate regime,” it could well mean that it may be more management than floating. To be sure, the appreciation was small; it should be taken as the start of a series of further renminbi yuan revaluations that will bring an alignment of other East Asian currencies by pushing them upward against the dollar, up to the point to correct the global—particularly the US—trade imbalances. The eventual economic and political effects of the revaluation will depend on how the currency is managed during the post-appreciation period.

The twin move enabled the monetary authorities to manage the soft landing that they were aiming for. At the time of appreciation, the economy looked well balanced. It was getting more support from consumer spending, alongside fixed investment and exports. Rising household incomes were boosting households’ spending power, lifting retail sales by 13 percent in the first half of 2005, compared with the same period of 2004. The agricultural sector began playing its role. After six years of lackluster growth, rural incomes rose by 12.5 percent in the first half of 2005.

The managed floating exchange rate regime adopted by the PBC is not an original Chinese concept. Singapore has used it skillfully since the early 1980s. This system was christened the “basket, band and crawl,” or the BBC. In the BBC regime the currency is managed against an undisclosed basket of currencies of the largest trading partners. The exchange rate floats within a band, which allows the currency to crawl up or down instead of sharply fluctuating. The BBC is considered one of the most successful currency regimes in the world. It provided the Monetary Authority of Singapore (MAS) flexibility to respond to changes in both local and global conditions and simultaneously maintain export competitiveness and inflation control.

In the BBC system, the composition of the currency basket is revised periodically to accommodate changes in trade patterns. The secret policy band is also regularly reviewed to ensure that it remains consistent with changes in economic circumstances. It is adjusted every two-quarters or every quarter, if needed. Singapore has guided monetary policy through exchange rates instead of

directly adjusting interest rates. Inflation has been relatively low at 2 percent a year since the early 1980s. As a template exists, it is possible that more Asian economies will use the BBC system in future (Das, 2006).

Two arresting developments of 2005 were, first, the growing divergence between the renminbi yuan and the yen, and second, the currencies of the other Asian economies showing a greater correlation with the dollar/renminbi yuan rate than with the dollar/yen rate, suggesting that the yen is no longer a dominant currency for the Asian economies. Not only that, currency traders believe that divergence between the renminbi yuan and the yen exchange rates will continue into the future, albeit with a slower pace (Jen, 2005). Similarly, Asian currencies are likely to remain more correlated with the renminbi yuan than the yen. Indubitably, this is a dramatic departure from the past, when the Asian currencies had trended with the yen. Between December 2004 and December 2005, the real effective exchange rate (REER) of the renminbi yuan appreciated by 11.0 percent. Conversely, the REER of the yen depreciated 12.1 percent. As the Chinese and the Japanese economies are more complementary than competitive, if the renminbi yuan appreciates the Japanese economy could be hurt. Also, as the currencies of the Asian economies are growing more correlated with the renminbi yuan, and they import capital goods from Japan, while competing with China in the global market place, an increasing divergence between the renminbi yuan and the yen could have a favorable impact over the Asian economies because it would work as a positive terms-of-trade (TOT) shock for the Asian economies.

6. Foreign direct investment flows

There is a consensus in the profession that liberal policies related to FDI inflows spur GDP growth rate, that FDI works as a catalyst for development and that it is a veritable force in integrating a developing economy into the global economy (WDR, 2005). FDI has been a vitally important element of China's contemporary reform and growth strategy. China has been a categorical success in attracting it in large amounts. FDI was instrumental in engendering thousands of FIEs, which in turn played an exceedingly important role in China's industrial development and globalization endeavors. It enabled China to ride the front wave of current globalization.

Conscious, calculated and concerted measures by policy professionals for increasing FDI inflows enabled China to emerge as the most important and alluring destination¹⁹ for FDI in the world (GBPC, 2004; UNCTAD, 2005). It began with the 1979 promulgation of the Equity and Joint Venture Law. Since then China has progressively liberalized its foreign investment regime, reduced restrictions on FDI, opened more and more sectors for foreign investment and considerably improved the overall investment environment. FDI has played an increasingly important role in terms of creating positive externalities by enhancement of fixed capital formation, employment generation, training and skilling of labor, export promotion, improved access to high, even state-of-the-art, technology and technology spillover. FDI-induced technology transfer and spillover takes place not only

for domestic firms in the same industry but also for the domestic firms in other industries (Okabe, 2002). Indirect benefits to China have included productivity gains through increased competition in the domestic market. Over the years FDI has led to substantial gains because a large number of transnational corporations (TNCs) have invested significant sums in China.

6.1 Liberalization and policy reforms for promoting FDI

There were three essential phases in China's strategic liberalization for FDI. The first phase entailed gradual and limited liberalization of the domestic policy structure, the second phase was that of active promotion through preferential treatment, and the third and final phase was a more comprehensive one and included alignment of FDI promotion with domestic industrial objectives. One of the first important steps in this direction was China's assumption of responsibility for relations with the International Monetary Fund (IMF) in April 1980. To this end, a number of reform measures were taken in quick succession. They were both pragmatic and objective-oriented. In 1982, the decision to open the economy for FDI was formally included in the constitution and adopted by the Sixth National People's Congress. The following year, Regulations for the Implementations of the Law of the People's Republic of China on Joint Ventures was formulated and the domestic markets were further liberalized for receiving FDI. More liberalization and reform measures were taken in 1984 by extending the SEZ concept from the original four to an additional fourteen SEZs in coastal cities and Hainan Island (see Section 6.4). Chinese policy-makers were aware of the technological backwardness of their industries and economy. Therefore, in 1985, twelve of these fourteen cities were designated as Technology Promotion Zones, with the express objective of attracting FDI for the purpose of state-of-the-art technology transfer.

Liberalization of the regulatory framework continued. In 1986, the Foreign Exchange Balance Provisions Act and the Encouragement Provisions Act were passed. They facilitated in resolving the foreign exchange-related problems of the FIEs. More favorable regulations were adopted to encourage FDI. Export-oriented joint ventures and high-technology joint ventures were given top priority. The concept of wholly foreign-owned enterprises was given official approval too. During the same year, the State Council promulgated another law for encouragement of FDI.²⁰ This law became famous as the "22 Article Provisions." It provided joint ventures with preferential tax treatment, freedom to import raw material and capital equipment, and the right to retain and swap foreign exchange in the swap market. Licensing procedures were also simplified and streamlined (Fung *et al.*, 2002).

As the objectives of export promotion and import of advanced technology were assigned high priority by policy-makers, an improved package of tax benefits was offered to joint ventures that were producing exportables and those utilizing advanced technology. A new set of reform measures was again instituted in 1994 to further facilitate foreign exchange management by the FIEs. Yet another new set of reforms was announced in late 1996, when China accepted the obligations

of Article VIII of the IMF, eliminating all restrictions on foreign exchange transactions. Capital account was kept closed. This long sequence of thoughtful and thorough-going reform processes enhanced investors' confidence in the Chinese economy, which was reflected in the brisk inflow of FDI.

6.2 Expansion in FDI commitments and realization

A slow trickle of FDI began in 1979, when \$109 million was received. The very next year it increased to \$195 million. Despite these increases, the contracted value of FDI as well as the actual realized value remained small until 1990. Initially a good part of this came from the large- and medium-sized businesses in Hong Kong and was focused in the Guangdong Province, particularly in Shenzhen, a small town close to Hong Kong's northern border. Initially only export-oriented industries were the focus of foreign investment. In 1990, \$3.4 billion was received as FDI. However, sharp increases in FDI flows began in 1992. During 1992 and 1993 China recorded an increase of approximately 150 percent each year; FDI surged from \$4.4 billion in 1991 to \$28 billion in 2003. This is regarded as the veritable "take-off" point of FDI in China.

There were several reasons behind FDI picking up such heady momentum in 1992. First, Deng Xiaoping's symbolic visit to the Guangdong Province, and to Shenzhen, in the summer of 1992, which confirmed the direction of the "socialist market economy" and future economic reforms and the commitment of political leadership to them.²¹ Second, post-1992 acceleration in the GDP growth rate with political stability strengthened the confidence of foreign investors. Third, perhaps the most important, was the significant reforms of the foreign investment regime.

In an endeavor to improve the investment environment, several restrictions on FDI were eliminated from the previously banned sectors, which provided a strong boost to FDI in 1992. A reform and liberalization package to attract FDI was applied to the original four SEZs. Based on experience, this package was refined and improved and then extended to broader areas, the most important being the Yangtze River Delta Area (Lai, 2003).

Since 1996, China has become the largest developing country recipient of FDI. However, it was surpassed by industrial economies like the US, Germany and France in terms of volume of FDI receipts. By 2000, the cumulative contractual amount of FDI received by China had reached \$676.1 billion and the actual or realized amount had reached \$348.3 billion (MOFTEC, 2001). Four noteworthy changes took place in 2002. First, global FDI flows went into a sharp (27 percent) decline; it was the largest drop in 30 years. The principal reasons for this decline were global economic deceleration, followed by weak recovery, which did not pick up momentum. Second, the US, which traditionally was the highest recipient of FDI inflows, recorded the largest (65 percent) decline in FDI commitments. Continuing weak performance on the stock market precluded any new cross-border merger and acquisition (M&A) activities. An unprecedented string of corporate and accounting scandals in the US tarnished the image of US business corporations

as well as sully the business environment. Third, FDI flows to Asia also recorded a small decline (12 percent) in 2002, but China resisted this trend. Going against the grain, China's FDI inflows increased from \$46.8 billion in 2001 to \$52.7 billion in 2002. And fourth, for the first time, China overtook the US, which received \$44.0 billion in 2002. This made China the largest global recipient of FDI in 2002, accounting for 9.88 percent of the global flows for that year, which was a landmark for the economy.

One of the factors that had favored China in 2002 was that it began the year as a new member of the WTO. China promised not only market access to investors but also policy transparency and better governance, making it a more attractive destination for FDI than in the past. This was a consequential achievement that accelerated FDI inflows. Furthermore, FDI started going into many previously closed sectors like the services. Second, a large number of manufacturing firms and TNCs underwent restructuring during this period, which made them increase their commitment and FDI to China. Third, in a volatile global economy the investment climate in China seemed placid, serene and lucrative, making it a more attractive location for FDI than ever in the past. These unique structural characteristics made China a bigger magnet for FDI beyond 2002. In 2003, it increased to \$53.2 billion and in 2004 to \$60.6 billion (see Chapter 1, Table 1.1). This is the highest ever level and there has been a rational concern about overheating of the investment cycle. A fair amount of these funds took the form of property investment. The ploughing back of profits by FIEs also contributed to this large volume of FDI. Many of the past investment projects have proved to be "highly profitable and investors have been in no hurry to repatriate their profits" (Christiansen and Bertrand, 2005). According to one estimate, the stock of actual or realized FDI in China stood at \$505.5 billion in 2003 (UNCTAD, 2004).

6.3 Qualitative attributes

FDI became the most important source of foreign capital for China. The largest proportion of FDI went to the manufacturing sector and consisted of greenfield investment. Sector-wise concentration of FDI varied in different periods; for instance during the 1980s it was concentrated in the labor-intensive manufacturing industries and real estate. A large part of it went into light manufacturing. It continued to go into this sector until it began to be felt that these industries had become saturated. During the 1990s, FDI flows shifted to capital-intensive industries; also FDI in real estate continued. In the late 1990s it moved further to high technology-intensive industries. Its latest move in the early 2000s was to the knowledge-intensive industries and services sectors.

Even in the early 2000s, FDI accounted for a mere 4 percent of GDP and 10 percent of fixed capital formation in China. The global average for the latter indicator is 15 percent (HKMA, 2003). Although it is lower than the global average, FDI exerted a disproportionate influence over the Chinese economy. The reason was that it was the principal driver of Chinese export expansion. Foreign firms

and affiliates accounted for an ever increasing proportion of exports. The share of FIEs in China's exports was 16.75 percent in 1991, which soared to 47.93 percent in 2000. The FIEs were responsible for 80 percent of high-technology exports in 2000. In terms of the value of industrial output, the share of FIEs increased from 5.29 percent in 1991 to 22.51 percent in 2000 (MOFTEC, 2001). The technology transferred by means of FDI and FIEs has been rapidly moving the manufacturing sector up the value-added chain.

Cross-border mergers and acquisitions (M&As) are a normal channel of making FDI. China has a long way to go in cross-border M&As, which have barely started. The ratio of cross-border M&As to total FDI in China hovered around 5 percent in the early 2000s; for the developing economies the corresponding average was 42 percent, while the world average was 81 percent (HKMA, 2003). In keeping with its WTO commitments, China has opened and will continue to open its services sector further in future, which is sure to result in an increasing amount of FDI flowing in to financial services, insurance, telecommunications and other services. The principal motivating factors for foreign investors in the foreseeable future are likely to be low manufacturing cost, huge domestic market potential and encouraging the macroeconomic environment. Service sector liberation and cross-border M&A would be the other motivating forces that could help sustain growth of FDI inflows.

As discussed below (Section 6.5), an overwhelming proportion of FDI to China has come from the other Asian economies like the NIAEs and ASEAN-4, and frequently through Hong Kong SAR. However, this disaggregated picture reveals that from 1996 this Asian dominance began to decline and the EU, Japan and the US began investing increasing amounts. FDI from these economies had a different character from that originating in the Asian economies. It was largely absorbed by industrial sectors in which China had revealed clear comparative advantage (RCA). Thus, in the latter half of the 1990s FIEs became more export focused than in the first half. Also, as FDI from the EU, Japan and the US rose, so did the average size of investment. These matured industrial economies were able to invest larger quanta than the Asian economies before them. The majority of investors from this group were the TNCs. Moreover, FDI from the Asian economies did not go into sectors having RCA, but was aimed more at exploitation of China's domestic market.

6.4 Regional distribution

The four SEZs, noted above (see Section 6.1), that were originally chosen in 1979 for FDI were: Guangdong, Jiangsu, Fujian and Shandong. With the passage of time FDI-related liberalization progressed and FDI flows increased, and *pari passu* FDI spread to other coastal areas first and then into the inland provinces. By the early 2000s, FDI had penetrated virtually all the geographical regions of China, except Tibet. The eastern and southern provinces—particularly Guangdong, Fujian—and areas surrounding Shanghai proved to be the most attractive areas. These five regions succeeded in attracting 64.56 percent of the total realized FDI

inflows (MOFTEC, 2001). As a generalization, it can be stated that the eastern coastal areas and provinces were more successful in attracting FDI than the western ones. Per capita income in provinces and regions where FDI flows were focused was significantly higher than the other areas.

The pattern of FDI distribution showed only minor shifts. For foreign investors, the investment environment, local market potential, infrastructure and human capital were the principal factors that played a role in determining the direction and location of FDI. As noted above (see Section 6.2), when FDI started in China its concentration was Shenzhen and surrounding areas, directly north of Hong Kong. Shenzhen is justly referred to as the most successful city from the perspective of FDI. It spread to the other areas in the Guangdong province next. Jiangsu has seen rapid growth in FDI since the early 1990s, and it replaced Shanghai as the second largest recipient of FDI by 2000. The reason behind this shift in FDI flows was that a large part of FDI in Shanghai went into the speculative real estate sector, while Jiangsu attracted FDI in the manufacturing sector.

6.5 Are FDI statistics dubious?

Skepticism regarding the quality of FDI statistics is not new. It has been argued that statistics tended to overstate China's ability to attract FDI for two reasons. First is the issue of foreign investors ploughing back their profits, and counting it as FDI. The second is the issue of "round-tripping"; that is, Chinese capital is sent out and then is repatriated as disguised FDI. This unjustifiably inflates FDI receipts. There can be no valid reason for not including reinvestment of profits as FDI because, according to international norms stipulated by the International Monetary Fund and the definition of FDI published by the Organization for Economic Cooperation and Development (OECD), it is nothing but FDI. One-third of FDI inflows in China are the reinvested profits of foreign affiliates and TNCs.

In contrast to this, round-tripping is domestic capital disguised as FDI. Including it in the FDI statistics is not honest. Fiscal incentives for FDI are the principal motivation for the popularity of round-tripping among Chinese firms. Foreign investors enjoy a tax holiday for two years after the first profitable year. After that, a 50 percent rebate is given on tax for three years. A common method of generating funds for round-tripping by domestic firms is by under-invoicing exports and over-invoicing imports. Chinese firms first move capital to Hong Kong SAR or the Caribbean tax havens, then bring it back as FDI. This process enables them to take advantage of preferential tax treatment, originally envisaged for the genuine foreign investors. The correct proportion of total FDI that is the result of round-tripping cannot be established because it has been a clandestine affair. There are neither statistics nor any consensus in this regard. The Hong Kong Monetary Authority (2003) has estimated this proportion was 30 percent of the total FDI in the early 1990s, declining over the years to around 10 percent in the early 2000s. Huang (1998) has estimated that round-tripping was responsible for at least 23 percent of China's FDI in 1992. Thus, FDI statistics are not outright dubious but certainly exaggerated.

Historically approximately half of the committed and realized FDI in China is listed as having originated in Hong Kong SAR, which is a largely self-governing “Special Autonomous Region.” Between 1979 and 2000, 48.50 percent of cumulative FDI commitment and 48.89 percent of cumulative realized FDI was sourced in Hong Kong SAR (MOFTEC, 2001). It is illusory because Hong Kong firms did not invest such a large proportion of FDI. It included an unknown proportion of FDI from the Chinese Diaspora in the other Asian countries, particularly Taiwan, as well as round-tripping. Although firms from Hong Kong SAR were initially the largest investors, their contribution recorded a steadily declining trend.

7. Impact of the transitioning Chinese economy on the Asian economies

In the early 2000s, was China’s dynamic expansion having a favorable welfare effect on the neighboring Asian economies? Experiences of the recent past connote that having a large dynamic economy in the neighborhood generally works in the interest of the smaller developing economies. For example, Mexico has benefited from the presence of the US and AHP economies from the presence of a dynamic Japanese economy. As elaborated above, rapid real GDP growth and improvements in the investment climate have made China a strong magnet for attracting global and regional FDI. The early 1990s was a period of strong expansion of FDI receipts in the ASEAN economies as well as in China. The ASEAN economies did well in attracting FDI and had a global reputation for having aggressive and attractive FDI regimes. This observation applies particularly to Indonesia, Malaysia, Singapore, the Philippines and Thailand. For all the years between 1991 and 1998, Malaysia, Singapore and Thailand received more FDI than the larger regional economies like Japan, Korea and Taiwan. However, the Asian crisis radically changed the *mise-en-scène*. FDI inflows plummeted dramatically in several Asian economies and failed to recover during the recovery. The financial press in Korea, Malaysia, Singapore, Taiwan and Thailand have frequently raised the issue of China’s success being at the expense of its Asian neighbors in the local and regional media. The Asia director of the World Economic Forum, Frank J. Richter, also warned the Asian economies with regard to the investment climate in their domestic economies.²²

China’s growing FDI flows, even in periods when the global FDI took a downturn, caused anxiety among the rival Asian economies, particular the ASEAN economies. In 1990, the ASEAN economies received 51 percent of total Asia-bound FDI; in 2001 this proportion shrank to 11 percent. In the early 1990s, China used to receive close to 18 percent of the total FDI bound for the developing economies of Asia; by 2000 this was 30 percent. Statistical evidence of diversion is clearly there. Some of the ASEAN economies even blamed China for “intercepting” the FDI that was destined to them. A valid reason for decline in FDI to the Asian economies was slowing outflows from the EU and the US, the economies that were the principal investors in these economies. Second, the Asian crisis can also be blamed for exposing the structural weaknesses of the ASEAN

and other Asian economies, rendering them somewhat less attractive to global investors, particularly the TNCs.

An increasing amount of FDI has been flowing to China because its labor costs are lower than that of the competing Asian economies. Any foreign investor who is interested in producing a labor-intensive and low- or medium-technology product for sale in the industrial economies should logically prefer China to the ASEAN economies. A large number of such foreign investors and TNCs that are already producing this category of products in China see fit to reinvest their profits there, because by so doing they can also preclude further geographical diversification of their production facilities, which can potentially affect their cost structure adversely. Japan has been a vociferous critic of China's briskly rising FDI level, which has adversely affected FDI investment in the other Asian economies. However, it is interesting to note that even the Japanese firms have increased their investment in China substantially because it offers significant advantages—including labor cost advantage—over the ASEAN economies (Das, 2005b).

7.1 Impact of the WTO accession

As alluded to earlier, recent FDI increases in China were caused by its WTO accession, which was a structural factor (see Section 6.2). The WTO membership earned China the most-favored-nation (MFN) status, which is an invaluable gain for an economy that attracts large FDI in its export industries. The pre-WTO membership environment had risks of an important trade partner not renewing China's MFN status, and in the process obstructing exports originating from China. Accession brought the risk premium in the export-oriented industries down to zero, in the process enhancing the draw of China as a FDI destination. A related factor was that the WTO accession also increased China's reliability as a source economy for trading partners. Thus, this one important event caused some loss of FDI flows to the rival Asian economies.

That in the post-WTO membership period investors' preference for China increased was apparent from the annual survey that the Japan Bank of International Cooperation (JBIC) conducts among large Japanese firms and TNCs. One of the survey questions asked was to indicate in order of preference the ten most-favored countries for locating manufacturing industries. Between 2000 and 2001, the proportion of large Japanese firms and TNCs naming China as the most-favored location increased from 65 percent to 82 percent. In contrast, mention of ASEAN economies steadily declined between 1996 and 2000. Also, the gap between China and US, in terms of favorite destinations for FDI, improved in China's favor. They were ranked first and second, respectively, in 2000 and 2001 by the Japanese firms. In 2000, this ratio was 65:41, while in 2001 it became 82:32. That is, the gap widened from 24 percentage points to 50 percentage points, assigning China a higher position on their scale.²³ In the JBIC survey of 2005, 76.5 percent of respondent Japanese companies mentioned that they intended to increase "the scale of overseas business operations in China." Many Japanese companies consider China as promising because of its growing market size.

They do not regard China as a short-term investment boom destination (JBIC, 2005).

7.2 Compatibility with the size of the Chinese economy

In Section 6.3, I mentioned that, when global averages are compared, China does not appear to be a dominant recipient of FDI. China is the second largest economy in Asia. Its FDI receipts so far are compatible with its size and the domestic market. If anything, they are somewhat lower than justified by the size of the Chinese economy and natural and human resource endowments. As noted above, FDI is barely 10 percent of its fixed investment, which is much lower than the global average. In the *World Investment Report 2002*²⁴ a benchmarking tool was devised, namely the Inward FDI Performance Index. It is simply the ratio of a country's share in global FDI flows to its share in global GDP. It is an instrument of comparing the relative performance of countries in attracting FDI. A value of unity means that the shares of global FDI flows and global GDP are equal. A country with an index value that is greater than unity is reckoned to have received more FDI than justified by the size of GDP. This index is an indicator of the country having advantages in production, or better growth prospects, or a superior investment environment. Lower than unity value of the index implies that the country in question is protectionist, or technologically backward, or has a political or social system that is not conducive to investment, including FDI. Index values in the report were computed for two periods, 1988–90 and 1998–2000. Table 3.1 provides the values and ranks for the Inward FDI Performance Index for the Asian economies for both periods.

Table 3.1 Inward FDI Performance Index for the Asian-high-performing economies.

| Country | 1988–90 | | 1998–2000 | |
|---------------------|------------|-----------|------------|-----------|
| | Value | Rank | Value | Rank |
| Singapore | 13.8 | 1 | 2.2 | 18 |
| Hong Kong SAR | 5.4 | 4 | 4.9 | 2 |
| Malaysia | 4.4 | 8 | 1.2 | 44 |
| Thailand | 2.6 | 25 | 1.3 | 41 |
| The Philippines | 1.7 | 39 | 0.6 | 89 |
| Taiwan | 0.9 | 58 | 0.3 | 112 |
| China | 0.9 | 61 | 1.2 | 47 |
| Indonesia | 0.8 | 63 | –0.6 | 138 |
| Korea (Republic of) | 0.5 | 93 | 0.6 | 87 |
| Japan | 0.0 | 128 | 0.1 | 131 |
| Average for Asia | 1.07 | – | 0.85 | – |

Source: The United Nations Conference on Trade and Development (UNCTAD). *World Investment Report 2002*. New York, Table II.1, p. 25.

As FDI tends to be lumpy by nature, these ratios were computed as three-year averages. During the first period, Singapore topped the index value. Its share of FDI was 13.8 times the share of its GDP in the global economy. Hong Kong SAR also did extremely well. Malaysia, Thailand, the Philippines and Taiwan were all in the first half of the index list computed for 170 countries. However, the post Asian crisis values of the index were markedly lower. Their rankings dropped precipitously in a short period of a decade. Singapore lost its top position and was ranked eighteenth, although Hong Kong SAR was one economy that recorded improvement during the second period by improving its ranking to second place. Conversely, Malaysia and Thailand slid sharply downward with rankings of forty-four and forty-one, respectively. The Philippines, Taiwan and Indonesia slipped to even worse positions. They found places in the lower half of the table with rankings of eighty-nine, 112 and 138, respectively. This demonstrates a dramatic reversal in the capability of the ASEAN economies of attracting FDI. This country group has lost its old status as attractive destinations for global FDI flows.

Both China and Korea managed to improve their rankings over the two periods. Of the two, China recorded an improvement from the sixty-one to forty-seven, an upward motion of fourteen places, whereas Korea improved its rank for ninety-three to eighty-seven, an upward motion of six places. According to the Inward FDI Performance Index, China's performance cannot be rated as high or impressive as that of Singapore and Hong Kong SAR during the first period. Although there was an improvement in its ranking, its performance in attracting FDI was merely above average. China's index value was 1.2 in the second period, which was a small improvement over the value of 0.9 in the first period, which was even less than unity. Even after the jolt of the Asian crisis, China was ranked below Malaysia, Singapore and Thailand. Computation and comparison of the Inward FDI Performance Index vividly demonstrates that China's share of global FDI flows has not been out of proportion. Notwithstanding the fact that FDI flows to China dramatically spurted in the early 1992 and again in the 2000s, they only kept pace with China's strong GDP growth performance. Relative to the size of their GDP, during the 1990s many neighboring Asian economies had performed better than China in attracting global FDI.

7.3 Zero-sum-game assumption

The general perception of the antagonists that China's increasing FDI has been at the expense of its Asian neighbors is based on "the assumption that FDI is a zero-sum game" (Wu *et al.*, 2002). If this assumption is correct, every time there is a rise in FDI flows to China, there should be a corresponding decline in flows to the ASEAN and other Asian economies. Casual empiricism fails to establish such a correspondence. Such an assumption is flawed because there were periods when both the ASEAN economies and China received higher FDI at the same time. One such period was 1989–97, when both of them shared an increasing FDI trend. In the case of China it soared from \$3.4 billion to \$44.0 billion, whereas for the ASEAN economies it soared from \$7.6 billion to \$27.0 billion during the period

under consideration. This does not justify the assumption that China benefited at the expense of its neighboring economies.

Regression analysis by Chantasasavat *et al.* (2004) has attempted to estimate the impact of inward FDI flows into China on Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand for the 1985–2001 period. Their strategy was to control for all the standard explanatory variables of FDI in the Asian economies. To proxy for China's effect, they chose the level of FDI inflows in China. Their estimates found that the value of the coefficient for inward FDI into China was positive and highly significant in all the specifications. They concluded that a 10 percent increase in FDI inflows into China would raise the level of FDI inflows into the eight Asian economies they considered for their empirical study by about 2 to 3 percent. Thus, increasing FDI in China is not at the expense of the Asian economies; if anything, they benefit from it. One explanation for this increase could be the production networks among the Asian economies, of which China is an integral part. In addition, Asian economies are heavily involved in a vertical trade specialization with China, which may lead to increasing FDI in them when FDI flows into China increase. Another detailed empirical exercise (McKibbin and Woo, 2003) has concluded that changing the direction of FDI in Asia will lead to welfare losses in the ASEAN-4 economies "only if the ASEAN-4 economies fail to absorb new foreign technologies quickly and to engage in indigenous technical innovation." In the past, the ASEAN-4 economies were decidedly and amply technology conscious and one can see no reason why they would not continue to be so in face of the Chinese challenge.

China's neighbors are regarded as high-performing economies and have earned global accolades for their postwar economic dynamism. Many of them have created successful niches for themselves in the global economy (Das, 2005a). Sensitive to the allegation of disrupting and dislocating the performance of its regional neighbors, China has endeavored to manage its economic relations with them by proposing a free-trade agreement (FTA). Although an FTA is yet to be formed, a trade accord was signed during the tenth ASEAN Summit of 2004.²⁵ This may well be a precursor to an FTA in the near future (Yu and Cheng, 2004). This lack of insouciance demonstrates China's commitment to not only good neighborliness but also to responsible conduct in the community of nations.

8. Advanced-technology exports: another global accomplishment

Technological upgrading in the industrial sector was a perpetual concern of Chinese policy mandarins. It discernibly benefited China's manufacturing industries. In a short span of two decades, it has moved up several rungs of the technology ladder, rendering China competitive in a range of advanced-technology products. Consequently its export structure has constantly moved up the value-chain; starting from low-technology, low-price products it now exports sophisticated state-of-the-art technology products. China's exports are no longer limited to labor-intensive, low-price manufactured goods. The economy is moving up the

value-chain from simple manufactured goods like textiles, shoes and toys to sophisticated electronics. Martin and Manole (2004) have computed that China's long-term (1981–2001) average growth rate of high-technology exports is exceedingly high (see Chapter 2, Section 6). China's high-technology export growth grew three times the world average export growth rate for this category. It was 38 percent per annum for China, while the world average was 18 percent.

A noteworthy—in no way surprising—development is that, after a decade of explosive growth in the electronics sector, in 2004 China overtook the US as the world's largest exporter of advanced-technology products like laptop computers, information technology products, cellular phones and digital cameras. In 2003, the US was the global leader in this category with exports of \$137 billion, followed by China with \$123 billion. China exported \$180 billion worth of high-technology equipment in 2004, compared to the US exports of \$149 billion (OECD, 2005b). This is a veritable landmark in China's industrial diversification and technological up-gradation. It is no longer a country of low-technology sweatshops, but one that has sophisticated electronics factories. China's total trade (imports + exports) in advanced-technology products and ICT products in 1996 was less than \$35 billion. Growing at the rate of 38 percent a year, it soared to \$329 billion in 2004.

Trade statistics show a shift towards more trade between China and the Asian economies, with a corresponding decline in high-technology imports of the region from the EU and the US. Until recently, China relied on imports from the EU and the US for electronics components, such as integrated circuits (ICs) needed to manufacture laptops and advanced mobile phones. China is a large importer of ICT components but the sources of its imports have changed; it has started sourcing them from other neighboring Asian economies. In 2004, Japan accounted for 18 percent of China's total imports of ICT components, Taiwan 16 percent, Korea 13 percent and Malaysia 8 percent. China's imports of components and intermediate electronics products from Japan, Taiwan, Korea and Malaysia have increased significantly and China's trade deficit with these regional economies in electronics has grown large. In addition, China itself has been growing into a large manufacturer and substantial exporter of many of these components, thus reducing its overall import needs.

China is the single largest exporter of advanced-technology and ICT goods to the US. It overtook Japan in 2004, when it supplied 27 percent of all US imports in this category, up from merely 10 percent in 2000. China's trade surplus in this category of trade with the US was \$34 billion in 2004 and with the EU \$27 billion (OECD, 2005b). China's large and growing overall trade surplus with the US was \$103 billion in 2002, \$124 billion in 2003 and \$162 billion in 2004, which fueled trade frictions.²⁶ It was basically the growth in imports of advanced-technology products from China that was largely responsible for the growing US trade deficit. It is an evidence of China's progress in its long-term plan to upgrade the capacity and technological prowess of its manufacturing sector as it strives to become a global economic power to be reckoned with. China has begun to impose its own technology standards on a range of consumer products,

including cellular phones, digital photography and wireless networks. This could enable China to dominate the future global markets for information and communication technology (ICT) products.

9. Swaying regional and global economies

China is not only making its presence felt in the regional and global economic arenas but also shaping their contours. It has grown into a large presence in several global markets and has been swaying oil and commodity prices. In 2004, with a GDP of \$1.3 trillion, it was the sixth largest global economy, larger than Italy, Canada and Spain, in that order. China has earned global kudos for its buoyant economy and well-documented emergence as a global export powerhouse for manufactured goods at varying levels of technology. Measured as a proportion of GDP, in 1978 trade was 9.8 percent of China's GDP; this proportion soared to 60.1 percent in 2003. In 2003 China's imports expanded by a remarkable 40 percent in nominal dollar terms (i.e. not adjusted for price changes) while its exports expanded by 35 percent—unprecedented levels of expansion for a country with such a substantial trade volume.²⁷ Japan, the US and EU are China's largest markets, together accounting for 39.9 percent of China's exports in 2003.

As stated in Chapter 1 (Section 5.1), when the PPP exchange rate is used, China is the second largest economy after the US. However, an amber signal is necessary. While the PPP measure overstates China's GDP, the conventional measure that uses market exchange rate underestimates it (Wong and Ding, 2003). Rapid economic growth has ensured political stability. The Chinese Communist Party survived the 1989 Tiananmen Square clampdown. Rapid economic growth in 2004 and the first half of 2005 led Standard and Poor's to raise China's foreign and local currency debt ratings to A- in July 2005.

China is exerting an unprecedented degree of influence over regional and global trade. Several Chinese industrial sectors, including steel, are considered competitive in the global market place. Its imports of iron ore surpassed those of Japan in 2003, making it the largest consumer of iron ore and steel in 2003. It was also the largest consumer of tin, copper, zinc and platinum, the second largest consumer of aluminum, lead and oil, and the third largest consumer of nickel. Due to its heavy construction activity, China became the largest importer of cement in 2004. According to WTO trade statistics, China accounted for 8.9 percent (\$593.7 billion) of the global merchandise exports in 2004, up from 2.7 percent in 1995 (WTO, 2005). Rising levels of intra-regional and global trade put severe pressure on China's fast-growing ports. In mid-2003, the southern Chinese city of Shenzhen overtook Kaohsiung in Taiwan to become the world's fifth-largest container port (*The Economist*, 2003).²⁸

Both before and after the WTO accession, overall growth in China's imports has been brisk. Consequently it has become an export market of global significance for other economies. In 2003 it was the third largest importer of goods from developing economies. The US and the EU were the first and second, respectively. China's imports from the surrounding Asian economies also rose at

an extraordinarily rapid rate. The surrounding economies primarily included the NIAEs and the ASEAN-4 economies. A novel trend in Asian export evolved, in that China turned into an energetic center for regional reprocessing and a manufacturing hub for re-export to the industrial economies. This development assigned China the role of the regional engine of growth, which up to then was largely played by Japan. During the recent period, China's regional imports of electronics parts and components recorded a marked increase. This was due to China's increasing electronics exports to the EU, Japan and the US markets. In the foreseeable future, China is likely to become a larger regional engine of growth than Japan, integrating further with the surrounding regional economies, and imparting dynamism to their growth.

In keeping with its role of the regional locomotive of growth, China's imports of primary commodities from the regional and global markets went on increasing since the early 1990s. By the early 2000s, it became a prominent importer of several key commodities. It has been importing a rising share of world exports of aluminum, cement, coke, iron ore, oil, copper, nickel, steel and soybeans. It is one of the largest importers of iron ore and aluminum. China became an important player in several product markets and has contributed to the recent strength in global commodity prices. During 2004 nickel prices doubled in the global markets because of the insatiable demand from China. By 2005, it dictated global prices of a range of products from cement to microchips.

A notable impact was observed in the global steel industry, which has been undergoing a revival. The most important factor behind this revival is China's soaring demand, which has sent steel prices spiraling upwards. Benchmark hot-rolled coil was priced at \$200 a ton in 2001. It broke the \$600 a ton price barrier in 2004. In a bankruptcy-prone industry, this price boom ushered in a period of profits and high valuation. By any stretch of imagination, the Indian economy did not make any comparable wide-ranging impact over the global commodity and product markets. Also, it has not played the role of a locomotive economy even for the seven surrounding south Asian economies, which are members of the SAARC.²⁹ This invaluable opportunity should have been deftly created by Indian business and policy community. Thus far, Indian business leaders and policy professionals have tended to ignore it.

The transnational corporations (TNCs) regard China as a special economy in their strategic plans. That China is being regarded as an important market is indicated by the fact that General Motors has announced (June 2004) plans to double its capacity and introduce 20 new models into China over the next three years. Given that every large car manufacturer was making similar plans, it appears that the industry could be driving towards excess capacity by as early as 2007. Nonetheless, General Motors remains convinced that it can continue to succeed in China, largely at the expense of less-experienced local players. General Motors has been highly successful in China, increasing its market share from 4.5 percent in 2001 to 10 percent in 2004 (EIU, 2004).

There is a growing perception that China may join the ranks of the industrialized countries in a shorter time than visualized earlier by truncating the usually

long industrial development process. As China has been effectively competing with Japan in many markets in high-technology and ICT products, many Japanese analysts are convinced about this leapfrogging hypothesis and tend to think of China as a future threat. Due to the growing strength of ICT exports from China it is believed by some that the export structure of China is nearly on a par with that of Japan. Evidence of these assumptions is generally drawn from isolated cases, rather than systematic analysis and comparison. One reason for this flawed perception is that, while there are indicators to evaluate the international competitiveness of individual products and industries, an index to evaluate the competitiveness of the export structure of an economy does not exist. Kwan (2002) has developed a methodology to measure the level of advancement of each economy's export structure based on the weighted average of the level of sophistication or value-added of products that comprise the export structure. This study concluded that while high-technology manufactured goods and ICT products have become a substantive part of China's fast expanding exports, its competitiveness still lies in low-value-added, low- and medium-technology exportables. Even in the fast growing ICT sector, China's competitiveness lags behind Japan's. Although there are overlapping areas, a clear division of labor was found between Japan and China by Kwan; the former having competitive advantage in high-value-added products, the latter in the low-value-added products. This trend is in keeping with Kaname Akamatsu's (1961) age-old "flying geese paradigm," and by the early 2000s China's industrial structure had not leapfrogged over Japan's. One wonders about future developments.

10. Conclusions and summary

China has recorded vertiginous economic growth during the post-1978 period. It is manifested in its regional and global presence which has grown markedly. China's global shares of trade, foreign investment and production soared at a historic pace in a short span of two-and-a-half decades. It is swaying regional and global institutions, economic structure and markets. It became the largest FDI recipient in the global economy in 2002 and the largest exporter of ICT and other advance technology products in 2004. It is not without reason that some analysts regard China's economic ascendance as a quiet rise of a superpower.

One of the characteristic features of contemporary Chinese economic growth is its high saving and investment rates, both in comparison to its past and to that in other EMEs. Its macroeconomic management was prudent, if conservative, and the budget deficit was routinely kept at a low level. There were many factors that were responsible for the success of reforms in China. The fundamental reason why the reform program has succeeded in China is that the political leadership, which was earnestly committed to it, is not beguiled by ideological dogmas. Their approach to implementation gave high priority to pragmatism. There was nothing of value in the capitalist economic system that they did not rationally consider and adopt for China. That said, reforms are still incomplete; they are a work

in progress. Two areas where reforms have seriously lagged are SOEs and the financial sector.

Both before and after the WTO accession, overall growth in China's trade was brisk. China has emerged as a large trading economy. It has become an export market of global significance for the other economies. In 2004 it was the third largest exporter and importer. There are far reaching domestic, regional and global ramifications of China's emergence as a large trading economy. China's rapid trade expansion will materially affect both its developing and industrial country partners. China has constantly diversified its import and export markets. NIAEs and ASEAN economies have emerged as China's important trade partners. With many of them China has trade complementarity. It has also integrated well by way of production networks with the regional and global economies. China is the third largest trader with the developing economies *en masse* after the EU and the US. Using the GTAP model, various empirical studies have concluded China's WTO accession and trade expansion has favorable welfare implications for both China and the global economy. The liberalization strategy for attracting FDI was carefully planned. Most importantly, the expansion of SEZs was instrumental in attracting FDI in a consequential manner. WTO accession was helpful in further stimulating FDI inflows.

4 The elephant's saunter: the transitioning Indian economy

India has been among the fastest-growing economies in the world over the last two decades, and has achieved trend improvements in growth, literacy, mortality and poverty rates ... Yet despite these gains poverty remains high, with more than a third of population still living below the official poverty line.

The International Monetary Fund
May 2000, p. 117

1. Introduction

In terms of sheer physical size and population, India, like China is comparable to a medium size continent. Measured by land mass, it is the seventh largest country in the world. The largest democracy, India has had negligible international economic weight until recently. Since independence in 1947, its importance and participation in the global economy has progressively declined and it remains a marginal economy and country.

When it became independent, India had a reasonable place in the world of multilateral trade, and it was one of the 23 founding Contracting Parties (CPs) of the General Agreement on Tariffs and Trade (GATT). In 1948, India's share in multilateral trade was 2.2 percent, which was higher than that of China (0.9 percent) and Japan (0.4 percent). India's share in multilateral trade further rose to 2.4 percent in 1950, but plummeted to 0.4 percent in 1980, rising a little to 0.5 percent in 1990, and further to 0.7 percent in 2000. It has remained by and large stationary since then and in 2004 it accounted for 0.8 percent of multilateral trade. Thus, during the post-independence period India was completely marginalized in the multilateral trade arena, although paradoxically this was a period of rapid growth in multilateral trade. The early decades (1950–73) were period of rapid growth, when it grew at an average annual rate of 7.9 percent. The growth rate of Indian exports was 2.7 percent during the period under consideration, which was close to a third of the average growth rate of multilateral trade. In 2004, India accounted for 1.62 percent of global GDP, but only 1.01 percent of multilateral merchandise trade.

India was also not regarded as a major recipient of foreign direct investment (FDI) at any stage in its economic growth during the postwar years. When private capital flows from the global capital markets to the emerging-market economies (EMEs) began to grow at a rapid rate in the mid-1980s, India was once again not regarded as a favored destination by the global investing community.¹ Although rich in diverse natural resources as well as human capital, it remained an impoverished, low-income, slow-growth economy, with a significant proportion of population living below the poverty line. Charles De Gaulle's remark about Brazil,

that “it has enormous potential, and always will,” aptly applies to the Indian economy as well. Relative to its physical size and population its global presence is still modest at best. The macroeconomic and structural policy package followed by India during the post-independence era brought it to the brink of bankruptcy in 1991. Before that, the Indian economy had suffered from a series of balance of payments (BoP) crises, the first one precipitating in 1957.

According to the statistics published in the latest (2005) *World Development Indicators* its population is 1.06 billion, the second largest after China. On the current trend, India's population will cross 1.5 billion by the middle of the twenty-first century, overtaking China's. Its gross national income (GNI) is \$570 billion, which ranks it twelve in the global economy. When measured at the purchasing power parity (PPP) exchange rate, India's GNI rises to \$3,062 billion. India's per capita income is \$540 at the market exchange rate, making it 159th in the global ranking of per capita income. The per capita income measured in PPP terms improves it to \$2,880; its global ranking improves to 146th (see Chapter 1, Table 1.1). Over a third (34.7 percent) of India's population, or over 300 million, still lived on \$1 a day.²

2. Fervent *dirigisme* and recent growth trends

The quote at the beginning of this chapter is from the *World Economic Outlook* (2000)³ and is fraught with meaning and veracity about the present state of the Indian economy. To be sure, economic performance has improved relative to India's own past. It has made noteworthy strides and the negative perceptions about its economic performance and prospects are beginning to change. A segment of its tertiary sector has successfully and gainfully globalized and has been engendering commendable and lucrative results. Growth in this sector has recorded a remarkable rise in the 1990s.

Likewise, some industries and services sector firms have picked up a great deal of momentum and are turning out world-class products. For instance, steel production in India is among the lowest-cost in the world. Pharmaceutical and biotech firms are becoming competitive internationally. Indian firms are not only carrying out their own research and development (R&D) but also for large international firms and transnational corporations. During 2004, Indian pharmaceutical companies filed for 200 patents. However, despite remarkable progress in some areas of the economy, others continue to mournfully lag behind. While success in the services sector has been creditable, the numerous other sectors of the economy have been languishing as they have in the past. This uneven progress—or enclave economy scenario—raises valid questions about the impact of and the need for economic and structural reforms on growth endeavors in India. Earnest and efficient reform and restructuring measures are required to achieve and sustain high GDP growth rate and make greater inroads into poverty alleviation.

As evidenced by the long-term average real GDP growth rates, growth during the early decades after independence was stifled by *inter alia* adoption of a state-led

import-substituting industrialization (ISI) regime, which was an inward-oriented growth strategy (see Chapter 2, Section 5.1). It was erroneously believed that ISI would work as the engine of economic growth and development. The ISI regime was implemented with the help of an extremely restrictive trade regime. Strict licensing of imports and quantitative restrictions (QRs) on them were rampant. A gigantic public sector was created, which comprised large, grossly inefficient and wasteful firms. The private sector was made to conform to the priorities of the successive Five Year Plan exercises by strictly controlling investment, capital issues, foreign collaborations, imports of capital goods and technology, as well as intermediate inputs. The economic system that emerged as an outcome of these strategies was that of highly distorted price signals. The Indian economy soon became the most highly regulated economic system in the world. Although this economic strategy was not the command economic system, like that of the Soviet Union, it was a statist one. It suffered from an excessive degree of government planning and unwarranted regulations and controls, or in one word *dirigisme*.⁴ Policy-makers of this period were impressed by the economic achievements of the Soviet Union and emulating it was considered an economic panacea.

The fervent dirigistic tradition continued to be the bane of the economic system and blighted it for decades. Whenever the dirigistic economic strategy failed to show wholesome results, it was belatedly revised and made more stringent. Excessive state interference in economic affairs remained a curse to the economy. Although it has been somewhat diluted in the recent past, whether the economy has broken loose from this tradition is open to doubt. The consequence of this strategy in terms of GDP growth was poor. During the 1951–79 period, the average annual real GDP growth rate was a paltry 3.7 percent, while the real per capita GDP growth rate was 1.5 percent per annum. Over the 1980–90 period, a minor improvement was observed and the average real GDP growth rate picked up to 5.9 percent per annum and the real per capita GDP growth rate rose to 3.8 percent per annum.⁵ The unprecedented parliamentary majority (77 percent of all Lok Sabha seats) received in 1984 by the Rajeev Gandhi government enabled it to introduce some reform measures without worrying about the opposition. Although these reform measures were minor by any standard, they did have a discernible impact for a short period on economic growth, and in the late 1980s the Indian economy became one of the rapidest growing economies in the world. This growth was accompanied by a rapid total factor productivity (TFP) growth, which had stagnated for a prolonged period (Ahluwalia, 1991).

The pre-1980 GDP growth performance of the Indian economy was unimpressive in absolute and relative terms when India was compared to the neighboring Asian high-performing (AHP) economies.⁶ However, DeLong (2003) has pointed out that, judged by the usual standards of developing country growth over the post-World War II period, this performance was “normal.” A comparative analysis of cross-country growth experience of 85 developing economies over the 1960–92 period placed India’s growth performance squarely in the middle. Between independence and 1992, while the Indian economy for certain did not perform as meritoriously as the AHP economies, it at least did not perform as poorly as the

sub-Saharan economies. If long-term growth rates of all 200 economies, for which the statistical indicators are regularly compiled and published by the World Bank, are taken into consideration, only ten economies performed better than India during the 1980–2003 period (see Chapter 2, Section 1).

What is noteworthy is that the above-noted improvement in the growth performance of the Indian economy during the 1980s took place when the aggregate performance of the developing economies (excluding the transition economies) was on a steady decline. The performance of the Indian economy ran counter to the broad performance of the developing economies. Average per capita real GDP growth rate in the developing economies declined from around 3 percent in the 1970s to nearly 1 percent in the 1980s. The factors that caused this decline included worsening terms-of-trade (TOT), the debt crisis that mauled several developing economies in the early 1980s and continuance of inferior macroeconomic and structural policies. As opposed to this, the average growth performance of India in the 1980s exceeded that of all the sub-groups among the developing economies, except the dynamic economies of East Asia. Taking a decadal average of the real GDP growth rates, Brahmhatt *et al.* (1996) ranked 115 economies (eighty-nine developing and twenty-six industrial) and found that India's rank improved from eighty-seventh in the 1970s to thirteenth in the 1980s. Not being integrated with the global economy, the Indian economy was neither adversely affected by the deteriorating TOT nor by the debt crisis of the early 1980s.

A downside of the improvement in GDP growth performance in the 1980s was that the existing macroeconomic imbalances had worsened. They were reflected in constantly rising fiscal and current account deficits. The rate of accumulation of external debt was also high and unsustainable. To no one's surprise, this witch's brew finally led to the fiscal-cum-Balance-of-Payments (BoP) crisis of 1991, which is analyzed in the next section.

Immediately after the 1991 crisis in the Indian economy, the GDP growth rate slipped. The average for 1991–3 was close to 2 percent, which brought India's ranking down to twenty-eighth during the early 1990s in the sample of the 115 countries (Brahmhatt *et al.*, 1996). The GDP growth rate picked up in 1994 and it did not fall below 5 percent until 1997. Over the 1992–7 period the average annual real GDP growth rate was 6.8 percent, which was a little higher than the average for the developing economies (6.4 percent) for this period. Furthermore, the Asian crisis of 1997–8 did not affect the Indian economy, primarily because of the reason as given above; that is, it was not globally integrated and had remained insular. The contagion that engulfed several of the AHP economies did not affect India. Two of the other factors that were helpful in keeping India's financial sector secure from the contagion effect were, first, banks in India were discouraged by the central banking authorities to invest in real estate and the stock market and, second, corporate exposure to external short- and medium-term debt was low, much lower than the crisis-affected economies of Asia.

Over the 1997–2002 period, average annual real GDP growth rate declined to 5.1 percent; the decline was essentially attributable to poor monsoons and other

domestic factors. As a good deal of agriculture in India is still rain-fed, monsoons have a decisive impact over economic performance. In 2002, India suffered from its most serious drought in almost two decades. The real GDP growth rate picked up in 2003 to 8.5 percent. This rebound was led by an improvement in agricultural growth, which reached 9.1 percent, the highest level recorded since 1996. The agricultural sector is still an important one in the Indian economy, although the proportion of total output accounted for by the agricultural sector in GDP has fallen steadily. It accounted for over half of GDP in 1950, but for only 22 percent in 2003 (see Chapter 1, Table 1.1). However, the proportion of population dependent on agriculture has not declined rapidly. This proportion was 77 percent in the early 1950s, but was still high at 62 percent in 2004. In 2004 the real GDP growth rate declined to 6.5 percent, but improved marginally to 6.9 percent in 2005.

3. The fiscal-cum-Balance-of-Payments crisis

During the initial post-independence period, the macroeconomic stance of policy-makers was conservative. However, this fiscal conservatism was supplanted by an expansionary fiscal policy in the early 1980s. The federal and state governments became large borrowers from the Reserve Bank of India (RBI), the central bank. The first set of furtive reforms mentioned in the preceding section, which were adopted in 1984, was accompanied with an expansionary macroeconomic stance. It raised the fiscal deficits to 8 percent of GDP in the late 1980s. The resulting debt burden was customarily financed by borrowings in the domestic and international financial markets at high interest rates. The fiscal stimulus undoubtedly was one of the contributing factors to the acceleration of growth in the 1980s. Neither fiscal deficits of such large magnitude nor high levels of borrowings were sustainable. The fiscal stimuli—or profligacy, if you like—also became one of the causal factors of the 1991 crisis. According to the statistics published by the Government of India,⁷ during the fiscal year 1990–1,⁸ the combined gross fiscal deficit of the federal and state governments was 9.4 percent of GDP. At this time, the current account deficit had risen to 3.2 percent of GDP, or about \$10 billion. The rate of inflation was running at 10 percent.

The Gulf War of January to April 1991 proved to be a grim external shock for the Indian economy and took a heavy toll through, first, a war-induced oil price hike and, second, by causing disarray in the remittances from the large population of the Indian expatriate labor force in the Gulf countries. Many of them were prematurely repatriated to remain unemployed in India. Although the trigger of the fiscal-cum-BoP crisis was the Gulf War, it would have been precipitated even without the Gulf War (Basu, 2005). India had come perilously close to defaulting on its international financial obligations. By June 1991, the foreign exchange reserve level plummeted to two weeks of imports cover (see Chapter 2, Section 3). The International Monetary Fund (IMF) norm regarding the minimum level of reserves for the member countries at this time was reserves adequate to finance

two months of imports. This situation had arisen in spite of an IMF loan of \$1.8 billion in January 1991 and sharp cuts in imports in early 1991. During the fiscal year 1991–2, industrial production grew at the rate of 0.7 percent and GDP growth was 1.3 percent. The deteriorating BoP situation further worsened the fiscal deficits. The debt-service ratio was high at 35.3 percent of the current foreign exchange earnings. What was worse was that the stock of short-maturity foreign currency denominated debt was at a dangerously high level. In March 1991, it was 146.5 percent of the total foreign exchange reserves. Twin probabilities of currency depreciation and default on short-term loans seemed not only real but also close. Non-resident Indians (NRI) had reasons to be wary and they began withdrawing their foreign currency deposits in NRI accounts.

To be sure, the economic crisis provided a rationale for a radical shift in the non-operational economic strategy that had been continuing for decades. However, there were several non-economic reasons that supported the same move. First among them was the fact that the few macroeconomic liberalization policy measures taken in 1984 and 1988 did show diminutive, albeit noticeable, favorable results in terms of increase in labor productivity and quickening the GDP growth rate. However, it eventually did not—certainly, could not—prove to be sustainable. This made liberalization politically acceptable, although it failed to create a constituency for the adoption of a major macroeconomic reform program. Second, for years several noted analysts, perceptive observers, academics and thought leaders had pointed out the folly of the inward-oriented economic policy regime, autarchic industrialization, and the resulting high cost in terms of a lack-luster long-term GDP growth performance. While their opinions were considered irrelevant in the past and disregarded, the crisis made it worthwhile to take a second look at these dissenting strategies. Third, between 1989 and 1991 the Soviet Union disintegrated economically and politically, which put into question the central planning strategy to which Indian policy-makers had adhered so avidly. Fourth, China's notable success after it had adopted the market-friendly "open-door strategy" was another good reason to promote a paradigm shift. Fifth, a tiny segment of knowledgeable Indian policy-makers had also paid lip-service to the achievements of the AHP economies in the past and expressed hope of emulating them some time in the future. They grew in number and strength during the 1991 crisis period.

3.1 Principal policy areas for reforms and restructuring

The 1991 reform program was launched by the minority government formed by the Congress Party and continued by successive coalition governments that were formed in 1966, 1998 and 2004. The reform program was consistent with orthodox neoclassical economic principles, something that the Bretton Woods institutions would propose. It had the unmistakable imprint of the Washington consensus over it.⁹ For a short time, it demonstrated that Indian policy-makers had learned something from the meritorious experiences and achievements of the AHP economies.

An array of structural rigidities was addressed during the early period of implementation of the reform program. Deregulation and liberalization measures were taken both in domestic policy areas and the external sector of the economy. In the former case, licensing requirements for making domestic investment and administrative control over resource allocation were considerably curtailed. In 1991, licensing requirements for all but eighteen industries were abolished. By 1998, this number came down to six. A large number of industries were reserved for investment only by small-scale industrialists (SSI). This age-old practice for “reservation” for the SSI sector was a hindrance to creating competitive firms that could benefit from scale economies in production. These restrictions were liberalized, albeit slowly. Similarly, the industrial sectors that were reserved for the public sector in the past were de-reserved. Measures were taken to expand the role of the private sector in the economy. Similarly price deregulation and serious financial sector reforms were attempted. Price controls on iron and steel, coal, and fertilizers were eliminated.

Other major areas of reform were addressed too. The Monopolies and Restrictive Trade Policies (MRTP) Act, which required prior approval for capacity expansion and diversification by private sector industries, was abolished. A system of a market-determined exchange rate policy was adopted, which was to operate in an environment of a liberalizing trade regime. There was removal of QRs and the slashing of peak tariff rates from 300 percent to 30 percent. Restrictive regulations over FDI inflows were liberalized and it was permitted in a wide spectrum of industries. Other non-debt creating inflows were also encouraged and short-term external debt was severely restricted. Lastly, wide-ranging financial and banking sector reforms were initiated, which included deregulation of interest rate.

Liberalization measures do have a real impact over the economy. The airline and automotive industries exemplify how much the economy has benefited from domestic liberalization and deregulation. In 1991, there was one state-owned domestic air carrier, providing ridiculously inefficient and low quality services. In 2005, there were eight competing air carriers and India has become the world's second largest commercial aircraft market. On-time performance and service levels have improved beyond recognition and air-fares have dropped sharply. Consequently, passenger traffic has been projected to grow by 20 percent annually until 2010. Likewise, in the automobile sector, deregulation has initiated competition; a local company, Tata Motors, has succeeded in capturing 15 percent of the domestic market. Car sales have spiked from around 150,000 units in 1991 to over a million in 2005 (Pandit, 2005a). Over this period, employment in the automobile industry has tripled. These are encouraging indicators of the success of liberalization and deregulation.

Conversely, India's large and grossly wasteful public sector, which needed an instantaneous adoption of aggressive privatization policies, was dealt with in a reluctant manner. Attempts were made to sell minority stakes in the public sector enterprises, with the principal objective of raising revenues for government. The reasons for making such flagrant errors emanates from the political expedience of Indian polity. The new Congress Party-led coalition government that came to

power in mid-2004 was a coalition of twelve poorly matched political parties in terms of political philosophy and strategy. Although the coalition named itself the United Progressive Alliance (UPA), member parties had fundamental disagreements over what and how to reform and restructure the economy. An idiosyncratic feature of the new government was that Dr. Manmohan Singh, the intellectual prime minister of India, was in office but not in power. All the important decisions were taken by Mrs. Sonia Gandhi, the president of the Congress Party. The new government distanced itself from privatization of the public sector and announced closure of the Ministry of Disinvestment. This major policy error is sure to have a high economic and social cost in the future.

In an endeavor to repair the external sector of the economy, the rupee was depreciated (see Section 3.2). Its net real depreciation was 25 percent. Between 1991 and 1993 a dual exchange rate prevailed. It was unified in 1993. Export subsidies and the QRs on the import of capital and intermediate were eliminated in 1991. The number of items restricted by QRs and the number of banned and restricted import items were significantly reduced. India adopted full current account convertibility in 1994, and simultaneously adopted IMF Article VIII status. Items of bulk import, like cereals, newsprint, petroleum, ores, fertilizers, chemicals and metals and metal products, were traditionally imported by the government-owned canalizing agencies, like the State Trading Corporation (STC) and the Metals and Minerals Trade Corporation (MMTC). This system of government monopoly on imports was egregiously inefficient, but persisted for decades. It was finally abolished in 2001.

In response to a complaint by the US, India was forced by the World Trade Organization (WTO) to drop QRs on consumer goods and agricultural imports in 2001. In view of large fiscal deficits, and the need to strengthen the financial sector, India's cautious move on the liberalization of its capital account is justifiable. To be sure, fiscal consolidation and strengthening of the financial sector are preconditions of capital account liberalization. Policy measures taken by the RBI in 2005 eased corporations' access to global capital markets. According to the new limits, RBI approval is required only for loans larger than \$500 million, as long as the minimum maturity requirements are met. Along with this move, the limit on foreign investors' holding of government bonds was also raised in 2005.

At the beginning of the reform program, tariffs and non-tariff barriers in the Indian economy were the highest in the world. At time of the 1991 crisis, India was the most autarkic country in the world, barring the economies of the former socialist block. The reform program gradually ushered in structural change and tariff barriers were reduced in steps. Maximum tariff rates were gradually reduced from 150 percent in 1991–2 to approximately 30 percent in 2002–3. Some of the strategies of the AHP economies were adopted, in particular those that boosted their export performance. Schemes were devised to allow exporters to import capital equipment, machinery and inputs duty-free in return for higher export targets. Similarly, raw material, components and parts imports were also allowed duty-free or at concessional rates.

Some liberalization of direct capital inflows also accompanied trade liberalization over the 1990s. Controls on FDI and portfolio investment were relaxed. In the former case, a 51 percent stake by foreign investors began to be approved by authorities in a good number of industrial sectors. Investors from the global capital market were allowed to invest in Indian stock and debt markets. Indian firms were allowed to raise capital in the global capital market using instruments like Global Depository Receipts (GDRs) and American Depository Receipts (ADRs) (Thirlwell, 2004).

By mid-2005, India's foreign exchange reserves had increased to \$144 billion, a far cry from the situation in 1991. The principal sources of these reserves are inflows of foreign investment—portfolio as well as direct—and banking capital, including deposits by NRIs. A major contribution to the reserves was made through the current account. Software exports, information and communication enabled services (ICTeS) and BPO earnings crossed \$17 billion in the fiscal year of 2004–05 (see Section 6.1). Remittances from expatriate Indian workers in the US, the EU economies and the Middle East increased to \$21 billion during the fiscal year of 2005. Large reserve accumulation has partly been done so that the embarrassing situation that had arisen in 1991 does not arise again. The present high level of reserves is the highest ever for India and has led to a debate regarding their appropriate utilization and optimal size. The Indian economy has suffered from well known infrastructural weaknesses, which have been having a telling effect. Therefore, the Government of India intends to use a part of these reserves for financing the long-awaited infrastructure construction. To this end, in the 2005 budget a scheme was announced. Given the low, even negative, yield from infrastructural investment, this step has been criticized by many analysts (Singh, 2005a).

3.2 Short-term achievements of reforms

Judged by any norm, India was a latecomer to economic and structural reforms. As the macroeconomic reform program of 1991 was designed in response to the crisis, its foremost objective was to achieve economic stability in as short a time span as possible. The immediate crisis management was capably accomplished by Dr. Manmohan Singh, a trained economist and a technocrat-turned-politician, who was appointed the new Finance Minister. Crisis control measures were taken in a textbook manner; that is, expenditure compression through sharp fiscal correction and expenditure switching through depreciation of the rupee.

The reform program worked adequately as intended and the short-term objective of achieving economic stability was achieved. The following statistics testify to the success of the reform program. Fiscal consolidation was attempted in a purposeful manner. By 1992, the gross fiscal deficits had declined to 5.7 percent of GDP, non-oil imports declined by 22 percent, inflation was reined in from double to single digits, although the target was missed. The current account deficit was reduced to 0.7 percent of GDP by 1993. The stock of short-maturity

foreign currency debt declined to 76.7 percent of total foreign exchange reserves in 1992 and further to 64.5 percent in 1993. The rupee was depreciated in 1991 and a floating exchange rate regime was adopted in 1993. Notwithstanding the fiscal contraction, the real GDP growth rate recovered to 5.1 percent in 1992. By 1993, a turnaround was observed in the key indicators of the external sector. The foreign exchange reserves level rose to more than eight months of imports cover. The debt service ratio sharply declined to 25.6 percent. Capital flows from the global financial markets also began to improve (Srinivasan and Tendulkar, 2003). Thus, relief from the crisis did not take long to come. The stabilization program—a part of the 1991 reform program—was an unmitigated success.

3.3 Achieving a long-awaited strategic shift

A second and perhaps more important objective of the reform program was to restructure the economy in such a manner that the long-festering macroeconomic and structural malaise could be corrected, and conditions set for sustained long-term growth and poverty alleviation. Also, it was essential to reverse the expansionary macroeconomic stance and rigorously control fiscal profligacy, which was having a high cost to the economy. Incongruously, it was the crisis that made it possible to reform and restructure the economy by elimination of the restrictive trade and investment—both domestic and foreign—policies of the past.

The AHP economies had convincingly demonstrated that the traded goods sector could be turned into an engine of growth and had benefited immensely from the global integration of their economies. India had failed, nay refused, to learn this lesson. It was time for Indian policy-makers to take a leaf from the experiences of the AHP economies and liberalize the external sector of India's economy. Although the Congress Party had a minority government at this point, the severity of the crisis and the pressing need to resolve it made it possible for the government to act in a decisive, pragmatic and bold manner for the first time in decades and craft far-reaching strategic modifications in the macroeconomic policy framework and economic management. Those in power could not politically afford to let the status quo continue because inaction involved a towering risk. This was a historic opportunity for the political leadership to initiate clairvoyant strategic measures and make their mark.

The segment of society that benefited from the discretionary control regime of the past and resisted any change in the macroeconomic policy framework was weakened in its opposition to a strategic shift. Conceptually, the reform program did make a stab at a strategic shift by conceiving to distance the economy (i) from its erstwhile inward-orientation in favor of outer-orientation and global integration of the economy, (ii) from an overstretched and highly inefficient public sector towards greater reliance on the private sector, and (iii) curtailing all-pervasive government and bureaucratic intrusion in economic activity. Few economic activities could be undertaken without permission or licenses from the federal, state and local governments before the 1991 reform program was launched. The program *inter alia* emphasized curbing of the endemic licensing requirements.

It also proposed that government permission for making investment should be restricted to a few explicitly specified economic activities. The fundamental shift that the reform program conceived was that investment decisions should be market-promoted not state-determined. Theoretically this plan was what the Indian economy sorely needed.

3.4 Initiating fiscal consolidation

It has been set out above (Section 3) that unsustainable fiscal deficits of the federal government had become a problem in the 1980s. Although India did not have a large external public debt, its domestic public debt was among the highest in the world. There has been little improvement in this situation. High deficits of successive state governments have exacerbated this problem. Weak revenue performance and lack of expenditure control both at the state and federal levels have caused deficits to rise to extremely high levels. The pressing need to put India's public finance on a solid footing has been obvious for a long time, but public finances were not in order even in 2000–1 when the combined deficits of the federal and state governments were in the region of 11 percent of GDP. Deficits of this order of magnitude are not only unsustainable but also have a major, if silent, cost to the Indian economy. The ability of the government to finance large deficits domestically with ease has reduced the sense of urgency to make the difficult choices necessary to turn the fiscal situation around.

Reining in fiscal profligacy immensely improves financial intermediation. Indian banks held 33 percent of their assets in the form of government securities even in 2005. This proportion was 8 percent in Singapore and 15 percent in Thailand. It has made Indian banks—particularly those in the public sector—largely disinterested in private sector business activity (de Rato, 2005). Tackling the fiscal deficits in an urgent manner would free up investible resources for the private sector, raising the level of productive investment in the economy. “Economies function most efficiently when governments concentrate on the efficient provision of public goods, and let the market allocate resources in the private sector” (Krueger, 2004). An economy with large fiscal deficits can never hope to create such economic efficiency.

To tame the fiscal deficits the Fiscal Responsibility and Budget Management Act (FRBMA) was passed in the Indian parliament in 2004, which obliged the government to strengthen the institutional framework for conducting a responsible and accountable fiscal policy and pave the way for promoting greater macro-economic stability. The Act enunciated the federal government's commitment to wipe the revenue deficit out by the end of 2008–9. Notwithstanding this institutional endeavor of fiscal consolidation, the fiscal deficit of the federal government for 2004–5 remained at 4.3 percent of GDP, with a revenue deficit of 2.7 percent. After the deficits of the state governments are included, this added up to 8.8 percent of GDP. The targets under the FRBMA were not met. The shortfall in meeting the fiscal deficit target was largely due to the failure of recoveries of loans to state governments. The Ministry of Finance still express certainty that its medium-term

target of fiscal consolidation will be met. It was discouraging to note that the budget did not make any attempt to slash the numerous market-distorting subsidies and failed to initiate any major initiative in the area of disinvestment in public enterprises. Even after such a long time after the crisis, a sustainable budgetary situation of the federal and state governments has not been achieved. The pattern of expenditure, particularly the large number of subsidies, has not been addressed, which is not conducive to rapid GDP growth.

The bulk of fiscal adjustment needs to be made with the help of front-loaded tax reforms. Also, the numerous tax exemptions built into the system over a long period must be eliminated. What is most important is improvement in the tax administration itself so that additional tax revenues can be collected. The need for tax reforms is an immediate one, so that an expansionary fiscal adjustment can be set in motion and low tax productivity can be rectified. Since the beginning of the reforms, the federal government's tax receipts have declined from 10 percent of GDP to 9 percent in 2004. Over the same period, China's tax receipts rose from 15 percent of GDP to 19 percent. India's policy-makers need to crack down on the informal economy; that is, businesses that remain outside the reach of the tax administration. This informal economy has been estimated at more than a quarter of India's economy. This will not only raise the tax revenues but also level the field for the law abiding companies.

3.5 Reforms in the financial system

Irrespective of the stage of growth, an underdeveloped financial sector is a veritable handicap for any economy and its growth endeavors. Theorists like McKinnon (1973) and Shaw (1973) have elaborated on the role of financial markets in growth. Several studies based on a large number of sample countries have concluded that financial sector development facilitates and buttresses economic growth.¹⁰ The Indian financial system was and continues to be dominated by the public sector banks. Before the reform of the financial system was initiated in 1991, it was designed to serve the centrally planned, government-led economy. Accordingly, the statutory reserve and cash reserve requirements for Indian banks was kept high by the RBI and a large proportion of bank deposits were preempted by the government. These moves enabled the government to finance its outlandish levels of fiscal deficit. Also, an administered interest rate regime resulted in an exceptionally high-cost-low-quality financial intermediation. Some sectors were charged low interest rates on social benefits grounds, and therefore other sectors had to be charged higher interest rates to make up for those low rates. The pre-reform period banking system was well known for its lack of transparency, accountability, and prudential norms, which led to a growing burden of non-performing loans (NPLs).

The commercial banks were (and are) the most important segment of the financial system; they have the largest financial assets, almost 55 percent of GDP. The financial reforms began with the commercial banks, and then were extended to development finance institutions, co-operative banks and non-banking financial institutions. Basic reform measures initiated in 1991 included liberalization of

interest rates, creating a deregulated environment, strengthening the prudential norms and the supervisory system, setting up provisioning and exposure norms and introducing competition in the banking industry. The statutory reserve requirement and statutory liquidity ratio were significantly lowered and brought down to reasonable levels. Old policy measures like government control on interest rates, interest rate ceiling and the requirement of central bank approval of large bank loans were eliminated. Under the liberalized interest rate regime banks were allowed to determine their interest rates on deposits and lending. Micro-prudential requirements like accounting norms were introduced and a greater disclosure requirement in the balance sheet were mandated to ensure transparency (Prasad and Ghosh, 2005).

Elimination of the automatic monetization of government securities in 1997 was an important step. After that both federal and state governments were allowed to borrow short-term from the RBI at the bank rate. However, for long-term loans they were required to approach the financial market and borrow at the market rate of interest. Consequently, a market in government securities has developed slowly and it is expected that by 2006 the RBI will stop operating in the primary government securities markets.

In stark contrast to the financial sector reforms in China, the Indian financial sector reforms progressed at an even pace. Risk management practices in the Indian banking system had existed for a long time and were far superior to those in the Chinese banks. However, the size of India's financial sector is much smaller than that of China. India's stock of financial assets, if bank deposits, equities and debt securities are included, was \$900 billion in 2004. As opposed to this, China's stock of financial assets was \$3,900 billion (Farrell and Lund, 2005).

In terms of capital allocation, India's financial system is regarded as more efficient than that of China. Private sector firms have better access to capital than do those in China. This is because the Indian banking sector was initially dominated by largely inefficient public sector banks, but in 1993 the RBI rationalized norms and regulations for the entry of private sector banks and foreign banks so that a competitive banking market could be created. Lack of competition in the banking sector was a serious debility of the Indian financial system. In 2005, the banking sector has twenty-seven public sector banks in which the government has majority stakes, forty private sector banks and thirty-three foreign banks. A significant proportion of capital allocation is handled by efficient foreign and privately owned banks. By 2004, they catered for as much as 25 percent of the total private sector banking business in the economy. Small and medium-sized businesses in India account for 45 percent of Indian banks' loans and generate 23 percent of the industry's revenues (WB, 2004a).

Public sector banks owned 75 percent of the assets and continued to dominate the banking sector. However, at the time when the reforms were initiated their dominance was greater and they held 91 percent of the total assets in 1991. Capital is still not efficiently allocated by Indian banks because of distorting laws of the RBI regarding lending. It insists that 40 percent of all bank lending should go to the "priority" sector, which means small businesses and agriculture.

Of this almost a quarter turns into NPLs. This is a waste of precious financial resources.

In 2003, foreign banks were given more flexibility to operate in the Indian market. They are now at liberty to operate in India as branches of foreign parent banks or incorporate as Indian banks. NPLs were significantly cleaned up between 2002 and 2005. At present, although RBI reported NPL to be 4.5 percent of the total outstanding loans, if the international norm of 90-day overdue is applied they stood at 9 percent of the total. Thus, the NPL level is much lower than that estimated for China. The stock market performance over the last five years has been more than satisfactory, and in 2005 it boomed. A small number of elite Indian business firms list their shares on global bourses (Farrell and Lund, 2005).

To keep abreast of ongoing financial globalization, the need for a new set of reform measures was felt and the Government of India appointed a Committee on Banking Sector Reforms, which submitted its report in 1998. Supervisory norms and the regulatory framework in the banking and financial sector were upgraded further so that the financial sector could move towards adopting international best practices and comply with the recommendations of both Basel I and Basel II frameworks. A capital adequacy ratio of 9 percent was achieved by 2001 by a majority of the scheduled commercial banks. Objective reports indicate that by 2005 in the commercial banking sector prudential norms, income recognition, asset classification, provisioning, supervision and regulation either began to meet international norms or they were fairly close to them (Singh, 2005b). Thus viewed, a reasonably healthy beginning has been made in the area of financial sector reforms, although several important decisions, like the change in ownership of 27 large public sector banks, have been deferred because of political expedience.

By 2000, financial sector reforms had undeniably advanced the objectives of liberalizing various segments of the Indian financial market and opening them to competition. A decade of across-the-board reforms and deregulation favorably affected financial markets, institutions and products, some of which changed beyond recognition. Sweeping structural reforms in the banking sector led to capital markets growing deeper and more liquid and, as alluded to above, equity markets remained buoyant over the 2000–5 period. International credit rating agencies began rating Indian financial markets better than in the past. In September 2003, the Standard and Poor's revised Indian banking sector rating upward to stable and the Fitch Rating assessed that reforms had strengthened the fundamentals of the Indian financial system. A July 2004 report from Fitch Ratings entitled "The Indian Banking System" noted that "the reforms initiated by the Indian Government in the early nineties have considerably improved the health and the outlook of the country's financial sector." Although a December 2005 Standard and Poor's rating affirmed BB+ for long-term and B for short-term, with good reason it expressed concern about the fiscal deficit situation in the economy.

At the current stage of financial sector reforms, commercial banks badly need to acquire professional skills to "identify users, assess risk and extend credit to private sector and not continue to invest in government securities and guaranteed bonds beyond the statutory stipulations" (Singh, 2005b). In view of the demands of the new operational environment, banks have started restructuring

their operations in a professional manner, so that they can strengthen their balance sheets and raise capital from the financial market when the need arises.

4. Achievements of reforms and lack thereof

Economic performance in the post-reform period has both positive and negative attributes. A great deal was achieved in terms of liberalization of the statist or state-controlled economy of the pre-reform era. Almost every budget between 1991 and 2005 reduced tariff rates and freed more industries from “reservation” for the SSI sector (see Section 3.1). The decadal GDP growth rate achieved during the 1990s was the highest the Indian economy had achieved since independence, the crisis year of 1991 being an exception to this generalization. Two social indicators, literacy and poverty alleviation, also recorded their best decadal performance (Deaton and Dreze, 2002; Sen and Himanshu, 2004). Market forces and competition began to pick up some momentum in the economy. State governments were given greater freedom to devise strategies to pursue global investors for wooing in FDI.

An Indian proverb states that there is darkness below the lamp. Notwithstanding some of the above-stated achievements, there are weaknesses and chasms galore in economic performance, management and reform implementation. Notwithstanding the achievements, reform implementation first slowed and then stalled after the politically easy measures were taken. These easy reform measures, or the so-called first generation reforms, were completed after drawn-out delays and foot-dragging. However, the second generation reforms that required both the broadening and deepening of the reform program, as well as attention to several new areas of economic distortion and unfinished businesses, have been left completely unattended. Many of these areas should have been attended to in the first generation of reforms.

The reform measures of the early 1990s hurt no one and benefited many. Curtailing of the license *raj* and liberalization of the external sector imparted a degree of dynamism to the economy, although these reforms did cut back some of the omnipresent powers of the large and stifling government bureaucracy. To that extent, they hurt one large and powerful interest group. Furthermore, despite hurdles a national system of value-added tax (VAT) was enacted in early 2005.¹¹ However, there is a pressing need for a push for second generation supply-side reforms at present. This set of much-needed reforms would certainly hurt some powerful interest groups, at least in the short term. This applies particularly to the liberalization of the agriculture sector, reforms in labor laws and bankruptcy laws, dismantling of a network of market-distorting subsidies and privatization, or even closure, of a large number of wasteful and grossly inefficient public sector enterprises. It is worth emphasizing that India's labor laws, rules governing unions and the industrial relations regime are long overdue for a complete overhaul. They are fundamentally unsuitable for an economy that is planning to globalize. All these areas of reform were regarded as politically sensitive by successive governments, so reforms were shunned. Despite policy endeavors, fiscal consolidation has thus far eluded policy-makers. Corrective measures are badly needed to be taken by state and federal governments in this regard.

A conspicuous achievement of the reform program was that the average annual GDP growth rate in the ten year period from 1992–3 to 2001–2 rose to around 6.0 percent, which made India one of the fastest growing developing countries in the 1990s. However, this decadal average growth rate concealed the fact that while the economy grew at an impressive 6.7 percent in the first five years after the launching of the reform program, it slowed down to 5.4 percent in the next five years. “India remained among the fastest growing developing countries in the second sub-period because other developing countries also slowed down after the Asian crisis of 1997–8, but the annual growth of 5.4 percent was much below the target of 7.5 percent which the government had set for the period” (Ahluwalia, 2002).

Other than the incomplete reforms, there has been the long-standing issue of deficient, if not woefully substandard, infrastructure. It is regarded as the principal weakness of the Indian economy. Serious infrastructural lacunae have long persisted because no substantive effort to upgrade them was made over the preceding half century. They have continued to be an acute constraint on GDP growth for decades. Roads, ports, airports, railroads, transport systems, and power and telecommunication sectors fall seriously short of the present requirement. Infrastructure gaps are most conspicuous in the areas of energy and transport (Luthra *et al.*, 2005). Massive financial resources are needed to redress this long-standing structural weakness of the economy. Estimates vary, some climbing up to as high as \$150 billion. The federal government has been working on building new institutional frameworks, and redefining the role of state governments in this area. Yet, the new arrangements are far from being commercially viable. Although some programs are under way, they cannot be regarded as more than a mere beginning. In the road sector, a program to build four-lane and six-lane highways is presently under implementation. International firms, such as P&O, Singapore’s PSA and Maersk, are successfully running container terminals on a long-term contract. The creativity, tenacity and accomplishments of Indian entrepreneurs are worthy of praise because, with such a large infrastructure deficit, little can be achieved under normal circumstances. A thoroughgoing and determined endeavor to improve India’s industrial infrastructure needs to be a policy priority. As the public sector was not able to mobilize resources, the infrastructure sectors were opened to private sector investment. It did not pan out because the expectations from the private sector were exaggerated.

4.1 Politics of the reform process: reforms by stealth

A great deal of blame for the poor implementation of reforms can be justly put at the door of democracy and Indian politics. Political theorists posit that in democracies “special interest groups,” which includes politicians, hinder reforms. In 1984, Rajeev Gandhi’s government failed to launch a reform program and meekly withdrew after initial overtures. In the best of times, the politics of a reform process in a democracy is difficult and arcane because its costs are immediate, concentrated and high for some segments of the society, while its benefits are usually delayed and thinly but widely spread. Many who do benefit from reforms are not even aware of

the sources of their beneficial influence. Ignorance regarding the reform process and its impact on Indian society is nothing short of astonishing.

Given this background, there is no political constituency for economic and structural reforms in India. They remained a non-issue in all the post-1991 elections. Mass politics in India comprehends little about economics and the complexity of liberalization and structural reforms and the same applies to Indian politicians. Two exceptions in this regard were reform of labor laws and agriculture, which very much concerned the masses and did become part of political debate. Political parties have expediently remained superficially committed to the reform program. Fear of opposition from the people forced either the shelving or withdrawal of important reform measures in the past. When Dr. Manmohan Singh, the maverick Finance Minister, launched the comprehensive economic reform and liberalization program in July 1991, in his budget speech he called it the continuation of the old efforts—such was his compulsion to disguise them. Public protests led once to withdrawal of plans to introduce harmonized VAT in the past, as were plans to cut the fertilizer subsidy, increase the price of phone-calls, and privatize state-owned air-line and oil companies.¹² These examples illustrate the fact that democracy and domestic politics became an effective constraint on making intelligent, pragmatic and result-oriented changes in the economic policy framework. As opposed to this elite politics does understand the value of and pressing need for reforms, and regards them as indispensable, but it does not matter because this elite is minuscule in size.

Jenkins (2004) argues that whatever little progress reforms have so far made in India is due to fragmentation of power groups, which allowed a small group of skillful politicians to carry out some “reforms by stealth.” Successive governments have tried to slip reform policies through the back door, rather than affecting them through an overt decision-making process. The large leftover in the first generation reforms is the result of political expedience, if not compulsions. For the same reasons, the second generation supply-side reforms, which delve deep into sectoral specificities, have remained virtual nonstarters.

A political consensus emerged gingerly, at a snail’s pace, around advancement of economic and structural reforms. To be candid, this consensus was not on the political adoption of a vigorous reform program and its efficient implementation. The political process of reforms was such that, after long debates, disagreements, delays and foot-dragging, a strong consensus evolved for weak reforms. The Congress Party-led coalition government, that took office in 2004, has expediently reverted to its traditional stance; that is, to remain left-leaning and disinterested in reform implementation. The current corps of politicians seems to believe that this strategy is the surest way of perpetuating themselves in power until eternity. Political leadership completely lacks the vision, commitment and chutzpah that the kind leaders in the AHP economies had. If this could be developed, they could create the policy framework necessary for economic dynamism.

The present Congress Party-led government is a coalition of twelve poorly matched political parties in terms of their political philosophies. It is supported by the left front, including the Communist Party of India. The left-leaning parties

of the coalition are dead set against reforms in several areas of the economy, in particular labor laws, subsidies and privatization of public sector enterprises. Those reform measures passed by stealth were poorly implemented by the large, corrupt and grossly inefficient bureaucracy. Consequently, reform implementation lost whatever small momentum it had gained in the early 1990s. However, continual lip service was paid to the pressing need for reforms. Dr. Manmohan Singh recently remarked that India's "salvation lies in economic reforms" (Gupta, 2005).¹³

If the objective of policy mandarins is to create a policy and structural framework that would allow India to move to a higher growth trajectory like China, achieve rapid poverty alleviation, fast clip GDP growth and integration with the global economy, a great deal still remains to be done in several vitally important macroeconomic and financial policy areas.

4.2 Will India draw level with China?

As the Indian economy is playing catch up with the Chinese economy, it is often asked whether India will be able to emulate China's performance in the foreseeable future and make its presence felt in the global economy as China is so successfully doing. An honest answer is that, until the infrastructural lacunae noted above (Section 4) are fulfilled and the reform program is earnestly and pragmatically implemented, India's economic performance cannot parallel that of China in the medium- or long-term.

An official view of the achievement of the reform program and its "gradual" implementation was presented by M.S. Ahluwalia (2002), an Indian economist who has held high positions in the government system.¹⁴ He has called the achievements so far a "mixed picture." In his opinion

the industrial and trade policy reforms have gone far, though they need to be supplemented by labor market reforms which are a critical missing link. The logic of liberalization also needs to be extended to agriculture, where numerous restrictions remain in place. Reforms aimed at encouraging private investment in infrastructure have worked in some areas but not in others. The complexity of the problems in this area was underestimated, especially in the power sector. This has now been recognized and policies are being reshaped accordingly. Progress has been made in several areas of financial sector reforms, though some of the critical issues relating to government ownership of the banks remain to be addressed. However, the outcome in the fiscal area shows a worse situation at the end of ten years than at the start.

This indeed is a truthful, unbiased and level-headed assessment of the achievements and lack thereof.

One benefit of “gradualism” was that it enabled the government to get agreement from different political and interest groups, albeit a consensus remained an unattainable target. It also assured a limited degree of continuity in reform endeavors. However, the disadvantage was loss of precious time and stretching out of the reform process, which delayed the flow of benefits from reforms, strengthening the general perception that the reform program does not produce favorable results and is not worthwhile (Ahluwalia, 2004). Second, a frequent justification of “gradualism” is made on the grounds that it has eased the pain of transition. Third, the objectives of the reform program were given only in terms of a broad and imprecise direction so that political opposition could be minimized. A consensus had to be allowed to evolve in all the principal areas for reform and restructuring. Precise targets would have rendered this consensus impossible. The consensus that did evolve at each stage in the reform process represented a compromise. Many interest groups politically supported the reform measure only because they believed that reforms would not go “too far,” in the process diluting the reform measure appreciably. This turned “gradualism” into a fitful and opportunistic process (Ahluwalia, 2004). An interesting analogy is that gradualism was also an idiosyncratic feature of the Chinese reform process (see Chapter 2, Section 4), widely admired for its success and substantive achievements.

The quandary that gradualism created can be illustrated by the liberalization measures taken in the external sector. Because a pressing need to lower tariff barriers was felt, it was signaled by government that they would be lowered to the level of the ASEAN economies. But a phased sequence of cutting tariff lines was never announced. This made it impossible for investors to plan for tariff changes. Many of them did not do so at all. Precisely the same occurred in the case of de-reservation of industries reserved for the SSI sector in the past. While it was announced that de-reservation would take place “progressively,” there was no program about which sectors would be de-reserved and when, leading to complete policy confusion.

A thorough debate among the stakeholders and political groups before launching the reforms would have been a healthier alternative course. An agreement on goals would have resulted in firm policy objectives and targets with a time line, as well as their earnest, purposeful and result-oriented implementation. However, it could also mean risk of a gridlock in India’s prolix society, pluralistic democracy and rambunctious polity. Whether the reform program and its slow implementation thus far can deliver average annual GDP growth of 8 percent is open to debate, if not legitimate doubts. This is the target average annual growth rate for the Tenth Five-Year Plan (2002–7) of the Government of India.

Despite improvements in some areas, numerous weak links still menacingly persist. Failure on the fiscal consolidation front is only one of them, which can undo whatever little has been achieved so far. Ahluwalia (2002) appropriately believes that if “these trends are not reversed, it may be difficult even to maintain 6 percent annual growth in the future, let alone accelerate to 8 percent.” Such success will be within India’s grasp *if* it succeeds in boldly and efficiently implementing the second generation supply-side reforms and restructuring program,

without ignoring crucial areas on the grounds of political expedience. Incomplete and patchy implementation of the reform program needs to be supplanted with its earnest and complete implementation. In addition, the reform process needs to be broadened and deepened. If policy-makers continue in the manner they have done in the past, the goal of emulating the Chinese economic performance of long-term average annual real GDP growth rate of 10 percent, or something close to it, will remain an unachievable ambition, a veritable pie in the sky.

5. Integration with the global economy

In its post-independence era, Indian policy-makers did not regard such integration as a worthy policy objective. One of the economic reasons for deliberate adoption of inward-oriented autarchic industrialization was that their thinking was influenced by the export-pessimism theories propounded by Raul Prebisch, Ragnar Nurkse and Hans Singer during the 1950s. Ardent adherence to the ISI strategy made India's policy stance strongly inward-oriented and insular for over four decades (1950–91).

5.1 Initial inward-orientation of the strategy

Export pessimism was not only a belief among the economic policy-making elite of the 1950s but almost an ideology. They were positive that India had nothing to gain by integrating with the global economy. One characteristic feature of an inward-oriented economy is an extremely high level of protectionist barriers (see Section 3.3), which isolates the domestic economy from the rest of the global economy. The domestic manufacturing sector is protected by high tariffs and non-tariff-barriers (NTBs), ostensibly so that domestic manufacturing firms can become competitive at some point in time. The impact of infant industry protection in India was the opposite of what is normally expected. These infants never grew up and protection continued even when these highly protected industries were decades old. The ISI strategy was promoted with the help of an array of incentives, supports and subsidies for the key industries. Its restrictiveness has been alluded to in Section 2. It was considered necessary to prohibit imports of a sizeable range of capital goods, imported inputs and all consumer items. The first BoP crisis in India precipitated in 1957, which was the middle of the Second Five Year Plan period. The stringent import controls instituted at this point continued until the end of the century. The import-substituting promotion of manufacturing industries was regarded as synonymous with industrialization, which in turn was taken as the key to economic growth and development. Additionally, a stringent maze of direct and indirect barriers was created for obstructing FDI inflows.

Rational public policy-makers usually learn from their mistakes because they have high economic and social costs. Having made them once, they try to ensure that they are never repeated. It did not happen in India. When inward-orientation of policy stance failed to produce results in terms of reasonably satisfactory GDP growth rates, it was made more rigorous and thorough-going. Such a policy

structure *inter alia* rendered it impossible for the economy to identify and exploit those sectors in which it had a comparative advantage. Also, it forced the economy to ignore the static and dynamic gains that could accrue from interactions and integration with the global economy.

5.2 Shift to outer-orientation and global integration

Global integration can be defined as participation in international markets for goods, services, capital, labor and knowledge which tends to help enhance economic performance by raising productivity through access to the newest technologies, ideas and products. Firms in a globally integrated economy benefit by way of competition with the more efficient, world-class rivals. Competition is a value enhancing force in its own right. It exposes an economy and firms in the exporting economy to new technologies, designs and management techniques, which have a direct effect on the competitiveness of the firms and the economy.

In addition, global integration engenders opportunities for improvement of resource allocation in the domestic economy as well as welfare improvements due to buying and selling of inputs and products at world market prices. Rapidly integrating developing economies tend to record higher long-term GDP growth rates than those economies that are not integrating with the global economy, or are doing so at a slow pace. Theoretical links between global integration and growth has been established by a growing body of empirical research.¹⁵ It is regarded as conventional wisdom to associate outer-oriented growth strategy and global integration with improved growth prospects as well as poverty alleviation (Dollar, 2001; Dollar and Kraay, 2001). Outer-orientation is believed to greatly enhance growth prospects by providing uniform incentives (primarily through the exchange rate) for production across export and import competing goods (Krueger, 1997). Global integration enhances import capabilities, making import of a larger range of capital goods feasible, which in turn embody state-of-the-art technologies. Such capital goods and technologies contribute to productivity gains. Growing imports of capital goods channel advance industrial research from the exporting industrial economy to the importing developing economy, which has a favorable impact over total factor productivity (TFP). A vigorous adoption—no matter how belated—of this strategy would have enabled the Indian economy not only to identify and exploit its comparative advantage but also to reap the benefits that come from interaction with the global economy.

That the Indian economy had marginalized itself from the global economy has been brought out in Section 1. An essential conceptual element of the post-crisis 1991 reform program was to move away from the deliberate inward-orientation of economic strategy (see Section 3.1). For the first time it began to seem possible that belatedly the Indian economic policy structure would shift whole hog from inward-orientation to outer-orientation and that it would perhaps attempt to emulate the dynamic experiences and performance of the AHP economies.

Notwithstanding the initiation of liberalization efforts, restrictions on trade and FDI inflows in India continue to remain high—well above the average for the

Asian economies. Consequently, while there was moderate improvement in trade and FDI inflows, India's performance could hardly be compared to its successful regional neighbors in the East. One of the widely used indicators for sizing up integration with the global economy is the ratio of trade to GDP. In 1990, the trade in goods to GDP ratio for India was 13.1 percent, which was low in absolute terms as well as compared to other Asian economies like China (32.5 percent), Malaysia (133.4 percent), the Republic of Korea (53.4 percent), the Philippines (47.7 percent) and Thailand (65.7 percent). Although the Indian economy recorded an improvement in the trade in goods to GDP ratio in 2001 to 19.5, once again it continued to be much lower than that in the other comparable Asian economies. For instance, the corresponding ratios for China (44.0 percent), Malaysia (184.0 percent), the Republic of Korea (69.1 percent), the Philippines (88.9 percent) and Thailand (110.9 percent) were far superior.¹⁶

In 2003, India's ratio of trade in goods to GDP improved marginally to 21.1 percent, but that of China had leaped to 60.1 percent. However, the other neighboring Asian economies remained by and large at the same level as they were in 2001; for instance, for Korea the corresponding proportion was 61.6 percent, Malaysia 174.8 percent, the Philippines 94.3 percent and for Thailand 109.4 percent.¹⁷ According to the latest World Trade Organization (2005) data, India has continued to remain a small trading economy accounting for 0.8 percent of multilateral exports in 2004; its merchandise exports were \$75.6 billion. Compared to this, China's share in multilateral exports was 8.9 percent (\$593.3 billion), the Republic of Korea's was 2.8 percent (\$254 billion), Taiwan's 2.0 percent (\$182 billion), Singapore's 2.0 percent (\$180 billion), Malaysia's 1.4 percent (\$127 billion), and Thailand's 1.1 percent (\$97 billion). In the latest league table of leading exporters in the world, India occupied thirtieth place.¹⁸

Another oft-used indicator for reckoning integration with the global economy is gross FDI inflows as a percentage of GDP. FDI is not only non-debt creating but also a significant source of technology and skills for the recipient economy. Unlike portfolio investment it is not volatile and its tendency of reversal during a period of crisis is much lower, often nonexistent. It is known to strengthen export performance of the recipient economy (Albuquerque, 2003; Borzenstein *et al.*, 1998). India was a traditionally low recipient of FDI. Measured as a proportion of GDP, in 1990 India received almost zero percent of GDP as gross FDI, while China's FDI receipts were measured at 1.2 percent of GDP at this point in time. The Republic of Korea (0.7 percent), Malaysia (5.3 percent), the Philippines (1.2 percent) and Thailand (3.0 percent) succeeded in attracting significant amounts of FDI, which were much larger than India's FDI inflows. To be sure, following the launch of the post-crisis reform and liberalization program, FDI inflows improved and, in 2001, India's FDI receipts were measured at 0.6 percent of GDP. As compared to this, China's FDI receipts were 4.9 percent of GDP in 2001. The Republic of Korea (1.5 percent), Malaysia (5.7 percent), the Philippines (2.7 percent) and Thailand (3.5 percent) all attracted a far larger proportion of FDI from the global investing community.¹⁹ Thus, openness to trade and FDI as well as trade and FDI flows improved moderately in the

post-reform era; India's performance can neither be regarded as high-quality in absolute terms nor comparable to the AHP economies. In 2004, China's FDI receipt was \$60.6 billion, while that of India was \$3.4 billion.

In the *World Investment Report 2002*²⁰ a benchmarking tool was devised, namely the Inward FDI Performance Index. It is simply the ratio of a country's share in global FDI flows to its share in global GDP. It is an instrument of comparing the relative performance of countries in attracting FDI. A value of unity means that the shares of global FDI flows and global GDP are equal. A country with an index value that is greater than unity is reckoned to have received more FDI than justified by the size of GDP. This index is an indicator of the country having advantages in production, or better growth prospects, or a superior investment environment. Lower than unity value of the index implies that the country in question is protectionist, or technologically backward, or has a political or social system that is not conducive to investment, including FDI. Index values were computed for two periods, 1988–90 and 1998–2000. Table 4.1 provides the values and ranks for the Inward FDI Performance Index for India and compares it to China's for both periods.

For the first period, the value of index for India was 0.1, far below unity. The value for China was 0.9, which also was lower than unity. There was an improvement in the value for the index during the second period. It improved to 0.2 for India and to 1.2 for China. Improvement in India was not comparable to that in China.

To be sure, the external sector was liberalized during the 1990s. Notwithstanding these liberalization endeavors, India's trade regime continues to be one of the most restrictive in the world. Both tariff and non-tariff barriers are still among the highest in the world. If IMF's Trade Restrictiveness Index (TRI), which is unique among existing indices of trade policy, is taken as a measure, the Indian economy in 2005 was among the least open economies in the world (IMF, 2005c).²¹ The TRI consists of three components, namely (i) overall Trade Restrictive Index, (ii) the Tariff Restrictiveness Rating, and (iii) Non-tariff Restrictiveness Rating. The TRI scale runs between one and ten, with one being most open and ten the least open economy. India was ranked seven in 2005, with few economies having a higher ranking. In 2003, it was ranked eight, implying minor improvement in this respect.

Table 4.1 The Inward FDI Performance Index for the Chinese and Indian economies.

| <i>Country</i> | <i>1988–1990</i> | | <i>1998–2000</i> | |
|------------------|------------------|-------------|------------------|-------------|
| | <i>Value</i> | <i>Rank</i> | <i>Value</i> | <i>Rank</i> |
| China | 0.9 | 61 | 1.2 | 47 |
| India | 0.1 | 121 | 0.2 | 119 |
| Average for Asia | 1.07 | – | 0.85 | – |

Source: The United Nations Conference on Trade and Development (UNCTAD). *World Investment Report 2002*, New York, Table II.1, p. 25.

The declared policy objective in 2005 was to double India's share of world trade by 2009. Given the competitive international market place, this goal seems overly ambitious. The second objective was to reduce the tariff level to those of the Association of South East Asian Nations (ASEAN) economies by 2009. In 2005, peak tariff rates were reduced from 30 percent to 20 percent. However, some policy moves counteracted on this progress in trade liberalization. While tariff rates were reduced and the majority of QRs were largely eliminated, India's reliance on non-tariff barriers, technical standards and regulations increased. Also, India initiated 15 percent of all anti-dumping cases in the WTO during the 1995–2004 period. Given its favorable external position, this is the time for India to liberalize its trade policy in a consistent, concerted and meaningful manner, and be a parallel to the AHP economies.

For the first time, regional integration endeavors were given an impetus. India reached a Free Trade Agreement (FTA) with the other South Asian economies and was negotiating bilateral FTAs with ASEAN, Singapore and Thailand. It has also signed a Preferential Trade Agreement (PTA) with MERCOSUR or Mercado Comun del Sur.²² These are novel and uncharacteristic strategic measures for India, which has never paid attention to regional or global integration in the past.

6. Growth momentum in the tertiary sector

Although in the manufacturing sector India lags way behind not only China but also the other AHP economies, in the tertiary sector or services the story is different (Luthra *et al.*, 2005). As alluded to in Section 1, unlike the agricultural and manufacturing sectors, the tertiary sector presents a heartening and hopeful portrait. The growth momentum in the services sector began in the 1980s and picked up discernibly in the 1990s. The average annual sectoral growth in the services during 1991–2000 was 7.5 percent, compared to 3.1 percent in the agriculture sector and 5.8 percent in the manufacturing sector. In addition, growth in this sector was less cyclical than that in the other two sectors. The services sector recorded the smallest coefficient of variation; the most visible success in the services sector is the take-off of the software, information and communications technology (ICT) related services and computer-enabled services (see Chapter 2, Section 5.3). It is seldom realized that the growth in the services sector in India has been broad-based, albeit not uniform. The other successfully performing services industries are business services, communications, financial services, community services (education and health) and the hospitality industry (hotels and restaurants). Although bleak at present, the future growth rate in tourism has been projected to be the second highest in the world. Acceleration in the growth rate of services was far from uniform. Only a small number of services recorded a sharp acceleration, or a break from their trend growth rate. The ones that did not show a break from their trend growth rate included distribution, real estate, legal services, transport, storage and personal services.

This growth trajectory of the Indian economy is a little different from the normal growth pattern of the developing economies. As economic growth

picks up momentum, sectoral growth generally evolves in the following two stages. In the first stage, the manufacturing and services sectors grow faster than the primary sector and their contribution to GDP expands. In the next stage, it is the services sector that grows more rapidly than the other two sectors and its contribution to GDP continues to rise. At this stage of growth, it is common to see the agricultural sector's significance in GDP declining and that of the manufacturing sector stagnating or even declining. What happened in India was a trifle different from the common pattern; that is, the Indian economy truncated the first stage and leapfrogged to the second stage. The structure of India's GDP shows that between 1990 and 2003 contribution of the agricultural sector from 31 percent to 22 percent and that of the manufacturing sector from 17 percent to 16 percent. Conversely, the contribution of the services sector soared by 10 percentage points, from 41 percent to 51 percent.

If the structure of output is compared for China and India, India's services sector is significantly larger (see Chapter 1, Table 1.1). In 2003, China's services sector was 33 percent of GDP. In addition, unlike India it did not record a large increase during the 1990s. Its contribution was 31 percent of GDP in 1990, which increased by a paltry 2 percent in 2003. In India, superior performance of the services sector over that of the manufacturing sector had two important reasons. First, India's long-term rigid labor laws and reservation for small industries disadvantaged and constrained growth in the industrial sector, therefore growth in the services sector benefited by default. Second, the services sector received more generous tax incentives than the industrial sector (IMF, 2005b). Gordon and Gupta (2004) have shown that the increase in final demand for services as well as the decline in the relative price of services were the other causal factors that played a role in the structural shift of the Indian economy.

6.1 Software and ICT-enabled services

Exports of services grew at an average annual rate of 15 percent in the 1990s and 21 percent in the latter half of the 1990s. Between 1990 and 2003, export of commercial services increased from 42.7 percent of total services exports to 75.1 percent. The category of commercial services includes ICT-enabled Services (ICTeS), information, telecommunication and other commercial services. For China, increase in this category of services exports was smaller than for India. It increased from 18.7 percent to 44.4 percent during the period under review.²³

Cumulatively, India's services exports recorded a four-fold increase during the 1990s; a third of this was software exports. High rates of growth in software exports and business-process services have continued in the 2000s. The global ICT services market includes a large range of services; in 2003 it was estimated to be \$570 billion. India presently caters to a certain market segment; its present market share in ICT services stands at 2 percent. Thus, the growth potential for expansion in the ICT services sector is immense.

The ICT refers to digital processing, storage and communication of information of all kinds; it is a general purpose technology and can be potentially used

in myriad sectors of the economy. The ICT revolution made it possible to deliver services over a long distance in a highly cost-effective manner. India's software exports were a mere \$150 million in 1991. Since then they have grown at the rate of almost 50 percent annually and reached \$5.7 billion in 2000 in a globally competitive market. No other Indian industry ever performed so well. Software exports went on rising to \$12.7 billion in 2004.

In many matured industrial economies, India has become one of the most favored destinations for sourcing software and ICTeS.²⁴ Bangalore, in the words of Thomas L. Friedman, the well-known scholar on globalization, has become "the capital of outsourcing."²⁵ Several Indian cities other than Bangalore are developing state-of-the-art software facilities and the presence of a large number of overseas vendors. This list includes Hyderabad, Mumbai, Pune, Chennai, Calcutta, Delhi-Noida-Gurgaon, Vadodara, Bhubaneswar, Ahmedabad, Goa, Chandigarh and Trivandrum. India's off-shoring sector, "the world's largest and fastest growing, is dominated by ICT services, which play a major role in the country's overall economic growth" (Farrell, Kaka and Sturze, 2005). ICT and ICTeS have emerged as an elite enclave in the economy. This success has markedly expanded India's services trade and increased revenues. In 2004, India was the eighth largest services exporter in the world, with services exports of \$39.6 billion. India's ICT success story is essentially one of private sector initiative. To be sure, the government deserves credit for stepping back and holding back.

In addition to rapid growth, the Indian market for ICT and ICTeS has diversified, expanding to encompass non-application-related services. In the past, Indian suppliers have focused primarily on delivering application-related services; in 2005 they offer everything from application support to infrastructure management, which includes data center outsourcing, network management, data center consolidation, strategic consulting, and the like. In addition to offering a broader range of services, many Indian firms now offer value-added services that help to ease transition to outsourcing. Vendors' repertoire includes relationship management, organizational change management and customer advocacy.

Several Indian ICT firms are well regarded and are globally competitive. Firms like Infosys Technologies, MindTree, Satyam, TCS and Wipro²⁶ successfully compete with ICT multinationals for large consultancy projects. In professional circles, Infosys Technologies has earned the fond sobriquet of being the Microsoft of India. Growth in ICT infrastructure was responsible for producing a huge business in outsourcing almost any business process that can be performed remotely. "These service businesses have thrived because they have capitalized on India's strengths—computer skills and fluency in English—and are not hostage to its litany of weaknesses" (*The Economist*, 2005c).

The NASSCOM-McKinsey study of 2004²⁷ pointed out that outsourcing ICTeS and business-process outsourcing (BPO) operations to India saves costs by as much as 40 to 50 percent for companies in the mature industrial economies, generating cash flows due to cost reduction. In its full-scale update published in December 2005, the NASSCOM-McKinsey study estimated that, of all the principal outsourcing destinations, India is still the lowest-cost.²⁸ In 2000,

ICT and ICTeS accounted for 3 percent of India's GDP. They also created a large number of well-paid jobs in India. In 2004, the ICTeS and BPO employed more than a million professionals; in 2004 alone ICTeS and BPO created 150,000 jobs. By this point in time, ICTeS and BPO have been projected to account for 7 percent of India's GDP. To sustain its competitive advantage, the industry needs to interact closely with academia to create the right talent pool and collaborate with the ICT hardware industry in microelectronics and embedded software.

Indian vendors started from the low-end low-margin services, but gradually established their presence in high-margin segments, along with a steady growth in the traditional ICTeS and BPO sector. They are gaining ground in newer services such as packaged software implementation, systems integration, network infrastructure management and ICT consulting. New services that are moving to India include settling complex structured-finance and derivative deals, which are some of the most sophisticated financial transactions. In December 2005, J.P. Morgan Chase announced plans to double its workforce in India to 9,000, for handling such complex financial tasks. The total value of outsourcing to India (\$17.2 billion in 2004–5) is estimated to be 44 percent of the world-wide total. Offshore penetration of *Fortune 500* increased by 33 percent in 2004 (from 300 companies in 2003 to 400 companies in 2004). While the US and UK remained the dominant markets, Indian companies are gaining traction in new countries like Germany, Japan, and Singapore. The NASSCOM-McKinsey study of 2005 argues that exports from ICT and BPO—both from services outsourced to Indian firms and those performed by captive Indian firms—are on track to reach \$60 billion a year by 2010 (NASSCOM-McKinsey, 2005).

Many imaginative Indian corporations have made profitable use of ICT and turned global with self-confidence. A Chennai (Madras) based small firm called HeyMath! is an excellent illustration of how a small firm can make a global mark for its services with the help of ICT and expertise in mathematics. HeyMath! provides assistance with mathematics homework to students and lesson plans to teachers on the Internet. Originally created for schools in Singapore, this product is being used in other countries. HeyMath! is a small but veritably global firm, with consultants from Cambridge University and the Indian Institute of Management in Chennai, and Indian managers, many of whom were trained in US universities. Its success is squarely based on its information and knowledge base in mathematics and curriculum for schools in numerous client countries.

The ICT and BPO sectors employed 700,000 in India in 2005. According to projections by NASSCOM-McKinsey (2005), this number will soar to 2.3 million in 2010. It will also provide indirect employment to approximately 6.5 million workers by 2010 and could contribute 1 percent annually to GDP growth.

One poorly concealed negative development in this area is that demand for experienced professionals has outpaced supply. Industry leaders have foreseen the shortage of talent looming in the medium term. By 2008, this sector is expected to fall short of 250,000 skilled professionals. The NASSCOM-McKinsey (2005) study has forecasted a shortfall of 500,000 by 2010. At 1.2 million, the number

of people holding engineering degrees is low in India. It is a paltry 4 percent of university educated persons. This proportion is 20 percent in Germany and 33 percent in China. Combined with the uneven quality of university output and the generally low suitability of a good proportion of Indian graduates for absorption into high-technology jobs, this could mean a shortage of engineering graduates emerging by 2010. Indian educators are well aware of this ominous scarcity of engineers and this issue is frequently debated in the media. Cities like Bangalore and Mumbai are likely to come under the squeeze first. Before this boom peters out, new ways will have to be devised to augment the supply of human resources appropriate for high-technology jobs in ICT, ICTeS and R&D. Salaries for graduate engineers have been rising at a steep pace, particularly in the most popular off-shoring destinations.

6.2 Tech hubs and global networked R&D in India

Google, IBM, Microsoft and Sarnoff are among the many Western technological titans that have set up research operations in India because of its combination of low labor cost, availability of human resources for high-technology jobs and English language. GE's biggest research center outside the US is in Bangalore; it employs 1,700 Indian scientists and engineers. This group is playing invaluable roles in the global innovation chain. Although there are challenges, these large corporations are positive about their investment in Indian R&D operations paying off handsomely. Consequently these operations have been expanding briskly. They are pioneering global networked R&D projects and have been christened the "third wave" of high-technology research (Hamm, 2005). The first and second waves were in-house R&D and venture capitalist funded innovative startups, respectively. The third wave of R&D is about harvesting innovations from anywhere in the world, including in-company R&D or that from independent researchers. The third wave R&D operations build on the research of a small army of researchers who are spread all over the globe. As these operations are globally networked it is feasible to do so.

Motorola, Hewlett-Packard, Cisco Systems and other technology giants rely on their Indian research teams to devise software platforms and multimedia features for next generation products and devices. Using 3-D computer simulations, Indian engineers fine-tune designs of everything from car engines to aircraft wings for such clients as General Motors and Boeing. Sarnoff, which has 400 engineers and scientists based in Princeton, Silicon Valley, Belgium and Japan, has recently added a high-technology research lab in Bangalore. Before settling on R&D expansion in India, Sarnoff had considered thirteen other countries. AOL, Google, IBM, Microsoft, Oracle, Philips, SAP Labs, Sun Microsystems and Texas Instruments have been following similar strategies of having R&D operations spread all over the globe. All of them have large R&D laboratories in India, some of which are as old as two decades. IBM had two old R&D out-posts in New Delhi and Pune but added a software lab in Bangalore in 2001. Google and Microsoft set up research laboratories in Bangalore in early 2004. As many as

100 other transnational corporations (TNCs) set up R&D facilities in India over the 2000–5 period, which includes colossuses like Bell Labs, Caterpillar, Cummings, Daimler Chrysler, Du Pont, GE, General Motors, Eli Lilly, Intel and Monsanto.

Engineers to man research in these laboratories were picked up from local engineering schools at salaries of \$5,000 to \$10,000 per annum. It was not only their low cost but their talent also counted. However, the down side of these R&D operations is that certain kinds of skills are hard to come by in India. For instance, engineers with skills in analog-chip design are not available in plenty in India. Google found the hiring of senior researchers with certain skill sets difficult. Hiring had to be slowed because of the scarcity of scientists with those particular skill sets, although those skill sets were available among junior level scientists. To lure top technologists, these companies offer them the same status as they do to their programmers and scientists in the US. Also, they are allowed as much as 30 percent of their research time to work on their own projects. R&D labs and offices in Bangalore look like technology company offices in any other part of the globe.

As the research is networked, research collaboration is global and researchers keep in touch real time by phone, e-mail, teleconferencing and videoconferencing. They pass on jobs to another researcher or team as the day turns to night in one location, and the sun dawns in another location. In some major R&D projects the team is broken up into two halves, with each half located in two parts of the globe. When the Bangalore crew quits, the other crew at Princeton picks up and moves ahead. This method of networked global research has produced admirable technological breakthroughs. Bangalore R&D teams have filed several investment-disclosure reports, which is the first step toward filing for US patent applications (Hamm, 2005). The future in R&D looks brighter. Between October and December 2005, Microsoft unveiled new plans to invest a further \$1.7 billion, Intel \$1 billion and Cisco System \$1.1 billion.

Large Indian conglomerates are entering this lucrative business. The Tata Group, India's second largest conglomerate, having core interests in steel, cars, hotels, consulting, consumer goods, telecommunications and software, has been planning to strengthen its ICT and software operations and make them world-class suppliers. This group also is working on developing product-development centers for the pharmaceutical industry as well as global R&D centers in biotechnology, and the other emerging technologies, like nanotechnology (Pandit, 2005b).

7. Dynamism in Indian companies

While the Chinese economy has outpaced the Indian economy by a wide margin, Chinese companies have been found to perform poorly in comparison to their Indian counterparts. *Business Week's* (2005) analysis of financial data from Standard & Poor's Compustat demonstrates that "Indian companies are getting more buck from their rupee." An analysis of financial performance of 340 publicly held companies, in nine different sectors of the Chinese and Indian economies, from 1999 to 2003, revealed that the performance of Indian companies was superior

when the following two indicators were taken as the criteria: (i) return on equity (ROE) and (ii) return on invested capital (ROIC). Indian companies were able to turn in superior performances despite working under a plethora of government regulations that shackled and retarded them. When it comes to free markets, China is still regarded as a work in progress. As the government has stakes in most publicly listed companies, Chinese managers need to be heedful of the government agenda such as the employment creation objective, which adversely affects their performance. Chinese companies listed in the more internationally exposed Hong Kong stock market—the so called Red Chips—turned in superior results in terms of ROE and ROIC to those listed on the mainland exchanges. In 2003, the 25 Red Chips stocks had a return on equity of 14.8 percent compared to 12.9 percent for the mainland listed companies.

Beyond the evident macroeconomic and infrastructural weaknesses, there are segments of the Indian economy that can turn out globally competitive products in an array of high-technology areas. Pace of innovation in areas like chip designs, software and pharmaceuticals has been impressive by global standards. Numerous Indian R&D centers, discussed above, have been adjudged as among the most exciting by scientists in industrial economies. Some Indian companies have demonstrated a capability to produce world-quality goods and services at Indian prices, which are ridiculously low. Examples of such products and services range from a \$2,200 car, \$50 flights, to a clearly audible two-cent-a-minute cell-phone service. Indian surgeons, with world-class skills, can perform open heart surgery at a small fraction of the US price (Engardio, 2005).

7.1 Mini-multinationals?

Some analysts see in these instances possibilities of a birth of a new generation of globally competitive mini-multinationals or TNCs. Successful Indian firms like Bharti Tele-Ventures,²⁹ ITC, Tata Group and ICICI Bank are regarded as highly capital-efficient companies. They are being seen as the trend-setters of the future. Ambitious companies like these are going global. Once they turn into TNCs and learn to sell world-quality products and services at Indian prices, they will be difficult to compete with. In addition, India has a large pharmaceutical industry which has so far mainly catered for the massive domestic market. Some of these companies have recently improved enormously in terms of the quality of their products and are now competing globally. In 2005, seventy five pharmaceutical producing factories were approved by the US Food and Drug Administration (FDA), the largest number outside the US (Luthra *et al.*, 2005).

Indian firms have been acquiring global assets; in 2005 their pace of acquisitions was impressive. They acquired a Sudanese oil field, a German metal forge, a South Korean truck maker, a British tea company, a French television manufacturer operating in Poland, Mexico and China, a Singapore paint company with plants in 12 countries and about 60,000 kilometers of undersea communication cables. Between January and August 2005, Indian firms paid \$1.7 billion,

over four times the amount for 2001, for 62 overseas acquisitions (Giridharadas, 2005). Some Indian companies have chosen to grow abroad due to frustrations with the domestic economic and productive environment.

However, there is an important lesson to be learned from the past. That is, whether the prospects of creating and expanding Indian mini-multinationals and TNCs will materialize will necessarily depend upon how far the interfering government and its corrupt bureaucracy can be kept away from these innovative business ventures. Presence of an intrusive and stifling government system holds a veritable risk of nipping them in the bud.

8. Transition to a high growth trajectory?

Improvement in the growth rate in the Indian economy has been highlighted in Section 2, which indicated that real GDP growth rates in the late 1980s and in the post-reform era were higher than those in the past. Should this be taken to imply that, premised on structural transformation, the Indian economy is in the early phase of a transformation to a higher real GDP growth trend, comparable to that of China after 1978? An empirical assessment of this possibility shows that while the trend growth rate accelerated somewhat, there is little evidence to suggest that this is a shift in the growth trajectory of the Indian economy. As noted in Section 2, despite diversification of the economy, agriculture continues to be an important sector. One important characteristic of Indian agriculture is that only 40 percent of total arable land is irrigated, while the rest of it is rain-fed. There is a high correlation (0.65) between growth in the agricultural sector and rainfall. This, in turn, implies that India's economic growth performance continues to be highly dependent upon monsoons. This is manifested in a magnified manner through its impact over the rural income and consumption pattern. Although the correlation between the agricultural growth rate and the GDP growth rate has declined over the decades, it is still high. For the 1950–1 through 2003–4 period it was measured at 0.83. It declined 0.52 for the 1990–1 through 2003–4 period. Rainfall-adjusted GDP growth for 2003–4 was calculated at 4.3 percent (IMF, 2005b).

Two recent empirical studies have concluded that the Indian economy transitioned to a higher level of GDP growth in the 1980s.³⁰ They posit that the hike in the GDP growth rate from a little over 3 percent in the decades of the 1960s and 1970s to 5 to 6 percent in the 1980s should be seen as a shift in the growth trajectory of the Indian economy and the dawn of a new trend. However, interestingly, these studies found no evidence of a similar shift in the growth trajectory in the post-crisis 1991 reform period. Should it, therefore, be taken to imply that there was an unsustainable growth spurt in the 1980s?

When the long-term trend GDP growth rate was estimated by smoothing the underlying rain-adjusted GDP series for the 1970–2003 period, using the Hodrick-Prescott Filter, the growth did not appear to have an accelerating trend (IMF, 2005b). Plotting of the GDP growth trend showed that there were distinct accelerating phases of GDP growth in India and that it did accelerate in

the early 1980s, 1989 and 1992. While the statistical evidence of a break in 1989 was weak, the evidence for 1992 was robust.

The causal factor behind the recent leveling off in GDP growth is a declining trend in investment in the economy. In the mid-1990s, total investment in India plummeted from 26 percent of GDP to close to 20 percent. To no one's surprise, high and sustained fiscal profligacy in the economy was the villain of the piece that crowded out domestic investment. This observation applied to investment in both public and private sectors. Another characteristic of declining investment was that it affected both industrial and agricultural sectors. Capital growth per worker in the industrial sector turned negative. This goes to highlight how pernicious sustained fiscal deficits can be to any economy. The growth potential of both sectors—agricultural and industrial—was further curtailed by long-standing weaknesses in the Indian economy, namely continuing restrictions on size of investment, archaic labor laws and enduring restrictions on trade, particularly trade in agricultural products.

9. Conclusion and summary

During the post-independence era, Indian policy-makers adopted the inward-oriented ISI strategy of growth, which made the Indian economy an insular one, virtually cut off from the global economy. India's importance and participation in the global economy incessantly declined and it remained a marginal economy and country. Its failure in the areas of trade and FDI were notable. The fervent dirigistic tradition soon became the bane of the economic system and blighted it for decades. A large and grossly inefficient public sector, an intrusive government system and a large, corrupt and inefficient bureaucracy further degraded a deficient and anemic macroeconomic policy environment. The private sector was kept under stringent control. The present economic performance has improved relative to India's own past. It has made noteworthy strides and the negative views about its economic performance and prospects are beginning to change.

The growth performance of the Indian economy during the 1980s improved somewhat due to the small number of furtive reforms taken by the erstwhile government. Due to this improvement India was ranked higher in terms of GDP growth performance among the developing economies during the 1980s. However, the fiscal profligacy of the 1980s, which had contributed to this improvement in growth, also became one of the contributing factors of the 1991 fiscal-cum-BoP crisis. The reform program worked adequately, as intended, and the short-term objective of achieving economic stability was achieved. To be sure, the economic crisis provided a rationale for a radical shift in the economic strategy that had been continuing for decades. A second and equally important objective of the reform program was to restructure the economy in such a manner that the long-festering macroeconomic and structural malaise could be corrected, and conditions for sustained long-term growth created.

Deregulation and liberalization measures were taken both in domestic policy areas and the external sector of the economy. In the former case, licensing

requirements for making domestic investment and administrative control over resource allocation were considerably curtailed. However, several policy areas that needed immediate attention were ignored. For instance, India's large and grossly wasteful public sector, which needed an instantaneous adoption of aggressive privatization policies, was dealt with in a reluctant manner. Archaic labor laws, bankruptcy laws and the massive maze of subsidies were left untouched. These policy failures have had high economic and social costs.

Although tariffs and NTBs were reduced, they still remained among the highest in Asia. Fiscal consolidation did not succeed despite the enactment of the FRBMA in 2004. A reasonably healthy beginning was made in the area of financial sector reforms, although several important decisions, like the change in ownership of 27 large public sector banks, have been deferred because of political expedience.

After the first set of easy reforms in the early 1990s, policy-makers stopped short of implementing the second large set of measures of supply-side reforms. Other than arduous bureaucratic hurdles, serious political barriers exist in implementing the reform and restructuring process. The present Congress Party-led coalition government is supported by the left front, including the Communist Party of India. The left-leaning parties of the coalition are dead set against reforms in many areas of the economy. Consequently, by the late 1990s reform implementation lost whatever small momentum it had gained. If the objective of the policy-makers is to create a policy and structural framework that would allow India to move to a higher growth trajectory like China, achieve rapid poverty alleviation, faster GDP growth and integration with the global economy, a great deal still remains to be done in several vitally important macroeconomic and financial policy areas.

A segment of its tertiary sector, particularly commercial services that include ICT, ICTeS, information, telecommunication and other commercial services, has successfully and gainfully globalized and has been engendering commendable and lucrative results. Growth in this sector has recorded a remarkable rise in the 1990s. Also, some industries and services sector firms have picked up a great deal of momentum and are turning out world-class products. For instance, steel production in India is among the lowest-cost in the world. Pharmaceutical and biotech firms are highly competitive internationally. Indian firms are not only carrying out their own research and development (R&D) but have become hubs for global networked R&D. India has been attracting technological titans in the matured economies to create their R&D facilities. While the Chinese economy has outpaced the Indian economy by a wide margin, Chinese companies have been found to perform poorly in comparison to their Indian counterparts. Some analysts see in these instances possibilities of a birth of a new generation of globally competitive Indian mini-multinationals or TNCs.

Emulating China's meritorious economic performance will be within India's grasp if it succeeds in boldly and efficiently implementing the reforms and restructuring program, without ignoring crucial areas on the grounds of political expedience. Incomplete and patchy implementation of the reform program needs to be supplanted with its earnest and complete implementation. Serious and long

persisting deficiencies in the infrastructure sector call for immediate attention. The large, inefficient and corrupt bureaucracy badly needs to be retrenched; society has been paying a high cost of this institutional blemish. In addition, reform and restructuring of the economy needs to be broadened and deepened. If policy-makers continue in the manner they have done in the past, the goal of emulating the Chinese economic performance of long-term average annual real GDP growth of 10 percent, or something close to it, will remain an unachievable ambition, an elusive target.

5 Crouching tiger, hidden dragon: how the two emerging economies interact with each other

1. Historic intellectual, cultural and economic relations

China and India are both ancient civilizations, with histories stretching over five thousand years. Their mutual relations are accordingly ancient. That China and India have had long-term intellectual and cultural ties is not well known to economists because this relationship falls into the domain of religious scholars. The strong ties date back to the first century AD when Buddhism spread from India to China. The history of Buddhism has chronicled detailed accounts of religious and cultural bonds between the two neighbors. The Han dynasty emperor Mingdi invited two Indian monks, Dharmaraksa and Kasypa Matanga, during the first century AD. This was the beginning of a large exchange of scholars and monks between the two countries.

A tradition of translating Sanskrit¹ texts or *sastras* started. Exchange of scholars and monks continued unabated until the eleventh century. Supported by successive emperors, Buddhism became a powerful force in China and remained so until approximately a thousand years ago when it was largely displaced by Confucianism and Taoism.

During the first millennium, India exerted a strong religious and cultural influence over not only China but also Southeast Asia. This influence was exerted by the export of ideas, knowledge and spiritual philosophies. Export of religious and cultural ideas was particularly significant. Wales (1967) called it “Indianization” of these societies to the point that they became almost Indian “cultural colonies.” Indian monks, scholars and teachers of Buddhism traveled to China during the fourth century through Kashmir and the seventh century through Tibet. During the Sui dynasty (581–618) and Tang dynasty (618–907) translation of hoards of Sanskrit texts or *sastras* not only continued but also was supported royally. During the reign of emperor Harsha of Kanauj (606–47), north India enjoyed a renaissance of art, letters, and theology. The noted Chinese scholar-pilgrim Hsüan-tsang, whose written accounts of Indian history are still avidly followed, visited India during this period (see Chapter 1, Section 2.2).

The texts that were taken to China by the peripatetic scholars and religious leaders continued to be translated until the eleventh century AD, when like the visits of monks and preachers, this process is believed to have come to an end.

Between AD 982 and AD 1011, over two hundred Sanskrit volumes were taken to China for translation (Sen, 2004). Among the many treatises were the Laws of Manu, which were taken to China by visiting scholars and translated. Several well-documented and elaborate accounts of the two countries and their relations by famous Chinese and Indian scholars and historians are available and are part of Indian history school books.² The most famous among these scholars are Faxian in the fifth century and Xuanzang and Yi Jing in the seventh. Xuanzang spent several years at Nalanda, the famous university of this period, ruins of which exist in Patliputra or modern-day Patna.

A large number of Indian scholars traveled to China, particularly in the seventh and the eighth centuries, which included some famous mathematicians and astronomers. Gautama Siddhartha became the president of the Board of Astronomy of China in the eighth century. Religion was only one, if central, part of the much larger story of the Sino-Indian association during the first and second millenniums. Rich and varied secular exchanges of knowledge extended to science, mathematics, literature, logic, astronomy, linguistics, architecture, medicine and music. During his extended stay, Xuanzang closely studied the Indian public health care system.

The history of trade between China and India is also ancient. Some scholars believe that the foundation of Sino-Indian relations was laid by trade, not by religious and cultural exchanges (Sen, 2004). Kautilya, the noted Indian scholar and the author of treaties on economics and politics, which were written in fourth century BC, has mentioned trade in silk, objects of artistic value and precious articles between China and India. Mention of the use of Chinese products by Indian royalty can be found in the ancient Indian epic *Mahabharata*. Silk (in Sanskrit *cinamsuka*) was regarded as a precious object fit to be offered as a present to people in high position. The classical Sanskrit literature of the early part of the first millennium captured the exotic nature of Chinese products.³ Products imported from China influenced the lifestyle and consumption pattern of rich Indian families. Other than silk, these Chinese products included camphor (*cinaka*), vermilion (*cinapista*), high-quality leather (*cinasi*) and delicious fruits like pears (*cinarajaputra*) and peaches (*cinani*). Indian traders became a bond between West Asia and China, selling gold from West Asia to China and Chinese silk and pottery to West Asia. They also sold Indian products like cotton cloth and spices like cardamom, cinnamon and pepper to China.

2. Bilateral relations during the contemporary period

During the early part of the twentieth century, China and India remained aloof and standoffish because both “fought their prolonged battles against imperial rule and economic penetration over a similar time span” (Frankel, 2004). Their challenges were similar but their responses were dissimilar. Each had a different method of dealing with the challenge, which was consistent with its culture. India chose strategies of civil disobedience and non-violence, while China preferred mobilization of the armed peasantry. The national leaders of these respective

movements on both sides of the border were completely immersed in their own respective national struggles, and did not have any contact with each other.

After independence, the first Indian Prime Minister, Jawaharlal Nehru, took a benign view of China and considered a close and pivotal China–India relationship for Asia. He thought it an ideal means of keeping the two cold-war super-powers out of Asia, or at least reduce their influence. When the two neighbors did establish contact in the latter half of the twentieth century, it was like starting a liaison between two rank strangers. The ancient legacy of intellectual, cultural and economic ties was buried into oblivion. During the 1950s, China and India started off with an amicable and cordial relationship of *bon voisinage* that two kindly and good neighbors should have. One proof of this is that India was the first non-socialist country to accord recognition to the newly born People’s Republic of China.

Notwithstanding the difference in political systems, the two countries faced the common challenges of organizing the enormous tasks of economic development and social uplift. Both had a common penchant for socialistic economic ideas and the Soviet growth model. As both countries were among the poorest in the world, political leadership in the two countries was imbued with the dreams of creating a socialist society that would be able to achieve growth with equality for the impoverished masses.⁴ To this end, while China adopted the command economic system on the lines adopted by the Soviet Union, India followed a statist economic system based on central planning, where the public sector played a dominant role—although the private sector did coexist (see Chapter 4, Section 2). The mutual relationship during this “honeymoon” period was affable and was represented by the “Hindi-Chini Bhai Bhai” slogan⁵ in India, which means in Hindi that “Chinese and Indians are brothers.” Leaders of the two countries jointly advocated *Panch Sheel* or the five principles of peaceful coexistence, which subsequently became the guiding principles of international relations in general. This was the halcyon period of Sino–Indian friendship in the contemporary era (Shihai, 2004).

The 1962 short but fierce border war brought an abrupt end to this period of amicability. Relations were severed, both the countries withdrew ambassadors and a trade hiatus continued for the next 14 years. This was the beginning of “Hindi-Chini Bye Bye,” or “goodbye to the China–India relationship.” The thaw did not begin until 1988, when the young Indian Prime Minister Rajeev Gandhi visited China and met octogenarian Deng Xiaoping, who treated his youthful guest to a monologue on the importance of close political and economic relations between the two countries, economic development in Asia and the possibility of a future “Asian Age.” Their forty-five minute long handshake was noted and commented upon by the watchful international press. Bilateral relations gradually improved during the 1990s, when two agreements were signed by the two governments as confidence-building measures. Also, bilateral trade restarted and grew rapidly during the 1990s. An Indian journalist coined a third slogan for this period, which was “Hindi-Chini Buy Buy,” that is “China and India are buying a lot of goods from each other.”

Another serious downturn in the bilateral relationship came in mid-1998, when India made a nuclear test known as the Pokhran II.⁶ The test ran against the international trend of nuclear disarmament. India justified it to a disapproving global community by saying that it had a hostile neighbor in the north and therefore it needed nuclear arsenal for self-defense. The Chinese leaders were offended more by words than by the test *per se*. In their strong official reaction they called India's accusation of China posing a nuclear threat as gratuitous and malicious. Livid and outraged, the Chinese government called the Indian government "irresponsible and immoral."⁷ Political and diplomatic relations soured and dipped to a new low once again, albeit trade continued.

The asymmetric relationship between India and Pakistan has been a negative factor in the Sino-Indian relationship. It cannot be ignored because any Indian government was and will remain highly sensitive about it and watch it cautiously, with a certain degree of turpitude, even edginess. China was blamed for passing its nuclear know-how to Pakistan, which has significantly increased its military threat to India. However, of late China has changed that stance by not supporting Pakistan, even diplomatically. In the 1999, low-intensity armed conflict between India and Pakistan, China refrained from offering any public support to Pakistan. Frazier (2004) noted that, "From a purely self-interested perspective, China on balance would prefer not to see another Indo-Pakistan conflict." Chinese efforts to restrain Pakistan in future would go a long way in reassuring India that China no longer "views Pakistan as a strategic counterweight to India."

The present corps of political leaders in the two countries has placed greater emphasis on stable relations with each other than was the case during much of the Cold War period. Visits of top political leaders worked towards smoothing ruffled feathers. Premier Zhu Rongji made a state visit to India in early 2002 and emphasized trade expansion and economic cooperation between the two countries. When the soon-to-be octogenarian Indian Prime Minister Vajpayee met 60-year-old Hu Jintao, the Chinese President, in St. Petersburg in June 2002, he expressed Deng Xiaoping-like hopes by saying that "if the two countries were to cooperate this could even result in the 21st century turning into an Asian century." Vajpayee paid a state visit to China in June 2003; China and India signed a joint declaration to build a "comprehensive cooperative" partnership for the twenty-first century during this visit.

In April 2005, Chinese Premier Wen Jiabao made his maiden state visit to India. In a pre-visit press conference in Beijing, Wen Jiabao won the appreciation of visiting Indian journalists by quoting from a Hindu scripture in Sanskrit and wishing for peace between the two neighbors. A political rapprochement was progressing in the form of diplomatic visits by top political leaders. It was not only a momentous event of historic significance for the two large neighbors but also for the region. The world's fastest growing economy displayed rare wisdom in reaching out to the world's largest democracy, which was making its own endeavors to be a dynamic economy. China and India both favor democratization of international relations and multi-polarization of the world. They have both expressed commitment to peace and stability in Asia as well as to economic growth

and prosperity. Trade officials in the two countries also agreed to coordinate their strategies in support of Asian developing economies in the World Trade Organization (WTO).

Premier Wen Jiabao's charm offensive included an offer for "a strategic partnership for peace and prosperity." He came with a clearly defined message of expanding trade and technological cooperation between the two economies. An enthusiastic and sincere Wen Jiabao also proposed a bilateral trade agreement (BTA) between China and India. Additionally, he promised support for India's long-standing bid for permanent membership of the United Nations Security Council and noted that a thaw in bilateral relations between the two countries was not only "immeasurably valuable for the Asian countries but for the world." In his warm welcome address the Indian Prime Minister, Dr. Manmohan Singh, remarked, with a tad of hyperbole, "Together India and China could reshape the world order." Furthermore, the two leaders called for the combining of Indian software technology with Chinese prowess in hardware technology to achieve world leadership in the global information and communication technology (ICT) industry.

These favorable developments and proposals were driven by the recognition that in a rapidly globalizing world of economics and finance, economics trumps politics. Geo-politics has begun playing second fiddle to geo-economics. Political leaders on both sides of the border see that the top priority in their national agendas is economic development and social transformation. Also, the two economies can be both potential competitors and potential partners in the global economy. Therefore, a coordinated and mutually beneficial economic engagement is a pragmatic and profitable approach for both countries. Wen Jiabao during his state visit expressed his eagerness to be seen as "friends not competitors," which was a far-reaching, statesman-like gesture and was well received in India. Among scholars of the Asian economy, this rapprochement is an important, if not an impassioned, issue. If it grows, it can potentially transform the regional economic landscape.

In Dr. Manmohan Singh's reference to the shape of a new world order, nostalgia for a world of six centuries ago was evident, when China and India accounted for about 75 percent of global GDP. During this epoch, the economic significance of Europe was minor, and America still lay undiscovered beyond the Atlantic. Even in the early eighteenth century, the combined GDP of China and India was over 45 percent of global GDP (Maddison, 1998). Visions of an economically prosperous China and India having a respectable place in the global community of nations are not new. During the early part of the twentieth century similar sentiments were eloquently expressed by Rabindranath Tagore and Jawaharlal Nehru.

3. Rapid bilateral trade expansion

The two largest emerging-market economies (EMEs) began to look for opportunities in each other's markets. In 1984, the two countries had signed a trade agreement granting each other the most-favored-nation (MFN) treatment. During the 1990s, bilateral trade grew rapidly, albeit from a small base. It was a measly \$3 million in 1991, but reached \$2.9 billion in 2000. In 2001 it recorded an

increase of 21.5 percent and reached \$3.59 billion. The next year, during his state visit, when Premier Zhu Rongji exhorted in a public speech that trade between the two economies should be \$10 billion, he was neither taken seriously by his aides nor the Indian business community. However, bilateral trade jumped to \$4.9 billion in 2002 and \$7.6 billion in 2003, recording increases of 41 percent and 22 percent, respectively. In 2004, a whopping 77 percent growth brought bilateral trade to \$13.6 billion. Of this, India's exports to China were \$7,677.43 million and imports \$5,926.67 million, with India enjoying a trade surplus of \$1,750.76 million. Given the market potential these bilateral trade figures are on the low side. In his address to Indian business leaders on 11 April 2005, Premier Wen Jiabao set ambitious targets for bilateral trade: \$20 billion by 2008 and \$30 billion by 2010.

Although the bilateral trade level by 2005 was not large, its growth rate since 2000 has been brisk. With such rapid growth, China is poised to become India's largest trade partner after the US before 2010. The two countries are discussing reducing tariff and non-tariff barriers (NTBs). A free trade agreement (FTA) between them in the near future is well within the realm of possibilities. A joint feasibility study was launched by the two governments in 2003. The mandate of the group is to identify areas of mutual interest and draw up a program for further development of trade and economic cooperation.

The two economies have obvious complementarities. They have adopted different growth paths, which are reflected in their economic structures, but this dissimilarity is also reflected in their trade structures. While China has been a phenomenal success in manufacturing, India achieved greater success in the services sector, particularly in software and ICT-enabled services (ICTeS). As a proportion of GDP, China's manufacturing sector is two-and-a-half times larger than India's and contributed 39 percent of GDP in 2004. Conversely, as a proportion of GDP, India's services sector is 1.7 times that of China and contributed 51 percent of GDP. This complementarity was not obvious in their bilateral trade until 2004. However, one characteristic of their mutual trade structure was obvious; that is, despite trade surplus, Indian exports to China were overwhelmingly dominated by low value-added products. Iron ore constituted 53 percent of total exports in 2004. Potential export items from India to China included oil seeds, marine products, dairy products and salt, none of which are high value-added products.

However, there is a range of high value-added products in which Indian exporters can expand their exports. They include inorganic chemicals, pharmaceuticals, plastic and rubber goods, and optical and medical equipment. Also, there is a sizeable potential to increase Indian exports in services and knowledge-intensive areas, where the Indian economy has a comparative advantage, like biotechnology, ICT, ICTeS, education, software, consulting, auditing, accountancy, tourism and the financial sector. Conversely, China exports an array of high value-added products to India. Only machinery and electrical machinery accounted for 36 percent of Chinese exports to India in 2004. Exports of organic chemicals, iron and steel from China has also recorded enormous growth in recent years.

3.1 A plausible free trade agreement

There are various reasons why the proposal of a BTA made by the Chinese Premier (see Section 2) needs to be taken seriously by both the countries. The “second wave” of regional trade agreements (RTAs) that started in the global economy in the early 1990s added a large number of small RTAs of different kinds, essentially around the European Union (EU), the Mediterranean countries, Eastern and Central European countries, North America and Latin America. The EU has been expanded on several occasions and, after the North American Free Trade Area (NAFTA), the US negotiated the Central American Free Trade Agreement (CAFTA) on a very short timeline. The collapse of the WTO’s Fifth Ministerial Conference in Cancun, Mexico, in September 2003 gave an impetus to the formation of the hemispheric Free Trade Area of the Americas (FTAA) agreement. Consequently, the 139 members of the WTO had 186 RTAs in goods and services in force in December 2005.

The Asian economies remained indifferent to institutionalized regionalism and RTAs during the first wave of regionalization; the second wave also left them almost completely out of the RTA game (Das, 2004b). They had remained committed to multilateralism and market-driven regionalization of Asian economies (Das, 2005c). However, after the debacle of the Third Ministerial Conference of the WTO in Seattle in 1999, the scenario began to transform and Asian economies picked up some momentum in formulating RTAs and BTAs. In this multilateral *mise-en-scène*, the trade ministries of China and India must go with the flow and endeavor to launch a regional trade agreement covering trade in goods and services in the short-term.

Due to the flurry of RTA formations in different regions during the second wave of regionalism, Asian economies have suffered from diversion of trade. A logical response of Asian economies to this trade diversion is to enter into their own set of RTAs and BTAs. A China–India free trade agreement (FTA), no matter what its initial scope, could well be the beginning of such a trend in Asia. Possibilities of joining hands with the ASEAN-Plus-Three (APT)⁸ at an opportune time can always be kept open. These developments could go a long way in laying the foundation of Asian economic integration. In addition to trade in goods and services, a China–India FTA can also promote an alternative template that is inclusive of non-trade issues like labor standards, intellectual property rights and streamlined regulations on cross-border capital flows. These subjects are presently a part of the US FTA template. There is a likely possibility that they may become part of the WTO template in future.

Neither country is a neophyte to the concept of an RTA or BTA or a preferential trade agreement (PTA). China signed four FTAs in trade in goods and services with Hong Kong SAR and Macao and a PTA with the Association of South East Asian Nations (ASEAN)⁹ economies in 2004. India and Sri Lanka signed an FTA in 2001, and the South Asia Free Trade Area (SAFTA) between Bangladesh, Bhutan, Nepal, India, Pakistan, the Maldives and Sri Lanka became a reality on 1 January 2006. Given the fact that a template exists and so does a reasonable degree of

complementarity, the prospect of an RTA formulation between China and India is a realistic one. What is needed is a critical mass of political commitment; with this the two neighbors will be on their way to formulate an RTA of some mutually beneficial genus.

3.2. Will China's success result in trade diversion for India?

If the annual growth rate of trade expansion is taken as an indicator, China has been the most successful economy in multilateral trade during the contemporary period. The largest traditional export market for both China and India is the US, which accounted for 20 to 22 percent of their exports. The two countries also compete in many third-country markets, the EU and Japan being the most important ones among them. A moot question is whether China's success in multilateral trade and growing integration with the global economy will be at the expense of Indian trade and its economy. This question has become more relevant after China's WTO accession in 2001 because it has helped in the further integration of the Chinese economy both regionally and globally, which in turn has had serious ramifications for Asian and global trade. These effects of China's WTO accession have been avidly researched (Das, 2001c and 2005c).

The WTO accession entitled China MFN treatment from all its trade partners, who lifted, or are phasing out, all the restrictions and quotas on China's exports. It also entitled China to make use of the dispute-settlement undertaking of the WTO to protect its trade interests. Using 6-digit HS industry data from the COMTRADE data tapes of the United Nations, Cerra, Riveera and Saxena (2005) have constructed several trade indices to analyze the impact of China's trade expansion on India's trade and welfare. They came to conclusions that were both realistic, likely and intuitively correct. They first constructed the Herfindahl index, which measures diversification or concentration of exports and imports. Value of indexes for the 1991–2001 period showed that China's exports are far more diversified than India's.

As the Herfindahl index does not indicate product categories of specialization, revealed comparative advantage (RCA) relative to the world on the basis of actual trade was computed. Comparing RCA for the two economies for broad industrial groups indicated that India, not China, has industries in the 0 and 1 categories of the Harmonized System (HS), or agricultural products. It is not a surprise because the agricultural sector is still quite large in the Indian economy, contributing 22 percent of GDP in 2003. Out of the total labor force of 387 million, 256 million work in the agriculture sector. India is the largest producer of milk, fruits, cashew nuts, coconuts and tea in the world. It is also the second largest producer of wheat, vegetables, sugar and fish and the third largest producer of tobacco and rice. It is one of the largest exporters of rice and tea in the world, and among the important exporters of wheat. During the fiscal year of 2003–4, total Indian agricultural exports were worth \$6.5 billion. Exports in the first half of 2004–5 were \$3.6 billion. As China does not have RCA in agriculture, Indian exporters would do well to target their exports in this market segment of China.

Second, neither economy had RCA in industry 2 (beverages, fuels and chemicals), industry 3 (chemicals and pharmaceuticals), industry 4 (hides and forest products) and industry 8 (articles of metals and transport vehicles). The exceptions to these areas are transport equipment, in which China's RCA has been on the rise, and pharmaceuticals, in which India's RCA has been on the rise. Third, India was found to have clear RCA in industry 7 (metals and metal products), and China in industry 9 (manufactured products of different kinds, like arms, instruments, toys and the like).

Both economies have strong RCA in textiles and clothing. Exports from this one sector accounted for around 30 percent of total exports for both countries over the 1991–2001 period. Their trade in this large industry presents an interesting picture. Most importantly, the two economies were found to specialize in different sub-sectors. While China recorded robust RCA in clothing (industry 6), India had higher RCA in basic material or textiles (industry 5). Although the two countries competed in textiles and clothing, it was limited to a small range of items and sub-sectors. Indian exports focused on textiles, non-knitted undergarments and miscellaneous textiles, while China's maximum focus was on clothing and outer-garments as well as headgear and knitted undergarments (Shafaeddin, 2004).

One valuable conclusion that emerges from this pattern of RCA in textiles and clothing is that the two countries can expand their bilateral trade in this large industrial category in which both have overall RCA. In times to come, textiles and clothing will remain an important domestic industry and an equally important trade sector for both economies. No slackening in this basic industry appears plausible in the near future in either country. China and India are the second and third largest producers of cotton in the world, respectively. In terms of production of textiles, China and India are also the largest and second largest in the world, respectively. India is also the third largest producer of filament yarn. By 2005, China grew into a large importer of textiles from Japan, Republic of Korea, Taiwan, Singapore and Hong Kong SAR to meet its demand for clothing exports to the global markets. India needs to capitalize on this demand. Indian textile exporters have not succeeded because the textile industry is India operated under a gamut of government-imposed regulations and restrictions, including those on firm size, import of capital goods and machinery and stringent labor laws. These policies weakened the textiles industry over the decades and rendered it globally uncompetitive. It needs to be noted that the textiles industry has traditionally been the second largest employer in India after agriculture.

Cerra *et al.* (2005) also constructed a new index that measured the extent to which two countries competed in world markets based on the similarities of composition of their trade. This index aggregates the data about export shares by product and measures the extent to which the countries are exporting the same products in the global markets. The conclusion they arrived at was that China and India competed only in 25 percent of the products that are exported to third-country markets.

China's rapid multilateral trade growth and expansion into third-country markets since 2001 is likely to affect the trade growth of many Asian economies,

including India. General equilibrium modeling using the Global Trade Analysis Project (GTAP) data base reveals that India will “likely experience a fall in economic welfare, along with a fall in the GDP (quantity) by about \$359 million over the shock period” (Cerra *et al.*, 2005). India’s loss of welfare will largely emanate from deterioration in its terms-of-trade (TOT) in several of its export lines. The TOT driven losses were estimated to be the highest in clothing exports. India will not be alone in suffering welfare losses. Indonesia, Malaysia and the Philippines in Asia and Mexico in Latin America will also experience adverse shocks and welfare losses.

4. Foreign direct investment

Foreign direct investment (FDI) has increasingly been viewed as more than mere external capital supplementing domestic financial resources. It works as a conduit of transfer of technology, management skills, and a link to the global markets, and therefore it is regarded as a definite catalyst to economic growth for the developing economies. Therefore, investment climate in a developing economy is regarded as a vitally important policy variable. Little wonder that the key message of the *World Development Report 2005* is that “for governments at all levels, a top priority should be to improve the investment climates of their societies. To do so, they need to understand how their policies and behaviors shape the opportunities and incentives facing firms ... The agenda is broad and challenging, but delivering on it holds great promise for reducing poverty and improving living standards.”¹⁰ Another benefit of FDI, brought home by the financial crises of the 1990s, is that in a crisis situation—unlike portfolio investment, debt flows and short-term capital—FDI flows have proved to be resilient. However, convincing evidence is available to show that the growth-enhancing impact of FDI varies from economy to economy.

Over the last two decades the rate of growth of FDI has been higher than the rates of growth of global GDP and multilateral trade. Also, the proportion of FDI going to developing economies in total global FDI flows has been on the rise. Its relative importance for developing economies has increased since the mid-1980s. It has grown to be the largest single component of global capital flows into developing economies. The competition for attracting FDI has also increased, with larger developing economies vying for a larger size of the pie. Additionally, there are some structural factors that have made the larger EMEs favored destinations for FDI. Global investors are increasingly attracted to the larger EMEs that offer competitive production costs and provide access to a buoyant consumer base. Given their recent rapid growth rate and large population base, some of the EMEs hold prospects of becoming large consumer markets within the next decade. The transnational corporations (TNCs) have been increasingly betting on this outcome (Christiansen and Bertrand, 2005). Presently, FDI flows to China are far higher than Indian levels. Besides, India has suffered from the image of an underachiever (see Chapter 1, Table 1.1). The FDI flows into China are essentially capital-intensive, while in India they are

skill-intensive. The following two sub-sections elucidate on the FDI scenarios of China and India.

4.1 Rapid increase in China

As elaborated in Chapter 3, Section 6, China has been highly successful in attracting foreign FDI. Over the 1990s, it emerged as a large destination of regional and global FDI, somewhat destabilizing the other Asian FDI destination economies in the process. One of the essential reasons for this unparalleled success was China's strategy of creating Special Economic Zones (SEZs) and coastal economic zones. Decision-makers in the public policy community proactively created an enabling environment for the inflows of FDI in the domestic economy, which were essentially located in the coastal areas of the eastern and the southern provinces of China. Along with liberalization of the external sector, it requires a certain level of development in the areas of education, technology and infrastructure, including financial infrastructure. Foreign investors were also attracted by China's large market and abundant supply of industrious low-wage labor (Das, 2005b).

During the 1990–5 quinquennium, average annual FDI flows to China were \$19 billion. They soared to \$40 billion in 1996, making it the highest developing country FDI recipient. Growth rate of net FDI decelerated somewhat between 1998 and 2000. After three years of relatively slow growth, China received \$46.8 billion in 2001. The WTO accession in November 2001 provided an impetus to FDI and in 2002 China received \$53 billion. China continued to retain its high perch and be Asia's and the developing world's largest recipient of FDI. It was also the recipient of the second highest FDI in the world in 2001. As noted in Chapter 3, Section 6.2, in 2002, for the first time, China overtook the US. It became the largest global recipient of FDI in 2002, accounting for 9.88 percent of the global flows for that year.

That FDI played a prominent role in the Chinese economy is well recognized. China's export-led manufacturing boom has largely been spawned by FDI inflows. In 2001, FDI accounted for 23 percent of the total value-added in the industrial sector. They also generated 18 percent of the domestic tax revenue and were responsible for 48 percent of Chinese exports. According to statistics released by the Ministry of Commerce, China approved more than 41,000 new foreign-invested firms in 2003, a 20 percent rise over 2002. This led to an FDI inflow of \$53 billion in 2003. This performance was the consequence of China's ongoing economic liberalization and structural reforms, and efforts to bring domestic regulations in line with international standards. The manufacturing industry continued to be the star performer, garnering 70 percent of total FDI. Electronics, telecom equipment, chemicals and machinery were the most important sectors in the manufacturing industry in 2003. Chinese economists see this trend continuing in the near future.¹¹ In 2004, China received \$60.6 billion of FDI.

The flip side of the coin is that, at \$30 per capita, China receives much less FDI than other comparable developing countries, such as Brazil, where per capita FDI was \$195. A great deal of credit for China's recent success goes to its adoption

and meticulous following of the “open door” policy or the Deng doctrine.¹² However, in the twenty-five years following China opening the door to foreign investment, much of FDI was concentrated in low-technology, labor-intensive manufacturing projects, which is not to say that high-technology industries were excluded. Electronics and telecom were among the favored high-technology sectors. A relatively low share of FDI has come from the world’s most prolific group of investors. Historically, Organization for Economic Cooperation and Development (OECD) member countries have been the largest investing group in the world. To be sure, during the recent period a good deal of FDI stock in China was built by Japan, which was not a large investor in the past. In addition, a large part of FDI flows to China still originated from the other Asian economies. As set out in Chapter 3, the present challenge faced by China is to develop a more transparent business environment and business policies with a clear legal and regulatory framework. It should help attract higher-quality, long-term investments from the West European and North American economies in high-technology, capital-intensive industries (OECD, 2003b).

After initial skepticism FDI from the large Japanese firms and TNCs to China began to rise in the early 1990s. The JBIC (2002) survey has revealed that, between 1993 and 2001, manufacturing bases of Japanese TNCs in China rose from 100 to almost 700. Although at 1,000, in 2001, the corresponding number was higher in the ASEAN-4 countries, the pace of investment in China shows that this number may become higher for China in the short-term. It was noted earlier that the Japanese TNCs regarded the investment benefits in China as greater than in ASEAN-4 economies and gradually it became the most favored destination of Japanese FDI (JBIC, 2002). In the early 2000s, while Thailand, Malaysia and Vietnam were ranked high in the survey of Japanese TNCs as destination countries, they remained below China in the rankings. Several Japanese TNCs were planning to relocate their manufacturing facilities from Japan to China, while a good number of them were even considering relocating from ASEAN-4, Hong Kong and Taiwan to China.¹³ The JETRO (2001) survey reports that Japanese TNCs found better advantages in the areas of market growth, production costs and labor supply in China.

FDI statistics from UNCTAD (2002) show that, since the mid-1990s, the share of China in total FDI to Asia has grown at the cost of ASEAN economies. During the 1990–5 period ASEAN’s average annual share of inflows to Asia was 38 percent. In 2001 it declined to 14 percent. Conversely, China’s average annual share during the 1990–5 period was 44 percent per annum. It peaked at 51 percent in 1998, fell for the subsequent two years, and then rose again to 49 percent in 2001. It soared to 57.7 percent of the total FDI flows in Asia in 2002. That China has an enormous “pull” force is obvious. As noted above, low labor cost and relatively higher labor productivity were two of the principal pull forces for the TNCs in the industrial economies (Das, 2001a and 2005b).

4.2 Sluggish expansion in India

In the 1950s the anti-FDI environment in India was largely based on two factors. The first was the strong nationalistic sentiments in the wake of independence.

Second, whatever narrow industrial base the country had at that time, an overwhelming part of it, almost three-fourths, was British-owned. Political and business leaders wished for the day when such a large foreign ownership of industries could be contained and Indian industry and market became a place for Indian entrepreneurs. Although no overt policy hostility was shown towards foreign investment in the domestic market, if anything conciliatory policy statements emerged from Parliament. Yet, new FDI inflows either did not come, or when they did, it was on a modest scale. Indian industrialists did extend a friendly hand towards foreign investors because FDI was seen by them as a way of importing state-of-the-art technology and famous brand names, but it did not produce encouraging results.

The reticence of potential foreign investors was understandable. They judged the investment climate as inhospitable and stayed off. Uncertainty regarding what stand the Government of India would take in future repelled potential foreign investors. The political environment of this period failed to inspire confidence. Subsequently, adoption of import-substituting industrialization (ISI) and large investments in public sector enterprises under the various Five-Year Plan exercises made the global investing community and TNCs more cautious than ever before. When the Government allowed FDI in the 1960s and set up the Indian Investment Center in 1961, FDI started flowing in at a snail's pace in technology-intensive manufacturing sectors. Collaboration and joint ventures were the preferred mode of FDI involvement during this period. However, insistence on majority ownership and restrictions on sectors in which FDI could be made produced discouraging results. The factor that rankled the foreign investors most was the habit of Indian bureaucrats to endlessly negotiate fine points of an FDI proposal, often for years. Frequently these bureaucrats were poorly trained to scrutinize an investment project and badly lacked the knowledge of the subject matter at hand, but did not refrain from pompously continuing negotiations and in the end shelving them for a future decision-making date.

Those dates never came. The word went around in the community of foreign investors that trying to negotiate FDI deals in India was a waste of time, energy and resources. Even Japanese capital and technology, which had played a consequential role in the other Asian high-performing (AHP) economies, and proactively participated in the creation of the "flying geese paradigm" in Asia, neglected to invest in India.

The latter half of the 1960s and early 1970s was a problematic period for the Indian economy. This period is known for two disastrous famines, a balance-of-payments crisis and devaluation of the rupee. Major commercial banks were nationalized and the Monopolies and Restrictive Trade Practices (MRTP) commission was set up. FDI inflows were not stopped but the Government of India wanted it at its own terms because *inter alia* the foreign exchange cost of repatriated profits was considered too high to allow FDI to come in liberally. Quadrupling of oil prices was a serious external shock to the economy. Foreign oil companies operating in India were nationalized. The Foreign Exchange Regulation Act (FERA) of 1973 was passed, which was considered hostile to FDI inflows.

Foreign companies were asked to dilute their foreign equity holdings to 40 percent if they wanted national treatment. A majority of them complied with the new regulation but IBM and Coca Cola wound off their Indian operations, which further deteriorated the image of India as an investment destination among foreign investors.

India was neglected by the global investing community and there were good reasons for it. During the 1970s, not only was no new FDI made in India but some TNCs terminated their operations and left. The 1980s were marginally better and small trickles of FDI came India's way. The average for 1985–90 was less than \$2 million per annum. To put the lack of significant FDI in the Indian economy in perspective, one should take note of the two following statistics. First, the stock of FDI in 1990 was less than \$2 billion, while the inflow was \$100 million (Kapur and Athreye, 2001). These statistics are enough to bring home that India was a minor player in global FDI flows.

After the macroeconomic reform process began in 1991, the economy was gradually opened up to FDI and policy endeavors were made to attract it. FDI inflows did increase but without a trend. In 1994, the total FDI inflows were \$973 million and during the next two years FDI rose at an annual rate of a little above \$2 billion. It reached the first high mark of \$3.57 billion in 1997, but declined over the next three years and was \$2.65 billion in 2000. Another high point was reached in 2001, when it was \$4.33 billion, but it declined again the next year to \$3.0 billion. In 2004, with total inflows of \$3.4 billion India was the fifth largest recipient of FDI in the developing world.¹⁴ China, Hong Kong SAR, Singapore and Korea were larger recipients than India, while Malaysia received almost as much as India did. A caveat is essential here. India was not the only economy that recorded a rise in the level of FDI receipts. Global FDI flows as well as those going to the EMEs were on the rise during the 1990s and the other EMEs had also recorded significant increases. One cannot, therefore, conclude that increases in FDI flows to India were the result of improvement in the Indian policy environment alone.

4.3 *Sparing over FDI?*

Various opinion surveys reveal that the opinion of the global investing community, including TNCs, regarding India as an investment destination, has been undergoing a transformation. A survey of global executives was conducted by the Global Business Policy Council (GBPC) in 2004 and published as *FDI Confidence Index*. This survey had a wide coverage in terms of sample size. It covered top decision-makers in the 1,000 largest TNCs of the world. These 1,000 TNCs contributed over 70 percent of total FDI flows. The survey tracked the impact of political, economic and regulatory changes in the host economies on the global investing community and preferences of decision-makers in these TNCs. The confidence index ranges between zero and three. This extensive opinion-survey put China at the top (2.03) for having the best investment environment, the US second (1.45) followed by India (1.40) (GBPC, 2004). A noteworthy observation is that the gap in the value of the confidence index between the US and India is tiny.

The results of the GBPC opinion survey coincided with that of a 2005 opinion survey conducted by the *World Investment Report* team of the United Nations Conference on Trade and Development (UNCTAD). This team conducted a larger sample survey of the global investing community, TNCs, FDI experts and investment promotion agencies (IPAs). Their results revealed, first, that during the 2005–8 period global FDI flows are expected to escalate. An overwhelming majority (81 percent) of those surveyed were optimistic regarding global FDI expansion. Second, those who were surveyed regarded China as the most attractive location and India the third choice. The US once again stood in second place (UNCTAD, 2005).¹⁵ The industries expected at the forefront of FDI growth during the period under consideration were computing and ICT, public utilities, transportation and tourism-related services. In the manufacturing sector electrical and electronics products, machinery and metals were predicted as having high priority. This set of industries and services are relevant to both China and India and they can be reasonably expected to benefit from the forecast of an upswing in FDI in the short-term.

The 2005 Japan Bank of International Cooperation (JBIC, 2005) survey also came up with comparable results. While China continued to be the overwhelming favorite (76.5 percent) of Japanese overseas investing firms and TNCs, their opinion regarding India has markedly improved. The Japanese firms now see India as an economy that will have high medium-term potential. India had ranked fifth in 2004 survey, but improved its position to third in the 2005 survey. One distinction must be borne in mind; that is, as noted in Chapter 2 (Section 1.1), the sources of FDI for China and India differ. While China's FDI overwhelmingly come from overseas Chinese Diaspora, based in Hong Kong SAR, Macau, Singapore and Taiwan, TNCs are the lone source of FDI for India.

In terms of FDI flows, China and India present a David and Goliath image. However, the above opinion surveys portend to a probability of competition between the two in the medium-term. Decision-makers in the TNCs ranked the two highly as their choice for (i) likely first-time investment destinations and (ii) most preferred off-shore investment locations for business processing functions and ICT service. Compared to other potential locations which competed for favored spots, namely Australia, Brazil, Hong Kong SAR, Malaysia, Mexico, New Zealand, Poland and Singapore, India and China were preferred for both investments in the short-term as well as medium-term.

The global investing community, decision-makers in the TNCs and investment experts who opined in these surveys are clairvoyant professionals. They perceive China and India as distinctly different markets. While China was well regarded by them as the leading global manufacturer and the fastest growing consumer market, India was viewed as a world-class services provider in business processes and ICT-enabled services (ICTeS). Its lead in R&D in a wide range of industries was also thought of highly by them. The global investing community and experts favored China over India in the following significant areas: market size, access to export markets, incentives provided by the host government, favorable cost structure, quality of infrastructure and macroeconomic management. All these

added up to create a superior investment environment in China than in India. The same set of decision-makers had favorable opinions on India's highly educated workforce, management talent, the rule of law, transparency, cultural affinity and regularity environment. India was adjudged superior in all these areas.

In addition, there was awareness in the global investment community that India's service-oriented development over the last two decades has made it possible for it to bypass some of its glaring economic weaknesses, like a poor quality physical infrastructure. They recognized that a "wired" India has played to its strength: the pragmatic and hardnosed utilization of its ICT-savvy workforce. The opinion surveys also revealed that the decision-makers were acutely conscious of India's challenges, like its corrupt and inefficient bureaucracy, which could turn into a veritable and bothersome hurdle. This issue calls for serious attention from government. An attempt to sweep such unsavory weaknesses under the carpet will imply that investor confidence will not translate into tangible FDI inflows. Going by these opinion surveys, India is at the verge of an FDI take-off. Whether this potential materializes or not will necessarily depend on how the government manages and upgrades its business policy environment in the foreseeable future (see Chapter 2, Section 7).

The question whether the recent improvement in the image of India in the global investing community will affect FDI flows to China can be answered by saying that it will have little impact. This relates only to the part of FDI that originates from TNCs, which is a small proportion of total FDI going to China. Regional FDI flows that originate from the Chinese Diaspora will not change its pattern of FDI. Besides, the sectors that are going to attract global FDI in the immediate future in the two economies are very different.

5. Building closer economic bonds

China and India have a lot to gain from each other by trading and investing in each other's economies as well as by cooperating in international and regional fora. However, the strength of economic ties between the two countries will necessarily depend on political relationships and trust. Political commitment of the two governments is indispensable for creating and strengthening bilateral economic and financial relations. There is a likely possibility that the future evolution of the relationship between the two large Asian neighbors will be multi-faceted, of which competition and cooperation may be an integral part. Analysis in the following three sub-sections shows that some of this multi-faceted cooperation has started, albeit at a nascent stage.

That political determination for intensifying cooperation in economic and non-economic areas does exist is evident from the recent spate of mutually beneficial initiatives. Although irritants exist, the twenty-first century has seen a good deal of top-level political contacts between China and India, which have been followed through by substantive initiatives. Between 2001 and 2005, three prime ministerial visits took place between the two neighbors. Furthermore, while they announced

their interest in building stable, enduring and forward-looking mutual ties, there also was an incontestable political penchant in intensification of bilateral business, economic and financial relations. Going by the well-publicized pronouncements of the two governments, there seems to be an agreement between the two on an all-round expansion of economic cooperation.

5.1 Political endeavors for charting bilateral economic relations

China has taken a proactive regional posture, which is reflected in the expansion of its regional political influence. Both bilaterally and multilaterally China's "diplomacy has been remarkably adept and nuanced, earning praise around the region. As a result most nations in the region now see China as a good neighbor, a constructive partner, a careful listener, and a non-threatening regional power" (Shambaugh, 2004). The China–India relationship has also been evolving in accordance with this new diplomatic stance. To be sure, the quality of relationship has changed for the better and both countries have been taking a pragmatic approach to mutually benefiting economic cooperation. A Joint Study Group (JSG) of economists and government officials was set up in 2003 to examine the potential complementarities between the two economies and to draw up a comprehensive plan for future economic interaction. The JSG sought input from the private sector, which bodes well for its future success. Scrutiny of present transportation links and banking support between the two countries and future strengthening is also on the agenda. The JSG was also charged with proposing trade facilitation measures that would contribute to expansion of trade.

Another meaningful measure that was taken by political leaders from the two countries in April 2005 was to establish a "Strategic Partnership for Peace and Prosperity." The two governments agreed that their mutual relations have reached a comprehensive development stage and need to be advanced to ministerial-level exchanges and dialogue. The JSG report that came out in 2005 identified a series of measures related to trade in goods and services as well as bilateral investment. It covered other areas of economic cooperation and recommended expeditious implementation of policy measures that would enhance economic engagement. A ministerial-level Joint Economic Group (JEG) was tasked to coordinate the implementation of the JSG recommendations. So far the two governments have displayed interest and earnest efforts in expanding and intensifying bilateral economic relations.

In 2005, the two countries appointed a Joint Task Force (JTF) to study in depth the feasibility of a China–India Regional Trading Arrangement. The two neighbors agreed to conduct a feasibility study on entering into a Bilateral Investment Promotion and Protection Agreement. China took a more proactive stance about entering into such an agreement than India. The two countries were also in unison about promoting cooperation in the spheres of education, science and technology, health care, ICT, tourism, youth exchange programs, agriculture and dairy development on the basis of mutual benefit and reciprocity. They decided to establish a China–India Steering Committee on Scientific and

Technological Cooperation chaired by their Ministers of Science and Technology and begin consultations on an agreement on mutual recognition of academic degrees.

The two neighbors expressed interest in developing more extensive cooperation in regional and international affairs, including the ongoing Doha Round of Multilateral Trade Negotiations. During the Cancun Ministerial Conference of the WTO, four developing countries, namely Brazil, India, China and South Africa, took the initiative to form and collegially lead the Group-of-Twenty (G-20) with an express objective of articulating and negotiating for the developing economies. Under the leadership of the four EMEs, the G-20 was effective and could make its presence felt at the Cancun Ministerial Conference. China's membership in the G-20, and its status as one of the three largest traders in the world, made other large traders take the G-20 more seriously than in the past. A similar Group-of-Ten (G-10) of developing countries was formed at the beginning of the Uruguay Round of Multilateral Trade Negotiations in September 1986, at Punta del Este in Uruguay. The G-10 was led by Brazil and India. The leadership provided by these two turned out to be weak and the G-10 was not effective in making or putting forth a credible case for the developing economies. Much to the chagrin of the developing economies, the G-10 disintegrated as the Punta del Este conference progressed (Das, 2003).

Together the two countries can provide collegial leadership to both Asian countries and the developing economies in a convincing and realistic manner. Cancun-like cooperation in multilateral trade fora will be necessary for the two neighbors to be able to play a credible role on the international arena and work towards mutually beneficial conclusions on global economic issues as well as for the regional and other developing economies. While the same kind of cooperation applies to regional issues, other Asian countries, particularly Korea and Singapore, disagree. The political leadership in the latter countries has shown a clear preference for a European Union-like model of regional economic cooperation in Asia. This perspective evidently confuses economic cooperation and integration with political integration in order to have a credible voice in global fora.

5.2 Bilateral economic initiatives by the private sector

Large business delegations accompanied the prime ministers from both countries during their respective state visits. Business leaders saw a great deal of potential for expansion of trade and investment as well as economic cooperation. Companies in the two large EMEs were intensively ferreting business opportunities in each other's markets. It was clearly reflected in the rapid trade growth and increase in investment and business projects undertaken by the business firms from both sides of the border. Although investment was not high by 2003, seventy-one projects were set up by Indian business firms in China and fifteen by Chinese companies were operating in India. By 2005, the number of Indian businesses in China grew to ninety.

The majority of Indian businesses in China were in sectors like pharmaceuticals production, automobile components, software, ICT and ICTeS. The majority of Chinese businesses in India were in the production of consumer goods and electronics. To be sure, this was a modest beginning, but the symbolism of two of the largest developing country neighbors investing across the border with a view to strengthening economic cooperation augured well for future business cooperation between the business communities. Companies of the large Indian conglomerate, Tata Group, have been actively pursuing business opportunities in China. Tata Iron and Steel Co. have been trying to set up joint ventures in China and also supply intermediate steel products for the booming Chinese market. Similarly Tata Motors is planning and negotiating joint ventures with Chinese firms to manufacture automobile parts and components for the two large markets.

Aware of India's comparative advantage in ICT and ICTeS, the Government of China has established a Sino-Indian Cooperative Office to liaise with Indian companies about setting up their bases in China. Four Indian software giants, namely TCS, Infosys Technologies, Wipro and Satyam, were being encouraged by the Chinese government to expand their Chinese operation bases. Infosys announced its plans to invest \$65 million to expand its Chinese operations; its plans include constructing corporate campuses in Shanghai and Hangzhou. It has outgrown three office buildings in Pudong, the futuristic city east of Shanghai. China produces 400,000 engineers a year; Indian ICT giants have their eye on this high quality human resource. Chinese officials have been looking for training opportunities in India. In early 2005, the government of Shenzhen signed an agreement with a large Indian software company, Zensar Technologies, to train 1,000 Chinese software project managers. Other large Indian software training companies, like MIIT, have set up more than 100 training centers in China. Chinese hardware manufacturers like Huawei, which successfully competes with Cisco Systems of San Jose, California, have set up shops in India and hired 700 Indian software specialists (French, 2005).

The size of the Indian middle class has been growing and the Chinese manufacturing companies have been investing in India to cater for this emergent consumer market. Chinese consumer goods manufacturers have become ubiquitous in India, substantially bringing down prices of many products of day-to-day use. The consumer electronics giant TCL has invested \$150 million to build a manufacturing facility in India to manufacture televisions, DVD players and air-conditioners. The Haier Group, which has been active in India manufacturing televisions, is planning to manufacture home appliances, which are its forte. Its plans include setting up a hub in India to cater for the entire South Asian and Middle Eastern markets. In 2005, several large Chinese companies were exploring opportunities for exporting manufactured products and studying the feasibility of making investments in India.

5.3 Cooperation in energy security

Essentially due to rapid growth, industrialization and urbanization, China, and to a lesser extent India, has become an ever-larger consumer of commodities and

resources in general, and oil in particular. By 2004, China had become the second largest energy consumer in the world and India the sixth largest. In the foreseeable future their participation in the global energy market is sure to rise. As there is a close empirical link between economic growth and energy demand, their future economic growth will affect the global energy demand.

The proportion of energy consumed by the two economies in the world primary energy consumption has almost doubled in the recent past; it rose from 8 percent of the total in 1980 to 16 percent in 2003. To be sure, China accounted for the lion's share of this increase. As alluded to above, the rise in China's energy consumption was essentially driven by its industrialization, particularly the rapid growth of several energy-intensive sectors, including iron and steel and chemicals. Conversely, India's growth was more dependent on the tertiary sector than on industrial expansion (see Chapter 1, Table 1.1). However, of late the industrial sector in India has picked up momentum and it is likely that this sector's role will expand in the near future, influencing India's energy consumption. In addition, growing urbanization and enlargement in the size of the middle class will boost energy consumption in both countries. According to the forecasts of the US Energy Information Administration (USEIA, 2005), world demand for energy between 2001 and 2025 will increase by 44 percent, with China and India leading the demand expansion. The two economies will be responsible for 30 percent of the total demand expansion during this period.

China has significant oil resources of its own. Therefore, while China was not an oil importer until 1993, India was for a long time. The reliance on imported oil made both of them vulnerable to supply or price fluctuations, or both. An empirical study by the International Energy Agency (IEA), the International Monetary Fund (IMF) and the OECD Secretariat concluded that a \$10 per barrel increase in the price of oil would cause an output loss of 0.8 percent of GDP for China and 1 percent for India (IEA, 2004).¹⁶

Energy cooperation between China and India started in a small way in 2002, when India's Oil and Natural Gas Company (ONGC) bought a 25 percent stake in Sudan's Greater Nile Oil field operated by China National Petroleum Corporation. In 2004, India's largest gas distributor, GAIL India Ltd., bought a 9 percent stake in China Gas Holdings. India also signed a contract to set up a joint venture company in China to operate and manage Chinese city gas pipelines.

State oil companies from both countries have been eager to invest in long-term supply contract and production agreements. As Chinese and Indian companies are the newest entrants in the global oil markets, they face keen competition from much larger, resourceful and seasoned oil leviathans of the industrial economies. While operating individually to secure oil supplies, oil companies from both countries have begun cooperating in this vitally important resource area. In early 2005, the Indian Ministry of Petroleum took the initiative to form an Organization for Oil Importing Countries to ensure a stable energy supply for Asia at reasonable prices. Other than India, the countries that took interest in this venture were China, Korea and Japan.

6. Conclusion and summary

The two countries are ancient civilizations and have a legacy of intellectual, cultural and economic relations dating back to the fourth century BC. During the first century AD, when Buddhism spread from India to China, these ties strengthened further. During the early part of the twentieth century, China and India remained aloof and standoffish because both were engrossed in their own political and social problems. After independence, the first Indian Prime Minister tried to establish a close relationship with China. He considered it an ideal means of keeping the two cold-war super-powers out of Asia, or at least reduce their influence. The short 1962 border war destroyed any semblance of amicability between the two neighbors. Another serious downturn in the bilateral relationship came in mid-1998, when India made a nuclear test known as the Pokhran II.

In the contemporary period, the two economies can be both potential competitors and potential partners in the global economy. This makes their bilateral relationship both interesting and complex. In 1984, the two countries signed a trade agreement granting each other the most-favored-nation treatment. During the 1990s, the two largest EMEs began to look for opportunities in each other's markets. The two economies have obvious complementarities. Bilateral trade grew rapidly, albeit from a small base. Although trade level by 2005 was not large, its growth rate since 2000 has been brisk. With such rapid growth, China is poised to become India's largest trade partner after the US before 2010.

Despite the trade surplus, Indian exports to China were overwhelmingly dominated by low value-added products. Iron ore constituted 53 percent of total exports in 2004. Potential export items from India to China included oil seeds, marine products, dairy products and salt, none of which are high value-added products. Also, there is a range of high value-added products in which Indian exporters can potentially expand their exports. There are various reasons why the proposal of a BTA made by the Chinese Premier needs to be taken seriously by both countries.

Empirical studies have concluded that China and India compete only in 25 percent of their products that are exported to third-country markets. In some product categories they can become each other's export markets. China's rapid multilateral trade growth and expansion into third-country markets is likely to affect the trade growth of many Asian economies, including India. General equilibrium modeling using the Global Trade Analysis Project data base reveals that India will likely experience a fall in economic welfare, along with a fall in GDP (quantity) by about \$359 million over the shock period. India's loss of welfare will largely emanate from deterioration in its terms-of-trade in several of its export lines.

Various opinion surveys reveal that the opinion of the global investing community, including TNCs, regarding India as an investment destination, has been undergoing a transformation. The question whether improvement in the image of India in the global investing community will affect FDI flows to China can be answered by saying that it will have little impact. This relates only to the part of FDI that

originates from TNCs, which is a small proportion of total FDI going to China. Also, there are differences in sectors that are going to attract FDI in the two economies.

The China–India relationship has also been evolving in accordance with the new diplomatic stance of conciliation. That political determination for intensifying cooperation in economic and non-economic areas does exist is evident from the recent spate of mutually beneficial initiatives. They have a lot to gain from each other by trading and investing in each other's economies as well as by cooperating in international and regional fora. The two neighbors have expressed interest in developing a more extensive cooperation in regional and international affairs, including the ongoing Doha Round of Multilateral Trade Negotiations. Some cooperation in these areas has already begun.

Business leaders see a great deal of potential for expansion of trade and investment as well as economic cooperation. Over the 2000–5 period, companies in the two large EMEs were intensively ferreting business opportunities in each other's markets. Several steps were taken by the private sector firms of the two countries to set up operational bases across the border. Meaningful cooperation in the area of energy has also begun.

Notes

Chapter 1

- 1 In 1990, the agricultural sector accounted for 27 percent of China's economic structure and 31 percent of India's. By 2003, their relative importance had reduced. In the case of China it accounted for 15 percent of the economy, while for India it accounted for 22 percent (see Table 1.1).
- 2 "Beginning in the mid-19th century, China was reduced to dire misery as the country suffered one humiliating defeat after another and the population languished in poverty and starvation as a result of brutal foreign aggressions and corrupt and incompetent feudal rulers" (Hu Jintao, 2005). President Hu Jintao was addressing the corporate elite of Asia and the Western world at the opening ceremony of the 2005 Fortune Global Forum, on 17 May 2005, in Beijing. This text is available online at the People's Daily: http://english.people.com.cn/200505/17/eng20050517_185302.html.
- 3 Public Law 480, or PL 480, is formally known as the Agricultural Trade Development Assistance Act of 1954. It was signed by President Dwight D. Eisenhower. Since then 106 million metric tonnes of food grain has been sent overseas under this Act. A large part of PL 480 grain saved millions from hunger and malnutrition.
- 4 In December 2005, some twenty demonstrators were killed by police in Dongzhou in the Guangdong province. The issue was property rights: the local people were enraged because their land was being confiscated for use in a \$700 million development project to supply electricity to Shanwai. The land owners were offered little compensation. The provincial government criticized the "wrong actions" of the commander of the paramilitary forces responsible for the deaths and, in an extraordinary response, civilian officials detained him. There was a high-level concern that the incident was badly mishandled.
- 5 From *Four Quartets* by T.S. Eliot, which were written between 1935 and 1942 and published as a book in 1943. They won him the prestigious Nobel Prize for Literature in 1948, and are regarded by many as the greatest philosophical poems of the twentieth century.
- 6 See Das (2005a), Chapter 1.
- 7 The source of this historical account of India is *The Columbia Electronic Encyclopedia*, 6th edition, Columbia University Press, New York, 2005.
- 8 See Srinivasan and Tendulkar (2003), Chapter 1.
- 9 See Maddison (2002), Table C.
- 10 Jawaharlal Nehru, the first Prime Minister of India, often humorously referred to himself as the last English-man Prime Minister of India.
- 11 The purchasing power parity based exchange rate is a different concept from the normally used market exchange rate. The PPP is a theory which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries whose exchange rates are being compared. This means that the exchange rate between two countries should equal the ratio of the two countries'

price level of a fixed basket of goods and services. The PPP exchange rate is a theoretical concept. It is a mere hypothesis and is constructed using the value of a typical basket of goods and services across countries. That is, while calculating PPP exchange rate adjustments are made for the fact that the price of non-traded goods tend to be lower in China and India than, say, in Switzerland. The PPP exchange rate corrects for this difference. The PPP estimates are taken from studies carried out by the Organization of Economic Cooperation and Development (OECD) and others, but they should not be taken as “definitive.” Different methods of calculation arrive at different PPP exchange rates. When GDP is measured using PPP exchange rate, the GDP of countries like China and India becomes much higher than when it is calculated using market exchange rate. As regards the question of which measure is more accurate, market exchange rate has the advantage of being the visible and tangible exchange rate on which the global markets operate. International trade and financial transactions are based on this exchange rate. It is not a mere theoretical notion like the PPP. Therefore, for the purpose of sizing up an economy’s immediate weight in the global economy, measures using market exchange rates are more relevant and realistic than those using the PPP exchange rate. However, the PPP based exchange rate provides a better estimate of relative standard of living in economies. According to economic theory, over the long haul the two rates should converge. More correctly, the market exchange rate should move toward the PPP exchange rate. Therefore, PPP rates can be taken as the future exchange rate, or an indicator for it.

- 12 See also Schultze (2004) for a scholarly discussion on these lines.
- 13 Frustration of industrialists in the industrial economies was expressed well by Engardio and Roberts (2004) as follows: “America has survived import waves before, from Japan, South Korea, and Mexico. And it had lived with China for two decades. But something very different is happening (now). The assumption has long been that the US and other industrialized nations will keep leading in knowledge-intensive industries while developing nations focus on lower-skill sectors. That’s now open to debate. ‘What is stunning about China is that for the first time we have a huge, poor country that can compete both with very low wages and high tech,’ says Harvard University economist Richard B. Freeman. ‘Combine the two, and America has a problem.’”
- 14 The ten Asian high-performing economies that turned Asia into the most rapid growing region of the recent past comprised China, Hong Kong SAR, Indonesia, Japan, Republic of Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand. This dynamic group of Asian economies was led by Japan. China is the latest entrant to it.
- 15 Namely, Korea, Hong Kong SAR, Singapore and Taiwan.
- 16 The acronym ASEAN stands for Association for South East Asian Nations. The membership of ASEAN included the following ten countries in 2005: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Cambodia was the last to join (in 1999) the membership of ASEAN. ASEAN-4 stands for four of the original members, namely Indonesia, Malaysia, the Philippines and Thailand.
- 17 The source of these data is the WEO (2004), Chapter 2, Table 2.9.
- 18 Ahearne *et al.* (2003), Feyzioglu and Wang (2003) and also WEO (2004), Chapter 2, discuss these issues at length.
- 19 In Mandarin *heping jueqi* means peaceful ascendancy.
- 20 See the report by Sommers (2001). Justin Sommers was the rapporteur for this conference and summarized the comments and observations of a large number of conference panelists.
- 21 The young Prime Minister Rajeev Gandhi met the octogenarian Chinese leader Deng Xiaoping in December 1988. This was the first time after the 1962 border war that the two countries had showed any warmth for each other.

Chapter 2

- 1 The Hindi word *raj* means a reign or an empire. The expression “license *raj*” is a pun on the British *raj*. The popular witticism was, “The British *raj* went, and the license *raj* came.” The expression *raj* has been absorbed in English language and can be found in all major English dictionaries, including Oxford and Webster’s.
- 2 The term “foreign-invested enterprises” stands for subsidiaries of TNCs and joint ventures. It is somewhat of a misnomer in China. It stands for local affiliates of foreign-owned firms. Many of these local affiliates are joint ventures with Chinese enterprises. Until 1992, almost all FDI in China was in the form of joint ventures. The expression “foreign-invested” was used to describe those ventures run by domestic firms with foreign participation. Since 1992, a growing proportion of local affiliates of foreign firms are majority-owned or wholly-owned by foreign investors, but the term “foreign-invested” continues to be applied to them.
- 3 Cited in Ahmed (2004).
- 4 See *International Trade Statistics 2004 and 2005*, World Trade Organization (2004, 2005), Table 1.5.
- 5 In November 2001, China acceded to membership of the World Trade Organization.
- 6 The membership of ASEAN included the following ten countries in 2005: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Cambodia was the last to join (in 1999) the membership of ASEAN.
- 7 The ASEAN-Plus-Three (APT) group comprises the ten ASEAN countries, plus China, Japan and the Republic of Korea.
- 8 This was the general impression of Indian economists who watched the scenario on a daily basis.
- 9 This coalition represented regional parties as well as the communist Left Front, which made it difficult to come to a consensus on important economic issues. Each party firmly believes that its objectives are best suited to advance the common good. With so many prolix political parties with deviant objectives, reaching common ground on important strategic matters was a difficult and time-consuming exercise. Even small issues were interminably debated, with deliberations frequently breaking down.
- 10 Even at present India has rules preventing any company with more than 100 employees from making redundancies, without obtaining approval from local labor boards. In the Congress-led multi-party coalition government, called the United Progressive Alliance (UPA), the left-leaning political parties are convinced that such regulations protect workers from unscrupulous employers. In reality, such restrictive labor regulations make employers overly cautious about expanding their labor force beyond the threshold of 100, starting new ventures, or expanding their production facilities. The left-leaning political parties, or the Left Front, take a parochial view and ignore this because their base is organized labor and their objective is to win as many seats in the elections as possible with the help of their large, organized labor base. The segment of labor force that is adversely affected by such short-sighted strategies is the hundred of millions of workers who are under-employed or marginally employed in the countryside. India’s manufacturing sector has been in the middle of a boom and has recorded a growth rate of 7 percent in 2005. However, this boom has not increased the rate of employment and is jobless.
- 11 The basic objective of this Act is enhancement of revenue and reduction of revenue expenditure. The main provisions of the FRBM Act in its original form are: (i) The revenue deficit as a ratio of GDP should be brought down by 0.5 percent every year and eliminated completely by 2007–8. (ii) The fiscal deficit as a ratio of GDP should be reduced by 0.3 percent every year and brought down to 3 percent by 2007–8. (iii) The total liabilities of the Federal Government should not rise by more than

9 percent a year. (iv) The Union Government shall not give guarantee to loans raised by public sector enterprises and State governments for more than 0.5 percent of GDP in the aggregate. (v) The Union Government should place three documents along with the budget, namely the Macroeconomic Framework Statement, the Medium Term Fiscal Policy Statement and the Fiscal Policy Strategy Statement. In addition, the Finance Minister will have to make a statement at the end of the second quarter on the trend of fiscal indicators and corrective measures if they deviate from the budget estimates beyond the extent stipulated in the FRBM.

The present Finance Minister, like his predecessors, has presented in the budget reduced deficits and borrowings as per the stipulations of the FRBM. He has reduced the revenue deficit–GDP ratio by 1.1 percentage points and the fiscal deficit–GDP ratio by 0.4 percentage points. The reductions are quite substantial and much more than the norms in the FRBM. Yet an analysis of the budget leads one to a different conclusion if it is read against the background of the three statements provided with the budget. In this way, at least, the FRBM has enabled better flow of information about budget making.

- 12 The statistical data used here come from the *The Economist* (2005a) and *World Development Indicators 2004*.
- 13 See GOI (2003), Table 10.6.
- 14 The ten Asian high-performing economies that turned Asia into the rapidest growing region of the recent past comprised China, Hong Kong SAR, Indonesia, Japan, Republic of Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.
- 15 Indian bureaucracy and politicians, two powerful groups in Indian society, were (and continue to be) of the firm belief that there is little wrong with the Indian economy, or growth strategy, and that it is doing as well as, if not better than, the dynamic Asian high-performing economies. They have always had an uncontrollable penchant for making make-belief an art form. Logic was not their long suit when they compared Indian economic performance to that of the dynamic AHP economies. As pointed out in Chapter 1 (Section 7), while they were perturbed about the global esteem and admiration of the Chinese economic performance, for a long time they remained completely convinced that it was spurious and based on incorrect statistics and biased reporting. They were convinced that China's economic achievements—like those of NIAEs and ASEAN-4 economies in the past—were unworthy of their attention. They were irrelevant to India. Ostrichism knew no bounds. Of late, their perception of China's economic success has undergone a change.
- 16 This was the polar opposite of the so-called “single track” or “big bang strategy” followed by the Russian Federation and some of the East European economies.
- 17 Pareto-improving economic effects imply improvements in welfare without any systemic losses.
- 18 For example, see Zhang (2000).
- 19 The first four and the best known SEZs were: Shenzhen, close to Hong Kong SAR; Zhuhai, close to Macao; Shantou, in Guangdong facing Taiwan; and Xiamen, close to Taiwan across the Taiwan Straits.
- 20 The four newly industrialized Asian economies are Hong Kong SAR, Republic of Korea, Singapore and Taiwan.
- 21 See Das (2004a), Chapter 1.
- 22 This is according to “The Country Assistance Strategy Report” of the World Bank for 2003, which is cited by Ahmed (2004).
- 23 Published on Bloomberg.com on 30 November 2004. See “China Tells Currency Speculators to Get Lost” by W. Pesek. Accessed on 15 December 2004. Available online at http://quote.bloomberg.com/apps/news?pid=10000039&refer=columnist_pesek&sid=aDaFXG_Fn08.
- 24 In early 2005, the Chairman of the China Construction Bank was removed for taking bribes and before that some fifty high-ranking officials were removed for embezzling over \$85 million. Early in 2005, a Bank of China (BoC) branch manager

- fled the country with \$120 million of the bank's money. In August 2005, a deputy chairman of BoC received a lengthy prison term for bribe-taking and embezzlement. Since then sentences for financial crimes were made much harsher to deter wrongdoing as the end-2006 deadline approached for China's financial market to open fully to foreign competition under its commitments to the World Trade Organization.
- 25 Ahmed (2004) provides graphic accounts of several instances of American and European companies falling victim to fraud and losing their valuable assets because of their naiveté and limitations in the legal system.
 - 26 Real GDP growth forecast by the Economic Intelligence Unit (EIU), London, for the 2003 to 2007 period is of 8 percent growth, comparable to the rate recorded in the previous five years (EIU, 2004).
 - 27 Numerous anecdotal accounts are available of enterprising Indians who sought to escape their motherland to succeed. One such example is that of Lakshmi Mittal, the eponymous steel titan, who oversees the world's largest steel company, Mittal Steel. He is one of the richest men in the UK, with net worth of more than \$25 billion. He merged his Ispat International with the Ohio-based International Steel Group in December 2005. He owns 88 percent of the \$31.5 billion (sales) company. Living in Calcutta the Mittal family felt choked under the oppressive burden of government regulations and bureaucratic corruption. They moved to the UK to launch the foundation of their steel empire. In 2004, Mittal was number 62 on Forbes' list of the world's richest people.
 - 28 The Government of India established the Planning Commission in March 1950.
 - 29 Fabian socialism was a softer kind of socialism, which was not an antithesis of capitalism but merely sought to mitigate the social ills capitalism caused. Fabian socialists considered it essential that the public sector occupy the economy's "commanding heights," to use a phrase coined by Vladimir Lenin but popularized by India's first prime minister, Jawaharlal Nehru.
 - 30 The Hindi word *swadeshi* means made in one's own country. In this context, its origins can be traced back to the Swadeshi Movement launched by Mahatma Gandhi at the beginning of the twentieth century against colonial rule.
 - 31 On the one hand, neither Mahatma Gandhi nor Jawaharlal Nehru were economists. Both were trained lawyers and had some naïve, uni-dimensional notions which they thought were sound economics. On the other hand, the two national leaders, at a crucial time in the nation's history, enjoyed enormous popularity and mass adulation. Their economic legacies, that is, Fabian socialism in the case of Nehru and *swadeshi* in the case of Gandhi, were adopted by Indian society and government without the least bit analysis and questioning. Trained economists did point to the inappropriateness of the former concept and absurdity of the latter, but they were treated by society and government with contempt for being "nerds," who did not know what they were talking about. In contrast to these two Indian leaders, Lee Kwan Yew, also a trained lawyer, and Chung Hee Park, an army general, honestly believed that while they were successful individuals in their own right as well as well-intentioned, they were not economists. This realization made them seek high quality economic advice in running Singapore and Korea, respectively. What they succeeded in achieving for their countries in a short span of time is history. Deng Xiaoping was also not an economist, but he learned from the failure of the centrally planned non-market economic system in China. Also, he was a clear-headed, dispassionate, result-oriented and pragmatic political leader, not an ideologue with his mind closed. His oft-repeated dictum was, "How does it matter whether the cat is white or black, as long as it kills the rats?" The moral of the story is that the quality of political leadership makes an enormous difference in determining a country's economic future.
 - 32 In 2000 the Indian population reached the 1 billion mark, which meant that 16 percent of the world's population lived on 2.4 percent of the globe's land area. If this trend continues, India could overtake China in 2045 to become the most populous country

- in the world. While global population has increased threefold during the twentieth century, from 2 billion to 6 billion, the Indian population increased nearly five times from 238 million to 1 billion in the same period. In 2000, India was adding 15.5 million people to its population annually. It is large enough to neutralize efforts to conserve the resource endowment and environment.
- 33 An excellent account of India's strategic failure during the early period has been provided by John P. Lewis in his book *Quiet Crisis in India*, published by the Brookings Institution in 1962. I was an undergraduate student at that time and learned a lot about the Indian economy from this knowledgeable and dispassionate analysis.
 - 34 Indonesia, Malaysia, the Philippines and Thailand are the ASEAN-4 economies.
 - 35 The Congress Party lost the election in March 1998, and a new Bharatiya Janata Party (BJP) led coalition government took over.
 - 36 The old industrial order is giving way to a more complex, dynamic and dispersed knowledge economy, which is being shaped by information and communications technologies (ICT), global markets and new communications networks like the Internet. This is the so-called New Economy. One of its important implications is the globalization of business. Simply put, capitalism is spreading around the world—if not full-blown capitalism, at least the introduction of market forces, freer trade, and widespread deregulation. The New Economy paradigm is profoundly transferring our societies by changing the way we organize our workplaces, our businesses, our education systems and our R&D. It is helping us to improve our health, defend our international interest, and clean up the environment.
 - 37 The Indian Parliament approved of the legislation on 11 May 2005.
 - 38 Changes in survey methodology of the National Sample Survey in 2000 (the fifty-fifth round) made comparison of results with the previous rounds of survey impossible. Empirical studies attempted to correct for the changes in survey methodology. Most new estimates indicated that there was a 5 to 10 percent improvement in the incidence of poverty.
 - 39 Paradoxically the maverick Finance Minister, Dr. Manmohan Singh, who was the father of the 1991 reforms package, was the Prime Minister in this government. Instead of supporting the correct economic measures and advancing the implementation of the much needed reforms, he chose the path of expedience and political appeasement.
 - 40 See Table 1.5, *International Trade Statistics 2005*, World Trade Organization (2005), Geneva, p. 21.
 - 41 This database is available on their website at <http://rru.worldbank.org/DoingBusiness>. The Doing Business Database provides indicators of the cost of doing business by identifying specific regulations. The indicators are developed in collaboration with the Lex Mundi Association of law firms, the International Bar Association, and Yale University's International Institute for Corporate Governance.

Chapter 3

- 1 The four newly industrialized Asian economies are Hong Kong SAR, Republic of Korea, Singapore and Taiwan.
- 2 The acronym ASEAN stands for the Association of South East Asian Nations, which has ten members. The ASEAN-4 economies are Indonesia, Malaysia, the Philippines and Thailand.
- 3 The ASEAN-Plus-Three grouping comprises the ten members of ASEAN, and the three Northeast Asian economies, namely China, Japan and the Republic of Korea.
- 4 By early 2000s, the formal activities of ATP or JACK had expanded and included periodic meetings of finance, trade and foreign ministers of these thirteen Asian countries. The tenth ASEAN Summit of 2004, which took place in Vientiane, Laos, was also the eighth year the APT economies had met. During this summit the long awaited FTA between ASEAN and China was signed.

- 5 See Das (2004a), Chapters 1 and 2, for an explanation of what emerging-market economies are.
- 6 The ten Asian high-performing economies that turned Asia into the rapidest growing region of the recent past comprised China, Hong Kong SAR, Indonesia, Japan, Republic of Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.
- 7 The term “foreign-invested enterprises” covers subsidiaries of TNCs and joint ventures. It is somewhat of a misnomer in China. Here it means local affiliates of foreign-owned firms. Many of these local affiliates are joint ventures with Chinese enterprises. Until 1992, almost all FDI in China was in the form of joint ventures. The expression “foreign-invested” was used to reassure that these ventures were domestic firms with foreign participation. Since 1992, a growing proportion of local affiliates of foreign firms are majority-owned or wholly-owned by foreign investors, but the term “foreign-invested” continues to be applied to them.
- 8 China was also one of the original 23 contracting parties (CPs) of the General Agreement on Tariffs and Trade (GATT), a status it shares with India, but it relinquished its GATT membership in 1950.
- 9 See Rambaugh and Blancher (2004a), Table 2.7.
- 10 Tariff binding implies commitment not to increase a rate of duty beyond an agreed level. Once a rate of duty is bound it may not be raised without compensating the affected parties.
- 11 Tariff-rate quotas were formulated and adopted at the end of the Uruguay Round as an instrument for providing greater market access in the industrial economies markets having high tariffs and NTBs. In the TRQ system, first an import quota is determined, and then one tariff rate is set of imports inside the quota, with the other outside of it. A limited volume of imports is allowed at the lower tariff inside the predetermined quota, and all subsequent imports are charged much higher rates of tariff. If the demand for imports at the low tariff is greater than the volume allowed by the TRQ, then imports are rationed. Of the many rationing methods currently allowed by the WTO, some are more likely than others to bias trade in an unwarranted manner. TRQs cannot be easily converted into tariff equivalents.
- 12 See Table 1.5 on page 19, *International Trade Statistics 2004*, World Trade Organization (2004), Switzerland.
- 13 See Table 1.5 on page 21, *International Trade Statistics 2005*, World Trade Organization (2005), Switzerland.
- 14 For instance see Hertel and Walmsley (2000), Ianchovichina and Martin (2003), Panitchpakdi and Clifford (2002), Wang (2003), Yang (2003) and Zhai and Li (2000).
- 15 In Mandarin renminbi means people’s currency and yuan means a round coin.
- 16 The real effective exchange rate indices of a currency are trade-weighted real exchange rates against a basket of currencies.
- 17 In a short space of time, China’s foreign exchange reserves rose dramatically. At the time of adoption of the Open-Door Policy in 1978, China’s reserves were a measly \$1.6 billion. In 1990, they had risen to \$26.6 billion and in 2000 to \$165.6 billion. However, their level in July 2005 had soared to \$711 billion.
- 18 China was invited to the G-7 meeting which took place in London on 5 February 2005. Chinese central bank deputy governor Li Ruogu told reporters after the meeting, “We are determined to move towards a flexible exchange rate,” although a timeframe of future events was not available at that point (Morgan Stanley Global Economic Forum, 2005).
- 19 This is according to an index prepared on the basis of a survey of 2000 chief executive officers (CEOs) conducted by the Global Business Policy Council (GBPC), 2004, “FDI Confidence Index,” Alexandria, VA, USA, A.T. Kearney, Inc. In the 2004 opinion survey China was accorded the most favored country status by the CEOs surveyed. It was one step ahead of the US.

- 20 It was promulgated in October 1986 and was called the Provisions of the State Council of the People's Republic of China for the Encouragement of Foreign Investment.
- 21 These reforms were officially reiterated at the 14th National Congress of the Chinese Communist Party of 1992.
- 22 See *The New Straits Times*, "Future Flows of FDI to Asia to Depend on China," 9 March 2002.
- 23 Cited by Woo (2004).
- 24 Published by the United Nations Conference on Trade and Development (UNCTAD) in 2002.
- 25 This ASEAN summit took place during 29–30 November 2004 in Vientiane, Laos.
- 26 This is based on statistics published by the US Census Bureau.
- 27 World Trade Organization (WTO). 2004. *World Trade 2003, Prospects for 2004*. Press Release, No. Press/373, 5 April.
- 28 The rapidly growing export value and volume in China is reflected in its fast expanding ports. In 2002, the Chinese city of Shanghai, which overtook Kaohsiung as the world's fourth-largest port (after Hong Kong SAR, Singapore and South Korea's Pusan), saw traffic rise by almost 40 percent during 2002–3. Thanks to a surge in exports from southern China, throughput at Hong Kong SAR's container terminals is soaring. Traffic at the Kwai Chung terminal, for instance, was up by 25 percent in the first half of 2003 compared with the same period in 2002, according to the Port and Maritime Board of Hong Kong SAR (*The Economist*, 2003).
- 29 These seven south Asian nations are: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. They are members of the South Asian Association for Regional Cooperation (SAARC), which was established in 1985.

Chapter 4

- 1 See Das (2004a), Chapter 2.
- 2 See IMF (2005a), Table 1.
- 3 See Chapter 4, Box 4.2, *World Economic Outlook*, The International Monetary Fund, 2000. "How Can the Poorest Countries Catch up?," May, p. 117.
- 4 *Dirigisme* is a French concept, and term; it describes an economy where the government exerts a strong directive influence over the economy. In this system the government owns or effectively controls production and allocation of resources.
- 5 The source of these statistics is Chapter 4, Box 4.2, *World Economic Outlook*, The International Monetary Fund, May 2000.
- 6 The ten Asian high-performing economies that turned Asia into the rapidest growing region of the recent past comprised China, Hong Kong SAR, Indonesia, Japan, Republic of Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.
- 7 See *Economic Survey, 2002*, which is the annual publication of the Ministry of Finance, Government of India.
- 8 The fiscal year in India runs between April 1 and March 31.
- 9 The term "Washington Consensus" is considered synonymous with "neo-liberalism" and "globalization." John Williamson propounded the concept as a set of neo-liberal policies, which in turn referred to the lowest common denominator of policy advice that was being given by the Washington-based Bretton Woods twins to Latin American countries in 1989. This policy advice essentially entailed: fiscal discipline, a redirection of public expenditure priorities toward fields offering both high economic returns and the potential to improve income distribution (such as primary health care, primary education, and infrastructure), tax reforms (to lower marginal rates and broaden the tax base), interest rate liberalization, a competitive exchange rate, trade liberalization, liberalization of inflows of foreign direct investment, privatization, deregulation (to abolish barriers to entry and exit), and secured property rights.
- 10 Two well-acclaimed recent research works are Rajan and Zingales (1998) and Levine (2004).

- 11 The much awaited VAT was introduced in the Indian taxation system from 1 April 2005, making India fall in line with the other 123 countries that follow this system of taxation.
- 12 See Thirlwell, 2004, Chapter 2, for more details.
- 13 See Dr. Manmohan Singh's interview by R.K. Gupta on 16 August 2005, the day after his annual Independence Day address to the nation. It was published in *The McKinsey Quarterly*, 2005, Special Issue.
- 14 At the time of writing this book Dr. M.S. Ahluwalia was the Deputy Chairman of the Planning Commission, Government of India.
- 15 A large body of theoretical and empirical research exists on this subject. Some of the better known empirical studies include Dollar (1992), Ben-David (1993), Sachs and Warner (1995), Edwards (1998), OECD (1998), Bhagwati and Srinivasan (2001), Dollar and Kraay (2001) and Dollar (2001).
- 16 The source of these statistical data is *World Development Indicators 2003*, Table 6.1, pp. 310–13.
- 17 The source of these statistical data is *World Development Indicators 2005*, Table 6.1, pp. 322–5.
- 18 Source. WTO (2005), Table 1.5, p. 21.
- 19 The source of these statistical data is *World Development Indicators 2003*, Table 6.1, pp. 310–13.
- 20 Published by the United Nations Conference on Trade and Development (UNCTAD) in 2002.
- 21 See Table 4, p. 17.
- 22 Its membership includes Argentina, Brazil, Paraguay and Uruguay.
- 23 The source of statistics used in this section is the *World Development Indicators 2005*.
- 24 In the United States, India has been the most important country for sourcing software and ICTeS; Canada comes in second spot.
- 25 He described Bangalore as “the capital of outsourcing” during the IMF Forum on “The World is Flat: A Brief History of the Twenty-First Century,” held in Washington DC on 8 April 2005.
- 26 Wipro is an embodiment of India's info-tech revolution. Its current revenue is \$1.7 billion and its workforce is 42,000 strong. Its stock, which is traded on Wall Street, has climbed 230 percent in two years. It is not only a leader in software development but also a pioneer in business-process outsourcing (BPO). It does anything and everything for clients, from running accounting operations to processing mortgage applications.
- 27 NASSCOM stands for the National Association of Software and Services Companies. It is located in Mumbai (Bombay).
- 28 For a wealth of data on India's ICT and ICTeS industries see NASSCOM-McKinsey Study (2004 and 2005).
- 29 In an endeavor to keep the cost down and provide reliable services, Bharti Tele-Ventures took a genuinely radical measure. It outsourced its entire cellular network to its three existing equipment suppliers: Ericsson, Nokia and Siemens. It was a \$725 million three-year deal. The move to “deep outsourcing” is regarded as revolutionary. It worked for Bharti. Its executives no longer have to bother about managing the network, but focus on marketing and customer service. In one year it added 6 million subscribers, which was 25 percent of annual subscription growth. This model is now being copied by other telecom companies globally.
- 30 These two studies are Rodrik and Subramanian (2004) and Virmani (2004).

Chapter 5

- 1 Sanskrit is a classical language of India and a liturgical language of Hinduism and Buddhism. In India it has the same status as Latin had in Medieval Europe. It is a central part of Hindu tradition. At present Sanskrit is mostly used as a ceremonial language in Hindu religious rituals in the form of hymns and mantras.

- 2 A naturalized Canadian, I was born in India, and followed these accounts as a school boy.
- 3 One example is the mention of Chinese products in the fifth century AD Sanskrit play called *Shakuntala*, by Kalidasa, perhaps the greatest poet and dramatist in classical Sanskrit literature.
- 4 The objective of creating a socialist society was made a part of the preamble of the Indian constitution in the mid-1970s.
- 5 This slogan is ascribed to Jawaharlal Nehru, the first Indian Prime Minister, and his Chinese counterpart Zhou Enlai.
- 6 The first nuclear test, Pokhran I, was conducted by India in 1974.
- 7 A statement of the Vice Premier Qian Qichen published in *China Daily*, 20 May 1998, and cited by Shirk (2004). Publishing this in the English language *China Daily* clearly implied that the Chinese government was sending its response to the international community.
- 8 The ASEAN-Plus-Three grouping includes the ten ASEAN economies and China, Japan and the Republic of Korea.
- 9 The Association for South East Asian Nations was established on 8 August 1967 in Bangkok by the five original Member Countries, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand. The ten present ASEAN members are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.
- 10 World Development Report (2005), p. 12, para. 1.6.
- 11 *The Beijing Times* (BT), “China’s Foreign Investment Hits \$53 Billion,” 15 January 2004, p. 1.
- 12 At the Third Plenary Session of the 11th Central Committee of the Chinese Communist Party (CCP) in December 1978, the People’s Republic of China adopted its “open door” strategy. This became famous as the Deng doctrine, as Deng Xiaoping was the intellectual father of this liberal economic strategy. This marked a turning point in Chinese economic performance and economic history. The economy grew with a healthy clip through the 1980s and 1990s. GDP increased by 10 percent per annum in real terms over the 1980–2000 period. In a short period of two decades China economically transformed itself. Between 1978 and 2000, the GDP grew almost five fold, per capita income quadrupled, and 270 million Chinese were lifted out of absolute poverty (*The Economist*, 2001). In 1990, China’s GDP was \$378.8 billion and per capita GDP was \$341.60. A decade later, in 2000, GDP reached \$1,080 billion, while per capita GDP rose to \$853.40. China successfully became the manufacturing storehouse of the global economy. In doing so, it turned from a near autarky to the fourth largest merchandise exporter in the world, accounting for 6.6 percent (\$325.6 billion) of merchandise exports in 2002. In addition, throughout the 1990s China was pre-empting the largest amount of net FDI among the developing economies. In 2000, it lost its high perch for one year to Hong Kong SAR, but in 2001 it regained its lost position.
- 13 See Lardy (2002) for the evolving FDI trend and JETRO (2001) for the results of the TNC survey.
- 14 The source of these FDI statistics is the *International Financial Statistics*, published by the International Monetary Fund. Volumes of various years were consulted.
- 15 This survey was published in November 2005, by the United Nations Conference on Trade and Development (UNCTAD). It was entitled *The Prospects for Foreign Direct Investment and the Strategies of Transnational Corporations*.
- 16 This sub-section draws on Bubalo and Thirlwell (2004).

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