

August 2004

Research Focus

China and India

The steady progression towards two
consumer markets

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Dear Readers

The two most populous countries in the world are also among the fastest growing emerging markets. China and India, however, are in the midst of an ambitious transition, and face considerable economic and social challenges. In this study, we explore three issues. First, we examine the challenges to continued economic growth in each country. Secondly, we project a likely scenario for GDP growth, consumption and savings during the next 25 years. Finally, we look at available and prospective investment opportunities for each market.

With over a billion inhabitants each, and a low level of per capita income, China and India may appear similar. But most other characteristics are very different. For example, China's population is ageing, while India has a relatively young population. In China, manufacturing is the largest and fastest growing sector. In India, the growth of manufacturing is encumbered by regulation, while the service sector includes some of the country's most dynamic enterprises. China is a net exporter of manufactured goods, and a net importer of services. India is a net importer of manufactured goods, and a net exporter of services.

While both China and India have undertaken considerable reforms during the past two decades, neither country has a fully functioning market economy. Future growth will need further reform and financing. In this regard, two key areas will be enhancing the role of the banking systems, and reducing controls on capital flows. This will not only increase available financing, but improve the efficiency of capital allocation.

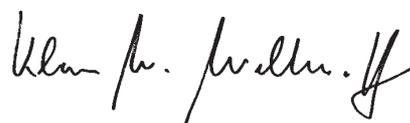
In Chapter 2, we project GDP growth taking into account the differing population dynamics. Based on modest expectations on investment and productivity growth, we find that within 25 years China and India are likely to have a combined GDP five times the size of today's United States on a purchasing power parity basis. We also estimate how rising incomes can impact consumption patterns. Although basic necessities such as food will continue to account for the highest share of total expenditure, discretionary expenditures such as entertainment will show the fastest growth rates.

The evolution of China and India into societies with a higher level of consumption will be consequential. With increasing global economic integration, it is not only the economic structure of each country that will be impacted, but the global economy as a whole.

In Chapter 3, we explore opportunities available to foreign investors, and examine the reasons for the relatively disappointing performance of Chinese and Indian equity markets during the past decade. The financing needs of China and India can only be fully met by increasing the openness of local capital markets. For foreign investors, this can bring two important changes. First, the palette of available investment opportunities will broaden. Secondly, competition for financing in the global market should bring improvements in corporate governance, transparency and other areas important for good performance.

While the local markets will become more attractive, investors should not focus exclusively on domestic opportunities. Some foreign companies are setting up production in these countries, others are setting up product distribution channels. At the same time, some of the larger local companies may be mostly export oriented. Therefore, in an increasingly integrated global economy, the relationship between the domestic financial markets and the domestic economy is less robust. Companies in the region, or elsewhere in the world, may be as well placed as local companies to profit from the growth of these economies.

China's and India's combined share of world GDP has more than doubled to 16 % of world GDP during the last 25 years. The next 25 years will bring not only continued expansion, but also greater global integration of their economic and financial sectors. This in turn will bring the promise of greater prosperity not only for China and India but also for the rest of the world.



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Chapter 1

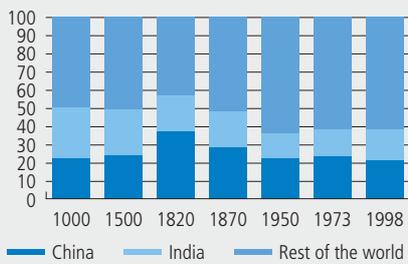
Challenges ahead

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Challenges ahead

Fig. 1.1: India and China have always been large

Share of world population; in %



Source: Angus Maddison, The World Economy: a Millennial Perspective, OECD

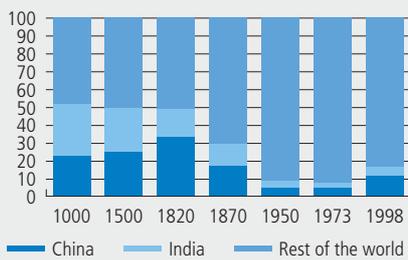
Throughout history, India and China have accounted for at least two-fifths of the world population. Two centuries ago they also accounted for over two-fifths of world output. Since then both economies have fallen behind as other regions of the world accelerated. In the second half of the twentieth century, both pursued a development path that was based on socialism. The experiment failed, and by the eighties both were in the midst of a long process of economic reform.

India and China today are two of the world's most promising economies. Had we been preparing this study 25 years ago, the central concern would have been how India and China would be able to feed their populations. Today the question is when India and China will again account for two fifths of world GDP.

The answer depends on how successful both countries will be in reforming their economies. While each country has made important strides towards creating a market economy, the legacy of socialism is still all too evident in inefficient state industries, weak financial systems, and the regulatory environment. The reforms will be challenging, but both countries are very well placed to succeed.

Fig. 1.2: Increasing again?

Share of world GDP; in %



Source: Angus Maddison, The World Economy: a Millennial Perspective, OECD

How fast can China grow?

More than two decades of market-oriented reforms have brought visible success and economic transformation to China. The country's achievements include large increases in per capita incomes, significant reductions in poverty, a substantial rise in private-sector activity, and growing integration into the global economy. GDP growth has averaged more than 9% a year since 1979 according to official statistics. But structural and resource constraints preclude a continuation of current growth rates. Demographic trends will also reduce potential growth. But China's comparative advantages are many, and it will continue catching up with the industrialised world, albeit at a slower rate.

China's economic reforms have taken place at a measured pace since Deng Xiaoping began opening the economy in 1978. The economy at that time was completely state controlled and suffering from the deep scars of the Cultural Revolution. Liberalisation began in the agricultural sector by allowing households and factories to sell their quota surpluses on the open market. Beginning in 1984, Special Economic Zones were established in southern coastal regions to attract investment. Investors in the zones enjoyed sale of land-use rights, a liberal trade regime, and tax incentives. Now known as the "National Economic and Technological Development Zones," they enjoyed sweeping economic success, and now number 54, dispersed over all of China's provinces. Meanwhile, liberalisation also went ahead in the overall economy, by allowing privately-owned small businesses, restructuring or closing down loss-making state-owned enterprises, and lowering trade tariffs. A key step for China was gaining full membership of the World Trade Organisation (WTO) in 2001, although it is still a long way from full implementation of its commitments.

Fig. 1.3: China's growth is impressive

GDP growth and per capita GDP



Source: IIF and UBS estimates

Smoking tyres

After more than a decade of consistently rapid growth, the Chinese economy is showing clear signs of overheating. Official statistics put real GDP growth in 2003 at more than 9%, but other indicators suggest that growth may have been even higher. Figures for the first two quarters of 2004 suggest that growth is continuing at a torrid rate. Inflation,

though not high, is beginning to rise after a period of deflation. So far, the inflationary impulse has been most evident in food, property and energy, but infrastructure constraints and shortages suggest that wider inflationary pressures may arise.

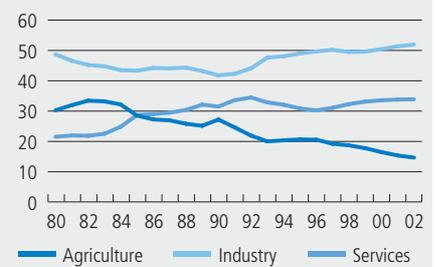
The most recent phase of economic growth in China has been unbalanced. It was driven largely by investment spending, while private consumption has lagged and net exports have contributed almost nothing. The government is well aware of the risks of emerging overcapacity in many sectors, and of the need to cut the pace of growth in investment. To help engineer an orderly slowdown, the banking sector's reserve requirements were raised, helping to slow the pace of money supply growth. Banks have also been urged to cut lending.

But bearing in mind the sharp disruptions following a tightening of monetary policy in the mid-1990s, the central government is reluctant to risk another hard landing by taking stronger measures such as sharply raising interest rates. Maintaining growth at a sustainable level is crucial if enough new jobs are to be created to offset unemployment and layoffs at state-owned enterprises (SOEs) and in agriculture, thus preventing social unrest. Apart from some targeted, though rather symbolic cuts in public spending, the government will also maintain its efforts to develop western provinces and rural regions, and to eliminate bottlenecks in transport capacity and resources.

On the export side, the boom looks set to go on as long as global demand is sustained. However, Chinese imports are surging, pushing the current account surplus into deficit this year. While commodities such as metals and oil are an important part of import growth, China's imports are generally a very well-diversified basket of primary, intermediate and finished goods. Private consumption is expected to continue expanding for the time being, albeit at a slow rate compared to fixed capital formation and exports. Given the overall development in all sectors, GDP growth should thus come down only gradually, to 8.5% this year.

Fig. 1.4: China's economic structure has evolved

Sectors in % of GDP



Source: IMF

Box 1.1: China's political system

The People's Republic of China (PRC), founded on 1 October 1949, covers an area of 9.6 million square kilometres. In 2002, it had a population of 1,284 million living in 31 provinces, autonomous regions and municipalities. The size of the US, China is a country with 56 nationalities (ethnic minorities) but nonetheless very homogenous, as the Han nationality alone accounts for about 94% of the total population. China's population is agglomerated heavily along the eastern provinces, where 40% of the landmass houses over 90% of its population. There are about 600 cities of more than 100,000 inhabitants, though almost 70% of the population still resides in the countryside.

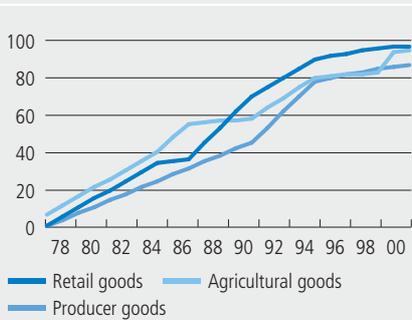
National government and political structure

Politically, China remains an authoritarian state where the Communist party remains the dominant ruling party. Within the party, the politburo is the most powerful organ, with key leaders of the party, the Congress and the state council forming a standing committee. The committee includes:

Hu Jintao, chairman of the party and country, and vice-chairman of the Military Commission of the Central Committee of the Communist Party; *Wu Bangguo*, chairman of the National People's Congress; *Wen Jiabao*, premier and the head of the State Council;

At the national level, the organs of state power include the People's Congress and the State Council. The People's Congress is the supreme organ of state power and its permanent organisation is the Standing Committee, which exercises legislative power and approves key government leaders. It also approves other important issues such as the budget and annual economic plan. The State Council is the organ which runs the state's daily business and macro management. Under the State Council, there are a number of functional commissions, ministries and bureaux in charge of related affairs and business. The army is mainly controlled by the party in terms of personnel arrangements, budget and so on.

Fig. 1.5: Market price formation in China
Share of transactions taking place at market prices; in %



Source: Nicholas Lardy, *Integrating China into the Global Economy* (Brookings, 2002)

Growth is an economic imperative

Despite past successes, the key to future growth and stability in China lies in further structural reforms. The challenges facing the government are deep, involving every aspect of policy. China remains a poor country with serious social problems, in addition to the institutional weaknesses bequeathed by centralised planning. These challenges include reform of the state enterprise system, strengthening the banking system, establishing a social safety net, and upgrading the economic infrastructure. At the same time, the instruments of economic policy – especially monetary policy – lack effectiveness, given that the financial sector is heavily regulated and capital allocation is inefficient.

Growth in China is an imperative. Despite rapid economic growth, economic and social concerns remain substantial. In part, this is because it is difficult to separate the economic objectives from the social objectives that the government is pursuing in the economy. Despite reforms, the role of the state in the economy is still large. The government also owns a substantial share of companies listed on the stock exchange, and takes an active role in business decisions.

The large role of the state, however, does not mean that the internal market in China is uncompetitive. Competition is on the increase, both internally and externally. The share of transactions conducted at market prices has risen steadily to about 90 % at present. Enterprises are also exposed to significant foreign competition. The average customs tariff is close to 12 % and is scheduled to fall to about 10 % under the WTO agreement. This compares very favourably to tariff rates of around 30 % in other emerging markets such as India, Brazil and Argentina.

Thanks to the external and domestic competition faced by state-owned enterprises (SOEs), their inefficiencies have become glaringly obvious, with return on assets declining from more than 25 % (according to official data) in the 1980s to about 5 % in 1998. During the past few years, the government has started reforming and restructuring these enterprises. As a result, return on assets has improved somewhat. However, at about 8 % last year it remains well below the average for other Chinese enterprises.

The reform process has raised new challenges. In particular, the restructuring of state-owned enterprises has resulted in an urban unemployment problem. About 10 % of the urban workforce (including part-time and casual labourers) is unemployed.

China faces a dilemma. Social problems will intensify and increase the risk of social unrest if politicians restructure the corporate sector too fast. But if they move too slowly, the prospects for future economic growth will also deteriorate, again raising risks of social and political stability. Both reform and growth are imperatives for China.

The policy agenda is challenging

The challenges facing the government stem from the fact that China's economic transformation to a market economy is far from complete – indeed the European Union recently refused China the status of a "functioning market economy", denying full market treatment to some of China's exports. The challenges include reforming the financial sector, addressing rural poverty, establishing a social safety net, upgrading infrastructure and industries, as well as institutional reform and deregulation. Challenges also arise from scarce natural resources and demographic factors.

Future growth needs financing

No country has been able to continue to grow smoothly without a financial system that can efficiently intermediate between savers and investors. In developing countries, banks tend to play the pre-eminent role in such intermediation until equity and bond markets have matured. A common measure of the development of the banking system is to compare its assets or liabilities with GDP. By this measure China's banking system ranks very highly.

Yet China's banking system still falls short of playing an efficient role in intermediation. Most banks are state-owned and are saddled by non-performing loans (NPLs). The NPL problem is a legacy of decades of directed lending by state-owned banks to SOEs. Decades of directed funding have also hindered the development of a credit culture. Moreover, Chinese banks lack expertise in assessing creditworthiness, risk control and risk pricing.

Estimates of these NPLs vary, as the definitions used internationally are not always comparable. NPLs within the banking system reached about 35 % of GDP in 2000 but have been declining since. This figure understates the overall problem as the government has moved some of the NPLs from the balance sheet of the banks to asset management companies in an effort to relieve pressure on the banking system.

Since 2000, various measures have led to a steady reduction in the NPL-to-GDP ratio. In part, this decline was assisted by high GDP growth. More importantly, the improvement was due to the fact that banks have been allowed to write off some of the loans more aggressively. This was made possible by injections of capital from the central government. The banks also increased lending to more profitable areas, including an expansion of consumer loans. By the end of last year, non-performing loans amounted to about 17 % of GDP or 13 % of outstanding loans.

Improved capital adequacy should enable the government to start reducing its stake in the banking sector. The government should not find it too onerous to assume much of the non-performing debt. Overall government debt is relatively low and the government has a controlling interest in most of the borrowers. But writing off all bad loans will be tricky, given that it could loosen the financial constraints on some of the less efficient SOEs.

The non-performing loan problem is intertwined with other structural issues in the economy. The recapitalisation and privatisation of banks is only one step. Familiarity with credit is also needed if non-performing loans are to be prevented from recurring in the future. Recently, for example, a rise in default rates has accompanied the consumer lending boom, suggesting that credit risk assessment by lenders is still weak, while consumer familiarity may also be limited. Tighter controls on the finances of regional governments are required to stop them using regional banks to finance uneconomic projects. Also, a better targeted social safety net is needed to replace the social functions that public-sector enterprises undertake. Importantly, a proper performance assessment system for bank managers needs to be established, as the benchmark hitherto has been credit growth.

Fig. 1.6: Non-performing loans are declining

Non-performing loans of state-owned commercial banks; in %

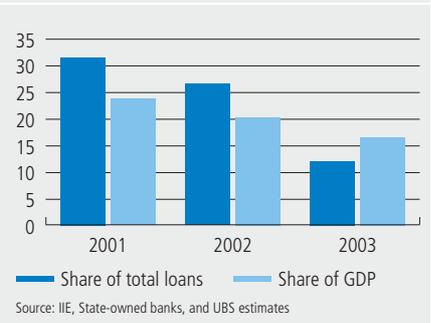


Fig. 1.7: China's banking system is state-dominated

In % of assets

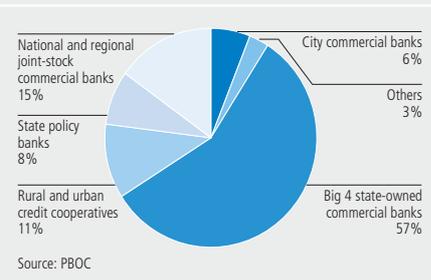
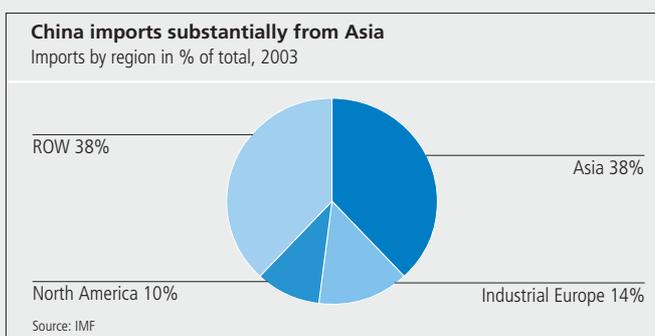
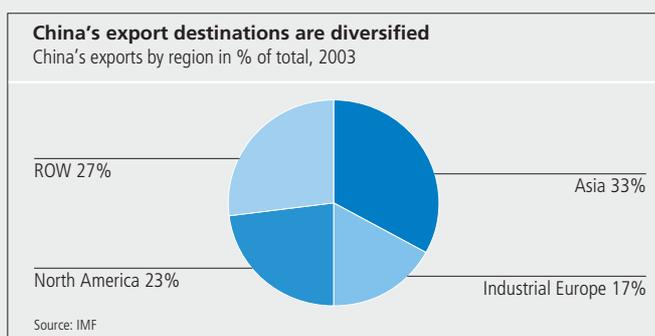
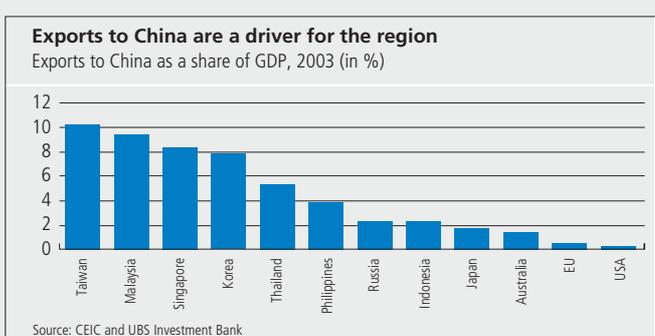
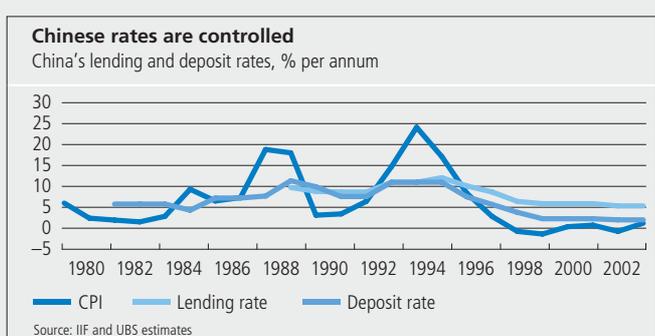
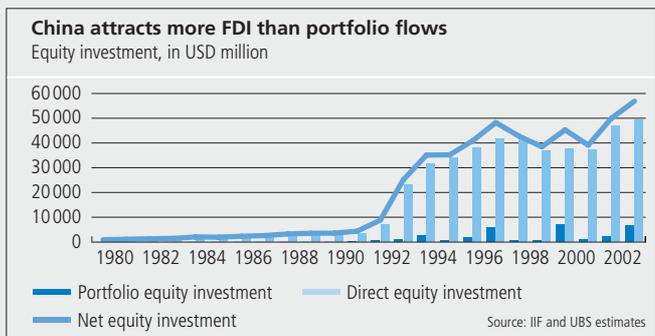
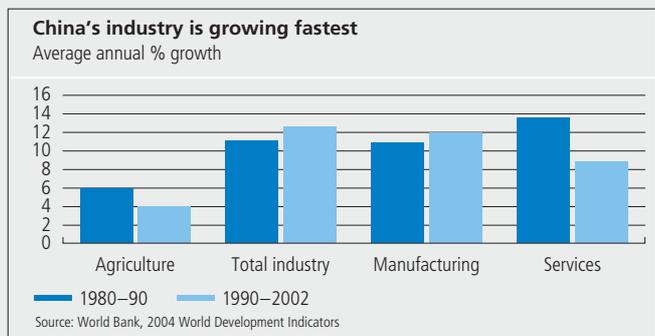
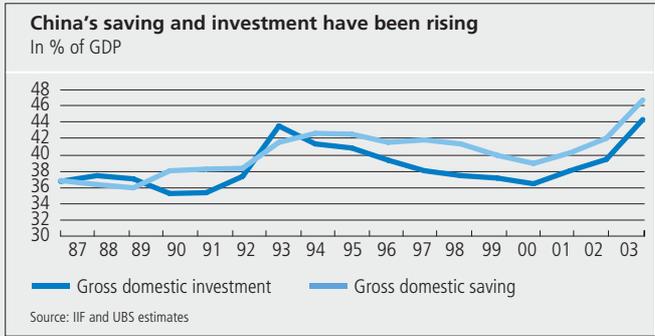
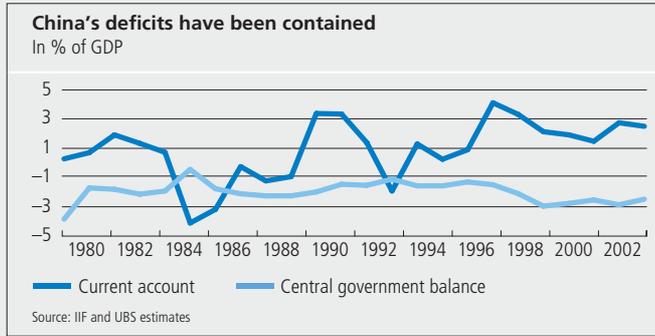


Fig. 1.8



That non-performing loans have so far not precipitated a crisis in China is largely due to the ample liquidity inflows into the banking system, coupled with the effect of capital controls. With strict controls on the transfer of capital abroad, the private sector has limited alternatives to the banking system.

At the same time, the need for capital controls perpetuates many distortions in capital allocation. It is not possible to fully open the equity markets and bond markets to foreign investors. This in turn deprives Chinese enterprises of sources of finance that may otherwise be available.

Growth faces constraints

China's torrid rate of economic growth was recently a driving force behind the rise in global commodity prices. This sparked speculation as to the impact of continued growth. China currently consumes more than 25% of iron ore and steel production and more than 15% of global copper and zinc supplies. It has been the single largest source of growth in the demand for oil.

The rapid growth in commodity prices since last year is partly due to Chinese demand growth and partly to supply scarcity. Commodity producers around the world have invested little in developing supplies over the past few years. Renewed investment will bring world supplies and demand back into closer alignment. But it is clear from experience this year that China needs to be an integral part of the calculations of all tradable commodity producers.

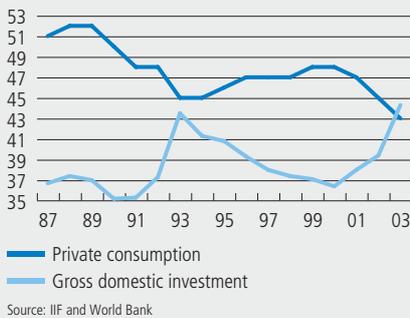
Tradable commodities are not the only area where China's growth creates constraints. China is also short of adequate supplies of water. In a vast country covering a wide range of climatic zones, the water supply is naturally highly variable in quantity and quality. While the monsoon-influenced southern parts get enough precipitation in normal years and the desert-like north-western regions are well adapted to dry conditions, the densely populated eastern areas are increasingly plagued by shortages. Rapid population growth and economic expansion are pushing up water consumption by industry and households in urban areas, while agriculture is increasingly dependent on irrigation. Meanwhile, leaks in water supply pipelines waste as much as 17% of transported water in Beijing alone.

As a consequence, surface water is in ever shorter supply while underground water is over-exploited. For example, the Yellow River, China's second-largest and once notorious for its flooding, all but dries up seasonally in its lower reaches. At the same time, water quality is deteriorating across the country due to a lack of sewage treatment capacity.

Government and party officials are addressing the problem by a combination of supply- and demand-side measures. The first category includes ambitious water-diversion projects, from the Yangzi River and other areas to Northern China, seawater desalination and pipeline repair, as well as the construction of more sewage purification plants. On the demand side, both price hikes and calls to save water are used. Given the sheer size of China, solving the water problem will take its toll in terms of cost and time. For a while, at least, this factor could put a brake on strong economic growth.

Energy is less a problem of quantity than of quality and distribution, even taking economic growth into account. On a national level, energy consumption currently exceeds production by 7%, with coal in surplus and oil in deficit. Yet the big question regarding future development is China's heavy dependence on fossil energy, which is used either directly for heating, processing and transport or for electricity generation. Coal alone accounts for two-thirds of primary energy consumption and, being of mostly poor quality, is responsible for much of the air pollution in major cities and around industrial sites. Reducing smog and carbon dioxide emissions will impose high costs as existing combustion devices are replaced by more environment-friendly technology. Efforts are under way to increase the share of hydroelectric energy, though even the gigantic Three Gorges Dam project will add no more than 10% to current electricity production by 2009. As another option, nuclear power, now rather underdeveloped, will take even longer to contribute substantially to overall energy production. Supply shortages, mainly of electricity, will thus prevail for some time, limiting economic growth.

Fig. 1.9: China is investing, not consuming
In % of GDP



Perhaps surprisingly, labour constraints spell a further challenge. Despite the abundance of labour in the world's most populous country, labour dynamics still have the potential to complicate economic management. The legacy of the one family, one child policy (now being relaxed) is that Chinese society is ageing in the space of a single generation. As a result, increasingly fewer workers are available to support a rising proportion of elderly people in the population. Concluding that the 80% final-salary pension was unsustainable, China has adopted a three-pillar pension system based on a blue-print developed by the World Bank. China's ageing population also has implications for the savings rate, currently very high at about 45% of GDP, but set to decline as more people start retiring (see Chapter 2).

Box 1.2: The Chinese diaspora

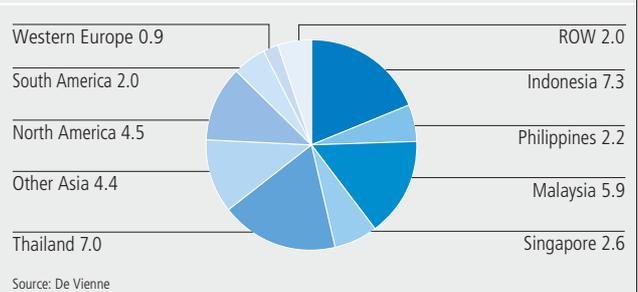
Relative to China's population, the number of Chinese living abroad is relatively small. But in absolute terms, this is the world's largest diaspora. Some 25–40 million people of Chinese origin live overseas, concentrated mainly in south-east Asia. At the same time, the notion of overseas Chinese communities masks a large diversity of socio-economic situations, from the 200,000 Chinese students enrolled in foreign universities to the more than 7 million Indonesians of Chinese origin.

Within the countries where they live, the Chinese tend to have a relatively high per capita income. The Chinese of Indonesia are estimated to have a per capita income of about \$10,000, three times the national average.

The Chinese diaspora is mostly involved in entrepreneurial and commercial activities. If accounted for as a national entity, they would have a combined GDP of USD 400 billion. However, the links to mainland China through foreign direct investment (FDI) and commercial activities are rather subdued at USD 16 billion, and do not compare with the way in which the Indian diaspora invests and interacts with India. However, the new waves

of Chinese students-turned-entrepreneurs abroad, such as in Silicon Valley, are poised to begin a new trend of Chinese returning to their homeland to found new enterprises.

Fig. 1.10: The Chinese diaspora is mostly in Asia
In millions



Determined reform

China's economic potential is strong enough for the social costs of economic transformation to be manageable provided the authorities maintain the current reform momentum. That said, while recent rates of growth may continue, a somewhat slower growth rate of about 7% is more likely in the years ahead. This growth will be driven by productivity improvements deriving from the reallocation of resources from low-productivity activities, such as agriculture, to higher value-added manufacturing and service-sector activities. The growth potential also remains high, as educational standards are rising, saving rates are high and foreign direct investment (FDI) continues to flow in, bringing technological transfer in addition to financing. WTO accession in itself will continue to stimulate growth by forcing the domestic market to restructure and by accelerating technical transfers from abroad.

The promising long-term prospects of the Chinese economy should allow the government to push ahead consistently with reforms despite the immediate social costs. The government intends to facilitate the internal reform of enterprises by improving incentives for managers, making accounting practices more transparent and restructuring and reorganising SOEs. Improved bankruptcy and merger laws are also on the agenda.

Private consumption: a motor or a drag?

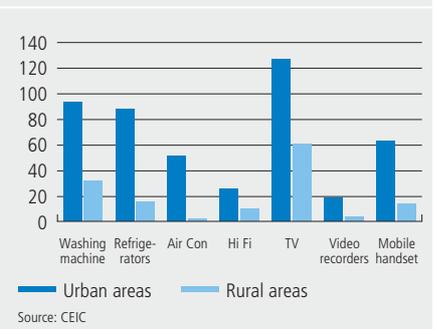
Up to now, China's economic expansion has been driven by investment spending. With investment and saving rates both hovering at around 45% of GDP, it is difficult to see how investment can continue growing at current rates. It is often asked whether and how consumption growth can compensate for the inevitable slowdown in investment.

Economic growth, as clarified in the next chapter, is not a function of the level of investment, but growth in investment. If the rate of investment increases, GDP growth will increase only temporarily before returning to its former trend. Similarly, an increase in consumption can increase economic growth only temporarily, before GDP growth returns to its trend. It therefore follows that private consumption in China can settle at a higher share of GDP than today without impacting the trend growth rate of the economy. The determinants of saving and consumption are more fully discussed in the next chapter. It is nevertheless instructive to review some of the particular issues that can impact consumption and saving decisions in China.

China's potential as a consumer market is substantial. Industrial production, which was concentrated in coastal regions of the South East, is moving inwards, and economic development is spreading into new regions, thereby boosting incomes and hence consumption. Potential demand for TV sets, washing machines, refrigerators and other home equipment – to say nothing of private cars – thus looks enormous. Much support also comes from emerging private credit financing facilities. Not least, shopping for many Chinese has become a form of entertainment that can be pursued almost around the clock.

One obvious incentive for the Chinese to continue saving is the inadequacy of public pension schemes and health insurance. Since the "iron rice bowl" system which provided employees with modest but secure food, housing and pension from their work units was abandoned, a reliable social security net has only just started to emerge and is so far restricted to urban employees. Pension schemes cover only basic needs while health insurance is subject to large excess or deductible payments. Individuals are thus well

Fig. 1.11: High potential demand for consumer goods
China's household durable ownership in 2002 (units per 100 households)



advised to make their own provisions for health care and old age. The one-child policy also encourages savings, (1) to provide the best possible education and (2) for the parents' own retirement, given that a single child is unlikely to be able to support its elderly parents.

Spreading private ownership of housing is often cited as a source of consumption growth as it entails demand for additional household equipment. Employers grant allowances to buy housing depending on the length of employment. It should also be noted that statistically defined income does not always correspond to effective disbursements. An odd "bonus" system allows employers to pay out only a fraction of the agreed monthly salary, with the difference eventually being paid at year-end or later according to profitability. However, many employees have a secondary source of income. Against this background, expectations should be moderate, although consumption can certainly be expected to rise in the medium term.

Catching up, but at a slower pace

China will continue to grow faster than the rest of the world. The country has a large pool of labour, but other important resources are constrained. Continued rapid growth will therefore depend on greater efficiency in the use of scarce resources and capital. However, productivity in many sectors of China's economy has already increased substantially in the past two decades. Economic growth in the future is therefore likely to be slower.

Realising China's growth potential is entirely contingent upon fostering efficiency through economic reforms. Greater efficiency in the use of resources would be encouraged by further liberalisation, ongoing integration into global markets and gradual restructuring of the economy, especially the state-owned sector. Greater efficiency in financing future growth will come about through rehabilitating the banking sector, and opening up China to the international capital markets.

Box 1.3: The exchange rate: Why the controversy?

China's exchange rate system has attracted much attention. The reluctance of the Chinese authorities to yield to upward pressure on the currency has raised concerns that China is using its exchange rate system to gain an unfair comparative advantage in trade. While there is some evidence that the currency is undervalued, the issue is complex.

China's currency is known as both the yuan or renminbi, creating some confusion to outsiders. Strictly speaking, however, the Chinese currency is the renminbi, which means "the people's currency" while a unit of this currency is known as a yuan. In the financial world the terms are often used interchangeably, although renminbi slightly predominates. The renminbi is managed in a narrow fluctuation band of 8.268–8.280 against the US dollar.

There are several reasons why an exchange rate peg was the right policy choice for China. First, the weak banking system was not in a position to

handle significant exchange rate movements. Secondly, the foreign exchange market is insufficiently developed. There are not enough ways of hedging currency risk. Therefore, allowing the currency to move significantly may create difficulties for businesses. Thirdly, the exchange rate helps provide an anchor for monetary policy. This is important in a country undergoing structural change because the impact of monetary policy on the real economy changes, making it more difficult for the central bank to gauge the impact of a particular policy stance.

But there are also important disadvantages to maintaining such a peg. The most obvious is that even with capital controls in place, monetary management will be complicated. Foreign exchange inflows, whether due to export proceeds or foreign investment, are exchanged for domestic currency. If there is no corresponding outflow of funds, the domestic supply of money increases, creating potential inflationary pressures.

A combination of high export growth and foreign investment inflows laid the foundation for substantial money creation. This additional money supply was absorbed by China's economy without any great risk of inflation because the large stock of labour, overcapacity in certain industries and strong productivity growth put downward pressure on prices.

With China's economy now operating close to or even above capacity in certain sectors, inflationary pressures are beginning to rise. One way for the government to neutralise the impact of foreign exchange inflows has been to issue government bonds to remove the money supply increase from the economy. This is known as sterilisation. But sterilisation has a price – the government has to bear the cost of servicing the newly issued bonds. As long as interest rates in China are lower than interest rates in the US, this type of operation may be profitable for the central bank, which can borrow domestically and place the foreign exchange inflows into US securities, mostly Treasuries.

In principle, such a policy cannot be maintained indefinitely, however. If the government borrows domestically, interest rates will ultimately begin to rise, slowing economic activity and raising the cost of sterilisation. But this too creates a problem, as rising interest rates attract more inflows. In this case, the central bank will be caught in an unsustainable cycle. If inflows are not sterilised, then inflation will set in, ultimately reducing export competitiveness. Speculation that the yuan will be revalued triggered substantial inflows in 2003. One sign is that "errors and omissions" in the balance of payments

have turned from deficit to surplus. China is attempting a delicate juggling act in trying to contain inflation and reduce pressure on the exchange rate while preventing any sudden change in the exchange rate regime that would create problems for the financial system. Upward pressure on the yuan has indeed declined as rising imports have turned the current account surplus into a small deficit. Pressure will also be eased by the establishment of a Qualified Domestic Institutional Investor (QDII) system that will allow portfolio investment outflows. In the medium term, of course, the fact that China's exchange rate is undervalued in purchasing power parity terms should lead to upward pressure on the real exchange rate.

Although the near-term pressure on the exchange rate has abated, a change in the exchange rate regime will eventually become necessary. The government has also been saying that a move to greater flexibility is on the cards. The question is therefore when and how.

Ideally a change in the exchange rate regime would come at a time when there is no heavy pressure on the currency in either direction. This would minimise the risk of abrupt movements regardless of timing. However, China is likely to make any move very gradual. A peg to a basket of currencies, probably next year, is more likely than a free float, as it introduces flexibility that is more apparent than real. This will help reduce the risk of market pressures, while allowing the government to continue to move gradually in reforming the financial system and liberalising capital flows.

Fig. 1.12: China's reserves have risen dramatically
In billions of yuan

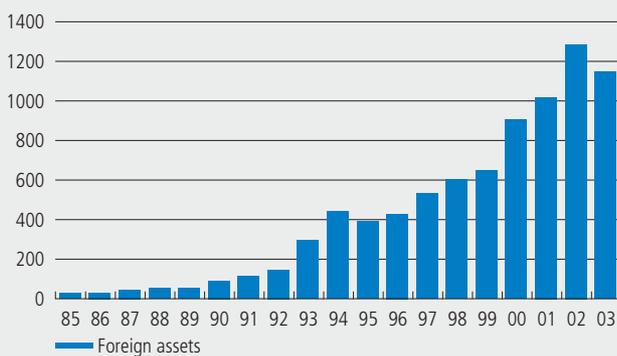


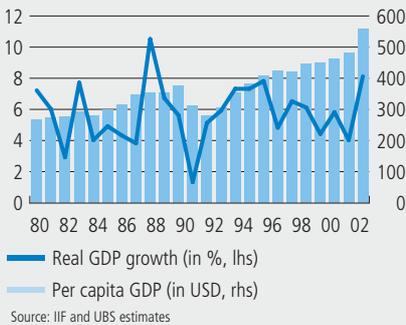
Fig. 1.13: Capital flight has reversed

Net flow of the "errors and omissions" in the balance of payments, USD million



Fig. 1.14: India's growth has been volatile

GDP growth and per capita GDP



India: a two-track economy

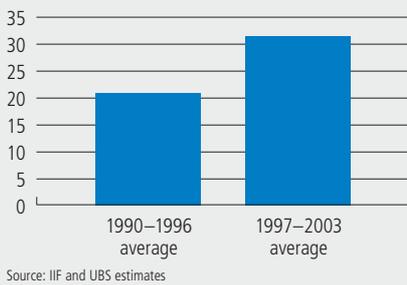
While relatively slow to integrate its economy with the rest of the world, India is now becoming an increasingly significant exporter of services. Unlike China, growth in India has originated mostly in the services sector. India's transformation is far from complete, and unlocking the country's potential will require further liberalization as well as substantial infrastructure investment. But India's dynamic and growing labour force supports its growth prospects.

An economy in the early stage of transformation

For much of its post-independence history, India was a largely closed socialist economy. Unlike the Chinese case, private property existed. But as in China, economic activity was circumscribed by economic planning. Despite reforms over a period of almost a decade and a half, many of India's economic features betray that legacy.

Fig. 1.15: Services are an increasing share of exports

Services in % of total



India's economy depends heavily on agriculture. Though accounting for only 25 % of GDP, agriculture employs two-thirds of India's population. Most landholdings are farmed at subsistence level, and India has lagged in the introduction of irrigation projects. As a result, economic output is dependent on variable weather factors such as the monsoon.

Indian industry has traditionally comprised large, heavily regulated firms that enjoyed considerable protection from external competition. Several areas, however, have been opened up to foreign investment, contributing to a significant expansion in the production of durable consumer goods, including cars, scooters, consumer electronics, computer systems and white goods. However, a large proportion of heavy industry is still publicly owned and internationally uncompetitive.

The service sector accounts for almost half of GDP, and arguably includes some of India's most competitive enterprises. Information technology firms are among the best known to the outside world, but telecommunications-related enterprises have also shown a healthy degree of dynamism. The service sector also includes a very large state sector, as well as small-scale private traders. The state sector is not only large but inefficient. As noted later in this chapter, the Indian bureaucracy is in fact seen an impediment to growth.

A relatively closed economy

Notwithstanding its increasing role in the world economy, India remains rather closed in terms of both trade and investment flows. Taken as a share of GDP, trade remains closer to levels observed in economies such as Brazil and Argentina than the more open economies in Asia. A key feature in the growth of India's exports is the growth of services as opposed to goods exports.

India is also relatively closed to capital flows. Due to tight controls, foreign investment in India and Indian investment abroad remain limited by regional standards. However, as is the case in most other Asian economies, India depends more on foreign equity than on credits. Foreign loan liabilities have, in fact, been declining in recent years.

India began integrating its economy with the rest of the world in the early 1990s, following a balance of payments crisis in 1991 in which foreign exchange reserves were almost exhausted. As a result, the government launched an economic reform programme with IMF financial support that entailed a significant liberalisation of trade and capital flows.

Non-tariff barriers to trade were reduced, and a schedule for reducing tariffs was adopted. The average tariff was slashed from almost 130% to under 30%. India formally joined the WTO in 1995, cementing its integration into the world trade system. Tariff levels, however, remain relatively high when compared to most other emerging markets.

In parallel with the liberalisation of trade, India also liberalised financial flows. Current account restrictions – mostly restrictions on payments for goods and services – were gradually eased and fully eliminated by the late nineties. Capital account restrictions were only partially removed. The reform process in India was given another boost in 1999 after a new government assumed office. These second-generation reforms entailed a substantial liberalisation of the regulatory environment. While different political parties in India have different priorities, there appears to be a consensus in favour of continued reform.

Why has India been growing?

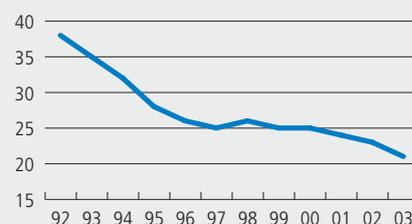
India's economic acceleration arguably began in the mid-eighties, when economic reforms significantly reduced some of the restrictions on private sector activity. The economic reforms of the 1990s helped underpin growth at higher levels than in the two preceding decades. While growth benefited most sectors, it is services that showed the most vitality, while agriculture's contribution was predictably volatile.

During the past year, with economic growth at more than 8%, it has become increasingly clear that India has entered into a new era of dynamic growth. Part of the momentum can be explained by a rebound in agriculture following a drought. Structural improvements can only explain part of the surge in the economy. Another part is also due to relatively expansionary monetary and fiscal policies.

Economic expansion notwithstanding, a clear weakness in the Indian economy stems from the chronically weak fiscal policy. While the overall deficit has now fallen to the 5% range, the primary balance remains in deficit, and the state governments are also running deficits of their own, bringing the consolidated public-sector deficit to almost 10%. As a result, public-sector debt has steadily increased, reaching almost 65% of GDP from 50% only six years ago. Unlike the situation in 1991, however, export growth and capital inflows have helped India avoid balance of payments pressures. Nevertheless, India is vulnerable to a deterioration in the external environment.

Despite the loose fiscal policy and the cyclical economic upswing, interest rates have remained low. Ample domestic liquidity, low inflation expectations, and capital controls support the low-rate environment. However, like many other countries in Asia, India is intervening in the foreign exchange market in order to keep the currency from appreciating. Export growth and portfolio inflows have consequently sustained a continuous build-up of foreign exchange reserves. As a result, the government needs to sterilise the

Fig. 1.16: India does not depend on external borrowing
External debt as % of GDP



Source: IIF and UBS estimates

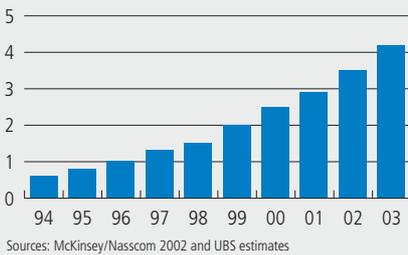
Fig. 1.17: Pre- and post-reform India
(% of GDP, unless otherwise indicated)

	1991 Crisis	2002/03
Average (unweighted) tariff rate (percent)	128	29
Trade openness (imports and exports as % of GDP)	17.2	30.5
Current account balance	-3.1	0.8
External debt	26.5	19.8
Short-term external debt (in % of reserves, excluding gold)	4.6	3
	630.1	21.6

Source: IMF

ensuing monetary expansion. The low interest rate environment will therefore ultimately come to an end, either through rising borrowing costs or through higher inflationary expectations, or through further exchange rate appreciation.

Fig. 1.18: Offshoring is increasingly important for India
Offshoring as % of GDP



Service exports: a dynamic but small sector

Service exports such as IT and back-office processing remain a small part of the economy, even though they have grown rapidly. Offshoring exports have grown from USD 1.8 billion in 1997 to USD 10 billion in 2003 and the IT industry has grown to account for more than 4 % of GDP.

Whereas the fledgling IT industry’s growth was initially driven by software-related outsourcing services, the new growth segment is business process outsourcing of back-office and call-centre functions. Exports from this segment of the industry grew by around 50 % in 2003, as increasing numbers of multinationals from the US and EU shifted data processing and other support functions to India, either into their own local subsidiaries or by using outsourcing companies.

India’s potential in this area is bolstered by a very large pool of highly skilled IT and other technical graduates, with an estimated 650,000 IT professionals employed in IT roles in 2003. Total annual supply of new IT graduates in 2004 is around 110,000, with a further 90,000 graduates from other fields also entering IT-related employment. India also produces 300,000 new graduates each year in other engineering-related disciplines, creating a very large pool of professionals with strong technical skills and English-language proficiency.

Although these services remain a small part of the economy, they are playing an important role in transforming the economy at large through several channels. Firstly, although direct employment in the offshoring industry is only about 1 million, the sector has positive indirect effects. One large beneficiary is the communications sector, but the economy at large also stands to benefit. It is estimated that every new job in offshoring indirectly creates a further three to six jobs outside the sector. Secondly, the IT

Box 1.4: The world’s biggest democracy

The Indian subcontinent occupies a landmass of over 3 million square kilometres. Its population is one of the fastest growing in the world and surpassed the billion mark in 2001. India has three mega-cities with more than 10 million inhabitants, although 700 million Indians still live in the countryside. India is a land of contrasts: climate, culture, languages and economic activity show a very high diversity. Apart from the most widespread languages, such as Tamil and Hindi, 600 other languages are actively spoken in different regions. Weather ranges from semi-arid in the north-west and tundra in the Himalayas to tropical in most of the peninsula. Of India’s 700 million farmers, 40% live below the poverty line of 1 US dollar a day, farming simply to feed themselves. India has some of the lowest human develop-

ment indicators in the world, particularly in rural areas. On the other hand, India also has a large number of highly qualified professionals as well as world-class companies concentrated in the mega-cities. India is a parliamentary democracy with a federal system of government, with 28 states and seven union territories. India’s bicameral parliament consists of the *Rajya Sabha* (Council of States) and the *Lok Sabha* (House of the People). The legislatures of the states and union territories elect 233 members to the *Rajya Sabha*, and the president appoints another 12. The elected members of the *Rajya Sabha* serve six-year terms, with one third up for election every two years. The *Lok Sabha* consists of 545 members who are directly elected for five-year terms.

and offshoring sectors are supporting the economic outlook by helping accelerate the pace of economic reforms. As a result of the needs of these sectors, significant liberalisation is already underway in other sectors such as financial services, communications and aviation. All of these areas have been bottlenecks for growth in the past.

Can growth remain rapid?

The challenges to India's growth potential are many. The reforms of the early 1990s left India a "two-track" economy. The heavily protected industrial sector is mostly uncompetitive by international standards. Private sector development has also been hampered by the reservation system to protect small-scale industries. By limiting production licences of certain goods to small-scale industries, economies of scale could not be exploited.

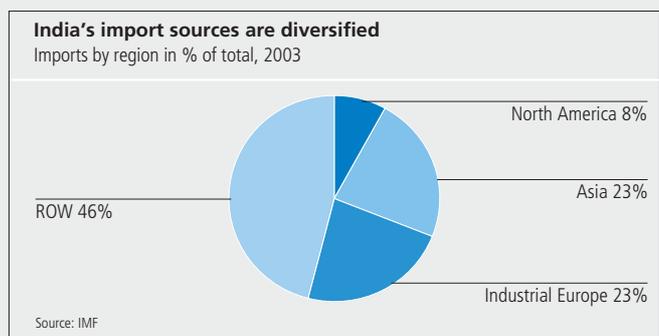
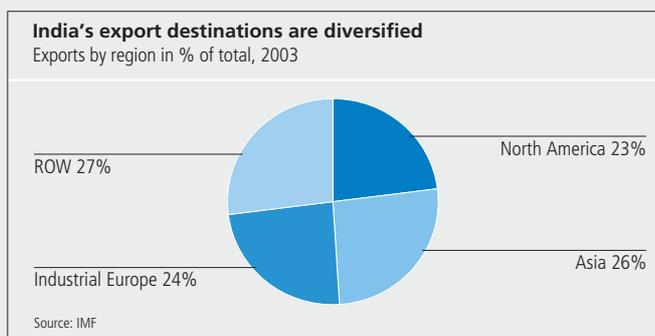
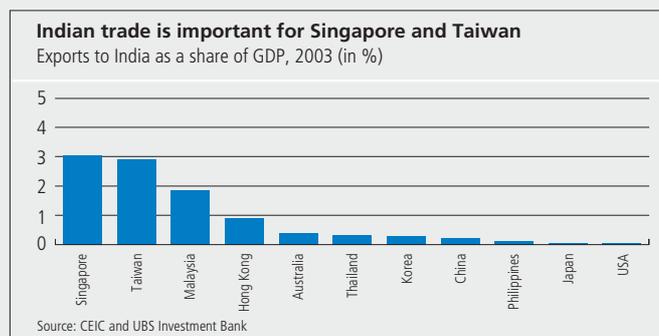
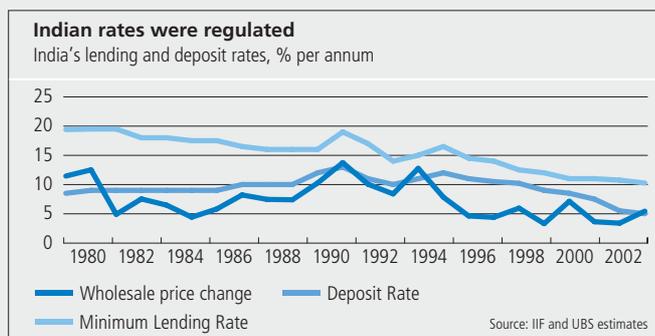
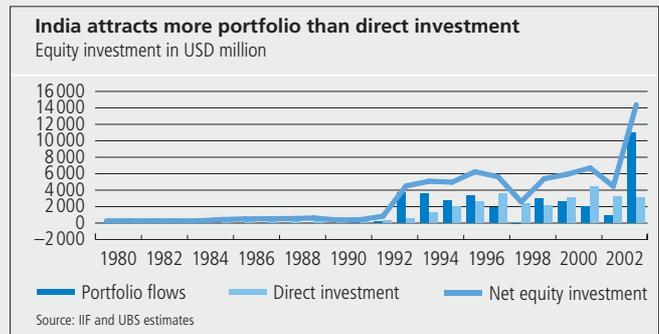
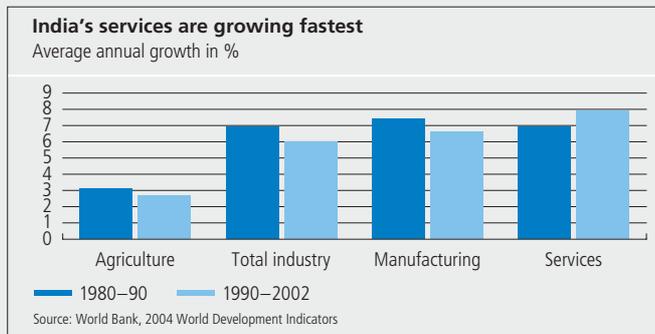
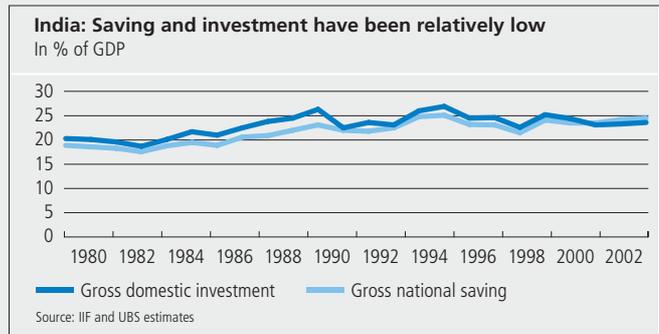
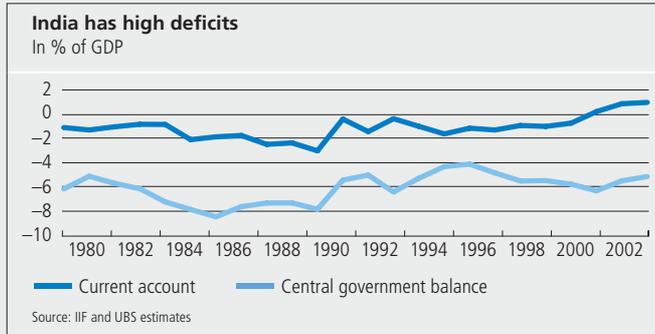
The Indian administrative and legal system is also bureaucratic. This has been a deterrent to foreign investment due to the complexity of approval processes, although the dynamism injected by the offshoring industry has created greater government focus on simplification of the approval process.

Poor physical infrastructure for transport, communications, utilities and government services has been a major impediment to economic development, and constitutes a significant challenge to the long-term development of the economy. In the offshoring hubs, high-quality private-sector infrastructure is increasingly provided in addition, giving foreign corporations better infrastructure in some areas such as communications and health services. In other parts of the economy, however, weak infrastructure makes India uncompetitive compared to other Asian investment destinations, such as China, Malaysia and Thailand. New infrastructure projects are underway, including an ambitious national highway project. However, it will be some time before India's basic infrastructure reaches the same level of efficiency as that of other countries in the region.

The success of the off-shoring industry creates new challenges for the authorities. Workers in industrial countries may be accustomed to competition in industry but not in services. The reaction of the US Congress and several US state governments in legislating against offshore outsourcing of certain types of government work is an indication of the potential external risks to India's service sector. Also, services involving information processing are subject to particularly high standards of data security. Until India has a more fully established track record in information protection, there may be natural limits to growth in this area.

India has a very youthful demographic structure compared to the ageing populations of most industrial countries as well as China. With 35% of the population now aged under 15 years, the working-age population is projected to increase by 335 million persons by 2030. India's population dynamics support higher and sustained growth, but government policy needs to stay focused on easing the impediments to rapid growth.

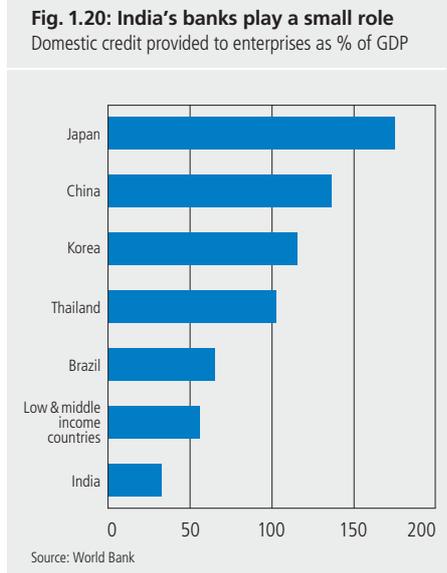
Fig. 1.19



The role of banks should be enhanced

India's financial system is small compared to those of other emerging markets. India has made considerable progress in strengthening and deepening its financial system since the early 1990s following the opening up of the domestic banking sector, interest rate liberalisation and capital market development. This has translated into a steady rise in the level of financial intermediation and a gradual rise of financial saving allocated to capital market instruments. In the second half of the 1990s, however, government intervention in the financial sector increased in order to meet the government's financing needs. This – together with scandals in the mutual fund industry – has slowed down the development of capital markets.

The growth of India's banking system will depend not only on reducing the role of government but also on regulatory reforms in other areas. India's banking system has generally sound controls and is relatively transparent. Nonetheless, the institutional framework does not encourage risk-taking by management, as contract enforcement can be complicated and legal processes are lengthy. Enhancing the role of banking is also necessary to allow for the reduction of capital controls. Experience elsewhere has been that capital account liberalisation is most successful when the financial system is well-placed to handle capital flows.



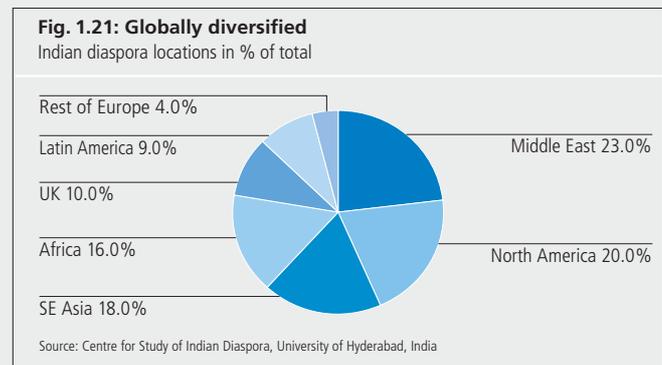
Box 1.5: The Indian diaspora

An estimated 15–20 million people of Indian origin live abroad, including both expatriated Indian nationals as well as Indians permanently settled abroad. This constitutes the largest ethnic diaspora after the overseas Chinese, with an estimated annual income of USD 200 bn, or around one third of India's GDP. At over USD 8 billion, the Indian community's annual home remittances are a key contributor to the balance of payments.

The Indian communities in the US, Europe and Middle East hold significant assets at Indian banks, in special non-resident accounts or designated government securities. Total non-resident Indian (NRI) deposits were USD 22 billion in September 2003, with new NRI inflows estimated at USD 4 billion annually. New Indian offshore banking legislation since 2002 has significantly increased the scope and attractiveness of such banking services, and Indian banks have responded by enthusiastically broadening their range of such services.

The Indian communities generally maintain close ties with India. US survey evidence from the Public Policy Institute in California indicates that around three quarters of Indian immigrants would consider starting a joint venture in India. Indian technology entrepreneurs are an important segment of Silicon Valley and have already been an important driving force behind new technology joint ventures between the US and India. An estimated 10–20% of FDI flows to India since 1990 are attributed to the Indian diaspora.

The Indian community in the US alone is estimated at 1.7 million people, with the US Census Bureau estimating that average Indian immigrant household income in the US is USD 60,000, or 1.5 times the US average. The UK Indian community is estimated at around 1.2m, with significant entrepreneurial and professional wealth. The Middle East is also a major hub for Indian expatriate workers, with an estimated 1.5 million workers in Saudi Arabia and around 1 million in the United Arab Emirates. Indian workers in the Middle East normally return to India and therefore maintain strong financial links with India through remittances and long-term savings for their eventual return.

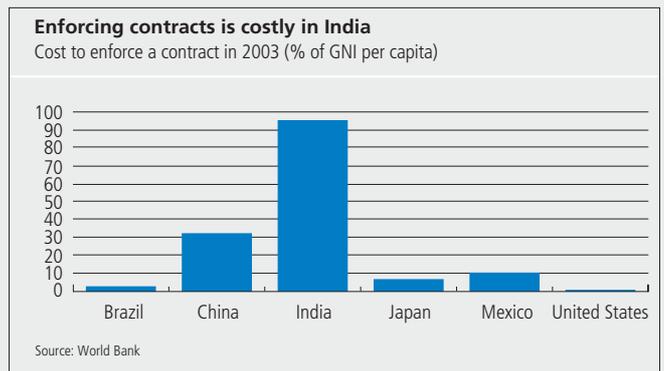
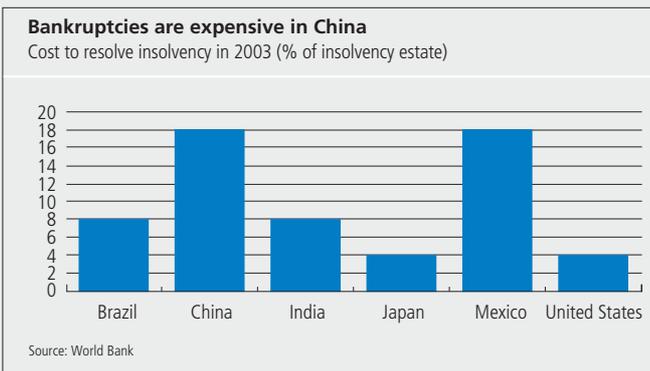
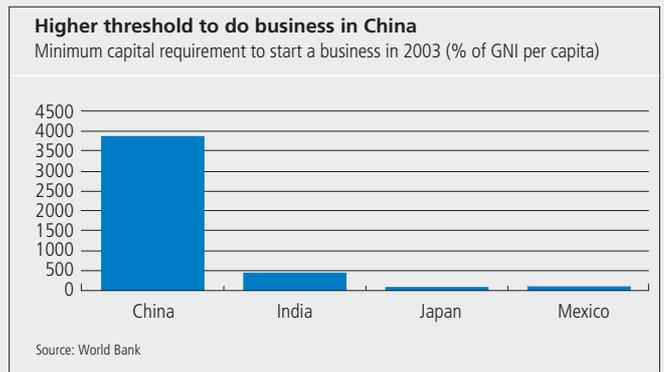
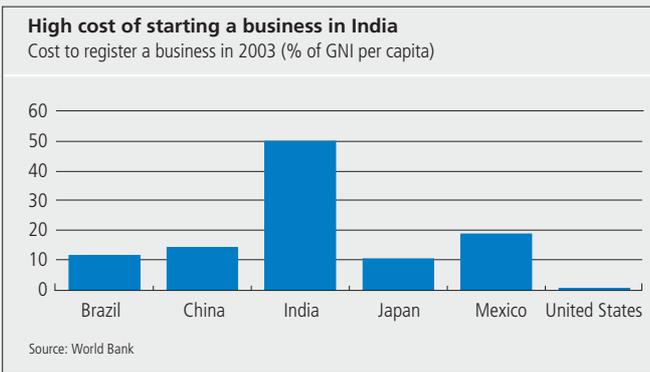
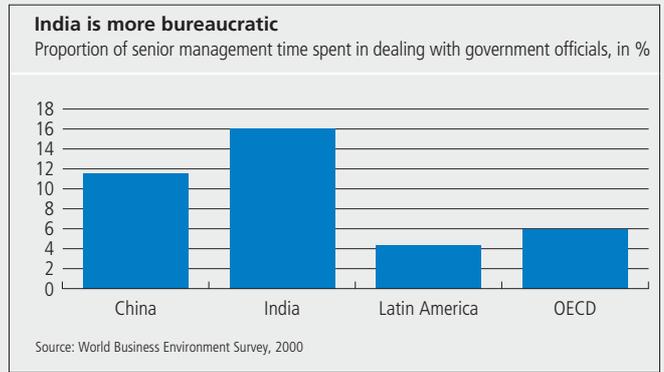
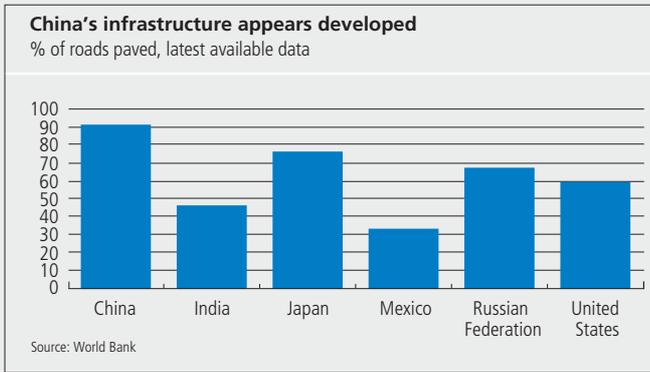


A limited role, but for how long?

India's role in the global economy is limited and its share in global trade very small. Its financial markets, though longer established than those of most emerging markets, remain peripheral. But India's increasing importance as a hub for service exports places it in an especially competitive position. India has developed strong comparative advantages in IT and related services precisely at a time when the world economy has become increasingly reliant on these services.

The role played by the more dynamic services in India remains small. It is also unreasonable to expect that these specialised services will grow to be a large share of GDP. Rather, they offer an impetus for growth in other areas. But for India's promising economic potential to be met, it needs to push through substantial economic reforms. One priority should be to reduce the regulatory shackles of the private sector as well as the protections accorded to inefficient industries. Another key area should be reform of the financial system in order to allow the banking system to more efficiently intermediate between savers and investors. All of this, of course, also requires fiscal reform. India's persistently high deficits are a significant medium-term risk.

Fig. 1.22



How do India and China compare?

Similarities between India and China are largely superficial. The economies have very different structures and institutional frameworks. One of the most significant differences between the two is demographic.

Fig. 1.23: India's wages are lower than China's

2002	Manufacturing labour cost per hour (\$)
Indonesia	0.35
India	0.43
China	0.59
Korea	8.35
Mexico	2.27
Thailand	0.92
Turkey	3.46
USA	20.32

Source: IMD World Competitiveness Yearbook 2002

Some similarities

Comparisons between China and India tend to focus on the size of the economy, size of the population and their starting points as relatively poor economies. Per capita income, the ratio of exports to GDP and the size of the population in India today are, indeed, close to the levels of the same indicators in China a decade ago. India is also in a good position to compete with China on the basis of labour costs.

Another area where China and India are similar is their socialist past. While India's system allowed for private property, government planning was a central feature of both countries' economic history. It still is to a lesser extent. This in turn has left both countries with large inefficient industries and state enterprises.

Major differences

Infrastructure weaknesses are an area that both India and China have in common, but for very different reasons. A survey in the Global Competitiveness Report finds that India has consistently lagged behind China in the quality of its infrastructure. World Bank data shows that less than 50% of roads in India are paved, whereas in China the ratio is closer to 90%. An important improvement to India's infrastructure is underway in the form of the Golden Quadrilateral and North South – East West highway projects. These will create a road network of 13,000 kilometres in total length. The government is also allowing a greater role for the private sector in the financing of infrastructure projects. For example, the government encourages private participation in the ports by leasing out existing facilities and inviting private investment in new ones. As a result, total time to unload a ship has fallen dramatically.

China's infrastructure appears better in terms of quality. However, the most recent spurt of economic growth has exposed significant inadequacies. Energy shortages are impacting businesses. Port capacity is stretched. Like India, China needs to invest substantially in its infrastructure and to improve the management of its infrastructure if growth is to remain buoyant.

Agricultural reform is another area where differences between India and China stand out. While agriculture is important for the Indian economy – particularly in terms of employment – it remains a sector that includes a substantial subsistence element. China, on the other hand, has undertaken one of the most far-reaching agricultural reforms in history. Indeed, it is the agricultural sector that was the focus of the initial phase of reform in the early 1980s. All collective farms were broken up, and most households were allotted individual plots of land with 15-year leases. This helped raise agricultural yields by 50% by 1985.

The agricultural sector remains a source of uncertainty for India's economy. Heavy dependence on the monsoon exposes overall economic growth to a substantial element of weather-related variability. In recent years, fluctuations in GDP growth have become less pronounced. However, this is largely due to an increase in the relative size of the service sector rather than a structural improvement in agriculture. Indeed, many agricultural policies in India have adverse results. Minimum prices are set for rice and wheat, while inputs such as fertiliser, water and power are heavily subsidised. As a result, prices of wheat, rice and other staples are politicised. The heavy costs sustained by the government are one reason why resources to finance irrigation projects are limited, thereby maintaining the volatility of the agricultural sector.

Foreign direct investment is an area where there are also substantial differences between India and China. At first glance, the difference between the two countries is striking. But the figures probably exaggerate the reality for two reasons. First, a substantial amount of investment in China is booked as FDI, but is in fact "round-trip" investment that originated domestically. Secondly, Indian data on foreign direct investment exclude re-invested profits and foreign currency loans. If these figures were included, the International Finance Corporation estimates that in 2000, foreign direct investment in India would have been almost three and a half times the published figure.

Even if these data problems were addressed, it is clear that China attracts substantially more foreign direct investment than India. India, on the other hand, opened up its equity markets to foreign portfolio investment well ahead of China. Portfolio investment in China remains constrained by quotas under the Qualified Foreign Institutional Investor scheme.

India offers foreign investors further advantages. The legal system is similar to that in many industrialised countries, despite being slow and inefficient. Intellectual property rights are better protected than in China, an important factor in today's knowledge-based economy.

The banking systems in both countries are very different. India's banking system is in better shape than China's, given the latter's non-performing loan problem. India's banking system also has an established private-sector involvement, but needs to develop much further. It is also impacted by a regulatory environment that reduces the appetite for credit risk. China's banking system, on the other hand, is due for a much more fundamental restructuring.

One of the most important differences between the two countries is demographic. As the next chapter discusses, it is demographic factors that will heavily influence the long-term growth potential of both countries. India's workforce increase will more than double China's. As a result, the labour force in India will increase as a share of the total population. In China, the ageing population profile will lead to the opposite.

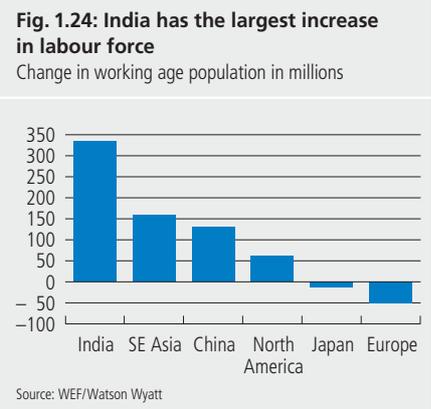


Fig. 1.25

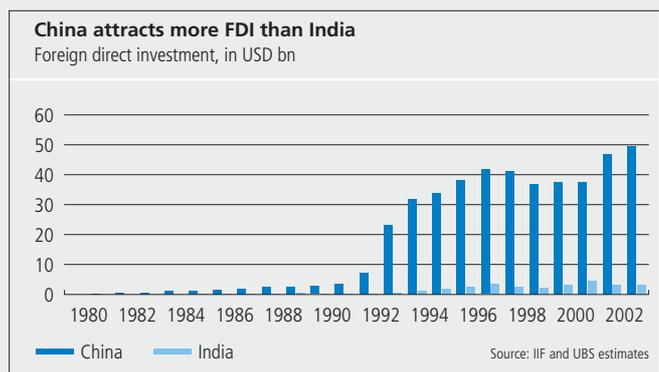
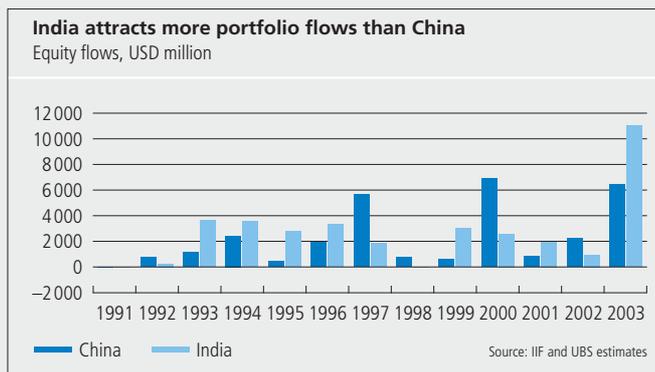
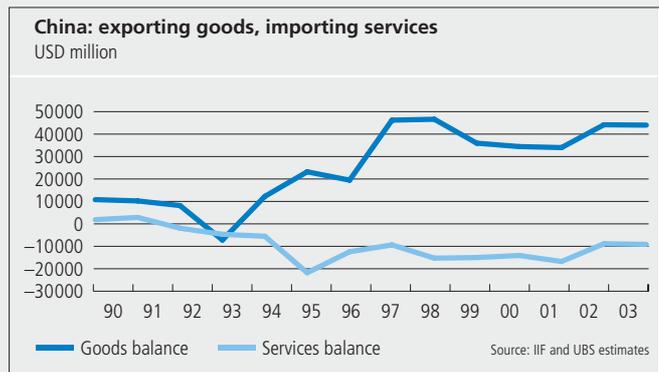
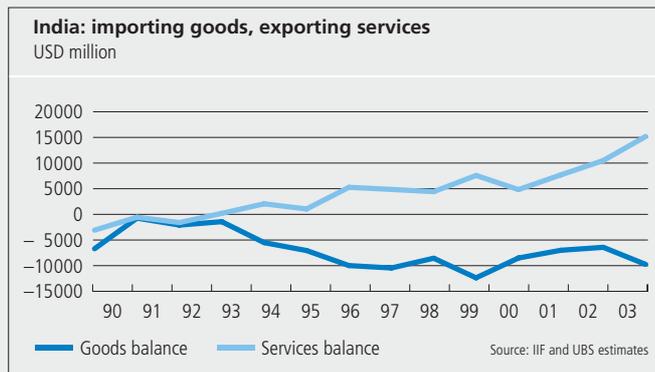
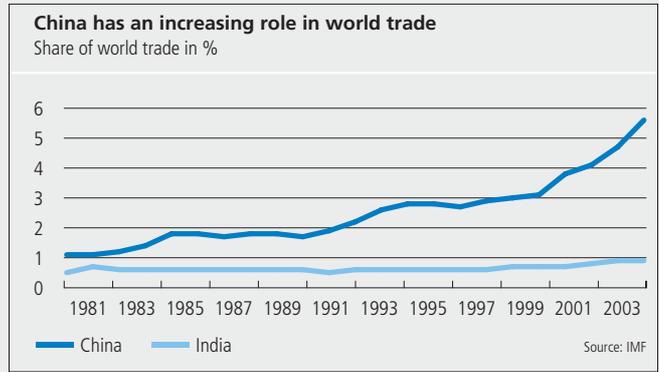
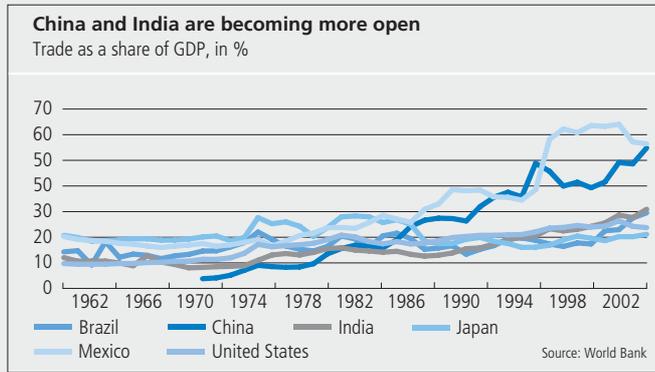


Fig. 1.26

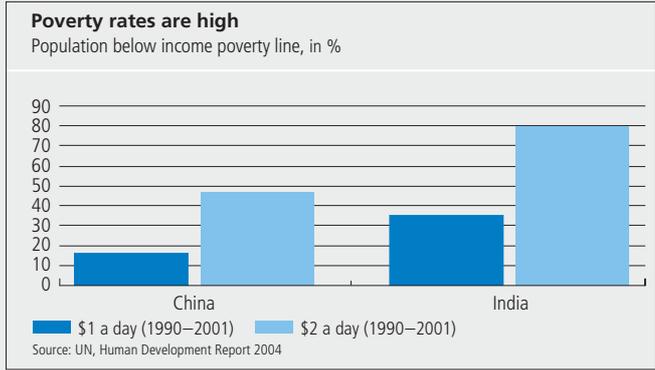
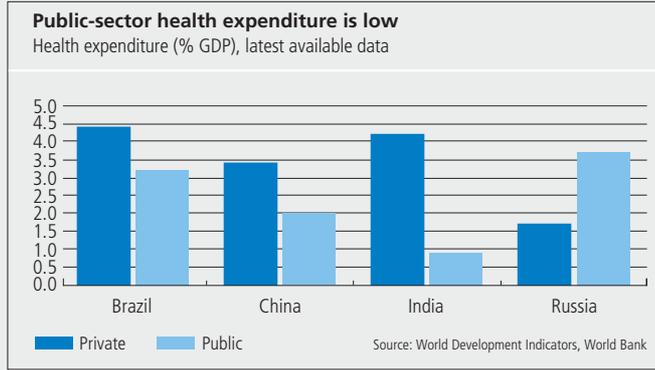
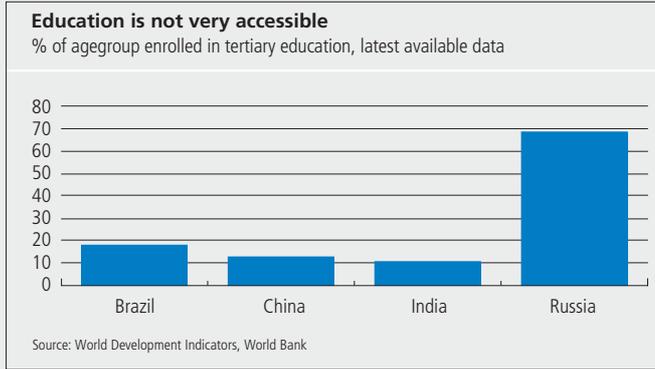
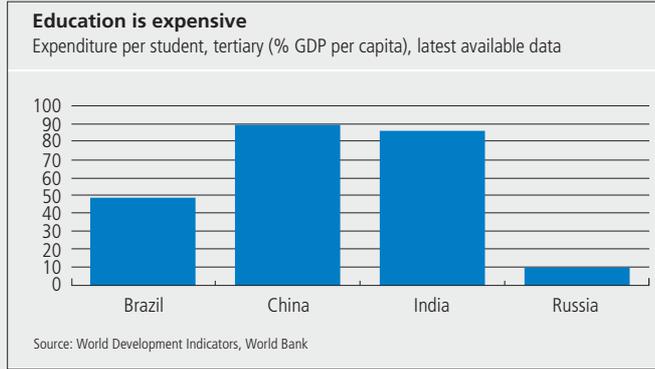
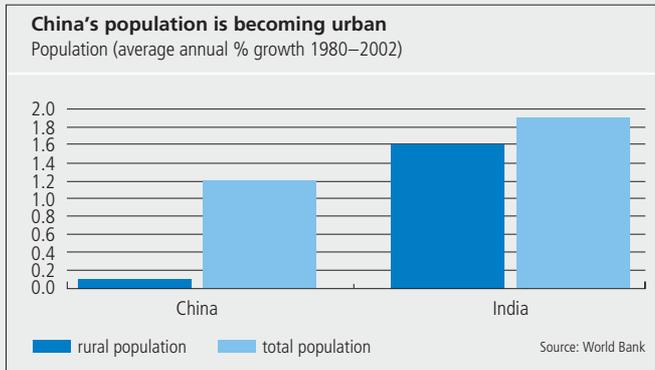
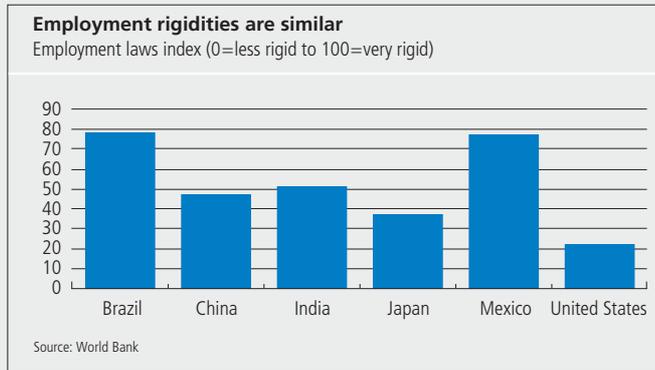


Fig. 1.27

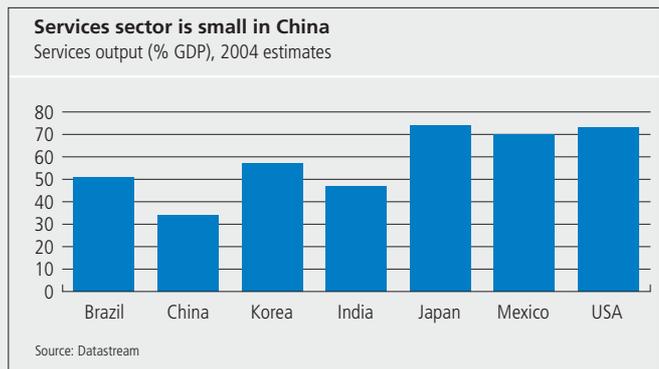
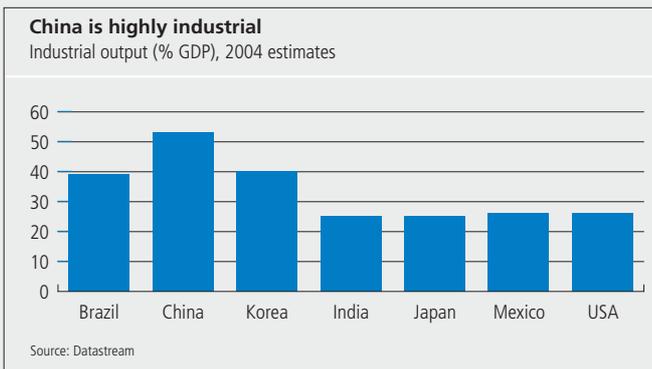
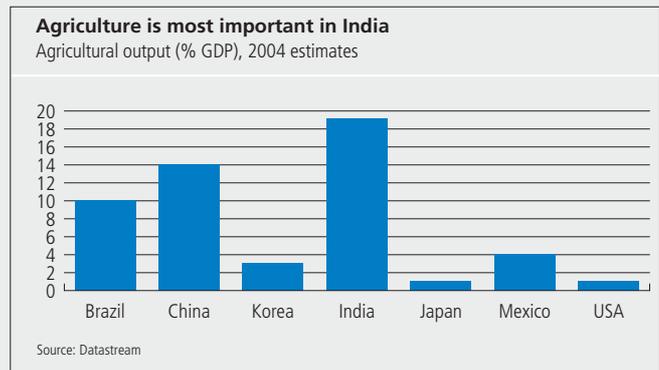
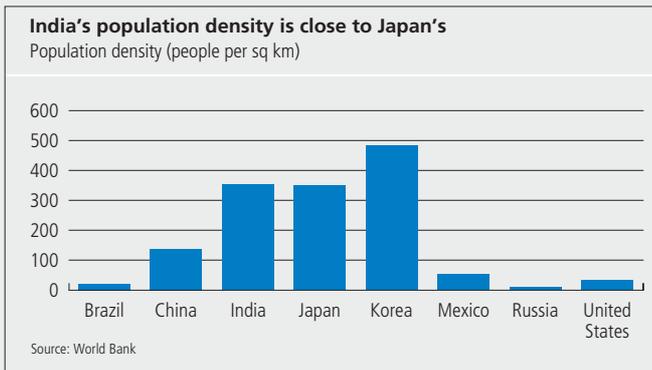
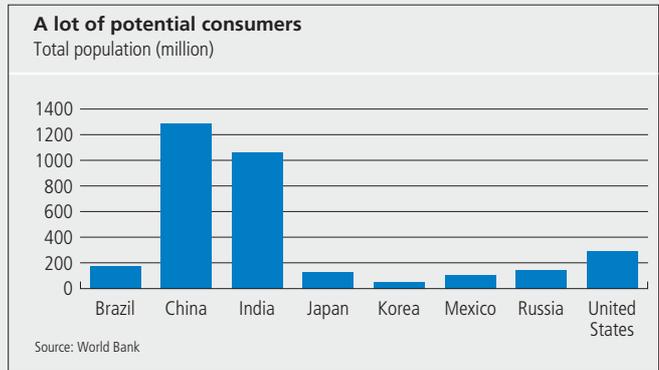
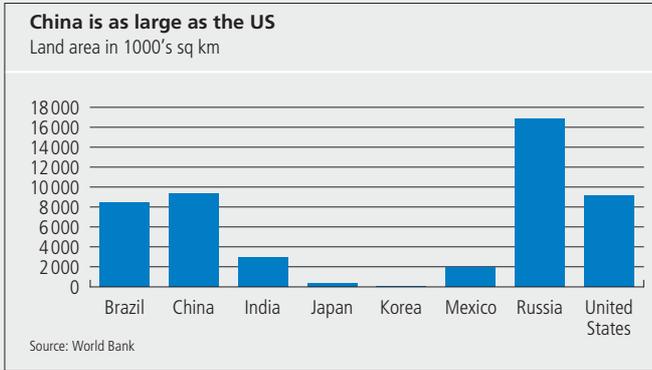
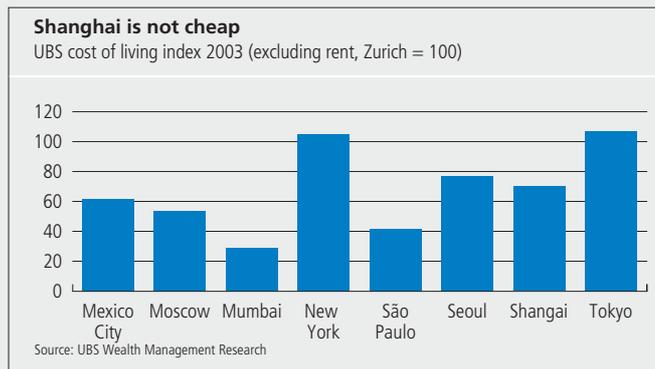
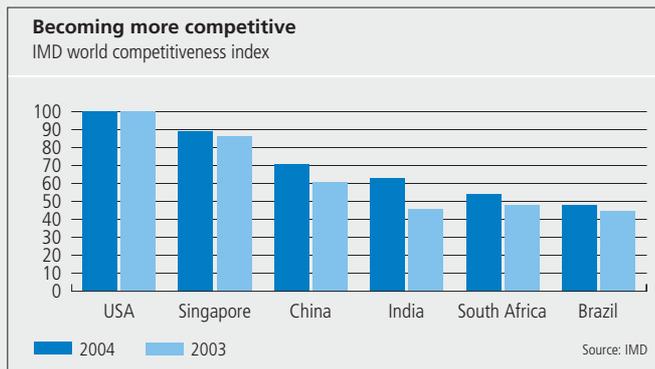
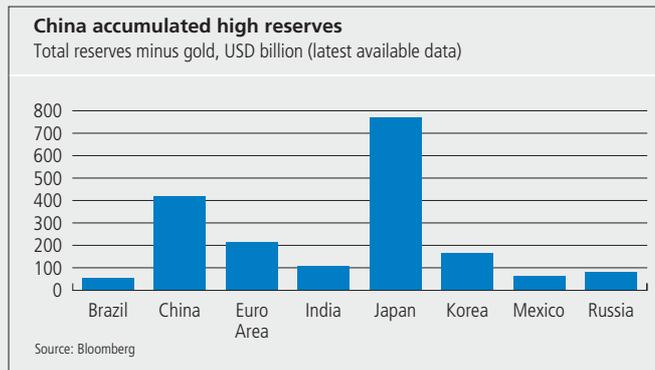
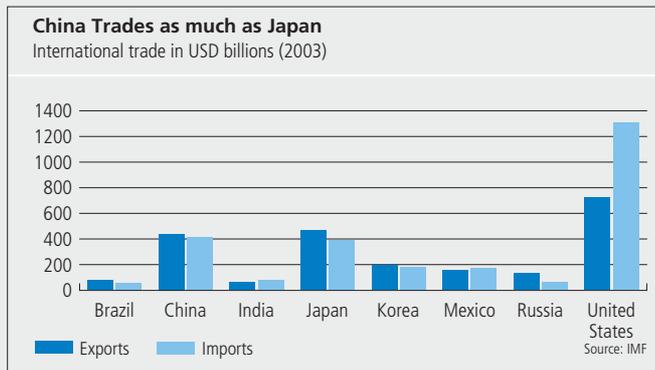
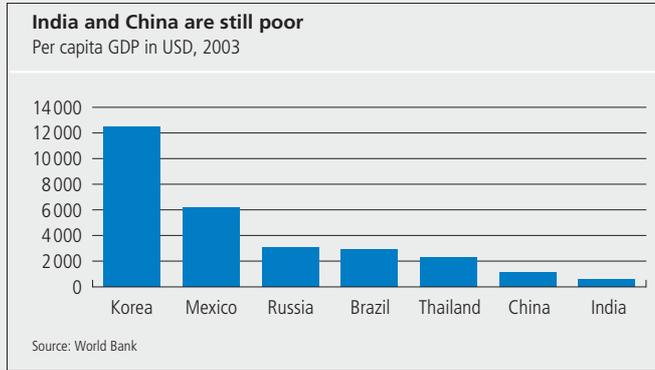
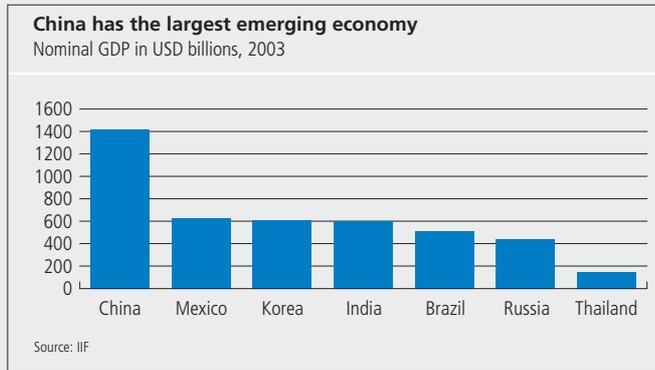


Fig. 1.28



Chapter 2

The emergence of two mass consumer markets

Thomas Berner
José Navarro de Pablo

The emergence of two mass consumer markets

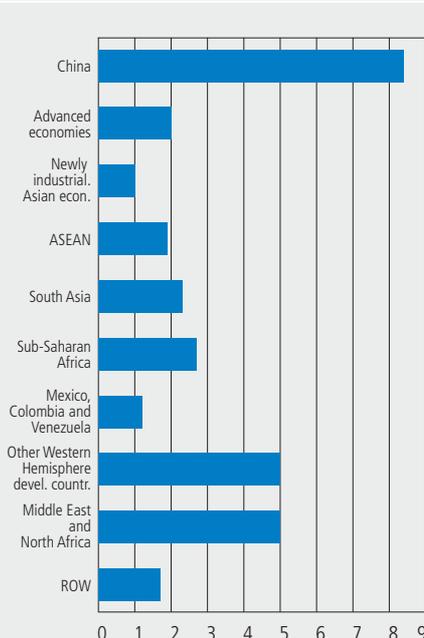
Although they are the two most populous nations on earth, India and China are relatively small markets for many goods. This is unsurprising given the low per capita income in both countries. But over the next 25 years India and China together will become a market five times the size of today's United States in purchasing power terms, even on conservative growth assumptions. The emergence of these markets will depend on their demographics. The relative youth of India's population means a higher potential growth rate than in China, but it also implies a rising savings rate. In China, an increasing share of older people should begin devoting a larger proportion of their income to consumption rather than savings.

Conspicuous producers, inconspicuous consumers

China and India have attracted an increasing amount of attention as their economic impact begins to be felt around the world. If China is perceived as the world's workshop, then India is often claimed to be its service centre. Increasingly open to foreign trade and foreign direct investment, China is a rapidly rising source of consumer goods to the world. India's competitiveness as a centre for outsourced services is also well recognised.

Fig. 2.1: China needs to adjust to global integration

Share of labour force that needs to change employment as a result of China's integration, in % of total



Source: IMF

Unsurprisingly, the roles India and China are assuming have raised concerns. The American Association of Textile Manufacturers, for example, estimates that China will soon boast a 70% market share in the US textile market. Newspapers abound with stories of large global firms moving back-office functions to India. Such trends provide ample ammunition for populist politicians and trade protectionists. But concerns about these trends are misplaced. Economic growth and trade have always provided net benefits to the world as a whole, even if certain narrow segments of an economy are adversely impacted during the adjustment process. A recent International Monetary Fund (IMF) study on the implications of China's integration into the world shows that the largest adjustment (in terms of labour market shifts) needs to come from China itself, while the impact on the industrial countries and the rest of Asia is minimal.

The economic impact of China and India cannot be viewed in isolation. The rise of these economies is only one manifestation of a broader trend that involves all the world's economies. The growth of global trade far exceeded global economic growth in the 1990s, as trade liberalisation agreements were implemented and the World Trade Organisation was established. India and China are far more open than other countries were in the comparable phases of their development. For example, in 1960 trade as a share of GDP was about 15% in Korea, compared to India's 30% and China's 50% today. As a result, the economic development of these countries will likely follow a different pattern.

Production processes are now globally integrated. In the case of China, about half of the final value of exports consists of imported intermediate goods. What appears as a Chinese electronic export may have most of the added value produced elsewhere. Key components could be made in Japan, the software could have been developed in India, while the design and engineering may be American.

In today's discussions, the attention paid to India and China as production hubs tends to overshadow the attention they get as markets for finished goods. For most global companies, the share of profits from sales in these markets is still very small, or even negligible. This is not surprising. Per capita GDP is less than USD 1,100 in China and below USD 600 in India.

Large numbers of people in both countries do, of course, enjoy a much higher standard of living. As economic growth continues, the living standard of this segment of the population should move closer to those of upper middle income countries. This means that India and China are both potentially very large and attractive markets even if overall per capita GDP is low. In China, 70 million people now dispose of a per capita income of more than USD 10,000.

How do economies grow?

In his classic *The Stages of Economic Growth*, Walt Whitman Rostow suggests that the development of all industrialised countries has proceeded in five stages. These are traditional society, preconditions for take-off, the take-off, the drive to maturity and the age of high mass consumption.

In the pre-conditions for take off stage, the transition between traditional societies and the stage of economic take-off, the decisive catalyst for change was often political. A nation state with a form of central government replaces traditional landed societies and regional interests. In the third stage, economic development takes off as investment rises and new industries expand rapidly, yielding profits which are largely re-invested in new plants. The fourth stage witnesses a continuation of growth and economic expansion as wealth accumulates, fuelling additional saving and investment.

Box 2.1: The model

Our growth projections are based on a simple model of economic production, the so called Cobb-Douglas function:

$$Y = AK^\alpha L^{1-\alpha}$$

where A represents productivity, K is capital, and L is labour.

We assume that technology will evolve in China and India as a process of catch-up with the most developed economies. Convergence depends on income per capita, and the basic assumption is that as China and India get closer to income per capita levels of more developed economies, their productivity growth rate will slow. The rate at which they catch up depends on technology transfer and on the initial productivity gap with more developed economies. Some factories in China are among the most productive in the world, because a robot is as quick in China as anywhere else. On the other hand, productivity in the agricultural sectors of China and India is around 1–2% of the US level, so overall productivity in these countries has a lot of room to catch up just by shifting

productivity from the agricultural to the services/industrial sectors, especially in India. We also assume that current exchange rates will appreciate in the long run towards their PPP level at a rate of 1% per year.

We use population estimations by the UN to project growth in the labour force. For the capital stock we assume a constant GDP to capital ratio, eliminating the cyclical component of variations in investment from our calculations. We chose this approach as a way to describe the very different economic structures of India and China. China's industrial sector still makes up more than 50% of economic activity, while in India services is the largest sector. The economic structure will then change at an accelerated pace in the coming decades, shifting emphasis away from production and redirecting it towards the consumer.

To calculate per capita income of different population segments we use income distribution data from the World Bank. We assume that the relative income distribution remains unchanged from today. Based on this assumption we project how the purchasing power of different groups of income earners will fare in 25 years' time.

China and India have in very different ways reached the beginning of this fourth stage. Both economies are now at the start of what is likely to be a long period of growth before they become mature economies with high consumption.

How fast can China and India grow?

Economic activity is driven by three variables: capital, labour and technology. For any level of capital, an increase in labour will increase the level of economic activity. The same is true for capital and for technological innovation. To estimate the growth rate of an economy, the changes in all three of these factors must be projected.

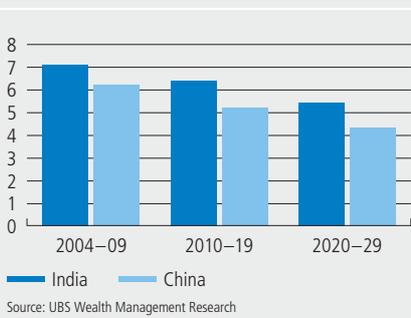
To project GDP growth, we make a number of assumptions to simplify our calculations. First, we assume that China and India will see steady increases in productivity at rates higher than those of industrialised countries, as technology catches up with US and European standards. As their income rises, however, the difference in the rate of productivity growth between these countries and the industrialised world narrows. Secondly, for labour force growth we use forecasts created by the United Nations based on current population growth trends. Thirdly, we do not make specific assumptions on capital, but we assume that investment will not increase, and instead capture the effect of capital growth through technological change.

These assumptions are decidedly conservative. We assume that productivity growth will average less than 5% in both India and China, compared to a long-run average of 2% in the US. Productivity can grow much faster than that. US productivity growth has been about 4% during the past decade. In China and India productivity has grown well above 7%. Although productivity in a few narrow sectors of the Chinese or Indian economies is the same as that in Europe or the US, overall productivity is far lower. In agriculture, for example, labour productivity is only 1% of the US level. We assume that, even with steady productivity growth, China and India will still not have reached the US level by 2030.

Our analysis also ignores several upside and downside risks to economic growth. Two potentially positive factors are the level of education and the quality of the infrastructure. Both have an important bearing on growth by increasing the quality of labour and capital. In both areas, India and China have made great strides in the last 20 years, which could have very positive implications for growth. As for negative factors, we ignore the social or political tension that could potentially arise during periods of economic transformation. Rising income differentials between urban and rural areas are one possible source of opposition to economic reforms.

Our simplifying assumptions imply that the basic force driving GDP in our forecasts will be population growth and productivity gains. In 2030, according to United Nations estimates, India and China will have a working-age population of 1.9 billion people, compared to 1.6 billion today. Based on these assumptions, real GDP growth will average 6.2% in India and 5% in China until 2030. India's growth rates show more upside potential, thanks to a lower base and the fact that its working-age population will increase by 40%, implying that almost 350 million people will join the workforce by 2030.

Fig. 2.2: Assumed average real GDP growth
2004–2030, averages; in %



These growth rates are actually low relative to recent trends. They nonetheless yield impressive results in terms of market size and increases in per capita income. In US dollar terms, GDP per capita will increase almost fivefold in India, from less than USD 600 to almost USD 2,800, and more than fourfold in China, from USD 1,100 to more than USD 5,000, by 2030. At first glance, these numbers may not be very impressive. When adjusted for purchasing power, however, India's per capita GDP will be more than USD 14,000, while China's will exceed USD19,000. In purchasing power terms, the combined size of these economies will be almost five times larger than today's US economy.

Box 2.2: Population assumptions in our model

World population is currently growing at a rate of 1.2% annually, implying a net addition of 77 million people per year. Six countries account for half of that annual increment: India for 21%; China for 12%; Pakistan for 5%; Bangladesh, Nigeria and the United States of America for 4% each. India and China increased their populations by 15 and 9 million people per annum, respectively, in the last five years, but this rate of growth is supposed to slow gradually over the next 30 years.

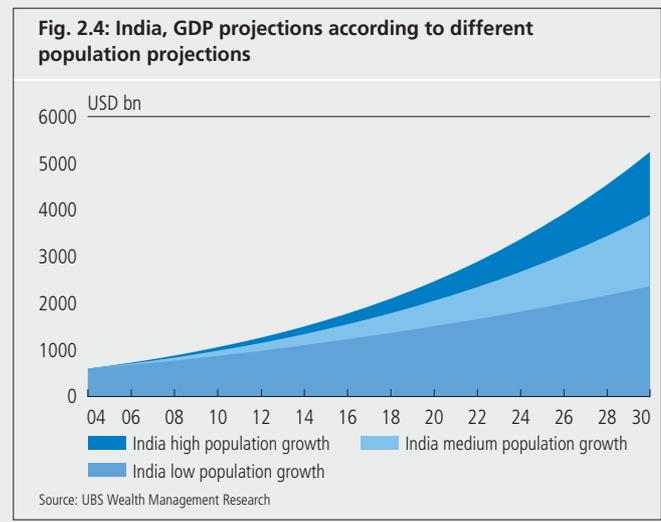
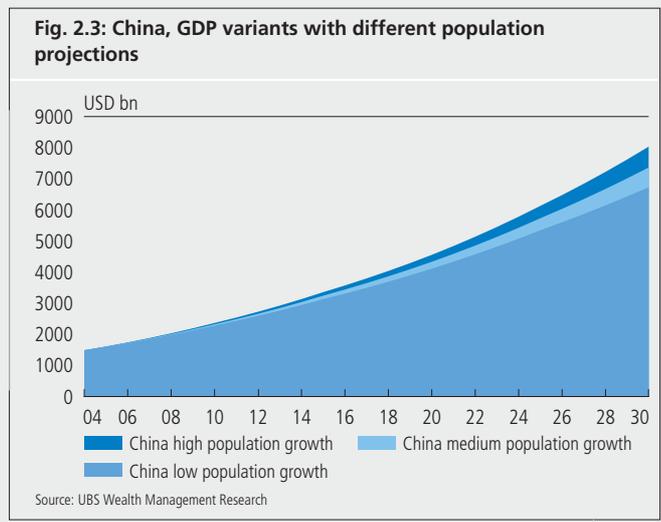
We have used the UN population division's World Population Prospects 2003 estimates, which are based on the cohort components of the population projection method. Every cohort of people of the same age is followed throughout its lifetime according to fertility, mortality and migration patterns.

The UN data include high and low fertility scenarios. Fertility rates are projected for the current female cohorts in childbearing age to estimate the number of births per year. Projected mortality rates are then applied on the resulting cohorts of children. Finally, migration is taken into account.

Factors being taken into account in setting fertility and mortality projections include trends in age at marriage; the proportion of women in the labour force and educational attainment; effectiveness of family planning programmes and availability of contraceptives. Mortality rates include information on the state of public hygiene, calorie intake per day, etc.

Migration patterns are far more speculative than those for mortality and fertility for such a period of time. The policy stance on international migration has seen huge variances in the past century. The assumption is made that current migration controls will prevail for the next 30 years.

When plotting the effect of the different population scenarios, it is immediately apparent that because of India's higher current population growth the variability of outcomes is much higher than for China. The upside of India's growth is therefore quite significant. We chose for our projections the mid-fertility scenarios.



How much will they consume ?

With rising income comes rising consumption. But will consumption rise in constant step with rising income? The answer is no. Individual saving and consumption behaviour is influenced by a number of factors, including the current level of wealth, expectations regarding future income, and access to credit.

The most established theory of consumption and savings is known as the “life cycle hypothesis”. Put simply, individuals tend to save more when they are working in order to have money to spend during retirement. There is empirical evidence to support this hypothesis from a number of countries. Nobel prize winning economist Franco Modigliani also finds evidence for this in China.

It follows that the savings rate depends on that society’s age profile. In a young society, an increasing share of the population becomes of working age. As the labour force increases, the share of income devoted to saving also rises. In an ageing society, an increasing share of income is spent rather than saved.

India and China have very different population profiles. India is a young society. China is an ageing society. This means that saving as a share of GDP should be rising in India and declining in China. As a result, consumption will grow faster than overall GDP in China, and slower than GDP in India.

For the purpose of projecting consumption patterns in these countries, we assume that the share of consumption in GDP will change in the same way as was seen in other Asian economies, including Japan. We therefore assume that China’s consumption rate will increase to 57 % of GDP in 2030 from the current level of 43 %. This rise will, of course, be accompanied by a drop in the investment rate, which is currently at 46 %, as well as a drop in the savings rate. At 45 %, the savings rate in China is astonishingly high. In India we assume the opposite. The consumption rate is currently 64 %, and we assume it will fall to 48 %. In stark contrast to China and even more to Japan, the Indian working population will grow continuously as a proportion of the total population over the next decades.

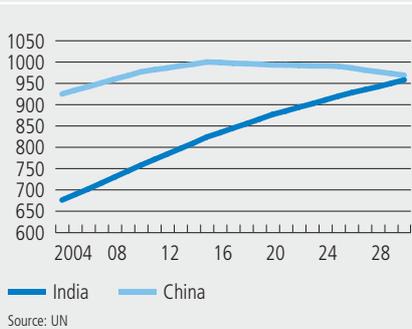
The changes in consumption rates that we are assuming are very large. However, changes of this magnitude have been observed in Korea, Indonesia and elsewhere in the region. Such changes tend to happen in very small increments over long periods of time and are not associated with a particular event or crisis.

What will they consume?

While theories of saving and consumption behaviour are well explored in economic literature, theories of consumption patterns are not as well developed. There are relatively few studies on how consumption of certain goods is influenced by the level of income.

Economist Ernst Engel was the first to analyse the relationship between income and consumption in 1857. He discovered that, as personal income rose, the percentage of total spending for necessities – food, shelter (residence and household operations) and apparel (clothing and shoes) – fell. However, while the share for food fell notice-

Fig. 2.5: China’s work force will peak
Working-age population in millions



Box 2.3: Nominal GDP, real GDP, and GDP at PPP exchange rates

Gross Domestic Product (GDP) is the broadest measure of the total value of all the goods and services produced over a period of time within the boundaries of a country.

GDP can be measured in nominal or real terms. Nominal GDP reflects the current prices in each measurement period. Thus the growth rate of nominal GDP will also reflect growth in prices, i.e. inflation. In contrast, real GDP holds prices constant at one measurement period. Thus the growth rate in real GDP is only the change in the amounts of goods and services produced over the relevant time period, barring any price changes. For example, currently US real GDP is measured using year 2000 prices in US dollars at its value in 2000. Thus the quantities of goods and services produced in 2003 were valued at 2000 prices.

When comparing real or nominal GDP across two countries one must naturally compare them in the same currency. Otherwise the comparison would be meaningless. Thus, when comparing the real or nominal GDP of the US with that of China, we have to convert US GDP from US dollars into renminbi or convert Chinese GDP from renminbi into US dollars. By doing so we get real or nominal GDP valued at current exchange rates.

Current exchange rates may not always be meaningful, however. In China, one dollar might be able to "buy" more goods and services than in the US.

The difference in cost may not be reflected in the current exchange rates. For example if the Mexican peso drops by 50% vis-à-vis the US dollar, Mexico's GDP measured in dollars will also drop by 50%. This, however, does not mean that Mexicans are 50% poorer, nor that their purchasing power has dropped by 50% if wages and prices remained the same. Therefore we must resort to a concept called purchasing power parity (PPP). If a homogenous basket of goods and services costs four times more in country A than in country B, then an exchange rate of 4:1 should be used to convert country B's GDP into PPP units comparable with country A's. When this concept is applied, the Chinese GDP is more than four times larger than when using current exchange rates.

In sum, GDP can be measured in real or nominal terms. In either case, it can be measured at current or PPP exchange rates. But when to use which? Current PPP is the appropriate tool to answer the question: "what is a country's position in terms of GDP (per capita), given the set of international prices for a given year?"

Constant PPP is the appropriate tool to answer the question: how has the relative position of a country's GDP (per capita) changed over time, given its measured growth performance?

ably, the shares for shelter and apparel remained fairly stable. The drop in food consumption as a percentage of total spending with rising income is known as Engel's law.

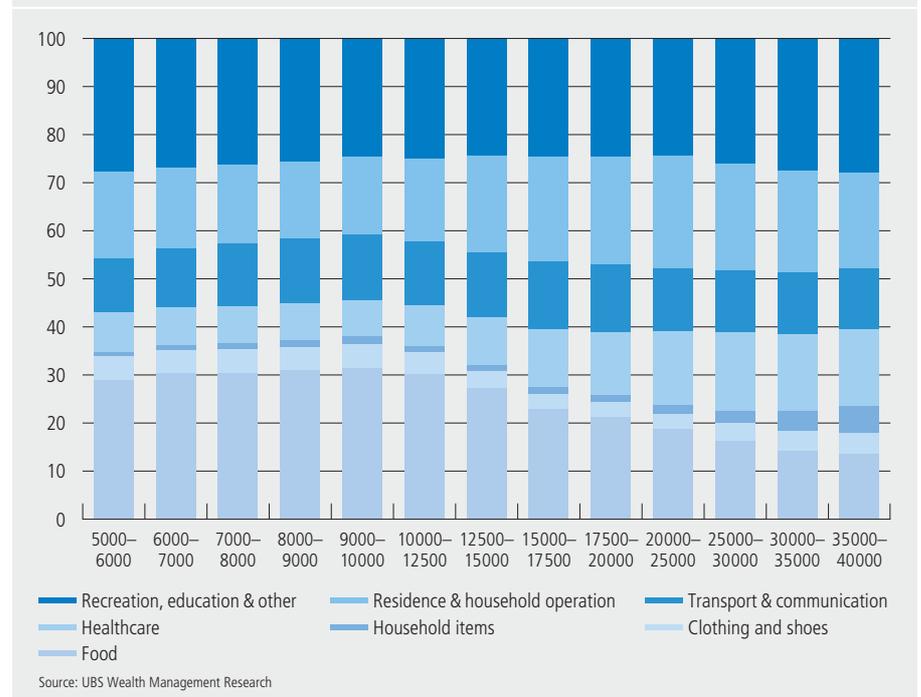
Discretionary spending, i.e. spending on non-essential goods, does not begin to rise until a certain level of income or of wealth is reached. Some economists argue that discretionary spending does not start to be meaningful before household wealth reaches a level of about 300% of national income. Other economists, such as Atkinson, find evidence that discretionary consumer spending begins to rise when per capita income reaches a level of USD 5,000 on a purchasing power basis. China's per capita GDP has recently reached this level, while India will reach it in about eight years.

Higher incomes change consumption

We examine consumption patterns in China and India and create broad categories of items: food, clothing and shoes, household items (i.e. furniture, electrical appliances), healthcare, transport and communications, residence and household operation, as well as recreation, education and other services and other (durable and non-durable) goods. The choice of these particular categories is due to data constraints. Chinese and Indian data are not available in enough detail to create more in depth comparable categories. A meaningful comparison with consumption in other developing countries, or historical comparisons, are also hampered by data constraints.

If a relationship between income and consumption patterns exists at the personal level it will also exist at the macroeconomic level. As real GDP per capita grows over time, the consumption patterns of the average Chinese or Indian will change as well. When compared to the United States, consumption in China and India appears to be in line with what economic theory would suggest. Food consumption takes the highest share of income in India. Expenditure on recreation and education is much higher in the US than in either China or India.

Fig. 2.6: US consumption patterns
% of expenditure for each income bracket



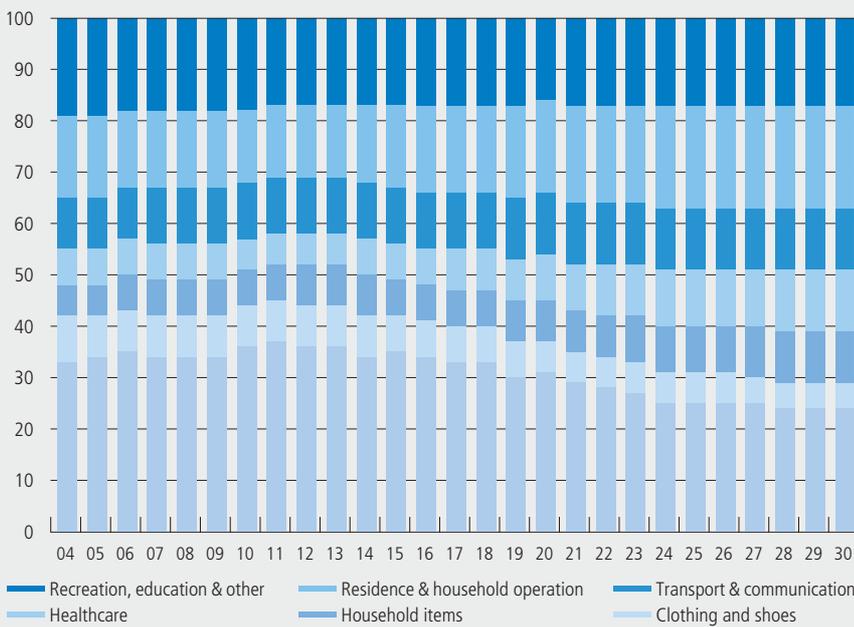
To assess how consumption patterns in China and India will change in the future we use the US as a benchmark. Of course, we acknowledge that cultural differences have an impact on consumption patterns. A comparison with a sample of Asian economies would have been interesting. However, the US provides the most adequately disaggregated data on real consumption patterns. Furthermore, cultural differences in terms of consumption should be minimal at a macro level. That is to say, Engel's law should apply in any country. Using historical data for the US, Fig. 2.6 provides an overview of consumption shares of different categories at different levels of income. By and large, the results are unsurprising:

- Food seems to follow Engel's law over most of the income spectrum.
- The share of expenditure on household items rises with income. This again should be expected. For example, while there is a plausible limit as to how many refrigerators fit into a home, consumers tend to upgrade to higher quality products.
- The share of residence and household operation rises strongly and then stabilises. The increase in these shares comes at the expense of a lower share of food consumption.

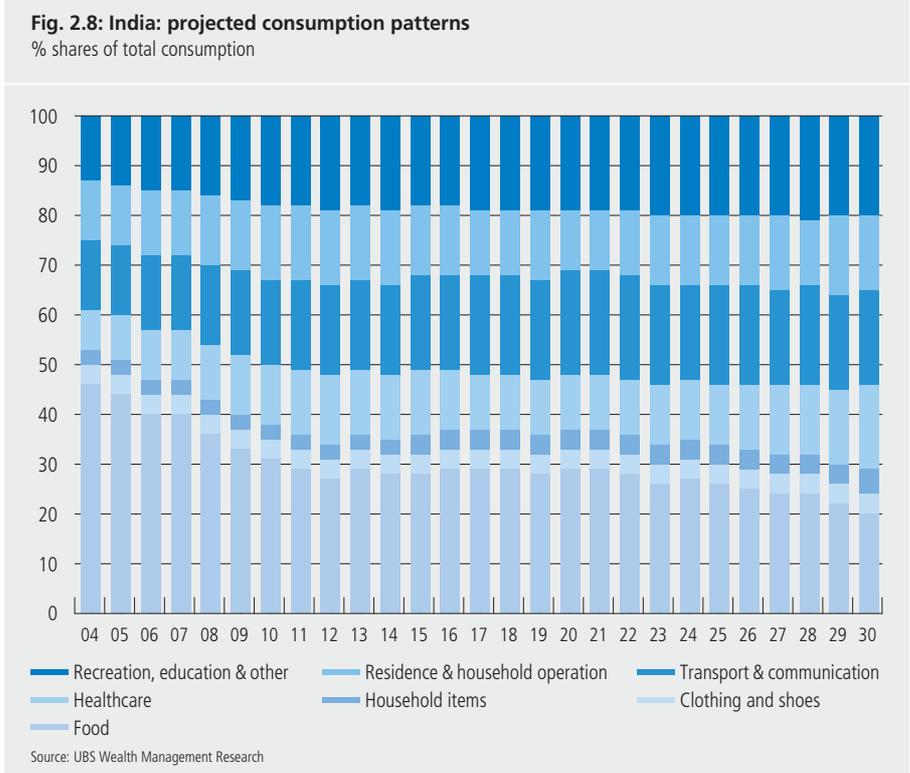
- The shares of income spent on clothing and shoes, as well as transport and communication and other durable and non-durable goods, seem to remain fairly stable over the income/per capita spectrum.
- The share spent on healthcare rises with real income per capita. Data on healthcare expenditure, however, need to be interpreted with caution. With rising income, individuals may indeed spend more on their own healthcare, but the choices made may be influenced by the type of insurance cover available, or the type of services that are available through the public sector.

With the above points in mind we project the future Chinese and Indian consumption patterns for the major goods and services categories. Our starting point is the current consumption share for each country. We then assume that as GDP per capita increases (in Purchasing Power Parity (PPP) terms), consumption in each country will converge to the patterns observed in the US. Figs. 2.7 and 2.10 show the shares of total consumption and consumption per capita in USD at PPP exchange rates for China. Similarly, Figs. 2.8 and 2.11 show the same data for India.

Fig. 2.7: China: projected consumption patterns
 % of total consumption



Source: UBS Wealth Management Research



Astoundingly large markets

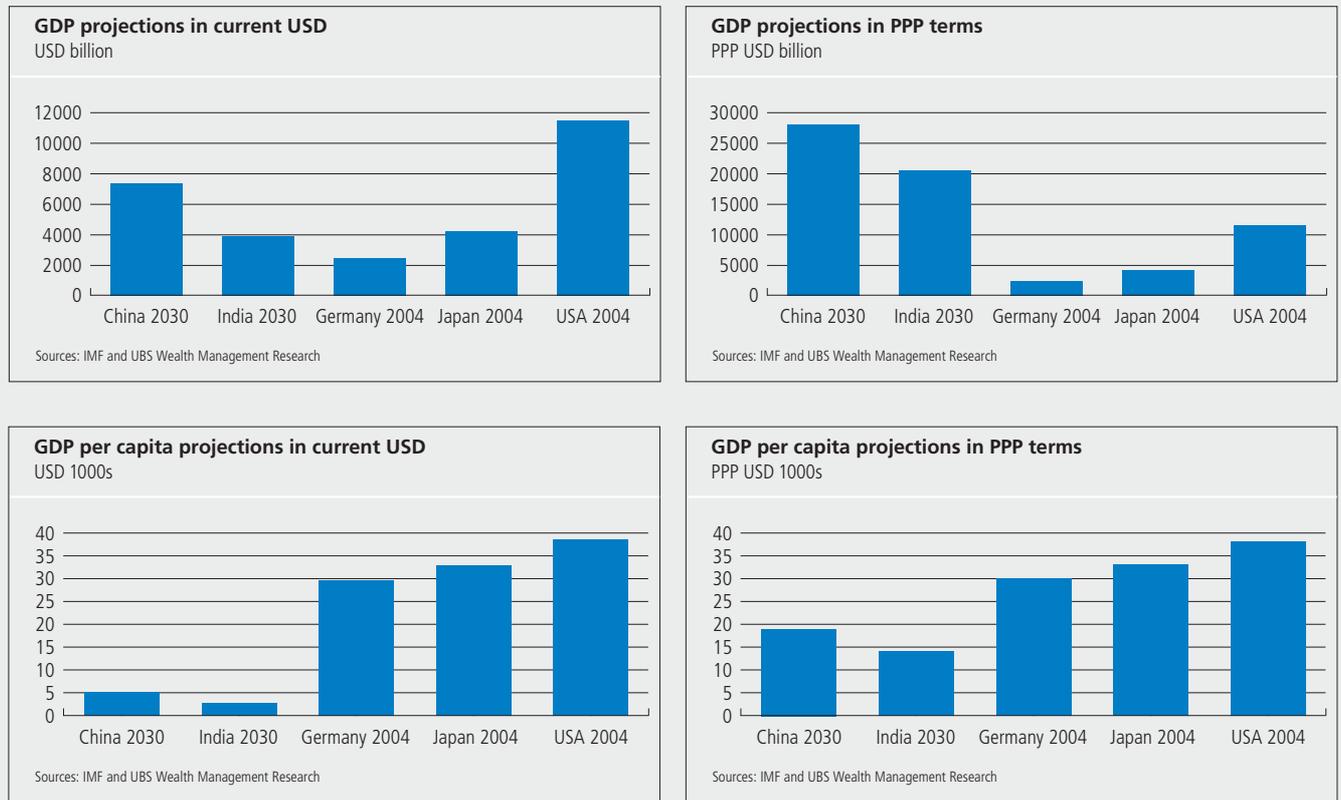
It is easy to forget the power of compounded growth rates. While our assumptions are conservative, our calculations nevertheless yield astounding results.

China’s GDP per capita at PPP exchange rates is already above USD 5,000 and is likely to reach to USD 19,000 in 2030. While below the current European or US average, this is a level comparable to today’s Greece, Portugal and New Zealand. India will likely reach a real GDP per capita at PPP of USD 14,500 in 2030, up from our 2004 estimate of USD 3,000. This is a level comparable to today’s Czech Republic or Korea.

Given China’s population, this implies that total consumption will have reached the magnitude of today’s US GDP in only 15 years. In only 18 years, the richest 10% of China’s population (over 130 million people) will have the same purchasing power as the average American today. With India’s savings rate expected to rise, consumption growth will be more modest. But Indian consumption will nonetheless be the same size as the US GDP by 2030. The richest 10% of Indians (about 140 million people), will have reached today’s purchasing power of the average American in 23 years.

PPP measures are appropriate for measuring consumption, but are not appropriate for measuring market size. In current dollar terms, the numbers are less dramatic, but nonetheless impressive. In 2030, China’s GDP will be three-quarters the size of today’s US economy, while India’s will almost be the size of today’s Japan.

Fig. 2.9



What does this mean for different baskets of goods? Consumption of all goods will of course rise substantially, but the growth in the consumption of certain goods will exceed others. As seen in Figs. 2.10 and 2.11, food consumption per capita in PPP dollar terms will likely grow fourfold in China and almost twofold in India. This large difference can be explained by the fact that India is starting from a poorer position, and the drop in the share of income spent will be sharper. Expenditure on residence and household operations will rise sixfold in China and sevenfold in India. But for both Chinese and Indians food will likely remain the single biggest share of their consumption.

Following the consumption patterns observed in the US, consumption on residence and household operation as well as on healthcare will likely begin to grow faster after the USD 10,000 GDP per capita threshold is reached. For China, this will be in 2015, for India in 2023. Household items will be the fastest growing goods basket in China, while in India it will be healthcare.

In current dollar terms the numbers are again more modest, but of course do imply substantial growth areas. Nonetheless, per capita consumption will only be about USD 1,300 dollars in India and USD 2,900 in China.

Fig. 2.10: China: projected consumption per capita levels
in USD at PPP, population average

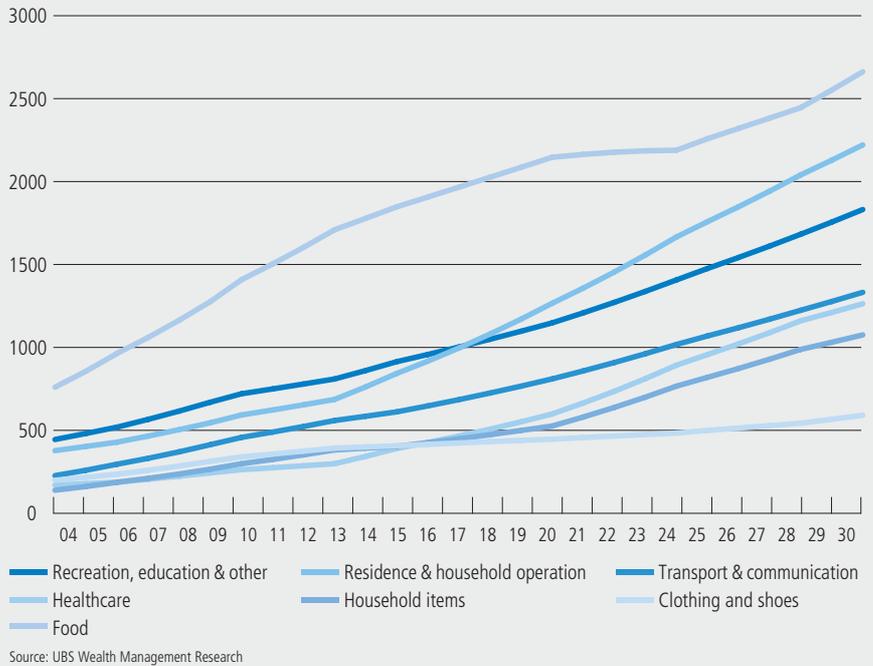


Fig. 2.11: India: projected consumption per capita levels
in USD at PPP rates, population average

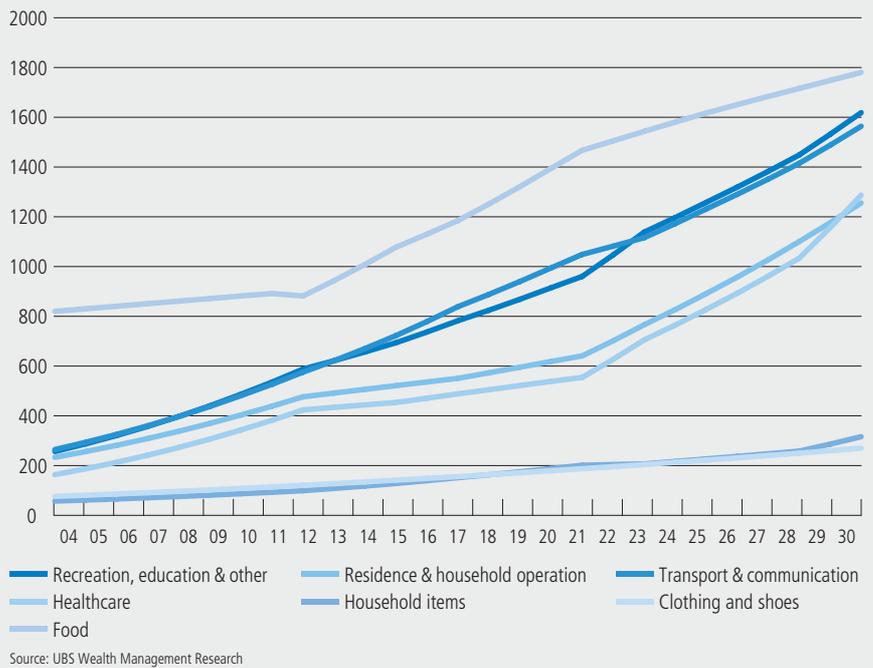


Fig. 2.12: Projected GDP per capita

	in USD		at PPP	
	China	India	China	India
2004	1139	560	5389	3053
2005	1221	600	5728	3271
2006	1307	642	6086	3505
2007	1399	688	6463	3753
2008	1496	736	6861	4018
2009	1599	787	7281	4301
2010	1708	841	7724	4602
2011	1818	898	8153	4909
2012	1933	958	8603	5236
2013	2054	1022	9074	5582
2014	2182	1090	9568	5950
2015	2317	1161	10085	6340
2016	2447	1234	10562	6726
2017	2584	1311	11058	7133
2018	2727	1392	11573	7562
2019	2877	1477	12108	8015
2020	3033	1567	12664	8493
2021	3203	1660	13248	8973
2022	3382	1758	13855	9477
2023	3568	1862	14484	10007
2024	3763	1970	15138	10564
2025	3967	2084	15816	11149
2026	4172	2204	16461	11743
2027	4385	2329	17127	12365
2028	4606	2461	17814	13017
2029	4837	2600	18524	13700
2030	5078	2745	19256	14415

Source: UBS Wealth Management Research

Significant implications for the world

Many caveats are needed in interpreting the above figures, but it is still possible to conclude that consumption rates of this magnitude will have ramifications for the whole world in terms of relative prices, global trade and investment flows, technology and public policies.

Although expenditure on food will not grow as fast as the overall economy, food will remain the single largest item in an average consumer basket in 2030. Even with a spectacular improvement in agricultural productivity in both countries, China and India will likely be increasingly reliant on food imports. Significant changes in the agricultural sectors and policies of both countries will need to take place. As do most other countries, China and India seek to minimise their dependence on imported food stuffs. This does not mean that trade in food products is low, but rather that, as in most large countries, there is an effort to be somewhat self-sufficient. The agricultural policy of the European Union is a case in point. But the increasing demand for food from these economies will also offer an opportunity for the world community to rethink the current system of trade in agricultural goods, which allows protectionism and inefficiencies to persist. This in turn could provide an important boost to economies with a

comparative advantage for agricultural production, especially those in Latin America and Africa. There are already signs of moves towards greater liberalisation of trade in agricultural goods in the context of the current round of multilateral trade negotiations.

The arrival of such large consumer markets will mean a substantial increase in global trade. But will this also mean large shifts in relative prices, such as commodities? The answer to this question, of course, depends not only on demand, but also on supply. Increasing demand for a single commodity such as iron ore or crude oil may raise the prices of these commodities. But such price increases should last only until new production capacity has been built. Higher prices for scarce resources has also tended to encourage technological change and efficiency. For example, the world today is far more efficient in the use of crude than it was thirty years ago. The last few decades have in fact witnessed continuous improvements in all technologies that have created a far more efficient world. There is little reason to believe that the next few decades will witness less innovation.

The growth of China and India will also have implications for the flow of investment. Financing growth in these countries will not only require investment, but a more efficient use of capital. As discussed in the previous chapter, for example, the banking systems in both countries are not in a position to efficiently intermediate between savers and investors. Also, as discussed in the next chapter, the bond and equity markets are not as well developed as in some other emerging markets, such as South Africa. Improving the efficiency of the allocation of capital will mean improving the efficiency of the capital markets. In the medium term, this will necessitate a liberalisation of capital flows that will increase both inflows and outflows of investment. Investment will be increasingly attracted to the opportunities that these mass consumption markets represent.

Chapter 3

The quest for investment returns

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The quest for investment returns

Economic expansion in China and India should offer global investors considerable opportunities. However, although both countries have grown rapidly during the past two decades, equity market investors have been disappointed. Will the future be equally frustrating?

Investment returns are not solely a function of economic growth, but of a host of other factors. Many of these factors are evolving. Regulatory environments are changing. Market liberalisation is enhancing efficiency. There is a greater awareness of the importance of good corporate governance.

Investment opportunities in the future will depend on the growth of the economies, as well as on the evolution of the financial markets. Furthermore, in an increasingly integrated global economy, investment opportunities need not be local.

Local market opportunities will grow in areas as diverse as financial services and real estate. Structural changes in one sector such as agriculture, can create growth for another, such as retailing. Global market opportunities will become interesting as China and India become the source of a greater share of companies' profits.

Fig. 3.1: A disappointing performance
MSCI Total return, index, rebased



Equity market returns have been perplexing

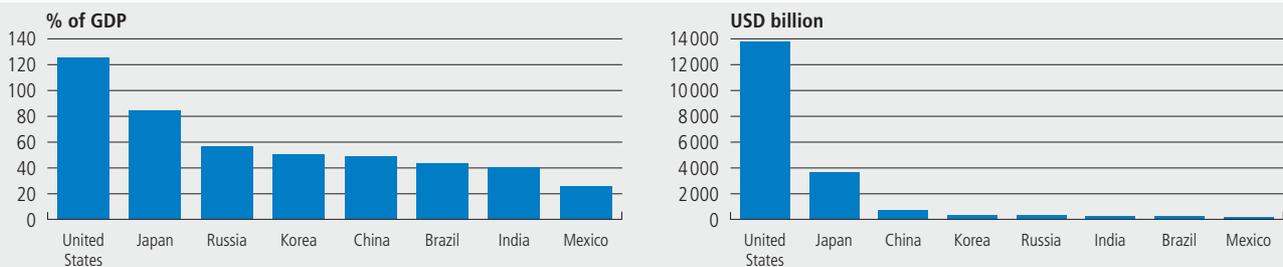
At first glance, the performance of Indian and Chinese equity markets during the past ten years may appear puzzling. There were a few significant rallies, but on balance, both equity markets substantially underperformed the rest of the world, even though economic growth in both countries substantially exceeded that of the rest of the world.

Economic growth and equity markets, of course, need not go hand in hand. Economic growth is an important ingredient for corporate "top line" growth, or growth in sales, but not sufficient for "bottom line" growth, namely growth in earnings per share.

Box 3.1: How big are the Chinese and Indian stock markets?

The size of the equity markets in China and India is in line with those of other emerging markets. In absolute terms they are small when compared to advanced economies such as the United States. But a more meaningful measure of their development is market capitalisation as a share of GDP.

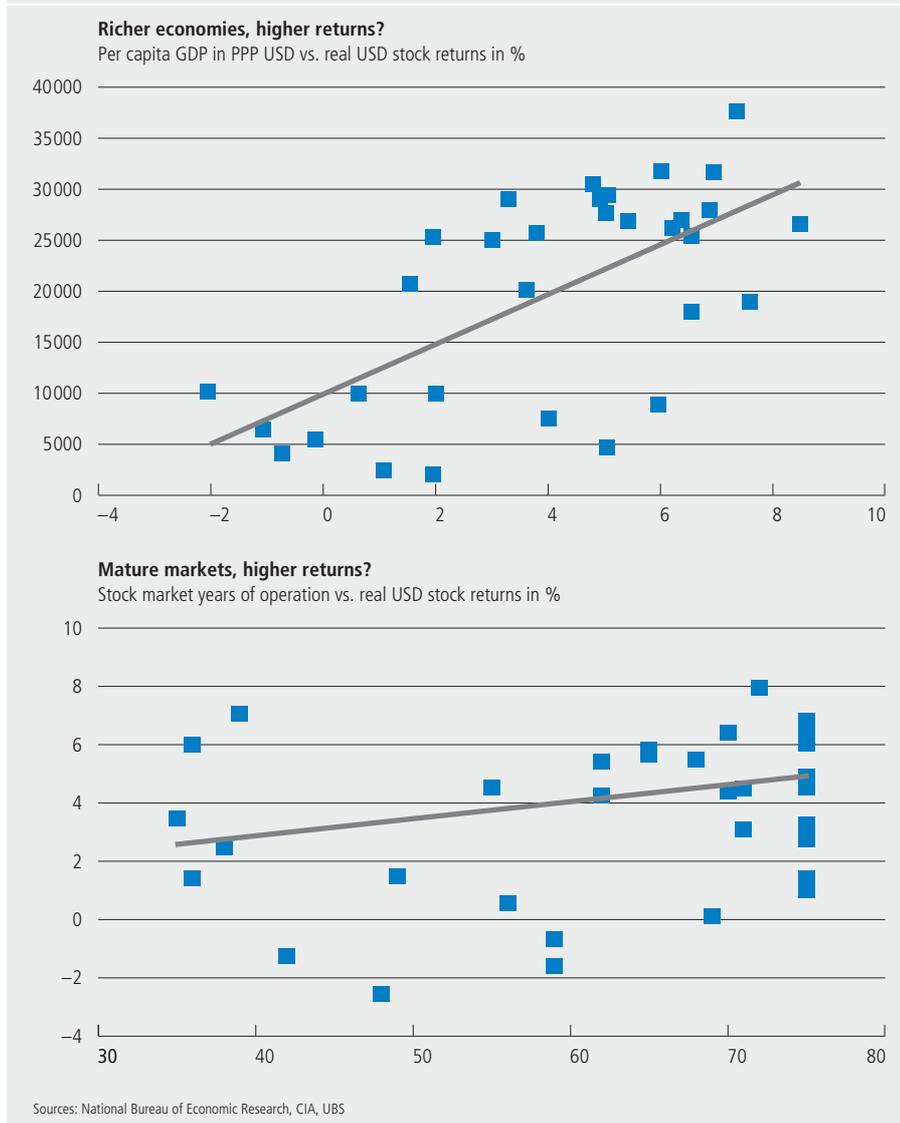
Fig. 3.2: Stock market capitalisation



Indian and Chinese equities are not outliers among emerging markets. Using historical data, Fig. 3.3 shows that higher returns (in inflation-adjusted terms) have tended to materialise in countries with higher levels of per capita income. Equity market performance is also not related to the maturity of the market, measured narrowly in terms of years of operation. Indeed, India has one of the world's oldest exchanges (the Bombay Stock Exchange was founded in 1875), while China has two of the newest (both the Shanghai and Shenzhen Stock Exchanges were founded in 1990).

This should not be surprising. In emerging markets it is not only the economies that are emerging, but so are regulatory frameworks, accounting standards, the culture of shareholder value, and other important factors.

Fig.3.3: Average real USD returns by markets



Assessing the market outlook

Past performance of the Indian and Chinese markets is, of course, not an indication of future performance. The outlook for the equity markets will be driven by two factors: the structural changes in the financial markets, as well as the structural changes and development of the economies.

A review of the experience during the last ten years is instructive as it raises many issues relevant to investors. Regulatory risk, sovereign risk, market volatility, correlation with world markets, corporate governance in addition to valuation are all issues that investors need to consider.

Because the markets are emerging, however, investors' opportunities will be continuously changing in terms of instruments and sectors. Financial liberalisation will, over time, expand the universe of available investments. The sectoral composition of equity markets should also begin to better reflect the structure of the economies. Corporate bond markets, which are not yet well developed, will also deepen and broaden. The

Box 3.2: Large but not well-utilised bond markets

Bond markets in China and India are large by comparison to most other emerging markets. The outstanding nominal value of the bond market amounts to USD 480 and 170 billion, making China and India respectively the second and fourth largest bond markets in Asia (Japan has the largest market, while Korea is the third largest). But the bond market is relatively unutilised by corporate issuers. In India, the market is overwhelmingly dominated by government issuance. In China, while a corporate bond market exists, the corporate issuance is also overwhelmingly dominated by state-owned enterprises.

The access of foreign investors to the local bond markets is restricted through the same mechanisms as the local equity markets. The bond markets, however, have tended to be of little interest to foreign investors, as the opportunities for non-sovereign exposure is very limited.

As elsewhere in Asia, there is an acknowledgement of the need to develop local bond markets. The Asian crisis highlighted to policy-makers in the

region that the bond markets can be a more efficient and transparent form of financial intermediation than bank credit.

To support the growth of the regional bond market, the Asian Bond Fund was created, whereby governments contribute part of their reserves toward buying sovereign and quasi sovereign debt, and there are plans to extend this fund into local currency instruments. Such a large buy-and-hold investor as this fund will help support the development of a stable regional market. However, it can also create moral hazard problems.

As regional capital markets develop, one would expect corporate bonds to be an increasing share of the local bond markets. Bank restructuring could be one impetus in this area. The plans to privatise part of China's banking system will necessitate raising capital adequacy ratios. Issuance of subordinated debt is one way this can be achieved. In both India and China, the development of a local corporate debt market can also be supported by the stabilisation of government debt issuance.

Fig. 3.4: Crowding out?
Composition of Indian rupee bond market, in %

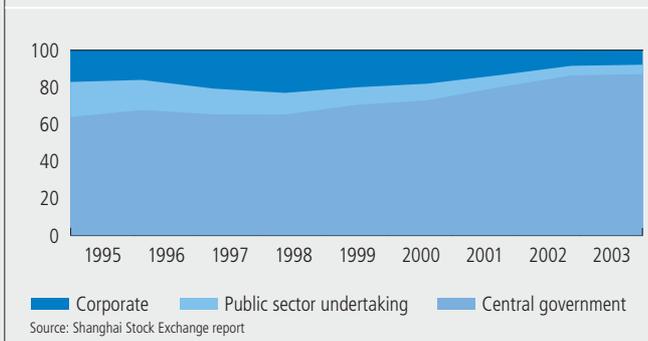
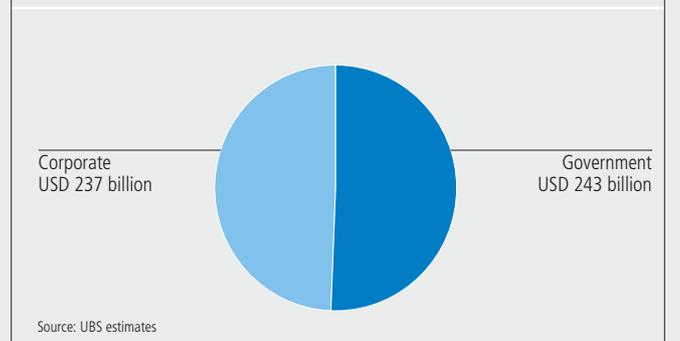


Fig. 3.5: Local-currency bond market of China
Composition, 2003



Box 3.3: China's fragmented equity market

While the Chinese equity market is relatively large, with a market capitalisation of almost USD 700 billion, it is nevertheless fragmented. There are several categories of equities. The universe open to global investors includes the Hong Kong listed H shares and Red Chips as well as the B shares in Shanghai and Shenzhen. These have a combined market capitalisation of about USD 200 billion. The largest market segment, the so-called A shares listed in Shanghai or Shenzhen, is open only to mainland Chinese investors. While the A shares have the largest aggregate market capitalisation, about USD 500 billion, the Red Chips have the highest average market capitalisation per outstanding certificate (about USD 6 billion).

China has about 1500 different equity certificates listed on the mainland, but the number of companies is lower, as many have several certificate categories outstanding. The list is likely to grow significantly, given the lengthy pipeline for initial public offerings (IPOs). Over the past 10 years, H shares and Red Chips worth more than USD 5 billion have been placed annually. While the years 1997, 2000 and 2003 were peak IPO years with H share and Red Chip placements of USD 10–15 billion in each year, 1995 and 1998 were particularly calm for IPOs. The average daily trading volume for all Chinese equity markets combined amounts to almost USD 4 billion.

- A shares:** These are Chinese stocks listed in Shanghai or Shenzhen, and are denominated in CNY, and open only to domestic investors and Qualified Foreign Institutional Investors (QFII). The financial results of listed companies are audited by domestic audit firms, according to the People's Republic of China's Accounting System for Business Enterprises, issued in 2001. The A-share market (with more than 1,200 issues) is currently the third largest in Asia in terms of market capitalisation. Stocks such as Chiwan Wharf, Mingsheng Bank, Fuyao Glass are A shares. A shares could have their counterpart H shares or Red Chips dually listed overseas.

- B shares:** These are Chinese stocks listed in Shanghai or Shenzhen, denominated in foreign currency, and open for domestic and foreign investors. The companies are audited by international audit firms, using international financial accounting standards. Currently, there are over 111 B shares.

- H shares:** These stocks are incorporated in China but listed in overseas markets, such as Hong Kong. These shares are denominated in foreign currency and are open to foreign investors. Examples of H shares are PetroChina, Sinopec, Huaneng Power and Tsingtao Brewery. H shares could have counterpart A shares listed in China.

- Red Chips:** There is no rigorous procedure to define what constitutes a Red Chip. In general, Red Chips are companies that are incorporated and listed overseas, but the parent company is a mainland incorporated, partially state-owned entity with a significant share of earnings from China. Red Chips are denominated in foreign currency and open to foreign investors only. Red Chips use international financial accounting standards or US GAAP. Examples of Red Chips are China Mobile, China Unicom, Shanghai Industrial, CITIC Pacific, etc.

Fig. 3.6: The largest Chinese equity market is domestic
Market capitalisation breakdown by stock classification

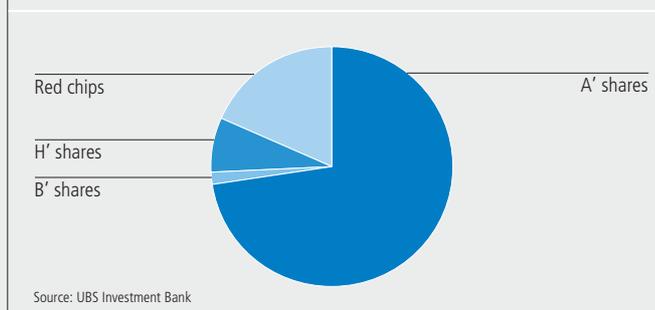
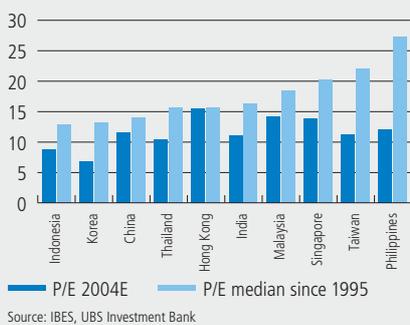


Fig. 3.7: The largest markets are not investible



Fig. 3.8: P/E ratios are in line with most of the region

Historic and current P/E's in Asia



investment opportunities that economic growth in India and China create, however, are not only restricted to the local markets. In an increasingly integrated global economy, such opportunities will arise in the global markets as well.

To assess the outlook for investment opportunities, we first review some of the questions raised by past performance. We then explore some of the areas of opportunity in the local markets and global markets.

How have Indian and Chinese equities been priced?

The structure of the Indian and Chinese equity markets is complicated by restrictions on capital flows (a discussion of the structures can be found in boxes 3.1, 3.3 and 3.4). Restrictions on capital flows, in turn, can drive a wedge between valuations in the local market and the global markets.

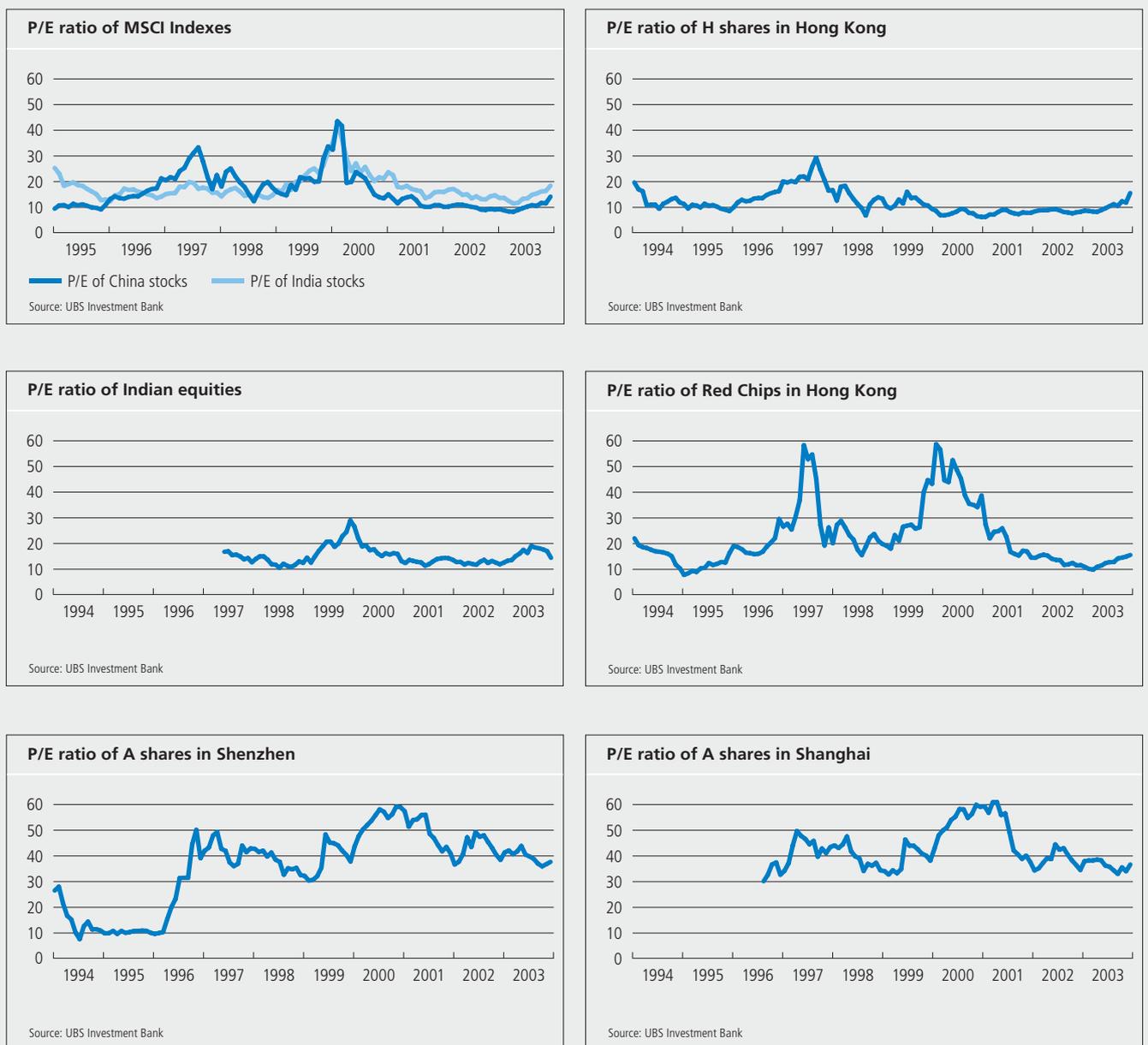
On the basis of price to earning ratios (P/E) a representative universe of stocks in Asia shows that, historically, Chinese stocks listed overseas have been among the cheapest in Asia, trading at about 14 times earnings. Indian stocks have traded at about the regional average of approximately 16.5 times.

By looking at the local equity markets, however, a number of important differences emerge. In the Chinese market, A share valuations have been remarkably high. In large part, this has to do with the fact that the market has been open only to domestic investors who are also unable to invest overseas. With a captive investor base and limited local equity research, the stock market in China has been a function of domestic liquidity levels and news-flow rather than relative investment attractiveness. Liquidity in China has generally been ample. The average real basic lending rate over the past 15 years was just 1%. This means that capital costs have generally been low, which was a key cause of low margins and earnings yields (the earnings yield is the inverse of the widely used P/E multiple) in domestic stocks. It comes as no surprise, therefore, that the P/E for A shares was actually low in the mid-90s, when monetary conditions were tight (see Fig. 3.9). As domestic financial markets are gradually liberalised, the relative significance of liquidity in explaining equity market valuations should diminish. The opening of the market to foreign investors should also help to bring valuations more into line with comparable investments elsewhere – among other benefits, the participation of international investment banks in the A share market is increasing the breadth and depth of research into local equities.

Except for a few brief periods, the P/E ratios of Red Chips and H shares have been far lower than those for A shares. The key difference between Red Chips and H shares was that Red Chips offered little organic growth, but rising returns-on-equity (ROE). The average ROE for Red Chips rose from around 8% in 1993 to around 15% ten years later. H shares have tended to be cyclical in nature and delivered somewhat better sales (or top-line) growth. Their ROE, however, has been volatile, dropping from more than 15% in 1993 to as low as 5% in 1998, before recovering again to 15%. In line with its sector composition, the performance of the H shares market has depended on the performance of these three sectors.

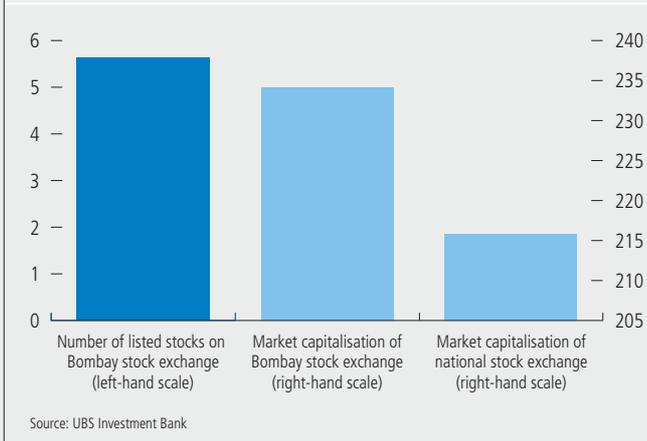
Are Red Chips and H share P/E's indicative of how A shares would be valued if domestic Chinese investors were allowed to invest overseas? This certainly is possible, but equity valuations depend on many factors, the liquidity of the market being one. Further reasons for differing valuations are the regulatory environment of the domestic equity market, credibility in the supervisory authority and accounting standards used.

Fig. 3.9



Box 3.4: India's multiple equity markets

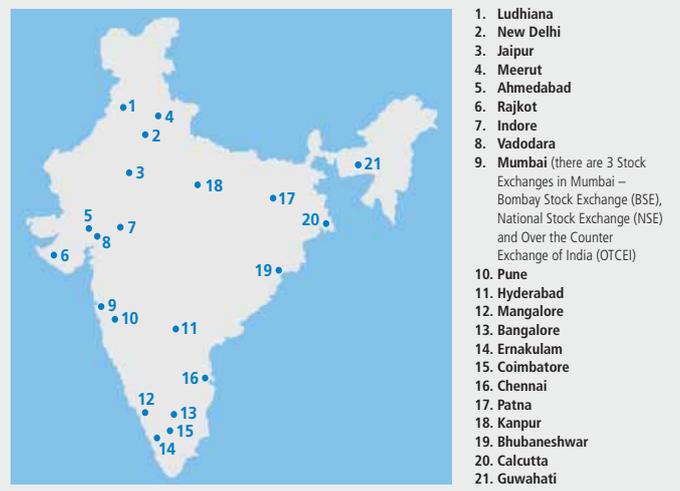
Fig. 3.10: Bombay has the largest market
Listed equities and equity market capitalization in India, 1000s and USD billion



India boasts one of Asia's oldest and most diversified equity markets. The Bombay Stock Exchange (BSE), was founded in 1875. Although there are 23 stock exchanges, the BSE and the National Stock Exchange (NSE) account for 96% of market capitalisation and trading volumes. Market capitalisation of Indian equity markets is about USD 250 billion. There are over 7000 listed companies in India, of which over 5500 are listed on the BSE. The daily trading volume on the BSE amounts to USD 2–5 billion.

Indian companies are increasingly listing their shares overseas, either through Global Depository Receipts (GDRs) listed in London or Luxembourg, or American Depository Receipts (ADRs) listed in New York. Currently, there are 23 Indian ADRs and 83 GDRs accessible to overseas investors. The first Indian company allowed to tap funds overseas was Reliance Industries in 1992. Several of these overseas listings, however, are rather illiquid and require caution when being traded.

Indian Stock Exchanges



Indian equities have historically traded on a P/E of just over 16 times. However, Indian companies have also delivered superior profitability. The Return on Equity (ROE) of Indian companies averaged 17% over the past 15 years, compared with 13% and 11% for Chinese Red Chips and H shares. This performance has arguably been less influenced by high liquidity. Indeed, the average real basic lending rate in India averaged close to 7% during the last 15 years. Of course, Indian companies also have a higher share of private ownership and management than their Chinese counterparts.

Fig. 3.11: Correlation of Chinese and Indian stocks to world average



Do China and India offer global investors diversification?

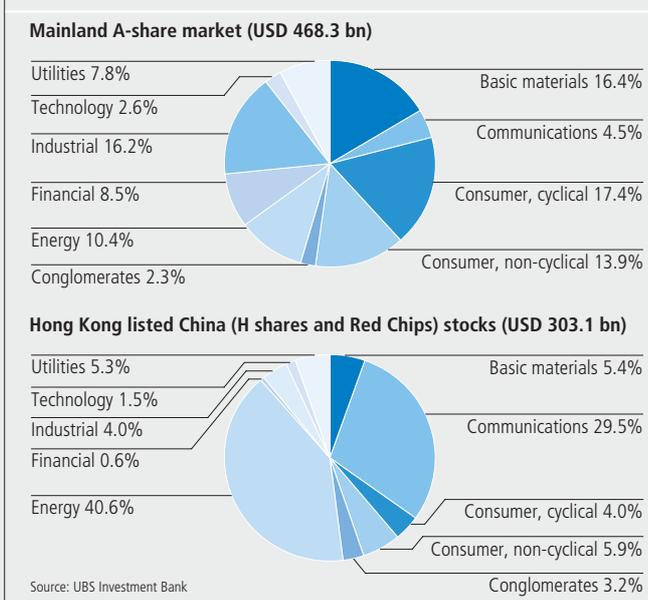
Absolute risk and return is one consideration for investors interested in India and China. Another important factor is the diversification that these markets offer in a global portfolio. An investment that may look compelling on an absolute risk and return basis may be inappropriate if it correlates strongly with the rest of an investor's portfolio, as this could add unnecessary volatility without enhancing performance.

Fig. 3.11 shows the one-year rolling correlation of the MSCI China and the MSCI India versus the MSCI World over the past decade. Both markets have a very low correlation with the global stock markets. In the case of China, the correlation over the past decade averaged less than 0.20, while India's averaged less than 0.10.

Box 3.5: Different sector exposure

While the freely investible equity universes of China and India have similar market capitalisations and trading volumes, the sector exposure in the two markets is very different. The Indian equity markets have a sector composition similar to the world average. The energy sector, accounting for almost 25% of market capitalisation, is the only one that appears out of line with the world average. The sector composition of China's market, on the other hand, is very unique. Energy, industrials, utilities and, in particular, telecommunications are highly over-represented in the universe open to international investors. In fact, the MSCI China Index understates the actual significance of the telecommunications weight by excluding China Mobile's peer, China Unicom. On the other hand, consumer staples, healthcare, financials and information technology are all under-represented in the investible Chinese equity markets. The unique composition of the Chinese market is one of the reasons why market performance does not fully reflect overall economic performance.

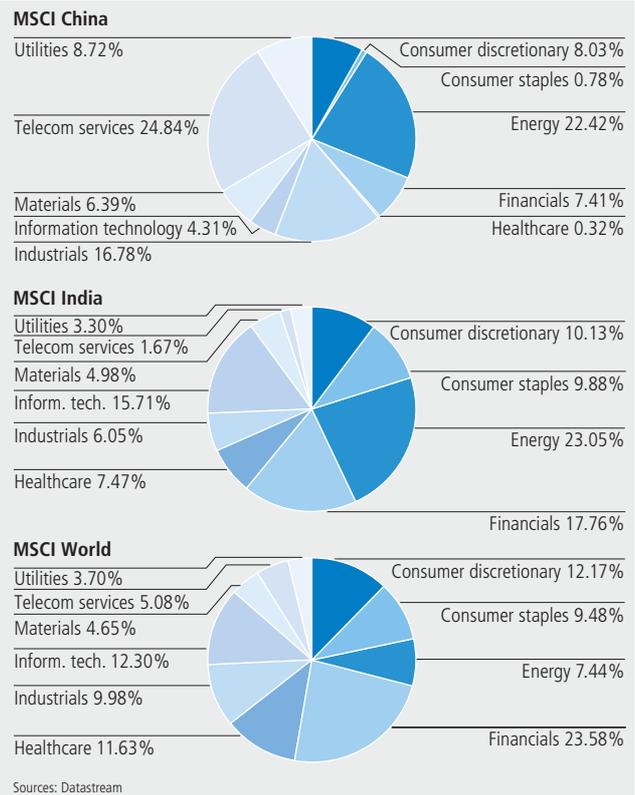
Fig. 3.12: A share market is more diversified



Based on the MSCI China, the two largest index components are the telecom firm China Mobile (21%) and energy group PetroChina (11%).

China Mobile: China Mobile is the largest operator of GSM mobile telecommunication services in China. It is the leader in all the provinces in which it provides cellular telecommunication services. As of June 2003, China Mobile's total subscribers reached 129 million. However, potential industry deregulation and intensifying competition from China Unicom as well as China Telecom's PHS system continue to pose the biggest risk to China Mobile's outlook.

Fig. 3.13: Sector composition is very different
MSCI sector distribution, in %



PetroChina: PetroChina is China's largest integrated oil company with a market share of around 65% in oil and gas production. Its businesses include exploration and production (E&P) of crude oil and natural gas; refining and marketing (R&M) of crude oil and petroleum products; sale of chemicals, and transmission of natural gas. Its upstream E&P reserves and production volumes are the fourth largest in the world, behind ExxonMobil, Royal Dutch Shell and BP Amoco.

Based on the Morgan Stanley Capital International (MSCI) India, the two largest index components are the energy group Reliance Industries (13%) and technology firm Infosys Technologies (9%).

Reliance Industries: Reliance Industries is the largest integrated petrochemical producer in India and has more than 50% domestic market share in most of the products. Integration with refinery and low capital cost make Reliance a globally competitive petrochemical producer. The group is also entering into the telecom and broadband sectors.

Infosys Technologies: Infosys is the second largest IT services company (in terms of revenues) in India with an employee base of over 13,000. Its service offerings include application development, maintenance and consulting,

which it provides to overseas clients through its various offshore development facilities in India.

Fig. 3.14: The Top 10 listed companies in the MSCI China

	Sector	Index weight in %
China Mobile	Telecommunications	21.1
PetroChina	Energy	11.0
Sinopec	Energy	6.6
China Life	Financials	5.8
CNOOC	Energy	4.8
Huaneng Power	Utility	4.6
CITIC Pacific	Industrials	4.3
China Telecom	Telecommunications	3.8
Denway Motors	Consumer discretionary	3.2
Aluminium Corp. of China	Materials	2.3

Fig. 3.15: The Top 10 listed companies in the MSCI India

	Sector	Index weight in %
Reliance Industries	Energy	13.4
Infosys Technologies	Information technology	9.4
ICICI Bank	Financials	6.8
Oil & Natural Gas Corp.	Energy	6.4
Hindustan Lever	Consumer staples	5.0
Housing Development Fin.	Financials	4.9
Indian Tobacco Corp.	Consumer staples	3.4
Tata Motors	Consumer discretionary	3.4
Ranbaxy Laboratories	Healthcare	3.4
Satyam Computer Services	Information technology	3.2

Source: MSCI

Both countries therefore appear as an attractive diversification in a global portfolio. It is worth noting, however, that the chart also suggests that the correlation of these two markets to the world market has been increasing slowly. Liberalisation and increasing integration in global trade and investment flows may indeed erode their diversification qualities over time.

Are the Indian and Chinese markets very volatile?

A number of features of the Indian and Chinese equity markets can make them more volatile than the global markets. For example, the concentration of the markets (in terms of number of listed equities), or diversification (in terms of sectors that are represented), can have an important bearing on volatility. The number of participants is also important. Key to reducing volatility is liquidity of the specific equity certificates in question, which in turn is a function of market capitalisation as well as the available “free-float,” i.e. the proportion of shares that is traded.

Fig. 3.16: India and China are highly volatile

Standard deviation of rolling one-year weekly returns



Source: Datastream

As can be seen from Fig. 3.16, both China and India have higher stock market volatility than the developed markets. It also shows that volatility tends to be higher in China versus India. This should not be surprising. One important factor in explaining volatility in these markets is the relatively high weight of a handful of companies in the index, see Box 3.5. With regards to the somewhat lower volatility in India, this can be explained in part by the higher “free-floats” of Indian companies. Indeed, the Chinese state owns substantial shares of listed companies.

Economic reforms in both countries should, over time, reduce volatility. Liberalisation of capital flows will increase liquidity. Privatisation will increase the free-float.

Do Chinese and Indian assets carry high sovereign risk?

In emerging markets, macroeconomic or sovereign risks can sometimes overshadow the investment-specific risks. One measure of sovereign risk is a credit rating by one of the main rating agencies. Sovereign risk can impact the equity market performance in two ways. First, the sovereign risk in part determines the premium that investors use to value their investments. Secondly, the sovereign risk has an important bearing on the cost of funding to companies. In an environment of improving credit ratings, risk premia should be declining, and as a consequence equity and bond markets should be performing well. Fig. 3.17 summarises the rating history of both India and China. India's rating has changed more often than China's. China's rating has improved during the past 10 years, while India's has slightly deteriorated.

Fig. 3.17: Credit rating history

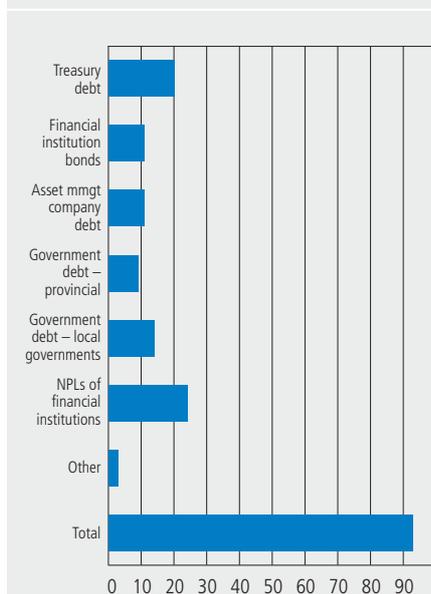
	China		India	
	Standard & Poor's	Moody's	Standard & Poor's	Moody's
Jan 90		Baa1		A2
Oct 90		Baa1		Baa1
Mar 91		Baa1		Baa3
Jun 91		Baa1		Ba2
Dec 92	BBB	Baa1	BB+	Ba2
Sept 93	BBB	A3	BB+	Ba2
Dec 94	BBB	A3	BB+	Baa3
Mai 97	BBB+	A3	BB+	Baa3
Jun 98	BBB+	A3	BB+	Ba2
Oct 98	BBB+	A3	BB	Ba2
Jul 99	BBB	A3	BB	Ba2
Feb 03	BBB	A3	BB	Ba1
Oct 03	BBB	A2	BB	Ba1
Jan 04	BBB	A2	BB	Baa3
Feb 04	BBB+	A2	BB	Baa3

Source: Bloomberg, Standard & Poor's, Moody's

The lower the credit rating, the higher the role that sovereign risk plays in determining bond or equity returns. India and China, however, are both rated above most other emerging markets. Given that both have an investment grade rating, sovereign risk should tend to play a smaller role in influencing performance.

That said, neither country is expected to see any sharp improvements in its credit rating in the near term. This is because both have significant debt burdens. In the case of India, a stronger and sustained effort by the government will be required to stabilise debt dynamics. In the case of China, the level of debt is high, and its structure is both complex and not very transparent (see Fig. 3.18). The liabilities of the state may be higher than assumed. Under such circumstances rating agencies will be cautious before raising ratings further.

Fig. 3.18: China is indebted
Public debt in China (% of GDP) 2003



Source: IIF and UBS estimates

Box 3.6: China's qualified foreign institutional investor facility

Global investors are free to invest in B and H shares, as well as Red Chips. The A share market is primarily available to domestic investors. However, the A share market is being somewhat liberalised through the introduction in November 2002 of the Qualified Foreign Institutional Investors (QFII) facility, which allows qualified institutional investors to invest in China under certain conditions and restrictions.

Types of investments allowed through QFII facility:

- QFII can invest in the following CNY-denominated instruments:
 - listed "A" shares in Shanghai and Shenzhen
 - listed treasury and corporate bonds in Shanghai and Shenzhen
 - listed convertible bonds in Shanghai and Shenzhen
 - other financial products approved by authorities from time to time
- Full discretion as to the choice of stocks/bonds:
 - switching in and out of stocks/bonds as and when desired
 - each QFII holding is limited to a maximum of 10% in any listed company
 - all QFII holdings combined are limited to a maximum of 20% in any listed company

- When not invested, the funds in the facility will stay as RMB deposit with the custodian bank

Restrictions on QFII funds:

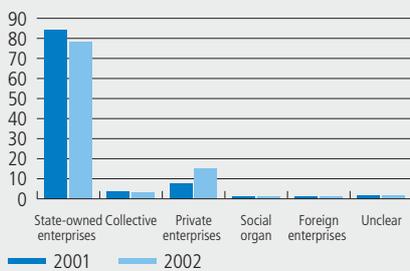
- The full committed amount has to be paid in at the start of the facility
- Minimum commitment is at least USD 50 million per QFII quota (not per client of the institutional investor)
- No repatriation of capital for one year. After one year, repatriation is allowed as long as:
 - each remittance does not exceed 20% of the initial investment
 - there are at least three months between each remittance
 - profits can be repatriated after each accounting year upon a formal audit

Are corporate governance and shareholder value a problem?

Corporate governance and shareholder value are important considerations when investing in emerging markets. During the Asian crisis, poor corporate governance lurked at the core of many of the problems that were exposed. However, this area has received increased attention and there are a number of private and public-sector initiatives that strive to improve the internationally accepted codes of conduct and best practices. Some aspects of corporate governance, however, are difficult to measure as they can entail considerable subjective judgement.

Fig. 3.19: State ownership is changing slowly

Control of listed companies on the Shanghai Stock Exchange, in % of total



Source: Shanghai Stock Exchange report

In many respects India is generally recognised as having a better record of corporate governance and a more stable and functional legal system than China's. This is presumably one of the reasons why Indian firms score better in measures such as return on equity and return on invested capital.

A problem with corporate governance in China is that it has a higher share of government-owned or government-controlled listed companies. Listed Chinese companies are often managed by former politicians rather than entrepreneurs. However, many Chinese companies have begun to improve on their record. Chinese companies with US listings, in particular, have improved communication with minority shareholders. An increasing number of them are also working on improving their image by hiring international public relations consultants to assist in improving public communications and policies.

Box 3.7: India's foreign institutional investors facility

India has put in place the Foreign Institutional Investors (FII) facility, which allows registered foreign institutional investors to invest in India under certain conditions and restrictions. Unlike the Chinese case, the FII facility has been in place for many years. Interested foreign institutional investors can apply to the Securities and Exchange Board of India, which normally grants approvals within 2–3 weeks. FIIs can invest in any Indian listed stocks and bonds.

Restrictions on FII funds:

- No restrictions on repatriation of capital
- Capital gains can be repatriated anytime, but are subject to Indian capital gains tax. Capital gains on investments of less than one year are taxed at 30%, while investments of more than one year are taxed at 10%. To avoid payment of the capital gains tax, FIIs can incorporate a holding company on Mauritius, which is what most FIIs actually do. The only requirement imposed by Mauritius is that one annual board meeting take place on the island.
- FII are also subject to the foreign ownership limits

India maintains a complex structure of foreign ownership limits in certain industries. Foreign direct investors (FDIs) are generally allowed to own up to 24% of any listed company, except government-sponsored banks, where the limit is 20%. This limit is not always binding. Individual companies can apply for higher limits, subject to the maximum limit set by the government for each industry.

Many key industries, however, do not have ownership limits. These include power generation, pharmaceuticals, petroleum, property, tourism, infrastructure (roads, highways, ports) and broadcasting. The Indian business community has been lobbying for higher foreign ownership limits, especially in telecommunications, banking and airlines. With the government still committed to inviting and facilitating FDI, it may consider excluding portfolio investors (not, however, strategic or manager owners) from all ownership limits. Key industries with maximum limits are:

Industry	Maximum foreign direct investment ownership limit	Comment
Private-sector banks	74%	
Government banks	20%	
Insurance	26%	Proposed to be increased to 49%
Airlines	40%	Proposed to be increased to 49%
Telecommunications	49%	Proposed to be increased to 74%. Internet service providers are at 100%
Defence	26%	

Are legal and regulatory risks high?

A key source of risk in emerging markets is regulation. This is to be expected, as the regulatory and legal environments tend to evolve with the economy. Such changes can bring to the fore new opportunities, but they can also present a risk to existing businesses. As with corporate governance, however, measurement of regulatory risks entails considerable subjective judgement.

One way to get a broad view of potential regulatory and legal risks in a country is to consider the economic freedom index developed by the Heritage Foundation and the Wall Street Journal. Designed to reflect economic freedom, the index also conveys information about regulatory and legal risks. This is because the more complex and pervasive the regulations are, the more likely they are to undergo change during a reform process. With regard to equity market performance, the index also reveals that the more liberal the environment, the greater the potential for private companies.

The index ranks countries from 1 (= most free) to 5 (= most unfree) on an annual basis. Not surprisingly, China and India both rank behind the Western markets and leading Asian economies, though India is marginally ahead of China. Also notable is the way in which this index has evolved during the past ten years. Economic freedom has clearly improved in both China and India over the past decade, mirroring the reform process in both markets. For most of the past ten years, China had a better economic freedom

Fig. 3.20: Economic freedom score
Scale 1–5. 5 = most unfree



Fig. 3.21: Economic freedom score of China and India 1995 to 2004
Scale 1–5. 5 = most unfree



score than India. However, the improvement in China's freedom score appears to have stalled since 2000. The full implementation of the WTO commitments should go a long way towards enhancing economic freedom in both countries.

Where are the investment opportunities?

The second chapter of this study projected a scenario for the future size of the Indian and Chinese markets and found that they will most likely become the two largest consumer markets in the world. We divided consumption into several sectors: food, residence and household operations, healthcare, household items, clothing and shoes, transport and communications. Some of the goods in these sectors are traded, such as clothing or pharmaceuticals. Others such as homes are obviously not. One of the key themes that emerge in the first two chapters of this study is that the global economy is becoming ever more integrated. This means that any tradable good consumed can be produced locally or imported.

Taken together, these considerations should imply that the best investment opportunities to emerge as a result of economic progress in India and China may not be domestic. Instead, they may well be located elsewhere in the global markets. At the same time, as the domestic financial markets develop, the type of investment opportunities available will also change, too. What appears to be a financial market with a relatively narrow set of options for international investors at present, therefore, will grow into a market with far more opportunities. For international investors, this means keeping an eye on domestic markets while also looking for opportunities in the international arena.

What type of opportunities does each market offer?

A key conclusion of our analysis is that discretionary spending (spending on non-essentials) will be rising faster than ever. China is already at a point where discretionary spending is beginning to rise rapidly. India is not far behind.

A simple conclusion, therefore, would be that consumer discretionary companies represent a growth area on which investors should focus. But that conclusion would be too simplistic for two reasons. First, the universe of available investments in both countries does not yet fully reflect this potential in either economy. Second, structural changes in the economy will reveal interesting opportunities in areas that may not show the fastest growth rates.

As shown in Box 3.5, the equity markets do not yet fully reflect the structure of the underlying economies. Over time, of course, the sector composition of the markets should change to reflect the local funding needs of various sectors of the economy. Local equities offer opportunities in domestic consumption, as well as export sectors. Food, healthcare, entertainment, real estate are all among the areas that will continue to grow. Financial services will be a key sector for developments. Manufacturing and service exports are areas of comparative advantage.

Food provides an example of how structural changes will impact investment opportunities. In Chapter 2, we showed that the cost of food will represent a declining share of income. Nevertheless, as income and urbanisation rise, an increasing share of the population will purchase food at a retail level, rather than producing it themselves. This trend

is already clearly visible in China. Total Chinese retail sales rose almost 250% in the past decade to almost CNY 420 billion. During this period, the share spent on food rose from less than 6% to more than 13%. More individuals have been able to buy their food in retail outlets rather than growing it themselves. Thus, although food as a share of total consumption may be declining, structural change in the economy, especially in rural areas, can translate into investment opportunities. The retail sector, therefore, will certainly continue to see strong sales growth going forward.

The trends observed in China are also likely to emerge in India. Furthermore, India's agricultural sector is relatively underdeveloped. For now, investment in this area is deterred by the complex system of subsidies and price controls. However, reform will need to come to the agricultural sector. When it does, opportunities should also arise from financing irrigation and other infrastructure projects in India.

Entertainment, of which tourism is a component, is an important area for discretionary spending. Tourism is, in fact, already an important industry, and Chinese tourists provide a significant share of the global tourist market (see Fig. 3.22). In addition, China has become the world's fifth largest tourist destination by number of tourist arrivals as well as by international tourism receipts. Indeed, this is part of a trend throughout Asia, which now captures a 20% and growing share of global international tourist expenditures. In its "Tourism 2020 Vision" report, the World Tourism Organisation expects international tourist arrivals to grow by more than 4% annually at the global level, more than 6% in South Asia (including India) and 6.5% in East Asia and the Pacific (including China).

Another potentially large component of the entertainment industry is media. It has been argued, for example, that "Bollywood's" Hindi movies produced in Mumbai, and the Chinese film industry in Hong Kong are the only two industries that can rival the size of Hollywood's customer base. Unfortunately, there are few investment opportunities through financial markets in these areas for now, but one can expect that, like Hollywood, these industries will need to turn to the market to finance future growth.

Health care is another area of growth, although the manner in which it grows will depend on the choices governments make in terms of public provision of healthcare services. The pharmaceutical sectors in both countries differ greatly (for a more detailed discussion see Boxes 3.8 and 3.9). While the Chinese pharmaceutical sector has largely remained a domestic story, India's has developed into one of export success. The industry's key successes so far were in the manufacturing of pharmaceutical ingredients and the development and production of branded generics. Leading Indian pharmaceutical stocks include Ranbaxy Laboratories, Dr. Reddy's, and Cipla.

Two important non-tradable sectors are real estate and banking. Investment possibilities in both of these areas will be mostly at local market level. The real estate market is discussed in Boxes 3.10 and 3.11. The financial sectors in both countries, as discussed in chapter one of this study, remain relatively underdeveloped. In principle, though, banks are one of the more interesting emerging market investments, as they offer indirect exposure to all sectors of the economy. However, supervisory and regulatory weaknesses have so far left many emerging market investors disappointed. As discussed earlier in this chapter, though, there is an increasing awareness of the benefits of adhering to international best practices in such regulatory areas among policy makers in all countries.

Fig. 3.22: Where does tourist money come from?

International tourism expenditures

	in USD bn
United States	58.0
Germany	53.2
United Kingdom	40.4
Japan	26.7
France	19.5
Italy	16.9
China	15.4
Netherlands	12.9
Hong Kong (China)	12.4
Russian Federation	12.0

Source: World Tourism Organization

Fig. 3.23: Where is tourist money spent?

International tourist arrivals and receipts

	Tourist arrivals in mn	Tourist receipts in USD bn
United States	41.9	66.5
Spain	51.7	33.6
France	77.0	32.3
Italy	39.8	26.9
China	36.8	20.4
Germany	18.0	19.2
United Kingdom	24.2	17.8
Austria	18.6	11.2
Hong Kong (China)	16.6	10.1
Greece	14.2	9.7

Source: World Tourism Organization

Box 3.8: China's pharmaceutical industry – a domestic sector

Rising personal wealth, significant trade and distribution barriers for foreign competitors as well as insufficient patent protection have contributed to an expansion of China's pharmaceutical sector. The low-cost environment and China's growing importance as a provider for bulk pharmaceuticals are likely to provide momentum for the sector. However, China faces some longer-term challenges in this area. There is a lack of innovative medicine investment and drug research and development (R&D) is inadequate. At present, Chinese companies put at most 1.5% of sales into development, compared to 13–15% in industrial countries. Indeed, only 2 new chemical entities were developed in China. With its entry into the WTO, China is expected to face more challenges from more innovative producers. Foreign pharmaceutical companies are hoping that a reliable system of patent recognition and respect for intellectual property rights will emerge over time.

China's commitment to respecting intellectual property rights has so far failed to benefit foreign drug firms in China because of regulatory loopholes for local suppliers. Foreign companies are also at a disadvantage because the reimbursement policy of Chinese medical insurance excludes foreign drugs. There is also a market for illegally manufactured copy-cat drugs, which tend to be of lower quality. The resulting health and safety concerns, however, have spurred government action to stamp out the production and sale of such sub-standard and counterfeit drugs. It is estimated that enforcement of these compliance measures will wipe out an estimated half of the smaller domestic pharmaceutical producers by the end of 2004.

Foreign companies are unlikely to benefit from these developments overnight. Medicine produced by domestic firms accounted for almost 70% of China's market in 2003. Imported and joint-venture-derived drugs have a 17% and 14% market share respectively. Moreover, imported drugs produced by Chinese-foreign joint ventures are mainly used in major Chinese cities, where the market is becoming increasingly saturated. In contrast, the pharmaceutical market in China's rural areas and smaller cities is still dominated by low-cost domestic medicine, partly due to distribution and warehousing issues and partly because of lower local purchasing power.

One distinguishing feature of China's drug market is the relevance of the so-called traditional Chinese medicine (TCM) sector. An estimated 70% of all companies, large or small, are engaged in producing and distributing ingredients for TCM. This sector, however, is not open to foreign investment.

In order to circumvent some of the restrictions and local particularities, many large foreign pharmaceutical firms are entering the Chinese market by establishing joint ventures. To date more than 75% of the large international pharmaceutical companies have established a presence in China. Forty percent of Chinese drug companies have alliances with foreign manufacturers. A growing number of these enterprises are aiming solely at the Chinese domestic market and few are aiming at actually exporting their product.

Box 3.9: India's pharmaceutical sector – a successful export industry

India has more than 20,000 pharmaceutical companies, but they are concentrated mainly on the production of so-called branded generics, i.e. drugs without patent protection marketed under a local brand name. Typical features of such markets are low prices and fierce competition. Indian companies account for only 1% of the world pharmaceutical market in US dollar terms, although they account for 20% of the world market in volume terms.

India's pharmaceutical sector also has broad coverage. The disease profiles in India display the typical characteristics of a developing country, namely a high prevalence of infectious diseases. Interestingly, with economic development and wider urbanisation, as well as improved sanitary conditions, the relative importance of anti-infective drugs is declining. At the same time, there is a rise in the importance of drugs for more chronic diseases that are common in industrial countries, such as cholesterol and diabetes.

Until 1970, India's pharmaceutical products enjoyed full patent protection. However, in view of rising prices and public health concerns, India has decided to get rid of the so-called product patents (usually the most difficult ones to circumvent, since they protect a substance) and to allow production

patents, which are easy to circumvent. In 1979, India introduced a ceiling on drug prices at levels far below the ones in the US or Europe.

These legislative initiatives proved to be the trigger of India's remarkable manufacturing and production know-how. By trying to avoid breaching protected processes and by observing price ceilings, Indian chemists acquired a wealth of experience and creativity in re-designing manufacturing processes. Expenses for R&D as well as manufacturing and marketing costs are estimated to amount to just one-eighth to one-fifth of those incurred in Western countries. As a result, India's pharmaceutical industry is now recognised as representing the leading edge in low-cost production of pharmaceutical ingredients. Today, India has the highest concentration of Food and Drug Administration approved manufacturing plants outside the US.

The signing of the WTO agreement in 1995, however, represents another paradigm shift for the Indian pharmaceutical sector. In order to comply with the Trade-Related Aspects of Intellectual Property Rights (TRIPS) India committed itself to respect international law for patents issued after 1995. As a result, volume sales growth in the domestic market is likely to shrink as prices

rise significantly, thereby making branded drugs less affordable. These developments are likely to drive the focus of larger Indian domestic players towards regulated markets, i.e. Europe and the US, using so-called abbreviated new drug approvals (first step in overcoming a patent protected drug). As an early indicator for generic challenges, the number of filings more than trebled since 2001. This can potentially represent USD 30 billion in product opportunities by 2007. Looking beyond the expected peak in patent expiration in 2006/07, however, challenges as well as growth opportunities become more complex.

In the near term, Indian pharmaceutical companies may well leverage their previously acquired manufacturing know-how to venture into speciality pharmaceutical areas (such as overturning formulation patents and creating proprietary modified-release versions of already existing agents). In the medium term, another growth area is likely to stem from generic biologics. This is because the first generation of drugs at least partially derived from genetically-engineered organisms is already either off-patent or will soon lose such protection. While this market is also of interest to Western generic drug companies, the regulatory framework is not yet in place in Europe

and the US, and the first generic entrants will be under increased scrutiny. Indian pharmaceutical companies stand to benefit from their lower-cost environments when it comes to manufacturing these more complicated products. They may also be better positioned to run clinical trials to obtain approval for generic biologics.

Looking past the generic opportunities, the more rigorous patent laws will force the Indian pharmaceutical sector to become increasingly innovative. Current R&D expenses are a mere 6% of revenues, significantly below the 13–15% of the branded pharmaceuticals majors. While this figure is expected to climb to only 10% over the next few years, the impact should still be tangible, given that additional spending will leverage the existing medicinal chemistry skills.

Combined, the looming wave of patent expiration and a much more cost-focussed healthcare system in the developed world should bode well for Indian pharmaceuticals and their progress into foreign markets. At the same time, compliance with international patent law from next year onwards will put pressure on Indian players to step up their R&D expenditure, move up the value chain and become more innovative.

In China, the financial sector is overwhelmingly state-owned, but privatisation of some banks is expected. The newly privatised banks may take time to fully adjust to operating on a commercial basis. In India private banks exist, but changes to the regulatory environment are required in order for the sector to achieve its full potential.

Export industries capture the comparative advantages both markets offer. In China, manufacturing will continue to be a comparative advantage. Over time, as the A share market is opened up to foreign investors, a greater number of manufacturing companies will be accessible. Of course, A share market valuations would need to fall to more reasonable levels before such investments become attractive.

Textile manufacturing in both China and India should show strong growth over the next few years. This is because on January 1st, 2005, WTO agreements will put an end to quotas regulating international trade in apparel. The countries expected to benefit most from this change are China, India and Bangladesh.

In India, software and IT services will very likely remain important drivers for India's service sector and stock market. In 2003, software and IT services generated a turnover of about USD 16 billion and the market segment continues to grow at a high double-digit rate. It is dominated by market leader Tata Consultancy Services (TCS), followed by Infosys Technologies and Wipro.

Throughout this section, we have focused on the equity markets, given that domestic bond markets are dominated by the state sector. This cannot remain the case. Companies will need financing in the future. The banking systems will also need to raise capital. Development of the local bond markets is likely to offer some of the most interesting possibilities in the future.

Box 3.10: Chinese real estate – high level of activity

The recent history of the Chinese real estate market can be divided into three phases: a strong boom at the start of the nineties, a period of consolidation from 1996 to around 2000 with sustained high economic growth, and a renewed albeit more moderate growth phase since then, at least with regard to rental and real estate prices.

Triggered by economic growth and economic liberalisation, the boom phase resulted in sharp increases in both rental and purchase prices, in both the business property and residential sectors. For instance, rents for Western-standard office space have almost tripled within five years in Beijing and have doubled in Shanghai. Similar price hikes have been noted in the residential sector. Since then, rental prices have fallen dramatically and now lie below some of the levels seen prior to the boom phase at the start of the 1990s. Since 2000, rental and property prices have stabilised or increased moderately.

China's entry into the World Trade Organisation was a milestone for the real estate market. The strengthening of legal provisions for foreign investors made their activities in the real estate sector a genuine possibility for the first time. Nevertheless, several legal uncertainties and restrictions remain, including restrictions on the repatriation of capital.

Today, the markets are extremely active, while the vacancy rates remain high at 10–15% in the business property sector and up to 30% in the luxury residential sector. The strong demand for business property stems from both domestic and international companies. Such activities are typically concentrated in the cities of Shanghai and Beijing. The southern part of the country

is also reaping the benefits of the strong growth of the Chinese economy. The implementation of the Closer Economic Partnership Agreement (CEPA, a free trade agreement between the Chinese mainland and Hong Kong) has given a strong boost to the demand for business property in the south of the country, particularly in the towns along the Pearl River Delta. Above all demand is increasing from small and medium-sized enterprises in Hong Kong that wish to exploit the new opportunities created by the Agreement. While many real estate transactions in the large cities are speculative, the property market in the south of China is driven more by the needs of end users. In spite of the high demand, rental and property prices have only fluctuated moderately, since demand in many towns is being offset by a construction boom. The amount of high-quality office space in the key Chinese business centres has tripled to over 12 million square metres within six years, and the market is dominated primarily by native property developers. The Olympic Games in Beijing in 2008 and the international exhibition in Shanghai in 2010 are likely to ensure that the construction boom will continue in these cities for several years to come. The rate at which cities are developing, however, is a key risk that real estate investors should not underestimate, especially in Shanghai. The implementation of a host of planned traffic infrastructure projects will herald the birth of new suburbs, while other areas are set to decline. Thus, the choice of the right location has an even greater impact on long-term yields of real estate investments than in slower-growing western cities.

Box 3.11: The Indian real estate market – outsourcing boom drives demand for commercial property

The rapid growth in IT and business process outsourcing to India in 2003 and the first half of 2004 has driven a sharp increase in demand for office space in India's largest cities. In 2004, around 1 million square metres of office space are projected to be taken up, almost double the figure for 2002. Yields in Indian commercial real estate investments are around 9–11% for prime real estate in the major cities. This is high when compared to major industrial nations where yields are 5–8%.

Mumbai, New Delhi, Bangalore and Chennai are the leading outsourcing hubs of India, and all have experienced particularly strong demand for commercial space in suburbs with modern business parks and quality office developments. This is expected to put upwards pressure on commercial prices and rents in these suburbs. Despite continued high levels of new development activity during the past year, land values rose by 20–30% in some of the new development areas of Bangalore. In Mumbai and New Delhi, however, central business district prices are stabilising after a protract-

ed period of declining values, and are not expected to rise in the near term, as vacancy rates remain very high.

The Securities & Exchange Board of India (SEBI) has considered a proposal to allow real estate mutual funds for some years, although it has concerns about the nature of the Indian market, including about rates of stamp duties, which are very high by international standards. The mutual funds industry has shown considerable interest in launching real estate funds for retail and institutional investors, and there is continued speculation about SEBI approval for the establishment of such funds. Since April 2004, SEBI-registered venture capital funds have been permitted to invest in real estate. Foreign investors, however, are still heavily restricted by the government's Industrial Policy rules, which limit foreign real estate investments to large-scale projects exceeding 100 acres and USD 10 million. A number of Singaporean and Malaysian companies are already active in the development of integrated townships which meet these foreign investment criteria.

What type of opportunities are there in the global markets?

Just as the local markets will evolve over time, so will the opportunities offered by the international markets. Opportunities will arise in two ways. Export industries, whose value added is not dependent on low labour costs, will be well-placed to benefit from sales to both countries. International companies with production in either country will benefit from sales in the growing local markets.

For most global companies, India and China still represent a very small share of earnings. Nevertheless, both countries are making a mark on many global businesses, and the experience of foreign companies has been wide-ranging. Companies with expertise in supplying goods as diverse as cars, luxury products, or machinery are enjoying growth. Restaurant as well as retail chains are establishing themselves. At the same time, new sectors, such as financial services, will open up to foreign companies.

As discussed in the first chapter, both India and China will need considerable investment in infrastructure to overcome bottlenecks to economic expansion. This in turn will entail considerable opportunities for global firms with expertise in areas such as electricity, power generation equipment, railway and port infrastructure.

Such opportunities will not necessarily arise only for global companies, but for other emerging market companies as well. For example, over the past five years, India has emerged as the primary export market for Malaysian construction services. According to the Construction Industry Development Board (CIDB) in Malaysia, Indian projects accounted for almost half a billion US dollars or more than half of ongoing overseas projects undertaken by Malaysian contractors. Most of these are highway projects. The Indian projects represent 20–25% of the total order books of leading Malaysian contractors IJM, Gamuda, Road Builder and UEM Builder.

Overseas companies well positioned to supply areas where China has capacity shortages will also gain. Attractive opportunities will present themselves for major overseas power-generating equipment producers such as General Electric (power generation equipment) and Siemens (power generation equipment, mobile phone handsets). Suppliers of commodities which are relatively scarce in both countries will also benefit. Beneficiaries could be leading mining companies such as Rio Tinto (iron ore, alumina, copper), and BHP Billiton (iron ore, alumina, copper). Both Rio Tinto and BHP Billiton currently generate about 9% of group sales in China. About 3% of BHP Billiton's total sales are to India.

Retail companies with global sourcing and distribution capacity are positioning themselves for the growth of the local consumer market. Carrefour of France opened its 49th outlet in China in June 2004, while its US peer Wal-Mart already operates 39 stores. Competition is, of course, fierce and other successful international retail chains are gaining market share.

The global luxury goods industry has been a key beneficiary of rising consumption in Asia. Asian consumers, excluding India and China, currently represent about 60% of the global luxury goods industry sales. In large part, this is due to the high brand awareness of the Asian consumer. There are no indications that the Chinese and Indian

Fig. 3.24: Exponential growth
Swiss watch exports to China 2001–2003

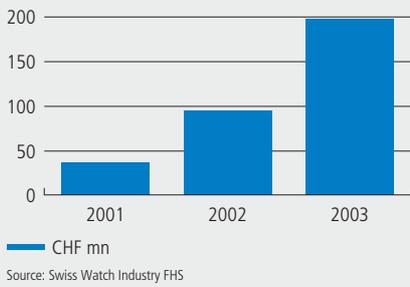


Fig. 3.25: Penetration of Yum!
Brand restaurants

	Urban population	Yum! system restaurants	Population per restaurant
China	467,000,000	999	467,467
India	287,000,000	51	5,627,451
USA	215,000,000	18,753	11,465
Brazil	143,000,000	61	2,344,262
Russia	106,000,000	10	10,600,000
Japan	100,000,000	1,500	66,667
Indonesia	96,000,000	321	299,065
Mexico	76,000,000	470	161,702
Germany	73,000,000	126	579,365
United Kingdom	53,000,000	1,158	45,769

Source: Company Data; United Nations Statistics

consumer will be less attracted by quality and brand status. While the presence of the luxury goods sector in China (excluding Hong Kong) and India is still small, we predict that China alone will account for 10% of global luxury goods revenues in 5–10 years. It is most likely that foreign firms will claim the bulk of this business. Some companies have already benefitted from this trend, and continue to be well positioned for future expansion of the consumer market. These include LVMH (which produces spirits, in addition to fashion, watches and cosmetics), L’Oreal (which focuses on high quality cosmetics), Procter & Gamble (producing household products and cosmetics), Swatch Group (watches), Nokia (mobile phone handsets), Hon Hai Precision (PC components), Samsung Electronics (consumer electronics, mobile phone handsets). Better household income and corporate profitability also lead to investments into more and higher-quality office equipment infrastructure. Firms such as Fuji Photo Film (multipurpose printer/copiers) will enjoy opportunities there.

Restaurants are another area of potential. The ubiquity of McDonald’s and Starbucks is well known, but in fact Yum Brands have the biggest presence, at least in China. Yum is the owner of such brands as Taco Bell, Pizza Hut and KFC, and it is with the latter that it has made the greatest inroads in China, where it has close to 1000 restaurants. Growth in the food industry faces greater challenges in India, given that a large part of the population is vegetarian. In India, McDonalds and other companies have adapted to local preferences, giving rise to the all-vegetarian Big Mac. But revenues have seen little significant improvement as a result. The paltry penetration in India also reflected difficulties as a result of prohibition on foreign majority ownership.

Vehicle sales have been rising at dramatic rates over the past few years in China, and at a more moderate but on average still impressive rate in India. Overseas car manufacturers captured significant market positions in both markets. VW has made the greatest inroads into the Chinese market. The second biggest overseas car maker is General Motors, followed by Peugeot, Honda, and Hyundai. Thanks to massive investments in new capacity, however, there is a danger of overcapacity, which would erode the currently good margins in the Chinese car manufacturing market over the mediumterm. In India, Suzuki has a large market share.

The Indian market for passenger cars is about 1 million units per annum, compared to 2 million in China. The Indian market is growing, but not at the torrid pace of China. Maruti-Suzuki, a joint venture in which Suzuki has a majority stake, towers over the competition with a market share of more than 50%. For Suzuki this translates into 25% of its own turnover (by units) but a smaller slice of its sales. General Motors in turn owns 20% of Suzuki.

The relative underdevelopment of the banking systems in both countries makes them attractive to the global financial industry. So far, the penetration of global financial firms is small and limited mostly to a few joint ventures. For example, Citigroup has a credit card programme in China. But it is unlikely that global financial firms will make big inroads in this area until the local market is further deregulated and developed, which we expect in the next 5 to 10 years. Both countries combined will have more potential clients in 2030 than the US has now, and this potential is virtually untapped.

Box 3.12: Volkswagen – a people’s car for the people’s republic

Volkswagen provides a good case study of the type of opportunities and challenges that foreign companies face when entering domestic markets. VW has been present in some form in China since 1985, when the company opened a representative office in Beijing. Since then it has rapidly expanded production through numerous joint ventures with local producers, the only way of doing business that was open to it. In market share and profits, VW enjoyed an early mover advantage in an explosive growth market.

Currently, the Chinese joint ventures of Volkswagen account for about 30% of all cars sold in China. While impressive, a few years ago VW’s market share was double that. In 2002, VW’s joint ventures sold 540,000 cars in China, giving it a market share of 48%, earning EUR 534 million. In 2003, the company sold close to 700,000 cars, resulting in a market share of 36% and earning EUR 511 million.

Two conclusions present themselves. The Chinese car market is expanding faster than VW China, and VW is selling more cars in China but making less money as its margins shrink. Competitors, both foreign and domestic, have entered the market thus reducing VW’s market share.

Peugeot, GM and late-comer Toyota have all been able to expand their market shares. At the same time, domestic producers such as the state-run Chery or privately-owned Geely are taking full advantage of their price edge. Some of this advantage may, as the foreign competitors allege, come from “design theft” by Chery and Geely. A large part, however, comes from the fact that these two source locally, while VW and others source internationally. These parts from suppliers such as Delphi or Robert Bosch are more expensive due to higher labour and other costs overseas. In addition, China imposes a 14% tariff on foreign car parts. The domestic producers currently have a market share hovering around 10%, a number expected to increase.

What is a likely future scenario for VW? The Chinese car market remains attractive. It is profitable and it is growing rapidly. Even though it is becoming more competitive, VW has some room to manoeuvre, for example by controlling costs.

Significant risks remain, however. While the Chinese government is cautiously in favour of market expansion, the climate is still very interventionist. Domestic producers tend to be favoured. To some degree it is possible to circumvent these effects by working through joint ventures. Joint ventures are not the only options open to foreign players which can also work like local companies by sourcing locally. This is something VW and other foreign companies with a presence in China are working hard to achieve.

VW recently announced it is opening three more factories in China. And it will be the principal automotive sponsor for the Beijing 2008 Olympic Games. Clearly the company is committed to a long run presence. The Chinese car market is far from mature. Growth rates will stay high for some time while discretionary income for an ever larger segment of the population is growing to levels where buying a car possible.

Fig. 3.26: Share of VW joint venture in Chinese auto sales



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