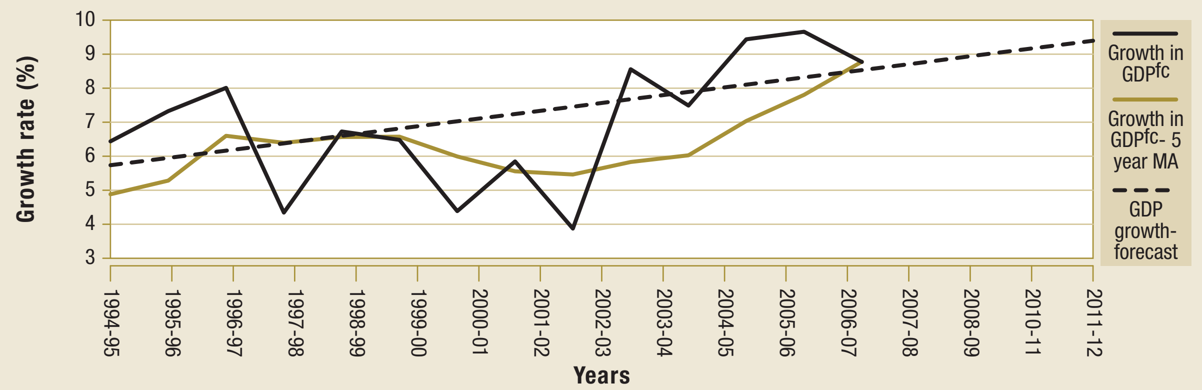
Figure 2.1 GDP at factor cost - annual and five year moving average growth



SUSTAINING THE GROWTH MOMENTUM

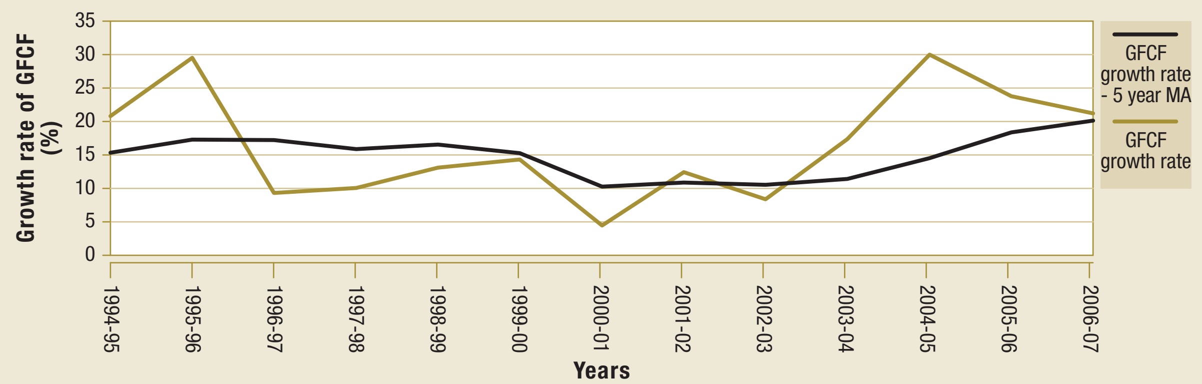
Growth

2.2 An analysis of the post-independence growth experience shows two statistically significant breaks in the rate of growth of the economy. The first break occurred in the early 1980s when the economy moved from what has been commonly described as "the Hindu growth rate" of around 3.5 to 5.5 per cent. This followed a policy shift away from excessive controls and restrictions on private enterprise towards gradual decontrol. The second break occurred in the mid-1990s with the ushering in of deeper and broad based reforms at the beginning of the decade. The step up in the GDP growth rate to 6.5 per cent in the late 1990s and further to 7.8 per cent during the Tenth Five Year Plan, with the last three years averaging over 9 per cent, is evidence of the success of these policy measures. If this trend persists in the medium-term, the economy would average over 8.9 per cent per annum over the Eleventh Five Year Plan period (Figure 2.1). It can be seen that the slightly lower GDP growth rate in 2007-08 (Advanced Estimates) is very much on the moving average trend and above the forecast line and, therefore, cannot be seen as a sign of a shift of the economy to a lower growth trend. If we achieve the GDP growth target of the Eleventh Five Year Plan, and step up the growth rate to 9.5 per cent in the succeeding year, the Indian economy would have averaged 9 per cent over a decade. This achievement would put India among the select group of about a dozen medium-large economies (such as China, Singapore, Japan, Taiwan China, Thailand, South Korea, Portugal, Greece and Hong Kong China) that have averaged a GDP growth of 9 per cent or more for at least a decade during their growth trajectory.

2.3 On the demand side the growth acceleration has been driven by investment and supported by private consumption. External trade, in terms of the balance on goods and service trade, has played an insignificant role. This is reflected in the change in average contribution of the three components between the Ninth and Tenth Five Year Plans, as discussed in Chapter 1. The economy is likely to remain domestic demand driven in the medium term.

2.4 The acceleration in growth of fixed capital formation reflects the vast improvement in investment climate as a result of the 1990s reforms. Figure 2.2 shows that there were two spurts in

Figure 2.2 Growth rate of GFCF - annual and five year moving average



fixed investment growth: the first followed the domestic decontrol cum import de-controls and tariff reduction on capital and intermediate goods in the early 1990s. The second followed, after an adjustment period, the freeing of consumer goods imports in the late 1990s. Paradoxically, the decision to delay lifting of quantitative restrictions (QRs) on consumer goods led to an increase in effective protection on them following the reduction of tariffs on intermediate inputs in the early 1990s. The initial negative impact of removal of control on consumer goods imports on industry as a whole was therefore a little more severe and led to a temporary slowdown of growth in the early 2000s, which was accentuated by monsoon linked agriculture declines. The increase in competitiveness of the economy that was under way since 1991, however, restored the growth momentum by 2003-04.

Managing capital inflows

2.5 There are two inter-related macroeconomic challenges that we face in maintaining high GDP growth on a sustained basis. These relate to capital inflows and inflation. Since 2005, India's merchandise trade deficit has risen to over 7 per cent and, in the last two years, the overall trade deficit (G&S) has stabilized at around 3 per cent of GDP at market prices. With net factor incomes (including remittances) at about 2 per cent of GDP, the current account deficit is down to a little over 1 per cent of GDP. In this period capital inflows have spurted to an average of around 4 per cent of GDP, far in excess of the current account financing requirements, leading to large accumulation of reserves and a build of pressure on prices.

2.6 High GDP growth attracts foreign capital looking for profitable investment opportunities. In a positive cycle this inflow will indeed find profitable investment opportunities that others have missed and lead to even higher growth. However, if the growth opportunities do not materialize fast enough there is pressure on the currency to appreciate, resulting in either an accumulation of reserves (followed by monetary expansion and inflation) or actual (nominal) appreciation or both. In the last two years, particularly in fiscal 2007-08, the Indian economy has gone through such a phase.

2.7 There are reasons to believe that the surge in capital inflows, including FDI, will continue in the medium term. The fact that the capital inflows have been in excess of the current account deficit despite two years of over 9 per cent growth suggests that investors expected opportunities for profitable investments to grow. At the same time, despite movement towards convergence of Indian nominal interest rates to global (US as proxy) levels (Figure 2.3), the short term arbitrage opportunities arising from underlying policy distortions remain a distinct possibility. Thus, short term flows could continue to add to the total capital inflows in the medium term, making it necessary to constantly review and revise the macro management strategy.

Inflation

2.8 Inflation management has always been a key policy concern of the Government. Traditionally, it has been a structural issue, where seasonal variations in production, particularly of wage goods, along with market rigidities have resulted in a build up of inflationary expectations translating local impulses and concerns into a more widespread impact on the consumers. Of late, however, the change in the structure of the economy and its more globalized nature have made management of inflation a complex task. With rising capital inflows, various monetary policy mechanisms have a more decisive role to play now. At the same time, inflationary impulses from global commodity prices have to be tackled through the use of fiscal and trade policy instruments.

2.9 The opening of the economy and the reduction in tariff rates since 1991, besides promoting competitiveness and growth, have also provided an impetus to convergence of inflation rates. Tariffs have come down from a peak rate of 150 per cent in 1990 to a peak non-agricultural rate of 10 per cent in 2007-08. Agricultural tariffs remain relatively high and stable, isolating this segment of the economy from both the benefits and costs of globalisation. The downtrend is, however, clear in both the simple and weighted average tariff rates for all goods (Figure 2.4). The reduction in tariffs on non-agricultural products has played an important role in the convergence of Indian to global inflation rates and needs to continue.

2.10 Figure 2.5 shows the inflation rates as represented by the Indian and US GDP deflators for consumption. The trend reduction in the inflation gap has bottomed out in the last two years at around half a per cent, though the actual inflation in India was above this trend. The interaction between high tariffs on agricultural products coupled with the large share of food in the consumption basket and the slow modernisation of Indian agriculture and agro-processing, coupled with the high dependence of the population on agriculture may play a role in future inflation.

Figure 2.3 **Interest rate differentials between India and USA (3 months & 1 year)**

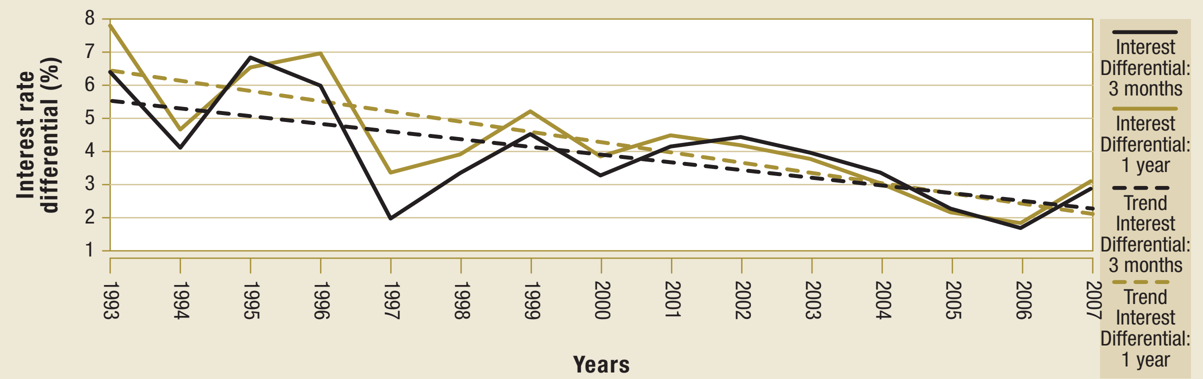
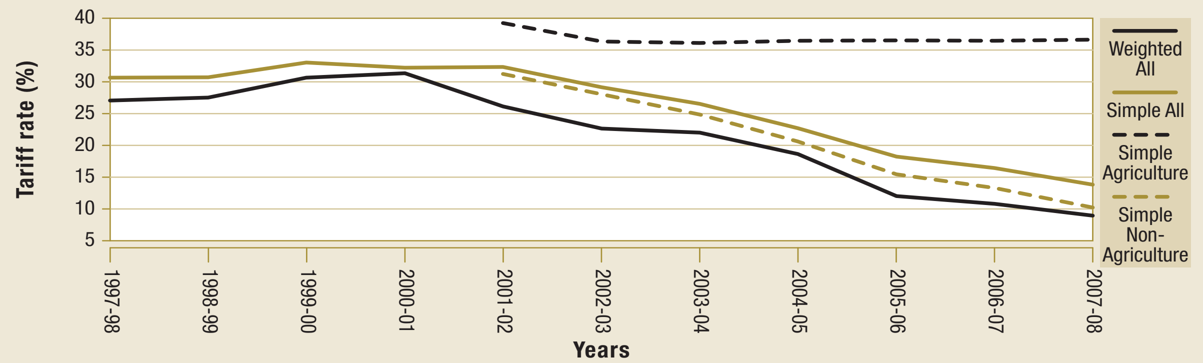
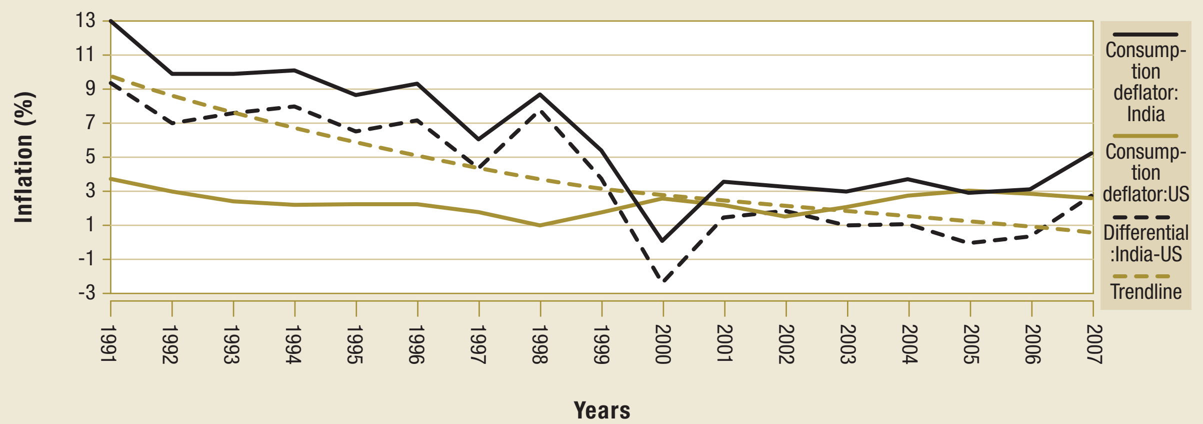


Figure 2.4 **Basic import tariff rates: import weighted and simple average**



Note : 2005-06 weights are used for 2006-07 and 2007-08.

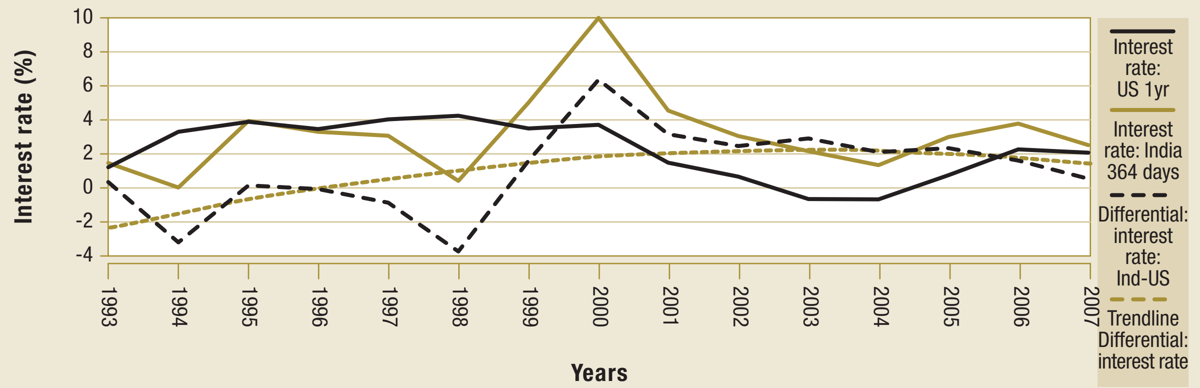
Figure 2.5 **Indian and US inflation (GDP consumption deflator)**



2.11 Economic theory suggests that the real interest rates (not nominal) are the ones that determine borrowing and lending and investment and saving decisions. This would be particularly significant in a longer time horizon. We use the nominal rates and inflation shown above to derive the real rate. Figure 2.6 shows the average annual real interest rate, as represented by the yield at auction cut-off on Indian 364 day Treasury Bills and the rate on US one year Government securities. In contrast to the convergence of nominal rates and inflation, the gap between the real rates (Indian-US), after trending down till 1999-2000 shot up in 2000-01 and has again trended down since then.

2.12 Thus, this downtrend was interrupted by a major shock in 1999-2000 and 2000-01, which raised the gap to a very high level, from which the downtrend continued. It may be recalled that these were the years in which import controls on consumer goods were completely eliminated. This seems to have reduced the inflation gap as expected, but paradoxically expanded the real interest gap. Theory

Figure 2.6 **Real interest rates: US Govt. securities and 364 day Indian treasury bills**



suggests that the rise in the real interest rates could be due to the adverse impact on expectations about long-term inflation and/or risk to investment. The inflation expectations were short lived, but the investment risk perceptions seem to have dissipated gradually and became completely normal by 2005. This was reflected in the sharp increase in inflows from 2005-06. Thus, a further convergence of both inflation and real interest rates is possible if we liberalise and develop India's debt and currency markets and remove the constraints on agriculture modernization and urban land supply.

External Sector

2.13 The US economy is expected to slowdown in 2008, consequent to the “sub-prime crises” (Box 2.1). Most projections of the world economy suggest a moderate but not severe slowdown in world growth. This will impact both the demand for India’s exports and the value of imports. The direct impact of the global growth slowdown is on the demand for imports. This will impact all countries including India, depending on the importance of the slowdown in different countries and the importance of the country in our exports. Though our exports to the US have already been slowing in 2006 and 2007, a further slowdown may be unavoidable, but may be relatively modest. The deceleration in world imports will also lead to a deceleration in growth of demand for commodities, including oil, and their international prices. While the extent of the impact is uncertain, it will have a salutatory effect on the unit value of imports and consequently on the value of imports. The balance of these two factors will likely result in a modest increase in the goods and services trade deficit, as long as a severe recession is avoided in the US.

Box 2.1 US sub-prime crisis

The sub-prime mortgage crisis is the major financial crisis of the new millennium whose origin is in the United States (US) housing market. Subsequently, this spread to Europe and some other parts of the world. The gradual softening of international interest rates during the last few years, coupled with relatively easy liquidity conditions across the world, provided for increased risk appetite of investors leading to expansion in the sub-prime market.

The word ‘sub-prime’ refers to borrowers (who are not rated as ‘prime’) and who do not have a sound track record of repayment of loans. The risks inherent in sub-prime loans were sliced into different components and packaged into a host of securities, referred to as asset-backed securities and collateralised debt obligations (CDOs). Credit rating agencies had assigned risk ranks (e.g. AAA, BBB) to them to facilitate marketability. Because of the complex nature of such new products, intermediaries such as hedge funds, pension funds and banks, who held them in their portfolio or through SPVs, were not fully aware of the risks involved. When interest rates rose leading to defaults in the housing sector, the value of the underlying loans declined along with the price of these products. Institutions were saddled with illiquid and value-eroded instruments, leading to liquidity crunch; the crisis in the credit market subsequently spread to the money market as well. The policy response in the US and the Euro area has been to address the issue of enhancing liquidity as well as to restore the faith in the financial system. The sub-prime crisis has also impacted the emerging economies, depending on their exposure to the sub-prime and the related assets.

India has remained relatively insulated from this crisis. The banks and financial institutions in India do not have marked exposure to the sub-prime and related assets in matured markets. Further, India’s gradual approach to the financial sector reforms process, with the building of appropriate safe-guards to ensure stability, has played a positive role in keeping India immune from such shocks.

2.14 The "sub-prime crisis" (Box 2.1) and the response of the US and other developed country Central Banks to it, has additional implications. There has been a renewed expansion of liquidity by these countries and this may increase the capital flows into India and other emerging markets. On the other hand the lack of precise information on securitised debt and all its manifestation has increased uncertainty, reduced the credibility of many developed market intermediaries and increased risk aversion among their investors. This will tend to reduce the flows into developing countries. The slower Indian economic growth in 2007-08, relative to 2005-06 and 2006-07, may also have a temporary dampening effect on capital inflows. On balance, the decline in capital inflows as a proportion of GDP in 2008 is likely to be modest and the remaining flows will likely take care of any expansion in current account deficit. Thus the situation of excess inflows is likely to remain, though the pressure on reserve accumulation and exchange rate appreciation is likely to ease. Any reduction in excess capital flows from the high levels in 2007 may affect the equity markets in the short term, but will make the task of monetary management easier. In the longer term the solution to excess capital inflows lies in deepening productivity gains and addressing the root causes of the excess capital flows like interest differential and build-up of expectations on the rupee.

Fiscal issues

2.15 A further reduction of the fiscal deficit can widen the space for monetary policy effectiveness. In the long term, a lower fiscal deficit will result in a reduction in the real domestic long-term interest rate of the economy and thus bring it closer to the world long-term rates. A reduction in the fiscal deficit during periods of excess inflow also reduces the costs of any subsequent reversal of capital flows. Most South East Asian economies had a fiscal surplus during a large part of their high growth period. A fiscal surplus can also contribute to an increase in a nation's global wealth holdings, for instance in China, Russia and many oil exporting countries.

2.16 In the short term, it can reduce the excess demand pressure created by the inflow of foreign funds. A lower fiscal deficit means a reduced supply of government securities and for any given demand structure a higher price for Government securities and Treasury Bills, i.e. a lower interest rate. This will directly reduce the interest gap with the global rates. The Finance Commission may like to consider to what extent these considerations should translate into lower FRBM targets over the next five years and beyond.

The supply side challenge

2.17 On the supply side, the most critical challenge is the availability of adequate physical and financial infrastructure. It is instructive to look at infrastructure in terms of public and private goods and a grey area in between - the "quasi-public good." This helps in identifying the most appropriate policy response. Thus, while roads, policing and urban development are examples of vital public goods, electricity is an example of a private good. In rural areas the electricity distribution network can be treated as a quasi-public good because of economies of scale in distribution. The same is true of dams, canals and to a limited extent of telecom, in rural areas. Private and quasi-public goods infrastructure requires the right policy framework and regulators that encourage competition in expanding supply at lowest cost. The telecom and civil aviation sectors, more recently the airport sector illustrate the possibilities. For public goods, direct public provisioning and leveraging of resources through special purpose vehicles (SPVs) will have to be the major instruments of growth.

Road Connectivity

2.18 The importance of roads in the development of the economy has received renewed attention in the last decade, with the launching of the national highway development project (NHDP) and the Prime Minister's Grameen Rozgar Yojana (PMGRY). While there is some visible progress in the road sector in the domain of the Central Government, the same is perhaps not true of some States. Given the low-skill intensity and high income multiplier effect of investment in this sector, there is an urgent need to place the highest priority on building roads to specified standards, especially in the poor States and regions of the country. Indeed, the medium term plan for this sector should target a network of highways linking all cities in the country, a network of State highways linking all towns at State level and connectivity of all villages with all weather district roads in every State.

Urban infrastructure

2.19 Urban development and renewal of existing towns and cities is yet another area of infrastructure development, which is critical for meeting the growing demand for urban housing and business premises from a rapidly expanding economy. The public good nature of this activity is brought out by the fact that the government has the responsibility not only to carry out detailed land use planning but also to provide connectivity, drainage, sanitation, water supply and public transport facilities. There are a number of policy measures, including addressing the limitations of the rent control act(s), the urban land ceiling laws and regulations and issues related to the financial empowerment of local bodies to make them capable of providing services befitting an urban habitation of a middle-income level country, that need to be urgently addressed. The provision of public goods coupled with policy reforms can energise private initiatives in development of housing (including rental housing), industrial estates and property development thereby impart additional momentum to overall growth. The Central sector programme, Jawaharlal Nehru National Urban Renewal Mission, and SEZs have imparted some impetus in this direction, but the States, particularly poorer ones, need to do more on their own.

Irrigation and agricultural support

2.20 For agriculture, there may be at least three public goods and one quasi-public good, which may be particularly lacking in poor backward regions, namely, the rule of law, all weather road connectivity, knowledge and information on appropriate technologies, farming practices and marketing, and assured irrigation. Irrigation is a major constraint on raising crop productivity. Up to March 2007, only about 74 per cent of the assessed irrigation potential of 140 million hectare has been utilized. The irrigation potential, however, can be increased with technological advancement, inter-basin transfers, recharging of ground water and storage of water in flood plains along the river banks. By having more active participation of actual beneficiaries, through Water Users Associations (WUAs), in maintenance of distribution channels, improvement in on-farm water management practices and reduction of field application losses of water through appropriate pricing, efficiency of water use can be enhanced. This can also increase allocation efficiency of water in terms of its application to different crops. Research and development on crop and non-crop agriculture and animal husbandry, including new varieties, operational methods and management practices have traditionally been generated by Government universities and transmitted to farmers by public organisations and extension services. These need to be addressed in the Eleventh Five Year Plan. The synergies between telecom connectivity, internet access, e-governance, e-learning and e-marketing must be exploited.

Financial intermediation and long term debt markets

2.21 Financial intermediation refers to the process that connects individual savers to potential investors with the most productive use for resources. While enabling the mobilisation of savings and its translation into investment, the process mediates the returns and risks on the investments. With sustained economic growth in the last few decades, the importance and nature of financial intermediation the world over is undergoing dramatic transformation. In many countries, the share of assets held by banks and insurance companies has declined and that of mutual funds, pension funds and non bank financial institutions has increased. The relative importance of different financial intermediaries has also changed. Most of these developments in international financial markets have been mirrored in the Indian financial markets, but the challenge is to deepen and broaden financial sector reforms in India. The banking sector remains, by and large, a government oligopoly despite the entry of private players. The insurance sector still has a long way to go and FDI limits are too low. The long term debt market must be developed to support the financing of infrastructure projects during the Eleventh Five Year Plan period. There is an urgent need for a regime that supports predictable user charges, a financial system that allocates risk efficiently, and project selection based on sound commercial and legal principles to ensure transparency.

Energy scenario

2.22 It is to the credit of India's growth process that its energy intensity has fallen over time. In comparison to the rest of the world, particularly the emerging economies of Brazil and China (Table 2.1), the use of energy per capita in India remained moderate and it increased at a slower pace. This could partly be due to unsatisfied demand due to domestic capacity constraints. There is considerable room to improve energy efficiency, especially of motor vehicles, and in the generation, transmission and end-use of electricity. Commercially viable and economically attractive technology options, in use in the developed world, should be considered and adopted.

2.23 Improving energy efficiency and demand side management measures like encouraging urban mass transport are important. Sustaining economic growth is critically dependent on

Table 2.1 **Energy use for slected countries**

ENERGY	Total Use of Energy (MMTOE)				Energy Use Per Capita (KGOE)					
	1990	2004	Change 1990-2004	Growth (%) 1990-2004	1990	2004	Change 1990-2004	Growth (%) 1990-2004	CRW/ Total 1990 %	CRW/ Total 2004 %
1	2	3	4	5	6	7	8	9	11	12
Brazil	134	205	71	3.2	897	1114	217	1.7	31.1	26.5
Russian Fed.	775	642	-133	–1.2	5211	4460	-751	–0.9	1.6	1.1
India	362	573	211	3.3	426	531	105	1.5	48.6	37.4
China	867	1609	743	3.6	763	1242	479	2.6	23.1	13.7
EMU	1053	1245	192	1.3	3568	3990	422	0.9	3.1	4.2
UK	212	234	22	0.6	3686	3906	220	0.3	0.3	1.3
US	1928	2326	398	1.4	7722	7921	199	0.2	3.2	3.0

Source: World Development Indicators.
Note: MMTOE (KGOE) =million metric tons (kilo gram) of oil equivalent.
crw: use of combustible renewables and waste.

Box 2.2 **Policy Reform Options**

- **Coal mining:** Amend Coal Mines Nationalisation Act to allow regulated private entry into coal mining. Privatize old coal mines to improve recovery of "in-place" reserves by 5-10%, subject to a professional, independent regulator for safety and environment issues.
- **PSUs**: Complete the process of selling of 5-10% equity in previously identified profit making non-navratnas. List all unlisted public sector enterprises and sell a minimum of 10% of equity to the public. Auction all loss making PSUs that cannot be revived. For those in which net worth is zero, allow negative bidding in the form of debt write-off.
- **Industrial decontrol***:* Phase-out control on Sugar, Fertilizer, Drugs.
- **Oil**: Sell old oil fields to private sector for application of Improved/Enhanced Oil Recovery Techniques.
- **Retail FDI**: Allow a share for foreign equity in all retail trade. Allow 100 per cent foreign equity in foreign branded, specialized retail chains (e.g. Luxury Brands, Consumer Durables, Semi-Durables).
- **Insurance**: Raise foreign equity share in Insurance to 49 per cent. Allow 51 per cent foreign equity in a special category of insurance companies that provide all types of insurance (e.g. health, weather) to rural residents and for all agricultural related activities including agro-processing.
- **Banking**: Allow 100 per cent FDI in Greenfield Private Rural-Agricultural Banks. Such a bank would be free to set up any number of branches in any rural or semi-rural area. It would be free to lend to agriculture and allied sectors, agro-processing and agro-input industries any where in the country and to any industry located in non-urban area (negative list). Such a bank would also be free to takeover (buy out) other private sector banks. As an incentive, such a bank could be allowed expansion into small towns when the general FDI policy on banks will be liberalized.
- **Factories act**: Increase work week to 60 hours (from 48) and daily limit to 12 hours to meet seasonal demand through overtime.
- **Power**: State Electricity Regulatory Commissions should notify rational, credible, cross-subsidy for open access so that it can become a reality. Open Access should include access to electricity pillars to string a wire. Accountability for T&D losses on this wire will be with the wire owner and not on the distribution company that owns the towers. Permit private corporate investment in nuclear power, subject to regulation by AERB and AEC.
- **Railways**: Freight Corridor: Public sector Rail Track company to own new tracks and signals. Free entry of private and public-private partnership rail freight companies.
- **Urban public transport**: Public Transport (bus) systems in Metros and large cities must be run by organized private companies that can use modern logistics and back office systems for planning routes and timings, acquiring and analyzing data on usage densities and running an integrated people movement system. A comprehensive system of road parking fees must be devised and introduced in metros and large congested cities.
- **Banruptcy law**: Either introduce a separate section on Bankruptcy in the Company Law or introduce a new bankruptcy law that facilitates exit of old/failed management as expeditiously as possible.

significant supply augmentation and change in the composition of energy use. Import dependence, for meeting the primary energy demand in the country, has been increasing over a long period since 1990-91 to 2006-07. Reducing incremental import dependence of the country's energy requirement in the medium to long term entails a number of measures: (a) tapping India's coal reserves with appropriate technology and reforms in the coal sector to increase competition, (b) mitigating transportation constraints on availability of coal, (c) accelerating exploration of oil and gas, (d) fully exploiting the nuclear and hydro potential for power generation, and (e) expediting programmes for energy generation through renewable and non-conventional sources. Besides, a step up of domestic production, the remaining deficit would have to be bridged by entering into strategic geo-political alliances to access the energy assets in the region. There is a need for regulatory reform to implement open access in power sector to facilitate competition.

Skill development

2.24 India's favourable demographics, with a relatively young labour force, has been often cited as a key factor in contributing to growth acceleration and as a major strength of the economy in the coming years. Despite this, it faces an emerging shortage of skills in the face of growing demand for labour from the technology and outsourcing sectors as well as in the semi-skilled labour intensive sectors of manufacturing and modern services like organised retail, civil aviation, construction and finance. As a result, wage costs are rising which not only contributes to cost push inflation, but may also end up eroding price advantage in some of the tradable sectors of the economy. Besides increase in wages, the skill shortage also manifests itself as a problem of retention and attrition in the fast growing knowledge based industries as well as in important social sector services like health and hospitality.

2.25 The enormous demand for professional education and employable skills cannot be met by the public sector alone, and the entry of private and non-government sectors such as recognised universities, education and skill development institutions under a professional, independent and credible regulatory system is essential for meeting the requirements. More specifically, there is a need for appropriate legal and policy changes to allow for the setting up of private educational testing, teacher certification and school/college grading organizations with a view to improve the quality of education at all levels. There is need also to make free the entry of "A grade" global universities (global grading already exists) into India. "B" and "C" grade global universities/colleges could be made subject to tighter regulation. There is a need to setup up a system of skill standardization and certification (6000 odd skills). In categories in which private (including foreign) certification and/or training institutes already exists, they should be allowed and encouraged to provide such certification and training in India. Transfer of management control of ITIs and other government training institutions through a bidding process focusing on the total value of scholarship grants to be provided to poor students should be considered. The basic commitment would be to modernize and expand the institution according to a time bound plan.