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2 Sustaining High Growth

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I have had the good fortune to have had Dr. Vijay Kelkar as a friend and collaborator for some 35 years now. In many ways, our ideas about priorities for India's development have evolved in remarkably similar ways. Dr. Kelkar has also had the opportunity to bring some of these ideas closer to fruition in the positions he has held in the past decade and a half. His work as Special Advisor to the Finance Minister who put together the framework for fiscal stability and tax reform and more recently, as Chairman of the 13th Finance Commission will be long remembered.

There are many things about India today which are different from the India that we knew when we were young and at the wheel. One big difference is in the growth prospects of the Indian economy. Today's controversies about whether 7 or 9 per cent is a more realistic estimate of the trend growth rate seem quite extraordinary to those of us who struggled to promote policies that would move the trend growth rate up from 4 per cent to 5-6 per cent or so. Dr. Kelkar was an early believer in the change in the growth prospects for the Indian economy. In his K.R. Narayanan lecture in 2004 (Kelkar, 2006), Dr. Vijay Kelkar saw a 10 per cent growth rate coming from a larger, better educated workforce, higher savings and investment because of the fall in the dependency ratio and fiscal consolidation, productivity gains, greater international interest in India and improved infrastructure. Hence, this contribution to the essays in his honour is focused on the sustainability of the high growth path that the Indian economy is now traversing. The focus is largely on the macroeconomics of growth.

The optimism about growth prospects rests to a large degree on the acceleration in growth seen since 1980 and even more so since 2003-04. Hence, the first part of the paper reviews the growth record of the Indian

economy since 1950, the reasons that underlie the acceleration and the prospects at present. The case for more rapid growth also rests to some extent on a comparision with other developing countries, particularly with some fast growing economies in Asia. Hence, the second part deals with some international comparisons. The third part draws some lessons from this review of the past and tries to highlight some of the key conditions for sustaining high growth over long periods. The paper ends with a discussion in the last part of what India would be like if we were to succeed.

The Growth Record

The record of GDP growth in the post-Independence era has been the subject of a vigorous academic debate.[1] The starting point for the debate is usually an assessment of when a structural break occurred in the growth path of the economy. The first and most obvious point to make is that the most important structural break took place with Independence (Hatekar and Dongre, 2005; Nayyar, 2006). Estimates of pre-Independence growth (available only for undivided India) vary a little and range between 0.8 per cent and 1.0 per cent (Sivasubramaniam, 2000; Maddison, 2003). As against this, the growth rate since Independence has averaged 4.7 per cent in the 55 years since 1950-51.[2]

The structural break that came with Independence is not just a statistical descriptor of the data. It reflects a thorough change in the degree of political autonomy, a radically transformed environment for business enterprises and a profound change in the goals of policy.[3] That break is now history and the real issue is whether there is a structural change in the growth path since then.

The record of growth since 1950-51 seems to show a structural break around 1980-81 according to most analysts who have looked at this.[4] The

1. The literature is too vast to cite. However, see Acharya *et al.* (2006), Nayyar (2006) and Virmani and Mittal (2006) and the references cited therein.
2. The years between Independence and the start of planning are a sort of grey area that rarely figures in these calculations. However, for the record the average growth rate of GDP in the three years from 1948 to 1950 was 1.3 per cent according to Maddison (2003).
3. This point is made forcefully in Nayyar (2006).
4. See Virmani (2004), Rodrik and Subramaniam (2004) among others.

growth statistics do not show a further structural break after 1991-92 with the massive dose of delicensing and trade liberalisation that came with the new economic policy. But, with the recent spurt in growth to 8 per cent plus there are some who argue that a structural break has occurred sometime between 2003-04 and 2006-07.[5]

Though there is general agreement that there was a break in the growth path around 1980-81, there is no real agreement on the narrative that could explain this break.[6] Since the primary purpose of these narratives is to attack or defend particular policy stances, analysts have looked for an explanation in policy changes. More particularly, the point at issue is the extent to which growth acceleration from 1980-81 onwards can be attributed to industrial delicensing and trade liberalisation.

A periodisation based on a statistical analysis of break points is helpful. However, in order to learn lessons from performance it is useful to try a different type of periodisation based on when the policy regime changed substantially.[7] Looked at this way the Indian growth experience can be broken up into the periods indicated in Table 2.1.

Table 2.1

Periodisation of Indian Growth Experience

Period	*Characterisation*	*GDP Growth (Annual Average)*	*GFCF Percentage (Annual Average)*	*ICOR (Column 4 Divided by Column 3)*
(1)	*(2)*	*(3)*	*(4)*	*(5)*
1951-52 to 1964-65	The foundational years	4.1	11.6	2.8
1965-66 to 1969-70	The crisis years	3.0	14.2	4.7
1970-71 to 1979-80	The turbulent years	2.9	15.7	5.4
1980-81 to 1990-91	The transitional years	5.6	20.4	3.6
1991-92 to 2002-03	The reform years	5.5	22.9	4.1
2003-04 to 2007-08	The high growth years	8.8	30.2	3.4

Note: Based on data from Tables 1.4 and 1.6 of the *Economic Survey 2008-09*, Ministry of Finance.

5. This has been asserted by Surjit Bhalla (2007).
6. Rodrik and Subramanian (2004) evaluates a variety of explanations for the 1980s' growth acceleration.
7. A similar periodisation can be found in Virmani and Mittal (2006).

The first three plan periods up to the drought and war crisis of 1965-1966 were the foundational years in which the institutional infrastructure and the policy regimes for development were put in place. These were the years when the government launched community development and rural credit cooperatives, industrial and import licensing and industrial development banks, IITs and many research establishments, and many other institutional and policy initiatives.

An import substituting heavy industry-oriented strategy was put in place with the Second Plan and large investments were made in public sector projects for steel and machine building, major power and river valley developments and the transport infrastructure. The public sector grew with fresh investment rather than nationalisation. The private sector had ample room to grow and the government was proactive providing technical advice and political support. The growth performance of the economy in this first phase is good in comparision with India's pre-Independence record.

The twin droughts of 1965 and 1966 were a major shock for which the economy was ill-prepared. Food aid prevented large-scale distress but the ambitious development strategy of the foundational years was more or less abandoned. The focus was on agricultural development with substantial results in the form of the green revolution. There was also some liberalisation of licensing for agriculture-related industries. But the overhang of the earlier strategy led to a continued investment in heavy industries, now including fertilisers. This was also the period which saw the real beginnings of the subsidy burden with the growth of the food and fertiliser subsidies.

In terms of policy regimes, 1970-71 is an important break point. By 1970-71, the green revolution had stabilised and India was past the worst when it came to food security. The Congress split was over and Mrs. Gandhi was firmly in the saddle, *garibi hatao* had become the slogan of the day, poverty eradication rather than growth became the dominating consideration in public policy and a public sector-oriented strategy was in place. The MRTP Act was tightened, state trading was actively promoted and for a brief period, the food grain trade was nationalised. The banking system, which was nationalised in 1969, was put under direct bureaucratic control and directed credit with differential interest rates was instituted.

The upheavals of the oil crisis of 1973-74 and the emergency intervened in mid-decade followed by the Janata Party government, which, though more business-friendly, continued to pursue an anti-poverty strategy in the guise of employment orientation. These were the years of turbulence when the state was in charge but the governments in charge of the state were buffeted by political currents that made it difficult for them to steer the economy with any sense of long-term purpose.

These middle years between 1965-66 and 1979-80 were the ones when Indian development performance was at its worst. This can be seen in the low growth rates despite relatively high levels of investment. The public investment programme was poorly managed with delays and cost overruns, inefficiencies imposed by multiple lines of tied credits being used for a single plant and input bottlenecks which could not be relieved through trade because of foreign exchange shortages.[8]

The return of the Congress Party to power in 1980 marks a shift in policy relative to the earlier years. Though the rhetoric of *garibi hatao* continued, there were some changes in policy in Mrs. Indira Gandhi's second administration that signaled a changed attitude to the private sector.[9] A series of high-level committees under leading figures like L.K. Jha, Vadilal Dagli, Abid Hussain and M. Narasimham laid out an agenda for a more pro-private sector and pro-market policy. But the changes made in the eighties are nowhere near as deep and far-reaching as the bonfire of controls in 1991.

Many of the more important substantive changes came later in mid-decade in Mr. Rajiv Gandhi's administration and Mr. V.P. Singh's budgets. The tax reductions that started with the 1985-86 budget conveyed a positive signal to capital markets and may even have led to improved collections as the tax-GDP ratio rose. But public expenditure rose even more rapidly and the combined deficit of the Central and state

8. Virmani and Mittal (2006) describes these as the years of "legislative-bureacratic socialism". I have chosen to break the period into two to distinguish the years when the focus was largely on getting out of the food crisis and the seventies which, at least in the first half was characterised by a commitment to a hard socialist doctrine. The mood in Delhi started changing after the oil crisis when the take-over of food grain trade was reversed and some hesitant moves towards liberalisation taken.

9. Rodrik and Subramanian (2004) attribute the improvement in growth performance largely to this attitudinal change.

governments rose from 7.5 per cent in 1980-81 to 9.9 per cent in 1986-87 and fell only slightly to 9.4 per cent by 1990-91.

There was a distinct improvement in growth performance beginning in 1980-81. This improvement cannot really be attributed to liberalisation as such, since there was very little of it any how though the big tax reform of the 1985 may have made a difference. The main reason for the change was the improved performance in the public sector and the entrepreneurial drive of a new breed of entrepreneurs who had come up in the seventies when the "big houses" were held in check by MRTP controls. Public investment rose as a proportion of GDP at market prices from 8.4 per cent in 1980-81 to 9.3 per cent by 1990-91. Power availability improved as an average of 4000 MW of power capacity was added per year in the eighties, which is as much in absolute terms and much more in percentage terms as was added per year in the nineties.

Despite a good growth performance why did the Indian economy hit a crisis in 1991? Basically India had not built up a viable relationship with the international economy. Industry remained highly protected and was not subject to competitive pressures though some licensing and MRTP constraints were eased after 1985. Exports had not taken off despite a substantial devaluation of the rupee in the latter half of the decade. Perhaps the large increases in oil production from Bombay High had reduced the sense of urgency. The more immediate reasons for the foreign exchange crisis of 1990-91 were the increase in free foreign exchange needed to replace rupee trade imports lost with the collapse of the Soviet Union, the oil price hike and the inability to go to the IMF before the crisis because of the political upheavals following the break between Rajiv Gandhi and V.P. Singh.

The big change in the policy regime comes after the deep foreign exchange crisis of 1991 when the newly elected Congress government, with Dr. Manmohan Singh as Finance Minister reversed four decades of state control on the private sector and high levels of protection with massive changes in the license-permit system and sharp reductions in tariff rates. Along with this, there was a major change in the policy on foreign investment. The policy regime in India now looked more like the regimes in the export-oriented economies of East and South-East Asia. In the

financial sector, SEBI was established and the NSE started leading to a sharp shift away from a bureaucratically directed capital market.[10]

Yet the growth performance in the years after liberalisation does not look much better than the performance in the eighties until recently. There was a boom immediately after liberalisation and a marked slowdown after 1995-96. In part this was due to the boom and bust in the stock market and in part to the weather-related slowdown in the agricultural economy.

The narrative presented above is broadly consistent with most analysis of sources of growth in a growth accounting framework. The source of growth in the eighties and nineties was a substantial improvement in capital productivity, measured crudely by the ICORs reported earlier and more systematically in calculations of total factor productivity[11] reported in Table 2.2.

Table 2.2

Total Factor Productivity Growth

(Per cent per annum)

	1950s	*1960s*	*1970s*	*1980s*	*1990s*
Growth (% p.a.)					
Net domestic product	3.9	4.0	2.8	5.9	5.8
Total factor productivity (1)	1.4	1.3	-0.1	3.0	2.3
Total factor productivity (2)	1.7	0.8	0.7	2.2	2.6
Contribution to Growth (%)					
Total factor productivity (1)	70	76	-33	84	66
Capital per worker	7	42	221	15	32
Rainfall deviation from mean	23	-18	-88	1	2

Note: (1) TFP (1) is from an unfiltered time series of estimates and TFP (2) filters out temporary factors like variations in capacity utilisation.

(2) The rainfall deviation factor in the last row arises from the use of a rainfall dummy in the estimates equations linking per capita NDP growth to per capita growth in capital per worker.

Source: Virmani (2004b: Table A1).

10. For a more complete listing of policy changes in this period, see Acharya *et al.* (2006: Box 3.1) and Virmani and Mittal (2006).

11. Total factor productivity calculations are generally based on an underlying production function with unit elasticity of substitution between capital and labour and fixed shares of the two factors in value added. Both assumptions are questionable. Hence, estimates of TFP presented should be treated as illustrative rather than precise.

The prospects for growth look much better in the past few years. The break in 2003-04 is not so much a change in the policy regime as a marked shift in performance. The most striking break from the past is the phenomenal growth in corporate savings from around 4 per cent of GDP at the end of the nineties to 8.8 per cent of GDP in 2007-08. This fuelled a big increase in private sector investment from around 16.5 per cent of GDP at the end of the nineties to 25.7 per cent of GDP by 2007-08. Since then the global crisis has intervened and the growth rates of GDP in 2008-09 fell to 6.7 per cent with some signs of recovery as the advance estimates for 2009-10 indicate a GDP growth rate of 7.2 per cent.

The moot question is whether and how soon the economy can get back to the 9 per cent growth path projected in the 11th Plan. Actual performance of some macro variables is presented in Table 2.3.

Table 2.3

Macroeconomic Performance during 11th Plan

(All figures are averages for the Plan period)

	Plan Target	*2007-08*	*2008-09 Quick Est.*	*2009-10 Advance Est.*
1. GDP growth	9.0	9.2	6.7	7.2
2. Investment rate (GDCF as % of GDPmp)	36.7	37.6	35.6	34.5
Public	8.0	7.9	8.5	NA
Private	28.7	28.6	26.2	NA
3. Fixed investment rate (GFCF as % of GDPmp)	-	33.0	33.0	32.3
Public		8.1	8.6	NA
Private		24.9	24.4	NA
4. Savings rate (GDS as % of GDPmp)	34.8	36.4	32.5	NA
Households	23.0	22.6	22.6	NA
Corporate	7.3	8.7	8.4	NA
Public	4.5	5.1	1.4	NA
5. Exports as % of GDPmp	22.5	13.5	13.8	NA
6. Imports as % of GDPmp	38.5	20.5	23.4	NA

Source: Data from Press Notes on Quick Estimates 2008-09 (dated 29 January 2010) and Advance Estimates 2009-10 (dated 8 February 2010).

These figures suggest that the sharp increase in investment that underlies the high growth of the four years after 2003-04 has been maintained and fixed investment in particular seems to be on track. The fixed investment rate would suggest that with an ICOR of around 4, a growth rate of 8 per cent is readily achievable. But for 9 per cent growth the investment rate may have to be a little higher than what the Plan projects, particularly if the substantial investment needs for infrastructure are taken into account. Two areas of macro policy may require a special effort: getting government savings back on track and ensuring that capital inflows contribute to real investment growth.

The projections of government savings and the revenue deficit in the 11th Plan involve a major shift. But they are implied by the goals set under the Fiscal Responsibility and Budget Management (FRBM) Act. The key lies in the management of the combined revenue deficit of the Centre and the state deficits which rose to a peak of nearly 7 per cent of GDP in 2001-02, has fallen steadily since then and is projected to fall to 0.48 per cent of GDP in the Budget Estimates for 2008-09 for the Centre and the states. But the actual outcome may well be different, given the amounts pushed out as a stimulus for flagging growth and the slowdown in revenue growth.

As for capital inflows, the absolute amount of inward flow implied by the projection amounts to about $30 billion a year. This looked plausible given the rate at which foreign portfolio and direct investment were flowing when the Plan was formulated, with the actual flow in 2005-06 being around $20 billion. The real challenge is to ensure that these flows are revived, that they focus much more on direct rather than portfolio investment and that they do not end up in even more reserve accumulation. If they do, the Plan investment rate may not be realised, the exchange rate will tend to appreciate, compromising the export goals and the sterilisation of excess reserves could pose major problems for monetary policy.

A crucial challenge for the Plan is the development of infrastructure. The two main areas of concern here are power and the rural infrastructure in the form of irrigation, roads and rural electrification that is necessary for revitalisng agriculture. The issue here is not just the resources but the managerial capacity to implement and operate this infrastructure efficiently.

The real test of feasibility for the Plan does not lie in the arcane algebra of growth accounting or inter-sectoral consistency but in the political economy of public policy choices and on that, some skepticism and caution is warranted because of the lack of political will to correct past distortions in policy. But there are strong growth impulses in the private sector. The main challenge for sustaining high growth is a public policy framework that ensures that this contributes to sustained growth by maintaining competitive pressures and pushing industry closer to technological frontiers, a matter dealt with later in this paper.

International Comparisons

The sense that we are exceptional is perhaps unavoidable in any large country and a comparision with others may be considered irrelevant. However, it surely is worth finding out if countries similarly placed in some broad sense have done better or worse. Table 2.4 presents data on observed growth rates in developing countries aggregated by continent and a rank for where India would stand in the developing country growth rate league table in each period.

Table 2.4

Growth Rates in a Global Perspective

(Average annual growth in GDP at PPP$ at 1990 prices)

	1951-1964	*1965-1979*	*1980-1990*	*1991-2001*
India	4.11	2.95	5.76	5.63
Asia less Japan	4.76	5.60	5.37	5.61
Latin America	5.15	5.21	-0.07	0.88
Africa	4.21	4.47	2.44	2.79
Rank order of Indian growth	68/108	87/108	13/108	16/108

Note: (1) The growth rates are for GDP calculated at purchasing power parity in 1990 $s.

(2) The rank order in the last row is the rank in the list of countries ordered by the average annual growth rate for the period indicated in the column. The three aggregated figures for 50 small countries were excluded from this ranking.

Source: Author's calculation based on data in Maddison (2003), basic tables 4b/5b/6b.

This table shows that the big difference between India and the rest of the developing world was in the 1965-1979 period. This difference cannot be attributed entirely to the droughts of 1965-66, 1972 and 1979 or to the political turbulence of the Emergency and the subsequent restoration of

democracy. Nor can one blame the oil shocks of 1973-74 and 1979-80 which affected all oil importing developing countries. At least part of the blame must be laid at the door of the development strategy followed in the early seventies.

An interesting insight is provided by a comparison of growth rates in the South Asian region grouped by policy regimes that is presented in Table 2.5 drawn from the analysis presented by Dr. Kirit Parikh (2006).

Table 2.5

Policy Regimes and Growth Rates of GDP in South Asia

Policy Regimes	*India*	*Pakistan*	*Bangladesh*	*Sri Lanka*	*Nepal*
Free market economy; Passive government				1947-1956 3.67%	
Import-substitution; Controlled economy	1950-1967 3.4%	1950-1957 3.1%	1971-1981 2.7%	1956-1965 3.4%	1966-1980 2.3%
Import-substitution Rigid controls; Nationalisation	1967-1980 3.8%	1971-1977 4.7%		1970-1977 2.9%	
Export promotion regulated		1958-1970 6.6%	1981-1989 3.9%		
Deregulation; Import restriction	1980-1990 5.6%	1978-1988 6.1%			1981-1990 4.9%
Liberalisation	1992-1996 6.7% 1997-2000 5.4%	1988-1999 4.4%	1989-1992 6.7% 1992-2000 5.3%	1977-2000 5.0%	1991-2000 5.1%

Source: Parikh (2006: Table 1.8).

The analysis presented in the table above suggest that GDP growth was correlated with the orientation of policy on two broad fronts—the stance towards the external economy and towards the domestic private sector. A shift towards export orientation and/or a reduction in controls on the domestic private sector increased the growth rate. When these are combined, as in the phases included in the last row which deals with liberalisation, the effects are not additive. The record since 2000, which

shows a significant acceleration of growth in India and Pakistan since 2003-04, would tend to reinforce this concluson.

The views of planners and researchers on the strategies that can lead to high growth have also been shaped by the experiences of Japan, South Korea, Taiwan and China and the ASEAN countries. Sustained growth over long periods at the levels envisaged by Yojana Bhawan is not unprecedented. It was experienced by several economies in East Asia and elsewhere. Japan between 1950 and 1973, Korea and Taiwan between 1965 and 1990 and China since 1980 are some examples of high growth sustained over long periods.

The sources of East Asian growth have been the subject of extensive discussion amongst researchers. A seminal and much quoted article by Alwyn Young (1995) attributed the growth in non-agricultural output[12] to the increase in capital and labour inputs adjusted for quality with total factor productivity contributing only a modest amount. His estimates of the sources of growth in three East Asian countries and Singapore are presented in Table 2.6.

Table 2.6

Sources of Growth in East Asia

(Growth per cent per annum)

Country	*Output*	*Aggregate Capital*	*Weighted Capital*	*Aggregate Labour*	*Weighted Labour*	*Total Factor Productivity*	*Memo: Labour Share*
S. Korea	10.4	12.9	13.7	5.4	6.4	1.6	0.680
Taiwan	9.1	11.8	12.3	4.6	5.1	1.9	0.710
Singapore	8.5	10.8	11.5	4.5	5.7	-0.3	0.470
Hong Kong	7.3	7.7	8.0	2.6	3.2	2.3	0.628

Note: The data are for non-agricultural output for South Korea and Taiwan and total output for Singapore and Hong Kong. The time period covered is 1966-1990 except Hong Kong where it is 1966-1991.

Source: Based on results reported in Young (1995).

12. Young (1995) estimates the sources of growth for four countries—Hong Kong, Singapore, South Korea and Taiwan. For the first two, no adjustment is made for agriculture as these are city states with a minimal agricultural sector. For the latter two, agricultural outputs and inputs are separated out and the sources of growth analysis is for non-agricultural output.

What this analysis shows is that the high growth was based primarily on high rates of factor accumulation. Rates of fixed investment, 30 per cent and over, drove a rapid accumulation of productive assets. There was also a large increase in the industrial labour force with substantial migration from rural to urban areas and an improvement in quality with spending on education and training increasing sharply. The rates of productivity growth seem quite modest in relation to the achieved growth rate.[13]

The sources of growth in China after the big policy changes that began with the Deng era are very similar. Calculations of total factor productivity for China in the pre- and post-Deng period are contained in Table 2.7 which shows that the sharp acceleration in the Chinese growth rate since 1978 is attributable to faster capital accumulation and to productivity growth roughly in the ratio of 1:3.

Table 2.7

Sources of Growth in China

	1952-1978	*1978-1998*
Average Exponential Annual Growth Rate		
GDP	5.82	9.27
Capital stock	7.13	9.02
Labour	2.54	2.78
Total factor productivity	0.00	2.68

Source: Chow and Lin (2003).

High growth in East Asia and in South-East Asia was associated with an outward-oriented trade strategy with a strong export bias, based on undervalued exchange rates or export subsidisation. The degree of openness to foreign investment varied. Japan and Korea followed a very restrictive policy on foreign investment while Singapore and Hong Kong based their strategy on attracting foreign investment. Foreign aid may have helped Korea and Taiwan when they were making their transition to outward-oriented growth but not much after that. China and South-East Asia, who came later to the high growth game, are more open but even there the bulk of the investment has been domestic rather than foreign.

13. See Note 11 above on TFP.

The differences between the high growth Asians were less marked when it came to the induction of foreign technology. One characteristic of their high growth path was the high rate at which new products and processes were introduced in the economy. In fact, it has been argued that the production of new products for exports played an important role in stimulating capital accumulation. That is why the algebraic calculations of factor productivity may underestimate the actual pace of technological advance (Khan, 2006).

There are other dimensions to the East Asian experience which we need to understand. We tend to focus attention on what they did to promote industrialisation and exports. But they also put in a great effort at rural reconstruction-land reforms, agricultural development and rural infrastructure. All of them protected their agriculture sector from the opening of the economy.

The political origins of the East Asian high growth paths are rather special. Japan went through the huge trauma of war loss and occupation during which there was a major land reform and restructuring of the corporate sector. In South Korea and Taiwan too, there was an antecedent political upheaval before the new export-oriented policy was implemented. In these countries too, there was an element of US tutelage and support in the crucial early years of reform. In China, the new high growth era started after the political changes that took place with the death of Mao and the old guard and the emergence of Deng as the leader. All of the East Asian tigers had strong authoritarian governments or *de facto* one-party rule during the high growth period. These were systems that could extract high savings from the economy, hold down labour unrest and where government and industry saw eye to eye.

One point is worth emphasising. The East Asian miracle was a product of an interventionist state and that too a state which intervened not just to make markets work but to promote specific economic activities and even specific businesses. The archetype here was MITI (the Ministry of International Trade and Industry in Japan) which acted virtually like a super managing agency, including providing a safety net for business risks.

Sustaining High Growth

There are many small lessons that one can learn from our own past policy regimes and their impact and from the experience of other high growth episodes. But there is one big lesson that is most important. Imitative development does not work. Each instance of high growth has been different in some essential respect from the other.[14] Even within a country certain policies succeed because of historically specific factors. For instance, one reason for the speed with which some of the East Asians built up domestic competencies in construction and South-East Asian economies started growing rapidly after the mid-sixties was a result of the large US spending in the region during the Vietnam war.

Even the mistakes that have been made sometimes turn out to be beneficial. Some of the "distorted" decisions taken in India during the years when an import-substituting strategy was pursued are today a source of comparative advantage. For instance, investments in aluminium in India were considered inefficient. But today India is a globally competitive producer of that metal.[15] The investments in chemical and petroleum process industries were also considered to be economically unjustifiable. But today, India is a competitive producer of these chemicals and a viable provider of process engineering skills. The auto industry is another example. When Maruti was set up it was widely criticised. But it led to the establishment of a viable component industry that is now a competitive global supplier (Luthra *et al.*, 2005). The establishment of domestic capacity for oil exploration and refining in the early sixties created ONGC which today is a commercially viable global player.

At any given point, a country's development strategy has to work with the competencies it has and the opportunities available. An acceleration of growth is possible as an economy that has been operating below its production frontier catches up and moves to this frontier. This is what may have happened in India in the eighties as the mild loosening of controls and the results of managerial capacity building led to improved project implementation and capacity utilisation. An acceleration is also possible

14. This is well demonstrated in Rodrik (2004).

15. A McKinsey study puts India's aluminium costs below Australia, North America, the energy-rich Middle East and Europe (Bhargava *et al.*, 2005).

with faster factor accumulation as an economy moves up its production function. These sources of acceleration are self-limiting as unused capacity gets used up and as diminishing returns set in with continued movement along a static production function. Sustaining high growth over long periods requires policies that lead to a continuous upward shift in the economy's production function.

In any growing economy, the input of primary factors will increase. A rapidly growing economy will have a high investment rate and the stock of capital will rise. Labour inputs may increase not just because of the increase in numbers but also changes in participation rates, rural-urban migration and most important of all, quality improvements because of better education and training. All of these can be thought of as necessary conditions for accelerating growth. But they are not sufficient for sustaining high growth over an extended period.[16] Judging from experience, the key to sustaining high growth lies in outward-oriented development policy and a continuous effort at maintaining global competitiveness, ensuring a steady shift in production functions that could be described as "technological dynamism" and institutional developments that allow markets to function efficiently.

Outward Orientation

If growth has to be balanced in the sense that sectoral growth rates have to match the growth in domestic demand then the sector in which supply constraints bite the hardest defines the overall growth rate. This is an onerous restriction. Hence, high growth is almost always unbalanced in the sense that output growth rates across sectors vary more than implied by underlying differences in income elasticities of demand. Trade with other countries takes care of the imbalances in domestic supply and demand that emerge with growth.

The nature of the imbalance will vary with the type of strategy followed. Typically, import substitution policies with over-valued exchange rates and high levels of protection lead to growth in excess of demand across a large number of sectors. This is because they are often

16. The distinction between what is required to accelerate growth and to sustain high growth is a distinction that has been made in Rodrik (2004).

accompanied by a state-imposed capacity limits which prevent investments flooding into the most protected sectors.[17] An export-oriented strategy however works with world demand and capacity direction is hardly possible. Typically, the front of rapid growth is spread across a more limited number of sectors.

The link between the degree of openness to trade and growth has been a subject of extensive academic debate. At one level, the argument has been that trade theory has little to say on the subject beyond the standard case for the static gains from trade liberalisation, which also have been questioned on a variety of grounds.[18] At another level, cross-sectional regression equations linking growth with trade and other determining variables have been used by both sides in the debate.[19]

The more careful and nuanced studies done by OECD, NBER and World Bank have addressed this issue at the country level. The best known of these is the set of studies prepared under the supervision of Prof. Jagdish Bhagwati and Prof. Anne Kreuger.[20] The general conclusion of all of these more detailed studies was that export-oriented development strategies were more successful in promoting growth than import substituting strategies. There were several practical rather than theoretical considerations which could explain this.

- Export-promotion (EP) strategies were better for allocative efficiency because import-substitutions (IS) strategies involved capricious variations in effective rates of protection that distorted investment incentives.

17. Indian experience suggests that capacity direction by the government does not prevent a sequence of sectoral investment spurt as entrepreneurs flock to activities that appear most attractive at a given point in time. We have seen in India the rush of investments into sectors like synthetic fibres and mini-steel as entrepreneurs do not want to be left out of opportunities that suddenly seemed lucrative because of policy changes or changes in international prices. We have also seen how so many of these "investment rushes" turned out to be misguided and ultimately loss-making.

18. There is an extensive theoretical literature on trade and growth. In the standard neo-classical growth model of Solow, the steady state growth rate is set by the growth of the labour force in efficiency units and does not depend on trade possibilities at all. However, trade does matter in a Harrod-Domar or Feldman-Mahalanobis model with unused supplies of labour.

19. See Srinivasan and Bhagwati (1999) for a devastating critique of cross-country regression analysis of the link between openness and growth.

20. See Bhagwati (1978) and Kreuger (1978) for two seminal and influential studies.

- IS regimes with over-valued exchange rates went hand in hand with foreign exchange rationing, import controls and investment controls (licence-permit *raj*) and this led to rent-seeking behaviour by entrepreneurs rather than a focus on efficiency and productivity.
- Under IS regimes, tariff and trade barrier jumping foreign investments worsened the welfare losses of these regimes and were limited in amount by the scale of the domestic market.
- Not being limited by the size of the domestic market, EP regimes offered better prospects of scale economies and hence, may have generated a greater stimulus for investment thereby raising rates of capital accumulation.
- The need to compete in global markets may have led to a stronger incentive to absorb new technologies and to innovate.

These practical arguments are borne out by the fact that practically every major episode of high growth has been based on an export-oriented strategy with under-valued exchange rates and a high degree of public policy support for exporting activities.[21] Sustained high growth comes from a fuller exploitation of comparative advantage and goes with a high, and possibly growing degree of outward orientation, measured by the share of foreign trade in national income. Even more tellingly, the acceleration in growth in China and India came after they shifted their emphasis from import substitution to export promotion.

Such a conclusion in no way belittles the contribution made by the earlier IS strategy in building up domestic entrepreneurial and technological capacity. It only says that import substitution may be the way to capacity building and self-reliance but not to sustained high growth. In some ways, the academic dispute between IS and EP proponents misses the point. The important lesson from the EP approach is to recognise that the aim must always be to become globally competitive. The point of the IS strategy is that getting there may require some losses to be borne as competencies and capacities are built up. In fact, a type of infant industry protection may be required even when the ultimate aim is global competitiveness.

21. There are some exceptions like the episode of high growth in Brazil in the 1960s.

The Indian economy has become increasingly outward-oriented with the trade and foreign investment liberalisation after 1991. Exports as a percentage of GDP at market prices had increased slowly from the mid-seventies to reach 5.8 per cent in 1990-91. Since then, this percentage has gone up to 13.2 per cent in 2005-06. The import to GDP (at market prices) percentage rose in the seventies because of the oil price hike from 4 per cent to 9 per cent in 1980-81 and stayed at more or less the same level in 1990-91. Since then, with liberalisation the import ratio has shot up to 19.6 per cent in 2005-06. The story for net invisibles and foreign investment is even more dramatic. From near negligible levels in 1990-91, foreign investment inflows are now 2.5 per cent of GDP and net invisibles have risen from less than one per cent of GDP in 1991-92 to 5.1 per cent by 2005-06.[22]

An outward orientation could make an economy more vulnerable to external shocks. The main source of trade shocks have been the periodic flare up in oil prices which India could not avoid even with a more inward looking strategy as in the seventies. In fact, at that time the lack of an export base reduced the capacity to cope with the trade shock as India was not in a position to profit from the spending by oil rich countries, except through the remittances of expatriate workers. Trade shocks could also arise from business cycle fluctuations. Even here, the experience of the IT export sector suggests that the price competitiveness of sourcing in India could be an advantage when developed country companies are trying to cut costs to cope with an economic downturn.

The situation is rather different with capital account liberalisation. India has moved cautiously in this area and it is this caution which prevented the contagion from the financial crisis of 1997 spreading to India.

The global environment in the nineties has been very different from the preceding decades. The pace of globalisation has quickened as the new information and communication technologies have led to a rapid growth in service trade and financial flows across borders. India profited from it because of policy changes that reduced trade barriers and unleashed

22. The low net invisibles figure for 1990-91 is an aberration and hence, the comparison has been made with 1991-92.

entrepreneurial drive and because of the capacities that had been built up in earlier years in areas like IT services. Indian industry has also coped well with competition, at least in the organised sector, and restructured to thrive in the new policy environment.

India's strength in the global economy lies in skill-intensive manufactures and services. The IT boom rests on that. The same is now true of sectors like auto components. There is also a boom of sorts in the outsourcing of R&D to India. This is the comparative advantage that can continue to drive the growing outward orientation of the Indian economy. This skill-oriented internationalisation and the growing global ambitions of Indian entrepreneurs can help to integrate Indian industry into the world economy.

The dynamics of the global economy are changing and the recent financial crisis has perhaps accelerated the shift of dynamism to Asia. The world continues to depend on continuing growth in the USA; but Asia, including India, has also emerged as an important contributor as is shown in Table 2.8.

Table 2.8

Share in Global Growth

(Percentage share in output increase)

	1989-1995	*1995-2000*	*2000-2004*
USA	20.58	25.99	16.36
China	27.98	22.07	28.37
India	9.06	8.45	9.63
Rest of developing Asia	18.63	8.15	9.45
Other regions	23.75	35.34	36.19
World	100.00	100.00	100.00

Source: Jorgensen and Vu (2006).

These changes in global dynamics are to India's advantage as new markets and new opportunities develop closer to our shores. But to profit from this will require continuing competitive pressures and a capacity for technological dynamism.

Technological Dynamism

Technological dynamism has to be thought of along several dimensions. One dimension is the familiar one of factor productivity—the efficiency with which primary factors like capital and labour are used. This is the dimension that we measure in calculations of total factor productivity. A closely related dimension is that of energy and material productivity. This is the dimension that we measure when we calculate changes in input-output coefficients over time.

These measurable dimensions of productivity dynamism are well known and understood. But sustained high growth requires us to look beyond these to the rate at which innovations in the form of new products, processes, business practices are introduced and the rate at which new markets are penetrated. This Schumpeterian dimension of productivity dynamism is perhaps the most important in the long run.

An outward-oriented development strategy generates pressures for technological dynamism in both senses—improvements in efficiency in established products and processes and the introduction of new activities, new products and new processes.

Export production depends much more on productivity management at the shop floor and enterprise level. International product and service markets operate within a quality band and a potential supplier has to be above a minimum quality threshold to be able to compete. Between this minimum and the global best practice, there is some scope for price competition, which can be assisted by an under-valued exchange rate. But below the quality minimum lower prices do not help. Hence, an export-oriented strategy generates pressures for quality improvement at the product level which, in turn often goes with productivity improvements, for instance in the form of a reduction in the proportion of defectives in production runs (Sutton, 2006).

Export production also requires that domestic suppliers who can pass the global quality threshold be price competitive. They have to operate in a market where other suppliers are continually improving their productivity and reducing costs. An under-valued exchange rate and export subsidies

can give a one-time advantage but cannot help to cope with a continuous downward pressure on costs and upward pressure on product quality. Hence, an export-oriented strategy generates pressures for productivity dynamism in the exporting sectors.

High growth also involves the exploitation of scale economies and increasing returns. Increasing returns is difficult to accommodate within the framework of equilibrium economics and that is one reason why the standard version of neo-classical economics has always seemed implausible as a guide to policy makers in developing countries. Yet economies with increasing returns do operate within an essentially capitalist market economy and the recourse to governmental direction is an inadequate response to the problem. Market players respond to incentives and the real challenge is to design incentive compatible policy interventions that guide markets rather than direct producers so that the outcomes realise the gains from increasing returns.

Growth can be self-reinforcing. At the enterprise level, this can come from learning by doing as workers and managers hone their skills. It can also come from external economies. For instance, economies of agglomeration can arise as more and more enterprises enter a particular field of activity and input supply chains realise economies of scale, thereby reducing costs and improving reliability. These agglomeration economies are most often realised at specific locations resulting in a comparative advantage for that location and for the country.

The locational specialisation that comes from agglomeration economies can be seen in the skewed geographical spread of particular industries not just between regions but between cities and sometimes even within cities. This can lead to regional imbalances in overall development as the region or city which specialises in a fast growing industry wins out over others stuck with slow growing ones. In fact it has been argued that these microeconomic roots of growth inevitably lead to a worsening of regional imbalances during episodes of high growth (Aghion *et al.*, 2005).

Agglomeration economies are external economies because the cost benefits of an additional enterprise in the parent industry (that generates the external economies) accrue not just to that enterprise but to all. Hence, the private incentive to co-locate with others is less than the industry-level

gain, which would justify a public policy that corrects the gap between private and social return. In India, closely linked agglomerations of linked firms come up almost inevitably because, with poor transport facilities, supplier firms try and locate close to the buyer firms. The link between entrepreneurship, caste and community amongst start-up entrepreneurs is another factor that works towards this. Public policy offering locational incentives must therefore work within the framework of a cluster approach.[23]

Technological dynamism and even factor accumulation is closely tied to the prospects and opportunities offered by evolving markets. When an opportunity opened up with the Y2K problem, large numbers of Indians went and acquired computer programming skills, often paying for it at commercial rates. In a sources of growth calculation, this will show up as an increase in labour supply in efficiency units and we would conclude that observed growth was a move along the production function rather than a shift of the function. That would be misleading as the skill acquisition is actually a product of the change in opportunities that leads to new activities appearing in the economy. A recent study treats sustained exports of new products as a proxy for this type of skill and technology acquisition and establishes its connection with investment (Khan, 2006).

The calculations of factor productivity presented earlier in Table 2.2 show a clear acceleration in productivity growth after 1980. Some estimates of factor productivity growth at the sectoral level are presented in Table 2.9. They should be treated as indicative since they rest on some heroic assumptions about factor use at the sectoral level. However, they do suggest a distinct acceleration in productivity growth in recent years.

The broader dimensions of technological dynamism are more difficult to measure. But there is some anecdotal evidence of a capacity for product and process engineering for innovation. Auto components are one area where technological dynamism is already evident. Around 80 per cent of Indian auto component suppliers have ISO 9000 certification.[24] There are examples of Indian firms re-engineering auto components like steering

23. This is being championed by the Foundation for MSME Clusters. More information is available at *www.smeclusters.org*

24. This is the international standard for quality management.

mechanisms, reducing manufacturing costs by lowering the level of automation and capital costs by refurbishing second-hand equipment. International auto makers like Toyota are investing in design development and manufacturing facilities in India. In fact in the auto sector, local content rules are becoming unnecessary as India is becoming a global supply source for most car manufacturers (Luthra *et al.*, 2005). The pharmaceutical industry is another one where domestic firms are graduating from reverse engineering already discovered compounds to new drug discovery.

Table 2.9

Sectoral Growth in Factor Productivity

(Per cent per annum)

	1950-51 to 1964-65	*1965-66 to 1979-80*	*1980-81 to 1991-92*	*1992-93 to 2003-04*
Mining	-4.3	-2.1	-0.2	4.3
Manufacturing	0.4	-0.8	1.3	2.4
Electricity	-17.0	0.6	4.1	4.7
Trans. & comm.	-2.1	1.5	2.8	4.9

Source: Virmani (2004b: Table 2.2).

Technological dynamism requires engineering skills and innovation needs investment in R&D. India started early on this track and some of the growth that we see today is a product of that foresight. However, it runs the risk of being left behind by countries like China which have expanded their system of higher education and raised quality standards rapidly. In civilian R&D investments also China is forging ahead. Hence, maintaining the edge that India has in skill based manufacturing and services will require a major effort to upgrade technical education and research capacity. Competitive pressures will do that in the private sector. But the world over corporate R&D needs the base of research in public institutions like universities and research laboratories.

Promoting Competition

The major gains in productivity performance have come from the increase in competitive pressures on Indian industry. In the public sector, the shift away from budgetary financing to capital market-based financing has

generated pressures to perform better. In the private sector, delicensing and tariff reduction have sharpened the edge of competition in the market place. Even in the infrastructure sector, the changes that we have seen in telecommunications are a product of competition.

A variety of policy changes have been made to make the economy not just business-friendly but also market-friendly.[25] The distinction between these two approaches is crucial. A business-friendly approach means a government which works closely with businesses, individually or collectively to promote preferred activities. It may take the form of directed credit, trade policy changes modulated to the needs of domestic producers, active help in foreign markets and so on. It quickly shades into what could be described as crony capitalism, a charge levied at the policy framework in some South-East Asian and even East Asian countries. The model for such an approach was provided by the Japanese MITI (Ministry of International Trade and Industry).[26]

A market-friendly approach, on the other hand focuses more on setting rules of the game and leveling the playing field for all producers and sectors. This means, for instance, that credit is not directed at specific borrowers or even to preferred sectors. A market-friendly credit policy works with measures like the interest rates at which the central bank will lend, prudential norms, disclosure requirements to protect consumers and so on. A market-friendly approach would also mean greater uniformity in indirect tax rates with differences being justified on objective social cost or benefit grounds. This is the liberal economic order that is beloved of economists and is the underlying philosophy of economic policy in countries like the USA and the UK.

A business-friendly policy system was possible in East Asia and South-East Asia in a political environment which was very different from the fractious and open political environment in India. Discrimination is possible in India at the sector level as the continuing support for small industry and backward area reservations and concessions shows. However, discrimination that goes much beyond this to promote "winners" in

25. See Kohli (2006) for a political scientist's view of this distinction and how it has played out in India.

26. The author recollects a strong interest amongst Indian policy makers in this model in the eighties.

specific sectors sooner or later degenerates into rent-seeking by politicians, bureaucrats and their business cronies. Even if it is a bona fide discrimination it will attract unfavourable political and media attention and soon become impossible. Hence, the MITI model is not the way to go as far as India is concerned.

India has to move towards a market-friendly, non-discriminatory mode of policy intervention. Some steps have been taken towards this end. In the fiscal sphere, the FRBM Acts, the changed procedures for government borrowing, the trend towards more standardised indirect tax rates are moves in this direction. In financial markets, the progress to a non-discriminatory rule-based regime is particularly striking. The changes include the replacement of discretionary controls exercised by the erstwhile CCI (Controller of Capital Issues) by SEBI, the establishment of the Insurance Regulator, the changes in the trading systems in the stock exchanges and the opening to private and foreign entrants which has sharpened the edge of competition for the benefit of consumers. Regulatory authorities have also been set up for power, telecommunications and other infrastructure sectors which have been also opened to competition from private and foreign suppliers.

The transition from planning to a market-friendly policy system is still work in progress. The objectives and modalities pursued by the independent regulators and the proposed Competition Commission have to be coherent. A market-friendly policy mode has to focus on ensuring freedom of entry, which is the best guarantor of competition, ensuring that market power is not abused and that consumers are protected. In pursuing these general objectives, each regulatory authority will have to ask more specific questions related to conditions in India.[27] Some of these are as follows:

- *Trade Competition*: Is the product tradeable/non-tradeable in principle and in practice? Does the size of the domestic market pose barriers to foreign competition?
- *Size Structure*: Are the units in the industry predominantly large/small/a mix of the two?

27. Academic research can play an important role in the evolution of a coherent approach to regulatory issues across sectors. Hence, the need for industrial and agricultural economics research will be even greater as we move to a market-friendly policy system.

- *Organisational Structure*: What is the public-private mix? What is the role of business houses (conglomerates)?
- *Market Integration*: How integrated is the domestic market as measured by price differentials? What is the degree of product differentiation?
- *Role of the Government*: What is the role of the government as purchaser? As controller of natural resources?
- *Entry Barriers*: Are their entry barriers because of the way upstream or downstream industries are organised or because of the nature of the distribution system?

A market-friendly policy does not rule out measures to assist producers. It only requires that such measures should be based on a sound analysis of market failure. For instance, it is plausible to argue that small producers who have the capacity to use credit well, do not have access to such credit because, given informational asymmetries and the small size of the loan transactions, large lending institutions do not meet their needs. This is a type of market failure in the market for small loans and can justify public intervention to promote micro finance, farm credit cooperatives and so on.

Making markets work involves more than interposing an independent regulator between the government and the producer or supplier. It also involves modernisation of trading practices and improved transport connectivity to connect markets better. There is some evidence that markets in India are becoming more integrated in the sense that price differentials for identical commodities are narrowing with the coefficient of variation across centres in different regions coming down (Virmani and Mittal, 2006). However, much more needs to be done to improve transport connectivity and to modernise trading systems for instance by bringing in screen-based trading for standard commodities the way it has been done for shares.

What if we Succeed

The growth target of 9 per cent is clearly ambitious. But the evidence available suggests that a growth rate of 7 per cent or so is fully consistent with recent trends. The difference between these two is a measure of the

challenge for policy. But it is also a measure of the distance India has travelled from the "Hindu Rate of Growth" of Raj Krishna.

What would India be like if the ambitions of the Approach Paper are realised and we have 9 per cent growth for say 15 years and in realising this, we do all of the things about outward orientation, technological dynamism, competition and regional balance that were stated as necessary conditions for this to happen?

There would clearly be a massive improvement in living conditions with per capita incomes tripling. But will the spread of income growth being more evenly spread between regions for if it is not, a political backlash can be expected. There is some evidence that regional disparities have widened after 1980s as growth rates of states have diverged (Rodrik and Subramaniam, 2004). Liberalisation tends to favour firms and regions that are closer to the production frontier and hence can widen disparity. That has happened since 1991 according to one study (Aghion *et al.*, 2003).

In India, the main challenge is to accelerate growth in the densely populated heartlands of the North and in the East. This is also where the growth in the labour force will be the largest. This part of the country needs labour-intensive non-agricultural employment. The impetus for this can come from the rising demand for consumer goods within the country, provided public investments in transport connects these regions to high growth regions reducing transit times to markets. This may be a more plausible route than labour-intensive export-production *a la* China. Of course, there are other things which will have to be done like labour training, power supply, and above all improved administration and law and order.

With 9 per cent growth, the structure of the economy would be very different so that agriculture would account for around 10 per cent of GDP as against its present share of 20-25 per cent. This structural change in the economy will also imply an India that is largely urbanised.

The occupational structure will also change. In the 2001 Census, there were about 400 million workers, 250 million in agriculture and household industry and 150 million in other sectors. By 2021, the total number of workers may be around 550 million on the assumption that the proportion of workers to the population in the 15-59 age group is around

the same as in 2001.[28] If non-agricultural employment increases at 6 per cent per year,[29] as proposed in the Approach Paper, then the number of workers outside agriculture and household industry would be 440-480 million.[30] This would mean that agriculture would have 100 million or less workers by 2021.

The implications of such a structural change in output and employment are far-reaching. Non-agricultural work in India has always attracted workers from often distant parts of India even in pre-Independence days and even more so now. Hence, we can expect a high degree of mobility with many people living away from their home regions and practicing occupations quite different from their parents. The expansion of higher education and the rising proportion of young adults in the population will reinforce this tendency. What we are looking at is an India where many of the present divisions of caste, language and religion may become less relevant for determining a person's life chances or status in society. It is an India that will have to tolerate and even cherish diversity. There are of course strong ethical and political grounds for a culture of tolerance. The point in the context of this paper is that it is also an economic necessity in a booming economy where migration and mobility are absolutely essential.

An outwardly-oriented India will become a major player in the global economy with a GDP that would be the third largest in the world. Indian capital has already started going global and this internationalisation of Indian businesses would be reinforced by the search for energy and other materials and for markets. Technological dynamism would reinforce this trend.

A high growth development path based on outward orientation and the promotion of a competitive environment domestically leads clearly to a capitalist liberal economic order with a government that remains at arm's length from private decisions about investment, pricing, etc. Its role would

28. A rising proportion staying in higher education would tend to reduce the proportion, but an increase in the female participation rate may tend to increase it.

29. This would allow for a substantial increase in output per worker in non-agriculture given the Plan projections of growth in industry and services.

30. The range reflects the uncertainty about the extent of non-agricultural growth between 2001 and 2006.

be to set up the legislative and regulatory framework for protecting the public interest and maintaining competition. But would that be all?

The history of capitalist market-based development in a democratic environment suggests that the government may have to do more. For capitalist development to be accepted by the majority, who will be workers rather than owners, sooner or later, the state has had to accept certain social responsibilities. In the USA, it took the form of the new deal, in Europe it was the welfare state and the social market economy. The terminology varies but in all cases the state accepted a certain role in providing social protection.

India too will have to recognise this. The need for this will become greater as migration, urbanisation and occupational shifts take people away from traditional support structures. A predominantly non-agricultural urbanised workforce will need a safety net to cope with the ups and downs of business cycles. A growing population of older persons, separated from children who may have moved to new opportunities in a booming economy, will need pensions and other support. Social protection for an urban population is qualitatively different from the anti-poverty schemes that are today the dominant mode of redistributive intervention by Government in India. Sustaining high growth will require the establishment of a system of social security for which we are ill-prepared as of now.

There is another important role for governmental intervention and that is to protect the environment. This is necessary even now. In fact, the revival of agricultural dynamism will not be possible without addressing issues of externalities in land and water management that require social control and governmental support. But with urbanisation and industrialisation proceeding at a fast pace, there is a formidable challenge in establishing effective legislation and institutions from the municipal to the national level. There are also some long-term concerns, particularly in the area of energy and water, which are seldom reflected adequately in market signals. This is a case of missing markets or externalities and is perhaps the most important area for public intervention in a market economy.

Do we have the political process that is needed to realise the vision of development implied by a high growth path? The policy shifts required to sustain a high growth path are very substantial. They may resonate well in the few areas in the country that have done well in the new liberalised economy. But they command little support elsewhere though that seems to be changing with the states that have lagged behind aiming at duplicating the experience of leading states with a push to attract export industries and foreign investment. But we continue with a language of political discourse that seeks protection for sectional interests in public policy. The compulsions of electoral politics lead to decisions for short-term political gains. This is where the most serious doubts about the sustainability of high growth come in. We have an economy and a workforce that is capable of sustaining high growth. The real question is whether we have a political system that is capable of leading and directing us in that direction.

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