

# The pattern and causes of economic growth in India

Kaushik Basu\* and Annemie Maertens\*\*

**Abstract** This paper presents the broad macro parameters of the growth of the Indian economy since the nation's independence and a cross-country evaluation of where India stands, drawing out the patterns discernible in these aggregative statistics. The paper gives an overview of the on-going debate on the components of the Indian growth and the relative importance of the different policies in the 1980s and 1990s. It contributes to this debate by identifying the landmark years, and analysing the politics behind some of the economics. The paper also analyses the factors behind the changes in India's savings rate and the relation between growth and development, on the one hand, and the nature of labour market regulation, on the other.

**Key words:** India, growth, labour market, savings

**JEL classification:** O10, O53

## I. Introduction

The mainspring of an economy's growth and take-off continues to puzzle economists. Even though, thanks to years of sustained research, many of the pieces of the jigsaw puzzle are in place, it remains very difficult to predict when an economy that has floundered for decades might suddenly take off. The economy, embedded as it is in politics, culture, and institutions, is a sufficiently complex organism for this not to be surprising. However, growth tends to beget growth, though, of course, missteps can bring it to a halt. Hence, our understanding of an economy's rapid growth has to focus largely on what causes the first stirrings.

\*Cornell University and Indian Statistical Institute, New Delhi, kb40@cornell.edu

\*\*Cornell University, am445@cornell.edu

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What this paper attempts is to analyse and understand the constellation of forces that has determined the growth performance of the Indian economy, including its long period of hibernation and sudden, recent show of dynamism. The first task in such an undertaking is to get the facts right. Over the last 4 or 5 years India has been getting a better press than ever before, since its independence in 1947. Is this good press really justified? If the economy is growing faster, when did the take-off occur? This is important to investigate not just to satisfy idle curiosity but to understand the various forces that may have triggered the dynamism; and that in turn is important for the crafting of policies to sustain the growth and spread its spoils more evenly across the population.

Section II of the paper presents the broad macro parameters of growth of the Indian economy since independence and also a cross-country evaluation of where India stands. It then goes on to discuss the broad patterns that can be discerned in these aggregative statistics pertaining to India, including the sectoral statistics, and gives a brief overview of the on-going debate on the components of Indian growth and the relative importance of the different policies in the 1980s and 1990s. Section III contributes to this debate by identifying the landmark years, and analysing the politics that occurred behind the scenes, and the extent to which they helped or hindered economic progress. Section IV looks at a critical microeconomic component of the overall growth—labour-market behaviour, and is followed by some concluding remarks in section V.

## II. Growth: trends and patterns

### (i) Backdrop

Thanks to a long history of data collection, the basic numbers of the Indian economy are, for a poor country, well documented. At the time of its independence in 1947, India had: a literacy rate of 18 per cent; an investment rate of around 9 per cent of its GDP; life expectancy at birth of 32 years; an annual population growth rate of 1.25 per cent; and an average annual growth rate of GDP of around 3 per cent. In 2005/6, India had: a literacy rate of around 60 per cent; an investment rate of around 30 per cent of its GDP; life expectancy at birth of 63 years; an annual population growth rate of 1.5 per cent; and an annual growth rate of GDP of around 8.4 per cent.<sup>1</sup>

Given that the focus of the paper is on growth, let us take a look at GDP growth and growth rate as displayed in Figure 1 and Table 1. We have graphed the natural log of the GDP, rather than the actual GDP, so that one can read the growth rate directly from the slope of the graph. A straight line represents a constant rate of growth. Table 1 presents annual averages of growth rates and averages over plan periods.

Without going into any detailed analysis as yet, but just glancing at the data in Table 1, it seems that the rate of growth in the 1950s, 1960s, and 1970s has been fluctuating around 3.5

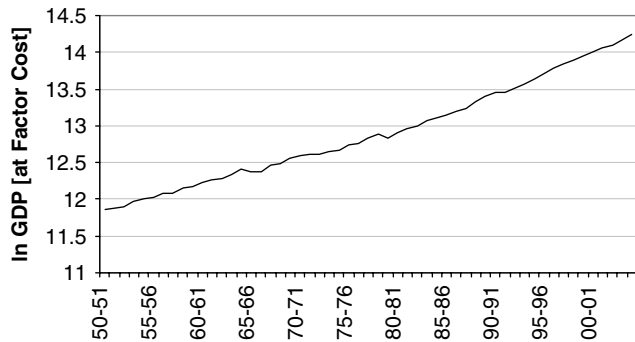
<sup>1</sup> Sources, respectively: Selected Education Statistics (age 15 and above), Ministry of Human Resource Development, from Indiatat; our Table 1; Age-group Wise Expectation of Life in India, Ministry of Health and Family Welfare, from Indiatat; Dyson *et al.* (2004, Table 2.1, p. 20); our Table 1; estimated literacy rate age 15 and above of UNESCO; our Table 1; *World Development Indicators 2006*, World Bank; Dyson *et al.* (2004, Table 2.1, p. 20); our Table 1.

**Table 1:** Annual growth rate of real GDP and gross capital formation, 1950–2006

Year	Annual growth rate of GDP at factor costs	Gross domestic capital formation (% of GDP at factor cost)	Year	Annual growth rate of GDP at factor costs	Gross domestic capital formation (% of GDP at factor cost)
1950/1		9.07	1980/1	7.2	22.45
1951/2	2.3	11.59	1981/2	6	22.34
1952/3	2.8	8.32	1982/3	3.1	21.79
1953/4	6.1	8.08	1983/4	7.7	20.69
1954/5	4.2	10.04	1984/5	4.3	22.16
1955/6	2.6	13.64	<b>Average</b>	<b>5.6</b>	
<b>Average</b>	<b>3.6</b>		1985/6	4.5	24.2
1956/7	5.7	15.76	1986/7	4.3	23.47
1957/8	-1.2	14.73	1987/8	3.8	25.23
1958/9	7.6	12.64	1988/9	10.5	26.48
1959/60	2.2	13.36	1989/90	6.7	27.23
<b>Average</b>	<b>3.5</b>		<b>Average</b>	<b>5.9</b>	
1960/1	7.1	15.23	1990/1	5.6	29.27
1961/2	3.1	14.18	1991/2	1.3	25
1962/3	2.1	15.95	1992/3	5.1	26.25
1963/4	5.1	15.31	1993/4	5.9	25.39
1964/5	7.6	15.26	1994/5	7.3	28.72
<b>Average</b>	<b>5.0</b>		<b>Average</b>	<b>5.0</b>	
1965/6	-3.7	17.47	1995/6	7.3	29.77
1966/7	1	18.19	1996/7	7.8	26.94
1967/8	8.1	15.17	1997/8	4.8	26.94
1968/9	2.6	14.23	1998/9	6.5	24.59
1969/70	6.5	15.99	1999/2000	6.1	28.43
<b>Average</b>	<b>2.8</b>		<b>Average</b>	<b>6.5</b>	
1970/1	5	16.68	2000/1	4.4	26.37
1971/2	1	17.46	2001/2	5.8	24.97
1972/3	-0.3	16.53	2002/3	3.8	27.51
1973/4	4.6	18.81	2003/4	8.5	29.57
1974/5	1.2	18.28	2004/5	7.5	33.04
<b>Average</b>	<b>2.3</b>		<b>Average</b>	<b>6.0</b>	
1975/6	9	18.79	2005/6	9.0 <sup>a</sup>	
1976/7	1.2	19.78	2006/7	9.2 <sup>a</sup>	
1977/8	7.5	20.11			
1978/9	5.5	23.85			
1979/80	-5.2	22.85			
<b>Average</b>	<b>3.5</b>				
Per 5-year plan periods					
I. 1951–56	3.6		VI. 1980–85	5.6	
II. 1956–61	4.2		VII. 1985–90	6.0	
III. 1961–66	2.8		VIII. 1992–97	6.7	
IV. 1969–74	3.3		IX. 1997–02	5.5	
V. 1974–79	4.8				

Notes: Up to 1999/2000, old series (base: 1993/4). From 2000/1 onwards, new series (base: 1999/2000). Averages: authors' own calculations.<sup>a</sup> Latest estimates, released by the Ministry of Finance, Economic Survey 2006/7.

Source: Reserve Bank of India, *Handbook of Statistics on the Indian Economy 2006* (Table 1 and 237).

**Figure 1:** Ln GDP (at constant prices), 1950–2005

Source: Reserve Bank of India, *Handbook of Statistics on the Indian Economy 2006* (Table 2—old series; base: 1993/4).

per cent per annum, the so-called ‘Hindu rate of growth’.<sup>2</sup> With an average annual rate of population growth of 1.9 per cent, this results in an average annual growth in per-capita GDP of around 1.6 per cent. From the late 1970s, the rate of growth exhibits an upward trend, averaging around 6 per cent for the period 1980–2005.

To get a basic idea of the absolute numbers involved, Table 2 gives the size of the Indian population, the real GDP (at market prices), and the real GDP per capita (at market prices). The key difference between the GDP at factor costs and the GDP at market prices is that the latter includes indirect taxes net of subsidies. As the latter is considered a better measure of the standard of living, we have opted to report the absolute figures of the GDP and GDP per capita at market prices.

From Table 2 it is clear that while the Indian population has more than doubled since the 1960s, GDP has increased more than eightfold since then. As the population figures for India are based on projections from Census of India data,<sup>3</sup> we have opted not to show the entire time series for population or GDP per capita.

To conclude this introduction, let us ask one more factual question: how has India done *vis-à-vis* other nations, especially other developing countries? Has it really done better or is it simply the fact of a large country beginning to grow that has caught the media’s attention and imagination?

In order to answer this question we assembled the purchasing power parity (PPP)-corrected national income and per-capita national income data of the World Bank for 109 countries.<sup>4</sup> There was a trade-off involved. As one goes further back, data, especially when we want

<sup>2</sup> ‘Hindu rate of growth’ is the tongue-in-cheek expression, coined by the Indian economist, the late Raj Krishna, to capture the frustrations India’s planners faced with growth. No matter what they did, growth seemed, invariably, to revert back to 3.5 per cent per annum, almost as if this magic figure was written in the land’s scriptures. The possibility of Hinduism having something to do with economic growth was earlier suggested by B. P. R. Vithal.

<sup>3</sup> The first census of India was carried out throughout the 1860s and completed in 1871. Since then there have been 13 more censuses, one per decade, the latest one being the 2001 census.

<sup>4</sup> The PPP-corrected GDP takes into account the difference in prices of goods and services between countries. As the exchange rate only takes into account the differences in tradable goods and services and several countries have non-market-based exchange-rate determination, it is arguable that the PPP allows us to make more meaningful comparisons of standards of living across countries.

**Table 2:** Population, GDP, and GDP per capita at market prices, selected years

Year	Population (in millions)	GDP (in millions constant 2000 US\$)	GDP per capita (constant 2000 US\$)
1960	435	76,283	175
1965	487	91,054	187
1970	548	113,606	207
1975	613	130,913	213
1980	687	152,621	222
1985	765	198,167	259
1990	850	268,023	316
1995	932	345,394	371
2000	1,016	457,377	450
2005	1,095	641,926	586

Source: *World Development Indicators 2006*, World Bank.

them PPP-corrected, get sparse and more and more countries have to be left out. We chose to go back to 1975, when the PPP-corrected data became available for the first time. There are 109 countries for which data are available without break from that year to current times. For each year since 1975, we ranked these 109 countries based on PPP-corrected GDP and per-capita GDP.

From this assembled data set (not shown here) it is clear that not only has India done better over time *vis-à-vis* itself, but even in comparison to others. In terms of GDP per capita, India ranked 90th among these nations in 1975. The rank fluctuated a little between 1975 and 1982, falling to 93rd and rising again to 90th. From 1982 onwards there has been a steady and monotonic improvement, with India's per-capita GDP (PPP-corrected), rising to 75th rank in 2004. There are two or three countries that did better than India over this period, the most notable being China, which was 108th among the 109 countries in 1975 but had risen to the rank of 58th by 2004. But, as follows from the fact of rank improvement, India overtook numerous nations during the last three decades.

In terms of GDP ranking the improvement has also been marked, though this is tempered by the fact that some of the poorer economies have had a faster growth of population, especially over the last two decades. In 1985, India's PPP-corrected GDP was the 8th largest in the world, and by 2004 it was the fourth largest, with only the USA, China, and Japan ahead.<sup>5</sup>

Despite this rank improvement, India and South Asia in general are still among the poorest regions in the world (see Table 3). Indeed, a quick look at one of the most important development indicators, the population below the poverty line, shows us that despite the decline in poverty headcount ratio, from 55 per cent in 1973/4 to 29 per cent in 1998/9, India still accounts for a large absolute number of poor people, close to 30 m in 2000.<sup>6</sup>

This change in India's growth rate and improved economic performance *vis-à-vis* other nations triggered off a change in global perception not just in academic writing, but in the

<sup>5</sup> If India's rank is measured in GDP (constant 2000 international dollars), India ranks 13th.

<sup>6</sup> Sources: Reserve Bank of India, *Handbook of Statistics of the Indian Economy 2005–2006* (Table 172) and National Sample Survey (NSS) 55th Round Official Estimates. Note that the measurement of poverty has been a hotly debated subject especially since the 55th round of the NSS tried to change the reference period of household consumption (see Deaton and Drèze, 2002; Himanshu and Sen, 2005; Lancaster and Ray, 2005; Subramanian, 2006, ch. 10).

**Table 3:** GDP per capita (constant 2000 US\$), selected comparisons

	1965	1970	1980	1990	1995	2000	2004
India	187	207	222	316	371	450	538
Sub-Saharan Africa	485	536	577	520	484	504	537
South Asia	197	220	234	326	377	446	522
East Asia and Pacific	145	176	273	481	735	952	1,254
Latin America and Caribbean	2,276	2,616	3,568	3,262	3,555	3,854	3,906
World	2,843	3,316	3,974	4,555	4,748	5,237	5,516

*Note:* The East Asia and Pacific and the Latin America and Caribbean aggregates do not contain the high-income countries.

*Source:* *World Development Indicators 2006*, World Bank.

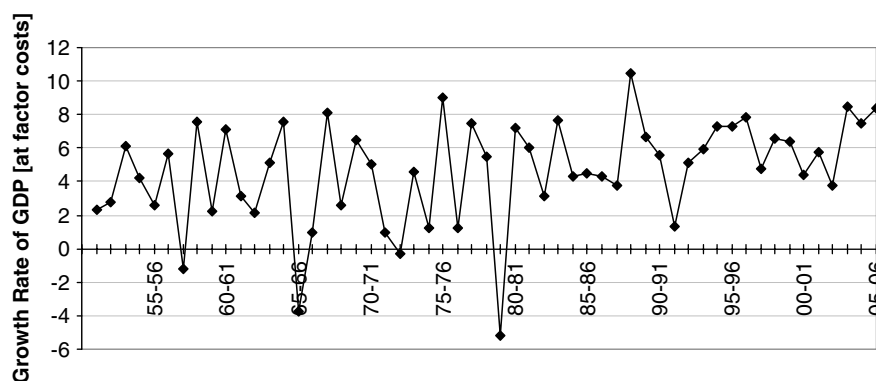
media and popular business publications, that India was a newly emerging and dynamic economy and, in very recent years, it has been repeatedly compared to China.<sup>7</sup> This was unthinkable to most India watchers even a decade ago. This popular celebration of the economy gives rise to a host of questions. While the strengthening of the growth rate is beyond doubt, the recorded overall growth rate is not the only indicator one uses to judge an economy and so the question arises as to whether the fundamentals are as strong as the media make them out to be. What are the strengths and weaknesses of the economy? Is there reason to expect that the growth will be sustained? What are the right policies for sustaining the high growth and spreading its spoils better among the population? Even though growth is higher, can we pin down when exactly the breaks occurred?

## (ii) Growth patterns and hypotheses

Turning to details of the growth performance, let us take another look at the growth rate of the GDP in Figure 2 and Table 1. Observe that the spikes in annual growth rates have not changed very much over the years; it is the downturns that have become less severe and frequent. Before 1980, there were 4 years when the GDP recorded negative growth rates: 1957/8, 1965/6, 1972/3, and 1979/80. Since 1980 never has the economy, as measured by GDP, shrunk in any year, though per-capita GDP fell once—during 1990/1—owing to the First Gulf War and a sharp decline in remittances and exports. GDP grew slowly that year but by less than the population growth.

Owing to the huge amount of noise, the trends are not too evident to the naked eye. But once we smooth out these annual fluctuations and look, instead, at averages of several years of growth (see Table 1), a pattern emerges. The average growth holds steady till about the mid-1970s and then, somewhere after that, it begins to move up, and that upward incline has persisted till current times. This is corroborated by the average, annual growth-rate figures for each of the 5-year plan periods. Average annual growth nearly touched the 5 per cent mark during the Fifth Plan period, 1974–9, and has never dropped below that since. The sharp spike occurred during the Eighth Plan period, 1992–7, when annual growth averaged 6.7 per cent. All the portents are that, during the Tenth Plan period, the economy will grow at close to 8 per cent per annum. Given that India's population growth rate is much slower than it used to be three or four decades ago (1.5 per cent in 2004/5 as against 2.22 per cent in

<sup>7</sup> This changing perception is cited and discussed in Basu (2006b).

**Figure 2:** Growth rate of GDP in India, 1950–2006

Source: Table 1.

1971/2<sup>8</sup>) this means that the rise in per-capita income growth rate from the 1960s and 1970s to current times has been even more marked.

More formal evidence that the GDP growth series exhibits a structural break at the end of the 1970s/beginning of the 1980s can be found in Virmani (1997, 2004a), Wallack (2003), Rodrik and Subramanian (2004b), and Balakrishnan and Parameswaran (2006). The last, for instance, use a regression-based least-squares approach that does not arbitrarily partition the data according to pre-selected break points and identify 1978/9 as a structural break year for the GDP growth series. These authors challenged the standard view held in the 1990s by the public and a large majority of economists that the policy reforms of the early 1990s had caused or played a major role in the growth acceleration (views held by, for instance, Ahluwalia (2002) and Srinivasan and Tendulkar (2003)). A new view emerged, led by Williamson and Zaghera (2002), De Long (2003), Rodrik and Subramanian (2004a,b), Panagariya (2004), and Virmani (2004a), that the surge in growth rate in India happened around 1980 and could therefore not be attributed entirely to the new economic policies of the early 1990s.

While it is difficult to dispute that a rise in growth rate took place before the 1990s, it is possible to argue that there was further acceleration after the reforms of the 1990s, which can be attributed to those reforms. Further, we are inclined to argue—as, indeed, some others have done—that the growth in the 1980s was not of a sustainable nature, since it relied too much on deficit financing and excessive foreign borrowing (Basu, 2004; Panagariya, 2004; Srinivasan, 2005).

To understand this debate and the components of the post-1980s growth further, let us take a look at the results of the growth accounting exercise of Bosworth *et al.* (2007). The objective of growth accounting is to decompose the economic growth rate of a country into contributions of different factors. Assuming a certain aggregate production function and competitive markets, the method identifies the contribution of the different factors (such as labour and physical capital) and a residual, called total factor productivity (TFP).<sup>9</sup> Changes

<sup>8</sup> Source: Dyson *et al.* (2004, Table 2.1, p. 20).

<sup>9</sup> Thereby hinting at the main critique of this approach: that TFP is a residual and, as such, incorporates also all kinds of shocks, such as political turmoil, external shifts, and measurement errors.

**Table 4:** Contributions to growth (in annual percentage rate of change)

Selected periods	Output	Employment	Output per worker	Contribution of:			
				Physical capital	Land	Education	Factor productivity
1960–73	3.3	2.0	1.3	1.1	–0.2	0.1	0.2
1973–83	4.2	2.4	1.8	0.9	–0.2	0.3	0.6
1983–93	5.0	2.1	2.9	0.9	–0.1	0.3	1.7
1993–9	7.0	1.2	5.8	2.4	–0.1	0.4	2.8
1999–2004	6.0	2.4	3.6	1.2	0.1	0.4	2.0
1960–2004	4.7	2.0	2.6	1.2	–0.1	0.3	1.2
1960–80	3.4	2.2	1.3	1.0	–0.2	0.2	0.2
1980–2004	5.8	1.9	3.8	1.4	0.0	0.4	2.0

Source: Bosworth *et al.* (2007, Table 3).

**Table 5:** Percentage of GDP (at factor costs) by industry of origin

Year	Agriculture, forestry, fishing, mining, and quarrying	Manufacturing, construction, and electricity, gas, and water supply	Trade, hotel, transport, and communication	Financing, insurance, real estate, and business services	Public administration and defence and other services
1950/1	59	13	12	7	9
1960/1	55	17	14	6	9
1970/1	48	20	16	6	11
1980/1	40	22	18	7	12
1990/1	35	24	19	10	12
2000/1	27	24	22	13	15
2005/6	23	24	25	13	14

Source: Ministry of Finance, *Economic Survey 2005–2006*, Table 1.3.

in the TFP represent changes in efficiency and/or changes in production technology. Table 4 shows the results of this exercise.

Table 4 shows that the pre-1980 growth is mainly associated with an increase in factors while the post-1980 growth is associated with some increase in factors, but more importantly an increase in TFP.<sup>10</sup> Looking at the entire time series, they conclude that the TFP growth took off around the early 1980s, and has shown an increasing trend since then. This finding is consistent with other studies on TFP growth (Rodrik and Subramanian, 2004*b*; Virmani, 2004*b*). Despite the large structural change in the economy (see Table 5), this increase in TFP, according to these authors, mainly reflects an improvement of the performance of the individual sectors rather than a re-allocation of resources from low-productivity sectors (agriculture) to higher productivity sectors (manufacturing and services).<sup>11</sup>

<sup>10</sup> Other studies confirm this general trend (see, for instance, Dholakia, 2002). A more detailed discussion can be found in Virmani (2004*b*).

<sup>11</sup> According to Rodrik and Subramanian (2004*b*), a structural shift can only explain 10 per cent of the TFP growth.



But how did this sudden surge in TFP come about? Rodrik and Subramanian (2004b) suggest that even though the reforms of the 1980s, which consisted of some industrial liberalization measures, lowering of tax rates, and limited import liberalization, were not substantial, this small trigger could have elicited a large response in TFP because India was below its production possibility frontier. The increases in TFP would, in that case, just be a reflection of the move towards the frontier rather than a shift of the frontier itself.<sup>12</sup> As a whole, they see an attitudinal shift towards ‘pro-business’ policies (in contrast to the ‘pro-market’ policies of the 1990s) as crucial in explaining the surge in the aggregate growth rate and TFP.<sup>13</sup> They share this view with other authors, such as Panagariya (2004), who see the switch from a ‘positive’ list approach, where restrictions are the rule and few exceptions are allowed, in the 1980s towards a ‘negative’ list approach in the 1990s as crucial.

Let us now turn to the disaggregate figures of growth and TFP. Beginning with the primary sector, from Table 6 (column 1) it is clear that the growth rate of this sector has been extremely volatile. The (arithmetic) average annual growth rate of the entire series is 5.5 per cent and the standard deviation is 3.8 per cent. Despite the irregular nature of this time series, Balakrishnan and Parameswaran (2006) were able to discern a structural break, namely a positive break around 1964/5. Notably, this break is situated slightly before the onset of the Green Revolution (around 1967/8), which in India mainly consisted of the spread of high-yield rice and wheat varieties. According to them, this structural break ‘may owe something to the steady expansion in irrigated area in the decade and a half preceding the mid-sixties’.<sup>14</sup> Indeed, given the significance of agriculture as a share of GDP in the 1950s–1980s, it seems that a good or a bad year in terms of rains could have a large impact on the overall growth rate. Consider, for example, the GDP growth rates of the good years 1958/9, 1967/8, and 1988/9 in Table 6. Virmani (2004a), however, contests this conventional wisdom and argues that there has been no change in the impact of rainfall fluctuations on the Indian economy during the last 50 years. As far as TFP is concerned, Bosworth *et al.* (2007) show that, taking 1960 as the index year (1960 = 1), the growth of TFP in the agriculture sector fluctuates around the index 1 up to the mid- to late 1980s, after which an increasing trend can be discerned. In figures, they find that the TFP growth changes from –0.2 per cent per year during the period 1960–73, to 0.9 per cent per year during 1973–83, and to 1.2 per cent during 1983–99.

Despite the fact that the growth figures of the last few years do not seem structurally different from the growth figures of the previous decades, there is talk of an agrarian crisis in India. This is caused by the declining public investments in agriculture (a trend which started in the early 1980s), the decline in agriculture as a share of the GDP associated with relatively little reallocation of employment (the primary sector contributes 20 per cent of the GDP but has a share of 60 per cent of the employment), the fact that poverty in India is a predominantly rural phenomenon, and the rise in farmer suicides, mainly in the states of Karnataka, Andhra Pradesh, and Maharashtra (Vaidyanathan, 2006).

<sup>12</sup> The reforms of the 1980s are extensively discussed by, among others, Kohli (2006a), Virmani (2004b), and Panagariya (2004).

<sup>13</sup> Rodrik and Subramanian (2004b) provide evidence for this attitudinal shift by the government in the early 1980s that favoured the interests of existing businesses rather than new entrants or consumers. This evidence has been contested by Srinivasan (2005).

<sup>14</sup> The current gross irrigated area is 40 per cent of the cultivated area. This area has increased greatly over the last 40 years (see Ministry of Agriculture, 2004, Table 14.2).

**Table 6:** Annual growth rate of real GDP at factor cost by industry of origin

	Agriculture, forestry, fishing, mining, and quarrying	Manufacturing, construction, and electricity, gas, and water supply	Trade, hotels, transport, and commu- nication	Financing, insurance, real estate, and business services	Public administra- tion, defence, and other services
1951/2	1.8	4.5	2.7	2.3	3.0
1952/3	3.1	0.1	3.2	4.2	2.1
1953/4	7.5	6.4	3.7	1.4	3.1
1954/5	3.0	8.6	6.4	3.7	3.6
1955/6	-0.8	11.2	7.3	4.0	3.1
<b>Average</b>	<b>2.9</b>	<b>6.1</b>	<b>4.6</b>	<b>3.1</b>	<b>3.0</b>
1956/7	5.4	8.8	7.4	1.6	3.8
1957/8	-4.2	-1.0	3.3	3.8	4.5
1958/9	9.9	7.1	5.1	2.8	4.1
1959/60	-0.8	7.1	6.3	3.8	4.3
<b>Average</b>	<b>2.5</b>	<b>5.6</b>	<b>5.3</b>	<b>3.0</b>	<b>3.9</b>
1960/1	7.0	10.5	8.5	2.1	4.9
1961/2	0.3	7.2	6.5	4.3	4.7
1962/3	-1.5	6.4	6.0	3.4	7.1
1963/4	2.4	10.6	7.1	3.1	6.6
1964/5	8.9	7.3	6.7	2.7	6.6
<b>Average</b>	<b>3.3</b>	<b>8.4</b>	<b>7.0</b>	<b>3.1</b>	<b>6.0</b>
1965/6	-10.2	3.0	2.0	3.0	4.0
1966/7	-1.3	3.4	2.6	1.8	4.6
1967/8	14.3	3.1	4.4	2.7	3.9
1968/9	0.0	5.2	4.6	4.9	4.5
1969/70	6.4	8.1	5.4	4.2	5.5
<b>Average</b>	<b>1.5</b>	<b>4.5</b>	<b>3.8</b>	<b>3.3</b>	<b>4.5</b>
1970/1	6.5	1.8	4.8	4.2	5.5
1971/2	-1.7	2.7	2.3	5.2	4.5
1972/3	-4.6	3.5	2.5	3.9	3.3
1973/4	6.9	1.1	4.2	2.4	2.6
1974/5	-1.3	1.3	6.2	-0.3	4.7
<b>Average</b>	<b>1.1</b>	<b>2.1</b>	<b>4.0</b>	<b>3.1</b>	<b>4.1</b>
1975/6	12.9	6.1	9.0	6.9	3.5
1976/7	-5.4	9.3	4.6	7.9	2.8
1977/8	9.7	7.2	6.4	4.9	2.7
1978/9	2.3	8.0	8.1	7.1	4.3
1979/80	-12.2	-3.4	-0.4	1.0	7.3
<b>Average</b>	<b>1.0</b>	<b>5.3</b>	<b>5.5</b>	<b>5.5</b>	<b>4.1</b>
1980/1	12.9	4.0	5.7	1.9	4.1
1981/2	5.7	7.4	6.2	8.3	2.6
1982/3	0.0	2.9	4.6	10.4	8.0
1983/4	9.1	8.7	4.9	10.0	3.9
1984/5	1.5	6.2	5.1	8.5	6.8
<b>Average</b>	<b>5.7</b>	<b>5.8</b>	<b>5.3</b>	<b>7.8</b>	<b>5.1</b>
1985/6	1.0	4.7	7.9	10.2	6.5
1986/7	0.2	6.2	5.9	11.3	7.0
1987/8	-1.0	7.0	5.2	8.4	7.2
1988/9	15.4	8.6	6.0	11.4	6.4
1989/90	1.9	10.7	7.4	12.6	8.3
<b>Average</b>	<b>3.3</b>	<b>7.4</b>	<b>6.5</b>	<b>10.8</b>	<b>7.1</b>

(continued overleaf)

Table 6: (Continued)

	Agriculture, forestry, fishing, mining, and quarrying	Manufacturing, construction, and electricity, gas, and water supply	Trade, hotels, transport, and communication	Financing, insurance, real estate, and business services	Public administration, defence, and other services
1990/1	4.6	7.4	4.9	7.7	4.1
1991/2	-1.1	-1.0	2.5	12.0	2.6
1992/3	5.4	4.3	5.6	5.9	4.6
1993/4	3.9	5.6	7.1	13.4	3.5
1994/5	5.3	10.3	10.4	5.6	3.2
<b>Average</b>	<b>3.6</b>	<b>5.3</b>	<b>6.1</b>	<b>8.9</b>	<b>3.6</b>
1995/6	-0.3	12.3	13.3	8.2	7.9
1996/7	8.8	7.7	7.8	7.0	6.3
1997/8	-1.5	3.8	7.8	11.6	11.7
1998/9	5.9	3.8	7.7	7.4	10.4
1999/2000	0.6	4.9	8.5	10.6	12.2
<b>Average</b>	<b>2.6</b>	<b>6.5</b>	<b>9.0</b>	<b>8.9</b>	<b>9.7</b>
2000/1	0.2	6.7	7.1	4.1	4.7
2001/2	5.8	2.8	9.2	7.3	3.9
2002/3	-5.6	6.8	9.1	8.0	3.8
2003/4	9.6	7.9	12.0	4.5	5.4
2004/5	1.2	8.9	10.6	9.2	9.2
<b>Average</b>	<b>2.1</b>	<b>6.6</b>	<b>9.6</b>	<b>6.6</b>	<b>5.4</b>

Source: Ministry of Finance, *Economic Survey 2005–2006*, Table 1.6. From 2001/2 new series at 1999/2000 prices. Before 2001/2 at 1993/94 prices. Averages: authors' own calculations.

Turning to industry, let us first look at the industry figures in column 2 of Tables 5 and 6. The share of the industrial sector has increased over the last 50 years from 13 per cent at the time of independence to 24 per cent. As such, the structure of the economy of India is nowadays of a very different nature from that of China, where industry represents nearly 50 per cent of the economy. The time series in column 2, Table 6, which seems at first sight quite volatile, has an (arithmetic) average of approximately 6 per cent and a standard deviation of 2.9 per cent. According to Balakrishnan and Parameswaran (2006), the manufacturing series exhibits three structural breaks. The first negative structural break is in the mid-1960s. The second positive structural break is in 1982/3, and the third negative structural break is in 1994/5. They interpret these figures as evidence against the hypothesis that manufacturing led the acceleration in the GDP growth rate at the beginning of the 1980s. Virmani (2004a), however, comes to the exact opposite conclusion: 'this [analysis] shows that the growth rate of manufacturing accelerated after 1980–81. This contributed to the acceleration of the rate of growth of GDP from 1981.' And the debate does not end there. According to Bosworth *et al.* (2007), the TFP growth of industry has been slowing down, not accelerating, during the post-reform period. They conclude that 'these results are disappointing in light of the attention that has been devoted to the on-going liberalization of the trade and regulatory regimes for goods production'. Their conclusions related to manufacturing are very similar to those for industry as a whole. They, among others, thereby provide counter-evidence to the studies of Ahluwalia (1995) and Unel (2003), who concluded that manufacturing experienced a surge of productivity in the 1980s. Goldar and Mitra (2002) take the more sceptical line that these differences in findings can be attributed to a variety of measurement issues.

Finally, let us take a look at the service-sector figures in the remaining columns of Tables 5 and 6. Table 6 shows that, since the 1980s, the services have shown a more consistent higher annual growth rate than the industrial and the agricultural sectors of the economy. Bosworth *et al.* (2007) show that, according to their growth-accounting analysis, this increase in growth rate is mainly due to an increase in TFP. This is rather puzzling as services are normally considered as an area of limited productivity growth. They suggest a number of explanations for this phenomenon, such as incorrect measurement of prices in the service industry. Srinivasan (2005) even suggests that the higher wages in the public sector might be driving a spurious increasing TFP. This is clearly an area which needs further research.

Given the predominance of the services in the Indian economy (see Table 5), namely 52 per cent of the GDP in 2005/6, several authors have concluded that this sector is driving the current growth that India witnesses. According to the analysis of Balakrishnan and Parameswaran (2006), services led the acceleration in the growth of GDP in India in the late 1970s to early 1980s (see, also, Babu, 2005). In this regard also, the growth in India is of a very different nature from the growth in China, where services contribute only 33.2 per cent to the GDP (Panagariya, 2004). As only 23 per cent of the population is employed in India's service sector and the growth in employment in this sector has been low, many scholars have concluded that India is caught in the groove of 'jobless growth'. While the growth in employment need not match the growth in each sector, the discrepancy between the contribution of the primary sector to the GDP (20 per cent) and its share in the workforce (60 per cent of the population) is indeed worrying.

As illustrated in the previous section, despite its limitations, growth accounting can provide some insight into the proximate causes of growth. In addition, other techniques, such as growth regressions, are often employed to analyse the impacts of the immediate causes, such as quantity and quality of labour and capital, as well as the 'fundamental determinants' of growth. It is, however, important to note that both methods have been heavily criticized in the literature.<sup>15</sup>

Without going into the technical details of these debates, let us conclude this section by taking a look at these 'fundamental determinants of growth' for the Indian case. Most scholars seem to agree on the fundamental determinants of growth: physical and human capital investments, quality of institutions or governance, and investment climate. While the gross domestic capital formation ratio (33 per cent—see Table 1) is rather high, India's low literacy rate (61 per cent) could potentially become a constraint on India's long-term growth prospects. And what about India's institutions and investment climate?

In order to answer this question, we took a look at the World Bank's 'ease-of-business' indicator, which can be viewed as a measure of investment climate. This indicator ranks economies in terms of their 'ease of business', from 1 to 175, with 1 referring to the best. It averages the country's percentile rankings in 10 categories, giving equal weight to each category. Each category in its turn averages the country's percentile rankings on different

<sup>15</sup> See, for instance, Durlauf *et al.* (2004). See also Bosworth and Collins (2003) for additional references on these critiques.

**Table 7:** Cross-country comparison of ease-of-business indicators (2006)

Category	Average rank				India
	Low-income countries	Lower-middle-income countries	Upper-middle-income countries	High-income countries	
Starting a business	116	98	71	45	88
Dealing with licences	115	94	75	49	155
Employing workers	107	85	81	70	112
Registering property	113	96	76	48	110
Getting credit	121	80	69	32	65
Protecting investors	94	96	67	50	33
Paying taxes	105	101	75	52	158
Trading across borders <sup>a</sup>	130	96	71	30	139
Enforcing contracts	111	95	91	39	173
Closing a business	117	94	87	26	133
Overall rank	133	97	67	27	134
GNI per capita (\$)	436	2,037	6,431	30,763	720

Notes: <sup>a</sup> The 'trading across borders' measure does not include tariffs or trade taxes.

Source: World Bank, *Doing Business 2007*.

sub-categories.<sup>16</sup> According to the latest indicators, India ranks 134 out of 175 and is situated around the average rank of low-income countries, above the majority of the Sub-Saharan African countries and below most South- and South-East-Asian and Latin-American developing countries. From Table 7, one can see that India ranks relatively high in the 'getting credit' and 'protecting investors' spheres, but particularly low in the areas of 'dealing with licences', 'paying taxes', and 'enforcing contracts'. In these areas, as well as in the areas of 'employing workers' and 'closing a business', most analysts would agree that further reforms are needed.

The 'dealing with licences' indicator is of particular interest in the Indian case as it is often viewed as a residue of the Licence Raj that characterized India before the 1980s (Aghion *et al.*, 2006).<sup>17</sup> According to the World Bank figures, India has not improved much over the last 2 years. In India one needs on average 270 days to complete all the procedures required to build a standardized warehouse in the construction industry; this is considerably higher than the average of the low-income countries (231 days). India's cost measure of this indicator gives a slightly more optimistic picture. Obtaining the necessary licences to build the warehouse costs 606 per cent of the GNI per capita, which is in between the averages of the low-income countries (996 per cent) and the lower-middle-income countries (558 per cent).

<sup>16</sup> Note that the World Bank figures consider only the official costs and times involved for a standardized firm, assuming perfect knowledge about the procedures, and these measures most likely underestimate the real costs involved. In addition, the rankings do not take into account that the opportunity cost of time differs across countries; one day waiting in India is not the same as one day waiting in the USA. On a similar note, as the gross national income (GNI) is much higher in the high-income countries, a low cost as a percentage of the GNI is in a way 'easier' to achieve; also, as this cost is not calculated as a percentage of the PPP GNI, the actual perceived costs in developing countries might be lower than is suggested by the World Bank figures. It is unclear how these data issues affect the relative ranking of the countries.

<sup>17</sup> Some first-hand descriptive accounts of India's burgeoning bureaucracy occur in Basu (2007b).

Many scholars have argued that India's performance is surprisingly low when compared to the quality of its institutions.<sup>18</sup> Rodrik and Subramanian (2004b), for instance, using geography, openness, and economic and political institutions as fundamental determinants of growth, conclude that:

India's level of income was about a quarter of what it should be given the strength of its economic institutions. On the other hand, if political institutions are the true long-run determinant of income, India's income is about 15 per cent of what it should be. India has thus been a significant under-achiever in the sense that it has not exploited the potential created by having done the really hard work of building institutions.

In their analysis they used settler mortality, fraction of the population speaking one of the major languages of Western Europe, or fraction of the population speaking English as an instrument for institutions, as described in Rodrik *et al.* (2002).

### III. The political economy of growth

The previous section gave an overview of India's growth performance over the last 50 years and briefly outlined the elements of the current debate in the literature on India's growth. This section tells the story behind the numbers.

The first real big growth year for India, 1975/6, was also one that stood out politically as one of the most salient, if not notorious, years for the nation. That year the country's GDP grew by 9 per cent, a figure that has been surpassed only twice since then.<sup>19</sup> It was also the year in which the then Prime Minister, Indira Gandhi, declared a state of emergency and established dictatorial control over the nation. This would last for 2 years. In 1977 Indira Gandhi called an election. There is no way of knowing if this was prompted by an exaggerated sense of popularity on her part or because of a genuine fatigue she felt with totalitarian control. But the fact of the matter is that she was routed at the polls, and she would return to power (re-elected) only in 1980.

Some of the growth spurt of the early Emergency period would be undone in 1979/80, the worst-performing year in the history of independent India, but 1974–9, as already noted, was nevertheless to be the cross-over plan period when average annual growth rate closed in on the 5 per cent mark.

Thanks to the totalitarian embarrassment of 1975, most Indian commentators are loathe to identify that year as a break in the trend for the economy.<sup>20</sup> Yet there is no denying that it was, even though the sustainability of that growth impulse may be questionable. The next improvement would come in the early 1980s, when not only did the growth rate pick up further but, as pointed out above, the country broke ranks with other nations. The next change, which in our opinion was the large and sustainable change and is often thought of as a structural break, occurred in 1991, when, pushed by a macroeconomic crisis, itself caused

<sup>18</sup> See, for instance, Srinivasan (2005).

<sup>19</sup> One of these is the current year, 2006/7, the growth rate for which is *estimated* to be 9.2 per cent.

<sup>20</sup> To the extent that the value of democracy is not purely instrumental but as an end in itself, 1975–7 must overall go down as dark years in India's history. For a discussion of India's democracy and development, see Sen (2004).

by the First Gulf War and the drying up of foreign reserves, Indian undertook the most major reforms since independence.<sup>21</sup>

If these are the three landmark years—and clearly this matches reasonably well with the statistical analysis—what were the factors that led to them? There were important policy changes, it is true, but what does not always get adequate credit in the case of India are the two closely related variables that are identified in standard growth theory as among the most significant factors—the savings and investment rates.<sup>22</sup> These rates, which were traditionally very low in India, around 15 per cent till the late 1960s, began climbing all through the 1970s and crossed the 20 per cent mark in 1978/9. This must have contributed to the greater growth momentum of the mid-1970s, and, in fact, the persistent growth that we have seen since the early 1980s. The extra spike in the year 1975/6 did probably owe something to the Emergency. Trains do run on time in the first flush of dictatorship and there is anecdotal evidence that this and other work-related efficiencies were adopted in that year. But that first flush soon vanished and, thanks to severe shortages in infrastructural resources, the economy, too, slowed down severely by the end of the 1970s.

A natural question that arises is: what caused the rise in the savings rate? Unfortunately, this question has not received sufficient attention and no clear answer is available. It seems to us, however, that it had something to do with the nationalization of banks that Indira Gandhi announced in 1969.<sup>23</sup> After nationalization, the banks were forced to open branches in remote, ‘unprofitable’ areas. This, coupled with the impetus that came with the formation of the state-owned Unit Trust of India in 1964, may have prompted greater savings by making savings easier and safe (Shetty, 2007). Table 8 shows that there was, indeed, a phenomenal increase in the number of bank branches in India, following the nationalization; so some prima-facie evidence for this hypothesis is, indeed, there.

The opening of branches and making savings and borrowing outlets available to poorer citizens were explicit objectives of the nationalization.<sup>24</sup> And while its impact on savings awaits formal investigation, there are other kinds of related studies that do suggest the nationalization of banks had a large impact on ordinary citizens.<sup>25</sup> Burgess and Pande (2005), for instance, test whether this large state-led bank-branch expansion programme was associated with poverty reduction in India, given that an integral element of the programme was branch expansion into rural locations without banks. The paper’s main finding is that branch expansion into such rural locations in India significantly reduced rural poverty. It

<sup>21</sup> Why the Indian reforms came so late, and only when the nation was up against the wall, is itself an interesting question. It may have something to do with India’s democracy, which is quite unique. All the currently developed democratic nations adopted democracy with universal suffrage, after the process of industrialization was firmly in place. India adopted universal suffrage at independence, at a level of poverty with few parallels, and so it has had to contend with the opinion of the poor in ways that are quite alien to the industrialized nations of today (Varshney, 2007). This may also have something to do with the tenacity of India’s labour laws, discussed below.

<sup>22</sup> See Majumdar (1997) for discussion of growth theory in the context of the Indian economy.

<sup>23</sup> The Supreme Court of India initially declared the nationalization to be invalid. But Indira Gandhi amended the law and passed the nationalization decision by an ordinance.

<sup>24</sup> ‘The banking system touches the lives of millions and has to be inspired by larger social purpose and has to subserve national priorities and objectives such as rapid growth of agriculture, small industries and exports, raising of employment levels, encouragement of new entrepreneurs and development of backward areas. For this purpose it is necessary for the government to take direct responsibility for the extension and diversification of banking services and for the working of a substantial part of the banking system.’ (Bank Company Acquisition Act, 1969).

<sup>25</sup> Economic analysis of banking reform is a relatively scarce discipline in India. For recent work, see Banerjee *et al.* (2003, 2004).

**Table 8:** Number of bank branches in India (scheduled and non-scheduled commercial banks)

Year	Number
1941	2,074 <sup>a</sup>
1951	4,119
1961	5,113
1969	9,051
1971	12,985
1976	23,656
1981	38,047
1986	53,397
1991	62,740
1996	64,937
2001	67,856
2005	70,324

Notes: <sup>a</sup> India and Burma (officially now Myanmar). Note the figures from 1991 onwards are from 31 March, while those before that date are from 31 December.

Source: Reserve Bank of India, *Statistical Tables Related to Banks in India, 2005–2006* and previous issues.

**Table 9:** Nominal and real lending rates, 1970–2004

Year	1970–4	1975–9	1980–4	1985–9	1990–4	1995–9	2000–4
Nominal lending rate	9.0	10.4	13.3	13.9	16.7	15.2	11.4
Inflation rate	15.3	4.7	9.3	6.7	11	5.3	5.2
Real interest rate	–4.9	5.9	3.9	6.8	5.2	9.4	5.9

Note: The nominal lending rate is an average of the rates for four major lending institutions. The inflation rate is measured by the annual rate of change in the wholesale price index for all commodities.

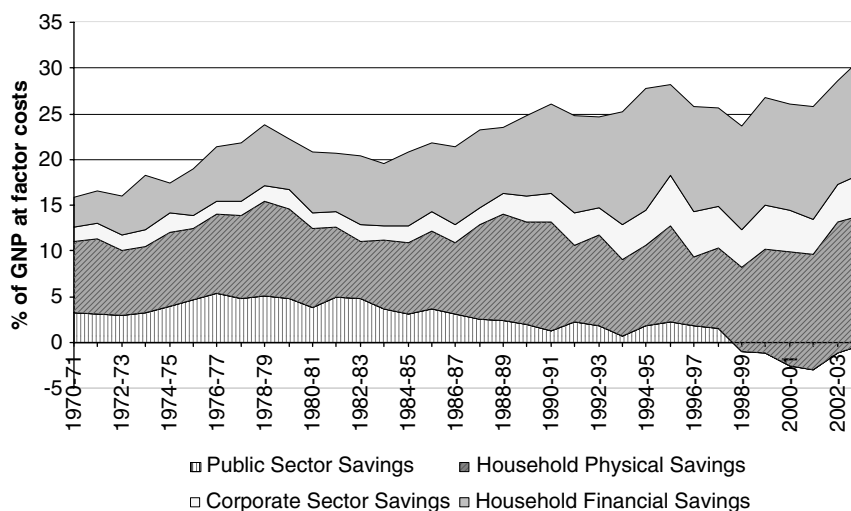
Source: Bosworth *et al.* (2007, Table 12)

seems natural to expect that such a large banking initiative did cause a boost in savings, especially since it coincided with the rise in India's savings rate.

Another reason for the increasing savings rate could be the increasing real interest rates (Table 9). These are positive and show an increasing trend since 1974. Yet, most detailed studies of savings find a rather weak connection between interest rates and savings (Rao, 2007; Shome, 2007), suggesting that consumers are more interested in long-run prospects and the facilities for saving than the immediate lure of interest. As Shome (2007, p. 464) remarks, 'But it is clearly the growth in financial intermediation that stands out most as the main driver of savings.'

Let us look at some statistics on the growth of savings in India. Bosworth *et al.* (2007) report that not only have national savings risen considerably since the 1980s, but that, in particular, household savings have risen from 10 to 25 per cent of GDP during the last 30 years. Half of this is in the form of financial savings, which can be channelled back into other sectors as investment. Public-sector saving, however, has not performed as well. From a high of around 4 per cent in the 1970s, it became negative in the late 1990s, recovering only recently. These trends are noted in Figure 3. Note that savings are reported here as percentage of GNP at factor costs. It is also important to note that savings have risen



**Figure 3:** Domestic savings per sector

Note: Old series (base: 1993/4) used for calculation.

Source: Reserve Bank of India, *Handbook of Statistics on the Indian Economy 2006* (Tables 1 and 10).

particularly in the post-liberalization years. Whether there is a link between higher savings and post-liberalization policies needs to be further researched.

To conclude, the rise in India's savings rate deserves more detailed investigation than has occurred thus far. Given that India is currently in the midst of another sharp rise in savings (the first since the late 1970s), this is a subject of contemporary relevance.

The second acceleration—in the early 1980s—probably owes something to altered policies, and, of course, it came with a background of higher investment and savings rates. The change in policy regime makes for interesting political sleuthing. It seems to have much to do with Indira Gandhi's altered perceptions. The reading of descriptive accounts of her regime (for instance, Dhar, 2000; Frank 2002) suggests that unlike her father, Nehru, India's first Prime Minister, Indira Gandhi never had strong convictions about economic policy. Her early commitment to 'socialism' was arguably prompted by an instinctive following of her father's convictions and policies, without any deep convictions of her own. She nationalized banks and established control over grain trade as homage to her father without a coherent plan for the whole economy as such.

By the mid-1970s she was under the influence of another man—her younger son, Sanjay Gandhi. Sanjay was not committed to any well-thought-out ideology, but was wary of Congress socialism. What was notable about him was his vaulting ambition and, along with his entrepreneurial friends, he pushed India towards crony capitalism. Much has been written about his disproportionate influence on his mother. In an interview that he gave in July 1976, he openly criticized the Communist Party of India (an ally of Indira Gandhi) and disparaged earlier policies of the Congress. Mrs Gandhi was upset by the interview and summoned P. N. Dhar, who headed her secretariat, and told him, 'Sanjay has done something terrible and I am upset' (Dhar, 2000, p. 325). The conversation that followed, where she asked Dhar to do the damage control, suggested to him that she was 'afraid' of Sanjay's 'displeasure'. As time progressed and she felt more and more isolated from her own party and other politicians,

she turned increasingly to her son, who had visions, without wisdom, of an entrepreneurial revolution, mainly under the ownership of him and his friends.<sup>26</sup>

By the early 1980s India had started out on a path of openly capitalist development. Even though this was done with no systematic vision and with favours doled out to those close to the government, it boosted growth, as the statistical analysis above shows. The economy had for so long been shackled by bureaucratic rules and red tape that the release from these, however small, caused a rise in growth. Moreover, by now India had higher investment and savings rates to support this.

By the late 1980s, even though the country was growing fast, it was beginning to borrow heavily from its future, which makes us believe that the growth impulse of the 1980s would not have been sustainable without sharp changes in policy. The fiscal deficit was growing, international debt was reaching record levels, and the debt–service ratio had become untenable. The meltdown happened in 1990/1. The First Gulf War was the proximate cause, but the bubble was anyway ready to burst. Huge amounts have been written on this crisis<sup>27</sup> and we will not go into that here. But the crisis became an impetus for economic reform. By 1991 government had changed hands. Narasimha Rao was Prime Minister and Manmohan Singh was his Finance Minister. Under their stewardship a reform started, more far-reaching than any since the early days of Nehru’s government. Industrial licensing was discarded and the astronomical import tariff rates were set on a sharp downward course. The first 2 years of the reform were a difficult time for the economy. But in terms of overall growth rate and performance in the international sector, the Indian economy has not looked back since then. From 1994 to 1997 the economy grew at a rate of above 7 per cent for 3 successive years, slowing down a little after that as a result of the general East-Asian crisis; but over the last few years the growth rate has picked up again. It has not dropped below 7.5 per cent per annum since 2003 and has thrice crossed the 8 per cent mark. What has been powering this new growth and was the big success of the reforms was the international sector. India’s foreign-exchange balance started rising from a precarious low in 1991, when the country was on the verge of default, to a very comfortable level. As Table 10 shows, the reserves had fluctuated but, on balance, remained low for several decades, up to 1990. Since then, with the reforms marking an excellent dummy variable, it has grown sharply. Currently, India is among the world’s five largest foreign reserve holders.

Even exports have risen, especially when one includes software and information-technology-related invisibles within exports.<sup>28</sup> According to World Bank figures (see Figure 4), exports, as a percentage of GDP, crossed 10 per cent for the first time in 1992 and are currently over 19 per cent. With the rise in foreign-exchange balance and the confidence of success in the software and pharmaceuticals sector, Indian corporations have gone on a spree of buying international companies, an activity unheard of 10 years ago. It is this international presence and visibility that has given India somewhat disproportionate global media attention. But that in itself is an advantage, since it has boosted confidence in the country, pouring money into the Indian bourses, and become partly self-fulfilling.

While the economic reforms of 1991–3 lie behind the international success of the country, there is more to the story, especially over the last 4 or 5 years and this, once again, intertwines with politics, this time global politics.

<sup>26</sup> Sanjay Gandhi died when a plane that he was flying crashed on 23 June 1980.

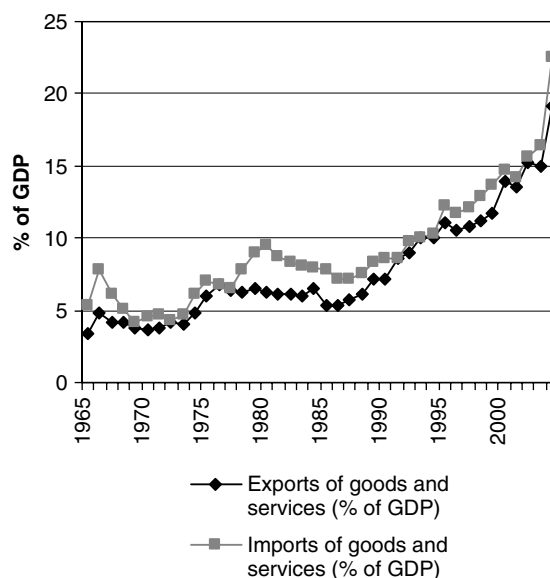
<sup>27</sup> See, for instance, Desai (1994), Srinivasan (2000), Ahluwalia (2002), Bardhan (2004), Basu (2004), and Chidambaram (2007).

<sup>28</sup> For an analysis of India’s success in software and information technology, see Kapur (2002) and Murthy (2004).

**Table 10:** Foreign-exchange reserves in India, selected years

Year	Foreign-exchange reserves (\$ millions)	Aggregate export of goods and services (\$ millions)	Short-term debt, (as % of foreign reserves)	Debt–service ratio
1977	5,824	6,354		
1990	5,834	18,477	129	35
1994	25,186	26,855	14	26
1998	32,490	34,298	16	18
2002	75,428	52,512	10	14
2005	130,000	68,000	5.7	6.2

Sources: Government of India, Ministry of Finance, *Economic Survey* (various years); press releases of the Ministry of Commerce.

**Figure 4:** Export and imports as a percentage of GDP in India, 1965–2004

Source: World Bank, *World Development Indicators* 2006.

There are two factors to which it is worth drawing attention.<sup>29</sup> First, there was one unintended positive spillover of the last US presidential election. During the election campaign, outsourcing back-office work to developing countries came under heavy criticism, with some television shows, such as that of Lou Dobbs, attacking US entrepreneurs for profiteering by outsourcing work. This had a huge advertisement effect for the advantages of outsourcing. Most poor countries would not be able to afford such advertising on American television; they suddenly got it for free. Small US entrepreneurs, who were unaware of

<sup>29</sup> A more detailed discussion of this occurs in Basu (2006b).

this profit opportunity, learned about it and began outsourcing, and India's already large outsourcing business received another boost.

Second, having an alignment of interest with the world's most powerful nation, the USA, can have large benefits for an economy. We have seen this happen in the case of South Korea since the 1950s. Shifts in the global geo-political balance of power have suddenly brought India into the ambit of US interest. As long as the USA's main foreign policy concern was Communism and the USSR, it had little use for India. But now, with terrorism being the main global concern of the USA, it has shared interests with India, which are deeper than the current tactical ties with Pakistan. Also, with the rise of China, the USA has apprehensions of a new unipolar world with China at the centre or, what is only marginally better, a direct face-off with China in a bipolar world. In the event of a showdown between these two countries, the risks for the USA are huge. If China were to cut off or monitor trade flows through the Strait of Malacca, the biggest sea route for trade in today's world, this could have very large consequences for the US economy. China also has a disproportionate leverage on the value of the dollar, thanks to its large foreign-exchange holdings. India is viewed by the United States as a counterpoise for all these risks, and India's economy has benefited from this emerging geo-political advantage.<sup>30</sup>

But we want to turn now from these macroeconomic aggregates and broad global issues to the microeconomic foundations of what is happening in India. The advantages of global politics can easily be dissipated, as we saw in the case of the former Soviet Union, if a country's economic 'nuts and bolts' do not function well. There are now increasing data on the microeconomic institutions that permit businesses to thrive and grow and play a crucial role in an economy's long-run trajectory. The next section examines some of these issues.

#### IV. Microeconomic foundations

India's initial focus on the international sector has paid off handsomely. But to sustain this growth, microeconomic issues—better distribution of income, improved labour-market functioning, the control of corruption, and more efficient institutions for business and enterprise—need greater attention. These are often referred to as second-generation reforms. There is no effort here to cover all these microfoundational issues, each of which could be the subject of a full-length paper, but we comment on one, namely, labour-market regulation, where we have some insights to offer which are not common knowledge.

While the Indian economy is booming, there is evidence that workers are not partaking in the boom adequately. Employment is not growing as fast as working-age population, nor are wages rising as rapidly as per-capita income. There are many reasons for this—some to do with forces of globalization that are beyond the Indian government's policy reach. But much of it has to do with the 'culture' that pervades India's labour markets, which in turn is a consequence of the complicated and ill-conceived laws that govern the labour market.

In India there are 45 laws at the national level and close to four times as many at the level of state governments that monitor the functioning of labour markets. This complexity is reflected in the World Bank's ease-of-business indicators, where India ranked 112 out of 175 countries in the category 'employing workers' in 2006 (with 1 being the best). Even though

<sup>30</sup> Interestingly, Indo-Chinese relations have also improved steadily since Rajiv Gandhi's visit to China in 1989; and trade between India and China has grown exponentially over the last 4 years (see Ramesh, 2005).

recent changes in the regulation of several Indian states have resulted in a lower ‘difficulty of hiring index’, ‘rigidity of hours index’, ‘rigidity of employment index’, and ‘firing costs’, India still scores high on the ‘difficulty of firing’ index (70/100), which is considerably higher than the average of the low-income countries (44/100).

Some of these labour laws date back to the nineteenth century. They were meant to control conflict and keep the labour market efficient. Unfortunately, the experience has been to the contrary. According to recent World Bank estimates, in 2004 there were 482 cases of major work stoppages, resulting in 15 m human days of work loss (World Bank, 2006). Between 1995 and 2001, around 9 per cent of factory workers were involved in these stoppages. The figure for China is close to zero. On the other hand, the wages of Chinese workers are rising much faster than those of India’s workers. These facts, we would argue, are not unrelated.

Most of India’s labour laws were crafted with scant respect for ‘market response’. If X seemed bad, the presumption was that you had simply to enact a law banning X. But the fact that each law leads entrepreneurs and labourers to respond strategically, often in complicated ways, was paid no heed. In a poor country no one with any sensitivity wants workers to lose their jobs. So what does one do? The instinct is to make it difficult for firms to lay off workers. That is exactly what India’s Industrial Disputes Act, 1947, did, especially through the amendments of 1976 and 1982, for firms in the formal sector and employing more than 100 workers.

But in today’s globalized world, with volatile and shifting demand, firms have responded to this by keeping their labour force as small as possible. It is little wonder that in a country as large as India fewer than 10m workers are employed in the formal private sector. Some commentators have argued that India’s labour laws could not have had much of a consequence since most of them apply only to the formal sector. What they fail to realize is that one reason the formal sector has remained minuscule is because of these laws and also the culture that these laws have spawned (Basu, 2006a).

Several recent studies have analysed the impacts of labour regulations on firm productivity, patterns of specialization, and technological progress. According to Besley and Burgess (2004), increasing pro-worker regulation has a negative impact on investment and productivity in the registered manufacturing sectors. What is also interesting about their findings is the lack of evidence that such policies improve labor interests. Aghion and Burgess (2003) confirm these results and in addition show that the negative impact of having stricter labour regulations on productivity has increased in the post-liberalization period. Kochar *et al.* (2006), based on their analysis of the patterns of specialization of Indian firms, suggest that not only is the level of productivity of existing firms affected by stringent regulations, but new firms are also kept from entering as a result.

What is needed in India is not a law that allows employers to fire workers at will, but one that allows for different kinds of contracts. Some workers may sign a contract for a high wage, but one that requires them to quit at short notice; others may seek the opposite. This would allow firms to employ different kinds of labour depending on the volatility of the market they operate in.

Much of the debate on labour laws has been misconstrued. What is needed is not change in labour laws and policy to elicit sacrifice from organized labour, as some economists have suggested. Indian workers, whether they be in the organized sector or the unorganized sector, are too poor for that. The need is for changes in order to create greater private-sector demand for labour, which would boost wages and employment. We believe that India’s poorly construed labour laws have been so persistent because of an intellectual failure—to

wit, the inability to grasp that, in some contexts, it may be in the worker's own interest to be able to waive some rights that have been granted to him/her.

It should be clarified that we are not making the case for all workers to be given the right to give up their right either to call strikes or to continue to work, but simply arguing that there are *contexts* where it is worthwhile giving them the meta-right to give up some right. One has to weigh lots of pros and cons before making a general recommendation. We feel that the right to strike has other advantages so that, barring some very special cases, workers should always have this right. On the other hand, we believe that in India workers should be given the right to sign contracts with different kinds of firing or retrenchment rules, and that doing so is likely to cause such a rise in aggregate demand for labour that all workers will be better off. While much of the current debate in India on labour laws is conducted as though worker interests are pitted against business interests, in reality it is between thinking clearly and not thinking clearly.

It should also be added that flexibility in hiring and firing is not the only problem. India's complex web of legislation has led to a system of dispute resolution that is incredibly slow. Data from the Ministry of Labour reveal that in the year 2000 there were 533,038 disputes pending in India's labour courts; of these, 28,864 had been pending for over 10 years. If India is to be a vibrant global economy, this has to change.

In brief, the need is to move to a system that (i) makes room for more flexible contracts in the labour market, (ii) has a minimal welfare net for workers who are out of work, and (iii) resolves labour-market disputes more quickly.

## V. Conclusion

To conclude, if India wants to sustain and raise even higher its current growth, the main bottlenecks in the Indian economy will need to be addressed. These are infrastructure (roads, expensive freight rates, power supply, ports, and airports), labour and bankruptcy regulations, and the high level of corruption in the government bureaucracy. In addition, the current erratic and low growth pattern of the agricultural sector, and the rising inequality—between states, between rural and urban areas, and within urban and within rural areas mainly since the 1990s—are a concern.

Of these numerous factors, we have addressed only a few in this paper. Each of these factors deserves inquiry, research, and policy initiative, but in concluding we remark briefly on just one of them—the subject of inequality.

Comparing the ratio of the income shares of the richest 10 per cent over the poorest 10 per cent in India with other countries, one may be tempted to conclude that inequality in India is not abnormally high. According to the World Bank's *World Development Indicators 2006*, this ratio was 7.2 in India (in 2000), compared to 18.36 in China (in 2001), 48 in Guatemala (in 2002), and 15.9 in the USA (in 2000). As such, India's current inequality seems to be low and comparable to some of the Western European nations. But one has to remember that a poor country will have a natural tendency for greater equality, since people cannot survive below a certain level of income. To take an extreme case, a country that has a per-capita income equal to the subsistence income will, by definition, have no income inequality. Hence, despite the seemingly encouraging inequality ratio mentioned above, inequality—especially when it results in higher poverty—is a serious problem for India. This could lead to political tensions and could destabilize the otherwise optimistic growth scenario. But, even if it does not dampen the country's growth prospects, it seems to

us that greater equity and the reduction of poverty are valuable ends in themselves. Indeed, it is arguable that growth is valuable precisely because it enables a country to banish poverty and achieve greater equality. India's trajectory over the last 15 years has been remarkable, but there will truly be reason to celebrate this when the overall gains filter down to the poorest and the most deprived sections of India's vast population.

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