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Inequality in India: A survey of recent trends*Parthapratim Pal and Jayati Ghosh*

Abstract

This paper analyses the nature and causes of the patterns of inequality and poverty in India. Since the economic liberalization in the early 1990s, the evidence suggests increasing inequality (in both spatial and vertical terms) as well as persistent poverty. The macroeconomic policies possibly responsible for these trends include—fiscal tightening, regressive tax policies and expenditure cuts; financial sector reform that reduced institutional credit flow to small producers and agriculturalists; liberalization of rules for foreign and domestic investment, leading to more regional imbalance and skewed investment patterns, and trade liberalization, which has affected livelihoods and employment generation.

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Inequality in India: A Survey of Recent Trends

Parthapratim Pal and Jayati Ghosh

Introduction

Officially, Indian policymakers have always been concerned with the reduction of poverty and inequality. However, between the first five year plan after independence in 1947 and the turn of the century, Indian economic policy making went through a sea of change. After independence and for a period of about forty years, India followed a development strategy based on central planning. As Chakravarty (1987) pointed out, one of the reasons for adopting an interventionist economic policy was the apprehension that total reliance on the market mechanism would result in excessive consumption by upper-income groups, along with relative under-investment in sectors essential to the development of the economy. According to Chakravarty (1987: 10), policymakers in India adopted a middle path, in which “there was a tolerance towards income inequality, provided it was not excessive and could be seen to result in a higher rate of growth than would be possible otherwise.” In this context however, the macroeconomic sensitivity to inflation as fallout from growth reflected government concerns regarding the redistributive effects of inflation, which typically affected workers, peasants and unorganized sectors more.

From the mid-1980s, the Indian government gradually adopted market-oriented economic reform policies. In the early phase, these were associated with an expansionist fiscal strategy that involved additional fiscal allocations to the rural areas, and thus counterbalanced the redistributive effects of the early liberalization. The pace of policy change accelerated during the early 1990s, when the explicit adoption of neo-liberal reform programs marked the beginning of a period of intensive economic liberalization and changed attitudes towards state intervention in the economy. The focus of economic policies during this period shifted away from state intervention for more equitable distribution towards liberalization, privatization and globalization. This study focuses on the period when these neo-liberal and market-oriented economic policies were being implemented in India. However, it should be noted that the Indian experience with such policies over this period was more limited, gradual and nuanced than in many other developing countries, with correspondingly different economic effects. This paper gives an overview of the nature and causes of inequality trends since the mid-1990s and tries to explain the observed trends.

Trends in income and consumption inequality in India

The debate on economic policy and reform began in India in the 1980s, and continues today. Prior to the extensive introduction in 1991 of the new economic policy, as it came to be known, there was widespread apprehension that liberalization and excessive reliance on market forces would lead to increases in regional, rural-urban and vertical inequalities in India. Nearly fifteen years later, the issue is still under debate, with various studies unable to give an unequivocal verdict. Economists continue to disagree on whether income and consumption inequality increased in India during the reform period.

A number of studies based on the National Sample Survey (NSS) estimates of household consumption expenditure reveal mixed evidence on aggregate and regional trends. For example, Bhalla (2003) reported that both urban and rural Gini coefficients declined between 1993-1994 and 1999-2000 (Table 1). According to his calculations, rural inequality decreased in 15 out of 16 major states of India, and urban

Table 1.

Consumption distribution of India, 1983 to 1999-2000

Consumption Distribution, NSS					
	Share of:	1983	1987-1988	1993-1994	1999-2000
Rural	Quintile 1	8.9	9.3	9.6	10.1
	Quintile 2	13.1	13.2	13.5	14.0
	Quintile 3	16.7	16.5	16.9	17.3
	Quintile 4	21.7	21.3	21.6	21.9
	Quintile 5	39.6	39.6	38.5	36.7
	Gini	30.4	29.9	28.6	26.3
Urban	Quintile 1	8.1	8.0	8.0	7.9
	Quintile 2	12.1	11.7	11.9	11.7
	Quintile 3	15.8	15.5	15.7	15.7
	Quintile 4	21.5	21.4	21.6	21.7
	Quintile 5	42.6	43.4	42.8	43.0
	Gini	33.9	35.0	34.4	34.7
National	Quintile 1	8.4	8.6	8.7	8.9
	Quintile 2	12.5	12.4	12.4	12.6
	Quintile 3	16.2	15.8	15.9	16.0
	Quintile 4	21.4	21.1	21.1	21.1
	Quintile 5	41.4	42.1	41.8	41.4
	Gini	32.5	32.9	32.5	32.0

Source: Bhalla (2003).

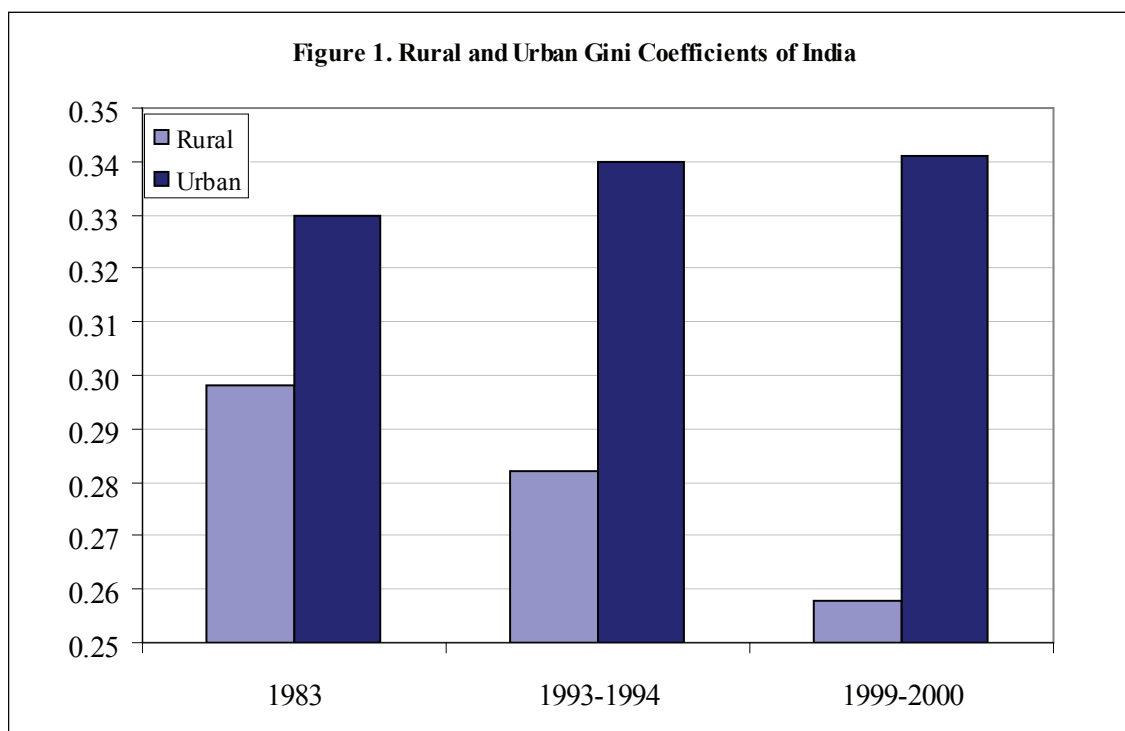
inequality declined in 8 of the 17 states over this period. He therefore concluded that inequality had not worsened in India during the period of reform.

Another study by Singh and others (2003) could not find strong evidence of increases in household inequality for the period 1993-1994 to 1999-2000. According to Singh and others (2003: 12), “there are some indications of increases in regional inequality, but they are neither uniform nor overly dramatic”. Singh and others also studied convergence of economic performance at a sub-state level. Using a set of five variables (petrol sales, diesel sales, bank credit, bank deposits and cereal production), their study found that during the post reform period, some states experienced increasing within-state inequality.

The Government of India National Human Development Report (2001) published the state-wide Gini coefficients for the years 1983, 1993-1994 and 1999-2000. These coefficients were estimated using the 38th, 50th & 55th rounds of Household Consumer Expenditure survey conducted by the National Sample Survey (NSS) of India. Comparing the level of inequality between 1993-1994 and 1999-2000, among the 32 states and union territories reported showed that seven states experienced an increase in rural inequality and fifteen states experienced an increase in urban inequality. There were five states where both urban and rural inequalities increased. It is interesting to note that all these five states were located in the North-Eastern part of India¹.

1 States and Union Territories where Rural Inequality has increased: Assam, Manipur, Mizoram, Nagaland, Sikkim, Chandigarh, Dadra and Nagar Haveli and Arunachal Pradesh. States and Union Territories where Urban Inequality has increased: Assam, Bihar, Gujarat, Haryana, Karnataka, Manipur, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Daman and Diu. Both urban and rural inequality has increased in Assam, Manipur, Mizoram, Nagaland and Sikkim.

It is also notable that during the reform period, urban inequality in India was much higher than rural inequality for most of the states. In fact, in 31 of the 32 states and union territories, urban inequality was higher than rural inequality. This was also reflected in the all India figures, which showed that urban inequality remained higher than rural inequality in all the reference years. Moreover, it could also be seen that from 1983 to 1999-2000, the rural Gini declined consistently, but there was a gradual rise in urban inequality during the same period (See Figure 1).



Source: Government of India, National Human Development Report (2001).

Using data from different rounds of the National Sample Surveys, Jha (2004) calculated rural and urban inequality in India. Table 2 reflects Jha's results for the period 1993-1994 to 1999-2000. It shows that both rural and urban Gini coefficients increased in the period between 1993-1994 and 1997, and declined between 1997 and 1999-2000. However, as Jha pointed out, and as discussed below, changes in the methodology used in the 55th round National Sample Survey meant that the results for 1999-2000 were not comparable to earlier rounds. Therefore, care should be taken not to interpret the lower Gini coefficients of 1999-2000 as a sign of declining inequality in India.

Table 2.

Trends in rural and urban inequality in India

	1993-1994	1994-1995	1995-1996	1997	1999-2000 ^a	1999-2000 ^b
Rural Gini	28.50	29.19	28.97	30.11	26.22	26.33
Urban Gini	34.50	33.43	35.36	36.12	34.40	34.25

Source: Jha (2004), 1999-2000^a –Using 30 day recall method, 1999-2000^b – Using 7 day recall, the shorter recall period was used in the 55th round.

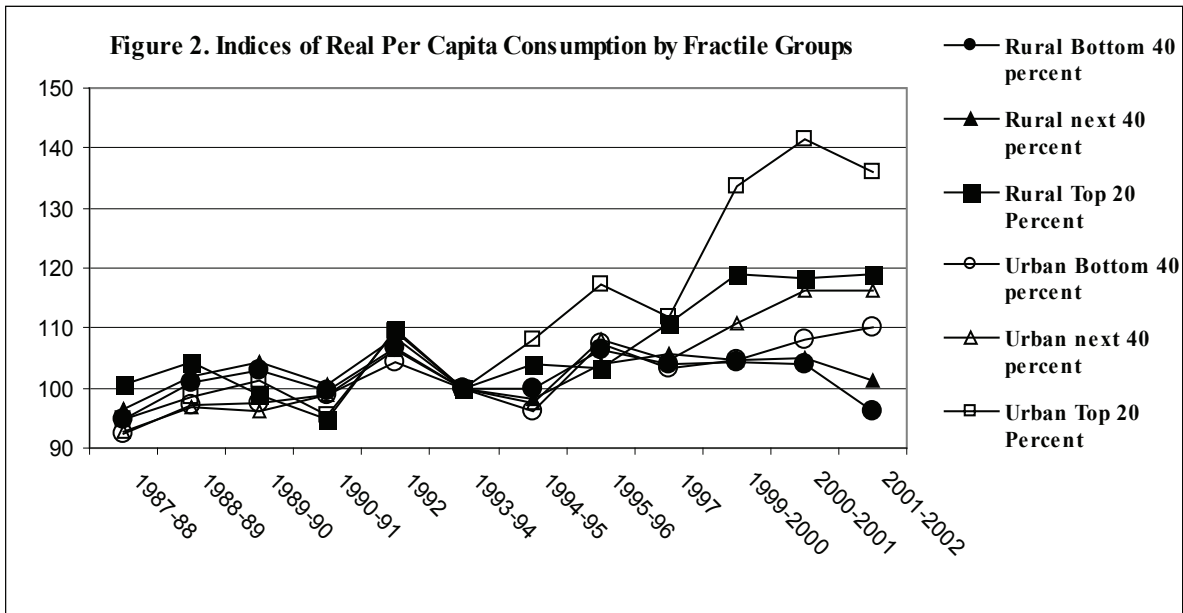
Most studies have used various rounds of NSS consumption expenditure survey statistics for calculating per capita incomes and Gini coefficients. But there is a well known problem of lack of comparability of NSS statistics between the latest (55th round, 1999-2000) round and the earlier ones. As Sen (2001) pointed out, the reference periods in the Consumer Expenditure Survey of the 55th round of NSS survey were changed from the uniform 30 day recall, used till then, to both seven and 30 day questions for items of food and intoxicants and to 365 day questions for items of clothing, footwear, education, institutional medical expense and durable goods. As Deaton and Dreze (2002) explained, the change from 30 to 365 days in the reporting period for these low frequency items possibly led to lower poverty and inequality estimates. According to them, the longer reporting period reduced the mean expenditures on these items, but because a much larger fraction of people reported something over the longer reporting period, the bottom tail of the consumption distribution was pulled up, and as a result, both inequality and poverty were reduced.

According to estimates by Sen and Himanshu (2005), the new methodology lowered the measured rural poverty in India by almost 50 million. As a consequence, rural inequality measures were also affected. Revised estimates of rural inequality had been calculated by Deaton and Dreze (2002), Sundaram and Tendulkar (2003a, 2003b) and Sen and Himanshu (2005). In general, these studies revealed that although the unadjusted data showed decreasing inequality between rounds 50 and 55, the adjusted (comparable) data suggested that rural inequality had, in fact, gone up in India between 1993-1994 (50th round) and 1999-2000 (55th round). Sen and Himanshu argued that the adjusted figures indicated that the more accurate change in rural inequality between the 50th and 55th rounds was an almost three Gini point increase, rather than a two Gini point decline. Deaton and Dreze (2002) and Sundaram and Tendulkar (2003b) also came to the conclusion that rural inequality increased in the period between 1993-1994 and 1999-2000².

Sen and Himanshu (2005) provided striking evidence about increased inequality in India in the post-reform period. Based on indices of real Mean Per Capita Expenditure (MPCE) by fractile groups, Sen and Himanshu showed that whereas the consumption level of the upper tail of the population, including the top 20 per cent of the rural population, went up remarkably during the 1990s, the bottom 80 per cent of the rural population suffered during this period (Figure 2). This graph clearly shows that the consumption disparities between the rich and the poor and between urban and rural India increased during the 1990s. These findings are based on the NSS 'thin sample' surveys, conducted annually since 1986. These surveys are not as comprehensive as the NSS comprehensive rounds or the 'thick sample' surveys, but provide sufficiently good estimates at the national level. Also, these thin sample results are comparable because they use a common type of questionnaire.

Similarly, using adjusted NSS data, Deaton and Dreze (2002) found three distinct trends of changing patterns of inequality during the 1990s. They showed that there is strong evidence of divergence in per capita consumption across states. Secondly, their estimates of state-wise per capita expenditure revealed that rural-urban inequality in per capita expenditure significantly increased at an all-India level. They also found

2 According to Deaton and Dreze (2002), the direct use of the 55th round—with no adjustment—shows a substantial reduction in inequality within the rural sectors of most states, with little or no increase in the urban sectors. But when corrections are made, results show that intra-state rural inequality has not fallen, and there have been marked increases in intra-state urban inequality. Sundaram and Tendulkar's findings show that unadjusted Gini indices for rural India are 28.6 and 26.3 from the unadjusted 50th and 55th Rounds respectively. This shows a decline in rural inequality. However, the revised and comparable estimate of Sundaram-Tendulkar (2003b) shows that the revised 50th round rural Gini was only 25.8. This implies that according to the revised data, rural inequality has gone up between the 50th and the 55th Rounds. It is also notable that the urban Gini also increased from 31.9 (50th round Mixed Recall Period) to 34.8 in the 55th round.



Source: Sen and Himanshu (2005).

strong evidence of increased rural-urban inequalities within states between 1993-1994 and 1999-2000. Jha (2004) also concluded that in both rural and urban sectors, all-India level inequality was higher during the post reform period than it was during the crisis period of the early 1990s.

Banerjee and Piketty (2001) also highlighted disproportionately large income/consumption gains by the upper tail of the population. Based on income tax reports, they found that in the 1990s, the real incomes of the top one per cent of income earners in India increased by about 50 per cent (Figure 3). Furthermore, among this top one per cent, the richest one per cent increased their real incomes by more than three times during the 1990s. Figure 3 shows the real income of the top one per cent of income earners in India as a share of total income. Banerjee and Piketty argued that the U-shaped pattern depicted in figure 3 was broadly consistent with the evolution of economic policy in India. While the 'socialist policies' of the early part of the planning period shrank the income share of the top earners very substantially until the mid-1980s, more open and pro-market policies have since allowed the ultra-rich to increase their share substantially.

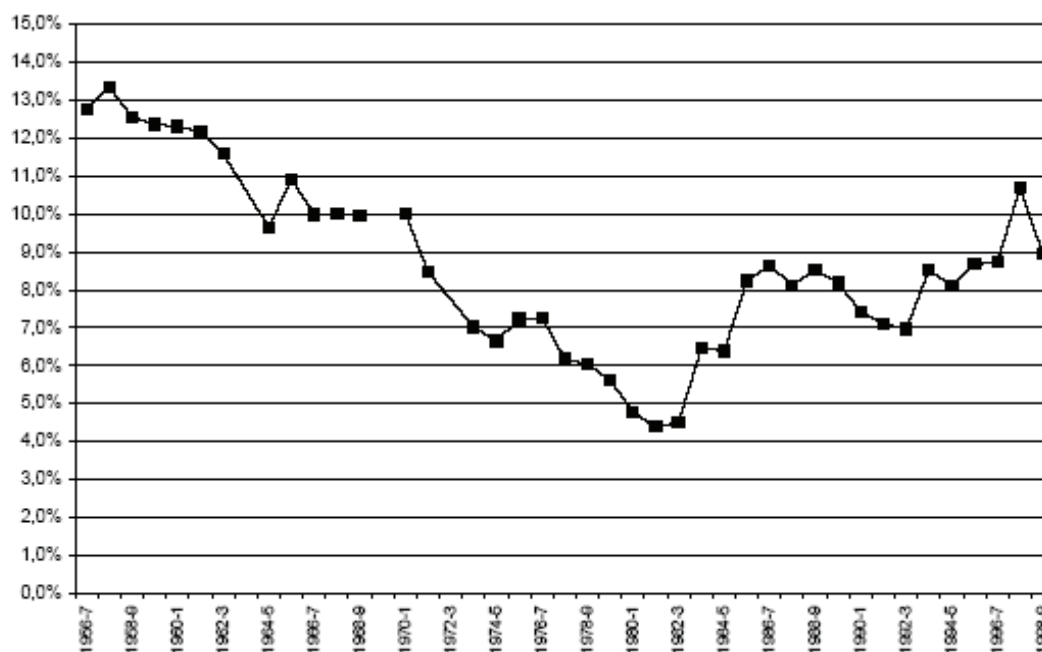
Sen and Himanshu also provided state wide rural and urban Gini coefficients for the 50th round and the 55th round NSS surveys. These Gini coefficients were comparable because they were based on adjusted data for the 50th and 55th rounds. Table 3 shows the Gini coefficients, where it can be seen that for the rural sector, eight of the fifteen states experienced a decline in inequality, while in seven others, inequality increased.³ On the other hand, it was noteworthy that for all the 15 major states, urban inequality increased by 1999-2000 as compared to 1993-1994.

Regional inequality

There was a sharp increase in regional inequality in India during the 1990s. In 2002-2003, the per capita Net State Domestic Product (NSDP) of the richest state, Punjab, was about 4.7 times that of Bihar, the poorest state. This ratio had increased from 4.2 in 1993-1994. A time-series graph of this ratio shows that

3 Assam, Gujarat, Karnataka, Kerala, Orissa, Punjab and Tamilnadu

Figure 3.

India; Real income of top one per cent of income earners as a share of total income

Source: Banerjee and Piketty (2001).

Table 3.

Gini coefficients^a

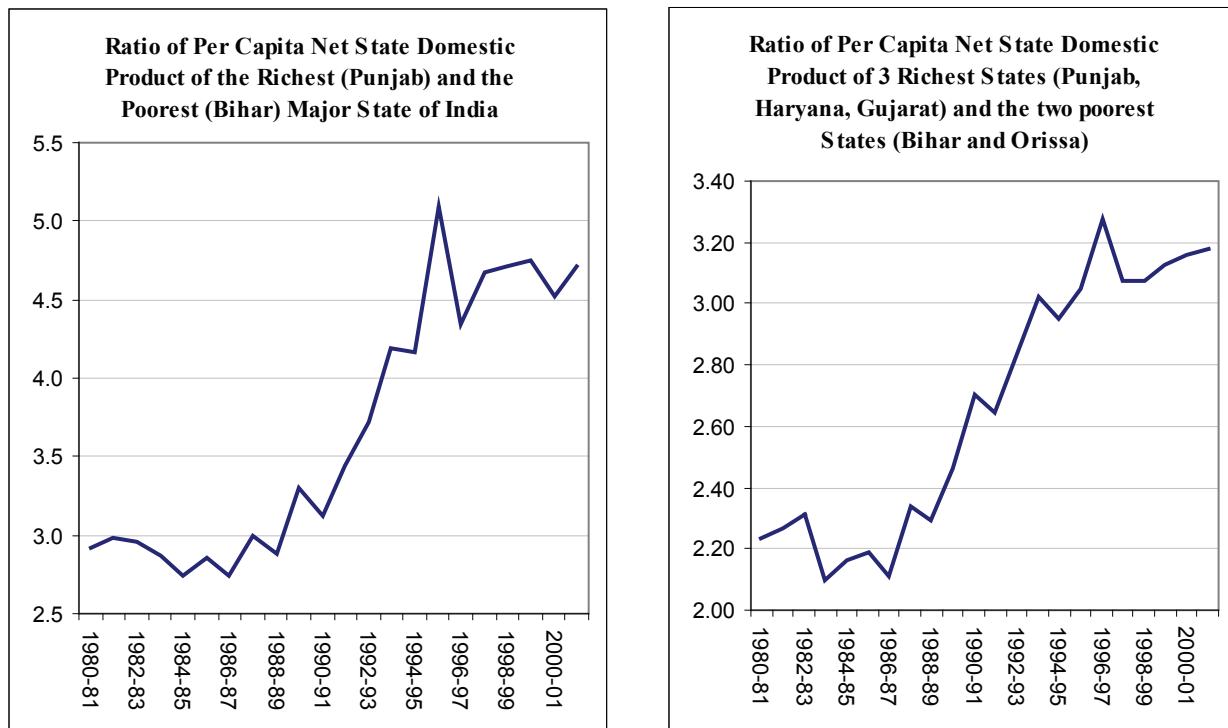
	<i>Rural</i>		<i>Urban</i>	
	<i>50th round</i>	<i>55th round</i>	<i>50th round</i>	<i>55th round</i>
Andhra Pradesh	24.9	23.8	30.3	31.7
Assam	17.6	20.3	28.3	31.2
Bihar	20.9	20.8	29.7	32.3
Gujarat	22.3	23.8	26.9	29.1
Haryana	26.9	25.0	26.7	29.2
Karnataka	24.3	24.5	30.4	33.0
Kerala	27.2	29.0	32.3	32.7
Madhya Pradesh	25.0	24.2	29.7	32.2
Maharashtra	26.7	26.4	33.5	35.5
Orissa	22.4	24.7	29.4	29.8
Punjab	23.8	25.3	26.5	29.4
Rajasthan	23.5	21.3	26.8	28.7
Tamilnadu	28.2	28.4	32.8	39.1
Uttar Pradesh	25.2	25.0	30.2	33.3
West Bengal	23.8	22.6	32.7	34.3
All India	25.8	26.3	31.9	34.8

Source: Sen and Himanshu (2005).

^a Using comparable estimates for the 50th and 55th round NSS Surveys

the disparity between the richest and poorest state shot up remarkably during the 1990s (Figure 4). This has been highlighted by Ghosh and Chandrasekhar (2003), who showed that inter-state inequality increased sharply in India during the reform period. As the authors pointed out, based on per capita SDP, the basic hierarchy of the Indian states remained the same during the reform period, with Punjab, Haryana and Maharashtra at the top, and Bihar and Orissa at the bottom. They also noted that the gap between the richest and poorest states opened up considerably after 1990-1991. To illustrate this, the authors benchmarked the average per capita net SDP of the three richest states (Punjab, Haryana and Maharashtra) against the average per capita net SDP of the two poorest states (Bihar and Orissa) (See Figure 4).

Figure 4.

Widening Disparity between the Richest and Poorest States

Source: Banerjee and Piketty (2001).

Ahluwalia (2002) also highlighted the trend of increasing inequality among states by using per capita gross state domestic product data for the period 1980-1981 to 1998-1999. The trend of the Gini coefficient indicating inter-state inequality is shown in Figure 5, which confirms that inter-state inequality grew steadily in India with liberalization.

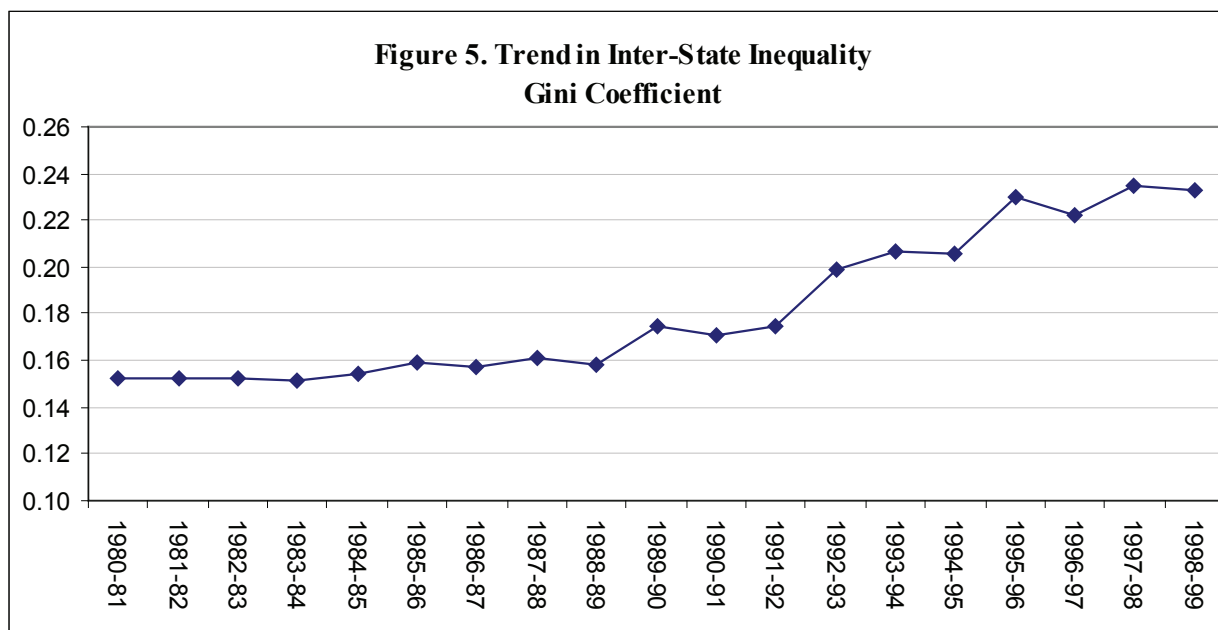
More evidence on increasing inter-state inequality came from Singh and others (2003), who used regressions to check convergence in per capita consumption expenditures across states. The study found absolute divergence of inter-state per capita consumption expenditures for the periods 1983 to 1999-2000 and 1993-1994 to 1999-2000⁴. A convergence exercise by Jha (2004) indicated that the ranking of states with respect to inequality had not changed in the reform period. According to his findings, inter-state convergence of the level of inequality was weak.

Poverty Trends in the 1990s

In addition to the discussion on inequality in India during the 1990s, there is a similar debate on the extent of poverty reduction during this same period. This debate essentially centres on two controversial and inter-linked issues.

During the early 1990s, it was observed that average consumption estimates, measured using National Accounts Statistics (NAS) data, tended to be consistently higher than NSS consumption data. Con-

⁴ For the post-reform period, the divergence was weaker, the coefficient “not quite significant at the 10% level, using a two-sided test”. (Singh and others, 2003: 5).



Source: Ahluwalia (2002).

sequently, NSS data showed higher poverty in India than NAS data. It must be emphasized here that NAS data are not the most appropriate to use because poverty estimates crucially depend on the distribution of incomes, and reliable poverty estimates cannot be directly obtained from NAS data in the absence of income distribution data. However, in spite of this NAS data limitation, the discrepancy between NAS and NSS poverty estimates fuelled a debate about the relative merit of sample surveys and national accounts statistics in India. Some proponents of the reform measures suggested that in the absence of any real evidence that consumption inequality has widened among the poor, NAS data essentially indicated that the National Sample Survey Organization (NSSO) survey results were not giving the right picture. They argued that surveys were unreliable and error prone, and urged a revision of the NSSO survey methodology to bridge the discrepancy between NSS and NAS data⁵. Among the pro-reformers, the opposition to the NSS methodology drew strength from the fact that for the NSS rounds 46 to 54 (1990-1998), poverty was higher than for the 45th round (1989-1990). These trends further fuelled the criticism that NSS surveys tended to underestimate consumption and eventually led to the changes in the NSS methodology for the 55th round.

Following criticism of the NSS poverty estimates, the methodology used to carry out a large scale consumer expenditure survey by the NSSO was modified in 1999-2000 (the 55th round). This led to serious compatibility issues between the 55th round and the previous rounds of NSS surveys. As mentioned before, this debate has revolved around the changes introduced in the questionnaire for the 55th round of the sample survey and the resultant changes in the data. According to most economists, these changes exaggerate the consumption data of the surveyed households, and thereby reduce measured poverty very sharply. It is not surprising that the 55th round NSS survey showed a sharp decline in poverty in India. Unadjusted 55th round estimates showed that the headcount ratio of poverty declined from 37.3 per cent in 1993-1994 to 27 per cent in 1999-2000. Surprisingly, in spite of the well-established shortcomings of the 55th round, the Indian Government accepted these figures as the official poverty estimates.

5 See Minhas (1988) for a comprehensive debunking of the claim that national account statistics are necessarily more reliable than sample surveys.

However, experts readily recognized that these figures could be misleading and spurious. Most economists tried to make a more meaningful estimate of the decline in poverty in India by attempting a reconciliation of the methodologies used in the 50th and 55th rounds of NSSO surveys. They attempted different techniques to attain this goal, and not surprisingly, even the comparable results showed considerable variation.

At one end of the spectrum is Bhalla (2003), who used NAS data for the computation of poverty, and claimed that there was a very sharp decline of poverty in India. According to Bhalla, the official poverty figure of 27 per cent for 1999-2000 was a gross overestimate. His calculations indicated that for the year 1999, poverty in India was less than 12 per cent. However, Bhalla's optimism was not shared by those who use the NSS data.

Deaton (2005), for example, attempted to reconcile the differences between the 50th round (1993-1994) and the 55th round of NSS survey, using a methodology suggested by Tarozzi (2003). This approach took into account the items in the questionnaire which were kept unchanged between the 50th and 55th rounds. Deaton found that expenditure on these items highly correlated with total household expenditure. Using the expenditure pattern on these items, Deaton constructed adjusted and comparable estimates of poverty for the 50th and 55th rounds. Calculations by Deaton showed that poverty declined from 37.3 per cent in 1993-1994 to 30.2 per cent in 1999-2000. These results suggested a slightly lower decline of poverty than the official estimates.

In a series of papers, Sundaram and Tendulkar (2003a, 2003b and 2003c) also tried to reconcile the results obtained from the 50th and the 55th rounds. These authors argued that for 'high' and 'intermediate' frequency goods, the difference between the 50th and the 55th rounds was insignificant. According to them, corrections were only required for low frequency items and for items like clothing, durables, education expenses and institutional medical expenses. Using a set of assumptions, Sundaram and Tendulkar found significant poverty reduction during the second half of the 1990s. According to their estimates, poverty declined from 32.15 per cent in 1993-1994 to 27.32 per cent in 1999-2000, which indicated a smaller decline in poverty than suggested either by the official figures or by Deaton. However, there remain some reservations about Sundaram and Tendulkar's measures because some of their assumptions underlying their calculations are considered moot. Secondly, and probably more importantly, they used a different poverty line than the standard one suggested and used by the Planning Commission.

Sen and Himanshu (2005) differed from both Deaton as well as Sundaram and Tendulkar (2003a, b and c) in their approach to the problem. Sen and Himanshu relied mainly on recalculation of unit-level NSS data from rounds 43, 50 and 55, and made fewer assumptions than the others. Their estimates showed that both Deaton as well as Sundaram and Tendulkar had overestimated the decline in poverty. According to the comparable estimates calculated by Sen and Himanshu, the head-count poverty ratio in India declined by three percentage points at most between the 50th and the 55th rounds, but the number of poor in the country actually increased during this period. These authors also argued that the change in methodology for the 55th round of the survey was ill-advised because there was hardly any validity in the criticisms of the 1990-1997 NSS data and their alleged mismatch with NAS figures. According to them, the growth rate of the NSS nominal consumption expenditure was almost identical to that from the then current National Accounts series with its 1980-1981 base. Some indication of the varying results that can be obtained by using different methods is provided in Table 4, but the essential conclusion of a slowdown in the rate of poverty reduction after 1993 remains.

Table 4.

Trends in poverty (per cent of population below poverty line)

	Urban			Rural		
	Planning Commission estimate	Method 1	Method 2	Planning Commission estimate	Method 1	Method 2
1977-1978	45.2	45.2		53.1	53.1	
1983	40.8	40.8		45.7	45.6	
1987-1988	38.2	38.2		39.1	39.1	
1993-1994	32.4	32.6	27.9	37.3	37	31.6
1999-2000	23.6		24.8	27.1		28.4

Sources: Government of India, Economic Survey (various years), and Sen and Himanshu (2005)

Note: Method 1 refers to the earlier pattern of questioning with 30 day and 365 day reference periods, while Method 2 refers to the new pattern, with 7 day questions also added, as well as different reference periods for particular commodities.

Employment growth and the distribution of income generating opportunities

The most significant link between growth and poverty reduction is employment generation, which is why patterns of employment growth are usually critical in determining both changes in income distribution and the incidence of poverty. During the 1990s, the employment growth rate in India plummeted. Table 5 shows a very significant deceleration of employment generation in both rural and urban areas, with the annual growth rate of rural employment falling to only 0.67 per cent over the period 1993-1994 to 1999-2000. This is not only less than one-third the rate of the previous period 1987-1988 to 1993-1994, but it is also less than half the projected growth rate of the labour force in the same period. In fact, it turns out that this is the lowest growth rate of rural employment in post-independence history.

Table 5.

Growth rates of employment

	Rural	Urban
1983 to 1987-1988	1.36	2.77
1987-1988 to 1993-1994	2.03	3.39
1993-1994 to 1999-2000	0.67	1.34

Source: Government of India, Economic Survey (various years).

The decline in rural employment can be directly attributed to the stagnation of agricultural employment during the 1990s. NSSO data indicated that total employment in the agriculture sector increased from 190.72 million in 1993-1994 to 190.94 million in 1999-2000, registering an annual growth rate of only 0.02 per cent during this period. This was much lower than the population growth rate over the same period (1.67 per cent), and also lower than the corresponding figures for earlier periods (Table 6). In fact, the agricultural

employment growth rate plummeted to its lowest ever mark since the NSS began recording employment data in the 1950s.

One of the major reasons behind the poor employment generation during the second half of the 1990s could have been attributable to the sharp decline in the employment elasticity of output growth during this period. Among the sectors, employment elasticities fell in agriculture, mining and quarrying, manufacturing, electricity, gas and water, transport, storage and communication, finance and insurance and services sectors. In general, the employment elasticity of output growth was highest in the tertiary sector, followed by the secondary sector. In

Table 6.

Employment in Agriculture

	1983	1987-1988	1993-1994	1999-2000
Employment (millions)	151.35	163.82	190.72	190.94
Annual Growth Rate (%)	1.77	2.57	2.23	0.02

Source: Government of India, Economic Survey (various years).

the reform period, the employment elasticity of agriculture was the lowest, and among the lowest observed in Indian agriculture since 1961.

Along with the stagnation of employment generation in the agricultural sector, the real wage growth rate of agricultural labourers also stagnated during the 1990s. As Deaton and Dreze (2002) showed, if one compared the growth rate of real wages for agricultural labourers with that of public sector salaries, real agricultural wages grew at about 2.5 per cent per year during the 1990s, whereas public sector salaries grew at about 5 per cent per year during the same period. This partly explained the increased rural-urban inequality of the 1990s in India.

Sen and Himanshu pointed out that though real wage growth of agricultural labourers was positive, its impact on rural per capita income was less significant because the number of agricultural labourers grew faster than the available days for wage employment. The authors showed that according to NSS estimates, the percentage of the rural population in agricultural labour households increased from 27.6 per cent to 31.1 per cent between rounds 50 (1993-1994) and 55 (1999-2000), implying an average of 3.7 per cent annual growth of this population. Against this, it reported less than 1.5 per cent average annual growth of wage paid days of employment in agriculture. As a result, agricultural unemployment was on the rise, and the increase in real wages had not resulted in an increase in the per capita income for rural agricultural workers.

Another observable employment trend was a steady increase in the casualization of the labour force in India. The proportion of casual workers increased steadily in rural India. This was matched by a steady decrease in the self-employment of workers, both male and female, in rural India. Regular employment for rural workers was also abysmally low in India, accounting for less than 7 per cent of all workers. However, for urban areas, the share of casual employment for female workers came down over the years and regular employment rose. But for male workers, the shares of casual workers and self-employed workers steadily increased, and there was a marginal decline in the share of regular employment.

The decline in self-employment in agriculture, which was especially sharp for women, may have been related to changes in production conditions, which forced some peasants out of direct cultivation. There was strong evidence of the declining viability of cultivation in India over the 1990s. A recent study of farm business incomes (Sen and Bhatia, 2004) found that average farm business income at current prices deflated by the CPIAL (Consumer Price Index for Agricultural Labourers) grew at only 1.02 per cent per annum over the 1990s, compared to 3.21 per cent in the 1980s. Rising input costs and fluctuating output prices were found to be the dominant cause of this trend. These numbers were averages for farmers of all size holdings; clearly, the situation had been much worse for small and marginal farmers with inferior access to both input and product markets. This, in turn, led to a loss of assets, including land, by the small peasantry. It is now clear that this period witnessed a significant degree of concentration of operated holdings, reflecting changes in both ownership and tenancy patterns. Many small and very marginal peasants lost their land over this period, and therefore were forced to search for work as landless labourers. Meanwhile, micro-level surveys reported increased leasing-in by large farmers from small landowners. According to NSS data, there was a very large increase in landless households as a percentage of total rural households, from around 35 per cent in 1987-1988 to as much as 41 per cent in 1999-2000.⁶ This would definitely have affected the degree of labour intensity on farms.

6 This point is elaborated in Ghosh (2005).

The sector-wise distributions of the workforce showed some interesting patterns. Sundaram (2001a, 2001b)⁷ showed that if one took a broad definition of the agricultural sector (i.e. agriculture, forestry and fishing sector), the work force participation rate in agriculture declined steadily between 1961 and 1999-2000. According to his figures, there was a 16 percentage point decline in the share of the agricultural sector in the total workforce. Moreover, between 1993-1994 and 1999-2000, the share of the agricultural sector in the total workforce declined twice as fast as the rate of decline over the 33-year period between 1961 and 1994. As a result, as noted earlier, there was hardly any change in the absolute number of workers in the agricultural sector.

Sundaram also showed that of the 16 percentage point decline in the share of the agriculture sector, the manufacturing (and repair services) sector and the construction sector gained about 3 per cent each of total employment. But the services sector, as a group, recorded a 10 percentage point gain in its share of the workforce. About 50 per cent of this increase was caused by the relatively high employment growth rate in the trade, hotels and restaurants sector. The transport, storage and communications, as well as the community, social and personal services sectors each gained 2 percentage points in their (respective) shares of the workforce.

Agriculture still employs about 75 per cent of the total female workforce in India. For rural female workers, dependence on agriculture is much higher at around 84 per cent. Data from earlier NSS rounds also showed that in 8 of the 17 major states, the share of agriculture in total female rural employment exceeded 90 per cent; in 15 states, their share was no less than 75 per cent in 1999-2000. Only in West Bengal and Kerala, did rural females account for a somewhat higher proportion of non-agricultural employment (Chadha and Sahu, 2002). This trend was contrary to the trend observed for male workers. As the NSS data showed, there was a steady decline in the proportion of male workers dependent upon the primary sector. Increasingly higher proportions of male workers (both rural and urban) were getting employed in secondary, tertiary and other non-farm activities, increasing from 22 per cent in 1983 to 29 per cent in 1999-2000.

In this context, the difference between the occupational structures of rural and urban female workers is worth noting. Whereas 37.8 per cent of urban female workers are employed in the services sector, the corresponding figure for rural female workers is 4.3 per cent. In spite of the fact that the tertiary sector is the fastest growing sector in the Indian economy, the share of rural female workers in this sector has not improved in the post-liberalization era. This difference between rural and urban female workers is a consequence of the fact that in poor developing countries like India, the ability of rural female workers to make inter-sectoral shifts in occupation is severely limited by various social and economic factors including their education and skill level. It is notable here that in most Indian states, the differences in the education and literacy standards between males and females are quite significant.

The lopsided nature of employment growth in India is evident from Table 7, which shows that employment in all sub-sectors of the services sector (except community, social and personal services) increased much faster than in the rest of the economy. However, in spite of the high rate of employment generation in the services sector, poor performance in agriculture and in some industrial sectors has brought down the overall rate of employment generation.

7 Sundaram (2001b) uses revised Census 2001 figures for population and workforce data. So the figures from this paper may not totally match figures from earlier papers, which have used earlier (and provisional) estimates of population and workforce data.

Table 7.

Employment growth rate of India by sector

	1983 to 1987-1988	1987-1988 to 1993-1994	1983 to 1993-1994	1993-1994 to 1999-2000
Agriculture	1.77	2.57	2.23	0.02
Industry				
Mining & quarrying	7.35	1.00	3.68	-1.91
Manufacturing	3.64	1.23	2.26	2.58
Electricity, gas & water supply	2.87	7.19	5.31	-3.55
Construction	12.08	-1.38	4.18	5.21
Services				
Trade, hotels & restaurant	4.89	2.99	3.8	5.72
Transport, storage & communication	3.21	3.46	3.35	5.53
Financial, insurance, real estate & business services	4.72	4.50	4.60	5.40
Community, social & personal services	3.57	4.06	3.85	-2.08
<i>All Sectors</i>	2.89	2.5	2.67	1.07

Source: Government of India, Economic Survey (various years).

In India, only about eight to ten per cent of the population is involved in the organized sector. But employment generation in this sector suffered during the 1990s, mainly because of a decline in employment generated by the public sector. However, due to the better performance of the private sector, total employment generated by the organized sector grew marginally in the period 1995-2001. The deceleration in organized sector employment was one of the more disconcerting features of the 1990s, especially since industrial output increased manifold and the service sector, in which much organized employment was based, was the most dynamic element in national income growth. So, along with the deceleration of employment generation in the rural areas, urban employment generation also suffered during the 1990s. However, there was some increase in employment opportunities in certain service sub-sectors such as information technology, communications and entertainment related services. But the numbers involved remained very small (currently around 170,000 to 200,000) relative to the size of the labour force and these jobs remain concentrated in the larger cities. So this really created some islands of prosperity in an otherwise desperate employment scenario.

There was also a strong gender dimension in the growth rate of organized sector employment. For male workers, employment in the organized sector has steadily declined since 1997. Both in private and public sector companies, employment of male workers fell. Female workers, on the other hand, have done better, and there has been an increase in aggregate organized sector employment for them.

State wise employment generation data also revealed higher levels of inequalities in 1999-2000 than in 1993-1994. The coefficient of variation across states increased from 53.7 in 1993-1994 to 63.7 in 1999-2000. Out of the fifteen major states and union territories, only three (Gujarat, Haryana and Karnataka) experienced a decline in the unemployment rate during this period (Table 8).

Inequalities in health, nutrition and education

India's performance in health is one area which has been extremely disappointing over the years. Though there have been improvements in some health related indicators like birth and death rates, India's performance in a number of health-related development indicators has been worse than Sub-Saharan Africa's. Also,

Table 8.

Unemployment rates by State between 1993-1994 and 1999-2000

	Employment ('000)	Employment Growth	Unemployment Rate		Employment Elasticity	GDP growth Rate
	1999-2000	1993-1994 to 1999-2000	1999-2000	1993-1994	1993-1994 to 1999-2000	
Andhra Pradesh	30 614	0.35	8.03	6.69	0.067	5.2
Assam	7 647	1.99	8.03	8.03	0.737	2.7
Bihar	30 355	1.59	7.32	6.34	0.353	4.5
Gujarat	18 545	2.31	4.55	5.7	0.316	7.3
Haryana	5 982	2.43	4.77	6.51	0.42	5.8
Himachal Pradesh	2 371	0.37	2.96	1.8	0.052	7.1
Karnataka	20 333	1.43	4.57	4.94	0.188	7.6
Kerala	8 902	0.07	20.97	15.51	0.013	5.5
Madhya Pradesh	28 725	1.28	4.45	3.56	0.272	4.7
Maharashtra	34 979	1.25	7.16	5.09	0.216	5.8
Orissa	11 928	1.05	7.34	7.3	0.262	4
Punjab	8 013	1.96	4.03	3.1	0.426	4.6
Rajasthan	19 930	0.73	3.13	1.31	0.104	7
Tamil Nadu	23 143	0.37	11.78	11.41	0.052	7.1
Uttar Pradesh	49 387	1.02	4.08	3.45	0.185	5.5
West Bengal	22 656	0.41	14.99	10.06	0.056	7.3
<i>All India</i>	336 736	1.07	7.32	5.99	0.16	6.7

Source: Government of India, Economic Survey (various years).

the improvements have not been uniform throughout the country. Health services are much better in urban areas, and there are differences in the population's health across different regions.

Dreze and Sen (2003) pointed out that India has fared much worse than Sub-Saharan Africa in nutrition-related indicators such as the proportions of undernourished children, low birth weight babies and pregnant women with anaemia. The proportion of females to males in the population is also lower in India than in Sub-Saharan Africa. World Bank data suggest that about 53 per cent of children are undernourished, and the proportion of pregnant women with anaemia is as high as 88 per cent. In fact, as far as these indicators are concerned, for all the countries for which data are available, none—except Bangladesh—has fared worse than India. Also, if one looks at basic gender inequality data, India is again right at the bottom of the world table, along with Pakistan.

On certain other indicators like infant mortality and life expectancy, India's performance is relatively much better, but these figures hide considerable inter-state variations as well as persistent vulnerabilities of some segments of the population.⁸ For example, life expectancy at birth is about 55 in Madhya Pradesh, but in Kerala, it is more than 73 (1993-1997 data). Similarly, the number of women per 1000 males varies from 861 in Punjab to about 1058 in Kerala.

South Indian states have done much better on development-related indicators, including health indicators. For example, Kerala's health indicators are in many ways comparable to those of mid-income and high income countries. Kerala's fertility rate is about 1.8 per cent, which is lower than that of the USA and

⁸ These variations increase with the level of dis-aggregation. For example, according to 1999 data, district-level female literacy rates range between 9 and 84 per cent in India.

is comparable to West European rates. On the other hand, Dreze and Gazdar (1996) show that the performance of Uttar Pradesh and Bihar, two of the most populous states of India, has been worse than many Sub-Saharan African countries on a large number of health indicators. The Human Development Index (HDI) of India also shows considerable variations across the states (Table 9). However, the dispersion of HDI was lower in 2001 (coefficient of variation 18.4 per cent, range 0.283) than in 1991 (coefficient of variation 15.7 per cent, range 0.271).

It is also interesting to note that the inter-state variations in health related indicators do not always correlate with poverty levels. Poverty, as measured

by the head-count ratio, is higher in the eastern states of Bihar and Orissa, but child death rates are much higher in the central and northern states of Uttar Pradesh, Madhya Pradesh and Rajasthan. Despite poverty being lower in Uttar Pradesh, child mortality is more than twice as high in the state as compared to Tamil Nadu. Also, gender discrimination is most pronounced in the states of Punjab and Haryana, two of the most prosperous states of India. In fact, one of the most disturbing developments in the 1990s was the decline in the female-male ratios in the relatively prosperous states of India. The female-male ratio among children declined from 945 girls per 1,000 boys (in the 0-6 years age group) in 1991, to 927 girls per 1,000 boys in 2001. This decline was mainly driven by a combination of social discrimination against female children and the spread of prenatal sex-determination technology and sex-selective abortion. Since the largest declines in the female-male ratios have occurred in the more prosperous states of Gujarat, Haryana, Himachal Pradesh, Punjab and Delhi, it appears that economic growth may have facilitated the spread of sex-selective abortion by making sex-determination technology and sex-selective abortion more affordable. Though prenatal sex determination has subsequently been banned by the government, given the social stigma, corruption and availability of technology, it is difficult to say how effective the ban will be.

One of the main reasons behind the poor state of health care facilities in India and the high health-related inequalities across the states is the very low level of public health expenditure, which happens to be among the lowest in the world, at 5.1 per cent of Gross Domestic Product (GDP). Further, nutrition conditions are acknowledged to have a close relationship with overall health, and here, the conditions may even have worsened in recent years. There have been disturbing changes in consumption patterns, as revealed by the NSSO and other sources. Per capita food-grain consumption declined from 476 grams per day in 1990 to only 418 grams per day in 2001, while aggregate calorific consumption per capita declined from just over 2,200 calories per day in 1987-1988 to around 2,150 in 1999-2000. This decline was marked, even among the bottom 40 per cent of the population, where it was unlikely to reflect Engels curve type shifts in consumer choice, but rather relative prices and the inability to consume enough food due to income constraints.

Table 9.

India, Human Development Index by State

	<i>Value</i>	<i>Rank</i>	<i>Value</i>	<i>Rank</i>	<i>Value</i>	<i>Rank</i>
Andhra Pradesh	0.298	9	0.377	9	0.416	10
Assam	0.272	10	0.348	10	0.386	14
Bihar	0.237	15	0.308	15	0.367	15
Gujarat	0.360	4	0.431	6	0.479	6
Haryana	0.360	5	0.443	5	0.509	5
Karnataka	0.346	6	0.412	7	0.478	7
Kerala	0.500	1	0.591	1	0.638	1
Madhya Pradesh	0.245	14	0.328	13	0.394	12
Maharashtra	0.363	3	0.452	4	0.523	4
Orissa	0.267	11	0.345	12	0.404	11
Punjab	0.411	2	0.475	2	0.537	2
Rajasthan	0.256	12	0.347	11	0.424	9
Tamil Nadu	0.343	7	0.466	3	0.531	3
Uttar Pradesh	0.255	13	0.314	14	0.388	13
West Bengal	0.305	8	0.404	8	0.472	8
<i>All India</i>	0.302		0.381		0.472	

Source: Government of India (2001).

In India, the literacy rate has been increasing steadily, but still too slowly over the last few decades. The Census of India has calculated the country's overall literacy rate at 65 per cent in 2001, up from about 43 per cent in 1981 and 52 per cent in 1991. The male-female gap in literacy improved from 26.6 per cent in 1981 to 21.6 per cent in 2001, but remains large. There are significant inter-state inequalities in literacy rates. Even in 2001, Bihar, the state with lowest literacy rate below 50 per cent, was about 18 percentage points below the national average. For female literacy, the gap was even wider at about 21 per cent. By contrast, Kerala, the state with the highest literacy in India, had an average literacy rate of 90.92 per cent, with more than 86 per cent female literacy. Though the difference in literacy rates between the top and the

Table 10.

Literacy rates by location, 1991, 2001

	1991			2001		
	Male	Female	All	Male	Female	All
Rural areas	57.90	30.60	44.70	71.40	46.70	59.40
Urban areas	81.10	64.00	73.10	86.70	73.20	80.30
All areas	64.13	39.29	52.21	75.85	54.16	65.38
Rural-Urban differences	23.20	33.40	28.40	15.30	26.50	20.90

Source: Ministry of Education, Government of India website based on census (See www.censusindia.net).

bottom states has narrowed in recent years, it remains significant. Along with inter-state differences, there exist large disparities between the rural and urban sectors of the country, as Table 10 shows. In particular, the literacy rate is still shockingly low among rural women, with less than half classed as literate, even with a restricted definition of literacy.

Primary school enrolment in India may have increased steadily over the years, but is low even by South Asian standards. Countries like Sri Lanka and Bangladesh have higher primary school enrolment rates than India. Estimates suggest that more than 70 million children in the 6 to 14 years age group are either school dropouts or have never been enrolled in school at all. Many more children may be formally registered, but barely attend. This is not surprising because the bulk of primary schools in the country lack the most basic resources such as, teachers, buildings, blackboards, toilets, and textbooks. Dropout rates from schools are very high in India, with girls more prone to withdrawing. However, the dropout rate did decline marginally over the 1990s.

Another factor contributing to increased inequality in education in India has been the rapid growth of private schools. Over the years, the shares of private un-aided schools have gone up significantly at primary, mid-primary and secondary school levels. There has also been a commensurate decline in the share of government schools in these categories. The growth of private un-aided schools has been much higher at the secondary and higher secondary levels. These private un-aided schools are mostly located in urban areas, and charge much higher fees than the government or local body schools. Since these private schools mainly cater to the richer sections of the population, their rapid growth is indicative of increasing education inequality in India.

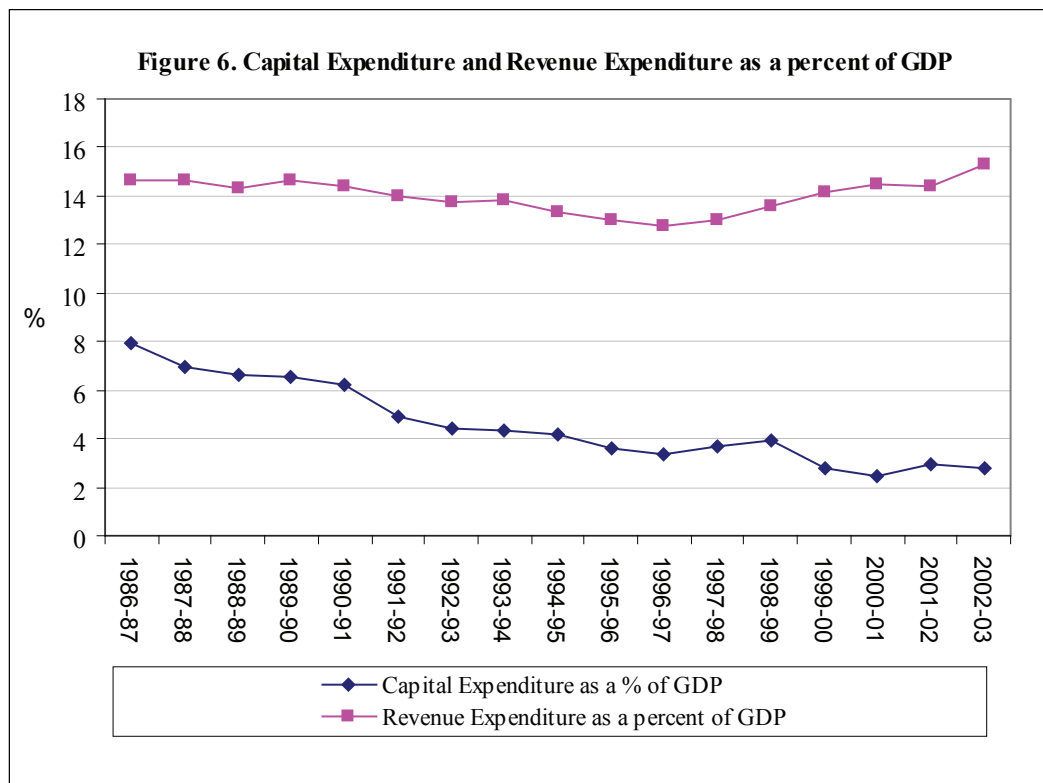
Factors behind growing inequality and persistent poverty

The earlier discussion shows a perceptible increase in inter- and intra-regional inequality in India during the reform period. This inequality is evident, not only in income terms, but also in terms of health and access to education. This section discusses some factors which might be responsible for the increase in inequality in India during the reform period.

Fiscal policy

An important element of the economic reform process adopted in India was the belief that a high fiscal deficit level was responsible for the 1991 crisis, and the deficit should therefore be brought down to a certain pre-determined target. It was argued that a high fiscal deficit is bad for an economy because it can be inflationary, can give rise to external deficits, can lead to high interest rates and therefore crowd-out private investment, and can put an unsustainable interest rate burden on an economy through accumulation of public debt.⁹ The IMF program required the government to bring down the fiscal deficit to a level of five to six per cent of GDP from the average of seven per cent of GDP for the period 1985-1990.

However, it was also part of the macro-policy paradigm that taxes should be rationalized and direct tax rates should be cut so as to improve “efficiency” and provide incentives to private investors. In addition, indirect tax rates were cut because of import liberalization and associated domestic duty reductions. This meant that fiscal balance could not be achieved through increased tax revenues, but would have to depend upon expenditure cuts. Therefore, to achieve this targeted fiscal deficit, the government undertook major expenditure cuts during the 1990s (Figure 6). Not surprisingly, the government found it difficult to cut current



Source: Ahluwalia (2002).

expenditure, so massive reductions were made in capital expenditure. As a result, central government capital expenditure, as a share of GDP, declined steadily from 7.02 per cent for the period 1986-1987 to 1989-1990 to 2.74 per cent for the period 1999-2000 to 2002-2003. Public investments in crucial areas like agriculture, rural development, infrastructure development and industry were scaled down. This adversely affected the

9 These arguments against high fiscal deficits are often not supported by economic theory. Chandrasekhar and Ghosh (2002) and Patnaik (2000, 2001a, 2001b) discuss problems of the neo-liberal arguments against high fiscal deficits

already fragile state of infrastructure in the economy and led to a virtual collapse of public services in areas like education, public health and sanitation. As discussed by Chandrasekhar and Ghosh (2002), not only were the plan targets for expenditure scaled down, but there were also huge shortfalls in public investment, even relative to these reduced targets, during most years of the decade.

In addition, there was a decline in the central government's current expenditure on rural development accompanied by an overall decline in per capita government expenditure in rural areas. The decline of government investment in rural areas marked a sharp turnaround from the trend observed during the early 1980s, when there was a large increase in expenditure on the rural sector. Political developments of the 1980s induced various governments to increase the flow of resources to this sector. This led to higher demand generation in the rural sector, and consequently resulted in lower poverty, economic diversification and increased rural employment generation. However, over the 1990s, many policies which had contributed to this rural development were reversed. Central government expenditure on rural development schemes like agricultural programs, rural employment programs and anti-poverty schemes were cut. This had a negative effect on rural poverty and employment generation during the 1990s.

Along with the cutback of central government expenditure on the rural sector, there was a gradual reorganization of the tax system, which led to reduced financial transfers to state governments. The central government reduced the Central Sales Tax (CST), introduced non-shareable levies in direct taxes, and adopted a value-added tax, all of which reduced the ability of states to generate resources. Since state governments were the dominant provider of basic services and rural infrastructure, the reduced ability of the state to finance these activities resulted in even lower levels of investment in rural sectors. This again, adversely affected demand and employment generation in the rural sector.

As part of the cost cutting exercise, subsidies given for food, fertilizer and exports were also reduced significantly. The reduction of the food subsidy crippled the public distribution system (PDS) for food, which provided fair-priced food items to a very large number of low-income households. To reduce the food subsidy, the government introduced the targeted public distribution system (TPDS). In this system, only the households which belonged to the BPL (Below Poverty Line) category were eligible for subsidized food through the public distribution system. To reduce the budgetary expenditure on food, in 1999-2000, the government tried to increase food prices to equal the economic cost of the Food Corporation of India (FCI). This led to a doubling of food prices for the above poverty line (APL) household. Food prices for BPL households were also raised by about 80 per cent during this period. At the same time, over the 1990s, the government increased the procurement prices of some major food-grains to placate the politically powerful farmer lobby. The increase in food prices led to a decline in food purchases by the public from the PDS, so stocks held by the FCI increased to three times the desired food-grain stock level, leading to very high stock holding costs. So, the attempt to reduce food subsidies by increasing prices paid by consumers had the paradoxical effect of increasing the public costs of holding food-grain stocks, and thus increased the food subsidy! Over this period, per capita food-grain availability in the country actually declined from 510 grams in 1991 to 458 grams in 2000.

Downsizing of employment in a number of key public sector industries was also undertaken in line with the expenditure-cutting exercise. This severely affected employment generation in the public sector but, as most studies pointed out, generated only notional fiscal benefits. Widespread disinvestment and sale of the equity of profitable public sector units were also undertaken during the 1990s. It was argued by the policymakers that disinvestment of public sector units (PSUs) would ensure fiscal discipline and would lead

to higher levels of efficiency. However, as many economists suspected, the real motivation behind the sale of PSUs was the accumulation of resources to meet the IMF fiscal deficit target. The disinvestment process pursued all through the 1990s turned out to be a disaster, as the controversial disinvestment of PSUs involved a number of profit making PSUs being sold at low and discounted prices to their global and domestic competitors. Not only did this result in a loss to the government exchequer, putting a recurring burden on the exchequer, but it also distorted the markets for several commodities and services. There were also persistent allegations about corruption and malpractice in the sale of PSUs.

As part of fiscal consolidation, a number of loss-making PSUs were closed down. Since some of these actually provided important services to farmers, small enterprises and people in general, their closure also had unfortunate productive and distributive implications. Many of these PSUs were not established solely as profit making companies, but were supposed to achieve various socio-economic targets. So, as a result of this process of disinvestment, the fiscal situation of the government did not improve, while many were deprived of the socio-economic benefits provided by many of these PSUs. This is one reason why the new government of the United Progressive Alliance, led by the Congress Party, declared that it would halt this process of mindless privatization, especially of profit-making public companies. Privatization of basic services like electricity and transport also raised the prices of these services in many places across India. This definitely contributed to the increased inequality observed during the 1990s. The relatively backward regions, where private participation in industry is low, were the worst hit.

The attempt by the government to undergo fiscal adjustment was essentially a one-track approach. In line with the expenditure cutting exercise, very little emphasis was put on improving revenue generation in the economy. As noted above, the dictates of market-friendly neo-liberal economic policies did not allow for increases in direct tax rates or import tariffs. As a result, the central government's tax to GDP ratio declined from about 11.8 per cent for the period 1987-1988 to 1989-1990 to about 9.6 per cent from 1999-2000 to 2002-2003.

A number of factors contributed to this decline. First, India initiated trade liberalization from the early 1990s, and levels of customs duties were reduced on a large number of goods. During the mid-1990s, tariff rates were reduced further, sometimes even going beyond the level required by WTO obligations. As a result, customs duties declined steadily from about 3.6 per cent of GDP in 1990-1991 to about 1.8 per cent in 2001-2002. Secondly, a range of excise duty concessions were introduced to boost private sector demand and to encourage the growth of private industry. Also, to attract foreign direct investment and foreign portfolio investment, a number of fiscal concessions were given to foreign investors. Huge amounts of tax revenue were foregone on these accounts.

Consequently, excise taxes declined from 4.3 per cent of GDP in 1990-1991 to 3.2 per cent in 2001-2002. During the mid-1990s, a number of direct tax concessions were also given as incentives to boost domestic savings and investment. It was argued that lowering direct tax rates would lead to higher tax revenue following the Laffer curve argument and would increase the buoyancy of tax receipts. However, Reserve Bank of India (RBI) data show that over the Eighth and Ninth Plan periods (between 1991-1996 and 1997-2001), the buoyancy of central government taxes deteriorated from 0.9 to 0.8. Though this decline happened mainly on account of indirect taxes, the buoyancy in direct tax collection stagnated at 1.3, and did not compensate adequately for the fall in buoyancy of indirect taxes. The restructuring of both direct and indirect taxes effected since the early 1990s, coupled with the structural shift in the composition of GDP towards the less-taxed services sector, appears to have affected the growth in tax revenue (Table 11).

Table 11.

Tax revenue of the Centre (Percentage of GDP)

	<i>Income Tax</i>	<i>Corporation Tax</i>	<i>Excise Duties</i>	<i>Customs Duties</i>	<i>Total Tax</i>
1990-1991	0.9	0.9	4.3	3.6	10.1
1991-1992	1.0	1.2	4.3	3.4	10.3
1992-1993	1.1	1.2	4.1	3.2	10.0
1993-1994	1.1	1.2	3.7	2.6	8.8
1994-1995	1.2	1.4	3.7	2.6	9.1
1995-1996	1.3	1.4	3.4	3.0	9.4
1996-1997	1.3	1.4	3.3	3.1	9.4
1997-1998	1.1	1.3	3.2	2.6	9.1
1998-1999	1.2	1.4	3.1	2.3	8.3
1999-2000	1.3	1.6	3.2	2.5	8.9
2000-2001	1.5	1.7	3.3	2.3	9.0
2001-2002	1.4	1.6	3.2	1.8	8.1

Source: Reserve Bank of India (various years).

of private investment. As a result of reduced public and private investment, there was inadequate productive employment generation, both in rural and urban areas. This was a key factor behind the increased inequality and slow down of poverty reduction in the country.

Financial sector reform

The crisis of 1991 hastened the process of financial liberalization pursued by the Indian government since the mid-1980s. Financial liberalization was designed to accomplish the following objectives: a) make the central bank more independent; b) relieve financial repression by freeing interest rates, and introduce various new financial instruments and innovations in the Indian financial system; c) reduce directed and subsidized credit; and d) allow greater openness and freedom for various forms of external capital flows. It should be noted that these objectives were not realized in full, and indeed, the lack of completeness of such financial liberalization has been one important reason for the relative financial stability of the country, unlike several other 'emerging markets.'

The most adverse effect of financial liberalization on inequality came from policies which eased 'priority sector'¹⁰ lending norms for nationalized banks. Until the 1980s, nationalized banks had obligations to fulfil priority sector lending targets. But post-liberalization, the priority sector definition was widened to include many more activities, and the emphasis in banking shifted instead towards maintaining the capital-adequacy level prescribed by the Basle accord. As a result, most banks now avoid lending to small farmers and small scale industries, as they are perceived to be less creditworthy customers. This has had dramatic effects on the viability and cultivation of small enterprises, which are the largest employers in the country, and has therefore indirectly impacted income distribution and poverty reduction.

A report by a Reserve Bank of India working group concluded that the recent slowdown in priority sector lending principally owes to risk aversion due to a high proportion of non-performing loans (RBI 2004). However, the composition of the non-performing assets (NPAs) of Indian public and private sector banks shows a somewhat different picture. According to RBI data, as of 31 March 2002, 77.91 per cent of total NPAs in private sector banks were in non-priority sectors, while priority sectors accounted for only

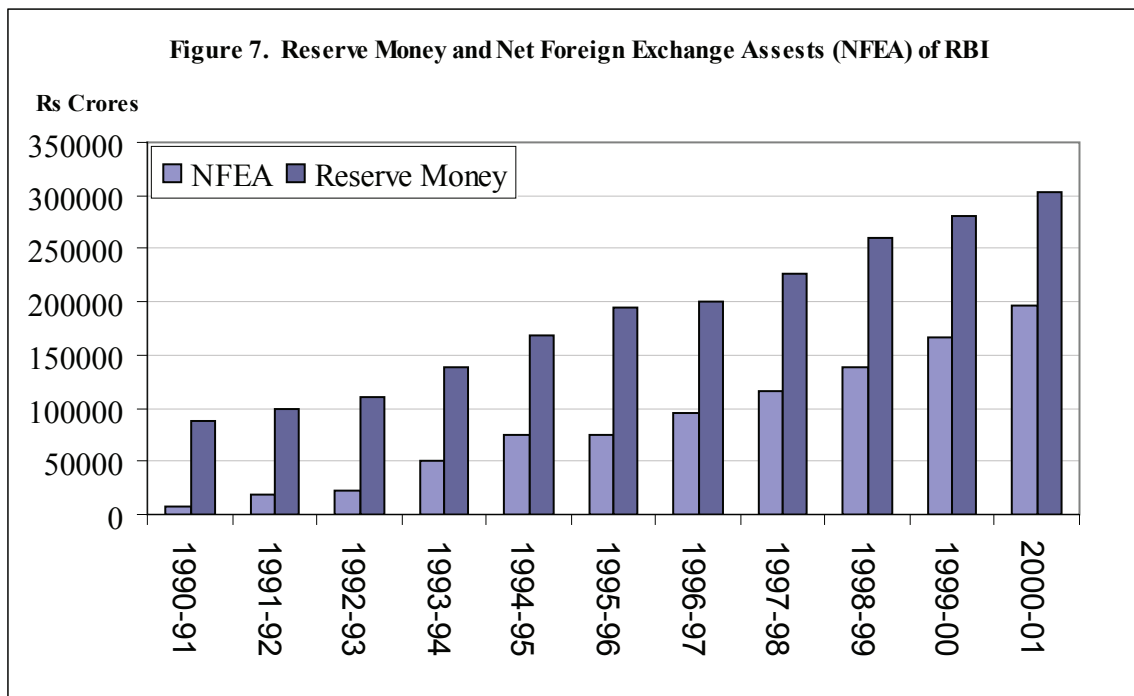
10 Priority sector includes agriculture and small and medium scale enterprises (SMEs).

Thus, it can be concluded that the fiscal policy measures initiated in the reform period did not allow the government to build up productive capacity in the economy. Lack of public investment dampened aggregate demand, negatively affected private investments, created infrastructure bottlenecks to future growth, and adversely affected the provision of important public services. Moreover, in a developing country, where capital expenditure on infrastructure and social services tends to crowd in private investment, reduced expenditure on these sectors led to the crowding out

21.8 per cent of total NPAs. For public sector banks, 53.5 per cent of NPAs were accounted for by non-priority sectors, 44.5 per cent of total NPAs were in priority sectors. Anecdotal evidence suggests that a number of big Indian business houses are responsible for a substantial share of the non-priority sector NPAs. Collusion of big business houses with the political elite has prevented strong legal measures against defaulters.

The decline in priority sector lending has led to a significant reduction in rural credit from formal channels, which has had major effects in terms of costs and the feasibility of cultivation. The irony is that the rural sector continues to contribute savings in the form of deposits into the banking system, leading to low and falling ratios of credits to deposits in rural banks. The reduced access to and higher cost of agricultural credit obviously means not just increased costs of cultivation, which has not been given adequate policy attention, but also adversely affected private investment in agriculture.

Another consequence of financial liberalization has been the high inflow of foreign private capital into India. A look at the RBI balance sheet shows that since 1993-1994, there has been a sharp increase in the Net Foreign Exchange Assets (NFEA) of the RBI. To moderate the growth of Reserve Money, which is defined as the sum of Net Foreign Exchange Assets (NFEA) and Net Domestic Assets (NDA) of the RBI, the RBI had to constrain the growth of NDA. This was partly done by selling domestic currency bonds in the market (sterilization), and partly by restricting RBI credit to the domestic sector. As a result, the share of NFEA increased from 20.44 per cent in 1992-1993 to 65.01 per cent in 2000-2001 (Figure 7). The figures show that in recent years, net foreign exchange asset accretion by the banking system became the most important source of money supply expansion in India. External compulsion of this kind can have serious implications for macroeconomic and monetary management of the country. If the central bank has to accommodate large increases in foreign capital inflow, base money supply can only be controlled by sterilization involving a reduction in central bank credit to the domestic sector. While there are obvious analytical problems with the view that such sterilization has an effect on broader measures of money supply, the point is that



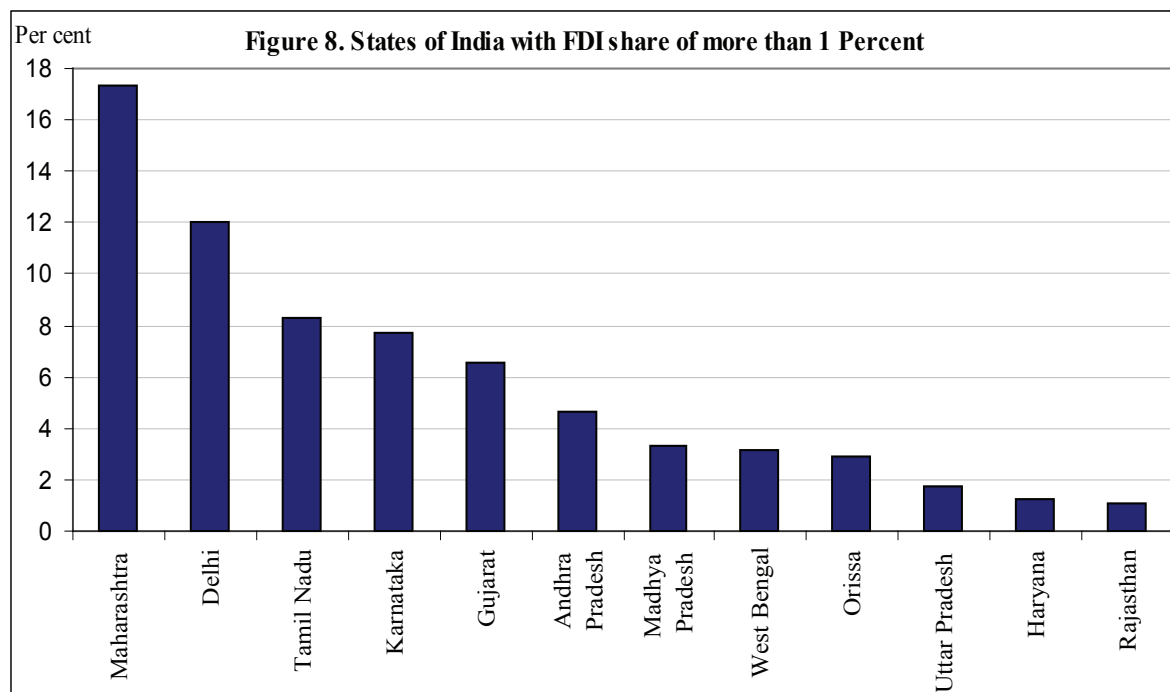
Source: Reserve Bank of India Handbook of Statistics on Indian Economy (various issues).

sterilization affects the government's own perception of the possibilities of domestic monetary expansion, and therefore constrains its fiscal behaviour. The principal area for such reductions is with regard to central bank credit to the government. This substantially increases the fiscal vulnerability of the state, reducing its ability to stimulate growth, sustain welfare measures like subsidies, and increase outlays on social sectors like health, education and meeting the basic needs of the population. This further constrained fiscal policy.

Liberalization of foreign and domestic investment

Extremely skewed inter-state distribution of domestic and foreign direct investment (FDI) has also contributed to increased inter-regional disparities in India. State-wise data on (aggregate) FDI approvals between 1991 and 2002 show that only a handful of states have managed to attract a very high share of FDI (Figure 8). From the figures, it can be seen that the top 10 Indian states attracted more than 63 per cent of total foreign direct investment in India. In contrast, the bottom 10 states together received less than 1 per cent of total FDI. There is also a strong regional disparity in the pattern of FDI flows, with the southern and western states faring much better than the other parts of the country. Three southern states (Andhra Pradesh, Karnataka and Tamil Nadu) received more than 20 per cent of total FDI, while Maharashtra and Gujarat (both in Western India) received 17.35 per cent and 7.7 per cent of FDI respectively. In contrast, the seven North-Eastern states together received only 0.03 per cent of total FDI during the same period. This unequal distribution of FDI across states in India is not unexpected, as FDI inflows tend toward states with better infrastructure and development. The concentration of FDI in a few pockets in India therefore did not help to reduce inequality during the reform period.

Apart from its very skewed regional distribution, FDI flows in India also exhibit a strong sectoral bias. In India, a very high proportion of FDI has gone into high-end consumer goods and financial services like banks, insurance companies and consultancy services. It has also flowed into information technol-



Source: Reserve Bank of India Handbook of Statistics on Indian Economy (various issues).

ogy related areas where India's human resources and research and development (R&D) base have pockets of international competitiveness. A large part of the inflow also went into the non-tradable infrastructural sector, attracted by special concessions, including guaranteed returns, offered by the government for such investments. However, benefits accruing from FDI in terms of fixed investments, exports and technological upgrading have been less than expected. This happened because since the 1990s, a significant part of FDI came in the form of mergers and acquisitions (M&As). As opposed to green-field FDI investment, M&As do not create productive capacity and hence do not benefit the host country as much. In fact, there are some negative consequences if M&As lead to the formation of monopoly powers in an industry. Also, typically with such mergers, employment stagnates or falls. This often counterbalances or even negates the increase in employment of multi-national corporation (MNC) affiliates, so that employment increases tend to be the least buoyant of all the major variables associated with MNC production.

Secondly, though FDI worth around \$30 billion has come into India since 1991, it has not contributed to an increase in exports. Most analysts suggest that a high proportion of FDI came into India during the early 1990s to jump the 'tariff wall' and service the Indian market, rather than to use the country as an export hub. There were also apprehensions that the initial inflow of direct investment would be followed by large and persistent outflows on account of imports, royalties, technical fees and dividends, with adverse balance of payments consequences. There have also been a few instances of anticompetitive practices by some large foreign companies in India. The most famous cases include the tussle between the government of Maharashtra and the energy giant Enron, and the buyout of a rival Indian cold drink company Parle Exports by Coca Cola.

However, despite the liberalization of rules regarding FDI, India's performance in attracting FDI was not particularly impressive in this period. Whereas China has managed to increase its FDI stock from \$24 billion in 1990 to \$448 billion in 2002, India's FDI stock increased from \$1.6 billion in 1990 to \$25.7 billion during 2002. FDI also financed only about 2-3 per cent of India's gross domestic capital formation, whereas the corresponding figure for China was around 10-11 per cent.

Patterns of FDI inflow in India suggest that the inflows are highly concentrated in a few states and in some sectors where India can offer either a big domestic market or cheap and skilled labour. The concentration of FDI in relatively small areas has created some illusion of prosperity, but has hardly done anything to reduce overall levels of poverty or inequality in India. On the other hand, in a bid to attract FDI to their states, many state governments have completely overlooked the rural sector and concentrated their development expenditures in the urban areas. This has resulted in increased rural-urban inequality, and has given rise to political tension in these states. In the 2004 elections, mainly due to rural discontent, the chief minister of Andhra Pradesh was voted out of office even though Hyderabad, the capital of the state, is one of the main hubs of the software industry in India and one of the most favoured FDI destinations in the country.

Along with FDI, domestic private investment has also been regionally skewed. In the reform period, decontrol of investment licensing eliminated the central government's ability to direct investment to particular areas, especially to backward or undeveloped regions. As a result, private corporate investment increasingly located in areas that could provide them with better support at lower cost. Ahluwalia (2000: 1643) argued "Private corporate investment is potentially highly mobile across states and is therefore likely to flow to states which have a skilled labour force with a good 'work culture', good infrastructure especially power, transport and communications, and good governance generally."

As a result of the increased mobility of private capital and the reduced power of the state to direct investment to certain areas, the poorer performing states, which suffer from infrastructure deficiencies, remain at a serious disadvantage in attracting private investment. This has led to the concentration of domestic investment in a few enclaves, and resulted in higher levels of inter-state inequality in India. To address this disparity, it is essential that public investment be used to build economic and social infrastructure in these states to help them attract a larger flow of private investment.

Trade liberalization

Trade liberalization is essentially inequitable in nature since it distributes income in favour of the export sector and against the import competing sector. Unless the gains from trade are redistributed, trade liberalization will always change income distribution, which may imply higher inequality. In India, a similar phenomenon can be observed, but not necessarily along the lines predicted by traditional Heckscher-Ohlin trade theory. The more employment-intensive sectors have been adversely affected, rather than encouraged, by trade liberalization. Opening up trade has helped certain sub-sectors, both in manufacturing and services, where India is internationally competitive, but mainly in activities using relatively skilled labour in the Indian context. By expanding the markets for these sectors, trade liberalization has definitely created some pockets of prosperity in India, but on the other hand, it has negatively affected most other manufacturing sectors and agriculture. The situation in agriculture is most disturbing because about 70 per cent of the population depends upon this sector. Continued subsidization of agriculture by developed countries and the resultant distortion of global agricultural trade is one of the important factors behind the poor performance of agriculture. Yet, other macroeconomic policies, such as patterns of public spending and financial policies have also played a role. Small and medium enterprises in the manufacturing sector have also been hit by trade liberalization. Typically, employment intensive domestic production has been displaced by imports of similar goods using more capital intensive production methods abroad.

There is also a possibility that increased globalization and reforms may increase the cost of labour, and this would encourage capital intensive industrialization (Goldar, 2002). This can happen because: (a) an increase in relative food prices would increase the cost of labour in the form of higher wages; (b) reduction of tariffs in capital goods sector may lead to cost advantages in favour of capital; (c) foreign competition and greater export drive may also encourage more capital intensity. Therefore, a freer trade regime may not necessarily lead to higher employment generation in a country; this is supported by India's experience thus far.

In this context, it is notable that in a liberalized trade regime, it is important that most workers possess some ability to shift jobs between sectors because trade liberalization is likely to induce the relocation of labour. Opening up trade leads to job losses in import competing industries and increases employment opportunities in export sectors. If socio-economic conditions prevent workers from making this transition smoothly, or if the rate of new job creation is not fast enough, then it may result in even higher levels of inequality than those already prevailing in the economy. It is the duty of the government to equip and train workers to build up the requisite skills to make such inter-sectoral shifts. However, the increased withdrawal of the state in India from most welfare-related issues suggests that the adjustment to trade liberalization is going to be a painful process, and the gap between the beneficiaries of trade liberalization and those who have not managed to benefit from it, will increase in the immediate future unless alternative policies are introduced.

Conclusion

In India, although there are claims that inequality has decreased in the post-liberalization period, careful analysis of data shows that these views are mostly unsubstantiated. Comparable estimates of the 50th (1993-1994) and 55th (1999-2000) rounds of National Sample Survey data reveal that inequality increased both in rural and urban India. Several authors have also pointed out that though the richer sections of the population benefited in the post-liberalization period, there has been a stagnation of incomes for the majority, with the bottom rung of the population severely negatively affected by this process. There is also evidence that, both at the national and the state levels, income disparities between the rural and urban sectors increased during this period. State-level data also showed that not only had the income gap between the poorest and the richest states increased during the 1990s, but urban inequality increased for all the 15 major states in India. Inequality also alarmingly increased in the North-Eastern part of the country, where all the states experienced increased rural and urban poverty during this same period.

One of the reasons behind the increased income inequality observed in India in the post-reform period has been the stagnation of employment generation in both rural and urban areas across the states. Open unemployment increased in most parts of the country, and the rate of growth of rural employment hit an all time low. Declining employment elasticity in several sectors, including agriculture, was one of the main reasons behind this decline. Low employment generation in the agriculture sector has also been associated with a steady, but significant increase in casualization of the labour force in India. Due to large scale downsizing and privatization of public sector units, employment generation in the organized sector also suffered. However, the services sector performed relatively better during this period. The employment growth rate in this sector was higher than in other sectors of the economy. Particularly in some sub-sectors like information technology, communication and entertainment, employment generation and wages increased substantially in this period. However, these sectors employed only a very small section of the labour force, and their impact on the overall employment scenario has been minimal. One countervailing force to the lower employment generation has been increased economic migration, typically to other countries in Asia and the Middle East. This has been especially important in certain regions and provided an important alternative source of transfer income to local residents through remittances. However, these flows have had little to do with domestic policies and more to do with international economic processes.

The discussion of health and education related indicators shows that though there has been some progress by India in these areas, this progress has been unsatisfactory, even when compared to other developing countries. Huge inter-state disparities in health and education related indicators remain across the country. State involvement and investment in these sectors has historically remained very low and declined even further during the 1990s. Gradual withdrawal of the state from these sectors and increased reliance on the private sector are likely to further exacerbate the already inequitable distribution of health and education services in India.

A number of policies adopted during the reform period essentially increased the level of inequality in India. Liberalization of trade helped some sectors where India was internationally competitive, but it also negatively affected the other sectors. The agriculture sector, as well as small and medium enterprises, which account for the bulk of employment, were the worst hit by the trade liberalization undertaken by policymakers since the mid-1990s. The inflow of FDI into India has only marginally improved gross domestic capital formation, but its incidence has been confined to some very small pockets, both geographically and sectorally. This has increased inter-state and inter-sectoral inequalities in the country.

Emphasis on reduction of the fiscal deficit also increased inequality in India during the reform period. Due to pressures from powerful lobbies, direct and indirect tax rates declined in India. The government's failure to reduce current expenditure implied that most of the adjustment to reduce the fiscal deficit was carried out by reducing capital expenditure and rural expenditure generally, as well as by selling PSUs to generate one-time revenue. Reduction of capital expenditure reduced public investment in key infrastructural areas and social welfare schemes. In a country like India, where the level of infrastructure development is poor, public investment in infrastructure is critical, not only for its direct developmental effects, but also because it brings in private investment through its crowding in effects.

Attempts to reduce government expenditure on food subsidies and social welfare schemes have also had serious negative effects on inequality in the country. In their zeal to adopt market-oriented reform measures, Indian policymakers have tended to overlook the fact that not only the so-called 'market economies' of Europe and America, but also the industrialization success stories of East Asia, all spend a very high percentage of their GDP on health, education and social security. Notwithstanding the free market rhetoric, these countries have steadily increased their public expenditure on social services since the 1980s.

Other market-oriented reform measures, like closure of non-profit making PSUs, have seriously undermined the social objectives of the PSUs and negatively affected employment and economic development in some parts of the country. The closure of non-profit-making PSUs hurt the backward regions of the country more severely because the profit-maximizing private sector often does not find these areas economically attractive.

Opening up the economy and financial sector liberalization also had major negative consequences for weaker sections of the population. The introduction of prudential norms for private and public sector banks and the Basle NPA benchmark made wary banks avoid lending to borrowers in agriculture and to small enterprises. As a result, credit flows to agriculture and to small and medium enterprises (SMEs) went down drastically in recent years. This reinforced the problems faced by these sectors due to trade liberalization and the complete removal of quantitative restrictions on imports.

All of this points to conclusions with implications for government policy. The first is the crucial importance of continued and increased public expenditure for productive investments in infrastructure as well as for social expenditures and ensuring food access. Both aggregate expenditure and the pattern of public expenditure are important. In addition, fiscal federalism—relations between the central and provincial governments—are very significant in large countries like India. Methods of raising resources for government expenditure, such as the pattern of taxation, also impact this connection. The relationships between growth patterns and the extent and type of employment generated have been extremely important as well. Trade liberalization has had dis-equalizing effects; while it provided more opportunities for some export activities, there were adverse effects for those employed in import-competing sectors, especially in small-scale activities. FDI patterns have tended to reinforce existing inequalities, possibly even more than domestic investment.

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