Looking Back on Two Decades of Poverty and Well-Being in India

Ambar Narayan
Rinku Murgai
Abstract

This paper provides an overview of poverty and well-being trends in India since the mid-1990s. Poverty reduction since 2005 has been much faster than the earlier decade, as a result of broad-based growth across most geographic areas. Underlying this is a pattern of high mobility in economic status that has led to an emerging middle class. Still, a vast (and rising) share of the population faces significant risk of slipping back into poverty. India's poor are increasingly concentrated in low-income states with historically lower rates of economic progress. Even as India has reduced poverty faster than the developing world as a whole, the degree of poverty reduction associated with growth has been substantially lower than in some of its middle-income peers. India faces important challenges in nonmonetary dimensions of welfare as well. Despite success on important fronts, such as infant and child mortality and secondary education, progress has been slow in others, such as sanitation and nutrition, and lags behind some other countries that are at a similar stage of development.
Looking Back on Two Decades of Poverty and Well-Being in India

Ambar Narayan and Rinku Murgai

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1. Introduction

Assessing how poverty and related measures of well-being have evolved, and understanding the pathways to reduce poverty and promote shared prosperity in India are issues of central importance for the country and for the world. The Government of India’s (Gol) 12th Five Year Plan recognizes poverty reduction based on faster, sustainable and more inclusive growth as its key objective and lays out ambitious targets for reducing poverty by 10 percentage points over the 2012-17 Plan period. From the global perspective, India in 2012 is home to 26 percent of the global poor at the newly updated $1.90 (2011 PPP) international poverty line. This implies that meeting the global target of an extreme poverty rate of 3 percent by 2030 (and an interim target of 9 percent by 2020) – originally adopted by the World Bank and now a key element of the Sustainable Development Goals that the global community has set for itself – will be impossible unless India makes substantial inroads in reducing poverty.

This paper examines the evolution of poverty and well-being in India since the mid-1990s, focusing primarily on the decade of the 2000s and placing India’s experience in the context of that of the developing world. Section 2 presents the trends and patterns of consumption poverty over two decades, comparing the periods of 1993-94 to 2004-05 and 2004-05 to 2011-12. It also looks at trends of consumption growth, inequality, the recently adopted World Bank Group indicator of shared prosperity, and the extent of mobility of households over time that help understand the dynamics underlying the headline poverty numbers. Section 3 assesses progress in key non-monetary indicators of welfare that have intrinsic as well as instrumental value for welfare, comparing these with the monetary poverty trends. Section 4 looks at the spatial pattern of poverty reduction across states, to examine whether the historically large gaps between high and low income states have converged over time. Section 5 uses cross-country comparisons to analyze how India’s progress in poverty reduction and non-monetary dimensions of welfare compares with the rest of the developing world and peers among middle-income countries. Section 6 addresses the question of what rate of progress is needed in India in order for the world to achieve its global goal of ending extreme poverty by 2030, and what would be needed for such progress to occur. Section 7 concludes the paper, summarizing the key findings.

2. Poverty and shared prosperity in India in the last two decades

The pace of poverty reduction in India accelerated after 2005

India has made substantial progress in reducing absolute poverty since the mid-1990s. Between 1993-94 and 2011-12, using the Government of India’s official poverty lines, the percentage of people who were poor declined from 45 percent to 22 percent, and 133 million people were lifted out of poverty. The poverty rate roughly halved in both rural and urban areas, as rural poverty fell from 50 to 26 percent and urban poverty from 32 to 14 percent. Improvement in these two decades is an acceleration of a long-term secular decline of both urban and rural poverty underway in India since the 1970s.

National poverty rates show that the pace of progress has continued to accelerate from one period to the next since the early 1990s. The poverty rate, which decreased from 45 to 37 percent of the population

1 Official poverty rates are based on the “Tendulkar” poverty lines and National Sample Survey (NSS) mixed recall period consumption data. A consistent series is available for 1993-94, 2004-05, 2009-10 and 2011-12. Although a
between 1994 and 2005, fell a further 15 percentage points in the next seven years, with similar patterns seen in both rural and urban areas (Figure 1). This was a three-fold increase in pace, as the country reduced poverty by 2.2 percentage points per year during 2005-2012, relative to the 0.7 percentage point per year decline between 1994 and 2005 (Figure 2). The period between 2005 and 2012 also contains two distinct phases: a moderate rate of poverty reduction till 2010 (which was still more than twice the rate of change seen between 1994 and 2005), followed by sharp and unprecedented reduction between 2010 and 2012.

Some of this volatility needs to be seen in the context of 2009-10 being a year of particularly severe droughts, which is likely to have dampened the gains between 2005 and 2010 and conversely, accentuated the apparent progress from 2010 to 2012 as the economy rebounded to its “trend” performance. Thus for the purpose of this paper, it seems more appropriate to focus attention on the entire period of 2005 to 2012, with occasional reference to a longer time horizon for contrast and context. At the same time, the volatility in poverty rates has significance for a different reason: it indicates the high vulnerability of a large segment of the population who are situated close enough to the poverty lines to be at risk of deprivation in the face of disasters and economic shocks.

Figure 1: Reductions in both urban and rural poverty

![Reductions in both urban and rural poverty](image1)

**Figure 2: Pace of poverty decline picked up after 2005**

![Pace of poverty decline picked up after 2005](image2)

Source: Authors’ estimates using mixed recall period consumption aggregates from respective NSS rounds and official poverty lines.

Seeing the trends in absolute numbers illustrates vividly the scale of progress and the scale of the challenge. With population growth, the number of poor people remained stubbornly high at over 400

NSS consumption survey was also carried out in 1999-2000, we do not report estimates from it because of well-known comparability problems of the consumption aggregate with other survey rounds. 2011-12 (referred to as “2012” hereafter, and so on) is the most recent year for which NSS consumption data are available.

Progress since 2005 is also confirmed by an independent, unrelated data source: the India Human Development Survey (IHDS) for 2005 and 2012 indicate a similar magnitude of decline in poverty rate, albeit with some differences with the official NSS in the rate of urban and rural poverty declines.
million in the eleven years between 1994 and 2005. In the next seven years, 137 million people (roughly 20 million per year) escaped poverty. Yet, poverty remains widespread; 270 million people still lived in poverty in 2012. Because India is predominantly rural and rural areas are poorer, a huge concentration of poor people (four out of every five) live in rural areas.

Poverty reduction in India was fueled by rising consumption levels, while consumption inequality remained more or less stable since 2005. The pace of poverty reduction tracks the growth in average consumption quite closely, as seen by comparing Figure 2 with Figure 3. Consumption inequality measured by the Gini coefficient, after rising appreciably between 1994 and 2005, has remained almost unchanged in both rural and urban areas since then (Figure 4). The Gini indices of 0.37 and 0.27 for urban and rural areas, respectively, in 2012 are on the low end of the spectrum among developing countries.

**Rising prosperity, but with falling share of the bottom 40% in total consumption**

For assessing progress among those at the lower end of the distribution, the World Bank Group’s preferred indicator for “shared prosperity”, which is the annualized per capita consumption (or income) growth of the bottom 40% of the population of a country, is an intuitive and useful metric. This indicator for India shows a significant improvement since 2005 from the earlier period, tracking the poverty trends closely. Consumption growth of the bottom 40% averaged an anemic 0.8 percent per year between 1994 and 2005, and increased four-fold to 3.3 percent per year between 2005 and 2012, averaging more than 5 percent annually during the last two years of this period (Figure 3).

Consumption growth for the bottom 40% of the distribution has however lagged slightly behind the average growth for the population through the entire period (Figure 3); which implies a declining share of the bottom 40% in total consumption expenditure, even as overall consumption inequality has remained almost unchanged since 2005. Thus there is room for improvement in the extent to which growth is “inclusive” or benefits the least well-off in society – poverty reduction in India, even during its best years, would have been even higher if consumption growth in the lower half of the distribution had matched or exceeded the average gains for the population. Interestingly, the decline in the share of the two bottom quintiles in total consumption has occurred even with an almost unchanged consumption Gini, which can occur because the Gini is a broader measure of inequality that takes into account the overall consumption distribution.

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3 See World Bank (2015), Basu (2013) and Narayan et al (2013) for the normative properties, interpretation and empirical measurement of this indicator. The welfare aggregate – household income or consumption – is typically selected to be the one that is used for poverty measurement in the country. For India, shared prosperity is estimated by the growth in consumption of the poorest 40 percent in the NSS consumption surveys.

4 This follows readily from the following algebraic property of the shared prosperity indicator: the growth of per capita consumption of the bottom 40% is decomposable into (i) the change in the share of total consumption accruing to the bottom 40% and (ii) the growth of the average consumption of the total population (Rosenblatt & McGavock, 2013).

5 It is possible, for example, for the consumption Gini to remain constant if inequality among top three quintiles falls, even as the share of the bottom 40% in total consumption declines.
High degree of mobility, where movements upward dominate

The true extent of mobility is not evident in trends in the shared prosperity indicator which refers to consumption growth of the “anonymous” bottom 40%, computed from the difference in (per capita) consumption of the bottom 40% of two different distributions at two points of time and not of the same group of households over time. In contrast, consumption growth of the “non-anonymous” bottom 40% of the distribution would measure the difference in consumption of the same group of households (those in the bottom 40% of the initial year) over time. The implications of anonymity are important to recognize for the correct interpretation of Figure 3.

How much difference does “anonymity” make in measuring shared prosperity in India? Although NSS does not allow for a tracking of expenditures by households over time, the India Human Development Surveys (IHDS) for 2004-05 and 2011-12, which include a panel component, offer the opportunity for a test. Between 2005 and 2012, annual per capita consumption growth among households who were in the bottom 40% of the consumption distribution in 2005 (9 percent) was much higher than that of the total population (4.7 percent); whereas consumption growth of the anonymous bottom 40% (4.4 percent) was on par with that of the overall population. In other words, the least well-off in 2005 experienced much higher than average growth in consumption. But as many of them rose up the distribution scale, others who did relatively worse took their place, with the net result that the difference in consumption between the bottom 40% in 2005 and the bottom 40% in 2012 was just about the same as the difference in average consumption for the whole population.

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To put it differently, India has remained as unequal (or equal) in terms of per capita consumption in 2012 as it was in 2005, but with a lot of “churning” underneath in terms of households moving up and down relative to other households, and in poverty status. As Table 1 shows, nearly one-third of all households in the IHDS panel changed poverty status from 2005 to 2012, which includes 27 percent who moved out of poverty and 7 percent who moved into poverty.

The IHDS panel also shows that movements out of poverty dominated movements into poverty: 69 percent of households who were poor in 2005 moved out of poverty in 2012, and only 11 percent of non-poor households in 2005 fell into poverty in 2012. This is not surprising, given the high rate of consumption growth among the (anonymous) bottom 40%, which caused the overall distribution to shift rightwards significantly, lifting all (or most) boats in the process.

A high degree of “churning” amid upward mobility is also observed in synthetic panels constructed from three rounds of NSS data over the period 2005-2012 (Dang & Lanjouw, 2015a). Their analysis classifies the population into the poor, the vulnerable and the middle-class (those who are neither poor nor vulnerable), where the vulnerable population are defined as those with consumption above the poverty line and below a “vulnerability line” (VL) that corresponds to a 20 percent probability of falling into poverty. This yields a VL that is about 72 percent higher than the national poverty line – slightly lower than an alternative VL equivalent to twice the poverty line, which has been used in past work by the World Bank in India as a threshold for vulnerability.

Table 1: Movements out of poverty exceed shifts into poverty

<table>
<thead>
<tr>
<th>% of Households</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td>2005</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>12.2</td>
</tr>
<tr>
<td>Non-poor</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Source: Authors’ estimates using IHDS panel (2005, 2012)

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7 See Dang & Lanjouw (2013, 2014) for a detailed discussion of the methodology of measuring poverty dynamics with synthetic panels and its application to define vulnerability lines in different countries.

8 The vulnerability line (VL) corresponds to a vulnerability index (VI) of 0.2, which is the probability of an individual being poor in 2012 given s/he is non-poor in 2005. VI is thus a welfare threshold such that an individual with consumption below this level in 2005 has a greater than 20 percent probability of being poor in 2012.

9 The Country Partnership Strategy (2013-17) for India (World Bank, 2013), uses twice the poverty line as the vulnerability threshold. It is associated with a vulnerability index of around 0.18, which implies that an individual with consumption below this threshold in 2005 has 18 percent or higher probability of being poor in 2012. Thus the seemingly arbitrary standard of twice the poverty line is associated with an estimated risk of becoming poor that is close to the 20 percent risk threshold often used to define vulnerability lines in recent research.
Figure 5: Upward mobility dominates downward mobility; most of those escaping poverty remain vulnerable

(a) VL corresponding to vulnerability index 0.2
(b) VL corresponding to 2 * PL

Notes: 1) Vulnerable are those above the (monthly) Poverty Line (PL) and below the Vulnerability Line (VL). Middle-class are those above VL. 2) Left panel: VL is given by \( \Pr(Y_t < PL | PL < Y_t < VL) = 0.2 \), where \( Y_t \) is the consumption of the individual in period \( t \) (0, 1) and \( Z_t \) is the PL in period \( t \). VL thus corresponds to a vulnerability index (VI) of 0.2, where VI is the probability of an individual being poor in 2011-12, given s/he is nonpoor in 2004-05. Right panel: uses a VL of (2*PL), which corresponds to a VI of about 0.18. All numbers are estimated with synthetic panel data and weighted with population weights, where the first survey round is used as the base year.

Source: Based on Table 7, Dang & Lanjouw (2015a)

Figure 5a shows that 52 percent of the population changed status from 2005 to 2012, using the lower VL. As in the IHDS panel, upward mobility (35 percent of the population) is much more common than downward mobility (16 percent). Upward mobility is seen among an estimated 58 percent and 34 percent of the poor and vulnerable groups of 2005, respectively, compared to downward mobility among 20 percent of the vulnerable group and 36 percent of the middle-class group, when the lower VL is used. The higher VL of twice the poverty line yields similar patterns (Figure 5b).10

An emerging middle-class, but two-thirds remain poor or vulnerable to falling back

With upward mobility, the middle class has expanded sharply. At the lower VL, the middle class increased from 23 percent to 34 percent of the population (Figure 6).11 However, the share of the vulnerable population has remained stubbornly high at two-fifths or more of the population in both years, reflecting the fact that a large number of people who have escaped poverty still have consumption levels that are precariously close to the poverty line. Among those who were poor in 2004, 58 percent are estimated to have exited poverty by 2012, but only a small minority among them had moved into middle-class (6 or 3 percent of the population, depending on the VL used). Those who are in the vulnerable group struggle to rise into middle-class, despite the opportunities afforded by rapid economic growth. Of those

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10 In addition to the results for the full period 2005-2010 shown here, Dang & Lanjouw (2015a) also do the same exercise for two interim periods – 2005-2010 and 2010-2012 – separately. The results for the two interim periods are qualitatively similar to those for the full period, with the additional insight that the chances for upward mobility was much higher and that of downward mobility just slightly higher in the second period than in the first.

11 With the higher VL, similar trends are estimated, even as the share of vulnerable population is higher and that of middle-class lower, as one would expect.
who were vulnerable in 2005, 45 percent (55 percent using the higher VL) remain vulnerable in 2012; and among those who remain in the same status in both periods, the vulnerable are the largest group (Figure 5).

Figure 6: As poverty fell, share of the vulnerable population rose slightly and the middle-class expanded (using two different thresholds of “vulnerability” or “middle-class”)

![Graph showing the share of total population for different thresholds of vulnerability and middle-class from 2005 to 2012](image)

**Notes:** See notes to Figure 5.

**Source:** Based on Table 7, Dang & Lanjouw (2015a)

Vietnam, a middle-income country that has been one of the strongest performers in poverty reduction, provides an interesting contrast to India’s experience and shows that lifting people out of poverty is not enough. Using similar measures, Dang and Lanjouw (2015b) show that India compares well with Vietnam in the degree of upward mobility. Both countries saw similar shares of the population moving out of poverty and vulnerable moving into the middle class. But downward mobility was also much more common in India, reflecting the still high levels of vulnerability to slipping back into poverty (Dang & Lanjouw, 2015b).

Reducing vulnerability would require understanding the factors that influence the direction and extent of mobility of households, starting with the observable characteristics that typically matter for the likelihood of being poor, such as education and occupation of the household head, household location, and the social group the household belongs to. Dang & Lanjouw (2015a) find that more education, being employed as a salaried or wage worker (as opposed to self-employment in or outside agriculture), living in urban areas, and belonging to social groups other than the scheduled castes and tribes are all associated

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12 See Dang & Lanjouw (2015b) for their findings on Vietnam and the United States, referring to more detailed results in Dang & Lanjouw (2014). Interestingly, the United States experienced a two percentage point decline in the share of the middle-class between 2004 and 2008, along with a roughly one percentage point increase in the share of the poor and the vulnerable, in a large part due to the financial crisis of 2008. Comparisons must however be qualified by the fact that while the same vulnerability index of 0.2 is used to define the vulnerability thresholds for all three countries, the national poverty lines they are anchored to are quite different. As a result, the line separating the middle-class from the vulnerable in the United States, and to a lesser degree in Vietnam, indicate a higher living standard than in India when adjusted for Purchasing Power Parity (PPP).
with higher-than-average chances of upward mobility, and symmetrically, lower than average chances of downward mobility. For example, the likelihood of upward mobility is significantly higher and that of downward mobility lower when the household head has secondary or higher level education as opposed to education at middle-school or lower levels.

Data uncertainties cloud the assessment of poverty, shared prosperity, and (especially) inequality

Important caveats apply to India’s estimates of inequality: when income rather than NSS consumption data are used, inequality in India appears to be lower than high-inequality countries like South Africa, Brazil and Colombia, but comparable with income inequality in Peru and Ecuador, and higher than in the Russian Federation, Turkey, and the United States.\(^\text{13}\) Why the gap between India’s income and consumption Gini measures of inequality is so large remains to be explained, but this at a minimum casts doubt on the oft-rehearsed notion that inequality is low in India. In addition, it is likely that income (or consumption) distribution from household surveys can underestimate the true extent of inequality due to under-reporting of top incomes (or consumption). Research using Indian tax return data over the period 1922-2000 shows a rising share of top income earners in total income from the mid-1980s to 2000.\(^\text{14}\) This would have led to greater underestimation of inequality over time if top income earners are insufficiently captured in the NSS data. Under-reporting of top incomes, however, is likely to have less bearing on the lower end of the distribution and therefore on poverty and shared prosperity estimates and trends.

One symptom of under-reporting is the large gap in levels and growth rates of mean consumption per person from the NSS and the private consumption component of the National Accounts Statistics (NAS), which have been diverging since the early 1990s (the 2010 to 2012 period is an exception). In levels, aggregate household consumption implied by the NSS is less than half that of the household component of the NAS. Such a gap is unusually large by international standards. The extent of bias in poverty, shared prosperity and inequality estimates depends on how much of the discrepancy is attributed to the NSS or the NAS. It is notable that changes in recall period for collecting consumption data – from URP to MRP and now MMRP – have helped close the gap between the NSS and NAS consumption aggregates.\(^\text{15}\) However, some of the gap in consumption is due to errors in NAS consumption (which is determined residually in India). Choosing between the NSS and NAS is not easy and well beyond the scope of this

\(^{13}\) Using IHDS data, Gini of household income per-capita in India is estimated to be 45.3 for 2005 and 45.9 for 2012. The income Ginis for South Africa, Brazil and Colombia are 63.4 (2011), 52.9 and 52.5 (2013), respectively. Countries with income Ginis close to India’s include Peru and Ecuador, while Russia, Turkey and United States had income Ginis between 40 and 42 (2012 or 2013) (all figures other than India’s are from the WDI database, accessed March 21, 2016).

\(^{14}\) See Banerjee & Piketty (2005), who find that the shares of the top 0.01 percent, 0.1 percent, and 1 percent in total income shrank substantially from the 1950s to the early to mid-1980s but then rose again, with some impact on the overall income distribution. The estimated impact is also large enough to explain 20-40 percent of the gap observed during the 1990s between average consumption growth in NSS data and national accounts data.

\(^{15}\) URP, or uniform reference period, is collected for a 30-day recall period for all consumption items. MRP, or mixed reference period, records consumption by combining a 30 day recall period for most items and a 365 day recall for items that are purchased with a lower frequency. The MMRP (modified-mixed reference period) aggregate introduced in 2009-10 and 2011-12 has further closed the gap. The MMRP method which reduces the recall period for some food items to a 7-day recall (compared to a 30-day recall in MRP) brings NSSO’s methods closer to the more common practice of a two week or less recall period for food items in other countries.
paper. With the available evidence, it is likely that the surveys do a better job of measuring poverty than inequality. Shared prosperity estimates could also be biased downward if NSS does not measure well the consumption growth of the bottom 40%. However, the difference between consumption of the bottom 40% and the rest (an indication of the degree to which growth is inclusive) could be larger still if underestimation is greater for richer households.

3. **Mixed progress in non-monetary dimensions of welfare**

Since the multi-dimensional aspect of poverty may not be fully captured by monetary indicators, trends in non-monetary indicators should be considered as well to get a more complete picture of the evolution of well-being in a country. In addition to their intrinsic value, non-monetary aspects of welfare have an instrumental value in reducing monetary poverty and vulnerability. With a sizeable segment of the Indian population estimated as being poor or vulnerable, improving human capability through better education, healthcare and access to basic services, to name a few, can create self-sustaining pathways out of poverty and vulnerability traps.

In India, the rapid decline in consumption poverty has been accompanied by similar progress in some, but not all, of the key non-monetary dimensions of welfare. Between 2005 and 2012, significant improvements occurred in infant and child (under age 5) mortality rates, literacy rate among working adults, and the share of children under age 5 who are not underweight; whereas progress in access to piped water, sanitation and reducing stunting among children under age 5 has been much slower (Figure 7a). While consumption poverty declined faster during 2005-2012 from the previous decade, no such acceleration is seen for non-monetary indicators (Figure 7b).

Education attainment among adults has risen appreciably since the mid-2000s, mainly due to increase in the share of adults who have completed at least secondary school. The decline in illiteracy among adults – from 38 percent in 2005 to 30 percent in 2012 – is matched by a 9 percent increase in the share of adults who have completed secondary education or more during this period (Figure 8). This indicates a positive trend of skilling of the Indian labor force as secondary school enrollments and completion have increased over the years. This trend could also have an impact in terms of reducing vulnerability, given that secondary education among household heads is associated with higher chances of upward mobility and lower chances of downward mobility for the household, as mentioned earlier.
Figure 7: Progress in some non-monetary indicators of welfare, but stagnation in others

(a) Rapid fall in child mortality, but slow progress in access to piped water and sanitation, and stunting

(b) Last decade did not see accelerated progress compared to the past


Figure 8: Improving literacy and education, mainly due to rising secondary school completion

(a) Proportion of adults (%), 2005

(b) Proportion of adults (%), 2012

Source: Employment, unemployment surveys conducted by the National Sample Survey Office (NSSO), 2005 & 2012; ‘adult’ defined as ages 15 and older.
4. **Spatial pattern of poverty reduction**

Poverty rates declined between 1994 and 2012 across all major states in India. Furthermore, as Figure 9a shows, the acceleration in pace of poverty decline since 2005 is evident in nearly every state, including states classified as “low-income states” (LIS). Gains in shared prosperity have also been widespread as annual consumption growth of bottom 40% was higher during 2005-2012 than during 1994-2005 in all large states with the exception of four, two of which are LIS (Figure 9b).

There is some degree of convergence in absolute changes in poverty rates across states, which implies that poorer states are gradually closing the gaps with richer states in the incidence of poverty. States with initially higher poverty rates experienced greater absolute reductions between 1994 and 2005 as well as between 2005 and 2012, with the rate of convergence rising in the latter period (see Figure A-1, Annex). However, absolute changes to measure catch-up can be misleading, given the vastly different initial levels of poverty across states. It turns out that states with initially higher poverty rates saw smaller percentage declines in poverty rates in both periods, indicating that there was divergence rather than convergence in terms of relative declines (see Figure A-2, Annex). Thus at current rates of poverty reduction in the states, the poorer states will not be able to catch up fully with the richer states in poverty rates. For poverty rates to fully converge across states, poverty reduction in the poorer states, which include almost all LIS, must accelerate.

**Figure 9: Poverty decline and shared prosperity has accelerated since 2005 in most Indian states**

![Graph showing poverty decline and shared prosperity](image)

<table>
<thead>
<tr>
<th>(a) Annual change in poverty rate (%)</th>
<th>(b) Annual growth in consumption per capita among bottom 40% (%)</th>
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<td><img src="image" alt="Graph 1" /></td>
<td><img src="image" alt="Graph 2" /></td>
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**Note:** Red: Low-income states (LIS). Only the 21 largest states are shown (as of 2004-05). Both figures show percentage (or proportionate) annual rate of change.

**Source:** Nayyar (2014) using NSS (different years)

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16 This section draws extensively from Nayyar (2014), which also includes detailed analysis of growth convergence across Indian states.

17 Following World Bank (2013), LIS refers to a group consisting of the following states: Assam (AS), Bihar (BH), Chhattisgarh (CT), Jharkhand (JK), Madhya Pradesh (MP), Uttar Pradesh (UP), Orissa (OR) and Rajasthan (RJ). The other states (out of the 21 larger states considered here for the analysis) are Andhra Pradesh (AP), Delhi (DL), Haryana (HY), Gujarat (GJ), Himachal Pradesh (HP), Jammu & Kashmir (JK), Karnataka (KK), Kerala (KL), Maharashtra (MH), Punjab (PJ), Tamil Nadu (TN), Uttarakhand (UK) and West Bengal (WB).
Poorer states, which include all LIS with the exception of Rajasthan, are particularly lagging in reducing the share of their population living that is vulnerable to falling back into poverty. The share of the population below the “vulnerability line” \((2*PL)\) fell faster during 2005-2012 than 1994-2005 in all states, but at a slower rate in LIS compared to other states in most cases (Figure 10a). As a result, the vulnerable of India as well as the bottom 40% – given the large overlap between these two groups – are increasingly concentrated in the LIS. Every LIS, with the sole exception of Orissa, accounted for a larger share of the national bottom 40% in 2012 compared to 1994 (Figure 10b).

The distribution of the poor across states depends on the poverty rates as well as the relative size of state populations. The combination of both these factors lead to Uttar Pradesh, Bihar and Madhya Pradesh accounting for 44 percent of the poor of the country in 2012. The ranking of states by the number of poor is quite different from the ranking by poverty rates (Figure 11). High-income states Maharashtra and West Bengal are among the five states with the highest share of the poor population, even though they are not among the top seven states by poverty rate.

**Figure 10: Poorer states are lagging in reducing share of vulnerable population**

<table>
<thead>
<tr>
<th>(a) Annual rate of change in share of vulnerable population (below 2*Poverty Line)</th>
<th>(b) Annual rate of change in the share of each state in the bottom 40% of the country</th>
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</thead>
<tbody>
<tr>
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<td><img src="image" alt="Graph" /></td>
</tr>
</tbody>
</table>

**Note:** Red: Low-income states (LIS). Only the 21 largest states are shown (as of 2004-05). Both figures show percentage (or proportionate) changes in relevant shares.  
**Source:** Nayyar (2014) and Authors’ estimates using NSS (different years)
Figure 11: Contribution of each state to poverty depends on poverty rate and population

(a) Share of the poor population by state (%) 
(b) Share of population who are poor, by state (%)

Note: Red: Low-Income states (LIS). Poor/non-poor status based on official poverty lines for 2011-12
Source: Authors’ estimates using NSS (different years).

Across Indian states, the last two decades saw encouraging trends in how growth translates into poverty reduction (Nayyar 2014). First, state level growth, in terms of aggregate economic activity as well as household consumption, had a strong and positive association with the pace of poverty reduction. Between 1994 and 2012, states with higher rates of growth of per capita income (Net State Domestic Product or NSDP) had higher rates of poverty reduction on average, an association that also holds strongly for growth of household per capita consumption. Second, poverty reduction became more responsive to growth over time – elasticity of poverty reduction to growth in per capita NSDP and household per capita consumption increased during 2005-2012 relative to 1994-2005 in almost all states.

The rate at which growth translated into poverty reduction varied widely across states, with the growth elasticity of poverty reduction ranging from -0.5 to -1.7 during 1994-2012 (Nayyar, 2014). Elasticity patterns across states highlight two important challenges: relatively low elasticity in the LIS (Rajasthan being the sole exception), and lower effectiveness of growth in lifting people out of vulnerability (2*PL) than out of poverty. The first challenge is a key reason why the LIS are not converging in the rate of poverty reduction with other states. That said, there is a lot of variation in elasticities among the set of higher income states. Elasticity is not strongly correlated with state-level growth in per capita incomes

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18 These results refer to poverty measured by the national poverty line for India, and not the international line.
19 This correlation also holds for the share of population living below twice the poverty line.
20 Jammu and Kashmir and Assam are strong exceptions to this trend, while the low-income states of Uttar Pradesh and Jharkhand experienced a mild decline in the elasticity of poverty reduction to NSDP growth from 1994-2005 to 2005-2012.
21 Refer to Figure A-3, Annex.
either. The second challenge is seen in the generally lower range of elasticities when the vulnerability line of 2*PL is used, which suggests that on average, economic growth has been less efficient in lifting people into middle-class than it has in lifting people out of poverty. Most LIS do relatively poorly on this metric as well, as do several of the other states.

5. India and the rest of the developing world in poverty reduction

Reduction in extreme poverty in India has exceeded the pace for the developing world since 2005

Since 2005, India has exceeded the pace of the developing world as a whole – as well as middle-income countries (MICs) and lower middle-income countries (LMICs) – in reducing extreme poverty defined by the international poverty line of $1.90/day (2011 PPP). This marks a change from the decade of the 1990s, when extreme poverty reduced in India at a rate on par with the developing world but lagged behind MICs and the sub-group of LMICs that India is a part of (Figure 12). Comparisons with individual countries in South Asia and India’s MIC peers illustrate this positive trend, which however falls short of the rate of progress seen among the best performers. Extreme poverty reduction in India since 2005 exceeded the rate of progress in its neighbors Sri Lanka and Pakistan and some of its MIC peers (e.g. Indonesia, Bolivia and the Philippines), but lagged behind strong performers like Vietnam, Bhutan and Nepal (see Figure A- 4, Annex).

In absolute numbers, India accounts for the largest number of global poor and also the largest number of people who have recently escaped poverty. Between 2005 and 2012, 164 million people moved out of poverty (Figure 13), a number that matches the combined population of Singapore, Thailand and Vietnam. As the rate of reduction has outpaced the rest of the developing world, India’s share in the total number of world poor at the international poverty line fell from 30 percent in 2005 to 26 percent in 2012 (Figure 13). The decline in this share came during 2010-12, after India’s share had increased from 23 percent in 1993 to 31 percent of the world’s poor population in 2010.

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22 This is consistent with past literature that finds a high degree of state-level variation in the association between growth and poverty reduction in India, with no statistically significant relationship between growth rates and growth elasticities of poverty during the period 1994 to 2000 (Datt and Ravallion 2002).

23 See Ferreira et al (2015) for details on the international poverty line based on 2011 PPP, including methodology and results.

24 The combined population of Singapore, Thailand and Vietnam was estimated to be 163.65 million in 2014 (WDI online database, accessed March 18, 2016).

25 As noted in the Global Monitoring Report 2015-16 (World Bank, 2015, Box 1.1), poverty in India at the $1.90 a day poverty line may be significantly lower if MMRP consumption aggregates from the 2011-12 NSS survey are taken into account. Current poverty estimates for India are based on the URP aggregates. As a result of differences in recall period (shorter-recall period for some food items and one-year recall for some non-foods), MMRP-based consumption expenditures in both rural and urban areas are 10-12 percent higher than URP estimates. This, combined with a high population density around the poverty line, translates to a significantly lower poverty rate of 12.4 percent in 2011-12. At this rate, India would account for a much smaller share (roughly 15 percent) of the global poor but would still be home to the largest number of poor.
Figure 12: Since 2005, poverty reduction in India has exceeded the pace for the developing world

![Graph showing poverty reduction in India and the developing world from 1993 to 2011.]

Note: Based on the international poverty line of $1.90/day (2011 PPP). Figures are available at roughly 3-year intervals during 1990-2008; for India, actual survey years are used.
Source: World Development Indicators (accessed on November 16, 2015)

Figure 13: Number of poor in India has fallen rapidly since 2005 and so has India’s share in total world poor in recent years

![Graph showing the number of poor in India and their share in the total world poor from 1993-2012.]

Shared prosperity indicator for India was just below the median among developing countries

Consumption growth for the bottom 40% in India averaged 3.2 percent annually between 2005 and 2012. While this was a significant improvement from preceding years, the performance was about the average among developing countries and middle-income countries (MICs) during this period (Figure 14). The rate for India was slightly below the median of 3.35 percent across the 62 developing countries for which data are available for roughly comparable years.

Among MICs – a group to which India belongs as a lower-MIC – India’s progress in shared prosperity was on par with the median of bottom 40% growth rates for this group. Compared to upper MICs, a group that India aspires to belong to, India’s bottom 40% grew at a rate well below the median rate (4.09 percent) for the group. To pick a few examples, the shared prosperity indicator for India bettered the performance of countries such as Mexico, Nigeria and Sri Lanka, but lagged behind countries like China, Vietnam, the Russian Federation, Brazil, Turkey, Thailand and South Africa (Figure 14). The latter group of countries went through a period of rapid economic growth in the second half of the decade of the 2000s, which was fueled in some cases by favorable global conditions such as high commodity prices.

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26 This estimate, drawn from the World Bank Global Database of Shared Prosperity, is based on consumption corrected for cost-of-living differences between urban and rural areas using the all-India poverty lines. It differs slightly from the estimates reported in Figure 3 which also correct for cost-of-living corrections between states.

27 Could the NSS-NAS divergence discussed earlier imply that consumption growth of the bottom 40% is underestimated in NSS for India? While this possibility cannot be ruled out, the choice of household consumption in NSS to measure “shared prosperity” is consistent with that for all countries in the World Bank’s global database, which is to use consumption (or income) from household surveys without any adjustment for differences between surveys and national accounts, which exist to a varying degree in many countries. This follows the intuitive logic of using the same welfare indicator for measuring poverty and shared prosperity. It also reflects the fact that any method for “adjusting” the survey welfare aggregates would be arbitrary, due to the absence of any credible estimates for such adjustments and how they should be apportioned across the consumption distribution.
Relative to comparators, consumption growth in India has been less inclusive of the bottom 40%

As seen earlier, consumption growth of the bottom 40% in India lagged the growth rate for the overall population, which averaged 3.7 percent annually for 2005-12.\footnote{This was the case in 20 out of 62 developing countries for which shared prosperity data is available, including 16 out of 51 MICs.} India’s experience has been similar to that of countries such as China, Vietnam, Turkey and South Africa where the bottom 40% experienced strong consumption growth but at a pace that lagged behind the average consumption growth for the population. By this metric, these countries have “underperformed” in inclusion for the overall economic expansion they experienced. Countries like Brazil, Thailand and the Russian Federation, in contrast, are ones where consumption (income in the case of Brazil) of the bottom 40% grew faster than the population average (see Figure A-5, Annex).

In general, the international comparisons show that while India has done well in generating consumption growth for its population, it has lagged behind many of its MIC peers in inclusiveness of growth. One statistic demonstrates this effectively: consumption growth of the bottom 40% in India was on par with the median growth rate of the bottom 40% for all MICs, but consumption growth of the Indian population as a whole (3.7 percent) was more than a percentage point higher than the median of the corresponding growth rate for MICs. As a result, India ranked 16th among 51 MICs in consumption growth of overall population, but only 27th in consumption growth of the bottom 40%.
The lower rank on inclusiveness of growth also implies that even as India outperformed the majority of developing countries and its MIC peers in poverty reduction, the rate of reduction was below par for the average consumption growth that India experienced. Poverty reduction in India, in relation to growth was lower still overall expansion of the economy (GDP growth) is taken into account. The elasticity of poverty reduction to per capita GDP growth in India is estimated to be approximately -0.93 for the period 2005-12, which puts India near the bottom third (75th out of 116 countries) among developing countries for this period.29 As a point of reference, the top 10 countries (out of 116) in terms of elasticity of poverty to per capita GDP growth during this period had elasticities between -6 and -18, while the median elasticity was -1.3. The relatively low elasticity in India was the reason why for the period 2005-2012, with per capita GDP growth that was in the top 10 percent among developing countries, India was just above the 60th percentile of developing countries in the rate of poverty reduction.30

Given the size of India and the extent of variation in income levels across states, the challenge of inclusive growth has an important spatial dimension, for which the state level snapshots in Section 4 are useful to revisit briefly. The wide variation in the growth elasticity of poverty reduction across states highlighted in Section 4 demonstrates the complexity of the challenge. Two important trends identified there – the strongly positive association between state level growth and the pace of poverty reduction, and the rise in the responsiveness of poverty reduction to growth from 1994-2005 to 2005-2012 in most states – suggest encouraging prospects for inclusive growth nationally. On the flip side, the comparatively lower elasticity in most LIS poses a challenge to inclusiveness of growth, given the rising share of these states in India’s poor and bottom 40 percent. The second challenge, that of growth being less efficient in lifting people above the higher “vulnerability” standard of twice the poverty line than out of poverty, is symptomatic of the constraints to middle-class expansion in India – and not just in LIS, but almost everywhere including the most economically developed states of the country.

India has made mixed progress in non-monetary dimensions of welfare compared to its peers

While key non-monetary indicators of welfare have improved steadily in India over the last two decades, improvements on some key dimensions do not stand out in comparison with countries that had indicators at a comparable level in the early 1990s. Child and infant mortality rates fell faster in countries like Nepal, Bangladesh and Cambodia, where mortality rates were higher than India’s in 1994 but fell below India’s in 2014. The reduction in mortality rates in India was sufficient to close the gap significantly with countries like Vietnam and Nicaragua between 1994 and 2014. However, the gaps in infant and child mortality with these countries, as well as with the other BRICS countries, remain large (Figure 15).

Relatively slow progress in sanitation in India has also meant that the country compares poorly with comparators including South Asian neighbors in access to sanitation and the incidence of open defecation (see Figure A- 6, Annex). In undernourishment among children of age 5 and under, stark differences across

29 To ensure comparability across countries, these elasticities are estimated for the period 2005-2012 for all countries (116 for which estimates are possible), using interpolated estimates of poverty rates for countries where survey years do not match the exact period.

30 Rankings based on 116 developing countries for which growth elasticity of poverty reduction could be estimated. It is important to note, however, that these elasticity estimates might be affected by the aforementioned divergence between NSS consumption series and NAS, although it is difficult to assign the direction of the bias.
states mean that a number of states have stunting and underweight rates that are above not only the average for its “peer group” of low-middle income countries but also the average for Sub-Saharan Africa, a group with much lower average per capita GDP (Figure A- 6, Annex). Low-income states like UP and Bihar fare particularly poorly, but challenges are not restricted to these states alone.

**Figure 15: India lags behind many of its comparators in reducing infant and child mortality**

(a) Infant mortality trend: India and selected comparators

(b) Child mortality trend: India and selected comparators

(c) Infant, child and maternal mortality, 2014: the BRICS

Source: World Development Indicators (WDI)

6. The global goal of ending extreme poverty by 2030 – what will it take in India?

India has the largest number of poor people in the world, accounting for roughly one-fourth of the world’s extreme poor (at the $1.90 poverty line) in 2012. If rural and urban India were considered as separate entities, both would be among the top 10 “countries” of the world in terms of the number of extreme poor – urban India would rank sixth while rural India would top the list (Figure 16). The number of urban poor in India is about the same as the combined number of poor in Indonesia, Brazil and South Africa. The number of Indian rural poor almost equals the total poor population of the four Sub-Saharan
African countries with the largest number of poor: Nigeria, Democratic Republic of Congo, Ethiopia and Tanzania.

**Figure 16: India is home to a quarter of the world’s extreme poor**

![Diagram showing the number of people living in extreme poverty in various countries.](image)

*Note: Number of poor calculated by using the 2012 line-up poverty rates and the population numbers (both) provided in PovcalNet. Source: World Bank, PovcalNet (accessed on November 16, 2015)*

For the world to achieve the Sustainable Development Goal (SDG) of extreme poverty rate of no more than 3 percent in 2030, sustaining progress in India will thus be critical. A recent report (World Bank, 2015) illustrates this point with a number of simulations, of which one is particularly compelling. A plausible scenario for achieving the global goal of 3 percent in 2030 is one where every developing country grows at the rate associated with the episode of highest per capita GDP growth (spells of 8-10 years) in the last 20 years, for the two decades 2011-2030. For India, this translates to a per capita household consumption growth of 3.5 percent and 3.9 percent for rural and urban India respectively, every year, for these two decades. With these growth rates and unchanging consumption distribution, India’s extreme poverty rate would reach around 1 percent in 2030.

Taking into account the recent past, the prospects for India are promising.³¹ Maintaining high growth rates (between 6 and 7 percent in real per capita GDP annually³²) for the next two decades will require sustained effort, in an environment when the global outlook is not as favorable today as it was in the late-2000s. More ambitiously, if India continued to grow rapidly and was able to raise the responsiveness (elasticity) of poverty reduction to growth – a dimension on which India lags the best performing countries -- the implications for India, and for the rest of the world would be significant.

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³¹ By contrast, Bangladesh and Ethiopia, for instance, would have to more than double their current rate of annual per capita consumption growth, while Indonesia and Nigeria would need to improve theirs by around 50 percent (Table 1.7, World Bank 2015).

³² Growth in per capita GDP in constant 2011 PPP $ averaged 6.6 percent annually during 2005-2012, and 6.3 percent if the longer period 2002-2012 is considered.
Low responsiveness of poverty reduction to growth in India is a result of two persistent factors: low elasticity of household consumption (from NSS) growth to GDP growth, and growth in household consumption that is insufficiently pro-poor. The first one is a recurring feature in India, where growth in GDP (and private consumption) in national accounts (NAS) has consistently surpassed that in household consumption from surveys so that the gap between the two series has widened over time. The second factor, that growth in household consumption is not pro-poor, is reflected by what is seen for the shared prosperity indicator earlier.

Both these factors have shown significant improvements from the past, which resulted in the elasticity of poverty reduction to GDP growth more than tripling from the period 1994-2005 to 2005-12. Even within the second period, there was an improving trend, with the last two years (2010-12) showing a much higher elasticity due to a reversal in both the factors: the gap between NAS consumption growth and household consumption growth narrowed and household consumption growth itself became more pro-poor. If these changes represent a trend and not an aberration, one would expect poverty reduction to become more responsive to GDP growth in the coming years, with encouraging prospects for the achievement of the global goal of “ending” extreme poverty by 2030. The rise in the growth elasticity of poverty in 2005-12 compared to the previous decade was also accompanied by fundamental shifts in how the composition of growth – between urban and rural and different sectors – affected rural and urban poverty.  

7. Conclusion

In concluding, it is useful to recap the highlights of the findings. Compared to the 1994 to 2005 period, poverty reduction accelerated during 2005-2012, falling from 37 percent nationally in 2005 to 22 percent in 2012. The annual rate of reduction was 2.2 percentage points during 2005-2012, compared to 0.7 percentage point during 1994-2005. Poverty fell more rapidly in rural areas. But with a rural poverty rate of 26 percent and urban poverty rate of 14 percent, the number of rural poor was still almost quadruple that of urban poor in 2012. Poverty reduction was driven by rapid growth in consumption; consumption inequality (Gini index), after rising between 1994 and 2005, remained almost unchanged. The World Bank Group’s indicator for “shared prosperity”, annualized per capita consumption growth of the bottom 40% of the population, showed significant improvement since 2005 from the earlier period of 1994-2005.

International comparisons validate the positive poverty reduction trends for India in the decade of the 2000s. After barely keeping up with the developing world as a whole and lagging behind MICs during the 1990s, India accelerated its progress in reducing monetary poverty after 2005 even in comparison to the rapid progress achieved by the developing world as a whole. The rate of reduction of extreme poverty in India, measured by the international poverty line of $1.90/day (2011 PPP), exceeded that of the

33 Elasticity of poverty headcount rate (international poverty line of $1.90/day at 2011 PPP) to growth in per capita GDP (constant 2011 PPP $) was -0.24 during 1994-2005 and -0.79 during 2005-12. Within the latter period, the elasticity rose from -0.49 in 2005-10 to -2.24 during 2010-12.

34 See Datt, Ravallion & Murgai (2016), who analyze in detail the relationship between the composition of growth and pattern of poverty reduction over time in India.
developing world as well as that of MICs as a group, which resulted in the country’s share in global extreme poor declining from 30 percent in 2005 to 26 percent in 2012.

Comparisons with the rest of the developing world also suggest room for improvement for India relative to some of the strongest performers in poverty reduction, primarily because economic growth in India was less inclusive. Consumption growth for the bottom 40% in India lagged slightly behind the average growth for the population, which led to a falling share of the bottom 40% in total consumption expenditure between 2005 and 2012, even though there was almost no change in overall inequality. India ranked 16th among 51 MICs in average consumption growth of the population during 2005-2012, but 27th in consumption growth among the bottom 40%. As a result, poverty reduction was below par for India’s average consumption growth, and even more so for its GDP growth. With per capita GDP growth in the top 10 percent among developing countries, India was just above the 60th percentile in poverty reduction rate during 2005-2012.

The period of 2005-2012 was also one of high mobility among households between groups defined as the poor, the vulnerable and the middle-class. Rapid consumption growth across the board meant that upward movements were much more common than movements downward, and especially so among households who were among the poorest in 2005. More than half the population is estimated to have changed their status from 2005 to 2012, including more than a third of the population who moved upward. This was enough for the Indian middle-class to grow into the second largest segment of the population by 2012 – between a quarter and a third of the population – as befits the country’s emergence as a middle-income country during the last decade. However, because many of those who escaped poverty moved into the vulnerable group and not into middle-class, it was still the case that the vulnerable were the largest group and the fastest growing segment of the population throughout the period.

That average living standards of the bottom 40% of the distribution improved slower than among the rest of the population, even as upward mobility was high among the poorer households of 2005, is due to the combination of two factors. Primarily, it is a consequence of high mobility across the distribution, which caused significant “churning” in the relative positions of households over time, along with a pattern of mobility that did not raise sufficient numbers above vulnerability and instead yielded a rapid increase in the share of population who remained economically insecure even as they rose out of poverty. This is also consistent with what is seen for the elasticity (responsiveness) of poverty reduction to economic growth across Indian states during 1994-2012 – growth was on average less effective in reducing “vulnerability” (by the standard of twice the poverty line) than in reducing poverty. Such a pattern could be symptomatic of growth that leads to rapidly rising returns at the lower end of the labor market in relatively low-productivity activities, but generates insufficient opportunities in higher productivity activities that allow households to move beyond vulnerability and into middle-class. Whether that is indeed the case is one of the key questions about the drivers of poverty reduction and economic mobility among households, which are beyond the scope of this paper and the subject of other research.35

Spatial differences across states in poverty and vulnerability persisted over the years even though low-income states (LIS) narrowed their gaps with other states to some degree. Poverty rates declined between 1994 and 2012 across all major states in India, and at an accelerated rate since 2005 in nearly every major

35 See, for example, Dang & Lanjouw (2015a), and Jacoby & Dasgupta (2015).
state. While poorer states are gradually closing the gaps with richer states in poverty rates, the rate of convergence is low since states with initially higher poverty rates saw smaller percentage declines in poverty rates. The high poverty rates and large populations of Uttar Pradesh, Bihar and Madhya Pradesh led to these three states accounting for 44 percent of the poor of the country in 2012. Most LIS also lagged behind other states in reducing their share of population living below twice the poverty line, with the result that this “vulnerable group” was much more concentrated in the LIS in 2012 than in 1994.

Despite its rapid gains, India was estimated to account for a quarter of the world’s extreme poor in 2012. The world is thus much more likely to achieve the SDG of ending extreme poverty (no more than three percent of the world population) by 2030 if the recent rate of progress in India is sustained, which will bring down extreme poverty rate in India to around one percent by 2030. The pace of decline could be hastened if growth were to translate to poverty reduction more effectively. That India was ranked near the bottom third of developing countries in responsiveness (elasticity) of poverty reduction to GDP growth for the period 2005-2012 suggests ample room for improvement on this front, while a trend of rising elasticity of poverty to growth over the years provide cause for optimism. This optimism is reinforced by the rise in the responsiveness of poverty reduction to growth from 1994-2005 to 2005-2012 in most Indian states.

In a country where a large majority of the population are poor or vulnerable, improving non-monetary dimensions of welfare is critically important to promote upward mobility among households and create self-sustaining paths out of poverty and vulnerability traps. Recent history in India offers a mixed picture in improving human capabilities, with success on some fronts – such as reducing infant and child mortality rates, and boosting secondary education – tempered by relatively slower progress in others like access to piped water, sanitation and stunting among children.

Moreover, unlike what was seen for consumption poverty, the pace of progress in India in many non-monetary welfare indicators has not accelerated in the past decade, and still lags behind high-performers among other developing countries. For example, by 2014, India had fallen behind some South Asian countries on sanitation, and these countries made even more rapid progress than India in reducing infant and child mortality between 1994 and 2014. Wide gaps with other BRICS countries and fast-developing MICs like Vietnam persisted for most of these indicators. A particular area of concern is undernourishment among children, with some states, including a few high-income ones, showing stunting and underweight rates that compared poorly with the 2014 averages for low-middle income countries, Sub-Saharan Africa, and some of the other countries in South Asia. On the other hand, substantial increase in the share of adults with secondary school education in India is an important positive development, since higher education attainment, particularly at the secondary level and above, is associated with a significantly higher likelihood of upward mobility and lower chance of downward mobility for a household.

The bird’s eye view of poverty and well-being in India in this paper raises important questions about the relationships between poverty and vulnerability on the one hand, and macroeconomic changes related to growth, distributional trends and sectoral trends and shifts on the other. These in turn lead to questions about the role of underlying processes, such as structural transformation, including the changing nature of labor markets and urbanization, in shaping the trends and patterns of poverty reduction. Understanding the role of transformation also requires examining the mutually reinforcing relationships between monetary and non-monetary dimensions of poverty, and how uneven human
development limits the pace and inclusiveness of labor market changes and urbanization. A comprehensive accounting of these drivers of recent trends and patterns will help shed light on the all-important question for the future: what is needed to facilitate growth with inclusion to sustain and even accelerate poverty reduction and rise of the middle-class, and to mitigate the risks that might slow down this process?
References


http://data.worldbank.org/products/wdi
Annex

Figure A-1: Gradual convergence in poverty rates across states, 1994 to 2012

Note: Red: Low-Income states (LIS); green: High-Income States (HIS). Only the 21 largest states are shown (not taking into account the split that has since occurred in AP to create Telangana).
Source: Nayyar (2014) using NSS (different years)

Figure A-2: Divergence in proportionate declines in poverty rates across states, 1994 to 2012

Note: Red: Low-Income states (LIS); green: High-Income States (HIS). Only the 21 largest states are shown (not taking into account the split that has since occurred in AP to create Telangana).
Source: Nayyar (2014) using NSS (different years)
Figure A- 3: Per capita income growth and poverty elasticity across states, 1994 to 2012

Note: Red: Low-Income states (LIS); green: High-Income States (HIS). Only the 21 largest states are shown (not taking into account the split that has since occurred in AP to create Telangana).
Source: Nayyar (2014) using NSS and CSO (different years)

Figure A- 4: Extreme poverty ($1.90/day) reduction in India compares well to that of its peers since mid-2000s
(a) Compares well with most of its SAR neighbors
(b) Matches or exceeds the rate in some middle income peers, but not Vietnam

Source: World Development Indicators (accessed on November 16, 2015)
Figure A- 5: Household consumption growth in India has the potential to be more inclusive

Note: Income growth figures for Mexico, Brazil, Germany and Italy. Consumption for all other named countries
Source: Global database for Shared Prosperity, World Bank (accessed November 10, 2015)

Figure A- 6: India lags comparators in sanitation and nutritional outcomes among children

(a) Access to sanitation and safe water: India and neighboring countries
(b) Undernourishment in Indian states

Source: Data for India and Indian States from Rapid Survey of Children 2013-14. Data for other countries is latest year available from World Development Indicators (2014). *Better performing states; **lagging states