

Shining for the Poor Too?

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The authors revisit the findings of their past research on poverty and growth in India in the light of the 14 rounds of the National Sample Survey now available for the period since economic reforms began in 1991. They find that the rate of poverty reduction has increased in the post-reform period, compared to the previous 30-year period, although it is still too early to say if this marks a new trend. In contrast to the pre-reform period, the post-reform process of urban economic growth appears to have brought significant gains to the rural poor as well as to the urban poor.

India's post-independence planners in the 1950s must surely have expected better progress against poverty from the new country's economic strategy. Our estimates (discussed later) suggest that, on average, slightly more than one person in two lived below the official poverty line in India during the 1950s and 1960s and the rate did not start to fall reasonably consistently until some 30 years after independence. By 1990 the proportion had fallen to slightly more than one person in three. There was no trend increase, or decrease, in measured consumption inequality over the period up to about 1990 (Bruno et al 1998). So the (proximate) reason why poverty did not fall more rapidly appears to have been a low rate of economic growth; the gross domestic product (GDP) per capita grew at an annual rate of barely 1% in the 1960s and 1970s, though picking up to 3% in the 1980s.

There has been much debate in India about whether the country's economic reforms, which started in earnest in 1991 (in the wake of a balance of payments crisis), would help put India's poor on a new trajectory of more rapidly rising living standards. Supporters have argued that the reforms would allow India to better exploit its comparative advantage in the production of labour-intensive goods and services, and that this would directly benefit the poor (see, for example, Joshi and Little 1996). By this view, the reforms would help in the fight against poverty by removing the bias that existed against the employment of unskilled labour, stemming from the policy emphasis (since the 1950s) on capital-intensive industrialisation in a largely closed economy. However, critics of the reforms have questioned whether this new policy environment would succeed in generating more labour-intensive growth, to help put India on a new path of rapid poverty reduction.

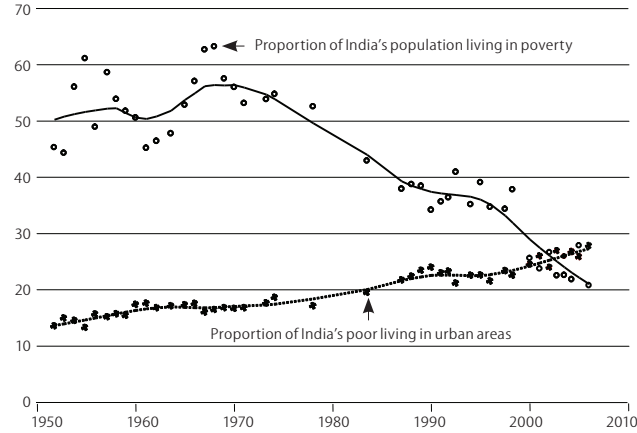
The growth impacts of the reforms are not in serious doubt. Greater openness to external trade has been accompanied by sufficient productivity growth in the domestic economy to assure a higher growth rate of national output. Economic growth has accelerated since the reforms started. GDP per capita grew at an annual rate of 4-5% after 1991.

However, there are signs that new inequality-increasing forces have emerged. A more labour-intensive growth process in a poor open economy need not reduce income inequality, and may well increase it, given how the growth process interacts with the antecedent inequalities in other ("non-income") dimensions, particularly in human capital, which can mean that the poorest are left behind. These inequalities – as evident in low adult literacy rates, for example – were far greater in India at the outset of its reform period than most other reforming developing countries, including China (even compared to when China started its reform period, more than 10 years earlier than India; see Ravallion 2009). In past research we have shown that the disappointing

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Figure 1: Headcount Index of Poverty Using the National Poverty Line (%)



Source: Datt and Ravallion (2009).

outcomes for the poor from non-farm growth can be traced back to India's antecedent socio-economic inequalities in access to schooling, amongst other factors. In particular, Ravallion and Datt (2002) found a strong interaction effect between the initial level of human development and the non-farm growth rate in determining the pace of poverty reduction at state level.

The pattern of post-reform growth has also been a concern. While past research pointed to the importance of rural economic growth to poverty reduction in India, the post-reform process of economic growth does not appear to have favoured the rural sector and there are signs of geographic and sectoral divergence in India's growth process (Datt and Ravallion 2002). Most worrying of all, there are reasonably clear signs of rising inequality, with the relative (and absolute) consumption gaps between "rich" and "poor" widening in the post-reform period.¹

So there has been higher growth, but higher inequality too. Which effect dominated in determining how the living standards of India's poor have evolved?

Growth and Poverty Reduction in India

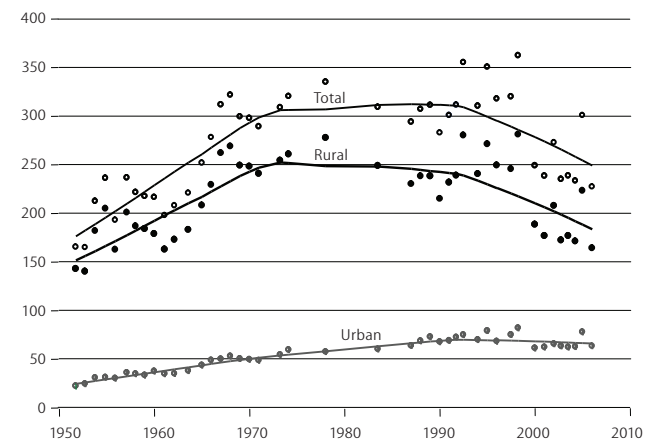
We have used distributional data from all available rounds of the National Sample Surveys (NSS), carried out by the National Sample Survey Organisation (NSSO), going back to the early 1950s. In analysing these data we follow our past methods in most respects. One difference is that we have developed new price indices that also take account of an issue that has been raised in discussions of how the measurement of price trends influences the estimation of poverty in India (Deaton 2007). It has been argued that the overall weight of food in the consumer price index for agricultural labourers (CPIAL) is too large, such that a rise (fall) in the relative price of food results in an overestimation (underestimation) of the rate of inflation. Potentially, the same problem arises for the consumer price index for industrial workers (CPIIW). To deal with this issue we have reweighted the food and non-food components of the CPIAL and CPIIW for any NSS round by the predicted food and the non-food shares for people living at the rural (and urban) poverty lines in the preceding round, starting with round 15 for July 1959-June 1960.² The reweighted indices for successive rounds were then combined to form chain price indices which give our preferred measures of inflation in rural and

urban areas corresponding to the evolving food and non-food budget shares of the poor.

Figure 1 gives our estimates of the headcount index of poverty – the proportion of the population living in households with consumption per person below India's national poverty line (fixed in real terms over time).³ The Appendix (p 60) gives the estimated poverty measures as well as the mean consumption (used later). Figure 2 gives the implied number of poor for each survey year.

There was little sign of sustained progress against poverty until the mid-1970s, but a trend decline in poverty incidence has emerged since then. Progress slowed somewhat in the early 1990s due to the macroeconomic difficulties of that period but since then it appears to have regained momentum. The number of poor has tended to decline since the early 1990s, coming primarily from falling numbers of poor in rural areas (Figure 2).

Figure 2: Number of People Living Below the Poverty Line (Number of poor in millions)



Source: Authors' estimates.

Table 1 gives both the linear and exponential trends, estimated by regression coefficients on time (the headcount index is the dependent variable for the linear trend regression, while it is the log of the headcount index for the exponential trend). The linear trend is the mean percentage point change per year while the exponential trend is the proportionate change, interpretable as the difference between the rate of population growth for the poor and that for the population as a whole. All regressions include a control for NSS rounds that used a mixed-recall period (MRP), which tends to give a higher mean, but lower inequality.⁴ The trends were also estimated by

Table 1: Trends in National Poverty Measures and Their Elasticities with Respect to Economic Growth in India (1958-2006)

	Annual Trend Rate in Headcount Index of Poverty		Rate of Population Growth (% Per Annum)	Elasticity of Headcount Index of Poverty with Respect to Growth in:	
	Linear (Percentage Points)	Exponential (%)		Mean Consumption from National Sample Surveys	Mean Private Consumption from National Accounts
Whole period	-0.56	-1.3	2.1	-1.6	-0.9
Pre-1991	-0.53	-1.1	2.2	-1.6	-1.0
Post-1991	-0.77	-2.4	1.7	-2.1	-0.7

Trends are based on regressions of the poverty measures on time using 37 surveys spanning 1958-2006. For estimating exponential trends, logs of poverty measures are used, while their levels are used for estimating linear trends. In the levels case, poverty measures are in percentages. Population growth rates are regressions coefficients of log population on time. The growth rates for pre- and post-1991 sub-periods were estimated as parameters of a single regression, constrained to assure that the predicted values were equal in 1992 (following Boyce 1986). The elasticities are based on regressions of log poverty measures against log consumption per person. The regressions control for mixed recall period rounds of the NSS. All elasticity estimates are significantly different from zero at the 1% level. Source: Datt and Ravallion (2009).

constraining the regressions to avoid any discontinuity in the levels in 1992.

The annual percentage point reduction in the headcount index, which had been about 0.5 percentage points per year during 1958-91, increased to nearly 0.8 percentage points during 1991-2006. Thus, the proportionate rate of progress against poverty is higher in the post-1991 period (as can be seen from the exponential trend in Table 1). Table 1 also gives the rates of population growth. Unlike the pre-1991 period, the higher trend rate of poverty reduction in the period after 1991 is sufficient to bring down the number of poor (since the sum of the exponential trend in the headcount index and the trend rate of population growth is negative).

There are two important caveats on these findings. First, the difference between the trend rates of poverty reduction for the two periods is not statistically significant;⁵ it is too early to say if a statistically robust new trend has emerged. Second, given that so little sustained progress was made against poverty prior to the mid-1970s (Figure 1), the identification of the “pre-reform” trend is sensitive to the starting year. For example, if we use 1970 (instead of 1958) as the first year for the trend calculations in Table 1 then the ranking reverses, with a higher trend in the pre-1991 period; the linear trends are -0.9 and -0.5 percentage points per year for the pre-1991 and post-1991 periods, respectively, while the corresponding exponential trends are -1.9% per annum and -1.8%. Arguably this comparison is deceptive, however, as there were severe droughts in India during the late 1960s, so that starting around this time exaggerates the trend reduction in poverty. Nonetheless, it is clear that there is some sensitivity to the starting year.

While there are some signs that the higher post-reform growth rates are delivering a steeper decline in poverty, we do not see in the aggregate numbers a robust case for believing that the growth process of the reform period has been more poverty-reducing at a given rate of growth. Table 1 gives the elasticities of poverty (measured by the headcount index) to real per capita consumption growth, measured from either the surveys or from the national accounts statistics (NAS). In all cases, the elasticities are estimated by regressing the log poverty measure on the log mean consumption or income.

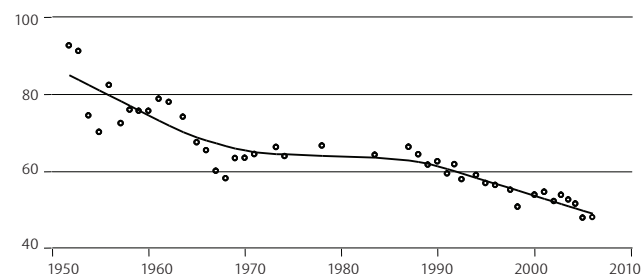
Using the survey means, the elasticity is higher in the post-reform period, but the opposite is true using consumption from the NAS. This difference stems from the fact that the NSS series does not reflect fully the gains in mean consumption indicated by the NAS.⁶ Figure 3 shows that the proportion of NSS consumption to NAS private consumption has been declining over time. The NSS data suggest a consumption aggregate that is now only about half of the private consumption component of the NAS.

It is difficult to fully assess what role the NSS methods have played in this divergence from NAS consumption. By international standards, the NSSO's methods appear to have not changed much over many decades. That is probably good news for comparability reasons, although it does raise questions about whether the NSSO's methods are in accord with the international best practice today. This is something that should be reviewed in the future.

However, we do know something about the effects of one notable change in the NSS survey methodology, namely, the use of

mixed as opposed to uniform recall periods for surveying consumption in several of the recent rounds of NSS. The mixed recall rounds of the NSS yield higher levels of mean consumption and have thus contributed to narrowing the gap between the NAS and NSS consumption aggregates (Datt and Ravallion 2009). The estimates in Table 1 already control for MRP rounds.

Figure 3: Mean NSS Consumption as a Proportion of NAS Private Consumption Per Person (%)



Source: Authors' calculations.

It is also important to note that the gap between the consumption aggregates from these two sources does not imply that the NSS overestimates poverty. Some of the gap is due to errors in NAS consumption, which is determined residually in India, after subtracting other components of domestic absorption from output at the commodity level. There are also differences in the definition of consumption, and there are things included in NAS consumption that should not be in a measure of household living standards. But not all of the gap can be explained this way.⁷ Some degree of under-reporting of consumption by respondents, or selective compliance with the NSSO's randomised assignments, is inevitable. However, it is expected that this is more of a problem for estimating consumption by the rich than the poor. For the same reason that the consumption aggregates from the NSS are diverging from the private consumption component of domestic absorption as estimated by the NAS, one cannot rule out the possibility that the increase in inequality in India is being underestimated by the NSS. If the divergence between NSS and NAS aggregates stems from a failure of the surveys to fully capture the rising consumption of India's middle class and rich, then it is unlikely that there will be much bias in the poverty measures based on the surveys.⁸

To summarise: the national aggregates suggest a faster decline in the headcount index of poverty since 1991, although this is sensitive to the starting date for the pre-1991 series. There are also signs that the growth process may have become less pro-poor in the sense of the headcount index becoming less responsive to growth in per capita consumption as measured in the national accounts, though this is not the case using growth rates based on the survey means.

Urban Economic Growth and the Rural Poor

When we look more closely at the sub-national data there are signs of a striking change in the relationship between India's pattern of growth and the pace of poverty reduction.

Rural poverty measures have historically been higher than urban ones, but as India's population has urbanised, we have seen falling rural poverty measures, and a rising share of the

poor living in urban areas (Figure 1). In common with most developing countries, there has been an urbanisation of poverty, which is consistent with falling overall poverty (Ravallion 2007). Even so, given the far larger size of the rural population, it remains that over 70% of India's poor still live in rural areas.

Past research has suggested that the fortunes of the poor in each of the urban and rural sectors are linked in various ways – through trade, migration, and transfers – and those linkages may well be stronger amongst poor and middle income people than amongst the rich (Ravallion and Datt 1996). A new finding from our latest research is that the post-reform period has seen a marked change in the relative importance of urban versus rural economic growth. Prior to the reform period, urban economic growth helped reduce urban poverty but brought little or no overall benefit to the rural poor; the main driving force for overall poverty reduction was rural economic growth. The picture looks different after 1991, as can be seen from Table 2. As before,

Table 2: Elasticities of the Headcount Index of Poverty with Respect to Urban and Rural Consumption Growth (1951-2006)

		National Poverty	Urban Poverty	Rural Poverty
Urban growth	Pre-91	-0.1	-0.9	0.1
Rural growth	Pre-91	-1.1	-0.4	-1.3
Urban growth	Post-91	-1.2	-1.3	-1.3
Rural growth	Post-91	-0.7	-0.1	-0.9

Source: Datt and Ravallion (2009). Urban and rural growth measured using mean consumption from the NSS.

urban growth reduced urban poverty, and rural growth reduced rural poverty in the post-1991 period. But we find much stronger evidence of a positive feedback effect from urban economic growth to rural poverty reduction than we had found in the pre-1991 data.

This is happening through improvements in the rural distribution – essentially, the urban economic growth process is starting to help reduce inequities within rural India. This is also evident if we focus directly on rural inequality, as measured by the usual Gini index. Urban economic growth in the pre-1991 period tended to increase rural inequality, with rural economic growth having the opposite effect. The evidence suggests that this has changed radically in the post-1991 period; urban economic growth has tended to put downward pressure on rural inequality, while the rural economic growth process has tended to increase inequality in rural areas (Datt and Ravallion 2009).

The aforementioned concerns about underestimation of consumption in the NSS also have implications for our assessment of how the urban-rural composition of growth has an impact on poverty. The proportionate bias in the NSS estimates of mean consumption may well be greater in India's urban areas, where it is widely thought that the NSS does not fully capture the consumption of the rich (notably for consumer durables and celebrations). Even so, the direction of any net bias in our estimates of the growth elasticity of poverty reduction is unclear on a priori grounds. There are three sources of potential bias. First, greater measurement error in the logs of urban mean consumption relative to that for rural areas would imply greater attenuation bias in our estimate of the impact of urban economic growth on poverty – leading us to underestimate the true elasticity, i.e. the true elasticity is more negative. Second, to the extent that the NSS is not

fully capturing the growth in consumption by the relatively rich, the measured mean consumption growth rate from the surveys may be lower than the true rate.⁹ Call this the “growth-rate bias”. This will partly or even fully off-set the attenuation bias; indeed, if the effect is strong enough then the measurement error in the mean may lead us to overestimate the true elasticity (i.e. the true elasticity is less negative). Third, some of the bias in estimating mean consumption will be passed onto the poverty measures – also pushing towards overestimation of the elasticity. We may call this the “spillover bias”. The overall (net) effect of these three potential sources of bias is unclear.

Nor is it clear how much all of this would matter to our comparison of the elasticities between the pre-1991 and post-1991 periods. Since the balance of these effects cannot be determined on theoretical grounds, our conclusion that urban economic growth has become more poverty reducing may not be robust to correcting for measurement error in the NSS. We do not think that the spillover bias is likely to be very strong, on the grounds that it is consumption by the urban non-poor that tends to be underestimated by the NSS, so that correcting for this bias would not have much effect on the poverty measures. However, by the same logic, the growth-rate bias could be large, and so there can be no presumption that the attenuation bias would dominate.

It might be argued that measurement error in the NSS has become a bigger problem in more recent years. This conjecture is at least consistent with the increasing divergence we see between the NSS mean and the NAS consumption aggregates (Figure 2), although this divergence could also stem from a rising share of the components of consumption included in the NAS aggregates that are not included in the NSS (including measurement errors in the NAS). We do find evidence of a lower elasticity of NSS consumption to NAS consumption in the post-reform period, although the difference is small and not statistically significant.¹⁰ However, this would presumably strengthen both the attenuation bias and the growth-rate bias, leaving the net effect indeterminate.

We have also revisited our earlier findings on the importance of the composition of growth by sector of origin. In Ravallion and Datt (1996) we found that it was growth in India's tertiary (primarily services) sector that had the greatest impact on poverty in the pre-reform period, with the primary sector (primarily agriculture) being the next most important (when measured in terms of absolute elasticities of poverty measures with respect to per capita sectoral output growth). The secondary (manufacturing) sector had little impact on poverty.

We confirm these findings for the pre-1991 data, but now we find that the sectoral structure of growth matters less in the post-1991 period. Indeed, in marked contrast to the pre-reform period, we cannot reject statistically the null hypothesis that it is the overall rate of growth that matters to the pace of poverty reduction in post-reform India rather than its sectoral composition.

Other recent research findings have also suggested that economic growth in India's urban areas, particularly small towns, has recently been contributing to lower rural poverty (Lanjouw and Murgai 2009). A plausible explanation for these findings is that the sectors of India's urban economy that use unskilled labour more intensively – notably trade, construction and the

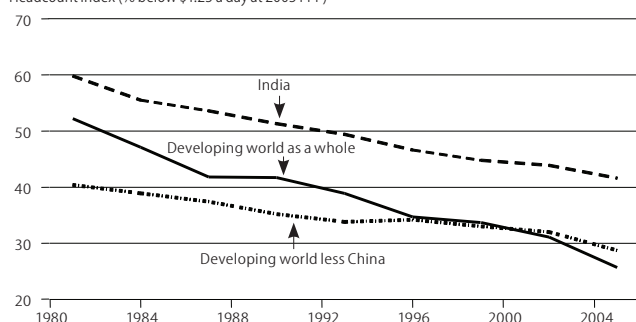
“unorganised” manufacturing sectors – have seen higher employment growth in the post-reform period than the prior period; Kotwal et al (2009) provide supportive evidence.

An International Comparative Perspective

It is of interest to also view the magnitude of poverty in India, and the country's progress against poverty, from a comparative international perspective. India's national poverty line is almost exactly \$1 a day at 2005 purchasing power parity (PPP) – lower than the World Bank's international line of \$1.25 a day, which is the average line of the poorest 15 countries (Ravallion et al 2007).¹¹ Of the 1.4 billion people living below \$1.25 a day in 2005, 33% lived in India.¹² Home to nearly 456 million poor people (by this international standard), India has the largest concentration of poor of any country.

Figure 4: Poverty in India Compared to the Rest of the Developing World

Headcount index (% below \$1.25 a day at 2005 PPP)



Source: Chen and Ravallion (2008).

Figure 4 plots estimates of the headcount index for the \$1.25 a day line, which is held constant in real terms, over 1981–2005. The figure gives the estimates for India as well as for the developing world as a whole over 1981–2005. China naturally carries a large weight, so the figure also gives the results for the developing world outside China.¹³

The proportion living below \$1.25 a day outside China has fallen from 40% to 29% over 1981–2005, which is about the same proportionate rate of decline (about 30%) as India (from 60% to 42%). India's share of poverty in the developing world outside China has fallen, but only slightly, from 39% in 1981 to 38% in 2005. The fall occurred in the 1980s; the proportion was 38% even in 1990.

Looking across the rest of the developing world, many countries have clearly not had India's success against poverty. But

many have done better too. For example, both China and Brazil have seen higher proportionate rates of poverty reduction since the early 1990s, though for different reasons; growth-promoting reforms delivered a high pace of poverty reduction in China, while redistributive social policies were more important in Brazil (Ravallion 2009).

Lessons and Some Warnings

It is clearly good news that there are signs of an emerging trend towards a faster decline in the fraction of poor in the country, and that we now see falling numbers of poor. It is too early to say that this is a (statistically) robust new trend, though it is certainly encouraging.

Nonetheless, poverty is still a huge problem for India, with over 450 million people living below \$1.25 a day in 2005. The relatively weak performance of the agricultural sector, the widening disparities between and within urban and rural areas, and the lagging poor areas, remain important concerns. And it can be expected that India's persistent inequalities in human development – linked to long-standing problems of public service delivery – will continue to constrain the scope for more rapid poverty reduction.

It is also encouraging that rising overall living standards in India's urban areas in the post-reform period have had significant distributional effects, benefiting the country's rural poor. While the attribution to the reforms is hardly conclusive – since we can have no comparison group, to observe India after 1991 but without the reforms – the research findings reported here are at least consistent with the view that India's efforts to create a more open and productive market economy have coincided with a reversal in the historical pattern of weak feedback effects of urban economic growth on rural living standards.

This good news also comes with some warnings. First, we have noted a number of concerns about India's official data, including the discrepancies between the consumption aggregates from the NSS and those from the national accounts. Second, while faster growth appears to have yielded somewhat faster poverty reduction, there are indications that to achieve the same rate of poverty reduction, relatively higher rates of economic growth are now needed. Third, while the rural poor have benefited more from urban economic growth in the post-reform economy, it can be expected that the reverse also holds: India's rural poor will be more vulnerable in the future to urban-based economic shocks.

NOTES

- Evidence of rising inequality in India since 1991 is reported in Ravallion (2000), Deaton and Drèze (2002) and Sen and Himanshu (2004).
- Predicted food shares were derived from grouped data on budget shares, using a regression for the previous round of food budget shares as a cubic function of the cumulative proportion of the population ranked by per capita monthly total expenditure. Food shares for the poor for the current round were then predicted at the estimated headcount index for the previous round. In the case of mixed recall period rounds, the regression for the most recent round with a uniform recall period was used. While our method of re-weighting the price indices can be done at greater disaggregation, it was only feasible to do it for the food and non-food components from the data available.
- In Datt and Ravallion (2009) we also give estimates using the poverty gap and squared poverty gap

indices. The key qualitative results reported here are robust to using these alternative measures.

- While most of the surveys have used a uniform recall period of 30 days for all consumption items, seven of the survey rounds over this period have used instead a mixed-recall period, with shorter (one week) recall for some items (for food in the 55th round) and longer (one year) for others (mainly non-food items).
- Only the increase in the exponential trend rate of decline in the headcount index is significant at the 8% level. For full details on the tests see Datt and Ravallion (2009).
- Upon regressing consumption growth from the NSS on that from the NAS, with controls for changes in whether the round used a mixed recall period and changes in the log ratio of rural price index to the NAS deflator, the overall elasticity of the NSS mean consumption to NAS consumption is 0.48 ($t=4.03$). The elasticity is significantly less than unity.
- Central Statistical Organisation (2008) estimates that the NSS consumption aggregate represents 60–65% of private consumption from the NAS after accounting for differences in certain notional components (imputed rents and financial intermediation services).
- For a more complete theoretical discussion of this issue see Korinek et al (2006).
- In more technical terms, the measurement error in the NSS mean is not just a simple additive error in the log mean, as in the standard formulation of the attenuation bias in a regression coefficient due to additive measurement error in the regressor.
- The elasticities obtained by regressing consumption growth from the NSS on that from the NAS (with controls for changes in whether the round used a mixed recall period and changes in the log ratio of rural price index to the NAS deflator) indicate that the elasticity is lower in the post-1991 period, declining to 0.45 ($t=3.29$) from 0.57 (4.47)

in the pre-1991 period. However, one cannot reject the null hypothesis that the elasticities for the two sub-periods are the same.

- 11 Using the national PPP for individual consumption from the 2005 International Comparison Program (ICP) and incorporating the urban-rural cost-of-living differential implied by India's official poverty line, Ravallion (2008) estimates that India's national line is equivalent to \$1.03 a day in 2005 prices. An Expert Group constituted by the Planning Commission (2009) has recently recommended a higher rural poverty line, while retaining the prior official line for urban areas. Thus the Expert Group recommends lowering the urban-rural cost-of-living differential implicit in the current official lines; under the recommended new lines, the urban cost-of-living at the poverty line in 2004-05 is deemed to be about 30% higher than in rural areas, as compared to about 50% previously. The Expert Group's recommended new line is equivalent to \$1.15 per day when evaluated at the implicit urban and rural PPPs consistent with the national consumption PPP from the 2005 ICP (following the method outlined in Ravallion 2008). The Expert Group estimates an all-India headcount index of 37% in 2004-05 for their recommended new lines.
- 12 The proportion is slightly lower, at 30%, if one instead measures global poverty using a line of \$1 a day – close to India's national line (Chen and Ravallion 2008).
- 13 An effort has been made to assure comparability, including "lining up" the estimates in time, unlike in Figure 1. This has the effect of smoothing the data over time. The fact that the international comparisons have relied on the five-yearly NSS surveys also smoothes the series in Figure 3, relative to Figure 1.

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Appendix: Headcount Indices of Poverty and Mean Consumption (1951-2006)

Year (Midpoint of NSS Round)	NSS Round	Headcount Index			Mean Consumption from NSS (Rs/Month; 1959 Prices)			Private Consumption Per Capita from NAS (Rs/Month; 1959 Prices)
		Rural	Urban	National	Rural	Urban	National	
1951.75	3	47.37	35.46	45.30	21.20	29.26	22.59	24.41
1952.733	4.5	45.61	38.08	44.30	21.79	27.34	22.76	24.98
1953.792	6.5	58.03	46.67	56.05	18.41	23.28	19.26	25.89
1954.875	8	64.23	46.19	61.06	17.15	24.45	18.43	26.27
1955.896	9.5	50.08	43.54	48.93	20.91	24.71	21.58	26.22
1957.125	11.5	60.36	50.27	58.57	18.15	23.24	19.05	26.29
1958.042	13	55.16	47.75	53.84	19.26	22.59	19.86	26.15
1959	14	53.27	44.77	51.75	20.13	23.20	20.68	27.35
1960	15	50.88	49.13	50.57	20.41	22.30	20.75	27.44
1961.083	16	45.40	44.29	45.20	21.89	23.46	22.17	28.15
1962.125	17	47.19	43.02	46.43	21.30	23.93	21.78	27.94
1963.583	18	48.52	44.48	47.77	20.07	24.23	20.84	28.12
1965	19	53.72	48.91	52.82	19.06	22.09	19.63	29.09
1966	20	57.98	52.99	57.04	18.21	20.75	18.69	28.56
1967	21	64.99	52.67	62.64	16.39	20.67	17.21	28.63
1968	22	65.38	53.88	63.17	16.31	20.32	17.08	29.37
1969	23	59.38	49.64	57.48	18.10	21.36	18.73	29.54
1970	24	58.05	47.39	55.95	18.09	22.77	19.01	29.96
1971	25	55.18	44.92	53.14	18.53	23.10	19.44	30.18
1973.25	27	55.81	46.20	53.83	18.79	22.80	19.61	29.61
1974.125	28	56.31	48.90	54.76	18.22	20.81	18.76	29.37
1978	32	55.97	40.62	52.56	20.28	24.69	21.26	31.92
1983.5	38	45.40	35.02	42.92	21.25	26.29	22.45	34.95
1987	42	39.42	33.36	37.92	23.01	28.33	24.33	36.69
1988	43	40.06	34.80	38.74	22.99	27.32	24.07	37.37
1989	44	39.35	35.76	38.45	22.96	26.86	23.95	38.82
1990	45	34.87	32.29	34.21	23.73	28.24	24.88	39.78
1991	46	36.95	31.94	35.66	22.95	27.47	24.11	40.59
1991.75	47	37.61	32.79	36.37	23.66	29.20	25.09	40.60
1992.5	48	43.60	33.30	40.92	22.05	27.91	23.57	40.69
1994	50	36.96	30.19	35.18	23.25	28.73	24.69	41.85
1995	51	41.13	33.36	39.07	22.95	28.85	24.51	43.06
1996	52	37.18	27.98	34.73	23.31	30.97	25.36	44.93
1997.5	53	36.02	29.62	34.29	24.40	29.91	25.89	46.95
1998.25	54	40.18	31.26	37.76	22.46	29.36	24.34	47.94
2000	55*	26.65	22.69	25.56	25.41	32.81	27.45	50.91
2001	56*	24.33	22.06	23.70	26.22	34.11	28.42	52.00
2002	57*	28.10	22.74	26.60	25.94	33.30	28.00	53.60
2002.75	58*	22.90	21.47	22.50	26.84	34.92	29.11	54.04
2003.5	59*	23.30	20.68	22.56	27.30	34.55	29.35	55.78
2004.25	60*	22.34	20.49	21.81	27.47	35.14	29.65	57.46
2005	61	28.91	25.08	27.81	26.44	33.73	28.53	59.53
2006	62*	21.05	20.00	20.75	28.23	35.94	30.45	63.32

Source: Authors' estimates using the methods described in Datt and Ravallion (2009). * denotes surveys that used a mixed-recall period. Private consumption per capita from NAS is at 1959 prices in terms of the national accounts deflator. Mean consumption per capita from NSS is also at constant 1959 prices in terms of our chain consumer price index.