The EPW special issue (25 October 2008) on the new poverty estimates of the World Bank and the editorial that accompanied it have provoked discussion. This note comments on Martin Ravallion’s critique of the EPW editorial.

Ravallion (2008b) has responded to each of four criticisms that have been made, in the EPW editorial, of the World Bank’s exercises in estimating global poverty. What follows is a discussion of this response. As will become apparent to the reader, I find little cause – despite the clarifications provided by Ravallion in his “Reply” – for viewing the World Bank’s approach to measuring world poverty with any less scepticism than the EPW editorial does.

On the International Poverty Line

Ravallion disagrees with the view that “…‘dollar a day’ (or thereabouts) poverty lines may well be little more than ‘destitution lines’”. He points out (as the editorial itself indicates) that the World Bank’s international poverty line (IPL) is based on the national poverty lines of a set of poorest countries of the world. Let us set aside the fact that at different points of time there have been differences in the numbers and composition of these poorest countries, as also in the basis of the relationship between the IPL and country-specific poverty lines. At a more basic level, it is not clear why it is the poorest countries’ poverty standards that must serve as the poverty standard for the world as a whole.

There are two kinds of classificatory errors one can make – call these Type-I and Type-II errors, respectively (see also, in this connection, Cornia and Stewart 1995). A Type-I error is one in which a person is wrongly counted as non-poor, and a Type-II error is one in which a person is wrongly counted as poor. One would imagine that a Type-I error is the graver sort of mistake to commit. In a matter as serious as identifying a person’s poverty status, if one must make a mistake, then it would appear to be doing less harm if one were to err (within limits, of course) on the side of generosity than on the side of niggardliness. Thus, if \( z_i \) is the national poverty line of the \( i \)th of \( n \) countries constituting the world, then a procedure aimed at avoiding a Type-I error would pitch the IPL at the level \( \bar{z} \), where \( \bar{z} = \max_i \{z_i\} \), that is, \( \bar{z} \) is the highest of the \( n \) countries’ national poverty lines (and is likely to be the poverty norm of the richest of the world’s nations). The World Bank’s procedure, on the other hand, seems to be geared to avoiding a Type-II error, and is close in spirit to pitching the IPL at the level \( \bar{z} \) (where \( \bar{z} = \min_i \{z_i\} \)), that is, \( \bar{z} \) is the lowest of the \( n \) countries’ national poverty lines (and is likely to be the poverty norm of the poorest of the world’s nations). Even a procedure which avoids both extremes would endorse an IPL higher than $1.25 per person per day at 2005 PPP: by Ravallion’s own estimation, the average of all except the poorest countries (from, presumably, a compilation of 75 national poverty lines) is twice as high, at $2.50.

The average official poverty line in the United States, Ravallion tells us, is $13 a day. The World Bank’s prescribed IPL of $1.25 a day is less than 10% of the US poverty line. I imagine an American living in, say, California, on $1.25 a day at 2005 purchasing power parity (PPP) is entitled to feel s/he is living in circumstances of destitution. It seems unlikely that the World Bank would be disposed to correct the perception of such a hypothetical Californian by counselling calm reasonableness to her/him. It is then fair to entertain the expectation that the World Bank should adopt the same stance towards a very real Sierra Leonean or Bangladeshi or Ecuadoran living on $1.25 a day at 2005 PPP. After all, the World Bank is supposed to be a world bank. It is easy enough to dismiss this as virtuous counsel on a matter of manners. It is, however, fundamentally a matter of logic that is involved – as should be apparent if we were to take seriously what Ravallion (2004: 15) himself has said of...
the rationale underlying the World Bank's IPL: “For our global poverty counts, we have but one overriding concern – that two people with the same standard of living, measured by their command over commodities, be treated the same way no matter where they live.” In light of this, I should think Ravallion really requires no assistance in answering his own query, which he raises in his “Reply” (p 78): “... India's official poverty line is about $1.00 a day using the same PPPs. So if $1.25 marks ‘destitution’ what are we to make of India’s national poverty line?”

It is, nevertheless, instructive to dwell a bit on India's official poverty line. In this connection, it is relevant to consider a particular construction of the dollar-a-day IPL due to Ravallion (2008a): ‘The “$1 a day” line aims to judge poverty in the world as a whole by the standards of what poverty means in poor countries’. This sentiment suggests that what poverty does, or should, mean in poor countries is credibly reflected in the national poverty lines of these countries. It is not self-evidently obvious that such is indeed the case, nor – if this is an intended interpretation – that the national poverty lines of poor countries invariably reflect perceptions of poverty that are a product of democratic consultation or informed public reasoning. (Such an interpretation certainly seems to be stretching it a bit when the poverty lines in question have been prescribed by the World Bank itself.) In fact, it is well known that – since the head-count ratio of poverty is a non-decreasing function of the poverty line – most governments, especially the governments of poorer nations, would be reluctant to set the poverty line at realistic (leave alone generous) levels. India’s is a particularly salient case in point.

Back in the early 1960s, the Perspective Planning Division of the Planning Commission put out an important document titled “Perspective of Development: 1961-1976” (a reprint of which is available in Srinivasan and Bardhan 1974). The “Perspective” makes what amounts to a candid admission of the extent of poverty which India could “afford” at the time. It was calculated that the balanced diet recommended by the Nutrition Advisory Committee, supplemented by a modest allowance for non-food requirements, yielded a poverty line of Rs 35 per person per month at 1960-61 prices. A further calculation revealed that this poverty line would plunge some 80% of the Indian population into poverty. Apparently, wiser – or at any rate, more sober, and cautious, and politic – counsels prevailed: a Working Group set up by the Planning Commission recommended in July 1962 that the poverty line should be pitched at Rs 20 per person per month at 1960-61 prices.

Subsequently, in the mid-1980s, the poverty line for 1973-74 was fixed at that level of consumption expenditure at which a calorific norm of 2,400 (respectively, 2,100) kilocalories per person per day in rural (respectively, urban) areas was observed to be realised. This yielded a rural (respectively, urban) poverty line of (roughly) Rs 49 (respectively, Rs 56) per person per month for rural (respectively, urban) India at 1973-74 prices. The official practice has been to “update” these poverty lines in subsequent years through employment of suitable consumer price indices. It is no longer news that these poverty lines have, over time, displayed a steady “calorific drift”, that is, at the official stipulated poverty lines, the calorific consumption, over time, has steadily fallen further short of the original 2,400 and 2,100 kilocalories norms: the “anchoring” of the poverty line in a nutritional standard is therefore a moot point.

There is a vast literature on this subject, and more generally on the conceptual and methodological inadequacies of the Planning Commission’s procedure of identifying the poverty line, a literature which, as it happens, also has implications for an understanding of the debate on the World Bank’s poverty estimates. A restricted sample of the India-related literature would include Nayyar (1991), Suryanarayana (1996, 2000), Panda and Rath (1999), Mehta and Venkatraman (2000), Meenakshi and Vishwanathan (2003), Patnaik (2004, 2007), Ray and Lancaster (2005), Subramanian (2005), and Reddy (2007). I cannot insist, but I believe it would not be illiberal on my part to suggest that an acquaintance with some of this literature might actually be helpful in acquiring an appreciation of the reliability of official Indian estimates of poverty.

The official poverty line for urban Tamil Nadu in 2004-05 was (roughly) Rs 547 per person per month, or (without allowing for any economies of scale), roughly Rs 2,200 per four-member household. I happen to know that, in my own city of Chennai, a modest low-income two-room flat with attached bathroom and kitchen would have commanded a rent of at least around Rs 1,500 per month in 2004-05. A modest meal at the local tea-shop would have cost Rs 10 per head; assuming two such meals per head over the entire day to be adequate nutritional intake, the monthly cost of food for a four-member household would be Rs 2,400. Let us, quite arbitrarily and drastically, cut this figure in half, to allow for the fact that home-cooked food is cheaper: the monthly cost of food would then be Rs 1,200, and the monthly requirement for meeting the needs of shelter and food together would work out to Rs 2,700. This – if the poverty line in 2004-05 were pitched at the official level of Rs 2,200 per month for the household – would have left a good deal less than nothing to spend on education, clothing, and transport, not to mention other exotica, like films or an occasional drink. Of course, a fractured arm, an episode of leptospirosis, any other incidence of morbidity or sickness, would have had to be treated as an unaffordable luxury, if not an outright sinful indulgence.

Using Ravallion’s own (2008b) conversion rates, an IPL of $1.25 in 2005 PPP would correspond to a rural (respectively, urban) all-India poverty line for a four-member household of Rs 1,709 (respectively, Rs 2,584), which is more – but not vastly more – generous than the Planning Commission’s allowances. When we deviate a little from such stringency, we discover what the National Commission for Enterprises in the Unorganised Sector (2008) discovered: namely, that – effectively – if we employed a national poverty line of Rs 2,400 per month for a four-member household (corresponding to Rs 20 per person per day) across the board for India in 2004-05, then the proportion of the population in poverty would be 77%. This is rather more serious than the headcount ratios corresponding to the Indian Planning Commission’s norms (27.5%) or the World Bank’s norm (42%).
Finally, in speaking of “destitution lines”, one is not committed, in a literal-minded way, to what Ravallion calls “a life-threateningly low level of living” (p 78) note that this is one dictionary definition of “destitution”; Merriam-Webster Online refers to destitution as “such extreme want as to threaten life unless relieved.” However, there are alternative ways of conceptualising destitution, as pointed out by Devereux (2002). In one such conceptualisation, which Devereux (op cit: 10) attributes to Craig and Potter (2003), “…lack of access to affordable, effective healthcare is dreaded, not just as a source of ‘ill health’, important though that is, but as a source of vulnerability and, ultimately, destitution”. Such a conceptualisation, in view of the discussion, in the preceding paragraph, of official Indian and World Bank poverty lines in relation to the requirements of meeting fairly basic needs, renders the use of the term “destitution lines” a not extravagant description even by the Merriam-Webster definition of the word in question. The term acquires even greater plausibility with reference to the construal by Dasgupta (1993: viii) of destitution as “an extreme condition of ill-being”, or by the American Heritage Dictionary of the English Language as “a deprivation or lack; a deficiency”. In any event, the issue does not turn on a semantic dissection of the word “destitution”, so much as on the socio-economic import of the notion, read in context. In the end, the issue reduces to advancing the claim of a simple but serious point: in fixing poverty lines – an exercise which requires us to assess the needs of the poor – let us, please, not be excessively stoical and Spartan on behalf of the poor.

**PPP Calculations**

Ravallion is right to point out that the latest World Bank estimates of global poverty have not been totally impervious to the possible merits of what one may call “PPPs for the poor” (or PPPPs, for short). From what one can understand, the conversion rates employed continue to be PPPs which, apparently on the basis of some applied sensitivity analysis, have been judged to be not unacceptable proxies for PPPPs. Overall, one senses that Ravallion is in agreement with the notion that PPPPs, if faithfully implemented, would constitute an improvement on PPPs. Having said this, it may be recalled that the EPW editorial had drawn reference, following the criticism made by Reddy and Pogge (2008), to two problems of cross-section comparability occasioned by the use of PPPs, which may be summarised as, respectively, the “irrelevant countries problem” and the “irrelevant commodities problem”. The use of PPPPs in place of PPPs would, in some measure, address the “irrelevant commodities problem”: as such, it would at best (and subject to proper implementation) be a partial response to the issue of cross-sectional comparability, geared toward mitigation, rather than elimination, of a difficulty.

More fundamentally, given that the use of price indices is seldom unproblematic, there is a case for employing a defensible procedure of poverty comparisons that does not rely on the employment of price indices at all. This focuses directly on the issue of the “common standard” according to which poverty comparisons are most meaningfully effected. Reddy and Pogge (2008), Reddy (2004), and Subramanian (2005, 2007) all point to the conceptual soundness of locating the “common standard” in an identified set of basic human capabilities to function (as opposed to alternative proposals that have been made of locating the common standard in an identified commodity bundle or an identified level of “real income”). As Sen (1983) has pointed out, deprivation is “absolute” in the space of functionings but may be “relative” (given the possibility of interpersonal variations in the ability to convert resources into functionings) in the space of resources or incomes. For any given region at any given point of time, the poverty line can be taken to be the monetary resources that will be needed to achieve some minimally acceptable level of functionings deemed necessary to avoid capability deprivation. This could be Rs x in India and $y in the US (per appropriately defined unit of time). If the world consisted only of these two countries, the global headcount of poverty would be the sum of the Indian population with incomes less than Rs x and the US population with incomes less than $y. The procedure, as one can see, does not require

the use of any price indices. I am not suggesting this is a practically easy route to identification, but this fact does not entail accepting that practically feasible solutions which are conceptually unsound constitute a satisfactory resolution of the problem.

**Inter-Temporal Comparisons**

On the EPW editorial’s criticism relating to a problem of consistency with the World Bank’s methodology when it comes to making inter-temporal poverty comparisons, Ravallion (2008b: 78) says:

Our method – let us call it method A – entails converting the international poverty line to local currencies using the PPP at the benchmark year… (now 2005) and then adjusting over time using the country’s consumer price index (CPI) to get to the prices prevailing in the relevant survey year. The editorial claims that it would only be a “fluke” if our method gave the same result if instead we had used the obvious alternative, method B, of converting all country-distributions to $ and then made the poverty calculations adjusting for inflation in the us.

It is not clear why method B is the “obvious alternative” to method A, nor that the editorial has claimed that it is only by fluke that methods A and B will “give the same result!” This makes it difficult to agree with the charge of a mistake having been made in the editorial (Ravallion 2008b: 78-79):

The mistake made in the editorial (and by one or two other critics) is not to realise that if one uses method B then the PPP for the non-benchmark year must be calculated consistently with the differential rates of inflation between the us and the country in question.

Specifically, the EPW editorial did not undertake any comparison between methods A and B. For, why would method B be the “obvious alternative” to method A, unless inflation in the us were the same as inflation in every other country? And if such an identity of inflation rates did in fact obtain, then B would not be an “alternative” to A, B would just be indistinguishable from A! When Ravallion (2008b: 78-79) says that “the PPP for the non-benchmark year must be calculated consistently with the differential rates of inflation between the us and the country in question”, one takes it he means the following. Suppose in the benchmark year –
call it $t_2$ – 1 US$ ≡ rupees $x$ in terms of the PPP exchange rate. Suppose in some other, non-benchmark year – call it $t_3$ – the price level has risen by 20% vis-à-vis $t_2$ in the US and by 25% in India. Ravallion’s requirement, it seems, is that in year $t_3$, one must take that 1.2 US$ ≡ rupees 1.25$x$, or (given that 1.25/1.2 = 1.042), that 1 US$ ≡ rupees 1.042$x$. The EPW editorial’s claim is that it is only by fluke that the actual PPP in $t_3$ will turn out to be given by 1 US$ ≡ rupees 1.042$x$. The problem of consistency alluded to in the editorial is now simply explained. What if a survey of consistency alluded to in the editorial is purchased power – which violates pre-

respectively reflect identically the same comparison method $A$ and $C$ of inter-temporal poverty comparison. Both methods, unfortunately, lead to inconsistent outcomes. One does not have to choose between the two inconsistencies, unless one has opted, for whatever reason, to confine one’s universe of available identification-related alternatives to Methods $A$ and $C$. Indeed, those not committed to “dollar-a-day” type international poverty lines are not, as a matter of logic, required to engage with this issue: in general, in a just world, one should be spared the necessity of dealing with a problem which is not of one’s creation!

### On Artefacts and Reality

In the Editorial, it was observed that

...it turns out that the lower the poverty line employed, the more flattering is the resulting trend decline in poverty. This suggests that the trends we obtain are not so much a reflection of what is actually happening to poverty on the ground, as a verification of the consistency of arithmetic.

Ravallion interprets this as pointing to the possibility of exploiting access to the a

Table: MDG Achievement at Different International Poverty Lines

<table>
<thead>
<tr>
<th>IPI Level in 2005 Dollars</th>
<th>1990 Baseline (Millions of Poor)</th>
<th>2005 Target Reduction of 27.5% (Millions)</th>
<th>Annual Reduction Needed to Reach Target (%)</th>
<th>Reduction Needed to be On Track in 2005 (Millions)</th>
<th>Actual Reduction Achieved 1990-2005 (Millions)</th>
<th>How is the World Doing in Regards to MDG-1? (100% = Exactly on Track)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1.00/day</td>
<td>1,303.2</td>
<td>358.4</td>
<td>1.28</td>
<td>228.7</td>
<td>424.2</td>
<td>185%, much ahead of schedule</td>
</tr>
<tr>
<td>$1.25/day</td>
<td>1,817.5</td>
<td>499.8</td>
<td>1.28</td>
<td>318.9</td>
<td>417.9</td>
<td>131%, ahead of schedule</td>
</tr>
<tr>
<td>$2.00/day</td>
<td>2,753.6</td>
<td>757.2</td>
<td>1.28</td>
<td>483.2</td>
<td>155.8</td>
<td>32%, much behind schedule</td>
</tr>
<tr>
<td>$2.50/day</td>
<td>3,076.6</td>
<td>846.1</td>
<td>1.28</td>
<td>539.9</td>
<td>-63.6</td>
<td>-12%, regressing</td>
</tr>
</tbody>
</table>

Source: Pogge (2008)

...of $1 (2005 PPP), the world can claim to be 85% ahead of schedule in realising the Millennium Development Goal-1; but with an IPI of $2, the world would have to be found 68% behind the warranted schedule for meeting MDG-1. The level at which the IPI is pitched is nothing if not crucial, and given a justifiable absence of extreme aversion to a Type-1 error, the $2.50 IPI should be seen to be more reasonable than the $1.25 IPI.

Or so one could argue if one’s interest in the matter led one in that direction, and if one also suspected that the cumulative density function (cdf) of income had a tendency to behave over time as shown in the figure (p 71). If the rate of growth of low income levels were faster than that of high income levels, then it is conceivable that the cdfs in an initial period $t_1$ and in a later period $t_2$ could be as pictured in the figure. If one knew or suspected this to be the case, and if one also wished to demonstrate a deterioration in poverty, then one would have a strategic reason for pitching the poverty line at a “high” level like $z_2^*$, to the right of $z^*$, in the figure – and one...
could proceed to seek a rationalisation of \( z_p \) after the event. If one’s interests ran in precisely the opposite direction, one might be inclined to pitch the poverty line at a “low” level like \( z_0 \) to the left of \( z^* \), in the figure – and thereafter invent reasons for finding \( z_p \) to be a plausible poverty line. In either case, one would be confirming the consistency of arithmetical rather than describing what is actually happening to poverty on the ground. Cynical? Perhaps. Wary? Definitely. The allusion to arithmetical artefacts and reality is amenable to interpretation as simply a rational invitation, addressed to each one of us that has a stake in national and international economic justice, to adopt a posture of wariness and vigilance towards vital statistics on national and international poverty.

A Summing-Up

The topic of these columns’ discussion has profound implications for a reckoning of well-being in the world today; for the rights of the world’s poor; and for the duties of those better placed. This – apart from intrinsic reasons of the desirability of getting things as nearly “right” as possible – is why estimates of poverty, at both country-specific and aggregated levels, deserve to be informed by logic, by evidence, and by a morality that is sensitive to the demands of global justice. This also is why the present debate is often difficult, occasionally charged, and unfailingly important.

REFERENCES


Figure: How Poverty Trends Can Change Depending on Where the Poverty Line Is Pitched

Cumulative density function

Between \( t_1 \) and \( t_2 \)

The headcount ratio declines when the poverty line is \( z^* \); the headcount ratio increases when the poverty line is \( z_{-p} \).

Between \( t_1 \) and \( t_2 \)

The headcount ratio declines when the poverty line is \( z_{-p} \); the headcount ratio increases when the poverty line is \( z^* \).

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