

Reply to Angus Deaton's paper, "[Price Indexes, Inequality and the Measurement of World Poverty](#)"

Since its 1990 *World Development Report (WDR)* on *Poverty*, the World Bank has anchored its international poverty lines to the national poverty lines used in the poorest countries. The original "\$1 a day" line was a typical line amongst low-income countries in the data available at the time of the 1990 WDR. This is acknowledged to be a frugal line; naturally richer countries have higher national poverty lines. One could hardly argue that the people in the world who are poor by the standards of the poorest countries are not in fact poor. This gives the global poverty line a salience in focusing on the world's poorest that a higher line would not have. Even so, the Bank has never insisted on using just one line; indeed, in its work with specific developing countries, the Bank uses the national poverty line considered most appropriate in each country.

Naturally there is now much more data available than was the case in 1990. The original data set on national poverty lines covered only 22 developing countries, all for the 1980s and mainly drawn from academic studies. This sample had particularly weak coverage of Africa and the lines were sometimes only for rural areas and some excluded non-food needs. Since then, there has been a large expansion in the number of countries that have set their own national poverty lines. In its latest update, the Bank has used national poverty lines for 75 developing countries.

The data on price levels has also improved substantially, thanks to the *International Comparison Program (ICP)*, which collects the data on prices needed to estimate purchasing power parity (PPP) exchange rates. Prior to the latest ICP for 2005, the Bank's main international poverty line was \$1.08 a day at 1993 PPP. The new ICP price data for 2005 indicate that the cost-of-living is higher in developing countries than we thought.

There are also a great many more household surveys available for measuring living standards. In the 1990 WDR the Bank used only 22 surveys for just 22 countries, while its latest update uses almost 700 surveys for 115 countries.

In the light of these new data, the Bank has made a major re-assessment of the extent of poverty in the world and how it has changed over time. The full details are available in the paper by Shaohua Chen and Martin Ravallion, "[The Developing World is Poorer than We Thought, But no Less Successful Against Poverty](#)," (Policy Research Working Paper 4703, World Bank). That paper gives revised poverty counts back to 1981. (As in all past updates of the Bank's global poverty measures, all past estimates back in time are also updated, for all countries.)

Armed with these new data, the Bank's researchers returned to the same original idea as in the 1990 WDR, namely that the global poverty lines should be anchored to the poverty lines found in the poorest countries. The Chen-Ravallion paper used five international lines. The lowest of these was \$1.00 a day at 2005 prices, which is very close to India's official poverty line. The next lowest was \$1.25 a day, which is the average line of the poorest 15 countries in the new data set. The highest was \$2.50 a day, which is the median of all countries except the poorest 15.

Angus Deaton claims that our new method of setting international poverty lines is "inappropriate." He endorses the basic method, namely to base the international lines on the national lines found in the poorest countries. The \$1.25 line at 2005 PPP is essentially set the same way as the original \$1 a day line. So in what sense can the new method be deemed "inappropriate" if the old method was not? Deaton's concern is that the precise group of countries changed with the updating of the sample of national lines. In particular, India was in the set of countries used to set the original \$1 a day line, but it is not amongst the poorest 15 countries used to set the \$1.25 line at 2005 prices.

Yet it was expected that the set of countries would change with the new data. Nobody ever said that India had to be in the reference group of countries forever. It is agreed that the new sample of national poverty

lines implies a higher international line than did the old sample of 22 countries in the 1980s. But, as the Bank's researchers explain in their paper "[Dollar a Day Revisited](#)" (Policy Research Working Paper 4620, World Bank), the old sample of national lines used by the 1990 WDR was clearly unrepresentative of developing countries as a whole, while the new sample looks much better from this point of view. To have kept the set of countries constant, as Deaton proposes, would have been very hard to justify given what we now know—it would mean deliberately ignoring the biases in past estimates and ignoring the new data available to correct those biases.

As noted in "Dollar a Day Revisited," the original sample of national lines was not representative of developing countries. This sampling bias was unavoidable at the time, but it can now be fixed. Correcting for this bias raised the international line somewhat. But as long as we agree on the principle that this line should be representative of the lines found in low-income countries, we must accept that poverty is higher than we thought by those standards.

Deaton proposes instead to use a mean of all national poverty lines, weighted by the number of poor. Naturally then the (relatively low) lines found in India (and also China) get a huge weight. However, we do not agree that Deaton's proposal "presents better continuity" with past estimates. In fact it is not easy to make sense of his comparison between an international line of \$0.92 a day in 2005 and the old \$1.08 line for 1993. To say that there is "no need for a major revision in our perceptions of poverty" based on that comparison stretches credibility. How can the line in 2005 prices not be higher than the 1993 line? At any 2005 line over \$1.03 a day the poverty count is higher than the Bank obtained before (as explained in Chen and Ravallion, \$1.03 is the 2005 line that gives the same headcount index for 2005 as the \$1.08 line at 1993 prices). So as long as it is agreed that \$1 in 1993 international prices is worth more than \$1 at 2005 prices, we must agree that the global poverty count for 2005 has risen.

What then is at stake here? India's (old) official poverty line is one of the five international lines considered by Chen and Ravallion, though they show clearly that a slightly higher line of \$1.25 a day is more representative of the lines found in poor countries. As is clear from the above discussion, India's official line is low by developing country standards. But any line is potentially contestable. If users of the Bank's global poverty measures want to use India's line they are free to do so. (The Bank's interactive web site [PovcalNet](#) allows users to set any line they like.) However, India's old official line is also thought to be too low in India. Indeed, an Expert Group appointed by India's Planning Commission has recently proposed a new official line for India, which is about \$1.17 a day at 2005 PPP. This is a lot closer to the Bank's line of \$1.25 a day.

Moreover, the choice between \$1.00 a day and \$1.25 a day (or even higher lines) makes no difference to the Bank's claim that measures of absolute poverty have fallen in the developing world over 1981-2005. Indeed, Chen and Ravallion show that this claim is robust to using global poverty lines anywhere between India's line and the official poverty line used in the United States, which is \$13 a day in 2005 (per person, for a family of four).

The attention of a distinguished economist such as Angus Deaton to issues of global poverty is always welcome. Deaton's paper contains important insights on a number of other issues not discussed above, including on the methods used to estimate PPPs. But his arguments against the new international line of \$1.25 a day do not seem germane to our broader efforts to gauge the extent of poverty in the world, and (most importantly) how much progress the world is making against poverty.

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January 2010