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HD INSIGHTS

Extreme Poverty Statistics

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According to the World Bank's $1 a day indicator, 950 million people are today living in extreme poverty, 17.72% of the 5359 million persons living in the developing world, http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp . How do they count this?

Whether or not one is counted as extremely poor depends on one's household's annual per capita income or consumption expenditure (either may be used depending on data availability), which must fall below the purchasing power that $392.88 had in the US in 1993 (Chen and Ravallion 2004, p. 147).

To apply this standard in the US in other years, one can employ the consumer price index (CPI), which shows that today's equivalent is about $564 (http://data.bls.gov/cgi-bin/cpicalc.pl). So, if you live in the US in a three-person household, for instance, then the three of you would have to be living on less than $1692 for all of 2007 to count as extremely poor.

If that is the standard, then nearly all the extremely poor today must be living outside the US. How do they get counted?

This $1 a day indicator relies on purchasing power parities (PPPs) which relate all the world's currencies to one another. PPPs are calculated by the International Comparison Program (ICP) (see previous issue of HD Insights on the ICP). While there are clear needs for internationally comparable income or consumption data, the PPPs must be approached with caution. The calculation is based on the prices prevailing in the various countries and gives greater or lesser weight to the price of any specific commodity depending on this commodity's share in international consumption expenditure. So the prices of cars, gas, and babysitters are weighted more heavily than those of hats or chimney cleanings, because households spend a lot more on the former than on the latter commodities.

How do PPPs diverge from the exchange rates prevailing in the currency markets?

PPPs assign a much higher $-value to poor-country currencies than exchange rates do. In the case of India, for

instance, the divergence is about 5:1 - 1000 Indian Rupees are counted as being worth $120 at PPP conversion even while they are only worth $24 at the bank. Such divergences are typical across poor-rich country pairs. Thus, if you wanted to live in a typical poor country right at the extreme-poverty line for one year, you could not take $564 with you, but would have to make do with somewhere between $90 and $170. The extremely poor reportedly live, on average, 28.2% below the extreme-poverty line. Assessed at currency exchange rates, the 15% of humanity living in extreme poverty account for about 0.4% of global consumption expenditure.

How can this divergence last? Why aren't people driving up the $-value of Rupees by buying 1000-Rupee notes for $24 and then using them to purchase commodities that would cost $120 in the US?

If all commodities were 80% cheaper in India, then this would happen of course. In fact, however, the 5:1 divergence is a weighted average. Many commodities that can easily be transported across borders cost only a little more in rich than poor countries. Commodities that cannot easily be transported may cost 50 times more. This is especially true of many services, like haircuts and childcare, where rich-country demand and poor-country supply cannot be brought together.

You see here a flaw in the $1 a day method. Take an Indian family of three with a monthly income of 1000 Rupees. If its consumption mirrored the pattern of international consumption, then what they buy in India would cost $120 in the US. But this family actually has a very different consumption pattern: concentrated on basic foodstuffs and other necessities, which constitute only a small fraction of international consumption expenditure. Because poor families *must* focus their spending this way, the amounts they earn and spend should be assessed in relation not to prices in general, but in relation to the prices of basic necessities.

In addition, this method introduces discrepancies when applying it with different base years. Up until 1999, the Bank had used 1985 as its base year, so we have some data: In 1999, applying its method with the 1985 PPP base year, the Bank reported that, in 1993, Sub-Saharan Africa and Latin America had extreme-poverty rates of 39.1% and 23.5%, respectively. In 2000, applying its method with the 1993 PPP base year, the Bank reported that these same regions in the same year had extreme-poverty rates of 49.7% and 15.3%, respectively. For individual countries, the purely base-year related headcount revisions were much greater still (compare Table 4 in World Bank 1999 with Table 4 in World Bank 2000).

What would an alternative method look like?

The best way of doing this may be to specify generally - in terms of calories, nutrients, and so on - what typical human beings need to keep themselves alive and healthy. One can then investigate, for any year and geographical area, how much local currency would be required to meet these needs in the cheapest way consistent with local customs. This method would give due prominence to the prices that are actually most relevant to the poorest in different areas: to the prices of rice, fish, bananas, water, and quinine, perhaps, in a malaria infested coastal region of South Asia, and to the prices of potatoes, chicken, water melons, and cloth in an Andean region where safe water is freely available. Relating the consumption expenditure of all households to this standard would achieve much more plausible comparisons across time and space than the current method which defines extreme poverty in these two regions by relating their currencies to the local prices of a vast universe of commodities nearly all of which the poor do not and could not rationally consume.

If one were to adopt the method proposed, how different a picture would it deliver about the incidence, trend and geographical distribution of extreme poverty?

This is difficult to know in advance. Preliminary work I have done with my economist colleague Sanjay Reddy suggests that the current $1a day method may well be presenting too rosy a picture of extreme poverty's incidence and trend. A recent workshop at the World Bank suggests openness to methodological refinements in the way the Bank conducts and processes its massive household surveys. We all may soon know more about extreme poverty and hence be better able to design intelligent policies toward its eradication.

Some general sources:

1. Chen, Shaohua and Martin Ravallion, 2004. 'How Have the World's Poorest Fared since the Early 1980s?,' World Bank Research Observer, 19: 141-69.
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2. Deaton, Angus, 2003. "How to Monitor Poverty for Millennium Development Goals." Princeton University Research Program in Development Studies, Working Paper 221.
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3. Reddy, Sanjay, and Thomas W. Pogge, 2008. "How Not to Count the Poor." Forthcoming in Sudhir Anand and Joseph Stiglitz, eds.: Measuring Global Poverty. Oxford: Oxford University Press.
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4. World Bank, 1999. World Development Report 1999/2000. New York: Oxford University Press.
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