FRIDAY October 17th was China’s first official “Poverty Alleviation Day”, an annual convocation of “forums and fundraisers”, designed to rally efforts to combat deprivation. Of course, thanks to China’s rapid economic progress, the country already alleviates a lot of poverty each day: last year the number of rural poor fell by 16.5 million or over 45,000 people per day. But that still left 82.49 million people stuck in rural squalor at the end of 2013, according to official statistics.

Some places in China are worse off than they look. Their “lavish city buildings” disguise impoverished populations, according to Xinhua (http://news.xinhuanet.com/english/china/2014-10/14/c_133716299.htm), the state news agency. Other parts of the country are less poor than they let on. They do not want to be removed from the list of “poverty-stricken counties” because of the aid and other benefits they would forfeit.

China’s poverty is, therefore, a matter of some contention and confusion. Indeed, China itself may not be as poor as its own official media seem to think. Xinhua reports (http://news.xinhuanet.com/english/china/2014-01/27/c_133078541.htm) incorrectly that China’s official poverty line is lower than the World Bank’s global standard of $1.25 a day. By that international standard, claims another state-backed newspaper (http://usa.chinadaily.com.cn/china/2014-10/14/content_18738448.htm), the country still has more than 200 million poor people. In citing that depressing statistic, it echoes a speech (http://news.xinhuanet.com/english/china/2014-06/21/c_133426262.htm) in June by Li Keqiang, China’s premier, in which he said that “some 200 million Chinese still live below the poverty line by World Bank standards.”

Take comfort. These reports are misleading as well as depressing. Despite what they say, 200 million Chinese are not now living on less than the World Bank’s global poverty line of $1.25 a day. We tried to explain the confusion in a blogpost in 2011 (http://www.economist.com/blogs/freeexchange/2011/12/chinas-poverty-line) and another in 2013 (http://www.economist.com/blogs/analects/2013/02/chinas-poor). Perhaps we should make it an annual event.

China’s rural poverty line is 2,300 yuan a year, or 6.3 yuan a day. At today’s exchange rates that is only about $1.03, which would seem much meaner than the World Bank’s line of $1.25. But the Bank’s poverty line is calculated at purchasing-power parity exchange rates, not market exchange rates. To the World Bank, someone is suffering from extreme poverty if they consume less than what $1.25 could buy in America in 2005 (to simplify a bit). To the Chinese government, a rural person is poor if they earn less than what 6.3 yuan could buy in rural China in 2010.

To illustrate the concept of purchasing-power parity, The Economist likes to compare the price of Big Macs around the world. To illustrate the present problem, we have to go one step further: comparing the price of burgers across space and time. Thus an American with $3.06 (http://www.economist.com/node/4065603) to his name in 2005 could afford to buy a Big Mac. Five years on, in 2010, a Chinese person with 13.2 yuan (http://www.economist.com/node/16646178) in his pocket could afford to do the same. The two Big Mac eaters are equally well off, even though 13.2 yuan is worth only $2.15 at today’s exchange rates.

To compare China’s poverty line with the World Bank’s we need to compare how much stuff a person on each line could buy. That requires four adjustments, because of the different years used for each line, the different places, the difference between consumer prices and other prices, and because of the difference between consumption and income.

1. Start with years. From 2005 to 2010, prices in rural China rose by about 17.7%, according to the rural consumer-price index published by China’s National Bureau of Statistics**. Therefore 6.3 yuan in 2010 stretched only as far as about 5.35 yuan in 2005.

2. How should we convert that 5.35 yuan into dollars? The World Bank reports that China’s 2005 per capita GDP of 14,185 yuan was
equivalent to $4,965 at purchasing-power parity. In other words, 2.86 yuan in China in 2005 could buy as much as one dollar in America in the same year. At that rate, China’s poverty line is equivalent to $1.87 in 2005 purchasing-power parity dollars, almost 50% higher than the World Bank’s standard.

3. But that exchange rate is based on a price comparison of all goods and services, across the whole economy. We are only interested in consumer goods and services. China’s consumer prices tend to be a little less cheap, relative to world standards, than its other prices. According to the 2011 International Comparison Program (http://siteresources.worldbank.org/ICPEXT/Resources/ICP_2011.html) (ICP), China’s consumer prices were 5.4% higher than prices across its economy as a whole***. If that was also the case in 2005, then China’s poverty line is equivalent to $1.77 in America that year or about 40% higher than the global standard.

4. There is one final difficulty. The World Bank’s line is based on consumption. China’s line is based on income. What the poor earn is not necessarily the same as what they consume. Someone earning over $1.77 per day, saving a lot of it, and consuming less than $1.25 will look poor to the World Bank but not to China’s government. China’s households do have high saving rates. However it would be surprising if there were lots of people earning more than $1.77 but consuming less than $1.25.

The simplest way to prove that China’s poverty line is higher than the World Bank’s is to compare the number of people falling below each line.

The most recent World Bank figure is almost three years old****. In 2011, by its $1.25 standard, the number of rural poor in China was 81.7m (http://iresearch.worldbank.org/PovcalNet/index.htm?2). (That is 12.31% of a rural population of 663.87m, using the numbers on PovCalNet, the Bank’s online tool for poverty measurement.) The Chinese government’s figure for the same year was 122.38m (http://www.stats.gov.cn/english/PressRelease/201202/t20120222_72118.html). The fact that more people fell below China’s line proves that it is higher than the World Bank’s. Indeed, we would have to raise the World Bank’s line to $1.45 a day to encompass as many poor people as China counted in that year.

Whichever standard you use, China is still home to tens of millions of hard-pressed people. It has many poverty-alleviation days ahead of it.

Footnotes:

* He was probably referring to the World Bank’s calculation for 2005, as featured in this paper (http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2008/05/19/000158349_20080519094812/Rendered/PDF/wps4621.pdf) by Martin Ravallion and Shaohua Chen (see Table 2).

** In our previous posts on this topic, we used national inflation not rural inflation.

*** This PPP is based on the results of a 2011 comparison of worldwide prices, published earlier this year. Our previous posts on this topic calculated PPP based on a 2005 comparison of prices.

**** The World Bank’s calculation of purchasing-power parity is based on the 2005 ICP not the more comprehensive comparison in 2011.