Since 1990 the World Bank has been calculating the “international poverty line”, the most commonly used benchmark for poverty in the world used to measure the progress of the fight against poverty. The international poverty line was originally set at one dollar per person per day. Since then, it has been updated many times. In 2008 it was increased to USD 1.25, and it was recently updated again to USD 1.90. While the increase in 2008 gave the world 400 million more poor people “overnight”, the latest increase slightly reduced the number of people living in extreme poverty from 1.011 billion to 987 million. What seems paradoxical at first is actually relatively easy to explain.

How are the poverty line and the number of people in the world living in extreme poverty calculated?

The international poverty line is based on the average of national poverty lines of 15 very poor developing countries. This is done by first converting the various national poverty lines into USD using purchasing power parity (PPP) exchange rates and then calculating the average. Purchasing power parity exchange rates are used instead of nominal exchange rates in order to cancel out any overvaluation or undervaluation of currencies in real terms. The number of people living in poverty in a particular country is then found by converting the average poverty line into that country’s currency, once again using purchasing power parity exchange rates. This can then be combined with data regarding the distribution of income in that country in order to estimate how many people have an income that falls below this poverty line and are therefore considered to be “extremely poor”.

In 2008 the World Bank calculated a new international poverty line of USD 1.25 (based on 2005 prices), meaning that in 2005, a person on the average national poverty line for the 15 countries in question was able to buy a basket of goods that would have cost exactly USD 1.25 after converting into USD (allowing for the appreciation/devaluation of currencies).

Why was it necessary to calculate the poverty line again?

The purchasing power parities are a key factor when it comes to calculating the international poverty line. They are only calculated at intervals of several years as the process is quite complex. In the meantime, they are extrapolated on the basis of national price indexes. The first new calculations of purchasing power parities since 2008 were published last year, based on prices as they were in 2011 instead of 2005. The results for 2011 are based on more reliable data and improved estimation methods compared to those used for 2005. This prompted the World Bank to decide to calculate the international poverty line again. No other changes were made to the method used, as a result of which the criticisms relating to the selection of countries, the calculation of the average and the use of baskets of goods and price indexes that are of little relevance to the consumption patterns of the poor remain valid.

The poverty line has remained the same in real terms. The nominal increase merely reflects inflation from 2005 to 2011.

For its new calculation, the World Bank first updated the national poverty lines from 2005 (in local currency) to 2011 prices using national price indexes, and then converted them into USD based on the new purchasing power parities for 2011. The average of the 15 poverty lines came to USD 1.88 (based on 2011 prices), which the World Bank then rounded up to USD 1.9. This means that the same basket of goods that could be bought for USD 1.25 in 2005 would have cost USD 1.88 on average in the 15 countries included in the calculation in 2011. The difference merely reflects the average rate of inflation between 2005 and 2011.

Since the poverty line has remained largely constant in real terms (and has simply been updated nominally from 2005 to 2011 prices), the total number of people living in extreme poverty has also not changed much. The marginal net reduction from 1.011 billion to 987 million people living in poverty is due to slight increases in more advanced and slight reductions in poorer developing countries, although these are solely due to the application of more precise purchasing power parity exchange rates rather than the nominal re-basing.

The situation was quite different when the previous adjustment was made in 2008. In addition to correcting the purchasing power parities (although not extensively enough, as it transpired in hindsight), other changes were made to the way in which the line was calculated. As a result, the national poverty lines rose significantly in real terms. This in turn meant that the number of people living in extreme poverty had to be revised upwards substantially, from 1.0 billion to 1.4 billion. This prompted a broad discussion regarding the general informative value of the international poverty line that is still ongoing.

Why does the increase in the poverty line exceed inflation in the US for the period 2005-2011?

One aspect of the debate was a source of considerable contention: the adjustment of the poverty line in US dollars from USD 1.25 to USD 1.9 significantly exceeds inflation in the US during the same period. Purchasing power parities should precisely offset the difference between the rates of inflation in two different countries. However, this discrepancy only underscores the fact that the purchasing power of the US dollar was significantly overestimated when the line was calculated in 2005. But this changes little about the number of people living in poverty. Converting the national poverty lines of the countries included in the calculation into US dollars and then converting them back into the national currencies offsets the discrepancy almost exactly.