The Price of Poverty: The Impact of the 2017 PPPs on the International Poverty Line and Global Poverty

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In May 2020, the International Comparison Program (ICP) released new purchasing power parities (PPPs) for the 2017 reference year. The 2017 PPPs are spatial price indices estimated from price surveys conducted by 176 national statistical offices around the world. In this paper, we analyze the 2017 PPPs to understand the impact of the new PPPs on three important issues related to the first Sustainable Development Goal (SDG), which is to eliminate poverty everywhere in all its forms.

First, we analyze the stability of the 2017 PPPs relative to the 2011 PPPs, the previous round of PPPs. The adoption of previous ICP rounds has resulted in large revisions to global poverty estimates, especially the 2005 round that added 400 million more people to the estimated number of extremely poor people in the developing world (Chen and Ravallion 2010). Against this background, the Atkinson Commission on global poverty argued that future ICP rounds should not be adopted until 2030, the target date for the SDGs (World Bank 2017, also see Deaton (2001) for a similar argument made earlier). We have shown in this paper that the ICP methodology has remained fairly stable between the 2011 and 2017 rounds. While changes at the country-level could still be important, we find no evidence of substantial broad-based changes which characterized earlier rounds and motivated the Atkinson recommendation.

Second, we update the global poverty lines with the new PPPs. The international poverty line (IPL) we use to measure extreme poverty changes from \$1.90 (2011 PPP) to \$2.15 (2017 PPP) per person per day. We employed the harmonized national poverty lines approach (Jolliffe and Prydz 2016) to arrive at this line, and show that it is consistent with an equivalent poverty lines approach (Kakwani and Son 2016). As such, the new IPL that we suggest keeps the global poverty rate largely at the levels which were observed when the SDGs were set. Therefore, the 2017 PPPs do not significantly shift the goalposts. The line that is more typical of lower-middle-income countries

(i.e. \$3.20 in 2011 PPP) changes to \$3.65 in 2017 PPP, while the line common in upper-middle-income countries (i.e. \$5.50 in 2011 PPP) increases more substantially to \$6.85 in 2017 PPP.

Third, we provide global poverty estimates with the new PPPs and these updated global poverty lines. While the changes at the upper-middle-income line are larger, the new PPPs have small implications for extreme poverty (and an even smaller effect at the lower-middle-income line). Between 1991 to 2017, extreme poverty in the world falls from 36.05% to 9.27% with the revised 2011 PPPs, and from 37.21% to 9.06% with the 2017 PPPs. This is equivalent to a decrease in the estimated number of poor people in the world by 16 million in 2017 (or 0.2pp). This is a very small change compared to prior PPP rounds, which is consistent with the methodological stability over the last two ICP rounds.

References

Chen, Shaohua, and Martin Ravallion. 2010. "The Developing World Is Poorer than We Thought, but No Less Successful in the Fight against Poverty." The Quarterly Journal of Economics, no. November: 1577–1625

Deaton, Angus. 2001. "Counting the World's Poor: Problems and Possible Solutions." World Bank Research Observer 16 (2): 125–47. https://doi.org/10.1093/wbro/16.2.125.

Jolliffe, Dean, and Espen Beer Prydz. 2016. "Estimating International Poverty Lines from Comparable National Thresholds." Journal of Economic Inequality 14 (2): 185–98. https://doi.org/10.1007/s10888-016-9327-5.

Kakwani, Nanak, and Hyun H. Son. 2016. "Global Poverty Estimates Based on 2011 Purchasing Power Parity: Where Should the New Poverty Line Be Drawn?" Journal of Economic Inequality 14 (2): 173–84. https://doi.org/10.1007/s10888-016-9322-x.

World Bank. 2017. Monitoring Global Poverty: Report of the Commission on Global Poverty. Washington, DC: Washington, DC: World Bank.