

# From income poverty to multidimensional poverty—an international comparison

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The first Sustainable Development Goal of the 2030 Agenda calls for ending “poverty in all its forms everywhere”, therefore recognising that poverty is more than just a lack of a sufficient income. Nevertheless, some scholars argue that an income-based measure of poverty is able to sufficiently capture poverty in other dimensions as well. This claim, however, has so far not been substantiated by any cross-country empirical evidence. Currently available international indicators of multidimensional poverty suffer from several weaknesses and cannot be directly compared with the existing monetary measures of poverty. This One Pager summarises the main findings of a broader study (Burchi, Rippin, and Montenegro 2018) on poverty measurement and analysis.

This study proposes an innovative indicator of multidimensional poverty, the Global Correlation Sensitive Poverty Index (G-CSPI), which addresses most of the problems in other poverty indicators, such as the Multidimensional Poverty Index (MPI) developed by the Oxford Poverty and Human Development Initiative (OPHI) and used by the United Nations Development Programme (UNDP). The main features of the new index are the following:

- It has a clear connection with a theoretical framework, which is Amartya Sen’s capability approach. This approach is deemed to be the most adequate for measuring poverty.
- It encompasses three dimensions of poverty: education, decent work, and access to safe drinking water and adequate sanitation (also as a proxy for health), which largely overlap with the list of ideal dimensions of poverty obtained by endorsing a recent approach for the selection of dimensions, called the Constitutional Approach.
- It identifies people suffering deprivation in each dimension as follows: individuals are considered deprived in the education dimension if they are illiterate, in the decent work dimension if they are either unemployed or employed in low-pay and low-qualification jobs, and in the safe drinking water and adequate sanitation dimension if they lack access to both safe drinking water and adequate sanitation.
- It aggregates deprivations in the three dimensions through the CSPI. This aggregation function does not require an arbitrary second cut-off to identify poor people. While it is as decomposable as the MPI (according to poverty dimensions as well as other attributes such as region, gender, social group, household size etc.), it is also distribution-sensitive, accounting not only for poverty incidence and intensity, as the MPI does, but for inequality among poor people as well.
- It is the first international poverty measure that uses the individual in the 15–65 age group as the unit of analysis instead of the household.

The paper used the World Bank’s International Income Distribution Database (I2D2) to compute the G-CSPI for more than 500 surveys. Focusing only on the latest survey conducted in each country after 1999, it examined the G-CSPI value and the contribution of each dimension for 102 countries. The results highlight that, as expected, mostly fragile States are among those with highest multidimensional poverty. In the overall sample, deprivations in decent work, immediately followed by those in health, contributed the most to overall poverty. Moreover, the calculation of the lower and upper bounds of the CSPI—based on a bootstrapping procedure—and a sensitivity analysis highlighted that the index is stable and robust.

All previous international comparisons of income and multidimensional poverty were based on different surveys that, for the most part, were even conducted in different years. This paper is the first to calculate income and multidimensional poverty based on the very same surveys, thus providing for the first time reliable evidence for the differences between these two ways of measuring poverty. The analysis, based on 92 countries, shows that the headcount ratio of extreme monetary poverty (USD1.90/day purchasing power parity—PPP) is highly correlated with that of the G-CSPI, but that the relationship is clearly non-linear. There are several outliers: countries such as Uzbekistan, Lesotho and Zambia have a much larger proportion of their population living in monetary poverty than in multidimensional poverty. Conversely, countries such as Thailand, Cambodia and Pakistan experience much higher poverty rates in the multidimensional space than in the monetary space. This finding provides the first scientifically sound evidence that income poverty is not a sufficiently good proxy for multidimensional poverty.

In conclusion, we believe that this new index provides a substantial contribution to the literature on poverty measurement and assessment and that the considerable amount of information generated in the empirical exercise allows other important research questions to be answered. These range from verifying whether the trends in multidimensional poverty and income poverty follow similar patterns and reassessing the relationship between growth and poverty from a multidimensional perspective, to the analysis of horizontal inequalities in poverty. The latter is made possible by the extensive data on poverty disaggregated by rural and urban areas, gender, age, household size, and gender of the household head, calculated but not examined in this paper.

#### Reference:

Burchi, Francesco, Nicole Rippin, and Claudio Montenegro. 2018. “From Income Poverty to Multidimensional Poverty—an International Comparison.” IPC-IG Working Paper 174. Brasília: International Policy Centre for Inclusive Growth.

#### Notes:

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2. The World Bank.