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Multidimensional Poverty: One Aim, Four Approaches, Quite a Few Different Results

The paper explains that the four main approaches to multidimensional poverty, CONEVAL, MPI, MODA and EU/Liser/Bristol, yield substantially different poverty estimates due to differences in the theoretical orientation, differences in the units of analysis and differences in the aggregation- and weighting- procedures. Simultaneously, the differences also illustrate that the various methodologies have their own merit and are differently useful in research and policy design. The theoretical part of the contribution takes stock of the experiences with the four approaches to multidimensional poverty and reviews the four methodologies in detail; the empirical part of the paper is confined to a comparison between the results of MPI and MODA applied to children in South Africa and Vietnam.

It is important to point to an implicit similarity in all approaches: all four approaches agree that poverty should not only be estimated by a money-metric variable. Because poverty is understood to be multidimensional in nature, it is deemed crucial to study the "other dimensions" of poverty. These "other dimensions" are referred to in this paper as "deprivations". Defining and measuring these deprivations and deciding whether and how are these deprivations combined and weighted, are exercises that all approaches engage in: they are essential steps in the four procedures and each of them use a different reference frame to solve the questions. Providing the central role of deprivations in all the analyses, it further remains a question whether it would not be wiser to use the term "deprivation poverty" rather than "multidimensional poverty".

MPI uses a basic needs approach with references to the capabilities approach to understand and capture multidimensional poverty. EU/Liser/Bristol refers to Peter Townsend's theory of poverty, which schematically states that poverty is relative in terms of the context, time and place in question. Moreover, and more importantly in this context, deprivations are seen as a natural consequence or product of monetary poverty. CONEVAL and MODA, on the other hand takes a right-based point of view. In the latter, having been developed by UNICEF to measuring multidimensional poverty among children, the fundamental rights of children as outlined in the Convention of the Rights of the Child (CRC) are taken as the starting point of the deprivation analysis: children are considered to be deprived if the lack a set of goods and services needed in order to survive, to develop to their full potential, to be protected and to participate in the society.

Despite some important similarities, all four approaches also differ in other important aspects than their theoretical basis. Probably the most important difference between EU/LISER/Bristol and MODA, on the one hand, and CONEVAL and MPI on the other hand, is the unit of analysis; in EU/LISER/Bristol and MODA, individuals are the unit of analysis; in CONEVAL/MPI, households are the unit of analysis.

The paper elaborates the importance consequences of the choice of the unit of analyses in six subsections:

1.   MODA uses a life cycle approach to define needs and deprivations;

2.   Household based approaches have more difficulties to identify gender and age-group differences;

3.   MODA is designed to study overlapping deprivations, while it is less straightforward with the other approaches;

4.   Bristol, MODA and CONEVAL, MPI adopt a different strategy in selecting indicators, dimensions and deprivation thresholds;

5.   The approaches adopt a different procedure to deal with missing values;

6.   MODA differ from the other approaches in the use of profiling variables and further analysis.

The paper further discusses differences in the aggregation of indicators in dimensions, the use of monetary or household wealth related variables as indicators, the definition of the Multidimensional Poverty threshold.

The differences in the units of analysis are particularly important since they have far-reaching consequences for all kinds of technical decisions taken in the analyses. Moreover, setting 'poverty lines' and aggregation- and weighting methods are also not the same in the four approaches. While these technical decisions seem futile in the light of the broader aim to mapping multidimensional poverty and the deprivations of households, children, men and women, they are responsible for widely differing outcomes of the analysis.

The second part of the paper estimates the differences between the two approaches that are used most widely, MPI and MODA, to estimate Child Multidimensional poverty in South Africa and in Vietnam. In the two cases the MPI and the MODA outcomes are found to be substantially different. The final outcome of the MPI exercise is a headcount ratio defined as the proportion of the children living in MPI-poor households, in turn defined as a household which has an-intensity weighted deprivation score greater than 0,33 (on a scale 0 – 1). MODA provides a distribution expressed as the percentages of the children suffering from 0, 1, 2, 3 etc. dimensional deprivations. In the MODA case the headcount depends on the cut-off point chosen to distinguish between multidimensionally poor/deprived children and the non-poor/deprived children (most often 2 or 3 dimensional deprivations). The intensity (A) and the

index (M0) are provided separately. Apart from the calculation method, the approaches differ substantially in the way indicators and dimensions are defined and, in the aggregation- and implicit weighting procedures used; each of the elements contribute significantly to the empirical differences between MPI and MODA outcomes in the cases of Vietnam and South Africa.