

Discussion points for PSMB

The simplest way to use the CA indicators is to sum them to produce a deprivation index - you can then select a threshold level to separate the multiply deprived/multi-dimensional poor from the non-poor.

You can also combine the deprivation index with the income/expenditure data to identify people in households who are suffering from having both a low income/expenditure and from multiple deprivation i.e. the 'truly poor' to use Prof Bjorn Hallerod's term. This is what is done in various ways across the 28 European Union countries by the EU and also in national poverty measures in many countries (including for children in the UK). Mexico does something similar although their deprivation indicators are based on the lack of fulfilment of constitutional rights. In many of the 33 Latin American countries the 'poor' are identified as those who have either a low income/expenditure OR suffer from deprivations of Unmet Basic Needs.

So the difference between how the deprivation index is used in Europe compared with Latin America is that in Europe the 'poor' are those who suffer from both low income AND multiple deprivations, whereas in Latin America the 'poor' are those who suffer from low income/expenditure OR from deprivation.

Both approaches have their merits, but of course the Latin American method produces much higher poverty estimates than the European method - you can of course use both methodologies to achieve different aims i.e. the Latin American method shows you how many people/households have living standard deficiencies, and the European method can be useful for targeting limited resources at those in greatest need.

You can also use the answers to individual deprivation questions for policy purposes e.g. to see if there are 'problems' for children's educational needs, with access to food, clothing, health care, housing difficulties, etc.

Possible important technical points to underline during the meeting:

1) The suitability of deprivation indicators: One of the major debates in multidimensional poverty measurement is about the selection of a set of indicators that capture the substantive needs of the population in question. One of the major problems internationally is that most surveys are not explicitly designed to measure poverty. Instead, researchers accommodate existent data to a given definition of poverty. This has several implications for measurement and policy design and monitoring:

- One problem is that the researchers are limited in the scope of what they can do with the data. Hence, if a necessity of life is not included in the data is not included in the measure.
- A second problem is the mismatch between the data and the actual necessity. Because the data was not designed to capture the deprivation of such a necessity, the data needs to be awkwardly fitted to the necessity of generating measurement error.
- The third problem is perhaps the most dangerous from a policy perspective. The truth is that the list of relevant necessities of life is a theoretical artifact. The only relevant space for the definition of necessities is society. The Consensual Approach and the theory of relative deprivation are one of the few frameworks that allow the exploration and definition of the space of necessities. It is, therefore, a more democratic and accurate representation of the relevant needs of society. This results in a more legitimate and credible way to measure poverty.

2) Measurement error: Another acute problem in multidimensional poverty measurement is the lack of acknowledgement and estimation of measurement error. Measurement error can be defined as all the unwanted variability of an index, i.e. the signal it captures relative to the noise. An ideal poverty measure is one that varies accordingly to changes in poverty, i.e. if the latent level of poverty changes, we should expect that our deprivation indicators reflect this behaviour. In contrast, a measure with a

lot of error will show no variation due to changes in poverty. For example, if there is a crisis that has a negative impact on the population, we should expect this effect to be captured in the proposed index. If there is a successful anti-poverty policy, we should see changes through the proposed index.

The only way to have low error is by linking theory, data and empirical assessment. That is, by implementing the scientific method. The consensual approach is the only methodology that fulfils these three pillars of the scientific enquiry. Other approaches have a gap between theory and the data (because it is not explicitly collected to measure poverty) and/or a gap between the three pillars.

In social statistics, there has been a lot of progress in terms of the estimation of the size of error of a measure. The CA has been systematically shown that it results in low measurement error. Other approaches like the MPI, for example, have a lot of error and cannot be reliably used for policy because they capture a lot of unwanted variability.

The low measurement error has a lot of positive implications for the use of multidimensional poverty measures. These are described in the next point.

3) The utility of relative deprivation and its links with resources: The theory of relative deprivation, through the implementation of the consensual method, permits linking more cleanly changes in resources with observed material and social deprivations. The reason is that the consensual approach explicitly asks the population about whether a given deprivation has lack of command of resources as its main cause.

This connection between resources and deprivation has important advantages in terms of the utility of the resulting poverty measure.

- First, the CA offers indicators that have high discriminatory statistical power relative to standard Unsatisfied Basic Needs (UBN) indicators. For example, the CA-based indicator of the capacity to replace worn-out clothes has high discrimination. In contrast, the standard UBN indicator of dwelling's materials does not work in Tonga due to the fact that variation in some materials do not correlate well with household's resources. The CA indicator on its own will be useful to identify the poor with high probability, the UBN indicator will do so with low probability (more error). Therefore, because the CA offers indicators that individually offer a lot of information about the poor and the not poor, in some surveys and situations is not necessary to apply the full CA module to have reliable predictions of poverty to target resources.
- Second, the low error of the CA-based indicators allows producing more reliable population ranks that can be used for policy. In other words, the worse-off and the better-off populations are more clearly ordered and distinguished. This means that when the deprivation indicators from the CA are used for policy, the inclusion and exclusion errors are lower relative to noisy measures.
- Third, the great discriminatory power of the CA indicators also mean that one CA-based indicator has much richer information about the latent level of poverty of a household than several UBN indicators. This makes data collection cheaper in the long run because it is a matter of asking a couple of indicators instead of asking several questions that will add very little information.
- Fourth, because the population ranks are very robust, the profile of the poor is clearer, and it can be identified using different surveys that do not necessarily have deprivation indicators. For example, labour force surveys and Census data.
- Five, having clear profiles of the poor populations is also especially useful for small-area estimation. The models just perform better and have lower error.

4) Concluding remarks:

- It is true that collecting new data requires an investment in data collection, production and analysis. But it is also true that if poverty is a concern, it should be measured under the highest standards and that requires collecting data that is devised to capture poverty. Standard HIES surveys were not designed with the idea of measuring poverty. The information from these surveys has been adapted with some degree of success to measure multidimensional poverty.

- Poverty measures must have face validity, i.e. its contents need to make sense to the population. The CA, in that it draws the set of necessities of life from the population, has face validity.
- Poverty measures must be useful for policy. That means that the poverty measures should lead to clear profiles of the poor that can be used for designing, monitoring and policy evaluation. Only measures with low error are useful for such purpose. Measures of acute poverty like the MPI sometimes offer clear profiles at the edges of the distribution but lack information about the bulk of the population in between.