

November  
2014Mobilizing critical research for  
preventing and eradicating poverty**SEPARATING AND COMBINING CHILD  
AND ADULT POVERTY: WHY? HOW?**

by Enrique Delamonica

A simple proposition constitutes the core of this note: It is possible to arrive at an estimate of child poverty which is part and parcel of the broader (population-wide) measurement of total poverty. This allows us to answer three distinct questions: What percent of children are poor? What percent of the total population are poor? What percent of the total poor are children, i.e. under 18 years old?

The way child poverty can both be estimated independently and as part of the overall poverty estimate is to recognize that children suffer specific deprivations that are different from the ones adults face. Aggregated poverty measurement may be misleading in the assessment of progress against poverty if large parts of the population (children) are not improving their situation. Child-specific deprivations can be measured and analyzed within a larger framework which looks at diverse deprivations (in various dimensions) for different age groups. A simple and practical way to accomplish this is presented in this note.

This brief argues that:

- Children suffer specific deprivations which are different from the ones faced by adults.
- The specific issues and deprivations suffered by children need to be highlighted to prevent their plight becoming obscured by aggregated poverty measures.
- Aggregated measurement may be misleading in the assessment of the progress against poverty if large parts of the population (children) are not improving their situation.
- It is possible to arrive at an estimate of child poverty which is part and parcel of the broader (population-wide) measurement of total poverty.

**1. Introduction**

The literature on child poverty has increased considerably in recent years and in particular since the publication by UNICEF (2000) of "Poverty Reduction Begins with Children". Since then, many methodological advances in child poverty analysis have taken place (e.g. Gordon et al, 2003, Boyden and Bourdillon, 2011, and Minujin and Nandy, 2012). Nevertheless, in most countries, the mechanisms are not in place to accurately measure child poverty, and this Policy Brief helps to address this gap.

It is now fairly well established that child poverty should be measured using a multi-dimensional approach. Moreover, this approach should be grounded on child rights<sup>1</sup>. However, not all child rights violations (of which, unfortunately, there are too many all over the world) constitute poverty. For instance, children belonging to families who are not allowed to express their religious views have their rights violated. They may or may not be poor, which is conceptually a different problem.

Nevertheless, there are various estimates of child poverty. These have been undertaken globally (Gordon et al, 2003, Nandy 2010), regionally (ECLAC-UNICEF, 2010, Minujin et al, 2014) and in many countries (Mexico, Morocco, Tanzania, Vietnam, Congo, etc.<sup>2</sup>), most of them as a result of UNICEF's Global Study on Child Poverty and Disparities (UNICEF 2007). All of these have used

a methodology similar to, or adapted from, the one described in Gordon et al (2003)<sup>3</sup>. As mentioned in that path-breaking study, the indicators and thresholds of the rights that constitute child poverty could and should be adapted to different national contexts. This has to be done carefully as adding extra indicators may inordinately increase the estimate of child poverty. Gordon et al (2003) were very clear and explicit about the need to provide conservative estimates of child poverty, preferring to err on the side of caution rather than being criticized for exaggerating the plight of child poverty.

As more countries engage in their own specific calculations of child poverty, many are confronted with a difficulty concerning the distinct nature of child poverty as opposed to total poverty, which subsumes children into household-based estimates. More precisely, many statistical office personnel and policy-makers are confronted with the need to explain/justify the existence of “two poverty measurements”: one for children, another one for the total population. Often they find it puzzling that the estimates do not converge.

This Brief presents a way to analyze and show the relationship between, and complementarity of, child and total poverty. This is done by first reviewing the importance of independent and regular measurements of child poverty, followed by an explanation about the aggregation process across age groups when there are age-specific dimensions and indicators (based on Minujin and Delamonica, 2012). This method is shown to provide a solution to the conundrum of the “two poverty measurements”.

## **2. Why measuring poverty (without paying special attention to children) may be misleading**

It is well known that measuring poverty only using a monetary approach (i.e. comparing the level of income or consumption with a poverty line) captures only some aspects of the experience of poverty in general and for children in particular (CCF, 2005, Minujin et al, 2006, Streeten et al 1981, etc). For instance, money cannot always purchase what children need. This is often the case in rural areas which often lack medical services rendering income useless to acquire medical services. Also, the needs of children are different from those of adults. They cannot always be assumed to be a fraction of the monetary needs of adults (their needs do not conveniently account for a set fraction of adult needs, e.g. “0.7 of an adult”). This conversion factor is questionable for caloric intake and even more so for health or education-related expenses. In addition, the development of children is adversely impacted when exposed to prolonged deprivation, be it of food, access to health care when sick, or education (Brooks-Gunn and Duncan, 1997). This is seen most clearly in terms of the impact on stunting of lack of nutrition, but it also applies to brain development and many other cognitive and emotional aspects. In addition, the

assumption of equal sharing of resources is unwarranted in most countries, both across gender and age groups.

Moreover, reductions in monetary or multi-dimensional poverty might well be observed, but it is possible that these improvements either mask the fact that children do not benefit equally or could actually be worse off after them. It is possible, for example, that an expansion of health insurance takes place across a population, but that its benefits are concentrated primarily among older sections of the population; or that despite being insured, children are not taken to see a doctor when ill (so they remain poor in the sense that their right to health is still not fulfilled). It is possible that governments launch literacy campaigns (which reduce poverty by addressing the right to education) but these may be focused only on adults, resulting in children remaining out of school. Monetary poverty could decline if the household income increases due to children working or both parents working very long hours thus involuntarily neglecting their children.

Thus, measures of poverty which only reveal the details about the living and working conditions of adults are not sufficient to understand what is happening to children, or poverty for the whole population. In other words, without an independent and periodic measure of child poverty, a distorted picture of the fight against poverty is painted. Fundamentally, without reducing child poverty, there are limits to the overall reduction of poverty. If child poverty is not measured, these limits will not be known until it is too late - too late for the children and to succeed in eliminating poverty.

## **3. How to integrate a measurement of child poverty within the total measurement of poverty**

First of all it is important to realize that answers to three different questions are being sought. These three questions are:

- What percent of the total population are poor?
- What percent of the total poor are children (i.e. under 18 years old)?
- What percent of children are poor?

Clearly, (monetary or multi-dimensional) poverty incidence among adults can be greater or lower than that of children. Comparing the first and third questions, it can be seen that both arrive at the incidence of poverty (one for the total population, the other one for a specific sub-group). The answer to the second question needs to be compared with the share of the under-18 population to ascertain whether children are disproportionately represented among the poor or not. That all the answers would be different numbers should not be confusing.

However, a different point is being made here. Simply disaggregating estimates of general poverty between those under and over 18 years, while it visualizes child poverty,

is not sufficient to properly understand what is happening to children and their poverty if the same indicators are used for adults and children<sup>4</sup>. This is certainly the case with monetary poverty because, as mentioned above, children rarely have an independent source of income to be pooled with the rest of the household (yet, unfortunately, millions of children do work and contribute to household finances). Also, estimating monetary child poverty from the percentage of children living in monetary poor household assumes (unwisely) that monetary resources are shared equally within the family (Cockburn et al, 2009). Thus, besides the limitations of using the monetary poverty approach to calculate child poverty mentioned above, it can now be added that it is not possible to actually estimate the percentage of children who are monetary poor. What can be calculated is the proportion of children who live in households where the level of monetary resources is less than the poverty line (for that number of household members).

This leads us to measure child poverty using a multi-dimensional approach (emanating from the Basic Needs methodology (ILO, 1976, Streeten et al, 1981). As a result, there is the need to present it “together” with total and adult poverty. At this stage a problem arises: the deprivations children face will not all be in dimensions that are relevant for adults (and vice versa). The way to deal with this is to check, for all the relevant, age-specific dimensions for each individual. Some of these will be the same for everybody (e.g. dwelling conditions) and some will be different. This is not a problem because the way to calculate poverty is to count how many people have at least one deprivation and this does not entail adding or averaging them. An example can help to visualize this.

In Table 1 individuals are listed in columns and the rows show the dimensions of deprivation. Nutrition only applies to children, illiteracy only applies to adults, and housing applies to all of them<sup>5</sup>. Children are identified by the household they live in (the capital letters) and a number. It can be observed that in household A there are two children (A<sub>1</sub> and A<sub>2</sub>) and in household B there is only one child. The adults in the corresponding household are identified with the same letter but numbered using Roman

numerals. It can be observed there are two households (E and F) where there are no children.

Two out of six children are nutrition-deprived (i.e. 33 per cent, first row, last column). Also, two out of the eight adults are illiterate (25 per cent, second row, last column) and half of the population is deprived of housing.

When analyzing the data vertically, we can establish who (children or adults) are suffering at least one deprivation (bottom row). It can be observed that for the population as a whole, 57 per cent (8 out of 14) are deprived in at least one dimension and thus are poor. Children comprise half of this poor population (4 of the 8 poor individuals, i.e. B<sub>1</sub> and D<sub>1</sub> who are nutrition deprived and C<sub>1</sub> and C<sub>2</sub> who are deprived of housing).

However, child poverty stands at 66 per cent. There are four poor children out of six children who are deprived in at least one of their rights.

Thus, all three questions (What percent of children are poor? What percent of the total population are poor? What percent of the total poor are children, i.e. under 18 years old?) can be answered in an integrated way with the information normally available in the national household surveys commonly used to estimate multi-dimensional poverty. Clearly the numbers answering each question are different because they provide information on different aspects of the measurement of poverty.

#### 4. Summary

A simple proposition constitutes the core of this note: It is possible to arrive at an estimate of child poverty which is part and parcel of the broader (population-wide) measurement of total poverty.

The way child poverty can both be estimated independently and as part of the overall poverty estimate is to recognize that children suffer specific deprivations which are different from the ones adults face. These child-specific deprivations ought to be measured. Once measured, if the information comes from censuses or household surveys, the information on these deprivations can be analyzed within a larger framework which looks at diverse deprivations (in various dimensions) for different

**Table 1: Merging child and adult multi-dimensional poverty at the individual level (hypothetical example)**

Access to	A <sub>1</sub>	A <sub>2</sub>	B <sub>1</sub>	C <sub>1</sub>	C <sub>2</sub>	D <sub>1</sub>	A <sub>i</sub>	B <sub>i</sub>	B <sub>ii</sub>	C <sub>i</sub>	C <sub>ii</sub>	D <sub>i</sub>	E <sub>i</sub>	F <sub>i</sub>	%
Nutrition (0-5 years)	✓	✓	D	✓	✓	D									33
Illiteracy (18-65 years)							✓	✓	✓	D	✓	✓	✓	D	25
Housing (All)	✓	✓	✓	D	D	D	✓	✓	✓	D	D	D	✓	D	50
<b>Deprived?</b>	NO	NO	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	NO	NO	NO	<b>YES</b>	<b>YES</b>	<b>YES</b>	NO	<b>YES</b>	57
<b>D: Deprived</b>															

age groups. In other words, the overall framework permits assessing different deprivations for different age groups. This information can be used to calculate an overall, population-wide measurement of poverty or by sub-groups (i.e. for different age groups such as children).

The way child poverty can be estimated within the overall poverty measurement proposed in this brief allows for an independent estimate of child poverty. This highlights the specific issues and deprivations suffered by children and it prevents their plight becoming obscured by aggregated poverty measures. Moreover, such an aggregated measurement may be misleading in the assessment of the progress against poverty if large parts of the population (children) are not improving their situation.

Thus, a simple and practical way to accomplish this is presented in this note. It is based on a human rights approach to poverty and is compatible with the way child poverty has been estimated world-wide and in many regions and countries for several years (and reflects the UNGA definition of international child poverty). The brief also provides a straightforward rationale for its implementation as well as guidance on how to put it into practice.

## Author

**Enrique Delamonica** is a CROP Fellow and an economist and political scientist, working as Chief of Social Policy and Gender Equality, UNICEF, Nigeria.

---

## Bibliography

- Alkire, A. and J. Foster (2011) "Counting and Multidimensional Poverty Measurement". *Journal of Public Economics*, 95.
- Alkire, S. and J. M. Roche (2012) "Beyond headcount: measures that reflect the breadth and components of child poverty." In Minujin, A., and Nandy S. (eds.) (2012), *Global Child Poverty and Well-being: Measurement, concepts, policy and action*. Bristol: Policy Press.
- Alkire, S. and M. E. Santos (2010) "Acute Multidimensional Poverty: A New Index for Developing Countries". OPHI Working Paper Nro. 38. Oxford, Oxford University.
- Boyden and Bourdillon, 2011, "Childhood Poverty: Multidisciplinary Approaches"
- Brooks-Gunn, J. and G.J. Duncan, The effects of poverty on children. *Future Child*, 1997. 7(2): p. 55-71.
- Christian Children's Fund, 2005 "Understanding Children's Experience of Poverty: An Introduction to the DEV Framework", Children & Poverty Working Paper 1
- Cockburn, John, Anyck Dauphin and Mohammad A. Razzaque (2009). "Child Poverty and Intra-Household Allocation." *Children, Youth and Environments* 19(2): 36-53.
- ECLAC 2013, *Social Panorama*, Santiago, Chile
- ECLAC-UNICEF 2010, *La Pobreza Infantil en América Latina y el Caribe*, Santiago de Chile.
- Gordon, D., Nandy, S., Pantazis, C., Pemberton, S., and Townsend P. (2003), *Child Poverty in the Developing World*, The Policy Press, Bristol Hunt et al 2003
- Hunt, P., Osmani, S. and Manfred Nowak (2002), *Draft Guidelines: A Human Rights Approach to Poverty Reduction Strategies*, Office of the High Commissioner for Human Rights, Geneva
- ILO: 1976, *Employment, Growth and Basic Needs: A One-World Problem*, Geneva.
- Minujin, A. and E. Delamonica 2012, "Multidimensional Child Poverty in Tanzania", in A. Minujin and S. Nandy (editors) *Global Child Poverty and Well-being: Measurement, concepts, policy and action*, Policy Press, UK
- Minujin, A., and Nandy S. (eds.) (2012), *Global Child Poverty and Well-being: Measurement, concepts, policy and action*. Bristol : Policy Press.
- Minujin, A., A. Davidziuk, E. Delamonica, and E. Gonzalez 2006 "The Definition of Child Poverty: A discussion of concepts and methods", *Environment and Urbanization*, Volume 18, Number 2.
- Minujin, C. McCaffrey, M. Patel, and Q. Paienjton, 2014, "Redefining poverty: Deprivation among children in East Asia and the Pacific" *Global Social Policy* April 2014 14: 3-31.
- Nandy, S (2010), *An analysis of changes in child poverty in the developing world at the end of the 20th century*, (PhD Thesis to be published by Zed Books), School for Policy Studies, University of Bristol, UK.
- Pemberton, S.A., et al., *The relationship between child poverty and child rights: the role of indicators*, in *Human Rights and Social Policies for Children and Women*, A. Minujin, E. Delamonica, and M. Komarecki, Editors. 2005, New School: New York City.
- Streeten P., et al. 1981 *First Things First: Meeting basic Needs in Developing Countries*, New York: Oxford University Press.
- UNICEF 2000, *Poverty Reduction Begins with Children*, New York.

## Notes

- 1 Hunt et al (2002) provide a very good introduction on the human rights approach to poverty, differentiating between those that constitute poverty (e.g. lack of access to education or health) and instrumental rights (e.g. voting and participation which could lead to better anti-poverty policies).
- 2 Essentially the same approach, albeit with different indicators has been applied to OECD countries (UNICEF 2012). Also, a computer software application to illustrate multiple overlapping deprivations has been developed by UNICEF and can be used to estimate child poverty as described here. Alkire and Roche (2012), recognizing the relevance of the assumptions and criteria of this approach to measure child poverty, applied them to the generic and flexible Alkire and Foster (2011) framework and formulae.
- 3 This study, commissioned by UNICEF to the London School of Economics and Bristol University, used the declaration of the World Summit on Social Development (1995) to operationalize a definition of child poverty with thresholds for severe deprivation in seven rights constitutive of child poverty: health, nutrition, water, sanitation, housing, education, and information. It combines early childhood and adolescent indicators in a way similar to what is proposed in this note for children and adults. There are also estimates that merely look at the age distribution within the households under the monetary poverty line. While this provides a number of children living in households which are monetary poor, it is not the same as child poverty in terms of the actual well-being of children and the way they experience poverty (UNICEF 2000, Minujin et al, 2006, CCF, 2005). Several studies have cross-tabulated child poverty with children living in monetary poor households. This provides very interesting results. For example, ECLAC-UNICEF reports that for Latin America and the Caribbean, roughly a quarter of all children suffer from multi-dimensional poverty and live in households which are monetary poor, almost 20 per cent live in households which are monetary poor but they do not suffer any of the deprivations of multi-dimensional poverty, and about 15 per cent suffer child poverty (multi-dimensional) although they live in households with monetary resources above the poverty line (ECLAC, 2013).
- 4 It also ignores the UNGA definition of child poverty (2006), and UNICEF's supporting statement that "measuring child poverty can no longer be lumped together with general poverty assessments".
- 5 A similar approach is used in Alkire and Santos (2010). However, although the Alkire Foster formulae they use allow for poverty estimates among sub-groups, they do not use it to separate and integrate child and adult poverty as proposed here.

The CROP Poverty Briefs are a series of short research notes highlighting recent research and trends in global poverty. The ideas contained in CROP Briefs are those of the named authors and do not

necessarily reflect a consensus view of the Programme. They are distributed as worthy of consideration by those concerned to "mobilize critical research for preventing and eradicating poverty".

### CROP Secretariat

P.O. Box 7800  
N - 5020 Bergen - NORWAY  
Visiting address: Jekteviksbakken 31

Phone: +47 555-89744 / -89703  
eMail: [crop@uib.no](mailto:crop@uib.no)  
Website: [www.crop.org](http://www.crop.org)

Editor: Etienne Nel  
Co-editor: Enrique Delamónica  
Coordinator: Inge Tesdal

