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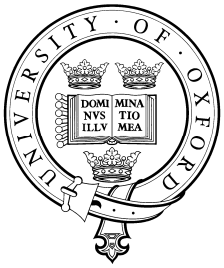

OPHI WORKING PAPER NO. 38

Acute Multidimensional Poverty: A New Index for Developing Countries

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July 2010

Abstract

This paper presents a new Multidimensional Poverty Index (MPI) for 104 developing countries. It is the first time multidimensional poverty is estimated using micro datasets (household surveys) for such a large number of countries which cover about 78 percent of the world´s population. The MPI has the mathematical structure of one of the Alkire and Foster poverty multidimensional measures and it is composed of ten indicators corresponding to same three dimensions as the Human Development Index: Education, Health and Standard of Living. The MPI captures a set of direct deprivations that batter a person at the same time. This tool could be used to target the poorest, track the Millennium Development Goals, and design policies that directly address the interlocking deprivations poor people experience. This paper presents the methodology and components in the MPI, describes main results, and shares basic robustness tests.

Keywords: Poverty Measurement, Multidimensional Poverty, Capability Approach, Multidimensional Welfare, Human Development, HDI, HPI.

JEL classification: I3, I32, D63, O1

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This study has been prepared within the OPHI theme on multidimensional measurement.

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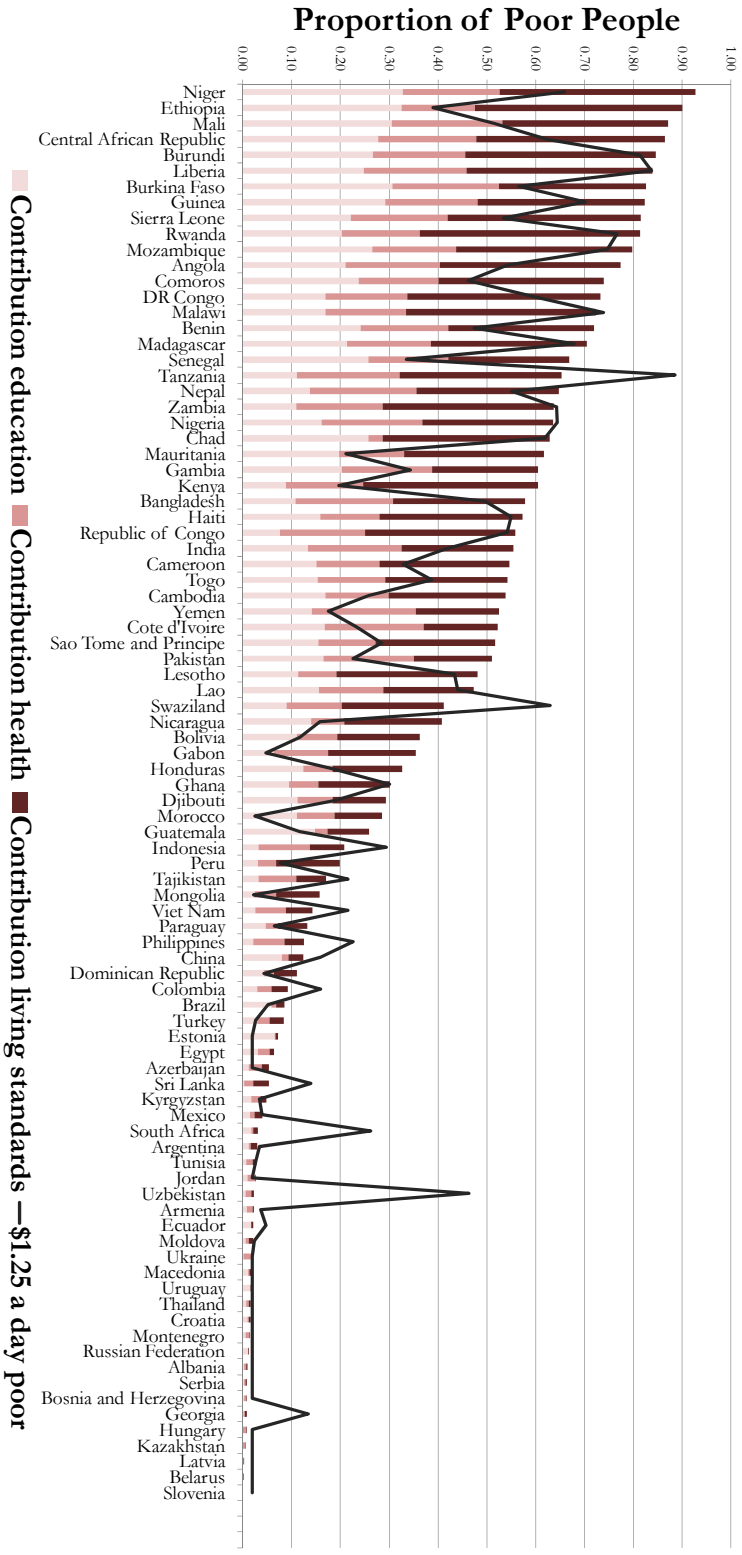

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Acronyms:

***A*:** The intensity of Multidimensional Poverty, measured by the proportion of weighted indicators in which the average Multidimensional-poor person is deprived.
CHNS: China Health and Nutrition Survey (here using 2006)
DHS: Demographic and Health Survey
ENSANUT: National Survey of Health and Nutrition for Mexico (Encuesta Nacional de Salud y Nutricion, 2006
ENNyS: National Survey of Nutrition and Health, for Argentia (Encuesta Nacional de Nutricion y Salud, 2004-2005
H: Headcount, or the proportion of the population who are identified as poor
MPI: Multidimensional Poverty Index
MICS: Multiple Indicator Cluster Survey
WHS: World Health Survey
HDI: Human Development Index
HPI: Human Poverty Index
UN: United Nations
WHO: World Health Organization
MDG: Millennium Development Goals

1. INTRODUCTION

In June 2010, the UNDP released an assessment of *What it would take to reach the Millennium Development Goals* (MDGs hereafter) based on detailed studies in 50 countries. Its first key message is that we need to address the deprivations that trap people in poverty together. Because they are interconnected: "acceleration in one goal often speeds up progress in others…. Given these synergistic and multiplier effects, all the goals need to be given equal attention and achieved simultaneously." In doing so, the report echoed and strengthened an insight from the 2001 UN *Roadmap towards the Implementation of the MDGs,* which pointed out that "all the issues around poverty are interconnected and demand crosscutting solutions" (p 3). But how are the interconnections to be seen, and how can they inform 'crosscutting' solutions?

Amartya Sen, Nobel Laureate in Economics whose work underpins the concept and measures of human development, has argued powerfully for the need to take a multidimensional approach to poverty as well as development: "Human lives are battered and diminished in all kinds of different ways, and the first task… is to acknowledge that deprivations of very different kinds have to be accommodated within a general overarching framework" (Sen 2000). Sen's perspective has implications for poverty measurement. "The need for a multidimensional view of poverty and deprivation," Anand and Sen wrote in 1997, "guides the search for an adequate indicator of human poverty."[3]

Informed and inspired by previous work,[4] this paper implements a new international measure of acute multidimensional poverty for 104 countries. What is distinctive about this multidimensional poverty index, or MPI, is that it reflects the overlapping deprivations that members of a household experience. By providing information on the joint distribution of deprivations related to the MDGs – which shows the intensity and the composition of several aspects of poverty at the same time – we have tried to explore how better measures could support efforts to accelerate the reduction of multidimensional poverty.

Map of paper. The paper proceeds as follows. First, we set the context for the MPI by describing the main differences between MPI and income poverty measures, and MDG indicators. Next, we describe the construction of the MPI, focusing on the normative selection of dimensions, indicators, cutoffs and weights; on the influence of data limitations; and on the methodology for identifying who is poor and aggregating data into a poverty index. We signal the main axiomatic properties of the MPI which make it particularly suited for the policy analysis that follows. Next, we introduce the data sources used to calculate the MPI and the particular considerations and adaptations we have made for each indicator. Following this, we present the main results of the MPI. First, we present the MPI findings and undertake key comparisons. Second, we drill down to explore more finely the relationship between MPI and income data. Third, we illustrate further features of the MPI that can inform policy analysis: we decompose the MPI in greater detail for certain countries; we identify distinct 'types' of poverty that begin to illustrate different regular patterns of deprivation, or poverty traps; and we explore changes in the MPI over time using time series data for three countries. Finally, we present a set of robustness tests for the MPI that focus on its robustness to changes in poverty cutoffs, to changes in certain variables, and in the cross-dimensional cutoff k. We close by

[3] See also Sen 1992, Sen 1993, Foster and Sen 1997

[4] In particular, the works cited above and also Bourguignon and Chakravarty (2003), Atkinson (2003), and Brandolini & D'Alessio (2009).

identifying additional avenues for further scrutiny, such as the relationship between MPI and household size and composition, or robustness tests on the indicator weights.

1.1 Multidimensional Poverty Index: Basic Overview

The MPI is an index of acute multidimensional poverty. It reflects deprivations in very rudimentary services and core human functionings for people across 104 countries. Although deeply constrained by data limitations, the MPI reveals a different pattern of poverty than income poverty, as it illuminates a different set of deprivations. The MPI has three dimensions: health, education, and standard of living. These are measured using ten indicators. Poor households are identified and an aggregate measure constructed using the methodology proposed by Alkire and Foster (2007, 2009). Each dimension is equally weighted; each indicator within a dimension is also equally weighted.

The MPI reveals the combination of deprivations that batter a household at the same time. A household is identified as multidimensionally poor if, and only if, it is deprived in some combination of indicators whose weighted sum is 30 percent or more of the dimensions. The dimensions, indicators, and deprivation criteria are presented below and explained with detail in the following section.

1. **Health** (each indicator weighted equally at 1/6)
    - **Child Mortality:** If any child has died in the family
    - **Nutrition:** If any adult or child in the family is malnourished
2. **Education** (each indicator weighted equally at 1/6)
    - **Years of Schooling** If no household member has completed 5 years of schooling
    - **Child School Attendance** If any school-aged child is out of school in years 1 to 8
3. **Standard of Living** (each of the six indicators weighted equally at 1/18)
    - **Electricity** If household does not have electricity
    - **Drinking water** If does not meet MDG definitions, or is more than 30 mins walk
    - **Sanitation** If does not meet MDG definitions, or the toilet is shared
    - **Flooring** If the floor is dirt, sand, or dung
    - **Cooking Fuel** If they cook with wood, charcoal, or dung
    - **Assets** If do *not* own *more than one* of: radio, tv, telephone, bike, motorbike or refrigerator and do not own a car or truck.

The MPI is the product of two numbers: the Headcount H or percentage of people who are poor, and the Average Intensity of deprivation A – which reflects the proportion of dimensions in which households are deprived. Alkire and Foster show that this measure is very easy to calculate and interpret, is intuitive yet robust, and satisfies many desirable properties.

1.2 Millennium Development Goals (MDGs)

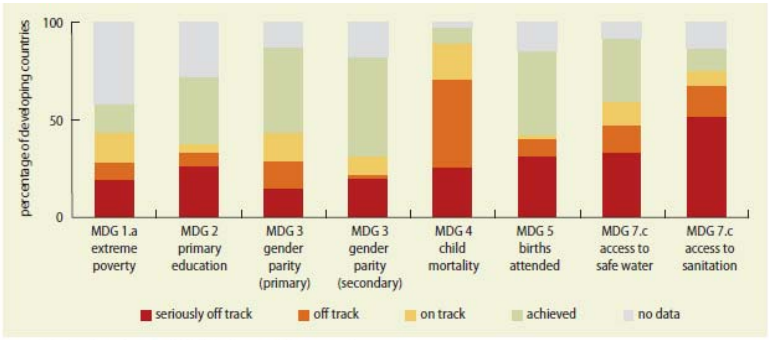
Since 2000, the United Nations and World Bank have compiled and reported data on the progress of nations and regions with respect to a uniform set of targets and indicators. These targets and indicators were agreed upon within the MDG framework, and countries' progress towards them has been monitored. The additional quantitative targets are needed because income poverty measures provide vitally important but incomplete guidance to redress multidimensional poverty.

The MDGs catalysed the collection and compilation of comparable international data related to the agreed goals and targets. The MDG statistics are presented annually and have been tremendously useful in providing feedback regarding improved development outcomes and in creating incentives to address core deprivations.

Unlike the MPI, however, the international MDG reports invariably report progress on each indicator singly. No composite MDG index has been developed, and few studies have reflected the interconnections between indicators. The reason that no composite MDG index has been developed is plain to see: the 'denominator' or base population of MDG indicators differ. In some cases it is all people (malnutrition, income); in some cases children (primary school, immunization), or youth 15-24 (literacy), or childbearing women (maternal mortality), or households (access to secure tenure), and so on. Some environmental indicators do not refer to human populations at all. Given this diversity of indicators, it is difficult to construct an index that meaningfully brings all deprivations into the same frame.

What the MPI does in relation to the MDGs is the following. First, it employs indicators that relate to the MDGs: 8 of the 10 indicators are directly linked to MDGs; the other two (electricity, flooring) are plausibly related. Second, the MPI establishes the 'base' population as being the household. People live in households, the suffering of one member affects other members, and similarly the abilities of one member (e.g. literacy) often help other household members. Third, within these parameters, insofar as data permit, the MPI illuminates the simultaneous deprivations of households. This enables us to identify different 'types' of deprivations – clusters of deprivations that occur regularly in different countries or groups. Such a measure can thus contribute to a better understanding of the interconnectedness among deprivations, can help identify poverty traps, and can thus strengthen the composition and sequencing of interventions required to meet the MDGs. It is indeed our hope that the MPI will support efforts to accelerate progress towards the MDGs.

Figure 1: Tracking the MDGs by percentage of developing countries



Source: Staff calculations based on World Development Indicators database.
Note: The data cover 144 developing countries and the latest available information as of 2009.

A final comment on the MPI analysis in comparison with the MDG reports is that in this paper we have often focused our results on people rather than nations. Many MDG reports identify the percentage of countries that are 'on target' to meet the MDGs. Such analyses do not present any information on the actual *number of people* who are deprived – although the MDGs were deemed feasible at a global not national level. Reporting the MDGs entirely in terms of countries deeply under-emphasises poor people in large countries. India has 3,000 times as many people as the Maldives, but each contribute equally as one South Asian country. In effect, this means that each Indian citizen's life is weighted $1/3000^{th}$ as much as a citizen of the Maldives. This aspect of the MDG reporting system is pervasive, affecting all *Global Monitoring Reports* (the above figure is from p 25 of the 2010 *Report*), for example, and summary tables on progress to achieving the MDGs. Yet in a human rights-based approach and many other ethical approaches, every human life is to be given equal weight. For this reason, our analysis of MPI emphasizes the *number of people* whose lives are

diminished by multiple deprivations – not the number of countries. Naturally, because many policies are constructed at the national level, we also report the percentage of people in different countries who are deprived and the intensity of their poverty, as these data are tremendously useful to incentivize and celebrate progress.

2. METHODOLOGY

2.1 Alkire Foster Method

As a measure, the MPI has the mathematical structure of one member of a family of multidimensional poverty measures proposed by Alkire and Foster (2007, 2009). This member of that family is called M_0 or Adjusted Headcount Ratio. M_0 is the appropriate measure to be used whenever one or more of the dimensions to be considered are of ordinal nature, meaning that their values have no cardinal meaning.[5] In this section, we describe this mathematical structure which is actually a methodology for poverty measurement. For accuracy, we refer to the measure as M_0. The MPI is the M_0 measure with a particular selection of dimensions, indicators and weights, which will be explained below.

M_0 measures poverty in d dimensions across a population of n individuals.[6] Let $y = \left[y_{ij} \right]$ denote the $n \times d$ matrix of achievements for i persons across j dimensions. The typical entry in the achievement $y_{ij} \geq 0$ represents individual i's achievement in dimension j. Each row vector $y_i = (y_{i1}, y_{i2}, ..., y_{id})$ gives individual i's achievements in the different dimensions, whereas each column vector $y_{.j} = (y_{1j}, y_{2j}, ..., y_{nj})$ gives the distribution of achievements in dimension j across individuals. M_0 allows weighting each dimension differently. In fact, this is the procedure followed by the MPI, which has 'nested weights'. For that purpose, we define a weighting vector w. The element w_j represents the weight that is applied to dimension j. Note that $\sum_{j=1}^{d} w_j = d$, that is, the dimensional weights sum to the total number of dimensions. In the case of the MPI $d=10$.

To identify who is poor among the population, a two-step procedure is applied using two different kinds of cutoffs. First we identify all individuals who are deprived in any dimension. Let $z_j > 0$ be the poverty line (or deprivation cut-off) in dimension j, and z be the vector of poverty lines for each of the dimensions of multidimensional poverty. Define a matrix of deprivations $g^0 = [g_{ij}^0]$, whose typical element g_{ij}^0 is defined by $g_{ij}^0 = w_j$ when $y_{ij} < z_j$, and $g_{ij}^0 = 0$ when $y_{ij} \geq z_j$. That is, the ij^{th} entry of the matrix is equivalent to the dimensional weight w_j when person i is deprived in dimension j, and is zero when the person is not deprived.

[5] For example, the type of source of drinkable water can be coded as 4 if the water source is some form of piped water, 3 if it is a public tap or standpipe, 2 if it a tube well, borehole or protected well, and 1 if it is some unprotected source. However the values 1, 2, 3, 4 have no meaning in themselves: having a value of 3 does not mean that the person is three times better off than another that has a value of 1.

[6] Note that Alkire and Foster term 'dimensions' is what we have referred to as 'indicators' in this paper. The MPI is composed of ten indicators, and the weighting vector takes the value of 0.56 for the living standard indicators and 1.67 for the indicators of health and education.

From the matrix g^0 we construct a column vector c of *deprivation counts*, whose i^{th} entry $c_i = \sum_{j=1}^{d} g_{ij}^0$ represents the sum of weighted deprivations suffered by person i[7]. Second, we need to identify who is to be considered multidimensionally poor. To do so, we select a second cutoff $k>0$ and apply it across this column vector c. More formally, let $\rho : R_+^d \times R_{++}^d \rightarrow \{0,1\}$, ρ_k be the *identification function* that maps from person i´s achievement vector $y_i \in R_+^d$ and cutoff vector z in R_{++}^d to an indicator variable. ρ_k takes the value of 1 when $c_i \geq k$, and $\rho_k(y_i, z) = 0$ when $c_i < k$. That means that a person is identified as poor if her weighted deprivation count is greater than or equal to k. This is called a *dual cutoff* method, because it uses the *within dimension* cutoffs z_j to determine whether a person is deprived or not in each dimension, and the *cross-dimensional* cutoff k to determine who is to be considered poor.

To aggregate information about poor persons into the population-wide measure MPI, we focus on poor people by censoring the deprivations of persons who are deprived but non-poor given k. To do that we construct a second matrix $g^0(k)$, obtained from g^0 by replacing its i^{th} row g_i^0 with a vector of zeros whenever $\rho_k = 0$. This matrix contains the weighted deprivations of all persons who have been identified as poor and excludes deprivations of the non-poor. From this censored matrix we construct the *censored vector of deprivation counts* $c(k)$ which differs from vector c in that it counts zero deprivations for those not identified as multidimensionally poor.[8] M_0 is simply the mean of the matrix $g^0(k)$, that is $M_0 = \mu(g^0(k))$, where μ denotes the arithmetic mean operator. In words, M_0 is the weighted sum of the deprivations the poor experience divided by the total number of people times the total number of dimensions considered.[9]

Interestingly, it can be verified that M_0 can also be expressed as the product of two intuitive measures: the (multidimensional) headcount ratio (H) and the average deprivation share among the poor (A). H is simply the proportion of people that are poor. That is, $H = q/n$ where q is the number of poor people; it represents the *incidence* of multidimensional poverty. To understand A, we first notice that $c_i(k)/d$ indicates the fraction of weighted indicators in which the poor person i is deprived. The average of that fraction among those who are poor (q), is precisely A, where its expression is given by $A = \sum_{i=1}^{n} c_i(k) \Big/ dq$. A represents the *intensity* of multidimensional poverty.

In this way, the M_0 measure summarises information on the incidence of poverty and its intensity, hence its name of *Adjusted* Headcount Ratio. As a consequence of combining both H and A, M_0 satisfies *dimensional monotonicity*[10]: if a poor individual becomes deprived in an additional dimension, the M_0 will increase. This is a very important advantage over the multidimensional headcount, which

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[7] Note that c_i is simply the sum of all the entries in the i^{th} row of matrix g^0.

[8] Note that $g_{ij}^0(k) = g_{ij}^0 \rho(y_i, z)$ and $c_i(k) = c_i \rho(y_i, z)$.

[9] In a more conventional notation: $M_0 = \sum_{i=1}^{n} \sum_{j=1}^{d} g_{ij}^0 \Big/ nd$.

[10] Alkire and Foster (2007) define the axiom formally and explain the intuition thus: "*Dimensional monotonicity* specifies that poverty should fall when the improvement removes the deprivation entirely." In other words, if a person who was deprived in four dimensions is now deprived in three dimensions only, by dimensional monotonicity, poverty should fall.

does not vary when the poor become poor in another dimension. Yet a society that has 30 percent of its population in poverty where –on average – the poor are deprived on average in six out of ten dimensions seems poorer than a society that although also having 30 percent of its population in poverty, the poor are deprived on average in three out of ten dimensions. M_0 reflects this higher intensity, H does not.

Another important characteristic of M_0 is that it is decomposable by population subgroups. Given two distributions x and y, corresponding to two population subgroups of size $n(\mathrm{x})$ and $n(\mathrm{y})$, the weighted sum of the subgroup poverty levels (weights referring to the population shares) equals the overall poverty level obtained when the two subgroups are merged (with the total population noted as $n(x,y)$:

$$M_0(x,y;z) = \frac{n(x)}{n(x,y)} M_0(x,z) + \frac{n(y)}{n(x,y)} M_0(y,z)$$

Additionally, after identification, M_0 can be broken down by dimension. To see this, note that the measures can also be expressed in the following way: $M_0 = \sum_{j=1}^{d} \mu(g^0_{*j}(k))/d$, where $g^0_{*j}(k)$ is the j^{th} column of the censored matrix $g^0(k)$. The contribution of dimension j to multidimensional poverty can be expressed as $Contr_j = (\mu(g^0_{*j}(k))/d)/M_0$. Itemizing the contribution of each dimension provides information that can be useful to reveal a group or region's particular configuration of deprivations and to target poor persons. This is a second advantage of M_0 over H, which does not allow such break-down.

The intuition of M_0 – the proportion of the poor adjusted by the intensity of their poverty– together with its convenient properties of dimensional monotonicity and decomposability makes it a suitable measure to be adopted in an index that intends to be internationally comparable and robust as the MPI, and this is why we use the M_0 structure in the MPI.[11]

The Alkire Foster M_0 methodology does not specify dimensions, indicators, weights, or cutoffs; it is flexible and can be adapted to many contexts. The MPI, in contrast, has specified dimensions, indicators, weights, and cutoffs. In the remainder of this section, we explain how and why these were chosen.

2.2 Choice of Dimensions

Sen has argued that the choice of relevant functionings and capabilities for any poverty measure is a value judgment rather than a technical exercise. "There is no escape from the problem of evaluation in selecting a class of functionings in the description and appraisal of capabilities, and this selection problem is, in fact, one part of the general task of the choice of weights in making normative evaluation…. The need for selection and discrimination is neither an embarrassment, nor a unique difficulty, for conceptualizing functionings and capabilities" (Sen 2008).[12]

[11] M_0 also satisfies other properties: replication invariance, symmetry, poverty focus, deprivation focus, weak monotonicity, non-triviality, normalisation, and weak re-arrangement.

[12] As is well known, Nussbaum argues that a list of central human capabilities must be specified for the purpose of constitutional guarantees. Her argument and Sen's rejoinder arguing against the creation of *one* list of capabilities in general, can be found in these articles: Nussbaum 2003, Sen 2004a.

The potential dimensions that a measure of poverty might reflect are quite broad and include health, education, standard of living, empowerment, work, environment, safety from violence, social relationships, and culture among others. In the context of choosing capabilities that have a moral weight akin to human rights, Sen has suggested focusing on dimensions that are of a) *special importance* to the society or people in question, and b) *social influenceable* – which means that they are an appropriate focus for public policy, rather than a private good or a capability like serenity which cannot be influenced from outside.[13]

In practice, the selection of the 2010 HDR dimensions has relied on the following mechanisms:

a. The first is the literature arising from *participatory exercises*, which engage a representative group of participants as reflective agents in making the value judgments to select focal capabilities. All of the dimensions for the MPI have been regularly identified as important elements of ill-being by communities.
b. The second is the use of some *enduring consensus,* particularly surrounding human rights and the Millennium Development Goals (MDGs).
c. The third is *theory based*, as in the many philosophical or psychological accounts of basic needs, universal values, human rights, and so on.
d. The fourth and the binding constraint is *whether the data exist*. Due to data constraints (as well as, perhaps, interpretability) we have had to severely limit the dimensions. For example, we do not have sufficient data on work or on empowerment. Yet each of these dimensions should arguably be considered in a human development-based multidimensional poverty measure.[14]

The MPI includes three dimensions: health, education, and the standard of living. The dimensions mirror the HDI. Why is this? Now, as then, data form the binding constraint. The construction of the HDI was driven to a great extent by the cross-country data available in 1990, as well as the need to generate a simple compelling policy message. It included three dimensions and four indicators. The Human Poverty Index (HPI) released in 1997 maintained the same three dimensions, but defined the indicators differently. Both the HDI and the HPI have been criticized for not including additional dimensions, such as those identified as human rights or within the MDGs. We very much wished the MPI to include additional vital dimensions. Unfortunately, we can state categorically that comparable data of sufficient quality are not available from the same survey in the public domain for 100+ less developed countries to consider *any* other dimensions, nor to include consumption data.[15]

However there are several arguments in favor of the chosen dimensions. First, parsimony: having only three dimensions simplifies comparisons with income poverty measures. Second, consensus: while there could be some disagreement about the appropriateness of including work, empowerment, or physical safety in a poverty measure, the value of health, education, and basic standard of living variables is widely recognized. Third, interpretability: there are substantial literatures and fields of expertise on each of these topics, which will make analysis of the MPI easier. Fourth, data: while some data are poor, the validity, strengths, and limitations of various indicators are well documented; such documentation is not as developed in domains such as empowerment. Fifth, inclusivity: human development appreciates both the intrinsic and the instrumental value of these dimensions. These same dimensions are emphasized in human capital approaches that seek to

[13] Sen 2004b.
[14] Alkire 2008.
[15] Additional questions are available in the Gallup International survey but the data are not publicly available.

clarify how each dimension is instrumental to income growth. In sum, there are good reasons for releasing the first version of the MPI with these three dimensions.

At the same time, because data are a binding constraint, a key priority for future work on multidimensional poverty must be gathering more and better data around core areas such as informal work, empowerment, safety from violence, and human relationships (social capital and respect versus humiliation) (Alkire 2007). This will enable empirical explorations of whether such dimensions add value to a multidimensional poverty measure. There is also growing interest in understanding potential contributions from data on subjective and psychological well-being.

2.3 Choice of Indicators and Unit of Analysis

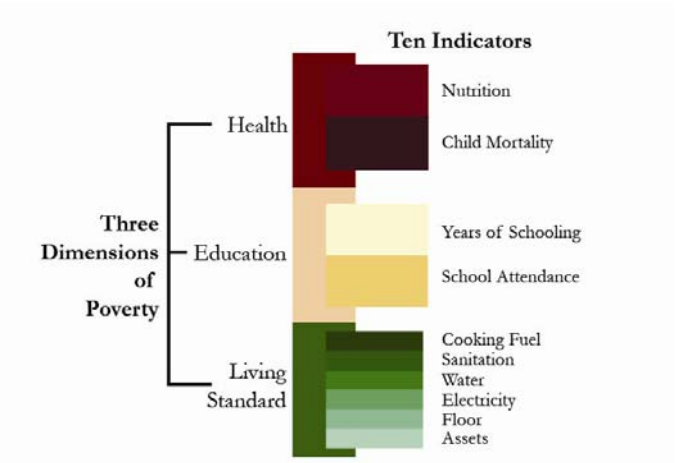


Figure 2: Dimensions and Indicators of MPI

The MPI has ten indicators: two each for health and education, and six for living standard. Ideally, the MPI would have used the person as a unit of analysis, which is possible to do with the AF measurement methodology. Such an analysis would have enabled us to compare across gender and age groups, and to document intra-household inequalities. The reason we were not able to do this is that the data required for such comparisons across 100+ developing countries are not available. For example, the DHS gathers nutritional information for children younger than five years and for women in reproductive age; MICS collects nutritional information for children only whereas WHS focuses on adults only. The only indicators for which individual level data are available for all household members are years of education and the living standard variables which naturally apply to all household members. Therefore the MPI uses the **household as a unit of analysis**. This means that the indicators differ systematically from traditional indicators constructed from the same data, and these differences are explained below.

The ten indicators (displayed in Figure 2) are almost the only set of indicators that could have been used to compare around 100 countries.[16] In fact, one of the main lessons of this first exercise of estimating multidimensional poverty for developing countries is the urgent need to start collecting information on key internationally comparable indicators at the individual level (Alkire and Eli, 2010).

Within the education dimension we use two indicators that complement each other: whether someone in the household has **five years of education** and whether **all children of school age are**

[16] For a detailed survey of the academic literature on each indicator please see Alkire and Eli (2010). Note that as an empirical exploration of different indicators and cutoffs, we constructed *eight* trial measures and presented these in mid-December to UNDP HDRO staff and statistical advisors, together with a draft background paper, and one set of indicators was selected. In March 2010, we presented *four* additional trial measures for 47 countries, and in April, an additional *five* measures for 108 countries. The March and April measures had the same three dimensions; the cutoffs and the precise indicators were varied.

attending school. Years of schooling acts as a proxy for the level of knowledge and understanding of household members. While years of schooling is an imperfect proxy, not capturing the quality of education nor the level of knowledge attained, nor skills, it is a robust indicator, widely available, and provides the closest feasible approximation to levels of education for household members. It can be conceived as a relatively good proxy of functionings that require education: literacy, numeracy, and understanding of information. Because the unit of analysis is the household, *all* household members are considered non-deprived if at least one person has five years of schooling. This variable follows the idea of *effective* literacy of Basu and Foster (1998) that all household members benefit from the abilities of a literate person in the household, regardless of each person's actual level of education. It is also linked to the idea of external capabilities (Foster and Handy, 2008).

Similarly all household members are considered deprived if any of their school-age children are not attending grades 1 to 8 of school. Once again, school attendance does not capture completion, quality of schooling, or skills. But it is the best indicator possible to indicate whether or not school-aged children are being exposed to a learning environment. Given the data restrictions, we consider it to be a sufficiently good proxy of educational functionings. The intuition of considering all household members deprived if one or more children are not attending school relates to external effects. When a child is not in school, the household's current *and* future knowledge and abilities are reduced. Note that households with no school-aged children are considered non-deprived. Hence incidence of deprivation in this indicator will reflect the demographic structure of the household and country as well as the educational attainments. Empirical studies suggest that this indicator provides different and complementary information to mean years of schooling (Santos et al, 2010). Furthermore, this indicator will be immediately sensitive to policy changes, whereas mean years of schooling will change more slowly. Moreover the indicator of children attending school is justified by a number of distinct sources that have attained a high degree of consensus: the MDGs include achieving universal primary education; 'echoing' the MDGs, UNESCO's *Education For All* 2010 report specifically analyzes possible solutions for making sure that no children are excluded from schooling; and the Unsatisfied Basic Needs approach typically includes this indicator.

Health was the most difficult dimension to measure. Comparable indicators of health for all household members are generally missing from household surveys. Yet the capability to live a long and healthy life is a basic capability and is also the prerequisite for much of human development. We use two health indicators that, although related, depart significantly from standard health indicators. The first identifies a person as deprived in nutrition if anyone in their household is malnourished. **Malnutrition** is a direct indicator of functionings. For children, malnutrition can have life-long effects in terms of cognitive and physical development. Adults or children who are malnourished are also susceptible to other health disorders; they are less able to learn and to concentrate and may not perform as well at work.

This being said, malnutrition indicators (BMI for adults, weight for age for children) are imperfect; they do not reflect micronutrient deficiencies. Also, we do not consider the problem of obesity. Moreover, some people may appear to be technically malnourished who are not (due to body type) or their nutritional status may be not be due to poverty (it may be due to alimentary disorders or fashion norms or a recent illness for example).

We wish to emphasise one key feature of our indicators on nutrition that might confuse the reader and which relates to the special construction of our measure. In the MPI *all* household members are considered to be deprived in nutrition if *at least one* undernourished person is observed in the

household.[17] Therefore, it is fundamental to note that when we present deprivation rates by indicator (censored headcounts), *these estimates depart from the standard nutritional statistics*. The standard measures refer to the percentage of undernourished population (number of malnourished people divided by total set people under consideration, such as percentage of underweight children). In our measure they refer to those identified as multidimensionally poor and who live in a household where at least one member is undernourished (*both* the numerator *and* the denominator of our indicators are different). Our estimate can be either higher or lower than the standard nutritional indicator because a) it counts as deprived people who are not undernourished themselves but in a household where somebody else is; b) it depends on the distribution of malnutrition in the population and the size of the households with malnourishment;[18] and c) we consider as non-deprived people in households where no one was measured.[19] Once again, note that although considering the household as the unit of analysis is not ideal, it is intuitive: the household experiences an external negative effect by the presence of a malnourished person.

The second indicator uses data on **child mortality**. The death of a child is a total health functioning failure – one that is direct and tragic, and that influences the entire household. Most, although not all, child deaths are preventable, being caused by infectious disease or diarrhea; child malnutrition also contributes to child death.

This indicator is particularly problematic. It is a stock indicator, because the year of death of the child is not recorded in most surveys – so the death could have happened many years ago. However given the absence of health functioning information on household members, it provides at least rudimentary information on health functionings.

In the MPI *all* household members are considered to be deprived if there has been at least one observed child death (of any age) in the household.[20] It is fundamental to note that this indicator differs from the standard mortality statistics. The standard under-five mortality rate is the number of deaths of children 0-5 years per 1000 children born alive. Here, it is the percentage of people

[17] Unfortunately the exact definition of the deprived in nutrition varies depending on the survey used: when we use DHS, it refers to child or women in reproductive age being undernourished; when we use MICS, the household is considered deprived if there is at least one undernourished child (this survey does not provide information on adults' nutrition); when we use the WHS, the household is considered deprived when the respondent (either men or women, any age) is undernourished (this survey does not provide information on children's nutrition).There are two country-specific surveys used, in Argentina, and Mexico. In Argentina the indicator coincides with that used with DHS. In the Mexican survey all household members were measured, so the household is deprived if there is *any* undernourished member.

[18] If the malnourished are concentrated in a few households and the size of these households is not excessively large, our estimates will tend to be lower than the standard measure. On the other hand, if the malnourished are distributed one-per household (as it could happen with a very unequal distribution of food resources within the household), our estimates will tend to be higher than the standard measure.

[19] Given that the information on nutrition was limited in each survey to a particular group, we have had to follow this assumption. Otherwise we would have had to drop all households where no-one was measured, which would have implied a significant loss of information and representativeness in the other indicators.

[20] The 'eligible' population for the mortality questionnaire varies slightly from one survey to the other, but on the basis of our analysis we think that – although not ideal – the comparison across the surveys is not unreasonable. In DHS, the mortality data are obtained from women 15-49 and – in most countries – it is also obtained from men aged 15-59. In MICS it is obtained from all women 15-49 who are currently married or were married at some point. In WHS it is obtained from the respondent, when this is a woman between 18 and 52 years of age. In WHS we have also used a small part of the information provided by the questionnaire on sibling's death, which is obtained from all respondents. This is explained in the Data section.

identified as poor and who live in a household where at least a child died. Our estimate can be either higher or lower than the mortality rate because a) it counts as deprived all people in households with a child death and not the actual children that died (both the numerator and the denominator are different); b) it depends on the distribution of child mortality in the population and the size of the households with child mortality;[21] c) we consider as non-deprived households where no one was interviewed on mortality.[22] Once again, note that although considering the household as the unit of analysis is not ideal, it does have some intuitive meaning, because the household experiences an external negative effect by the death of a child.

The MPI considers and weights standard of living indicators individually. It would also be very important and feasible to combine the data instead into other comparable asset indices and explore different weighting structures. The present measure uses six indicators which, in combination, arguably represent acute poverty. It includes three standard MDG indicators that are related to health, as well as to standard of living, and particularly affect women: **clean drinking water**, **improved sanitation**, and the use of **clean cooking fuel**. The justification for these indicators is adequately presented in the MDG literature. It also includes two non-MDG indicators: **electricity** and **flooring material**. Both of these provide some rudimentary indication of the quality of housing for the household. The final indicator covers the ownership of some consumer goods, each of which has a literature surrounding them: **radio, television, telephone, bicycle, motorbike, car, truck** and **refrigerator**. We are aware that all the living standard indicators are means rather than ends; they are not direct measures of funtionings. Yet, they have two strengths. In the first place, unlike income, which can serve an incredibly wide range of purposes (and one never knows whether it is used effectively to accomplish the needs considered to be basic), these are means very closely connected to the end (functioning) they are supposed to facilitate. Access to safe drinking water serves directly to satisfy the need of hydration and hygiene (hygiene is also facilitated by the access to improved sanitation and flooring material). Clean cooking fuel prevents respiratory diseases, which are a leading cause of preventable death, and contributes to a healthy home environment. Electricity is fundamental to pursue a number of activities. It allows lighting, which in turn allows people to be independent during the night time. Power also enables a wide range of work and leisure activities ranging from refrigeration to drilling to blending, sewing, and so forth. Electricity is also usually a safer means of lighting. And the set of considered assets are directly linked to the ability to communicate with other people, to be mobile, and even to have access to safe food. Secondly, most of the indicators are related to the MDGs, which provides stronger grounds for their inclusion in our index.

Of the ten indicators, all but one are relatively sensitive to policy change and measure 'flow', which means they will reflect changes in-country with as little as one year between surveys. The exception to this is the stock indicator of child mortality. More direct measures of household health functioning were simply not available. Other relatively stable indicators are years of schooling – which will be stable for many households who have no one in full-time education.

[21] If mortality is concentrated in a few households and the size of these households is not excessively large, our estimates will tend to be lower than the standard measure. On the other hand if mortality is distributed one-per household, our estimates will tend to be higher than the standard measure. For specific examples, please see the section on results.
[22] As explained by describing the eligible population for the mortality questionnaire in each survey (see footnote 22), many households in each survey were not asked the mortality questionnaire, and they are considered non-deprived in this indicator. If we had restricted the information only to households were the mortality questionnaire was asked, we would have missed significant information in the other indicators.

As we said before, it would have been ideal to estimate the measure at the individual level. Measures created using individual level data have significant strengths: for example, they can be decomposed to compare poverty between men and women, and between different age groups. However, working at the household level (a forced choice given the availability of data[23]) is not all counter-intuitive. It allows for interaction, smoothing, and mutual sharing within the household regarding the different indicators considered. We are aware that household size may affect results: large households are more likely to be deprived in child school attendance, nutrition, and mortality simply because they have more people who are 'eligible' to report these deprivations. For better or worse, this may be less of a problem in practice than in theory, particularly for health deprivations, as data are rarely available for all household members. However large households are less likely to be deprived in years of schooling. In subsequent versions of this paper, we will present decompositions and correlations of poverty and household size to explore vigorously any potential biases.

To capture the poverty differences between social and regional groups in Bolivia, Kenya, and India, we have **decomposed** the MPI by state and by **ethnic group** (see Appendix 3 on *Decomposition*). We find that large differences do emerge, so groups are clearly a key variable to consider in analyzing the causes of and responses to multidimensional poverty. The MPI allows these group differences to be seen and studied in detail, in order to design effective policies.[24]

2.4 Cutoffs for each Indicator

We have chosen cutoffs for each indicator that are based to a large extent on international standards such as the Millennium Development Goals. Where no standard was possible, we consulted the literature and also implemented multiple cutoffs to explore the sensitivity of the overall ranking to them.
The indicators and cutoffs are summarized in the figure below.

Figure 3: Dimensions, indicators, cutoffs and weights of the MPI

Dimension	Indicator	Deprived if…	Related to…	Relative Weight
Education	Years of Schooling	No household member has completed five years of schooling	MDG2	16.7%
	Child School Attendance	Any school-aged child is not attending school in years 1 to 8	MDG2	16.7%
Health	Mortality	Any child has died in the family	MDG4	16.7%
	Nutrition	Any adult or child for whom there is nutritional information is malnourished*	MDG1	16.7%
Standard of Living	Electricity	The household has no electricity		5.6%
	Sanitation	The household´s sanitation facility is not improved (according to the MDG guidelines), or it is improved but shared with other households	MDG7	5.6%
	Water	The household does not have access to clean drinking water (according to the MDG guidelines) or clean water is more than 30 minutes walking from home.	MDG7 MDG7	5.6%
	Floor	The household has dirt, sand or dung floor		5.6%
	Cooking Fuel	The household cooks with dung, wood or charcoal.	MDG7	5.6%
	Assets	The household does not own more than one of: radio, TV, telephone, bike, motorbike or refrigerator**,** and does not own a car or truck.	MDG7	5.6%

Note: **MDG1** is *Eradicate Extreme Poverty and Hunger*, **MDG2** is *Achieve Universal Primary Education*, **MDG4** is *Reduce Child Mortality*, **MDG7** is *Ensure Environmental Sustainability.*
* Adults are considered malnourished if their BMI is below 18.5. Children are considered malnourished if their z-score of weight-for-age is below minus two standard deviations from the median of the reference population.

[23] Note that to compute the poverty measure at the individual level, we would have needed nutritional information of every household member (and not just children/women/respondent – depending on the survey used). Analogously, we would have needed information on whether each adult experienced the death of a child.
[24] For example, Mexico's national poverty measure highlighted the high poverty rates of indigenous people.

2.5 Indicator Weights

Weights can be applied in three ways in multidimensional poverty measures: i) *between* dimensions (the relative weight of health and education), ii) *within* dimensions (if more than one indicator is used), and iii) *among* people in the distribution, for example to give greater priority to the most disadvantaged.

It is important to note that the choice of dimensions, of cutoffs, and of weights *between* dimensions is interconnected. For example, dimensions might be chosen such that they were of relatively equal weight. This, indeed, is the recommendation given by Atkinson *et al* (2002) in their work on social indicators in Europe: "the interpretation of the set of indicators is greatly eased where the individual components have degrees of importance that, while not necessarily exactly equal, are not grossly different."[25] At the same time, in the MPI the standard of living has a higher effective weight because the deprivation headcounts tend to be higher than they are in health or education, so although the explicit weights are equal, in practice standard of living is weighted more highly.

In the capability approach, because capabilities are of intrinsic value, the relative weights on different capabilities or dimensions that are used in society-wide measures are value judgments. Weights can represent

1) the enduring *importance* of a capability relative to other capabilities or
2) the *priority* of expanding one capability relative to others in the next phase.

Weights may be set by a number of processes, such as participatory processes or expert opinion that are informed by public debate. Alternatively, weights may be drawn from survey questions such as socially perceived necessities or interpreted using data on subjective evaluations.[26] The important feature to consider is that the weights are meant to represent a 'reasoned consensus' of the relevant community.

> It is thus crucial to ask in any evaluative exercise of this kind how the weights are to be selected. This judgmental exercise can be resolved only through reasoned evaluation. …[I]n arriving at an agreed range for social evaluations (e.g., in social studies of poverty), there has to be some kind of a reasoned consensus on weights or at least on a range of weights. This is a social exercise and requires public discussion and a democratic understanding and acceptance (Sen 1996: 397).

Empirically, the relative weights are influenced by the cutoffs, the normalization (if any) of the variable, and the explicit weights. The MPI explicitly weights each dimension equally and each indicator within the dimension equally. Equal weighting between the dimensions follows the HDI convention, upon which a critical literature has developed (e.g., Chowdhury and Squire 2006), yet largely substantiated this weighting structure. Equal weights for indicators within dimensions are not necessary– for example HDI places a 2/3 weight on adult literacy and 1/3 on Gross School attendance Ratio. In the case of health indicators, it seems that malnutrition and mortality are both important deprivations and it is not clear which is the more important indicator. In the case of

[25] Atkinson, Cantillon, Marlier, Nolan and Vandenbroucke 2002, p 25.

[26] Papers from a May 2008 workshop on setting weights in the capability approach are available as working papers on www.ophi.org.uk. For example Decanq and Lugo sketch the landscape of statistical and normative approaches to weighting; Fleurbaey and Schokkaert propose the use of subjective weights; Wright discusses the use of socially perceived questionnaires; and Dibben *et al.* discuss discrete choice experiments.

education, it could be argued that having one person with five or more years of schooling was the most important outcome; yet child school attendance is a time-sensitive input with long future returns, hence again we have weighted them equally. Weighting the six asset indicators equally is admittedly more difficult to justify and is also particularly important given that this is the dimension that contributes most to poverty in the poorest countries. Further research on the best comparable asset measures that can be constructed from multiple datasets would be useful in the future.[27]

2.6 Poverty cutoff *k*

The MPI reflects the *number* of deprivations a poor household experiences at the same time. But what qualifies a household as being multidimensionally *poor*? One could consider a household as poor if it were deprived in *any* of the ten indicators. Yet one deprivation may not represent poverty. For example, a household containing a slim fashion model or a grandfather who wants to cook only on a woodstove would have one MPI deprivation but perhaps should not be considered poor. At the other end of the extreme, one could require a household to be deprived in all ten indicators in order to be considered poor. This, however, seems overly demanding; surely a household that has many but not all of these basic deprivations should be considered poor. The MPI requires a household to be deprived in a few indicators at the same time. Concretely, we report two values of the MPI.

The variable k reflects the sum of weighted indicators in which a household must be deprived in order to be considered multidimensionally poor. Simply put, k is a policy variable that governs the range of simultaneous deprivations each poor household necessarily must have. As k goes up, the number of households who will be considered poor goes down, but the intensity or breadth of deprivations in any poor household goes up.
We report two values for k: $k = 3$ and $k = 2$. When k = 3, a person has to be deprived in at least the equivalent of 30 percent of the weighted indicators (two to six indicators) in order to be considered multidimensionally poor. This amounts to six asset indicators or two health or education indicators. If we choose instead cutoff value k = 2 then all poor people must be deprived in at least 20 percent of the weighted indicators (two to four indicators).
A person is multidimensionally poor if the weighted indicators in which he or she is deprived sum up to 30 percent.

Example: There are 10 indicators. Weight of Health = 3.33; Education = 3.33; and Standard of Living = 3.33 Any person whose deprived indicators' weights sum to 3 or more is considered poor.

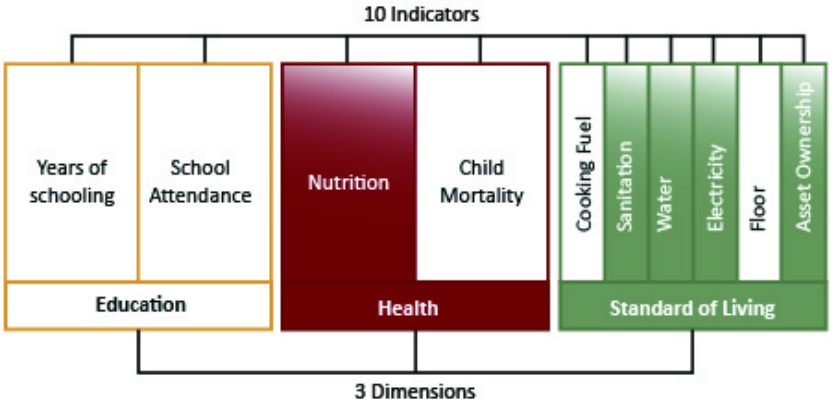
Health and Education: 1.67 each (1/6 of 10)
Standard of Living: 0.55 each (1/18 of 10)

Poor if deprived in:
* any 2 health/education indicators or
* all 6 standard of living indicators or
* 1 health/education indicator plus 3 standard of living indicators.

Consider Tabitha and her household, living in a Nairobi slum.[28]

[27] Ferguson *et al.* 2003
[28] This is a real case. Tabitha was interviewed as part of OPHI´s Ground Reality Check in Kenya.

Figure 4: Diagram of dimensions and indictors of the MPI



The diagram above shows the five indicators in which Tabitha is deprived. The height of the indicators corresponds to their weight. To identify whether Tabithais poor, we sum up the weighted indicators and see if they come up to the equivalent of 30 percent of indicators. In the right column, we
see that indeed Tabitha is deprived in over 30 percent of indicators and is thus multidimensionally poor. Consider some other examples:[29]

Ana is deprived in nutrition and child school attendance. Is Ana multidimensionally poor?
1.67 + 1.67 = 3.34 (≥ 3) ***Yes***
Ali is deprived in electricity, water, sanitation, and has a dirt floor. Is Ali multidimensionally poor?
0.55+0.55+0.55+0.55= 2.20 (<3) ***No***
Win is deprived in years schooling, sanitation, assets, and cooking fuel. Is Win multidimensionally poor?
1.67 + 0.55 + 0.55 + 0.55 = 3.33 (≥3) ***Yes***

We now turn to the data sources description and then to the results of the MPI.

3. Data & Results

3.1 Surveys used

Three main datasets were used to compute the MPI: the Demographic and Health Survey (DHS hereafter), the Multiple Indicators Cluster Survey (MICS hereafter), and the World Health Survey (WHS hereafter). Ideally we would have liked to use the same dataset for all countries, but this was not possible as none of the mentioned surveys (or others) were performed in a sufficiently high number of developing countries at a relatively recent point in time. However, the three surveys used have two primary advantages. In the first place, the countries implementing each of these surveys follow standardized guidelines and receive technical assistance, in terms of the questionnaire, sampling procedure, and training of the enumerators, so that within each survey there is greater homogeneity and comparability than between other national multi-topic household surveys. Second,

[29] The particular weights on indicators vary for countries which do not have data on all of the ten indicators; this will affect identification as well as aggregation. An example of the adjustments is given in the Results section.

they are the only currently available surveys that contain relevant information on health indicators such as nutrition and mortality in an internationally comparable way.[30]

A second problem is that although we would have liked to estimate poverty for exactly the same year in all countries to enable a strict cross-country comparison, this was not possible given that the different surveys have been performed in different years in each country. We followed a combined criterion of using (a) the most recent available dataset for each country (never before the year 2000) and (b) whenever more than one survey dataset was available from the year 2000 onwards, we privileged DHS over MICS, and MICS over WHS, because of data quality and indicator availability.[31]

The MEASURE DHS project started in 1984 and is funded mainly by the US Agency for International Development (USAID) and has conducted surveys in 84 countries. Over the years, the questionnaires have had some changes in some variables and that is why there are different DHS Phases, Phase 1 (surveys carried out between 1984 and 1989) through Phase 6 (surveys between 2008 and 2013). We used DHS datasets for 49 developing countries. All the DHS datasets used in this study correspond to Phase 4 or higher.[32] This favors cross-country comparability in the indicators used for this study. Moreover, all the questions used to construct the ten indicators that compose the MPI were homogenized one-by-one, so as to have the same recoding of categories.[33]

The MICS is financially and technically supported by the United Nations Children´s Fund (UNICEF) and it is implemented in each country in collaboration with some government office such as the Statistical Institutes or the Ministry of Health.[34] The program started in the mid-1990s. Up to present, there have been three rounds of MICS: MICS 1 conducted in 1995 in about 65 countries, MICS 2 was conducted in 2000 in about 65 countries, and MICS 3 was conducted in 2005-06 in 50 countries. For this study we used MICS 2 or MICS 3 datasets for 35 developing countries.[35] As with DHS datasets, all the questions used to construct the ten indicators that compose the MPI were homogenized for each country individually, so as to have the same recoding of categories.

[30] See Alkire and Eli (2010) for a discussion on bottlenecks of availability of internationally comparable indicators.
[31] For example, for Cameroon, Cote d´Ivoire, Guyana, and Malawi, the DHS datasets of either 2004 or 2005 are available, as well as the 2006 MICS dataset. We used the DHS datasets. There are a few exceptions to the mentioned rule. One is Nicaragua. For this country, we had DHS 2001 and 2006. Although we estimated the MPI for both years, we decided to use the estimates in 2001 (despite being older) because the dataset in 2006 lacks information on mortality. We indicate the difference in the estimates in the section of Results. The second exception is Angola. Although we prefer DHS data over MICS, in the case of Angola we used MICS because DHS does not contain information on nutrition and education for all household members (only for women and children). Third, although we prefer MICS data over WHS data, for Chad we used WHS because the MICS dataset had a very high percentage of households with missing data which produced an unacceptable sample size reduction.
[32] We use DHS 2008 (Phase 6) for three countries. We also use DHS 2007 for ten countries, DHS 2006 for nine countries, DHS 2005 for twelve countries, DHS 2004 and DHS 2003 for six countries each; all the aforementioned correspond to Phase 5. Finally, we use DHS 2002, DHS 2001, and DHS 2000 for one country each, which correspond to Phase 4.
[33] For example, when there were differences in country datasets, the type of toilet question was recoded to match a general standard coding. The same was done with type of drinking water source, cooking fuel, etc.
[34] It is common that other international and national agencies contribute to financing the implementation of DHS or MICS in each country. One example is the United Kingdom Department for International Development (DFID).
[35] We used MICS 2 for seven countries (six conducted the survey in 2000 and one in 2001) and MICS 3 for the other 28 countries (eleven conducted the survey in 2005, sixteen in 2006 and one in 2007).

The WHS was designed by the World Health Organization (WHO hereafter) and implemented for the first time in 2003 in 70 countries (both developing and developed) by different institutions in each country with the technical assistance and guidance of WHO. We use WHS datasets for 19 countries, all correspond to 2003.

The three surveys´ datasets used to compute the MPI are nationally representative samples of households. Two points are worth noting. First, in all surveys the samples are optimized with multi-stage stratified designs. Second, these surveys aim to provide accurate information on certain health indicators (such as fertility and child mortality). Therefore, the sample design makes sure to select enough number of cases from the relevant population to reduce the sampling error in such indicators. Because of these two characteristics, when the sample is not self weighted, we used the sample weight provided in the datasets to calculate the poverty estimations. In this way we ensure the actual national representativeness of the results. In the three surveys, the sample weights are adjusted by non-response. Not using the sample weights would produce bias towards the clusters or groups of population that were oversampled according to the survey design.

In addition to the three mentioned surveys, two country-specific surveys were also used: the Encuesta Nacional de Salud y Nutrición (ENSANUT hereafter) of Mexico, conducted in 2006, and the Encuesta Nacional de Nutrición y Salud (ENNyS) of Argentina conducted in 2004-2005.[36] No other survey with the required indicators was available for these two countries. ENSANUT has a nationally representative sample of households and collects indicators that are comparable with those in the other three surveys. However, unfortunately, ENNyS is the only survey we use that is not nationally representative. First, it was conducted only in urban areas; second, the sample design and survey weights do not allow nationally representative estimates in urban areas. However, we kept these estimates as a lower bound estimate of acute multidimensional poverty in the urban areas of Argentina.[37]

We have estimated the MPI for a total of 104 developing countries where one of the mentioned surveys with information on the relevant indicators was available. Of the 104 countries, 24 are in Central and Eastern Europe and the Commonwealth of Independent States (CIS), 11 are Arab States, 18 countries are in Latin America and the Caribbean, 9 in East Asia and the Pacific, 5 in South Asia, and 37 countries in Sub-Saharan Africa. Overall they add up to a total population of 5.2 billion people, which is about 78.4 percent of the total world population (using 2007 population data, HDR, 2009).

3.2 Available information in each survey

The preference of DHS over MICS and of MICS over WHS is partly due to the availability of indicators in each survey. In general, DHS contains more complete information on the ten indicators. In what follows we briefly describe differences in the indicators across the different surveys by dimension.

[36] We also performed estimations with two other country-specific surveys: the China Health and Nutrition Survey – Cross Section 2006 (CHNS) and the 2007 South Africa Community Survey (CS). However, in both cases we decided to use the WHS results for these countries. In the case of China, because the CHNS is not nationally representative – it only covers nine provinces. In the case of South Africa, the CS lacks nutritional information and the (women) sample size of the mortality questionnaire to which we have access is too small (3000 observations out of a total of 900,000 individuals).

[37] It is well known that rural areas in Argentina (which are not covered systematically by any survey), especially in the northern regions, are significantly poorer than urban ones.

Nutrition

DHS contains nutritional information on women between 15 and 49 years (Body Mass Index, BMI hereafter) and on the under-5-year-old children of the household (weight and height). As explained in Section 2, this allows constructing a composite indicator which considers a household to be deprived (and therefore all its members) if there is either a woman or a child undernourished in the household. MICS contains nutritional information only on the under-5-year-old children of the household whereas WHS provides nutritional information only on the survey respondent, that is any adult (18 years old and older), either male or female. Therefore, for countries with these surveys, the nutritional indicator is determined only with the information of one of the two components used in countries with DHS. ENSANUT provides nutritional information on all household members, of any age, whereas ENNyS provides nutritional information on under-5-year-old children and women of 10 to 49 years of age. Therefore, both ENSANUT and ENNyS allow the construction of an indicator similar to the DHS (though ENSANUT includes males, and both include a wider age range).

As explained in Section 2, the nutritional indicator for children is the weight-for-age. A child is underweight if he or she is two or more standard deviations below the median of the reference population. This is one of the indicators proposed by the MDGs to track progress in Goal 1: Eradicate Extreme poverty and Hunger. As a robustness check we also performed estimations with two other well-known nutritional indicators for children: weight-for-height and height-for-age.[38] To guarantee strict comparability of the nutritional indicators for children across surveys, we estimated them in all cases (DHS, MICS, ENSANUT, and ENNyS) following the algorithm provided by the WHO Child Growth Standards.[39] This algorithm uses a reference population constructed by the WHO Multicentre Growth Reference Study (MGRS), which was implemented between 1997 and 2003. The study involved 8,000 healthy children from Brazil, Ghana, India, Norway, Oman, and the United States, living under conditions likely to favor achievement of their full genetic growth potential. The study was purposely designed to produce a standard rather than a reference. It therefore provides a solid foundation to determine abnormal growth[40]

[38] "The weight-for-age indicator reflects body mass relative to chronological age and is influenced by both the height of the child (height-for-age) and weight-for-height. Its composite nature makes interpretation complex. For example, weight for age fails to distinguish between short children of adequate body weight and tall, thin children. Low height for age or stunting, defined as minus two standard deviations from the median height for the age of the reference population, measures the cumulative deficient growth associated with long-term factors, including chronic insufficient daily protein intake. Low weight for height or wasting, defined as below minus 2 standard deviations from the median weight for height of the reference population, indicates, in most cases, a recent and severe process of weight loss, often associated with acute starvation or severe disease. When possible, all three indicators should be analysed and presented since they measure and reflect different aspects of child malnutrition." (United Nations, 2003). The effect of using different nutritional indicators is further discussed in the Section 4.7.

[39] http://www.who.int/childgrowth/software/en/

[40] DHS and MICS provide the children´s nutrition z-scores as already computed variables. However, these computations are based on the National Center for Health Statistics (NCHS)/WHO growth reference that had been recommended for international use since the late 1970s (WHO, 1995). "The limitations of the NCHS/WHO reference have been documented (WHO Working Group on Infant Growth, 1994; de Onis and Yip, 1996; de Onis and Habicht, 1996). The data used to construct this reference covering birth to three years of age came from a longitudinal study of children of European ancestry from a single community in the USA. These children were measured every three months, which is inadequate to describe the rapid and changing rate of growth in early infancy. Also, the statistical methods available at the time the NCHS/WHO growth curves were constructed were too limited to correctly model the pattern and variability of growth. As a result, the NCHS/WHO curves do not adequately represent early childhood growth" (WHO Multicentre Growth Reference Study Group 2006 report, Chapter 1, p. 1). Therefore, now the WHO recommends using

Mortality

In terms of the mortality indicator, in DHS and WHS there is a general question on mortality (non-age specific), as well as a birth history that collects information on the age at death, allowing the construction of the age-specific indicators. In MICS, ENSANUT, and ENNyS there is only a general question on mortality (non-age specific). There are three exceptions to this in MICS: Somalia, Yemen, and Iraq also contain birth histories, which would allow the construction of the age-specific mortality indicator. To guarantee comparability across surveys, we use a non-age specific indicator of mortality. A household (and therefore all its members) is considered deprived if there has been a child death, no matter the age.[41]

Years of education

DHS contains information on the years of education for each household member. In MICS we had to build it from two questions: highest educational level achieved and highest grade completed in that level, considering the duration of each educational level in each country.[42] We are aware that there is measurement error in this variable. However, we think this does not have a significant impact on the MPI indicator, as this only requires determining whether each household member has five years of education or not, regardless of how many exact years he/she has completed.

In WHS, there is information on the number of years of education completed by the respondent. For other household members there is only information on the accomplished level. We consider that at least someone in the household has completed five years of education if: (a) any household member has completed secondary school or more, or (b) the respondent has completed five years of education or more, or (c) the maximum level of education of the household is incomplete or complete primary and the median number of years of education of all respondents with that educational level is five or more.

In ENSANUT, the variable was constructed as it was in MICS. Finally, in ENNyS there is only information on the educational attainment of the household head and the respondent (who is either a woman 10-49 or a child who is measured), so the household is considered non-deprived in education if either the household head or the respondent have completed five years of education.

Child School Attendance

In DHS, the school attendance question draws on one of two questions: 1) whether the child is currently attending school or 2) whether he or she attended school in the previous year. Which question was implemented varies by country. To construct the indicator of child school attendance, we have adjusted the age to each question.[43] In MICS, ENSANUT, and ENNyS the variable refers to whether the child is currently attending school. In WHS – quite unfortunately – there is no

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the MGRS reference population. We have computed the MPI using both reference populations and have records of the difference. This is discussed in the section on Results.

[41] For a robustness check, we computed an alternative measure using the under-5-years-of-age mortality indicator for those countries in which this is available. We comment on this in Section 4.7.

[42] The duration of each level in each country was taken from United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics database, Table 1. "Education systems" http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx?ReportId=163). Given that UNESCO determines the duration according to the International Standard Classification of Education, this information was contrasted with each dataset and country-specific information and adjusted whenever necessary.

[43] For example, if the schooling age is 6-14 years old and the question refers to the previous year, this applies to children 7-15; if it refers to current year then it applies to age 6-14. Information on the age at which children start school in each country was taken from UNESCO, Institute for Statistics database.

information on whether the child is attending school or not. So we have not been able to incorporate that indicator in the 19 countries for which we use that survey and therefore the years of education indicator receives full-weight.

Living Standard

All the living standard variables were recoded homogeneously across surveys. However, a few differences are worth noting. For the drinking water indicator, we also consider the time to the water source. The information of time-to-water is available in most DHS countries and in all MICS and WHS countries,[44] but it is not available in ENNyS (Argentina) and ENSANUT (Mexico). However, distance to a water source is not a serious problem in these two countries (except possibly for some remote rural areas).

For the sanitation indicator, we consider the household deprived if, despite having access to improved sanitation, the toilet is shared. In most DHS countries, all MICS countries, and all WHS countries, we have information on whether the household shares the sanitation facility. In ENSANUT, the question is applicable only for those who have latrines (who are considered deprived anyway as there was no specification on whether these where improved or not). In ENNyS, the information on whether the sanitation is shared or not is not available, but presumably this is not a major concern in this country. In Colombia, the information on shared sanitation seemed inaccurate, so despite being available we decided not to incorporate it in the indicator.

Information on electricity was available in most of the countries across all surveys; however, in the cases in which this was not available, we have checked whether the country had a coverage of 95 percent or higher and if so, we have assumed that no one is deprived in electricity. This has been the case for Albania, the Czech Republic, Croatia, Estonia, Hungary, Latvia, Mauritius, Russia, Slovenia, Slovakia, Brazil, China, Ecuador, the United Arab Emirates, and Uruguay.[45]

The assets indicator considers small assets as TVs, radios, telephones (landline or mobile), refrigerators, motorcycles, and big assets as cars or trucks. We require the household to have a car or any two of the other assets to be considered non-deprived. In most DHS and MICS countries, as well as in ENSANUT, we can count all of them. In WHS countries, we cannot track radios and motorbikes. In ENNyS, only refrigerators and telephones are counted, but given that we know that most people do have a radio and TV (even in the slums), we have required the household to have only one of these (refrigerator or telephone) to be considered non-deprived.

Overall, 63 of the 104 countries have all the ten indicators. Thirty countries lack one indicator: are WHS countries which lack child school attendance only; four countries lack mortality, eight countries lack nutritional information, and five lack one living standard. Eight countries lack two indicators: four of them are WHS countries that lack child school attendance and mortality; one is a WHS country that lacks child school attendance and electricity; and three are DHS countries that

[44] The DHS countries for which we do not have any information on the variable time-to-water are Cambodia, Cote d'Ivoire, Guyana, Jordan, Moldova, and Morocco.

[45] The information on electricity coverage was taken from the section "Electrification rate in 2008" in the *World Energy Outlook 2009*. Countries in which information on electricity was not available and no assumption was made (because information indicated that there was less than 95 percent coverage) are: Honduras (DHS), Suriname, Myanmar (MICS) and South Africa (WHS).

lack nutrition and cooking fuel. Finally, three countries lack three variables.[46] In all these cases, the indicators´ weights are adjusted to add up to 100 percent.[47]

We are aware that data limitations affect cross-country comparability in several different ways: we use different surveys that have differences in the definition of some indicators such as nutrition, we use different years, and 40 percent of the countries lack some indicator (fortunately the great majority lacks only one). Therefore, the value added of this study is not in determining the relative position of each country in a 'poverty ranking' but rather in a) providing a more comprehensive and accurate picture of the world´s acute deprivations (note that this is the first effort in estimating multidimensional poverty for the developing world), b) providing a poverty estimate in each of the 104 countries using all the available information with respect to three core dimensions of human development, and c) demonstrating a methodology that can be adapted to national or regional settings having more and better data.

3.3 Treatment of households with non-applicable population

Ideally, the MPI would reflect the same achievements for each person in the sample. However such an index would exclude all information about child poverty, because not every household has a child member. Furthermore, due to the data availability, such an index would exclude health variables. Given the importance of children and of health, the MPI includes three indicators that are not applicable to all households. While this affects the final measure, we feel it makes the measure more accurate than the alternative. Further, a household made up of men only (for example) can still be identified as poor if it is deprived in sufficient living standard and mean years of schooling indicators.

The three indicators that are not applicable to all the population are as follows: child school attendance is non-applicable for households with no children of school age; nutrition is non-applicable for households that have no under-five-year-old children and no women aged 15-49 (DHS) and for households that have no under-five-year-old children (MICS). Finally, the mortality indicator is non-applicable for households that do not have females of reproductive age and no males in the case of DHS, and no females in reproductive age in the case of MICS and WHS.[48] In all

[46] The thirteen WHS countries that lack child school attendance are: Chad, China, Ecuador, Estonia, Guatemala, Paraguay, Russia, Slovakia, Slovenia, Sri Lanka, Tunisia, the United Arab Emirates, and Uruguay. The five countries that lack mortality are: Bosnia and Herzegovina, Lao, Montenegro and Kyrgyzstan. Serbia had information on mortality but due to a high number of missing values in this variable, we could not use it. So this indicator was not considered for Serbia. The eight countries that lack nutrition are: Burundi, Guyana, Indonesia, Pakistan, Tanzania, Trinidad and Tobago, Ukraine and Yemen. The four countries that lack one living standard variable are: Egypt and Turkey, lacking cooking fuel, Honduras (lacking electricity) and Central African Republic, lacking floor. The four WHS countries that lack school attendance and mortality are Brazil, Croatia, the Czech Republic, and Hungary; South Africa lacks school attendance and electricity. The three DHS countries that lack nutrition and cooking fuel are Cote d´Ivoire, Philippines, and Viet Nam. Finally, Latvia (WHS) lacks child school attendance, mortality, and cooking fuel; Myanmar (MICS) lacks mortality, electricity, and cooking fuel; and Suriname (MICS) lacks electricity, cooking fuel, and assets.

[47] The indicators´ weight is calculated as Total number of indicators/(3*Number of Indicators in the corresponding dimension). Then, if for example, there is only one missing indicator in either the education or the health dimension, the non-missing indicator receives a weight of 9/3; if the missing indicator corresponds to the living standard dimension, the remaining five indicators receive a weight of 9/15. We did not estimate the MPI for countries that lacked all indicators within a dimension.

[48] DHS and MICS interview all females 15-49 year in the household. DHS also interviews males 15-59 usually, although the upper limit varies in some countries. In WHS, the mortality information comes from two questionnaires: one is on the respondent's children's mortality, which is applicable only to female respondents of reproductive (18-49 years) age, the other is a set of questions on the mortality of siblings, which is applicable to all respondents. We have used only part

cases, the procedure followed is to consider as non-deprived in each indicator the households that do not have the relevant eligible population for the questions regarding the mentioned indicators. However, households with applicable population that had missing values are considered as with missing information and are therefore excluded from the sample.

3.4 Treatment of missing data and sample sizes

Missing values are a common problem of household surveys. Whenever a household had missing information for all its members in an indicator, it was excluded from the computation. However, if there was missing information for only some of its members, we have used the available information as much as possible. Specifically, we proceeded as follows.

For the indicator on years of education, if we observe at least one member with five or more years of education then, regardless of the number of other members with missing data, we classify the household as non-deprived. If more than 1/3 of the household members have missing information on years of education, and the people for which we observe the years of education have less than five years, the household is given a missing value in this indicator. If we have information of 2/3 (or more) of household members, and these report less than five years of education, the household will be classified as deprived. For the child school attendance indicator, if all school-aged children in a household have missing information in school attendance, that value is considered missing. As long as we have information for one of the children in the household, the household will be classified as non-deprived or deprived depending on whether that child is reported to be attending school or not.

For the nutritional indicator, in DHS countries, if nutritional information for women and children in the household was missing and these were households with applicable members (that is with children and/or women), we consider the household as missing this indicator. Otherwise, we used the available information. Similarly, for child mortality, households that had applicable members who did not respond to the mortality question are considered to be missing this information; otherwise the household is considered non-deprived.

There are six living standard variables: water, electricity, toilet, cooking fuel, floor, and an assets indicator. Whenever the household had missing information on water, electricity, toilet, cooking fuel or flooring, this household is excluded from the computation of the poverty measure. The assets indicator considers a household as non-deprived if it has more than one of any of these items: TV, radio, telephone, refrigerator, motorcycle, and bicycle or if it has a car or truck. If there are any of these missing, then we assume that the household does not have this asset. The indicator takes a missing value only if there is missing information for all the seven assets.

Following the described procedure, we have a small percentage of sample reductions for most of the countries. Eighty-five countries have a sample size of 87 percent or higher of the original sample, nine have a sample size of between 77 and 85 percent of the original sample and only ten countries have a sample of 56 to 75 percent of the original sample (see Appendix 2). For the 19 countries with

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of the information of this second questionnaire: the one provided by respondents of 25 years of age or younger with siblings dying younger than the age of 15. In this way, we are quite certain that this sibling mortality information refers to a person who was a household member (assuming that people can stay in their households up to the age of 25). Households that had a male respondent older than 25 years of age are non-eligible for either of the mortality questions and are therefore considered non-deprived in this indicator.

sample sizes lower than 87 percent of the original sample we have performed a bias analysis. For each of the variables that have a high percentage of missing observations (typically the nutrition indicator), we have compared the percent of deprived population in each of the other indicators in the group with missing values in the indicator under analysis with that of the group with observed values in the indicator under analysis. We comment on the conclusions of this analysis in the section on Results.

4. RESULTS

Appendix 1 presents the estimation results. The same results are presented in two different groupings of countries. Tables 1.1 to 1.3 present the countries ordered by their MPI estimate, from lowest to highest, that is, from the least poor to the poorest. As detailed in Section 3.2, not all the indicators were available for all the countries in the sample, and years and surveys vary from one country to the other. Therefore, cross country comparison of MPI should be made with caution. Tables 1.4 to 1.6 present the countries grouped by the UN regions. Tables 1.1 and 1.4 present the estimates of the MPI, the rank value, and the MPI components H (headcount, or incidence) and A (average breadth, or intensity). These tables also contains some key comparison data, namely the proportion of people that live on less than $1.25/day and on less than $2 a day (and the country rankings by these income poverty measures), as well as the proportion of people under the national poverty line. We also report the 2009 Human Poverty Index and Human Development Index estimates. In Table 1.1 we additionally present the GDP growth rate, GDP per capita and Gini Coefficient, whereas in Table 1.4 we additionally present the estimated number of people MPI poor and income poor. Finally, we provide the population figures in each country according to the 2007 estimations.

Tables 1.2 and 1.5 present the so-called censored headcounts. These reflect the percentage of people who are poor and deprived in each indicator. These differ from traditional headcounts in two ways. In the first place, they are the proportion of population that are poor (i.e., deprived in some combination of two to six indicators) *and* deprived in each indicator. Note that some people might be deprived in that particular indicator but not deprived in enough indicators to be considered poor; they are not included in these headcounts (for example, someone may cook using a wood fire but otherwise be healthy, wealthy, and well educated). Second, the headcounts refer to the percentage of people who live in households that are affected by a particular deprivation. For example, as explained in Section 2, if any person in a household is malnourished, the household is considered deprived in nutrition – every member is a person who lives in a household that is affected by malnutrition. Thus, both the numerator and the denominator of our statistic differ from well-known headcounts of malnutrition itself – the percentage of people who are themselves deprived.[49] These two differences from traditional headcounts must be highlighted to prevent mis-interpretation of our results.

Looking at the traditional headcounts in each dimension does not inform whether the people deprived in one indicator are also deprived in some other indicator, that is, we cannot know whether they experience coupled deprivations. By identifying those with multiple simultaneous deprivations,

[49] It is worth re-emphasizing that as a consequence of the two mentioned differences between our censored headcounts and the traditional ones, the headcounts on nutrition, mortality, education, and school attendance should not be compared with standard measures of these variables reported elsewhere by different organizations

one can prioritize the poorest poor and provide the basis for further policy analysis that may find effective ways of reducing deprivation in one indicator by improving some other.

Tables 1.3 and 1.6 provide the dimensional contributions of each country to its overall poverty. These are three percentages, adding horizontally to 100, of the relative contribution of each dimension to that country's poverty. This reveals whether the MPI measures are more influenced by education, health, or standard of living indicators in that country. It is worth noting that these contributions should not be disassociated from the MPI estimate. For example, in the Belarus deprivation in education contributes 16.6 percent of overall multidimensional poverty, deprivation in the health dimension 61.6 percent, and deprivation in the living standard 21.7 percent. However, the MPI in Belarus is 0.00008, and the multidimensional headcount, as well as all the censored headcounts, are below 1 percent, so multidimensional poverty is essentially zero in this country and therefore the contributions have little meaning in this case. However, the contributions by dimension can prove useful in cases where there is poverty. This is exemplified below. The other note of caution is that across countries the discerning reader will note that deprivation in 'living standard' generally contributes more to MPI than deprivations in health or education. To some extent, this is due to the implicit higher weight of that dimension. While all dimensions explicitly have equal weights, the effective weight of each dimension also depends upon the dimensional cutoffs and resulting headcounts of poor people. The standard of living variables have a greater incidence of deprivation overall than health or education, hence their implicit weight is greater than 33 percent.

Tables 1.7 presents the MPI, H and A using a k cutoff value of 2, that is, requiring the poor to be deprived in 20 percent of the weighted indicators to be considered multidimensionally poor. Table 1.8 presents the censored headcounts and contributions by dimension associated to the MPI with this alternative cross-dimensional cutoff.

Table 1.9 provides some complementary information in the form of the raw headcounts by dimension. It provides the proportion of the population deprived in at least one of the two education indicators, the proportion of the population deprived in at least one of the two health indicators, and the proportion of the population deprived in three or more of the living standard indicators. These headcounts provide an overall impression of the incidence of deprivation in each dimension, but they are a rough guide only. For an accurate overview of the structure of deprivations readers are referred to Tables 2.A and B, which provide the actual censored headcounts of each of the ten indicators.

Finally, Tables 2.1 and 2.2 in Appendix 2 present the sample sizes of each country and percent of missing information in each indicator. Another clarification is worth noting. As explained in the Data Section, some countries have important sample reductions due to missing values in one or more variables (typically nutrition). For those countries we have compared the percent of deprived population in each of the other indicators in the group with missing values in the indicator under analysis with that of the group with observed values in the indicator under analysis, performing hypothesis tests of difference in means. From that analysis we conclude that the poverty estimates of South Africa, Guatemala, Sri Lanka, Tunisia, Latvia, the Russian Federation, Mauritania, and Myanmar should be interpreted as lower bound estimates – meaning that multidimensional poverty is at least as great as their MPI value indicates. Pakistan's MPI value should also be considered as a lower bound as there was no information on nutrition in the survey and it is well known that malnutrition has a high incidence in that country and it is associated with poverty. On the other

hand, the poverty estimates of Sao Tome and Principe, Gabon, Comoros, Slovenia, Syria, and Slovakia should be interpreted as upper bound estimates – meaning that multidimensional poverty is less than or equal to their MPI values. For the United Arab Emirates, Ecuador, Jordan, Chad, and Colombia, despite the fact that they also had some significant sample reduction, we did not find evidence of under or over-estimation

The following sections highlight the salient results from our estimation and analysis. Please note that there is still ongoing work and analysis which will be incorporated into subsequent versions of this paper.

4.1 Who is poor? Global Overview

Below we present a number of the interesting and thought-provoking MPI results. Some results explore its comparative advantage in relation to income poverty; some illustrate the insights that arise from the novel aspect of 'intensity'; some simply describe its distribution across countries. We also perform some basic robustness tests and more detailed country analyses such as decompositions by dimension, region, and ethnicity; trends across time; and individual comparisons between income- and MPI-poor people.

4.1.1 The MPI headcounts fall between $1.25 and $2.00/day headcounts. The present results cover 104 countries, which are home to 5,230 million or 5.2 billion people. Of these, 1,659 million (close to 1.7 billion) are poor according to the MPI.[50] For example, they could live in households that have a member who is undernourished and no member has five years of education. Or they might live in a household that has experienced a child death and is deprived in at least three living standard indicators (sanitation, water, cooking fuel, electricity, floor, and assets). Or they could live in a household that is deprived in three living standard indicators and in which there are school-aged children not attending school. According to the MPI, 32 percent of the total population in these 104 countries is poor. This figure lies between the total number of people living on less than $ 1.25/day, which is 1,3789 million people (26 percent), and the total number of people living with less than $2/day, which is 2,525 million people (48 percent).[51]

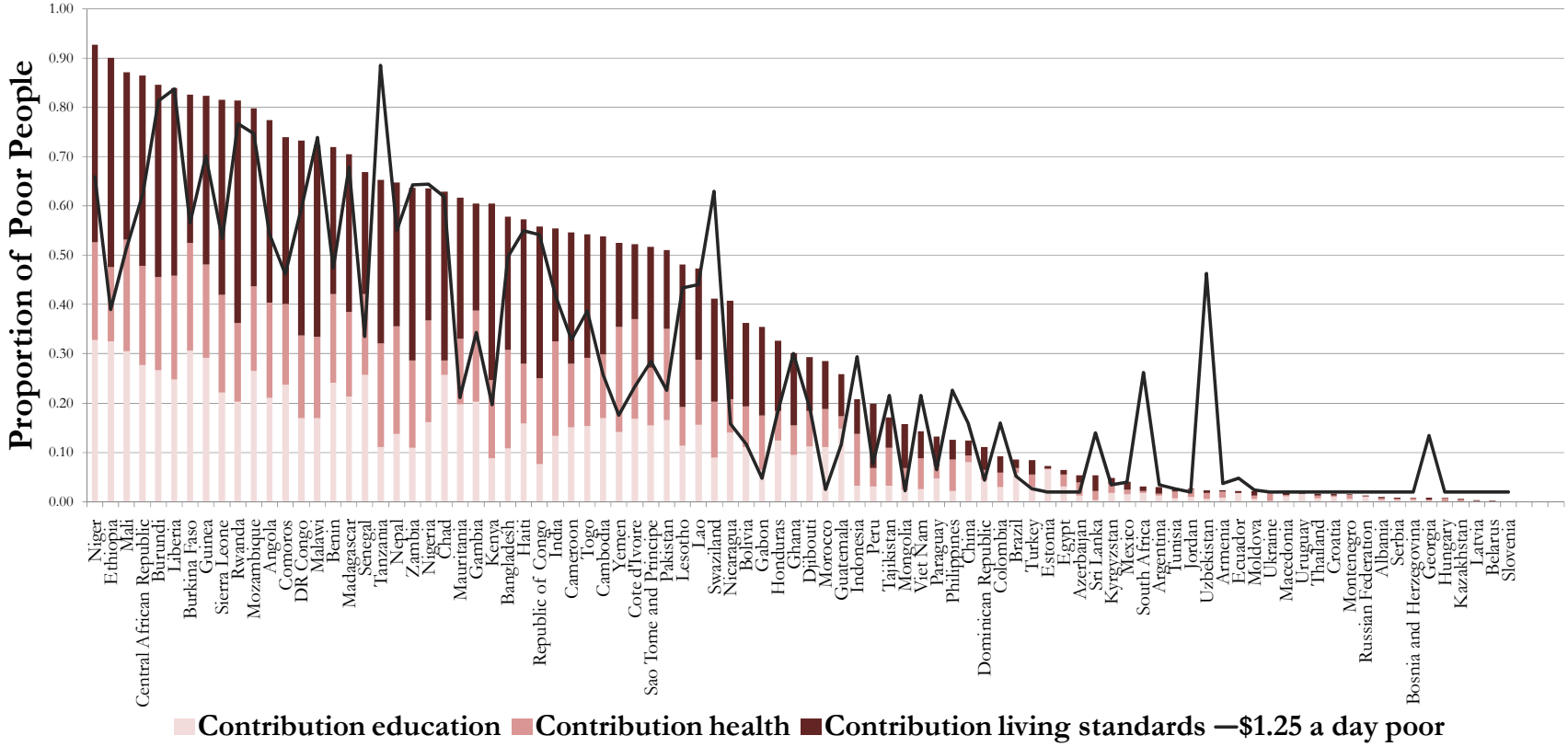
4.1.2 The MPI is measuring services and outcomes directly, so differs from income poverty. Although the global headcount is between $1.25/day and $2.00/day headcounts, the MPI is not a $1.50/day poverty line. Figure 5 presents our estimates for the 93 countries for which we have income poverty information. The figure shows that acute multidimensional poverty complements income poverty. The zig-zag black line presents the income poverty headcount for each country while the bar shows the multidimensional poverty headcount. The MPI headcount of poor persons is higher than the $2/day headcount in 24 countries and lower than $1.25/day headcount in 36 others. There are several reasons for the observed divergence. In some cases, income data are weak

[50] Population figures correspond to 2007. This assumes that the poverty rates in the year of the most recent survey (which goes back as far as 2000) are an adequate reflection of poverty today. As none of these surveys post-date the more recent economic crisis, these may well be under-estimates. Note that if 2010 population figures are used, the total number of MPI poor people is 1.75 billion.

[51] Note that the figures for the income poverty estimates exclude the following 14 countries for which this information is not available: Czech Republic, Guyana, Namibia, Slovakia, Suriname, Trinidad and Tobago, the United Arab Emirates, the Occupied Palestinian Territories, Syria, Belize, Iraq, Myanmar, Zimbabwe, and Somalia. The total number of multidimensionally poor excluding these countries is 1,633 million, which still lies in-between the two income poverty estimates. If 2010 population figures are used, the total number of $ 1.25/day poor is about 1.44 billion, whereas the total number of $2/day is about 2.6 billion.

or known to be inaccurate; the MPI is more direct and may be more accurate. In other cases, the MPI incorporates key services such as water and sanitation, electricity, primary education, and housing which are not consistently captured in all income/consumption surveys. Where they are not, the MPI is measuring a related but different underlying phenomenon than income poverty. Finally, different people may have differing abilities to convert income into nutritional or educational gains. For example, a household with a disabled member may be non-income poor but

Figure 5: Ranking of 93 countries by MPI compared to Income Poverty

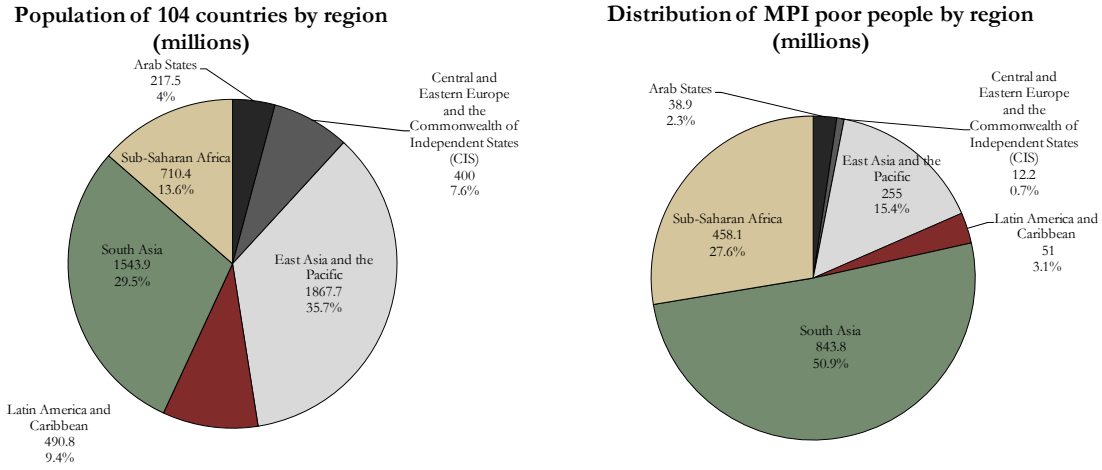


still significantly deprived. It is important to note that although a significant fraction of the MPI poor may overlap with the group of $1.25/day poor, the two groups need not perfectly coincide since the MPI identifies people with coupled deprivations.

4.1.3 Rural Areas contain about five times more MPI poor people than urban ones
Of the total 1659 million MPI poor people, about 1388 million live in rural areas. The pattern of higher incidence and intensity of poverty in rural areas than in urban ones is consistent across the different regions in the developing world. This is combined with the fact that 61 of the 104 studied countries have over half of their population living in rural areas, including populous countries such as China and India. Thus those in acute poverty are mostly concentrated in rural areas.

4.1.4 South Asia is home to nearly twice as many multidimensionally poor people as the next poorest-region, Africa. Figure 6 presents the regional distribution of the total considered world´s population in this study (in the pie chart on the left) and the regional distribution of the number of people who are multidimensionally poor in each region. Two contrasts are worth noting: (1) there is a huge unbalance between the population contribution of each region and the proportion of poor each region has. South Asia contributes 29.5 percent of the total considered population, yet it is home to 51 percent of the world's poor and (2) South Asia is home to 1.8 times the total poor population of Sub-Saharan Africa and three times the total poor population of East Asia and the Pacific, the third poorest region in the world.

Figure 6: Distribution of the MPI poor vs. total population



Note: A total of 5.2 billion people in 104 developing countries are considered, about 78.5 percent of the total world population estimated in 2007.

4.1.5 The intensity of MPI poverty is greatest in South Asia and Sub-Saharan Africa. If one merely gazes at a ranking of countries, one notices immediately that the poorest countries are all in Sub-Saharan Africa (plus Somalia which is technically an Arab State).[52] Does this mean that Africa is the poorest in terms of MPI? Unfortunately, South Asia also has comparable intensities of poverty.

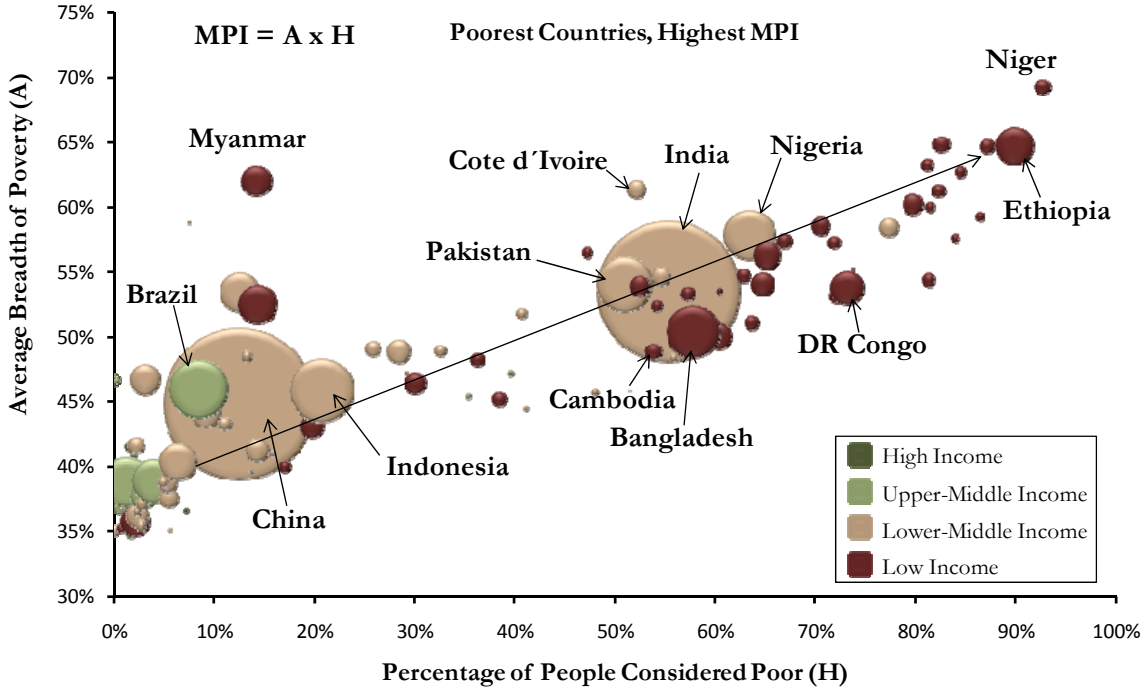
[52] Please note that we use this ranking only indicatively.

If we compare the MPI values of states within India alone, we find that 8 states with poverty as acute as the 26 poorest African countries, are home to 421 million multidimensionally poor persons, more than the 26 poorest African countries combined (410 million) (See also section 4.5).[53] Finally, even within Indian states further diversity is expected, so a district level analysis might bring out even more variation. Just to provide a sense of perspective, the population of the poorest Indian state Bihar, with 95 million people, exceeds the sum of nine of the ten poorest African countries.[54] Hence because of the different sizes of the units of analysis, it is not possible to say definitely where MPI poverty is more intense, but in either case what is clear is that both South Asia and Africa have a tragic intensity of poverty. In Bolivia, which we also decomposed, in no case does a state or ethnic group within Bolivia have a MPI that is comparable to these.

4.1.6 The intensity of deprivations is highest in the countries with the highest MPI headcounts. Recall that the MPI is the product of two components: the headcount or proportion of the population who are MPI-poor (incidence) and the average proportion of weighted indicators in which the MPI-poor persons are deprived (intensity). A natural question to explore is how these two sub-indices relate to one another. Figure 7 plots average intensity (A) vs. headcount (H). What we see is that there is a surprisingly uniform relationship: countries with higher MPI headcounts tend to have higher average intensity.

Figure 7: MPI Intensity increases with Headcount

[53] The poorest twenty-six African countries are Cote d'Ivoire, Gambia, Zambia, Chad, Mauritania, Tanzania, Nigeria, Senegal, Malawi, DR Congo, Comoros, Benin, Madagascar, Rwanda, Angola, Mozambique, Liberia, Sierra Leone, Guinea, the Central African Republic, Somalia, Burundi, Burkina Faso, Mali, Ethiopia, and Niger. The eight Indian states are West Bengal, Orissa, Rajasthan, Uttar Pradesh, Chhattisgarh, Madhya Pradesh, Jharkhand, and Bihar.
[54] It excludes Ethiopia, which has 78 million people.



4.1.7 Yet A and H have important differences: Their combination is key to the country ranking. Despite the fact that A and H are clearly highly correlated, what is interesting are the outliers: those that have a low H but a high A, and vice versa. Consider three countries: the Republic of Congo (located on top of India), Cote d'Ivoire, and Cambodia. All have relatively similar MPI headcounts: 56, 52, and 54 percent correspondingly. However, their average deprivations are 48 percent for the Republic of Congo, 61 percent for Cote d'Ivoire, and 49 percent for Cambodia. This differences cause a change of ranking. When ordered by the MPI headcount, Cote d'Ivoire is the least poor. However, by A and MPI, it becomes the poorest. The Republic of Congo, the poorest of the three countries according to the MPI headcount, is placed in the middle according to the MPI. Countries that have relatively high A values for their headcount include Suriname, Philippines, Vietnam, Myanmar and Lao. This suggests that countries can follow different pathways to reduce multidimensional poverty. For some may be easier to first reduce the proportion of the poor and only later on the average deprivation share, for others the opposite can be more feasible. This is a topic requiring further analysis.

Figure 8: Composition of MPI by H and A

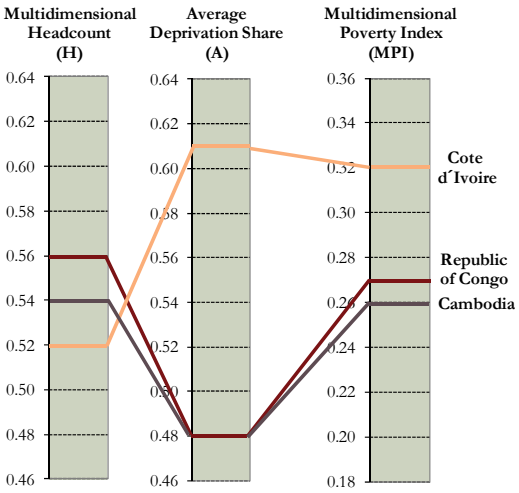


Figure 9 below provides a synthetic categorization of the countries according to their levels of *H* and *A*. For a clearer picture, countries are colored according to the region of the world they belong to. In a bird´s eye look we can see that most Central and Eastern Europe and CIS countries have a combination of a very low headcount (below 2.5 percent) and an average deprivation share no higher than 50 percent and usually lower than 45 percent. The Arab States, with the important exceptions of Somalia and Yemen, have low headcounts (between 2.5 and 25 percent) and an average deprivation share no higher than 50 percent and most frequently below 45 percent. The East Asia and Pacific countries show a great variety, with some in the same categories as most of Central and Eastern Europe and CIS, some similar to most of the Arab States, and some already mentioned outliers (with high average deprivation share in relation with their headcount). Latin American and Caribbean countries tend to be concentrated in middle-values of both H and A, except for Haiti. Apart from Sri Lanka, which has a relatively low H and A, South Asia countries are in the segment of countries with a headcount between 50 and 75 percent experiencing deprivations in 50 to 55 percent of the weighted indicators, although as we have mentioned these aggregate figures hide a huge variation, which is particularly important in large countries. Finally, most Sub-Saharan countries are concentrated in combinations of high H and A.

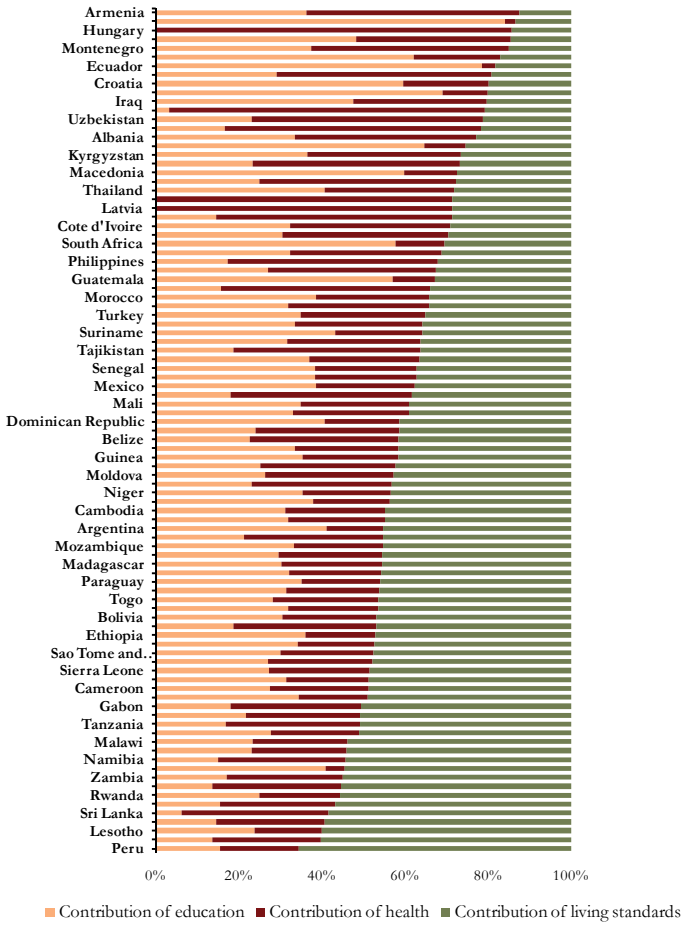
Figure 9: Categorisation of countries by their combination of H and A

Headcount (H)	Average Deprivation Share (A)								
	Less than 30%	30-35%	35-40%	40-45%	45-50%	50-55%	55-60%	60-65%	65% or more
Less than 2.5%	Slovakia Slovenia	Uruguay	OPT United Arab Emirates Albania Armenia Belarus Bosnia and Herzegovina Georgia Hungary Kazakhstan Moldova Russian Federation Ukraine Uzbekistan Thailand	Croatia Macedonia Montenegro Serbia Ecuador	Czech Republic Latvia				
2.5%-25%			Jordan Syrian Arab Republic Tunisia Azerbaijan Estonia Kyrgyzstan Argentina Guyana Mexico Trinidad and Tobago Sri Lanka	Egypt Iraq Tajikistan China Mongolia Belize Colombia Dominican Peru	Turkey Indonesia Brazil Paraguay South Africa	Philippines Viet Nam	Suriname	Myanmar	
25%-50%				Swaziland	Djibouti Morocco Bolivia Guatemala Honduras Gabon Ghana Lesotho Namibia Zimbabwe	Nicaragua	Lao		
50%-75%					Cambodia Republic of Congo Sao Tome and Principe	Yemen Haiti Bangladesh India Nepal Pakistan Cameroon Chad DR Congo Gambia Kenya Malawi Togo Zambia	Benin Comoros Madagascar Mauritania Nigeria Senegal Tanzania	Cote d'Ivoire	
More than 75%						Rwanda	Angola CAR Liberia	Somalia Burkina Faso Burundi Ethiopia Guinea Mali Mozambique Sierra Leone Niger	

Arab States	Latin America and the Caribbean
Central and Eastern Europe and the CIS	South Asia
East Asia and the Pacific	Sub-Saharan Africa

4.1.8 Often deprivations in living standard contribute the most to multidimensional poverty.
Figure 10 shows the dimensional contribution to MPI for each country. The contribution of each dimension is calculated as the sum of the contribution of each indicator.[55] Deprivation in living standards (the green portion) often contributes more than deprivation in either of the other two dimensions although this varies.[56] In most countries, the second biggest contribution comes from educational deprivations.

Figure 10: Contribution by dimension to MPI



[55] Each indicator´s contribution is the proportion of people who are poor and deprived in that particular indicator (the censored headcount) multiplied by the indicator´s weight and divided by the total number of indicators times the overall MPI. For example, as can be seen in Table 2.A of the Appendix, 55.6 percent of people are poor and live in a household where no one has completed five years of education. This indicator´s weight is 10/6 and Mozambique´s MPI is 0.48. Then, the contribution of deprivation in years of education in Mozambique is 55.6*(10/6)/(10*0.48)=19.3 percent. Following the same procedure, because the censored headcount in child school attendance is 40.3, deprivation in this indicator contributes 14 percent to overall multidimensional poverty. Therefore, both indicators together, which constitute the education dimension, contribute 33 percent to overall poverty.

[56] Specifically, this is the case in 55 out of the 104 countries, whereas in 22 countries deprivation in education is the biggest contributor and in 25 countries health deprivations contribute the most to overall poverty. Recall our note above which said that the higher deprivation headcounts in living standards indicators create a higher implicit weight on this dimension.

4.2 Income poverty, wealth poverty, and the MPI

The most widely used measure of poverty at present is income poverty, either measured according to a national poverty line or by an international standard. The MPI comparisons with income poverty are illuminating. The preliminary analysis suggests that the MPI is capturing a slightly overlapping but largely distinct aspect of poverty.

4.2.1 MPI and Income Poverty are related

Figure 11 presents different correlation coefficients between three income headcounts (using the $1.25/day, $2/day and national poverty lines) and deprivations in each of the three dimensions of the MPI, as well as with the MPI itself.[57] In the first place, we can see that the headcounts with the two international poverty lines are highly correlated with the MPI, but correlations are much lower with the headcounts using the national poverty lines. Secondly, as expected, income poverty is most highly correlated with deprivation in the living standard dimension. This correlation is followed by health deprivation and then by education deprivation (this is the case with the $1.25 and $2/day headcounts, the opposite is true for the correlation with the national poverty headcount). However, as we explore below and in the following section, behind these relatively high correlations there is a wide range of examples of mismatches between the two poverty criterion.

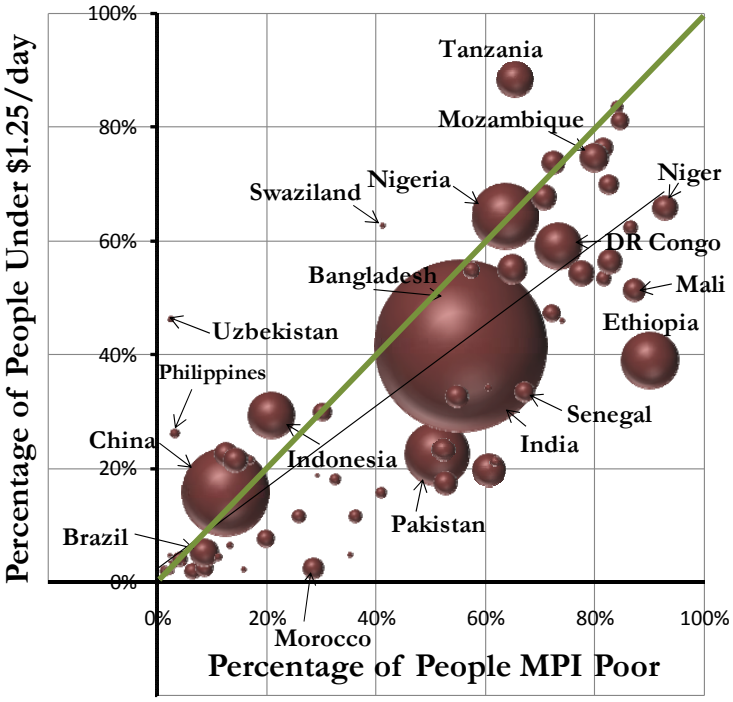
Figure 11: Correlations of income poverty headcounts with MPI and dimensional headcounts

		Pearson	Spearman	Kendall Tau-a	Kendall Tau-b
$1.25/day Headcount	H Education	0.73	0.78	0.57	0.58
	H Health	0.78	0.82	0.61	0.62
	H Living Standard	0.88	0.90	0.72	0.74
	MPI	**0.85**	**0.88**	**0.67**	**0.70**
$2/day Headcount	H Education	0.77	0.79	0.59	0.60
	H Health	0.82	0.83	0.63	0.64
	H Living Standard	0.90	0.90	0.73	0.74
	MPI	**0.86**	**0.88**	**0.70**	**0.71**
National Poverty Headcount	H Education	0.53	0.54	0.37	0.37
	H Health	0.58	0.57	0.41	0.41
	H Living Standard	0.58	0.61	0.43	0.44
	MPI	**0.55**	**0.57**	**0.42**	**0.42**

Figure 12 below plots the headcounts of those who are income poor against those who are MPI poor. The size of each bubble is given by the number of MPI poor people in that country. The green line plots the 45º line, while the black one plots the linear equation that best fits the scatter plot. The fact that the black line runs below the green one makes it clear that in most countries more persons are MPI poor than income poor (as expected from the global headcounts). Obviously, there are exceptions to this, as well as cases in which the MPI estimate is overwhelmingly higher than the income headcount and we have named some of these outliers on both sides.

[57] These headcounts are those reported in Table 4 of the Appendix.

Figure 12. Scatter plot of MPI vs. $1.25/day headcount

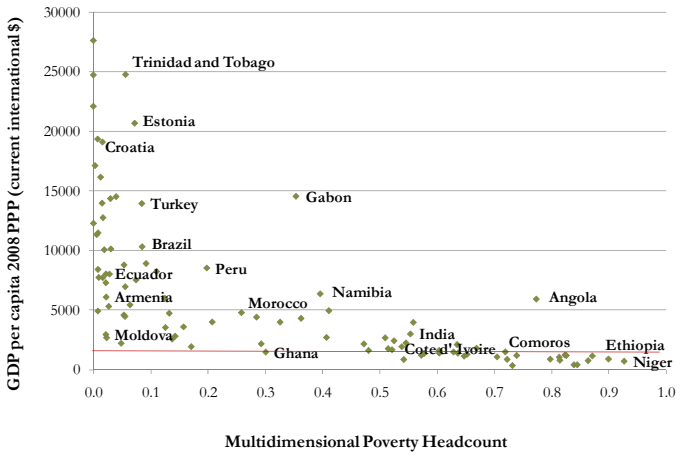


4.2.2 MPI and GDP per capita vary widely except for higher income countries

Figure 13 plots GDP per capita in 2008 (PPP, current international $) against MPI headcount. We have traced an *ad hoc* line at a low GDP per capita level (about $1700) and we can see an extraordinary range of MPI levels. This shows that some low GDP countries are able to address the MPI indicators to a considerable extent. Among higher GDP per capita countries MPI is clearly lower in general. However, there are several noteworthy exceptions. For example, Peru, Gabon, and Namibia, classified as high income countries by the World Bank[58], have relatively high MPI headcounts relative to their GDP per capita. This is also the case of Angola, a lower-middle income country.

[58] The World Bank classification is actually done using the Gross National Income per capita, calculated with the Atlas method, with the benchmarks being less than $975 per capita for low-income countries, between $975 and $3,855 for lower-middle income ones, between $3,856 and $11,905 for upper-middle income countries and $11,906 or higher for high-income countries.

Figure 13. Scatter plot of GDP per capita vs. MPI headcount



4.2.4 At the household level, MPI and Income diverge among poorer countries. In most countries we do not have both income poverty data and MPI for the same households. However the WHS does include a basic consumption module for the households. Thus for the countries for which we used the WHS, we are able to explore a key question: to what extent are the same households identified as poor using two different measures, and to what extent do the different measures identify completely different households as poor?[59] This is an important question because income poverty measures are often used for targeting purposes.

The exercise consists of identifying whether each household in the sample is income poor and MPI poor or not, and then combining all households into four possible groups as in Figure 14 below: (A) Not Income Poor and Not MPI poor; (B) Not Income Poor but MPI poor; (C) Income Poor but Not MPI poor, and (D) Income Poor and MPI poor.

Figure 14: Crosstab of income and MPI poverty

		MPI	
		Non-Poor	**Poor**
Income	**Not Poor**	**A**	**B**
	Poor	**C**	**D**

If Income and MPI were perfectly correlated, then the headcounts would coincide and all households would either be poor (cell D) or non-poor (cell A). Cells B and C represent Type II (exclusion) and Type I (inclusion) errors correspondingly in the sense that if the income indicator was used as a proxy variable to target the multidimensionally poor, B and C indicate the magnitude of the mismatch between the two identification criterions, either because some multidimensionally poor people would be ignored or because some multidimensionally non-poor people would be considered.

We performed this analysis with 18 of the total 19 WHS countries for which this was possible. We used the US$1.25/day poverty line adjusted by the Purchasing Power Parity Conversion Factor in

[59] Note that these comparisons are accurate if and only if the consumption data are also accurate.

2002 provided by the World Bank (2004).[60] As a first indicative result, the Spearman correlation coefficient between being income poor and being MPI poor is low in general and even negative in a few cases. The cases of negative correlation are South Africa, the Russian Federation, and Latvia: -0.024, -0.023 and -0.016, correspondingly. This is consistent with the magnitude of the Type I error obtained for these countries. In other five countries (Estonia, Ecuador, Tunisia, Chad, and Uruguay) it is 0.10 or lower, and in China, Paraguay, Sri Lanka, Brazil, and Guatemala it is between 0.16 and 0.37(countries in increasing order). The other countries have such small poverty numbers that the coefficient cannot be estimated.

For illustrative purposes, Figure 15 presents the described tabulation for three countries: Chad (MPI=0.34), China (MPI=0.05), and Sri Lanka (MPI=0.02). Sri Lanka is the least MPI poor and ranks 32nd in our MPI list; China ranks 44th; Chad ranks 81nd. Chad is the poorest country for which we have income data. The figure presents the information described above in two different ways. In the panel on the left we can see the percentages of population in each of the four categories, while in the table on the right we can see the conditional probabilities given the classification in terms of income poverty. In other words, given that a household is *not* income poor, what is the probability that it is identified as MPI poor? Conversely, given that a household *is* income poor, what is the probability that it is not identified as multidimensionally poor?

How significant are these errors? We find that they vary a great deal. In Sri Lanka, the discrepancy between income poverty headcount (14 percent) and MPI headcount (5.3 percent) is very great, which reduces the power of this exploration. In that case we find that there is only a 4 percent chance that a household that is *not* income poor will be identified as poor by the MPI, suggesting that the potential exclusion error of using the income poverty measure is low in this case (the two measures concur quite nicely). However, this coincidence between the two measures decreases for China and Chad. In China, there is a 12 percent probability that a person who is not income poor *is* multidimensionally poor; in Chad it is 59 percent.

Figure 15: Income poverty vs. MPI poverty in Sri Lanka, China and Chad

Percentage of Population

Sri Lanka

	Not MPI Poor	MPI Poor	Total
Not Income Poor	78.51	**2.85**	81.37
Income Poor	**16.16**	2.48	18.63
Total	94.67	5.33	100

China

	Not MPI Poor	MPI Poor	Total
Not Income Poor	85.71	**11.60**	97.31
Income Poor	**1.82**	0.87	2.69
Total	87.53	12.47	100

Chad

	Not MPI Poor	MPI Poor	Total
Not Income Poor	23.12	**33.45**	56.56
Income Poor	**13.98**	29.45	43.44
Total	37.10	62.90	100

Conditional Probability (Given Income Poverty)

	Not MPI Poor	MPI Poor	Total
Not Income Poor	0.96	**0.04**	81.37
Income Poor	**0.87**	0.13	18.63
Total	94.67	5.33	100

	Not MPI Poor	MPI Poor	Total
Not Income Poor	0.88	**0.12**	97.31
Income Poor	**0.68**	0.32	2.69
Total	87.53	12.47	100

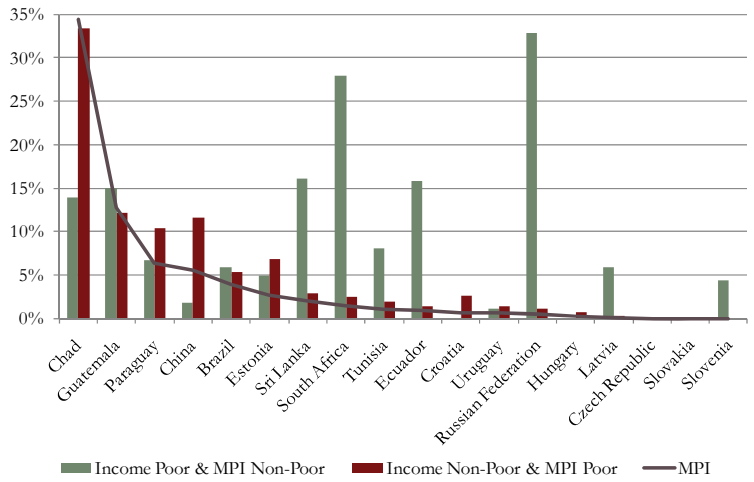
	Not MPI Poor	MPI Poor	Total
Not Income Poor	0.41	**0.59**	56.56
Income Poor	**0.32**	0.68	43.44
Total	37.10	62.90	100

[60] http://siteresources.worldbank.org/ICPINT/Resources/Table5_7.pdf. We count with expenditure information for the United Arab Emirates, but the PPP conversion factor is not available for 2002.

Looking at the equivalent of cell C in Figure 14 in Figure we can see the other kind of divergence: the chance that a household that *is* income poor will be identified as *non-poor* by MPI (inclusion error when using income poverty to target the multidimensionally poor). Here we see the opposite cross-country pattern. In Sri Lanka, MPI would consider non-poor 87 percent of the income-poor households; in China 68 percent, and in Chad 32 percent.

Figure 16 summarizes the magnitudes of cells B and C for 18 (out of the 19) WHS countries, which confirms the aforementioned pattern. Countries are sorted by the MPI. Clearly, the exclusion error (percentage of people who are not income poor but MPI poor) is higher for poorer countries, whereas the inclusion error (percentage of people who are income poor but not MPI poor) is higher for less poor countries. It may be worth recalling that the poverty estimates of South Africa, Guatemala, Sri Lanka, Tunisia, the Russian Federation, and Latvia should be seen as lower bounds. This may explain part of the inclusion error.

Figure 16: Income poverty vs. MPI poverty: insightful mismatches



Admittedly these results are indicative only, especially because the consumption module is abbreviated in WHS. However they do suggest that income becomes a poorer proxy for MPI among high poverty countries, perhaps in part because income does not capture access to basic services.[61]

Although DHS does not contain an expenditure module, it collects information on different household assets (access to services and amenities, many of which are considered in the MPI). With this information, the survey calculates the DHS Wealth Index. MICS also computes the same index. The DHS Wealth Index treats wealth (and economic status) as an underlying unobserved dimension that is estimated using latent variable techniques such principal components analysis. The indicators used to compute the index´s score include type of flooring; type of roofing; wall material, water supply, type of sanitation facility, access to electricity, radio, television, refrigerator, watch, type of vehicle, furniture items, people per room, ownership of agricultural land and size, ownership of animals, domestic servant, telephone, bank account, type of windows, and appliances. The index has been criticized as being too urban in its construction and not able to distinguish the poorest of the

[61] In future research we will perform the same analysis with alternative income poverty lines.

poor from other poor households (Rutstein, 2008). People are classified in quintiles according to their index´s score.

We computed Spearman correlation coefficients between the DHS Wealth Index category and being MPI-deprived in each dimension, and between being identified as MPI poor and being deprived in each dimension.[62] As expected the correlation between being MPI poor and deprived in health or education is twice or more the correlation with the category of the DHS Wealth Index. In terms of deprivation, in the living standard dimension the correlations tend to be closer, and in some cases the DHS index has a higher correlation.

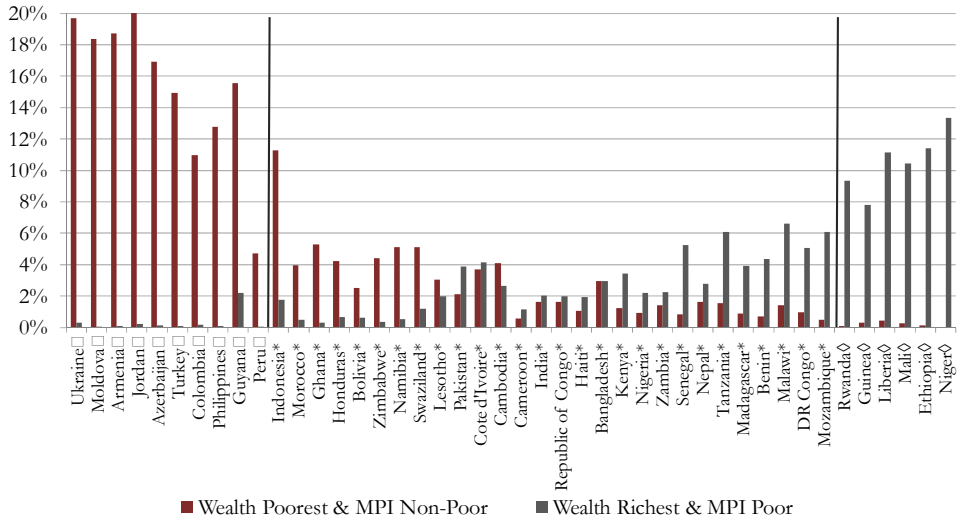
In the same lines as the table of Figure 14, we computed for the 44 (out of the 49) DHS countries (for which we had the DHS Wealth Index) the percent of population that is MPI poor and MPI non-poor that belongs to each wealth index quintile. Figure 17 presents the two extremes: the percent of people that although being in the poorest wealth index quintile are not MPI poor (which can be associated with an inclusion error) and the percent of people that although being in the highest wealth index quintile are MPI poor. Countries are presented in increasing order according to their MPI headcount. The figure reaffirms the pattern previously described with income. Inclusion error is higher for non-poor countries whereas exclusion errors are higher for poor countries. In fact, countries to the left of the first vertical lines have MPI headcounts lower than 20 percent, so we expected a high inclusion error. Conversely, countries to the right of the second vertical line have MPI headcounts above 80 percent, so we expected a high exclusion error.

The evidence, obtained using micro-data comparing the poor identified using income and wealth with the poor identified using the MPI criterion, is consistent with that obtained with macro-data (the two previous sub-sections): having enough income is no guarantee of being non-deprived in core aspects of well-being. With this we do not intend to say that income is not an important indicator. Although it has no intrinsic value, income does have a tremendous instrumental value because it is fungible and has the potential of allowing people to make certain choices – provided opportunities exist. Therefore, we believe that a multidimensional measure such as the MPI constitutes a powerful and necessary instrument to evaluate poverty but is not sufficient; it could usefully be complemented by income measures. Alternatively, whenever data allows, income could be incorporated as one indicator of a multidimensional poverty measure such as the MPI. Indeed, such an approach has been followed by the Government of Mexico in its poverty measure, as well as in studies at the country level (Santos et al. 2010, Santos and Ura 2008, Yu 2008).[63] Also note that the fact that in very high and high HDI countries, as well as in some of the medium HDI countries, we find the income poverty headcount to be higher than the MPI headcount and we find high `inclusion´ errors. This signals what has been previously argued: these countries need a different version of the MPI whose indicators and cutoffs are appropriate to that context. An MPI with different cutoffs and/or different indicators can succeed in depicting poverty composition in more developed countries.

[62] Here we followed the procedure of the headcounts of Table 1.9.

[63] Note that most frequently the surveys that collect good quality data on income or expenditure are not the same as the ones that collect good quality data on health, such as on nutrition and child mortality. In the MPI we preferred privileging health indicators which evidence functionings much more accurately than income.

Figure 17: DHS Wealth Index vs. MPI poverty: insightful mismatches



4.3 Regional Analysis

The set of 104 countries is spread across UN regions as follows:
~ 24 countries of **Europe and Eastern Europe and the Commonwealth of Independent States (CIS)**, adding up to a population of 400 million in 2007
~ 11 **Arab States**, adding up to a population of 217.5 million in 2007
~ 18 countries of **Latin America and the Caribbean**, adding up to 491 million in 2007
~ 5 countries of **South Asia**, adding up to a population of 1,544 million in 2007
~ 9 countries of **East Asia and the Pacific**, adding up to a population of 1,868 million in 2007
~ 37 countries of **Sub-Saharan Africa**, adding up to a population of 710.4 million in 2007

As summarized in Figure 18, the MPI ranks these regions as follows:
1) Europe and Eastern Europe and the Commonwealth of Independent States (CIS) (the lowest): a population-weighted average of **3 percent** poor people. Although this is a very low figure, it still means that about **12.2 million** people are MPI poor in this region.
2) Latin America and the Caribbean: a population-weighted average of **10.4 percent** poor people, which means about **51 million** people are MPI poor in this region of the world
3) East Asia and the Pacific: a population-weighted average of **13.7 percent** poor people, which means about **255 million** people are MPI poor in this region of the world
4) Arab States: a population-weighted average of **17.9 percent** poor people, which means about **38.9 million** people are MPI poor in this region of the world.
5) South Asia: a population-weighted average of **54.7 percent** poor people, which means about **843.8 million** people are MPI poor in this region of the world
6) Sub-Saharan Africa: a population-weighted average of **64.5 percent** poor people, which means about **458 million** people are MPI poor in this region of the world

Adding up all the multidimensionally poor, about 1,659 million people have been identified as being deprived in some combination of at least two to six indicators. On average, across all countries, people are, on average, deprived in 53 percent of the ten indicators

Figure 18: Summary MPI and income poverty estimates by UN regions

Region	Population in the region (millions)	Regional H (Proportion)	Regional A	Regional MPI	MPI poor population (millions)	$1.25/day poor (Proportion)	$1.25/day poor population (millions)	$2/day poor (Proportion)	$2/day poor population (millions)
Central and Eastern Europe and the Commonwealth of Independent States (CIS)	400	0.030	0.421	0.013	12.2	0.055	22.0	0.098	39.4
Latin America and Caribbean	490.8	0.104	0.462	0.048	51.0	0.074	36.5	0.150	73.7
East Asia and the Pacific	1867.7	0.137	0.465	0.063	255.0	0.173	323.7	0.385	719.9
Arab States	217.5	0.179	0.506	0.090	38.9	0.031	6.8	0.144	31.3
South Asia	1543.9	0.547	0.532	0.291	843.8	0.402	620.3	0.740	1143.1
Sub-Saharan Africa	710.4	0.644	0.582	0.375	457.5	0.520	369.5	0.730	518.3
Total 104 countries	**5230.3**	**0.317**	**0.532**	**0.169**	**1658.3**	**0.264**	**1378.8**	**0.483**	**2525.7**

Composition of MPI by Region. A natural question is whether the composition of poverty varies across regions of the world to identify whether deprivation in a particular dimension is more acute in certain regions than in others. It is important to note that this analysis needs to consider ***both*** the relative contribution of each dimension to overall poverty as well as the absolute levels the MPI poor experience in each dimension. All the figures mentioned below are contained in Tables 1.4-1.6 in Appendix 1.

1) South Asia

In terms of human lives, South Asia has the world's highest levels of poverty. Fifty-one percent of the population of **Pakistan** is MPI poor, 58 percent in **Bangladesh**, 55 percent in **India,** and 65 percent in **Nepal**. In these four countries, the poor are deprived on average in more than half of the (weighted) indicators. In India, Bangladesh, and Nepal, deprivation in living standard is the highest contributor of poverty, followed by health and education. In Pakistan the contributions are fairly similar (note that Pakistan did not have information on nutrition). **Sri Lanka** is the only one of the five countries we consider in this region that has low poverty estimates, with only 5 percent of MPI-poor people. The headcounts of the other four countries are relatively more uniform than in other regions. It is worth noting that water has low deprivation levels among the MPI poor in these countries (the highest being 14 percent in Nepal). Also, electricity has a low deprivation rate among the MPI poor in Pakistan (9 percent). However, deprivation in the other living standard indicators (and in electricity in India, Bangladesh, and Nepal) range from 26 percent to 63 percent, being particularly high in Nepal. Deprivation rates in the two health indicators are also high: 30 percent in Pakistan and Nepal are poor and live in a household where at least one child died; this rate is 24 percent in Bangladesh and 23 percent in India. Deprivation in nutrition of children and women is high, signaled by the fact that 40 percent of people in Nepal and 39 percent in India live in a poor household where at least one child or woman is undernourished. This rate is 37 percent in Bangladesh (there are no figures for Pakistan). Although education is the lowest contributor to poverty, deprivation rates are still high: between 17 percent and 29 percent of people in these four countries are poor and live in a household where no one completed five years of education. Thirty-four percent of the poor in Pakistan, 25 percent in India, and 15 percent in Nepal live in a household where one or more children are not attending school. It is worth noting that in Bangladesh only 9 percent of people live in poor households with children not attending school. Note that these country averages hide a huge diversity. In Section 4.4 below we decompose India's poverty by state and find headcounts ranging from 14 percent to 81 percent.

2) Sub-Saharan Africa

Africa presents the highest MPI poverty rates, with considerable variation among the 38 countries. The percentage of multidimensionally poor ranges from 3 percent in South Africa to 93 percent in Niger, while the average percentage of deprivations ranges from 44 percent in Swaziland to 69 percent in Niger. In 33 of the estimated Sub-Saharan African countries, the highest contributor to poverty is the deprivation measured by the living standard variables. Some of the most striking results include:

- In Guinea, Mali, and Niger, **more than 50 percent are poor** and live in a household where at least one child has **died**.
- In Nigeria, Madagascar, Mali, and Burkina Faso **30 percent or more** are poor and live in a household where at least a **woman or a child is undernourished**.
- In Liberia, the Central African Republic, Mali, Ethiopia, Burkina Faso, and Niger, **more than 55 percent** are poor and live in a household where there are **children of school age not attending school**.
- In Mozambique, Guinea, Burundi, Mali, Ethiopia, Burkina Faso, and Niger, **more than 50 percent** are poor and live in a household where **no one has completed five years of education**.

3) Latin America and the Caribbean:

The poverty estimates in the eighteen Latin American and Caribbean countries present a wide variety, from 1.6 percent of MPI poor in **Uruguay** and 2.2 percent in **Ecuador** to 57 percent in **Haiti**. In the middle, there is **Colombia** with 9.2 percent, **Brazil** with 8.5 percent, and **Bolivia** with 36 percent. However, the average deprivation is more stable, ranging from 34 percent in Uruguay to 58 percent in Suriname. Clearly, Haiti is the country with the most striking deprivation levels: 50 percent are poor and are deprived in electricity, 53 percent lack improved sanitation, 34 percent lack an improved water source, 35 percent lack an adequate floor, 57 percent are deprived in non-biomass cooking fuel and 49 percent in assets. In Nicaragua, deprivation in the living standard variables is between 24 and 36 percent; in Peru, Honduras, and Bolivia, it ranges from 12 percent to 35 percent. Living standard deprivation is 12 percent or lower in all the others except for Guatemala, where such deprivation ranges from 3 percent to 23 percent. With respect to deprivation in education and health, it is worth noting that 23 percent of people in Bolivia and Honduras live in a poor household where a school-age child is not attending school. Also, 27 percent of people in Haiti and 19 percent in Bolivia live in a poor household that experienced a child death, while 11 percent of people in Haiti live in a poor household with an undernourished woman or child.

4) East Asia and Pacific:

Thailand and **China** have relatively low poverty estimates: China has 13 percent of people who are MPI poor,[64] while Thailand has only 0.8 percent. At the other extreme, **Cambodia** has 54 percent of MPI poor, who on average are deprived in half of the (weighted) indicators. **Indonesia** is somewhere in the middle with 21 percent MPI poor. In terms of poverty composition, deprivation in living standard is the highest contributor in **Mongolia** and **Cambodia**, although clearly, the deprivation levels in Cambodia are far higher than in Mongolia. In Cambodia, 50 percent or more of

[64] We also calculated China's MPI using the CHNS, and found that 7 percent of people were poor according to it. But this survey covers only nine provinces of the country. As the WHS survey is also quite small, covering just under 4,000 households, we refrain from making detailed analyses.

people live in poor households which are deprived in electricity, improved sanitation, and cooking fuel; 30 percent are deprived of a safe source of drinking water; and 23 percent are deprived in assets (only the floor variable has a low headcount, 5 percent). Between 15 percent and 26 percent of Cambodians are poor and deprived in the education and health indicators. In **Thailand and China,** the highest contributor to overall poverty is deprivation in education**.** The headcounts, however, are very low in general.

5) Arab States

The Arab States constitute a highly heterogeneous group: the **UAE, Occupied Palestinian Territories, Jordan, Tunisia, Syria,** and **Egypt** have MPI headcounts below 7 percent. **Iraq** has an MPI-poor population of 14.2 percent. **Morocco** and **Djibouti** have an MPI-poor population of 28 and 29 percent correspondingly, and the percentage in **Yemen** is 52 percent. In **Somalia**, the 6th poorest country among the 104, 81 percent of people are poor, and they are deprived – on average – in 63 percent of the weighted indicators. In most of the Arab States, deprivation in education is the highest contributor to poverty, but the headcounts are significant only in Djibouti and Morocco: 13 percent of people in Djibouti and 18 percent in Morocco live in poor households where no one completed five years of education. The deprivation in terms of child school attendance reverses the order: in Djibouti 18 percent of people are in poor households with children not attending school whereas this is 15 percent in Morocco. In Jordan, Tunisia, and Yemen, the highest contributor to poverty is health deprivation, but headcounts are very low in the first two countries, whereas 34 percent of people live in poor households that have experienced a child death in Yemen. In **Somalia**, the highest contributor of poverty is living standard: between 64 and 81 percent of the population is deprived in some of these indicators.

6) Europe and Eastern Europe and the Commonwealth of Independent States (CIS)

In Europe and Central Asia the levels of poverty estimated with MPI are very low. In **Slovenia** and **Slovakia** the MPI is zero. In the **Czech Republic** and **Belarus** the MPI headcount is below 0.2 percent whereas in Latvia, Kazakhstan, Hungary, Georgia, Bosnia and Herzegovina, Serbia, and Albania, the MPI headcount is below 1 percent. In the Russian Federation, Montenegro, Croatia, Macedonia, Ukraine, Moldova, Armenia, and Uzbekistan, it ranges from 1.3 percent to 2.3 percent. In Kyrgyzstan and Azerbaijan it is about 5 percent. Estonia and Turkey show higher percentages of MPI-poor people, 7.2 percent and 8.5 percent, respectively. Tajikistan is the poorest country in this region, with 17 percent poor people. We do not believe that the MPI will be able to guide policy significantly in these countries; a different measure is required.

4.4 Decompositions by state and ethnic group[65]

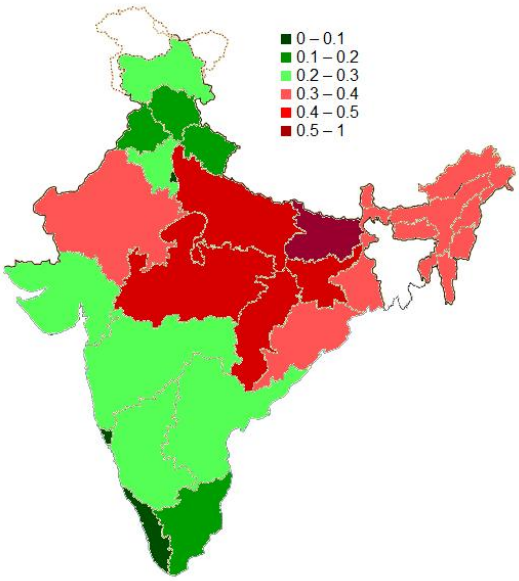
One of the strengths of the Alkire Foster methodology is that can be decomposed by population subgroup. Furthermore, it can be broken down by indicator to reveal the post-identification composition of multidimensional poverty for different groups. This technical feature is of tremendous practical value for policy. Given the need to accelerate progress towards the MDGs, for example, it is vital to understand the composition of deprivations among different states and ethnic groups, so that interventions address their particular deprivations most effectively. Naturally, decomposition is only possible when the data are representative by the relevant groups, so it was not possible to decompose all 104 countries by any common factors other than rural-urban. However to

[65] We are very grateful to Suman Seth for performing the decomposition calculations in India, Kenya, and Bolivia.

illustrate what could be done at the national level, we have decomposed the MPI by region and ethnicity for Bolivia, Kenya, and India.

The map presents the MPI values decomposed across states and union territories of India. We find that Delhi has an MPI equivalent to Iraq (which ranks 45), whereas Bihar's MPI is similar to Guinea´s (the 8th poorest country in the ranking). In terms of headcount, in Delhi and Kerala 14 percent and 16 percent of the population are MPI poor, respectively, whereas in Jharkhand 77 percent of the population are MPI poor and in Bihar (the darkest red on the map), 81 percent.

Figure 19: Map of India MPI by State



Similarly, in Kenya, headcounts range from 12 percent to 98 percent. Figure 20 links the MPI estimates of the different Kenyan states and regions to the MPI estimates in other countries. For example, the MPI in Nairobi is comparable to that of the Dominican Republic, whereas in the rural northeast, it is worse than Niger. In Bolivia the MPI headcount ranges from 27 percent to 46 percent. Naturally, the headcounts depend in part on the size of the population in the respective state or area, but they suggest considerable variation in MPI levels.

When we come to consider the composition of poverty among states, we find that this varies, even between states having similar levels of MPI. Consider, for example, two of the less-MPI poor Indian states, Punjab and Himachal Pradesh, which are neighboring states and are also adjacent in the MPI ranking. Figure21 below shows that the composition of their poverty is quite different. Himachal Pradesh has very low contributions of education to its poverty in comparison with the Punjab, but more malnutrition, as well as asset poverty.

Figure 20: MPI estimates of Kenyan states compared with aggregate MPI in other countries

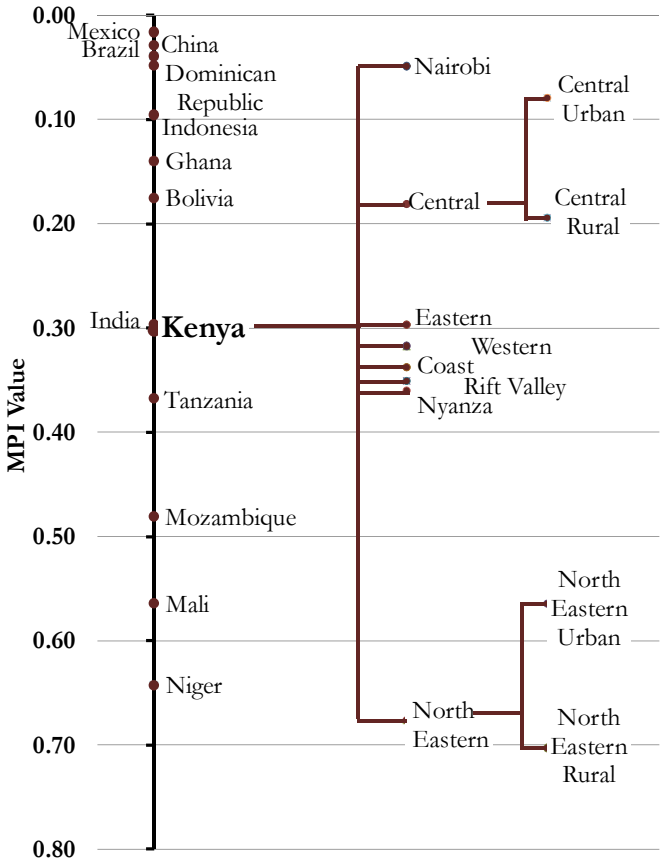
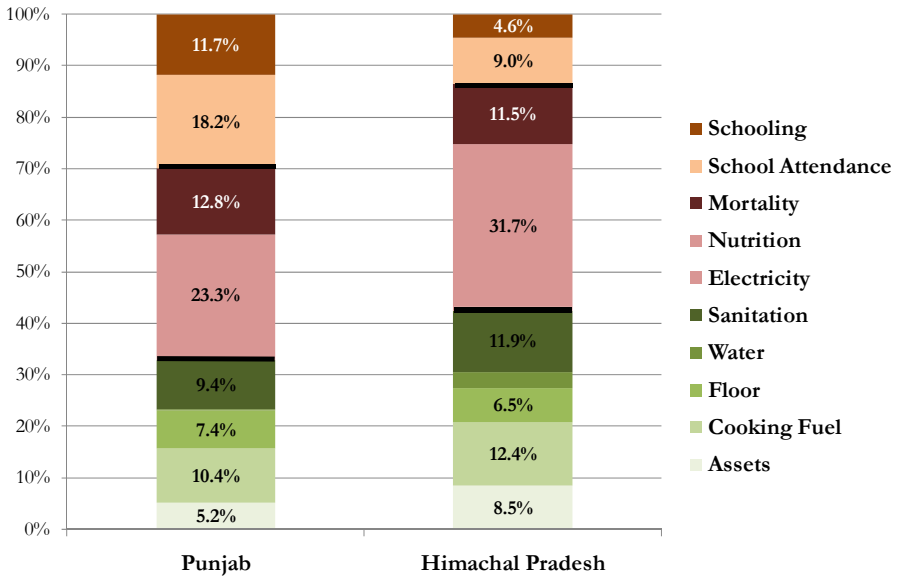


Figure 21: Composition of poverty in two Indian states



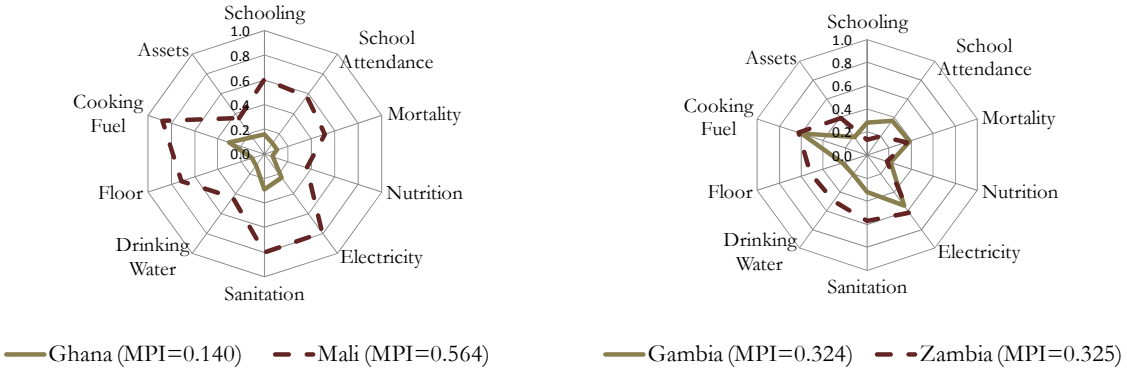
Another category that can be tremendously important for policy relates to ethnicity, religions affiliation, and caste. For example, Mexico's national multidimensional poverty measure, launched in 2009, highlighted the problem of indigenous poverty because the multidimensional poverty rates of indigenous peoples were much higher. For example, in Kenya, the MPI headcount ranged from 29 percent for the Embu to 96 percent for the Turkana and Masai. In Bolivia, poverty among mestizos was 27 percent, but 1.6 times that among the Quechua. In India, the decomposition was performed for caste groupings. The Scheduled Tribes have the highest MPI (0.482), almost the same as Mozambique, and a headcount of 81 percent. The Scheduled Castes have a headcount of 66 percent and their MPI is a bit better than Nigeria. Fifty-eight percent of other Backward Castes are MPI poor. About one in three of the remaining Indian households are multidimensionally poor, and their MPI is just below that of Honduras.

4.5 Clustered Deprivations[66]

Another key question for policy is whether it is possible to identify certain 'types' of multidimensional poverty, which would suggest distinctive policy pathways. Our results here are preliminary and suggest that this will be a fruitful area to explore. For example, consider in Figure 22 Ghana and Mali – two countries with very different MPI values. In Ghana, 30 percent people are MPI poor where as in Mali it is 87 percent. Yet what is interesting is the pattern of their deprivations. The spider diagrams below have one spoke for each of the ten indicators.[67] What is evident is that in both countries, deprivations in cooking fuel, sanitation, and electricity are the highest, and health deprivations are relatively low.

A very different situation is present in comparing the Gambia and Zambia, which have equal MPI values, but a different configuration of deprivations, with deprivations in floor, water, and sanitation being much higher in Zambia, whereas schooling and education are more problematic in Gambia.

Figure 22: MPI Composition patterns

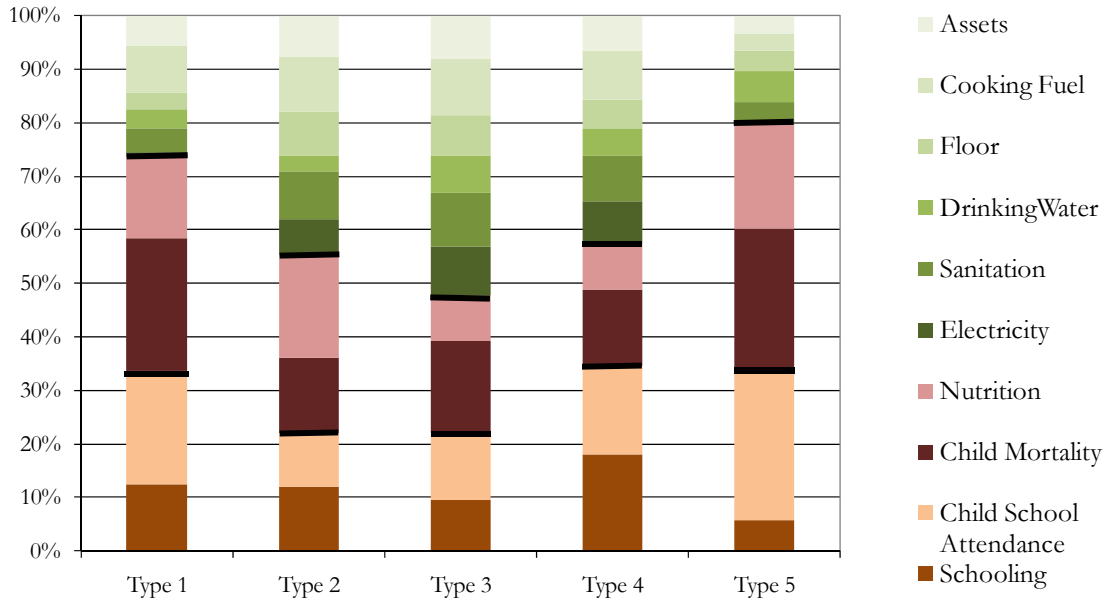


Note: the deprivations graphed are the censored headcounts, that is, the proportion of population that is poor and deprived in that particular indicator.

[66] We are grateful to Jose Manuel Roche for very helpful insights for this section and for performing the cluster analysis.
[67] Ideally there should be 3 main spokes for each dimension at 120 degrees, and the asset indicators should be distributed so that the spokes also reflect our weighting.

More generally, a cluster analysis performed on the 62 countries with complete indicators, suggests that these can be grouped in five typologies, as depicted in Figure 23. Types 3 and 4 are the ones that concentrate the great majority of countries, all of them with high acute poverty. In both types the contribution of deprivations in the living standard variables are the highest (an average contribution of 52 percent in Type 3 and of 42 percent in Type 4). The difference is that while in Type 3 the contribution of the other two dimensions is fairly similar (22 percent by education and 25 percent by health) in Type 4, the contribution of deprivations in education is relatively much bigger (34 percent vs. 23 percent). It is also worth noting that in both of these types, within the health dimension, mortality contributes relatively more than malnutrition. These two typologies group 33 of the 37 African countries, together with a few LAC, Arab States and EAP.[68] On the other hand, Type 2 contains India, Bangladesh and Nepal, also countries with high acute poverty, together with Namibia and Colombia. This type also shows a high contribution by deprivations in living standard variables. However, the second salient contribution is given by deprivations in health, and within this one, malnutrition contributes relatively more than mortality. The first and the fifth types are composed of relatively low-poverty countries and in both groups health deprivations are the ones that contribute most to poverty, followed by deprivation in education. However, the typology here is likely to be more dominated by the low poverty levels than by the specific contributions.

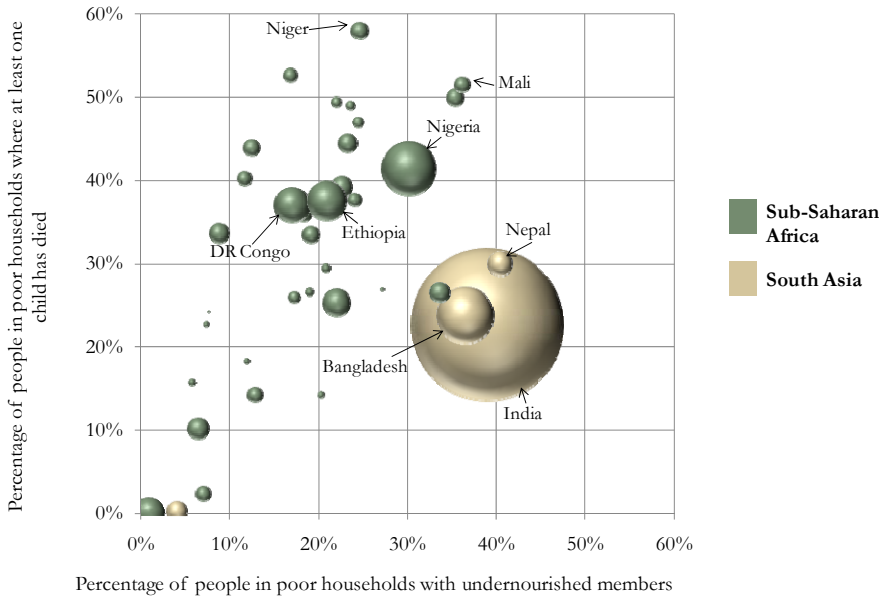
Figure 23 Five 'types' of poverty found across countries



[68] Countries included in Group 3 are: Kenya, Republic of Congo, Sierra Leone, Lesotho, Nigeria, Rwanda, Haiti, Belize, Angola, Peru, Cameroon, Mongolia, Swaziland, Zambia, Bolivia, Zimbabwe, Malawi, Gabon, DR Congo and Liberia. Countries included in Group 4 are: Mauritania, Mexico, Ghana, Benin, Madagascar, Cambodia, Comoros, Mali, Dominican Republic, Gambia, Mozambique, Ethiopia, Somalia, Burkina Faso, Djbouti, Senegal, Sao Tome and Principe, Nicaragua, Togo, Morocco, Niger and Guinea. Countries in Group 5 have the particular feature that, the contribution of deprivation in child school attendance is particularly important. The countries that form Group 1 are Moldova, Georgia, Kazakstan, Belarus, Albania, Armenia, Occupied Palestinian Territories, Thailand, Uzbekistan and Macedonia. Those in Group 5 are, Syrian Arab Republic, Tajikistan, Jordan, Azerbaijan and Iraq.

Figure 24 reflects more vividly the mentioned health deprivation pattern of South Asia, with relatively higher malnutrition incidence and Africa, with relatively higher mortality.[69] The figure plots the percentage of people that live in poor households which have undernourished members against the percentage of people who live in poor households where at least one child has died. We see that the bubbles corresponding to the South Asian countries are below the diagonal of the square while most of the bubbles of the Sub-Saharan African countries are above the diagonal.[70]

Figure 24: Malnutrition and Mortality in Sub-Saharan Africa and South Asia



4.6 Changes of MPI over time[71]

The strong linkages of the MPI components to the MDGs and their indicators make it a good tool for monitoring progress towards the achievement of the MDGs. It can also serve as an instrument for evaluating a government´s progress in improving the wellbeing of the poorest poor. Comparable datasets for each country over time are not abundant, which – one more time – calls for improvement in the systematic data collection of key indicators worldwide. As we explained in the Data section, both DHS and MICS have gone through different phases and their questionnaires have changed over time. In particular, DHS before Phase IV (year 2000) tends to be quite different. Therefore, evaluating the MPI over time for the 104 countries was not possible. However, estimations of MPI over time and trend analysis for a handful of countries for which there is data availability are in progress and will constitute a separate study. As an example, we now present the

[69] Such pattern has also been noted by Klasen (2008).
[70] Only in a few Sub-Saharan African countries do we find malnutrition to be more prevalent than mortality. These are South Africa, Chad, Namibia, Madagascar, and Comoros. Also note that Burundi, Tanzania, and Cote d'Ivoire are not included in this analysis as we do not have nutritional information for them. In China malnutrition seems to be more prevalent than mortality.
[71] We are grateful to Juan Pablo Ocampo and Mauricio Apablaza for calculations of MPI for surveys prior to 2000 and to Gaston Yalonetzky for his insights into the analysis.

MPI change for three countries between two points in time: Bangladesh between 2004 and 2007, Ethiopia between 2000 and 2005, and Ghana between 2003 and 2008. The time span covered in each country differs both in points in time as well as in duration (three years in Bangladesh and five years in Ethiopia and Ghana). Following this, we intend to exemplify the potential analysis that each country can pursue.

Figure 25 presents the MPI estimates for the three countries in the mentioned years, alongside the estimates of the MPI components: headcount (H) and intensity (A). In the cross-country set of estimates, Ghana ranks 57, with an MPI of 0.14; Bangladesh ranks 73, with an MPI of 0.29. Ethiopia is the second poorest country in the cross-country comparison. In each of these three countries, poverty has decreased over the two points in time. Ethiopia – the poorest country of these three – had the smallest MPI reduction, of 16 percent (from 0.69 to 0.58). In Bangladesh, there has been an MPI reduction of 22 percent (from 0.37 to 0.29) whereas in Ghana the poverty reduction has been the largest, halving the MPI (it decreased from 0.29 to 0.14).

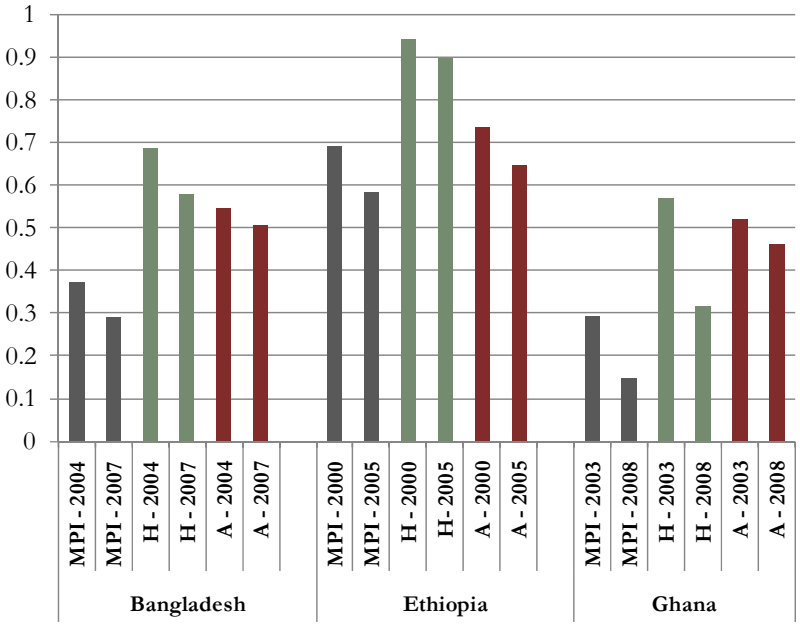


Figure 25: MPI in two points in time in Bangladesh, Ethiopia and Ghana

How have the corresponding transitions been? As can be seen in the figure, in the three countries, MPI was reduced as a consequence of a reduction of both H and A. That is, there was a reduction in the proportion of people with coupled deprivations *and* they experienced a reduction in the number of deprivations. It is worth noting that for the MPI to be reduced it is not necessary that both H and A are reduced, one of the two may remain constant or even increase (as long as the reduction in the other is sufficiently large).

A natural question is which of the two reductions dominated, whether H or A. As suggested earlier in the paper, different countries follow different paths and this is exemplified in this set of countries. Figure 26 presents the percent variations of MPI and its components in each country. The height of the bar from the X-axis to the negative Y-axis quadrant minus the positive part of the bar gives the total percent variation of the MPI in each country. The shading in green indicates the percent variation in H, whereas the shading in red indicates the percent variation in A. The light brown

(positive) part is an interaction term which is the product of the two percent variations. The sum of the three bars (the two negatives plus the positive) gives the total percent variation in the MPI.

In Ghana, the impressive reduction in MPI was mainly driven by a huge reduction in H, which decreased from 57 percent to 31 percent, that is a 44 percent reduction. However, the reduction in A is not negligible either: in 2003 the poor in Ghana were deprived on average in 52 percent of the weighted indicators, whereas in 2008 they were deprived in 46 percent of the weighted indicators (that is a reduction of 11 percent). In Bangladesh, the MPI reduction was also mainly driven by the reduction in H, which went from 69 percent to 58 percent – a reduction of 16 percent. A had a reduction of only 7 percent: in 2004 the poor were deprived on average in 54 percent of the weighted indicators, while in 2007 this became 50 percent. Ethiopia´s path is different. In this country the reduction of the MPI between 2000 and 2005 was mainly driven by a reduction in the number of deprivations the poor experience, which went from 73 percent to 65 percent – a reduction of 12 percent – while H was reduced only by 4 percent (decreasing from 94 percent to 90 percent).

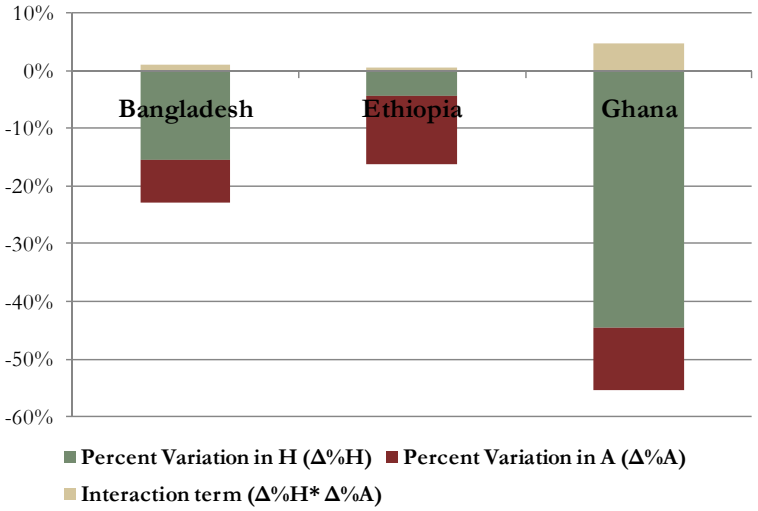
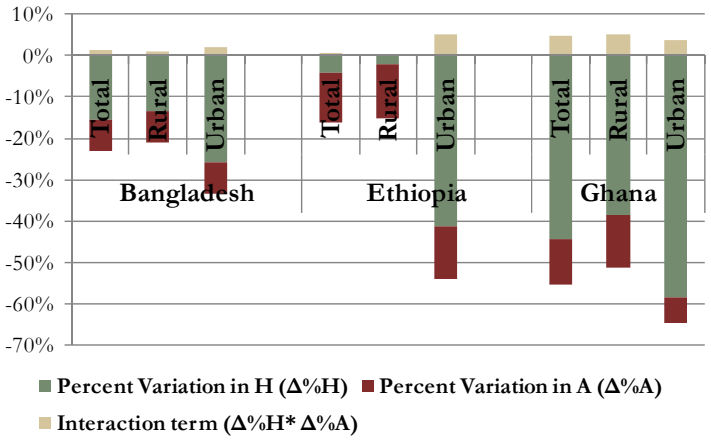


Figure 26: Decomposition of changes in MPI over time in Bangladesh, Ethiopia and Ghana

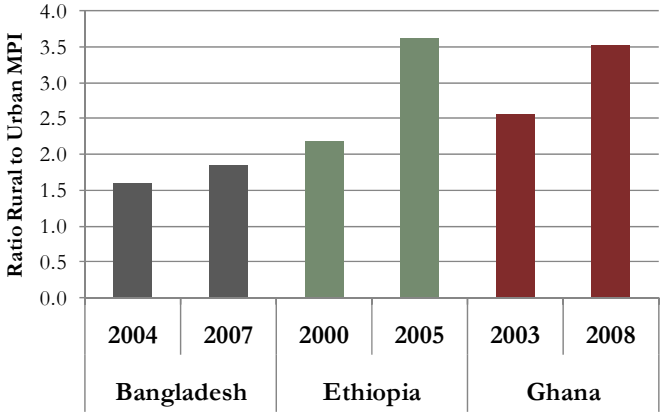
The previous analysis at the aggregate country level can be enriched by zooming-in to the regions of each country. Figure 27 is of the same type as Figure 26, but it compares the percent changes in MPI and its components in each country as a whole with changes occurring in rural and urban areas. The graph suggests two main results: (a) in all three countries poverty reduction was larger in urban areas than in rural ones with the difference between the reductions in the two areas being particularly striking in Ethiopia and (b) the reduction in MPI in the rural areas of each country was a result of a reduction in H and A, as analysed at the aggregate level. However, the regional patterns do not necessarily follow the aggregate one: in Ghana and Bangladesh, the pattern of a relatively larger reduction in H is observed both in urban and rural areas, coincident with the aggregate one. This is also the pattern exhibited by the urban areas of Ethiopia, but it differs from the pattern in the rural areas and nation as a whole, where the reduction was driven by a relatively larger reduction of A.

Figure 27: Decomposition of changes in MPI over time in Bangladesh, Ethiopia and Ghana Rural and Urban Areas



Worldwide, the incidence (H) of poverty is higher in rural areas than in urban ones. Moreover, in non-urbanized countries this also means that the rural areas are home to a much larger number of the poor than urban ones. This is the case in these three countries. The share of the urban population is 12 percent in Ethiopia, 22 percent in Bangladesh, and 44 percent in Ghana, the most urbanized country of the three. The MPI estimate is also much higher in rural areas than in urban ones in these three countries. Figure 28 presents the ratio of the rural MPI to the urban one in the three countries in the two points in time. The MPI of rural areas is 1.5 to 3.5 times larger than in urban areas. The fact that in the three countries urban areas have experienced a larger reduction of poverty than rural ones has increased the disparity between the two regions. Clearly, the achieved poverty reduction represents good progress; the fact that it occurred mostly in urban areas points that policy makers may need to develop complementary policies to address rural poverty.[72]

Figure 28: Ratio of Rural MPI to Urban MPI in two points in time in Bangladesh, Ethiopia and Ghana

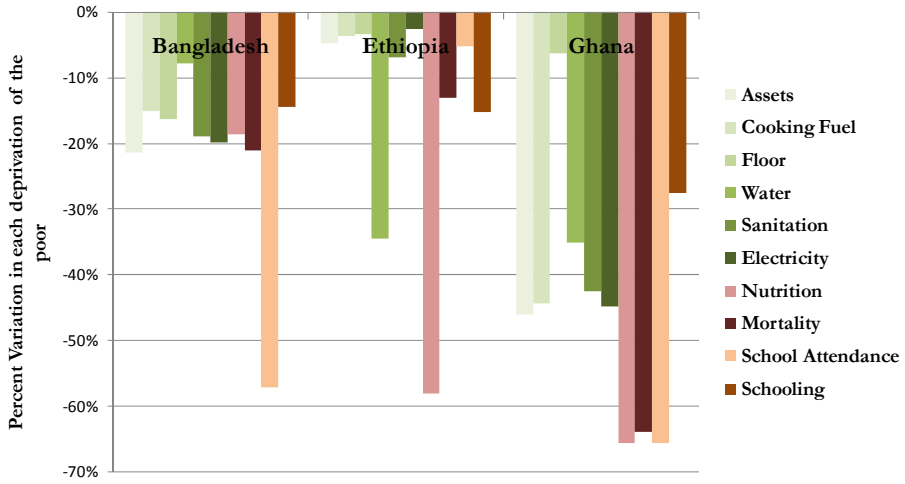


One of the strengths of the MPI is that although it summarizes the information on multiple and coupled deprivations into one single number, it allows the poverty composition to be unpacked, identifying the most prevailing deprivations. A natural question then is which indicators in which countries have improved most, causing the reduction in the MPI. Figure 29 presents the percent

[72] Also note that the reduction of urban poverty will likely accelerate the process of urbanization.

reduction in the censored headcounts for each indicator, that is, the percent reduction in those who are living in poor households deprived in each specific indicator. There we can see that in Bangladesh it was a reduction in child school attendance deprivations which contributed most to the decrease in the MPI. In Ethiopia, on the other hand, the improvement in nutrition and access to drinking water were the main contributors to the MPI reduction. Ghana's progress was driven by outstanding improvements in child school attendance, mortality, and nutrition, but the reduction in the other deprivations was also very important.

Figure 29: Changes in deprivation in each indicator
Bangladesh, Ethiopia and Ghana



4.7 Robustness of country rankings to changes in indicators' cutoffs

A natural question is the extent to which the country ranking is sensitive to small changes in the cutoffs. This is a concern, since some earlier work (Batana, 2008, Alkire & Seth, 2008) have suggested that the adjusted headcount is more sensitive to changes in cutoffs than to changes in the *k* value. This makes sense given the supposed distribution of deprivations around the cutoffs.

There is a legitimate diversity of judgments regarding what would or would not count as a deprivation in a number of indicators. If small changes in the cutoff would lead to a considerable re-ranking of countries, this would compromise the power of the MPI. To test the sensitivity of the MPI to the indicator´s cutoffs, we implemented different versions of the MPI, drawing on a range of ways of setting the cutoff. In particular we investigate a) three different measures of child nutrition and a different reference population; b) using mortality with and without age restrictions for the deceased child; c) the addition of an indicator on child school attendance versus using years of education only; d) using water alone or also including time to water; and e) using much higher living standard poverty lines for water (requiring piped water), sanitation (requiring flush toilet) and floor (considering the household deprived if it has a dirt/sand floor *or* palm bamboo/wood planks) in comparison to the best approximation to the MDG cutoffs that data allow.

The case of nutrition deserves some detailed explanation. As it was mentioned in the Data section, there exist three nutritional indicators for children: weight-for-age, weight-for-height and height-for-age, measured in standard deviations (SD) from the median of the reference population (z-scores). Children who are two or more SD below the mean of the reference population are considered

underweight, in wasting and stunting correspondingly.[73] Each of these indicators captures a different aspect of malnutrition. In particular, the wasting indicator reflects a recent process of weight loss usually associated with starvation, while stunting reflects cumulative deficiencies in growth associated with long-term factors such as chronically insufficient daily protein intake. The underweight indicator is a combination of the other two. In addition to the differences between indicators, as mentioned in the Data section, the reference population (on which the median is calculated) has recently been changed by the WHO. DHS and MICS z-scores for children are calculated using the old reference population which consisted only of US children. We have estimated our own z-scores using the new reference population, which constitutes a standard of well-nourishment rather than a mere reference and includes children from different ethnicities. However, we performed MPI estimations with both reference populations and we found that it made no significant difference for the MPI. Appendix 4 plots the Cumulative Distribution Function (CDF) for the three nutritional indicators using the two different reference populations in India and Mali. Clearly, the difference in the reference population produces important differences in the number of children considered to have deficient nutrition (look at the cumulative areas below each CDF, from the left and up of -2SD). This has previously been noted by Klasen (2008). To illustrate this clearly, Figure 30 below reports the percent of children under five years of age with underweight, wasting, and stunting in India and Mali for each reference population. In all, the percentage of children with wasting is the lowest; in the new reference population for z-scores, the number of stunted children is highest in Mali whereas according to the previous reference population, more children are underweight in India.

Figure 30: Underweight, Stunting and Wasting in India and Mali using different reference populations

	India (DHS 2005)		Mali (DHS 2006)	
Percent of under 5 children with low:	NCHS/WHO (Old Reference)	MGRS (WHO) (New Reference)	NCHS/WHO (Old Reference)	MGRS (WHO) (New Reference)
Weight-for-Age (Underweight)	43%	39%	32%	28%
Weight-for-Height (Wasting)	16%	18%	14%	16%
Height-for-Age (Stunting)	39%	44%	34%	38%

"Low" refers to lower than -2SD from the median of the reference population.
Own estimations. The small differences from the DHS Reports are due to the fact that these particular estimates were not weighted with the survey weights.

However, despite these differences in the traditional nutritional estimates obtained with each reference population, our estimates are not sensitive to these variations. This is because a) our base population is not just the children but includes adult women in the DHS, and we count as deprived all members in a household with an undernourished child or women; b) we are considering joint deprivations: it is not enough for someone to live in a household with an undernourished child to be considered multidimensionally poor. She needs to be deprived in at least one other health or educational indicator, or in three living standard indicators. Here as elsewhere, we find that scrutinizing joint deprivations not only reveals the character of poverty but also, practically, improves the accuracy of the measure by diminishing its sensitivity to potential inaccuracies in any single indicator.

[73] If they are below minus three SD, they are severely underweight, wasted, or stunted, correspondingly.

In terms of the different nutritional indicators, when stunting rather than underweight is used, MPI tends to be higher (the average increment is 0.011) and it ranges from a negative difference of 0.015 in Guinea and Senegal (the only two countries with a lower MPI when stunting is used), to a difference of 0.04 in Zambia, Kyrgyzstan, Malawi and the Central African Republic. Alternatively, when wasting is used rather than underweight, MPI tends to be lower, with an average reduction of 0.008. This reduction is highest in Laos (0.065) and smallest in Serbia (0.0025).

Despite the mentioned absolute differences in MPI, neither the change in the reference population nor the change in the children´s nutritional indicators produces a significant change in the ranking of the countries. All correlation coefficients (Pearson, Spearman and Kendall Tau b) between the reported MPI, which uses the underweight indicator and the new reference population, and three alternative MPIs, one using stunting, another using wasting, and another using underweight but with the old reference population, are above 0.96. (See Tables in Appendix 5)

We also checked the sensitivity of our mortality indicator by estimating an alternative MPI, using the under-5-years-of-age mortality indicator for those countries in which this is available. This does not change the estimates significantly: the biggest difference in MPI values is 0.04, with MPI higher when the non-age-specific mortality indicator was used in the case of Somalia for a k value of 6, and the opposite for the case of Liberia with k=5. The correlation between the rankings of the two measures is 0.97 or higher depending on the correlation coefficient. Also, because both our nutritional and mortality indicators differ from traditional ones, we calculated the correlations between the censored headcounts on mortality and nutrition with a WHO indicator called the "Healthy Life Expectancy at Birth (HALE)". This indicator is defined as the average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury. This indicator adds up life expectancy for different health states, adjusted by severity distribution making it sensitive to changes over time or differences between countries in the severity distribution of health states.[74] We found Spearman correlation coefficients of -0.78 with the censored headcount on mortality and -0.73 with the censored headcount on nutrition, and we found coefficient of -0.81 with the MPI. These correlations suggest that, despite not being the conventional ones, our indicators on health deprivations are capturing ill health as defined by these indicators quite accurately.

Appendix 5 presents three sets of correlation coefficients between the estimates of the different versions of the MPI regarding the poverty cutoffs, as enumerated (a) to (e) at the beginning of this section. In sum, all Kendall's Tau correlations are above 0.87, and all Spearman's rank correlations exceed 0.97, which suggest that the rankings are relatively robust.

4.8 Robustness of country rankings to changes in the poverty cutoff[75]

Like the single dimensional cutoff vector z, the choice of the cross-dimensional cutoff k, that is, the sum of weighted indicators in which a household must be deprived to be identified as poor, is normative. In the MPI k can vary from 0.56, which is the smallest indicator weight (corresponding to any of the living standard variables) to 10, the total number of indicators considered. Note that k =0.57 would require being deprived in merely one living standard indicator to be considered poor.

[74] For further information and calculation methods please visit http://www.who.int/whosis/indicators/2007HALE0/en/

[75] We are grateful to Yele Batana for performing the robustness analysis presented in this section.

Even k=1 seems a rather meager cutoff both empirically and normative: the deprivations in one indicator of health or education or two of living standard may not represent poverty. The normative argument is that while a household may have one shortfall by choice (for example cooking with wood or having a very trim figure), it is more likely that households with multiple deprivations in these very primitive indicators have not chosen these. The empirical reason is that individually each indicator may not be a perfect proxy for one aspect of poverty. On the other extreme, above k=4, poverty becomes zero in the less poor countries and therefore the estimates become irrelevant in those countries. Thus, in the MPI, the range of plausible values for k is quite limited. It clearly includes k=2, and k=3, and might include k=4 for the poorest countries.

An important empirical question is how sensitive the country rankings are to changes in this k cutoff, at least for the range of relevant values. Other studies (Batana, 2009) have found that many comparisons are relatively robust to changes in k, especially over some subset of reasonable values. Following that study, we have performed some basic dominance analysis. Given two countries, A and B, we say that B dominates A if A's MPI is greater or equal B's MPI for all k values, and is strictly greater for at least one k value. That is, B has lower poverty than A regardless of the k-cutoff. Such tests were performed among countries grouped by UN region and then all countries together. Countries with less than 9 indicators (only a few) were excluded from this analysis.

Within the Sub-Saharan African countries it was found that in 97 percent of the total possible pairs of African countries, there is a dominance relation when k varies from 2 to 4, meaning that one country is unambiguously less poor than another, independently of whether we require people to be deprived in 20, 30 or 40 percent of the weighted indicators. To see some graphical examples, Figure 31 plots the MPI value (vertical axis) for each possible k value (in the graph from k=1 to k=10, horizontal axis) for different countries in the UN regions.[76] In the first graph for Sub Saharan Africa, there are three sets of two countries: Ghana and Zimbabwe, which are among the least poor group within the Sub-Saharan African set of countries; Niger and Burkina Faso, among the poorest in the region (and in the overall ranking), and Nigeria and Senegal, with MPI values somewhere in between these other two groups. The figure indicates that Ghana and Zimbabwe are unambiguously less poor than Nigeria and Senegal for all k values, which in turn are unambiguously less poor than Niger and Burkina Faso. This is seen in that the curves lay one below the other indicating lower poverty. Moreover, for k<6, Ghana is less poor than Zimbabwe and Nigeria less poor than Senegal and, for all k values, Burkina is less poor than Niger. For countries that are closer together in the ranking, the dominance is sometimes restricted. For example in the second graph on African countries, we see that curves cross between Mauritania, Rwanda, Nigeria, Senegal, Comoros and Malawi. However, note that such crossings occur for k values higher than 4. For k<4, Mauritania dominates Nigeria, which dominates Senegal and Malawi, which in turn dominates Comoros and Rwanda.

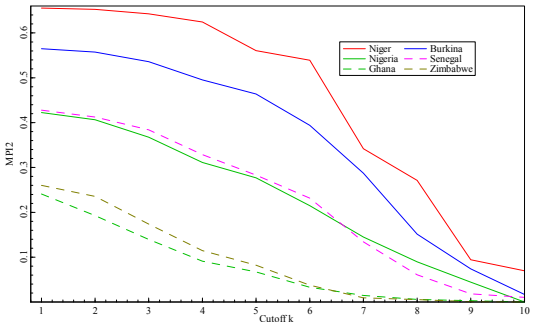
In the case of South Asia it was found that in 80 percent of the total possible pairs of countries, there is a dominance relation when k varies from 1 to 10, and if we restrict the range of k from 2 to 4, there are 90 percent of dominance relations among the countries of South Asia and East Asia and the Pacific altogether. In particular, in South Asia, as the third panel of Figure 31 depicts, it is found that Sri Lanka is unambiguously the least poor, whereas Nepal is unambiguously the poorest and there are crossings of the curves between India, Bangladesh and Pakistan. In the Arab States 86

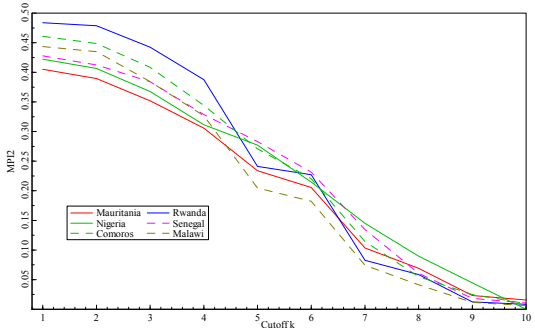
[76] Note that the graphs do not contain all the countries in each region to facilitate the reading of the graph. However, the analysis to which we refer was performed for all possible pairs of countries in each region and overall.

percent of the possible pairs of countries have a dominance relation when k varies from 1 to 10, and 94 percent when we restrict it to k from 2 to 4. Somalia is undeniably the poorest country here, being dominated by all others. In East Asia and the Pacific, there is dominance in 73 percent of the possible pairs of countries when k varies from 1 to 10, with Thailand dominating the other considered countries, Cambodia and Lao being the unambiguously poorest (although between them there are crossings) and China, Indonesia and Mongolia lying somewhere in the middle. In the Latin America and Caribbean region, 80 percent of the possible country pairs have a dominance relation when k varies from 1 to 10, and 91.5 percent have a dominance relation when k varies from 2 to 4. In the examples in the graph of Figure 31 we see that Belize dominates Colombia, which dominates the Dominican Republic, which in turn dominates Peru, which dominates Bolivia which dominates Haiti, all these for $k<4$. The European and the CIS is the region with less dominance relations, and not coincidentally, the least poor. Yet even there 53 percent of the possible pairs have dominance relations when k varies from 1 to 10, and 82 percent have dominance relations when k varies from 2 to 4. Tajikistan is definitely the poorest country in the region, followed by Kyrgyzstan and Azerbaijan (these last two crossing). Finally, when all countries are tested against all others, we find dominance relations in 95.5 percent of the pairs. These results suggest that the particular k value we use for the MPI is not a critical choice that dramatically affects results. For the range of considering poor those deprived in 20 percent to 40 percent of the indicators, the rankings are quite stable and robust.

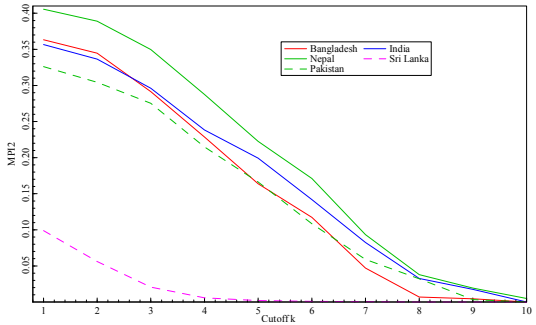
Figure 31: Examples of Robustness to the k-cutoff for countries by UN Regions

Sub-Saharan Africa

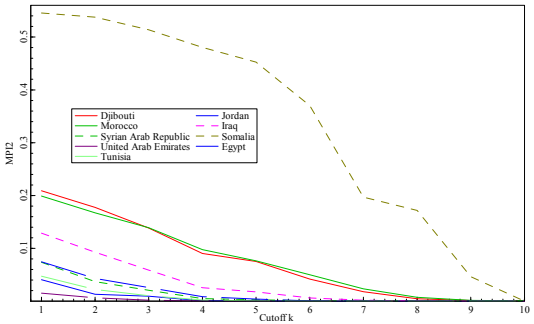




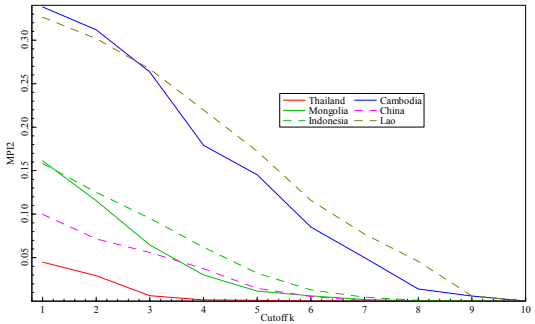
South Asia



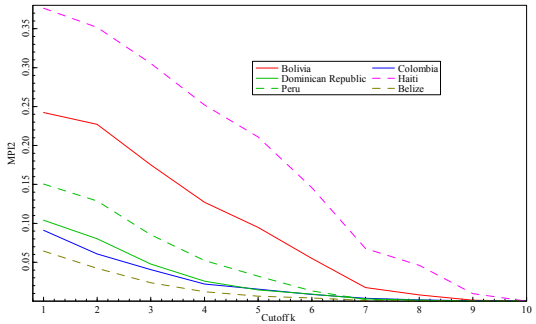
Arab States



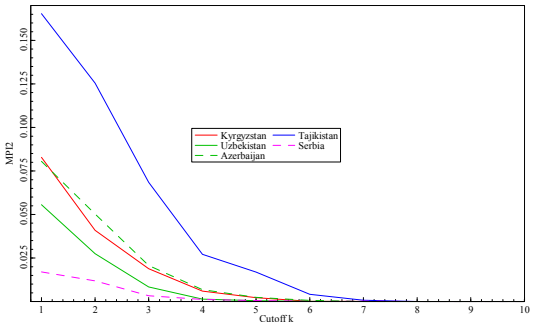
East Asia and the Pacific



Latin America and the Caribbean



Central and Eastern Europe and the CIS



4.9 Robustness of country rankings to changes in the indicators' weights

As explained in Section 2.4, the MPI has a structure of nested weights in which each of the three dimensions receives an equal relative weight of 1/3 and each of the indicators within each dimension receives an equal weight. Clearly, as the other normative choices made, the particular selection of weights requires a robustness check to see, in this case, whether the MPI is robust to a plausible range of weights. We have therefore estimated the MPI with other three alternative weighting structures giving 50 per cent of the relative weight to one of the three dimensions and 25 per cent to each of the other two.[77]

Changing the indicators' weights changes the poverty estimates. However, the country rankings generated are robust to such changes. We calculate the correlation coefficients between each pair of rankings using three different methods: Pearson's correlation coefficient, Spearman's rank correlation coefficient and Kendall's rank correlation coefficient (Tau-b). Results are presented in the last table of Appendix 5. There it can be seen that the correlation between the country rankings obtained with the baseline of equal weights and that obtained with the other three alternatives is 0.90 (using Kendall Taub) or higher. Interestingly, the correlation of the rankings obtained with the three alternative weighting systems is also high. For example the Kendall Tau b coefficient between the ranking obtained assigning 50 per cent of relative weight to education and the one obtained assigning 50 per cent of weight to health is 0.83, and that is the lowest correlation coefficient.[78]

As a second – related – exercise we compared for all possible pairs of countries the MPI estimate across the four different weighting structures and found that in 88 per cent of the total possible pairs one country has higher poverty than the other regardless of the weighting system.[79]

In summary, we can say that while the weighting structure affects the magnitude of each country poverty estimate, the relative position of each country with respect to others is highly robust to changes in the indicators' weights.

[77] In such way, in one of the alternative weightings each of the educational indicators weight 25 per cent, each of the health indicators 12.5 per cent and each of the living standard indicators 4.16 per cent. In the other, each of the health indicators weights 25 per cent, each of the two education indicators weights 12.5 per cent and the living standard indicators the same as above. Finally, in the weighting structure that gives higher weight to living standard, each of these indicators weights 8.33 per cent and each of the health and education indicators weights 12.5 per cent.

[78] Alkire et al (2010) estimate the same correlation coefficients for the different sub-groups of countries, namely, the bottom 75 countries and also classifying them by survey (only DHS countries, only MICS countries, only WHS countries). They find that the country estimates that are less robust are those obtained using the World Health Survey. Still, even in that case, the correlation of the MPI with the alternative weights with that using the equal weighting is 0.63 or higher. They also look at measures of concordance and perform a test of rank independence, with favorable evidence towards the robustness of the MPI.

[79] Because they are 104 countries, there are 5356 possible pairs. Of that total, in 4740 pairs one country has a dominant relation over the other independently of the weighting structure.

5. CONCLUDING REMARKS

The MPI represents significant progress in the measurement of poverty in an internationally comparable way. It shifts attention from solely income to include other intrinsically important dimensions. To measure these, the MPI makes the best use of indicators of functionings available. When this has not been possible, the MPI includes indicators of means closely linked to essential functionings. By using micro-data, it identifies people with coupled disadvantages, in other words, the 1,659 million poorest poor of the developing world.

The obtained results are intuitive. Sub-Saharan Africa has the highest poverty incidence; South Asia the highest number of people living in poverty. The Arab States and East Asia and the Pacific follow after these two, both in incidence and number. Next are Latin America and the Caribbean, and the least poor region, Europe and Eastern Europe and the Commonwealth of Independent States (CIS). But even in the relatively less poor regions, there are several million people experiencing acute poverty.

Coupled deprivations in the living standard indicators, namely access to safe water, improved sanitation, non-biomass cooking fuel, electricity, non-dirt floor, and a few assets are, in general, the most widespread. However, this is only in relative terms: many countries have unacceptably high proportions of poor people with health and education deprivations (as measured by malnutrition or mortality and years of education or children not attending school). These are very broad world-wide conclusions. Each country deserves an analysis that thoroughly scrutinizes the particular clustering of deprivations as well as the geographical, religious, and ethnic distribution of poverty.

We also have found evidence that indicates that the poor people identified by the MPI are not necessarily the same as the poor people identified by international income poverty criteria. The overlap is far from perfect, especially in the poorest countries. This reaffirms the need for an internationally comparable multidimensional poverty index to complement income poverty measures. This is a gap the MPI intends to fill.

We have stated that developing countries in higher stages of development would need a variant of the MPI, with different indicators and/or cutoffs to reveal the type of deprivations experienced there. Including indicators on employment, quality of education, empowerment, and using higher cutoffs for the living standard variables are possibilities for such a variant version. This is not to say that these other dimensions are not important in the less developed countries (there, it is a matter of missing data). Nor is it the case that we should change the cutoffs for the least developed countries. The MPI is an index of acute poverty, and that is what it reflects. Its possible variant would reflect a different type of poverty and would be relevant in medium and high human development countries.

We are fully aware of the limitations of the MPI, and we advocate improving data collection in the developing world to overcome these issues. The limitations are essentially in terms of cross-country/survey comparability, as was outlined in the data section. Without intending to minimize these limitations, it is however important to realize that all internationally comparable empirical studies face similar challenges and therefore require a number of assumptions. We have minimized truly 'heroic'

assumptions and have been unusually explicit in articulating the limitations as well as the strengths of the MPI. We understand these estimates as the first step in revealing a more accurate portrait of poverty in the world, highlighting the very high deprivation levels in core dimensions.

We also wish to emphasise that, despite data limitations, the MPI is a robust measure both axiomatically and empirically. Axiomatically its mathematical structure – that of the M_0 measure of the Alkire and Foster method – satisfies a number of properties that are widely regarded as desirable in the poverty measurement literature. It also handles ordinal variables in a technically sound way (although ordinal variables impede our ability to evaluate the depth of poverty using MPI). Its empirical robustness derives from the fact that the reported MPI has been chosen from a set of alternative versions that were estimated using different dimensional cutoffs and indicators. The country rankings that these different versions produce are very highly correlated. Also, stochastic dominance analysis suggests that our results are also robust to changes in the cross-dimensional cutoff k, that is, in the weighted number of deprivations we require a person to be deprived in order to be considered poor. In the near future we will work on bootstrapping the results (although given the sample sizes we expect the confidence intervals to be very small).

The MPI has tremendous practical potential for tracking the MDGs. Eight of the ten indicators are directly linked to the MDGs. Two of them (water and cooking fuel) are exactly the same indicators proposed to monitor progress. Our sanitation indicator is a bit more demanding as it requires the improved sanitation not to be shared. The indicator on years of schooling, child school attendance, nutrition, and mortality are closely related to those selected as MDG indicators. The only difference is that the *base* population of the MPI is the household, so all members are counted as deprived or not in these indicators, depending on the achievements of the household members. Floor and electricity are the only indicators not explicitly listed as MDG indicators. However, they are closely related to MDG 7 – Achieve Environmental Sustainability. Hence, progress in the MPI means advancement towards the MDGs. Moreover, as exemplified in this paper, the MPI allows analysts to identify the high impact causal pathways by which such progress is made. For example, what dimensions or combinations of dimensions reduce poverty the most? This information will help to inform the focus and sequencing of policies to reduce the MDGs.

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Appendix 1: Tables of Estimation Results

Table 1.1 MPI Ranks and Income comparisons

The table ranks 104 countries from low poverty to high poverty, and gives income poverty figures. Please see Section 3.2 for countries with missing indicators and differences by surveys.

Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Slovakia†	WHS	2003	0.000	1	0.000	0.000					0.168	8
Slovenia†	WHS	2003	0.000	1	0.000	0.000	0.020	1	0.020	1		
Czech Republic	WHS	2003	0.000	3	0.000	0.467						
Belarus	MICS	2005	0.000	4	0.000	0.351	0.020	1	0.020	1	0.174	9
Latvia*	WHS	2003	0.001	5	0.003	0.467	0.020	1	0.020	1	0.059	2
United Arab Emirates	WHS	2003	0.002	6	0.006	0.353						
Kazakhstan	MICS	2006	0.002	7	0.006	0.369	0.020	1	0.020	1	0.154	5
Occupied Palestinian Territories	MICS	2006	0.003	8	0.007	0.382						
Georgia	MICS	2005	0.003	9	0.008	0.352	0.134	37	0.304	39	0.545	52
Hungary	WHS	2003	0.003	10	0.008	0.389	0.020	1	0.020	1		
Bosnia and Herzegovina	MICS	2006	0.003	11	0.008	0.372	0.020	1	0.020	1	0.195	11
Serbia**	MICS	2005	0.003	12	0.008	0.400	0.020	1	0.020	1		
Albania	MICS	2005	0.004	13	0.010	0.381	0.020	1	0.078	18	0.185	10
Russian Federation*	WHS	2003	0.005	14	0.013	0.389	0.020	1	0.020	1	0.196	13
Uruguay	WHS	2003	0.006	15	0.017	0.347	0.020	1	0.042	15		
Thailand	MICS	2005	0.006	16	0.016	0.385	0.020	1	0.115	21		
Montenegro	MICS	2005	0.006	17	0.015	0.416	0.020	1	0.020	1		
Croatia	WHS	2003	0.007	18	0.016	0.416	0.020	1	0.020	1	0.111	3
Ukraine	DHS	2007	0.008	19	0.022	0.357	0.020	1	0.020	1	0.195	12
Macedonia	MICS	2005	0.008	20	0.019	0.409	0.020	1	0.053	16	0.217	15
Armenia	DHS	2005	0.008	21	0.023	0.365	0.037	27	0.210	33	0.509	47
Moldova	DHS	2005	0.008	22	0.022	0.375	0.024	21	0.115	22	0.485	44
Uzbekistan	MICS	2006	0.008	23	0.023	0.362	0.463	66	0.767	69	0.272	19
Ecuador	WHS	2003	0.009	24	0.022	0.416	0.047	30	0.128	25	0.383	30
Jordan	DHS	2007	0.010	25	0.027	0.354	0.020	1	0.035	14	0.142	4
Tunisia*	WHS	2003	0.010	26	0.028	0.371	0.026	24	0.128	26		
Argentina‡	ENNyS	2005	0.011	27	0.030	0.377	0.034	25	0.073	17		

Table 1.1, Continued

Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
South Africa*	WHS	2003	0.014	28	0.031	0.467	0.262	53	0.429	45	0.220	16
Mexico	ENSANUT	2006	0.015	29	0.040	0.389	0.040	28	0.082	19	0.470	42
Kyrgyzstan	MICS	2006	0.019	30	0.049	0.388	0.034	26	0.275	36	0.431	35
Trinidad and Tobago	MICS	2006	0.020	31	0.056	0.351						
Sri Lanka*	WHS	2003	0.021	32	0.053	0.387	0.140	38	0.397	42	0.227	17
Azerbaijan	DHS	2006	0.021	33	0.054	0.386	0.020	1	0.020	1	0.496	45
Syrian Arab Republic[†]	MICS	2006	0.021	34	0.055	0.375						
Belize	MICS	2006	0.024	35	0.056	0.426						
Egypt	DHS	2008	0.026	36	0.064	0.404	0.020	1	0.184	30	0.167	7
Estonia	WHS	2003	0.026	37	0.072	0.365	0.020	1	0.020	1		
Turkey[§]	DHS	2003	0.039	38	0.085	0.459	0.026	23	0.082	20	0.270	18
Brazil	WHS	2003	0.039	39	0.085	0.460	0.052	32	0.127	24	0.215	14
Colombia	DHS	2005	0.041	40	0.092	0.441	0.160	41	0.279	37	0.451	37
Suriname	MICS	2000	0.044	41	0.075	0.588						
Dominican Republic	MICS	2000	0.048	42	0.111	0.433	0.044	29	0.123	23	0.485	43
Guyana	DHS	2005	0.055	43	0.138	0.397						
China	WHS	2003	0.056	44	0.125	0.449	0.159	40	0.363	41	0.028	1
Iraq	MICS	2006	0.059	45	0.142	0.413						
Paraguay	WHS	2003	0.064	46	0.133	0.485	0.065	33	0.142	29		
Mongolia	MICS	2005	0.065	47	0.158	0.410	0.022	20	0.136	27	0.361	28
Philippines	DHS	2003	0.067	48	0.126	0.535	0.226	49	0.450	47		
Tajikistan	MICS	2005	0.068	49	0.171	0.400	0.215	48	0.508	51	0.535	51
Viet Nam	DHS	2002	0.075	50	0.143	0.525	0.215	47	0.484	50	0.289	22
Peru	DHS	2004	0.085	51	0.198	0.431	0.077	34	0.185	31	0.516	49
Myanmar*	MICS	2000	0.088	52	0.142	0.620					0.320	25
Indonesia	DHS	2007	0.095	53	0.208	0.459	0.294	55	0.600	57	0.167	6
Guatemala*	WHS	2003	0.127	54	0.259	0.491	0.117	36	0.243	35	0.510	48

Table 1.1, Continued

Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Djibouti	MICS	2006	0.139	55	0.293	0.473	0.188	44	0.412	44		
Morocco	DHS	2004	0.139	56	0.285	0.488	0.025	22	0.140	28		
Ghana	DHS	2008	0.140	57	0.301	0.464	0.300	56	0.536	52	0.285	20
Honduras	DHS	2006	0.160	58	0.326	0.489	0.182	43	0.297	38	0.507	46
Gabon[†§]	DHS	2000	0.161	59	0.354	0.455	0.048	31	0.196	32		
Zimbabwe	DHS	2006	0.174	60	0.385	0.452						
Bolivia	DHS	2003	0.175	61	0.363	0.483	0.117	35	0.219	34	0.377	29
Swaziland	DHS	2007	0.183	62	0.411	0.444	0.629	79	0.810	75	0.692	59
Namibia	DHS	2007	0.187	63	0.396	0.472						
Nicaragua	DHS	2001	0.211	64	0.407	0.519	0.158	39	0.318	40	0.458	38
Lesotho	DHS	2004	0.220	65	0.481	0.458	0.434	63	0.622	60	0.563	54
Sao Tome and Principe[†]	MICS	2000	0.236	66	0.516	0.458	0.284	54	0.566	53		
Cambodia	DHS	2005	0.263	67	0.539	0.489	0.258	52	0.578	56	0.301	23
Lao	MICS	2006	0.267	68	0.472	0.565	0.440	64	0.768	70	0.335	26
Republic of Congo	DHS	2005	0.270	69	0.559	0.484	0.541	71	0.744	65	0.423	34
Pakistan*	DHS	2007	0.275	70	0.510	0.540	0.226	50	0.603	59		
Yemen	MICS	2006	0.283	71	0.525	0.539	0.175	42	0.466	48		
Togo	MICS	2006	0.284	72	0.543	0.524	0.387	60	0.693	62		
Bangladesh	DHS	2007	0.291	73	0.578	0.504	0.496	68	0.813	77	0.400	33
India	DHS	2005	0.296	74	0.554	0.535	0.416	62	0.756	67	0.286	21
Cameroon	DHS	2004	0.299	75	0.546	0.547	0.328	57	0.577	55	0.399	32
Kenya	DHS	2003	0.302	76	0.604	0.500	0.197	45	0.399	43	0.466	41
Haiti	DHS	2006	0.306	77	0.573	0.533	0.549	73	0.721	64		
Cote d'Ivoire	DHS	2005	0.320	78	0.522	0.614	0.233	51	0.468	49		
Gambia	MICS	2006	0.324	79	0.604	0.536	0.343	59	0.567	54	0.613	56
Zambia	DHS	2007	0.325	80	0.637	0.511	0.643	80	0.815	78	0.680	57
Chad	WHS	2003	0.344	81	0.629	0.547	0.619	77	0.833	80		

Table 1.1, Continued

Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Nepal	DHS	2006	0.350	82	0.647	0.540	0.551	74	0.776	73	0.309	24
Mauritania*	MICS	2007	0.352	83	0.617	0.571	0.212	46	0.441	46	0.463	39
Tanzania	DHS	2008	0.367	84	0.653	0.563	0.885	90	0.966	90	0.357	27
Nigeria	DHS	2003	0.368	85	0.635	0.579	0.644	81	0.839	81		
Senegal	DHS	2005	0.384	86	0.669	0.574	0.335	58	0.603	58		
Malawi	DHS	2004	0.384	87	0.723	0.532	0.739	85	0.904	87	0.524	50
DR Congo	DHS	2007	0.393	88	0.732	0.537	0.592	76	0.795	74	0.713	61
Comoros†	MICS	2000	0.408	89	0.739	0.552	0.461	65	0.650	61		
Benin	DHS	2006	0.412	90	0.720	0.573	0.473	67	0.753	66	0.390	31
Madagascar	DHS	2004	0.413	91	0.705	0.585	0.678	83	0.896	84	0.687	58
Rwanda	DHS	2005	0.443	92	0.814	0.544	0.766	87	0.903	86	0.569	55
Angola	MICS	2001	0.452	93	0.774	0.584	0.543	72	0.702	63		
Mozambique	DHS	2003	0.481	94	0.798	0.602	0.747	86	0.900	85	0.552	53
Liberia	DHS	2007	0.484	95	0.839	0.577	0.837	89	0.948	89		
Sierra Leone	MICS	2005	0.489	96	0.815	0.600	0.534	70	0.761	68	0.702	60
Guinea	DHS	2005	0.505	97	0.824	0.613	0.701	84	0.872	83		
Central African Republic	MICS	2000	0.512	98	0.864	0.593	0.624	78	0.819	79		
Somalia	MICS	2006	0.514	99	0.812	0.633						
Burundi	MICS	2005	0.530	100	0.845	0.627	0.813	88	0.934	88		
Burkina Faso	MICS	2006	0.536	101	0.826	0.649	0.565	75	0.812	76	0.464	40
Mali	DHS	2006	0.564	102	0.871	0.647	0.514	69	0.771	71		
Ethiopia	DHS	2005	0.582	103	0.900	0.647	0.390	61	0.775	72	0.442	36
Niger	DHS	2006	0.642	104	0.927	0.693	0.659	82	0.856	82		

Columns 7, 9 and 11: World Bank (2009). '*World Development Indicators*'. Washington DC: World Bank. Income poverty figures correspond to the latest estimate available, of the year 2000 or later.

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.1, Continued: MPI, HDI, and other income figures.
Table gives the MPI value and rank, HDI value, rank and category, and shows GDP growth, GDP per capita, & Gini Index. The total population figures for each country are also reported.

Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators[c]			Other Income Indicators[b]			Population (millions, 2007)[c]
					HPI-1 2009	HDI 2009		GDP per capita average growth 2005-2008	GDP per capita 2008 PPP (current international $)	Gini Index (various years)	
					Value	Value	Category				
Slovakia†	WHS	2003	0.000	1		0.88	High	6.57	22080.74		5.4
Slovenia†	WHS	2003	0.000	1		0.929	Very High	4.51	27604.59	31.15	2
Czech Republic	WHS	2003	0.000	3	1.5	0.903	Very High	5.03	24712.21		10.3
Belarus	MICS	2005	0.000	4	4.3	0.826	High	9.91	12260.85	27.92	9.7
Latvia*	WHS	2003	0.001	5		0.866	High	7.61	17100.45	35.73	2.3
United Arab Emirates	WHS	2003	0.002	6	7.7	0.903	Very High	3.03			4.4
Kazakhstan	MICS	2006	0.002	7	7.9	0.804	High	6.97	11314.58	33.85	15.4
Occupied Palestinian Territories	MICS	2006	0.003	8	6	0.737	Medium	-3.03			4
Georgia	MICS	2005	0.003	9	4.7	0.778	Medium	9.29	4896.41	40.78	4.4
Hungary	WHS	2003	0.003	10	2.2	0.879	High	2.60	19329.54	30.04	10
Bosnia and Herzegovina	MICS	2006	0.003	11	2.8	0.812	High	6.07	8389.91	35.78	3.8
Serbia**	MICS	2005	0.003	12	3.1	0.826	High	6.30	11456.44		9.8
Albania	MICS	2005	0.004	13	4	0.818	High	5.25	7715.23	33.03	3.1
Russian Federation*	WHS	2003	0.005	14	7.4	0.817	High	8.15	16138.55	37.51	141.9
Uruguay	WHS	2003	0.006	15	3	0.865	High	4.98	12734.15	46.24	3.3
Thailand	MICS	2005	0.006	16	8.5	0.783	Medium	3.58	7702.58	43.53	67
Montenegro	MICS	2005	0.006	17	3.1	0.834	High	8.03	13950.66		0.6
Croatia	WHS	2003	0.007	18	1.9	0.871	High	4.23	19083.77	28.99	4.4
Ukraine	DHS	2007	0.008	19	5.8	0.796	Medium	5.93	7271.26	28.21	46.3
Macedonia	MICS	2005	0.008	20	3.2	0.817	High	4.54	10040.65	38.95	2
Armenia	DHS	2005	0.008	21	3.7	0.798	Medium	11.76	6070.09	33.8	3.1
Moldova	DHS	2005	0.008	22	5.9	0.72	Medium	6.95	2925.13	35.6	3.7
Uzbekistan	MICS	2006	0.008	23	8.5	0.71	Medium	5.94	2656.06	36.72	26.9
Ecuador	WHS	2003	0.009	24	7.9	0.806	High	3.61	8008.70	54.37	13.3
Jordan	DHS	2007	0.010	25	6.6	0.77	Medium	4.17	5282.73	37.72	5.9
Tunisia*	WHS	2003	0.010	26	15.6	0.769	Medium	4.10	7996.08	40.81	10.1
Argentina‡	ENNyS	2005	0.011	27	3.7	0.866	High	7.28	14332.81	50.03	39.5

Table 1.1, Continued

Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators[c]			Other Income Indicators[b]			Population (millions, 2007)[c]
					HPI-1 2009	HDI 2009		GDP per capita average growth 2005-2008	GDP per capita 2008 PPP (current international $)	Gini Index (various years)	
					Value	Value	Category				
South Africa*	WHS	2003	0.014	28	25.4	0.683	Medium	2.99	10108.56	57.77	49.2
Mexico	ENSANUT	2006	0.015	29	5.9	0.854	High	2.19	14495.33	48.11	107.5
Kyrgyzstan	MICS	2006	0.019	30	7.3	0.71	Medium	3.77	2188.17	32.93	5.3
Trinidad and Tobago	MICS	2006	0.020	31	6.4	0.837	High	6.28	24747.80		1.3
Sri Lanka*	WHS	2003	0.021	32	16.8	0.759	Medium	5.67	4560.45	41.06	19.9
Azerbaijan	DHS	2006	0.021	33	10.7	0.787	Medium	22.83	8765.21	36.5	8.6
Syrian Arab Republic[†]	MICS	2006	0.021	34	12.6	0.742	Medium	1.01	4439.78		20.5
Belize	MICS	2006	0.024	35	17.5	0.772	Medium	0.60	6940.62		0.3
Egypt	DHS	2008	0.026	36	23.4	0.703	Medium	4.42	5416.41	32.14	80.1
Estonia	WHS	2003	0.026	37		0.883	High	5.72	20662.32	36	1.3
Turkey[§]	DHS	2003	0.039	38	8.3	0.806	High	4.69	13920.15	43.23	73
Brazil	WHS	2003	0.039	39	8.6	0.813	High	3.35	10296.49	55.02	190.1
Colombia	DHS	2005	0.041	40	7.6	0.807	High	4.34	8884.51	58.49	44.4
Suriname	MICS	2000	0.044	41	10.1	0.769	Medium	2.99	7505.69	52.88	0.5
Dominican Republic	MICS	2000	0.048	42	9.1	0.777	Medium	6.98	8217.44	49.97	9.8
Guyana	DHS	2005	0.055	43	10.2	0.729	Medium	-0.94	2541.58	44.58	0.8
China	WHS	2003	0.056	44	7.7	0.772	Medium	10.38	5961.83	41.53	1329.1
Iraq	MICS	2006	0.059	45	19.4						29.5
Paraguay	WHS	2003	0.064	46	10.5	0.761	Medium	1.36	4709.10	53.24	6.1
Mongolia	MICS	2005	0.065	47	12.7	0.727	Medium	7.49	3566.49	33.03	2.6
Philippines	DHS	2003	0.067	48	12.4	0.751	Medium	3.47	3509.86	44.04	88.7
Tajikistan	MICS	2005	0.068	49	18.2	0.688	Medium	6.05	1905.56	33.61	6.7
Viet Nam	DHS	2002	0.075	50	12.4	0.725	Medium	6.52	2784.95	37.77	86.1
Peru	DHS	2004	0.085	51	10.2	0.806	High	5.90	8507.04	49.55	28.5
Myanmar*	MICS	2000	0.088	52	20.4	0.586	Medium	12.19			49.1
Indonesia	DHS	2007	0.095	53	17	0.734	Medium	4.62	3974.89	39.41	224.7
Guatemala*	WHS	2003	0.127	54	19.7	0.704	Medium	2.19	4760.30	53.69	13.4

Table 1.1, Continued

Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators			Other income indicators			Population (millions, 2007)
					HPI-1 2009	HDI 2009		GDP per capita average growth 2005-2008	GDP per capita 2008 PPP (current international $)	Gini Index (various years)	
					Value	Value	Category				
Djibouti	MICS	2006	0.139	55	25.6	0.52	Medium	2.05	2140.23	39.96	0.8
Morocco	DHS	2004	0.139	56	31.1	0.654	Medium	3.63	4388.50	40.88	31.2
Ghana	DHS	2008	0.140	57	28.1	0.526	Medium	3.90	1452.07	42.76	22.9
Honduras	DHS	2006	0.160	58	13.7	0.732	Medium	3.68	3964.55	55.31	7.2
Gabon[†§]	DHS	2000	0.161	59	17.5	0.755	Medium	1.03	14526.53	41.45	1.4
Zimbabwe	DHS	2006	0.174	60	34			-6.85			12.4
Bolivia	DHS	2003	0.175	61	11.6	0.729	Medium	3.15	4278.20	58.19	9.5
Swaziland	DHS	2007	0.183	62	35.1	0.572	Medium	2.93	4928.21	50.68	1.2
Namibia	DHS	2007	0.187	63	17.1	0.686	Medium	2.59	6342.70		2.1
Nicaragua	DHS	2001	0.211	64	17	0.699	Medium	2.52	2682.20	52.33	5.6
Lesotho	DHS	2004	0.220	65	34.3	0.514	Medium	3.78	1587.84	52.5	2
Sao Tome and Principe[†]	MICS	2000	0.236	66	12.6	0.651	Medium	4.20	1738.48		0.2
Cambodia	DHS	2005	0.263	67	27.7	0.593	Medium	7.99	1904.59	40.69	14.3
Lao	MICS	2006	0.267	68	30.7	0.619	Medium	5.77	2134.09	32.63	6.1
Republic of Congo	DHS	2005	0.270	69	24.3	0.601	Medium	2.44	3945.88	47.32	3.6
Pakistan*	DHS	2007	0.275	70	33.4	0.572	Medium	3.67	2644.21	31.18	173.2
Yemen	MICS	2006	0.283	71	35.7	0.575	Medium	1.05	2400.07	37.69	22.3
Togo	MICS	2006	0.284	72	36.6	0.499	Low	-1.18	829.48	34.41	6.3
Bangladesh	DHS	2007	0.291	73	36.1	0.543	Medium	4.73	1334.40	31.02	157.8
India	DHS	2005	0.296	74	28	0.612	Medium	7.33	2972.44	36.8	1164.7
Cameroon	DHS	2004	0.299	75	30.8	0.523	Medium	1.13	2215.06	44.56	18.7
Kenya	DHS	2003	0.302	76	29.5	0.541	Medium	2.94	1589.95	47.68	37.8
Haiti	DHS	2006	0.306	77	31.5	0.532	Medium	0.51	1176.82	59.5	9.7
Cote d'Ivoire	DHS	2005	0.320	78	37.4	0.484	Low	-0.76	1651.24	48.39	20.1
Gambia	MICS	2006	0.324	79	40.9	0.456	Low	2.99	1362.77	47.28	1.6
Zambia	DHS	2007	0.325	80	35.5	0.481	Low	2.91	1355.77	50.74	12.3
Chad	WHS	2003	0.344	81	53.1	0.392	Low	-1.06	1455.27	39.78	10.6

Table 1.1, Continued

Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators[c]			Other Income Indicators[b]			Population (millions, 2007)[c]
					HPI-1 2009	HDI 2009		GDP per capita average growth 2005-2008	GDP per capita 2008 PPP (current international $)	Gini Index (various years)	
					Value	Value	Category				
Nepal	DHS	2006	0.350	82	32.1	0.553	Medium	2.36	1112.28	47.3	28.3
Mauritania*	MICS	2007	0.352	83	36.2	0.52	Medium	3.56		39.04	3.1
Tanzania	DHS	2008	0.367	84	30	0.53	Medium	3.85	1262.94	34.62	41.3
Nigeria	DHS	2003	0.368	85	36.2	0.511	Medium	3.27	2081.89	42.93	147.7
Senegal	DHS	2005	0.384	86	41.6	0.464	Low	0.98	1771.96	39.19	11.9
Malawi	DHS	2004	0.384	87	28.2	0.493	Low	4.56	836.79	39.02	14.4
DR Congo	DHS	2007	0.393	88	38	0.389	Low	3.32	321.44	44.43	62.5
Comoros†	MICS	2000	0.408	89	20.4	0.576	Medium	-0.54	1169.01	64.3	0.6
Benin	DHS	2006	0.412	90	43.2	0.492	Low	0.79	1467.87	38.62	8.4
Madagascar	DHS	2004	0.413	91	36.1	0.543	Medium	2.84	1048.92	47.24	18.6
Rwanda	DHS	2005	0.443	92	32.9	0.46	Low	4.85	1021.93	46.68	9.5
Angola	MICS	2001	0.452	93	37.2	0.564	Medium	15.33	5898.54	58.64	17.6
Mozambique	DHS	2003	0.481	94	46.8	0.402	Low	5.47	855.35	47.11	21.9
Liberia	DHS	2007	0.484	95	35.2	0.442	Low	3.12	387.76	52.56	3.6
Sierra Leone	MICS	2005	0.489	96	47.7	0.365	Low	3.01	766.27	42.52	5.4
Guinea	DHS	2005	0.505	97	50.5	0.435	Low	1.69	1203.97	43.34	9.6
Central African Republic	MICS	2000	0.512	98	42.4	0.369	Low	1.55	735.67	43.57	4.3
Somalia	MICS	2006	0.514	99							8.7
Burundi	MICS	2005	0.530	100	36.4	0.394	Low	0.47	382.76	33.27	7.8
Burkina Faso	MICS	2006	0.536	101	51.8	0.389	Low	1.91	1161.34	39.6	14.7
Mali	DHS	2006	0.564	102	54.5	0.371	Low	1.68	1127.56	38.99	12.4
Ethiopia	DHS	2005	0.582	103	50.9	0.414	Low	8.42	868.11	29.76	78.6
Niger	DHS	2006	0.642	104	55.8	0.34	Low	1.38	684.00	43.89	14.1

Source for columns with (a): Alkire & Santos (2010) calculations.

Source for columns with (b): World Bank (2009). '*World Development Indicators*'. Washington DC: World Bank.

Source for columns with (c) : UNDP (2009). *Human Development Report 2009: Overcoming barriers: Human mobility and development.* New York: United Nations.

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.2 Censored headcounts

The table shows the proportion of people who are MPI poor and experience deprivations in each of 10 indicators. We clarify that these are 'MPI' poor people because people who are deprived in less than 30% of weighted indicators are not considered in these headcounts, and also because data on single deprivations may be inaccurate. For their information on the raw percent of people deprived by dimension see Table 1.9.

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Slovakia†	WHS	2003	0.000	1	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Slovenia†	WHS	2003	0.000	1	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Czech Republic	WHS	2003	0.000	3	0.000			0.000	0.000	0.000	0.000	0.000	0.000	0.000
Belarus	MICS	2005	0.000	4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Latvia*	WHS	2003	0.001	5	0.000			0.003	0.000	0.003	0.000		0.001	0.002
United Arab Emirates	WHS	2003	0.002	6	0.006		0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
Kazakhstan	MICS	2006	0.002	7	0.000	0.002	0.005	0.002	0.000	0.001	0.003	0.000	0.005	0.003
Occupied Palestinian Territories	MICS	2006	0.003	8	0.004	0.006	0.000	0.003	0.000	0.000	0.000	0.005	0.000	0.002
Georgia	MICS	2005	0.003	9	0.001	0.003	0.004	0.001	0.001	0.003	0.004	0.001	0.008	0.005
Hungary	WHS	2003	0.003	10	0.000			0.008	0.000	0.000	0.000	0.006	0.000	0.002
Bosnia and Herzegovina	MICS	2006	0.003	11	0.004	0.002		0.005	0.001	0.001	0.001	0.000	0.005	0.002
Serbia**	MICS	2005	0.003	12	0.004	0.002		0.004	0.001	0.002	0.001	0.004	0.007	0.003
Albania	MICS	2005	0.004	13	0.001	0.006	0.007	0.003	0.000	0.002	0.002	0.001	0.008	0.002
Russian Federation*	WHS	2003	0.005	14	0.012		0.000	0.000	0.000	0.004	0.001	0.000	0.001	0.005
Uruguay	WHS	2003	0.006	15	0.017		0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000
Thailand	MICS	2005	0.006	16	0.011	0.004	0.007	0.005	0.001	0.005	0.005	0.003	0.012	0.005
Montenegro	MICS	2005	0.006	17	0.007	0.008		0.009	0.000	0.004	0.002	0.000	0.009	0.001
Croatia	WHS	2003	0.007	18	0.012			0.004	0.000	0.003	0.001	0.001	0.012	0.007
Ukraine	DHS	2007	0.008	19	0.001	0.002	0.021		0.000	0.001	0.001	0.000	0.003	0.001
Macedonia	MICS	2005	0.008	20	0.014	0.015	0.005	0.001	0.002	0.008	0.004	0.006	0.015	0.005
Armenia	DHS	2005	0.008	21	0.000	0.018	0.016	0.009	0.000	0.005	0.002	0.001	0.005	0.004
Moldova	DHS	2005	0.008	22	0.006	0.007	0.009	0.006	0.003	0.015	0.006	0.010	0.017	0.013
Uzbekistan	MICS	2006	0.008	23	0.000	0.012	0.019	0.009	0.001	0.001	0.006	0.007	0.009	0.009
Ecuador	WHS	2003	0.009	24	0.022		0.001	0.001	0.002	0.006	0.007	0.002	0.003	0.011
Jordan	DHS	2007	0.010	25	0.002	0.017	0.016	0.018	0.002	0.003	0.004	0.000	0.001	0.002
Tunisia*	WHS	2003	0.010	26	0.008		0.018	0.012	0.002	0.014	0.012	0.004	0.005	0.015
Argentina‡	ENNyS	2005	0.011	27	0.028	0.000	0.003	0.007	0.007	0.022	0.002	0.016	0.022	0.022

Table 1.2, Continued

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
South Africa*	WHS	2003	0.014	28	0.025		0.001	0.009		0.020	0.008	0.014	0.018	0.006
Mexico	ENSANUT	2006	0.015	29	0.021	0.015	0.015	0.007	0.006	0.021	0.006	0.022	0.028	0.022
Kyrgyzstan	MICS	2006	0.019	30	0.014	0.028		0.021	0.000	0.010	0.016	0.012	0.028	0.024
Trinidad and Tobago	MICS	2006	0.020	31	0.000	0.001	0.056		0.003	0.005	0.003	0.002	0.000	0.002
Sri Lanka*	WHS	2003	0.021	32	0.004		0.003	0.041	0.035	0.026	0.030	0.025	0.053	0.048
Azerbaijan	DHS	2006	0.021	33	0.001	0.028	0.033	0.028	0.001	0.024	0.031	0.008	0.014	0.023
Syrian Arab Republic[†]	MICS	2006	0.021	34	0.013	0.044	0.032	0.021	0.002	0.010	0.017	0.010	0.001	0.005
Belize	MICS	2006	0.024	35	0.009	0.023	0.031	0.020	0.039	0.025	0.019	0.025	0.041	0.027
Egypt	DHS	2008	0.026	36	0.027	0.049	0.040	0.018	0.002	0.011	0.004	0.024		0.015
Estonia	WHS	2003	0.026	37	0.072		0.000	0.002	0.000	0.006	0.003	0.000	0.024	0.004
Turkey[§]	DHS	2003	0.039	38	0.019	0.062	0.056	0.015	0.085	0.048	0.030	0.020		0.020
Brazil	WHS	2003	0.039	39	0.081			0.013	0.000	0.039	0.020	0.016	0.066	0.001
Colombia	DHS	2005	0.041	40	0.038	0.040	0.039	0.040	0.022	0.047	0.034	0.040	0.064	0.058
Suriname	MICS	2000	0.044	41	0.062	0.052	0.033	0.022		0.060	0.048	0.033		
Dominican Republic	MICS	2000	0.048	42	0.080	0.036	0.042	0.010	0.040	0.100	0.036	0.034	0.071	0.074
Guyana	DHS	2005	0.055	43	0.006	0.005	0.125		0.052	0.050	0.028	0.012	0.029	0.033
China	WHS	2003	0.056	44	0.109		0.002	0.032	0.000	0.077	0.030	0.032	0.091	0.024
Iraq	MICS	2006	0.059	45	0.049	0.119	0.076	0.038	0.010	0.051	0.064	0.040	0.027	0.024
Paraguay	WHS	2003	0.064	46	0.068		0.046	0.027	0.045	0.112	0.088	0.075	0.124	0.087
Mongolia	MICS	2005	0.065	47	0.021	0.039	0.086	0.022	0.073	0.137	0.116	0.081	0.157	0.095
Philippines	DHS	2003	0.067	48	0.023	0.048	0.102		0.077	0.078	0.042	0.033		0.094
Tajikistan	MICS	2005	0.068	49	0.001	0.076	0.122	0.063	0.003	0.034	0.105	0.120	0.101	0.084
Viet Nam	DHS	2002	0.075	50	0.045	0.036	0.099		0.052	0.125	0.130	0.062		0.061
Peru	DHS	2004	0.085	51	0.048	0.032	0.083	0.015	0.155	0.192	0.139	0.174	0.191	0.155
Myanmar*	MICS	2000	0.088	52	0.082	0.087		0.089		0.098	0.121	0.028		0.114
Indonesia	DHS	2007	0.095	53	0.040	0.049	0.144		0.043	0.132	0.103	0.046	0.155	0.101
Guatemala*	WHS	2003	0.127	54	0.218		0.050	0.026	0.105	0.066	0.037	0.157	0.230	0.154
Djibouti	MICS	2006	0.139	55	0.135	0.183	0.098	0.106	0.204	0.163	0.067	0.178	0.088	0.226
Morocco	DHS	2004	0.139	56	0.176	0.147	0.130	0.096	0.161	0.159	0.159	0.142	0.080	0.156
Ghana	DHS	2008	0.140	57	0.156	0.107	0.103	0.065	0.237	0.289	0.122	0.110	0.300	0.166

Table 1.2, Continued

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Honduras	DHS	2006	0.160	58	0.135	0.228	0.106	0.070		0.232	0.119	0.198	0.297	0.198
Gabon[† §]	DHS	2000	0.161	59	0.090	0.084	0.184	0.120	0.212	0.326	0.194	0.198	0.269	0.265
Zimbabwe	DHS	2006	0.174	60	0.033	0.110	0.143	0.129	0.369	0.309	0.241	0.254	0.378	0.335
Bolivia	DHS	2003	0.175	61	0.089	0.231	0.194	0.046	0.234	0.355	0.160	0.252	0.281	0.191
Swaziland	DHS	2007	0.183	62	0.065	0.174	0.228	0.074	0.372	0.376	0.239	0.105	0.375	0.201
Namibia	DHS	2007	0.187	63	0.083	0.086	0.143	0.203	0.361	0.367	0.152	0.318	0.376	0.248
Nicaragua	DHS	2001	0.211	64	0.219	0.216	0.147	0.066	0.254	0.360	0.247	0.305	0.395	0.296
Lesotho	DHS	2004	0.220	65	0.133	0.180	0.158	0.058	0.480	0.448	0.255	0.317	0.428	0.448
Sao Tome and Principe[†]	MICS	2000	0.236	66	0.300	0.127	0.242	0.077	0.362	0.489	0.219	0.003	0.501	0.445
Cambodia	DHS	2005	0.263	67	0.237	0.258	0.234	0.145	0.504	0.502	0.297	0.048	0.535	0.230
Lao	MICS	2006	0.267	68	0.245	0.284		0.223	0.334	0.386	0.278	0.084	0.471	0.323
Republic of Congo	DHS	2005	0.270	69	0.061	0.161	0.295	0.209	0.467	0.543	0.350	0.349	0.538	0.442
Pakistan*	DHS	2007	0.275	70	0.193	0.344	0.300		0.089	0.333	0.081	0.363	0.419	0.260
Yemen	MICS	2006	0.283	71	0.125	0.335	0.344		0.312	0.257	0.319	0.208	0.284	0.274
Togo	MICS	2006	0.284	72	0.237	0.246	0.261	0.173	0.497	0.529	0.334	0.181	0.542	0.286
Bangladesh	DHS	2007	0.291	73	0.237	0.090	0.238	0.365	0.388	0.482	0.025	0.541	0.567	0.453
India	DHS	2005	0.296	74	0.176	0.250	0.228	0.389	0.287	0.493	0.121	0.400	0.522	0.381
Cameroon	DHS	2004	0.299	75	0.229	0.265	0.337	0.088	0.452	0.494	0.328	0.423	0.536	0.384
Kenya	DHS	2003	0.302	76	0.123	0.140	0.254	0.221	0.591	0.588	0.481	0.519	0.594	0.451
Haiti	DHS	2006	0.306	77	0.320	0.189	0.274	0.114	0.506	0.530	0.360	0.349	0.570	0.491
Cote d'Ivoire	DHS	2005	0.320	78	0.261	0.359	0.372		0.291	0.471	0.222	0.153		0.254
Gambia	MICS	2006	0.324	79	0.283	0.368	0.382	0.214	0.542	0.321	0.208	0.220	0.603	0.191
Zambia	DHS	2007	0.325	80	0.133	0.202	0.360	0.183	0.616	0.571	0.496	0.516	0.627	0.392
Chad	WHS	2003	0.344	81	0.423		0.024	0.070	0.619	0.584	0.429	0.600	0.613	0.531
Nepal	DHS	2006	0.350	82	0.292	0.156	0.300	0.403	0.434	0.563	0.144	0.601	0.634	0.467
Mauritania*	MICS	2007	0.352	83	0.360	0.315	0.266	0.190	0.530	0.545	0.454	0.449	0.534	0.432
Tanzania	DHS	2008	0.367	84	0.134	0.241	0.356		0.627	0.641	0.474	0.556	0.650	0.406
Nigeria	DHS	2003	0.368	85	0.254	0.305	0.415	0.302	0.418	0.622	0.499	0.323	0.605	0.323
Senegal	DHS	2005	0.384	86	0.385	0.502	0.440	0.125	0.490	0.514	0.317	0.326	0.532	0.381
Malawi	DHS	2004	0.384	87	0.291	0.249	0.336	0.191	0.712	0.718	0.442	0.643	0.721	0.483
DR Congo	DHS	2007	0.393	88	0.144	0.403	0.371	0.170	0.691	0.620	0.555	0.649	0.727	0.573

Table 1.2, Continued

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Comoros†	MICS	2000	0.408	89	0.308	0.479	0.270	0.272	0.543	0.728	0.450	0.283	0.723	0.637
Benin	DHS	2006	0.412	90	0.423	0.408	0.377	0.241	0.651	0.696	0.334	0.399	0.714	0.281
Madagascar	DHS	2004	0.413	91	0.427	0.322	0.266	0.337	0.679	0.609	0.588	0.158	0.705	0.634
Rwanda	DHS	2005	0.443	92	0.375	0.288	0.402	0.117	0.803	0.662	0.641	0.757	0.813	0.744
Angola	MICS	2001	0.452	93	0.433	0.304	0.445	0.233	0.671	0.685	0.513	0.612	0.710	0.697
Mozambique	DHS	2003	0.481	94	0.556	0.403	0.393	0.226	0.778	0.525	0.571	0.691	0.796	0.558
Liberia	DHS	2007	0.484	95	0.303	0.557	0.490	0.236	0.828	0.788	0.338	0.508	0.839	0.650
Sierra Leone	MICS	2005	0.489	96	0.464	0.335	0.494	0.220	0.779	0.775	0.523	0.625	0.815	0.748
Guinea	DHS	2005	0.505	97	0.542	0.532	0.527	0.169	0.741	0.754	0.376	0.521	0.823	0.559
Central African Republic	MICS	2000	0.512	98	0.357	0.627	0.471	0.245	0.820	0.533	0.536		0.861	0.687
Somalia	MICS	2006	0.514	99	0.618	0.435	0.274	0.300	0.758	0.691	0.700	0.644	0.810	0.762
Burundi	MICS	2005	0.530	100	0.529	0.473	0.356		0.835	0.631	0.516	0.812	0.843	0.756
Burkina Faso	MICS	2006	0.536	101	0.551	0.641	0.500	0.354	0.775	0.696	0.430	0.555	0.824	0.228
Mali	DHS	2006	0.564	102	0.608	0.577	0.516	0.362	0.788	0.799	0.437	0.714	0.870	0.354
Ethiopia	DHS	2005	0.582	103	0.615	0.649	0.376	0.209	0.857	0.876	0.543	0.875	0.896	0.887
Niger	DHS	2006	0.642	104	0.664	0.697	0.580	0.246	0.875	0.895	0.646	0.855	0.926	0.805

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.3 Contribution of deprivations
The table shows which dimensions contribute more to MPI

Country	Survey	Year	MPI Value	MPI Rank	Percent Contribution of Deprivations in…		
					Education	Health	Living Standard
Slovakia†	WHS	2003	0.000	1	0.00	0.00	0.00
Slovenia†	WHS	2003	0.000	1	0.00	0.00	0.00
Czech Republic	WHS	2003	0.000	3	0.00	71.43	28.57
Belarus	MICS	2005	0.000	4	16.58	61.75	21.67
Latvia*	WHS	2003	0.001	5	0.00	71.43	28.57
United Arab Emirates	WHS	2003	0.002	6	94.39	0.37	5.25
Kazakhstan	MICS	2006	0.002	7	14.55	56.78	28.67
Occupied Palestinian Territories	MICS	2006	0.003	8	62.14	20.93	16.93
Georgia	MICS	2005	0.003	9	23.16	33.82	43.02
Hungary	WHS	2003	0.003	10	0.00	85.71	14.29
Bosnia and Herzegovina	MICS	2006	0.003	11	29.20	51.78	19.02
Serbia**	MICS	2005	0.003	12	30.51	40.12	29.37
Albania	MICS	2005	0.004	13	33.44	43.86	22.70
Russian Federation*	WHS	2003	0.005	14	84.19	2.46	13.34
Uruguay	WHS	2003	0.006	15	96.05	0.58	3.38
Thailand	MICS	2005	0.006	16	40.72	31.15	28.13
Montenegro	MICS	2005	0.006	17	37.54	47.60	14.86
Croatia	WHS	2003	0.007	18	59.70	20.50	19.80
Ukraine	DHS	2007	0.008	19	5.82	89.86	4.32
Macedonia	MICS	2005	0.008	20	59.86	12.85	27.29
Armenia	DHS	2005	0.008	21	36.23	51.45	12.32
Moldova	DHS	2005	0.008	22	26.36	31.08	42.56
Uzbekistan	MICS	2006	0.008	23	23.18	55.69	21.13
Ecuador	WHS	2003	0.009	24	78.64	3.25	18.11
Jordan	DHS	2007	0.010	25	34.49	59.19	6.32
Tunisia*	WHS	2003	0.010	26	25.05	47.31	27.64
Argentina‡	ENNyS	2005	0.011	27	41.10	13.77	45.13
South Africa*	WHS	2003	0.014	28	57.84	11.72	30.44
Mexico	ENSANUT	2006	0.015	29	38.64	23.88	37.55
Kyrgyzstan	MICS	2006	0.019	30	36.65	36.94	26.41
Trinidad and Tobago	MICS	2006	0.020	31	1.29	94.29	4.42
Sri Lanka*	WHS	2003	0.021	32	6.26	35.40	58.34
Azerbaijan	DHS	2006	0.021	33	23.44	49.75	26.81
Syrian Arab Republic†	MICS	2006	0.021	34	45.43	42.73	11.84
Belize	MICS	2006	0.024	35	22.80	35.82	41.39
Egypt	DHS	2008	0.026	36	48.40	37.16	14.44
Estonia	WHS	2003	0.026	37	91.22	1.18	7.60
Turkey§	DHS	2003	0.039	38	34.83	30.25	34.92
Brazil	WHS	2003	0.039	39	69.13	10.83	20.04
Colombia	DHS	2005	0.041	40	31.74	32.07	36.19
Suriname	MICS	2000	0.044	41	43.16	21.04	35.80
Dominican Republic	MICS	2000	0.048	42	40.60	18.10	41.30
Guyana	DHS	2005	0.055	43	3.24	76.03	20.72
China	WHS	2003	0.056	44	64.85	9.90	25.25
Iraq	MICS	2006	0.059	45	47.53	32.12	20.35
Paraguay	WHS	2003	0.064	46	35.10	19.03	45.87
Mongolia	MICS	2005	0.065	47	15.45	27.91	56.64
Philippines	DHS	2003	0.067	48	17.49	50.39	32.13
Tajikistan	MICS	2005	0.068	49	18.71	45.03	36.27
Viet Nam	DHS	2002	0.075	50	17.97	43.75	38.29
Peru	DHS	2004	0.085	51	15.43	19.06	65.50
Myanmar*	MICS	2000	0.088	52	31.93	33.86	34.21
Indonesia	DHS	2007	0.095	53	15.67	50.52	33.82
Guatemala*	WHS	2003	0.127	54	57.22	9.98	32.79
Djibouti	MICS	2006	0.139	55	38.30	24.57	37.13

Table 1.3, Continued

Country	Survey	Year	MPI Value	MPI Rank	Percent Contribution of Deprivations in…		
					Education	Health	Living Standard
Morocco	DHS	2004	0.139	56	38.70	27.09	34.21
Ghana	DHS	2008	0.140	57	31.37	19.98	48.65
Honduras	DHS	2006	0.160	58	37.95	18.42	43.63
Gabon† §	DHS	2000	0.161	59	18.01	31.45	50.54
Zimbabwe	DHS	2006	0.174	60	13.70	26.06	60.24
Bolivia	DHS	2003	0.175	61	30.43	22.86	46.71
Swaziland	DHS	2007	0.183	62	21.83	27.51	50.67
Namibia	DHS	2007	0.187	63	15.03	30.84	54.12
Nicaragua	DHS	2001	0.211	64	34.37	16.79	48.84
Lesotho	DHS	2004	0.220	65	23.73	16.33	59.94
Sao Tome and Principe†	MICS	2000	0.236	66	30.08	22.49	47.43
Cambodia	DHS	2005	0.263	67	31.34	23.99	44.66
Lao	MICS	2006	0.267	68	33.08	27.87	39.05
Republic of Congo	DHS	2005	0.270	69	13.67	31.07	55.26
Pakistan*	DHS	2007	0.275	70	32.50	36.35	31.14
Yemen	MICS	2006	0.283	71	27.04	40.51	32.45
Togo	MICS	2006	0.284	72	28.31	25.40	46.29
Bangladesh	DHS	2007	0.291	73	18.70	34.50	46.81
India	DHS	2005	0.296	74	23.99	34.68	41.33
Cameroon	DHS	2004	0.299	75	27.55	23.75	48.70
Kenya	DHS	2003	0.302	76	14.54	26.17	59.28
Haiti	DHS	2006	0.306	77	27.79	21.18	51.03
Cote d'Ivoire	DHS	2005	0.320	78	32.29	38.73	28.98
Gambia	MICS	2006	0.324	79	33.53	30.69	35.78
Zambia	DHS	2007	0.325	80	17.21	27.85	54.95
Chad	WHS	2003	0.344	81	40.92	4.57	54.50
Nepal	DHS	2006	0.350	82	21.32	33.53	45.15
Mauritania*	MICS	2007	0.352	83	31.96	21.58	46.46
Tanzania	DHS	2008	0.367	84	17.00	32.29	50.71
Nigeria	DHS	2003	0.368	85	25.34	32.48	42.18
Senegal	DHS	2005	0.384	86	38.46	24.49	37.04
Malawi	DHS	2004	0.384	87	23.41	22.85	53.74
DR Congo	DHS	2007	0.393	88	23.18	22.93	53.89
Comoros†	MICS	2000	0.408	89	32.13	22.10	45.76
Benin	DHS	2006	0.412	90	33.60	24.96	41.44
Madagascar	DHS	2004	0.413	91	30.26	24.33	45.40
Rwanda	DHS	2005	0.443	92	24.95	19.55	55.50
Angola	MICS	2001	0.452	93	27.19	25.01	47.80
Mozambique	DHS	2003	0.481	94	33.26	21.45	45.29
Liberia	DHS	2007	0.484	95	29.60	25.02	45.37
Sierra Leone	MICS	2005	0.489	96	27.22	24.35	48.43
Guinea	DHS	2005	0.505	97	35.48	22.97	41.55
Central African Republic	MICS	2000	0.512	98	32.01	23.26	44.73
Somalia	MICS	2006	0.514	99	34.16	18.63	47.21
Burundi	MICS	2005	0.530	100	31.55	22.38	46.07
Burkina Faso	MICS	2006	0.536	101	37.07	26.55	36.38
Mali	DHS	2006	0.564	102	35.03	25.93	39.04
Ethiopia	DHS	2005	0.582	103	36.19	16.74	47.06
Niger	DHS	2006	0.642	104	35.31	21.44	43.25

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.4 MPI by region

The table sorts countries in each UN region by low to high multidimensional poverty & compares with income poverty. Estimates are the same as in Table 1.1, the only difference is that countries are grouped by region here.

Region/Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Europe and Commonwealth of Independent States (CIS)												
Slovakia†	WHS	2003	0	1	0						0.168	
Slovenia†	WHS	2003	0	1	0		0.020	1	0.020	8		
Czech Republic	WHS	2003	0.000	3	0.000	0.467						
Belarus	MICS	2005	0.000	4	0.000	0.351	0.020	1	0.020	1	0.174	9
Latvia*	WHS	2003	0.001	5	0.003	0.467	0.020	1	0.020	1	0.059	2
Kazakhstan	MICS	2006	0.002	7	0.006	0.369	0.020	1	0.020	1	0.154	5
Georgia	MICS	2005	0.003	9	0.008	0.352	0.134	37	0.304	39	0.545	52
Hungary	WHS	2003	0.003	10	0.008	0.389	0.020	1	0.020	1		
Bosnia and Herzegovina	MICS	2006	0.003	11	0.008	0.372	0.020	1	0.020	1	0.195	12
Serbia**	MICS	2005	0.003	12	0.008	0.400	0.020	1	0.020	1		
Albania	MICS	2005	0.004	13	0.010	0.381	0.020	1	0.078	18	0.185	10
Russian Federation*	WHS	2003	0.005	14	0.013	0.389	0.020	1	0.020	1	0.196	13
Montenegro	MICS	2005	0.006	17	0.015	0.416	0.020	1	0.020	1		
Croatia	WHS	2003	0.007	18	0.016	0.416	0.020	11	0.020	1	0.111	3
Ukraine	DHS	2007	0.008	19	0.022	0.357	0.020	1	0.020	1	0.195	11
Macedonia	MICS	2005	0.008	20	0.019	0.409	0.020	1	0.053	16	0.217	15
Armenia	DHS	2005	0.008	21	0.023	0.365	0.037	27	0.210	33	0.509	47
Moldova	DHS	2005	0.008	22	0.022	0.375	0.024	21	0.115	22	0.485	44
Uzbekistan	MICS	2006	0.008	23	0.023	0.362	0.463	66	0.767	69	0.272	19
Kyrgyzstan	MICS	2006	0.019	30	0.049	0.388	0.034	25	0.275	36	0.431	35
Azerbaijan	DHS	2006	0.021	33	0.054	0.386	0.020	1	0.020	10	0.496	45
Estonia	WHS	2003	0.026	37	0.072	0.365	0.020	1	0.020	1		
Turkey§	DHS	2003	0.039	38	0.085	0.459	0.026	23	0.082	20	0.270	18
Tajikistan	MICS	2005	0.068	49	0.171	0.400	0.215	48	0.508	51	0.535	51

Table 1.4, Continued

Region/Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Latin America and Caribbean												
Uruguay	WHS	2003	0.006	15	0.017	0.347	0.020	1	0.042	15		
Ecuador	WHS	2003	0.009	24	0.022	0.416	0.047	30	0.128	26	0.383	30
Argentina‡	ENNyS	2005	0.011	27	0.030	0.377	0.034	26	0.073	17		
Mexico	ENSANUT	2006	0.015	29	0.040	0.389	0.040	28	0.082	19	0.470	42
Trinidad and Tobago	MICS	2006	0.020	31	0.056	0.351						
Belize	MICS	2006	0.024	35	0.056	0.426						
Brazil	WHS	2003	0.039	39	0.085	0.460	0.052	32	0.127	24	0.215	14
Colombia	DHS	2005	0.041	40	0.092	0.441	0.160	41	0.279	37	0.451	37
Suriname	MICS	2000	0.044	41	0.075	0.588						
Dominican Republic	MICS	2000	0.048	42	0.111	0.433	0.044	29	0.123	23	0.485	43
Guyana	DHS	2005	0.055	43	0.138	0.397						
Paraguay	WHS	2003	0.064	46	0.133	0.485	0.065	33	0.142	29		
Peru	DHS	2004	0.085	51	0.198	0.431	0.077	34	0.185	31	0.516	49
Guatemala*	WHS	2003	0.127	54	0.259	0.491	0.117	36	0.243	35	0.510	48
Honduras	DHS	2006	0.160	58	0.326	0.489	0.182	43	0.297	38	0.507	46
Bolivia	DHS	2003	0.175	61	0.363	0.483	0.117	35	0.219	34	0.377	29
Nicaragua	DHS	2001	0.211	64	0.407	0.519	0.158	39	0.318	40	0.458	38
Haiti	DHS	2006	0.306	77	0.573	0.533	0.549	73	0.721	64		
East Asia and the Pacific												
Thailand	MICS	2005	0.006	16	0.016	0.385	0.020	1	0.115	21		
China	WHS	2003	0.056	44	0.125	0.449	0.159	40	0.363	41	0.028	1
Mongolia	MICS	2005	0.065	47	0.158	0.410	0.022	20	0.136	27	0.361	28
Philippines	DHS	2003	0.067	48	0.126	0.535	0.226	49	0.450	47		
Viet Nam	DHS	2002	0.075	50	0.143	0.525	0.215	47	0.484	50	0.289	22
Myanmar*	MICS	2000	0.088	52	0.142	0.620					0.320	25
Indonesia	DHS	2007	0.095	53	0.208	0.459	0.294	55	0.600	57	0.167	6
Cambodia	DHS	2005	0.263	67	0.539	0.489	0.258	52	0.578	56	0.301	23
Lao	MICS	2006	0.267	68	0.472	0.565	0.440	64	0.768	70	0.335	26

Table 1.4, Continued

Region/Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Arab States												
United Arab Emirates	WHS	2003	0.002	6	0.006	0.353						
Occupied Palestinian Territories	MICS	2006	0.003	8	0.007	0.382						
Jordan	DHS	2007	0.010	25	0.027	0.354	0.020	1	0.035	14	0.142	4
Tunisia*	WHS	2003	0.010	26	0.028	0.371	0.026	24	0.128	25		
Syrian Arab Republic†	MICS	2006	0.021	34	0.055	0.375						
Egypt	DHS	2008	0.026	36	0.064	0.404	0.020	1	0.184	30	0.167	7
Iraq	MICS	2006	0.059	45	0.142	0.413						
Djibouti	MICS	2006	0.139	55	0.293	0.473	0.188	44	0.412	44		
Morocco	DHS	2004	0.139	56	0.285	0.488	0.025	22	0.140	28		
Yemen	MICS	2006	0.283	71	0.525	0.539	0.175	42	0.466	48		
Somalia	MICS	2006	0.514	99	0.812	0.633						
South Asia												
Sri Lanka*	WHS	2003	0.021	32	0.053	0.387	0.140	38	0.397	42	0.227	17
Pakistan*	DHS	2007	0.275	70	0.510	0.540	0.226	50	0.603	58		
Bangladesh	DHS	2007	0.291	73	0.578	0.504	0.496	68	0.813	77	0.400	33
India	DHS	2005	0.296	74	0.554	0.535	0.416	62	0.756	67	0.286	21
Nepal	DHS	2006	0.350	82	0.647	0.540	0.551	74	0.776	73	0.309	24

Table 1.4, Continued

Region/Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Sub-Saharan Africa												
South Africa*	WHS	2003	0.014	28	0.031	0.467	0.262	53	0.429	45	0.220	16
Ghana	DHS	2008	0.140	57	0.301	0.464	0.300	56	0.536	52	0.285	20
Gabon†§	DHS	2000	0.161	59	0.354	0.455	0.048	31	0.196	32		
Zimbabwe	DHS	2006	0.174	60	0.385	0.452						
Swaziland	DHS	2007	0.183	62	0.411	0.444	0.629	79	0.810	75	0.692	59
Namibia	DHS	2007	0.187	63	0.396	0.472						
Lesotho	DHS	2004	0.220	65	0.481	0.458	0.434	63	0.622	60	0.563	54
Sao Tome and Principe†	MICS	2000	0.236	66	0.516	0.458	0.284	54	0.566	53		
Republic of Congo	DHS	2005	0.270	69	0.559	0.484	0.541	71	0.744	65	0.423	34
Togo	MICS	2006	0.284	72	0.543	0.524	0.387	60	0.693	62		
Cameroon	DHS	2004	0.299	75	0.546	0.547	0.328	57	0.577	55	0.399	32
Kenya	DHS	2003	0.302	76	0.604	0.500	0.197	45	0.399	43	0.466	41
Cote d'Ivoire	DHS	2005	0.320	78	0.522	0.614	0.233	51	0.468	49		
Gambia	MICS	2006	0.324	79	0.604	0.536	0.343	59	0.567	54	0.613	56
Zambia	DHS	2007	0.325	80	0.637	0.511	0.643	80	0.815	78	0.680	57
Chad	WHS	2003	0.344	81	0.629	0.547	0.619	77	0.833	80		
Mauritania*	MICS	2007	0.352	83	0.617	0.571	0.212	46	0.441	46	0.463	39
Tanzania	DHS	2008	0.367	84	0.653	0.563	0.885	90	0.966	90	0.357	27
Nigeria	DHS	2003	0.368	85	0.635	0.579	0.644	81	0.839	81		
Senegal	DHS	2005	0.384	86	0.669	0.574	0.335	58	0.603	59		
Malawi	DHS	2004	0.384	87	0.723	0.532	0.739	85	0.904	87	0.524	50
DR Congo	DHS	2007	0.393	88	0.732	0.537	0.592	76	0.795	74	0.713	61
Comoros†	MICS	2000	0.408	89	0.739	0.552	0.461	65	0.650	61		
Benin	DHS	2006	0.412	90	0.720	0.573	0.473	67	0.753	66	0.390	31
Madagascar	DHS	2004	0.413	91	0.705	0.585	0.678	83	0.896	84	0.687	58
Rwanda	DHS	2005	0.443	92	0.814	0.544	0.766	87	0.903	86	0.569	55
Angola	MICS	2001	0.452	93	0.774	0.584	0.543	72	0.702	63		

Table 1.4, Continued

Region/Country	Survey	Year	Multidimensional Poverty				Income Poverty					
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	$1.25 a day (Proportion of poor)		$2 a day (Proportion of poor)		National poverty line (Proportion of poor)	
							Value	Rank	Value	Rank	Value	Rank
Sub-Saharan Africa (cont.)												
Mozambique	DHS	2003	0.481	94	0.798	0.602	0.747	86	0.900	85	0.552	53
Liberia	DHS	2007	0.484	95	0.839	0.577	0.837	89	0.948	89		
Sierra Leone	MICS	2005	0.489	96	0.815	0.600	0.534	70	0.761	68	0.702	60
Guinea	DHS	2005	0.505	97	0.824	0.613	0.701	84	0.872	83		
Central African Republic	MICS	2000	0.512	98	0.864	0.593	0.624	78	0.819	79		
Burundi	MICS	2005	0.530	100	0.845	0.627	0.813	88	0.934	88		
Burkina Faso	MICS	2006	0.536	101	0.826	0.649	0.565	75	0.812	76	0.464	40
Mali	DHS	2006	0.564	102	0.871	0.647	0.514	69	0.771	71		
Ethiopia	DHS	2005	0.582	103	0.900	0.647	0.390	61	0.775	72	0.442	36
Niger	DHS	2006	0.642	104	0.927	0.693	0.659	82	0.856	82		

Columns 7, 9 and 11: World Bank (2009). '*World Development Indicators*'. Washington DC: World Bank. Income poverty figures correspond to the latest estimate available, of the year 2000 or later.

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.4, Continued MPI by region

The table provides the MPI, HPI and HDI and compares the number of MPI poor and the number of Income Poor for countries sorted by the UN Region

Region	Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators[c]			Population in poverty[a]			Population (millions, 2007)[c]
						HPI-1 2009	HDI 2009		MPI poor population (millions)	$1.25 a day poor population (millions)	$2 a day poor population (millions)	
						Value	Value	Category				
Europe and Commonwealth of Independent States (CIS)									12.198	23.631	44.875	394.6
	Slovakia[†]	WHS	2003	0.000	1		0.88	High	0.000	0.108	0.108	5.4
	Slovenia[†]	WHS	2003	0.000	1		0.929	Very High	0.000	0.040	0.040	2.0
	Czech Republic	WHS	2003	0.000	3	1.5	0.903	Very High	0.001	0.206	0.206	10.3
	Belarus	MICS	2005	0.000	4	4.3	0.826	High	0.002	0.194	0.194	9.7
	Latvia*	WHS	2003	0.001	5		0.866	High	0.007	0.046	0.046	2.3
	Kazakhstan	MICS	2006	0.002	7	7.9	0.804	High	0.090	0.477	2.649	15.4
	Georgia	MICS	2005	0.003	9	4.7	0.778	Medium	0.035	0.590	1.338	4.4
	Hungary	WHS	2003	0.003	10	2.2	0.879	High	0.076	0.200	0.200	10.0
	Bosnia and Herzegovina	MICS	2006	0.003	11	2.8	0.812	High	0.031	0.076	0.076	3.8
	Serbia**	MICS	2005	0.003	12	3.1	0.826	High	0.081			9.8
	Albania	MICS	2005	0.004	13	4.0	0.818	High	0.030	0.062	0.242	3.1
	Russian Federation*	WHS	2003	0.005	14	7.4	0.817	High	1.795	2.838	2.838	141.9
	Montenegro	MICS	2005	0.006	17	3.1	0.834	High	0.009			0.6
	Croatia	WHS	2003	0.007	18	1.9	0.871	High	0.070	0.088	0.088	4.4
	Ukraine	DHS	2007	0.008	19	5.8	0.796	Medium	1.014	0.926	0.926	46.3
	Macedonia	MICS	2005	0.008	20	3.2	0.817	High	0.038	0.040	0.064	2.0
	Armenia	DHS	2005	0.008	21	3.7	0.798	Medium	0.070	0.329	1.345	3.1
	Moldova	DHS	2005	0.008	22	5.9	0.72	Medium	0.081	0.300	1.069	3.7
	Uzbekistan	MICS	2006	0.008	23	8.5	0.71	Medium	0.625	12.455	20.632	26.9
	Kyrgyzstan	MICS	2006	0.019	30	7.3	0.71	Medium	0.258	1.155	2.751	5.3
	Azerbaijan	DHS	2006	0.021	33	10.7	0.787	Medium	0.461	0.172	0.172	8.6
	Estonia	WHS	2003	0.026	37		0.883	High	0.094	0.026	0.026	1.3
	Turkey[§]	DHS	2003	0.039	38	8.3	0.806	High	6.183	1.971	6.570	73.0
	Tajikistan	MICS	2005	0.068	49	18.2	0.688	Medium	1.145	1.441	3.404	6.7

Table 1.4 Continued

Region	Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators[c]			Population in poverty[a]			Population (millions, 2007)[c]
						HPI-1 2009	HDI 2009		MPI poor population (millions)	$1.25 a day poor population (millions)	$2 a day poor population (millions)	
						Value	Value	Category				
Latin America and Caribbean									50.919	35.824	72.968	487.5
	Uruguay	WHS	2003	0.006	15	3.0	0.865	High	0.056	0.066	0.139	3.3
	Ecuador	WHS	2003	0.009	24	7.9	0.806	High	0.294	0.625	1.702	13.3
	Argentina‡	ENNyS	2005	0.011	27	3.7	0.866	High	1.181	1.778	4.464	39.5
	Mexico	ENSANUT	2006	0.015	29	5.9	0.854	High	4.278	2.150	5.160	107.5
	Trinidad and Tobago	MICS	2006	0.020	31	6.4	0.837	High	0.073	0.055	0.176	1.3
	Belize	MICS	2006	0.024	35	17.5	0.772	Medium	0.017			0.3
	Brazil	WHS	2003	0.039	39	8.6	0.813	High	16.205	9.885	24.143	190.1
	Colombia	DHS	2005	0.041	40	7.6	0.807	High	4.090	7.104	12.388	44.4
	Suriname	MICS	2000	0.044	41	10.1	0.769	Medium	0.037	0.078	0.136	0.5
	Dominican Republic	MICS	2000	0.048	42	9.1	0.777	Medium	1.083	0.490	1.480	9.8
	Guyana	DHS	2005	0.055	43	10.2	0.729	Medium	0.110	0.062	0.134	0.8
	Paraguay	WHS	2003	0.064	46	10.5	0.761	Medium	0.809	0.397	0.866	6.1
	Peru	DHS	2004	0.085	51	10.2	0.806	High	5.645	2.252	5.273	28.5
	Guatemala*	WHS	2003	0.127	54	19.7	0.704	Medium	3.466	1.568	3.256	13.4
	Honduras	DHS	2006	0.160	58	13.7	0.732	Medium	2.349	1.310	2.138	7.2
	Bolivia	DHS	2003	0.175	61	11.6	0.729	Medium	3.446	1.862	2.879	9.5
	Nicaragua	DHS	2001	0.211	64	17.0	0.699	Medium	2.281	0.885	1.781	5.6
	Haiti	DHS	2006	0.306	77	31.5	0.532	Medium	5.556	5.325	6.994	9.7
East Asia and the Pacific									254.994	277.092	697.570	1867.7
	Thailand	MICS	2005	0.006	16	8.5	0.783	Medium	1.105	1.340	7.705	67.0
	China	WHS	2003	0.056	44	7.7	0.772	Medium	165.787	211.327	482.463	1329.1
	Mongolia	MICS	2005	0.065	47	12.7	0.727	Medium	0.410	0.582	1.274	2.6
	Philippines	DHS	2003	0.067	48	12.4	0.751	Medium	11.159	20.046	39.915	88.7
	Viet Nam	DHS	2002	0.075	50	12.4	0.725	Medium	12.313	18.512	41.672	86.1
	Myanmar	MICS	2000	0.088	52	20.4	0.586	Medium	6.969			49.1
	Indonesia	DHS	2007	0.095	53	17.0	0.734	Medium	46.666	16.853	110.103	224.7
	Cambodia	DHS	2005	0.263	67	27.7	0.593	Medium	7.703	5.749	9.753	14.3
	Lao	MICS	2006	0.267	68	30.7	0.619	Medium	2.882	2.684	4.685	6.1

Table 1.4, Continued

Region	Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators			Population in poverty			Population (millions, 2007)
						HPI-1 2009	HDI 2009		MPI poor population (millions)	$1.25 a day poor population (millions)	$2 a day poor population (millions)	
						Value	Value	Category				
Arab States									38.869	6.816	31.327	217.5
	United Arab Emirates	WHS	2003	0.002	6	7.7	0.903	Very High	0.025			4.4
	Occupied Palestinian Territories	MICS	2006	0.003	8	6.0	0.737	Medium	0.028			4.0
	Jordan	DHS	2007	0.010	25	6.6	0.77	Medium	0.159	0.118	0.207	5.9
	Tunisia*	WHS	2003	0.010	26	15.6	0.769	Medium	0.285	0.263	1.293	10.1
	Syrian Arab Republic†	MICS	2006	0.021	34	12.6	0.742	Medium	1.134			20.5
	Egypt	DHS	2008	0.026	36	23.4	0.703	Medium	5.138	1.602	14.738	80.1
	Iraq	MICS	2006	0.059	45	19.4			4.203			29.5
	Djibouti	MICS	2006	0.139	55	25.6	0.52	Medium	0.235	0.150	0.330	0.8
	Morocco	DHS	2004	0.139	56	31.1	0.654	Medium	8.892	0.780	4.368	31.2
	Yemen	MICS	2006	0.283	71	35.7	0.575	Medium	11.710	3.903	10.392	22.3
	Somalia	MICS	2006	0.514	99				7.061			8.7
South Asia									843.783	620.307	1143.105	1543.9
	Sri Lanka*	WHS	2003	0.021	32	16.8	0.759	Medium	1.061	2.786	7.900	19.9
	Pakistan*	DHS	2007	0.275	70	33.4	0.572	Medium	88.276	39.143	104.440	173.2
	Bangladesh	DHS	2007	0.291	73	36.1	0.543	Medium	91.166	78.269	128.291	157.8
	India	DHS	2005	0.296	74	28.0	0.612	Medium	644.958	484.515	880.513	1164.7
	Nepal	DHS	2006	0.350	82	32.1	0.553	Medium	18.322	15.593	21.961	28.3

Table 1.4, Continued

Region	Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators[c]			Population in poverty[a]			Population (millions, 2007)[c]
						HPI-1 2009	HDI 2009		MPI poor population (millions)	$1.25 a day poor population (millions)	$2 a day poor population (millions)	
						Value	Value	Category				
Sub-Saharan Africa									458.068	370.434	519.533	710.4
	South Africa*	WHS	2003	0.014	28	25.4	0.683	Medium	1.510	12.890	21.107	49.2
	Ghana	DHS	2008	0.140	57	28.1	0.526	Medium	6.894	6.870	12.274	22.9
	Gabon[† §]	DHS	2000	0.161	59	17.5	0.755	Medium	0.495	0.067	0.274	1.4
	Zimbabwe	DHS	2006	0.174	60	34.0			4.769			12.4
	Swaziland	DHS	2007	0.183	62	35.1	0.572	Medium	0.494	0.755	0.972	1.2
	Namibia	DHS	2007	0.187	63	17.1	0.686	Medium	0.832	1.031	1.306	2.1
	Lesotho	DHS	2004	0.220	65	34.3	0.514	Medium	0.961	0.868	1.244	2.0
	Sao Tome and Principe[†]	MICS	2000	0.236	66	12.6	0.651	Medium	0.103			0.2
	Republic of Congo	DHS	2005	0.270	69	24.3	0.601	Medium	2.012	1.948	2.678	3.6
	Togo	MICS	2006	0.284	72	36.6	0.499	Low	3.418	2.438	4.366	6.3
	Cameroon	DHS	2004	0.299	75	30.8	0.523	Medium	10.211	6.134	10.790	18.7
	Kenya	DHS	2003	0.302	76	29.5	0.541	Medium	22.835	7.447	15.082	37.8
	Cote d'Ivoire	DHS	2005	0.320	78	37.4	0.484	Low	10.484	4.683	9.407	20.1
	Gambia	MICS	2006	0.324	79	40.9	0.456	Low	0.967	0.549	0.907	1.6
	Zambia	DHS	2007	0.325	80	35.5	0.481	Low	7.830	7.909	10.025	12.3
	Chad	WHS	2003	0.344	81	53.1	0.392	Low	6.667	6.561	8.830	10.6
	Mauritania*	MICS	2007	0.352	83	36.2	0.52	Medium	1.912	0.657	1.367	3.1
	Tanzania	DHS	2008	0.367	84	30.0	0.53	Medium	26.952	36.551	39.896	41.3
	Nigeria	DHS	2003	0.368	85	36.2	0.511	Medium	93.832	95.119	123.920	147.7
	Senegal	DHS	2005	0.384	86	41.6	0.464	Low	7.964	3.987	7.176	11.9
	Malawi	DHS	2004	0.384	87	28.2	0.493	Low	10.406	10.642	13.018	14.4
	DR Congo	DHS	2007	0.393	88	38.0	0.389	Low	45.740	37.000	49.688	62.5
	Comoros[†]	MICS	2000	0.408	89	20.4	0.576	Medium	0.444	0.277	0.390	0.6
	Benin	DHS	2006	0.412	90	43.2	0.492	Low	6.044	3.973	6.325	8.4
	Madagascar	DHS	2004	0.413	91	36.1	0.543	Medium	13.114	12.611	16.666	18.6
	Rwanda	DHS	2005	0.443	92	32.9	0.46	Low	7.730	7.277	8.579	9.5
	Angola	MICS	2001	0.452	93	37.2	0.564	Medium	13.614	9.557	12.355	17.6

Table 1.4, Continued

Region	Country	Survey	Year	MPI Value	MPI Rank	Human Development Indicators[c]			Population in poverty[a]			Population (millions, 2007)[c]
						HPI-1 2009	HDI 2009		MPI poor population (millions)	$1.25 a day poor population (millions)	$2 a day poor population (millions)	
						Value	Value	Category				
Sub-Saharan Africa (cont.)												
	Mozambique	DHS	2003	0.481	94	46.8	0.402	Low	17.475	16.359	19.710	21.9
	Liberia	DHS	2007	0.484	95	35.2	0.442	Low	3.022	3.013	3.413	3.6
	Sierra Leone	MICS	2005	0.489	96	47.7	0.365	Low	4.399	2.884	4.109	5.4
	Guinea	DHS	2005	0.505	97	50.5	0.435	Low	7.906	6.730	8.371	9.6
	Central African Republic	MICS	2000	0.512	98	42.4	0.369	Low	3.716	2.683	3.522	4.3
	Burundi	MICS	2005	0.530	100	36.4	0.394	Low	6.591	6.341	7.285	7.8
	Burkina Faso	MICS	2006	0.536	101	51.8	0.389	Low	12.142	8.306	11.936	14.7
	Mali	DHS	2006	0.564	102	54.5	0.371	Low	10.806	6.374	9.560	12.4
	Ethiopia	DHS	2005	0.582	103	50.9	0.414	Low	70.709	30.654	60.915	78.6
	Niger	DHS	2006	0.642	104	55.8	0.34	Low	13.070	9.292	12.070	14.1

Source for columns with (a): Alkire & Santos (2010) calculations.

Source for columns with (b): World Bank (2009). '*World Development Indicators*'. Washington DC: World Bank.

Source for columns with (c) : UNDP (2009). *Human Development Report 2009: Overcoming barriers: Human mobility and development.* New York: United Nations.

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.5 Censored headcounts by region

The table shows the proportion of people who are MPI poor and experience deprivations in each of 10 indicators. Estimates are the same as in Table 1.2. The only difference is that countries are grouped by region here. We clarify that these are 'MPI' poor people because people who are deprived in less than 30% of weighted indicators are not considered in these headcounts, and also because data on single deprivations may be inaccurate. For their information on the raw percent of people deprived by dimension see Table 1.9.

Region/Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Europe and Commonwealth of Independent States (CIS)														
Slovakia†	WHS	2003	0.000	1	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Slovenia†	WHS	2003	0.000	1	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Czech Republic	WHS	2003	0.000	3	0.000			0.000	0.000	0.000	0.000	0.000	0.000	0.000
Belarus	MICS	2005	0.000	4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Latvia*	WHS	2003	0.001	5	0.000			0.003	0.000	0.003	0.000		0.001	0.002
Kazakhstan	MICS	2006	0.002	7	0.000	0.002	0.005	0.002	0.000	0.001	0.003	0.000	0.005	0.003
Georgia	MICS	2005	0.003	9	0.001	0.003	0.004	0.001	0.001	0.003	0.004	0.001	0.008	0.005
Hungary	WHS	2003	0.003	10	0.000			0.008	0.000	0.000	0.000	0.006	0.000	0.002
Bosnia and Herzegovina	MICS	2006	0.003	11	0.004	0.002		0.005	0.001	0.001	0.001	0.000	0.005	0.002
Serbia**	MICS	2005	0.003	12	0.004	0.002		0.004	0.001	0.002	0.001	0.004	0.007	0.003
Albania	MICS	2005	0.004	13	0.001	0.006	0.007	0.003	0.000	0.002	0.002	0.001	0.008	0.002
Russian Federation*	WHS	2003	0.005	14	0.012		0.000	0.000	0.000	0.004	0.001	0.000	0.001	0.005
Montenegro	MICS	2005	0.006	17	0.007	0.008		0.009	0.000	0.004	0.002	0.000	0.009	0.001
Croatia	WHS	2003	0.007	18	0.012			0.004	0.000	0.003	0.001	0.001	0.012	0.007
Ukraine	DHS	2007	0.008	19	0.001	0.002	0.021		0.000	0.001	0.001	0.000	0.003	0.001
Macedonia	MICS	2005	0.008	20	0.014	0.015	0.005	0.001	0.002	0.008	0.004	0.006	0.015	0.005
Armenia	DHS	2005	0.008	21	0.000	0.018	0.016	0.009	0.000	0.005	0.002	0.001	0.005	0.004
Moldova	DHS	2005	0.008	22	0.006	0.007	0.009	0.006	0.003	0.015	0.006	0.010	0.017	0.013
Uzbekistan	MICS	2006	0.008	23	0.000	0.012	0.019	0.009	0.001	0.001	0.006	0.007	0.009	0.009
Kyrgyzstan	MICS	2006	0.019	30	0.014	0.028		0.021	0.000	0.010	0.016	0.012	0.028	0.024
Azerbaijan	DHS	2006	0.021	33	0.001	0.028	0.033	0.028	0.001	0.024	0.031	0.008	0.014	0.023
Estonia	WHS	2003	0.026	37	0.072		0.000	0.002	0.000	0.006	0.003	0.000	0.024	0.004
Turkey§	DHS	2003	0.039	38	0.019	0.062	0.056	0.015	0.085	0.048	0.030	0.020		0.020
Tajikistan	MICS	2005	0.068	49	0.001	0.076	0.122	0.063	0.003	0.034	0.105	0.120	0.101	0.084

Table 1.5, Continued

Region/Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Latin America and Caribbean														
Uruguay	WHS	2003	0.006	15	0.017		0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000
Ecuador	WHS	2003	0.009	24	0.022		0.001	0.001	0.002	0.006	0.007	0.002	0.003	0.011
Argentina‡	ENNyS	2005	0.011	27	0.028	0.000	0.003	0.007	0.007	0.022	0.002	0.016	0.022	0.022
Mexico	ENSANUT	2006	0.015	29	0.021	0.015	0.015	0.007	0.006	0.021	0.006	0.022	0.028	0.022
Trinidad and Tobago	MICS	2006	0.020	31	0.000	0.001	0.056		0.003	0.005	0.003	0.002	0.000	0.002
Belize	MICS	2006	0.024	35	0.009	0.023	0.031	0.020	0.039	0.025	0.019	0.025	0.041	0.027
Brazil	WHS	2003	0.039	39	0.081			0.013	0.000	0.039	0.020	0.016	0.066	0.001
Colombia	DHS	2005	0.041	40	0.038	0.040	0.039	0.040	0.022	0.047	0.034	0.040	0.064	0.058
Suriname	MICS	2000	0.044	41	0.062	0.052	0.033	0.022		0.060	0.048	0.033		
Dominican Republic	MICS	2000	0.048	42	0.080	0.036	0.042	0.010	0.040	0.100	0.036	0.034	0.071	0.074
Guyana	DHS	2005	0.055	43	0.006	0.005	0.125		0.052	0.050	0.028	0.012	0.029	0.033
Paraguay	WHS	2003	0.064	46	0.068		0.046	0.027	0.045	0.112	0.088	0.075	0.124	0.087
Peru	DHS	2004	0.085	51	0.048	0.032	0.083	0.015	0.155	0.192	0.139	0.174	0.191	0.155
Guatemala*	WHS	2003	0.127	54	0.218		0.050	0.026	0.105	0.066	0.037	0.157	0.230	0.154
Honduras	DHS	2006	0.160	58	0.135	0.228	0.106	0.070		0.232	0.119	0.198	0.297	0.198
Bolivia	DHS	2003	0.175	61	0.089	0.231	0.194	0.046	0.234	0.355	0.160	0.252	0.281	0.191
Nicaragua	DHS	2001	0.211	64	0.219	0.216	0.147	0.066	0.254	0.360	0.247	0.305	0.395	0.296
Haiti	DHS	2006	0.306	77	0.320	0.189	0.274	0.114	0.506	0.530	0.360	0.349	0.570	0.491
East Asia and the Pacific														
Thailand	MICS	2005	0.006	16	0.011	0.004	0.007	0.005	0.001	0.005	0.005	0.003	0.012	0.005
China	WHS	2003	0.056	44	0.109		0.002	0.032	0.000	0.077	0.030	0.032	0.091	0.024
Mongolia	MICS	2005	0.065	47	0.021	0.039	0.086	0.022	0.073	0.137	0.116	0.081	0.157	0.095
Philippines	DHS	2003	0.067	48	0.023	0.048	0.102		0.077	0.078	0.042	0.033		0.094
Viet Nam	DHS	2002	0.075	50	0.045	0.036	0.099		0.052	0.125	0.130	0.062		0.061
Myanmar*	MICS	2000	0.088	52	0.082	0.087		0.089		0.098	0.121	0.028		0.114
Indonesia	DHS	2007	0.095	53	0.040	0.049	0.144		0.043	0.132	0.103	0.046	0.155	0.101
Cambodia	DHS	2005	0.263	67	0.237	0.258	0.234	0.145	0.504	0.502	0.297	0.048	0.535	0.230
Lao	MICS	2006	0.267	68	0.245	0.284		0.223	0.334	0.386	0.278	0.084	0.471	0.323

Table 1.5, Continued

Region/Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Arab States														
United Arab Emirates	WHS	2003	0.002	6	0.006		0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
Occupied Palestinian Territories	MICS	2006	0.0027	8	0.004	0.006	0.000	0.003	0.000	0.000	0.000	0.005	0.000	0.002
Jordan	DHS	2007	0.0096	25	0.002	0.017	0.016	0.018	0.002	0.003	0.004	0.000	0.001	0.002
Tunisia*	WHS	2003	0.0105	26	0.008		0.018	0.012	0.002	0.014	0.012	0.004	0.005	0.015
Syrian Arab Republic†	MICS	2006	0.0207	34	0.013	0.044	0.032	0.021	0.002	0.010	0.017	0.010	0.001	0.005
Egypt	DHS	2008	0.0259	36	0.027	0.049	0.040	0.018	0.002	0.011	0.004	0.024		0.015
Iraq	MICS	2006	0.0588	45	0.049	0.119	0.076	0.038	0.010	0.051	0.064	0.040	0.027	0.024
Djibouti	MICS	2006	0.1385	55	0.135	0.183	0.098	0.106	0.204	0.163	0.067	0.178	0.088	0.226
Morocco	DHS	2004	0.1392	56	0.176	0.147	0.130	0.096	0.161	0.159	0.159	0.142	0.080	0.156
Yemen	MICS	2006	0.2832	71	0.125	0.335	0.344		0.312	0.257	0.319	0.208	0.284	0.274
Somalia	MICS	2006	0.5137	99	0.618	0.435	0.274	0.300	0.758	0.691	0.700	0.644	0.810	0.762
South Asia														
Sri Lanka*	WHS	2003	0.0206	32	0.004		0.003	0.041	0.035	0.026	0.030	0.025	0.053	0.048
Pakistan*	DHS	2007	0.2754	70	0.193	0.344	0.300		0.089	0.333	0.081	0.363	0.419	0.260
Bangladesh	DHS	2007	0.2914	73	0.237	0.090	0.238	0.365	0.388	0.482	0.025	0.541	0.567	0.453
India	DHS	2005	0.2962	74	0.176	0.250	0.228	0.389	0.287	0.493	0.121	0.400	0.522	0.381
Nepal	DHS	2006	0.3499	82	0.292	0.156	0.300	0.403	0.434	0.563	0.144	0.601	0.634	0.467

Table 1.5, Continued

Region/Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Sub-Saharan Africa														
South Africa*	WHS	2003	0.0143	28	0.025		0.001	0.009		0.020	0.008	0.014	0.018	0.006
Ghana	DHS	2008	0.1397	57	0.156	0.107	0.103	0.065	0.237	0.289	0.122	0.110	0.300	0.166
Gabon† §	DHS	2000	0.1609	59	0.090	0.084	0.184	0.120	0.212	0.326	0.194	0.198	0.269	0.265
Zimbabwe	DHS	2006	0.1739	60	0.033	0.110	0.143	0.129	0.369	0.309	0.241	0.254	0.378	0.335
Swaziland	DHS	2007	0.1828	62	0.065	0.174	0.228	0.074	0.372	0.376	0.239	0.105	0.375	0.201
Namibia	DHS	2007	0.187	63	0.083	0.086	0.143	0.203	0.361	0.367	0.152	0.318	0.376	0.248
Lesotho	DHS	2004	0.2201	65	0.133	0.180	0.158	0.058	0.480	0.448	0.255	0.317	0.428	0.448
Sao Tome and Principe†	MICS	2000	0.2364	66	0.300	0.127	0.242	0.077	0.362	0.489	0.219	0.003	0.501	0.445
Republic of Congo	DHS	2005	0.2703	69	0.061	0.161	0.295	0.209	0.467	0.543	0.350	0.349	0.538	0.442
Togo	MICS	2006	0.2844	72	0.237	0.246	0.261	0.173	0.497	0.529	0.334	0.181	0.542	0.286
Cameroon	DHS	2004	0.2985	75	0.229	0.265	0.337	0.088	0.452	0.494	0.328	0.423	0.536	0.384
Kenya	DHS	2003	0.3021	76	0.123	0.140	0.254	0.221	0.591	0.588	0.481	0.519	0.594	0.451
Cote d'Ivoire	DHS	2005	0.3202	78	0.261	0.359	0.372		0.291	0.471	0.222	0.153		0.254
Gambia	MICS	2006	0.3236	79	0.283	0.368	0.382	0.214	0.542	0.321	0.208	0.220	0.603	0.191
Zambia	DHS	2007	0.3253	80	0.133	0.202	0.360	0.183	0.616	0.571	0.496	0.516	0.627	0.392
Chad	WHS	2003	0.3442	81	0.423		0.024	0.070	0.619	0.584	0.429	0.600	0.613	0.531
Mauritania*	MICS	2007	0.352	83	0.360	0.315	0.266	0.190	0.530	0.545	0.454	0.449	0.534	0.432
Tanzania	DHS	2008	0.3673	84	0.134	0.241	0.356		0.627	0.641	0.474	0.556	0.650	0.406
Nigeria	DHS	2003	0.3676	85	0.254	0.305	0.415	0.302	0.418	0.622	0.499	0.323	0.605	0.323
Senegal	DHS	2005	0.3842	86	0.385	0.502	0.440	0.125	0.490	0.514	0.317	0.326	0.532	0.381
Malawi	DHS	2004	0.3844	87	0.291	0.249	0.336	0.191	0.712	0.718	0.442	0.643	0.721	0.483
DR Congo	DHS	2007	0.3932	88	0.144	0.403	0.371	0.170	0.691	0.620	0.555	0.649	0.727	0.573
Comoros†	MICS	2000	0.4085	89	0.308	0.479	0.270	0.272	0.543	0.728	0.450	0.283	0.723	0.637
Benin	DHS	2006	0.4123	90	0.423	0.408	0.377	0.241	0.651	0.696	0.334	0.399	0.714	0.281
Madagascar	DHS	2004	0.4128	91	0.427	0.322	0.266	0.337	0.679	0.609	0.588	0.158	0.705	0.634
Rwanda	DHS	2005	0.4426	92	0.375	0.288	0.402	0.117	0.803	0.662	0.641	0.757	0.813	0.744
Angola	MICS	2001	0.452	93	0.433	0.304	0.445	0.233	0.671	0.685	0.513	0.612	0.710	0.697

Table 1.5, Continued

Region/Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
					Education		Health		Living Standard					
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Mozambique	DHS	2003	0.4807	94	0.556	0.403	0.393	0.226	0.778	0.525	0.571	0.691	0.796	0.558
Liberia	DHS	2007	0.4839	95	0.303	0.557	0.490	0.236	0.828	0.788	0.338	0.508	0.839	0.650
Sierra Leone	MICS	2005	0.4891	96	0.464	0.335	0.494	0.220	0.779	0.775	0.523	0.625	0.815	0.748
Guinea	DHS	2005	0.5047	97	0.542	0.532	0.527	0.169	0.741	0.754	0.376	0.521	0.823	0.559
Central African Republic	MICS	2000	0.5123	98	0.357	0.627	0.471	0.245	0.820	0.533	0.536		0.861	0.687
Burundi	MICS	2005	0.5298	100	0.529	0.473	0.356		0.835	0.631	0.516	0.812	0.843	0.756
Burkina Faso	MICS	2006	0.5358	101	0.551	0.641	0.500	0.354	0.775	0.696	0.430	0.555	0.824	0.228
Mali	DHS	2006	0.5639	102	0.608	0.577	0.516	0.362	0.788	0.799	0.437	0.714	0.870	0.354
Ethiopia	DHS	2005	0.5824	103	0.615	0.649	0.376	0.209	0.857	0.876	0.543	0.875	0.896	0.887
Niger	DHS	2006	0.6425	104	0.664	0.697	0.580	0.246	0.875	0.895	0.646	0.855	0.926	0.805

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.6 Contribution of deprivations by region

The table shows which dimensions contribute more to MPI. Estimates are the same as in Table 1.3, the only difference is that countries are grouped by region here

Region/Country	Survey	Year	MPI Value	MPI Rank	Percent Contribution of Deprivations in…		
					Education	Health	Living Standard
Europe and Commonwealth of Independent States (CIS)							
Slovakia†	WHS	2003	0.000	1	0.00	0.00	0.00
Slovenia†	WHS	2003	0.000	1	0.00	0.00	0.00
Czech Republic	WHS	2003	0.000	3	0.00	71.43	28.57
Belarus	MICS	2005	0.000	4	16.58	61.75	21.67
Latvia*	WHS	2003	0.001	5	0.00	71.43	28.57
Kazakhstan	MICS	2006	0.002	7	14.55	56.78	28.67
Georgia	MICS	2005	0.003	9	23.16	33.82	43.02
Hungary	WHS	2003	0.003	10	0.00	85.71	14.29
Bosnia and Herzegovina	MICS	2006	0.003	11	29.20	51.78	19.02
Serbia**	MICS	2005	0.003	12	30.51	40.12	29.37
Albania	MICS	2005	0.004	13	33.44	43.86	22.70
Russian Federation*	WHS	2003	0.005	14	84.19	2.46	13.34
Montenegro	MICS	2005	0.006	17	37.54	47.60	14.86
Croatia	WHS	2003	0.007	18	59.70	20.50	19.80
Ukraine	DHS	2007	0.008	19	5.82	89.86	4.32
Macedonia	MICS	2005	0.008	20	59.86	12.85	27.29
Armenia	DHS	2005	0.008	21	36.23	51.45	12.32
Moldova	DHS	2005	0.008	22	26.36	31.08	42.56
Uzbekistan	MICS	2006	0.008	23	23.18	55.69	21.13
Kyrgyzstan	MICS	2006	0.019	30	36.65	36.94	26.41
Azerbaijan	DHS	2006	0.021	33	23.44	49.75	26.81
Estonia	WHS	2003	0.026	37	91.22	1.18	7.60
Turkey§	DHS	2003	0.039	38	34.83	30.25	34.92
Tajikistan	MICS	2005	0.068	49	18.71	45.03	36.27
Latin America and Caribbean							
Uruguay	WHS	2003	0.006	15	96.05	0.58	3.38
Ecuador	WHS	2003	0.009	24	78.64	3.25	18.11
Argentina‡	ENNyS	2005	0.011	27	41.10	13.77	45.13
Mexico	ENSANUT	2006	0.015	29	38.64	23.88	37.55
Trinidad and Tobago	MICS	2006	0.020	31	1.29	94.29	4.42
Belize	MICS	2006	0.024	35	22.80	35.82	41.39
Brazil	WHS	2003	0.039	39	69.13	10.83	20.04
Colombia	DHS	2005	0.041	40	31.74	32.07	36.19
Suriname	MICS	2000	0.044	41	43.16	21.04	35.80
Dominican Republic	MICS	2000	0.048	42	40.60	18.10	41.30
Guyana	DHS	2005	0.055	43	3.24	76.03	20.72
Paraguay	WHS	2003	0.064	46	35.10	19.03	45.87
Peru	DHS	2004	0.085	51	15.43	19.06	65.50
Guatemala*	WHS	2003	0.127	54	57.22	9.98	32.79
Honduras	DHS	2006	0.160	58	37.95	18.42	43.63
Bolivia	DHS	2003	0.175	61	30.43	22.86	46.71
Nicaragua	DHS	2001	0.211	64	34.37	16.79	48.84
Haiti	DHS	2006	0.306	77	27.79	21.18	51.03
East Asia and the Pacific							
Thailand	MICS	2005	0.006	16	40.72	31.15	28.13
China	WHS	2003	0.056	44	64.85	9.90	25.25
Mongolia	MICS	2005	0.065	47	15.45	27.91	56.64
Philippines	DHS	2003	0.067	48	17.49	50.39	32.13
Viet Nam	DHS	2002	0.075	50	17.97	43.75	38.29
Myanmar*	MICS	2000	0.088	52	31.93	33.86	34.21
Indonesia	DHS	2007	0.095	53	15.67	50.52	33.82
Cambodia	DHS	2005	0.263	67	31.34	23.99	44.66
Lao	MICS	2006	0.267	68	33.08	27.87	39.05

Table 1.6, Continued

Region/Country	Survey	Year	MPI	MPI Rank	Percent Contribution of Deprivations in…		
					Education	Health	Living Standard
Arab States							
United Arab Emirates	WHS	2003	0.002	6	94.39	0.37	5.25
Occupied Palestinian Territories	MICS	2006	0.003	8	62.14	20.93	16.93
Jordan	DHS	2007	0.010	25	34.49	59.19	6.32
Tunisia*	WHS	2003	0.010	26	25.05	47.31	27.64
Syrian Arab Republic†	MICS	2006	0.021	34	45.43	42.73	11.84
Egypt	DHS	2008	0.026	36	48.40	37.16	14.44
Iraq	MICS	2006	0.059	45	47.53	32.12	20.35
Djibouti	MICS	2006	0.139	55	38.30	24.57	37.13
Morocco	DHS	2004	0.139	56	38.70	27.09	34.21
Yemen	MICS	2006	0.283	71	27.04	40.51	32.45
Somalia	MICS	2006	0.514	99	34.16	18.63	47.21
South Asia							
Sri Lanka*	WHS	2003	0.021	32	6.26	35.40	58.34
Pakistan*	DHS	2007	0.275	70	32.50	36.35	31.14
Bangladesh	DHS	2007	0.291	73	18.70	34.50	46.81
India	DHS	2005	0.296	74	23.99	34.68	41.33
Nepal	DHS	2006	0.350	82	21.32	33.53	45.15
Sub-Saharan Africa							
South Africa*	WHS	2003	0.014	28	57.84	11.72	30.44
Ghana	DHS	2008	0.140	57	31.37	19.98	48.65
Gabon†§	DHS	2000	0.161	59	18.01	31.45	50.54
Zimbabwe	DHS	2006	0.174	60	13.70	26.06	60.24
Swaziland	DHS	2007	0.183	62	21.83	27.51	50.67
Namibia	DHS	2007	0.187	63	15.03	30.84	54.12
Lesotho	DHS	2004	0.220	65	23.73	16.33	59.94
Sao Tome and Principe†	MICS	2000	0.236	66	30.08	22.49	47.43
Republic of Congo	DHS	2005	0.270	69	13.67	31.07	55.26
Togo	MICS	2006	0.284	72	28.31	25.40	46.29
Cameroon	DHS	2004	0.299	75	27.55	23.75	48.70
Kenya	DHS	2003	0.302	76	14.54	26.17	59.28
Cote d'Ivoire	DHS	2005	0.320	78	32.29	38.73	28.98
Gambia	MICS	2006	0.324	79	33.53	30.69	35.78
Zambia	DHS	2007	0.325	80	17.21	27.85	54.95
Chad	WHS	2003	0.344	81	40.92	4.57	54.50
Mauritania*	MICS	2007	0.352	83	31.96	21.58	46.46
Tanzania	DHS	2008	0.367	84	17.00	32.29	50.71
Nigeria	DHS	2003	0.368	85	25.34	32.48	42.18
Senegal	DHS	2005	0.384	86	38.46	24.49	37.04
Malawi	DHS	2004	0.384	87	23.41	22.85	53.74
DR Congo	DHS	2007	0.393	88	23.18	22.93	53.89
Comoros†	MICS	2000	0.408	89	32.13	22.10	45.76
Benin	DHS	2006	0.412	90	33.60	24.96	41.44
Madagascar	DHS	2004	0.413	91	30.26	24.33	45.40
Rwanda	DHS	2005	0.443	92	24.95	19.55	55.50
Angola	MICS	2001	0.452	93	27.19	25.01	47.80

Table 1.6 Continued

Region/Country	Survey	Year	MPI	MPI Rank	Percent Contribution of Deprivations in…		
					Education	Health	Living Standard
Mozambique	DHS	2003	0.481	94	33.26	21.45	45.29
Liberia	DHS	2007	0.484	95	29.60	25.02	45.37
Sierra Leone	MICS	2005	0.489	96	27.22	24.35	48.43
Guinea	DHS	2005	0.505	97	35.48	22.97	41.55
Central African Republic	MICS	2000	0.512	98	32.01	23.26	44.73
Burundi	MICS	2005	0.530	100	31.55	22.38	46.07
Burkina Faso	MICS	2006	0.536	101	37.07	26.55	36.38
Mali	DHS	2006	0.564	102	35.03	25.93	39.04
Ethiopia	DHS	2005	0.582	103	36.19	16.74	47.06
Niger	DHS	2006	0.642	104	35.31	21.44	43.25

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.7 MPI Ranks with k=2 as the cross-dimensional cutoff

The table ranks 104 countries from low poverty to high poverty, when we require households to be deprived in at least 20 % of the weighted indicators (two to four indicators) to be considered poor (rather than requiring 30%). It also gives income poverty figures

Country	Survey	Year	Multidimensional Poverty			
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)
Slovakia†	WHS	2003	0.000	1	0.000	0.222
Slovenia†	WHS	2003	0.001	2	0.004	0.222
Belarus	MICS	2005	0.002	3	0.008	0.231
Uruguay	WHS	2003	0.006	4	0.018	0.342
Latvia*	WHS	2003	0.006	5	0.016	0.379
United Arab Emirates	WHS	2003	0.007	6	0.026	0.252
Russian Federation*	WHS	2003	0.007	7	0.020	0.325
Czech Republic	WHS	2003	0.010	8	0.031	0.334
Ukraine	DHS	2007	0.011	9	0.033	0.314
Montenegro	MICS	2005	0.011	10	0.034	0.317
Serbia**	MICS	2005	0.012	11	0.045	0.266
Jordan	DHS	2007	0.013	12	0.043	0.307
Kazakhstan	MICS	2006	0.014	13	0.056	0.249
Ecuador	WHS	2003	0.014	14	0.043	0.328
Georgia	MICS	2005	0.016	15	0.061	0.256
Hungary	WHS	2003	0.016	16	0.046	0.343
Croatia	WHS	2003	0.016	17	0.044	0.363
Bosnia and Herzegovina	MICS	2006	0.019	18	0.078	0.244
Trinidad and Tobago	MICS	2006	0.021	19	0.060	0.343
Armenia	DHS	2005	0.021	20	0.078	0.270
Tunisia*	WHS	2003	0.022	21	0.077	0.288
Macedonia	MICS	2005	0.024	22	0.087	0.274
Argentina‡	ENNyS	2005	0.025	23	0.087	0.287
Albania	MICS	2005	0.026	24	0.104	0.246
Moldova	DHS	2005	0.026	25	0.094	0.273
South Africa*	WHS	2003	0.027	26	0.070	0.384
Uzbekistan	MICS	2006	0.028	27	0.104	0.265
Thailand	MICS	2005	0.029	28	0.115	0.254
Estonia	WHS	2003	0.029	29	0.086	0.343
Mexico	ENSANUT	2006	0.029	30	0.098	0.301
Occupied Palestinian Territories	MICS	2006	0.032	31	0.134	0.239
Syrian Arab Republic†	MICS	2006	0.037	32	0.126	0.294
Kyrgyzstan	MICS	2006	0.041	33	0.141	0.290
Belize	MICS	2006	0.042	34	0.132	0.321
Egypt	DHS	2008	0.043	35	0.133	0.324
Azerbaijan	DHS	2006	0.050	36	0.177	0.283
Sri Lanka*	WHS	2003	0.056	37	0.197	0.285
Colombia	DHS	2005	0.061	38	0.175	0.346
Suriname	MICS	2000	0.063	39	0.126	0.497
Guyana	DHS	2005	0.070	40	0.203	0.347
China	WHS	2003	0.071	41	0.187	0.381
Dominican Republic	MICS	2000	0.080	42	0.242	0.331
Brazil	WHS	2003	0.083	43	0.216	0.383
Turkey§	DHS	2003	0.087	44	0.275	0.315
Iraq	MICS	2006	0.093	45	0.286	0.325
Paraguay	WHS	2003	0.101	46	0.282	0.357
Philippines	DHS	2003	0.102	47	0.237	0.432
Viet Nam	DHS	2002	0.112	48	0.263	0.425
Mongolia	MICS	2005	0.116	49	0.364	0.317
Indonesia	DHS	2007	0.125	50	0.330	0.380
Tajikistan	MICS	2005	0.125	51	0.401	0.313
Peru	DHS	2004	0.129	52	0.369	0.349
Guatemala*	WHS	2003	0.151	53	0.357	0.422
Myanmar*	MICS	2000	0.154	54	0.318	0.483

Table 1.7, Continued

Country	Survey	Year	Multidimensional Poverty			
			MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)
Morocco	DHS	2004	0.167	55	0.399	0.419
Djibouti	MICS	2006	0.177	56	0.454	0.391
Ghana	DHS	2008	0.193	57	0.515	0.374
Honduras	DHS	2006	0.207	58	0.504	0.410
Gabon† §	DHS	2000	0.216	59	0.577	0.373
Bolivia	DHS	2003	0.227	60	0.579	0.392
Zimbabwe	DHS	2006	0.235	61	0.630	0.374
Swaziland	DHS	2007	0.244	62	0.656	0.371
Namibia	DHS	2007	0.246	63	0.631	0.390
Nicaragua	DHS	2001	0.250	64	0.564	0.443
Lesotho	DHS	2004	0.289	65	0.755	0.383
Sao Tome and Principe†	MICS	2000	0.295	66	0.756	0.390
Lao	MICS	2006	0.302	67	0.614	0.492
Pakistan*	DHS	2007	0.304	68	0.627	0.485
Cambodia	DHS	2005	0.312	69	0.740	0.421
Yemen	MICS	2006	0.315	70	0.655	0.481
Republic of Congo	DHS	2005	0.327	71	0.784	0.417
India	DHS	2005	0.337	72	0.715	0.471
Togo	MICS	2006	0.338	73	0.758	0.446
Cameroon	DHS	2004	0.344	74	0.729	0.473
Bangladesh	DHS	2007	0.345	75	0.790	0.436
Haiti	DHS	2006	0.352	76	0.757	0.464
Kenya	DHS	2003	0.361	77	0.836	0.432
Gambia	MICS	2006	0.368	78	0.780	0.472
Zambia	DHS	2007	0.370	79	0.814	0.455
Cote d'Ivoire	DHS	2005	0.373	80	0.685	0.545
Nepal	DHS	2006	0.389	81	0.804	0.484
Mauritania*	MICS	2007	0.389	82	0.767	0.508
Nigeria	DHS	2003	0.407	83	0.792	0.513
Senegal	DHS	2005	0.412	84	0.785	0.526
Chad	WHS	2003	0.417	85	0.911	0.458
Tanzania	DHS	2008	0.426	86	0.883	0.483
DR Congo	DHS	2007	0.434	87	0.893	0.486
Malawi	DHS	2004	0.435	88	0.921	0.472
Benin	DHS	2006	0.446	89	0.852	0.524
Comoros†	MICS	2000	0.449	90	0.899	0.499
Madagascar	DHS	2004	0.451	91	0.853	0.528
Rwanda	DHS	2005	0.479	92	0.954	0.502
Angola	MICS	2001	0.479	93	0.880	0.544
Mozambique	DHS	2003	0.505	94	0.896	0.564
Liberia	DHS	2007	0.508	95	0.934	0.544
Sierra Leone	MICS	2005	0.517	96	0.926	0.558
Guinea	DHS	2005	0.529	97	0.918	0.576
Central African Republic	MICS	2000	0.533	98	0.940	0.567
Somalia	MICS	2006	0.538	99	0.906	0.593
Burkina Faso	MICS	2006	0.557	100	0.912	0.611
Burundi	MICS	2005	0.562	101	0.967	0.580
Mali	DHS	2006	0.583	102	0.944	0.617
Ethiopia	DHS	2005	0.595	103	0.951	0.626
Niger	DHS	2006	0.653	104	0.967	0.675

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

†The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Table 1.8 Censored Headcounts and Contribution of deprivations to MPI with k=2.
The table shows the proportion of people who are MPI poor (using a cutoff of being deprived in 20% or more of the weighted indicators) and experience deprivations in each of 10 indicators. It also shows which dimensions contribute more to MPI with k=2

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…										Percent Contribution of Deprivations in…		
					Education		Health		Living Standard								
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets	Education	Health	Living Standard
Slovakia†	WHS	2003	0.000	1	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	75.00	25.00
Slovenia†	WHS	2003	0.001	2	0.000		0.000	0.004	0.000	0.000	0.001	0.000	0.004	0.000	0.00	75.00	25.00
Belarus	MICS	2005	0.002	3	0.004	0.000	0.004	0.001	0.000	0.003	0.000	0.000	0.004	0.002	36.25	37.34	26.41
Uruguay	WHS	2003	0.006	4	0.017		0.001	0.000	0.000	0.000	0.000	0.000	0.003	0.001	93.58	2.49	3.93
Latvia*	WHS	2003	0.006	5	0.000			0.016	0.000	0.008	0.000		0.001	0.002	0.00	88.00	12.00
United Arab Emirates	WHS	2003	0.007	6	0.006		0.002	0.018	0.000	0.003	0.020	0.000	0.000	0.000	29.17	51.60	19.23
Russian Federation*	WHS	2003	0.007	7	0.012		0.004	0.005	0.000	0.005	0.001	0.000	0.004	0.009	62.16	21.45	16.39
Czech Republic	WHS	2003	0.010	8	0.000			0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.00	99.86	0.14
Ukraine	DHS	2007	0.011	9	0.007	0.007	0.021		0.000	0.005	0.003	0.001	0.007	0.004	22.43	66.95	10.62
Montenegro	MICS	2005	0.011	10	0.021	0.012		0.009	0.000	0.009	0.004	0.001	0.026	0.003	50.41	27.76	21.83
Serbia**	MICS	2005	0.012	11	0.036	0.005		0.004	0.001	0.004	0.003	0.007	0.041	0.009	58.26	11.26	30.48
Jordan	DHS	2007	0.013	12	0.007	0.020	0.020	0.023	0.004	0.009	0.008	0.000	0.001	0.006	33.75	54.05	12.19
Kazakhstan	MICS	2006	0.014	13	0.002	0.004	0.042	0.011	0.000	0.004	0.014	0.000	0.043	0.013	8.08	62.55	29.37
Ecuador	WHS	2003	0.014	14	0.022		0.005	0.013	0.005	0.014	0.012	0.008	0.006	0.027	50.84	20.68	28.48
Georgia	MICS	2005	0.016	15	0.006	0.012	0.036	0.004	0.004	0.010	0.010	0.001	0.056	0.024	19.95	42.27	37.78
Hungary	WHS	2003	0.016	16	0.001			0.045	0.000	0.000	0.000	0.006	0.000	0.002	1.76	95.57	2.68
Croatia	WHS	2003	0.016	17	0.021			0.022	0.000	0.003	0.001	0.001	0.012	0.007	45.02	46.69	8.29
Bosnia and Herzegovina	MICS	2006	0.019	18	0.053	0.022		0.005	0.001	0.005	0.003	0.001	0.074	0.007	65.37	8.20	26.43
Trinidad and Tobago	MICS	2006	0.021	19	0.002	0.002	0.056		0.005	0.007	0.005	0.002	0.001	0.003	3.57	89.96	6.47
Armenia	DHS	2005	0.021	20	0.002	0.041	0.036	0.019	0.000	0.025	0.014	0.003	0.017	0.025	34.14	43.44	22.43
Tunisia*	WHS	2003	0.022	21	0.008		0.047	0.026	0.006	0.036	0.030	0.012	0.014	0.040	11.76	54.09	34.15
Macedonia	MICS	2005	0.024	22	0.027	0.024	0.046	0.005	0.002	0.031	0.010	0.010	0.064	0.007	35.61	35.46	28.93
Argentina‡	ENNyS	2005	0.025	23	0.071	0.000	0.004	0.011	0.011	0.048	0.005	0.030	0.045	0.052	47.57	10.00	42.44
Albania	MICS	2005	0.026	24	0.021	0.030	0.042	0.017	0.000	0.006	0.007	0.006	0.100	0.010	33.20	38.70	28.10
Moldova	DHS	2005	0.026	25	0.021	0.016	0.029	0.024	0.005	0.059	0.022	0.020	0.047	0.037	24.27	34.33	41.40
South Africa*	WHS	2003	0.027	26	0.031		0.009	0.027		0.041	0.026	0.032	0.043	0.017	38.43	22.33	39.24
Uzbekistan	MICS	2006	0.028	27	0.000	0.026	0.074	0.018	0.002	0.005	0.030	0.021	0.049	0.031	16.02	56.06	27.92

Table 1.8, Continued

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…										Percent Contribution of Deprivations in…		
					Education		Health		Living Standard								
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets	Education	Health	Living Standard
Thailand	MICS	2005	0.029	28	0.078	0.009	0.020	0.016	0.003	0.016	0.016	0.005	0.100	0.014	49.86	20.88	29.25
Estonia	WHS	2003	0.029	29	0.072		0.003	0.013	0.000	0.008	0.003	0.000	0.035	0.004	81.84	8.68	9.48
Mexico	ENSANUT	2006	0.029	30	0.034	0.028	0.026	0.014	0.011	0.046	0.013	0.045	0.065	0.047	34.70	22.40	42.90
Occupied Palestinian Territories	MICS	2006	0.032	31	0.036	0.081	0.000	0.024	0.002	0.005	0.016	0.122	0.001	0.010	60.69	12.21	27.10
Syrian Arab Republic†	MICS	2006	0.037	32	0.021	0.076	0.046	0.036	0.003	0.032	0.060	0.021	0.002	0.009	43.76	37.05	19.18
Kyrgyzstan	MICS	2006	0.041	33	0.041	0.082		0.021	0.001	0.023	0.037	0.027	0.094	0.061	50.05	17.02	32.93
Belize	MICS	2006	0.042	34	0.016	0.042	0.056	0.026	0.070	0.053	0.037	0.039	0.089	0.051	22.81	32.59	44.61
Egypt	DHS	2008	0.043	35	0.044	0.069	0.064	0.025	0.003	0.027	0.013	0.064		0.036	43.79	34.14	22.07
Azerbaijan	DHS	2006	0.050	36	0.004	0.061	0.085	0.062	0.002	0.077	0.094	0.013	0.039	0.044	21.56	48.76	29.68
Sri Lanka*	WHS	2003	0.056	37	0.004		0.006	0.099	0.103	0.075	0.088	0.075	0.191	0.143	2.30	30.90	66.80
Colombia	DHS	2005	0.061	38	0.050	0.053	0.055	0.063	0.031	0.074	0.055	0.062	0.109	0.100	28.30	32.20	39.50
Suriname	MICS	2000	0.063	39	0.093	0.065	0.050	0.031		0.090	0.078	0.038			42.00	21.51	36.49
Guyana	DHS	2005	0.070	40	0.016	0.011	0.125		0.106	0.080	0.065	0.028	0.073	0.082	6.62	59.02	34.36
China	WHS	2003	0.071	41	0.109		0.002	0.073	0.001	0.121	0.047	0.052	0.151	0.037	50.80	17.45	31.75
Dominican Republic	MICS	2000	0.080	42	0.125	0.051	0.086	0.019	0.054	0.219	0.054	0.047	0.106	0.121	36.66	21.80	41.54
Brazil	WHS	2003	0.083	43	0.174			0.051	0.000	0.039	0.020	0.016	0.066	0.001	69.97	20.54	9.49
Turkey§	DHS	2003	0.087	44	0.045	0.119	0.152	0.020	0.275	0.077	0.049	0.028		0.030	31.65	33.08	35.27
Iraq	MICS	2006	0.093	45	0.067	0.195	0.104	0.055	0.017	0.121	0.135	0.060	0.038	0.040	47.03	28.42	24.55
Paraguay	WHS	2003	0.101	46	0.068		0.074	0.040	0.065	0.228	0.183	0.159	0.266	0.161	22.44	18.99	58.57
Philippines	DHS	2003	0.102	47	0.034	0.075	0.142		0.136	0.130	0.073	0.056		0.162	17.70	46.06	36.24
Viet Nam	DHS	2002	0.112	48	0.068	0.057	0.108		0.097	0.233	0.233	0.128		0.134	18.60	32.18	49.22
Mongolia	MICS	2005	0.116	49	0.024	0.049	0.152	0.029	0.130	0.274	0.229	0.152	0.359	0.176	10.42	26.11	63.48
Indonesia	DHS	2007	0.125	50	0.051	0.070	0.144		0.078	0.231	0.183	0.083	0.267	0.183	16.04	38.49	45.47
Tajikistan	MICS	2005	0.125	51	0.002	0.125	0.233	0.102	0.004	0.057	0.203	0.242	0.212	0.153	16.87	44.54	38.58
Peru	DHS	2004	0.129	52	0.051	0.035	0.108	0.018	0.253	0.345	0.215	0.294	0.334	0.239	11.15	16.28	72.57
Guatemala*	WHS	2003	0.151	53	0.218		0.077	0.038	0.143	0.101	0.054	0.225	0.320	0.216	48.24	12.73	39.03
Myanmar*	MICS	2000	0.154	54	0.155	0.163		0.119		0.191	0.252	0.054		0.237	34.48	25.73	39.79

Table 1.8, Continued

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…										Percent Contribution of Deprivations in…		
					Education		Health		Living Standard								
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets	Education	Health	Living Standard
Morocco	DHS	2004	0.167	55	0.215	0.165	0.155	0.112	0.202	0.201	0.207	0.170	0.093	0.193	37.98	26.57	35.46
Djibouti	MICS	2006	0.177	56	0.158	0.239	0.122	0.128	0.259	0.256	0.083	0.230	0.107	0.317	37.32	23.45	39.23
Ghana	DHS	2008	0.193	57	0.168	0.121	0.132	0.077	0.368	0.488	0.185	0.154	0.507	0.273	25.03	18.07	56.91
Honduras	DHS	2006	0.207	58	0.158	0.325	0.127	0.086		0.316	0.139	0.231	0.439	0.235	38.95	17.17	43.88
Gabon[†§]	DHS	2000	0.216	59	0.113	0.100	0.267	0.142	0.274	0.537	0.246	0.239	0.360	0.360	16.47	31.60	51.93
Bolivia	DHS	2003	0.227	60	0.100	0.304	0.267	0.059	0.275	0.565	0.191	0.304	0.342	0.225	29.62	23.87	46.51
Zimbabwe	DHS	2006	0.235	61	0.034	0.120	0.164	0.143	0.575	0.484	0.329	0.343	0.596	0.523	10.97	21.75	67.28
Swaziland	DHS	2007	0.244	62	0.072	0.195	0.272	0.080	0.567	0.581	0.364	0.122	0.580	0.311	18.28	24.14	57.58
Namibia	DHS	2007	0.246	63	0.087	0.091	0.159	0.227	0.556	0.573	0.204	0.485	0.581	0.340	12.05	26.11	61.84
Nicaragua	DHS	2001	0.250	64	0.229	0.237	0.178	0.083	0.294	0.484	0.297	0.381	0.514	0.357	31.01	17.34	51.65
Lesotho	DHS	2004	0.289	65	0.136	0.191	0.177	0.062	0.749	0.680	0.342	0.418	0.645	0.677	18.84	13.76	67.40
Sao Tome and Principe[†]	MICS	2000	0.295	66	0.315	0.134	0.277	0.080	0.518	0.718	0.299	0.003	0.720	0.628	25.38	20.20	54.41
Lao	MICS	2006	0.302	67	0.258	0.322		0.223	0.414	0.483	0.351	0.099	0.612	0.396	32.01	24.65	43.34
Pakistan*	DHS	2007	0.304	68	0.203	0.417	0.300		0.099	0.386	0.095	0.421	0.513	0.303	33.95	32.89	33.17
Cambodia	DHS	2005	0.312	69	0.241	0.270	0.253	0.158	0.666	0.662	0.422	0.072	0.730	0.294	27.34	21.97	50.69
Yemen	MICS	2006	0.315	70	0.131	0.420	0.344		0.369	0.302	0.398	0.237	0.327	0.322	29.16	36.39	34.45
Republic of Congo	DHS	2005	0.327	71	0.062	0.168	0.339	0.236	0.603	0.745	0.414	0.412	0.730	0.561	11.77	29.32	58.91
India	DHS	2005	0.337	72	0.182	0.269	0.247	0.448	0.322	0.605	0.142	0.459	0.644	0.446	22.33	34.43	43.24
Togo	MICS	2006	0.338	73	0.242	0.269	0.285	0.186	0.644	0.715	0.435	0.204	0.756	0.386	25.18	23.24	51.57
Cameroon	DHS	2004	0.344	74	0.233	0.276	0.391	0.095	0.532	0.628	0.382	0.498	0.699	0.476	24.63	23.54	51.83
Bangladesh	DHS	2007	0.345	75	0.241	0.096	0.260	0.399	0.499	0.627	0.029	0.711	0.767	0.584	16.29	31.88	51.83
Haiti	DHS	2006	0.352	76	0.325	0.201	0.301	0.130	0.622	0.674	0.434	0.385	0.747	0.595	24.91	20.45	54.63
Kenya	DHS	2003	0.361	77	0.125	0.143	0.269	0.227	0.803	0.801	0.604	0.657	0.804	0.536	12.37	22.90	64.73
Gambia	MICS	2006	0.368	78	0.301	0.401	0.436	0.232	0.642	0.391	0.236	0.245	0.777	0.219	31.81	30.28	37.90
Zambia	DHS	2007	0.370	79	0.134	0.210	0.390	0.192	0.754	0.706	0.591	0.607	0.780	0.447	15.48	26.23	58.28
Cote d'Ivoire	DHS	2005	0.373	80	0.313	0.419	0.409		0.368	0.588	0.275	0.176		0.316	32.71	36.54	30.75
Nepal	DHS	2006	0.389	81	0.302	0.158	0.321	0.433	0.496	0.671	0.162	0.705	0.768	0.558	19.74	32.28	47.98

Table 1.8, Continued

Country	Survey	Year	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…										Percent Contribution of Deprivations in…		
					Education		Health		Living Standard								
					Schooling	Child School Attendance	Mortality (any age)	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets	Education	Health	Living Standard
Mauritania*	MICS	2007	0.389	82	0.376	0.336	0.311	0.201	0.597	0.630	0.545	0.494	0.600	0.471	30.47	21.93	47.60
Nigeria	DHS	2003	0.407	83	0.258	0.313	0.455	0.332	0.475	0.766	0.583	0.347	0.706	0.368	23.41	32.25	44.34
Senegal	DHS	2005	0.412	84	0.397	0.540	0.467	0.134	0.524	0.596	0.340	0.347	0.586	0.414	37.85	24.32	37.82
Chad	WHS	2003	0.417	85	0.423		0.027	0.074	0.889	0.828	0.509	0.850	0.890	0.700	33.78	4.05	62.17
Tanzania	DHS	2008	0.426	86	0.135	0.247	0.356		0.848	0.867	0.574	0.728	0.880	0.497	14.93	27.82	57.26
DR Congo	DHS	2007	0.434	87	0.144	0.415	0.399	0.177	0.803	0.742	0.619	0.737	0.877	0.633	21.45	22.12	56.43
Malawi	DHS	2004	0.435	88	0.291	0.253	0.344	0.194	0.893	0.909	0.504	0.782	0.918	0.580	20.84	20.60	58.56
Benin	DHS	2006	0.446	89	0.433	0.429	0.406	0.253	0.712	0.806	0.365	0.426	0.840	0.314	32.22	24.64	43.14
Comoros†	MICS	2000	0.449	90	0.315	0.493	0.276	0.281	0.638	0.878	0.540	0.315	0.855	0.755	30.02	20.69	49.29
Madagascar	DHS	2004	0.451	91	0.430	0.331	0.280	0.357	0.783	0.719	0.669	0.170	0.852	0.724	28.12	23.56	48.31
Rwanda	DHS	2005	0.479	92	0.375	0.295	0.409	0.118	0.928	0.730	0.713	0.855	0.953	0.844	23.36	18.35	58.30
Angola	MICS	2001	0.479	93	0.437	0.311	0.478	0.240	0.726	0.748	0.560	0.656	0.773	0.764	26.03	24.96	49.01
Mozambique	DHS	2003	0.505	94	0.559	0.414	0.418	0.232	0.845	0.554	0.600	0.733	0.892	0.596	32.12	21.45	46.42
Liberia	DHS	2007	0.508	95	0.304	0.572	0.503	0.240	0.911	0.854	0.353	0.538	0.934	0.701	28.71	24.36	46.93
Sierra Leone	MICS	2005	0.517	96	0.465	0.339	0.513	0.224	0.865	0.867	0.548	0.652	0.925	0.825	25.92	23.76	50.31
Guinea	DHS	2005	0.529	97	0.549	0.549	0.557	0.174	0.777	0.821	0.389	0.539	0.917	0.589	34.59	23.05	42.36
Central African Republic	MICS	2000	0.533	98	0.359	0.639	0.481	0.247	0.878	0.567	0.571		0.936	0.731	31.18	22.76	46.05
Somalia	MICS	2006	0.538	99	0.624	0.450	0.299	0.305	0.802	0.733	0.738	0.661	0.905	0.806	33.29	18.73	47.98
Burkina Faso	MICS	2006	0.557	100	0.557	0.668	0.523	0.362	0.810	0.734	0.451	0.565	0.908	0.234	36.63	26.48	36.89
Burundi	MICS	2005	0.562	101	0.530	0.476	0.356		0.953	0.713	0.557	0.912	0.965	0.855	29.86	21.11	49.02
Mali	DHS	2006	0.583	102	0.616	0.588	0.532	0.372	0.817	0.851	0.449	0.738	0.943	0.365	34.45	25.86	39.69
Ethiopia	DHS	2005	0.595	103	0.617	0.657	0.381	0.212	0.879	0.922	0.547	0.908	0.941	0.924	35.64	16.59	47.78
Niger	DHS	2006	0.653	104	0.667	0.702	0.589	0.251	0.894	0.925	0.650	0.871	0.966	0.819	34.94	21.44	43.61

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

1.9 Raw Headcounts by Dimension

The table presents the raw proportion of people who are deprived in one or more educational indicators, the proportion who are deprived in one or more the health indicators and the proportion deprived in three or more living standard indicators. Please note that among these people not everyone is MPI poor (as they may be deprived in less than 30% of the weighted indicators). This is only complementary information.

Country	Survey	Year	MPI Value	MPI Rank	Raw Proportion of Population Deprived in…		
					Education	Health	Living Standard
Slovakia†	WHS	2003	0.000	1	0.0	3.8	0.0
Slovenia†	WHS	2003	0.000	1	0.0	3.1	0.0
Czech Republic	WHS	2003	0.000	3	0.0	3.1	0.0
Belarus	MICS	2005	0.000	4	2.0	3.1	0.1
Latvia*	WHS	2003	0.001	5	0.1	1.6	1.1
United Arab Emirates	WHS	2003	0.002	6	0.6	5.4	0.0
Kazakhstan	MICS	2006	0.002	7	1.3	9.8	1.1
Occupied Palestinian Territories	MICS	2006	0.003	8	14.6	2.8	0.8
Georgia	MICS	2005	0.003	9	2.4	5.9	4.6
Hungary	WHS	2003	0.003	10	0.1	4.5	0.0
Bosnia and Herzegovina	MICS	2006	0.003	11	11.1	0.4	0.8
Serbia**	MICS	2005	0.003	12	5.2	0.4	0.8
Albania	MICS	2005	0.004	13	6.6	7.2	0.9
Russian Federation*	WHS	2003	0.005	14	1.6	3.5	0.4
Uruguay	WHS	2003	0.006	15	1.7	5.1	0.0
Thailand	MICS	2005	0.006	16	12.6	5.6	1.5
Montenegro	MICS	2005	0.006	17	4.2	0.8	0.7
Croatia	WHS	2003	0.007	18	2.3	2.4	0.4
Ukraine	DHS	2007	0.008	19	6.2	2.1	0.2
Macedonia	MICS	2005	0.008	20	5.9	7.2	0.9
Armenia	DHS	2005	0.008	21	9.5	14.6	0.8
Moldova	DHS	2005	0.008	22	5.1	10.1	5.3
Uzbekistan	MICS	2006	0.008	23	4.4	17.4	2.3
Ecuador	WHS	2003	0.009	24	2.3	4.6	3.9
Jordan	DHS	2007	0.010	25	10.6	11.9	0.2
Tunisia*	WHS	2003	0.010	26	1.1	13.1	6.9
Argentina‡	ENNyS	2005	0.011	27	15.4	3.8	4.7
South Africa*	WHS	2003	0.014	28	3.2	8.1	10.8
Mexico	ENSANUT	2006	0.015	29	10.1	9.2	6.7
Kyrgyzstan	MICS	2006	0.019	30	18.7	2.1	8.3
Trinidad and Tobago	MICS	2006	0.020	31	1.5	5.6	0.8
Sri Lanka*	WHS	2003	0.021	32	0.5	9.8	26.4
Azerbaijan	DHS	2006	0.021	33	10.2	20.3	4.2
Syrian Arab Republic†	MICS	2006	0.021	34	20.4	13.6	1.3

Table 1.9, Continued

Country	Survey	Year	MPI Value	MPI Rank	Raw Proportion of Population Deprived in…		
					Education	Health	Living Standard
Belize	MICS	2006	0.024	35	8.5	13.3	7.0
Egypt	DHS	2008	0.026	36	18.0	16.9	0.9
Estonia	WHS	2003	0.026	37	7.3	5.1	0.1
Turkey[§]	DHS	2003	0.039	38	15.4	16.0	7.3
Brazil	WHS	2003	0.039	39	20.2	5.2	2.8
Colombia	DHS	2005	0.041	40	13.2	17.5	9.7
Suriname	MICS	2000	0.044	41	18.8	15.9	2.3
Dominican Republic	MICS	2000	0.048	42	17.5	13.1	13.2
Guyana	DHS	2005	0.055	43	4.7	12.4	10.8
China	WHS	2003	0.056	44	10.9	11.3	12.4
Iraq	MICS	2006	0.059	45	32.0	20.0	5.2
Paraguay	WHS	2003	0.064	46	7.5	13.1	32.4
Mongolia	MICS	2005	0.065	47	6.8	19.0	39.6
Philippines	DHS	2003	0.067	48	13.6	14.2	18.2
Tajikistan	MICS	2005	0.068	49	14.3	35.6	21.9
Viet Nam	DHS	2002	0.075	50	12.3	10.8	30.1
Peru	DHS	2004	0.085	51	8.5	14.6	38.2
Myanmar*	MICS	2000	0.088	52	32.7	11.7	22.8
Indonesia	DHS	2007	0.095	53	12.6	14.4	31.2
Guatemala*	WHS	2003	0.127	54	26.8	15.0	40.5
Djibouti	MICS	2006	0.139	55	39.3	25.6	28.1
Morocco	DHS	2004	0.139	56	36.3	31.5	21.4
Ghana	DHS	2008	0.140	57	24.1	17.9	57.5
Honduras	DHS	2006	0.160	58	46.6	21.1	30.8
Gabon[† §]	DHS	2000	0.161	59	19.2	35.4	34.8
Zimbabwe	DHS	2006	0.174	60	15.1	29.6	64.5
Bolivia	DHS	2003	0.175	61	37.8	31.4	38.0
Swaziland	DHS	2007	0.183	62	25.9	33.5	66.3
Namibia	DHS	2007	0.187	63	16.0	37.2	60.8
Nicaragua	DHS	2001	0.211	64	36.4	25.9	54.1
Lesotho	DHS	2004	0.220	65	29.7	22.1	82.4
Sao Tome and Principe[†]	MICS	2000	0.236	66	36.7	26.6	74.3
Cambodia	DHS	2005	0.263	67	40.9	36.0	78.4
Lao	MICS	2006	0.267	68	43.9	22.3	59.7
Republic of Congo	DHS	2005	0.270	69	21.7	47.6	73.8

Table 1.9, Continued

Country	Survey	Year	MPI Value	MPI Rank	Raw Proportion of Population Deprived in…		
					Education	Health	Living Standard
Pakistan*	DHS	2007	0.275	70	51.2	29.2	42.9
Yemen	MICS	2006	0.283	71	54.5	34.4	38.2
Togo	MICS	2006	0.284	72	39.9	38.0	75.5
Bangladesh	DHS	2007	0.291	73	31.4	53.1	76.3
India	DHS	2005	0.296	74	37.5	56.5	58.5
Cameroon	DHS	2004	0.299	75	37.4	42.6	67.9
Kenya	DHS	2003	0.302	76	21.9	41.4	86.2
Haiti	DHS	2006	0.306	77	41.0	37.3	76.0
Cote d'Ivoire	DHS	2005	0.320	78	62.7	40.6	37.7
Gambia	MICS	2006	0.324	79	53.4	52.1	60.1
Zambia	DHS	2007	0.325	80	30.1	51.3	78.3
Chad	WHS	2003	0.344	81	39.4	8.2	95.2
Nepal	DHS	2006	0.350	82	38.0	58.3	77.2
Mauritania*	MICS	2007	0.352	83	55.3	44.1	66.8
Tanzania	DHS	2008	0.367	84	34.0	35.5	90.6
Nigeria	DHS	2003	0.368	85	42.4	59.5	72.1
Senegal	DHS	2005	0.384	86	66.9	54.3	54.9
Malawi	DHS	2004	0.384	87	43.6	45.2	93.9
DR Congo	DHS	2007	0.393	88	48.4	48.2	85.5
Comoros†	MICS	2000	0.408	89	60.1	45.7	90.3
Benin	DHS	2006	0.412	90	62.8	51.7	79.1
Madagascar	DHS	2004	0.413	91	55.4	49.6	83.7
Rwanda	DHS	2005	0.443	92	53.6	46.1	95.3
Angola	MICS	2001	0.452	93	56.9	60.8	82.0
Mozambique	DHS	2003	0.481	94	69.1	52.7	86.4
Liberia	DHS	2007	0.484	95	68.9	59.6	91.6
Sierra Leone	MICS	2005	0.489	96	60.6	58.2	92.4
Guinea	DHS	2005	0.505	97	74.8	60.8	84.4
Central African Republic	MICS	2000	0.512	98	72.7	56.2	92.3
Somalia	MICS	2006	0.514	99	74.5	47.6	86.7
Burundi	MICS	2005	0.530	100	71.6	35.5	97.3
Burkina Faso	MICS	2006	0.536	101	80.4	62.9	81.6
Mali	DHS	2006	0.564	102	81.1	65.8	86.8
Ethiopia	DHS	2005	0.582	103	83.93	48.22	94.15
Niger	DHS	2006	0.642	104	87.09	64.91	93.03

* The poverty estimates for these countries should be interpreted as lower bound estimates, meaning that multidimensional poverty is at least as great as their MPI values indicates.

† The poverty estimates for these countries should be interpreted as upper bound estimates, meaning that multidimensional poverty is less than or equal to their MPI values.

‡ Estimates are not country representative.

§ In these countries we have information on Body Mass Index only for the mothers of under five year old children.

** Although there was information on mortality for this country, the indicator had to be excluded from the estimates due to a very high percentage of missing values.

Appendix 2: Sample Sizes and Non Response Rate

Table 2.1 Sample sizes

The table reports the sample sizes from each survey that were used to compute MPI and gives the rural-urban breakdown
Reductions in sample sizes were due to missing data, which is detailed by indicator in Table 2.2

Country	Survey	Year	Total Sample Size	Urban Sample Size	Rural Sample Size	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of Total Sample Used to compute MPI (Weighted)	Percent of Urban Sample Used to compute MPI (Unweighted)	Percent of Urban Sample Used to compute MPI (Weighted)	Percent of Rural Sample Used to compute MPI (Unweighted)	Percent of Rural Sample Used to compute MPI (Weighted)
United Arab Emirates	WHS	2003	6411	4465	1946	56.89%	50.73%	49.59%	48.05%	73.64%	63.44%
South Africa	WHS	2003	10633	5944	4689	57.39%	57.93%	57.17%	59.65%	57.67%	56.21%
Ecuador	WHS	2003	22667	14840	7827	59.03%	74.08%	59.15%	74.52%	58.81%	73.40%
Jordan	DHS	2007	80539	54077	26462	60.97%	59.51%	60.14%	58.81%	62.66%	62.93%
Sao Tome and Principe	MICS	2000	14251	7262	6989	63.75%	64.02%	59.29%	59.35%	68.38%	68.33%
Guatemala	WHS	2003	25820	9647	16173	63.92%	63.92%	76.59%	76.59%	56.37%	56.37%
Chad	WHS	2003	24524	5944	18580	63.98%	67.24%	65.17%	70.27%	63.60%	66.13%
Sri Lanka	WHS	2003	28847	4401	24446	66.98%	76.18%	72.23%	81.28%	66.03%	74.86%
Gabon	DHS	2000	30736	18678	12058	73.39%	69.61%	69.26%	66.20%	79.78%	79.30%
Comoros	MICS	2000	27060	8403	18657	74.62%	74.11%	76.89%	77.18%	73.60%	73.27%
Slovenia	WHS	2003	2166	2166	0	76.82%	76.82%	76.82%	76.82%	0.00%	0.00%
Tunisia	WHS	2003	25290	14895	10395	78.66%	80.90%	82.67%	85.37%	72.92%	74.24%
Myanmar	MICS	2000	132534	30000	102534	79.07%	80.45%	81.92%	83.53%	78.24%	79.46%
Latvia	WHS	2003	2283	1526	757	79.59%	88.81%	82.04%	90.07%	74.64%	86.61%
Russian Federation	WHS	2003	11079	10269	810	81.77%	83.60%	81.97%	83.73%	79.26%	82.65%
Syrian Arab Republic	MICS	2006	107369	56902	50467	81.83%	81.83%	82.70%	82.70%	80.84%	80.84%
Slovakia	WHS	2003	6838	6131	707	84.13%	87.84%	83.54%	87.66%	89.25%	88.05%
Colombia	DHS	2005	153749	112455	41294	84.48%	82.37%	84.91%	82.21%	83.32%	82.81%
Mauritania	MICS	2007	58646	24828	33818	85.71%	84.63%	87.70%	86.85%	84.25%	82.79%
Paraguay	WHS	2003	24771	10950	13821	87.51%	91.32%	89.81%	93.40%	85.68%	88.85%
Brazil	WHS	2003	18085	14720	3365	87.80%	88.85%	89.42%	90.23%	80.71%	82.54%
Djibouti	MICS	2006	28014	24809	3205	88.12%	89.79%	88.89%	90.07%	82.18%	83.01%
Iraq	MICS	2006	116106	75482	40624	88.76%	88.40%	88.47%	87.64%	89.31%	89.72%
Angola	MICS	2001	29817	19571	10246	90.28%	90.01%	88.38%	88.30%	93.91%	93.97%
Kyrgyzstan	MICS	2006	24731	12888	11843	90.70%	90.38%	86.29%	81.77%	95.51%	95.56%
Somalia	MICS	2006	33557	13265	20292	90.82%	90.81%	91.04%	91.43%	90.67%	90.43%
Sierra Leone	MICS	2005	42693	12076	30617	91.46%	91.47%	95.41%	95.42%	89.91%	89.91%
Central African Republic	MICS	2000	92466	36388	56078	91.61%	91.41%	92.21%	91.87%	91.22%	91.10%
Suriname	MICS	2000	17071	9034	8037	92.14%	91.95%	92.21%	92.21%	92.07%	91.67%
Belize	MICS	2006	7673	3681	3992	92.66%	92.58%	92.04%	92.04%	93.24%	93.09%

Table 2.1, Continued

Country	Survey	Year	Total Sample Size	Urban Sample Size	Rural Sample Size	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of Total Sample Used to compute MPI (Weighted)	Percent of Urban Sample Used to compute MPI (Unweighted)	Percent of Urban Sample Used to compute MPI (Weighted)	Percent of Rural Sample Used to compute MPI (Unweighted)	Percent of Rural Sample Used to compute MPI (Weighted)
Burkina Faso	MICS	2006	38504	5691	32813	93.64%	93.78%	95.31%	95.65%	93.35%	93.17%
Georgia	MICS	2005	44265	21460	22805	93.68%	93.83%	94.69%	95.21%	92.73%	92.55%
Montenegro	MICS	2005	9602	5908	3694	93.89%	95.89%	94.13%	95.95%	93.50%	95.80%
Bangladesh	DHS	2007	50215	18641	31574	94.09%	94.29%	93.83%	93.45%	94.24%	94.53%
Senegal	DHS	2005	67485	26162	41323	94.38%	94.54%	94.42%	94.66%	94.35%	94.46%
Morocco	DHS	2004	62891	31699	31192	94.58%	94.40%	92.35%	92.59%	96.86%	96.81%
Mozambique	DHS	2003	62262	26028	36234	95.14%	95.45%	94.02%	94.54%	95.95%	95.91%
Dominican Republic	MICS	2000	17759	9554	8205	95.15%	94.98%	94.69%	94.44%	95.69%	95.74%
Guyana	DHS	2005	10898	5287	5611	95.25%	95.42%	94.38%	94.30%	96.06%	95.89%
Nicaragua	DHS	2001	60889	30381	30508	95.63%	95.74%	95.83%	96.07%	95.43%	95.31%
Zimbabwe	DHS	2006	41749	12489	29260	95.68%	95.67%	93.38%	93.78%	96.67%	96.55%
Mongolia	MICS	2005	26718	15141	11577	95.76%	95.75%	95.12%	95.11%	96.60%	96.60%
India	DHS	2005	516251	229391	286860	95.88%	96.21%	94.63%	94.65%	96.87%	96.91%
Honduras	DHS	2006	92183	33312	58871	95.91%	95.34%	94.34%	93.79%	96.80%	96.71%
Czech Republic	WHS	2003	2712	1851	861	95.94%	97.76%	96.06%	97.78%	95.70%	97.72%
Nigeria	DHS	2003	35269	13931	21338	96.04%	95.85%	97.02%	96.31%	95.40%	95.62%
Togo	MICS	2006	32326	10220	22106	96.12%	95.86%	94.58%	94.49%	96.83%	96.70%
Moldova	DHS	2005	31297	17153	14144	96.35%	96.61%	95.52%	95.40%	97.36%	97.39%
Cote d'Ivoire	DHS	2005	23747	9832	13915	96.37%	95.65%	96.25%	95.59%	96.46%	95.70%
Serbia	MICS	2005	33273	18956	14317	96.40%	98.19%	96.27%	98.18%	96.58%	98.20%
Ukraine	DHS	2007	33598	19962	13636	96.48%	96.23%	96.20%	95.85%	96.88%	97.05%
Liberia	DHS	2007	34344	13924	20420	96.52%	96.58%	96.55%	97.03%	96.50%	96.31%
Pakistan	DHS	2007	109148	38210	70938	96.64%	96.67%	96.05%	95.32%	96.96%	97.36%
Lesotho	DHS	2004	34091	7105	26986	96.70%	96.46%	97.09%	96.43%	96.59%	96.46%
Bolivia	DHS	2003	80546	48193	32353	96.93%	96.66%	96.45%	96.11%	97.64%	97.55%
Benin	DHS	2006	89371	34743	54628	96.95%	96.93%	96.99%	97.01%	96.93%	96.88%
Indonesia	DHS	2007	175142	69810	105332	97.05%	97.84%	97.24%	97.71%	96.93%	97.93%
Madagascar	DHS	2004	37446	22469	14977	97.13%	96.91%	97.37%	97.42%	96.78%	96.78%
Armenia	DHS	2005	24888	17020	7868	97.18%	97.32%	97.10%	97.14%	97.37%	97.63%

Table 2.1, Continued

Country	Survey	Year	Total Sample Size	Urban Sample Size	Rural Sample Size	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of Total Sample Used to compute MPI (Weighted)	Percent of Urban Sample Used to compute MPI (Unweighted)	Percent of Urban Sample Used to compute MPI (Weighted)	Percent of Rural Sample Used to compute MPI (Unweighted)	Percent of Rural Sample Used to compute MPI (Weighted)
Estonia	WHS	2003	2750	1747	1003	97.20%	97.89%	96.74%	97.22%	98.01%	99.28%
Turkey	DHS	2003	46233	32164	14069	97.26%	97.04%	97.09%	96.74%	97.63%	97.64%
Macedonia	MICS	2005	26423	14707	11716	97.31%	98.79%	97.04%	98.37%	97.64%	99.34%
Argentina	ENNyS	2005	196320	196320	0	97.33%	97.33%	97.33%	97.33%	0.00%	0.00%
Mali	DHS	2006	73045	23429	49616	97.35%	97.46%	97.62%	97.92%	97.23%	97.26%
Namibia	DHS	2007	40794	15657	25137	97.41%	97.14%	96.21%	95.87%	98.15%	98.03%
Trinidad and Tobago	MICS	2006	18680	3040	15640	97.45%	97.39%	98.09%	98.06%	97.32%	97.26%
Ethiopia	DHS	2005	66388	15262	51126	97.52%	98.30%	97.92%	98.22%	97.40%	98.31%
Malawi	DHS	2004	59714	7403	52311	97.54%	97.37%	97.57%	97.34%	97.54%	97.38%
Republic of Congo	DHS	2005	29868	19716	10152	97.62%	97.46%	97.99%	97.89%	96.91%	96.99%
Cameroon	DHS	2004	49478	21891	27587	97.63%	97.71%	97.36%	97.29%	97.84%	98.12%
Tajikistan	MICS	2005	40340	13785	26555	97.65%	98.00%	97.27%	97.33%	97.85%	98.25%
Niger	DHS	2006	47420	15415	32005	97.70%	98.00%	97.07%	96.95%	98.00%	98.22%
Kenya	DHS	2003	36687	10404	26283	97.78%	97.94%	97.34%	97.48%	97.96%	98.05%
Lao	MICS	2006	33551	7395	26156	97.90%	97.64%	96.74%	96.29%	98.23%	98.10%
Guinea	DHS	2005	37589	10785	26804	98.01%	98.10%	97.35%	97.38%	98.28%	98.40%
Swaziland	DHS	2007	21523	5529	15994	98.11%	98.11%	97.67%	97.49%	98.27%	98.28%
Gambia	MICS	2006	45720	17303	28417	98.19%	98.15%	98.20%	98.12%	98.19%	98.16%
Peru	DHS	2004	54843	30055	24788	98.21%	98.00%	98.11%	97.63%	98.35%	98.64%
Azerbaijan	DHS	2006	30114	15547	14567	98.40%	98.50%	98.24%	98.32%	98.58%	98.71%
Burundi	MICS	2005	41301	6338	34963	98.41%	98.36%	98.99%	98.87%	98.30%	98.33%
Croatia	WHS	2003	2948	1896	1052	98.44%	98.26%	98.00%	97.78%	99.24%	99.15%
DR Congo	DHS	2005	47602	21529	26073	98.45%	98.65%	98.30%	98.22%	98.58%	98.96%
Uzbekistan	MICS	2006	52018	21390	30628	98.45%	98.26%	98.56%	98.25%	98.38%	98.27%
Hungary	WHS	2003	4298	2551	1747	98.60%	98.52%	98.71%	98.52%	98.45%	98.53%
Uruguay	WHS	2003	8389	6882	1507	98.81%	98.86%	98.76%	98.82%	99.00%	99.25%
Thailand	MICS	2005	137006	74985	62021	98.83%	98.72%	98.74%	98.30%	98.94%	98.90%
Tanzania	DHS	2008	43493	8464	35029	98.96%	98.89%	99.11%	99.05%	98.92%	98.84%
Occupied Palestinian Territories	MICS	2006	29126	22359	6767	98.99%	98.99%	98.93%	98.93%	99.19%	99.19%
Rwanda	DHS	2005	47163	10056	37107	99.06%	99.07%	98.38%	98.19%	99.24%	99.23%

Table 2.1, Continued

Country	Survey	Year	Total Sample Size	Urban Sample Size	Rural Sample Size	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of Total Sample Used to compute MPI (Weighted)	Percent of Urban Sample Used to compute MPI (Unweighted)	Percent of Urban Sample Used to compute MPI (Weighted)	Percent of Rural Sample Used to compute MPI (Unweighted)	Percent of Rural Sample Used to compute MPI (Weighted)
Philippines	DHS	2003	60866	29474	31392	99.11%	99.12%	99.20%	99.15%	99.04%	99.08%
Zambia	DHS	2007	34909	13427	21482	99.16%	99.16%	99.19%	99.22%	99.14%	99.13%
Cambodia	DHS	2005	72342	16218	56124	99.18%	99.24%	99.03%	99.22%	99.23%	99.25%
Yemen	MICS	2006	26082	7406	18676	99.19%	99.23%	99.38%	99.47%	99.11%	99.12%
Nepal	DHS	2006	42271	11084	31187	99.21%	99.09%	98.85%	98.08%	99.34%	99.27%
Bosnia and Herzegovina	MICS	2006	21063	6889	14174	99.28%	99.70%	99.23%	99.66%	99.31%	99.72%
Haiti	DHS	2006	46678	18529	28149	99.30%	99.28%	99.38%	99.24%	99.25%	99.30%
Kazakhstan	MICS	2006	54121	26645	27476	99.43%	99.39%	99.53%	99.53%	99.32%	99.20%
Ghana	DHS	2008	46061	18073	27988	99.43%	99.39%	99.35%	99.30%	99.48%	99.46%
Viet Nam	DHS	2002	31279	7218	24061	99.46%	99.53%	99.29%	99.35%	99.51%	99.57%
China	WHS	2003	13986	4843	9143	99.61%	99.59%	98.86%	98.41%	100.00%	100.00%
Belarus	MICS	2005	20475	13242	7233	99.61%	99.80%	99.56%	99.75%	99.71%	99.90%
Albania	MICS	2005	20233	9629	10604	99.70%	99.61%	99.93%	99.91%	99.50%	99.40%
Egypt	DHS	2008	90118	29233	60885	99.83%	99.85%	99.80%	99.85%	99.85%	99.85%
Mexico	ENSANUT	2006	206700	151196	55504	99.86%	99.86%	99.86%	99.86%	99.85%	99.85%
Minimum % of total sample size				56.89%							
Maximum				99.86%							

Table 2.2 Missing and non-response percentages

Country	Survey	Year	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of non response rate by indicator (Unweighted)										
				Education		Health			Living Standard					
							Nutrition							
				Schooling	Child School Attendance	Mortality	Women/ Adult's BMI	Child Nutrition (Weight-for-age)	Electricity	Cooking fuel	Floor	Sanitation	Drinking Water	Assets
United Arab Emirates	WHS	2003	56.89%	0.08%	NA	0.00%	15.49%	NA	0.00%	0.80%	0.70%	0.50%	31.96%	0.53%
South Africa	WHS	2003	57.39%	0.38%	NA	0.00%	38.43%	NA	NA	12.07%	12.90%	10.95%	12.41%	0.36%
Ecuador	WHS	2003	59.03%	0.07%	NA	0.04%	30.94%	NA	22.33%	27.60%	28.91%	27.26%	28.56%	20.49%
Jordan	DHS	2007	60.97%	0.00%	0.01%	0.96%	38.62%	77.38%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sao Tome and Principe	MICS	2000	63.75%	2.27%	4.20%	23.11%	NA	13.36%	0.00%	0.08%	0.04%	0.36%	0.00%	0.00%
Guatemala	WHS	2003	63.92%	0.00%	NA	0.12%	33.64%	NA	1.45%	1.03%	1.05%	1.17%	1.24%	0.25%
Chad	WHS	2003	63.98%	0.04%	NA	0.13%	24.60%	NA	1.25%	6.65%	21.41%	6.68%	7.28%	0.27%
Sri Lanka	WHS	2003	66.98%	0.08%	NA	0.00%	30.82%	NA	2.41%	1.34%	1.53%	1.40%	0.00%	0.26%
Gabon	DHS	2000	73.39%	0.17%	0.03%	1.56%	26.43%	47.02%	0.11%	0.01%	0.13%	0.29%	0.10%	0.05%
Comoros	MICS	2000	74.62%	4.87%	4.36%	0.50%	NA	9.85%	0.00%	8.71%	1.90%	0.09%	0.00%	0.00%
Slovenia	WHS	2003	76.82%	0.28%	NA	0.00%	18.37%	NA	0.00%	16.90%	17.31%	16.53%	19.76%	3.28%
Tunisia	WHS	2003	78.66%	0.11%	NA	0.00%	18.65%	NA	1.17%	3.31%	3.67%	2.63%	0.00%	0.52%
Myanmar	MICS	2000	79.07%	0.03%	0.52%	NA	NA	20.34%	NA	NA	0.07%	0.01%	0.01%	0.04%
Latvia	WHS	2003	79.59%	0.00%	NA	NA	19.89%	NA	0.00%	8.28%	NA	8.50%	8.28%	1.23%
Russian Federation	WHS	2003	81.77%	0.01%	NA	0.00%	17.71%	NA	0.00%	0.41%	0.29%	0.35%	0.35%	0.50%
Syrian Arab Republic	MICS	2006	81.83%	0.01%	0.00%	17.17%	NA	1.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Slovakia	WHS	2003	84.13%	10.47%	NA	0.00%	11.60%	NA	0.00%	11.67%	11.63%	11.29%	13.29%	10.63%
Colombia	DHS	2005	84.48%	0.14%	0.01%	14.53%	6.22%	7.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Mauritania	MICS	2007	85.71%	0.21%	9.03%	2.52%	NA	3.42%	0.15%	0.15%	0.46%	0.27%	0.06%	0.02%
Paraguay	WHS	2003	87.51%	0.00%	NA	0.00%	11.82%	NA	0.40%	3.23%	3.19%	3.25%	3.23%	0.09%
Brazil	WHS	2003	87.80%	0.00%	NA	NA	11.13%	NA	0.00%	0.00%	1.23%	0.01%	0.00%	0.00%
Djibouti	MICS	2006	88.12%	0.30%	0.72%	7.98%	NA	4.01%	0.21%	0.30%	0.47%	0.75%	0.00%	0.15%
Iraq	MICS	2006	88.76%	0.00%	0.00%	10.83%	NA	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Angola	MICS	2001	90.28%	0.00%	0.19%	0.17%	NA	2.07%	0.00%	0.14%	0.00%	7.38%	0.00%	0.00%
Kyrgyzstan	MICS	2006	90.70%	7.34%	0.10%	0.00%	NA	1.24%	0.12%	0.23%	0.13%	0.32%	0.00%	0.01%
Somalia	MICS	2006	90.82%	0.37%	1.21%	2.45%	NA	4.22%	0.27%	0.15%	1.00%	0.19%	0.00%	0.08%
Sierra Leone	MICS	2005	91.46%	0.01%	0.00%	5.53%	NA	4.80%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%
Central African Republic	MICS	2000	91.61%	0.27%	0.57%	3.77%	NA	4.76%	0.09%	0.40%	NA	0.04%	0.00%	0.07%
Suriname	MICS	2000	92.14%	2.51%	0.91%	4.06%	NA	0.28%	NA	NA	0.53%	0.30%	0.00%	NA
Belize	MICS	2006	92.66%	0.10%	0.00%	3.26%	NA	4.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 2.2, Continued

Country	Survey	Year	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of non response rate by indicator (Unweighted)										
				Education		Health			Living Standard					
							Nutrition							
				Schooling	Child School Attendance	Mortality	Women/ Adult's BMI	Child Nutrition (Weight-for-age)	Electricity	Cooking fuel	Floor	Sanitation	Drinking Water	Assets
Burkina Faso	MICS	2006	93.64%	0.09%	0.10%	3.23%	NA	4.12%	0.17%	0.03%	0.12%	0.32%	0.00%	0.03%
Georgia	MICS	2005	93.68%	0.00%	0.09%	4.33%	NA	2.64%	0.00%	0.06%	0.14%	0.06%	0.00%	0.00%
Montenegro	MICS	2005	93.89%	0.00%	0.08%	NA	NA	6.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bangladesh	DHS	2007	94.09%	0.00%	3.30%	2.66%	0.00%	5.99%	0.00%	0.00%	0.06%	0.01%	0.00%	0.00%
Senegal	DHS	2005	94.38%	0.15%	0.05%	0.94%	65.89%	3.96%	0.05%	0.13%	0.75%	0.25%	1.93%	0.01%
Morocco	DHS	2004	94.58%	0.05%	0.04%	1.00%	1.28%	4.06%	0.08%	0.33%	3.97%	0.03%	0.01%	0.00%
Mozambique	DHS	2003	95.14%	0.11%	0.09%	2.70%	5.39%	12.26%	0.13%	0.09%	0.05%	0.05%	0.06%	0.03%
Dominican Republic	MICS	2000	95.15%	0.60%	0.18%	2.13%	NA	2.41%	0.04%	0.07%	0.00%	0.00%	0.00%	0.00%
Guyana	DHS	2005	95.25%	0.25%	0.16%	4.14%	NA	NA	0.15%	0.04%	0.07%	0.04%	0.00%	0.00%
Nicaragua	DHS	2001	95.63%	0.02%	0.10%	2.72%	5.02%	9.74%	0.10%	0.07%	0.30%	0.14%	0.02%	0.01%
Zimbabwe	DHS	2006	95.68%	0.12%	0.05%	2.68%	4.28%	14.59%	0.13%	0.04%	0.08%	0.15%	0.01%	0.04%
Mongolia	MICS	2005	95.76%	0.00%	0.00%	1.82%	NA	2.55%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%
India	DHS	2005	95.88%	0.03%	0.10%	1.91%	6.21%	8.20%	0.02%	0.02%	0.02%	0.09%	0.01%	0.00%
Honduras	DHS	2006	95.91%	0.02%	0.02%	3.15%	4.74%	9.65%	NA	0.01%	0.01%	0.00%	0.01%	0.01%
Czech Republic	WHS	2003	95.94%	0.37%	NA	NA	3.02%	NA	0.00%	1.95%	1.73%	1.73%	1.73%	1.62%
Nigeria	DHS	2003	96.04%	0.45%	0.11%	1.45%	2.85%	8.30%	0.18%	0.21%	0.67%	0.09%	0.16%	0.03%
Togo	MICS	2006	96.12%	0.07%	0.02%	2.63%	NA	1.79%	0.01%	0.00%	0.00%	0.03%	0.00%	0.00%
Moldova	DHS	2005	96.35%	0.81%	0.10%	2.39%	0.00%	4.13%	0.10%	0.02%	0.17%	0.09%	0.05%	0.01%
Cote d'Ivoire	DHS	2005	96.37%	0.37%	0.88%	1.80%	NA	NA	0.49%	NA	0.32%	0.32%	0.23%	0.24%
Serbia	MICS	2005	96.40%	0.03%	0.08%	NA	NA	3.41%	0.00%	0.08%	0.00%	0.00%	0.00%	0.00%
Ukraine	DHS	2007	96.48%	0.05%	0.27%	2.83%	NA	NA	0.06%	0.07%	0.26%	0.09%	0.07%	0.04%
Liberia	DHS	2007	96.52%	0.33%	0.69%	0.83%	2.38%	13.88%	0.16%	0.16%	0.36%	0.22%	0.10%	0.03%
Pakistan	DHS	2007	96.64%	0.04%	0.11%	1.64%	NA	NA	1.29%	1.29%	1.25%	1.33%	1.40%	1.22%
Lesotho	DHS	2004	96.70%	0.04%	0.08%	2.05%	40.50%	6.95%	0.27%	0.02%	0.06%	0.08%	0.07%	0.01%
Bolivia	DHS	2003	96.93%	0.10%	0.17%	1.79%	2.81%	6.03%	0.15%	0.04%	0.09%	0.11%	0.10%	0.01%
Benin	DHS	2006	96.95%	0.31%	0.18%	1.90%	0.00%	10.72%	0.00%	0.42%	0.07%	0.12%	0.14%	0.01%
Indonesia	DHS	2007	97.05%	0.12%	0.26%	2.00%	NA	NA	0.14%	0.11%	0.33%	0.17%	0.07%	0.04%
Madagascar	DHS	2004	97.13%	0.19%	0.14%	1.70%	2.42%	9.54%	0.08%	0.13%	0.00%	0.01%	0.01%	0.00%
Armenia	DHS	2005	97.18%	0.06%	0.04%	1.35%	3.75%	2.29%	0.09%	0.10%	0.61%	0.06%	0.05%	0.08%

Table 2.2, Continued

Country	Survey	Year	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of non response rate by indicator (Unweighted)										
				Education		Health			Living Standard					
							Nutrition							
				Schooling	Child School Attendance	Mortality	Women/ Adult's BMI	Child Nutrition (Weight-for-age)	Electricity	Cooking fuel	Floor	Sanitation	Drinking Water	Assets
Estonia	WHS	2003	97.20%	0.00%	NA	0.00%	1.42%	NA	0.00%	1.49%	0.98%	0.95%	1.75%	0.18%
Turkey	DHS	2003	97.26%	0.04%	0.02%	2.51%	80.84%	0.06%	0.00%	NA	0.08%	0.06%	0.03%	0.01%
Macedonia	MICS	2005	97.31%	0.00%	0.00%	0.33%	NA	2.51%	0.00%	0.03%	0.03%	0.00%	0.00%	0.00%
Argentina	ENNyS	2005	97.33%	0.12%	0.00%	0.00%	NA	0.00%	0.01%	0.80%	0.00%	1.76%	0.00%	0.01%
Mali	DHS	2006	97.35%	0.40%	0.10%	1.12%	0.00%	8.07%	0.29%	0.20%	0.37%	0.25%	0.06%	0.02%
Namibia	DHS	2007	97.41%	0.41%	0.31%	1.69%	0.00%	15.32%	0.12%	0.04%	0.05%	0.04%	0.00%	0.00%
Trinidad and Tobago	MICS	2006	97.45%	0.20%	0.06%	2.20%	NA	NA	0.05%	0.00%	0.00%	0.03%	0.00%	0.04%
Ethiopia	DHS	2005	97.52%	0.17%	0.11%	1.41%	46.87%	3.76%	0.08%	0.07%	0.08%	0.05%	0.01%	0.00%
Malawi	DHS	2004	97.54%	0.05%	0.05%	1.75%	2.05%	11.15%	0.16%	0.01%	0.07%	0.04%	0.02%	0.01%
Republic of Congo	DHS	2005	97.62%	0.17%	0.10%	1.24%	0.00%	9.65%	0.03%	0.73%	0.06%	0.10%	0.00%	0.00%
Cameroon	DHS	2004	97.63%	0.12%	0.10%	1.57%	42.09%	6.18%	0.05%	0.34%	0.16%	0.11%	0.08%	0.04%
Tajikistan	MICS	2005	97.65%	0.00%	0.02%	1.23%	NA	1.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Niger	DHS	2006	97.70%	0.23%	0.43%	1.34%	45.73%	4.77%	0.07%	0.12%	0.08%	0.05%	0.04%	0.00%
Kenya	DHS	2003	97.78%	0.13%	0.02%	1.71%	0.00%	7.87%	0.11%	0.08%	0.14%	0.16%	0.10%	0.04%
Lao	MICS	2006	97.90%	0.02%	0.00%	NA	NA	2.06%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%
Guinea	DHS	2005	98.01%	0.15%	0.06%	0.74%	45.09%	4.19%	0.31%	0.12%	0.27%	0.29%	0.18%	0.03%
Swaziland	DHS	2007	98.11%	0.12%	0.04%	1.56%	0.00%	14.55%	0.00%	0.06%	0.07%	0.04%	0.00%	0.00%
Gambia	MICS	2006	98.19%	0.03%	0.02%	0.34%	NA	1.03%	0.26%	0.03%	0.12%	0.07%	0.00%	0.00%
Peru	DHS	2004	98.21%	0.02%	0.00%	1.09%	43.41%	3.01%	0.03%	0.03%	0.01%	0.01%	0.01%	0.00%
Azerbaijan	DHS	2006	98.40%	0.09%	0.06%	0.70%	3.09%	2.02%	0.11%	0.07%	0.07%	0.07%	0.03%	0.06%
Burundi	MICS	2005	98.41%	0.04%	0.27%	0.79%	NA	NA	0.08%	0.09%	0.29%	0.10%	0.04%	0.07%
Croatia	WHS	2003	98.44%	0.14%	NA	NA	0.81%	NA	0.00%	0.78%	0.95%	0.75%	0.75%	0.00%
DR Congo	DHS	2005	98.45%	0.10%	0.06%	0.78%	45.43%	5.07%	0.18%	0.05%	0.12%	0.32%	0.00%	0.01%
Uzbekistan	MICS	2006	98.45%	0.00%	0.00%	0.76%	NA	0.97%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hungary	WHS	2003	98.60%	0.00%	NA	NA	1.00%	NA	0.00%	0.00%	0.00%	0.00%	NA	0.51%
Uruguay	WHS	2003	98.81%	0.00%	NA	0.00%	0.44%	NA	0.00%	0.61%	0.43%	0.51%	0.77%	0.17%
Thailand	MICS	2005	98.83%	0.05%	0.00%	0.34%	NA	0.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Tanzania	DHS	2008	98.96%	0.02%	0.28%	0.45%	NA	NA	0.12%	0.00%	0.04%	0.12%	0.03%	0.00%
Occupied Palestinian Territories	MICS	2006	98.99%	0.11%	0.02%	0.56%	NA	0.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Rwanda	DHS	2005	99.06%	0.18%	0.14%	0.36%	44.20%	2.71%	0.10%	0.08%	0.03%	0.06%	0.04%	0.00%

Table 2.2, Continued

Country	Survey	Year	Percent of Total Sample Used to compute MPI (Unweighted)	Percent of non response rate by indicator (Unweighted)										
				Education		Health			Living Standard					
							Nutrition							
				Schooling	Child School Attendance	Mortality	Women/ Adult's BMI	Child Nutrition (Weight-for-age)	Electricity	Cooking fuel	Floor	Sanitation	Drinking Water	Assets
Philippines	DHS	2003	99.11%	0.01%	0.02%	0.71%	NA	NA	0.02%	NA	0.07%	0.05%	0.05%	0.00%
Zambia	DHS	2007	99.16%	0.07%	0.09%	0.62%	0.00%	9.93%	0.01%	0.01%	0.03%	0.04%	0.01%	0.01%
Cambodia	DHS	2005	99.18%	0.07%	0.04%	0.63%	45.51%	2.84%	0.02%	0.02%	0.02%	0.02%	0.00%	0.00%
Yemen	MICS	2006	99.19%	0.02%	0.23%	0.00%	NA	NA	0.07%	0.12%	0.43%	0.02%	0.00%	0.04%
Nepal	DHS	2006	99.21%	0.00%	0.00%	0.44%	0.82%	4.47%	0.00%	0.00%	0.05%	0.00%	0.00%	0.00%
Bosnia and Herzegovina	MICS	2006	99.28%	0.00%	0.02%	NA	NA	0.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Haiti	DHS	2006	99.30%	0.12%	0.09%	0.36%	43.32%	3.49%	0.01%	0.01%	0.00%	0.13%	0.00%	0.00%
Kazakhstan	MICS	2006	99.43%	0.00%	0.00%	0.46%	NA	0.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ghana	DHS	2008	99.43%	0.07%	0.03%	0.29%	0.00%	3.86%	0.04%	0.00%	0.02%	0.12%	0.01%	0.00%
Viet Nam	DHS	2002	99.46%	0.00%	0.00%	0.39%	NA	NA	0.05%	NA	0.08%	0.10%	0.04%	0.04%
China	WHS	2003	99.61%	0.04%	NA	0.00%	0.15%	NA	0.07%	0.06%	0.12%	0.09%	0.00%	0.00%
Belarus	MICS	2005	99.61%	0.00%	0.00%	0.04%	NA	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Albania	MICS	2005	99.70%	0.00%	0.00%	0.24%	NA	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Egypt	DHS	2008	99.83%	0.01%	0.01%	0.06%	0.00%	0.74%	0.00%	NA	0.04%	0.04%	0.01%	0.00%
Mexico	ENSANUT	2006	99.86%	0.10%	0.00%	0.00%	25.48%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%

Appendix 3: Decomposition Results for India, Kenya and Bolivia

3.1 India

3.1.1 India Decomposition by State

State	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	Population (millions) 2007	Sample Population Share	Contribution to Aggregate MPI
Delhi	0.062	1	0.142	0.437	16.9	1.1%	0.2%
Kerala	0.065	2	0.159	0.409	35.0	2.6%	0.6%
Goa	0.094	3	0.217	0.434	1.6	0.1%	0.0%
Punjab	0.120	4	0.262	0.460	27.1	2.5%	1.0%
Himachal Pradesh	0.131	5	0.310	0.423	6.7	0.6%	0.3%
Tamil Nadu	0.141	6	0.324	0.436	68.0	5.5%	2.6%
Uttaranchal	0.189	7	0.403	0.469	9.6	0.8%	0.5%
Maharashtra	0.193	8	0.401	0.481	108.7	9.3%	6.0%
Haryana	0.199	9	0.416	0.479	24.1	2.0%	1.3%
Gujarat	0.205	10	0.415	0.492	57.3	4.9%	3.4%
Jammu And Kashmir	0.209	11	0.438	0.477	12.2	0.9%	0.7%
Andhra Pradesh	0.211	12	0.447	0.471	83.9	7.1%	5.1%
Karnataka	0.223	13	0.461	0.483	58.6	5.5%	4.2%
Eastern States	0.303	14	0.576	0.525	44.2	3.9%	4.0%
West Bengal	0.317	15	0.583	0.543	89.5	8.0%	8.5%
Orissa	0.345	16	0.640	0.540	40.7	3.7%	4.3%
Rajasthan	0.351	17	0.642	0.547	65.4	5.9%	7.0%
Uttar Pradesh	0.386	18	0.699	0.552	192.6	16.3%	21.3%
Chhattisgarh	0.387	19	0.719	0.539	23.9	2.3%	2.9%
Madhya Pradesh	0.389	20	0.695	0.560	70.0	6.5%	8.5%
Jharkhand	0.463	21	0.770	0.602	30.5	2.7%	4.2%
Bihar	0.499	22	0.814	0.613	95.0	8.0%	13.5%
India	**0.296**		**0.554**	**0.535**	**1,164.7**	**100.0%**	**100%**

State	MPI	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Delhi	0.062	1	0.04	0.09	0.07	0.09	0.00	0.10	0.03	0.02	0.05	0.06
Kerala	0.065	2	0.01	0.07	0.04	0.12	0.05	0.04	0.09	0.03	0.15	0.11
Goa	0.094	3	0.04	0.09	0.04	0.16	0.02	0.16	0.10	0.12	0.17	0.12
Punjab	0.120	4	0.08	0.13	0.09	0.17	0.02	0.20	0.01	0.16	0.23	0.11
Himachal Pradesh	0.131	5	0.04	0.07	0.09	0.25	0.01	0.28	0.08	0.15	0.29	0.20
Tamil Nadu	0.141	6	0.09	0.08	0.11	0.21	0.07	0.31	0.05	0.12	0.30	0.24
Uttaranchal	0.189	7	0.08	0.10	0.15	0.30	0.15	0.33	0.10	0.30	0.37	0.27
Maharashtra	0.193	8	0.08	0.15	0.14	0.30	0.13	0.36	0.08	0.27	0.34	0.28
Haryana	0.199	9	0.08	0.20	0.15	0.30	0.08	0.34	0.08	0.24	0.39	0.25
Gujarat	0.205	10	0.12	0.13	0.17	0.33	0.09	0.36	0.10	0.24	0.36	0.29
Jammu And Kashmir	0.209	11	0.08	0.22	0.16	0.27	0.05	0.40	0.17	0.28	0.39	0.27
Andhra Pradesh	0.211	12	0.19	0.13	0.16	0.29	0.08	0.41	0.06	0.19	0.42	0.35
Karnataka	0.223	13	0.12	0.21	0.17	0.33	0.08	0.41	0.12	0.19	0.42	0.32
Eastern States	0.303	14	0.19	0.21	0.19	0.37	0.41	0.45	0.23	0.50	0.55	0.42
West Bengal	0.317	15	0.25	0.23	0.19	0.42	0.41	0.47	0.07	0.48	0.57	0.43
Orissa	0.345	16	0.23	0.19	0.24	0.45	0.43	0.62	0.20	0.51	0.63	0.49
Rajasthan	0.351	17	0.21	0.32	0.28	0.44	0.31	0.60	0.24	0.36	0.61	0.47
Uttar Pradesh	0.386	18	0.18	0.36	0.37	0.46	0.48	0.62	0.07	0.58	0.66	0.41
Chhattisgarh	0.387	19	0.21	0.29	0.31	0.52	0.24	0.69	0.22	0.64	0.70	0.48
Madhya Pradesh	0.389	20	0.22	0.32	0.31	0.50	0.25	0.65	0.31	0.57	0.67	0.52
Jharkhand	0.463	21	0.26	0.45	0.30	0.56	0.55	0.73	0.42	0.63	0.76	0.55
Bihar	0.499	22	0.35	0.52	0.35	0.61	0.65	0.74	0.04	0.70	0.79	0.57
India	**0.296**		**0.18**	**0.25**	**0.23**	**0.39**	**0.29**	**0.49**	**0.12**	**0.40**	**0.52**	**0.38**

State	MPI	MPI Rank	Percent Contribution of Deprivations in …		
			Education	Health	Standard of Living
Delhi	0.062	1	34.6%	41.4%	24.0%
Kerala	0.065	2	20.3%	40.4%	39.3%
Goa	0.094	3	22.8%	36.8%	40.4%
Punjab	0.120	4	30.0%	36.1%	33.9%
Himachal Pradesh	0.131	5	13.6%	43.3%	43.1%
Tamil Nadu	0.141	6	19.4%	37.5%	43.2%
Uttaranchal	0.189	7	15.9%	39.7%	44.5%
Maharashtra	0.193	8	20.0%	37.8%	42.2%
Haryana	0.199	9	23.8%	37.6%	38.6%
Gujarat	0.205	10	20.3%	40.6%	39.2%
Jammu And Kashmir	0.209	11	24.5%	34.0%	41.4%
Andhra Pradesh	0.211	12	25.1%	35.0%	39.9%
Karnataka	0.223	13	24.9%	36.9%	38.2%
Eastern States	0.303	14	22.0%	31.0%	47.0%
West Bengal	0.317	15	25.4%	32.0%	42.7%
Orissa	0.345	16	20.3%	33.3%	46.4%
Rajasthan	0.351	17	25.0%	34.2%	40.8%
Uttar Pradesh	0.386	18	23.4%	35.8%	40.8%
Chhattisgarh	0.387	19	21.6%	35.8%	42.5%
Madhya Pradesh	0.389	20	22.9%	34.7%	42.4%
Jharkhand	0.463	21	25.3%	31.0%	43.7%
Bihar	0.499	22	29.0%	32.0%	39.0%
India	**0.296**		24.0%	34.7%	41.3%

3.1.2 India Decomposition by Caste

Caste	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	Sample Population Share	Contribution to Aggregate MPI
Scheduled Tribe	0.482	4	0.814	0.592	9.2%	15.1%
Scheduled Caste	0.361	3	0.658	0.548	21.6%	26.5%
Other Backward Class	0.305	2	0.583	0.523	43.0%	44.5%
None of Above	0.157	1	0.333	0.472	26.1%	13.9%
India (Hindu)	**0.295**		**0.555**	**0.531**	**100%**	**100%**

Caste	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Scheduled Tribe	0.482	4	0.35	0.37	0.32	0.58	0.47	0.79	0.32	0.71	0.80	0.67
Scheduled Caste	0.361	3	0.23	0.28	0.28	0.47	0.37	0.60	0.13	0.50	0.63	0.49
Other Backward Class	0.305	2	0.16	0.25	0.25	0.40	0.29	0.54	0.13	0.41	0.55	0.39
None of Above	0.157	1	0.06	0.12	0.13	0.24	0.14	0.27	0.07	0.21	0.30	0.19
India (Hindu)	**0.296**		**0.17**	**0.24**	**0.23**	**0.39**	**0.28**	**0.50**	**0.13**	**0.40**	**0.53**	**0.38**

State	MPI Value	MPI Rank	Percent Contribution of Deprivations in...		
			Education	Health	Standard of Living
Scheduled Tribe	0.482	4	25.2%	31.4%	43.4%
Scheduled Caste	0.361	3	23.5%	34.5%	42.0%
Other Backward Class	0.305	2	22.5%	35.6%	43.4%
None of above	0.157	1	19.1%	39.6%	43.4%
India (Hindu)	**0.296**		**22.7%**	**35.2%**	**42.0%**

3.1.3 India Decomposition of the least poor and poorest caste by region

Least Poor and Poorest Caste by Region	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)
None Urban	0.052	1	0.122	0.425
Scheduled Tribe Urban	0.202	2	0.393	0.513
None Rural	0.235	3	0.489	0.480
Scheduled Tribe Rural	0.510	4	0.856	0.596

Least Poor and Poorest Caste by Region	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
None Urban	0.052	1	0.02	0.06	0.06	0.09	0.01	0.07	0.02	0.03	0.06	0.06
Scheduled Tribe Urban	0.202	2	0.14	0.19	0.16	0.28	0.10	0.34	0.08	0.21	0.32	0.27
None Rural	0.235	3	0.09	0.17	0.19	0.35	0.23	0.41	0.11	0.35	0.47	0.28
Scheduled Tribe Rural	0.510	4	0.38	0.39	0.34	0.62	0.51	0.84	0.35	0.76	0.85	0.71

Least Poor and Poorest Caste by Region	MPI Value	MPI Rank	Percent Contribution of Deprivations in...		
			Education	Health	Standard of Living
None Urban	0.052	1	26.1%	47.4%	26.5%
Scheduled Tribe Urban	0.202	2	27.4%	36.2%	36.4%
None Rural	0.235	3	18.0%	38.4%	43.6%
Scheduled Tribe Rural	0.510	4	25.1%	31.3%	43.7%

3.2 Kenya

3.2.1 Kenya Decomposition by State

State	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	Sample Population Share	Contribution to Aggregate MPI
Nairobi	0.049	1	0.118	0.411	7.3%	1.2%
Central	0.181	2	0.426	0.425	13.5%	8.1%
Coast	0.338	5	0.627	0.539	8.1%	9.1%
Eastern	0.297	3	0.616	0.482	16.9%	16.6%
Nyanza	0.360	7	0.738	0.488	15.4%	18.4%
Rift Valley	0.351	6	0.675	0.520	24.0%	27.9%
Western	0.317	4	0.669	0.474	11.9%	12.5%
North Eastern	0.676	8	0.981	0.690	2.8%	6.3%
Kenya	**0.302**		**0.604**	**0.500**	**100%**	**100%**

State	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Nairobi	0.049	1	0.04	0.05	0.08	0.03	0.06	0.08	0.01	0.03	0.05	0.07
Central	0.181	2	0.04	0.04	0.12	0.13	0.42	0.42	0.31	0.36	0.42	0.31
Coast	0.338	5	0.09	0.12	0.43	0.19	0.73	0.73	0.63	0.64	0.73	0.53
Eastern	0.297	3	0.20	0.22	0.30	0.24	0.61	0.58	0.37	0.51	0.61	0.51
Nyanza	0.360	7	0.08	0.07	0.34	0.22	0.67	0.65	0.56	0.63	0.66	0.41
Rift Valley	0.351	6	0.17	0.20	0.23	0.30	0.66	0.66	0.55	0.58	0.67	0.53
Western	0.317	4	0.10	0.11	0.20	0.26	0.61	0.60	0.51	0.52	0.61	0.45
North Eastern	0.676	8	0.67	0.70	0.39	0.38	0.96	0.97	0.92	0.93	0.98	0.97
Kenya	**0.302**		**0.12**	**0.14**	**0.25**	**0.22**	**0.59**	**0.59**	**0.48**	**0.52**	**0.59**	**0.45**

State	MPI Value	MPI Rank	Percent Contribution of Deprivations in …		
			Education	Health	Standard of Living
Nairobi	0.049	1	27.6%	36.7%	35.7%
Central	0.181	2	7.9%	23.1%	69.0%
Coast	0.338	5	9.6%	28.8%	61.7%
Eastern	0.297	3	20.8%	26.8%	52.4%
Nyanza	0.360	7	8.3%	29.2%	62.6%
Rift Valley	0.351	6	17.3%	24.9%	57.8%
Western	0.317	4	11.7%	26.2%	62.1%
North Eastern	0.676	8	20.8%	26.8%	52.4%
Kenya	**0.302**		**14.5%**	**26.2%**	**59.3%**

3.2.2 Kenya Decomposition by Ethnicity

Ethnicity	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	Sample Population Share	Contribution to Aggregate MPI
Embu	0.141	1	0.369	0.381	1.3%	0.6%
Kikuyu	0.167	2	0.386	0.433	19.5%	10.3%
Taita/Tavate	0.205	3	0.483	0.424	1.2%	0.8%
Meru	0.241	4	0.486	0.496	5.2%	4.0%
Luhya	0.284	5	0.602	0.472	14.9%	13.4%
Kamba	0.304	6	0.633	0.480	11.9%	11.5%
Other	0.313	7	0.557	0.563	1.3%	1.3%
Kisii	0.315	8	0.708	0.446	5.5%	5.5%
Luo	0.333	9	0.663	0.502	11.9%	12.6%
Kalenjin	0.369	10	0.736	0.502	11.6%	13.5%
Mijikenda/Swahili	0.417	11	0.747	0.558	5.3%	7.0%
Kuria	0.508	12	0.852	0.596	0.7%	1.2%
Somali	0.594	13	0.887	0.670	4.5%	8.5%
Masai	0.599	14	0.961	0.623	3.2%	6.1%
Turkana	0.654	15	0.956	0.684	1.9%	3.9%
Kenya	**0.316**		**0.622**	**0.508**	**100%**	**100%**

Ethnicity	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Embu	0.141	1	0.02	0.03	0.04	0.09	0.36	0.36	0.34	0.32	0.37	0.26
Kikuyu	0.167	2	0.02	0.04	0.14	0.14	0.37	0.38	0.27	0.31	0.38	0.27
Taita/Tavate	0.205	3	0.02	0.05	0.20	0.16	0.47	0.35	0.28	0.39	0.47	0.43
Meru	0.241	4	0.10	0.10	0.20	0.20	0.48	0.48	0.32	0.42	0.48	0.34
Luhya	0.284	5	0.06	0.08	0.34	0.18	0.60	0.58	0.47	0.53	0.59	0.36
Kamba	0.304	6	0.04	0.09	0.24	0.33	0.63	0.61	0.56	0.51	0.62	0.44
Other	0.313	7	0.10	0.17	0.37	0.28	0.54	0.55	0.48	0.49	0.54	0.30
Kisii	0.315	8	0.01	0.08	0.27	0.21	0.71	0.69	0.64	0.61	0.70	0.59
Luo	0.333	9	0.05	0.11	0.51	0.21	0.63	0.65	0.50	0.52	0.64	0.42
Kalenjin	0.369	10	0.06	0.14	0.27	0.39	0.73	0.72	0.64	0.66	0.73	0.60
Mijikenda/Swahili	0.417	11	0.20	0.29	0.40	0.33	0.73	0.71	0.45	0.64	0.74	0.58
Kuria	0.508	12	0.14	0.37	0.65	0.30	0.85	0.85	0.69	0.84	0.85	0.70
Somali	0.594	13	0.57	0.60	0.41	0.39	0.80	0.82	0.68	0.76	0.88	0.83
Masai	0.599	14	0.45	0.56	0.24	0.55	0.96	0.95	0.87	0.92	0.96	0.71
Turkana	0.654	15	0.63	0.57	0.33	0.60	0.96	0.92	0.82	0.87	0.95	0.85
Kenya	**0.316**		**0.10**	**0.15**	**0.29**	**0.26**	**0.61**	**0.60**	**0.49**	**0.53**	**0.61**	**0.45**

Ethnicity	MPI Value	MPI Rank	Percent Contribution of Deprivations in …		
			Education	Health	Standard of Living
Embu	0.141	1	5.6%	15.5%	78.9%
Kikuyu	0.167	2	5.8%	28.5%	65.6%
Taita/Tavate	0.205	3	5.8%	29.5%	64.7%
Meru	0.241	4	14.1%	27.7%	58.1%
Luhya	0.284	5	7.8%	30.9%	61.3%
Kamba	0.304	6	7.2%	31.1%	61.7%
Other	0.313	7	14.3%	34.4%	51.3%
Kisii	0.315	8	4.9%	25.5%	69.6%
Luo	0.333	9	8.4%	35.7%	55.9%
Kalenjin	0.369	10	9.0%	29.6%	61.4%
Mijikenda/Sw	0.417	11	19.6%	29.1%	51.4%
Kuria	0.508	12	16.6%	31.0%	52.4%
Somali	0.594	13	33.0%	22.4%	44.6%
Masai	0.599	14	28.2%	22.0%	49.8%
Turkana	0.654	15	30.6%	23.8%	45.6%
Kenya	**0.316**		13.1%	29.0%	57.9%

3.2.3 Kenya Decomposition of the least poor and poorest ethnicity by region

Least Poor and Poorest Caste by Region	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)
Central Urban	0.079	1	0.175	0.451
Central Rural	0.194	2	0.458	0.424
North Eastern Urban	0.564	3	0.908	0.621
North Eastern Rural	0.703	4	0.998	0.704

Least Poor and Poorest Caste by Region	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Central Urban	0.079	1	0.02	0.02	0.06	0.06	0.17	0.18	0.15	0.16	0.16	0.14
Central Rural	0.194	2	0.05	0.05	0.13	0.14	0.45	0.45	0.33	0.39	0.45	0.34
North Eastern Rural	0.564	3	0.73	0.73	0.40	0.37	1.00	0.99	0.97	0.99	1.00	1.00
North Eastern Urban	0.703	4	0.44	0.57	0.33	0.42	0.79	0.88	0.71	0.70	0.91	0.87

Least Poor and Poorest Caste & Region	MPI Value	MPI Rank	Percent Contribution of Deprivations in...		
			Education	Health	Standard of Living
Central Urban	0.079	1	8.5%	24.4%	67.1%
Central Rural	0.194	2	7.8%	23.1%	69.1%
North Eastern Urban	0.564	3	30.0%	22.2%	47.9%
North Eastern Rural	0.703	4	34.6%	18.4%	47.0%

3.3 Bolivia

3.3.1 Bolivia Decomposition by State

State	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	Sample Population Share	Contribution to Aggregate MPI
Oruro	0.118	1	0.267	0.441	5.0%	3.4%
Santa Cruz	0.121	2	0.260	0.467	24.4%	16.9%
Tarija	0.161	3	0.333	0.484	4.8%	4.4%
La Paz	0.167	4	0.372	0.449	26.5%	25.2%
Cochabamba	0.175	5	0.347	0.504	18.9%	18.9%
Pando	0.176	6	0.345	0.511	0.5%	0.5%
Beni	0.235	7	0.501	0.469	3.9%	5.2%
Potosi	0.270	8	0.513	0.526	8.7%	13.4%
Chuquisaca	0.291	9	0.551	0.527	7.3%	12.1%
Bolivia	**0.175**		**0.363**	**0.483**	**100%**	100%

State	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Oruro	0.118	1	0.06	0.13	0.16	0.03	0.15	0.26	0.15	0.17	0.18	0.08
Santa Cruz	0.121	2	0.04	0.19	0.15	0.03	0.16	0.25	0.07	0.16	0.19	0.13
Tarija	0.161	3	0.08	0.26	0.15	0.03	0.23	0.33	0.15	0.18	0.29	0.16
La Paz	0.167	4	0.06	0.24	0.21	0.04	0.19	0.36	0.15	0.25	0.24	0.17
Cochabamba	0.175	5	0.12	0.19	0.19	0.05	0.22	0.34	0.16	0.26	0.29	0.19
Pando	0.176	6	0.12	0.14	0.19	0.06	0.28	0.34	0.31	0.20	0.31	0.23
Beni	0.235	7	0.05	0.35	0.23	0.08	0.30	0.50	0.30	0.43	0.40	0.21
Potosi	0.270	8	0.19	0.31	0.25	0.08	0.42	0.51	0.26	0.39	0.45	0.32
Chuquisaca	0.291	9	0.17	0.36	0.26	0.06	0.47	0.55	0.33	0.42	0.51	0.41
Bolivia	**0.175**		**0.09**	**0.23**	**0.19**	**0.05**	**0.23**	**0.36**	**0.16**	**0.25**	**0.28**	**0.19**

State	MPI Value	MPI Rank	Percent Contribution of Deprivations in …		
			Education	Health	Standard of Living
Oruro	0.118	1	27.3%	26.1%	46.6%
Santa Cruz	0.121	2	31.5%	24.9%	43.5%
Tarija	0.161	3	35.5%	18.5%	46.0%
La Paz	0.167	4	30.1%	24.8%	45.1%
Cochabamba	0.175	5	30.0%	23.5%	46.5%
Pando	0.176	6	24.2%	23.1%	52.7%
Beni	0.235	7	27.8%	21.6%	50.5%
Potosi	0.270	8	30.8%	20.8%	48.4%
Chuquisaca	0.291	9	30.2%	18.4%	51.3%

3.3.2 Bolivia Decomposition by Ethnicity

Ethnicity	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)	Sample Population Share	Contribution to Aggregate MPI
None	0.132	1	0.277	0.474	40.6%	30%
Aymara	0.164	2	0.363	0.452	22.6%	21.1%
Guarani	0.227	3	0.456	0.498	2.4%	3.1%
Other	0.227	4	0.458	0.495	1.1%	1.4%
Quechua	0.231	5	0.442	0.523	33.4%	44.0%
Bolivia	**0.175**		**0.358**	**0.490**	**100.0%**	**100.0%**

Ethnicity	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Asset
None	0.132	1	0.04	0.20	0.16	0.05	0.16	0.27	0.11	0.17	0.20	0.13
Aymara	0.164	2	0.03	0.24	0.24	0.04	0.19	0.35	0.16	0.24	0.24	0.14
Guaraní	0.227	3	0.07	0.38	0.25	0.04	0.31	0.45	0.12	0.33	0.40	0.26
Other	0.227	4	0.06	0.33	0.24	0.07	0.28	0.45	0.18	0.39	0.40	0.25
Quechua	0.231	5	0.12	0.28	0.27	0.08	0.31	0.44	0.21	0.32	0.37	0.25
Bolivia	**0.175**		0.07	0.24	0.22	0.05	0.22	0.35	0.16	0.24	0.27	0.18

Ethnicity	MPI Value	MPI Rank	Percent Contribution of Deprivations in …		
			Education	Health	Standard of Living
None	0.132	1	29.8%	26.5%	43.7%
Aymara	0.164	2	27.8%	27.6%	44.6%
Guaraní	0.227	3	32.9%	21.4%	45.7%
Other	0.227	4	29.0%	23.1%	47.8%
Quechua	0.231	5	29.5%	24.9%	45.6%
Bolivia	**0.175**		29.3%	25.8%	44.9%

3.3.3 Bolivia Decomposition of the least poor and poorest ethnicity by region

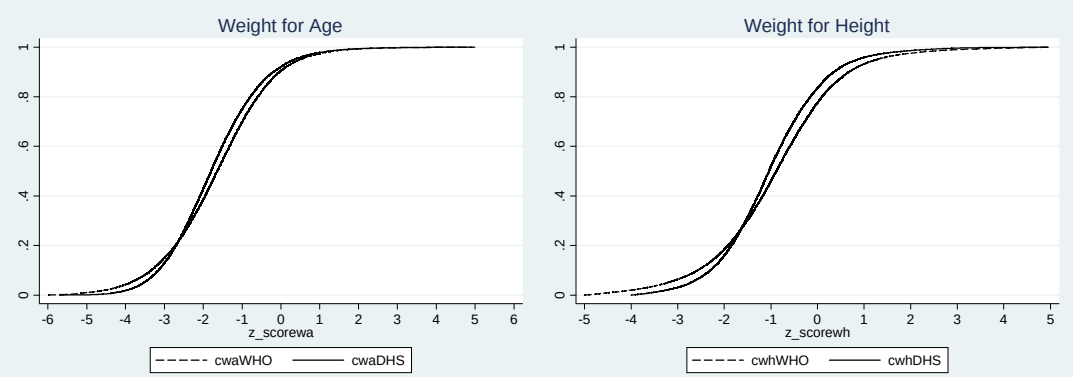
Least Poor and Poorest Caste by Region	MPI Value	MPI Rank	H (Proportion of poor)	A (Average intensity of deprivations)
Quechua Urban	0.053	1	0.122	0.433
None Urban	0.062	2	0.143	0.434
None Rural	0.342	3	0.684	0.500
Quechua Rural	0.406	4	0.756	0.537

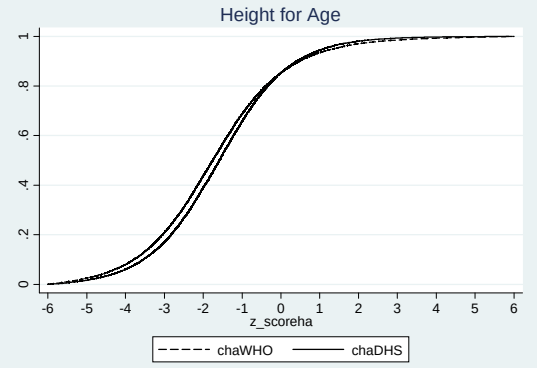
Least Poor and Poorest Caste by Region	MPI Value	MPI Rank	Proportion of people who are poor and deprived in…									
			Education		Health		Standard of Living					
			Schooling	Child School Attendance	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Asset
Quechua Urban	0.053	1	0.03	0.07	0.10	0.03	0.02	0.11	0.03	0.04	0.03	0.04
None Urban	0.062	2	0.01	0.10	0.10	0.03	0.04	0.13	0.04	0.07	0.06	0.05
None Rural	0.342	3	0.11	0.51	0.36	0.08	0.54	0.68	0.32	0.48	0.61	0.38
Quechua Rural	0.406	4	0.22	0.49	0.44	0.13	0.60	0.75	0.39	0.60	0.69	0.46

Least Poor and Poorest Caste & Region	MPI	MPI Rank	Percent Contribution of Deprivations in...		
			Education	Health	Standard of Living
Quechua Urban	0.053	1	31.8%	39.0%	29.2%
None Urban	0.062	2	29.3%	35.9%	34.8%
None Rural	0.342	3	30.0%	21.3%	48.7%
Quechua Rural	0.406	4	29.2%	23.1%	47.7%

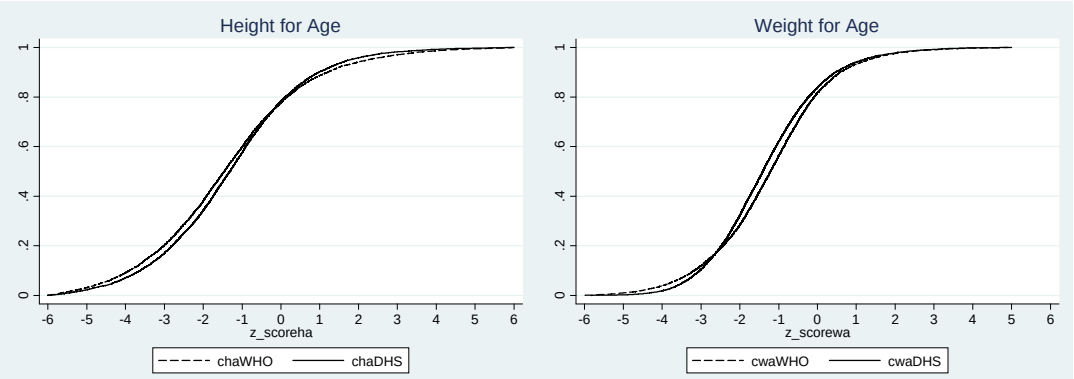
Appendix 4: Differences in children´s nutritional reference populations NCHS/WHO vs. MGRS (WHO)

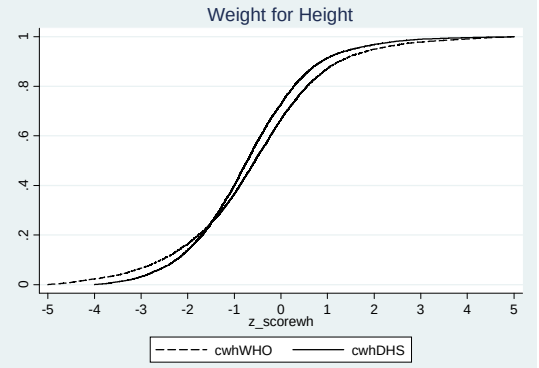
India





Mali





Appendix 5: Correlations between different specifications of MPI (robustness to indicators´ cutoffs and weights)

			Excluding Child School Attendance	Using weight-for-age	Using weight-for-height
				Selected Measure	
MPI 2	Using weight-for-age (Selected Measure)	Pearson	0.989		
		Spearman	0.977		
		Kendall (Taub)	0.884		
MPI 3	Using weight-for-height	Pearson	0.986	0.999	
		Spearman	0.974	0.998	
		Kendall (Taub)	0.872	0.975	
MPI 4	Using height-for-age	Pearson	0.987	0.998	0.996
		Spearman	0.976	0.996	0.994
		Kendall (Taub)	0.881	0.960	0.946
Number of countries:		**85 (All DHS and MICS countries)**			

All MPI 1-4 use the New Reference Population to calculate children´s nutritional indicators
In all cases a cutoff of being deprived in 30% of the weighted indicators was used

			Excluding Child School Attendance	Using weight-for-age	Using weight-for-height	Using height-for-age
				Selected Measure		
MPI 2	Using weight-for-age (Selected Measure)	Pearson	0.989			
		Spearman	0.988			
		Kendall (Taub)	0.920			
MPI 3	Using weight-for-height	Pearson	0.986	0.996		
		Spearman	0.985	0.999		
		Kendall (Taub)	0.908	0.984		
MPI 4	Using height-for-age	Pearson	0.987	0.998	0.996	
		Spearman	0.987	0.998	0.996	
		Kendall (Taub)	0.917	0.969	0.962	
MPI 5	Using under 5 mortality (rather than age non-specific mortality)	Pearson	0.991	0.998	0.997	0.996
		Spearman	0.989	0.997	0.995	0.996
		Kendall (Taub)	0.920	0.975	0.966	0.959
Number of countries:		**51 (All DHS and three MICS countries which have Birth History)**				

All MPI 1-4 use the New Reference Population to calculate children´s nutritional indicators
In all cases a cutoff of being deprived in 30% of the weighted indicators was used

			MPI 2 Using weight-for-age (New Reference Population) (Selected Measure)	**MPI6** Using weight-for-age (Old Reference Population) Not considering distance to water source
MPI 6	Using weight-for-age (Old Reference Population) Not considering distance to water source	Pearson	0.997	
		Spearman	0.994	
		Kendall (Taub)	0.956	
MPI 7	Using weight-for-age (Old Reference Population) Higher cutoffs for water, sanitation and	Pearson	0.995	0.999
		Spearman	0.991	0.997
		Kendall (Taub)	0.938	0.975
Number of countries:		**47 DHS countries**		

In all cases a cutoff of being deprived in 30% of the weighted indicators was used

			MPI Weights 1	MPI Weights 2	MPI Weights 3
			Equal weights: 33% each **(Selected Measure)**	50% Education 25% Health 25% LS	50% Health 25% Education 25% LS
MPI Weights 2	50% Education 25% Health 25% LS	Pearson Spearman Kendall (Taub)	0.991 0.984 0.903		
MPI Weights 3	50% Health 25% Education 25% LS	Pearson Spearman Kendall (Taub)	0.995 0.981 0.909	0.985 0.957 0.836	
MPI Weights 4	50% LS 25% Education 25% Health	Pearson Spearman Kendall (Taub)	0.989 0.989 0.916	0.966 0.970 0.854	0.978 0.968 0.856
Number of countries:		**104**			