Identifying the Bottom Billion: Beyond National Averages

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Motivation

• Important for effective policies for poverty reduction
  – Who are the multidimensionally poorest billion people?
  – Where do they live?

• The answer depends on how we identify the poorest billion
What’s new

• This is the first exercise to identify the poorest billion people using a **multidimensional** poverty measure.

• The calculations demonstrate the importance of **going beyond national averages**.
  – We start with **national MPI** values.
  – We next use **subnational MPI** values.
  – Finally, we use **individual poverty profiles** – the deprivation scores showing the intensity of a person’s poverty.

• Like other ‘bottom billion’ exercises, these findings are illustrative, as MPI data are from different years.
How is a Person Identified as Poor?

The MPI uses the Adjusted Headcount Ratio:

\[ \text{MPI} = H \times A \]

\( H \) is the *incidence* of multidimensional poverty

\( A \) is the average proportion of weighted deprivations people suffer at the same time, or the *intensity* of poverty

A person is identified as *poor* if he or she is deprived in 1/3 or more of ten weighted indicators.
Data: 104 Surveys

Demographic & Health Surveys (*DHS* - 51)
Multiple Indicator Cluster Surveys (*MICS* - 30)
World Health Survey (*WHS* – 17)

Additionally, we used six special surveys covering urban Argentina (*ENNyS*), Brazil (*PNDS*), Mexico (*ENSANUT*), Morocco (*ENNVM*), Occupied Palestinian Territory (*PAPFAM*), and South Africa (*NIDS*).

Constraints: Data are 2002-2011. Not all have all ten indicators. Five countries having 2000-01 data are not reported in HDR 2013.
Poorest Billion in Poorest Countries

• Rank countries from poorest to richest based on MPI
• Add up the total number of poor living in poorest countries until a billion is reached
• The poorest billion people reside in 30 countries
Poorest Billion in Poorest Countries

All countries fall in low or lower-middle income category
Poorest Billion in Poorest Countries

• However, national averages conceal regional variation

• Example: Tanzania (2010)

  Kilimanjaro: 32.4% multidimensionally poor
  Dodoma: 87.4% multidimensionally poor

• We disaggregate national averages across sub-national regions
Poorest Billion in Poorest Sub-national Regions

- Rank sub-national regions from poorest to richest based on MPI
- Add up the total number of poor living in poorest sub-national regions until a billion is reached
- The poorest billion people reside in 265 sub-national regions across 44 countries
The Poorest Billion in Poorest Sub-national Regions

Distribution of Subnational Bottom Billion Poor across Geographical Regions:
- Arab States: 2.0%
- Latin America & Caribbean: 0.5%
- East Asia and Pacific: 0.3%
- Sub-Saharan Africa: 39.2%
- South Asia: 57.9%

Distribution of Subnational Bottom Billion Poor across Income Categories:
- Upper Middle Income: 0.04%
- Lower Middle Income: 61.6%
- Low Income: 38.4%

Some sub-national regions are in upper-middle income countries.
Poorest Billion in Poorest Sub-national Regions

• Does this analysis provide a complete picture?
• Individual poverty profiles vary within sub-national regions
• So, can we disaggregate further?
  – The answer is: Yes
• We identify the poorest billion people by their poverty profiles
Poorest Billion by Individual Poverty Profiles

• Rank *individuals* from poorest to richest based on their poverty profiles built on ten indicators
• Add up the total number of poor with the worst deprivation profiles until a billion is reached
• The poorest billion people reside across 100 countries
Poorest Billion by Individual Poverty Profiles

Distribution of Individual Bottom Billion Poor across Geographical Regions

- Sub-Saharan Africa: 32.7%
- East Asia & Pacific: 12.3%
- Latin America and Caribbean: 1.4%
- Arab States: 1.8%
- Europe and Central Asia: 0.2%
- South Asia: 51.6%

9.5 percent of the poorest billion people live in upper-middle income countries

Distribution of Individual Bottom Billion Poor across Income Categories

- Low Income: 31.0%
- Upper Middle Income: 9.5%
- Lower Middle Income: 59.5%
- High Income: 0.004%
Poorest Billion in Poorest Countries

The map illustrates the distribution of the poorest billion people in the world, highlighting regions where they are concentrated. The color intensity indicates the concentration of the poorest population in different countries.

Footnote:
Some to some of the
people, according to this analysis
are home to any of the
people, according to this analysis
part of this analysis.
Poorest Billion in Poorest Sub-national Regions
Poorest Billion by Individual Poverty Profiles

Poverty to some of the people, according to this analysis, is endemic to any of the people, according to this analysis. OPHI | Oxford Poverty & Human Development Initiative
Concluding Remarks

• South Asia is home to more than half the poorest billion, followed by Africa (India, 40%)
• Most of the poorest billion (60-66%) live in middle-income countries
• It is vital to go beyond national averages, and consider subnational data as well as individual poverty profiles when assessing poverty.