Poverty Statistics
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Reducing poverty is a central goal on national and international development agendas

- SDG Target 1.1: “eradicate extreme poverty for all people everywhere”
- SDG Target 1.2: “reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.”

Countries also set specific targets

Various methods for measuring welfare and poverty around the world.
Multiple dimensions of welfare

• Widely accepted that poverty is a multidimensional concept, beyond income or consumption.
  • SDG 1.2.2.: “Poverty in all its dimensions according to national definitions.”
• Monetary measures most common, but limitations:
  • Many aspects of wellbeing not available (or priced correctly) in markets
  • Health, nutrition status, literacy, freedom, security, and subjective wellbeing
• Growing number of approaches to measure multiple dimensions of welfare. Two broad categories.
  • “Dashboard” approach: Each deprivation assessed side-by-side
  • Overlapping deprivations: aggregation of multiple deprivations, often using Venn diagrams to illustrate overlaps.
Monetary measures of welfare

- Monetary measures of poverty most common choice for measuring national and international poverty statistics today, and focus of this paper

- Because market prices reflect - at least in part - the relative value people place on goods and services, the value of consumption (or income) is a useful indicator of general welfare

- **Income vs. consumption**
  - **Income**: Reflects opportunities to consume (and save)
  - **Consumption**: Reflects the *realization* of those opportunities
  - Different concepts: People with zero income not always “poor”, people with consumption near zero certainly are
  - Consumption often easier to measure in poorer countries, while income easier to measure in richer countries
Poverty Lines

- Poverty line: threshold of “welfare” (income/consumption for monetary measures) below which an individual is considered poor.

- Absolute Poverty Lines
  - Cost of basic needs (CBN) – pricing calories and essential non-food
  - Food-energy-intake (FEI) method – typical income/consumption for meeting basic caloric intake.
  - CBN and FEI poverty lines are generally considered ‘absolute’ and fixed over time – but still tend to be higher in richer countries.

- Relative Poverty Lines
  - Proportion of typical welfare (e.g. 50 or 60% of mean or median income)
  - SDG 10.2.1 “Proportion of people living below 50 percent of median income”

- Thresholds also used in measures of multidimensional poverty
Monetary Poverty Lines Around the World
Data Sources

• National household surveys: collecting data from representative samples about dimensions of welfare, including consumption, income, education, health status, etc.

• Price data: For valid comparisons of income/consumption in time and space, intertemporal and spatial price data and adjustments is essential. Price information from CPI and household surveys.

• Census and Population Data: For sampling for surveys, understanding how many people are poor, and for imputing spatially disaggregated poverty measures.

• National accounts data used to align estimates and fill data gaps.
International Poverty Measures

- International poverty lines such as $1.90/day build on national data and methodologies to produce comparable estimates.

- **National poverty lines** are used to set the international poverty line: current $1.90/day line anchored in poverty lines of 15 of poorest countries.

- **Purchasing Power Parities** from the International Comparison Program, essential to adjust for price differences between countries.

Note: Fitted values use a lowess smoother with bandwidth=0.8

Source: Ravallion, Chen, Sangraula 2009
# National poverty lines foundational to International Poverty Line, over the last 25 years

<table>
<thead>
<tr>
<th>Update:</th>
<th>1979 “India line”</th>
<th>1990 “Dollar-a-day”</th>
<th>2001 1.08/day</th>
<th>2008 1.25/day</th>
<th>2015 1.90/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICP data</td>
<td>1985 PPPs</td>
<td>1993 PPPs</td>
<td>2005 PPPs</td>
<td>2011 PPPs</td>
<td></td>
</tr>
<tr>
<td>Poverty lines used</td>
<td>8 countries</td>
<td>10 countries</td>
<td>15 countries</td>
<td>15 (same lines as 2008)</td>
<td></td>
</tr>
<tr>
<td>Method</td>
<td>Inspection</td>
<td>Median</td>
<td>Mean</td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>Poverty line (ICP base year USD)</td>
<td>$1.01</td>
<td>$1.08</td>
<td>$1.25</td>
<td>$1.90</td>
<td></td>
</tr>
</tbody>
</table>
Data Availability Improved

• Data for monitoring monetary poverty indicators have become ever more available in recent years.

• World Bank Poverty and Equity Database contains estimates for 168 countries.

• Poverty estimates are now available for at least 1,500 country-year observations—more than triple what were available in the early 2000s.

• Disaggregation by group and subnational geography has improved but is not yet systematically available.
Country Poverty Estimates by Year

Note: Poverty and Equity Database: Country-level poverty estimates available by year (either at national or international poverty line), based on tabulation of SI.POV.DDAY and SI.POV.NAHC.NC.
Data Quality and Comparability

• Comparability of estimates, both across time within countries, and between countries, remains a challenge.

• Changes in data collection methods to improve measurement can create noncomparable series.
  • Imputation techniques and experimental designs can help overcome incomparability

• Different approaches in different countries
  • Some degree of post-fieldwork harmonization can be done, but reconciling differences in questionnaires and implementation is a significant challenge
  • Trade-off: Harmonizing survey design can improve comparability between countries, but can compromise comparability within countries
Poverty Statistics: The Way Forward

• "Leave no one behind," New expectations for disaggregating poverty estimates. E.g. “by sex, age, employment status and geographical location (urban/rural)” (SDG 1.1).

• “In all its dimensions,” Recognizing that poverty manifests itself in many ways.

• Improving Data Availability and Quality: Better, accessible household surveys, leveraging new survey technology (tablets, GPS) and data integration (Satellite imagery, etc.)

• Investing in More and Better Data: Investing in data collection, gains in efficiency through coordination (NSDS process)
Thank you