

EADS Snapshot on Poverty Data: Concepts and Sources

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Concept: Basic Idea

Poverty can be defined as falling below a specified income level, as lacking access to specified basic human needs, or a combination of those two approaches. Falling below a specific income level is the most common approach. Poverty analysis has to contend with several issues:

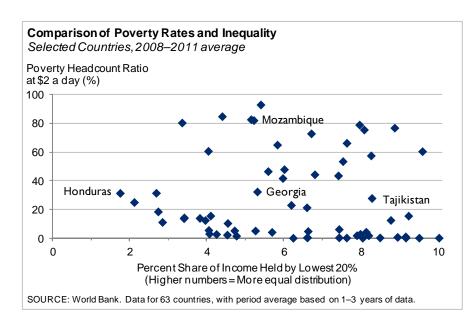
Income level threshold and cross-country comparability. National poverty data typically uses different absolute poverty lines, making comparisons difficult. Poverty lines that are standardized across countries, such as the World Bank's \$2 a day in purchasing power parity terms, attempt to solve this comparability problem. At whatever line, measuring the percentage of the population that is poor is typically referred to as the "headcount ratio."

Variance among people below the poverty line. One criticism of standard poverty data is that an income threshold measures people just below the line the same as people far below the line. Efforts to account for the intensity or depth of poverty have lead to concepts such as the "poverty gap," "ultra-poor," or the "poorest of the poor." One measure, the Foster-Greer-Thorbecke (FGT) indicator, accounts for the poverty gap and the inequality of income distribution among the poor.

Transient versus chronic poverty. Mobility indicators provide key context to poverty data. The ability of people to move in and out of poverty can vary significantly in countries that have the same level of poverty over time. Unfortunately, mobility indicators are not readily available in international sources.

Poverty is related to income inequality, but not synonymous. Although people in poverty can also be described as those with a relatively small share of national income, poverty and inequality measures are different concepts. The following graph illustrates the divergence between the two measures.

As measured by the World Bank's \$2 a day income standard, poverty is not tightly correlated with income inequality in the graph. Consider the cases of Honduras and Tajikistan. In the most recent data, they have similar levels of absolute poverty. However, based on the particular measure of "income share of the lowest 20 percent of households," they are very different. Honduras has one of the most unequal distributions of income of any country, while Tajikistan's distribution is among the most equal of the selected countries shown in the graph.



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Mozambique and Georgia also offer a contrast. Based on this indicator of income distribution, those two countries are almost identical and both are in the middle of the pack with respect to equality of income. However, the poverty rate in Mozambique is more than twice as high as in Georgia.

Sources: Background Information

With respect to internationally comparable poverty data relevant to USAID's development efforts, the range of data options is not particularly wide. The World Bank remains the prime source for poverty estimates. There are regional development organizations with poverty data for their own region and the International Labor Organization (ILO) has recently introduced data covering the "working poor." Recognizing that poverty is a complex situation, the United Nations Development Program (UNDP) has introduced the *Multidimensional Poverty Index* (MPI). The next sections of this snapshot will cover those data sources in detail.

Other organizations, such as the United Nations Statistical Division (UNSD), conduct work on poverty analysis and improving measurement, but are not a primary source of poverty data. UNSD maintains the *Millennium Indicators Database* with three poverty indicators, but those indicators are provided by the World Bank. And there are organizations such as the OECD which publish poverty data (through OECD.StatExtract) which are limited in country coverage to OECD member states.

The range of what might be called meta-databases related to poverty is extensive. For example, the International Household Survey Network (IHSN) was created based on a recommendation in the Marrakech Action Plan for Statistics and provides easy access to household surveys for most countries. In addition, the International Food Policy Research Institute (IFPRI) offers access to a wide variety of datasets. Based on household and community surveys, as well as other data collections, IFPRI datasets enable analysis of poverty and related socioeconomic factors. A recent example is the 2012 release of "Assessing the Potential of Farmer Field Schools (FFS) to Fight Poverty and Foster Innovation in East Africa" dataset.

In order to strengthen anti-poverty efforts, what might be called "applied poverty data tools" have been developed. Microfinance Institution (MFI) practitioners have supported the development of a "Progress out of Poverty Index" (PPI) based on nationally representative income or expenditure surveys. The PPI has ten factors and MFI representatives use it while visiting clients to measure the likelihood that they are still impoverished. In addition, the Abdul Latif Jameel Poverty Action Lab (J-PAL) is a research network analyzing interventions and their impact on poverty.

Many surveys used to generate poverty estimates are available online. The World Bank's Living Standards Measurement Study (LSMS) household survey results are posted online, as are the Demographic and Health Surveys (DHS).

Sources: The World Bank

The World Bank has long produced poverty estimates for countries, aggregates for regions, and global totals to track progress in poverty alleviation. With their launch of a Poverty and Equity Database, the Bank now provides estimates using a wider variety of poverty lines. The key concepts available in their data are the headcount ratio (number of poor persons as a percentage of the entire population) and the poverty gap (average income short-fall of the poor below the poverty line being used). The headcount ratio is designed to measure the incidence of poverty, while the poverty gap gauges the depth of poverty.

Both of the basic concepts are available using six different poverty lines, with the nation-specific poverty lines being joined by five different internationally comparable per capita per day incomes of \$1.25, \$2, \$2.50, \$4, and \$5. The per capita per day incomes use purchasing power parity (PPP) calculations to convert local currency income levels to an internationally comparable standard. Both of these measures are estimated at the country, urban, and rural levels. The urban/rural disaggregation is only available for measures using national poverty lines.

Consider the World Bank data on poverty for Nepal and Paraguay shown in the table (data are from 2010 or 2011). The first row, showing the internationally comparable \$1.25 a day measure, is the most direct comparison of poverty incidence in Nepal and Paraguay. Looking at urban and rural poverty in both countries, a direct compar-

Comparison of World Bank Poverty Data for Nepal and Paraguay		
Series	Nepal	Paraguay
Poverty headcount ratio at \$1.25 a day (PPP) (%)	25	7
Poverty headcount ratio at national poverty lines (%)	25	35
Poverty headcount ratio at urban poverty line (%)	16	25
Poverty headcount ratio at rural poverty line (%)	27	49
SOURCE: The World Bank.		

ison of the rates is difficult because the national poverty lines used in each country are different. However, we can infer that the relative strains of urban and rural poverty are roughly equal in Nepal and Paraguay because the ratio of urban to rural poverty is in a similar range.

The World Bank also provides a "do it yourself" poverty estimating tool. PovcalNet is an online database that enables users to replicate World Bank calculations of the extent of absolute poverty in the world, as well as calculate poverty measures under different assumptions. PovcalNet includes the latest country data from the World Bank, but the regional aggregates are only updated every three years. These are major updates, e.g., in February 2012, the World Bank revised world poverty estimates for 1981–2008.

Sources: Regional Organizations for Regional Data

The Inter-American Development Bank, the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), and the World Bank jointly produce statistics on poverty and related indicators in the Socio-Economic Database for Latin America and the Caribbean (SEDLAC). The poverty data are both from national statistical offices and from SEDLAC estimates. Data are more disaggregated than are available from the World Bank and the urban/rural estimates are available in greater detail. For example, you can compare poverty rates in the capital city with poverty rates in the fifteen largest cities combined.

SEDLAC also provides poverty data as an income measure (the poverty line approach) and as an "Unsatisfied Basic Needs" (UBN) measure. The UBN measure is based on eight socioeconomic indicators relevant to poverty. For the poverty line approach, SEDLAC data includes the headcount ratio, the poverty gap, and the FGT index.

CEPALSTAT is another database for the LAC region. The range of poverty data is not as extensive as in SEDLAC, but the amount of detailed data available is comparable. Several of the data tables are from the World Bank, but CEPALSTAT also offers data estimated by ECLAC.

European Community member states, as well as candidate countries, report data to EUROSTAT. The online database includes measures such as "people at risk of poverty or social exclusion." Data can be disaggregated by gender, household type, citizenship, and education level.

The UN Economic and Social Commission for Asia and the Pacific (ESCAP) provides a "Core Indicators" database that includes poverty measures, but it draws from other UN sources, World Bank data, and the UN's *Human Development Report*.

The African Development Bank (ADB) produces extensive reports on poverty trends in that region, but the poverty data is typically World Bank estimates, or national poverty line data also available from the World Bank.

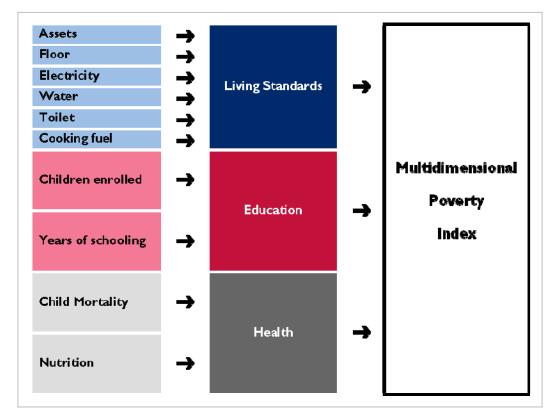
Sources: "Working Poor" Measures from the ILO

As part of its Key Indicators of the Labor Market (KILM) data, the ILO produces data on the "working poor" in fifty-four developing and emerging market countries. Econometric models are applied to national household surveys to generate the estimates. The ILO also produces an estimate of the total working poor worldwide, allowing tracking of global changes over time.

For all of the fifty-four countries in the KILM data, users can see the differences in labor market status between the poor and non-poor. For smaller numbers of countries in that set, data are available showing additional information on employment by sector and educational status.

Sources: Multidimensional Poverty Index

The UNDP's Human Development Report team has designed a "Multidimensional Poverty Index" (MPI), with three dimensions (health, education, and living standards) measured by a total of ten indicators. The MPI replaced the "Human Poverty Index" in UNDP reporting. The basic idea behind the MPI is to identify multiple deprivations at the individual level in education, health and standard of living, based on micro data from household surveys. The following diagram shows the components of the MPI, with the size of the boxes indicating the weight of the indicator in the index.

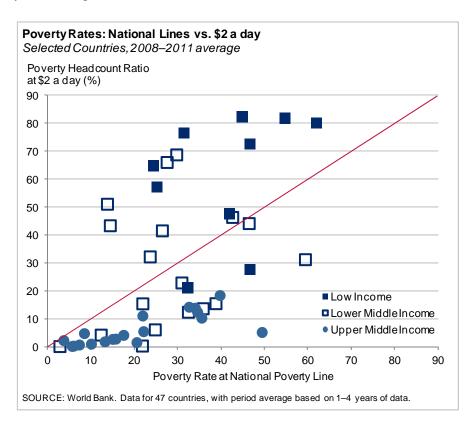


National Poverty Lines: Diversity and Improvement

For international comparability, and particularly to track changes in world poverty, the various dollar income per day measures are essential. But national poverty lines are sometimes more relevant to country analysis. The following graph shows the relationship between the \$2 a day measure and poverty rates using national poverty lines for 47 countries in the three groups below high income.

The diagonal 45 degree line in the graph indicates a poverty rate that is equal on either measure. Few countries are close to that line, indicating that these two measures are not identical. In general, the Upper Middle Income countries have a higher rate of poverty using national poverty line rates than at the \$2 a day line. Most, but not all, Low Income countries have a lower rate of poverty using national poverty rates than at the \$2 a day measure.

Poverty data from national statistical offices, using poverty lines which are specific to one country, are included in the World Bank and other cross-country databases. Often, however, accessing data directly from a national statistical office will provide poverty meas-



ures in much greater detail than is available from the standardized sources. The catch is that the quality of poverty data will vary from country to country.

In recent years, many developing countries have made significant progress in the quality of their own poverty data. Motivated by the "Poverty Reduction Strategy Paper" and the "National Action Plan" processes, developing country governments have partnered with donor agencies to produce more extensive and timely poverty data of higher quality.

For example, household surveys in Bangladesh have been producing poverty estimates at five-year intervals since the 1970s. In 2010, the government worked with the World Bank to better train the survey team and to equip them with the technology to record data in the field. New questions about credit, migration, and crisis management were added to the survey. The result was accelerated data release and better data. When poverty data are available closer to "real time" than after a long delay, the trends in the data have a stronger impact on policy discussions. Bangladesh has also decided to conduct household surveys at three-year intervals and use a new methodology to release annual poverty estimates.

In Latin America, the World Bank is improving the timeliness of poverty data by introducing mobile phone techniques to household surveys. After pilot projects in Nicaragua, Peru, and Honduras, the new approach is expanding to the rest of Latin America and the Caribbean.

Data Resources

Poverty Data Sources		
The World Bank	http://www.worldbank.org/poverty	
The World Bank Poverty and Equity Data (PED)	http://povertydata.org/	
PovcalNet	http://research.worldbank.org/PovcalNet	
Socio-Economic Database for Latin America and the Caribbean (SEDLAC)	http://sedlac.econo.unlp.edu.ar/eng/	
CEPALSTAT	http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp	
EUROSTAT	http://ec.europa.eu/eurostat	
Key Indicators of the Labor Market	http://kilm.ilo.org/kilmnet	
UNDP Multidimensional Poverty Index	http://hdr.undp.org/en/statistics/mpi	
National Statistical Offices		
Bangladesh and Improved Poverty Statistics	http://go.worldbank.org/MTAOR9T170	
Links Page for National Statistical Offices in Latin America and Caribbean	http://go.worldbank.org/HAF37532Q0	
Meta-datasets		
International Household Surveys Network (IHSN)	http://www.ihsn.org/	
International Food Policy Research Institute (IFPRI)	http://www.ifpri.org/datasets	
Applied Poverty Tools		
Progress out of Poverty Index (PPI)	http://progressoutofpoverty.org/	
Abdul Latif Jameel Poverty Action Lab (J-PAL)	http://www.povertyactionlab.org/	
Surveys Used for Poverty Estimates		
Living Standards Measurement Study (LSMS) Household Surveys	http://go.worldbank.org/UK1ETMHBN0	
Demographic and Health Surveys (DHS)	http://www.measuredhs.com/	

Additional Information

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The Economic and Social Database (ESDB), http://esdb.eads.usaidallnet.gov/, includes poverty data from the World Bank, Poverty and Equity Data; United Nations, Millennium Development Goals Indicators; and World Bank, World Development Indicators.