Goal 1: End poverty in all its forms everywhere

Target: 1.2 By 2030, 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

Indicator 1.2.1: Proportion of population living below the national poverty line, by sex and age

Institutional information

Organization(s):

World Bank

Concepts and definitions

Definition:

The national poverty rate is the percentage of the total population living below the national poverty line. The rural poverty rate is the percentage of the rural population living below the national poverty line (or in cases where a separate, rural poverty line is used, the rural poverty line). Urban poverty rate is the percentage of the urban population living below the national poverty line (or in cases where a separate, urban poverty line is used, the urban poverty line).

Concepts:

In assessing poverty in a given country, and how best to reduce poverty according to national definitions, one naturally focuses on a poverty line that is considered appropriate for that country. Poverty lines across countries vary in terms of their purchasing power, and they have a strong economic gradient, such that richer countries tend to adopt higher standards of living in defining poverty. Within a country, the cost of living is typically higher in urban areas than in rural areas. Some countries may have separate urban and rural poverty lines to represent different purchasing powers.

Rationale:

Monitoring national poverty is important for country-specific development agendas. National poverty lines are used to make more accurate estimates of poverty consistent with the country's specific economic and social circumstances, and are not intended for international comparisons of poverty rates.

Comments and limitations:

National poverty estimates are derived from household survey data. Caveats and limitations inherent to survey data applying to the construction of indicator 1.1.1 apply here as well.

To be useful for poverty estimates, surveys must be nationally representative. They must also include enough information to compute a comprehensive estimate of total household consumption or income

(including consumption or income from own production) and to construct a correctly weighted distribution of consumption or income per person.

Consumption is the preferred welfare indicator for a number of reasons[2]. Income is generally more difficult to measure accurately. For example, the poor who work in the informal sector may not receive or report monetary wages; self-employed workers often experience irregular income flows; and many people in rural areas depend on idiosyncratic, agricultural incomes. Moreover, consumption accords better with the idea of the standard of living than income, which can vary over time even if the actual standard of living does not. Thus, whenever possible, consumption-based welfare indicators are used to estimate the poverty measures reported here. But consumption data are not always available. For instance in Latin America and the Caribbean, the vast majority of countries collect primarily income data. In those cases there is little choice but to use income data.

Consumption is measured by using household survey questions on food and nonfood expenditures as well as food consumed from the household's own production, which is particularly important in the poorest developing countries. This information is collected either through recall questions using lists of consumption items or through diaries in which respondents record all expenditures daily. But these methods do not always provide equivalent information, and depending on the approach used, consumption can be underestimated or overestimated. Different surveys use different recall or reference periods. Depending on the true flow of expenditures, the rate of spending reported is sensitive to the length of reporting period. The longer the reference period, the more likely respondents will fail to recall certain expenses—especially food items—thus resulting in underestimation of true expenditure.

Best-practice surveys administer detailed lists of specific consumption items. These individual items collected through the questionnaires are aggregated afterwards. But many surveys use questionnaires in which respondents are asked to report expenditures for broad categories of goods. In other words, specific consumption items are implicitly aggregated by virtue of the questionnaire design. This shortens the interview, reducing the cost of the survey. A shorter questionnaire is also thought to reduce the likelihood of fatigue for both respondents and interviewers, which can lead to reporting errors. However, there is also evidence that less detailed coverage of specific items in the questionnaire can lead to underestimation of actual household consumption. The reuse of questionnaires may cause new consumption goods to be omitted, leading to further underreporting.

Invariably some sampled households do not participate in surveys because they refuse to do so or because nobody is at home. This is often referred to as "unit nonresponse" and is distinct from "item nonresponse," which occurs when some of the sampled respondents participate but refuse to answer certain questions, such as those pertaining to consumption or income. To the extent that survey nonresponse is random, there is no concern regarding biases in survey-based inferences; the sample will still be representative of the population. However, households with different incomes are not equally likely to respond. Relatively rich households may be less likely to participate because of the high opportunity cost of their time or because of concerns about intrusion in their affairs. It is conceivable that the poorest can likewise be underrepresented; some are homeless and hard to reach in standard household survey designs, and some may be physically or socially isolated and thus less easily interviewed. If nonresponse systematically increases with income, surveys will tend to overestimate poverty. But if compliance tends to be lower for both the very poor and the very rich, there will be potentially offsetting effects on the measured incidence of poverty.

Even if survey data were entirely accurate and comprehensive, the measure of poverty obtained could still fail to capture important aspects of individual welfare. For example, using household consumption measures ignores potential inequalities within households. Thus, consumption- or income-based poverty measures are informative but should not be interpreted as a sufficient statistic for assessing the quality of people's lives. The national poverty rate, a "headcount" measure, is one of the most commonly calculated measures of poverty. Yet it has the drawback that it does not capture income inequality among the poor or the depth of poverty. For instance, it fails to account for the fact that some people may be living just below the poverty line, while others experience far greater

shortfalls. Policymakers seeking to make the largest possible impact on the headcount measure might be tempted to direct their poverty alleviation resources to those closest to the poverty line (and therefore least poor).

Issues may also arise when comparing poverty measures within countries when urban and rural poverty lines represent different purchasing powers. For example, the cost of living is typically higher in urban than in rural areas. One reason is that food staples tend to be more expensive in urban areas. So the urban monetary poverty line should be higher than the rural poverty line. But it is not always clear that the difference between urban and rural poverty lines found in practice reflects only differences in the cost of living. In some countries the urban poverty line in common use has a higher real value—meaning that it allows the purchase of more commodities for consumption—than does the rural poverty line. Sometimes the difference has been so large as to imply that the incidence of poverty is greater in urban than in rural areas, even though the reverse is found when adjustments are made only for differences in the cost of living. As with international comparisons, when the real value of the poverty line varies it is not clear how meaningful such urban-rural comparisons are.

Lastly, these income/consumption based poverty indicators do not fully reflect the other dimensions of poverty such as inequality, vulnerability, and lack of voice and power of the poor.

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[2] For a discussion on reasons consumption is preferred, check: Deaton, Angus (2003). “Household Surveys, Consumption, and the Measurement of Poverty”. Economic Systems Research, Vol. 15, No. 2, June 2003 ↑

Methodology

Computation method:

The formula for calculating the proportion of the total, urban and rural population living below the national poverty line, or headcount index, is as follows:

$$P_0 = \frac{1}{N}\sum_{i=1}^{N} I(y_i < z) = \frac{N_p}{N}$$

Where I (.) is an indicator function that takes on a value of 1 if the bracketed expression is true, and 0 otherwise. If individual consumption or income y_i is less than the national poverty line z (for example, in absolute terms the line could be the price of a consumption bundle or in relative terms a percentage of the income distribution), then I (.) is equal to 1 and the individual is counted as poor. N_p is the total, urban or rural number of poor. N is the total, urban or rural population.

Consumption or income data are gathered from nationally representative household surveys, which contain detailed responses to questions regarding spending habits and sources of income. Consumption, including consumption from own production, or income is calculated for the entire household. In some cases, an “effective” household size is calculated from the actual household size to reflect assumed efficiencies in consumption; adjustments may also be made to reflect the number of children in a household. The number of people in those households is aggregated to estimate the number of poor persons.

National poverty rates use a country specific poverty line, reflecting the country's economic and social circumstances. In some case, the national poverty line is adjusted for different areas (such as urban and rural) within the country, to account for differences in prices or the availability of goods and services. Typically the urban poverty line is set higher than the rural poverty line; reflecting the relatively higher costs of living in urban areas.

Treatment of missing values:

- At country level:

Missing values in consumption of particular items are counted as zero. This is a standard practice in processing survey data. If the consumption is not reported, it is taken as zero consumption, and thus the consumption expenditure is zero.

- At regional and global levels:

Because national poverty lines are country-specific, there is no aggregation at the regional or global level.

Regional aggregates:

N/A

Sources of discrepancies:

National poverty estimates is a different concept from international poverty estimates. National poverty rate is defined at country-specific poverty lines in local currencies, which are different in real terms across countries and different from the $1.90-a-day international poverty line. Thus, national poverty rates cannot be compared across countries or with the $1.90-a-day poverty rate.

Data sources

Description:

National poverty estimates are typically produced and owned by country governments (e.g., National Statistic Office), and sometimes with technical assistance from the World Bank and UNDP. Upon release of the national poverty estimates by the government, the Global Poverty Working Group of the World Bank assesses the methodology used by the government, validates the estimates with raw data whenever possible, and consults the country economists for publishing. Accepted estimates, along with metadata, will be published in the WDI database as well as the Poverty and Equity Database of the World Bank.

Another source is World Bank's Poverty Assessments. The World Bank periodically prepares poverty assessments of countries in which it has an active program, in close collaboration with national institutions, other development agencies, and civil society groups, including poor people's organizations. Poverty assessments report the extent and causes of poverty and propose strategies to reduce it. The poverty assessments are the best available source of information on poverty estimates using national poverty lines. They often include separate assessments of urban and rural poverty.

Collection process:

Source collection is ongoing by the Global Poverty Working Group of the World Bank. The data in World Development Indicators (WDI) are updated quarterly following the WDI database[1] updating schedule.

1 http://data.worldbank.org/products/wdi ↑

Data Availability

Description:

Data availability depends on the availability of household surveys and analysis of survey data. Data for total, rural and urban poverty are currently available for 132, 101 and 103 countries, respectively.

Time series:

Data are available from 1985 to 2015. Because the effort and capacity of collecting and analysing survey data are different for each country, the length of the time series for each country varies greatly.

Disaggregation:

The only aggregation is by rural and urban areas.

Calendar

Data collection:

The schedule of source collection is determined by the country governments. Some are annual, and most others are less frequent.

Data release:

End of March 2017.

Data providers

National Statistic Offices.

Data compilers

World Bank – Global Poverty Working Group

References

URL:

Poverty and Equity Data Portal

http://povertydata.worldbank.org/poverty/home/

References:

Deaton, Angus. 2003. “Household Surveys, Consumption, and the Measurement of Poverty”. Economic Systems Research, Vol. 15, No. 2, June 2003

Deaton, Angus; Zaidi, Salman. 2002. Guidelines for Constructing Consumption Aggregates for Welfare Analysis. LSMS Working Paper; No. 135. World Bank.

World Bank 2008. *Poverty data: A supplement to World Development Indicators 2008*. Washington, DC.