

2008 | WORLD DEVELOPMENT INDICATORS

Poverty data A supplement to World Development Indicators 2008



THE WORLD BANK

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This supplement to the *World Development Indicators 2008* presents the latest poverty headcount data produced by the World Bank. The publication is a joint product of the Development Economics Data Group, directed by Shaida Badiee, and the Development Economics Research Group, directed by Martin Ravallion, under the general direction of Yifu Lin, Chief Economist and Senior Vice President for Development Economics of the World Bank.

It brings together the recently published results of the International Comparison Program, managed by the Data Group, and the extensive holdings of household survey information compiled by the Research Group. The report draws extensively on the

published research of Martin Ravallion, Shaohua Chen, and Prem Sangraula on the measurement of poverty and on the PovcalNet analysis tool designed by Qinghua Zhao and Yongming Du. Eric Swanson is the principal author of the report, with important contributions from Changqing Sun. Uranbileg Batjargal provided research assistance. The contributions of Johan Mistiaen to earlier poverty sections of the *World Development Indicators*, incorporated here, are gratefully acknowledged. Valuable advice on the application of purchasing power parity statistics was received from Yuri Dikhanov, Olivier Dupriez, and Fred Vogel. Richard Fix managed the production process. Communications Development Incorporated provided overall design, editing, and layout.

N

ew estimates of global poverty

This supplement to *World Development Indicators 2008* provides estimates of global poverty that are the first re-evaluation of the World Bank's "\$1 a day" poverty line since 1999. The international poverty line has been recalibrated at \$1.25 a day, using new data on purchasing power parities (PPPs), compiled by the International Comparison Program, and an expanded set of household income and expenditure surveys. New measurements of the extent and depth of poverty are presented here for 115 developing countries, along with poverty measurements based on their national poverty lines.

The \$1.25 a day poverty line measured in 2005 prices replaces the \$1.08 a day poverty line measured in 1993 prices. Often described as "\$1 a day," \$1.08 has been widely accepted as the international standard for extreme poverty and was incorporated in the first of the Millennium Development Goals. That goal calls for eradicating extreme poverty and sets a target of halving, between 1990 and 2015, the proportion of people whose income is less than \$1 a day. The new poverty line maintains the same standard for extreme poverty—the poverty line typical of the poorest countries in the world—but updates it using the latest information on the cost of living in developing countries.

The new data change our view of poverty in the world. There are more poor people—extremely poor people—and the incidence of poverty reaches farther into middle-income countries. Previous rounds of the International Comparison Program underestimated average price levels in developing countries (perhaps by not fully adjusting for quality differences) and thus overestimated standards of living. By the new measurements 1.4 billion people are living in extreme poverty—more than one-quarter of the population of developing countries. But countries and regions that have reduced their poverty rates are no less successful by the new measurements. In 1990, at the beginning of the period tracked by the Millennium Development Goals, 42 percent of the people in developing countries lived on less than \$1.25 a day. Over 15 years global poverty fell by an average of 1 percentage point a year. At that rate the target set by the Millennium Development Goals will be surpassed at the global level and in East Asia, where poverty rates have fallen fastest, by 2015. But large differences remain between regions, across countries in the same region, and even within countries. The data presented here allow us to see where some of those differences occur and point the way toward a world free from the most extreme poverty.

Setting the international poverty line

Since *World Development Report 1990: Poverty* (World Bank 1990), the World Bank has aimed to apply a common standard to measuring extreme poverty, anchored to what poverty means in the world's poorest countries.* The welfare of people living in different countries can be measured on a common scale by adjusting for differences in the purchasing power of currencies. This is similar to the adjustments for price changes when comparing the real purchasing power of income or expenditure over time within a country. And by focusing on the standards of the poorest countries, the international poverty line establishes a realistic lower bound for the minimum—but not acceptable—level of consumption to meet basic human needs.

Purchasing power parities

To convert the nominal value of poverty lines measured in different currencies to a common unit of account, the World Bank uses purchasing power parities (PPPs) from the 2005 round of the International Comparison Program, which surveyed prices in 146 countries.¹ PPP can be defined as the number of units of a country's currency needed to buy the same amount of goods and services in that country as one U.S. dollar would buy in the United States.² Statistically, PPPs are expenditure-weighted averages of the relative prices of commonly purchased goods and services. The weights are derived from expenditures recorded in the national accounts of each country.³ PPPs are preferable to currency exchange rates, which are determined by the demand for currencies to finance trade and investment and are also affected by speculative demands, because exchange rates do not necessarily reflect the relative prices of goods and services consumed in a country. As travelers frequently note, one dollar exchanged at the current exchange rate into a country's local currency may buy more or less than in the United States. In fact, the purchasing power of a dollar is generally greater in poor countries, so there is a negative relationship between the ratio of the PPP to the market exchange rate and GDP per capita.⁴

Previous estimates of the international poverty line

The World Bank's first effort to define an international poverty line, described in Ravallion, Datt, and van de Walle (1991), was undertaken for *World Development Report 1990* (World Bank 1990). Poverty lines were drawn from studies covering 33 countries (both developed and developing) and spanning 1980–90. The poverty lines were adjusted to 1985 prices using national price indexes and then converted to U.S. dollars using PPPs from the Penn World Tables. Based on these data, the mean poverty line of the poorest 15 countries was found to be \$31 a month or \$1.02 a day. The study also found a clear tendency for national poverty lines⁵ to increase with

* This section draws on, and quotes extensively from, Chen and Ravallion (2008) and from Ravallion, Chen, and Sangraula (2008), who also provided considerable help in preparing the data and tables published here.

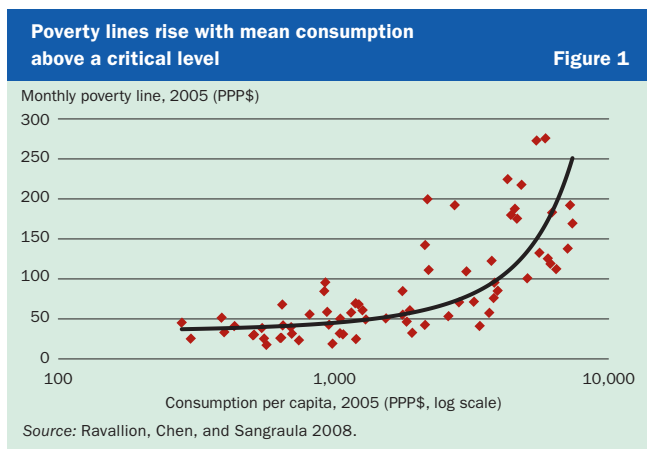
private consumption per capita after both were converted into a common currency using 1985 PPP rates.

When new estimates of PPPs, benchmarked to 1993, became available from the International Comparison Program,⁶ the international poverty line was re-assessed. Applying the same principle and using the original set of national poverty lines, the equivalent line in 1993 PPPs was found to be \$1.08 a day (or \$32.74 a month) in 1993 prices. This line was the median of the lowest 10 poverty lines in the same set of countries used by Ravallion, Datt, and van de Walle (1991). Results of this reassessment were first published in *World Development Report 2000/2001: Attacking Poverty* (World Bank 2000) and *World Development Indicators 2001*.

A new international poverty line

The new international poverty line estimate is based on 89 national poverty lines taken from poverty assessments by the World Bank between 1990 and 2005. National poverty lines are typically set with some version of the “cost of basic needs” method.⁷ First, a food poverty line is established by pricing a food bundle that provides a minimum calorie intake. To this is added an allowance for nonfood spending, typically obtained from data on the nonfood spending of people near the food poverty line. This procedure still leaves considerable room for differences across countries: different qualities of food bundles can achieve a minimum calorie diet, and the nonfood spending considered essential can vary widely. Poverty lines thus reflect a socially determined perception of “relative deprivation,” which rises with income. An “absolute” poverty line is determined by the minimum value of consumption needed to be deemed “not poor” in the world's poorest countries.

Complete data were not available for 15 countries, leaving 74 in the sample. Plotting the national poverty lines in PPP dollars per month against the log of consumption per capita from the national accounts (also in PPP dollars) gives the characteristic scatter diagram in figure 1. At the bottom end of the consumption range, national poverty lines reach a lower limit. In this “reference group” are 15 countries with average consumption below \$60 a month: Malawi, Mali,



Ethiopia, Sierra Leone, Niger, Uganda, Gambia, Rwanda, Guinea-Bissau, Tanzania, Tajikistan, Mozambique, Chad, Nepal, and Ghana, in that order. Above \$60, poverty lines rise steadily with consumption.

This suggests a specification for a general model of national poverty lines:

$$Z_i = Z^* * I_i + (\alpha + \beta * C_i) * (1 - I_i) + \varepsilon_i \quad (1)$$

where Z_i is the national poverty line in country i converted to U.S. dollars using PPP rates; i is monthly average consumption per capita in PPP terms; Z^* is the average absolute poverty line for countries with $C_i \leq \$60$; and I_i is a dummy variable taking the value 1 if country i is a member of the reference group comprising the 15 poorest countries and 0 otherwise.

This equation yields estimates for the absolute poverty line Z^* and the relative poverty line above the cutoff point of the reference group:

$$Z_i = 37.98 * I_i + (19.39 + 0.326 * C_i) * (1 - I_i) + \hat{\varepsilon}_i \quad (2)$$

$R^2 = 0.890, N = 74$

This places the new absolute poverty line at almost exactly \$38 a month or \$1.25 a day.

Country-level poverty measurement

Poverty data: A supplement to World Development Indicators includes two sets of country-level poverty measurements: those based on the countries' national (and, in some cases, urban and rural) poverty lines and those based on international poverty lines of \$1.25 and \$2.00 a day in 2005 PPP terms.* National poverty estimates are taken from poverty assessments conducted by World Bank staff in collaboration with national experts and poverty reduction strategy papers prepared by the countries themselves.

As discussed, national poverty lines reflect local perceptions of the level of consumption or income needed to be not poor. The perceived boundary between poor and not poor rises with the average income of a country and so does not provide a uniform measure for comparing poverty rates across countries. Nevertheless, national poverty estimates are clearly the appropriate measure for setting national policies for poverty reduction and for monitoring their results. The international poverty measurements provide a uniform standard for comparing poverty rates and the number of people living in poverty across countries.

The starting point for any poverty measurement is data on income or consumption collected through nationally representative household surveys. Over the last 20 years the number of countries that field surveys and the frequency of surveys have risen considerably. The quality of their data has improved greatly as well. The World Bank now has records

* This section draws extensively from Mistiaen and Swanson (2004).

Why the international poverty line has changed

Although the method was similar, the earlier international poverty lines were based on a smaller and now outdated set of national poverty lines. For this reason alone, the new international poverty line would be expected to change. But there have also been considerable changes in the PPPs used to convert national currencies to dollars. The data from the 2005 International Comparison Program indicate that price levels in developing countries are higher than previously estimated. Another way of saying this is that the 1993 PPPs were too low.

The downward bias was greatest in poorest countries. One possible reason: the quality of goods priced in the 1993 round was not carefully controlled. As a result, goods that appeared cheaper in poor countries may also have been of lower quality. So it cannot be concluded that the international poverty line has been raised or lowered in real value. The new poverty line has been measured against the same real standard: the poverty lines used by the poorest countries in the world. This new line may change over time—poverty lines should rise as income and consumption grow—but it provides a uniform basis for assessing the extent of extreme poverty by the standards now prevailing.

from 675 household surveys covering 115 developing countries collected between 1979 and 2007. Not all these surveys are comparable in design and sampling methods. Nonrepresentative surveys, though useful for some purposes, are excluded from the calculation of international poverty rates. There are 508 surveys for 115 countries used for deriving poverty estimates.

Table 1 shows the number of surveys from low- and middle-income countries in each three-year interval between 1980 and 2006. Noteworthy is the substantial increase in datasets, from 15 in 1980–82 to 118 in 2001–03. After 2003 there is a drop in the number of surveys, not because of a reduction in data collection, but rather because of the typical lag between data collection and data availability.

The proportion of the population in developing countries covered by a household income or expenditure survey has likewise increased. Because large countries conduct surveys more frequently than very small or very poor countries, the population coverage rate has reached almost 90 percent in recent years. Figure 2 shows the share of population covered as a three-year moving average for the world and for Sub-Saharan Africa and the Middle East and North Africa, two regions where coverage remains low.

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

Survey data sets used for poverty estimates

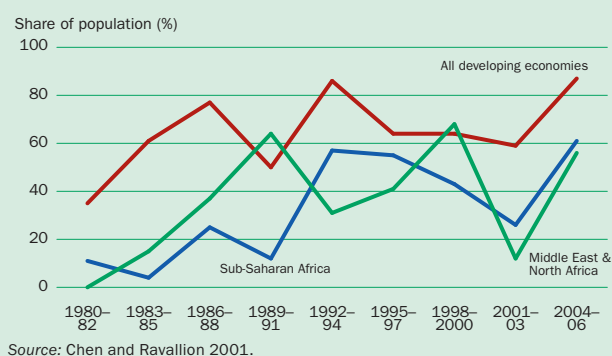
Table 1

Region	1978–79	1980–82	1983–85	1986–88	1989–91	1992–94	1995–97	1998–2000	2001–03	2004–06
East Asia & Pacific	0	5	7	6	7	14	16	15	9	12
Europe & Central Asia	0	0	1	21	5	25	29	42	51	20
Latin America & Caribbean	1	7	5	14	27	20	36	38	35	37
Middle East & North Africa	0	0	2	3	4	3	5	5	2	4
South Asia	2	1	6	6	7	6	10	4	4	4
Sub-Saharan Africa	0	2	4	7	7	24	15	16	17	17
Low and middle income	3	15	25	57	57	92	111	120	118	94

Source: PovcalNet, World Bank.

People represented by income or expenditure surveys

Figure 2



Source: Chen and Ravallion 2001.

weighted distribution of consumption or income per person. Despite these quality standards, there are numerous potential problems associated with household survey data. Some warrant more detailed discussion.

Recall periods

Consumption is measured by using household surveys 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.⁸

Aggregation of items

Best-practice surveys administer detailed lists of specific consumption items. These individual items collected through

the questionnaires are then 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.⁹ The use of questionnaires may cause new consumption goods to be omitted, leading to further underreporting.

Survey compliance

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.¹⁰ 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.

Income or consumption?

Consumption is the preferred welfare indicator for a number of reasons. 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 in *World Development Indicators*. 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.

Nonmeasurement issues

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.

Internationally comparable poverty measures: the country level

Three principal inputs are needed to compute internationally comparable poverty estimates: income or consumption data from household surveys, PPP conversion factors, and a consumer price index for each country.¹¹ The underlying idea is relatively straightforward and involves four steps. First, household survey data provide a measure of the distribution of household income or consumption normalized by household size. Second, for each country the international poverty line is converted to local currency using the base-period PPP rate. Third, using a country-specific consumer price index, the poverty line in local currency is adjusted to the price level prevailing during the survey period.¹² Fourth, the proportion of the population with expenditure or income below the international poverty line threshold is calculated from the survey distribution.

Measurement problems

While the methodology is clear and simple, practical implementation is beset by data problems and measurement issues at each step. In addition to the problems of survey design and data collection previously discussed, the reliability of the poverty estimates may be affected by the quality of the PPPs and price indexes used.

Although the 2005 International Comparison Program was the most comprehensive international price survey ever undertaken and employed more advanced methods than previous rounds, the resulting estimates may be affected by differences in sampling procedures, measurement errors, assumptions and approximations made in estimating prices that could not be obtained from price surveys, and the form of the multilateral price index. All of this notwithstanding, the 2005 International Comparison Program provides our best estimates of the comparative purchasing power of currencies.

Similarly, the quality of consumer price indexes around the world varies widely, which may affect the reliability of

extrapolations over long periods and comparisons across countries. Consumer price indexes can be particularly problematic when the specification of goods included in consumer price surveys and the expenditure weights used to aggregate prices have not been updated in a long time. Furthermore, unlike the International Comparison Program price surveys, products priced in the consumer price index may be loosely defined and may differ in characteristics from one part of the country to another.

Correcting for “urban bias”

The price data from which the PPPs are calculated are supposed to reflect national average prices in each country. However, in many countries, the price surveys were carried out entirely, or in large part, in urban areas. In China, for example, the International Comparison Program surveys were conducted in 11 highly urbanized provinces.¹³ Based on International Comparison Program sampling information, Ravallion, Chen, and Sangraula (2008) treated the 2005 consumption PPPs from Argentina, Brazil, Bolivia, Cambodia, Chile, China, Colombia, Ecuador, Pakistan, Peru, Thailand, and Uruguay as representing urban price levels. For China differentials between the national urban and rural poverty lines were used to adjust the PPPs to correct for the putative “urban bias.” Similar adjustments were made to the PPPs in India and Indonesia, although the International Comparison Program survey data for these countries covered both urban and rural areas. In these cases urban and rural PPPs were derived from the ratio of the urban to rural poverty lines such that their expenditure-weighted average was equal to the national PPP. These PPPs were then used to convert the international poverty line to separate urban and rural lines in local currencies, which were applied to urban and rural consumption distributions. This approach is only possible when countries maintain well defined urban and rural poverty lines and consumer price index series.

The Development Economics Research Group of World Bank provides a web-based, interactive computational tool—PovcalNet—that allows users to make their own poverty estimates using the same data from which the World Bank calculates its \$1 a day estimates.

Specifically, PovcalNet can be used to:

- Replicate the global and regional estimates on the extent of absolute poverty made by World Bank researchers (“first button”).
- Calculate aggregate poverty estimates based on alternative country groupings (“second button”).
- Estimate poverty rates and the poverty gap for countries or aggregate poverty rates using different assumptions about poverty lines and purchasing power parity (PPP) rates (“second button” and “third button”).

The income and consumption data included in PovcalNet come from 675 household surveys conducted in 115 developing countries during 1979–2007. To reduce the computation load, PovcalNet uses survey means and grouped distribution information such as deciles, ventiles, and percentiles rather than unit record data. With this information, the Povcal algorithm estimates the parametric specifications

of the underlying Lorenz (income or consumption distribution) curve. The parameters from the Povcal algorithm along with the survey mean and grouped distribution data can be retrieved for further analysis. Users can also access the country-specific metadata page on household surveys.

To produce a poverty estimate, the user specifies a poverty line in dollars per month. The default value is set at \$38 a month (or \$1.25 a day) in 2005 prices. To convert the poverty line to equivalent purchasing power in local currency, PovcalNet use the 2005 consumption PPPs from the International Comparison Program. For surveys conducted in a different year, the local currency equivalent of the 2005 poverty line is adjusted to the prices prevailing at the survey date using the official consumer price index of each country. The consumer price index data in PovcalNet come from the World Development Indicators database. By combining the adjusted poverty line with the estimated Lorenz curve, the proportion of people living at or below the poverty line can be calculated.

When estimating either aggregate or country-level poverty rates, users can also replace the default 2005 PPP rate with an alternate conversion factor for 2005, such as the official

exchange rate. Conversion factors are stated in local currency units per dollar: a higher rate implies a higher price level (relative to the dollar) and therefore a lower average income measured in dollars and a higher poverty rate at a given poverty line.

Aggregate poverty measures for two or more countries are estimated at nine “reference years”: 1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, and 2005. To estimate aggregate poverty rates, PovcalNet “lines up” surveys in time by applying the growth rate of real private consumption per person from the national accounts to the survey mean, assuming that the distribution of income around the survey mean does not change over time. When two surveys bracket a reference year, the poverty headcount for the reference year is the weighted average of the extrapolated poverty headcount estimates from both surveys. Once all countries have a poverty headcount for the reference year, the aggregate poverty headcount is the population-weighted average of country poverty headcount estimates. Data on population and the growth rate of private consumption included in PovcalNet come from the World Development Indicators database.

PovcalNet is available at <http://iresearch.worldbank.org/povcalnet/>.

Internationally comparable poverty measures: regional poverty rates

To compare the number of poor across different countries and compute regional aggregates, country estimates must first be “lined up” to a common reference year, interpolating for countries in which survey data are not available in the reference year but are available either before, after, or both.¹⁴ The more survey data available (that is, the more data for different years), the more accurate the interpolation. The process requires adjusting the mean income or expenditure observed in the survey year by a growth factor to infer the unobserved level in the reference year. Thus, two assumptions are required to implement this process: distribution-neutral growth and a conjectured real rate of growth between the survey and reference year.

Distribution-neutral growth

This implies that income or expenditure levels are adjusted for growth assuming that the underlying distribution of income or expenditure observed in survey years remains unchanged. Under this assumption, it is straightforward to interpolate the poverty estimate in a given reference year implied by a given rate of growth in income or expenditure.¹⁵

Rate of change in real consumption per capita

Ideally, this is based on the change in real consumption measured by comparing country survey data across different

years. In practice, however, survey data in most countries are not available on an annual basis. Therefore, the change in private consumption per capita as measured from the national accounts is used instead.¹⁶ While, there can be no guarantee that the survey-based measure of income or consumption change at exactly the same rate as private consumption in the national accounts, under certain circumstances and over short periods of time it can provide a reasonable approximation.¹⁷ The issue of national accounts versus survey data is discussed in more detail at the end of this section.

The lining-up process

When the reference year falls between two survey years, an estimate of mean consumption at the reference year is constructed by extrapolating the means obtained from the surveys forward and backward to the reference year. The second step is to compute the headcount poverty rate at the reference year after normalizing the distributions observed in the two survey years by the reference year mean. This yields two estimates of the headcount poverty rates in the reference year. The final reported poverty headcount rate for the reference years is the average of the two.¹⁸ When data from only one survey year are available, the reference year mean is based on the survey mean by applying the growth rate in

private consumption per capita from the national accounts. The reference year poverty estimate is then based on this mean and on the distribution observed in the one survey year.

New estimates of purchasing power parities

Purchasing poverty parities (PPPs) are exchange rates that convert a value in one currency to another while equalizing their purchasing power. PPPs are preferred to market exchange rates for comparing the size of economies or levels of consumption or for computing poverty rates because they reflect differences in price levels, particularly for nontradable goods and services, and therefore provide meaningful comparisons of the real output of economies. In a sense, PPPs adjust for differences in price levels between countries as a conventional, single-country price index adjusts for changes in the price level over time.

PPPs are calculated by simultaneously comparing the prices of similar goods and services in all participating countries. In practice, PPPs were computed in six geographic regions and then linked to form a global data set. Because PPPs are a multilateral index, it is not possible to compute a single country's PPP or logically consistent to substitute a pseudo PPP, based on a bilateral comparison of two countries, for a multilateral PPP.

Typically, price levels are lower in poor countries. Failure to correct for this difference means that market exchange rates underestimate the size of developing economies and the real consumption of their citizens. According to the PPP estimates recently released from the 2005 International Comparison Program, developing economies account for nearly 40 percent of world output when measured by PPPs, about 18 percentage points more than when measured by exchange rates. Differences between exchange rate and PPP values for GDP and private consumption are greatest for the poorest economies and gradually disappear in richer economies (figure 3).

The new 2005 PPP estimates are the outputs from the eighth round of the International Comparison Program, the most extensive and thorough effort to measure PPP for the major components of GDP. Some 146 countries and territories participated in the data collection—China for the first time, India for the first time since 1985, along with almost all African countries. And because of several quality-enhancing measures,¹⁹ the new PPPs provide a better and more complete view of the world economy.

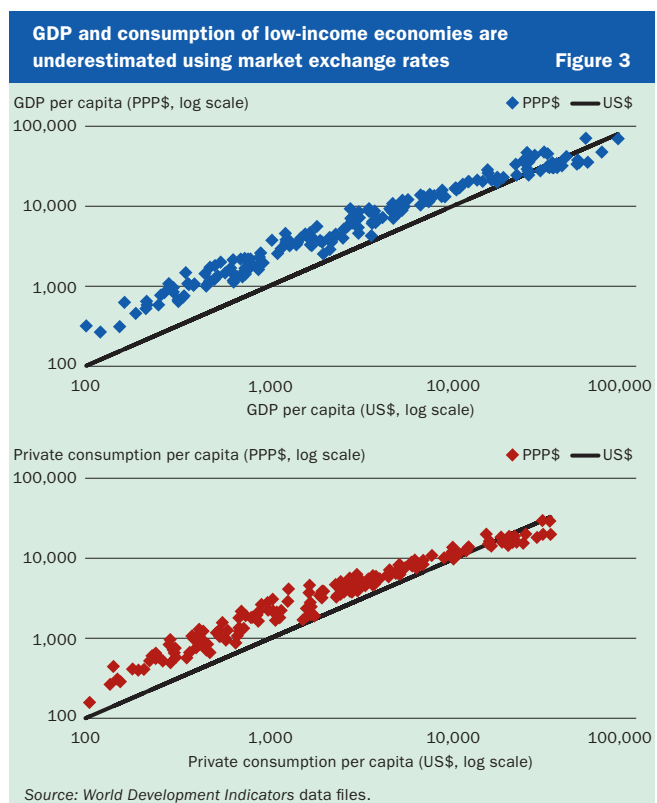
The 2005 PPP estimates in table S.3 replace those in previous editions of *World Development Indicators*. Many changes are substantial. The previous PPP estimates for GDP were taken from several past comparisons—the 1993–96 International Comparison Program round for most developing economies, the 2000 European Comparison Program for the economies in the Commonwealth of Independent States, and the 2002 Eurostat–Organisation for Economic Co-operation and

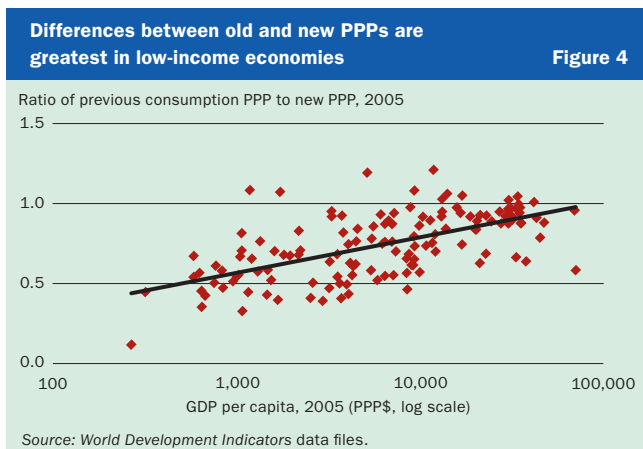
The better data coverage is in terms of number and frequency of available surveys, the more accurate this lining-up process is and the more reliable the regional estimates will be.

Development (OECD) PPP round for OECD members—while the previous PPP estimates for private consumption, used to calculate the international poverty estimates, were taken mainly from the 1993–96 International Comparison Program round. The PPP estimates for benchmark years were extrapolated to preceding and succeeding years by adjusting for price changes (typically using the GDP deflator or consumer price index) in each economy relative to the numeraire economy (the United States).

For most developing countries the new PPPs are higher than previous estimates, especially for poor countries, implying that the price levels of many developing countries are higher—and their GDPs are smaller—than previously thought. Figure 4 shows the ratio of the previous PPP for individual consumption to the PPP estimated by the 2005 International Comparison Program. A value less than 1 indicates that the previous PPPs were underestimated. Almost all were underestimated, but the discrepancy is greatest for low-income economies.

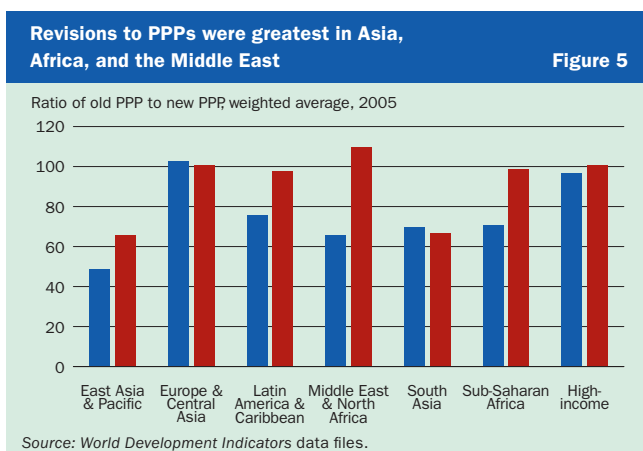
The average difference between the previous PPP estimates and those estimated in the 2005 ICP round are





smallest in regions that have recently updated their price surveys: the Commonwealth of Independent States economies, which were surveyed in 2000, and other economies in Europe and Central Asia, many of which were included in the 2002 Eurostat–OECD data collection. Figure 5 shows the regional average ratio of old PPPs to new PPPs for both GDP and individual consumption.

The differences are the result of several factors. First, the extrapolation method may be a good approximation in the short run but an increasingly poor approximation over a longer period due to changes in the relative prices of goods and services and the structure of economies. Second, the 2005 International Comparison Program round adopted changes in methodology that render the new PPPs not strictly comparable with previous PPPs. The major changes include use of the 1993 System of National Accounts (SNA 93) to measure GDP expenditure weights (replacing SNA 68); the use of the “ring comparison” to link regions (instead of ad hoc, single-country links); use of the structured product description method to define the key price-determining characteristics of products and ensure the principle of “matching like with like”; and quarterly price data collections with extensive data review to improve data quality.



The World Bank uses PPP for private consumption in measuring international poverty lines, so any revision of PPPs calls for a reassessment of global poverty status. The comparison of the previous PPP to the new PPP for private consumption indicates a significant underestimation by the previous PPPs. The average of the ratio of the previous to the new PPP estimates for private consumption in developing countries is only 0.7, probably at least partially due to the fact that all previous PPP estimates for private consumption were extrapolated from the 1993–96 round. And because the price levels in developing countries were higher than previously thought, the previous \$1 a day poverty estimates underestimated the true poverty level in most developing countries.

Although the new PPPs represent a significant improvement over previous estimates, their application in measuring poverty may still be problematic. PPPs for private consumption are calculated using national average prices and weighted GDP expenditure shares. Are those prices and weights representative of the consumption patterns of poor people? Preliminary results using expenditure weights of the poor derived from household surveys suggest that re-weighting has little impact on the PPP for private consumption. The Asian Development Bank (2008) has piloted poverty-specific price surveys in 14 Asian countries. Their data show that prices paid by the poor are often lower than the national average prices. The resulting PPPs for consumption using poverty-specific prices and expenditure weights turn out to be lower than the standard PPPs. However, their surveys were based on goods typically purchased by the poor, which may be of lower quality. Based on the experience of the earlier International Comparison Program rounds, failure to control for the quality of goods may lead to spurious underestimation of PPPs. Work on estimating PPPs applicable to the consumption patterns of poor people in developing countries is continuing.

Purchasing power parities for nonbenchmark countries

Not all countries participated in the 2005 round of the International Comparison Program. Although the so-called nonbenchmark economies account for only a small share of the global output and population, it is important to include them in any comprehensive measurements of economic size and international poverty.

The International Comparison Program 2005 final report includes a discussion of the regression models used in the previous (1993) round to impute PPP rates at GDP level.²⁰ The same specification was used to impute PPPs for the 2005 round. Afterward, an alternative model was found to yield better estimates. The new model uses the price level index (PLI) as the dependent variable. The PLI is the ratio of a PPP to a corresponding market exchange rate. The PLI for country i is modeled as:

$$PLI_i = a + b X_i + c D_i X_i + d D_i + e_i \quad (3)$$

The explanatory variables X_i include GDP per capita in U.S. dollars at market prices; imports as a share of GDP; exports as a share of GDP; and the age dependency ratio. Dummy variables D_i designate Sub-Saharan African economy, OECD economy, island economy, and landlocked developing economy; and e_i is an error term. Also included are interaction terms of GDP per capita and the dummy variables. Data come from the 2005 International Comparison Program and World Development Indicators databases, supplemented by other official data sources in a small number of cases. The PLI and the continuous variables are all expressed in natural logs.

Because the United States is the base country in the multilateral comparison, by definition its PPP is always 1 and

its PLI is always 100. So it is necessary to add an explicit constraint on the equation to force those values:

$$PLI_i = \ln(100) = b(X_i - X_{USA}) + c(D_i X_i - D_i X_{USA}) + d(D_i - D_{USA}) + e_i \quad (4)$$

In effect, both dependent variable and explanatory variables are “normalized” by the corresponding U.S. values.

There are two regressions: one for PLI at the GDP level and one for PLI at the private consumption level. Two regressions are run together using Zellner’s seemingly unrelated regression method. The regression results are presented in table 2. Estimated PPPs for nonbenchmark countries are included in table S.3.

Nonbenchmark regression results		Table 2			
Dependent variable	PLI at GDP level (N = 143)		PLI at private consumption level (N = 143)		
	Coefficient	Standard error	Coefficient	Standard error	
GDP per capita (US\$)	0.279	0.008	0.253	0.007	
Export as percent of GDP	-0.102	0.017			
Imports as percent of GDP	0.071	0.022			
Age dependency ratio	0.348	0.076	0.384	0.079	
GDP per capita (US\$) * Sub-Saharan Africa dummy variable	-0.083	0.022	-0.056	0.022	
GDP per capita (US\$) * island economy dummy variable	-0.063	0.026	-0.049	0.027	
GDP per capita (US\$) * landlocked developing economy dummy variable			-0.011	0.005	
OECD dummy variable	0.238	0.030	0.210	0.030	
Sub-Saharan Africa dummy variable	0.733	0.158	0.603	0.163	
Island economy dummy variable	0.633	0.223	0.556	0.232	
Landlocked developing economy dummy variable	-0.071	0.032			
Regression summary	R²	Root mean standard error	R²	Root mean standard error	
	0.969	0.135	0.948	0.143	

Source: World Bank staff estimates.

Regional poverty estimates and progress toward the Millennium Development Goals

Global poverty measured at the \$1.25 a day line has been decreasing since the 1980s. The number of people living in extreme poverty fell from 1.9 billion in 1981 to 1.8 billion in 1990 to about 1.4 billion in 2005 (figure 6). This substantial reduction in extreme poverty over the past quarter century, however, disguises large regional differences.

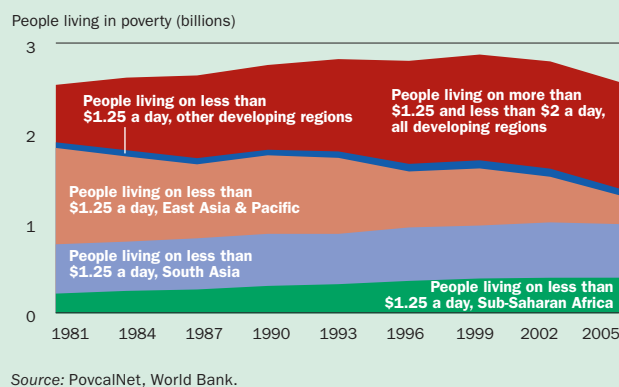
The greatest reduction in poverty occurred in East Asia and Pacific, where the poverty rate declined from 78 percent in 1981 to 17 percent in 2005 and the number of people living on less than \$1.25 a day dropped more than 750 million (figure 7). Much of this decline was in China, where poverty fell from 84 percent to 16 percent, leaving 627 million fewer people in poverty.

Over the same period the poverty rate in South Asia fell from 59 percent to 40 percent (table 3). In contrast, the poverty rate fell only slightly in Sub-Saharan Africa—going from 54 percent in 1981 to 59 percent in 1999 then down to 51 percent in 2005. But the number of people living below the poverty line has nearly doubled.

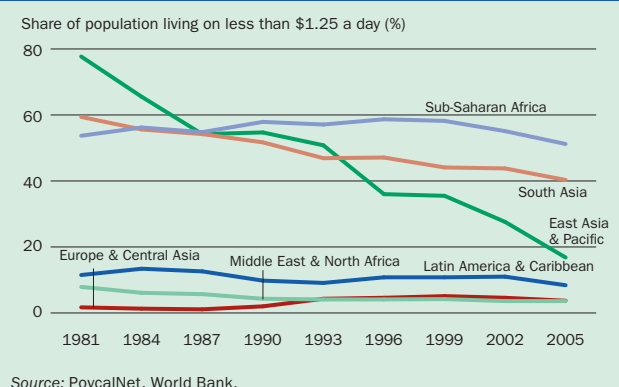
Only East Asia and Pacific is consistently on track to meet the Millennium Development Goal target of reducing 1990 poverty rates by half by 2015. But a slight acceleration over the historical growth rate could lift Latin America and the Caribbean and South Asia to the target. Whether they will succeed and whether poverty rates will continue to fall in all regions may depend on the length and depth of the global recession triggered by the U.S. financial crisis.

Most of the people who have escaped extreme poverty remain very poor by the standards of middle-income economies. The median poverty line for developing countries in 2005 was \$2.00 a day. The poverty rate for all developing countries measured at this line fell from nearly 70 percent in 1981 to 47 percent in 2005, but the number of people living on less than \$2.00 a day has remained nearly constant at 2.5 billion. The largest decrease, both in number and proportion, occurred in East Asia and Pacific, led by China. Elsewhere, the

The number of people living on less than \$2 a day has changed little since 1981 Figure 6



Poverty rates have begun to fall Figure 7



number of people living on less than \$2.00 a day increased, and the number of people living between \$1.25 and \$2.00 a day nearly doubled, to 1.18 billion.

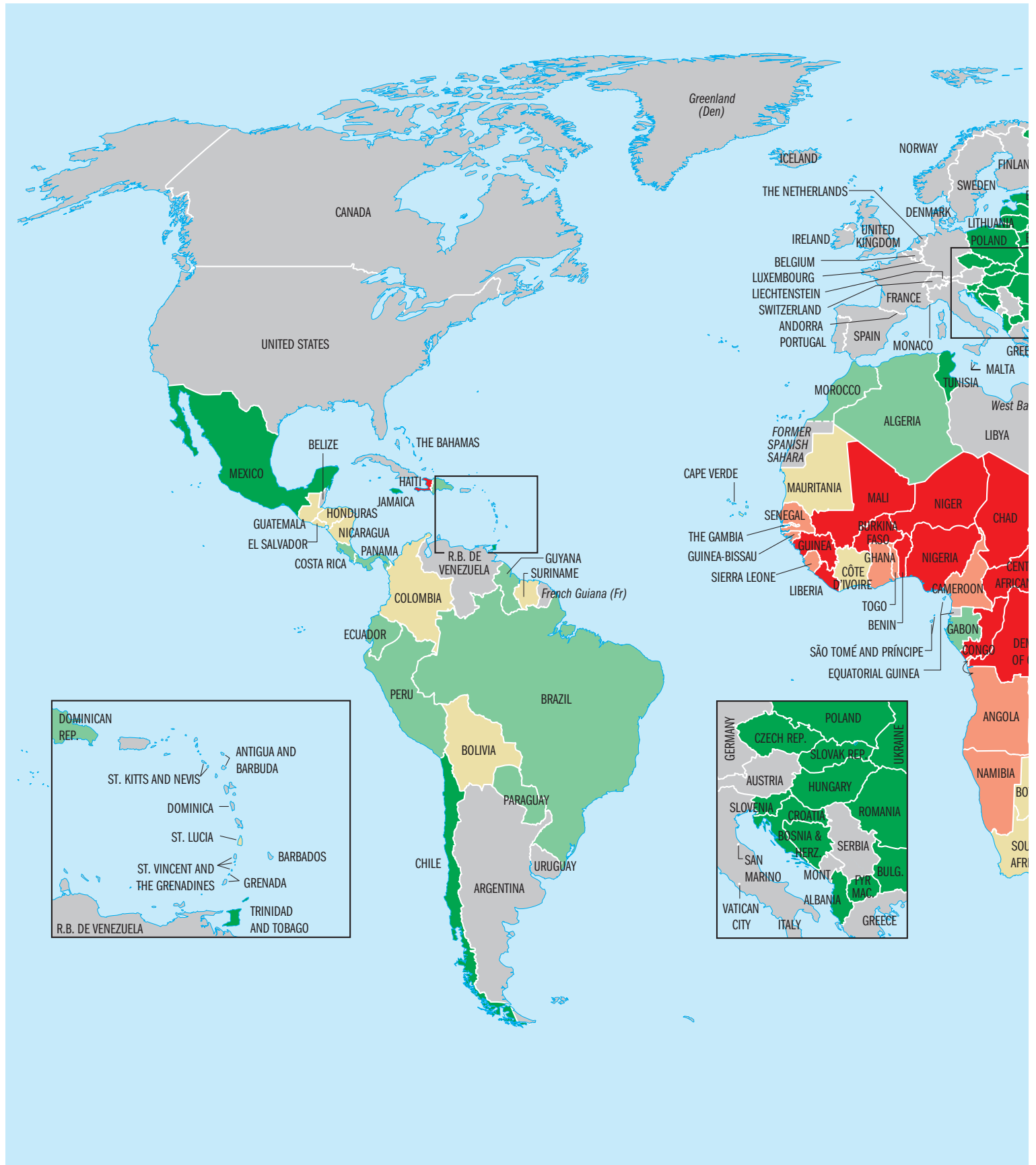
**Regional
poverty estimates**
Table 3

Region	1981	1984	1987	1990	1993	1996	1999	2002	2005
People living on less than 2005 PPP \$1.25 a day (millions)									
East Asia & Pacific	1,071	947	822	873	845	622	635	507	316
China	835	720	586	683	633	443	447	363	208
Europe & Central Asia	7	6	5	9	20	22	24	22	17
Latin America & Caribbean	47	59	57	50	47	53	55	57	45
Middle East & North Africa	14	12	12	10	10	11	12	10	11
South Asia	548	548	569	579	559	594	589	616	596
India	420	416	428	435	444	442	447	460	456
Sub-Saharan Africa	212	242	258	298	317	356	383	390	388
Total	1,900	1,814	1,723	1,818	1,799	1,658	1,698	1,601	1,374
Share of people living on less than 2005 PPP \$1.25 a day (%)									
East Asia & Pacific	77.7	65.5	54.2	54.7	50.8	36.0	35.5	27.6	16.8
China	84.0	69.4	54.0	60.2	53.7	36.4	35.6	28.4	15.9
Europe & Central Asia	1.7	1.3	1.1	2.0	4.3	4.6	5.1	4.6	3.7
Latin America & Caribbean	12.9	15.3	13.7	11.3	10.1	10.9	10.9	10.7	8.2
Middle East & North Africa	7.9	6.1	5.7	4.3	4.1	4.1	4.2	3.6	3.6
South Asia	59.4	55.6	54.2	51.7	46.9	47.1	44.1	43.8	40.3
India	59.8	55.5	53.6	51.3	49.4	46.6	44.8	43.9	41.6
Sub-Saharan Africa	53.4	55.8	54.5	57.6	56.9	58.8	58.4	55.0	50.9
Total	51.9	46.7	41.9	41.7	39.2	34.5	33.7	30.5	25.2
People living on less than 2005 PPP \$2.00 a day (millions)									
East Asia & Pacific	1,278	1,280	1,238	1,274	1,262	1,108	1,105	954	729
China	972	963	907	961	926	792	770	655	474
Europe & Central Asia	35	28	25	32	49	56	68	57	42
Latin America & Caribbean	90	110	103	96	96	107	111	114	94
Middle East & North Africa	46	44	47	44	48	52	52	51	51
South Asia	799	836	881	926	950	1,009	1,031	1,084	1,092
India	609	636	669	702	735	757	783	813	828
Sub-Saharan Africa	294	328	351	393	423	471	509	536	556
Total	2,542	2,625	2,646	2,765	2,828	2,803	2,875	2,795	2,564
Share of people living on less than 2005 PPP \$2.00 a day (%)									
East Asia & Pacific	92.6	88.5	81.6	79.8	75.8	64.1	61.8	51.9	38.7
China	97.8	92.9	83.7	84.6	78.6	65.1	61.4	51.2	36.3
Europe & Central Asia	8.3	6.5	5.6	6.9	10.3	11.9	14.3	12.0	8.9
Latin America & Caribbean	24.6	28.1	24.9	21.9	20.7	22.0	21.8	21.6	17.1
Middle East & North Africa	26.7	23.1	22.7	19.7	19.8	20.2	19.0	17.6	16.9
South Asia	86.5	84.8	83.9	82.7	79.7	79.9	77.2	77.1	73.9
India	86.6	84.8	83.8	82.6	81.7	79.8	78.4	77.5	75.6
Sub-Saharan Africa	73.8	75.5	74.0	76.1	75.9	77.9	77.6	75.6	72.9
Total	69.4	67.7	64.3	63.4	61.6	58.3	57.1	53.3	47.0

Source: PovcalNet, World Bank.

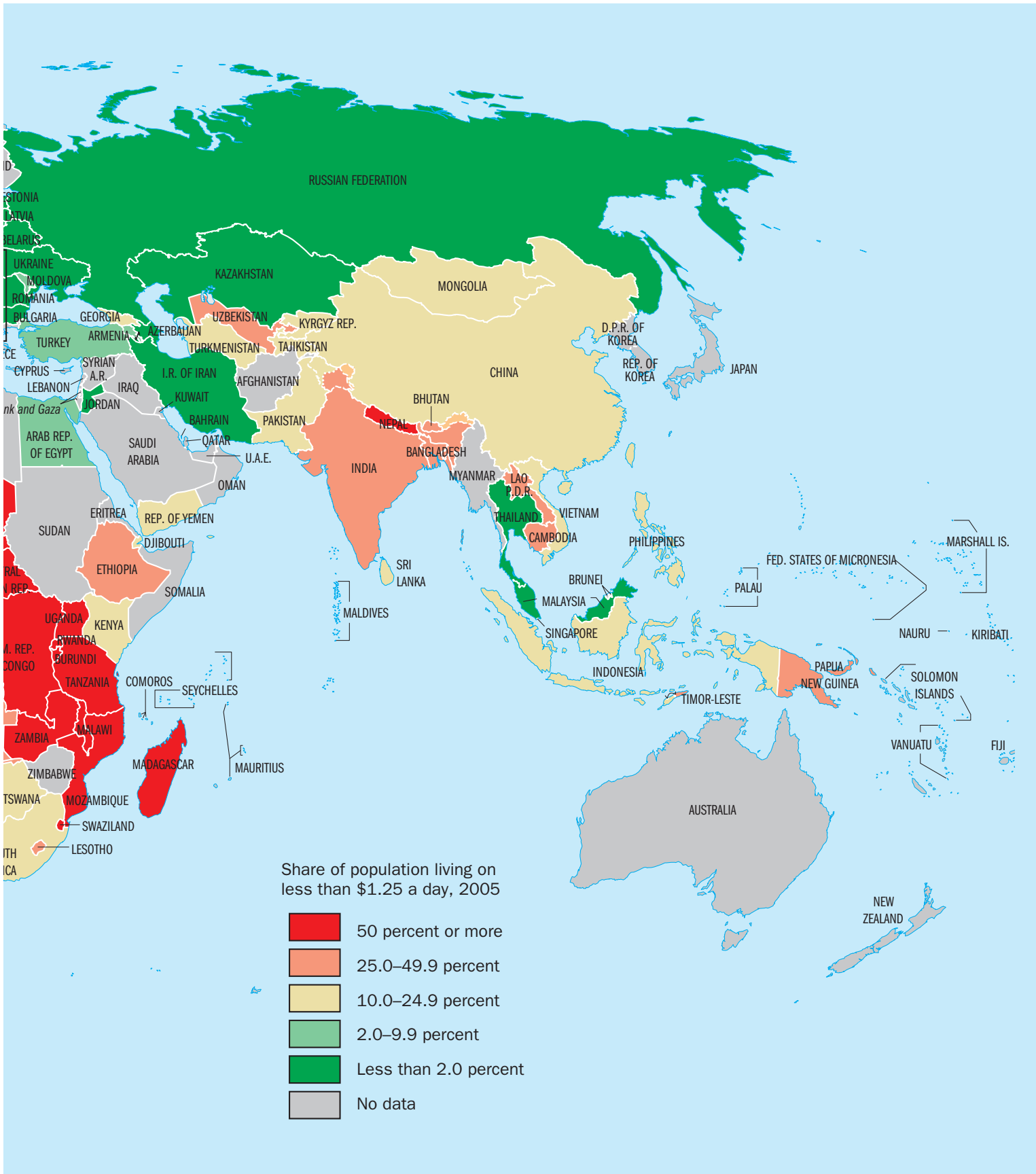
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People living in extreme poverty



People living in extreme poverty

1



Notes

1. Of these, 110 are classified as low- or middle-income economies; the rest are high-income economies. In addition, PPPs for 40 nonparticipating countries were estimated by regression (see table S.3).
2. PPPs can be referenced to any common currency. In practice, the U.S. dollar is usually taken as the numeraire currency.
3. For further discussion of the computation of PPPs, see *About the data* for table S.3. The global estimates of PPPs are described in World Bank (2008a).
4. This relationship exists because nontradable goods are not accounted for in the currency exchange rates and, in poor countries, these are generally cheap by virtue of being produced primarily using land and labor inputs. So using currency exchange rates instead of PPPs would make the price levels in poor countries appear to be higher and poverty estimates to be systematically overstated for poorer countries relative to richer ones.
5. The national poverty lines were from 33 countries (both developed and developing) and drew on specialized, country-specific, mostly academic studies of poverty spanning 1980–90.
6. The International Comparison Program price surveys started in 1968. Prior to 2000, the Penn World Tables were the main source of the consumption PPP data for the World Bank's global poverty measures. In 2000 the World Bank switched to the 1993 PPPs estimated by the Development Data Group as part of the International Comparison Program; the most recent 2005 results from the International Comparison Program are reported in World Bank (2008a). There are methodological differences in these two sets of PPPs. For more information on the Penn World Tables, see <http://pwt.econ.upenn.edu/>.
7. Ravallion, Chen, and Sangraula's (2008) appendix A1 lists the survey sources.
8. For a discussion of recall issues, see Chen and Ravallion (2001), Deaton and Grosh (2000), and Deaton (2001). Visaria (2000) reports an experiment conducted in 1997 in which different households in India were asked about food consumption for different recall periods. Some were asked one week recall, and others one month. The differences in implied poverty rates using the same poverty line were large: the one week recall for rural India yielded a poverty rate estimate of 21 percent, compared with 36 percent using the one month recall.
9. See, for instance, the discussion in Deaton and Grosh (2000).
10. While nonresponse is less pronounced in poor countries, it does occur; for instance, see Scott and Steele (2004). Various matching and imputation methods can be applied to address item nonresponse by exploiting the questions that have been answered. Little and Rubin (1987) provide a comprehensive overview of available techniques.
11. For any country, if one of these necessary datasets is not available, the international poverty estimate cannot be computed. This is why *World Development Indicators* does not report estimates for some developing countries.
12. Adjustments are made on the basis of annual average consumer price index data, except in the case of a handful of hyper- and high-inflation countries where adjustments were made on a monthly basis over the period corresponding to the survey data collection period.
13. See World Bank (2008a) for a discussion of the International Comparison Program data collection in China.
14. The World Bank omits countries for which no survey data are available from regional estimates.
15. For example, see Datt and Ravallion (1992), Kakwani (1993), and Bourguignon (2003, 2004).
16. For a handful of cases where neither of these datasets is available, the change in real GPP per capita is used instead.
17. For more discussion on the differences between growth rates observed in survey-based consumption measures and those obtained from private consumption in national account, see Ravallion (2000, 2003) and Deaton (2003).
18. See Chen and Ravallion (2001) for further details.
19. For more detailed discussion on data quality in the 2005 round, see World Bank (2008a).
20. The estimated values for nonbenchmark countries are on page 164 of the report (World Bank 2008a).

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	Population below national poverty line								Poverty gap at national poverty line			
	Survey year	Rural %	Urban %	National %	Survey year	Rural %	Urban %	National %	Survey year	Rural %	Urban %	National %
Afghanistan	2007	45.0	27.0	42.0		..	..	..	2005	..	..	..
Albania	2002	29.6	19.5	25.4	2005	24.2	11.2	18.5	2005	5.3	2.3	4.0
Algeria	1988	16.6	7.3	12.2	1995	30.3	14.7	22.6	1995	4.5	1.8	3.2
Argentina	1998	..	28.8	..	2002	..	53.0	..	2002	..	28.5	..
Armenia	1998–99	50.8	58.3	55.1	2001	48.7	51.9	50.9	2001	..	..	15.1
Azerbaijan	1995	..	..	68.1	2001	42.0	55.0	49.6	2001	..	..	15.5
Bangladesh	1995–96	55.2	29.4	51.0	2000	53.0	36.6	49.8	2000	13.8	9.5	12.9
Belarus	2002	..	..	30.5	2004	..	..	17.4	2004	..	..	..
Benin	1999	33.0	23.3	29.0	2003	46.0	29.0	39.0	2003	14.0	8.0	12.0
Bolivia	1999	80.1	51.4	62.0	2002	82.2	53.9	64.6	2002	43.4	23.8	31.2
Bosnia and Herzegovina	2001–02	19.9	13.8	19.5		..	..	..	2001–02	4.9	2.8	4.6
Brazil	1998	51.4	14.7	22.0	2002–03	41.0	17.5	21.5	2002–03	28.4	17.8	19.6
Bulgaria	1997	..	..	36.0	2001	..	..	12.8	2001	..	..	4.2
Burkina Faso	1998	61.1	22.4	54.6	2003	52.4	19.2	46.4	2003	17.6	5.1	15.3
Burundi	1998	64.6	66.5	68.0		..	..	..		..	..	..
Cambodia	1994	..	..	47.0	2004	38.0	18.0	35.0	2004	7.8	1.2	6.7
Cameroon	1996	59.6	41.4	53.3	2001	49.9	22.1	40.2		..	..	..
Chad	1995–96	48.6	..	43.4		..	..	..	1995–96	26.3	..	27.5
Chile	1996	..	..	19.9	1998	..	..	17.0	1998	..	..	5.7
China	1998	4.6	..	4.6	2004	..	..	2.8		..	..	..
Colombia	1995	79.0	48.0	60.0	1999	79.0	55.0	64.0	1999	44.0	26.0	34.0
Congo, Dem. Rep.	2004–05	75.7	61.5	71.3		..	..	..	2004–05	34.9	26.2	32.2
Congo, Rep.	2005	49.2	42.3	..		..	..	..		..	..	..
Costa Rica	1989	35.8	26.2	31.7	2004	28.3	20.8	23.9	2004	10.8	7.0	8.6
Croatia	2002	..	..	11.2	2004	..	..	11.1		..	..	..
Dominican Republic	2000	45.3	18.2	27.7	2004	55.7	34.7	42.2	2004	24.0	12.9	16.8
Ecuador	1998	69.0	30.0	46.0	2001	..	..	45.2	2001	..	..	18.0
Egypt, Arab Rep.	1995–96	23.3	22.5	22.9	1999–2000	..	..	16.7	1999–2000	..	..	3.0
El Salvador	1995	64.8	38.9	50.6	2002	49.8	28.5	37.2	2002	24.2	11.1	16.5
Eritrea	1993–94	..	..	53.0		..	..	..		..	..	..
Estonia	1995	14.7	6.8	8.9		..	..	..	1995	6.6	1.8	3.1
Ethiopia	1995–96	47.0	33.3	45.5	1999–2000	45.0	37.0	44.2	1999–2000	12.0	10.0	12.0
Gambia, The	1998	61.0	48.0	57.6	2003	63.0	57.0	61.3	2003	..	..	25.9
Georgia	2002	55.4	48.5	52.1	2003	52.7	56.2	54.5		..	..	..
Ghana	1998–99	49.6	19.4	39.5	2005–06	39.2	10.8	28.5	2005–06	13.5	3.1	9.6
Guatemala	1989	71.9	33.7	57.9	2000	74.5	27.1	56.2	2000	..	..	22.6
Guinea	1994	..	..	40.0		..	..	..		..	..	..
Guinea-Bissau	2002	..	52.6	65.7		..	..	..	2000	..	17.5	25.7
Haiti	1987	..	..	65.0	1995	66.0	..	..		..	..	..
Honduras	1998–99	71.2	28.6	52.5	2004	70.4	29.5	50.7	2004	34.5	9.1	22.3
Hungary	1993	..	..	14.5	1997	..	..	17.3	1997	4.1	..	..
India	1993–94	37.3	32.4	36.0	1999–2000	30.2	24.7	28.6	1999–2000	5.6	6.9	..
Indonesia	1996	19.8	13.6	17.6	2005	..	..	16.0	2004	..	..	2.9
Jamaica	1995	37.0	18.7	27.5	2000	25.1	12.8	18.7		..	..	..
Jordan	1997	27.0	19.7	21.3	2002	18.7	12.9	14.2	2002	4.7	2.9	3.3
Kazakhstan	2001	..	..	17.6	2002	..	..	15.4	2002	4.5	2.0	3.1
Kenya	1994	47.0	29.0	40.0	1997	53.0	49.0	52.0		..	..	..
Kyrgyz Republic	2003	57.5	35.7	49.9	2005	50.8	29.8	43.1	2005	12.0	7.0	10.0
Lao PDR	1997–98	41.0	26.9	38.6	2002–03	..	..	33.0	2002–03	..	..	8.0
Latvia	2002	11.6	..	7.5	2004	12.7	..	5.9	2004	..	..	1.2

Poverty rates at national poverty lines

S.1

	Population below national poverty line								Poverty gap at national poverty line			
	Survey year	Rural %	Urban %	National %	Survey year	Rural %	Urban %	National %	Survey year	Rural %	Urban %	National %
Lesotho	1993	53.9	27.8	49.2	1999	..	..	68.0	..	..	..	..
Macedonia, FYR	2002	25.3	..	21.4	2003	22.3	..	21.7	2003	6.5	..	6.7
Madagascar	1997	76.0	63.2	73.3	1999	76.7	52.1	71.3	1999	36.1	21.4	32.8
Malawi	1990–91	..	..	54.0	1997–98	66.5	54.9	65.3	..	..	..	..
Malaysia	1989	..	..	15.5	..	..	..	..	..	..	..	..
Mali	1998	75.9	30.1	63.8	..	..	..	..	..	..	..	..
Mauritania	1996	65.5	30.1	50.0	2000	61.2	25.4	46.3	..	..	..	..
Mauritius	1992	..	..	10.6	..	..	..	..	..	..	..	..
Mexico ^a	2002	34.8	11.4	20.3	2004	27.9	11.3	17.6	2002	12.2	2.8	6.3
Moldova	2001	64.1	58.0	62.4	2002	67.2	42.6	48.5	2002	..	..	16.5
Mongolia	1998	32.6	39.4	35.6	2002	43.4	30.3	36.1	2002	13.2	9.2	11.0
Morocco	1990–91	18.0	7.6	13.1	1998–99	27.2	12.0	19.0	1998–99	6.7	2.5	4.4
Mozambique	1996–97	71.3	62.0	69.4	2002–03	55.3	51.5	54.1	2002–03	20.9	19.7	20.5
Nepal	1995–96	43.3	21.6	41.8	2003–04	34.6	9.6	30.9	2003–04	8.5	2.2	7.5
Nicaragua	1998	68.5	30.5	47.9	2001	64.3	28.7	45.8	2001	25.9	8.7	17.0
Niger	1989–93	66.0	52.0	63.0	..	..	..	..	..	..	..	..
Nigeria	1985	49.5	31.7	43.0	1992–93	36.4	30.4	34.1	..	..	..	..
Pakistan	1993	33.4	17.2	28.6	1998–99	35.9	24.2	32.6	1998–99	7.9	5.0	7.0
Panama	1997	64.9	15.3	37.3	..	..	..	..	1997	32.1	3.9	16.4
Papua New Guinea	1996	41.3	16.1	37.5	..	..	..	..	1996	13.8	4.3	12.4
Paraguay ^b	1990	28.5	19.7	20.5	..	..	..	..	1990	10.5	5.6	6.0
Peru	2001	77.1	42.0	54.3	2004	72.1	42.9	53.1	2004	28.3	12.4	18.0
Philippines	1994	45.4	18.6	32.1	1997	36.9	11.9	25.1	1997	10.0	2.6	6.4
Poland	1996	..	..	14.6	2001	..	..	14.8	..	..	..	..
Romania	1995	..	..	25.4	2002	..	..	28.9	2002	..	..	7.6
Russian Federation	1998	..	..	31.4	2002	..	..	19.6	2002	..	..	5.1
Rwanda	1993	..	..	51.2	1999–2000	65.7	14.3	60.3	..	..	..	..
Senegal	1992	40.4	23.7	33.4	..	..	..	..	1992	16.4	3.1	13.9
Sierra Leone	1989	..	..	82.8	2003–04	79.0	56.4	70.2	2003–04	34.0	..	29.0
Slovak Republic	2004	..	..	16.8	..	..	..	..	2004	..	..	5.5
Sri Lanka	1995–96	27.0	15.0	25.0	2002	7.9	24.7	22.7	2002	5.6	1.7	5.1
Swaziland	2000–01	75.0	49.0	69.2	..	..	..	..	2000–01	..	..	32.9
Tajikistan	1999	..	..	74.9	2003	..	..	44.4	2003	..	..	12.7
Tanzania	1991	40.8	31.2	38.6	2000–01	38.7	29.5	35.7	..	..	..	..
Thailand	1994	..	..	9.8	1998	..	..	13.6	1998	..	..	3.0
Timor-Leste	2001	..	..	39.7	..	..	..	..	2001	..	..	11.9
Togo	1987–89	..	..	32.3	..	..	..	..	1987–89	..	..	10.0
Trinidad and Tobago	1992	20.0	24.0	21.0	..	..	..	..	1992	6.2	7.4	7.3
Tunisia	1990	13.1	3.5	7.4	1995	13.9	3.6	7.6	1990	3.3	0.9	1.7
Turkey	1994	..	..	28.3	2002	34.5	22.0	27.0	2002	..	..	0.3
Uganda	1999–2000	37.4	9.6	33.8	2002–03	41.7	12.2	37.7	2002–03	12.6	3.0	11.3
Ukraine	2000	34.9	..	31.5	2003	28.4	..	19.5	..	..	..	..
Uruguay	1994	..	20.2	..	1998	..	24.7	..	1998	..	8.6	..
Uzbekistan	2000–01	33.6	27.8	31.5	2003	29.8	22.6	27.2	..	..	..	..
Venezuela, RB	1989	..	..	31.3	1997–99	..	..	52.0	1997–99	..	..	24.0
Vietnam	1998	45.5	9.2	37.4	2002	35.6	6.6	28.9	2002	8.7	1.3	6.9
Yemen, Rep.	1998	45.0	30.8	41.8	..	..	..	..	1998	14.7	8.2	13.2
Zambia	1998	83.1	56.0	72.9	2004	78.0	53.0	68.0	2004	44.0	22.0	36.0
Zimbabwe	1990–91	35.8	3.4	25.8	1995–96	48.0	7.9	34.9	..	..	..	..

a. Based on food poverty line. b. Covers Asunción metropolitan area only.

S.1 Poverty rates at national poverty lines

About the data

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. Since 1992 the World Bank has conducted about 200 poverty assessments, which are the main source of the poverty estimates presented in the table. Countries report similar assessments as part of their Poverty Reduction Strategies.

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. Data are derived from nationally representative household surveys conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical offices and World Bank Group country departments.

Some poverty assessments analyze the current poverty status of a country using the latest available household survey data, while others use survey data for several years to analyze poverty trends. Thus, poverty estimates for more than one year might be derived from a single poverty assessment. A poverty assessment might not use all available household surveys, or survey data might become available at a later date even though data were collected before the poverty assessment date. Thus poverty assessments may not fully represent all household survey data.

Over the last 20 years there has been considerable expansion in the number of countries that field surveys and in the frequency of the surveys. The quality of their data has improved greatly as well. Availability of survey data is discussed in detail in the introduction to this supplement and in *About the data* for table S.2.

Data quality

Poverty assessments are based on surveys fielded to collect, among other things, information on income or consumption from a sample of households. To be useful for poverty estimates, surveys must be nationally representative and include sufficient information to compute a comprehensive estimate of total household consumption or income (including consumption or income from own production), from which it is possible to construct a correctly weighted distribution

of consumption or income per person. There remain many potential problems with household survey data, including selective nonresponse and differences in the menu of consumption items presented and the length of the period over which respondents must recall their expenditures. These issues are discussed in detail in the introduction of this supplement and in *About the data* for table S.2.

National poverty lines

National poverty lines are used to make estimates of poverty consistent with the country's specific economic and social circumstances and are not intended for international comparisons of poverty rates. The setting of national poverty lines reflects local perceptions of the level of consumption or income needed not to be poor. The perceived boundary between poor and not poor rises with the average income of a country and so does not provide a uniform measure for comparing poverty rates across countries. Nevertheless, national poverty estimates are clearly the appropriate measure for setting national policies for poverty reduction and for monitoring their results.

Almost all the national poverty lines use a food bundle that attains predetermined nutritional requirements for good health and normal activity levels by prevailing diets, plus an allowance for nonfood spending. The rise in poverty lines with average income is driven more by the gradient in the nonfood component of the poverty lines than in the food component, although there is still an appreciable share attributable to the gradient in food poverty lines. While nutritional requirements tend to be fairly similar even across countries at different levels of economic development, richer countries tend to use a more expensive food bundle—more meat and vegetables, less starchy staples, and more processed foods generally—for attaining the same nutritional needs.

Definitions

• **Survey year** is the year in which the underlying data were collected. • **Rural population below national poverty line** is the percentage of the rural population living below the national rural poverty line. • **Urban population below national poverty line** is the percentage of the urban population living below the national urban poverty line. • **National population below national poverty line** is the percentage of the country's population living below the national poverty line. National estimates are based on population-weighted subgroup estimates from household surveys. • **Poverty gap at national poverty line** is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall) as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Data sources

The poverty measures are prepared by the World Bank's Development Research Group, based on data from World Bank's country poverty assessments and country Poverty Reduction Strategies. Summaries of poverty assessments are available at www.worldbank.org/poverty.net, by selecting "Poverty assessments" from the left side bar. Poverty assessment documents are available at www-wds.worldbank.org, under "By topic," "Poverty reduction," "Poverty assessment." Further discussion of how national poverty lines vary across countries can be found in Ravallion, Chen, and Sangraula 2008.

Poverty rates at international poverty lines

S.2

	International poverty line in local currency, 2005		International poverty line									
	\$1.25 a day	\$2 a day	Survey year	Population below	Poverty gap at	Population below	Poverty gap at	Survey year	Population below	Poverty gap at	Population below	Poverty gap at
				\$1.25 a day %	\$1.25 a day %	\$2 a day %	\$2 a day %		\$1.25 a day %	\$1.25 a day %	\$2 a day %	\$2 a day %
Albania	75.51	120.82	2002	<2	<0.5	8.7	1.4	2005	<2	<0.5	7.8	1.4
Algeria	48.42 ^a	77.48 ^a	1988	6.6	1.8	23.8	6.6	1995	6.8	1.4	23.6	6.4
Angola	88.13	141.01		..	..	..	..	2000	54.3	29.9	70.2	42.3
Argentina	1.69	2.71	2002 ^b	9.9	2.9	19.7	7.4	2005 ^b	4.5	1.0	11.3	3.6
Armenia	245.24	392.38	2002	15.0	3.1	46.7	13.6	2003	10.6	1.9	43.4	11.3
Azerbaijan	2,170.94	3,473.51	2001	6.3	1.1	27.1	6.8	2005	<2	<0.5	<2	<0.5
Bangladesh	31.87	50.99	2000	57.8 ^c	17.3 ^c	85.4 ^c	38.7 ^c	2005	49.6 ^c	13.1 ^c	81.3 ^c	33.8 ^c
Belarus	949.53	1,519.25	2002	<2	<0.5	<2	<0.5	2005	<2	<0.5	<2	<0.5
Benin	343.99	550.38		..	..	..	..	2003	47.3	15.7	75.3	33.5
Bhutan	23.08	36.93		..	..	..	..	2003	26.2	7.0	49.5	18.8
Bolivia	3.21	5.14	2002	22.8	12.4	34.2	18.5	2005	19.6	9.7	30.3	15.5
Bosnia and Herzegovina	1.09	1.74	2001	<2	<0.5	<2	<0.5	2004	<2	<0.5	<2	<0.5
Botswana	4.23	6.77	1985–86	35.6	13.8	54.7	25.8	1993–94	31.2	11.0	49.4	22.3
Brazil	1.96	3.14	2002	9.8	2.2	21.3	7.3	2005	7.8	1.6	18.3	5.9
Bulgaria	0.92	1.47	2001	2.6	<0.5	7.8	2.2	2003	<2	<0.5	<2	0.9
Burkina Faso	303.02	484.83	1998	70.0	30.2	87.6	49.1	2003	56.5	20.3	81.2	39.2
Burundi	558.79	894.07	1998	86.4	47.3	95.4	64.1	2006	81.3	36.4	93.4	56.0
Cambodia	2,019.12	3,230.60	1994 ^d	48.6	13.8	77.8	33.3	2004	40.2	11.3	68.2	28.0
Cameroon	368.12	588.99	1996	51.5	18.9	74.4	36.0	2001	32.8	10.2	57.7	23.6
Cape Verde	97.72	156.35		..	..	..	..	2001	20.6	5.9	40.2	14.9
Central African Republic	384.33	614.93	1993	82.8	57.0	90.7	68.4	2003	62.4	28.3	81.9	45.3
Chad	409.46	655.14		..	..	..	..	2002–03	61.9	25.6	83.3	43.9
Chile	484.20	774.72	2000	<2	<0.5	6.0	1.3	2003	<2	<0.5	5.3	1.3
China	5.11 ^e	8.17 ^e	2002	28.4 ^f	8.7 ^f	51.1 ^f	20.6 ^f	2005	15.9 ^f	4.0 ^f	36.3 ^f	12.2 ^f
Colombia	1,489.68	2,383.48	2000	16.8	6.9	29.1	13.0	2003	15.4	6.1	26.3	10.9
Comoros	368.01	588.82		..	..	..	..	2004	46.1	20.8	65.0	34.2
Congo, Dem. Rep.	395.29	632.46		..	..	..	..	2005–06	59.2	25.3	79.5	42.4
Congo, Rep.	469.46	751.14		..	..	..	..	2005	54.1	22.8	74.4	38.8
Costa Rica	348.70 ^a	557.92 ^a	2003	5.6	2.4	11.5	4.7	2005	2.4	<0.5	8.6	2.3
Croatia	5.58	8.92	2001	<2	<0.5	<2	<0.5	2005	<2	<0.5	<2	<0.5
Czech Republic	19.00	30.39	1993	<2	<0.5	<2	<0.5	1996	<2	<0.5	<2	<0.5
Côte d'Ivoire	407.26	651.62	1998	24.1	6.7	49.1	18.1	2002	23.3	6.8	46.8	17.6
Djibouti	134.76	215.61	1996	4.8	1.6	15.1	4.5	2002	18.8	5.3	41.2	14.6
Dominican Republic	25.50 ^a	40.79 ^a	2003	6.1	1.5	16.3	5.1	2005	5.0	0.9	15.1	4.3
Ecuador	0.63	1.00	2003	10.5	4.1	22.4	8.7	2005	9.8	3.2	20.4	7.6
Egypt, Arab Rep.	2.53	4.04	1999–2000	<2	<0.5	19.3	3.5	2004–05	<2	<0.5	18.4	3.5
El Salvador	6.02 ^a	9.62 ^a	2002	14.2	6.5	23.7	11.2	2003	14.3	6.7	25.3	11.6
Estonia	11.04	17.66	2002	<2	<0.5	2.5	0.6	2004	<2	<0.5	<2	<0.5
Ethiopia	3.44	5.50	1999–2000	55.6	16.2	86.4	37.9	2005	39.0	9.6	77.5	28.8
Gabon	554.69	887.50		..	..	..	..	2005	4.8	0.9	19.6	5.0
Gambia, The	12.93	20.69	1998	66.7	34.7	82.0	50.0	2003	34.3	12.1	56.7	24.9
Georgia	0.98	1.57	2002	15.1	4.7	34.2	12.2	2005	13.4	4.4	30.4	10.9
Ghana	5,594.78	8,951.64	1998–99	39.1	14.4	63.3	28.5	2005	30.0	10.5	53.6	22.3
Guatemala	5.68 ^a	9.08 ^a	2002	12.7	3.8	29.8	12.9	2006	12.7	3.8	23.7	9.6
Guinea-Bissau	355.34	568.55	1993	52.1	20.6	75.7	37.4	2002	48.8	16.5	77.9	34.8
Guinea	1,849.46	2,959.13	1994	36.8	11.5	63.8	26.4	2003	70.1	32.2	87.2	50.2
Guyana	131.47 ^a	210.35 ^a	1992.5	5.8	2.6	15.0	5.4	1998	7.7	3.9	16.8	6.9
Haiti	24.21 ^a	38.73 ^a		..	..	..	..	2001	54.9	28.2	72.1	41.8
Honduras	12.08 ^a	19.32 ^a	2003	18.1	5.6	33.4	13.2	2005	22.2	10.2	34.8	16.7
Hungary	171.90	275.03	2002	<2	<0.5	<2	<0.5	2004	<2	<0.5	<2	<0.5
India	19.50 ^g	31.20 ^g	1993–94	49.4 ^f	14.4 ^f	81.7 ^f	35.3 ^f	2004–05	41.6 ^f	10.8 ^f	75.6 ^f	30.4 ^f
Indonesia	5,241.03 ^g	8,385.65 ^g	2002	29.3 ^f	6.0 ^f	66.9 ^f	22.4 ^f	2005	21.4 ^f	4.6 ^f	53.8 ^f	17.3 ^f
Iran, Islamic Rep.	3,393.53	5,429.65	1998	<2	<0.5	8.3	1.8	2005	<2	<0.5	8.0	1.8
Jamaica	54.20 ^a	86.72 ^a	2002	<2	<0.5	8.7	1.6	2004	<2	<0.5	5.8	0.9
Jordan	0.62	0.99	2002–03	<2	<0.5	11.0	2.1	2006	<2	<0.5	3.5	0.6
Kazakhstan	81.21	129.93	2002	5.2	0.9	21.5	5.4	2003	3.1	<0.5	17.2	3.9

S.2

Poverty rates at international poverty lines

	International poverty line in local currency, 2005		International poverty line									
	\$1.25 a day	\$2 a day	Survey year	Population below \$1.25 a day	Poverty gap at \$1.25 a day	Population below \$2 a day	Poverty gap at \$2 a day	Survey year	Population below \$1.25 a day	Poverty gap at \$1.25 a day	Population below \$2 a day	Poverty gap at \$2 a day
				%	%	%	%		%	%	%	%
Kenya	40.85	65.37	1997	19.6	4.6	42.7	14.7	2005–06	19.7	6.1	39.9	15.1
Kyrgyz Republic	16.25	26.00	2002	34.0	8.8	66.6	24.9	2004	21.8	4.4	51.9	16.8
Lao PDR	4,677.02	7,483.24	1997–98	49.3 ^c	14.9 ^c	79.9 ^c	34.4 ^c	2002–03	44.0 ^c	12.1 ^c	76.8 ^c	31.0 ^c
Latvia	0.43	0.69	2002	<2	<0.5	<2	0.6	2004	<2	<0.5	<2	<0.5
Lesotho	4.28	6.85	1995	47.6	26.7	61.1	37.3	2002–03	43.4	20.8	62.2	33.0
Liberia	0.64	1.02		..	..	..	..	2007	83.7	40.8	94.8	59.5
Lithuania	2.08	3.32	2002	<2	<0.5	<2	<0.5	2004	<2	<0.5	<2	<0.5
Macedonia, FYR	29.47	47.16	2002	<2	<0.5	3.1	0.7	2003	<2	<0.5	3.2	0.7
Madagascar	945.48	1,512.76	2001	76.3	41.4	88.7	57.2	2005	67.8	26.5	89.6	46.9
Malawi	71.15	113.84	1997–98	83.1	46.0	93.5	62.3	2004–05 ^h	73.9	32.3	90.4	51.8
Malaysia	2.64	4.23	1997	<2	<0.5	6.8	1.3	2004	<2	<0.5	7.8	1.4
Mali	362.10	579.36	2001	61.2	25.8	82.0	43.6	2006	51.4	18.8	77.1	36.5
Mauritania	157.08	251.33	1995–96	23.4	7.1	48.3	17.8	2000	21.2	5.7	44.1	15.9
Mexico	9.56	15.30	2004	2.8	1.4	7.0	2.6	2006	<2	<0.5	4.8	1.0
Moldova	6.03	9.65	2002	17.1	4.0	40.3	13.2	2004	8.1	1.7	28.9	7.9
Mongolia	653.12	1,044.99	2002	15.5	3.6	38.8	12.3	2005	22.4	6.2	49.0	17.2
Morocco	6.89	11.02	2000	6.3	0.9	24.3	6.3	2007	2.5	0.5	14.0	3.1
Mozambique	14,532.12	23,251.39	1996–97	81.3	42.0	92.9	59.4	2002–03	74.7	35.4	90.0	53.5
Namibia	6.33	10.13		..	..	..	..	1993	49.1	24.6	62.2	36.5
Nepal	33.08	52.93	1995–96	68.4	26.7	88.1	46.8	2003–04	55.1	19.7	77.6	37.8
Nicaragua	9.12 ^a	14.59 ^a	2001	19.4	6.7	37.5	14.4	2005	15.8	5.2	31.8	12.3
Niger	334.16	534.66	1994	78.2	38.6	91.5	56.5	2005	65.9	28.1	85.6	46.6
Nigeria	98.23	157.17	1996–97	68.5	32.1	86.4	49.7	2003–04	64.4	29.6	83.9	46.9
Pakistan	25.89	41.42	2001–02	35.9	7.9	73.9	26.4	2004–05	22.6	4.4	60.3	18.7
Panama	0.76 ^a	1.22 ^a	2002	10.8	3.5	20.0	8.0	2004	9.2	2.7	18.0	6.8
Papua New Guinea	2.11 ^a	3.37 ^a		..	..	..	..	1996	35.8	12.3	57.4	25.5
Paraguay	2,659.74	4,255.59	2002	17.2	7.8	28.1	13.4	2005	9.3	3.4	18.4	7.3
Peru	2.07	3.31	2002	12.6	4.3	24.4	9.6	2005	8.2	2.0	19.4	6.3
Philippines	30.22	48.36	2003	22.0	5.5	43.8	16.0	2006	22.6	5.5	45.0	16.3
Poland	2.69	4.31	2002	<2	<0.5	<2	<0.5	2005	<2	<0.5	<2	<0.5
Romania	2.15	3.44	2002	2.9	0.8	13.0	3.2	2005	<2	<0.5	3.4	0.9

Poverty rates at international poverty lines

S.2

	International poverty line in local currency, 2005		International poverty line									
	\$1.25 a day	\$2 a day	Survey year	Population below \$1.25 a day	Poverty gap at \$1.25 a day	Population below \$2 a day	Poverty gap at \$2 a day	Survey year	Population below \$1.25 a day	Poverty gap at \$1.25 a day	Population below \$2 a day	Poverty gap at \$2 a day
				%	%	%	%		%	%	%	%
Russian Federation	16.74	26.78	2002	<2	<0.5	3.7	0.6	2005	<2	<0.5	<2	<0.5
Rwanda	295.93	473.49	1984–85	63.3	19.7	88.4	41.8	2000	76.6	38.2	90.3	55.7
Senegal	372.81	596.49	2001	44.2	14.3	71.3	31.2	2005	33.5	10.8	60.3	24.6
Sierra Leone	1,745.26	2,792.42	1989–90	62.8	44.8	75.0	54.0	2003	53.4	20.3	76.1	37.5
Slovak Republic	23.53	37.66	1992	<2	<0.5	<2	<0.5	1996	<2	<0.5	<2	<0.5
Slovenia	198.25	317.20	2002	<2	<0.5	<2	<0.5	2004	<2	<0.5	<2	<0.5
South Africa	5.71	9.14	1995	21.4	5.2	39.9	15.0	2000	26.2	8.2	42.9	18.3
Sri Lanka	50.05	80.08	1995–96	16.3	3.0	46.7	13.7	2002	14.0	2.6	39.7	11.8
St. Lucia	2.37 ^a	3.80 ^a		..	..	..	..	1995	20.9	7.2	40.6	15.5
Suriname	2.29 ^a	3.67 ^a		..	..	..	..	1999	15.5	5.9	27.2	11.7
Swaziland	4.66	7.45	1994–95	78.6	47.7	89.3	61.6	2000–01	62.9	29.4	81.0	45.8
Tajikistan	1.16	1.85	2003	36.3	10.3	68.8	26.7	2004	21.5	5.1	50.8	16.8
Tanzania	603.06	964.90	1991–92	72.6	29.7	91.3	50.1	2000–01	88.5	46.8	96.6	64.4
Thailand	21.83	34.93	2002	<2	<0.5	15.1	2.8	2004	<2	<0.5	11.5	2.0
Timor-Leste	0.61 ^a	0.98 ^a		..	..	..	..	2001	52.9	19.1	77.5	37.0
Togo	352.82	564.51		..	..	..	..	2006	38.7	11.4	69.3	27.9
Trinidad and Tobago	5.77 ^a	9.23 ^a	1988	<2	<0.5	8.6	1.9	1992	4.2	1.1	13.5	3.9
Tunisia	0.87	1.39	1995	6.5	1.3	20.4	5.8	2000	2.6	<0.5	12.8	3.0
Turkey	1.25	2.00	2002	2.0	<0.5	9.6	2.3	2005	2.7	0.9	9.0	2.6
Turkmenistan	5,961.06 ^a	9,537.69 ^a	1993	63.5	25.8	85.7	44.8	1998	24.8	7.0	49.6	18.4
Uganda	930.77	1,489.24	2002	57.4	22.7	79.8	40.6	2005	51.5	19.1	75.6	36.4
Ukraine	2.14	3.42	2002	<2	<0.5	3.4	0.7	2005	<2	<0.5	<2	<0.5
Uruguay	19.14	30.62	2001 ^b	<2	<0.5	<2	<0.5	2005 ^b	<2	<0.5	4.5	0.7
Uzbekistan	470.09 ^a	752.14 ^a	2002	42.3	12.4	75.6	30.6	2003	46.3	15.0	76.7	33.2
Venezuela, RB	1,563.90	2,502.24	1998	14.0	7.3	23.9	11.7	2003	18.4	8.8	31.7	14.6
Vietnam	7,399.87	11,839.79	2004	24.2	5.1	52.5	17.9	2006	21.5	4.6	48.4	16.2
Yemen, Rep.	113.83	182.12	1998	12.9	3.0	36.3	11.1	2005	17.5	4.2	46.6	14.8
Zambia	3,537.91	5,660.65	2002–03	64.6	27.1	85.1	45.8	2004–05	64.3	32.8	81.5	48.3

a. PPP imputed using regression. b. Covers urban area only. c. Adjusted by spatial consumer price index information. d. Due to security concerns, the survey covered only 56 percent of rural villages and 65 percent of the rural population. e. Urban poverty lines. f. Weighted average of urban and rural estimates. g. Weighted average of urban and rural poverty lines. h. Due to change in survey design, the most recent survey is not strictly comparable with the previous one.

About the data

The World Bank produced its first global poverty estimates for developing countries for *World Development Report 1990: Poverty* using household survey data for 22 countries (Ravallion, Datt, and van de Walle 1991). Since then there has been considerable expansion in the number of countries that field household income and expenditure surveys. The World Bank's poverty monitoring database now includes more than 600 surveys representing 115 developing countries. More than 1.2 million randomly sampled households were interviewed in these surveys, representing 96 percent of the population of developing countries.

Data availability

The number of data sets within two years of any given year rose dramatically, from 13 between 1978 and 1982 to 158 between 2001 and 2006. Data coverage is improving in all regions, but the Middle East and North Africa and Sub-Saharan Africa continue to lag. The database, maintained by a team in the World Bank's Development Research Group, is updated annually as new survey data become available, and a major reassessment of progress against poverty is made about every three years. A complete overview of data availability by year and country is available at <http://iresearch.worldbank.org/povcalnet/>.

Data quality

Besides the frequency and timeliness of survey data, other data quality issues arise in measuring household living standards. The surveys ask detailed questions on sources of income and how it was spent, which must be carefully recorded by trained personnel. Income is generally more difficult to measure accurately, and consumption comes closer to the notion of living standards. And income can vary over time even if living standards do not. But consumption data are not always available: the latest estimates reported here use consumption for about two-thirds of countries.

However, even similar surveys may not be strictly comparable because of differences in timing or in the quality and training of enumerators. Comparisons of countries at different levels of development also pose a potential problem because of differences in the relative importance of the consumption of nonmarket goods. The local market value of all consumption in kind (including own production, particularly important in underdeveloped rural economies) should be included in total consumption expenditure, but may not be. Surveys now routinely include imputed values for consumption in-kind from own-farm production. Imputed profit from the production of nonmarket goods should be included in income, but is not

always done (such omissions were a bigger problem in surveys before the 1980s). Most survey data now include valuations for consumption or income from own production, but valuation methods vary.

The statistics reported here are based on consumption data or, when unavailable, on income surveys. Analysis of some 20 countries for which income and consumption expenditure data were both available from the same surveys found income to yield a higher mean than consumption but also higher inequality. When poverty measures based on consumption and income were compared, the two effects roughly cancelled each other out: there was no significant statistical difference.

International poverty lines

International comparisons of poverty estimates entail both conceptual and practical problems. Countries have different definitions of poverty, and consistent comparisons across countries can be difficult. Local poverty lines tend to have higher purchasing power in rich countries, where more generous standards are used, than in poor countries.

Poverty measures based on an international poverty line attempt to hold the real value of the poverty line constant across countries, as is done when making comparisons over time. Since *World Development Report 1990* the World Bank has aimed to apply a common standard in measuring extreme poverty, anchored to what *poverty* means in the world's poorest countries. The welfare of people living in different countries can be measured on a common scale by adjusting for differences in the purchasing power of currencies. The commonly used \$1 a day standard, measured in 1985 international prices and adjusted to local currency using purchasing power parities (PPPs), was chosen for *World Development Report 1990* because it was typical of the poverty lines in low-income countries at the time.

Early editions of *World Development Indicators* used PPPs from the Penn World Tables to convert values in local currency to equivalent purchasing power measured in U.S. dollars. Later editions used 1993 consumption PPP estimates produced by the World Bank. International poverty lines were recently revised using the new data on PPPs compiled by the 2005 round of the International Comparison Program, along with data from an expanded set of household income and expenditure surveys. The new extreme poverty line is set at \$1.25 a day in 2005 PPP terms, which represents the mean of the poverty lines found in the poorest 15 countries ranked by per capita consumption. The new poverty line maintains

the same standard for extreme poverty—the poverty line typical of the poorest countries in the world—but updates it using the latest information on the cost of living in developing countries.

PPP exchange rates are used to estimate global poverty, because they take into account the local prices of goods and services not traded internationally. But PPP rates were designed for comparing aggregates from national accounts, not for making international poverty comparisons. As a result, there is no certainty that an international poverty line measures the same degree of need or deprivation across countries. So called poverty PPPs, designed to compare the consumption of the poorest people in the world, might provide a better basis for comparison of poverty across countries. Work on these measures is ongoing.

Definitions

- **International poverty line in local currency** is the international poverty lines of \$1.25 and \$2.00 a day in 2005 prices, converted to local currency using the PPP conversion factors estimated by the International Comparison Program.
- **Survey year** is the year in which the underlying data were collected.
- **Population below \$1.25 a day and population below \$2.00 a day** are the percentages of the population living on less than \$1.25 a day and \$2.00 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.
- **Poverty gap** is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Data sources

The poverty measures are prepared by the World Bank's Development Research Group. The international poverty lines are based on nationally representative primary household surveys conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical offices and World Bank Group country departments. The World Bank Group has prepared an annual review of its poverty work since 1993. For details on data sources and methods used in deriving the World Bank's latest estimates, and further discussion of the results, see Chen and Ravallion's "The developing world is poorer than we thought, but no less successful in the fight against poverty?" (2008).

Purchasing power parities

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	Purchasing power parity (PPP) conversion factor, GDP	Market exchange rate	Ratio of PPP conversion factor to market exchange rate	Gross domestic product			PPP conversion factor, private consumption	Household final consumption expenditure			Ratio of previous PPP to new PPP	
				per capita				per capita			GDP	Private consumption
				PPP \$ billions	PPP \$	\$		PPP \$ billions	PPP \$	\$			2005	2005
local currency units to international \$	local currency units to \$	2005	2005	2005	local currency units to international \$	2005	2005	2005	2005	2005		
Albania	48.56	99.87	0.49	17.2	5,463	2,656	60.41	12.5	3,948	2,388	1.04 ^a	0.78 ^a
Algeria	31.81 ^b	73.28	0.43	235.8	7,176	3,115	38.74 ^b	65.4	1,990	1,052	1.02 ^c	0.55 ^c
Angola	44.49	87.16	0.51	60.0	3,729	1,903	70.50	..	..	..	1.73 ^c	.. ^c
Argentina	1.269	2.904	0.44	419.0	10,815	4,728	1.353	241.2	6,226	2,900	0.76 ^a	0.74 ^a
Armenia	178.6	457.7	0.39	12.6	4,162	1,624	196.2	8.6	2,860	1,226	0.84 ^d	0.63 ^a
Australia	1.388	1.330	1.04	645.8	31,656	33,040	1.464	355.8	17,443	19,199	1.07 ^e	0.92 ^a
Austria	0.8736	0.8041	1.09	280.6	34,075	37,022	0.8905	154.5	18,765	20,780	1.02 ^e	1.04 ^a
Azerbaijan	0.3319 ^f	0.9454	0.35	37.7	4,496	1,578	0.3533 ^f	14.9	1,781	666	0.85 ^d	0.76 ^a
Bahrain	0.2488	0.376	0.66	24.2	33,451	22,132	0.3194	10.0	13,777	11,704	1.25 ^a	0.66 ^a
Bangladesh	22.64	61.5	0.37	163.7	1,068	393	25.49	108.3	706	293	0.56 ^a	0.71 ^a
Belarus	779.3	2,154	0.36	83.5	8,541	3,090	759.6	44.5	4,555	1,607	1.06 ^d	0.46 ^a
Belgium	0.8988	0.8041	1.12	332.2	31,699	35,431	0.9261	171.3	16,351	18,832	0.99 ^e	0.91 ^a
Benin	219.6	527.5	0.42	10.3	1,213	505	275.2	6.4	749	391	1.07 ^a	0.66 ^a
Bhutan	15.74	44.1	0.36	2.3	3,649	1,302	18.46	0.8	1,240	519	..	..
Bolivia	2.232	8.066	0.28	34.5	3,758	1,040	2.571	19.7	2,151	685	1.30 ^a	0.92 ^a
Bosnia and Herzegovina	0.7268	1.572	0.46	23.3	6,159	2,847	0.8680	18.2	4,817	2,659	..	..
Botswana	2.421	5.110	0.47	22.2	12,088	5,726	3.384	4.3	2,336	1,547	1.00 ^a	0.81 ^a
Brazil	1.357	2.434	0.56	1,583.2	8,474	4,723	1.571	825.1	4,416	2,851	0.91 ^a	0.66 ^a
Brunei Darussalam	0.9031	1.664	0.54	17.6	46,991	25,497	1.0795	3.3	8,830	5,727	..	..
Bulgaria	0.5928	1.574	0.38	72.2	9,328	3,513	0.7369	39.2	5,062	2,369	1.01 ^e	1.08 ^a
Burkina Faso	200.2	527.5	0.38	14.3	1,026	390	242.4	9.0	646	297	0.85 ^c	0.55 ^c
Burundi	343.0	1,082	0.32	2.5	319	101	447.0	1.9	237	98	0.48 ^c	0.45 ^c
Cambodia	1,279	4,097	0.31	20.1	1,440	449	1,615	13.4	963	380	0.52 ^c	..
Cameroon	251.0	527.5	0.48	34.9	1,959	932	294.5	21.4	1,202	671	0.95 ^a	0.67 ^a
Canada	1.214	1.212	1.00	1,130.0	34,972	35,025	1.260	603.5	18,677	19,419	1.03 ^e	0.94 ^a
Cape Verde	69.36	88.67	0.78	1.3	2,538	1,985	78.17	0.9	1,682	1,482	0.43 ^c	0.41 ^c
Central African Republic	263.7	527.5	0.50	2.7	644	322	307.5	2.0	486	284	0.55 ^c	0.45 ^c
Chad	208.0	527.5	0.39	14.9	1,468	579	327.6	5.7	559	347	1.00 ^c	0.43 ^c
Chile	333.7	560.1	0.60	198.4	12,173	7,253	387.4	100.1	6,143	4,248	0.99 ^a	0.70 ^a
China	3,448 ^g	8,194	0.42	5,333.2	4,088	1,720	4.087 ^g	1,742.6	1,336	666	0.60 ^h	0.43 ⁱ
Hong Kong, China	5,688	7,777	0.73	243.1	35,678	26,092	7.236	111.2	16,327	15,191	1.00 ^a	0.88 ^a
Macao, China	5,270	8,011	0.66	17.4	36,869	24,251	6.430	3.9	8,266	6,635	1.04 ^c	..
Colombia	1,082	2,321	0.47	263.7	5,867	2,735	1,192	98.7	2,195	1,127	0.79 ^c	0.52 ^c
Comoros	226.2	395.6	0.57	0.7	1,127	645	294.4	0.5	859	640	0.57 ^c	..
Congo, Dem. Rep.	214.3	473.9	0.45	15.7	267	121	316.2	9.1	154	103	0.38 ^c	.. ^c
Congo, Rep.	268.8	527.5	0.51	11.9	3,309	1,686	375.6	2.4	651	464	1.98 ^a	0.92 ^a
Costa Rica	244.82 ^b	477.79	0.51	39.0	9,008	4,616	278.96 ^b	22.7	5,238	3,058	0.89 ^c	0.62 ^c
Côte d'Ivoire	287.5	527.5	0.55	30.0	1,614	879	325.8	19.6	1,057	653	1.00 ^a	0.70 ^a
Croatia	3,935	5,949	0.66	58.8	13,231	8,752	4.462	29.5	6,641	4,981	1.00 ^e	1.03 ^a
Cyprus	0.424	0.4636	0.91	18.6	24,534	22,428	0.452	..	..	..	..	..
Czech Republic	14.40	23.96	0.60	207.6	20,280	12,186	15.20	96.4	9,424	5,978	0.98 ^e	0.84 ^a
Denmark	8.517	5.997	1.42	182.2	33,645	47,783	9.088	83.0	15,320	23,217	0.99 ^e	0.97 ^a
Djibouti	84.69	177.7	0.48	1.5	1,850	881	107.81	0.8	934	566	0.86 ^c	..
Dominican Republic	17.26 ^b	30.41	0.57	51.3	5,415	3,073	20.40 ^b	32.1	3,392	2,275	0.70 ^c	0.58 ^c
Ecuador	0.4226	1	0.42	88.0	6,737	2,847	0.5008	49.0	3,753	1,880	1.50 ^a	0.89 ^a
Egypt, Arab Rep.	1.616	6.004	0.27	333.2	4,574	1,231	2.022	190.5	2,615	881	1.03 ^a	0.84 ^a
El Salvador	0.50 ^b	1.00	0.50	34.5	5,167	2,560	0.55 ^b	29.0	4,347	2,391	0.95 ^c	1.19 ^c
Equatorial Guinea	287.4	527.5	0.54	13.8	28,536	15,550	436.3	0.9	1,907	1,578	..	..
Eritrea	6.31 ^b	15.50	0.41	2.4	526	214	6.73 ^b	1.8	406	176	0.49 ^c	..
Estonia	7.813	12.59	0.62	22.4	16,677	10,351	8.832	10.2	7,547	5,295	1.01 ^e	0.94 ^a
Ethiopia	2.254	8.653	0.26	47.2	628	164	2.751	32.8	436	139	0.57 ^c	0.57 ^j
Fiji	1.430	1.691	0.85	3.5	4,282	3,620	1.548	1.5	1,871	1,713	0.63 ^a	0.55 ^a
Finland	0.9834	0.8041	1.22	159.8	30,462	37,256	1.0765	75.4	14,380	19,252	0.94 ^e	0.88 ^a
France	0.9225	0.8041	1.15	1,862.2	30,591	35,097	0.9381	1,042.2	17,121	19,974	1.00 ^e	0.96 ^a
Gabon	256.2	527.5	0.49	17.8	13,821	6,714	443.7	2.5	1,949	1,639	1.72 ^a	0.84 ^a
Gambia, The	7.560	28.58	0.26	1.7	1,078	285	10.344	0.60 ^c	0.33 ^c

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Purchasing power parities

	Purchasing power parity (PPP) conversion factor, GDP	Market exchange rate	Ratio of PPP conversion factor to market exchange rate	Gross domestic product			PPP conversion factor, private consumption	Household final consumption expenditure			Ratio of previous PPP to new PPP	
				per capita				per capita			GDP	Private consumption
				PPP \$ billions	PPP \$	\$		PPP \$ billions	PPP \$	\$		
	local currency units to international \$	local currency units to \$	2005	2005	2005	2005	2005	2005	2005	2005	2005	2005
Georgia	0.7380	1.812	0.41	15.7	3,520	1,433	0.7845	9.9	2,217	960	1.04 ^d	..
Germany	0.8926	0.8041	1.11	2,510.8	30,445	33,794	0.9054	1,459.0	17,692	19,921	1.04 ^e	1.02 ^a
Ghana	3,721	9,073	0.41	26.1	1,160	476	4,476	18.4	819	404	0.48 ^c	0.81 ^k
Greece	0.7022	0.8041	0.87	324.9	29,261	25,553	0.7718	203.1	18,294	17,560	0.99 ^e	0.92 ^a
Guatemala	4.02 ^b	7.63	0.53	51.8	4,075	2,147	4.54 ^b	40.1	3,158	1,878	1.04 ^c	0.75 ^c
Guinea	1,219	3,640	0.33	9.7	1,081	362	1,480	6.7	739	300	0.45 ^a	..
Guinea-Bissau	217.3	527.5	0.41	0.7	458	189	284.3	0.4	281	151	0.56 ^c	..
Guyana	87.11 ^b	199.88	0.44	1.9	2,563	1,117	105.17 ^b	1.2	1,612	848	0.54 ^c	..
Haiti	17.57 ^b	40.45	0.43	9.9	1,068	464	19.37 ^b	8.4	899	431	0.69 ^c	0.82 ^c
Honduras	8.15 ^b	19.00	0.43	22.5	3,298	1,415	9.66 ^b	14.3	2,096	1,066	0.78 ^c	0.95 ^c
Hungary	128.5	199.6	0.64	171.6	17,014	10,955	137.5	108.4	10,749	7,406	0.94 ^e	1.05 ^a
Iceland	97.06	62.98	1.54	10.5	35,465	54,656	104.06	5.9	19,758	32,645	0.95 ^e	0.88 ^a
India	14.67	44.27	0.33	2,440.8	2,230	739	15.60	1,321.8	1,208	426	0.64 ^c	0.71 ^j
Indonesia	3,934	9,705	0.41	707.9	3,209	1,301	4,193	425.9	1,931	834	0.82 ^a	0.47 ^a
Iran, Islamic Rep.	2,675	8,964	0.30	643.5	9,314	2,779	2,715	282.0	4,081	1,236	1.17 ^a	0.65 ^a
Iraq	558.7	..	..	..	..	..	639.9	..	..	..	..	..
Ireland	1.023	0.8041	1.27	157.6	37,887	48,190	1.090	65.6	15,776	21,386	0.99 ^e	0.64 ^a
Israel	3.717	4.488	0.83	158.5	22,886	18,954	4.071	79.2	11,435	10,372	0.83 ^e	0.69 ^a
Italy	0.8750	0.8041	1.09	1,626.3	27,750	30,197	0.9080	924.8	15,779	17,817	0.97 ^e	0.88 ^a
Jamaica	37.29 ^b	62.28	0.60	16.2	6,112	3,660	43.36 ^b	10.2	3,829	2,666	1.43 ^a	0.93 ^a
Japan	129.6	110.2	1.18	3,870.3	30,290	35,603	142.9	2,005.0	15,692	20,350	0.97 ^e	0.97 ^a
Jordan	0.3805	0.709	0.54	23.5	4,342	2,330	0.4929	17.5	3,236	2,250	0.78 ^a	0.61 ^a
Kazakhstan	57.61	132.9	0.43	131.8	8,699	3,771	64.96	58.3	3,846	1,880	1.11 ^d	0.69 ^a
Kenya	29.52	75.55	0.39	47.9	1,346	526	32.68	33.0	926	400	1.13 ^a	0.76 ^a
Korea, Rep.	788.9	1,024	0.77	1,027.4	21,273	16,388	879.4	485.2	10,047	8,627	0.96 ^e	0.93 ^a
Kuwait	0.2136	0.2920	0.73	114.6	45,198	33,065	0.2789	26.5	10,446	9,976	1.65 ^c	0.79 ^c
Kyrgyz Republic	11.35	41.02	0.28	8.9	1,728	478	13.00	6.6	1,276	404	0.89 ^d	..
Lao PDR	2,988	10,655	0.28	10.3	1,814	509	3,742	6.0	1,054	370	0.85 ^a	0.68 ^c
Latvia	0.2980	0.5647	0.53	30.4	13,215	6,973	0.3471	16.3	7,095	4,361	0.96 ^e	0.95 ^a
Lebanon	847.5	1,508	0.56	38.3	9,561	5,375	1,107.1	25.8	6,430	4,722	1.95 ^a	..
Lesotho	3.490	6.359	0.55	2.6	1,311	720	3.427	2.6	1,310	706	0.44 ^c	0.58 ^c
Liberia	28.123	57.096	0.49	1.1	313	154	29.185	0.9	261	133	..	..
Lithuania	1.484	2.776	0.53	48.1	14,084	7,532	1.660	28.0	8,194	4,902	0.97 ^e	1.06 ^a
Luxembourg	0.9225	0.8041	1.15	31.9	69,776	80,047	0.8968	13.2	28,989	32,331	1.16 ^e	0.96 ^a
Macedonia, FYR	19.06	49.29	0.39	15.0	7,394	2,859	23.58	9.4	4,645	2,222	1.02 ^e	0.70 ^a
Madagascar	649.6	2,003	0.32	15.5	834	270	756.4	11.1	595	225	0.90 ^a	0.58 ^a
Malawi	39.46	118.4	0.33	8.6	648	216	56.92	4.0	303	146	0.72 ^a	0.35 ^a
Malaysia	1.734	3.787	0.46	299.6	11,678	5,347	2.114	110.3	4,302	2,401	1.04 ^a	0.75 ^c
Maldives	8.134	12.800	0.64	1.2	3,995	2,539	9.737	..	..	..	..	..
Mali	240.1	527.5	0.46	11.7	1,004	457	289.7	7.6	655	360	0.83 ^a	0.54 ^a
Malta	0.2474	0.3460	0.71	8.3	20,483	14,645	0.2746	4.9	12,053	9,564	1.01 ^e	0.89 ^c
Mauritania	98.84	268.60	0.37	5.0	1,684	620	125.67	3.7	1,233	577	0.73 ^c	0.96 ^k
Mauritius	14.68	28.94	0.51	12.4	9,975	5,059	17.73	6.8	5,463	3,346	0.78 ^a	0.57 ^a
Mexico	7.127	10.90	0.65	1,173.9	11,387	7,447	7.648	745.9	7,235	5,078	1.06 ^e	0.90 ^a
Moldova	4.434	12.60	0.35	8.5	2,190	771	4.827	7.3	1,891	724	0.94 ^d	..
Mongolia	417.2	1,205	0.35	6.7	2,609	903	522.5	3.0	1,159	502	1.01 ^d	0.51 ^a
Montenegro	0.3659	0.8041	0.45	5.0	8,160	3,713	0.4991	2.5	4,178	2,594	..	..
Morocco	4.8782	8.8650	0.55	107.1	3,554	1,956	5.5109	53.7	1,782	1,108	0.68 ^a	0.54 ^a
Mozambique	10,909	23,061	0.47	13.9	677	320	11,626	10.5	511	257	0.57 ^c	0.42 ^c
Myanmar	249.69 ^b	..	..	41.0	854	..	266.32 ^b	..	..	..	..	..
Namibia	4.265	6.359	0.67	9.3	4,599	3,085	5.064	4.1	2,050	1,633	0.59 ^c	..
Nepal	22.65	72.06	0.31	26.0	960	302	26.47	17.4	641	235	0.56 ^a	0.51 ^a
Netherlands	0.8983	0.8041	1.12	562.9	34,492	38,532	0.9126	270.7	16,588	18,826	1.05 ^e	1.00 ^a
New Zealand	1.535	1.447	1.06	101.6	24,566	26,062	1.599	58.3	14,100	15,579	0.99 ^e	0.89 ^a
Nicaragua	6.44 ^b	16.73	0.38	12.6	2,311	889	7.30 ^b	9.9	1,811	790	0.63 ^c	..
Niger	226.7	527.5	0.43	7.7	584	251	267.3	5.3	401	203	0.73 ^c	0.54 ^c
Nigeria	60.23	131.3	0.46	244.6	1,731	794	78.58	..	..	..	1.45 ^a	1.07 ^a

Purchasing power parities

S.3

	Purchasing power parity (PPP) conversion factor, GDP	Market exchange rate	Ratio of PPP conversion factor to market exchange rate	Gross domestic product			PPP conversion factor, private consumption	Household final consumption expenditure			Ratio of previous PPP to new PPP	
				per capita				per capita			GDP	Private consumption
				PPP \$ billions	PPP \$	\$		PPP \$ billions	PPP \$	\$		
local currency units to international \$	local currency units to \$	2005	2005	2005	2005	2005	2005	2005	2005	2005	2005	
Norway	8.840	6.443	1.37	219.8	47,538	65,229	9.797	83.7	18,114	27,544	1.12 ^e	0.88 ^a
Oman	0.2324	0.3845	0.60	51.0	20,350	12,299	0.2857	14.6	5,814	4,320	..	..
Pakistan	19.10	59.36	0.32	340.3	2,184	703	20.71	241.5	1,550	541	0.93 ^a	0.68 ^a
Panama	0.52 ^b	1.00	0.52	29.7	9,197	4,791	0.61 ^b	15.8	4,888	2,988	1.21 ^a	0.61 ^a
Papua New Guinea	1.34 ^b	3.10	0.43	11.4	1,882	811	1.69 ^b	5.0	827	450	0.76 ^c	..
Paraguay	2,007	6,178	0.32	22.6	3,824	1,242	2,128	16.3	2,757	950	0.79 ^c	0.82 ^c
Peru	1.487	3,296	0.45	176.2	6,460	2,913	1.653	104.2	3,822	1,917	1.04 ^a	0.87 ^a
Philippines	21.75	55.09	0.39	250.0	2,956	1,167	24.18	156.0	1,845	810	0.58 ^a	0.69 ^k
Poland	1.898	3,235	0.59	518.0	13,571	7,965	2.155	281.8	7,384	4,919	0.98 ^e	..
Portugal	0.7074	0.8041	0.88	210.5	19,956	17,556	0.7448	129.9	12,314	11,406	0.97 ^e	0.84 ^a
Qatar	2.745	3,640	0.75	56.3	70,716	53,333	3.641	7.7	9,716	9,718	..	0.58 ^a
Romania	1.421	2,914	0.49	202.7	9,368	4,569	1.719	129.9	6,006	3,543	1.03 ^e	0.73 ^a
Russian Federation	12.736	28,286	0.45	1,698.0	11,861	5,341	13.391	801.2	5,597	2,650	1.09 ^e	1.21 ^a
Rwanda	186.2	557.8	0.33	7.1	772	258	236.7	4.7	514	218	0.59 ^c	0.61 ^c
São Tomé and Príncipe	5,558	10,558	0.53	0.2	1,416	746	6,363	..	..	..	0.39 ^c	..
Saudi Arabia	2.410	3,747	0.64	490.6	21,220	13,650	2.903	107.8	4,664	3,613	1.25 ^c	0.63 ^c
Senegal	251.7	527.5	0.48	18.2	1,547	738	298.2	11.7	991	560	0.83 ^a	0.52 ^a
Serbia	27.21	66.71	0.41	64.3	8,644	3,525	34.31	40.2	5,397	2,775	..	..
Sierra Leone	1,074	2,890	0.37	3.3	585	217	1,396	2.2	392	189	0.74 ^a	0.67 ^a
Singapore	1.079	1,665	0.65	184.9	43,334	28,079	1.467	55.5	13,016	11,473	1.40 ^a	0.91 ^a
Slovak Republic	17.20	31.02	0.55	85.6	15,881	8,803	18.83	44.1	8,181	4,965	0.98 ^e	0.98 ^a
Slovenia	147.0	192.7	0.76	46.0	23,010	17,557	158.6	23.0	11,514	9,476	1.01 ^e	0.93 ^a
South Africa	3.872	6,359	0.61	397.5	8,478	5,162	4.572	210.7	4,493	3,230	0.76 ^c	0.57 ^c
Spain	0.7676	0.8041	0.95	1,179.6	27,180	25,947	0.8032	652.4	15,034	15,018	1.00 ^e	0.95 ^a
Sri Lanka	35.17	100.5	0.35	69.7	3,546	1,241	40.04	42.3	2,149	856	0.74 ^a	0.68 ^a
St. Lucia	1.62 ^b	2.70	0.60	1.5	8,879	5,324	1.90 ^b	0.9	5,487	3,858	..	0.98 ^a
Sudan	107.7	243.6	0.44	62.0	1,679	742	123.5	38.2	1,034	524	0.83 ^c	.. ^c
Suriname	1.60 ^b	2.73	0.59	3.0	6,702	3,928	1.83 ^b	1.1	2,443	1,641	0.66 ^c	..
Swaziland	3.293	6,359	0.52	5.0	4,462	2,310	3.727	3.1	2,767	1,622	0.97 ^a	0.62 ^a
Sweden	9.243	7,473	1.24	288.9	32,016	39,600	9.561	134.4	14,895	19,058	0.99 ^e	0.90 ^a
Switzerland	1.741	1,245	1.40	261.7	35,182	49,197	1.865	147.3	19,809	29,670	0.99 ^e	0.97 ^a
Syrian Arab Republic	19.72	52.86	0.37	75.6	4,002	1,493	24.65	41.1	2,177	1,015	0.97 ^a	0.49 ^a
Tajikistan	0.7444	3,117	0.24	9.7	1,477	353	0.9269	6.2	948	282	1.10 ^d	..
Tanzania	395.6	1,129	0.35	40.4	1,049	368	482.5	22.0	571	244	1.21 ^a	0.67 ^a
Thailand	15.93	40.22	0.40	445.4	7,069	2,800	17.47	231.8	3,679	1,598	0.80 ^a	0.87 ^a
Timor-Leste	0.47 ^b	1.00	0.47	0.7	725	340	0.49 ^b	..	..	..	..	..
Togo	240.4	527.5	0.46	4.7	758	345	282.3	3.5	565	302	0.52 ^c	0.50 ^c
Trinidad and Tobago	3.82 ^b	6.30	0.61	24.9	18,818	11,399	4.61 ^b	10.5	7,930	5,808	1.24 ^c	0.92 ^c
Tunisia	0.5813	1,2970	0.45	64.6	6,445	2,888	0.6961	34.1	3,397	1,823	0.78 ^a	0.55 ^a
Turkey	0.8683	1,341	0.65	747.3	10,370	6,716	1.0014	464.7	6,449	4,817	0.93 ^e	0.92 ^a
Turkmenistan	3,950 ^b	11,022	0.36	22.6	4,677	1,676	4,769 ^b	8.7	1,791	775	..	..
Uganda	619.6	1,737	0.36	24.5	846	302	744.6	15.9	550	236	0.58 ^c	1.48 ^k
Ukraine	1.678	5,125	0.33	263.0	5,583	1,829	1.709	143.1	3,038	1,013	0.78 ^d	0.86 ^a
United Kingdom	0.6489	0.5493	1.18	1,889.4	31,371	37,058	0.6584	1,202.3	19,962	23,929	0.93 ^e	0.97 ^a
United States	1	1	1.00	12,397.9	41,813	41,813	1	8,742.4	29,485	29,485	1.00 ^e	1.01 ^a
Uruguay	13.28	24.48	0.54	30.6	9,266	5,026	15.31	19.5	5,886	3,681	0.90 ^a	0.80 ^a
Uzbekistan	304.12 ^b	1,112.9	0.27	52.4	2,001	547	376.07 ^b	21.6	824	278	0.93 ^d	..
Venezuela, RB	1,153	2,090	0.55	263.8	9,924	5,475	1,251	114.0	4,290	2,568	1.44 ^a	0.86 ^a
Vietnam	4,713	15,804	0.30	178.1	2,143	639	5,920	90.1	1,084	406	0.70 ^a	..
Yemen, Rep.	69.49	191.5	0.36	46.2	2,189	794	91.06	..	..	..	2.13 ^a	0.83 ^a
Zambia	2,415	4,464	0.54	13.6	1,183	640	2,830	8.0	700	444	1.13 ^a	1.08 ^a
Zimbabwe	..	22,364	..	..	..	..	..	..	..	..	..	..

a. The previous benchmark PPP estimate is from the 1993–96 round. b. The 2005 PPP estimate is imputed. c. The previous PPP estimate is imputed. d. The previous benchmark PPP estimate is from the 2000 round. e. The previous benchmark PPP estimate is from the 2002 round. f. Original data collected in old manat are converted to new manat where 1 new manat = 5,000 old manat. g. Based on national average prices extrapolated by the World Bank and Asian Development Bank using price data for 11 cities submitted by the National Bureau of Statistics for China. Does not include Hong Kong, China; Macao, China; and Taiwan, China. h. The previous PPP estimate is based on a 1986 bilateral comparison of China and the United States (Ren and Chen 1995), employing a different methodology than that used for other countries. i. The 1986 basic heading level PPPs for consumption were extrapolated to 1993 and compared bilaterally with those for the United States to obtain the consumption PPP. j. The 1985 basic heading PPPs were extrapolated to 1993 and combined with the rest of the region to estimate its PPPs for consumption for 1993. k. Penn World Table 5.7.

S.3 Purchasing power parities

About the data

Using purchasing power parities (PPPs) instead of market exchange rates to convert currencies makes it possible to compare the output of economies and the welfare of their inhabitants in real terms—that is, controlling for differences in price levels. PPPs are the preferred means of converting gross domestic product (GDP) and its components such as private consumption to a common currency. They enable cross-country comparison of the size of economies, average consumption levels, poverty rates, productivity, and the use of resources. The ratio of the PPP conversion factor to the market exchange rate (also referred to as the price level index) makes it possible to compare the cost of the goods and services that make up GDP across countries.

The International Comparison Program (ICP) is a worldwide statistical initiative to collect comparative price data and estimate PPPs of the world's economies. The new estimates of 2005 PPPs are the result of a global program of price surveys carried out using similar methods in 146 countries. New methods of data collection and analysis were used to overcome problems encountered in previous rounds of the ICP. Teams in each region identified characteristic goods and services to be priced. Surveys conducted by each country during 2005 and 2006 provided prices for more than 1,000 goods and services. Many countries participated for the first time, including China. India participated for the first time since 1985. For details, see the 2005 ICP report (available at go.worldbank.org/VMCB80AB40).

The 2005 survey results replace previously published PPPs based on the last comprehensive ICP data collection, which took place between 1993 and 1996 for 70 economies in Africa, Asia and Pacific, Latin America, and Western Asia; on the 2000 European Comparison Program for 12 economies in the Commonwealth of Independent States; and on the Eurostat–Organisation for Economic Co-operation and Development (OECD) PPP program 2002 round for 42 economies. As before, the 2005 benchmark year PPP estimates will be extrapolated forward and backward to other years, adjusting for price changes relative to those in the United States.

PPP estimates of previous rounds, when extrapolated to 2005 by rates of inflation relative to that in the United States, will likely differ from the estimates of the 2005 round. ICP surveys work with current year estimates so that successive benchmark estimates reflect changes from one year to another, not only in quantities but also in prices. Extrapolating one benchmark year value to another benchmark year by relative rates of inflation will yield changes in the

aggregate quantity only and will fail to capture any changes in the composition of the quantity, which may result from changes in relative prices and interplay of supply and demand of complementary and substitute products.

The 2005 round also made a number of changes in the methodology to improve data quality. The 1993 System of National Accounts (SNA) was the basis of the 2005 round, while the 1968 SNA was the basis of the 1993–96 round. Ring comparison based on prices collected on a global list of products by 18 countries was used in the 2005 round to provide a more robust link using regional PPPs to construct a global set of PPPs, while a single-country link was used in the prior rounds. The structured product description method provided a coding structure to ensure the comparison of “like with like” and reduced the potential of mixing price differences with quality differences, as observed in the 1993–96 round.

Definitions

• **Purchasing power parity (PPP) conversion factor, GDP**, is the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as a U.S. dollar would buy in the United States. This conversion factor is applicable to aggregate GDP. • **Market exchange rate** is the exchange rate determined by national authorities or the rate determined in the legally sanctioned exchange market. In a few cases where the official exchange rate is judged to diverge by an exceptionally large margin from the rate effectively applied to domestic transactions of foreign currencies and traded products, the market exchange rate is an estimated alternative conversion factor. It is calculated as an annual average based on monthly averages. • **Ratio of PPP conversion factor to market exchange rate** is the result obtained by dividing the PPP conversion factor by the market exchange rate (also known as the price level index). • **Gross domestic product (GDP)** is the total final expenditures at purchasers' prices, including the free on board (f.o.b.) value of exports of goods and services, less the f.o.b. value of imports of goods and services. When converted from local currency to dollars using PPP exchange rates, it is denoted by PPP\$ (sometimes called international dollars). When converted to U.S. dollars using market exchange rates, it is denoted by \$. • **GDP per capita** is GDP divided by midyear population. Population is based on the de facto definition of population, which counts all residents regardless of legal status

or citizenship—except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. • **PPP conversion factor, private consumption**, is the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as a U.S. dollar would buy in the United States. This conversion factor is applicable to private consumption. • **Household final consumption expenditure** is the market value of all goods and services, including durable products purchased by households. It excludes purchases of dwellings but includes imputed rent for owner-occupied dwellings. It also includes payments and fees to governments to obtain permits and licenses as well as the expenditures of nonprofit institutions serving households, even when reported separately by the country. When converted from local currency to dollars using PPP exchange rates, it is denoted by PPP\$ (sometimes called international dollars). When converted to U.S. dollars using market exchange rates, it is denoted by \$. • **Household final consumption expenditure per capita** is household final consumption expenditure, PPP, divided by midyear population. • **Ratio of previous PPP to new PPP, GDP**, is the ratio of the previous PPP conversion factor for GDP, extrapolated to 2005 using the ratio of the GDP deflator in an economy to that of the United States, to the new PPP conversion factor for GDP in 2005. • **Ratio of previous PPP to new PPP, private consumption**, is the ratio of the previous PPP conversion factor for private consumption, extrapolated to 2005 using the ratio of the consumer price index in an economy to that in the United States, to the new PPP conversion factor for private consumption in 2005.

Data sources

PPP conversion factors are estimated by the ICP for participating economies. For nonparticipating economies PPP conversion factors are estimated using regression by World Bank staff. Data on gross domestic product are estimated by World Bank staff based on national accounts data collected by World Bank staff during economic missions or reported to other international organizations such as the OECD. Population estimates are prepared by World Bank staff from a variety of sources.

