Absolute poverty measures for the developing world, 1981–2004

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We report new estimates of measures of absolute poverty for the developing world for the period 1981–2004. A clear trend decline in the percentage of people who are absolutely poor is evident, although with uneven progress across regions. We find more mixed success in reducing the total number of poor. Indeed, the developing world outside China has seen little or no sustained progress in reducing the number of poor, with rising poverty counts in some regions, notably sub-Saharan Africa. There are encouraging signs of progress in all regions after 2000, although it is too early to say whether this is a new trend. We also summarize results from estimating a new series incorporating an allowance for the higher cost of living facing poor people in urban areas. This reveals a marked urbanization of poverty in the developing world, which is stronger in some regions than others, although it remains that three-quarters of the poor live in rural areas.

development | urbanization | surveys

Progress against absolute poverty is a widely accepted yardstick for assessing the overall performance of developing economies. The best data for assessing progress against poverty come from surveys of the living standards of nationally representative samples of households. The last 25 years has seen great progress in the production and availability of such data for developing countries, thanks to the efforts of national statistics agencies throughout the world and the support of the donor community and international development agencies.

Drawing on these data, this article provides internally consistent estimates of a time series of measures of absolute poverty for the developing world, and by region, at ≈3-yearly intervals from 1981 to 2004. We use data from >500 household surveys spanning 100 countries. We follow exactly the methods outlined in ref. 1, which was the last update of the World Bank's "global" poverty measures, providing estimates up to 2002. A key feature of these methods is that international poverty lines are used, which are intended to have a fixed purchasing power, both across countries, as measured by existing purchasing power parity (PPP) exchange rates, and, over time, as measured by existing national Consumer Price Indices. Thus, our attention is confined to absolute poverty measures in which simply moving individuals between dates or countries, with no absolute loss in their real consumption, cannot increase the aggregate measure of poverty.[b]

In addition to including new data available since 2004, we have recalculated all prior estimates back to 1981 to incorporate any updates or revisions from past data sources. The article also notes the implications of incorporating an urban–rural poverty line differential into the global poverty estimates, drawing on ref. 4. This is of interest, given popular concerns about the urbanization of developing world's population and (one expects) of poverty.

The article begins by reviewing the assumptions and methods and then presents and discusses the results.

Measuring Poverty in the Developing World

We rely heavily on nationally representative household surveys for measuring poverty. This is one of the purposes for which these surveys exist. There is no alternative to the use of survey data for measuring the distribution of relative consumptions or incomes, "inequality" for short. But there is an alternative source of data on average consumption, namely the national accounts (NAS).[c] (Given certain assumptions, one can derive standard poverty measures from the mean and a suitable inequality measure.) We use NAS data in some aspects of our estimation methods, notably in dealing with the fact that different countries do their surveys on different dates, and we want to line them up in time to a common reference date. However, we do not let the NAS data override the survey mean when both are known. In other words, we use the survey at the survey date. In this respect, we follow the standard, although not universal, practice in the literature on poverty measurement.

Advocates of replacing the survey mean by the NAS estimate of national income or consumption per capita argue that household surveys underestimate mean income or consumption because of deliberate underreporting and selective compliance with random samples. However, it is not clear that the NAS data can provide a more accurate measure of mean household welfare than the survey data that were collected for that purpose. As typically measured in practice, NAS "private consumption" includes institutional and other attributed consumption as well as personal consumption, as relevant to measuring poverty. And, even acknowledging the problems of income underreporting and selective survey compliance, there can be no presumption that the discrepancies between survey means and the NAS aggregates (such as private consumption per person) are distribution-neutral; more plausibly, the main reasons why surveys underestimate consumption or income would also lead them to underestimate inequality.[d] Furthermore, the NAS-means method is clearly unacceptable when doing an urban–rural split of global poverty measures, allowing for cost-of-living (COL) differences, because neither the inequality measures nor the NAS means would then be valid.

Also following past practice, "poverty" is assessed here by using household per capita expenditure on consumption.[e] The measures

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[b]The theoretical arguments for and against this approach are discussed in ref. 2. Relative poverty measures for the developing world can be found in refs. 1 and 3.

[c]Examples include refs. 5 and 6.

[d]For example, ref. 7 attributes up to 40% of the difference between the (higher) growth of gross domestic product per capita and (lower) growth of mean household per capita consumption from household surveys in India to unreported increase in the incomes of the rich. Selective compliance with random samples could well be an equally important source of bias, although the sign is theoretically ambiguous; ref. 8 provides evidence on the impact of selective nonresponse for the U.S.

[e]The use of a per capita normalization is standard in the literature on developing countries. This stems from the general presumption that there is rather little scope for economies of size in consumption for poor people. However, that assumption can be questioned; see ref. 9.

Table 1. Percentage of the population living below $1.08 a day at 1993 PPP by region

Region	1981	1984	1987	1990	1993	1996	1999	2002	2004
East Asia and Pacific (EAP)	57.73	39.02	28.23	29.84	25.23	16.14	15.46	12.33	9.05
Of which China is	63.76	41.02	28.64	32.98	28.36	17.37	17.77	13.79	9.90
ECA	0.70	0.51	0.35	0.46	3.60	4.42	3.78	1.27	0.94
LAC	10.77	13.07	12.09	10.19	8.42	8.87	9.66	9.09	8.64
Middle East and North Africa (MNA)	5.08	3.82	3.09	2.33	1.87	1.69	2.08	1.69	1.47
South Asia (SAS)	49.57	45.43	45.11	43.04	36.87	36.06	34.92	33.56	30.84
Of which India is	51.75	47.94	46.15	44.31	41.82	39.94	37.66	36.03	34.33
SSA	42.26	46.20	47.22	46.73	45.47	47.72	45.77	42.63	41.10
Total	40.14	32.72	28.72	28.66	25.56	22.66	22.10	20.13	18.09
Total excluding China	31.35	29.69	28.75	27.14	24.58	24.45	23.54	22.19	20.70

Source: authors' calculations. The set of countries are the Part 2 member countries of the World Bank, essentially all low- and middle-income countries, which the Bank currently defines as having average gross domestic product per capita for the period 2004–2006 of no more than $11,115; see ref. 10.

of consumption (or income, when consumption is unavailable) in the survey data we use are reasonably comprehensive, including both cash spending and imputed values for consumption from our own production. But we acknowledge that even the best consumption data need not adequately reflect certain "nonmarket" dimensions of welfare, such as access to certain public services, or intrahousehold inequalities. For these reasons, our poverty measures need to be supplemented by other data, such as on infant and child mortality, to obtain a more complete picture of how living standards are evolving.[f]

Our poverty measures are estimated from the primary (unit record or tabulated) survey data. For the main poverty measures, we have used 560 household surveys for 100 low- and middle-income countries, representing 93% of the population of the developing world.[g] Only for a subset of these was it feasible to do the urban–rural decomposition. This was done for 87 countries by using 208 household surveys. (Details on the specific survey used can be found at: http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp.)

We have not used any secondary sources for measuring poverty at each survey round (unlike all other compilations of distributional data and global poverty measures that we know of). Households are ranked by either consumption or income per person. The distributions are weighted by household size and sample expansion factors so that a given fractile (such as the poorest decile) should have the same share of the country-specific population across the sample. Thus, our poverty counts give the number of people living in households with per capita consumption or income below the poverty line.

As in past work, we have tried to eliminate obvious comparability problems, either by reestimating the consumption/income aggregates or even dropping a survey when there is little option. However, there are problems that we cannot deal with. It is known that differences in survey methods (such as in questionnaire design) can create nonnegligible differences in the estimates obtained for consumption or income.

We use standard additively separable poverty measures for which the aggregate measure is the (population-weighted) sum of individual measures. In this article, we report two such poverty measures. The first measure is the headcount index given by the percentage of population living in households with consumption or income per person below the poverty line. We also give estimates of the number of poor, as obtained by applying the estimated headcount index to the population of each region (under the assumption that the countries without surveys are a random

subsample of the region). Results are also available from the authors for the poverty gap index,[h] although the basic patterns reported here are similar; for details, see http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp.

The World Bank's "global" poverty measures have been based mainly on an international poverty line of approximately $1 a day; more precisely, the "$1 a day" line is $32.74 per month, at 1993 international purchasing power parity (4). This is a deliberately conservative definition of poverty, being anchored to the poverty lines typical of low-income countries (11, 12). To gauge sensitivity, we also use a line set at twice this value, $65.48 per person per month. Following common practice, we refer to these as the $1 a day and $2 a day lines ($1.08 and $2.15 would be more precise). The higher line is more representative of what poverty means in middle-income developing countries.

The international line is converted to local currencies by using the Bank's 1993 PPP exchange rates for consumption. PPP exchange rates adjust for the fact that nontraded goods tend to be cheaper in poorer countries. There is more than one way to measure PPP exchange rates. The Geary–Khamis method used by the Penn World Tables uses quantity weights to compute the international price indices; for our purposes, this method gives too high a weight to consumption patterns in richer countries when measuring poverty globally. The Elteto–Kones–Sculc (EKS) method, a multilateral extension of the usual bilateral Fisher index, attempts to correct for this bias. Since 2000, the World Bank's global poverty and inequality measures have been based on the Bank's PPP rates, which use the EKS method.[i]

Existing PPP exchange rates used to convert the international line into local currencies do not distinguish rural from urban areas (or provide other subnational PPP rates). Yet the COL is generally higher in urban areas. Casual observations suggest that relatively weak internal market integration and the existence of geographically nontraded goods can yield substantial COL differences between urban and rural areas.

There are, however, a number of problems in making urban–rural COL comparisons in developing countries. Even in the (few) cases in which Consumer Price Indices are available separately for urban and rural areas, they are not spatial indices (being indexed to 100 in both urban and rural areas at the base date). There are also problems of making allowances for goods such as housing and clothing, which vary enormously in quality.

To test sensitivity to an allowance for the higher COL in urban areas, we turned to the World Bank's country-specific poverty

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[f]The annual *World Development Indicators* provides data on a broad set of indicators, including poverty measures, but also measures of health and education attainments (10).

[g]Coverage varies across regions, from 78% in SSA to 98% in Eastern Europe and Central Asia and South Asia.

[h]The poverty gap index is the mean distance below the poverty line as a proportion of the line where the mean is taken over the whole population, counting the nonpoor as having zero poverty gaps.

[i]For further discussion of the difference between these two methods and the bearing on poverty measurement, see ref. 14.

Table 2. Number of people (in millions) living below $1.08 a day

Region	1981	1984	1987	1990	1993	1996	1999	2002	2004
EAP	796.40	564.30	428.76	476.22	420.22	279.09	276.54	226.77	169.13
China	633.66	425.27	310.43	374.33	334.21	211.44	222.78	176.61	128.36
ECA	3.00	2.27	1.61	2.16	16.94	20.87	17.90	6.01	4.42
LAC	39.35	50.90	50.00	44.60	38.83	42.96	49.03	48.13	47.02
MNA	8.81	7.26	6.41	5.26	4.53	4.38	5.67	4.88	4.40
SAS	455.18	445.05	471.14	479.10	436.74	452.91	463.40	469.55	446.20
India	363.72	359.41	368.60	376.44	376.14	378.91	376.25	377.84	370.67
SSA	167.53	199.78	222.80	240.34	252.26	286.21	296.07	296.11	298.30
Total	1,470.28	1,269.56	1,180.73	1,247.68	1,170.17	1,087.81	1,108.61	1,051.46	969.48
Total excluding China	836.62	844.29	870.30	873.35	835.96	876.37	885.83	874.85	841.12

Source: authors' calculations. The set of countries are the Part 2 member countries of the World Bank, essentially all low- and middle-income countries, which the Bank currently defines as having average gross domestic product per capita for the period 2004–2006 of no more than $11,115; see ref. 10.

assessments (PAs), which have now been done for most developing countries. These are core reports within the Bank's program of analytic work at country level; each report describes the extent of poverty and its causes in that country. The PAs are clearly the best available source of information on urban–rural differentials for setting international poverty lines. In almost all cases, the PA poverty lines were constructed by using some version of the cost-of-basic-needs method.[j] This aims to approximate a COL index that reflects the differences in prices faced between urban and rural areas, weighted by the consumption patterns of people living in a neighborhood of the country-specific poverty line.

However, although our method appears to be the best option that is currently feasible, internal consistency is questionable if the urban–rural COL differential varies by income, for then the differential from the PA may not be right for the international poverty lines. If the COL differential tends to rise with income, then we will tend to overestimate urban poverty by the $1 a day line in middle- relative to low-income countries, given that the PA poverty line will tend to be above the international line for most middle-income countries.

We used the ratio of the urban poverty line to the rural line from the PA (generally the one closest to 1993 if there is more than one) to obtain an urban poverty line for each country corresponding to its PPP-adjusted $1 a day rural line. On average, the urban poverty line is ≈30% higher than the rural line, although there are marked differences between countries, with a tendency for the differential to be higher in poorer countries (3), which is consistent with one's expectation that transport costs and other impediments to internal market integration are higher in poor countries.

The urban population data are from the latest available issue of the United Nations' *World Urbanization Prospects* (WUP) (15). There are undoubtedly differences in the definitions used between countries, which we can do little about here (for further discussion see refs. 16 and 3). The WUP estimates are based on actual enumerations whenever they are available. The WUP web site provides details on data sources and how specific cases were handled; see http://esa.un.org/unup/.

Naturally, the surveys are scattered over time. We estimate the poverty measures for nine "reference years" 1981, 1984, 1987, 1993, 1996, 1999, 2002, and 2004 (adding 2004 to the years reported in ref. 1, although revising all past estimates as well). Our estimates for the urban–rural breakdown are for 1993, 1996, 1999, and 2002. To estimate regional poverty at a given reference year we "line up" the surveys in time using the same method described in ref. 1. The latter article also describes our interpolation method when the reference date is between two surveys.

Results

Tables 1–4 give our aggregate results for the two poverty lines and for both the headcount index (Tables 1 and 3) and the absolute number of poor judged against each line (Tables 2 and 3). These follow our past methods for global poverty measurement, as summarized above, without an allowance for the higher COL in urban areas. Table 5 gives the results of the urban and rural poverty measures for 1993 and 2002, which we discuss later.

Aggregating across regions, we find trend declines in the head- count indices; for both lines, the trend is ≈0.8% points per year for the period 1981–2004.[k] The number of people living below $1 a day has also declined (Table 2), and fell below 1 billion for the first time in 2004. However, progress has been slower for the $2 line. The number of people living below the $2 line actually rose over most of the period, only falling briefly in the mid-1990s and since the end of the 1990s. Based on Tables 3 and 4, we can derive the population growth rates for the three groups: those living under $1 a day, those living between $1 and $2, and those living over $2; the annual exponential growth rates (obtained by regressing the log population on time) for these three groups are −1.4%, 1.9%, and 3.5%, respectively (with standard errors of 0.2%, 0.4%, and 0.1%).

China naturally carries the largest weight in these calculations (which also points to the likely sensitivity of global poverty aggre- gates to measurement errors in the data for China). Tables 1–4 also give our estimates excluding China. The trend rates of decline in the headcount indices are approximately halved when one focuses on the developing world outside China.[l] When we exclude China, we find a fairly static picture in terms of the number of people living under $1 a day, with no clear trend, and a clear trend increase in the number of poor by the $2-a-day poverty line, which shows little sign of the possible reversal after 2000, indicated by the series including China (Table 4). Of course, this static picture overall for the developing world outside China hides both gains and losses at the country level, which roughly balanced in the aggregate. The aggre- gate pattern of population growth rates across the three income groups, under $1, between $1 and $2, and over $2, changes radically when we focus on the developing world outside China. We now find annual growth rates of 0.1% (SE = 0.1%), 2.4% (0.2), and 2.5% (0.1), respectively.

It should also be noted that some features of the overall series also reflect events in China. The sharp reduction in the poverty count in the early 1980s (particularly for the lower line) is largely because of China; over 200 million fewer people are found to have

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[j]The precise method used varies from country to country, depending on the data available. For more information on the alternative methods found in practice, see ref. 11.

[k]The regression coefficients on time are −0.83 (SE = 0.09) and −0.77 (SE = 0.05) for $1 and $2, respectively. Note that this trend rate of poverty reduction is more than the rate of 0.6% points per year that would be more than enough to halve the 1990 $1-a-day poverty rate by 2015, which is the first of the United Nations' Millennium Development Goals.

[l]The regression coefficients on time are −0.45 (SE = 0.03) and −0.28 (SE =0.03) for $1 and $2, respectively.

Table 3. Percentage of the population living below $2.15 a day

Region	1981	1984	1987	1990	1993	1996	1999	2002	2004
EAP	84.80	77.17	68.53	69.73	65.04	52.49	49.34	41.68	36.58
China	88.12	79.00	68.64	72.16	68.13	53.34	50.05	40.94	34.89
ECA	4.60	3.93	3.08	4.31	16.53	17.97	18.57	12.88	9.79
LAC	28.45	32.25	29.57	26.25	24.09	25.24	25.31	24.76	22.17
MNA	29.16	25.59	24.24	21.69	21.41	21.40	23.62	21.09	19.70
SAS	88.53	87.01	86.57	85.62	82.22	82.12	80.41	79.73	77.12
India	88.92	87.89	86.98	86.30	85.33	84.12	82.67	81.37	80.36
SSA	74.52	76.98	77.36	77.05	76.09	76.42	75.85	73.81	71.97
Total	66.96	64.25	60.73	60.79	59.44	55.52	54.24	50.69	47.55
Total excluding China	59.08	58.87	57.89	56.78	56.43	56.26	55.63	53.85	51.58

Source: author's calculations.

lived under $1 a day in 1984 than 1981.[m] China is also responsible for the slight drop in the number of poor globally in the mid-1990s.[n]

So far, we have focused on the aggregates across regions. It is clear from Tables 1–4 that the evolution of the poverty measures over the period as a whole is strikingly different across regions, as is evident from Fig. 1. We find sharply falling numbers of poor in East Asia (by both lines). Both the numbers and proportions of poor were generally rising in Eastern Europe and Central Asia (ECA), although showing a marked improvement after 2000. We find generally rising numbers of poor but falling percentages in Latin America and the Caribbean (LAC) and the Middle East and North Africa (MENA), although with some signs of improvement after 2000, and a trend decline in the number of people under the $1 line in MENA. We find falling percentages of poor in South Asia but a fairly static count of the number of poor under $1 a day, and a rising count for the higher one.

We find a clear indication of rising poverty counts in sub-Saharan Africa (SSA) for both lines, although with encouraging signs of a reduction in the percentage below the line after 2000, in keeping with other regions. The rate of decline in SSA's $1-a-day poverty is approximately one percentage point per year from 1999 to 2004; in absolute terms, this is slightly higher than the rate of decline for the developing world as a whole, although (given Africa's higher-than-average poverty rate) the proportionate rate of decline over the period 1999–2004 is still lower than average. Using the $2 line, we still see progress in SSA since the 1990s, although the rates of decline in the incidence of poverty lag behind the developing world as a whole.

The regional composition of poverty has changed dramatically. Because the decline in poverty between 1981 and 1984 is rather special (being largely because of changes in China), let us focus on 1984 and 2004. In 1984, the region with the highest share of the world's $1-a-day poor (assuming there are none in developed countries) was East Asia, with 44% of the total; one-third of the poor were in China at that time. By 2004, East Asia's share had fallen to 17% (13% for China). This was made up largely by the rise in the share of the poor in South Asia (from 35% in 1984 to 46% in 2004) and (most strikingly) SSA, which saw its share of the number of people living under $1 a day rise from 16% in 1984 to 31% 20 years later. Projecting these numbers forward to 2015, SSA's share of the $1-a-day poor will be almost 40%.[o]

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[m]The agrarian reforms that commenced in the late 1970s are believed to have brought a huge reduction in the number of poor over a fairly short period. For further discussion of both the data for China and the various policy reforms impinging on poverty over the 1980s and 1990s, see ref. 17.

[n]The main reason for the sharp reduction in poverty in China in the mid-1990s was probably that the government brought the procurement prices for its foodgrain quotas up to market levels, which entailed a substantial drop in its (implicit) taxation of farmers; for further discussion see ref. 17.

[o]Regressing SSA's share of the poor on time, the prediction for 2015 is 39.4% (SE = 1.2%).

How are our results affected by introducing an urban–rural COL differential? Fig. 2 gives the aggregate poverty measures with and without the correction for a higher urban COL. Naturally, the poverty count rises (because we have treated the international line as the rural line). But by how much does the poverty count rise? When we allow for an urban–rural differential in the COL, we find a $1-a-day headcount index in 1993 that is ≈2.3% points higher (27.9% versus 25.6%, from Table 1). More than 100 million people are added to the global count of the poor when we allow for the higher cost of living in urban areas, and approximately half of the 100 million come from South Asia and one third from SSA.

The change in methodology makes much less differences to the trends over time. Over the period 1993–2002, both methods indicate a 5.2% point decline in the $1-a-day poverty rate (Table 5). The proportionate rate of decline is slightly lower when one allows for the urban–rural poverty-line differential. This was sufficient to reduce the overall count of the number of poor by ≈100 million people (105 million when the same line for urban and rural areas is used and 98 million when one allows for a higher urban poverty line).

We find that rural poverty incidence is appreciably higher than urban, even allowing for the higher COL facing the poor in urban areas. The $1-a-day rural poverty rate in 2002 of 30% is more than double the urban rate (Table 5). Similarly, whereas 70% of the rural population live below $2 a day, the proportion in urban areas is less than half that figure. The rural share of poverty in 2002 is 75% when the $1-a-day line is used and slightly lower when $2 is used.

There has been a marked urbanization of poverty in the world. For the $1-a-day line, we find that the urban share of the poor is rising over time, from 19% in 1993 to 25% in 2002 (3). This is not just urban population growth. The ratio of urban poverty incidence to total poverty incidence has also risen with urbanization, implying that the poor have been urbanizing faster (in proportionate terms) than the population as a whole. Using the $2-a-day line, we find a slightly higher share of the poor living in urban areas, but that this share has been rising at a slower pace than for the $1-a-day line. There is also a sign of a deceleration in the urbanization of poverty when the $2 line is used (3).

Not only did the urban poverty rate fall more slowly, but the number of urban poor in the world rose over this period. We obtain a count of 98 million fewer poor by the $1-a-day standard over the period 1993–2002, which is the net effect of a decline by 148 million in the number of rural poor and an increase of 50 million in the number of urban poor. Similarly, the progress in reducing the total number of people living under $2 a day in rural areas by 116 million came with an increase in the number of urban poor of 65 million, giving a net drop in the poverty count of only 51 million (3).

There are notable differences across regions in the urbanization of poverty; Table 5 gives the breakdown by region. In 2002, the rural headcount index for East Asia was nine times higher than the urban index but only 16% higher in South Asia, the region with the lowest

Table 4. Numbers of people (in millions) living below $2.15 a day

Region	1981	1984	1987	1990	1993	1996	1999	2002	2004
EAP	1,169.74	1,115.97	1,040.71	1,112.93	1,083.21	907.83	882.70	766.26	683.83
China	875.77	819.11	744.07	819.11	802.86	649.47	627.55	524.24	452.25
ECA	19.78	17.38	14.03	20.07	77.83	84.88	87.94	60.75	46.25
LAC	103.90	125.58	122.30	114.85	111.08	122.30	128.44	131.14	120.62
MNA	50.56	48.62	50.24	48.91	51.80	55.40	64.50	60.92	59.13
SAS	813.04	852.39	904.21	953.00	973.99	1,031.48	1,067.15	1,115.54	1,115.77
India	624.92	658.92	694.71	733.13	767.39	798.07	825.93	853.32	867.62
SSA	295.46	332.87	365.02	396.32	422.11	458.37	490.58	512.62	522.34
Total	2,452.47	2,492.81	2,496.50	2,646.09	2,721.72	2,665.66	2,721.31	2,647.22	2,547.94
Total excluding China	1,576.70	1,673.70	1,752.42	1,826.98	1,918.86	2,016.19	2,093.75	2,122.98	2,095.69

Source: authors' calculations.

relative difference in poverty rates between the two sectors. The contrast between China and India is particularly striking. Poverty incidence in urban China in 2002 was barely 4% of the rural rate, whereas it was 90% for India (3). Urban poverty incidence in China is unusually low relative to rural, although problems in the available data (notably in the fact that recent migrants to urban areas are undercounted in the urban surveys) are probably leading us to underestimate the urban share of the poor in that country (for further discussion, see ref. 17).

We find that the urban share of the poor is lowest in East Asia (6.6% of the $1-a-day poor lived in urban areas in 2002), due, in large part, to China. The urban share of the poor is highest in Latin America, where 59% of the $1-a-day poor, and 66% of the $2-a-day poor lived in urban areas in 2002. This is the only region in which more of the $1-a-day poor live in urban than rural areas (the switch occurred in the mid-1990s).

In the aggregate and in most regions, we find that poverty incidence fell in both urban and rural sectors over the period as a whole (although with greater progress against rural poverty in the aggregate). LAC and SSA are exceptions. There rising urban poverty came with falling rural poverty. The (poverty-reducing)

population shift and rural components for LAC and SSA were offset by the (poverty-increasing) urban component.

Although the urban poverty rate for the developing world as a whole was relatively stagnant over time for $1 a day, this is not true in all regions. Indeed, the urban poverty rate is falling relative to the national rate in both East Asia and ECA, attenuating the urbanization of poverty; indeed, in ECA the urban share of the poor is actually falling over time (a "ruralization" of poverty) even while the urban share of the total population has risen, although only slightly. (There is the hint of a ruralization of $2-a-day poverty in East Asia from the late 1990s, again because of China.) The ruralization of poverty in ECA is not surprising, because it is consistent with other evidence suggesting that the economic transition process in this region has favored urban areas over rural areas (18). This has also been the case in China since the mid-1990s (17).

South Asia shows no trend in either direction in the urban poverty rate relative to the national rate, and the region has also had a relatively low overall urbanization rate, with little sign of a trend increase in the urban share of the poor. The population shift component of poverty reduction is also relatively less important in South Asia.

Table 5. Urban and rural poverty measures for 1993 and 2002 using the $1.08-a-day poverty line

	Number of poor (in millions)			Headcount index, %			Urban share of the poor, %	Urban share of population, %
	Urban	Rural	Total	Urban	Rural	Total		
1993								
EAP	28.71	407.17	435.88	5.55	35.47	26.17	6.59	31.09
China	10.98	331.38	342.36	3.33	39.05	29.05	3.21	29.77
ECA	6.12	6.37	12.49	2.06	3.66	2.65	48.98	63.06
LAC	26.07	28.55	54.62	7.82	22.38	11.85	47.73	72.33
MNA	0.77	4.29	5.07	0.61	3.76	2.09	15.29	52.82
SAS	107.48	383.30	490.78	35.30	43.55	41.43	21.90	25.70
India	94.28	324.55	418.83	40.06	48.88	46.57	22.51	26.17
SSA	66.42	206.73	273.15	40.21	53.07	49.24	24.32	29.78
Total	235.58	1,036.41	1,271.99	13.50	36.58	27.78	18.52	38.12
Total excluding China	224.60	705.03	929.63	15.86	35.53	27.34	24.16	41.64
2002								
EAP	16.27	223.23	239.50	2.28	19.83	13.03	6.79	38.79
China	4.00	175.01	179.01	0.80	22.44	13.98	2.24	37.68
ECA	2.48	4.94	7.42	0.83	2.87	1.57	33.40	63.45
LAC	38.33	26.60	64.93	9.49	21.15	12.26	59.03	76.24
MNA	1.21	4.88	6.09	0.75	3.82	2.11	19.87	55.75
SAS	125.40	394.34	519.74	32.21	39.05	37.15	24.13	27.83
India	106.64	316.42	423.06	36.20	41.96	40.34	25.21	28.09
SSA	98.84	228.77	327.61	40.38	50.86	47.17	30.17	35.24
Total	282.52	882.77	1165.29	12.78	29.32	22.31	24.24	42.34
Total excluding China	278.52	707.76	986.28	16.28	31.72	25.02	28.24	43.40

Source: ref. 3.

Fig. 1. Evolution of poverty measures over time, 1981–2004. (*a*) Headcount indices. Note: The series labeled "u+r" incorporates the urban–rural poverty line differential. (*b*) Number of people below poverty lines. The series labeled "u+r" incorporates the urban–rural poverty line differential.

The urban poverty rate relative to the national rate has shown no clear trend in SSA, although rapid urbanization of the population as a whole has meant that a rising share of the poor are living in urban areas.

Conclusions

We have provided new estimates of the aggregate poverty measures and their regional and urban–rural breakdown for the developing world based on household survey data. The longest time series we have estimated here follows past practice in the World Bank's global poverty measures of not incorporating an allowance for the higher cost of living in urban areas. We have provided an update of these measures to 2004. We find a clear trend decline in the percentages of people below each of the international poverty lines, although naturally with less progress in reducing the numbers of poor. Indeed, when our higher line is used, the count of the poor has been rising over most of the period, and there has not been much progress in reducing the number of people living below our lower line (at approximately $1 a day) when one looks at the developing

Fig. 2. Poverty measures by region 1981–2004. (*a*) Headcount index. (*b*) Number of people.

world outside China. However, it is encouraging that we do find evidence of progress in reducing poverty after approximately the year 2000.

The overall picture is fairly similar when we allow for the higher cost of living in urban areas. We find that three-quarters of the developing world's poor live in rural areas, when assessed by international poverty lines that aim to have a constant real value (between countries and between urban and rural areas within countries). The poor are urbanizing faster than the population as a whole, reflecting a lower-than-average pace of urban poverty reduction. Over the period 1993–2002, although 50 million people were added to the count of $1-a-day poor in urban areas, the aggregate count of the poor fell by ≈100 million, thanks to a decline of 150 million in the number of rural poor.

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